



**Environmental
Protection Agency**

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



1PK0001820090206

WARREN LOWER LITTLE MIAMI WWTP

ZIMMERMAN, MICH 2009/02/06



State of Ohio Environmental Protection Agency

Southwest District Office

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

February 6, 2009

Mr. Richard A. Renneker, P.E.
Warren County Water and Sewer Department
P.O. Box 530, 406 Justice Drive
Lebanon, Ohio 45036

**Re: Warren County Lower Little Miami WWTP
NPDES Permit No. 1PK00018*GD; OH0071692
NPDES Compliance Inspection and Notice of Violation**

Dear Mr. Renneker:

On January 26, 2009, I conducted a National Pollutant Discharge Elimination System (NPDES) permit compliance inspection at the above referenced facility. Carl Gatton, Operations Superintendent, and Gregory Squire, Chief Operator, were present and represented the County during the inspection. The purpose of the inspection was to evaluate several aspects of plant operation and performance, and to assess compliance with the facility's National Pollutant Discharge Elimination System (NPDES) permit.

Observations and findings of the inspection are included in the attached report. As indicated in the report (Section C.), all areas evaluated during the inspection were rated Satisfactory except for "Effluent/Receiving Waters". This was rated marginal because of exceedances of the final effluent limitations over the last three years (January, 2006 through December, 2008; refer to the table in the report). Particularly, the TSS violations in March and May, 2008, resulted in Significant Noncompliance. We acknowledge and appreciate the County's previously submitted noncompliance notification letters for the 2008 violations as required by the permit. However, we have no record of receiving letters for the March and October, 2007 TSS violations or the July, 2006 total residual chlorine violation. Explanatory information for these exceedances should be submitted to this office by February 20, 2009. In addition, please provide a status update on the repair of the sludge filter press feed pump.

Significant improvements in plant operation and maintenance were evident, with regular cleaning of treatment units, maintenance of back-up units (i.e. generators), logging of plant and laboratory activities, and the usual high quality of the final effluent.

Ohio EPA received the Permit to Install application and plans for the Phase III upgrade of the Lower Little Miami WWTP on December 8, 2008. The plans were prepared by Malcolm Pirnie, Inc., and will be reviewed by the Division of Engineering and Financial Assistance and the Division of Surface Water, Southwest District Office. The proposed improvements will increase the plant capacity to an average design flow of 12 MGD.

If you have any questions, don't hesitate to contact me at (937) 285-6102.

Sincerely,



Michael W. Zimmerman
Division of Surface Water

Enclosure

Copy: Carl Gatton, Warren County Water and Sewer Department, w/ enclosure
Gregory Squire, Warren County Water and Sewer Department, w/ enclosure



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
1PK00018*GD	OH0071692	11/25/2008	C	S	1

Section B: Facility Data		
Name and Location of Facility Inspected	Entry Time	Permit Effective Date
Warren County Lower Little Miami WWTP 2086 West U.S. Route 22 & 3 Maineville, Ohio 45039 Mailing: P.O. Box 530, 406 Justice Dr. Lebanon 45036	10:20 am	9/1/2005
	Exit Time	Permit Expiration Date
	12:20 pm	8/31/2010
Name(s) and Title(s) of On-Site Representatives	Phone Number(s)	
Gregory Squire, WWTP Chief Operator Carl Gatton, Operations Superintendent	(513) 683-5808 (513) 925-1643	
Name, Address and Title of Responsible Official	Phone Number	
Richard A. Renneker, P.E., County Sanitary Engineer Chris Brausch, P.E., Deputy Sanitary Engineer	(513) 695-1377 same	

Section C: Areas Evaluated During Inspection					
(S = Satisfactory, M = Marginal, U = Unsatisfactory, N = Not Evaluated)					
S	Permit	S	Flow Measurement	N	Pretreatment
S	Records/Reports	S	Laboratory	S	Compliance Schedule
S	Operations & Maintenance	M	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)	
Refer to attached report.	
Inspector	Reviewer
 Michael W. Zimmerman Division of Surface Water Southwest District Office Date: Feb. 6, 2009	 Martyn Burt Compliance & Enforcement Supervisor Division of Surface Water Southwest District Office Date: 2/6/09

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..... N
- (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 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..... N
- (d) Compliance schedule contained in

- (e) Permittee is meeting compliance schedule..... N/A

Comments/Status:

Final effluent limit violations for TSS, CBOD5, NH3-N for the review period Jan., 2006 thru Dec., 2008; also one TRC violation on 7/18/2006 and one copper violation in Feb., 2008 (refer to attached table). The TSS violations in March and May, 2008, placed the facility in Significant Noncompliance for two quarters (Jan.-March, 2008 and Apr.-June, 2008). The March, 2008 TSS violations were caused by hydraulic overloading associated with heavy rainfall. The May, 2008 TSS violations were attributed to operator error (WAS return pump left off causing overflow of activated sludge from clarifier). September, 2008 NH3-N violations caused by power outage associated with the September 14th wind storm.

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..... Y
 Class: IV - *plant has two Class IV operators*
- (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..... Y
- (b) Format of log book (i.e. computer log, hard bound book)

Permanently bound notebook – all activities recorded in this 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)... Y
 - 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

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..... Y
- (g) Lift station alarms provided and maintained..... Y
- (h) Are lift stations equipped with permanent standby power
or equivalent..... Y
- (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 Y
- (k) Are any portions of the sewer system at or near capacity..... N

Comments/Status:

Treatment Works:

- tea cup degritters not being used (permanent situation)
- there has been a significant improvement in plant maintenance with Greg Squire as chief operator
- two backup generators – now exercised regularly and logged
- one of the two belt filter presses is down due to inoperable feed pump; pump seals on order and scheduled to be back on line in February

Record Keeping:

- arrival and departure of operators tracked through use of time clock

Collection System:

- supervisor – Mike Carter
- 71 lift stations in system – each has a monitoring system with alarms
- some lift stations are equipped with standby power; County also uses portable generators
- Willow Pond area – experienced basement back-ups/flooding (Sumco – industrial user; installed a separate sewer)

Section H: Sludge Management

- (a) Sludge management plan (SMP)
Submitted date: 8/2/1989 Approval #: 05-176-PW Not submitted N/A
- (b) Sludge management plan current..... Y
- (c) Sludge adequately disposed..... Y
(Method: Landfilled)
- (d) If sludge is incinerated, where is ash disposed of
- (e) Is sludge disposal contracted..... Y
(Name: Rumpke)
- (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..... 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)..... Y

Comments/Status:

- dewatered sludge collected in roll-offs and hauled to the Hamilton Co., Colerain Twp. Rumpke landfill
- two Ashbrook filter presses

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: May, 2008)
- (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:

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: O&G, NO3-NO2-N, TKN, T-P,metals

Lab name: *Belmonte Labs, Dayton (Jeff Nottingham)*

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: 2008

Comments/Status:

- laboratory manager at plant is Jon Collins
- 2008 DMR-QA study was Satisfactory except for fecal coliform, which was missed due to a calculation error
- drying oven temp was 104°C – acceptable
- cursory review of laboratory practices and procedures – very good

Section J: Effluent/Receiving Water Observations

Outfall Number	Oil sheen	Grease	Turbidity	Visible Foam	Visible Floating Solids	Color	Other
001	None	None	Clear	None	None	Clear	--

Comments/Status:

Final effluent from chlorine contact tank --> 30-inch effluent pipe -> daylights at a concrete headwall -> unnamed tributary -> Simpson Creek -> Little Miami River (RM 28.14)

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:

**Warren County Lower Little Miami WWTP
 Final Effluent Limitation Violations (Outfall 001)**

(Period of Record: January, 2006 – December, 2008)

Reporting Period	Station	Parameter	Limit Type	Limit	Reported Value	Violation Date
July 2006	001	Chlorine, Total Residual	1D Conc	0.019	.215	7/18/2006
March 2007	001	Total Suspended Solids	30D Conc	20	41.6071	3/1/2007
March 2007	001	Total Suspended Solids	7D Conc	30	172.	3/1/2007
March 2007	001	Total Suspended Solids	30D Qty	551	1801.93	3/1/2007
March 2007	001	Total Suspended Solids	7D Qty	827	7872.99	3/1/2007
October 2007	001	Total Suspended Solids	7D Qty	827	994.348	10/22/2007
February 2008	001	Copper, Total Recoverable	30D Qty	0.6	.64255	2/1/2008
March 2008	001	CBOD 5 day	30D Conc	8.0	9.62	3/1/2008
March 2008	001	CBOD 5 day	30D Qty	207	512.647	3/1/2008
March 2008	001	CBOD 5 day	7D Qty	317	349.448	3/1/2008
March 2008	001	Total Suspended Solids	30D Conc	20	89.9583	3/1/2008
March 2008	001	Total Suspended Solids	30D Qty	551	5632.64	3/1/2008
March 2008	001	Total Suspended Solids	7D Qty	827	1294.68	3/1/2008
March 2008	001	CBOD 5 day	7D Conc	12	23.0466	3/15/2008
March 2008	001	CBOD 5 day	7D Qty	317	1483.29	3/15/2008
March 2008	001	Nitrogen, Ammonia (NH3)	7D Qty	52	72.0631	3/15/2008
March 2008	001	Total Suspended Solids	7D Conc	30	322.666	3/15/2008
March 2008	001	Total Suspended Solids	7D Qty	827	20955.5	3/15/2008
May 2008	001	Total Suspended Solids	30D Conc	20	27.8571	5/1/2008
May 2008	001	Total Suspended Solids	30D Qty	551	840.877	5/1/2008
May 2008	001	Dissolved Oxygen	1D Conc	5.0	2.8	5/30/2008
September 2008	001	Nitrogen, Ammonia (NH3)	30D Conc	0.8	1.52475	9/1/2008
September 2008	001	Nitrogen, Ammonia (NH3)	30D Qty	21	31.5023	9/1/2008
September 2008	001	Nitrogen, Ammonia (NH3)	7D Conc	1.2	5.748	9/15/2008
September 2008	001	Nitrogen, Ammonia (NH3)	7D Qty	31	118.708	9/15/2008