



**Environmental
Protection Agency**

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

July 25, 2012

RE: CUYAHOGA COUNTY
CITY OF NORTH ROYALTON
NORTH ROYALTON 'B' WWTP
NPDES PERMIT NO. OH0026808
OHIO EPA PERMIT NO. 3PC00018

Mayor and Council
City of North Royalton
City Hall
13834 Ridge Road
North Royalton, OH 44133

Dear Mayor and Council:

On June 14, 2012, a Compliance Evaluation Inspection (CEI) was conducted at the City of North Royalton 'B' Wastewater Treatment Plant (WWTP). Present during the inspection were Messrs. Tim Tigue, Superintendent and Tom Kuehn, Asst. Superintendent. The purpose of the inspection was to evaluate facility's compliance with terms and conditions of the 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 municipal facility authorizes an average daily discharge of 1.0 million gallons per day (MGD) of treated wastewater to Baldwin Creek (River Mile 7.4) via an unnamed tributary. The NPDES permit will expire on August 31, 2012. Receipt of a timely renewal application on February 22, 2012 authorizes the facility to discharge beyond the date of expiration. Information obtained during the inspection will be utilized during the review and issuance of the renewal permit.

Facility Description

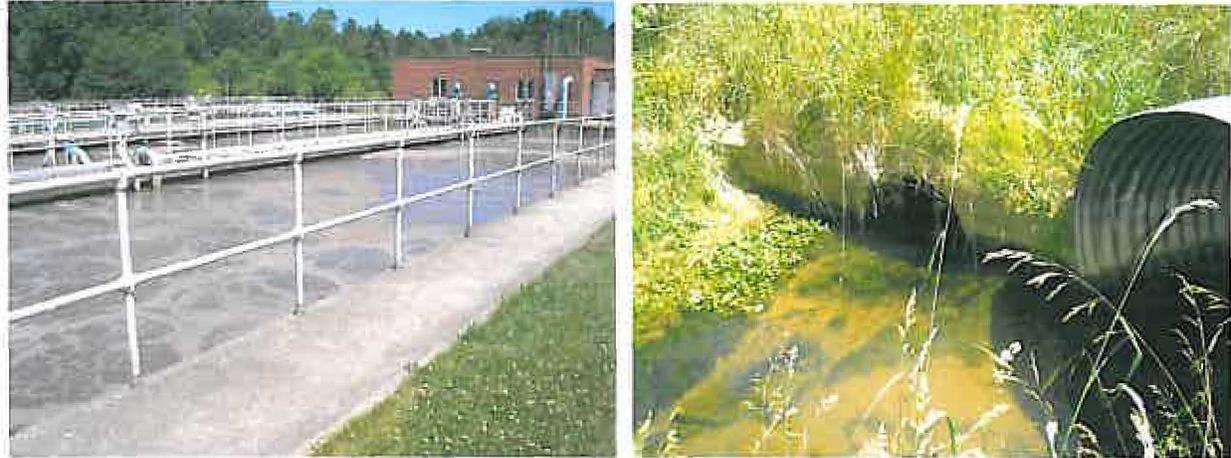
The WWTP presently serves a population of approximately 6600 people within North Royalton's Sewer District "B". Originally constructed in 1967, the last major modification to the facility was in 1990. The treatment processes consist of influent pumping (screw pumps), mechanical screening, grit removal, fine-bubble extended aeration activated sludge biological treatment, secondary clarification, disinfection using chlorine gas, and dechlorination utilizing sodium bisulfite. Phosphorus removal is achieved through the addition of ferrous chloride. An off-line flow equalization basin is used to divert and store excess wastewater flows during wet weather events.

Sludge handling consists of a sludge holding tank. The sludge is pumped to the North Royalton 'A' WWTP, via a 6-inch force main, for additional processing. The dewatered sludge is presently hauled to the PPG Lime Reclamation site in Barberton, Ohio.

Inspection Findings/Compliance Status

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

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 segment of the receiving stream.



Six SSO events (Station 300) were reported over the past year. Please be advised that the diverting or bypassing of wastewater from any portion of the treatment facility, including the EQ basin overflow, 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 e-mail or telephone and confirmation in writing. Sampling must occur during bypass events. The NPDES permit renewal will require the City to conduct a comprehensive analysis of all feasible alternatives necessary to eliminate the bypass at the treatment plant and any overflows in the collection system.

2. Field testing is performed by the onsite operator for chlorine residual, DO, pH, and temperature. The balance of the required analytical testing is coordinated through the main laboratory at the North Royalton "A" WWTP.
3. The facility currently maintains a Storm Water Pollution Prevention Plan(SWP3), dated July 2008.

Discharge Monitoring Reports (DMR)

Discharge monitoring reports (DMR) received by Ohio EPA for the period, May 2011 through June 2012, were reviewed. A summary of the Outfall 001 discharge data is listed in Attachment A. Additionally, the data was reviewed for compliance with the final effluent limitations and monitoring requirements of the NPDES permit. Violations of the NPDES permit at Outfall 001 are listed in Attachment B.

The following reporting issues 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.

- The applicable Water Quality Standard (WQS) for Cadmium is lower than the MDL, i.e. 5ug/l, currently being reported on the DMRs. The MDL must be lowered in order to demonstrate consistent compliance with the downstream WQS.

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 above violation and/or deficiencies. Your response **shall** include specific dates for completion of the actions. Please be advised that past or present issues of noncompliance can continue as subjects of future enforcement actions by Ohio EPA.

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. Based on the new Class B Primary Contact Recreation standard, the projected E.coli effluent limitations for the facility will be 161/100 ml (30-day average) and 362/100 ml (7-day average). The NPDES permit will include a "Schedule of Compliance" to allow the facility until May 2014 to achieve compliance with the new requirement. **Please advise this office if you believe that such a schedule is not necessary.**
- POTWs with a design flow of 1.0 MGD or greater are required to perform an annual Whole Effluent Biological Toxicity (WET) Test.
- Testing will be required for Total Dissolved Solids.

If there are any comments or questions concerning this letter, please feel free to contact me at (330) 963-1196.

Respectfully,



Ermelindo Gomes
Environmental Engineer
Division of Surface Water

EG/cs

cc: Tim Tigie, North Royalton Wastewater Department

Attachments

File: Public/North Royalton "B" WWTP/PC

Attachment A: North Royalton "B" WWTP Effluent Discharge Summary (5/2011 - 6/2012)						
Parameter	Season	Units	# Obs	Percentiles		Data Range
				50 th	95 th	
Outfall 001						
Water Temperature	Annual	C	426	17.6	23	11.3-24.2
Dissolved Oxygen	Summer	mg/l	245	8.2	9	6.1-9.4
Dissolved Oxygen	Winter	mg/l	182	9.1	10.2	8.2-10.6
Total Suspended Solids	Annual	mg/l	184	3.2	6.4	1.2-8.4
Oil and Grease, Hexane Extr Method	Annual	mg/l	14	0	6.6	0-10
Nitrogen, Ammonia (NH3)	Summer	mg/l	107	0	0.536	0-1.06
Nitrogen, Ammonia (NH3)	Winter	mg/l	79	0	0.525	0-4.79
Nitrogen Kjeldahl, Total	Annual	mg/l	14	1.36	3.84	0.732-4.98
Nitrite Plus Nitrate, Total	Annual	mg/l	14	15	22.9	0-23.4
Phosphorus, Total (P)	Annual	mg/l	28	0.25	0.649	0.087-0.934
Nickel, Total Recoverable	Annual	ug/l	3	0	0	0-0
Zinc, Total Recoverable	Annual	ug/l	3	34.7	48.3	25.4-49.8
Cadmium, Total Recoverable	Annual	ug/l	3	0	0	0-0
Lead, Total Recoverable	Annual	ug/l	5	0	0	0-0
Chromium, Total Recoverable	Annual	ug/l	3	0	0	0-0
Copper, Total Recoverable	Annual	ug/l	6	12	36	0-42.9
Chromium, Dissolved Hexavalent	Annual	ug/l	3	0	0	0-0
Fecal Coliform	Annual	#/100 ml	105	31	150	1-4600
Flow Rate	Summer	MGD	245	0.537	1.47	0.124-2.44
Flow Rate	Winter	MGD	182	0.684	1.54	0.335-2.56
Flow Rate	Annual	MGD	427	0.593	1.51	0.124-2.56
Chlorine, Total Residual	Annual	mg/l	245	0	0.02	0-0.02
Mercury, Total (Low Level)	Annual	ng/l	5	0.87	2.04	0.64-2.3
pH, Maximum	Annual	S.U.	427	7.4	7.6	6.7-7.9
pH, Minimum	Annual	S.U.	427	7.3	7.6	6.5-7.8
CBOD 5 day	Summer	mg/l	100	2.4	3.71	0-5.2
CBOD 5 day	Winter	mg/l	77	0	3.22	0-3.9

Attachment B: North Royalton "B" WWTP Effluent Discharge Violations (5/2011 - 6/2012)							
Reporting Period	Station	Parameter	Units	Limit Type	Limit	Reported Value	Violation Date
June 2011	001	Mercury, Total	ng/l	30D Conc	1.3 (*)	2.3	6/1/2011
June 2012	001	Copper, Total Recoverable	ug/l	30D Conc	19	29.15	6/1/2012
June 2012	001	Copper, Total Recoverable	ug/l	1D Conc	31	42.9	6/6/2012

(*) –Hg variance limit of 2.79 ng/l authorized on 2/1/2012