



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

August 27, 2013

Re: Belmont County
Pennwood Estates WWTP
Belmont County Sewer District
Compliance Evaluation Inspection
NPDES Permit OPH00012*GD

Mr. Mark Esposito, Director
Belmont County Sewer District
P.O. Box 457
St. Clairsville, Ohio 43950

Dear Mr. Esposito:

On August 8, 2013, I conducted a Compliance Evaluation Inspection (CEI) of the Pennwood Estates Wastewater Treatment Plant (WWTP). Ron Pacifico, Dale Jendrusk, and Mike Reed accompanied me on the inspection.

The purpose of the inspection was to perform a pre-permit NPDES renewal inspection and to evaluate the WWTP's status of compliance with the NPDES permit, federal number OH0059307, state number OPH00012*GD. Wastewater samples were not taken. A copy of the inspection report form is attached.

As a result of the inspection and file review, I have the following comments:

1. Operation and Maintenance - Part III of the NPDES Permit
 - a. As stated in previous inspections, this facility is showing significant wear. Based on my review of the files and discussions with the operators at the site, no action has been taken to address the following issues:
 - 1) The walls of the clarifiers are cracked and leaking in several locations.
 - 2) The weir in the upflow media filter is rusted and needs to be replaced.
 - 3) The block walls of the sand filters are collapsing and in very poor condition.

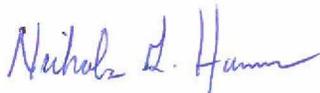
Due to the aging infrastructure and condition of the facility, it is prudent that the county plan for repairs or replace the plant. The Belmont County Sanitary Sewer District shall submit a detailed plan, with a schedule, to make repairs to or replace the plant to Ohio EPA. This may include the possibility of connecting to nearby St. Clairsville WWTP. This plan shall be submitted within sixty (60) days from the date of this letter.

As stated in previous inspection letters, there is a large area surrounding this subdivision that is unsewered. Ohio EPA has received numerous complaints over the years regarding failing residential and commercial sewage systems in this area. It should be included in any planning the county or the City of St. Clairsville performs to address the upgrade of the Pennwood system.

- b. Laboratory - Currently, there are no Standard Operating Procedures (SOPs) for any analysis performed on-site. These SOPs 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 shall be developed and provided for each analytical procedure conducted on-site.
 - c. At the time of the inspection, all four sand filters had piles of vegetation piled in the corners of the sand filter. Properly dispose of all vegetation within the sand filters.
 - d. Ohio EPA strongly encourages an operation and maintenance (O&M) checklist be developed and implemented for routine O&M activities at the WWTP.
2. Compliance Schedule Part I, C of the NPDES Permit - The NPDES permit contains a compliance schedule requiring submission and implementation of a plan to reduce Inflow and Infiltration (I/I) in the Pennwood collection system. Please provide a copy of this plan and a listing of all actions taken to identify and remove I/I from the collection system for the last five years.
 3. The current NPDES permit expired on July 31, 2013. Ohio EPA received your renewal application on March 29, 2013. Ohio EPA is currently in the process of renewing your NPDES permit. Until this permit is renewed, continue to sample in accordance with the expired permit until the renewal is effective.

Please respond, in writing, within sixty (60) days of the date of this letter, to items 1 and 2 identified above. If you have any questions, please contact me at (740) 380-5416 or nick.hammer@epa.ohio.gov.

Sincerely,



Nicholas G. Hammer, R.S.
Environmental Specialist
Permits and Enforcement Section
Division of Surface Water

NH/dh

Enclosure

- c: Belmont County Commissioners
- c: Ron Pacifico, Operator of Record



State of Ohio Environmental Protection Agency
Southeast District Office

Municipal NPDES Compliance Inspection Report

Section A: National Data System Coding					
Permit #	NPDES #	Month/Day/Year	Inspection Type	Inspector	Facility Type
OPH00012*GD	OH0059307	August 8, 2013	C	S	1

Section B: Facility Data			
Name and Location of Facility Inspected		Entry Time	Permit Effective Date
Pennwood Estates Subdivision STP South Rustic Drive St. Clairsville, Ohio		10:30 a.m.	August 1, 2008
		Exit Time	Permit Expiration Date
		12:30 p.m.	July 31, 2013
Name(s) and Title(s) of On-Site Representative(s)		Phone Number(s)	
Ron Pacifico, Dale Jendrusk, Mike Reed		(740) 695-6669	
Name, Address, and Title of Responsible Official		Phone Number	
Mark Esposito, Director Belmont County Sanitary Sewer District P.O. Box 457 St. Clairsville, Ohio 43950		(740) 695-3341	

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

Section D: Summary of Findings (attach additional sheets if necessary)			
See attached letter			
Inspector		Reviewer	
<i>Nicholas G. Hammer</i>		<i>Jennifer M. Witte</i>	
8-27-13		8/27/13	
Date		Date	
Nicholas G. Hammer Division of Surface Water Southeast District Office		Jennifer M. Witte Compliance & Enforcement Supervisor Division of Surface Water Southeast District Office	

Sections E through 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..... Y
- (e) Number and location of discharge points are as described in permit..... Y
- (f) Storm water discharges properly permitted..... Y

Comments/Status:

Section F: Compliance

- (a) Any significant violations since the last inspection..... N
- (b) Appropriate Non-compliance notification of violations..... Y
- (c) Permittee is taking actions to resolve violations..... Y
- (d) Permittee has a compliance schedule..... Y
- (e) Compliance schedule contained in..... Y
- (f) Permittee is in compliance with schedule..... Y
- (g) Has biomonitoring shown toxicity in discharge since last inspection..... N/A

Comments/Status:

(e) Compliance Schedule contained in expired NPDES permit.

Section G: Operation and 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

N/A

ii. How often is the generator tested under load

N/A

- (b) Which components have an alarm system available for power or equipment failures
No alarms at the Plant, Lift Station in Collection system has high water alarm
- (c) All treatment units in service other than backup units Y
- (d) What method is used for scheduling routine and preventative maintenance (calendar, software, etc.)
Calendar
- (e) Any major equipment breakdown since last inspection N
- (f) Operation and maintenance manual provided and maintained Y
- (g) Any plant bypasses since last inspection N
- (h) Any plant upsets since last inspection N

Comments/Status:

(f) Need to provide a revised O&M manual.
 The sand filters are in very poor condition, concrete block is collapsing and need replaced. Vegetation piles in the corners of the sand filters need removed.
 Wier in upflow filter needs replaced.

Record Keeping/Operator of Record:

- (a) Wastewater Treatment Works classification (OAC 3745-7) I
- (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 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 operator and maintenance activities (including preventative maintenance, repairs and request for repairs, process control test results, etc.) Y
 - IV. Laboratory results (unless documented on bench sheets) Y
 - V. 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:

Collection System:

- (a) Are there pump stations in the collection system Y
 - I. How many publicly-owned pump stations equipped with permanent standby power or equivalent 0
 - II. How many pump stations have telemetered alarms..... 0
 - III. How many pump stations have operable alarms..... 1
- (b) Any chronic collection system overflows since last inspection N
- (c) Regulatory agency notified of all overflows Y
- (d) Are there CSOs in the collection system N

If so, what is the LTCP status

N/A
- (e) How are CSOs monitored (chalk, block, level sensor, etc.)

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

Comments/Status:

(a) Single pump station in collection system.

Section H: Sludge Management

- (a) Method of Sludge Disposal.....
- Land Application
 - Haul to Another NPDES Permittee
 - Haul to a Mixed Solid Waste Landfill

*if one of the selected methods is land application, complete applicable charts.

Class A – Exception Quality Sewage Sludge (monitoring station 584)

Pathogen Reduction Alternative	84370 Vector Attraction Reduction Options							
	Option 1 – 38% Volatile Solids Reduction	Option 2 – Anaerobic Bench Scale Analysis	Option 3 – Aerobic Bench Scale Analysis	Option 4 – Specific Oxygen Uptake Rate	Option 5 – Aerobic Time and Temperature	Option 6 – Alkali Addition	Option 7 - >75% Solids without Unstabilized Solids	Option 8 - >75% Solids with Unstabilized Solids
Alternative 1 – Time and Temperature Regime (84369)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Alternative 2 – High pH and High Temperature (84369)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Alternative 3 – Other Processes (84369)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Alternative 4 – Unknown Processes (84369)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Alternative 5 – Composting (84397)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Alternative 5 – Heat Drying (84397)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Alternative 5 – Heat Treatment (84397)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Alternative 5 – Thermophilic Aerobic Digestion (84397)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Alternative 5 – Beta Ray Irradiation (84397)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Alternative 5 – Gamma Ray Irradiation (84397)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Alternative 5 – Pasteurization (84397)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Alternative 6 – Approved Equivalent Process	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Class B – Sewage Sludge (monitoring station 581)

Pathogen Reduction Alternative	84370 Vector Attraction Reduction Options									
	Option 1 – 38% Volatile Solids Reduction	Option 2 – Anaerobic Bench Scale Analysis	Option 3 – Aerobic Bench Scale Analysis	Option 4 – Specific Oxygen Uptake Rate	Option 5 – Aerobic Time and Temperature	Option 6 – Alkali Addition	Option 7 - >75% Solids without Unstabilized Solids	Option 8 - >75% Solids with Unstabilized Solids	Option 9 – Land Injection	Option 10 – Immediate Incorporation
Alternative 1 – Geometric Mean of Seven Fecal Samples (84369)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Alternative 2 – Aerobic Digestion (46396)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Alternative 2 – Air Drying (46396)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Alternative 2 – Anaerobic Digestion (46396)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Alternative 2 – Composting (46396)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Alternative 2 – Lime Treatment (46396)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Alternative 3 – Approved Equivalent Process	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

- (b) Has amount of sludge generated changed significantly since the last inspection N
- (c) How much sludge storage is provided at the plant
- (d) Records kept in accordance with State and Federal law (5 years according to OAC 3745-40-06) Y
- (e) Any complaints received in last year regarding sludge N
- (f) 5/8" screen at headworks for facilities that land apply sludge N/A
- (g) Are sludge application sites inspected to verify compliance with NPDES permit N/A
- (h) Is a contractor used for sludge disposal N
If so, what is the name of the contractor

Comments/Status:

(a) Sludge hauled to Foxshannon WWTP

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 Y
Date of last calibration
- (c) 24-hour recording instruments operated and maintained Y
- (d) Flow measurement equipment adequate to handle full range of flows Y
- (e) All discharged flow is measured Y

Comments/Status:

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 (see GLC page) 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:

Laboratory:

General

- (a) Does the Quality Assurance Manual contain written Standard Operating Procedures (SOP's) for all analysis performed onsite..... N
- (b) Do SOP's include the following if applicable N
- Title
 - Scope and Application
 - Summary
 - Sample Handling & 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 (see score from GLC page) Y
- (h) Commercial laboratory used..... Y

Parameters analyzed by commercial lab: **all but DO, pH, Chlorine, Ammonia**
 Lab name: **Foxshannon WWTP and TCCI**

Discharge Monitoring Report Quality Assurance (DMRQA)

- (a) Participation in latest USEPA quality assurance performance sampling N/A
 Date: **N/A**
- (b) Were any parameters "Unsatisfactory" N/A
- (c) Reasons for "Unsatisfactory" parameters

N/A

Comments/Status:

Section J: Effluent/Receiving Water Observations

Outfall #: **001**

Outfall Description: **Clear, no odor**

Receiving Stream: **McMonies Run**

Receiving Stream Description: **Small Flow**

Comments/Status:

Section K: Multimedia Observations

- | | |
|--|---|
| (a) Are there indications of sloppy housekeeping or poor maintenance in work & storage areas or laboratories | N |
| (b) Do you notice staining or discoloration of soils, pavement or floors..... | Y |
| (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:

(b) Several locations were flow is exiting the clarifiers through deterioration of concrete.