



State of Ohio Environmental Protection Agency

Southeast District Office

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Logan, Ohio 43138

TELE: (740) 385-8501 FAX: (740) 385-6480
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Ted Strickland, Governor
Lee Fisher, Lieutenant Governor
Chris Korleski, Director

March 23, 2007

Re: Ross County
City of Chillicothe
Compliance Inspection
Correspondence (PWW)

Mayor and Council
City of Chillicothe
35 South Paint Street
Chillicothe, Ohio 45601

Dear Mayor and Council:

On February 5, 2007, I conducted a Compliance Sampling Inspection (CEI) at the Chillicothe Wastewater Treatment Plant. The purpose of the inspection and sampling was to determine the facility's compliance status with the terms and conditions of NPDES Permit Number OPD00003*LD. Composite samples were collected from the facility's sampler on February 6, 2007 by Joann Montgomery with the Ohio EPA water quality unit. Mr. Wayne Grigsby, Plant Superintendent was present during the inspection.

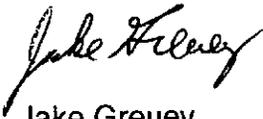
As a result of my inspection, the following observations were made.

1. All components of the treatment plant were inspected and appeared to be well maintained and in satisfactory condition.
2. An inspection of the laboratory showed the facility to be neat and orderly with all instrumentation properly maintained. Upon inspection of the laboratory, it was found that field instruments were being calibrated and recorded into a spreadsheet. The SOP was also reviewed and contained relatively detailed yet understandable analytical procedures for the tests performed in house. The SOP should be a working document, reviewed and updated on a routine basis. According to Martina Long, lab technician, the lab recently received a copy of a Quality Assurance Plan (QAP) from the City of Circleville to use as a model for their own. The lab has yet to draft a QAP and was initially notified of the need to develop a plan following the Ohio EPA Lab audit in 2003 and again following my inspection on May 25, 2006. The facility should immediately begin drafting a plan and submit a draft copy to this office by June 29, 2007.

A review of the 2006 DMRQA results showed the laboratory failed the tests for cBOD and Phosphorus. The laboratory does have SOPs drafted for these two analytical procedures although they should be re-evaluated and updated if needed to assure correct analytical procedures are followed.

The compliance sampling results shown in the attached Table 1 found the facility to be in compliance with the effluent limits and the effluent to exhibit no toxicity. The Ohio EPA toxicity report will be sent in the near future by Joann Montgomery with the water quality unit. The effluent was found to be relatively clear and free of any objectionable odors and the facility to be in substantial compliance with the terms and conditions of your NPDES permit. Enclosed is a copy of my detailed inspection report. If you have any questions please call me at (740) 380-5416.

Sincerely,



Jake Greuey
District Representative
Division of Surface Water

JJG/dh

Enclosure

c: Wayne Grigsby, Superintendent

**NPDES
Compliance Inspection Report**

A. NATIONAL DATA SYSTEM CODING

Permit No.	NPDES No.	Date	Inspection Type	Inspector	Facility Type
OPD00003*LD	OH0024406	February 5, 2006	S	S	1

B. FACILITY DATA

Name and Location of Facility Inspected	Entry Time	Permit Effective Date
Chillicothe WWTP 405 Environmental Way Chillicothe, Ohio 45601	9:45 a.m.	February 1, 2004
	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)
Wayne Grigsby, Plant Superintendent	(740) 774-1223
Name, Address and Title of Responsible Official	Phone Number
Mayor and Council City of Chillicothe 35 S. Paint Street Chillicothe, Ohio 45601	(740) 774-1185

C. AREAS EVALUATED DURING INSPECTION

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

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

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

See attached letter.


 Jake Greuey, Inspector, Ohio EPA, Southeast District Office

3/22/07
 Date


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

3/22/07
 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 NPDES 0PD00003*LD	X			
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 <u> </u>	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>	X			
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 <u> </u> on MORS <u> </u> 800 Number			X	
k. Any hydraulic and/or organic overloads experienced since last inspection		X		

Comments:

I. SELF-MONITORING PROGRAM

Part 1: Flow Measurement	Yes	No	N/A	N/E
a. Primary flow measuring device properly operated & maintained. Type of device: <input type="checkbox"/> ultrasonic & parshall flume <input type="checkbox"/> calculated from influent <input type="checkbox"/> weir <input checked="" type="checkbox"/> Other <input type="checkbox"/> ultrasonic & weir Specify: *	X			
b. Calibration frequency adequate (date of last calibration <u>Annually</u>)	X			
c. Secondary instruments (totalizers, recorders etc.) properly operated and maintained	X			
d. Flow measurement equipment adequate to handle expected ranges of flows	X			
e. Actual flow discharged is measured	X			
f. Flow measuring equipment inspection frequency: <input checked="" type="checkbox"/> Daily <input type="checkbox"/> Weekly <input type="checkbox"/> Monthly <input type="checkbox"/> Other				

Comments: * Influent: Parshall flume/ultrasonic; effluent; propeller flow meter.

Part 2: Sampling	Yes	No	N/A	N/E
a. Sampling location(s) are as specified by permit	X			
b. Parameters and sampling frequency agree with permit	X			
c. Permittee uses required sampling method	X			
d. Sample collection procedures are adequate	X			
i. Samples refrigerated during compositing	X			
ii. Proper preservation techniques used	X			
Conform with 40 CFR 136.3	X			
e. Monitoring records (e.g., flow, pH, D.O., etc.) maintained for a minimum of three years including all original strip chart recordings (e.g., continuous monitoring instrumentation, calibration, and maintenance records)	X			
f. Adequate records maintained of sampling date, time, exact location, etc.	X			

Comments:

Part 3: Laboratory - General	Yes	No	N/A	N/E
a. EPA approved analytical testing procedures used (40 CFR 136.3)	X			
b. If alternate analytical procedures are used, proper approval has been obtained			X	
c. Analyses being performed more frequently than required by permit		X		
d. If (c) is yes, are results reported in permittee's self-monitoring report			X	
e. Commercial laboratory used	X			
1. Parameters analyzed by commercial lab: <u>All metals, O&G & Cr-6</u>				
2. Lab name: <u>Ginosko Laboratories, Harpster, Ohio</u>				

Comments:

Part 3, Laboratory - Quality Control/Quality Assurance		Yes	No	N/A	N/E
f.	Quality assurance manual provided and maintained		X		
g.	Satisfactory calibration and maintenance of instruments and equipment	X			
h.	Adequate records maintained	X			
i. Results of latest U.S. EPA quality assurance performance sampling program:					
Date: 9/2006					
	Satisfactory				
	X Marginal				
	Unsatisfactory				

Comments: * A quality assurance manual has not been completed and was noted during the Ohio EPA lab audit in 2003 and the May 2006 inspection.
 ** The facility failed the tests for cBOD and Phosphorus on the 2006 DMRQA.

J. EFFLUENT/RECEIVING WATER OBSERVATIONS

Outfall #	Oil Sheen	Grease	Turbidity	Visible Foam	Visible Float Solids	Color	Other
001	None	None	Clear	None	None	Colorless	

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 dust clouds 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		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 24-hours Preservation 4 degrees Celsius
- Flow proportioned sample obtained
- Automatic sampler used
- Sample split with permittee
- 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: The facility's automatic sampler was used due to the likely freezing of an ISCO sampler placed outdoors during the bitter cold weather.

TABLE I

OHIO EPA FIELD DATA

FACILITY: Chillicothe WWTP

DATES SAMPLED: February 5 & 6, 2007

<u>Station</u>	<u>Date</u>	<u>Time</u>	<u>Parameter</u>	<u>Units</u>	<u>Value</u>	<u>Permit Limits</u>
001	2/5	1230	pH	S.U.	7.63	6.5-9.0
			Temperature	°C	9.53	-
			Dissolved oxygen	mg/l	8.08	-
			Conductivity	umhos/cm	911	-
001	2/6	0915	pH	S.U.	7.41	6.5-9.0
			Temperature	°C	9.45	-
			Dissolved oxygen	mg/l	8.82	-
			Conductivity	umhos/cm	931	-

TABLE II

COMPLIANCE SAMPLING DATA

FACILITY: Chillicothe WWTP

DATES SAMPLED: February 5, 2007 (samples taken midnight-midnight over 24 hours)

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	11	89.9	9**	73.6	45	647
	C	CBOD ₅	mg/l	5.3	43.3	9.8	80.1	40	576
	G	Cyanide, total	ug/l	<10	-	-	-	-	-
	C	Ammonia	mg/l	1.22	-	1.2**	-	-	-
	C	Nitrate-nitrite	mg/l	13.6	-	-	-	-	-
	C	Phosphorus	mg/l	3.61	-	-	-	-	-
	G	Oil & Grease	mg/l	<2.0	-	6.0	-	10 max.	-
	C	Nickel, tot.	ug/l	<40	-	<1	-	-	-
	C	Copper, tot.	ug/l	<10	-	5	-	-	-
	C	Cadmium, tot.	ug/l	<0.2	-	<0.2	-	-	-
	C	Lead, tot.	ug/l	<2.0	-	<2	-	-	-
	C	Chromium, tot.	ug/l	<30	-	<0.2	-	-	-
	C	Mercury, tot.	ug/l	<0.2	-	<0.2	-	-	-
	C	Zinc, tot.	ug/l	49	-	49	-	-	-
	G	Chrom. hex.	ug/l	<10	-	<5	-	-	-
		Flow, tot.	MGD			2.16			

*SAMPLE TYPE: G=grab; C=composite

** These results were from samples taken on the following day-Feb. 6th, after the split sample.