



State of Ohio Environmental Protection Agency

STREET ADDRESS:

Lazarus Government Center
50 W. Town St., Suite 700
Columbus, Ohio 43215

TELE: (614) 644-3020 FAX: (614) 644-3184
www.epa.state.oh.us

MAILING ADDRESS:

P.O. Box 1049
Columbus, OH 43216-1049



1PC0010020100205

HIGHLAND HILLSBORO STP

JACKSON, JOSHUA | 2010/02/05



State of Ohio Environmental Protection Agency

Southwest District Office

401 East Fifth Street
Dayton, Ohio 45402-2911

TELE: (937) 285-6357 FAX: (937) 285-6249
www.epa.state.oh.us

Ted Strickland, Governor
Lee Fisher, Lt. Governor
Chris Korleski, Director

February 5, 2010

Mayor & Council
City of Hillsboro
130 North High Street
Hillsboro, OH 45133

RE: Notice of Violation *Corresp.*
Hillsboro WWTW/Compliance Evaluation Inspection
NPDES Permit No. OH0020389/OEPA PERMIT NO. 1PC00100*ID

Ladies & Gentlemen:

On January 27, 2010, I conducted a NPDES Compliance Evaluation Inspection at the City of Hillsboro wastewater treatment works (WWTW). Brandon Leeth (ORC), Bob Creamer, Brian Williamson, Bryan Shumacher, and Randy Barr (Collections Chief) all represented the City during the inspection. The purpose of the inspection was to evaluate compliance with the terms and conditions of the NPDES Permit. A copy of the report is provided within.

As noted in the report, several areas received below "satisfactory" ratings; justifications for these ratings are noted as well. Please pay special attention to the "items requiring correction" shown in bold type; for there are compliance schedules associated with these items.

Thank you for your time extended during the inspection process. If you have any questions, please feel free to contact me by phone at (937) 285-6029 or by e-mail at joshua.jackson@epa.state.oh.us.

Respectfully,

Joshua Jackson
Environmental Specialist II
Division of Surface Water

Cc: Brandon Leeth, City of Hillsboro

Enclosures





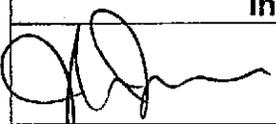
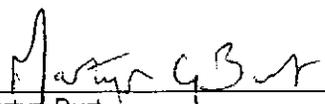
State of Ohio Environmental Protection Agency
Southwest District Office

NPDES Compliance Inspection Report

Section A: National Data System Coding					
Permit #	NPDES#	Month/Day/Year	Inspection Type	Inspector	Facility Type
1PC00100*ID	OH0020389	1/27/2010	C	S	11

Section B: Facility Data		
Name and Location of Facility Inspected	Entry Time	Permit Effective Date
City of Hillsboro WWTW 1520 North High Street Hillsboro, Highland County		9/1/2009
	Exit Time	Permit Expiration Date
		7/31/2012
Name(s) and Title(s) of On-Site Representatives		Phone Number(s)
Brandon Leeth, WW Supt. (ORC)		937-393-4831
Bob Creamer, Brian Williamson - Class III Operators		
Randy Barr, Collection System Supt.		937-393-2233
Name, Address and Title of Responsible Official		Phone Number
Ralph Holt, Village Administrator City of Hillsboro 130 North High Street Hillsboro, OH 45133		937-393-5219

Section C: Areas Evaluated During Inspection					
(S = Satisfactory, M = Marginal, U = Unsatisfactory, N = Not Evaluated)					
S	Permit	M	Flow Measurement	N	Pretreatment
S	Records/Reports	U	Laboratory	M	Compliance Schedule
S	Operations & Maintenance	S	Effluent/Receiving Waters	S	Self-Monitoring Program
S	Facility Site Review	U	Sludge Storage/Disposal	N	Other
S	Collection System				

Section D: Summary of Findings (Attach additional sheets if necessary)	
See Attached Report.	
Inspector	Reviewer
	
2-5-10	2/5/10
Date	Date
Joshua Jackson Division of Surface Water Southwest District Office	Martyr Burt Compliance & Enforcement Supervisor Division of Surface Water Southwest District Office

Sections E thru K: Complete on all inspections as appropriate
Y – Yes, N – No, N/A – Not Applicable, N/E – Not Evaluated

Section E: Permit Verification

Inspection observations verify the permit

- (a) Correct name and mailing address of permittee Y
- (b) Flows and loadings conform with NPDES permit..... Y
- (c) Treatment processes are as described in permit application... Y
- (d) All discharges are permitted..... Y
- (e) Number and location of discharge points are as described
in permit..... Y
- (f) Storm water discharges properly permitted..... Y

Comments/Status:

It appeared that all contaminated storm water from the site (such as near the sludge drying beds) were directed to the head of the WWTW. Hillsboro is intending to submit a "No Exposure Certification" form.

Section F: Compliance

- (a) Any significant violations since the last inspection..... Y
- (b) Appropriate Non-compliance notification of violations..... Y
- (c) Permittee is taking actions to resolve violations..... Y
- (d) Permittee has a compliance schedule..... Y
- (e) Compliance schedule contained in...NPDES Permit Compliance Schedule
- (f) Permittee is in compliance with schedule..... N
- (g) Has biomonitoring shown toxicity in discharge since last inspection N

Comments/Status:

Hillsboro is behind schedule on construction start-up (WWTW upgrade) but is expected to complete construction on schedule.
Hillsboro operations staff are interested in changing the Village ordinance to provide more enforcement capabilities concerning mercury reduction in the collection system (filters at dentist offices)

Section G: Operation & Maintenance

Treatment Works:

Treatment facility properly operated and maintained

(a) Standby power available.....generator or dual feed Y

i. What does the back-up power source operate.....

Operates all WW components. However, most components need to be switched over manually during a power outage. The upgrade will provide a new generator and the switchover is automatic.

ii. How often is the generator tested under load.....

1/year under load. It is started every Monday for 3 minutes.

(b) Which components have an alarm system available for power or equipment failures.....

An autodialer system is set up for a power outage at the WWTW. Staff are also notified when WW is filling the first EQ tank.

(c) All treatment units in service other than backup units..... N

(d) What method is used for scheduling routine & preventative maintenance (calendar, software, etc.).....

Calendar.

(e) Any major equipment breakdown since last inspection..... N

(f) Operation and maintenance manual provided and maintained..... Y

(g) Any plant bypasses since last inspection..... Y

(h) Any plant upsets since last inspection..... N

Comments/Status:

One of the comminutors was down at the time of the inspection, which means that only one influent channel is being utilized. It is expected that the comminator will be repaired and on-line by the end of February or the beginning of March. During this time, only one influent channel is being utilized, which means the possibility of diverting flow to the EQ basins is increased. This also increases the chances of WWTW bypassing.

Section G: Operation & Maintenance con't

Record Keeping/Operator of Record:

- (a) Wastewater Treatment Works classification (OAC 3745-7)..... III
- (b) Operator of Record holds unexpired license of class required by Permit..... Y
- (c) Copy of certificate of Operator of Record displayed on-site..... Y
- (d) Has the Operator of Record submitted an ORC Notification form.. Y
- (e) Minimum operator staffing requirements fulfilled (OAC 3745-7).... Y
- (f) If a Staffing Reduction plan has been approved, are the stipulations of the plan being met..... Y
- (g) Operator of Record log book provided..... Y
- (h) Format of log book (e.g. computer log, hard bound book)

Hard bound.
- (i) Log book kept onsite (in an area protected from weather)..... Y
- (j) Log book contains the following:
 - I. Identification of treatment works..... Y
 - II. Date/times of arrival/departure for Operator of Record and any other operator required by OAC 3745-7..... Y
 - iii. Daily record of operator and maintenance activities (including preventative maintenance, repairs and request for repairs, process control test results, etc.)..... Y
 - iv. Laboratory results (unless documented on bench sheets)... Y
 - v. Identification of person making entries..... Y
- (k) Has the Operator of Record submitted written notifications to the permittee, Ohio EPA and, if applicable, any local environmental agencies when a collection system overflow, treatment plant bypass or effluent limit violation has occurred..... Y

Comments/Status:

Operator of Record maintains a separate log book from remaining staff. Both books were correctly logging facility time and activities. I recommended that both books be kept in the same location so that they could be easily found in the event of a surprise inspection during times when the facility is not normally staffed.

Section G: Operation & Maintenance con't

Collection System:

- (a) Are there pump stations in the collection system..... Y
 - i. How many publicly-owned pump stations equipped with permanent standby power or equivalent.....5
 - ii. How many pump stations have telemetered alarms.....7
 - iii. How many pump stations have operable alarms.....7

- (b) Any chronic collection system overflows since last inspection..... N
- (c) Regulatory agency notified of all overflows..... N/A
- (d) Are there CSOs in the collection system..... N
if so, what is the LTCP status.....
- (e) How are CSOs monitored (chalk, block, level sensor, etc.).....
- (f) Portable pumps available for collection system maintenance..... Y
- (g) RDII Program established and active..... Y
- (h) Any WIB complaint received since last inspection..... N
- (i) Is there a WIB response plan..... N
- (j) Is any portion of the collection system at or near dry weather capacity..... N

Comments/Status:

There are currently 5 pump stations with back-up power. The City has budgetted to outfit the remaining 2 this fiscal year.

Section H: Sludge Management

- (a) Method of Sludge Disposal... Land Application
 Haul to Another NPDES Permittee
 Haul to a Mixed Solid Waste Landfill

*if one of the selected methods is land application, complete applicable charts.

Class B Sewage Sludge (monitoring station 581)

Pathogen Reduction Alternative	84370 Vector Attraction Reduction Options									
	Option 1 -38% Volatile Solids Reduction	Option 2 -Anaerobic Bench Scale Analysis	Option 3 - Aerobic Bench Scale Analysis	Option 4 - Specific Oxygen Uptake Rate	Option 5 - Aerobic Time and Temperature	Option 6 - Alkali Addition	Option 7 - >75% Percent Solids without Unstabilized	Option 8 - >75% Percent Solids with Unstabilized	Option 9 - Land Injection	Option 10 - Immediate Incorporation
Alternative 1 - Geometric Mean of Seven Fecal Samples (84369)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- (b) Has amount of sludge generated changed significantly since the last inspection..... N
- (c) How much sludge storage is provided at the plant.....
- (d) Records kept in accordance with State and Federal law (5 years according to OAC 3745-40-06)..... Y
- (e) Any complaints received in last year regarding sludge..... Y
- (f) 5/8" screen at headworks for facilities that land apply sludge..... N
- (g) Are sludge application sites inspected to verify compliance with NPDES permit..... Y
- (h) Is a contractor used for sludge disposal..... N
 If so, what is the name of the contractor.....

Comments/Status:

This facility has comminutors at the headworks. These will be replaced with fine screens when the WWTW is upgraded.

Section I: Self-Monitoring Program

Flow Measurement:

- (a) Primary/Secondary flow measuring devices (e.g. weir with ultrasonic level sensor):
ultrasonic with v-notch weir
- (b) Flow meter calibrated annually Y
(Date of last calibration: 4/1/2009)
- (c) 24-hour recording instruments operated and maintained..... Y
- (d) Flow measurement equipment adequate to handle full range of flows..... Y
- (e) All discharged flow is measured..... Y

Comments/Status:

The influent magmeter and the effluent flow meter are typically far apart in daily flow values (even on days when there is no sludge wasting or diversion to the equalization basins). WWTW staff believe the effluent meter may not be recording accurately even though this meter was installed last year. They have been utilizing the influent and effluent meter readings to record daily discharge flows (utilizing the highest reading of the two meters). A new effluent meter/channel will be part of the WWTW upgrade.

Section I: Self-Monitoring Program (con't)

Sampling:

- (a) Sampling location(s) are as specified by permit..... Y
- (b) Parameters and sampling frequency agree with permit..... Y
- (c) Permittee uses required sampling method..... Y
(see GLC page)
- (d) Monitoring records (i.e., flow, pH, DO) maintained for a minimum of three years including all original strip chart recordings (i.e., continuous monitoring instrumentation, calibration and maintenance records)..... Y

Comments/Status:

Section I: Self-Monitoring Program (con't)

Laboratory:

General

- (a) Does the Quality Assurance Manual contain written Standard Operating Procedures (SOP's) for all analysis performed onsite..... N
- (b) Do SOP's include the following if applicable..... N
- Title
 - Scope and Application
 - Summary
 - Sample Handling and Preservation
 - Interferences
 - Apparatus and Materials
 - Reagents
 - Procedure
 - Calculations
 - Quality Control
 - Maintenance
 - Corrective Action
 - Reference (Parent Method)

Note: Standard Methods 1020A establishes that "Quality assurance (QA) is the definitive program for laboratory operation that specifies the measure required to produce defensible data of known precision and accuracy. Standard operating procedures are to be used in the laboratory in sufficient detail that a competent analyst unfamiliar with the method can conduct a reliable review and/or obtain acceptable results." SOPs should be developed for each analytical procedure.

- (c) EPA approved analytical testing procedures used (40 CFR 136.3).. N
- (d) If alternate analytical procedures are used, proper approval has been obtained..... N/A
- (e) Analyses being performed more frequently than required by permit. Y
- (f) If (e) is yes, are results in permittee's self-monitoring report..... Y
- (g) Satisfactory calibration and maintenance of instruments/equipment. N (see score from GLC page)
- (h) Commercial laboratory used..... Y
Parameters analyzed by commercial lab: all but pH, temp. and DO.

Lab name: Belmont Labs

Discharge Monitoring Report Quality Assurance (DMRQA)

- (a) Participation in latest USEPA quality assurance performance sampling..... Y
Date: August 2009
- (b) Were any parameters "Unsatisfactory"..... N
- (c) Reasons for "Unsatisfactory" parameters.....

Comments/Status:

Section J: Effluent/Receiving Water Observations

Outfall # 001

Outfall Description: effluent was clear with minimal foam

Receiving Stream: Clear Creek

Receiving Stream Description: Large amount of sedimentation from upstream erosion.

Comments/Status:

Appropriate outfall sign was posted.

Section K: Multimedia Observations

- (a) Are there indications of sloppy housekeeping or poor maintenance in work and storage areas or laboratories..... N
- (b) Do you notice staining or discoloration of soils, pavement or floors.. N
- (c) Do you notice distressed (unhealthy, discolored, dead) vegetation.. N
- (d) Do you see unidentified dark smoke or dust clouds coming from sources other than smokestacks..... N
- (e) Do you notice any unusual odors or strong chemical smells..... N
- (f) Do you see any open or unmarked drums, unsecured liquids, or damaged containment facilities..... N

If any of the above are observed, ask the following questions:

- (1) What is the cause of the condition?
- (2) Is the observed condition or source a waste product?
- (3) Where is the suspected contaminant normally disposed?
- (4) Is this disposal permitted?
- (5) How long has the condition existed and when did it begin?

Comments/Status:

Inspection Findings

The Hillsboro wastewater treatment works (WWTW) is designed to treat and discharge an average daily flow of 1.2 million gallons/day (MGD). A review of the discharge monitoring reports submitted by the City from January – December 2009, shows an average daily discharge flow of 1.32 MGD. This same review revealed the following effluent limit violations:

EFFLUENT LIMIT VIOLATIONS

(Period of Review: January 2009 – December 2009)

7D = Weekly 30D = Monthly 1D = Daily
 Conc. = Concentration (mg/l) Qty.= Quantity (Kg/Day)

Reporting Period	Parameter	Limit Type	Limit	Reported Value
April 2009	Mercury, Total (Low Level)	30D Qty	0.00008	.00015
April 2009	pH, Minimum	1D Conc	6.5	6.4
July 2009	Phosphorus, Total (P)	30D Conc	1.0	1.22675
July 2009	Phosphorus, Total (P)	7D Conc	1.5	4.67
July 2009	Phosphorus, Total (P)	7D Qty	6.8	15.9790
August 2009	Mercury, Total (Low Level)	30D Conc	18	22.615
August 2009	Mercury, Total (Low Level)	30D Qty	0.00008	.00016
September 2009	Phosphorus, Total (P)	7D Conc	1.5	3.01
September 2009	Phosphorus, Total (P)	7D Qty	6.8	10.1054
December 2009	Mercury, Total (Low Level)	30D Conc	18	39.34
December 2009	Mercury, Total (Low Level)	30D Qty	0.00008	.0003

WWTW staff discussed the need to tighten ordinances pertaining to pollution prevention (mercury) with the sewage collection system. Staff have already inspected numerous facilities within the City, including dentist offices and schools, and have identified at least one dentist office that was not using mercury filters.

At this point, the City is in "Significant Non-Compliance" for violating mercury effluent limits within the NPDES permit. The City must submit a letter to Ohio EPA outlining what action will be taken to further reduce mercury concentrations in the WWTW influent. The letter should provide a schedule for passing City ordinances that enforce mercury best management practices at dentist offices, schools, and health care facilities (at a minimum); as well as continuing the inspection schedule. The letter shall be submitted to this office no later than March 1, 2010.

WWTW Upgrade

Ohio EPA has approved Permit to Install #623396 for the upgrade/treatment expansion of the Hillsboro WWTW on July 22, 2009. It is anticipated that construction will initiate on March 1, 2010. This is in violation of the NPDES

permit compliance schedule, which requires construction to commence on December 1, 2009. For this reason, a rating of "Marginal" was given for the "Compliance Schedule" section of this report. City representatives do, however, anticipate that construction will be completed on schedule. The upgrade/treatment expansion will include the following salient features:

- Expand the treatment capacity to 1.5 MGD with Peak Hydraulic of 7.0 MGD.
- (2) mechanical bar screens with ¼"-opening rated at 11 MGD each
- (1) grit removal system rated at 7.0 MGD
- (3) additional vertical loop reactor tanks
- (2) additional secondary clarifiers
- (4) influent pumps rated at 2.33 MGD each
- (3) equalization pumps rated at 2.0 MGD each
- (1) equalization tank with a volume of 1.33 million gallons.
- (1) UV disinfection channel rated at 7.0 MGD
- (1) post aeration tank

The main purpose of the improvements is to eliminate bypassing of secondary treatment. However, additional capacity will accommodate some future growth within the City.

Items Noted During the Inspection

1. The influent sample refrigerator was not equipped with a thermometer (immersed in a water bath) to ensure the appropriate holding temperature was achieved (<4°C). **These units should have "chamber thermometers" (where the thermometer is immersed in water without touching the sides of the bottle) to verify the appropriate holding temperatures are maintained on sampling days. Temperature readings for each of the refrigeration units should also be documented on sampling days (at the beginning and end of the 24-hour sampling period) and kept in a logbook. Protocol should be corrected immediately.**
2. The mixed liquor for the vertical loop reactors was light chocolate brown in color with no objectionable odor.
3. The surface of the secondary clarifiers did have some non-putrescible material but none was observed in the effluent trough. There also was some algae build-up around the baffles. A small amount of solids was observed in the clarifier effluent.
4. The current pH meter is not an approved instrument, for this reason a rating of "Unsatisfactory" was given for the "Laboratory" section of this report. During telephone follow-up after the inspection, WWTW staff notified Ohio EPA that a new "USEPA-approved" meter was purchased.
5. A National Institute of Standards & Technology (NIST) traceable thermometer must be utilized to calibrate thermometers used within the

Permit # : 1PC00100*ID
NPDES # : OH0020389

WWTW for the purposes of NPDES and QA monitoring. During telephone follow-up after the inspection, WWTW staff notified Ohio EPA that an NIST traceable thermometer was purchased.

Rain-Derived Infiltration & Inflow (RDII) Program

In 2009, the City did not have any overflows from the South lift station, which had been a known sanitary sewer overflow point in the collection system for several years. There have been several efforts made by the city to eliminate this overflow point such as upgrading the South lift station with a 650,000-gallon equalization basin in 2005 and this past year the City just completed a project that replaced 6,217 lineal feet of corroded sewers (including 28 manholes).

In a separate area, the City installed a relief sewer for the Northwest Interceptor. This project will provide service to the remaining pocket (~4 homes) of the City that are not presently connected to sanitary sewers. It also has freed up some wet weather capacity in Northwest interceptor.

This coming year the City plans on confronting the tough issue of private RDII sources into public sewer system, such as: Failing homeowner laterals, sump pumps/basement drains, driveway drains and downspout connections. Letters notifying residents on the upcoming inspections were mailed out in August of 2009. The City plans to begin work in the South lift station sewershed this year.

As a change in protocol, the City will be installing PAMREX manhole ring/lids whenever a street repaving project occurs. This product claims to reduce the level of infiltration allowed by traditional manhole lids.

It is obvious that much has been done the in last 4 years in an effort to initiate and implement an RDII program. With the City investing in a new treatment works designed for a 20-year lifespan/beyond, having an aggressive, ongoing RDII program will go a long way towards protecting that investment.

Ohio EPA encourages the City to continue work on the sewage collection system in the upcoming years and document these activities.

Quality Assurance & Standard Operating Procedures

The foundation of the NPDES permitting program is the reliability of data "self-reported" by wastewater dischargers under permit. Part III, 3., of the City's NPDES permit requires "All wastewater treatment works shall be operated in a manner consistent with the following: At all times, the permittee shall maintain in good working order and operate as efficiently as possible all treatment or control facilities or systems installed or used by the permittee necessary to achieve compliance with the terms and conditions of this permit. *Proper operation and*

maintenance also includes adequate laboratory controls and appropriate quality assurance procedures... Part III, 5., goes on to say, "Test procedures for the analysis of pollutants shall conform to regulation 40 CFR 136... The permittee shall periodically calibrate and perform maintenance procedures on all monitoring and analytical instrumentation at intervals to insure accuracy of measurements."

The federal regulatory benchmark for all water and wastewater sampling/laboratory procedures is 40 CFR 136. This rule lists acceptable sampling and laboratory procedures published in "Standard Methods for the Examination of Water and Wastewater" (Standard Methods) among other resources such as the American Society for Testing and Materials (ASTM). Standard Methods is a comprehensive reference widely used throughout the industry and is cooperatively published by the American Water Works Association, Water Environment Federation and the American Public Health Association.

Standard Methods 1020A establishes that "Quality assurance (QA) is the definitive program for laboratory operation that specifies the measure required to produce defensible data of known precision and accuracy". *Without a QA program, the City is without defensible data showing compliance with the NPDES permit.* Standard Methods goes on to require the inclusion of Standard Operating Procedures (SOP) for each analytical method within the QA manual. The SOP should include the following applicable categories:

- Title
- Scope and Application
- Summary
- Sample Handling and Preservation
- Interferences
- Apparatus and Materials
- Reagents
- Procedure
- Calculations
- Quality Control (calibration)
- Maintenance
- Corrective Action
- Reference (Parent Method)

During the inspection, WWTW staff was given example SOPs and/or sections of Standard Methods for every analytical method performed at the WWTW. **It is expected that the City of Hillsboro develop SOPs for the following analytical procedures (at a minimum) by no later than May 1, 2010: pH, temperature, dissolved oxygen and sample collection. Each of the SOPs should comply with the analytical methods outlined in Standard Methods.**

If the City has the resources, Ohio EPA encourages expansion of the current testing program to include additional analytical methods (e.g. suspended solids, CBOD5, etc.). In the long term, this could save the City laboratory testing fees and give operations staff more of an "ownership" role in the WWTW monitoring & sampling program. If the City does expand the scope of in-house testing, SOPs will need to be developed for the additional procedures. Contact Ohio EPA Southwest District Office for additional information if needed.

Effluent Flow Monitoring

As mentioned earlier in the report, there is a large discrepancy between the daily discharge values reported by the effluent meter (level sensor with v-notch weir) versus the influent magnetic meter. WWTW staff believes that improper installation of the v-notch weir may be affecting the long-term performance (it was installed three years ago). The City will be installing a new effluent meter/channel as part of the WWTW upgrade (to be completed by June 1, 2012).

Accurate discharge flow monitoring is one of the foundational requirements of the NPDES permitting program; pollutant loading-based limitations are discharge flow driven, as are waste load allocations to meet Ohio water quality standards. Therefore, it is paramount that the City report accurate and defensible data to Ohio EPA.

To rectify this issue, the City must bring in a third-party consultant to troubleshoot the problem and implement an acceptable short-term solution by no later than May 1, 2010.

Biosolids Program

During the inspection several deficiencies within the City's biosolids program were noted. As a result, the "Sludge storage/disposal" section of this report was given an "Unsatisfactory" rating and Jacob Howdysshell (Ohio EPA biosolids coordinator) will perform a follow-up inspection on February 10, 2010, with the specific focus of biosolids handling. Some of the deficiencies were as follows:

1. Ohio Administrative Code (OAC) 3745-40-05, requires a permittee to meet a "Pathogen Reduction" alternative prior to the land application of any biosolids. The City has not performed any required testing to show that this requirement is being met.
2. OAC 3745-40-05, requires a permittee to meet a "Vector Attraction Reduction" alternative prior to the land application of biosolids. The City has chosen alternative one as the preferred method, which is "the mass of volatile solids in the sewage sludge must be reduce by a minimum of 38%". City personnel admitted that some instances they did not meet this requirement but land applied the biosolids anyway. In the future, the City plans on utilizing a back-up "VAR" alternative of incorporating the biosolids within 6 hours of application to the land if the volatile solids reduction alternative is not met.
3. Currently, the City land applies to a 22-acre field. At the time of the inspection the City did not have any results of soil tests for that field. OAC 3745-40-06(E), states "For authorized sites, the frequency of monitoring for soil pH and soil phosphorus level (Bray-Kurtz P1 extraction or Mehlich

extraction) shall be such that the most recent results are not more than two years old at the time of the bulk sewage sludge land application." Without this information, the City is unable to determine if the soil pH and/or phosphorus levels have drifted out of acceptable ranges (as specified in the rule).

4. According to WWTW staff, crops have never been planted/harvested on the application field. OAC 3745-40-04(D), states "Bulk sewage sludge shall be land applied at a rate that is equal to or less than the agronomic rate..." If no crops are planted/harvested on this field, biosolids are not being applied at agronomic rates.

*After the inspection, WWTW staff followed up with Ohio EPA in numerous conversations in an effort to correct biosolids program deficiencies. More follow-up will occur once Mr. Howdysshell completes the biosolids program inspection.