



**Environmental
Protection Agency**

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



1PD0001520070928

GREENE XENIA FORD ROAD STP

JACKSON, JOSHUA | 2007/09/28



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
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September 26, 2007

City of Xenia
Attn: Mr. Kenneth Johnson
101 North Detroit Street
Xenia, OH 45385

- Cor. 250

**RE: City of Xenia Ford Road WWTW/Compliance Evaluation Inspection Report
NPDES Permit No. OH0028193/OEPA PERMIT NO. 1PD00015*JD**

Dear Mr. Johnson:

On September 12, 2007, Michelle Waller and I conducted an NPDES Compliance Evaluation Inspection at the City of Xenia Ford Road wastewater treatment works (WWTW). Jason Tincu and Eddie Walker (representatives of the City) were present during the inspection. The purpose of the inspection was to evaluate compliance with the terms and conditions of the NPDES Permit.

A copy of Mr. Jackson's report on the inspection is enclosed. All areas within the review received "Satisfactory" ratings. However, please pay special attention to the discussion of on-site sludge storage located within the report.

Thank you and your staff for the 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: Jason Tincu, City of Xenia (w/report)

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
1PD00015*JD	OH0028193	9/12/2007	C	S	1

Section B: Facility Data		
Name and Location of Facility Inspected	Entry Time	Permit Effective Date
City of Xenia Ford Road WWTW 779 Ford Road Xenia, Greene County	10:00 a.m.	5/1/2003
	Exit Time	Permit Expiration Date
	12:00 p.m.	1/31/2008
Name(s) and Title(s) of On-Site Representatives	Phone Number(s)	
Jason Tincu, Wastewater Supt. Eddie Walker, Operator	937-376-7271	
Name, Address and Title of Responsible Official	Phone Number	
City of Xenia Attn: Mr. Kenneth Johnson (City Manager) 101 North Detroit Street Xenia, OH 45385	937-376-7230	

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

Section D: Summary of Findings (Attach additional sheets if necessary)			
See Attached Report.			
Inspector		Reviewer	
9-26-07		9/28/07	
Date		Date	
Joshua Jackson Division of Surface Water Southwest District Office		Martyn Burt Compliance & Enforcement Supervisor Division of Surface Water Southwest District Office	



Permit #: 1PD00015*JD
NPDES #: OH0028193

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) Correct name and location of receiving waters..... Y
- (c) Product(s) and production rates conform with permit application (Industries)..... Y
- (d) Flows and loadings conform with NPDES permit..... Y
- (e) Treatment processes are as described in permit application... Y
- (f) New treatment process(es) added since last inspection..... Y
- (g) Notification given to State of new, different or increased discharges..... N/A
- (h) All discharges are permitted..... Y
- (i) Number and location of discharge points are as described in permit..... Y

Comments/Status:

Section E: Permit Verification

- (a) Any significant violations since the last inspection..... N
- (b) Permittee is taking actions to resolve violations..... N/A
- (c) Permittee has a compliance schedule..... Y
- (d) Compliance schedule contained in
- (e) Permittee is meeting compliance schedule..... Y

Comments/Status:

Mr. Tincu stated that the City will meet the deadline of November 1, 2007, for submittal of a General Plan to meet Phosphorus TMDL standards.



Section G: Operation & Maintenance

Treatment Works:

Treatment facility properly operated and maintained

- (a) Standby power available.....generator or dual feed Y
- (b) Adequate alarm system available for power or equipment failures.. Y
- (c) All treatment units in service other than backup units..... Y
- (d) Operator holds unexpired license of class required by permit..... Y
Class: IV
- (f) Routine and preventative maintenance schedule/performed
on time..... N/E
- (g) Any major equipment breakdown since last inspection..... N
- (h) Operation and maintenance manual provided and maintained..... N/E
- (i) Any plant bypasses since last inspection..... N
- (j) Regulatory agency notified of bypasses..... N/A
On MORs and/or Spill Hotline (1-800-282-9378)
- (k) Any hydraulic and/or organic overloads since last inspection..... Y

Collection System:

- (a) Percent combined system: 0 %
- (b) Any collection system overflows since last inspection..... Y
(CSO and/or SSO)
- (c) Regulatory agency notified of overflows (SSOs)..... Y
- (d) CSO O&M plan provided and implemented..... N/A
- (e) CSOs monitored and reported in accordance with permit..... N/A
- (f) Portable pumps used to relieve system..... N
- (g) Lift station alarms provided and maintained..... Y
- (h) Are lift stations equipped with permanent standby power
or equivalent..... Y
- (i) Is there an inflow/infiltration problem (separate sewer system),
or were there any major repairs to collection system since
last inspection..... Y
- (j) Any complaints received since last inspection of basement flooding Y
- (k) Are any portions of the sewer system at or near capacity..... Y

Comments/Status:

10 SSO occurrences reported within the last year.
3 Lift Stations all equipped with telemetered alarms.
Excessive I&I is tributary to the Garcia Pump Station. The City is seeking to perform residential inspections for sump pumps in the Wilberforce area. On occasion (during heavy rains) the City has utilized a vac truck because the existing pumps could not keep up with the influent flow rates.



Section H: Sludge Management

- (a) Sludge management plan (SMP)
Approval date: 7/24/2002 Approval #: 05-422PW Not submitted N/A
- (b) Sludge management plan current..... Y
- (c) Sludge adequately disposed..... Y
(Method:Land application)
- (d) If sludge is incinerated, where is ash disposed of
- (e) Is sludge disposal contracted..... Y
(Name:Synagro)
- (f) Has amount of sludge generated changed significantly since
last inspection..... N
- (g) Adequate sludge storage provided at plant..... Y
- (h) Land application sites monitored and inspected per SMP..... N/E
- (i) Records kept in accordance with State and Federal law..... N/E
- (j) Any complaints received in last year regarding sludge..... N/E
- (k) Is sludge adequately processed (digestion, pathogen control)..... N/E

Comments/Status:

Sludge from the Xenia Gladly Run WWTW is hauled to the Ford Road WWTW for dewatering/lime stabilizing and disposal.
The Ford Road WWTW does not have a covered area for storage of dewatered/lime stabilized sludge. It is clear the City has greatly invested in the sludge dewatering/lime stabilization process; so it may benefit the City to keep the biosolids product dry while it is staged before hauling for land application (especially during inclement weather). As the amount of solids generated by both WWTWs increases over time, a covered storage building would also allow for more operator flexibility in efforts to achieve compliance with discharge limits (removal of phosphorus-laden solids from the waste stream).

Section I: Self-Monitoring Program

Flow Measurement:

- (a) Primary flow measuring device operated and maintained..... Y
Type of device: Ultrasonic & Parshall flume Ultrasonic & Weir Weir
Calculated from influent Other (Specify:magmeter on influent)
- (b) Calibration frequency adequate Y
(Date of last calibration: 7/1/2007)
- (c) Secondary instruments operated and maintained..... Y
- (d) Flow measurement equipment adequate to handle full range
of flows..... Y
- (e) Actual flow discharged is measured..... Y
- (f) Flow measuring equipment inspection frequency
Daily Weekly monthly other

Comments/Status:



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
- (d) Sample collection procedures are adequate..... Y
 - (i) Samples refrigerated during compositing..... Y
 - (ii) Proper preservation techniques used..... N/E
 - (iii) Containers and sample holding times prior to analysis conform with 40 CFR 136.3..... N/E
- (e) 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
- (f) Adequate records maintained of sampling date, time, location, etc.. Y

Laboratory:

General

- (a) EPA approved analytical testing procedures used (40 CFR 136.3).. N/E
 - (b) If alternate analytical procedures are used, proper approval has been obtained..... N/E
 - (c) Analyses being performed more frequently than required by permit. N/E
 - (d) If (c) is yes, are results in permittee's self-monitoring report..... N/E
 - (e) Commercial laboratory used..... N/E
- Parameters analyzed by commercial lab:

Lab name:

Quality Control/Quality Assurance

- (f) Quality assurance manual provided and maintained..... N/E
- (g) Satisfactory calibration and maintenance of instruments/equipment. N/E
- (h) Adequate records maintained..... N/E
- (i) Results of latest USEPA quality assurance performance sampling program: Satisfactory Marginal Unsatisfactory

Date:

Comments/Status:



Section J: Effluent/Receiving Water Observations

Outfall Number	Oil sheen	Grease	Turbidity	Visible Foam	Visible Floating Solids	Color	Other
001	none	none	mild	mild	none	clear	

Comments/Status:

The City has taken measures to reenforce the stream bank behind the headwall to 001. Upstream of the outfall, the stream bank is eroding away.

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 City of Xenia Ford Road (Ford Road) Wastewater Treatment Works (WWTW) is designed for an average daily flow of 3.6 Million Gallons/Day (MGD). A review of the Discharge Monitoring Reports (DMRs) for January 2006 through August 2007 shows an average daily discharge flow of 2.8 MGD. During this same period of time, WWTW staff report one numeric violation; shown below:

EFFLUENT LIMIT VIOLATIONS (Period of Review: January 2006 – August 2007)

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

Reporting Period	Parameter	Limit Type	Limit Limit	Reported Value	Violation Date
August 2007	Dissolved Oxygen	1D Conc	7.0	6.6	8/20/2007

- The City of Xenia was given a 3-year compliance schedule, within the current National Pollutant Discharge Elimination System permit for the Ford Road WWTW, to meet a Total Phosphorus 30-day discharge limit of 1.0 mg/l. Since January of 2006, the City has reported values that have a summer 50th percentile of 0.69 mg/l and a 75th percentile of 0.9 mg/l. Phosphorus is removed biologically from the Ford Road WWTW influent.
- The City was also given a 4.5-year compliance schedule to submit a general plan outlining the following:

Not later than 54 months from effective date of this permit, the permittee shall submit a general plan for additional loading reductions necessary to achieve the final allowable phosphorus load of 6.8 kg/day. In developing the plan, the permittee shall evaluate various alternatives for achieving the additional loading reduction. The alternatives may include, but are not limited to: implementation of nonpoint source loading reduction projects; implementation of projects that increase the capacity of the receiving waters to assimilate total phosphorus loads; entering into cooperative agreements with other parties to implement projects that will achieve the cumulative, basin-wide point source loading reductions identified in the report "Total Maximum Daily Loads for the Upper Little Miami River"; and/or upgrading the existing wastewater treatment facilities. (Event Code 1299)

Any alternative load reduction projects or other initiatives identified and undertaken by the permittee to achieve the additional phosphorus loading reductions must comply with the wasteload allocations (WLA) and load allocations (LA) assigned in the Upper Little Miami River TMDL report.



Loading reductions achieved by the permittee must be applied to meeting the point source WLA for phosphorus. After review and acceptance by Ohio EPA, any portion of loading reductions achieved by one stakeholder may be credited to it or to any other stakeholder(s) so long as such credit is not duplicated.

The general plan for achieving the additional loading reductions shall address, as a minimum, the following:

- a. The alternative(s) chosen to achieve the loading reductions.*
- b. Cost estimates of implementing the chosen alternatives, including any applicable operation, maintenance, and replacement costs.*
- c. A fixed date compliance schedule for meeting the reduction targets for total phosphorus during the months of May - October. As a minimum, this schedule should include dates for: submission of approvable detail plans (if applicable); completion of implementation/construction; attainment of operational level; notification of the Ohio EPA Southwest District Office within 14 days of attaining operational level (if applicable); and achieving the additional loading reductions required by Schedule of Compliance Item A.6. not later than 118 months from the effective date of this permit. (March 1, 2013)*
- d. The financial mechanism to be used to fund the required improvements, operation, maintenance, and replacement costs (if applicable).*
- e. For alternatives other than upgrading the existing wastewater treatment facilities, demonstrate reasonable assurance by providing information that: the proposed projects are technically feasible based on accepted modeling, data from similar projects, and commonly accepted professional expectations; there is a reasonable expectation that the proposed controls will be implemented; and other appropriate measures identified by the permittee.*

The permittee shall achieve the final allowable total phosphorus load of 6.8 kg/day during the months of May - October not later than 118 months from the effective date of this permit. (March 1, 2013)

In the event that evidence becomes available demonstrating to the Director's satisfaction that biological indices applicable to the Upper Little Miami River Basin are in full attainment, or that monitoring data collected at the lower end of the TMDL study area show that the May - October median total phosphorus concentration measured at this site is less than or equal to the 0.17 mg/l instream target for two consecutive years, the Director will evaluate any proposed modification of the TMDL Implementation Schedule included in this NPDES permit.

This permit may be modified or revoked and reissued for the following reasons:



- *To include new or revised conditions based on new information resulting from implementation of the TMDL recommendations.*

- *To include new or revised conditions based on plans submitted by the permittee to upgrade the existing wastewater treatment facilities to achieve the allowable total phosphorus load of 6.8 kg/day during the months of May through October.*

WWTW staff have indicated that the general plan to meet reduce Total Phosphorus loadings will be submitted by November 1, 2007. They have also implied that they believe the in-stream target of 0.17 mg/l will be achieved at the downstream monitoring location once the Greene County Sugarcreek WWTW improvements are completed. As a contingency, the City will include an option in the general plan for further treatment to meet the reduced Total Phosphorus loading limits.

The City and other public entities with WWTW dischargers within the Upper Little Miami River TMDL study area will be working with ODNR to prepare an application for a Conservation Enhancement Restoration Project (CREP). The CREP will, among other things, provide a mechanism for non-point source reduction of nutrients within the watershed.

