



Environmental
Protection Agency

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



1PB0003420090603

CLERMONT WILLIAMSBURG WWTP

WARE, RONALD

2009/06/03



State of Ohio Environmental Protection Agency

Southwest District Office

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

June 4, 2009

Patti Bates, Village Administrator
Village of Williamsburg
107 West Main Street
Williamsburg, Ohio 45176

**Re: Williamsburg WWTP, NPDES Permit No. 1PB00034*FD / OH0021571
Compliance Evaluation Inspection**

Dear Ms. Bates:

On Thursday, May 28, 2009, Mr. Ron Ware of this office conducted a Compliance Evaluation Inspection at the above referenced facility. The Village was represented by Jeremiah Fite, Operator of Record. The purpose of the inspection was to evaluate several aspects of plant operation and performance. As indicated in the attached report, there were two areas evaluated during the inspection that were not rated as "Satisfactory."

"Effluent/Receiving Waters" received a "marginal" rating due to violations of the final effluent limitations for total phosphorus in this facility's current NPDES permit (1PB00034*FD) that occurred during the months of August, October, and November 2008.

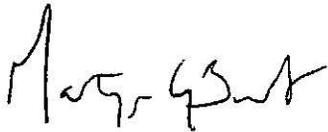
The area designated as "Facility Site Review" received an "unsatisfactory" rating due to the UV light disinfection equipment being exposed during operation at the time of the inspection. Operating UV lights that are exposed pose a major eye safety issue. Provisions need to be made at once to secure covering or some other protective measures for these UV lights in order to protect the eye sight of plant workers.

Please provide this office with a written description of any actions, either taken or proposed, to address this situation. This written description should include the dates, either actual or proposed, for completion of these actions. Please provide this office with this written response within thirty days of receipt of this letter.

Patti Bates, Village Administrator
Village of Williamsburg
June 4, 2009
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If you have any questions regarding this report, please contact Mr. Ware at (937) 285 - 6098.

Sincerely,

A handwritten signature in black ink, appearing to read "Martyn Burt". The signature is written in a cursive style with a large initial "M".

Martyn Burt
Compliance and Enforcement Supervisor

Attachment

MBRWbp

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:

Section F: Compliance

- (a) Any significant violations over the past year Y
- (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..... N/A

Comments/Status:

(a) A list of violations over the past year is provided on page 8 of this report.

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)..... II
- (e) Operator of Record holds unexpired license of class required by permit..... Y
 Class: II
- (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..... Y
- (j) Operation and maintenance manual provided and maintained..... Y
- (k) Any plant bypasses over the past year N
- (l) Regulatory agency notified of bypasses..... N/A
 On MOR's 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..... N
 - 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)... N
 - V. Identification of person making log entries..... Y
- (e) 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

Section G: Operation & Maintenance (con't)

Collection System:

- (a) Combined system? N
- (b) Any collection system overflows since last inspection..... N
(CSO and/or SSO)
- (c) Regulatory agency notified of overflows (SSOs)..... N/A
- (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..... Y
- (g) Lift station alarms provided and maintained..... Y
- (h) Are lift stations equipped with permanent standby power
or equivalent..... N/E
- (i) Is there an inflow/infiltration problem (separate sewer system),
or were there any major repairs to collection system since
last inspection..... Y
- (j) Any complaints received since last inspection of basement flooding N/E
- (k) Are any portions of the sewer system at or near capacity..... N/E

Comments/Status:

Treatment Works:

(g) The current back-up to the Operator of Record (Jeremiah Fite) is Bob Stewart, who has a Class II WW operator certificate.

(i) In September '08, an actuator (which regulates flow patterns) on one of the SBR units failed. A replacement actuator was obtained and installed in January '09.

Record Keeping:

(d) Lab results are kept in logs that are separate from the operator log book.

Collection System:

(g) The Village has 4 lift stations with visual/audio alarms. They are all checked daily. The Main St. lift station does have an auto-dialer system for "High wet-well."

Section H: Sludge Management

- (a) Sludge management plan (SMP)
Submitted date: Approval #: Not submitted N/A
- (b) Sludge management plan current..... N/A
(c) Sludge adequately disposed..... Y
(Method: New Richmond WWTP)
(d) If sludge is incinerated, where is ash disposed of? N/A
(e) Is sludge disposal contracted..... Y
(Name: Gullet Sanitation)
(f) Has amount of sludge generated changed significantly since
last inspection..... N
(g) Adequate sludge storage provided at plant..... N
(h) Land application sites monitored and inspected per SMP..... N/A
(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)..... N/E

Comments/Status:

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: Magmeter at plant head - works)
- (b) Calibration frequency adequate Y
(Date of last calibration: February 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..... N
(f) Flow measuring equipment inspection frequency
 Daily Weekly monthly other

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).. Y
 - (b) If alternate analytical procedures are used, proper approval has been obtained..... N/A
 - (c) Analyses being performed more frequently than required by permit. N
 - (d) If (c) is yes, are results in permittee's self-monitoring report..... N/A
 - (e) Commercial laboratory used..... Y
- Parameters analyzed by commercial lab: CBOD₅, ammonia nitrogen, nitrates & nitrites, oil & grease, total phosphorus, total suspended solids, fecal coliform, sludge parameters, cyanide & metals
Lab name: Test America

Quality Control/Quality Assurance

- (f) Quality assurance manual provided and maintained..... Y
 - (g) Satisfactory calibration and maintenance of instruments/equipment. Y
 - (h) Adequate records maintained..... Y
 - (i) Results of latest USEPA quality assurance performance sampling program: Satisfactory Marginal Unsatisfactory N/A
- Date:

Comments/Status:

Laboratory:

Section J: Effluent/Receiving Water Observations

Outfall Number	Outfall sign in place?	Oil sheen	Grease	Turbidity	Foam	Solids	Color	Other
1PB00034001	Not evaluated	None	None	None	slight	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

The Village of Williamsburg's wastewater treatment works (WWTW) is designed to treat an average daily flow of 0.5 million gallons per day (MGD). From January 2008 thru April 2009, the Village reported an average daily flow of 0.607 MGD. The WWTW consists of the following major components:

- Preliminary Screens (mechanical 3/4" opening)
- Vortex Grit Removal
- (4) Sequencing Batch Reactor Tanks
- Ultraviolet disinfection
- (2) Aerobic Digesters
- (4) Sludge drying beds

Effluent Limit Violations

(Period of Review: January 2008 – April 2009)

	7D = Weekly	30D = Monthly	1D = Daily		
	Conc. = Concentration (mg/l)		Qty. = Quantity (Kg/Day)		
August 2008	Phosphorus, Total (P)	30D Conc	2.0	4.29	
August 2008	Phosphorus, Total (P)	7D Conc	3.0	4.29	
October 2008	Phosphorus, Total (P)	30D Conc	2.0	4.76	
October 2008	Phosphorus, Total (P)	7D Conc	3.0	4.76	
November 2008	Phosphorus, Total (P)	30D Conc	2.0	2.18	
February 2009	Oil and Grease, Freon	1D Conc	5.0	7.62	

A review of the files showed that Ohio EPA was given notification of the NPDES violations listed above. A possible cause of the violations for total phosphorus was the fact that one of the four SBR units was out of service from February '08 to January '09. For this reason, the "Effluent/Receiving Waters" section of this report was given a "Marginal" rating.

Items Noted During the Inspection

1. The laboratory was in relatively good condition. The Village now performs split sampling in-house and with its contract laboratory (Test America) for CBOD₅, TSS and NH₃. The issues that were raised during the last compliance inspection regarding thermometers (in the BOD incubator) and in the automatic composite samplers) have been addressed.
2. A daily log book is now kept at the plant (in accordance with Ohio Administrative Code 3745-7-09). Maintenance activities are also logged into this book.

3. The UV light disinfection units in the final effluent pumping tank were in operation, but were not covered. Uncovered and operating UV lights are a major eye safety issue. Provisions need to be made at once to secure covering or some other protective measures for these UV lights in order to protect the eye sight of plant workers. For this reason, the "Facility Site Review" section of this report was given a rating of "Unsatisfactory."

4. Waste sludge handling and excessive wet weather flows are two major issues for this facility. The current waste sludge tanks do not provide enough storage for the amount of sludge that needs to be wasted consistently to keep solids out of the plant's final effluent. During wet weather high flow events, the operation of the plant's SBR units has to be modified in order to prevent solids wash out. A Permit to Install (PTI # 704417) was issued to the Village of Williamsburg on May 14, 2009 for Phase I improvements to the Williamsburg WWTP. The proposed Phase I improvements are: 1) the installation of a 254,000 gallon flow equalization tank; 2) the installation of a 100,000 gallon waste sludge storage tank; and 3) the construction of a sludge belt press facility. The intent of these proposed improvements is to alleviate the aforementioned problems with waste sludge handling and excessive wet weather flows.

