Environmental
Protection Agency

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

December 23, 2011

Jerry Ball, Board President
Village of Ostrander
19 S. Main Street
Ostrander, OH 43061

Re: **Ostrander WWTP**
NPDES Permit 4PA00007/ OH0105929
Compliance Evaluation Inspection
Delaware County

Dear Mr. Ball:

On November 30, 2011, a Compliance Evaluation Inspection was conducted at the Ostrander WWTP. Present for the inspection were Lloyd Hagerty, representing the Village of Ostrander, Cole Miller, and myself of the Ohio EPA, Central District Office, Division of Surface Water.

The purpose of the inspection was to evaluate compliance with the terms and conditions of your NPDES permit and to evaluate the operation and maintenance of the plant. The Compliance Evaluation Inspection raised several concerns which must be addressed in the following areas

Effluent Flow Meter Relocation – At the time of the inspection, only one half of the chlorine tank was being utilized due to the location of the effluent flow meter. The flow meter is currently mounted over the effluent weir on the west contact tank and is not capable of monitoring flow from the east half of the tank. Utilizing only half of the chlorine contact tank may provide insufficient contact time during high flow events. Please provide a schedule, in writing within 30 days of receipt of this correspondence, for the relocation of the effluent flow meter.

Outfall Signage - In accordance with the effective NPDES permit a sign identifying the location of the outfall 001 discharge to Mill Creek was required to be installed no later than December 1, 2008. Please have the sign installed no later than 30 days following the receipt of this correspondence and provide confirmation once installation is completed (an e-mailed photograph would be acceptable).

Central District Office
50 West Town Street, Suite 700
P.O. Box 1049
Columbus, OH 43216-1049

614 | 728 3778
614 | 728 3898 (fax)
www.epa.ohio.gov

If you have any questions or comments concerning the enclosed inspection report, please contact me at (614) 728-3848 or e-mail at mike.sapp@epa.ohio.gov.

Sincerely,

Michael Sapp
Compliance and Enforcement Section
Division of Surface Water
Central District Office

c: Lloyd Hagerty w/enclosures

ec: Mike Sapp

MS/nsm Ostrander 11

NPDES Compliance Inspection Report

SECTION A: NATIONAL DATA SYSTEM CODING				
Permit #	NPDES #	Inspection Type	Inspector	Facility Type
4PA00007	OH0105929	CEI	S	Municipal
Inspection Date	Entry Time	Exit Time	Notice of Violation	Significant Non-Compliance
11/30/2011	9:30 AM	11:15 AM	No	No

SECTION B: FACILITY DATA	
Name and Location of Facility Inspected	Permit Effective Date
Ostrander WWTP 4400 Ostrander Road Ostrander, Ohio 43061	8/1/2008 Permit Expiration Date 7/31/2013
Name(s) and Title(s) of On-Site Representatives	Phone Numbers
Lloyd Hagerty Wastewater Superintendent	(740) 666-1933
Name and Title of Responsible Official	Phone Number
Jerry Ball, President - Board of Public Affairs	(740) 666-3591

SECTION C: AREAS EVALUATED DURING INSPECTION		
Key: S = Satisfactory, M = Marginal, U = Unsatisfactory, N = Not Evaluated		
M	NPDES Compliance	Non-compliance with outfall signage requirement
S	Operations & Maintenance	
S	Facility Site Review	
S	Collection System	
M	Flow Measurement	Meter location only allows one-half of chlorine contact tank to be utilized
S	Receiving Waters	
S	Laboratory	

Comments:

Signatures	
12/15/11	12/15/11
Mike Sapp, Inspector Date Compliance & Enforcement Division of Surface Water Central District Office	Erin Sherer, Reviewer Date Compliance & Enforcement Supervisor Division of Surface Water Central District Office

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).....	NA
(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.....	Y
(h) All discharges are permitted.....	Y
(i) Number and location of discharge points are as described in permit.....	Y

SECTION F: COMPLIANCE

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

SECTION G: OPERATION & MAINTENANCE

Treatment Works:

Treatment facility properly operated and maintained

(a)	Standby power available.....generator X 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.....	N*
(d)	Wastewater Treatment Works classification (OAC 3745-7).....	II
(e)	Operator of Record holds unexpired license of class required by permit..... Class: IV	Y
(f)	Copy of certificate of Operator of Record displayed on-site.....	Y
(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.....	N*
(j)	Operation and maintenance manual provided and maintained.....	Y
(k)	Any plant bypasses since last inspection.....	N
(l)	Regulatory agency notified of bypasses.....	NA

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

Collection System:

(a) Percent combined system: 0%

(b) Any collection system overflows since last inspection..... N (CSO ☐ and/or SSO ☐)

(c) Regulatory agency notified of overflows (SSOs)..... NA

(d) CSO O&M plan provided and implemented..... NA

(e) CSOs monitored and reported in accordance with permit..... NA

(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..... N

(i) Is there an inflow/infiltration problem (separate sewer system), or were there any major repairs to collection system since last inspection..... N

(j) Any complaints received since last inspection of basement flooding N

(k) Are any portions of the sewer system at or near capacity..... N

SECTION H: SLUDGE MANAGEMENT

(a) Sludge management plan (SMP)
Submitted date: Approval #: Not submitted ☐ N/A X

(b) Sludge management plan current..... NA*
(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:unknown)
(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..... 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*

SECTION I: SELF-MONITORING PROGRAM

Flow Measurement:
(a) Primary flow measuring device operated and maintained..... Y*
Type of device: Ultrasonic & Parshall flume ☐ Ultrasonic & Weir X Weir ☐
Calculated from influent ☐ Other ☐(Specify:)

(b) Calibration frequency adequate ..... Y*
(Date of last calibration: monthly internal calibrations)
(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 X Weekly ☐monthly ☐other

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 5 and 8)
(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

Laboratory:

General

(a) Do you have written Standard Operating Procedures (SOP's) for all analysis performed onsite? Y

(b) Do SOP's include the following if applicable:

- 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: SOP's are required per Standard Methods 1020A and states "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."

(c) EPA approved analytical testing procedures used for all analysis (40 CFR 136.3, see GLC page 8). Y

(d) If alternate analytical procedures are used, proper approval has been obtained..... Y

(e) Analyses being performed more frequently than required by permit. N

(f) If (e) is yes, are results in permittee's self-monitoring report..... NA

Quality Control/Quality Assurance

(g) Quality assurance manual provided and maintained..... Y

(h) Satisfactory calibration and maintenance of instruments/equipment. Y (see score from GLC page 7)

(i) Results of latest USEPA quality assurance performance sampling program: ☐ Satisfactory ☐ Marginal ☐ Unsatisfactory
Date:

(j) Commercial laboratory used..... Y
Parameters analyzed by commercial lab: all parameters except chlorine, DO and pH

Lab name: MASI

Comments/Status:

SECTION J: EFFLUENT/RECEIVING WATER OBSERVATIONS

Outfall Number	Outfall sign in place?	Oil sheen	Grease	Turbidity	Foam	Solids	Color	Other
001	No	No*	No	No	No	No	Clear	No

- Note Observations made at chlorine contact tank

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?

ADDITIONAL INFORMATION

Ostrander Wastewater Treatment Plant

4PA00007 - OH0105929

General

The Ostrander WWTP has a design treatment capacity of 90,000 gpd with a discharge to Mill Creek. Wet stream process provided at the facility include screening, communition, flow equalization, extended aeration, final clarification, chlorine disinfection, dechlorination and post-aeration. Solids handling facilities consist of aerobic digestion and sludge storage followed by land application. Sludge drying beds may also be utilized for dewatering and storage.

Section E. - Permit Verification

(d.) The average daily flow at outfall 001, for the time period from August 2008 - October 2011 was 40,000 gpd. The maximum daily flow experienced during that time period was 145,000 gpd which occurred in March 2011.

(e.) At the time of the inspection, only the east treatment train was on-line.. The west treatment train was used for sludge storage and thickening and is placed into operation only during high flow events (e.g. influent flows in excess of 90,000 gpd).

Section F. - Compliance Schedule Violations

(a.) The plant experienced several pH and suspended solids violations in 2008 and had one fecal coliform violation in 2009 and 2010. pH issues have been addressed by monitoring residual alkalinity and adding bicarbonate, if necessary. Only half of the chlorine tank is utilized due to the location of the effluent flow meter. It's possible that the fecal coliform violations could be attributed to insufficient contact time during higher flows. Consequently, the Village should consider relocating the effluent flow meter to a location which allows the plant to operate both sides of the chlorine contact tank.

Section G. - Operation and Maintenance

Treatment Works

(a.) The plant is equipped with a propane-powered generator capable of providing back-up power to the entire plant and the main pump station.

(b.) The plant is equipped with an autodialer that alerts the plant superintendent in the event of a power failure.

(c.) The communitor is no longer utilized and the west treatment train was off line due to low flows.

(i.) One of the transfer pumps on the flow equalization was lost temporarily. In addition the influent grinder is not used; the plant operator indicated that the plant functions best when rags and floatables are manually removed instead of being ground-up and sent through the treatment trains.

Collection System

(g.) There are currently two main lift stations in the collection system and a third unit connecting several homes (Fields St.). The two largest units consist of the main pump station in town and a newer pump station and force main serving the Meadows at Mill Creek which was installed several years ago. This force main comes all the way to the plant headworks. Both of the large pump stations are equipped with Mission Communications telemetry software and controls. This system allows the plant operator to be notified of alarm conditions and control pump station operations using cell phone and internet communications.

Section H. - Sludge Management

(b) The modified NPDES permit was approved for 3 sludge disposal options, land application, land filling and hauling to another POTW. The majority of sludge generated is land applied and incorporated on a 60-80 farm near the plant. The plant operator estimated that 6-9 months of sludge storage are provided.

(c.) Liquid sludge is hauled and land applied once a year by a local farmer in close proximity to the plant. The sludge drying beds have not been used since 1995.

(e.) The local farmer is responsible for hauling, spreading and incorporating sludge with his own truck.

(k.) Sludge is digested and thickened using the plant aerobic digester.

Section I. - Self Monitoring Program

Part 1. - Flow Measurement

(a.) Effluent flows are measured using a v-notched weir and an ultrasonic unit.

(b.) The operator performs periodic internal calibrations; however, there was no record of a formal calibration performed by an outside vendor. The Mission software will allow the operator to compare the incoming plant flow with the flow meter readings.

Part 2. - Sampling

(c.) Ammonia and $CBOD_5$ are manually composited.

Part 3. - Laboratory

(e.) The plant operator performs analyses for dissolved oxygen, temperature, pH and residual chlorine. MASI performs analysis for all other parameters.

SUMMARY OF FINDINGS AND COMMENTS

Ostrander WWTP

1. At the time of the inspection, the following general observations were made with respect to the operational practices at the plant;
   - MLSS concentrations are maintained in the range of 2000 mg/l for optimum treatment
   - The aeration blowers are operated in an on/off mode of operation. The blowers run for approximately 13 hours/day.
   - The surface of the east clarifier, which was off-line, was covered with a blanket of scum. This condition was attributed to a problem with the skimmer. Scum was also observed behind the baffle on the western half of the chlorine contact tank.
   - The drop tubes and diffusers in the aeration tanks were changed out during the past year. The tubes and diffusers in the flow equalization tank and digester will be replaced within the next year.
   - Bicarbonate is usually added 3-4 times per year to help with nitrification. Bicarbonate is added when the residual alkalinity is below 100 mg/L.

2. A sign is required that identifies the location of the permitted outfall to Mill Creek. The effective NPDES permit required this sign to be installed on or before December 1, 2008. Please have this sign posted within the next 30 days and submit documentation to this office once it is accomplished. The sign must comply with the following requirements:

   - The marker shall consist, at a minimum, of the name of the establishment to which the permit was issued, the Ohio EPA permit number, and the outfall number and a contact telephone number. The information shall be printed in letters not less than two inches in height.
   - The marker shall be a minimum of 2 feet by 2 feet and shall be a minimum of 3 feet above ground level. The sign shall not be obstructed such that persons in boats or persons swimming on the river or someone fishing or walking along the shore cannot read the sign. Vegetation shall be periodically removed to keep the sign visible.

3. At the time of the inspection, only one half of the chlorine tank was being utilized due to the location of the effluent flow meter. The flow meter is currently mounted over the effluent weir on the west contact tank and is not capable of monitoring flow from the east tank if it was placed in service. Utilizing only half of the chlorine contact tank may provide insufficient contact time during higher

flows. Please provide a schedule, in writing within 30 days of receipt of this correspondence, for the relocation of the effluent flow meter.

Compliance Data for Ostrander WWTP between 8/1/2008 to 10/30/2011

Summary

Permit Effluent Limit Violations: 9
Permit Effluent Code Violations: 1
Permit Effluent Frequency Violations: 0
Compliance Schedule Violations: 0

Violations

ting Period	Station	Parameter	Limit Type	Limit	Reported Value	Violation Date
nber 2008	001	Total Suspended Solids	30D Conc	30	34.5	11/1/2008
nber 2008	001	pH	1D Conc	6.5	5.5	11/14/2008
nber 2008	001	Total Suspended Solids	7D Conc	45	48.	11/22/2008
nber 2008	001	pH	1D Conc	6.5	6.	11/25/2008
nber 2008	001	Total Suspended Solids	30D Conc	30	41.4	12/1/2008
nber 2008	001	Total Suspended Solids	7D Conc	45	84.	12/1/2008
nber 2008	001	pH	1D Conc	6.5	5.7	12/1/2008
009	001	Fecal Coliform	7D Conc	2000	2600.	5/8/2009
010	001	Fecal Coliform	7D Conc	2000	2000.	7/1/2010

Code Violations

Reporting Period	Station	Parameter	Reported Value	Violation Date
March 2011	001	Flow Rate	AD	3/1/2011

Flow Data for Ostrander WWTP between 8/1/2008 and 10/30/2011

	Date	Flows (MGD)
Ten Highest Flows	3/5/2011	0.145
	3/6/2011	0.145
	3/7/2011	0.145
	4/26/2011	0.136
	9/4/2010	0.124
	9/5/2010	0.124
	9/6/2010	0.124
	9/7/2010	0.124
	4/21/2011	0.119
	2/12/2009	0.118
Average Flow Rate		0.040