

Sugarcreek 15



State of Ohio Environmental Protection Agency

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May 13, 2010

Mayor and Council
Village of Sugarcreek
410 S. Broadway
Sugarcreek, OH 44681

Re: Sewage Sludge Compliance Evaluation Inspection

On March 30, 2010, Ohio EPA representatives Jacob Howdyshell, Jennifer Witte, and Tim Campbell conducted an inspection at the Village of Sugarcreek Wastewater Treatment Plant (WWTP). The purpose of the inspection was to determine compliance with the Ohio Sewage Sludge Rules, Chapter 3745-40 of the Ohio Administrative Code (OAC). Mr. Jim Cappon, Superintendent, was present and provided information on sludge operations and record keeping. The inspection included a walk-through of the plant, a review of sewage sludge records, and completion of the enclosed checklist.

Currently, waste activated sludge is sent to aerobic digesters with a total capacity of approximately 247,000 gallons for treatment. After some digestion, the sewage sludge is transferred to either the Village of Millersburg or the Village of Strasburg for further treatment. When the WWTP was land applying their sewage sludge, which ended in 2006, pathogen reduction was met through fecal coliform monitoring and vector attraction reduction was met through a 38 % reduction in volatile solids.

The following violations were found in regards to recordkeeping:

- OAC 3745-40-04(E) states that "A permittee who generates bulk sewage sludge shall provide a label or information sheet to...the owner or lease holder of the land upon which the bulk sewage sludge is land applied. Such label or information sheet shall provide all notices and information necessary to comply with the requirements of this chapter including the following:
 - 1) The name, address, telephone number, and NPDES permit number of the permittee;
 - 2) A statement that the material is or contains a byproduct of wastewater treatment;
 - 3) A statement that the Ohio EPA, division of surface water, may be contacted at 1-877-644-2001;

Ted Strickland, Governor
Lee Fisher, Lieutenant Governor
Chris Korleski, Director

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4) The concentration of total Kjeldahl nitrogen, ammonia nitrogen, total phosphorous, and total potassium of the sewage sludge in milligrams per kilogram (dry weight basis);...

At the time of our inspection, Mr. Cappon stated that he did not believe that this information had been provided to the landowner when the WWTP was land applying.

- OAC 3745-40-05(M) states that "One of the vector attraction reduction requirements in paragraphs (Q)(1) through (Q)(10) of this rule shall be met when sewage sludge is applied to the land."

At the time of our inspection, there were no records available to show that the 38% reduction in volatile solids had been met prior to land application.

- OAC 3745-40-06(I) requires that the permittee who provides treatment to bulk sewage sludge develop and sign the following certification statements:

"I certify, under penalty of law, that the information that will be used to determine compliance with class (insert A or B) pathogen reduction alternative (insert one of the class A alternatives in paragraphs (N)(1) to (N)(6) of rule 3745-40-05 of the Administrative Code or one of the class B alternatives in paragraphs (O)(1) to (O)(3) of rule 3745-40-05 of the Administrative Code) was 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 there are significant penalties for false certification including the possibility of fine and imprisonment."

and

"I certify, under penalty of law, that the information that will be used to determine compliance with vector attraction reduction requirement (insert one of the vector attraction reduction requirements in paragraphs (Q)(1) to (Q)(8) of rule 3745-40-05 of the Administrative Code) was 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 there are significant penalties for false certification including the possibility of fine and imprisonment."

At the time of my inspection there were no records of certification statements available for review.

- OAC 3745-40-06(I) requires that the permittee who provides treatment to bulk sewage sludge develop and retain a description of how the pathogen reduction

requirements of rule 3745-40-05 of the Administrative Code are met and a description of how the vector attraction reduction requirements of rule 3745-40-05 of the Administrative Code are met.

At the time of my inspection, these descriptions were not available.

- OAC 3745-40-06(J) states the following:

"The person who land applies bulk sewage sludge shall develop the following information, shall retain the information for five years, and shall make the information available to the division upon request:

(1) A description of how the land application agronomic management requirements of rule 3745-40-04 of the Administrative Code are met for each site on which bulk sewage sludge is applied;

(2) For class B sewage sludge, a description of how the site restrictions of rule 3745-40-05 of the Administrative Code are met for each site on which bulk sewage sludge is applied;

(3) When applicable, a description of how the vector attraction reduction requirements in paragraphs (Q)(9) to (Q)(10) of rule 3745-40-05 of the Administrative Code are met for each site on which bulk sewage sludge is applied;

(4) The agronomic rate calculations used to determine the bulk sewage sludge loading rate in dry tons per acre for each site on which bulk sewage sludge is applied;

(5) The following certification statement signed by the person who land applies bulk sewage sludge:

"I certify, under penalty of law, that the information that will be used to determine compliance with the land application agronomic management requirements of rule 3745-40-04 of the Administrative Code was 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 there are significant penalties for false certification including the possibility of fine and imprisonment.";

(6) When applicable, the following certification statement signed by the person who land applies bulk sewage sludge:

"I certify, under penalty of law, that the information that will be used to determine compliance with the site restrictions in rule 3745-40-05 of the Administrative Code was 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 there are significant penalties for false certification including the possibility of fine and imprisonment..."

(7) When applicable, the following certification statement signed by the person who land applies bulk sewage sludge:

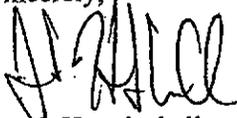
"I certify, under penalty of law, that the information that will be used to determine compliance with vector attraction reduction requirement (insert one of the vector attraction reduction requirements in paragraphs (Q)(9) to (Q)(10) of rule 3745-40-05 of the Administrative Code) was prepared under my direction and supervision in accordance with the system designed to ensure that qualified personnel properly gather and evaluate the information. I am aware that there are significant penalties for false certification including the possibility of fine and imprisonment."

At the time of our inspection, none of the above required records and certification statements were available for review.

The Village of Sugarcreek WWTP sewage sludge management program is currently in compliance with OAC 3745-40. However, if the Village of Sugarcreek wishes to resume land application in the future, the above noted recordkeeping violations will have to be addressed before land application resumes.

If you have any immediate questions concerning this letter, you may contact me (614) 644-2018 or by email at jacob.howdyshell@epa.state.oh.us.

Sincerely,



Jacob Howdyshell
Ohio EPA Division of Surface Water
Permits and Compliance Assistance Unit

Cc: Paul Novak, Manager, PCA Unit
Jennifer Witte, Ohio EPA SEDO
file



JACOB HOWDYSHEN
JENNIFER WITTE

Inspector: TIM CAMPBELL
Date of Inspection: 3/30/10

BIOSOLIDS GENERATOR INSPECTION

1. Contact Information

Treatment Works		Contractor	
Name: <u>JIM CAPPON</u>		Name: <u>MILLER</u>	
Title: <u>SUPERINTENDENT</u>		Contact:	
Phone: <u>(330) 852-4497</u>		Mailing Address:	
<u>sugarwrf@yahoo.com</u>		Phone:	
List Additional Persons Present:			

2. Inspection Letter Notification

Mailing Address (1)	Mailing Address (2)
Name:	Name:
Title:	Title:
Mailing Address: <u>410 S BROADWAY</u>	Mailing Address:

3. Facility Information

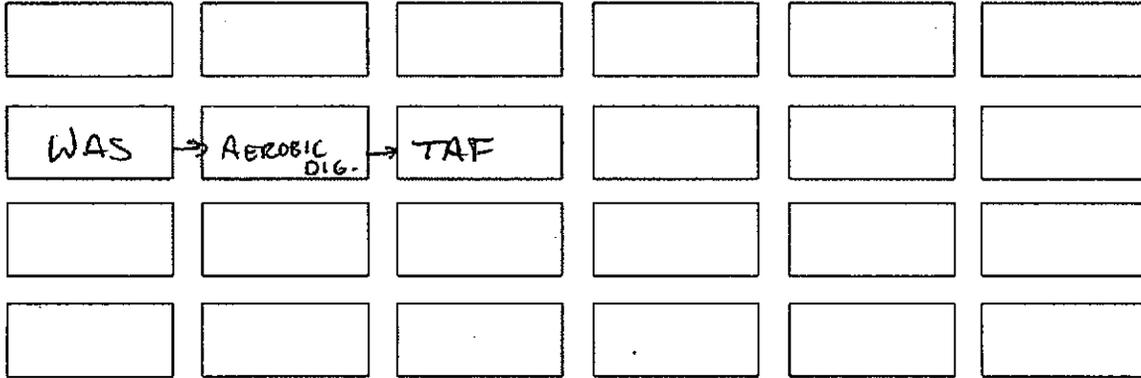
Average Daily Flow (MDG)	<u>0.230</u>
Biosolids Storage Capacity (Days)	<u>180</u>
Contracted Alternative / Contingency Disposal	<u>Haul to MILLERSBURG or STRASBURG</u>
Headworks Screening	Screen Size: <u>1/4"</u>
	Alternative:
Plans for Upgrades	<u>No</u>
Recent Maintenance Issues/Equipment Failures	<u>No</u>

NPDES Permit Verification	Station 581: Class B Biosolids	<input checked="" type="checkbox"/>
	Station 584: Exceptional Quality Biosolids	<input type="checkbox"/>
	Station 586: Landfill	<input type="checkbox"/>
	Station 588: Transfer to NPDES Permittee	<input checked="" type="checkbox"/>
	Station 589: PPG Lime Lakes	<input type="checkbox"/>
	SMP less than 5 years old	<input type="checkbox"/>
	Does the NPDES permit or SMP contain the appropriate 3745-40 language?	<input checked="" type="checkbox"/>

4. Sewage Sludge Treatment

Treatment Units	Quantity	Comments (Online/Offline and Capacity/Dimensions)
Aerobic Digesters	4	3 @ 200,000 TOTAL 1 @ 47,000
Anaerobic Digesters		
Belt Filter Press		
Holding Tanks		
Gravity Thickener		
Drying Beds		
Storage Pad		
Lagoon		
Centrifuge		
Dryer		
Other		
Comments:		

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



6. Operational Questions

Digester Operational Temperature	Digester Environment	Temperature
	Aerobic	N/A
	Anaerobic	
Dewatering Efficiency	Sample Location	Average % Solids
	Prior to Dewatering	
	After Dewatering	

7. Beneficial Use or Disposal

<input checked="" type="checkbox"/>	Beneficial Use	<input checked="" type="checkbox"/> Class B	<input type="checkbox"/> Exceptional Quality
<input checked="" type="checkbox"/>	Transfer to Another NPDES Permittee	Name of Permittee: MILLERSBURG/STRASBURG/CANTON	
<input type="checkbox"/>	Landfill	Name of Landfill:	
<input type="checkbox"/>	Incineration		
Comments:			

8. Pathogen Reduction Alternative

	Pathogen Reduction Alternative		Requirements
<input checked="" type="checkbox"/>	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).
<input type="checkbox"/>	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).
<input type="checkbox"/>	P-3	Air Drying	Sewage sludge is dried for a minimum of 90 days. The average ambient air temperature is greater than 0°C (32 °F) for at least 60 days within the 90 day period.
<input type="checkbox"/>	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).
<input type="checkbox"/>	P-5	Composting	
		<input type="checkbox"/> i. In vessel	The compost temperature is $\geq 40^{\circ}\text{C}$ (104°F) for 5 consecutive days. For four consecutive hours during the 5 day period, the compost temperature must $\geq 55^{\circ}\text{C}$ (131°F).
		<input type="checkbox"/> ii. Aerated static pile	The compost temperature is $\geq 40^{\circ}\text{C}$ (104°F) for 5 consecutive days. For 4 consecutive hours during the 5 day period, the compost temperature must $\geq 55^{\circ}\text{C}$ (131°F).
		<input type="checkbox"/> iii. Windrow	The compost temperature is $\geq 40^{\circ}\text{C}$ (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 $\geq 55^{\circ}\text{C}$ (131°F). The windrow shall be turned or mixed by machine during the 5 day period. The compost temperature shall be $\geq 40^{\circ}\text{C}$ (104°F) within 24 hours after turning or mixing.
<input type="checkbox"/>	P-6	Lime Treatment	The sewage sludge pH shall rise to twelve after two hours of contact.
<input type="checkbox"/>	P-7	Equivalent Process	Obtained an equivalency recommendation from USEPA's pathogen equivalency committee.
<input type="checkbox"/>	P-8	Time and Temperature	
		<input type="checkbox"/> i. $> 7\%$ solids	The sewage sludge temperature shall be $\geq 55^{\circ}\text{C}$ (131°F) for ≥ 20 minutes.
		<input type="checkbox"/> ii. $> 7\%$ and heated by warmed gases or an immiscible liquid	The sewage sludge temperature shall be $\geq 55^{\circ}\text{C}$ (131°F) for ≥ 15 seconds.
		<input type="checkbox"/> iii. $< 7\%$ solids	The sewage sludge temperature shall be $X^{\circ}\text{C}$ for ≥ 15 seconds, but ≤ 30 minutes.
		<input type="checkbox"/> iv. $< 7\%$ solids	The sewage sludge temperature is $\geq 50^{\circ}\text{C}$ (122°F) for ≥ 30 minutes.
<input type="checkbox"/>	P-9	High pH and High Temperature	The pH of the sewage sludge is ≥ 12 for at least 72 hours. The sewage sludge temperature is $\geq 52^{\circ}\text{C}$ (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 $\geq 50\%$.
<input type="checkbox"/>	P-10	Composting	

		<input type="checkbox"/> i. In-vessel	The compost temperature is $\geq 55^{\circ}\text{C}$ (131°F) for 72 hours.
		<input type="checkbox"/> ii. Aerated static pile	The compost temperature is $\geq 55^{\circ}\text{C}$ (131°F) for 72 hours.
		<input type="checkbox"/> iii. Windrow	The compost temperature is $\geq 55^{\circ}\text{C}$ (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 $\geq 55^{\circ}\text{C}$ (131°F) within 24 hours after each turning or mixing.
<input type="checkbox"/>	P-11	Heat Drying	Drying the sewage sludge to $\geq 90\%$ solids, where either the sewage sludge temperature $\geq 80^{\circ}\text{C}$ (176°F) or the wet bulb temperature of the gas in contact with the sewage sludge as the sewage sludge leaves the dryer $\geq 80^{\circ}\text{C}$ (176°F).
<input type="checkbox"/>	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).
<input type="checkbox"/>	P-13	Beta Ray Irradiation	Irradiated with beta rays from an accelerator at dosages of at least one megarad at room temperature.
<input type="checkbox"/>	P-14	Gamma Ray Irradiation	Irradiated with gamma rays from certain isotopes, such as ^{60}Co and ^{137}Cs , at dosages of at least one megarad at room temperature.
<input type="checkbox"/>	P-15	Pasteurization	The sewage sludge temperature will be $\geq 70^{\circ}\text{C}$ (158°F) for ≥ 30 minutes and tracked constantly.
<input type="checkbox"/>	P-16	Equivalent Process	Obtained an equivalency recommendation from USEPA's pathogen equivalency committee.

9. Vector Attraction Reduction Option

	Vector Attraction Reduction Option	Requirements
<input checked="" type="checkbox"/>	VAR-1 38% Volatile Solids Reduction	$\%VSR = \frac{VS_{in} - VS_{out}}{VS_{in} - (VS_{in} \times VS_{out})} \times 100$
<input type="checkbox"/>	VAR-2 Bench Scale Anaerobic Digestion	Digesting anaerobic sewage sludge in a bench scale unit for at 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 $\leq 17\%$.
<input type="checkbox"/>	VAR-3 Bench Scale Aerobic Digestion	Digesting a $\leq 2\%$ 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 $\leq 15\%$.
<input type="checkbox"/>	VAR-4 Specific Oxygen Uptake Rate	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).
<input type="checkbox"/>	VAR-5 Aerobic Process Time and	Sewage sludge shall be aerobically treated for ≥ 14

		Temperature Treatment	days. During that time, the sewage sludge temperature shall be $\geq 40^{\circ}\text{C}$ (104°F) and the average sewage sludge temperature shall be $\geq 45^{\circ}\text{C}$ (113°F).
<input type="checkbox"/>	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.
<input type="checkbox"/>	VAR-7	$\geq 75\%$ solids	The % solids that do not contain primary unstabilized solids, shall be $\geq 75\%$ prior to mixing with other materials.
<input type="checkbox"/>	VAR-8	$\geq 90\%$ solids	The % solids that contain primary unstabilized solids shall be $\geq 90\%$ prior to mixing with other materials.
<input type="checkbox"/>	VAR-9	Injection	Injected below the surface of the beneficial use site.
<input type="checkbox"/>	VAR-10	Immediate Incorporation	Incorporation into the soil within 6 hours.

10. Records Retention

Pathogen Reduction Alternative		Required Records	
P-1	Geometric Mean of Seven Fecal Coliform Samples	<input type="checkbox"/>	Documentation of stabilization via an actively mixed aerobic or anaerobic process or through lime stabilization
		<input type="checkbox"/>	Fecal coliform analytical results.
		<input type="checkbox"/>	The geometric mean calculations.
P-2	Aerobic Digestion	<input type="checkbox"/>	The mean cell residence time in each digester:
		<input type="checkbox"/>	Temperature records maintained during the mean cell residence time.
P-3	Air Drying	<input type="checkbox"/>	The type of drying bed media being used:
		<input type="checkbox"/>	The drying time (days) for each drying bed in use:
		<input type="checkbox"/>	The daily minimum temperature, for each of the ninety days.
P-4	Anaerobic Digestion	<input type="checkbox"/>	The mean cell residence time in each digester:
		<input type="checkbox"/>	Temperature records maintained during the mean cell residence time.
		<input type="checkbox"/>	The weight/volume and county of origin of all feedstocks, bulking agents and additives.
		<input type="checkbox"/>	List feedstocks:
P-5	Composting	<input type="checkbox"/>	A description of the composting method.
		<input type="checkbox"/>	Daily temperature records for each vessel/aerated static pile/windrow showing the compost temperature is $\geq 40^{\circ}\text{C}$ (104°F) for 5 consecutive days.

		<input type="checkbox"/>	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.
		<input type="checkbox"/>	Windrow Only -Records of the day and the time each windrow was turned or mixed . Average number of turnings:
		<input type="checkbox"/>	The weight/volume and county of origin of all feedstocks, bulking agents and additives
		<input type="checkbox"/>	List feedstocks:
P-6	Lime Treatment	<input type="checkbox"/>	A description of how the pH is monitored throughout the sludge and how the lime is mixed into the sludge.
		<input type="checkbox"/>	Records that of the pH once lime has been added.
		<input type="checkbox"/>	Records of the pH two hours after lime addition.
		<input type="checkbox"/>	Records of the amount (dry tons) of lime added.
P-7	Equivalent Process	<input type="checkbox"/>	Records as necessary to demonstrate the process equivalent to a process to significantly reduce pathogens.
P-8	Time and Temperature	<input type="checkbox"/>	Analytical results for density of fecal coliform (mpn/g) or the density of Salmonella sp. bacteria expressed as mpn/4g.
		<input type="checkbox"/>	The sewage sludge temperature:
		<input type="checkbox"/>	The duration, in days, hours, minutes and seconds, as applicable, that the temperature was maintained:
		<input type="checkbox"/>	Analytical results for % solids:
P-9	High pH and High Temperature	<input type="checkbox"/>	Analytical results for density of fecal coliform (mpn/g) or the density of Salmonella sp. bacteria expressed as mpn/4g.
		<input type="checkbox"/>	Records of pH at:
		<input type="checkbox"/>	i. Start up;
		<input type="checkbox"/>	ii. 24 hours;
		<input type="checkbox"/>	iii. 48 hours; and
		<input type="checkbox"/>	iv. 72 hours
		<input type="checkbox"/>	The hourly biosolids temperature for the required 12 hours.
		<input type="checkbox"/>	The % solids after air drying
		<input type="checkbox"/>	Records of the amount (dry tons) of alkaline material added.
		<input type="checkbox"/>	A narrative description of how pH and temperature are maintained throughout all of the biosolids.
P-10	Composting	<input type="checkbox"/>	Analytical results for density of fecal coliform (mpn/g) or the density of Salmonella sp. bacteria expressed as mpn/4g.
		<input type="checkbox"/>	A description of the composting method.

		<input type="checkbox"/>	The weight or volume and county of origin of all feedstocks, bulking agents and additives utilized in the composting process.
		<input type="checkbox"/>	List feedstocks:
		<input type="checkbox"/>	Records the temperature was maintained $\geq 55^{\circ}\text{C}$ (131°F) for:
		<input type="checkbox"/>	3 days for in-vessel/aerated static pile; or
		<input type="checkbox"/>	15 days for windrow.
		<input type="checkbox"/>	Windrow Only -Records of the day and the time each windrow was turned or mixed . Average number of turnings:
P-11	Heat Drying	<input type="checkbox"/>	Analytical results for density of fecal coliform (mpn/g) or the density of Salmonella sp. bacteria expressed as mpn/4g.
		<input type="checkbox"/>	The % solids of the dried sewage sludge.
		<input type="checkbox"/>	Records that the sewage sludge temperature / wet bulb temperature of exit gas is $\geq 80^{\circ}\text{C}$ (176°F).
P-12	Thermophilic Aerobic Digestion	<input type="checkbox"/>	Analytical results for density of fecal coliform (mpn/g) or the density of Salmonella sp. bacteria expressed as mpn/4g.
		<input type="checkbox"/>	The dissolved oxygen concentration in each digester.
		<input type="checkbox"/>	Records that the temperature was maintained at 55°C to 60°C (131°F to 140°F) in each digester
		<input type="checkbox"/>	Records documenting the mean cell residence time was met in each digester
P-13	Beta Ray Irradiation	<input type="checkbox"/>	Analytical results for density of fecal coliform (mpn/g) or the density of Salmonella sp. bacteria expressed as mpn/4g.
		<input type="checkbox"/>	The beta ray dosage.
		<input type="checkbox"/>	Records of the ambient room temperature.
P-14	Gamma Ray Irradiation	<input type="checkbox"/>	Analytical results for density of fecal coliform (mpn/g) or the density of Salmonella sp. bacteria expressed as mpn/4g.
		<input type="checkbox"/>	Documentation of the gamma ray isotope uses.
		<input type="checkbox"/>	The gamma ray dosage.
		<input type="checkbox"/>	Records of the ambient room temperature.
P-15	Pasteurization	<input type="checkbox"/>	Analytical results for density of fecal coliform (mpn/g) or the density of Salmonella sp. bacteria expressed as mpn/4g.
		<input type="checkbox"/>	Records documenting that the sewage sludge temperature was $\geq 70^{\circ}\text{C}$ (158°F) for ≥ 30 minutes.
P-16	Equivalent Process	<input type="checkbox"/>	Analytical results for density of fecal coliform (mpn/g) or the density of Salmonella sp. bacteria expressed as mpn/4g.
		<input type="checkbox"/>	Records as necessary to demonstrate the process

		equivalent to a process to significantly reduce pathogens.
Comments:		

Vector Attraction Reduction Option		Required Records	
VAR-1	38% Volatile Solids Reduction	<input type="checkbox"/>	Volatile solids concentration of:
		<input type="checkbox"/>	i. the raw sewage sludge; and
		<input type="checkbox"/>	ii. the final sewage sludge.
		<input type="checkbox"/>	The 38% volatile solids reduction calculation: $\%VSR = \frac{VS_{in} - VS_{out}}{VS_{in} - (VS_{in} \times VS_{out})} \times 100$
VAR-2	Bench Scale Anaerobic Digestion	<input type="checkbox"/>	A description of the bench scale digester.
		<input type="checkbox"/>	The time (days) that the sample was further digested in the bench scale digester.
		<input type="checkbox"/>	Daily temperature records.
		<input type="checkbox"/>	The volatile solids concentration of the sewage sludge:
		<input type="checkbox"/>	i. Before bench scale digestion; and
		<input type="checkbox"/>	ii. After the bench scale digestion.
VAR-3	Bench Scale Aerobic Digestion	<input type="checkbox"/>	A description of the bench scale digester.
		<input type="checkbox"/>	The time (days) that the sample was further digested in the bench scale digester.
		<input type="checkbox"/>	Daily temperature records.
		<input type="checkbox"/>	The volatile solids concentration of the sewage sludge:
		<input type="checkbox"/>	iii. Before bench scale digestion; and
		<input type="checkbox"/>	iv. After the bench scale digestion.
VAR-4	Specific Oxygen Uptake Rate (SOUR)	<input type="checkbox"/>	Dissolved oxygen readings for sewage sludge sample over fifteen minute intervals.
		<input type="checkbox"/>	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 $\Theta = 1.05$ if $T > 20$ degrees Celsius; or Where $\Theta = 1.07$ if $T < 20$ degrees Celsius)
		<input type="checkbox"/>	Total solids for the sewage sludge sample.
		<input type="checkbox"/>	The SOUR calculations.
VAR-5	Aerobic Process Time and Temperature Treatment	<input type="checkbox"/>	Records showing that the average temperature was $\geq 45^{\circ}\text{C}$ (113°F).
		<input type="checkbox"/>	A Record showing the minimum temperature was $\geq 40^{\circ}\text{C}$ (104°F) for 14 consecutive days.
VAR-6	Alkaline Treatment	<input type="checkbox"/>	A narrative description of how the pH was monitored

		<input type="checkbox"/>	throughout the material for the applicable time period.
		<input type="checkbox"/>	Records indicating how the pH was maintained:
		<input type="checkbox"/>	i. ≥ 12 for 2 hours; and
		<input type="checkbox"/>	ii. ≥ 11.5 for 24 hours.
		<input type="checkbox"/>	Records of the amount (dry tons) of alkaline material added.
VAR-7	$\geq 75\%$ solids	<input type="checkbox"/>	Results of % solids tests.
		<input type="checkbox"/>	Records showing the sewage sludge has been stabilized.
VAR-8	$\geq 90\%$ solids	<input type="checkbox"/>	Results of % solids tests.
VAR-9	Injection	<input type="checkbox"/>	Applier certification statement.
VAR-10	Immediate Incorporation	<input type="checkbox"/>	Applier certification statement.
Comments:			

Permittee	Record Requirements			
Exceptional Quality Biosolids	<input type="checkbox"/>	The following analytical results:		
	<input type="checkbox"/>	Arsenic	<input type="checkbox"/>	Cadmium
	<input type="checkbox"/>	Copper	<input type="checkbox"/>	Lead
	<input type="checkbox"/>	Mercury	<input type="checkbox"/>	Molybdenum
	<input type="checkbox"/>	Nickel	<input type="checkbox"/>	Selenium
	<input type="checkbox"/>	Zinc	<input type="checkbox"/>	Total Kjeldahl Nitrogen
	<input type="checkbox"/>	Ammonia Nitrogen	<input type="checkbox"/>	Total Phosphorus
	<input type="checkbox"/>	Total Potassium	<input type="checkbox"/>	Dioxin (if required)
	<input type="checkbox"/>	Certification Statement.		
	<input type="checkbox"/>	Standard Operating Procedure, including:		
<input type="checkbox"/>	i. Sample collection or monitoring locations;			
<input type="checkbox"/>	ii. The frequency at which sample collection or monitoring is to occur;			
<input type="checkbox"/>	iii. Sample collection or monitoring procedures;			
<input type="checkbox"/>	iv. Sample storage and preservation procedures;			
<input type="checkbox"/>	v. Sample or monitoring analysis procedures; and			
<input type="checkbox"/>	vi. Any calculations required for sample or monitoring analysis.			
<input type="checkbox"/>	Records showing that bulk exceptional quality biosolids were not stored ≥ 90 days at the beneficial use site.			
<input type="checkbox"/>	The following beneficial use site records:			
<input type="checkbox"/>	i. The soil pH for each beneficial use site;			
<input type="checkbox"/>	ii. The soil phosphorous levels for each beneficial use site;			
<input type="checkbox"/>	iii. The agronomic rate calculations for each beneficial use site;			
<input type="checkbox"/>	iv. Forecast/actual precipitation data; and			

	<input type="checkbox"/>	v. The monitoring records for all beneficial use sites with subsurface tile.
	<input type="checkbox"/>	A description detailing how the agronomic rate is met at each beneficial use site, including how the beneficial use application equipment is calibrated.
	<input type="checkbox"/>	When beneficial use of exceptional quality biosolids occurs on a beneficial use site:
	<input type="checkbox"/>	<ul style="list-style-type: none"> i. The date the bulk exceptional quality biosolids were beneficially used ; and ii. The quantity (dry tons) of exceptional quality biosolids that were beneficially used.
	<input type="checkbox"/>	If distributing exceptional quality biosolids, contact information for each person who receives the exceptional quality biosolids.

Comments:

Class B Biosolids	<input checked="" type="checkbox"/>	The following analytical results:																												
		<table border="1"> <tr> <td><input checked="" type="checkbox"/></td> <td>Arsenic</td> <td><input checked="" type="checkbox"/></td> <td>Cadmium</td> </tr> <tr> <td><input checked="" type="checkbox"/></td> <td>Copper</td> <td><input checked="" type="checkbox"/></td> <td>Lead</td> </tr> <tr> <td><input checked="" type="checkbox"/></td> <td>Mercury</td> <td><input checked="" type="checkbox"/></td> <td>Molybdenum</td> </tr> <tr> <td><input checked="" type="checkbox"/></td> <td>Nickel</td> <td><input checked="" type="checkbox"/></td> <td>Selenium</td> </tr> <tr> <td><input checked="" type="checkbox"/></td> <td>Zinc</td> <td><input checked="" type="checkbox"/></td> <td>Total Kjeldahl Nitrogen</td> </tr> <tr> <td><input checked="" type="checkbox"/></td> <td>Ammonia Nitrogen</td> <td><input checked="" type="checkbox"/></td> <td>Total Phosphorus</td> </tr> <tr> <td><input type="checkbox"/></td> <td>Total Potassium</td> <td><input type="checkbox"/></td> <td>Dioxin (if required)</td> </tr> </table>	<input checked="" type="checkbox"/>	Arsenic	<input checked="" type="checkbox"/>	Cadmium	<input checked="" type="checkbox"/>	Copper	<input checked="" type="checkbox"/>	Lead	<input checked="" type="checkbox"/>	Mercury	<input checked="" type="checkbox"/>	Molybdenum	<input checked="" type="checkbox"/>	Nickel	<input checked="" type="checkbox"/>	Selenium	<input checked="" type="checkbox"/>	Zinc	<input checked="" type="checkbox"/>	Total Kjeldahl Nitrogen	<input checked="" type="checkbox"/>	Ammonia Nitrogen	<input checked="" type="checkbox"/>	Total Phosphorus	<input type="checkbox"/>	Total Potassium	<input type="checkbox"/>	Dioxin (if required)
	<input checked="" type="checkbox"/>	Arsenic	<input checked="" type="checkbox"/>	Cadmium																										
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	<input checked="" type="checkbox"/>	Ammonia Nitrogen	<input checked="" type="checkbox"/>	Total Phosphorus																										
	<input type="checkbox"/>	Total Potassium	<input type="checkbox"/>	Dioxin (if required)																										
	<input type="checkbox"/>	Certification statement.																												
<input type="checkbox"/>	A copy of the beneficial user certification statement.																													
<input type="checkbox"/>	Standard Operating Procedure, including:																													
<input type="checkbox"/>	vii. Sample collection or monitoring locations;																													
<input type="checkbox"/>	viii. The frequency at which sample collection or monitoring is to occur;																													
<input type="checkbox"/>	ix. Sample collection or monitoring procedures;																													
<input type="checkbox"/>	x. Sample storage and preservation procedures;																													
<input type="checkbox"/>	xi. Sample or monitoring analysis procedures; and																													
<input type="checkbox"/>	xii. Any calculations required for sample or monitoring analysis.																													
<input type="checkbox"/>	An example of the notice and necessary information.																													
	<input checked="" type="checkbox"/>	Records of the following:																												
	<input checked="" type="checkbox"/>	<ul style="list-style-type: none"> i. The application for an authorization for a beneficial use site; and ii. The Ohio EPA beneficial use site authorization letter for each beneficial use site that is utilized for beneficial use. 																												
	<input checked="" type="checkbox"/>	Records showing that Class B biosolids were not stored																												

	≥90 days at the beneficial use site.
<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> N/A <input checked="" type="checkbox"/> N/A <input checked="" type="checkbox"/> N/A	<p>The following beneficial use site records:</p> <ul style="list-style-type: none"> i. The soil pH for each beneficial use site; ii. The soil phosphorous levels for each beneficial use site; iii. The agronomic rate calculations for each beneficial use site; iv. Forecast/actual precipitation data; v. The monitoring records for all beneficial use sites with subsurface tile drainage; and vi. The sign placement records for all authorized beneficial use sites.
<input type="checkbox"/>	A description detailing how the agronomic rate is met at each beneficial use site, including how the beneficial use application equipment is calibrated.
<input type="checkbox"/> <input checked="" type="checkbox"/> N/A <input type="checkbox"/>	<p>When beneficial use of class B biosolids occurs on a beneficial use site:</p> <ul style="list-style-type: none"> i. The date the class B biosolids were beneficially used ; and ii. The quantity (dry tons) of class B biosolids that were beneficially used.
<input checked="" type="checkbox"/> N/A	The total amount (dry tons) of biosolids beneficially used.
<input checked="" type="checkbox"/> N/A	The total amount of acreage on the beneficial use site where beneficial use of biosolids occurred.
<input checked="" type="checkbox"/> N/A	The quantity (pounds per acre) of plant available nitrogen, plant available phosphorus, and plant available potassium of the biosolids.
<input checked="" type="checkbox"/> N/A	<p>If performing VAR-9, a narrative description that contains the following:</p> <ul style="list-style-type: none"> i. The equipment utilized to inject the biosolids; and ii. 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.
<input type="checkbox"/> <input checked="" type="checkbox"/> N/A <input type="checkbox"/> <input type="checkbox"/>	<p>If performing VAR-10, a narrative description that contains the following:</p> <ul style="list-style-type: none"> i. The date and time the sewage sludge was delivered to the authorized beneficial use site; ii. The date and time Class B biosolids were incorporated into the soil of the authorized beneficial use site; iii. The equipment utilized to incorporate the biosolids; and iv. 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.

	<input type="checkbox"/>	If CPLR, complete the Class B record requirements checklist.
	<input type="checkbox"/>	If CPLR, maintain the location, by either street address or latitude and longitude, of each beneficial use site on which class B biosolids are beneficially used.
	<input type="checkbox"/>	If CPLR, The cumulative amount, in pounds per acre, of each metal that is beneficially used at each beneficial use site.
Comments:		

5 Years of Records:

Year	Metals	Nutrients	Total Solids	Pathogen Reduction	Vector Attraction Reduction	Certification Statement	PR/VAR Descriptions	NANI
09 1	N/A	N/A	N/A	N/A	N/A	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
08 2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
07 3	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
06 4	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
05 5	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:								

11. Monitoring Information

Where does biosolids sample collection occur?	Describe: OUT OF DIGESTERS		
At what frequencies are biosolids samples collected?	<input checked="" type="checkbox"/>	Annually	<input type="checkbox"/> Semi-Annually
	<input type="checkbox"/>	Quarterly	<input type="checkbox"/> Monthly
	<input type="checkbox"/>	Other:	
Does the treatment works utilize eDMR?	<input checked="" type="checkbox"/>	If yes, check box.	
Comments:			

12. Analytical Information

If treatment works is performing fecal coliform monitoring, are fecal coliform samples analyzed	<input type="checkbox"/>	If no, check box and describe current process:
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within six hours of collection?		
If treatment works beneficially used a CPLR biosolids, is the beneficial use site in compliance with Table 2 pollutant loading rate?	<input type="checkbox"/>	If no, check box and describe current process:
Does the treatment works perform in-house analyses?	<input type="checkbox"/>	If checked, detail the parameters that the treatment works performs: VS, TS
Does the treatment works utilize a contracted lab to perform analyses?	<input type="checkbox"/>	If checked, detail the parameters that the contracted lab performs: METALS, FECALS
Contract Lab: <u>REAM + HAEGER</u>		
Contact:		
Mailing Address:		
Phone:		
Comments:		

13. Inspection Summary

Does the treatment works have:	Appropriate headworks screening?	YES
	Adequate treatment unit redundancy?	YES
	A biosolids disposal/beneficial use contingency plan?	YES
	A biosolids sampling plant that includes: i. Appropriate sample location; and ii. Representative sample collection	No
	Adequate biosolids quality for beneficial use?	No
	Proper sample collection to ensure that	

	biosolids samples are representative?	YES
Comments:		

-GET SOME KIND OF RECEIPT FROM RECEIVING FACILITY