



State of Ohio Environmental Protection Agency

Northeast District Office

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Ted Strickland, Governor
Lee Fisher, Lieutenant Governor
Chris Korieski, Director

July 9, 2008

RE: CITY OF BEDFORD HEIGHTS WWTP
CUYAHOGA COUNTY
COMPLIANCE EVALUATION INSPECTION
NPDES PERMIT 3PD00006 (OH0024040)

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

Dear Mayor Berger and Council:

On July 1, 2008, this office met with Mr. David Pocaro, Director of Water Reclamation, to conduct an inspection of the above referenced wastewater treatment plant (WWTP). The purpose of the inspection was to obtain and review information in anticipation of renewal of the National Pollutant Discharge Elimination System (NPDES) permit. The NPDES permit for this facility will expire on July 31, 2008. Receipt of the renewal application by Ohio EPA authorizes the permittee to discharge beyond the expiration date.

Wastewater Treatment Plant

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. Phosphorous 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.

At the time of the inspection the facility appeared to be well maintained. All components necessary for the treatment of current flows were in service. Several improvement projects to enhance/maintain treatment capabilities were noted. The headers, diffusers and piping in all three preaeration tanks have been replaced; a new controller for LPO-1, associated with the Zimpro process, was installed last December; and, one belt filter press has been refurbished with new rollers, bearings and filter cloth. The second belt filter press will be refurbished in 2009.

Three treatment system bypass locations were noted and discussed during this inspection. The bypasses involve the diversion from treatment located (1) at the headworks; (2) after primary clarification prior to aeration (secondary bypass); and, (3)

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after secondary clarification prior to the rapid sand filters (tertiary bypass). 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, the diverting or bypassing of wastewater from any portion of the treatment facility is prohibited and may be subject to an enforcement action. All bypass 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 telephone and confirmation in writing. Sampling must occur during bypass events.

The operator certification rule, Ohio Administrative Code (OAC) 3745-7 has changed effective December 21, 2006. As discussed, the rule now requires the owner and the operator of record to maintain operation and maintenance records. These records shall be accessible on site for twenty-four hour inspection. Please refer to this rule for the information required to be maintained.

Laboratory

The laboratory area appeared to be clean and well kept. Samples required by the NPDES permit are collected by plant personnel and analyzed by the in-house laboratory except for metals (including mercury), cyanide and oil and grease which are sent to contract commercial laboratories. Quality control measures are documented by the development and implementation of a Quality Assurance/Quality Control (QA/QC) program. The analyses of standards, duplicates and spikes are regularly performed. Analytical procedures are documented in writing and maintained in a bound document. All samples sent to commercial laboratories are submitted under a Chain of Custody. The Performance Evaluation Report DMR-QA study number 27 indicates all analytes reported were within the "acceptable" range of analytical precision with the exception of hexavalent chromium. The analyte was reported as "not acceptable." The contract laboratory re-evaluated the analyte and provided a response as required by the program. A discrepancy of the hexavalent chromium data provided in the response from the commercial laboratory was noted during the inspection. It is our understanding that the commercial laboratory will be contacted for an explanation. Upon resolution please provide this office with written confirmation.

Discharge Monitoring Reports

Discharge monitoring reports (DMR), received by Ohio EPA for the period May 2004 through May 2008, were reviewed for compliance with the effluent limitations and monitoring requirements of the NPDES permit.

The frequency violations cited below appear to be a failure to collect the appropriate number of samples within a given week. As discussed during the inspection, a week starts with the first day of the month and ends seven days later (i.e. Week 1 is days 1 - 7, Week 2 is days 8 - 14, etc.). Sampling for 2008 has not resulted in frequency violations; however, sampling procedures should be reviewed and changed accordingly to avoid recurring frequency violations.

Frequency Violations

Station	Reporting Code	Parameter	Sample Frequency	Expected	Reported	Violation Date
001	80082	CBOD 5 day	3/Week	3	2	11/22/2004
001	80082	CBOD 5 day	3/Week	3	2	11/08/2007
001	00300	Dissolved Oxygen	1/Day	1	0	01/28/2006
001	31616	Fecal Coliform	3/Week	3	2	09/01/2004
001	31616	Fecal Coliform	3/Week	3	2	09/22/2005
001	31616	Fecal Coliform	3/Week	3	2	05/01/2006
001	31616	Fecal Coliform	3/Week	3	2	05/22/2007
001	31616	Fecal Coliform	3/Week	3	2	08/01/2007
001	31616	Fecal Coliform	3/Week	3	1	08/15/2007
001	00530	Total Suspended Solids	3/Week	3	2	02/15/2005
001	00530	Total Suspended Solids	3/Week	3	2	11/08/2007
001	00010	Water Temperature	1/Day	1	0	01/01/2005
001	00010	Water Temperature	1/Day	1	0	10/29/2006
601	80082	CBOD 5 day	3/Week	3	2	11/22/2004
601	80082	CBOD 5 day	3/Week	3	2	08/01/2007
601	80082	CBOD 5 day	3/Week	3	2	11/08/2007
601	00530	Total Suspended Solids	3/Week	3	2	02/15/2005
601	00530	Total Suspended Solids	3/Week	3	2	05/22/2007

Final effluent limitation violations cited by this office in correspondence dated April 6, 2007, have been addressed by the City. The noncompliance for CBOD₅ and ammonia that occurred between September 2006 and March 2007 was attributed to the acceptance of landfill leachate. The volume of leachate accepted at the WWTP has been reduced. Since April 2007 the data has shown general compliance with the final effluent limitations of the NPDES permit.

Collection System

The collection system consists of gravity sewers and eleven pump stations and force mains. The service area includes portions of the Cities of Solon and Warrensville Heights and the Villages of Oakwood and Glenwillow. The Richmond Road and Bear Creek pump stations were recently renovated. Improvements at the pump stations include new telemetry and the replacement of pumps, motors and piping. In an effort to

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identify and reduce inflow and infiltration the City is jetting and televising the sanitary sewers. Problem areas have been and will continue to be identified and addressed. A point of sale program has been initiated for residential dwellings. The program includes the dye testing of the storm and sanitary laterals to ensure each lateral is properly connected to the city system.

Storm Water

Under the provisions of the US EPA storm water program and in accordance with OAC 3745-39-04, publically owned treatment works with a design flow of 1.0 mgd or greater are required to apply for an industrial storm water permit. Provisions of the final rule have expanded the No Exposure Certification exemption to all categories of industrial activity, except construction. The exemption allows facilities that do not have process related materials exposed to storm water to opt out of obtaining a storm water NPDES permit. Storm water language will be added to the NPDES permit upon renewal.

Conclusion

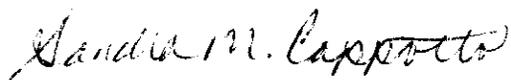
Within thirty days of the date of this letter submit a written response to this office addressing the discrepancy of the hexavalent chromium data discussed above.

Please be advised, failure to comply with the terms and conditions of the NPDES permits may be cause for enforcement pursuant to the Ohio Revised Code Chapter 6111.

A draft copy of the renewal permit will be sent under separate cover. Any comments regarding the draft permit must be submitted in writing during the public notice period.

If you should have any questions, please contact this office at (330) 963-1124.

Sincerely,



Sandra M. Cappotto
Environmental Scientist
Division of Surface Water

SMC/mt

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