



State of Ohio Environmental Protection Agency

Southeast District Office

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Logan, Ohio 43138

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

May 19, 2009

Re: Tuscarawas County
Dover WWTP
Compliance Evaluation Inspection
Correspondence (PWW)

Mayor and Council
City of Dover
110 East Third Street
Dover, Ohio 44622

Dear Mayor and Council:

On May 5, 2009, I conducted a compliance evaluation inspection at the Dover Wastewater Treatment Plant. The purpose of the inspection was to determine compliance with the terms and conditions of National Pollutant Discharge Elimination System (NPDES) Permit Number 0PD00005*KD and to evaluate the wastewater treatment plant performance. Mr. Bill Craigo was present during the evaluation. The final effluent discharging to the Tuscarawas River was visually clear. No effluent samples were collected.

Since the last inspection, the wastewater treatment plant has been upgraded from an average daily design flow of 1.5 MGD to 3.0 MGD. The new plant consists of a coarse bar screen, grit removal, fine screening, submerged membrane activated sludge technology, ultraviolet (UV) disinfection, aerobic digestion and a SCADA system. The existing oxidation ditches were converted to flow equalization basins. In addition, the Tuscarawas River pump station was upgraded with two higher capacity variable frequency drive pumps. Lastly, the main plant influent sewer was upgraded from 24-inches to 30-inches.

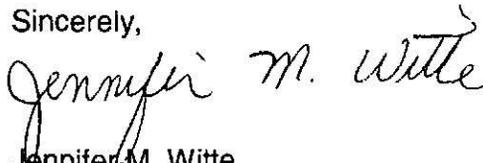
As a result of the inspection, I have the following comments:

- Since the upgrades to the wastewater treatment plant have been completed, it will be necessary to submit a new operation and maintenance manual for the facility.
- Your NPDES permit will expire on January 31, 2010. A renewal application is due no later than July 31, 2009.
- My October 11, 2005 inspection letter noted the city needed to develop a program to limit discharges of grease into its sanitary sewer system. In addition, we recommended the city consider implementation of a general permit for grease trap discharges, combined with periodical inspections. Please inform this office of your progress on this project.

- In 2005, the city had planned to purchase televising equipment for the sanitary sewer system. At the time of my inspection, I was informed the city has not purchased this equipment to date. Please inform this office of the city's intentions.
- At the time of my inspection, I was informed that the UV system is being operated on the lowest setting. Until Ohio EPA makes a conclusion on the need for UV disinfection with membrane technology, the city should operate the UV equipment at 100%. As mentioned during the inspection, bacteria is an indicator for pathogens, however, viruses can pass through the membrane since they are much smaller than bacteria.
- The city needs a log book for the influent and effluent composite sampler thermometers.
- The sewer crew has been using a GIS program to map the collection system. I understand the city would like to complete sewer relining on Progress and East Front Streets; Wade, Stucky, Angel and Northstar Drives; and Commercial Parkway in 2009. In addition, I understand the city plans to continue locating sources of inflow/infiltration in Indian Meadows.
- Stand-by power is now provided at the wastewater treatment plant via two separate feed lines (Parral and Arizona).
- At the time of our inspection, the plant was in good operating condition and very well maintained. The housekeeping at the plant was exemplary. Staffing levels are excellent.

On the day of the inspection, the city was found to be in compliance with the permit. A copy of our completed inspection report is enclosed. Please submit a written response to the aforementioned comments within **30 days** of receipt of this letter. The assistance and cooperation received during the inspection are appreciated. If you have any questions, please feel free to call me at (740) 380-5206.

Sincerely,



Jennifer M. Witte
Chemical Engineer - Environmental Specialist II
Division of Surface Water

JMW/dh

Enclosure

- c: Bill Craig, Superintendent, City of Dover
- c: Tuscarawas County Health Department

NPDES
Compliance Inspection Report

A. NATIONAL DATA SYSTEM CODING

Permit No.	NPDES No.	Date	Inspection Type	Inspector	Facility Type
OPD00005*KD	OH0024945	May 5, 2009	C	S	1

B. FACILITY DATA

Name and Location of Facility Inspected	Entry Time	Permit Effective Date
City of Dover WWTP 100 N. Tuscarawas Avenue Dover, Ohio 44622	12:15 p.m.	December 1, 2006
	Exit Time	Permit Expiration Date
	2:00 p.m.	January 31, 2010

Name(s) and Title(s) of On-Site Representative(s)	Phone Number(s)
Bill Craigo, Supt.	(330) 364-5118
Name, Address and Title of Responsible Official	Phone Number
Bill Craigo, Supt. 100 N. Tuscarawas Avenue Dover, Ohio 44662	(330) 364-5118

C. AREAS EVALUATED DURING INSPECTION

<u>S</u> Permit	<u>S</u> Flow Measurement	<u>--</u> Pretreatment
<u>S</u> Records/Reports	<u>S</u> Laboratory	<u>S</u> Compliance Schedules
<u>S</u> Operations & Maintenance	<u>S</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>M</u> Collection System		

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

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

See the attached letter.

Jennifer M. Witte
Jennifer M. Witte, Inspector, Ohio EPA, Southeast District Office

5/21/09
Date

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

5/22/09
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: *WWTP has been upgraded and converted to MBR technology.

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>	X			
e. Permittee is meeting compliance schedule	X			

Comments: *Infiltration/Inflow control plan

G. OPERATION AND MAINTENANCE

Treatment Facility Properly Operated and Maintained	Yes	No	N/A	N/E
a. Standby power available: Generator: _____ Dual Feed: <u>X</u> ¹	X			
b. Adequate alarm system available for power or equipment failures	X ²			
c. All treatment units in service other than backup units	X			
d. Sufficient operating staff provided: No. of shifts: <u>3</u> Days/Week: <u>7</u> ³	X			
e. Operator holds unexpired license of class required by permit Class: <u>III</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 ⁴		
i. Any plant bypasses since last inspection	X			
j. Regulatory agency notified of bypasses: _____ on MORS <u>X</u> 800 No.	X			
k. Any hydraulic and/or organic overloads experienced since last inspection		X		

Comments: ¹Two sources of power now available (Parral feed line and Arizona fed line)

²SCADA system to monitor the plant

³Sewer crew consists of 2-Class III operators and 1-Class II operator. All 7 WWTP operators have a Class III license. 2 lab technicians with Class III

⁴The operation and maintenance manual needs to be updated and submitted to Ohio EPA since the plant upgrades have been completed.

Collection System	Yes	No	N/A	N/E
a. Percent combined system: <u>0</u> %				
b. Any collection system overflows since last inspection: CSO _____ SSO: <u>X</u>	X			
c. Regulatory agency notified of overflow (SSOs)	X			
d. CSO O and M plan provided and implemented			X	
e. CSOs monitored and reported in accordance with permit			X	
f. Portable pumps used to relieve system	X			
g. Lift station alarm systems provided and maintained	X			
h. Are lift stations equipped with permanent standby power or equivalent		X*		
i. Is there an inflow/infiltration problem (separate sewer system), or were there any major repairs to collection system since last inspection	X**			
j. Any complaints received since last inspection of basement flooding	X			
k. Are any portions of the sewer system at or near capacity	X			

Comments: *Only the River Street lift station is equipped with perm. standby power.

**Renner Addition and County Road 80 area. Relining and grouting has been done.

H. SLUDGE MANAGEMENT

	Yes	No	N/A	N/E
a. Sludge adequately disposed (Method: <u>Landfilled</u>)	X			
b. If sludge is incinerated, where is ash disposed of? _____			X	
c. Is sludge disposal contracted (Name: _____)		X		
d. Has amount of sludge generated changed significantly since last inspection		X		
e. Adequate sludge storage provided at facility	X			
f. Land application sites monitored and inspected per state rules			X	
g. Records kept in accordance with state rules	X			
h. Any complaints received in last year regarding sludge		X		
i. Is sludge adequately processed (digestion, dewatering, pathogen control) in accordance with Ohio EPA rules	X			

Comments: The city has been landfilling all of its sludge since March 2001.

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: <u>X</u> ultrasonic & parshall flume (effluent) _____ calculated from influent _____ weir _____ <u>X</u> other _____ ultrasonic & weir _____ specify: Magmeter (influent)	X			
b. Calibration frequency adequate (date of last calibration: <u> * </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: _____ <u>X</u> Daily _____ Weekly _____ Monthly _____ <u>X</u> Other				

Comments: *Flow meters and secondary instruments must be calibrated annually.

K. MULTIMEDIA OBSERVATIONS

	Yes	No	N/A	NE
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:

F. GUIDE – VISUAL OBSERVATION – UNIT PROCESS

OMB No. 158-R0035

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 Prot.	S	Backflow preventer has been installed; city supply
	Safety Features	S	
	Bypasses	OUT	Head of plant; no treatment or disinfection
	Stormwater Overflows	OUT	Bypass from flow equalization; manually sample
	Alternate Power Source	OUT	2 separate power lines into WWTP
	Flow Equalization	OUT	2 units; 4 aerators per ditch
Preliminary	Maintenance of Collection Systems	M	Still locating sources of I/I
	Pump Station	IN	Main pumps bypasses to river
	Ventilation	S	
	Bar Screen	IN	1 unit; coarse; cleaned several times per day
	Disposal of Screenings	S	Landfilled
	Comminutor	--	
	Grit Chamber	IN	1 unit; Pisto-grit; minimal material
	Disposal of Grit	S	Landfilled
	Grit Pump/Classifier	IN	1 unit; 1 unit – separator
	Fine Screens	IN	2 units; rotated 1/month; cleaned every 15 minutes
	Influent Sampler	IN	1 unit; time proportioned; 4°C
	Influent Pumps	IN	3 units; screened
	Drainage Pump	IN	1 unit; discharges to head works
	Dump Tank	IN	1 unit; had of plant; Kimble leachate & vac. trucks
Sludge Disposal	Digesters	IN	2 units; aerobic; coarse diffusers; timers; series
	Blowers	IN	3 units
	Sludge Pumps	IN	3 units; 2 transfer; 1 sludge
	Disposal of Sludge	S	Landfilled
	Sludge Press	IN	1 unit; filtrate returned to coarse bar screen
Other	Flow Meter and Recorder	IN	Ultrasonic; calibrated
	Records	S	
	Lab Controls	S	
	Chemical Treatment	S	Sodium hypochlorite to clean membranes; spill containment
Secondary Tertiary (list items as required)	MBR's	IN	2 trains; 22 cassettes; 200 plates per one cassette
	MBR Blowers	IN	3 units; 2 small oil leaks
	Pre-air Blowers	IN	3 units
	Post air Blower	IN	1 unit
	Permeate Pumps	IN	5 units
Disinfection	Effluent	S	Visually clear
	Disinfection System	IN	UV disinfection; 2 units; in-line
	Effective Dosage	S	
	Contact Time	S	
	Post Aeration	IN	
	Effluent Sampler	IN	1 unit; flow proportioned; 4°C