



Environmental  
Protection Agency

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

July 30, 2012

Mayor and Council  
Village of Quincy  
P.O. Box 126  
Quincy, Ohio 43343

Mayor and Council  
Village of DeGraff  
P.O. Box 309  
DeGraff, Ohio 43318

**RE: Reconnaissance Inspection, July 18, 2012  
Quincy/DeGraff Wastewater Treatment Plant  
Notice of Violation**

Dear Mayor and Council:

On July 18, 2012, representatives of the Southwest District Office of Ohio EPA performed a Reconnaissance Inspection at the Quincy/DeGraff Wastewater Treatment Plant.

The inspection was conducted as part of the National Pollutant Discharge Elimination System (NPDES) permit renewal process and compliance review for the plant. The inspection findings are included in the attached report. The report contains six items which require a response. The response dates for each of the items is noted in the Items Requiring a Response section of the report.

If you have any questions concerning the inspection, please contact Mr. Reynolds at (937) 285-6097.

Sincerely,

Martyn Buft  
Compliance Supervisor  
Division of Surface Water

MB/tf

cc: Ken McAlexander, Operator of Record  
Kirk Helmandollar, Village of Quincy



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
1PB00036*DD	OH0035882	7/18/2012	C	S	

Section B: Facility Data		
Name and Location of Facility Inspected	Entry Time	Permit Effective Date
Village of Quincy / Degraff 5820 State Route 235 Quincy, Ohio 43343	9:30 AM	11/1/2007
	Exit Time	Permit Expiration Date
	11:45 AM	10/31/2012
Name(s) and Title(s) of On-Site Representatives	Phone Number(s)	
Ken McAlexander, Superintendent	(937) 585 - 4054	
Name, Address and Title of Responsible Official	Phone Number	
Mayor and Council, Village of Quincy P.O. Box 126 Quincy, Ohio 43343	(937) 585 - 5314 (Quincy Clerk Office)	

Section C: Areas Evaluated During Inspection			
S - Satisfactory		N - Marginal / Unsatisfactory / Not Evaluated	
<input checked="" type="checkbox"/> Permit	<input checked="" type="checkbox"/> Flow Measurement	<input type="checkbox"/> N	<input type="checkbox"/> Pretreatment
<input checked="" type="checkbox"/> Records/Reports	<input type="checkbox"/> N Laboratory	<input type="checkbox"/> N	<input type="checkbox"/> Compliance Schedule
<input checked="" type="checkbox"/> Operations & Maintenance	<input checked="" type="checkbox"/> S Effluent/Receiving Waters	<input checked="" type="checkbox"/> S	<input checked="" type="checkbox"/> Self-Monitoring Program
<input checked="" type="checkbox"/> Facility Site Review	<input checked="" type="checkbox"/> S Sludge Storage/Disposal	<input type="checkbox"/> N	<input type="checkbox"/> Other
<input checked="" type="checkbox"/> Collection System			

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

See attached Report.

Inspector	Reviewer
 Date: 7/30/12	 Date: 7/30/2012
Joe Reynolds / Ron Ware Division of Surface Water Southwest District Office	Martyn Burt Compliance & Enforcement Supervisor Division of Surface Water Southwest District Office

## Inspection Findings

The Village of Quincy was issued National Pollutant Discharge Elimination System (NPDES) permit number 1PB00036\*DD on September 19, 2007. This permit will expire on October 31, 2012. An NPDES renewal application was submitted on February 27, 2012.

The waste water works is currently classified as a Class II treatment facility. This classification will remain the same in the NPDES renewal. Ken McAlexander is a Class III state certified operator. An Operator of Record form (see attached), identifying the Operator(s) in response charge of plant operations, must be completed and returned to the Ohio EPA Central Office.

Mr. McAlexander oversees plant operations and the DeGraff Collection system. Kirk Helmandollar oversees the Quincy collection system. Kirk is a Class I waste water operator.

In accordance with Ohio Revised Code 3745-7-04 C, "Staffing", the plant must be staffed by a Class II operator for a minimum of 5 days per week, 20 hours per week. This requirement currently is not being met all of the time. The staffing requirements must be met either through the establishment of a back-up operator (minimum, Class I certified) or through formal approval of a staffing reduction plan. A back-up operator is required during periods when Mr. McAlexander is on leave.

The NPDES permit is currently in the Village of Quincy's name. Both villages support the operation and maintenance of the plant. The agency would like the villages to establish a formalized agreement for oversight of the treatment system. This agreement should address the following: who does what / who pays for what / who is responsible for what? Both villages maintain their own water treatment plants.

Issues with infiltration and inflow into the collection system have contributed to system overflows. Work on the DeGraff collection system including system grouting (2010) and flex sealing of manholes has reduced infiltration and inflow by 8%.

The treatment plant consist of the following units: influent lift station, two influent flow metering manholes, a static screen with conveyor and press, aerated grit with dewatering channel, two oxidation ditches, two integral clarifiers, ultra violet disinfection, and a cascade post aeration system. Waste activated sludge is processed in two storage/digestion tanks, three wedge wire drying beds, a cake storage pad, and bio bags.

## Inspection Findings (continued)

The old lagoon system (three cells) have been closed out and filled in. They are currently being farmed for wheat.

An auto dialer system is used to notify plant personnel of equipment failure and back-up power activation.

The pumps in the main plant lift station were being impacted by grit. Upon investigation it was discovered that the pump seals were the wrong seals for raw pump station applications. Carbide seals were installed and the problem appears to be solved. Debris is removed from the station on an annual basis.

As part of the NPDES renewal, bacteria monitoring will switch from fecal coliform to e-coli. The new e-coli limits will be 284 count per 100 ml (7 day avg.) and 126 count per 100 ml (30 day avg.). An interim and final table has been added to the draft permit to allow time to evaluate compliance with the new limits.

The permit renewal also will require signage at the final outfall. The sign shall at a minimum include the name of the establishment, the Ohio EPA permit number, the outfall number, and a contact phone number. The information shall be printed in letters not less than two inches high. The marker shall be a minimum of 2 feet by 2 feet and a minimum of 3 feet above ground level.

Problems with the static screen overflowing have been corrected through the installation of a pressure sensor that automatically activates a bypass to the bar screen. This work was completed in January, 2007.

Between January 1, 2011 and May 31, 2012 the village reported three final effluent suspended solids violation.

## Facility Inspection

There are two main Influent lines, one from the Village of Quincy (gravity line) and one from the Village of DeGraff (force main). Sewage from the Village of Quincy enters the main plant lift station where it is pumped to the preliminary treatment system. The lift station has both a high water alarm and seal alarm.

A check valve was installed on the DeGraff force main to prevent back-ups from the combined force main at the plant. This valve has helped to prevent sewer ruptures in the DeGraff force main.

## Facility Inspection (continued)

Separate flow meters are used to measure flows from each of the villages.

Combined flows are pumped to a static fine screen. The screen is cleaned once per day. Screened solids are collected in a screw press for dewatering. Pressed solids are collected in storage bags for disposal as part of the facilities solid waste stream.

After screening, the waste water flows by gravity to the aerated grit tank. The tank was uniformly mixed. Waste water is pumped through a grit channel on top of the tank prior to the oxidation ditch splitter box. Influent samples are collected at the inlet to the grit system. The sampler was less than 4 degrees. The sample container had some discoloration.

A gated splitter box is used to divide flow between the two ditches. Due to flow channel energy gradients it is hard to divide flows evenly between the ditches. Some plastics were noted in the splitter box, reportedly from the high flow bypass bar screen.

Both oxidation ditches were on line. One rotor per ditch is being operated which is able to provide enough air and mixing. The mixed liquor in the east ditch was chocolate brown. The mixed liquor in the west ditch was lighter in color indicating not as many solids.

The effluent from both secondary clarifiers was clear. Some ash solids were noted on the surface. There was algae growth in the trough of the west clarifier (the east trough was recently cleaned).

The UV system was up and operating at the time of the inspection. All units are operational. The system is set-up to alternate between modules. The system contains two banks. Each bank has five modules. Each module has four bulbs. A new bar rack was added at the head of the system to capture any algae strands released from clarification.

Final effluent samples are collected after the UV system. The effluent sampler was at 4 degrees celsius. The final effluent was clear.

Waste activated sludge is sent to two aerobic digesters. The digesters are fed in series. From the aerobic digesters sludge can be pumped to either three drying beds, liquid to a truck, or to a geo bag dewatering system. Polymer is fed in the force main leading to the systems.

## Facility Inspection (continued)

Currently plastic tarps are being used to collect filtrate from the geo bags. The efficiency of this process can be improved with the addition of a dedicated concrete pad with a drain system.

All three drying beds had sludge on them. Fissures were forming in the drying sludge. The sludge storage pad was partially full.

### Item Requiring a Response

1. A written response detailing how the villages will meet the minimum staffing requirements contained in Ohio Administrative Code Rule 3745 – 7 – 04 (C), "Staffing" (Class II plant, 5 days per week, 20 hours per week) must be submitted to this office. A written response must be submitted to this office by no later than September 14, 2012.
2. A brief written summary detailing I/I work completed during the last year along with any work scheduled for the coming year must be submitted for both villages by no later than September 14, 2012.
3. A schedule for the development of a formalized agreement between the two village's, which spells out individual village responsibilities with respect to plant financing, plant operations and maintenance, and NPDES permit compliance and reporting obligations, must be submitted to this office. This schedule must be submitted by no later than September 14, 2012.
4. All influent and effluent sampling equipment and hosing must be relatively free of debris and dirt. A written update detailing any maintenance activities performed on both the influent and effluent samplers must be submitted to this office by no later than September 14, 2012. Equipment blanks can be run as part of the sampling program to verify the effectiveness of the equipment maintenance program.
5. The Ohio EPA recommends that the village establish a concrete pad and drain system for the geo bag treatment system. This type of structure can insure filtrate is returned to the treatment system. A written response detailing the village's plans with respect to this issue must be submitted to this office by no later than September 14, 2012.
6. An Operator of Record form must be completed and returned to the Ohio EPA Central Office by no later than September 14, 2012.



**Environmental Protection Agency**  
**Division of Drinking and Ground Waters**  
**Operator Certification Unit**

**Operator of Record (ORC) Notification Form**

Ohio Environmental Protection Agency  
 Division of Drinking and Ground Waters  
 Operator Certification Unit  
 50 West Town St, Suite 700  
 P.O. Box 1049  
 Columbus, OH 43216-1049

Phone: (614) 644-2752  
 1- 866 - 411-OPCT (6728)  
 Fax: (614) 644-2909  
 email: opcert@epa.state.oh.us  
 website: http://www.epa.ohio.gov/ddagw/opcert.aspx

**I. SYSTEM INFORMATION**

Name of System: \_\_\_\_\_ Phone Number: \_\_\_\_\_

PWS ID/NPDES Permit #: \_\_\_\_\_ STU #: \_\_\_\_\_ Classification: \_\_\_\_\_

Name of Facility Owner or Permittee, Title (Print) \_\_\_\_\_ Facility Owner or Permittee (Signature) \_\_\_\_\_

**II. SYSTEM TYPE (Check only one of the following. Use additional sheets if necessary.)**

Public Water System (PWS)	Distribution System	Treatment Works	Collection System
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**III. OPERATOR OF RECORD INFORMATION**

Add Additional (A), Existing (E), New (N) or Remove (R)	Effective Date	Name of Operator of Record	Certification Number & Expiration Date	I verify that I am the onsite certified operator responsible for the technical operation of the above referenced facility. I have a valid certification of a class equal to or greater than the classification of the above referenced facility. (Signature of certified operator)*

\* A signature by an operator of record who is being removed is not required.  
 (Attach additional sheets if necessary.)

Amount of time an ORC spends onsite at the Facility: \_\_\_\_\_ hours/week \_\_\_\_\_ days/week

For Internal Use Only	
Reviewed by:	Date of SDWIS update:
Date of Compliance Status Letter:	