



State of Ohio Environmental Protection Agency

Southeast District Office

2195 Front Street
Logan, Ohio 43138

TELE: (740) 385-8501 FAX: (740) 385-6490
www.epa.state.oh.us

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

May 11, 2007

Re: Washington County
City of Marietta
Compliance Sampling
Inspection (CSI)
Correspondence (PWW)

Mayor and Council
City of Marietta
301 Putnam Street
Marietta, Ohio 45750

Dear Mayor and Council:

On March 26 and 27, 2007, a Compliance Sampling Inspection (CSI) was conducted at the City of Marietta's wastewater treatment plant. The purpose of the inspection was to determine the City's compliance with its National Pollutant Discharge Elimination System (NPDES) Permit. Present for the inspection was Steve Elliott, representing the City of Marietta and Joann Montgomery and Stephen Wells representing the Ohio EPA, Division of Surface Water, Southeast District Office. Wastewater samples were collected as part of the inspection. A copy of my inspection report and sample results are attached.

As a result of my inspection, I have the following comments:

1. At the time of the inspection, river water intrusion was affecting the collection system. The plant was using the EQ basin to regulate flows through the treatment plant. The City is working on eliminating some source of river water intrusion by replacing normal manhole covers with watertight locking covers. The City needs to continue working on eliminating river water intrusion into its collection system.
2. The river water intrusion was observed in the final effluent due to a green color being observed and lower conductivity than normal sewer plant effluent.
3. The plant is starting to see the formation of filamentous bacteria in the aeration tanks. This has caused the plant to have problems in the past. The City is prepared to treat the aeration tanks for bacteria if the problem get any worse in the future.

4. Since the last inspection, the primary and secondary digesters have been repaired. During this time, the City disposed of sludge a landfill due to not being able to meet the 503 requirements for land application.
5. During the inspection, the waste gas burner was in the process of being replaced to complete the repairs on digesters.
6. The City has had fecal coliform violations of its NPDES Permit effluent limits in the last year. In response to these violations, the UV disinfection bulbs have been replaced. This appears to have corrected the fecal coliform violations.
7. The City is in the process of starting design of the upgrade for the wastewater treatment plant. The City needs to move forward with the upgrading of the wastewater treatment as soon as possible. Failure to upgrade the plant may cause effluent limitation violations in the future and result in enforcement action by Ohio EPA. The enforcement action could limit connections to the City's sewage collection system. Please update this office on the status of upgrading the wastewater treatment plant.
8. The City's pretreatment program targeting oil and grease discharges to the collection system has helped to reduce the amount of oil and grease being treated at the treatment plant. The City needs to continue this program to help prevent NPDES Permit effluent violations.
9. The sampling results showed the plant effluent to be acutely toxic. Ohio EPA is willing to collect another toxicity sampling later this year to determine if there is an on-going problem with toxicity. Ohio EPA would like for the City to split the toxicity sampling. I will be contacting the plant to determine a date for the toxicity sampling.

The Ohio EPA strongly encourages pollution prevention as the preferred approach for waste management. The first priority of pollution prevention is to eliminate the generation of wastes and pollutants at the source (source reduction). For those wastes or pollutants that are generated, the second priority is to recycle or reuse them in an environmentally sound manner. You can benefit economically, help preserve the environment, and improve your public image by implementing pollution prevention programs. For more information about pollution prevention, including fact sheets or U.S. EPA's "*Facility Pollution Prevention Guide*" (EPA/600/R-92.008), please contact the Ohio EPA Pollution Prevention Section at (614) 644-3469.

In conclusion, the City of Marietta was in non-compliance with its NPDES Permit at the time of inspection, due to the toxicity results.

Please respond to the above comments in writing to this office within 15 days of receipt of this letter.

If you have any questions, feel free to contact me at (740) 380-5434.

Sincerely,



Stephen Wells
District Representative
Division of Surface Water

SW/dh

Enclosure

c: Steve Elliott, City of Marietta

NPDES
Compliance Inspection Report

A. NATIONAL DATA SYSTEM CODING

Permit No.	NPDES No.	Date	Inspection Type	Inspector	Facility Type
OPD00016*PD	OH0026344	March 26, 27, 2007	S	S	1

B. FACILITY DATA

Name and Location of Facility Inspected	Entry Time	Permit Effective Date
City of Marietta Wastewater Treatment Plant 440 East 8th Street Marietta, Ohio 45750	9:45 a.m.	March 1, 2005
	Exit Time	Permit Expiration Date
	12:30 p.m.	January 31, 2009

Name(s) and Title(s) of On-Site Representative(s)	Phone Number(s)
Steve Elliott, Wastewater Superintendent	(740) 373-3858
Name, Address and Title of Responsible Official	Phone Number
Mayor and Council City of Marietta 301 Putnam Street Marietta, Ohio 45750	(740) 373-1387

C. AREAS EVALUATED DURING INSPECTION

<u>S</u> Permit	<u>S</u> Flow Measurement	<u>N</u> Pretreatment
<u>S</u> Records/Reports	<u>N</u> Laboratory	<u>S</u> Compliance Schedules
<u>S</u> Operations & Maintenance	<u>M</u> Effluent/Receiving Waters	<u>S</u> Self-Monitoring Program
<u>S</u> Facility Site Review	<u>S</u> Sludge Storage/Disposal	<u>--</u> Other
<u>S</u> Collection System		

(S = Satisfactory, M = Marginal, U = Unsatisfactory, N = Not Evaluated)

D. SUMMARY OF FINDINGS/COMMENTS (attach additional sheets if necessary)

See attached letter.



Stephen Wells, Inspector, Ohio EPA, Southeast District Office

5/14/07

Date



Timothy M. Campbell, Reviewer, Ohio EPA, Southeast District Office

5/14/07

Date

E. PERMIT VERIFICATION

Inspection Observations Verify the Permit	Yes	No	N/A	N/E
a. Correct name and mailing address of permittee	X			
b. Correct name and location of receiving waters	X			
c. Product(s) and production rates conform with permit application (industries)			X	
d. Flows and loadings conform with NPDES permit	X			
e. Treatment processes are as described in permit application/briefing memo	X			
f. New treatment process(es) added since last inspection		X		
g. Notification given to state of new, different, or increased discharges			X	
h. All discharges are permitted	X			
i. Number and location of discharge points are as described in permit	X			

Comments:

F. COMPLIANCE SCHEDULES/VIOLATIONS

	Yes	No	N/A	N/E
a. Any significant violations since the last inspection	X			
b. Permittee is taking actions to resolve violations	X			
c. Permittee has compliance schedule	X			
d. Compliance schedule contained in: <u>NPDES Permit</u>				
e. Permittee is meeting compliance schedule	X			

Comments:

G. OPERATION AND MAINTENANCE

Treatment Facility Properly Operated and Maintained	Yes	No	N/A	N/E
a. Standby power available: Generator <u>X</u> Dual Feed _____	X			
b. Adequate alarm system available for power or equipment failures	X			
c. All treatment units in service other than backup units	X			
d. Sufficient operating staff provided: # of shifts <u>3</u> Days/Week <u>7</u>				
e. Operator holds unexpired license of class required by permit Class: <u>IV</u>	X			
f. Routine and preventive maintenance schedule/performed on time	X			
g. Any major equipment breakdown since last inspection		X		
h. Operation and maintenance manual provided and maintained	X			
i. Any plant bypasses since last inspection		X		
j. Regulatory agency notified of bypasses: _____ on MORS _____ 800 Number			X	
k. Any hydraulic and/or organic overloads experienced since last inspection	X*			

Comments: *Plant was at capacity due to river water intrusion.

Part 3, Laboratory - Quality Control/Quality Assurance		Yes	No	N/A	N/E
f.	Quality assurance manual provided and maintained				
g.	Satisfactory calibration and maintenance of instruments and equipment				
h.	Adequate records maintained				
i. Results of latest U.S. EPA quality assurance performance sampling program: Date: _____ Satisfactory _____ Marginal _____ Unsatisfactory					

Comments:

J. EFFLUENT/RECEIVING WATER OBSERVATIONS

Outfall #	Oil Sheen	Grease	Turbidity	Visible Foam	Visible Float Solids	Color	Other
001	None	None	Slight	None	None	Greenish	None

Comments:

K. MULTIMEDIA OBSERVATIONS

		Yes	No	N/A	N/E
a.	Are there indications of sloppy housekeeping or poor maintenance in work and storage areas or laboratories		X		
b.	Do you notice staining or discoloration of soils, pavement, or floors		X		
c.	Do you notice distressed (unhealthy, discolored, dead) vegetation		X		
d.	Do you see unidentified dark smoke or dustclouds coming from sources		X		
e.	Do you notice any unusual odors or strong chemical smells		X		
f.	Do you see any open or unmarked drums, unsecured liquids, or damaged containment facilities		X		

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

1. What is the cause of the conditions?
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:

Complete as appropriate for sampling inspections
Do not attach this page when completing reports for evaluation inspections

L. SAMPLING PROCEDURES (FOR CSI'S)

- Grab samples obtained
- Composite obtained
- Compositing frequency: 190 ml/15 min/24 hr. Preservation: HNO₃, H₂SO₄, ice
- Flow proportioned sample obtained
- Automatic sampler used
- Sample split with permittee (partial, no toxicity split)
- Chain of custody employed
- Sample obtained from facility sampling device
- Sample refrigerated during compositing: Yes No
- Sample representative of volume and nature of discharge: Yes

Comments:

TABLE I

OHIO EPA FIELD DATA

FACILITY: Marietta WWTP

DATES SAMPLED: March 26 & 27, 2007

Station	Date	Time	Parameter	Units	Value	Permit Limits
001	3/26	1030	pH	S.U.	7.03	6.0-9.0
			Temperature	°C	12.97	-
			Dissolved oxygen	mg/l	8.50	-
			Conductivity	umhos/cm	576	-
001	3/27	0945	pH	S.U.	7.06	6.0-9.0
			Temperature	°C	14.51	-
			Dissolved oxygen	mg/l	6.92	-
			Conductivity	umhos/cm	663	-

TABLE II

COMPLIANCE SAMPLING DATA

FACILITY: Marietta WWTP

DATES SAMPLED: March 26-27, 2007

STATION	T*	PARAMETER	UNITS	<u>OHIO EPA</u>		<u>ENTITY</u>		<u>PERMIT LIMITS</u>	
				CONC.	(KG/D) LOAD.	CONC.	(KG/D) LOAD.	CONC.	(KG/D) LOAD.
001	C	Susp. solids	mg/l	14	332.2	16.7	396.3	45	570.6
	C	cBOD ₅	mg/l	4.4	104.4	11.6	275.3	40	507.2
	G	Cyanide, free	ug/l	<5.0	-	-	-	-	-
	G	Cyanide, total	ug/l	<10	-	<10	-	-	-
	C	Nitrate-nitrite	mg/l	3.23	-	2.5	-	-	-
	C	Ammonia	mg/l	5.21	-	5.0	-	-	-
	C	TKN	mg/l	5.67	-	7.7	-	-	-
	G	Oil & Grease	mg/l	<2.0	-	2.1	-	10	-
	G	Fec. Coliform	#/100 ml.	<10	-	2.3	-	2000	-
	C	Cadmium, tot.	ug/l	<0.20	-	<10	-	-	-
	C	Chrom., tot.	ug/l	<30	-	<10	-	-	-
	C	Copper, tot.	ug/l	<10	ND	<10	ND	42	0.53
	C	Lead, tot.	ug/l	<2.0	-	<10	-	-	-
	C	Mercury, tot.	ug/l	<0.2	-	<0.2	-	-	-
	C	Nickel, tot.	ug/l	<40	-	<10	-	-	-
	C	Zinc, tot.	ug/l	24	-	28.9	-	-	-
	G	Chrom., hex.	ug/l	<10	-	-	-	-	-
		Flow, tot.	MGD		6.27				

*SAMPLE TYPE: G=grab; C=composite

ND=Not detected. Concentration was below detection limits; therefore, no loadings were calculated.