



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

May 7, 2013

RE: CUYAHOGA COUNTY
CITY OF BEDFORD HEIGHTS WWTP
COMPLIANCE EVALUATION INSPECTION
NPDES PERMIT NO. OH0024040
OHIO EPA PERMIT NO. 3PD00006

Mayor Fletcher D. Berger
Bedford Heights City Hall
5661 Perkins Road
Bedford Hts., OH 44146

Dear Mayor Berger:

On April 4, 2013, this office conducted an inspection of the wastewater treatment plant (WWTP) serving the City of Bedford Heights. The facility was represented by Messrs. David Pocaro, Director of Water Reclamation, and Guy Vincent, Chief Operator. 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; supplemental information was received on April 20, 2013. Information obtained during the inspection will be utilized during the review and issuance of the renewal permit.

Facility Description

The treatment plant serves Bedford Heights, as well as portions of Solon, Warrensville Heights, Oakwood, and Glenwillow. The current National Pollutant Discharge Elimination System (NPDES) permit authorizes an average daily discharge of 7.5 MGD from the facility to a tributary of Hawthorne Creek at river mile 0.04. The wet stream treatment process consists of bar screens, grit removal and preaeration, followed by primary clarification, aeration, secondary clarification, rapid sand filtration, chlorination/dechlorination and post aeration. Phosphorus removal is achieved through the addition of ferrous chloride. Sludges from the primary and secondary clarifiers are thickened, combined and treated through the use of the Zimpro wet oxidation system prior to dewatering by a belt filter press. The sludge cake is hauled off-site for proper disposal. The stand-by diesel generator provides power to the raw sewage pumps, which are necessary to lift the influent wastewater into the plant.

In addition to the unpermitted headworks bypass, the facility includes two internal treatment system bypass locations where wastewater can be manually diverted around required treatment operations: (1) after primary clarification prior to aeration (secondary bypass station 602); and, (3) after secondary clarification prior to the rapid sand filters (tertiary bypass station 603). The headworks bypass receives no treatment and ties into the effluent discharge line after the final

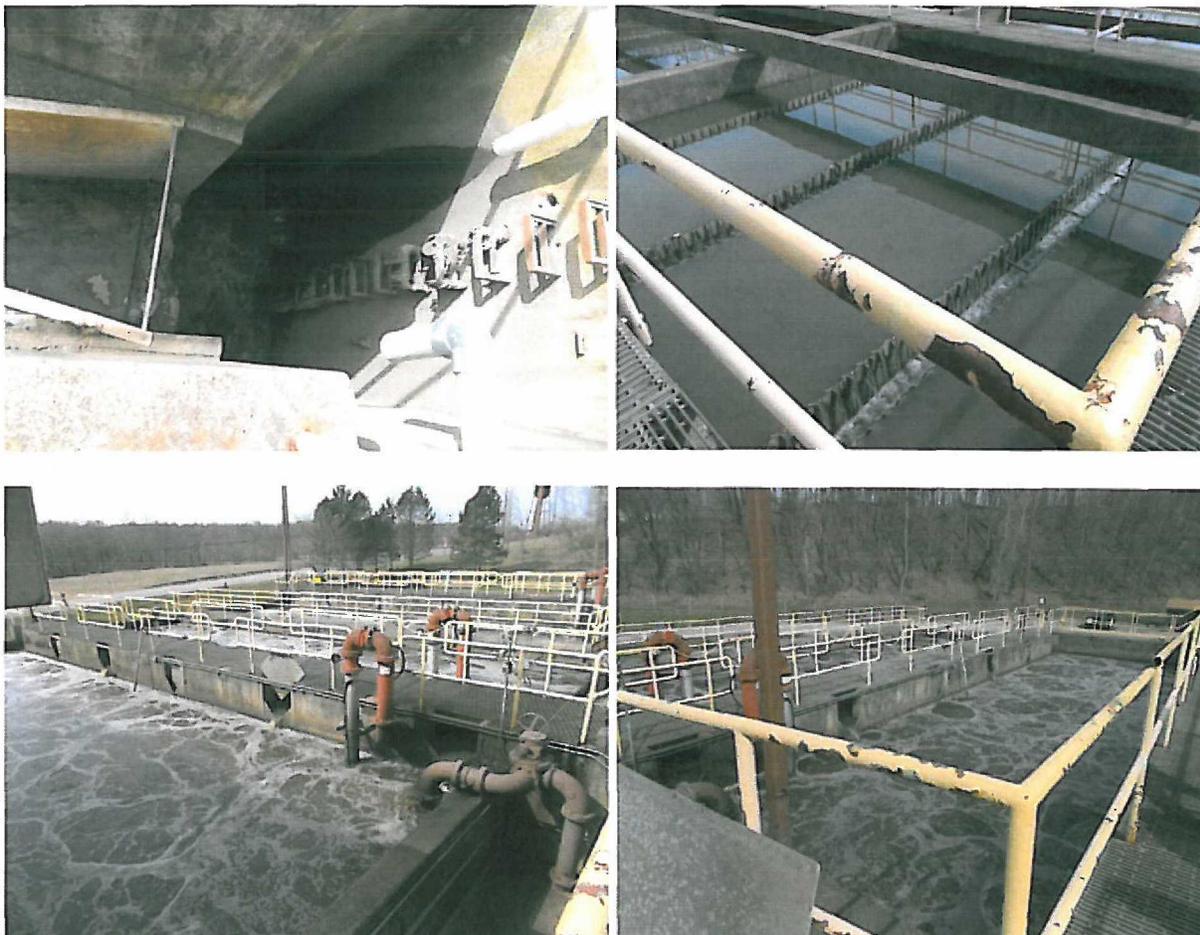
sampling point. The secondary and tertiary bypasses tie into the chlorination channel prior to the final sampling point.

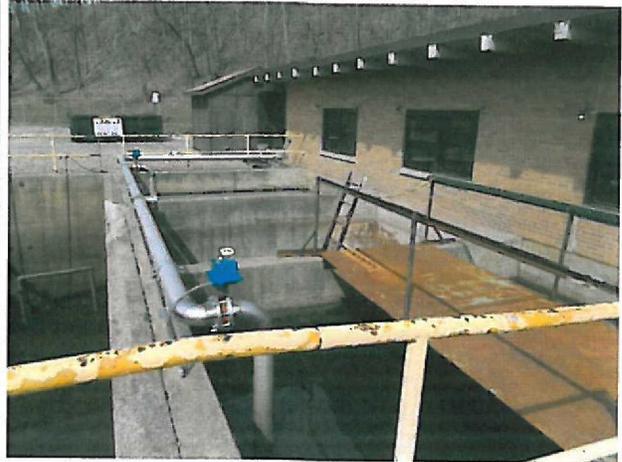
Please be advised that the diverting or bypassing of wastewater from any portion of the treatment facility is prohibited and must be reported as an unauthorized discharge in accordance with Part III, items 11 and 12, of your NPDES permit. This includes notification by email or telephone and confirmation in writing. Sampling must occur during bypass events.

Inspection Findings/Compliance Status

At the time of the inspection, the following observations and comments were noted and discussed with the gentlemen:

- It would appear that plant's design capacity denoted in previous NPDES permits is in fact incorrect. Based on the last major process modification of the facility in 1991, the average daily design flow (ADDF) was established at **3.6 MGD**, with a peak hydraulic flowrate of 7.5 MGD. As noted in prior inspections, it appears that the aeration system cannot process the peak flowrate.
- A visual observation of the plant effluent revealed no signs of floating debris, oil & grease, or foam in the discharge.





- Repairs were continuing on the underdrain system to the 6th surface sand filter.
- Handle rails had been installed around the existing chlorine contact tanks, as well as the gravity thickener. Additionally, it was noted that repairs to the chlorine contact tank walls and pump support structures had been made.
- The facility had not implemented its Storm Water Pollution Prevention Plan (SWPPP). Among other things, implementation shall include documentation of inspection and maintenance activities.

Discharge Monitoring Reports

Discharge monitoring reports (DMR), received by Ohio EPA for the period July 2011 through June 2012 were reviewed for compliance with the final effluent limitations and monitoring requirements of the NPDES. Violations of the NPDES permit at Outfall 001 are listed in Attachment A. Bypasses at Stations 602 and 603 are listed in Attachment B.

The following reporting issue must also be addressed:

- Please ensure that the Method Detection Limit (MDL) reported for mercury is denoted as 0.2 ng/l, not 0.5 ng/l.

Part III, item 12, of your NPDES permit requires the permittee to provide notification and a letter of explanation outlining the actions taken, or to be taken, to correct all instances of noncompliance. Within 10 days of the date of this letter, please submit a written response to this office addressing all deficiencies cited above.

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 will need to perform a comprehensive analysis of all feasible alternatives necessary to eliminate the bypasses at the treatment plant and any overflows in the collection system.
- 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.

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

Respectfully,

A handwritten signature in blue ink, appearing to read 'Ermelindo Gomes', written in a cursive style.

Ermelindo Gomes
Environmental Engineer
Division of Surface Water

EG/cs

Attachments

cc: David Pocaro, Director of Water Reclamation, City of Bedford Heights

Attachment A: Bedford Heights WWTP Effluent Violations Summary (7/2012- 3/2013)						
Reporting Period	Station	Parameter	Limit Type	Limit	Reported Value	Violation Date
July 2012	001	Mercury, Total (Low Le	30D Conc	1.3	1.53	7/1/2012
July 2012	001	pH, Minimum	1D Conc	6.5	6.4	7/5/2012
July 2012	001	pH, Minimum	1D Conc	6.5	6.4	7/6/2012
July 2012	001	pH, Minimum	1D Conc	6.5	6.4	7/7/2012
July 2012	001	Fecal Coliform	7D Conc	2000	2069.03	7/8/2012
July 2012	001	pH, Minimum	1D Conc	6.5	6.4	7/8/2012
July 2012	001	pH, Maximum	1D Conc	9.0	9.4	7/9/2012
July 2012	001	pH, Minimum	1D Conc	6.5	6.3	7/9/2012
July 2012	001	pH, Minimum	1D Conc	6.5	6.4	7/12/2012
July 2012	001	pH, Minimum	1D Conc	6.5	6.4	7/16/2012
July 2012	001	pH, Minimum	1D Conc	6.5	6.1	7/17/2012
July 2012	001	pH, Minimum	1D Conc	6.5	6.	7/18/2012
July 2012	001	pH, Minimum	1D Conc	6.5	6.1	7/19/2012
July 2012	001	pH, Minimum	1D Conc	6.5	6.4	7/20/2012
July 2012	001	pH, Minimum	1D Conc	6.5	6.3	7/22/2012
July 2012	001	pH, Minimum	1D Conc	6.5	6.3	7/23/2012
July 2012	001	pH, Minimum	1D Conc	6.5	6.1	7/24/2012
August 2012	001	Chlorine, Total Residu	1D Conc	0.019	.057	8/11/2012
August 2012	001	Chlorine, Total Residu	1D Conc	0.019	.189	8/21/2012
September 2012	001	Phosphorus, Total (P)	7D Conc	0.7	.83	9/8/2012
October 2012	001	Chlorine, Total Residu	1D Conc	0.019	.1	10/28/2012

Attachment B: Bedford Heights WWTP Bypass Summary (7/2012- 3/2013)				
Station	Parameter	Units	Date	Reported Value
602	Bypass Volume	MGAL	9/4/2012	0.415
602	Bypass Volume	MGAL	9/8/2012	0.99
602	Bypass Volume	MGAL	9/26/2012	0.2
602	Bypass Volume	MGAL	10/28/2012	0.7
602	Bypass Volume	MGAL	10/29/2012	1.72
602	Bypass Volume	MGAL	10/30/2012	3.53
602	Bypass Volume	MGAL	10/31/2012	3.84
602	Bypass Volume	MGAL	12/18/2012	0.164
602	Bypass Volume	MGAL	1/11/2013	0.598
602	Bypass Volume	MGAL	2/26/2013	0.2
602	Bypass Volume	MGAL	3/11/2013	0.45
603	Bypass Volume	MGAL	9/4/2012	0.9
603	Bypass Volume	MGAL	9/8/2012	2.01
603	Bypass Volume	MGAL	9/22/2012	0.76
603	Bypass Volume	MGAL	10/28/2012	2.85
603	Bypass Volume	MGAL	10/29/2012	4.5
603	Bypass Volume	MGAL	10/30/2012	10.33
603	Bypass Volume	MGAL	10/31/2012	8.71

Attachment B: Bedford Heights WWTP Bypass Summary (7/2012- 3/2013)				
Station	Parameter	Units	Date	Reported Value
603	Bypass Volume	MGAL	12/18/2012	1.15
603	Bypass Volume	MGAL	1/11/2013	1.31
603	Bypass Volume	MGAL	2/26/2013	0.35
603	Bypass Volume	MGAL	3/11/2013	0.65