



**Environmental
Protection Agency**

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



1PB0010320080115

BROWN

RIPLEY STP

JACKSON, JOSHUA 2008/01/15



State of Ohio Environmental Protection Agency

Southwest District Office

401 East Fifth Street
Dayton, Ohio 45402-2911

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

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

January 14, 2008

Village of Ripley
Charles Ashmore, Village Administrator
123 Waterworks Drive, P.O. Box 219
Ripley, OH 45167

Car esp.
**RE: Village of Ripley WWTW/Compliance Evaluation Inspection Report
NPDES Permit No. OH0020966 / OEPA PERMIT NO. 1PB00103*GD
Notice of Violation**

Dear Mr. Ashmore:

On January 9, 2008, I conducted an NPDES Compliance Evaluation Inspection at the Village of Ripley wastewater treatment works (WWTW). Mr. David Klump was representing the Village during the inspection. The purpose of the inspection was to evaluate compliance with the terms and conditions of the NPDES Permit.

A copy of Mr. Jackson's report on the inspection is enclosed. As indicated in the report, all evaluated sections received "Satisfactory" ratings with the exception of the "Collection System" section, which received a "Marginal" rating.

Thank you and your staff for the time extended during the inspection process. If you have any questions, please feel free to contact me by phone at (937) 285-6029 or by e-mail at joshua.jackson@epa.state.oh.us.

Respectfully,

Joshua Jackson
Environmental Specialist II
Division of Surface Water

Cc: David Klump, Village of Ripley

Enclosures







State of Ohio Environmental Protection Agency
Southwest District Office

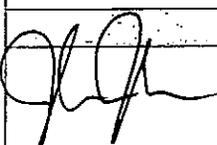
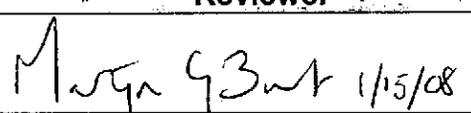
NPDES Compliance Inspection Report

Section A: National Data System Coding					
Permit #	NPDES#	Month/Day/Year	Inspection Type	Inspector	Facility Type
1PB00103*GD	OH0020966	1/9/2008	C	S	II

Section B: Facility Data		
Name and Location of Facility Inspected	Entry Time	Permit Effective Date
Village of Ripley 71 Victoria Street Ripley, Brown County	10:00 a.m.	4/1/2003
	Exit Time	Permit Expiration Date
	12:00 p.m.	3/31/2008
Name(s) and Title(s) of On-Site Representatives	Phone Number(s)	
David Klump, Wastewater Supt.	937-392-1524 (WWTW) 937-515-9669 (cell)	
Name, Address and Title of Responsible Official	Phone Number	
Village of Ripley Charles Ashmore, Village Administrator 123 Waterworks Drive, P.O. Box 219 Ripley, OH 45167	937-392-4378	

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	S	Effluent/Receiving Waters	S	Self-Monitoring Program
S	Facility Site Review	S	Sludge Storage/Disposal	N	Other
M	Collection System				

Section D: Summary of Findings (Attach additional sheets if necessary)
See Attached Report.

Inspector	Reviewer
	
1-14-08	1/15/08
Joshua Jackson Division of Surface Water Southwest District Office	Martyn Burt Compliance & Enforcement Supervisor Division of Surface Water Southwest District Office



Permit #: 1PB00103*GD
NPDES #: OH0020966

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)..... Y
- (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..... Y
- (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..... N
- (b) Permittee is taking actions to resolve violations..... N/A
- (c) Permittee has a compliance schedule..... N/A
- (d) Compliance schedule contained in
- (e) Permittee is meeting compliance schedule..... N/A

Comments/Status:

Section G: Operation & Maintenance

Treatment Works:

Treatment facility properly operated and maintained

- (a) Standby power available.....generator or dual feed N
- (b) Adequate alarm system available for power or equipment failures.. N
- (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..... N
- (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

New generator was onsite, but will not be completely operation for another 2 months (as will the SCADA system).
Wastewater certificate was not displayed because of construction. Operator will display WW certificate once the new office/lab is completed.
Mr. Klump will be compiling a new routine preventative maintenance schedule and and O&M manual (written for operators), once construction is complete at the WWTW.

Section G: Operation & Maintenance (cont)

Record Keeping:

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

Hard bound
- (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..... N
 - 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..... 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..... Y

Collection System:

- (a) Percent combined system: 0%
- (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..... 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/E
- (j) Any complaints received since last inspection of basement flooding N
- (k) Are any portions of the sewer system at or near capacity..... N/E

Comments/Status:

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:Hauling to a mixed solid waste landfill)
- (d) If sludge is incinerated, where is ash disposed of
- (e) Is sludge disposal contracted..... Y
(Name:Gullett's Sanitation)
- (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:

Gullett's Sanitation brings a portable belt filter press to the WWTW, dewateres the sludge and then hauls to Rumpke mixed solid waste landfill (Brown County)

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: 9/1/2007)
- (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:

Secondary flow measurement device was not connected at the time of the inspection, but will be in the next two months.

Section I: Self-Monitoring Program (cont)

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, O&G, Nitrate+Nitrite and

Phosphorus

Lab name: MASI

Quality Control/Quality Assurance

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

MASI provides sample containers with preservative.

Section J: Effluent/Receiving Water Observations

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

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:

Permit # : 1PB00103*GD
 NPDES # : OH0020966

The Village of Ripley is almost completed with construction of the wastewater treatment works improvements. All treatment units are on-line, and the remainder of the electrical and site work will be completed in the next two months. The permit to install for the upgrade was issued in October of 2005. The upgraded facility will contain the following salient features:

Design Flows: Total ADDF of WWTP – 0.4 MGD
 Peak hourly influent flow – 1.2 MGD

Design Effluent Quality: TSS (30 day)- 12 mg/l
 CBOD₅ (30 day)- 10 mg/l
 Ammonia (N) (30 day summer) - 1.0 mg/l
 Ammonia (N) (30 day winter) - 3.0 mg/l
 E. Coli (30 day summer)- 126 cts/100ml
 Dissolved Oxygen- not less than 6.0 mg/l

- Influent Pump Station (3 pumps)
- Mechanical Bar Screen (3/16-inch) with Manual bar screen backup
- 2-Oxidation Ditches (24.83 total hours of detention- ADDF)
- 2-Secondary Clarifiers (8.5 total hours of detention – ADDF)
- UV disinfection (2 banks at 1.5 MGD peak)
- 2-Aerobic Digesters/sludge holding (conversion of existing Can-TEX tanks)

In 2007 the average daily flow of the Village of Ripley WWTW was 0.247 MGD.

Effluent Limit Violations

(Period of Review: January 2006 – January 2007)

7D = Weekly 30D = Monthly 1D = Daily
 Conc. = Concentration (mg/l) Qty. = Quantity (Kg/Day)

Reporting Period	Parameter	Limit Type	Limit	Reported Value
October 2007	Dissolved Oxygen	1D Conc	4.0	3.7
December 2007	Oil and Grease, Freon	1D Conc	10	10.4

A review of the files showed that Ohio EPA was not given a self-notification report with either of the NPDES exceedences listed above. Part III (General Conditions), Section 12, of the Village of Ripley's NPDES permit states the following:

- A. *The permittee shall by telephone report any of the following within twenty-four (24) hours of discovery, at (toll free) 1-800-282-9378:*
1. *Any noncompliance which may endanger health or the environment;*
 2. *Any unanticipated bypass which exceeds any effluent limitation in the permit; or*

3. *Any upset which exceeds any effluent limitation in the permit.*
4. *Any violation of a maximum daily discharge limitation for any of the pollutant listed by the Director in the permit.*
- B. *For the telephone reports required by Part 12.A, the following information must be included:*
 1. *The times at which the discharge occurred, and was discovered;*
 2. *The approximate amount and the characteristics of this discharge;*
 3. *The stream(s) affected by the discharge;*
 4. *The circumstances which created the discharge;*
 5. *The names and telephone numbers of the persons who have knowledge of these circumstances;*
 6. *What remedial steps are being taken; and*
 7. *The names and numbers of the persons responsible for such remedial steps.*
- C. *These telephone reports shall be confirmed in writing within five days of the discharge and submitted to the appropriate Ohio EPA District office. The report shall include the following:*
 1. *The limitation(s) which has been exceeded;*
 2. *The extent of the exceedance(s);*
 3. *The cause of the exceedance(s);*
 4. *The period of the exceedance(s) including exact dates and times;*
 5. *If uncorrected, the anticipated time the exceedance(s) is expected to continue, and*
 6. *Steps being taken to reduce eliminate and/or prevent recurrence of the exceedance(s).*

The Village of Ripley shall also adhere to the General Conditions of the NPDES permit, specifically Part 12 (noncompliance notification), in the future. Contact this office for assistance in establishing a self-notification report protocol.

The Village also failed to report several parameters during the course of 2007. After discussing this with Mr. Klump, it was determined that samples are taken on the same two days every week. Sometimes these days don't correspond with the specific sampling requirements in the NPDES permit. "Weeks" are defined as days 1-7, 8-14, 15-21, and 22-28. Mr. Klump stated that he would ensure that the proper amount of samples is collected.

Items Noted During the Inspection

1. The mixed liquor in the oxidation ditch was chocolate brown in color with no odors. Each ditch has a DO meter that sends a signal to the computer system that regulates the aerator velocity. Mr. Klump is maintaining a dissolved oxygen concentration of 3.0 mg/l in both ditches. He also

- strives to keep a mixed liquor suspended solids concentration of 3500-4000 mg/l; since the WWTW is relatively new, however, he is still making adjustments to achieve peak performance.
2. The secondary clarifiers were clear with a small amount of algae. The sludge blanket depth was 3.5 feet.
The Village should purchase a longer "sludge judge" (or put a longer rope on the existing 15-foot sludge judge) so Mr. Klump does not have to stand on the clarifier weirs to measure sludge blanket depth. This method of sampling is a safety hazard.
 3. The two main collection system pump stations (Red Oak and Waterworks) are connected to the WWTW and the water treatment plants respectively. However, the remaining 4 pump stations are designed to run off a portable generator in the event of a power failure. Currently, the Village of Ripley does not own a portable generator. Please state how the Village intends to continue operation of the pump station if there is a localized power failure? Does the Village have intentions of purchasing a portable generator in the near future? What is the timetable for this purchase?
 4. When construction of the WWTW is completed in the next two months, each pump station in the collection system will be equipped with a telemetry system to alert the operator of high water alarm.

Inflow and Infiltration

At the time of the inspection, the Village of Ripley did not have an infiltration & inflow (I&I) removal program established. For this reason, a rating of "Marginal" was given to the "Collection System" section of this report. With aging sewer infrastructures, more and more communities are investing time and money into sewer investigation and repair work in order to remove extraneous water from the collection system. Groundwater and surface water run-off can enter the sewers through deteriorated manholes, sewer joints, cracked sewer mains/laterals and cross-connections (including downspouts, sump pumps and driveway drains). During precipitation events, surges of "clean" water in the collection system can create compliance problems at the WWTW or even illegal sanitary sewer overflows.

The Village of Ripley has recently made a substantial investment with the newly constructed WWTW. Attention should also be given to the sewage collection system in order to protect that investment. Initiating an I&I removal program should consist of the following items (at a minimum):

1. Dye/smoke testing.
2. Collection system flow monitoring to identify and prioritize problems areas.
3. Establish and implement a rotating schedule for CCTVing of the sewer mains (starting with the problem areas identified by the collection system flow monitoring)

Permit # : 1PB00103*GD
NPDES # : OH0020966

4. Inventory manhole conditions and residential downspout connections.
5. Prioritize and initiate specific I&I removal projects.

All of the items shown above must be documented and available for review by Ohio EPA.