



**Environmental
Protection Agency**

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

June 28, 2012

RE: CUYAHOGA COUNTY
VILLAGE OF CHAGRIN FALLS
CHAGRIN FALLS WWTP
NPDES PERMIT NO. OH002174
OHIO EPA PERMIT NO. 3PD00038

Mr. Benjamin T. Himes, CAO
Chagrin Falls Village Hall
21 West Washington Street
Chagrin Falls, OH 44022

Dear Mr. Himes:

On June 4, 2012, an inspection of the wastewater treatment plant (WWTP) serving the Village of Chagrin Falls was conducted by the undersigned. The facility was represented by Messrs. Glenn Elliott and Mark Davis. The purpose of the inspection was to obtain and review information in anticipation of renewal of the facility's National Pollutant Discharge Elimination System (NPDES) discharge 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 NPDES permit for this facility was renewed on November 1, 2011 and will expire on October 31, 2016.

Facility Description

The current NPDES permit authorizes an average daily discharge of 1.0 MGD from the facility to the Chagrin River. The treatment process consists of a bar screen, influent lift station, grit removal, comminutor, primary settling, tanks, activated sludge aeration tanks, final clarifiers, rapid sand filters and chlorination/dechlorination.

Sludge handling consists of aerobic digestion and mechanical dewatering using a filter press. The dewatered sludge is presently hauled to the PPG Lime Reclamation site in Barberton, Ohio.

Bypass of treatment may occur during wet weather events when flow in the collection system is diverted to the equalization tank located on Solon Road. 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 Mr. Elliott:

1. The general operation and maintenance of the treatment processes and equipment appeared to be satisfactory. A visual observation of the plant effluent revealed 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 the Chagrin River.



2. Mr. Elliott noted that the flow meter and recorder had been recently calibrated by an outside contractor. However, there were no calibration stickers on the equipment. Please provide this office with the calibration date(s).
3. The review of the plant laboratory noted that the following permit parameters are currently being analyzed in-house: DO, pH, Temperature, Chlorine, cBOD, Suspended Solids, E. Coli, Ammonia, and Phosphorus. The balance of the permit parameters are analyzed by Ream and Haager, New Philadelphia, Ohio. The following deficiencies identified during the 2011 inspection have **not** been corrected:
 - The analysis of duplicate samples was not being routinely performed. General laboratory procedures require that spiked and duplicate samples should be analyzed with each batch of samples and recorded. 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.
- It appears that the method detection limits (MDLs) being used for the analyses of the following parameters may need to be revised in order to demonstrate consistent compliance with the downstream Water Quality Standards (WQS):

Parameter	Chagrin River WQS	Reported MDL
Cadmium	3.3 ug/l	10 ug/l
Copper	13 ug/l	10 ug/l
Free Cyanide	22 ug/l	20 ug/l

In addition to the above, the facility was not using an approved procedure, e.g. EPA Method 1603, for the analyses of *E.coli*. Attached is a copy of Method 1603, as well as sample standard operating procedures (SOPs) for CBOD and thermometer calibration.

Discharge Monitoring Reports (DMR)

Discharge monitoring reports (DMR) received by Ohio EPA for the period April 2011 through May 2012, were reviewed for compliance with the final effluent limitations and monitoring requirements of the NPDES. The specific violations are as follows:

Attachment A: Chagrin Falls WWTP Numeric Effluent Violations (4/2011 – 5/2011)						
Reporting Period	Station	Parameter	Limit Type	Limit	Reported Value	Violation Date
Jul 2011	001	Dissolved Oxygen	1D Conc	6.0	5.7	7/9/2011
Jul 2011	001	Dissolved Oxygen	1D Conc	6.0	5.9	7/21/2011
Mar 2011	001	Total Suspended Solids	7D Qty	68.1	71.1832	3/8/2011
Apr 2011	001	Total Suspended Solids	7D Qty	68.1	71.8587	4/15/2011
Jan 2011	001	Phosphorus, Total (P)	7D Conc	1.5	1.51333	1/8/2011
Aug 2011	001	Phosphorus, Total (P)	7D Conc	1.5	1.77333	8/22/2011
Jul 2011	001	Chlorine, Total Residu	1D Conc	0.038	.12	7/4/2011
Jul 2011	001	Chlorine, Total Residu	1D Conc	0.038	.18	7/5/2011
Jul 2011	001	Chlorine, Total Residu	1D Conc	0.038	.11	7/26/2011
Jul 2011	001	Chlorine, Total Residu	1D Conc	0.038	.16	7/27/2011
Dec 2011	001	Total Suspended Solids	7D Qty	56.8	85.4648	12/22/2011

Please be advised that failure to comply with the terms and conditions of your NPDES permit may be subject to enforcement actions pursuant to Chapter 6111 of the Ohio Revised Code. Such actions can result in fines of up to \$10,000 per day of violation. Please inform this office, in writing, within 10 days of receipt of this notification as to the actions taken or proposed to address the violation and/or deficiencies referenced herein. Your response *shall* include specific dates for completion of the actions. A follow-up inspection will be conducted to verify that the corrective actions have been implemented.

Please be advised that past or present issues of noncompliance can continue as subjects of future enforcement actions by Ohio EPA.

CHAGRIN FALLS WWTP
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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

cc: Chagrin Falls WWTP
Mayor and Council, Village of Chagrin Falls

Enclosures: SOPs

File: Public/Permit/Compliance