



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

May 13, 2013

RE: PORTAGE COUNTY  
VILLAGE OF GARRETTSVILLE  
GARRETTSVILLE WWTP  
NPDES PERMIT NO. OH0025330  
OHIO EPA PERMIT NO. 3PB00016

Jeff Sheehan, Utility Superintendent  
Village of Garrettsville  
Board of Public Affairs  
8213 High Street  
P.O. Box 35  
Garrettsville, Ohio 44231

Dear Mr. Sheehan:

On April 15, 2013, an inspection of the wastewater treatment plant (WWTP) serving the Village of Garrettsville was conducted by the undersigned. The purpose of the inspection was to evaluate the facility's compliance status with respect to the terms and conditions of the above-referenced National Pollutant Discharge Elimination System (NPDES) permit. During the course of the inspection, evaluations were conducted of the treatment processes, effluent discharge quality, laboratory, and biosolids management.

#### **NPDES Permit Status**

The current NPDES permit for this facility became effective on November 1, 2010 and will expire on October 31, 2015. The permit authorizes an average daily discharge of 0.5 MGD from the facility to Eagle Creek.

#### **Facility Description**

During 2012, the facility completed a major expansion in treatment capacity. The improvements, authorized pursuant to Permit-to-Install (PTI) Nos. 753365 and 817636, expanded the plant's capacity from 0.356 MGD to 0.500 MGD. The treatment processes consist of preliminary screening, influent lift station, flow equalization basin, extended aeration activated sludge tanks, final clarifiers, tertiary disk filtration, and UV disinfection.

Sludge handling consists of aerobic digestion, aerated sludge holding, and sludge drying beds. The dewatered biosolids are presently hauled to local farms by Agri-Sludge, Inc. for agricultural land application.

Bypass of treatment can occur during wet weather events when flow in the collection system is diverted to the equalization tank. The EQ basin overflow at Station 602 is disinfected, via UV, prior to mixing with the treated effluent. No overflow events have occurred since September 2011. Please be advised that the diverting or bypassing of wastewater from any portion of the treatment facility is generally prohibited. All such events must be reported as an unauthorized

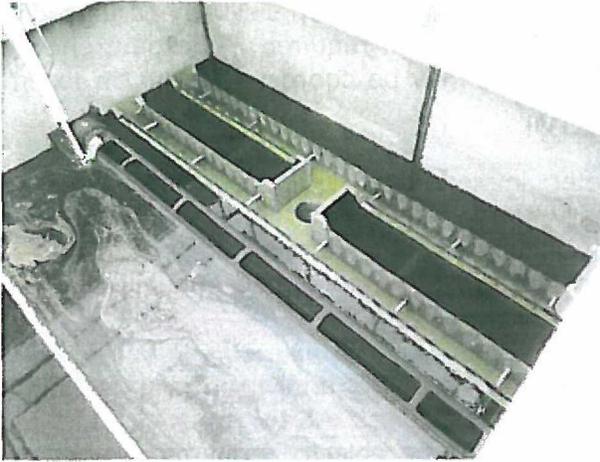
discharge in accordance with Part III, Items 11 and 12, of your NPDES permit. This includes notification by email/telephone and confirmation in writing.

**Inspection Findings/Compliance Status**

At the time of the inspection, the following items were noted and discussed with you:

1. The general operation and maintenance of the treatment processes and equipment appeared to be satisfactory. A visual observation of the plant outfall noted the effluent to be visually clear with no signs of floating debris, oil & grease, or foam in the discharge. Additionally, no adverse impact was evident within the mixing zone and downstream segments of Eagle Creek.





2. The review of the plant laboratory noted that the following permit parameters are currently being analyzed in-house: dissolved oxygen (DO), pH, Temperature, cBOD, Suspended Solids, E. coli, and Ammonia. The balance of the permit parameters are analyzed by external laboratories (i.e. Portage County, Alloway). The following highlights were noted during the limited review:
- The facility had purchased a new multi-functioned meter for use in the analyses of pH, DO, and Ammonia. Additionally, the laboratory purchased a new luminescent DO probe to replace its existing membrane probe.
  - With the exception of cBOD, the analysis of duplicate samples was not being routinely performed. General laboratory procedures require that blanks, spiked, and duplicate samples should be run with each batch of samples. Quality control charts should be developed from the results of standards, duplicates, and spikes.
  - In the CBOD procedure, effluent samples that are collected after disinfection must be "seeded". Additionally, a glucose-glutamic acid (GGA) standard should be analyzed with each batch of tests.

- The facility must develop a comparability study between distilled and un-distilled Ammonia-N samples. Manual distillation is not required if the data shows a difference of less than 10 %. The study may be coordinated with an external laboratory.
- Please ensure that a thermometer, immersed in liquid, is maintained in the composite samplers. Additionally, temperature logs must be kept of all refrigerators, ovens, water baths, incubators, etc. during the periods that the equipment is in use. All thermometers are to be calibrated annually against a NIST-traceable thermometer.
- It was unclear as to the certification status of the analytical balance weights. Please ensure that the weights are certified as ASTM class 1 or 2. The technician that services the balance should be able to certify the weights and provide the necessary paperwork

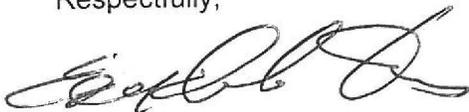
**Discharge Monitoring Reports (DMR)**

Discharge monitoring reports (DMR) received by Ohio EPA for the period January 2012 through March 2013, were reviewed. A summary of the Outfall 001 discharge data is listed in Attachment A. Additionally, the effluent data was reviewed for compliance with the final effluent limitations and monitoring requirements of the NPDES permit. A summary of the specific violations are cited in Attachment B.

Please be advised that any violations referenced herein are subject to appropriate enforcement actions pursuant to Chapter 6111 of the Ohio Revised Code. Such actions can result in the imposition of fines of up to \$10,000 per day of violation.

If you should have any questions, please contact this office at (330) 963-1196.

Respectfully,



Ermelindo Gomes  
Environmental Engineer  
Division of Surface Water

EG/cs

Attachments: Ohio EPA TSS and E.coli Analytical Methods

File: Public/Garrettsville/Permit-Compliance

<b>Attachment A: Garrettsville WWTP Effluent Summary Data (1/2012 – 3/2013)</b>						
<b>Parameter</b>	<b>Season</b>	<b>Units</b>	<b># Obs.</b>	<b>50<sup>th</sup></b>	<b>95<sup>th</sup></b>	<b>Data Range</b>
<b>Outfall 001</b>						
Water Temperature	Annual	C	317	13	23	4-25
Dissolved Oxygen	Summer	mg/l	129	7.3	8.5	6.3-9.1
Dissolved Oxygen	Winter	mg/l	188	9	9.9	5.2-10.3
pH	Annual	S.U.	317	7.7	7.9	7.3-8.1
Total Suspended Solids	Annual	mg/l	121	1	19	0-102
Oil and Grease, Hexane Extr Method	Annual	mg/l	16	0	0	0-0
Nitrogen, Ammonia (NH3)	Summer	mg/l	48	0.1	0.24	0-0.31
Nitrogen, Ammonia (NH3)	Winter	mg/l	72	0.05	0.318	0.02-1.32
Nitrite Plus Nitrate, Total	Annual	mg/l	15	26.4	35.8	15.3-37.7
Phosphorus, Total (P)	Annual	mg/l	16	2.38	3.81	0.93-4.08
Cyanide, Free	Annual	mg/l	5	0	0	0-0
Nickel, Total Recoverable	Annual	ug/l	6	0	0	0-0
Zinc, Total Recoverable	Annual	ug/l	6	39.5	69.5	31-74
Cadmium, Total Recoverable	Annual	ug/l	6	0	0	0-0
Lead, Total Recoverable	Annual	ug/l	6	0	0	0-0
Chromium, Total Recoverable	Annual	ug/l	6	0	0	0-0
Copper, Total Recoverable	Annual	ug/l	6	73	111	32-120
Chromium, Dissolved Hexavalent	Annual	ug/l	5	0	0	0-0
Fecal Coliform	Annual	#/100 ml	16	3	41.3	0-90
E. coli	Annual	#/100 ml	48	2	42.8	0-120
Flow Rate	Summer	MGD	184	0.19	0.359	0.13-1
Flow Rate	Winter	MGD	272	0.26	0.445	0.06-0.73
Flow Rate	Annual	MGD	456	0.23	0.413	0.06-1
Mercury, Total (Low Level)	Annual	ng/l	5	0	0	0-0
CBOD 5 day	Summer	mg/l	48	0	2	0-3
CBOD 5 day	Winter	mg/l	72	0	7	0-12

<b>Attachment B: Garrettsville WWTP Numeric Effluent Violations (1/2012 – 3/2013)</b>						
<b>Reporting Period</b>	<b>Station</b>	<b>Parameter</b>	<b>Limit Type</b>	<b>Limit</b>	<b>Reported Value</b>	<b>Violation Date</b>
January 2012	001	Total Suspended Solids	30D Conc	30	36.6666	1/1/2012
January 2012	001	Total Suspended Solids	30D Qty	40.4	44.0876	1/1/2012
January 2012	001	Total Suspended Solids	7D Conc	45	69.	1/8/2012
January 2012	001	Total Suspended Solids	7D Qty	60.6	87.6328	1/8/2012

