



Environmental
Protection Agency

Ted Strickland, Governor
Lee Fisher, Lt. Governor
Chris Korleski, Director



1PD0001120090904

CHAMPAIGN URBANA WPCF *

REYNOLDS, JOSEP 2009/09/04

Orphan



State of Ohio Environmental Protection Agency

Southwest District Office

401 E. Fifth St.
Dayton, Ohio 45402

TELE: (937) 285-6357 FAX: (937) 285-6249
www.epa.state.oh.us

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

September 3, 2009

Mayor and Council, City of Urbana
205 S. Main Street
Urbana, Ohio 43078

RE: City of Urbana WWTP Compliance Evaluation Inspection / Notice of Violation.

Dear Mayor and Council:

On August 25, 2009, Joe Reynolds conducted a Compliance Evaluation Inspection at the City of Urbana waste water treatment plant. The inspection was conducted as part of a compliance review of the plant with respect to the terms and conditions of the National Pollutant Discharge Elimination System (NPDES) permit issued to the city.

The findings from this inspection are included in the attached report. The report contains five items that require a response. Please provide a written response to these items by no later than October 12, 2009.

If you have any questions regarding the report, you may contact ~~Joe Reynolds~~ at (937) 285-6097.

Sincerely,

Martyn G. Burt
Division of Surface Water

Enclosure

cc: Chad Hull, Interim Plant Superintendent
Dave Stewart, Wilber Smith and Associates



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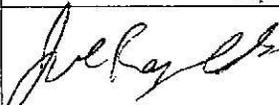
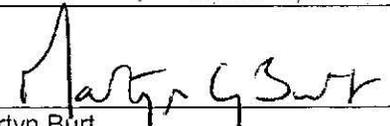
State of Ohio Environmental Protection Agency
Southwest District Office

NPDES Compliance Inspection Report

Section A: National Data System Coding					
Permit #	NPDES#	Month/Day/Year	Inspection Type	Inspector	Facility Type
1PD00011*LD	OH0027880	08/25/2009	C	S	1

Section B: Facility Data		
Name and Location of Facility Inspected	Entry Time	Permit Effective Date
City of Urbana WWTP 1547 Muzzy Road Urbana, Ohio	9:15AM	01/01/2006
	Exit Time	Permit Expiration Date
	12:15PM	12/31/2010
Name(s) and Title(s) of On-Site Representatives	Phone Number(s)	
Dave Stewart, Plant Superintendent Chad Hull, Interim Plant Superintendent	(937) 652 - 4331	
Name, Address and Title of Responsible Official	Phone Number	
Mayor and Council 205 South Main Street Urbana, Ohio 43078	(937) 652 - 4300	

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

Section D: Summary of Findings (Attach additional sheets if necessary)	
See attached report.	
Inspector	Reviewer
 Joe Reynolds Division of Surface Water Southwest District Office	 Martyn G Burt Compliance & Enforcement Supervisor Division of Surface Water Southwest District Office
9/3/09 Date	9/3/09 Date

Permit # : Error! Reference source not found.
NPDES #: Error! Reference source not found.

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

Comments/Status:

New treatment processes added since the last inspection include septage receiving station and microwave sludge handling.

Section E: Permit Verification

- (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..... N
- (d) Compliance schedule contained in
- (e) Permittee is meeting compliance schedule..... N/A

Comments/Status:

Permit #: Error! Reference source not found.
NPDES #: Error! Reference source not found.

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)..... IV
- (e) Operator of Record holds unexpired license of class required by permit..... N
Class: III
- (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..... 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..... N
- (b) Format of log book (i.e. computer log, hard bound book)
- (c) Log book(s) kept onsite (in an area protected from weather)..... N
- (d) Log book contains the following:
 - Identification of treatment works..... N
 - I. Date/times of arrival/departure for Operator of Record and any other operator required by OAC 3745-7..... N
 - II. Daily record of operation and maintenance activities (including preventative maintenance, repairs and request for repairs)..... N
 - III. Laboratory results (unless documented on bench sheets)... N
 - IV. Identification of person making log entries..... N
- (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..... N

Section G: Operation & Maintenance (con't)

Collection System:

- (a) Percent combined system: 0%
- (b) Any collection system overflows since last inspection..... Y
(CSO and/or SSO)
- (c) Regulatory agency notified of overflows (SSOs)..... Y
- (d) CSO O&M plan provided and implemented..... N/A
- (e) CSOs monitored and reported in accordance with permit..... N/A
- (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 Y
- (k) Are any portions of the sewer system at or near capacity..... N

Comments/Status:

A few basement back-ups were reported. All were due to blockages.

Section H: Sludge Management

- (a) Sludge management plan (SMP)
Submitted date: _____ Approval #: _____ Not submitted N/A
- (b) Sludge management plan current..... Y
- (c) Sludge adequately disposed..... Y
(Method: Land application.)
- (d) If sludge is incinerated, where is ash disposed of
- (e) Is sludge disposal contracted..... N
(Name: _____)
- (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

Comments/Status:

Urbana started up a new microwave sludge processor this year. They are producing a Class A sludge (91% solids). Filtrate from the septage receiving station is being sent to the head of the plant.

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: _____)
- (b) Calibration frequency adequate Y
(Date of last calibration: 4/1/2009)
- (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:

Empty box for comments/status.

Section I: Self-Monitoring Program (con't)

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).. N/E
 - (b) If alternate analytical procedures are used, proper approval has been obtained..... N/E
 - (c) Analyses being performed more frequently than required by permit. N/E
 - (d) If (c) is yes, are results in permittee's self-monitoring report..... N/E
 - (e) Commercial laboratory used..... N/E
- Parameters analyzed by commercial lab:

Lab name:

Quality Control/Quality Assurance

- (f) Quality assurance manual provided and maintained..... N/E
- (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:

Comments/Status:

Permit # : Error! Referer source not found.
 NPDES #: Error! Reference source not found.

Section J: Effluent/Receiving Water Observations

Outfall Number	Outfall sign in place?	Oil sheen	Grease	Turbidity	Foam	Solids	Color	Other
001	No	None	None	None	Slight / White	None	None	

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:

Inspection Findings

National Pollutant Discharge Elimination System (NPDES) permit number 1PD00011*LD was issued to the City of Urbana on January 1, 2006. This permit expires on December 31, 2010. An NPDES permit renewal application will need to be submitted 6 months prior to the permit expiration date.

Chad Hull is a Class III certified waste water operators. Chad Hull will be submitting his Class IV application sometime next year. The Urbana plant also has (2) Class I operators and (1) Class II operator.

The Urbana plant is currently a Class IV plant. In accordance with recent rule changes (Ohio Administrative Code 3745 – 7 – 04) the Urbana WWTP will be reclassified as a Class III waste water works at permit renewal time. Along with this reclassification the city will need to meet the minimum staffing requirements contained in the rule (Class III operator of Record present at the plant 5 days per week, minimum 40 hours per week).

The city is currently developing plans to upgrade the treatment system. Upgrades to the head works and wet stream treatment capacity are being evaluated. Along with the upgrades a Capacity, Management, Operations, and Maintenance (CMOM) plans is being developed for the collection system.

Upgrades to the treatment system in last two years include a new plant outfall sewer, including head wall, a micro wave sludge processing unit, and a new septage receiving station.

The city has an on-going Infiltration and Inflow program. Infiltration and Inflow is contributing to increased flows during storm events. On July 17, 2008 an influent flow of 7.8 million gallons was recorded. This flow was treated through secondary treatment without a loss of solids.

In order to alleviate a bottle neck which caused primary clarifier flooding, a partial diversion of flows around the trickling filters was installed. Flows are diverted to the secondary treatment system.

Inspection Findings (cont.)

The Neenah Paper company closed in September, 2008. With the plant closing both hydraulic and organic loads to the plant were reduced. Some of the organic loadings were restored with the introduction of septage receiving station waste to the head of the plant. Plant staff believes the additional food is helping plant operations. The city is in negotiations with another paper company as a possible tenant for the old Neenah Paper Mill.

Operation and Maintenance activities are scheduled and performed through the use of a maintenance card system. Some of the maintenance activities performed includes the rebuilding of two trickling filter pumps and replacement of one of the three plant blowers.

In accordance with Ohio Administrative Code 3745 – 7 – 09 an operators log is required to be maintained at the plant. At the time of the inspection the log had not been established. The log format is described in section (A) (3) of the rule (see attached).

An Operator of Record form needs to be completed and returned to the Ohio EPA Central office for the facility (see attached).

The City of Urbana currently uses a microwave sludge processing unit to produce Class A sludge. The primary disposal method is land application. A small volume was disposed by landfill. In 2008 six hundred sixty eight dry tons were land applied and 81 dry tons were land filled.

Between January, 2008 and July, 2009 the city reported the following final effluent numeric limits violations: (1) fecal coliform and (1) zinc. The following frequency violations also were recorded during the same time period: (18) chlorine residual, (1) suspended solids, (1) CBOD5, (1) ammonia, (10) temperature, (21) pH, (10) dissolved oxygen, and (1) oil and grease.

Facility Inspection

The influent auger monster was rebuilt in the spring of this year.

The influent sampler is showing signs of aging (rust, dirt, etc.). The temperature was at 6 degrees.

Influent flows are measured through a parshall flume with ultrasonic sensor.

Facility Inspection (cont.)

The grit removal system is manually run twice a day. Fine screens are used to remove the grit.

The plant has two primary clarifiers. The effluent from the tanks was fairly uniform (effluent weir level). Some preliminary solids were noted on the effluent trough walls. Primary solids are wasted to the primary aerobic digesters. A distribution line between the digester recently broke. The line was replaced and one of the digesters was cleaned at that time.

Primary effluent flow is pumped to the trickling filters. The pumping chamber has two 4.3 MGD pumps. These pumps were recently rebuilt. The inlet to the pumping chamber is used to remove grease and floating solids. In order to eliminate a bottle neck, which has contributed to surcharging of the primary clarifiers, a partial bypass was added around the trickling filters.

The plant has two trickling filters. Both filters have good flow distribution and growth. There were a lot of preliminary solids on their surface. These solids are manually removed. Each filter has two forced air units (draw air up in summer / down in winter). One of the motors was down for repair. These units are showing signs of aging (rust, wear, etc.).

The aeration system is divided into four zones. The first and third zones are operating as anoxic zones. The second and fourth zones are aerobic. Fine bubble diffusers have been installed. The mixed liquor was chocolate brown with minor light brown foam.

Flows from the aeration system are divided between two secondary clarifiers. The clarifiers were clear to over three feet. The effluent was clear. A minor fine solid was noted leaving the tanks. The rake arm on one of the clarifiers was damaged when the unit was run backward during an electrical phase upgrade project. The arm will be repaired after the claim is settled. The city had a bloom of water fleas (*Cerodaphnie*) in the clarifiers earlier this summer.

Flows from the secondary clarifiers go to the chlorine contact tank. The clarity in the tank was such that the bottom of the tank could be seen throughout the system. Some minor grease was noted on the surface. The effluent from the chlorine contact tank was clear.

The post aeration system was providing vigorous mixing. The effluent was clear minor white foam.

Facility Inspection (cont.)

The final effluent automatic sampler was at 5 degrees. Both the influent and effluent samplers are scheduled to be replaced next year.

The final effluent to the Mad River was clear. Minor white foam was noted.

At the time of this inspection the Urbana WWTP was producing a visually high quality effluent. A combination of operations oversight along with reductions in industrial flows, and the introduction of septage (readily available food) are contributing factors.

The yard waste compost operations at the plant are being moved to the Urbana materials property. All of the remaining compost materials will be removed by November of this year.

A new electrical transformer was installed at the plant as part of the sludge microwave upgrade. The electrical capacity was doubled as part of this upgrade.

Items requiring a response

1. The attached Operator of Record (ORC) Notification Form must be completed and returned to Ohio EPA, at the address noted, by no later than October 12, 2009. A copy of the notification should be submitted to the Ohio EPA Southwest District Office, 401 East Fifth Street, Dayton, Ohio 45402.
2. The operator log books at the facility must be updated to meet the requirements of OAC 3745-7-09 (A) (see attached). Written verification as to the completion of this update must be provided by no later than October 12, 2009.
3. In order to prevent preliminary solids from entering and potentially interfering with treatment systems downstream, upgrades to the preliminary treatment system are needed. An update, including preliminary schedule, detailing proposed treatment system upgrades must be submitted to this office by no later than October 12, 2009.

Items requiring a response (cont.)

4. A written response detailing the circumstances that resulted in 60 frequency violations in November, 2008 must be submitted to this office by no later than October 12, 2009.

5. In order to meet the Class IV staffing requirements as currently required in the city's permit (the permit expires December 31, 2010) one of the following options must be enacted: contract with a Class IV operator, or submit a permit modification request to have the plant classification reduced to Class III. A written response detailing which option will be enacted must be provided by no later than October 12, 2009.



Ohio Environmental Protection Agency
 Division of Drinking and Ground Waters
 Operator Certification Unit

Operator of Record (ORC) Notification Form

Ohio Environmental Protection Agency
 Division of Drinking and Ground Waters
 Operator Certification Unit
 50 West Town St, Suite 700
 P.O. Box 1049
 Columbus, OH 43216-1049

Phone: (614) 644-2752
 1- 866 - 411-OPCT (6728)
 Fax: (614) 644-2909
 email: opcert@epa.state.oh.us
 website: www.epa.state.oh.us/ddagw/opcert.html

I. SYSTEM INFORMATION

Name of System: _____ Phone Number: _____
 PWS ID/NPDES Permit #: _____ STU # _____ Classification: _____
 Name of Facility Owner or Permittee, Title (Print) _____ Facility Owner or Permittee (Signature) _____

II. SYSTEM TYPE (Check only one of the following. Use additional sheets if necessary.)

Public Water System (PWS)	Distribution System	Treatment Works	Collection System

III. OPERATOR OF RECORD INFORMATION

Add Additional(A), New (N) or Remove(R)	Name of Operator of Record	Certification Number & Expiration Date	I verify that I am the onsite certified operator responsible for the technical operation of the above referenced facility. (Signature of certified operator)*

* A signature by an operator of record who is being removed is not required.
 (Attach additional sheets if necessary.)

Amount of time an ORC spends onsite at the Facility: _____

For Internal Use Only	
Reviewed by:	Date of SDWIS update:
Date of Compliance Status Letter:	

