



John R. Kasich, Governor  
Mary Taylor, Lt. Governor  
Scott J. Nally, Director

December 6, 2012

Mr. Rick Looker, Village Administrator  
Village of Bradford  
115 West Main Avenue  
Bradford, Ohio 45308

**RE: Village of Bradford WWTP, NPDES Permit No. 1PB00008\*HD / OH0020192  
Compliance Evaluation/Pre-permit Renewal Inspection & Notice of Violation**

Dear Mr. Looker:

On Tuesday, November 20, 2012, Mr. Ron Ware of this office conducted a Compliance Evaluation Inspection (CEI) of the Village's wastewater treatment facility. A copy of the Inspection Report is enclosed. As indicated in the report, six of the areas that were evaluated during the inspection received ratings other than "Satisfactory."

The area designated as "Effluent/Receiving Waters" received an "Unsatisfactory" rating due to violations of the final effluent limitations in this facility's current NPDES permit (1PB00008\*HD) that have occurred over the past two years.

The areas designated as "Collection System" and "Compliance Schedule" received a "Unsatisfactory" rating due to the Village's inability to meet deadlines for: 1) submitting a Permit to Install application and approvable detail plans for the Phase V - Combined Sewer Separation project; and 2) beginning construction of the Phase V - Combined Sewer Separation project. The compliance schedule in the Village's current NPDES permit (1PB00008\*HD) indicates that construction of the Phase V - Combined Sewer Separation project is to be completed by February 1, 2013. Please indicate when a Permit to Install application and approvable detail plans for the Phase V - Combined Sewer Separation project will be submitted to Ohio EPA.

The area designated as "Operations & Maintenance" received an "Unsatisfactory" rating due to the condition of the oxidation ditches. The aerator shaft on the west ditch was separated from the bearing and partially in the ditch, while the lone remaining (and operating) aerator on the east ditch had visible smoke coming from its bearing, which is an indication of a need for a repair or replacement of that bearing. This condition is unacceptable and is a violation of item 3. A. "FACILITY OPERATION AND QUALITY CONTROL" in Part III, page 31 of the Village's current NPDES permit for this facility (1PB00008\*HD). Please provide this office with a timeline for when repairs will be made to the oxidation ditches at this facility.

The area designated as "Self-Monitoring Program" received an "Unsatisfactory" rating due to the treatment plant's flow meter not having been calibrated for six years. Please provide this office with a timeline for when this facility's flow meter will be calibrated.

The area designated as "Sludge Storage/Disposal" received an "Unsatisfactory" rating due to the backlog of sludge in the sludge digesters and the lack of working aeration equipment for the sludge digesters. Please provide this office with a timeline for when the backlog of waste sludge at this facility will be reduced and when operable aeration equipment will be restored to the sludge digesters at this facility.

Please also be advised that the Bradford WWTP has been placed on a Six Month Significant Non-Compliance (SNC) watch list. Wastewater treatment facilities that are placed on this Six Month SNC list have either had effluent limit violations for four out of six months or had "significant" effluent limit violations for two straight quarters. (Significant effluent limit violations are violations where the reported effluent data for a pollutant parameter exceeds a technical review criterion). A review of the monthly reporting data for the Bradford WWTP over the past twenty two months shows that there have been effluent limit violations (including some significant violations) for twenty one of those twenty two months.

Due to the number fact that Bradford WWTP has been in Significant Non-Compliance for many months now, both for effluent violations and failure to meet compliance schedule dates, I am recommending that formal enforcement action be taken against the Village of Bradford. The main aim of this recommendation is to formalize a schedule by which the Village can return to compliance with the terms and conditions of the NPDES permit 1PB00008.

A draft renewal NPDES permit for this facility (1PB00008\*ID) has been prepared and will be sent out to public notice in the coming month. This draft permit will have the following requirements:

#### Effluent Sampling

For parameters for which composite sampling is required (CBOD<sub>5</sub>, Total Suspended Solids, Ammonia – Nitrogen, etc.), the type of composite sampling to be used for these parameters is described in Paragraph H in Part II of the renewal NPDES permit. This description reads as follows:

*"Composite samples of the effluent shall be comprised of a series of grab samples collected over a 24-hour period and proportionate in volume to the sewage flow rate at the time of sampling. Such samples shall be collected at such times and locations, and in such a fashion, as to be representative of the facility's overall performance."*

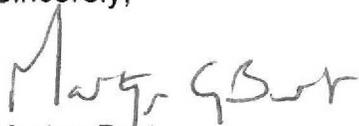
In addition, the collected effluent samples need to be refrigerated to 6° C +/- 2° in order to preserve them prior to lab analysis.

Effluent Disinfection Standard

Due to changes in the State of Ohio's Water Quality Standards, the disinfection standard in NPDES permits has been changed from fecal coliform to E. coli. For the Village's treatment plant, the applicable E. coli standards will be 161 counts/100 ml (monthly geometric mean) and 362 counts/100/ ml (weekly geometric mean). Interim and final effluent tables, along with a compliance schedule, have been added to the draft renewal permit to allow the Village some time to evaluate whether its treatment works can comply with the new limits for E. coli.

Please provide this office with a written response to the findings in this inspection by December 19, 2012. If you have any questions regarding this report, please contact Mr. Ware at (937) 285 – 6098 or by e-mail at [ron.ware@epa.state.oh.us](mailto:ron.ware@epa.state.oh.us).

Sincerely,



Martyn Burt  
Compliance and Enforcement Supervisor  
Division of Surface Water

MB/tb

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
1PB00008*HD	OH0020192	11/20/2012	C	S	1

Section B: Facility Data		
Name and Location of Facility Inspected	Entry Time	Permit Effective Date
Village of Bradford WWTP 11755 Klinger Road Bradford, Ohio 45308	9:20 AM	October 1, 2010
	Exit Time	Permit Expiration Date
	11:21 AM	December 31, 2012
Name(s) and Title(s) of On-Site Representatives	Phone Number(s)	
Jay Roberts, Operator of Record	(937) 417 - 9952	
Name, Address and Title of Responsible Official	Phone Number	
Rick Looker, Village Administrator Village of Bradford 115 Miami Avenue Bradford, Ohio 45308	(937) 448 - 0221	

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	U	Compliance Schedule
U	Operations & Maintenance	U	Effluent/Receiving Waters	U	Self-Monitoring Program
S	Facility Site Review	U	Sludge Storage/Disposal	N	Other
U	Collection System				

Section D: Summary of Findings (Attach additional sheets if necessary)	
Inspector	Reviewer
<i>Ron Ware</i> 12/6/2012 Ron Ware      Date Division of Surface Water Southwest District Office	<i>Martyn G Burt</i> 12/6/12 Martyn Burt      Date Compliance & Enforcement Supervisor Division of Surface Water Southwest District Office

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) Flows and loadings conform with NPDES permit..... Y
- (c) Treatment processes are as described in permit application... Y
- (d) All discharges are permitted..... N
- (e) Number and location of discharge points are as described  
in permit..... N

Comments/Status:

(d) & (e) There is an ongoing overflow from the old lagoon on the south side of the plant site to the receiving stream (Ballenger Run). The replacement pumps in the main lift station that sends all flows to the treatment plant are oversized, which results in frequent overflows at the screening building. Overflows from the screening building drain to the old lagoon.

**Section F: Compliance**

- (a) Any effluent 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 Compliance Schedule
- (e) Permittee is in compliance with schedule..... N

Comments/Status:

(b) Construction of the new treatment works was initiated on March 19, 2012. The projected completion date is June 2013.

(e) The Village has missed two deadlines in the compliance schedule in their current NPDES permit:

- 1) Submitting a Permit to Install application and approvable detail plans for the Phase V – Combined Sewer Separation project by November 1, 2011; and
- 2) Beginning construction of the Phase V - Combined Sewer Separation project by June 1, 2012.

**Section G: Operation & Maintenance**

**Treatment Works:**

Treatment facility properly operated and maintained

- (a) Standby power available.....generator  or dual feed ..... N
- i. What does the back-up power source operate.....
- ii. How often is the generator tested under load.....
- (b) Which components have an alarm system available for power or equipment failures.....  
  
The alarm system for the current treatment plant is unreliable. The new treatment plant will have an auto dialer and a SCADA system.
- (c) All treatment units in service other than backup units..... N
- (d) What method is used for scheduling routine & preventative maintenance (calendar, software, etc.).....  
  
Maintenance is performed on an "as needed" basis.
- (e) Any major equipment breakdown since last inspection..... Y
- (f) Operation and maintenance manual provided and maintained..... Y
- (g) Any plant bypasses since last inspection..... Y
- (h) Any plant upsets since last inspection..... N

**Comments/Status:**

- a) The new treatment plant will have a generator.
- c) & e) The aerator shaft on the west ditch separated from its bearing in March 2012. The repair of this aerator has yet to take place, The lone remaining aerator on the east ditch had visible smoke coming from its bearing, which is an indication of a need for repair or replacement of that bearing.
- g) There is an ongoing overflow from the old lagoon on the south side of the plant site to the receiving stream (Ballenger Run). The replacement pumps in the main lift station that sends all flows to the treatment plant are oversized, which results in frequent overflows at the screening building. Overflows from the screening building drain to the old lagoon.

**Section G: Operation & Maintenance con't**

**Record Keeping/Operator of Record:**

- (a) Wastewater Treatment Works classification (OAC 3745-7)..... II
- (b) Operator of Record holds unexpired license of class required by Permit..... Y
- (c) Copy of certificate of Operator of Record displayed on-site..... Y
- (d) Has the Operator of Record submitted an ORC Notification form.. Y
- (e) Minimum operator staffing requirements fulfilled (OAC 3745-7).... Y
- (f) If a Staffing Reduction plan has been approved, are the stipulations of the plan being met..... N/A
- (g) Operator of Record log book provided..... Y
- (h) Format of log book (e.g. computer log, hard bound book)  

Hard bound book.
- (i) Log book kept onsite (in an area protected from weather)..... Y.
- (j) 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
- b) Daily record of operator and maintenance activities (including preventative maintenance, repairs and request for repairs, process control test results, etc.)..... Y
- c) Laboratory results (unless documented on bench sheets)... N
- d) Identification of person making entries..... Y
- (k) Has the Operator of Record submitted written notifications 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

Comments/Status:

(j)(I) Identification of the treatment works needs to be provided on/in the ORC log book.

**Section G: Operation & Maintenance con't**

**Collection System:**

- (a) Are there pump stations in the collection system..... Y  
(There is 1 pump station in the collection system for this facility)
  - i. How many publicly-owned pump stations equipped with permanent standby power or equivalent..... 1
  - ii. How many pump stations have telemetered alarms..... 1
  - iii. How many pump stations have operable alarms..... 1
  
- (b) Any chronic collection system overflows since last inspection..... Y
- (c) Regulatory agency notified of all overflows..... Y
- (d) Are there CSOs in the collection system..... Y  
if so, what is the LTCP status.....  

Approved.
  
- (e) How are CSOs monitored (chalk, block, level sensor, etc.).....  

Daily observations.
  
- (f) Portable pumps available for collection system maintenance..... Y
- (g) RDII Program established and active..... Y
- (h) Any WIB complaint received since last inspection..... N
- (i) Is there a WIB response plan..... N
- (j) Is any portion of the collection system at or near dry weather capacity..... N

Comments/Status:

**Section H: Sludge Management**

- (a) Method of Sludge Disposal...
  - Land Application
  - Haul to Another NPDES Permittee
  - Haul to a Mixed Solid Waste Landfill
  
- (b) Has amount of sludge generated changed significantly since the last inspection..... N
- (c) How much sludge storage is provided at the plant.....
- (d) Sludge adequately disposed..... N  
(Method: Hauling to Mike's Sanitation Service in New Bremen, Ohio)
- (e) Records kept in accordance with State and Federal law (5 years according to OAC 3745-40-06)..... N/E
- (f) Any complaints received in last year regarding sludge..... N
- (g) 5/8" screen at headworks for facilities that land apply sludge..... N/A
- (h) Are sludge application sites inspected to verify compliance with NPDES permit..... N/A
- (i) Is a contractor used for sludge disposal..... Y  
If so, what is the name of the contractor.....

**Comments/Status:**

There is currently a backlog of sludge in the sludge digesters and no working aeration equipment for the sludge digesters.

**Section I: Self-Monitoring Program**

**Flow Measurement:**

- (a) Primary/Secondary flow measuring devices (e.g. weir with ultrasonic level sensor):
- (b) Flow meter calibrated annually ..... N  
(Date of last calibration: July 2006)
- (c) 24-hour recording instruments operated and maintained..... N/A
- (d) Flow measurement equipment adequate to handle full range of flows..... Y
- (e) All discharged flow is measured..... Y

**Comments/Status:**

The same type of flow meter (a parshall flume) will be used in the new treatment plant.

**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) 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

**Comments/Status:**

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

**Laboratory:**

*General*

- (a) Does the Quality Assurance Manual contain written Standard Operating Procedures (SOP's) for all analysis performed onsite..... Y
- (b) Do SOP's include the following if applicable..... Y
  - Title
  - Scope and Application
  - Summary
  - Sample Handling and Preservation
  - Interferences
  - Apparatus and Materials
  - Reagents
  - Procedure
  - Calculations
  - Quality Control
  - Maintenance
  - Corrective Action
  - Reference (Parent Method)

*Note: Standard Methods 1020A establishes that "Quality assurance (QA) is the definitive program for laboratory operation that specifies the measure required to produce defensible data of known precision and accuracy. Standard operating procedures are to be used in the laboratory in sufficient detail that a competent analyst unfamiliar with the method can conduct a reliable review and/or obtain acceptable results." SOPs should be developed for each analytical procedure.*

- (c) EPA approved analytical testing procedures used (40 CFR 136.3).. Y
- (d) If alternate analytical procedures are used, proper approval has been obtained..... N/A
- (e) Analyses being performed more frequently than required by permit. N
- (f) If (e) is yes, are results in permittee's self-monitoring report..... N/A
- (g) Satisfactory calibration and maintenance of instruments/equipment. Y

(h) Commercial laboratory used..... Y  
Parameters analyzed by commercial lab: Ammonia nitrogen, bacteria,  
metals, oil & grease, total phosphorus

Lab name: MASI

**Comments/Status:**

**Section J: Effluent/Receiving Water Observations**

Outfall # 1PB00008001

Outfall Description: Plant outfall to Ballenger Run

Receiving Stream: Ballenger Run

Receiving Stream Description: Warm Water Habitat, Primary Contact Recreation

**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:**

Effluent Limit Violations

(Period of Review: Nov. 2011 – Oct. 2012)

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

Reporting Period	Parameter	Limit Type	Limit	Reported Value	Violation Date
Nov. 2011	Phosphorus, Total (P)	30D Conc	1.0	1.595	11/1/2011
Nov. 2011	Phosphorus, Total (P)	7D Conc	1.5	1.88	11/1/2011
Dec. 2011	Phosphorus, Total (P)	30D Conc	1.0	2.285	12/1/2011
Dec. 2011	Phosphorus, Total (P)	7D Conc	1.5	1.71	12/1/2011
Dec. 2011	Phosphorus, Total (P)	30D Qty	1.82	1.83677	12/1/2011
Dec. 2011	Phosphorus, Total (P)	7D Conc	1.5	2.86	12/15/2011
Jan. 2012	Phosphorus, Total (P)	30D Conc	1.0	1.29	1/1/2012
Feb. 2012	Phosphorus, Total (P)	30D Conc	1.0	1.635	2/1/2012
Feb. 2012	Phosphorus, Total (P)	7D Conc	1.5	1.77	2/1/2012
March 2012	Phosphorus, Total (P)	30D Conc	1.0	2.17	3/1/2012
March 2012	Phosphorus, Total (P)	7D Conc	1.5	1.66	3/1/2012
March 2012	Phosphorus, Total (P)	7D Conc	1.5	2.68	3/15/2012
April 2012	Phosphorus, Total (P)	30D Conc	1.0	4.	4/1/2012
April 2012	Phosphorus, Total (P)	7D Conc	1.5	4.33	4/1/2012
April 2012	Phosphorus, Total (P)	30D Qty	1.82	1.85872	4/1/2012
April 2012	Phosphorus, Total (P)	7D Conc	1.5	3.67	4/15/2012
May 2012	Total Suspended Solids	7D Conc	20	21.5	5/1/2012
May 2012	CBOD 5 day	7D Conc	15	16.6	5/1/2012
May 2012	Phosphorus, Total (P)	30D Conc	1.0	2.69	5/1/2012
May 2012	Phosphorus, Total (P)	7D Conc	1.5	4.49	5/1/2012
June 2012	Phosphorus, Total (P)	30D Conc	1.0	2.64	6/1/2012
June 2012	Phosphorus, Total (P)	7D Conc	1.5	2.92	6/1/2012
June 2012	Phosphorus, Total (P)	7D Conc	1.5	2.36	6/8/2012
July 2012	Phosphorus, Total (P)	30D Conc	1.0	1.305	7/1/2012
Aug. 2012	Phosphorus, Total (P)	30D Conc	1.0	3.075	8/1/2012
Aug. 2012	Phosphorus, Total (P)	7D Conc	1.5	4.71	8/1/2012
Sept. 2012	Phosphorus, Total (P)	30D Conc	1.0	1.42	9/1/2012
Sept. 2012	Phosphorus, Total (P)	7D Conc	1.5	1.72	9/15/2012
Oct. 2012	Phosphorus, Total (P)	30D Conc	1.0	1.86	10/1/2012
Oct. 2012	Phosphorus, Total (P)	7D Conc	1.5	2.37	10/15/2012

Code Violations

Reporting Period	Station	Parameter	Limit Type	Limit	Reported Value	Violation Date
June 2012	001	Fecal Coliform			AK	6/1/2012
July 2012	001	Fecal Coliform			AK	7/20/2012

Frequency Violations

Reporting Period	Station	Parameter	Sample Frequency	Expected	Reported	Violation Date
Dec. 2011	001	Nitrogen, Ammonia (NH3)	2/Week	2	0	12/22/2011
May 2012	001	Nitrogen, Ammonia (NH3)	2/Week	2	1	05/08/2012
June 2012	001	Phosphorus, Total (P)	1/2Weeks	1	0	06/15/2012
Dec. 2011	581	Nitrogen Kjeldahl, Tot	1/Year	1	0	12/01/2011
Dec. 2011	581	Phosphorus, Total In Sludge	1/Year	1	0	12/01/2011
Dec. 2011	581	Arsenic, Total In Sludge	1/Year	1	0	12/01/2011
Dec. 2011	581	Cadmium, Total In Sludge	1/Year	1	0	12/01/2011
Dec. 2011	581	Copper, Total In Sludge	1/Year	1	0	12/01/2011
Dec. 2011	581	Lead, Total In Sludge	1/Year	1	0	12/01/2011
Dec. 2011	581	Nickel, Total In Sludge	1/Year	1	0	12/01/2011
Dec. 2011	581	Zinc, Total In Sludge	1/Year	1	0	12/01/2011
Dec. 2011	581	Selenium, Total In Sludge	1/Year	1	0	12/01/2011
Dec. 2011	581	Mercury, Total In Sludge	1/Year	1	0	12/01/2011
Dec. 2011	581	Molybdenum In Sludge	1/Year	1	0	12/01/2011
Dec. 2011	581	Ammonia (NH3) In Sludge	1/Year	1	0	12/01/2011
Dec. 2011	581	Nitrite Plus Nitrate,	1/Year	1	0	12/01/2011
Dec. 2011	581	Potassium In Sludge	1/Year	1	0	12/01/2011
Dec. 2011	581	Sludge Fee Weight	1/Year	1	0	12/01/2011
Dec. 2011	581	Fecal Coliform in Sludge	1/Year	1	0	12/01/2011