



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

May 3, 2013

RE: CUYAHOGA COUNTY
CITY OF SOLON WWTP
COMPLIANCE EVALUATION INSPECTION
NPDES PERMIT OH0027430
OHIO EPA PERMIT NO. 3PD00019

Mayor Susan Drucker
City of Solon
34200 Bainbridge Road
Solon, OH 44139

Dear Mayor Drucker:

On April 4, 2013, this office conducted an inspection at the City of Solon Water Reclamation Facility. The facility was represented by Mr. Paul Solanics, Director. 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 NPDES permit for this facility will expire on July 31, 2013. A renewal application was received by Ohio EPA on January 10, 2013. Information obtained during the inspection will be utilized during the review and issuance of the renewal permit.

The current NPDES permit authorizes an average daily discharge of 5.8 MGD from the facility to Beaver Meadow Run. Beaver Meadow Run is tributary to Tinkers Creek, Cuyahoga River, and Lake Erie, respectively.

Facility Description

The advanced WWTP is designed to serve a population of approximately 26,000 people. Originally constructed in 1962, the facility has undergone a number of upgrades over the years, with the most recent being modifications to the anaerobic digestion process. The collection system consists of approximately 75 miles of sanitary sewers and 21 pump stations.

The wet stream treatment processes consist of flow equalization, mechanical bar screens, grit removal, primary settling, trickling filters, activated sludge, secondary settling, rapid sand filters, ultraviolet disinfection, and post aeration. Phosphorus removal is achieved through the addition of ferric chloride. Primary sludge is anaerobically digested before combining with waste activated sludge from the gravity thickener. The combined sludge is dewatered by a belt filter press and hauled to a landfill for proper disposal.

The treatment facility includes two locations where flows may be bypassed and/or diverted around treatment operations. The bypasses involve the diversion from treatment located: (1) at the headworks (Outfall 002); and (2) after secondary settling prior to the rapid sand filters

(tertiary bypass Station 602). While some diversions have occurred at Station 602 due to the hydraulic limitations of the sand filters, only one untreated bypass event (i.e. 2/28/2011) has occurred at Outfall 002 during the current permit cycle.

Inspection Findings/Compliance Status

At the time of the inspection, 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 or oil & grease in the discharge. Some minimal foam present at the outfall quickly dissipated within the stream mixing zone. No adverse impact was evident beyond the mixing zone and downstream segments of Beaver Meadow Run.



Discharge Monitoring Reports

Discharge monitoring reports (DMR) received by Ohio EPA for the period, July 2012 through March 2013, were reviewed for compliance with the final effluent limitations and monitoring requirements of the NPDES. A summary of the specific violations are listed in Attachment A. Specific bypass events at Station 602 are listed 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.

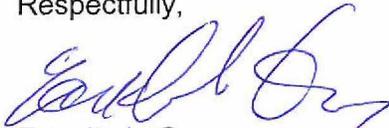
NPDES Permit Renewal Changes

The following changes are expected to be incorporated into the renewal permit:

- The Fecal Coliform water quality standard has been replaced by an Escherichia (E.) coli standard.
- Publicly owned treatment works (POTW) with a design flow of 1.0 MGD or greater are now required to perform a minimum of one annual Whole Effluent Biological Toxicity (WET) test.
- The City must develop a permitting/reporting system for satellite communities served by the POTW. The goal of the satellite program is to: (1) ensure that the respective collection systems are properly operated and maintained; and (2) establish protocols for notifying the POTW and Ohio EPA of any operational issues that result in bypasses and/or overflows in the respective collection systems.
- The facility will need to develop and implement a Storm Water Pollution Prevention Plan (SWPPP) for its storm water outfalls.

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

Attachment

cc: Paul Solanics, Director, City of Solon Water Reclamation Department

Attachment A: Solon WWTP Effluent Violations Summary (7/2012- 3/2013)						
Reporting Period	Station	Parameter	Limit Type	Limit	Reported Value	Violation Date
September 2012	001	pH, Minimum	1D Conc	6.5	6.4	9/3/2012
January 2013	001	Nitrogen, Ammonia (NH3	30D Conc	4.1	4.4835	1/1/2013

Attachment B: Solon WWTP Tertiary System Bypasses (7/2012- 3/2013)					
Station	Parameter	Units	Date	Reported	
602	Bypass Volume	MGAL	10/29/2012	0.1	
602	Bypass Volume	MGAL	10/30/2012	3.9	
602	Bypass Volume	MGAL	10/31/2012	3.7	
602	Bypass Volume	MGAL	11/1/2012	0.9	
602	Bypass Volume	MGAL	1/11/2013	1.4	
602	Bypass Volume	MGAL	1/12/2013	1	