



**Environmental
Protection Agency**

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



1PB0003320080912

DARKE

VERSAILLES WWTP

MILLER, JOSEPH

2008/09/12



State of Ohio Environmental Protection Agency

Southwest District Office

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Ted Strickland, Governor
Lee Fisher, Lieutenant Governor
Laura Powell, Acting Director

September 12, 2008

Mayor and Council
Village of Versailles
P.O. Box 288
Versailles, OH 45380

**RE: Compliance Evaluation Investigation (CEI)
Village of Versailles Wastewater Treatment Plant
1PB00033*GD/OH0020656, Versailles, Darke County**

Mayor and Council:

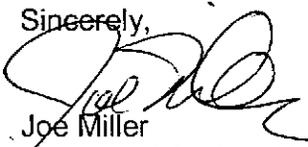
On August 19, 2008, Laura Pohlman and I conducted a Compliance Evaluation Investigation at the Village of Versailles wastewater treatment works. Dennis Deniro, OEPA-DEFA and Dan Gill, OEPA-DSW, were also present for this inspection. This inspection was conducted to determine compliance with the NPDES discharge permit. Frank Treon and Tim Wehrkamp, wastewater operators, represented the Village during this inspection.

Overall the wastewater facility was rated as "Marginal" due to two areas rated as "Unsatisfactory". A detailed inspection report is attached.

Following the inspection, we met at the village building to discuss the "No Feasible Alternatives Analysis" report submitted as part of the proposed wastewater treatment plant improvements. This report was required due to the practice of effluent blending at the wastewater plant during high storm flows. Steve Singer of Singer Environmental, Alan Smith of CH2M Hill, along with Randy Gump, Village Administrator, and Dane Nagel, Utilities Superintendent, represented the Village at this meeting. A short summary of our discussion is attached

No response to this inspection is required at this time. If you have any questions, I can be reached at (937) 285-6109.

Sincerely,



Joe Miller

Division of Surface Water

CC: Dennis Deniro, CO-DEFA
Dan Gill, CO-DSW
Randy Gump, Village Administrator

Alan Smith, CH2MHill
Steve Singer, Singer Environmental
Mark Voisard, WWTP Superintendent



**Village of Versailles Wastewater Treatment Plant
Compliance Evaluation Investigation (CEI)
August 19, 2008**

Overview

The Village of Versailles wastewater treatment plant treatment consists of influent pumping, micro-straining, flow equalization, oxidation ditch, secondary clarification, ultraviolet disinfection, and post-aeration. Excessive infiltration and inflow exceeds the capacity of the wastewater treatment plant during storm events, resulting in diversions around treatment components and effluent blending. Sludge is dewatered, aerobically digested, and land applied.

Permit to Install 665873 is currently under review by Ohio EPA. This proposed project will expand the capacity of the existing wastewater treatment plant from 0.35 mgd to 0.75 mgd and provide the capability to treat excess wet weather flows up to 4.5 mgd. The NPDES permit was modified effective August 1, 2008, to reflect this change in design flow.

Improvements proposed as part of this project include increasing the capacity of the influent lift station up to 6 mgd, modification of the screening processes, a new oxidation ditch with the ability to biologically remove total phosphorus, conversion of the existing oxidation ditch to flow equalization, new ultraviolet disinfection, effluent pumping ability, new flow meter, and sludge improvements. Additional flow equalization may be submitted in a future project if blending of effluent cannot be eliminated by the current proposed improvements. An additional oxidation ditch and clarifier could be added in the future as well.

No Feasible Alternatives Analysis

As part of the WWTP upgrade, a No Feasible Alternatives Analysis (NFA) report was submitted to Ohio EPA. The NFA was submitted due to the current practice of effluent blending. Effluent blending should be considered an interim solution while the causes of the excessive flow are addressed by other means. The analysis provided predicts the WWTP expansion to eliminate the need to bypass flows at least up to the flows observed during the period examined (2003-2007). Ultimately, the expectation is that effluent blending will be eliminated.

Ohio EPA agrees to the merit of the proposed project, but strongly believes that an aggressive and comprehensive infiltration and inflow (I/I) removal program needs to be implemented in conjunction with the WWTP improvements. The I/I program should be system-wide, covering public and private sewers, laterals, downspouts, and foundation drains. Smoke and/or dye testing of sewers should be used to identify problem areas along with flow measurement and CCTV as appropriate. Annual funding should be set aside for I/I removal programs. Funding should be specifically allocated for relining a certain number of sewer lines and manholes per year. An annual report summarizing efforts towards I/I removal projects should be sent to Ohio EPA. The annual report should also outline I/I removal projects planned for the upcoming calendar year.

The NFA report is considered acceptable with the expectation that the I/I program will be expanded as described.

Permit #: 1PB00033*GD
 NPDES #: OH0020656



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
1PB00033*GD	OH0020656	8/19/08	C	S	1

Section B: Facility Data		
Name and Location of Facility Inspected	Entry Time	Permit Effective Date
Village of Versailles WWTP 300 Grand Avenue Versailles, Ohio 45380	9:00 AM	8/1/2008
	Exit Time	Permit Expiration Date
	10:05 AM	5/31/2011
Name(s) and Title(s) of On-Site Representatives	Phone Number(s)	
Frank Treon, Wastewater Operator I	937-526-3148	
Tim Wehrkamp, Wastewater Operator II	937-526-3148	
Name, Address and Title of Responsible Official	Phone Number	
Mayor and Council Randy Gump, Village Administrator Village of Versailles P.O. Box 288 Versailles, OH 45380	937-526-3294	

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

Section D: Summary of Findings (Attach additional sheets if necessary)	
Collection system was rated as "Unsatisfactory" due to excessive infiltration and inflow, resulting in flows that exceed plant capacity and subsequently bypass of treatment and effluent blending.	
Flow Measurement was rated as "Unsatisfactory" due to the flow meter being out of service from June 22, 2007 to September 19, 2007.	
Inspector	Reviewer
 Joe Miller Division of Surface Water Southwest District Office	 Martyn Burt Compliance & Enforcement Supervisor Division of Surface Water Southwest District Office
9/12/08 Date	9/12/08 Date

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..... | N |
| (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..... | N |
| (i) Number and location of discharge points are as described in permit..... | Y |

Comments/Status:

Flows exceed plant capacity during large storm events. Effluent blending is used during these periods. Excess flow is diverted following screening to ultraviolet disinfection and blended with treated effluent.

Section E: Permit Verification

- | | |
|---|---|
| (a) Any significant violations since the last inspection..... | Y |
| (b) Permittee is taking actions to resolve violations..... | Y |
| (c) Permittee has a compliance schedule..... | Y |
| (d) Compliance schedule contained in NPDES PERMIT | |
| (e) Permittee is meeting compliance schedule..... | Y |

Comments/Status:

NPDES permit includes a Schedule of Compliance for phosphorus removal.
 Twenty-two bypass events reported during the period from July 2007 to July 2008.
 CBOD loading violation in March 2008.

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) Operator holds unexpired license of class required by permit..... Y
Class: II (Mark Voisard, WW2; Tim Wehrkamp, WW2; Frank Treon, WW1)
- (f) Routine and preventative maintenance schedule/performed
on time..... Y
- (g) Any major equipment breakdown since last inspection..... N
- (h) Operation and maintenance manual provided and maintained..... Y
- (i) Any plant bypasses since last inspection..... Y
- (j) Regulatory agency notified of bypasses..... Y
On MORs and/or Spill Hotline (1-800-282-9378)
- (k) Any hydraulic and/or organic overloads since last inspection..... Y

Record Keeping:

- (a) Log book provided..... Y
- (b) Format of log book (i.e. computer log, hard bound book)

Hardbound log 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..... Y
 - 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)... Bench
 - V. Identification of person making log entries..... Y
- (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..... Y

Collection System:

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

Comments/Status:

Major infiltration and inflow program planned in conjunction with wastewater plant expansion. Lift stations are to be equipped with SCADA capabilities as part of the upcoming WWTP improvements. Influent lift station to be provided with emergency power.

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..... N/A
- (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..... N
- (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: Sludge improvements planned as part of WWTP upgrade.

Section I: Self-Monitoring Program

Flow Measurement:

- (a) Primary flow measuring device operated and maintained..... Y
Type of device: Ultrasonic & Parshall flume Ultrasonic & Weir X Weir
Calculated from influent Other (Specify: Pressure transducer)
- (b) Calibration frequency adequate Y
(Date of last calibration: 2008 (2/year))
- (c) Secondary instruments operated and maintained..... Y
- (d) Flow measurement equipment adequate to handle full range
of flows..... N
- (e) Actual flow discharged is measured..... Y
- (f) Flow measuring equipment inspection frequency
 Daily Weekly monthly other

Comments/Status:

Flow meter current range is from 0 to 1.4 MGD. Flow meter changing with new plant to improve accuracy of measurement. Flow meter was out of service for three months in 2007.

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: metals, CBOD5, TSS, Fecal Coliform
 Lab name: Belmonte Laboratories

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
 Date:

Comments/Status:

Section J: Effluent/Receiving Water Observations

Outfall Number	Oil sheen	Grease	Turbidity	Visible Foam	Visible Floating Solids	Color	Other
001	no	no	no	yes	no	no	

Comments/Status:

foaming at outfall.

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