



John R. Kasich, Governor
Mary Taylor, Lt. Governor
Scott J. Nally, Director

Re: **Notice of Violation**
Sandusky County
Clyde WWTP
NPDES permit

May 17, 2013

Mayor & Council
City of Clyde
222 North Main Street
Clyde, Ohio 43410

Dear Mayor & Council:

On April 4, 2013, a National Pollutant Discharge Elimination System (NPDES) permit compliance inspection was conducted at the Clyde Wastewater Treatment Plant (WWTP). Mr. Thomas Bauer, Superintendent, and Mr. Louis Stein, Pretreatment Coordinator/Lab, were present and provided information on plant operations.

All major treatment units were in operation during the inspection. The following items were noted:

- It was indicated that maintenance to the oxidation ditches planned for this year includes replacing the effluent pipe supports, painting pipes and inspection of the ditches. Additionally, any major accumulation of grit will be removed from the ditches while they are out of service.
- The loss of solids from the oxidation ditches during 2011's extreme rainfall events caused higher than usual deposits of sludge in the first tertiary pond. Cleaning of the pond to remove the accumulated solids is proposed to be completed this year.
- The sludge thickener motor drive shaft broke in half due to decay, and was required to be repaired this past year. It was noted that the WWTP has been in use for close to 30 years and necessary repairs have been increasing.
- The rebuild of the centrifuge required a new VFD and computer program to support the changes.
- On March 29, Evergreen Plastics, LTD, had a propylene glycol spill (600 -1,000 gallons), causing a WWTP upset. The east oxidation ditch was isolated to contain the spill, and mixers were being run at 100% while the effects on treatment were being evaluated.
- The WWTP staff continues to sample influent sewer lines at various locations in an effort to track down the source of high mercury.
- The WWTP operations continue to treat as much flow as possible during wet weather events.

- Average daily flows are at or above the NPDES permitted average design flow of 1.9 mgd. The 2012 annual average was calculated to be 1.89 mgd. The average flow so far this year, January thru April 2013, is 2.09 mgd. We are hopeful that proposed improvements being implemented as part of the long term control plan will allow the plant to return to or below design flow conditions, so that expansion will not be necessary.

Discharge Monitoring Reports (DMRs)/Notice of Violation (NOV)

A compliance review of your discharge monitoring reports (DMRs) was conducted. A list of permit violations (October 2011 through April 2013) is included in the inspection report.

Our completed inspection report forms are enclosed for your review. If there are any questions, please call Mary Beth Cohen at 419-373-3014.

Yours truly,



Elizabeth A. Wick, P.E.
Environmental Engineer/Section Manager
Division of Surface Water

MBC/jlm

Enclosures

pc: Thomas Bauer, Superintendent

ec: Tracking



State of Ohio Environmental Protection Agency
Northwest District Office

NPDES Compliance Inspection Report

Section A: National Data System Coding					
Permit #	NPDES#	Month/Day/Year	Inspection Type	Inspector	Facility Type
2PD00004	OH0024686	04/04/2013	C	S	1

Section B: Facility Data		
Name and Location of Facility Inspected	Entry Time	Permit Effective Date
Clyde Wastewater Treatment Plant 749 West McPherson Highway Clyde, Ohio 43410	9:30 am	04/01/2012
	Exit Time	Permit Expiration Date
	1:30 pm	01/31/2017
Name(s) and Title(s) of On-Site Representatives	Phone Number(s)	
Thomas Bauer, Superintendent Louis Stein, Pretreatment Coordinator / Lab	419-547-9407	
Name, Address and Title of Responsible Official	Phone Number	
Mayor and Council, City of Clyde 222 N. Main Street Clyde, Ohio 43410		

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

Section D: Summary of Findings (Attach additional sheets if necessary)	
<p>Cleaning of the pond to remove accumulated solids is proposed.</p> <p>The sludge thickener motor drive shaft rotted off and snapped in half, thus was required to be repaired this past year.</p> <p>Rebuild of the centrifuge required that a new VFD and computer program to support the changes.</p> <p>The WWTP staff continues to sample influent sewer lines at various locations in an effort to track down the source of high mercury.</p>	
Inspector	Reviewer
 Mary Beth Cohen Division of Surface Water Northwest District Office	 Thomas Poffenberger, P.E. Water Quality Engineer/Unit Supervisor Division of Surface Water - Northwest District Office
5/5/13 Date	5/16/13 Date

Permit #: 2PD00004
 NPDES #: OH0024686

Compliance Data for Clyde WWTP between 10/1/2011 thru 4/30/2013

Summary

Permit Effluent Limit Violations: 3

Limit Violations						
Reporting Period	Station	Parameter	Limit Type	Limit	Reported Value	Violation Date
February 2012	001	Mercury, Total (Low Level)	30D Conc	2.7	6.3	2/1/2012
February 2012	001	Mercury, Total (Low Level)	30D Qty	0.00002	0.00007	2/1/2012
September 2012	001	Dissolved Oxygen	1D Conc	7.0	6.6	9/7/2012

Clyde WWTP NPDES permit is based on the average design flow of 1.9 MGD

Flow Data for Clyde WWTP between 10/1/2011 and 4/1/2013

Average Flow Rate	2.080 MGD
-------------------	-----------

Ten Highest Flows	
Date	Flows (MGD)
11/29/2011	7.407
12/5/2011	6.574
12/6/2011	6.123
3/16/2012	5.752
12/21/2011	5.530
10/30/2012	5.126
1/27/2012	5.086
3/18/2012	5.022
10/20/2011	4.931
3/19/2012	4.883

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..... N
- (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:

**Average daily flows are noted to be at or above the NPDES permitted average design flow of 1.9 mgd. The 2012 annual average was calculated to be 1.89 mgd. The average flow so far this year, January thru April, 2013 is 2.09 mgd.*

Section F: Compliance Schedules/Violations

- (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 NPDES Permit
- (e) Permittee is meeting compliance schedule..... Y

Comments/Status:

- *The City is still experiencing random high mercury numbers. The City continues to test the three main influent lines, but high levels have been found on each line at different sampling times.*
- *Sewer lines are being cleaned on a rotating quarterly basis or more frequently as needed.*

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) Wastewater Treatment Works classification (OAC 3745-7)..... III
- (e) Operator of Record holds unexpired license of class required by permit: Class:III Y
- (f) Copy of certificate of Operator of Record displayed on-site..... N/E
- (g) Minimum operator staffing requirements fulfilled (OAC 3745-7)... Y
- (h) Routine and preventative maintenance scheduled/performed... Y
- (i) Any major equipment breakdown since last inspection..... Y
- (j) Operation and maintenance manual provided and maintained..... Y
- (k) Any plant bypasses since last inspection..... N
- (l) Regulatory agency notified of bypasses..... N/A
- On MORs and/or Spill Hotline (1-800-282-9378)
- (m) Any hydraulic and/or organic overloads since last inspection..... N

Record Keeping:

- (a) Log book provided..... Y
- (b) Format of log book (i.e. computer log, hard bound book)

- Hard bound book
- (c) Log book(s) kept onsite (in an area protected from weather)..... Y
- (d) 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 operation and maintenance activities (including preventative maintenance, repairs and request for repairs)..... Y
 - IV. Laboratory results (unless documented on bench sheets)... Y
 - V. Identification of person making log entries..... Y
- (d) Has the operator of record submitted written notification 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

Section G: Operation & Maintenance (con't)

Collection System:

- (a) Percent combined system: 27%
- (b) Any collection system overflows since last inspection..... Y
(CSO and/or SSO)
- (c) Regulatory agency notified of overflows (SSOs)..... N/A
- (d) CSO O&M plan provided and implemented..... Y
- (e) CSOs monitored and reported in accordance with permit..... Y
- (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 N
- (k) Are any portions of the sewer system at or near capacity..... N

Comments/Status:

- There were no reports of basement flooding this year.

- The NPDES permit application indicated that 27% of the sewer system is combined and 73% is separate.

Section H: Sludge Management

- (a) Sludge management plan (SMP)
Submitted date: 05/28/93 Approval #: # 03-33310-WP Not submitted N/A
- (b) Sludge management plan current..... Y
- (c) Sludge adequately disposed..... Y
(Method: *Land application and/or landfill*)
- (d) If sludge is incinerated, where is ash disposed of
- (e) Is sludge disposal contracted..... Y
(Name: *Midwest Compost*)
- (f) Has amount of sludge generated changed significantly since last inspection..... N
- (g) Adequate sludge storage provided at plant..... N
- (h) Land application sites monitored and inspected per SMP..... Y
- (i) Records kept in accordance with State and Federal law..... Y
- (j) Any complaints received in last year regarding sludge..... N
- (k) Is sludge adequately processed (digestion, pathogen control)..... Y

Comments/Status:

Centrifuge sludge is landfilled if land application is not accessible.

It was indicated that on site storage is being explored to reduce the need to landfill sludge during the winter months.

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: *Magnetic*)
- (b) Calibration frequency adequate Y
(Date of last calibration: *04/2011*)
- (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:

The final effluent flow meter only measures up to 6 MGD, so the influent meter (with a range of 0-15 mgd) is used for reporting.

Section I: Self-Monitoring Program (cont)

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..... Y
 - (iii) Containers and sample holding times prior to analysis conform with 40 CFR 136.3..... Y
- (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).. Y
- (b) If alternate analytical procedures are used, proper approval has been obtained..... Y
- (c) Analyses being performed more frequently than required by permit. Y
- (d) If (c) is yes, are results in permittee's self-monitoring report..... Y
- (e) Commercial laboratory used..... Y
 - Parameters analyzed by commercial lab:
 - Metals, free cyanide, oil & grease, mercury and sludge (J & H)
 - Bioassay analyses (Enviroscience)

Lab name: *Jones & Henry and Enviroscience*

Quality Control/Quality Assurance

- (f) Quality assurance manual provided and maintained..... Y
- (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: *Study #32- 2011*

Comments/Status:

Standard operating procedures (SOP's) need to be established and available for all analysis done at the WWTP.

Section J: Effluent/Receiving Water Observations

Outfall Number	Oil sheen	Grease	Turbidity	Visible Foam	Visible Floating Solids	Color	Other
001	None	None	None	None	None	Clear	

Comments/Status:

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:

F. GUIDE - VISUAL OBSERVATION - UNIT PROCESS

RATING CODES: S = Satisfactory; U = Unsatisfactory; M = Marginal; IN = In Operation; OUT = Out of Operation

CONDITION OR APPEARANCE		RATING	COMMENTS
General	Grounds	S	
	Buildings	S	
	Potable Water Supply Protection	S	
	Safety Features	S	
	Bypasses	None	
	CSO Screening	Out	
	Alternate Power Source	S	The City of Clyde has a dual feed electric system
Preliminary	Maintenance of Collection Systems	S	
	Pump Station	In	
	Ventilation	S	
	Bar Screen	In	Two automated mechanical bar screens are in use (based on flow and time)
	Disposal of Screenings	S	Landfill
	Comminutor	-	
	Grit Chamber	In	Two automated systems (runs based on time and flow)
Disposal of Grit	S	Landfill	
Primary	Settling Tanks		
	Scum Removal		
	Sludge Removal		
	Effluent		
Sludge Disposal	Digesters - Aerobic	In	Two units operated as primary & secondary
	Temperature and pH	-	
	Gas Production	-	
	Heating Equipment	-	
	Sludge Pumps	In	2 WAS, 2 transfer, 2 thickener, 2 conc. pumps
	Sludge Storage	In	3 units, operational (one is small mix tank under building)
	Sludge Thickener	In	The thickeners center stem snapped off and had to be replaced this past year
	Concentrator / Belt Press	Out	One belt press concentrator, use as needed
Blowers	In		
Centrifuge / Polymer mix tank	Out	Used as needed- land application or landfilled (22-23% solids @ reduced flow)	
Other	Flow Meter and Recorder	In	Influent flow meter operational / flow meter at UV in use (up to 6 MGD)
	Records	In	
	Lab Controls	S	
	Chemical Treatment	In	Alum added at distribution box and polymer added for sludge
Secondary Tertiary	Oxidation ditch w/ integral clarifier	In	2 units, both in operation
	Blowers	In	3 blowers, 2 in operation w/ 1 on standby
	Tertiary Lagoons	In	2 lagoons in series (sludge removal from the 1 st pond is still needed)
	Aerators (2 nd lagoon)	In	Post aeration provided at outlet of 2 nd lagoon as needed
Disinfection	Effluent	S	Effluent was clear w/ very slight green cast, white foam dissipates quickly
	Disinfection System	Out	UV - out of use for the winter
	Effective Dosage	-	
	Contact Time	-	