



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

December 17, 2012

Re: Guernsey County
Rolling Hills Subdivision
Compliance Inspection
0PW00007; OH0075809
Correspondence (PWW)

Guernsey County Board of Commissioners
627 Wheeling Avenue
Suite 300
Cambridge, Ohio 43725-2251

Dear Board of Commissioners:

On November 28, 2012, I conducted a Compliance Evaluation Inspection (CEI) of the Rolling Hills Subdivision wastewater treatment plant. The purpose of the inspection was to determine the facility's compliance status with the terms and conditions of NPDES Permit Number 0PW00007*GD. Ohio EPA employees Joann Montgomery and myself and Operator Dennis Daugherty were present during the inspection.

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

1. A review of the facility's discharge monitoring reports (DMRs) from September 2011 to October 2012 showed three violations (see attached data). One for fecal coliform and two for chlorine residual. A previous response to these violations has been provided.
2. All three aeration basins had a healthy brown color and were well aerated. Pin floc was observed discharging from all three clarifiers. The pin floc was being captured by the fixed media upflow clarifier as the discharge from the fixed media upflow clarifiers was visually clear. Steps should be taken to increase the settling in the clarifiers so that the fixed media clarifiers are not overloaded.
3. All four sand filters were clean and free of residual solids. The final discharge appeared visually clear and no affects to the stream were observed.
4. **Part III, Item A(3) of NPDES Permit # 0PW00007*GD:** "At all times, the permittee shall maintain in good working order and operate as efficiently as possible all treatment or control facilities or systems installed or used by the permittee necessary to achieve compliance with the terms and conditions of this permit." Many improvements have been made to the facility since the county assumed ownership including:

- Upgraded 1 blower with new belt and pulleys.
- Added a baffle to the headworks to improve the performance of the influent bar rack.
- Replaced all air diffusers and repaired leaking air lines.
- Added sand to the filters.
- Wasted excess solids from the aeration basins.

Continued maintenance and improvements will be necessary to maintain compliance at this facility. During my inspection, I noted the following items that will need to be addressed:

- The media in the fixed media upflow clarifiers shows substantial wear. Mr. Daugherty indicated that replacements for the media currently in use are not available. It will be necessary to find a suitable replacement.
 - Flow is not being distributed equally over the two sets of weirs in the #3 clarifier. The weirs need to be level with one another so that the effluent flow is distributed equally over them.
 - Due to the gradient of the piping and non-functional valves, the majority of the flow is going through the southern fixed media upflow clarifier. This needs to be addressed so that the flow can be split evenly through the four clarifiers. The valves also need to be repaired so the clarifiers can be isolated and taken offline for cleaning and repairs.
 - The mounting bracket for the skimmer in the #2 clarifier was broken. The skimmer was being temporarily held in place by a ratchet strap. The mounting bracket needs to be repaired.
 - The weir in the #2 clarifier is corroded and leaks below the overflow level. The weir will need to be replaced.
 - Mr. Daugherty indicated that one blower had the belt and pulley's upgraded, which allowed it to provide sufficient air to the aeration basins. Mr. Daugherty indicated that the other blower, with the current belts and pulleys, cannot deliver sufficient air. This blower should be upgraded similar to the other blower so that a sufficient back up blower is available.
5. Joann Montgomery setup a 24 hour sampler for compliance sampling. She returned on November 30, 2012 to collect the sample and split it with the operator. The results of our testing will be forwarded to you once they become available.
6. The name of the treatment works needs to be included in the operator log book for the facility.

Please provide a response on how items #4 and 6 will be addressed within thirty (30) days upon receipt of this letter.

The Ohio EPA strongly encourages pollution prevention as the preferred approach for waste management. The first priority of pollution prevention is to eliminate the generation of wastes and pollutants at the source (source reduction). For those wastes or pollutants that are generated, the second priority is to recycle or reuse them in an environmentally sound manner. You can benefit economically, help preserve the environment, and improve your public image by implementing pollution prevention programs. For more information about pollution prevention, including fact sheets or U.S. EPA's "Facility Pollution Prevention Guide" (EPA/600/R-92.008), please contact the Ohio EPA Pollution Prevention Section at (614) 644-3469.

Attached is a copy of the inspection report. If you have any questions about my inspection, please feel free to contact me by phone at (740) 380-5418 or email at tim.fulks@epa.ohio.gov.

Sincerely,



Timothy A. Fulks
District Representative
Division of Surface Water

TF/dh

Enclosure

c: Dennis Daugherty, Plant Operator



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
0PW00007*GD	OH0075809	November 28, 2012	C	S	1

Section B: Facility Data

Name and Location of Facility Inspected	Entry Time	Permit Effective Date
Rolling Hills Subdivision Wastewater Treatment Plant Township Highway 435 Byesville, Ohio 43723	10:00 a.m.	November 1, 2012
	Exit Time	Permit Expiration Date
	12:15 p.m.	October 31, 2017
Name(s) and Title(s) of On-Site Representative(s)	Phone Number(s)	
Dennis Daugherty, Operator	(740) 260-4958	
Name, Address, and Title of Responsible Official	Phone Number	
Guernsey County Board of Commissioners 627 Wheeling Avenue, Suite 300 Cambridge, Ohio 43725-2251	(740) 432-9200	

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	S	Laboratory	S	Compliance Schedules
M	Operations & Maintenance	S	Effluent/Receiving Waters	S	Self-Monitoring Program
S	Facility Site Review	S	Sludge Storage/Disposal	--	Other
S	Collection System				

Section D: Summary of Findings (attach additional sheets if necessary)

Operations & Maintenance: Refer to inspection report for required maintenance items

Inspector	Reviewer
 Timothy A. Fulks Division of Surface Water Southeast District Office	 Jennifer M. Witte Compliance & Enforcement Supervisor Division of Surface Water Southeast District Office
12/14/12 Date	12/17/12 Date

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 Y
- (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 NPDES
- (f) Permittee is in compliance with schedule Y
- (g) Has biomonitoring shown toxicity in discharge since last inspection..... N/A

Comments/Status:

Section G: Operation and Maintenance

Treatment Works:

Treatment facility properly operated and maintained

- (a) Standby power available generator or dual feed Y
 - i. What does the back-up power source operate

Pumps, a compressor is rented for aeration when necessary
 - ii. How often is the generator tested under load

N/E

- (b) Which components have an alarm system available for power or equipment failures
 N
- (c) All treatment units in service other than backup units N
- (d) What method is used for scheduling routine and preventative maintenance (calendar, software, etc.)
 N
- (e) Any major equipment breakdown since last inspection N
- (f) Operation and maintenance manual provided and maintained N/E
- (g) Any plant bypasses since last inspection N
- (h) Any plant upsets since last inspection Y

Comments/Status:

During power outage from wind storm in June 2012, aeration basin went without air for 24 hours before a compressor was brought on site

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)
- (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
 - 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:

The log book needs to identify the treatment works.

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 1
 - 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 Y
- (h) Any WIB complaint received since last inspection..... N
- (i) Is there a WIB response plan..... N/E
- (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

*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 Y
If so, what is the name of the contractor

Comments/Status:

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/E
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/E
- (b) Do SOP's include the following if applicable N/E

- | | |
|----------------------------------|-----------------------------|
| • Title | • Procedure |
| • Scope and Application | • Calculations |
| • Summary | • Quality Control |
| • Sample Handling & Preservation | • Maintenance |
| • Interferences | • Corrective Action |
| • Apparatus and Materials | • Reference (Parent Method) |
| • Reagents | |

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) N
- (h) Commercial laboratory used..... Y
- Parameters analyzed by commercial lab: TSS, Nutrients, O&G, Hg, Bacteria, CBOD
- Lab name: MASI Environmental Labs

Discharge Monitoring Report Quality Assurance (DMRQA)

- (a) Participation in latest USEPA quality assurance performance sampling N/A
- Date:
- (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: Final Outfall

Receiving Stream: Unnamed Tributary to Wills Creek
Receiving Stream Description: No observable impacts to the receiving stream from discharge

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..... 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 No	Reporting Period	Station	Reporting Code	Parameter	Limit Type	Limit	Reported Value	Violation Date
0PW00007*FD	September 2011	001	50060	Chlorine, Total Residu	1D Conc	0.019	.05	9/7/2011
0PW00007*FD	September 2011	001	50060	Chlorine, Total Residu	1D Conc	0.019	.05	9/8/2011
0PW00007*FD	June 2012	001	31616	Fecal Coliform	7D Conc	2000	5100.	6/15/2012