Ohio Environmental Protection Agency

Mike DeWine, Governor
Jon Husted, Lt. Governor
Anne M. Vogel, Director

July 3, 2023

Transmitted Electronically

Mr. Michael Caprella, Utilities Director
50 Town Square
Lima, Ohio 45804

Re: Lima WWTP
Inspection
NPDES - Biosolids
Allen County
2PE00000

Subject: Ohio Environmental Protection Agency NPDES Inspection

Dear Mr. Caprella:

On June 13, 2023, Ohio EPA staff members Ms. Catherine Robertson and Mr. John Takas from the Ohio EPA's Northwest District Office conducted an inspection of Lima WWTP located in Lima, Ohio. Ms. Kim Furry and Mr. Shawn Dershem were also present from Lima WWTP.

The purpose of the inspection was to evaluate compliance with the terms and conditions of your National Pollutant Discharge Elimination System (NPDES) permit, Ohio Sewage Sludge Rules Chapter 3745-40 of the Ohio Administrative Code (OAC), and to evaluate the operation and maintenance of the plant.

Findings:

1. As of January 2023, facility is not generating exceptional quality biosolids; Currently, all biosolids are sent to landfill.

2. Facility plans to develop a biosolids master plan to prepare for biosolids treatment upgrades. Master plan will consider new biosolids treatment units and return to exceptional quality biosolids

Recommendations:

The recommendation(s) set out below are not Orders. The recommendations are offered by Ohio EPA in an effort to provide compliance assistance to your facility.

1. When bulk exceptional quality biosolids are applied to the land, it is recommended the following records are retained:

    a. Records showing that bulk EQ biosolids were not stored ≥90 days at the beneficial use site.

    b. Forecast/actual precipitation data.

    c. A description detailing how the agronomic rate is met at each beneficial use site, including how the beneficial use application equipment is calibrated.

    d. The date and quantity used.

If you have any questions or comments concerning the enclosed inspection report, please contact Catherine Robertson at (419) 373-3019 or email at catherine.robertson@epa.ohio.gov.

Sincerely

Alex A. Smaili

Alex A. Smaili, P.E.
Water Quality Engineer II/Unit Supervisor
Division of Surface Water, Northwest District Office

/cle

ec: Catherine Robertson, DSW-NWDO
John Takas, DSW-NWDO
Alex Smaili, DSW-NWDO
Kim Furry, Plant Supervisor
Shawn Dershem, Assistant Supervisor

NPDES Compliance Inspection Report

SECTION A: NATIONAL DATA SYSTEM CODING						
Permit #	NPDES #	Inspection Type	Sig. Non-Compliance	Inspection Date	Entry Time	Exit Time
OH0026069	2PE00000	Biosolids	No	6/13/2023	9:10 AM	11:10 AM

SECTION B: FACILITY DATA	
Name and Location of Facility Inspected	Permit Effective Date
Lima WWTP 1200 Ft. Amanda Rd Lima, OH 45804	8/1/2018 Permit Expiration Date 8/31/2022
Name(s) and Title(s) of On-Site Representatives	Phone Numbers
Kim Furry, Plant Supervisor kim.furry@cityhall.lima.oh.us Shawn Dershem, Assistant Supervisor shawn.dershem@cityhall.lima.oh.us	(419) 221-5198 (419) 221-5191
Name and Title of Responsible Official	Phone Number
Michael Caprella, Utilities Director michael.caprella@cityhall.lima.oh.us	(419) 221-5294

SECTION C: AREAS EVALUATED DURING INSPECTION		
Evaluated? Y-Yes; N-No	Area Evaluated	Recommendations noted in report? Y – Yes; N – No; N/A – Not Applicable
Y	E. NPDES Compliance	N
Y	F. Operations & Maintenance	N
N	G. Operator Certification	N
N	H. Collection System	N
Y	I. Sludge Management	N
N	J. Storm Water	N
N	K. Self-Monitoring Program	N
N	L. Laboratory	N
N	M. Effluent / Receiving Water Observations	N

Comments:

Signatures	
Catherine Robertson 6/29/2023	*Alex A. Smaili 6/29/2023*
Catherine Robertson Date Compliance and Enforcement Division of Surface Water Northwest District Office	Alex A. Smaili, P.E. Date Water Quality Engineer II/Unit Supervisor Division of Surface Water Northwest District Office

BIOSOLIDS GENERATOR INSPECTION CHECKLIST

1. Contact Information

	Treatment Works	Contractor	Inspector
Entity Name	Lima WWTP	Wright Mulch	Ohio EPA
Contact	Kim Furry	Aaron Wright	Catherine Robertson
Title	Plant Supervisor	Owner	Environmental Specialist
Phone	(419) 221-5198		(419) 373-3019
Email	kim.furry@cityhall.lima.oh.us		catherine.robertson@epa.ohio.gov
Mailing Address			
Additional Persons Present: John Takas – Ohio EPA Shawn Dershem – Lima WWTP			

2. Inspection Letter Notification

	Mailing Address (1)	Mailing Address (2)
Name	Michael Caprella	
Title	Utilities Director	
Address	50 Town Square Lima Ohio, 45804	

3. Facility Information

Average Daily Flow (MGD)	12-13 MGD		
Design Treatment Capacity (MGD)	18.5 MGD (70 MGD peak)		
Biosolids Storage Capacity (Days)	7-8 months EQ/Class A (Class B, >8 months)		
Contracted Alternative / Contingency Disposal	Landfill		
Headworks Screening (max aperture of 1.59 cm)	Screen Size: 0.25 in		
	Alternative: 4 bar screens		
Planned Upgrades: Initially Digester lids, plan to look at biosolids upgrades as a whole next 1.5-2 years			
Recent Maintenance Issues/Equipment Failures: Front ends of aeration basins, knife gate, Valves, Trickle filter/nitrification new arms/media (all currently)			
Are there indications of sloppy housekeeping or poor maintenance in work and storage areas?	☐ Yes ☒ No	Notes:	
NPDES Permit Verification	In Permit	Beneficial Use or Disposal	Notes
Station 581: Class B Biosolids	☒	☐	
Station 584: Exceptional Quality Biosolids	☒	☐	
Station 585: Incineration	☐	☐	
Station 586: Landfill	☒	☒	
Station 588: Transfer to NPDES Permittee	☒	☐	
Comments: As of Jan 2023, generating class B and sending to landfill			

4. Sewage Sludge Treatment

Treatment Units	Quantity	Comments (Online/Offline and Capacity/Dimensions)
Aerobic Digesters		
Anaerobic Digesters	3	2 primaries, 1 secondary, online
Belt Filter Press	3	online
Holding Tanks	2	1 MG capacity
Gravity Thickener	2	1 used by Lima 1 used by county transfers
Drying Beds		
Storage Pad	1	EQ - quarantined until passes PR and VAR Class B - covered pad
Lagoon		
Centrifuge		
Dryer		
Other	1	NVIRO Process – adds lime and fly ash
Comments:		

5. Biosolids Treatment Train Flow Chart (Primary and Secondary)

Gravity thickener -> digester -> storage tanks -> belt filter press (B) -> NVIRO (EQ)

6. Operational Questions

Digester Operational Temperature	Digester Environment:	Temperature:
	Aerobic	
	Anaerobic	95-112 (6/13: 105 and 108)
Dewatering Efficiency	Sample Location:	Average % Solids:
	Prior to Dewatering	3-4%
	After Dewatering	25-28%
Comments: Prior to dewatering depends on decant Post NVIRO- 60-65% solids		

7. Field Storage Requirements

Are biosolids being stored at a beneficial use site?	☐ Yes ☐ No ☒ NA	Notes Class A removed in April, still has not received paperwork back

Are records being maintained to show < 90-days storage, amounts, map with locations?	☐ Yes ☒ No ☐ NA	Notes Farmers list day picked up and day applied to field, communicating information to the facility can be slow

8. Pathogen Reduction Alternative

☐	**P-1**	**Geometric Mean of Seven Fecal Coliform Samples**	**Less than two million most probable number or colony forming units per gram of total solids (dry weight basis).**
☐	Documentation of stabilization via an actively mixed aerobic or anaerobic process or through lime stabilization.		
☐	Fecal coliform analytical results.		
☐	The geometric mean calculations.		

☐	**P-2**	**Aerobic Digestion**	**The mean cell residence time and temperature shall be between 40 days at 20°C(68°F) and 60 days at 15 °C (59°F).**	
☐	MCRT	Minimum Residence:		Average Residence:
☐	Temp.	Minimum Temp.:		Average Temp.:

☐	**P-3**	**Air Drying**	**Sludge is dried for a min. of 90-days. The average ambient air temp. is > 0°C (32°F) for at least 60 of the 90-days.**
☐	The type of drying bed media being used:		
☐	90 days of drying met for all poured beds.		
☐	Daily temperature records maintained.		

☐	**P-4**	**Anaerobic Digestion**	**Mean cell residence time and temperature shall be between 15 days at 35 to 55°C (95 to 131°F) and 60 days at 20°C (68°F).**	
☐	MCRT	Minimum Residence:		Average Residence:
☐	Temperature records maintained during the mean cell residence time.			
☐	The weight/volume and county of origin of all feedstocks, bulking agents and additives.			
☐	List feedstocks:			

☐	**P-5**	**Composting**	**Must complete last 6 rows.**
☐	In-vessel	- The compost temperature is ≥40°C (104°F) for 5 consecutive days. - For four consecutive hours during the 5-day period, the compost temperature must ≥55 °C (131°F).	
☐	Aerated static pile	- The compost temperature is ≥40°C (104°F) for 5 consecutive days. - For 4 consecutive hours during the 5-day period, the compost temperature must ≥55 °C (131°F). - One foot or greater of insulation material.	
☐	Windrow	- The compost temperature is ≥40°C (104°F) for a minimum of 5 consecutive days, except during active turning or mixing. - For 4 consecutive hours during the 5-day period, the compost temperature must ≥55 °C (131°F). - The compost is turned or mixed (via machine) during the 5-day period. The compost temperature shall be ≥40°C (104°F) within 24 hours after turning or mixing.	
☐	A description of the composting method.		

☐	Daily temperature records for each vessel/aerated static pile/windrow showing the compost temperature is ≥40°C (104°F) for 5 consecutive days.
☐	The hourly readings for each vessel/aerated static pile/windrow showing the compost temperature is ≥55 °C (131°F) for 4 consecutive hours during the 5-day period.
☐	**Windrow Only** - Records of the day and the time each windrow was turned or mixed. Average number of turnings:
☐	The weight/volume and county of origin of all feedstocks, bulking agents, and additives.
☐	List feedstocks:

☐	**P-6**	**Lime Treatment**	**The sewage sludge pH shall rise to twelve after two hours of contact.**
☐	A description of how the pH is monitored throughout the sludge and how the lime is mixed into the sludge.		
☐	Records for pH after initial addition of lime.		
☐	Records for pH two hours after lime addition.		
☐	Records of the amount (dry tons) of lime added.		

☐	**P-7**	**Equivalent Process**	**Obtained an equivalency recommendation from USEPA's pathogen equivalency committee.**
☐	Records as necessary to demonstrate the process equivalent to a process to significantly reduce pathogens.		

☐	**P-8**	**Time and Temperature**	**Must complete last 4 rows.**
☐	> 7% solids	The sewage sludge temperature shall be ≥50 °C (122°F) for ≥20 minutes.	
☐	> 7% and heated by warmed gases or an immiscible liquid	The sewage sludge temperature shall be ≥50 °C (122°F) for ≥15 seconds.	
☐	< 7% solids	The sewage sludge temperature shall be X°C for ≥ 15 seconds, but ≤ 30 minutes.	
☐	< 7% solids	The sewage sludge temperature is ≥50°C (122°F) for ≥30 minutes.	
☐	Analytical results for density of fecal coliform (mpn/g) or the density of Salmonella sp. bacteria expressed as mpn/4g.		
☐	Temp. Records	Min. temp.:	Average temp.:
☐	Treatment Time Records	Min. Time(d/h/m/s):	Average Time(d/h/m/s):
☐	Avg. %TS:		

☒	**P-9**	**High pH and High Temperature**	- **The pH of the sewage sludge is ≥12 for at least 72 hrs.** - **The sewage sludge temperature is ≥52°C (125.6°F) for ≥12 hours during the period that the pH is ≥12.** - **At the end of the 72 hours period the sewage sludge is ≥ 50% solids.**				
☒	Analytical results for density of fecal coliform (mpn/g) or the density of Salmonella sp. bacteria expressed as mpn/4g.						
☒	pH Records at:	☒ Start	☒ 24-hrs.	☒ 48-hrs.	☒ 72-hrs.		
☒	Records documenting hourly biosolids temp. for the required 12-hours	Min. temp.: 59C 11/29/2022	Average temp.:65C				
☒	Records of the amount (dry tons) of alkaline material added.						
☒	A narrative description of how pH and temperature are maintained throughout all of the biosolids.						

☐	**P-10**	**EQ Composting**	**Must complete last 6 rows.**

☐	In-vessel	The compost temperature is ≥55°C (131°F) for 72 hrs.
☐	Aerated static pile	- The compost temperature is ≥55°C (131°F) for 72 hrs. - One foot or greater of insulation material.
☐	Windrow	- The compost temperature is ≥55°C (131°F) for ≥15 consecutive days. - The compost is turned or mixed (via machine) 5 times at 72-hour intervals during the 15 day period. - The core temperature is ≥55°C (131°F) within 24 hours after each turning or mixing.
☐	Analytical results for density of fecal coliform (mpn/g) or the density of Salmonella sp. bacteria expressed as mpn/4g.	
☐	A description of the composting method.	
☐	The weight or volume and county of origin of all feedstocks, bulking agents and additives utilized in the composting process.	
☐	Records the temperature was maintained ≥55 °C (131°F) for: - 3 days for in-vessel/aerated static pile or; - 15 days for windrow.	
☐	Windrow Only - Records of the day and the time each windrow was turned or mixed. Average number of turnings:	
☐	List feedstocks:	

☐	**P-11**	**Heat Drying**	**Drying the sewage sludge to ≥90% solids, where either the sewage sludge temperature ≥80°C (176°F) or the wet bulb temperature of the gas leaving the dryer ≥80°C (176°F).**
☐	Analytical results for density of fecal coliform (mpn/g) or the density of Salmonella sp. bacteria expressed as mpn/4g.		
☐	Records documenting % Solids of dried sewage sludge	Min. % Solids:	Average % Solids:
☐	Records that the sewage sludge temperature / wet bulb temperature of exit gas is ≥80°C (176°F).	Min. Temp.:	Average Temp.:

☐	**P-12**	**Thermophilic Aerobic Digestion**	**Mean cell residence time is 10-days and the temperature is between 55°C to 60°C (131°F to 140°F).**	
☐	Analytical results for density of fecal coliform (mpn/g) or the density of Salmonella sp. bacteria expressed as mpn/4g.			
☐	Records that the temperature was maintained at 55°C to 60°C (131°F to 140°F) in each digester.		Min. temp.:	Average temp.:
☐	Records documenting the mean cell residence time was met in each digester.		Min. Time(d/h/m/s):	Average Time(d/h/m/s):

☐	**P-13**	**Beta Ray Irradiation**	**Irradiated with beta rays from an accelerator at dosages of at least one megarad at room temperature.**
☐	Analytical results for density of fecal coliform (mpn/g) or the density of Salmonella sp. bacteria expressed as mpn/4g.		
☐	The beta ray dosage.		
☐	Records of the ambient room temperature.		

☐	**P-14**	**Gamma Ray Irradiation**	**Irradiated with gamma rays from certain isotopes, such as \60\cobalt and \137\cesium, at dosages of at least one megarad at room temperature.**

☐	Analytical results for density of fecal coliform (mpn/g) or the density of Salmonella sp. bacteria expressed as mpn/4g.
☐	Documentation of the gamma ray isotope uses.
☐	The gamma ray dosage.
☐	Records of the ambient room temperature.

☐	**P-15**	**Pasteurization**	**The sewage sludge temperature will be ≥70°C (158°F) for ≥30 minutes and tracked constantly.**	
☐	Analytical results for density of fecal coliform (mpn/g) or the density of Salmonella sp. bacteria expressed as mpn/4g.			
☐	Records documenting that the sewage sludge temperature was ≥70°C (158°F) for ≥30 minutes.		Min. temp.:	Average temp.:
☐	Records documenting the treatment time.		Min. Time (d/h/m/s):	Average Time(d/h/m/s):

☐	**P-16**	**Equivalent Process**	**Obtained an equivalency recommendation from USEPA's pathogen equivalency committee.**
☐	Analytical results for density of fecal coliform (mpn/g) or the density of Salmonella sp. bacteria expressed as mpn/4g.		
☐	Records as necessary to demonstrate the process equivalent to a process to significantly reduce pathogens.		

Comments:
Composite sample daily, then to one month composite sample, fecal from 7 locations from pile, send to Alloway, composite from composite for metals daily, NANI are created for the materials sampled, NANI reflects months on stock, highest metal is listed, nutrients for months available

9. Vector Attraction Reduction Option

☐	**VAR-1**	**38% Volatile Solids Reduction**	**Requirements**	
☐	Average volatile solids concentration of:		Raw sludge:	Final sludge:
☐	Average volatile solids reduction equation:		$\%VSR = \frac{VSin - VSout}{VSin - (VSin \times VSout)} \times 100$	

☐	**VAR-2**	**Bench Scale Anaerobic Digestion**	**Digesting anaerobic sewage sludge in a bench scale unit for 40 days between 30°C and 37°C (86°F and 98.6°F). At the end of 40 days the volatile solids reduction is ≤17%.**
☐	A description of the bench scale digester.		
☐	The time (days) that the sample was further digested in the bench scale digester.		
☐	Daily temperature records.		
☐	VS conc. of sewage sludge: ☐ Before bench scale digestion ☐ After bench scale digestion		

☐	**VAR-3**	**Bench Scale Aerobic Digestion**	**Digesting ≤2% solids aerobic sewage sludge aerobically in a bench-scale unit for 30 days at 20°C (68°F). At the end of 30 days the volatile solids reduction is ≤15%.**

☐	A description of the bench scale digester.
☐	The time (days) that the sample was further digested in the bench scale digester.
☐	Daily temperature records.
☐	VS conc. of sewage sludge: ☐ Before bench scale digestion ☐ After bench scale digestion

☐	**VAR-4**	**Specific Oxygen Uptake Rate (SOUR)**	**For aerobic sewage sludge that is treated between 10°C and 30°C (50°F and 86°F), the specific oxygen uptake rate shall be ≤1.5 milligrams of oxygen per hour per gram of total solids (dry weight basis) at 20°C (68°F).**
☐	Dissolved oxygen readings at 1-minute intervals over fifteen-minutes.		
☐	Temperature records showing that the test was corrected to 20°C (68°F):		$Sour_{20\text{-degrees Celsius}} = Sour_{T\text{-degrees Celsius}} \times \Theta^{(20-T)}$ (Where T is the temperature of the sewage sludge when the SOUR test was started; and Where Θ = 1.05 if T > 20 degrees Celsius; or Where Θ = 1.07 if T < 20 degrees Celsius)
☐	Total solids for the sewage sludge sample.		
☐	Sour calculations:	Max. SOUR:	Min. SOUR:

☐	**VAR-5**	**Aerobic Process Time and Temperature Treatment**	**Sewage sludge shall be aerobically treated for ≥14 days. During that time, the sewage sludge temperature shall be ≥40°C (104°F) and the average sewage sludge temperature shall be ≥45°C (113°F).**	
☐	Records of the detention time in the aerobic digester/ composting process.		Min. Time (d/h/m/s):	Average Time (d/h/m/s):
☐	Temperature records.		Min. temp.:	Average temp.:

☒	**VAR-6**	**Alkaline Treatment**	**The pH shall be ≥12 by alkaline addition and, without the addition of more alkali, shall remain ≥12 for 2 hours and then remain ≥11.5 for an additional 22 hours.**
☒	A narrative description of how the pH was monitored throughout the material for the applicable time period.		
☒	Records indicating the pH was maintained: ☒ ≥12 for 2 hours ☒ 11.5 for 24 hours		
☒	Records of the amount (dry tons) of alkaline material added.		

☐	**VAR-7**	**≥75% solids**	**The % solids that do not contain primary unstabilized solids shall be ≥75% prior to mixing with other materials.**	
☐	Results of % solids tests:		Min. % solids:	Average % solids:
☐	Has the sewage sludge been stabilized?			

☐	**VAR-8**	**≥90% solids**	**The % solids that contain primary unstabilized solids shall be ≥90% prior to mixing with other materials.**	
☐	Results of % solids tests:		Min. % solids:	Average % solids:

☐	**VAR-9**	**Injection**	**Injected below the surface of the beneficial use site.**
☐	Applier certification statement.		

☐	**VAR-10**	**Immediate Incorporation**	**Incorporation into the soil within 6 hours.**
☐	Applier certification statement.		

Comments:
If continued with EQ would stay with the same PR and VAR
Would retrain with all employees if continued to EQ/Class A

10. **Biosolids Classification**

☒	**Exceptional Quality (EQ)**	**Record Requirements**
☒	The following analytical results:	

☒ Arsenic	☒ Copper	☒ Mercury	☒ Nickel
☒ Zinc	☒ Cadmium	☒ Lead	☒ Molybdenum
☒ Selenium	☒ Ammonia Nitrogen	☒ Total Kjeldahl Nitrogen	☒ Total Phosphorus
☒ Total Potassium			

☒	Standard Operating Procedure (must include)	☒ Sample collection or monitoring locations ☒ Sample collection/monitoring frequency ☒ Sample collection/monitoring procedures ☒ Sample storage and preservation procedures ☒ Sample/monitoring analysis procedures ☒ Any calculations required for sample/monitoring analysis
☒	An example of the notice and necessary information.	
☒	Contact information for each person who receives the EQ biosolids.	
☐	**Bulk EQ Only** - Records showing that bulk EQ biosolids were not stored ≥90 days at the beneficial use site.	
☐	**Bulk EQ Only** - The following beneficial use site records:	☒ Soil phosphorus levels ☒ Agronomic rate calculations ☐ Forecast/actual precipitation data ☐ Subsurface tile monitoring records (if applicable)
☐	**Bulk EQ Only** - A description detailing how the agronomic rate is met at each beneficial use site, including how the beneficial use application equipment is calibrated.	
☐	**Bulk EQ Only** - When beneficial use occurs on a beneficial use site:	☐ Date Used ☐ Quantity used (DT)

Comments:
When biosolids were taken to when it was land applied (no records showing exact time)
Needs to keep weather forecasts/ actual precipitation data.
Farmers not providing agronomic rates

☐	**Class B**	**Record Requirements**
☒	The following analytical results:	

☒	Arsenic	☒	Copper	☒	Mercury	☒	Nickel
☒	Zinc	☒	Cadmium	☒	Lead	☒	Molybdenum
☒	Selenium	☒	Ammonia Nitrogen	☒	Total Kjeldahl Nitrogen	☒	Total Phosphorus
☒	Total Potassium						

☒	Standard Operating Procedure (must include)	☒ Sample collection or monitoring locations ☒ Sample collection/monitoring frequency ☒ Sample collection/monitoring procedures ☒ Sample storage and preservation procedures ☒ Sample/monitoring analysis procedures ☒ Any calculations required for sample/monitoring analysis
☒	An example of the notice and necessary information.	
☐	Copies of:	☐ Beneficial use site authorization applications ☐ Ohio EPA Beneficial use site authorization letters ☐ Copies of all crop year reports ☐ Records showing that Class B biosolids were not stored ≥90 days at the beneficial use site
☐	Beneficial use site records	☐ Soil pH for each beneficial use site ☐ Soil phosphorus for each beneficial use site ☐ Agronomic rate calculations for each beneficial use site ☐ Forecast/actual precipitation data ☐ Subsurface tile monitoring records (if applicable) ☐ Sign placement records for all beneficial use sites ☐ Date and quantities of beneficial use ☐ The total amount of acreage on the beneficial use site where beneficial use of biosolids occurred
☐	A description detailing how the agronomic rate is met at each beneficial use site, including how the beneficial use application equipment is calibrated.	
☐	**If VAR-9,** a narrative description that contains**:**	☐ The equipment utilized to inject the biosolids. ☐ How the beneficial user ensures that there is not a significant amount of the biosolids present on the surface of the authorized beneficial use site.
☐	**If VAR-10,** a narrative description that contains**:**	☐ The date and time the sewage sludge was delivered to the authorized beneficial use site. ☐ The date and time Class B biosolids were incorporated into the soil of the authorized beneficial use site. ☐ The equipment utilized to incorporate the biosolids. ☐ How the beneficial user ensures that the biosolids are mixed with soil to a minimum depth of four inches or greater on the authorized beneficial use site.

Comments:

☐	**CPLR**	**Record Requirements (Class B section must be completed)**
☐	Location of each CPLR beneficial use site.	
☐	Total acres of each CPLR beneficial use site.	

☐	Date of beneficial use.
☐	The following cumulative amount (lbs./acre):

☐	Arsenic 36.6	☐	Copper 1339.9	☐	Mercury 15.2	☐	Nickel 375.1
☐	Zinc 2500.4	☐	Cadmium 34.8	☐	Lead 267.9		

☐	The total amount (dry tons) of biosolids beneficially used.
☐	CPLR beneficial user certification statement.
☐	Copy of notification submitted to Ohio EPA that includes: ☐ Location of each CPLR beneficial use site ☐ Generator name ☐ Generator address ☐ Generator telephone number ☐ Generator name NPDES permit number

Comments:

11. Monitoring Information

Where does biosolids sample collection occur?	At piles			
Who collects the biosolids samples?	Operators/Lab techs			
What are the biosolids sample preservation/shipping procedures?	Sent to Alloway			
Is a chain of custody utilized?	yes			
At what frequencies are biosolids samples collected?	☐	Annually	☐	Semi-Annually
	☐	Quarterly	☒	Monthly
	☒	Other:		

Comments:
EQ after 72hr go to baggy before pile is moved
Baggies are composited into one bag
Bag is mixed and sample is sent to Alloway
MPN, 7 individual bottles from months pile, samples are taken same day and sent to testing

12. Analytical Information

Y	N	Analytical Information
☒	☐	Does the generator perform in-house analyses? If yes, list in-house analyses in comments.
☒	☐	Does the generator utilize a contracted laboratory to perform analyses? If yes, list contracted analyses in comments.

Provide the contracted laboratory information:

Lab Name	Alloway	
Address		
Contact Name	**Phone**	**Email**

Comments:
In-house- pH, temp, TS, VS
Alloway: everything else

13. Method Verification

Y	N	N/A	Method verification (If no, describe in the comments)
☒	☐	☐	Fecal Coliform - Is Standard Methods 9221E or 9222D, EPA Method 1680 or 1681 utilized?
☒	☐	☐	Are fecal coliform samples analyzed within eight hours of collection? If no, describe in comments.
☐	☐	☒	Enteric Viruses - Is ASTM D 4994-89 utilized?
☐	☐	☒	Helminth ova - Is Yanko, W.A. "Occurrence of Pathogens in Distribution and Marketing Municipal Sludges" utilized?
☐	☐	☒	Salmonella sp. Bacteria - Is Standard Methods 9260D, Kenner, B.A and H.P Clark “Detection and Enumeration of Salmonella and Pseudomonas aeruginosa," or EPA Method 1682 utilized?
☐	☒	☐	Inorganic Metals - Is SW-846 utilized (6010D, 7061A, 7000B, 7470A, 7471B)?
☐	☐	☒	Specific Oxygen Uptake Rate - Is Standard Methods 2710B utilized?
☒	☐	☐	Total, Fixed and Volatile Solids - Is Standard Methods 2540G utilized?

Comments:
Inorganic metals:
SW-6020A
SM 2450 G
SW-6010 B
SW-7471A