



**Environmental
Protection Agency**

Ted Strickland, Governor
Lee Fisher, Lt. Governor
Chris Korleski, Director



1PD0002020080807

MONTGOME TRI-CITIES NORTH REGIONAL WW AUTHORITY REYNOLDS, JOSEP 2008/08/07



State of Ohio Environmental Protection Agency

Southwest District Office

401 E. Fifth St.
Dayton, Ohio 45402

TELE: (937) 285-6357 FAX: (937) 285-6249
www.epa.state.oh.us

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Lee Fisher, Lieutenant Governor
Chris Korleski, Director

August 7, 2008

Mr. David Heckler
TCA General Manager
Tri-Cities North Regional WWTP
3777 Old Needmore Road
Dayton, Ohio 45424

RE: Tri-Cities North Regional WWTP Compliance Evaluation Inspection.

Dear Mr. Heckler:

On July 22, 2008 representatives of the Ohio EPA Southwest District office conducted a Compliance Evaluation Inspection (CEI) inspection at the Tri-Cities North Regional WWTP, 3777 Old Needmore Road, Dayton. The inspection was conducted as part of the National Pollutant Discharge Elimination System (NPDES) permit renewal process for the facility.

The inspection report is attached. There are two items that require a response. Please provide a written response by no later than September 29, 2008.

A draft NPDES permit will be issued later this year. The draft permit will be public notice for a period of 30 days to allow for public comment. If you have questions, comments, or corrections concerning the draft, you should contact the district (Joe Reynolds, 937 285 – 6097) during the 30 day comment period.

If you have any questions regarding the report, please feel free to contact Mr. Reynolds at the number above.

Sincerely,

Martyn Burt, Environmental Supervisor
Division of Surface Water

cc: Holly Weatherhead, TCA
Dan Ward, TCA



State of Ohio Environmental Protection Agency
Southwest District Office

NPDES Compliance Inspection Report

Section A: National Data System Coding					
Permit #	NPDES#	Month/Day/Year	Inspection Type	Inspector	Facility Type
1PD00020*HD	OH0049646	7/22/2008	C	S	1

Section B: Facility Data		
Name and Location of Facility Inspected	Entry Time	Permit Effective Date
Tri - Cities North Regional 3777 Old Needmore Road Dayton, Ohio 45424	1:00 PM	6/1/2003
	Exit Time	Permit Expiration Date
	3:00 PM	5/31/2008
Name(s) and Title(s) of On-Site Representatives	Phone Number(s)	
Holly Weatherhead, Plant Manager Dave Heckler, General Manager Dan Ward, Operations Supervisor	(937) 233 - 7083	
Name, Address and Title of Responsible Official	Phone Number	
Dave Heckler, General Manager 3777 Old Needmore Road Dayton, Ohio 45424	(937) 233 - 7083	

Section C: Areas Evaluated During Inspection					
(S = Satisfactory, M = Marginal, U = Unsatisfactory, N = Not Evaluated)					
S	Permit	S	Flow Measurement	N	Pretreatment
S	Records/Reports	N	Laboratory	N	Compliance Schedule
S	Operations & Maintenance	S	Effluent/Receiving Waters	S	Self-Monitoring Program
S	Facility Site Review	N	Sludge Storage/Disposal	N	Other
U	Collection System				

Section D: Summary of Findings (Attach additional sheets if necessary)			
See attached report.			
Inspector		Reviewer	
<i>Joseph Reynolds</i>	<i>8/5/08</i>	<i>Martyn G Burt</i>	<i>8/7/08</i>
Joseph Reynolds Division of Surface Water Southwest District Office	Date	Martyn Burt Compliance & Enforcement Supervisor Division of Surface Water Southwest District Office	Date

Inspection Findings

Tri Cities North Regional was issued National Pollutant Discharge Elimination System (NPDES) permit number 1PD00020*HD on June 1, 2003. This permit expired on May 31, 2008. An NPDES renewal application was submitted on January 9, 2008.

The Tri Cities North Regional waste water treatment plant consist of grit and scum removal, flow equalization, primary settling, trickling filters, intermediate clarification, nitrification towers, final clarification, chlorination and dechlorination.

The North Regional WWTP provides waste water service to the cities of Huber Heights, Tipp City, and Vandalia. Each city maintains its own collection system. Veolia water also maintains part of the collection system.

Excessive infiltration and inflow is contributing to collection system overflows in all three communities. In January, 2008 fifty three flow monitors and eighteen rain gages were placed throughout the system (sewers larger than 12", except Tipp City where sewers larger than 8" were used). Flow information will be used to develop a model of the system.

Some of the sewer system issues being faced include old combined sewers (Tipp City), shallow bedrock (Huber Heights), and basement drain tie-ins (Vandalia). Through the use of a cost share program Vandalia has reduced infiltration and inflow from neighborhoods by seventy four percent.

Sanitary sewer system overflows (SSOs) are unauthorized discharges and must be eliminated. All flows entering the collection system are expected to be conveyed to the treatment plant and to receive secondary treatment at a minimum. SSO's are usually addressed by removing extraneous water, providing additional collection system capacity, or a combination. It may also necessitate additional capacity at the treatment works.

The conventional means to address SSO's is to develop a compliance schedule for their elimination. We would anticipate that such a schedule would be negotiated with Tri-Cities over the next several months. We will also need to address the issue of new development that may be proposed up gradient from these overflows through the development of a storm water trading programs (proposed trade ratio 5 to 1 clear water removal per gallon of new sewage added).

As part of the infiltration and inflow abatement program the wastewater sewer authority is charging two cents for every 1000 gallons of flow from the cities.

Inspection Findings (continued)

In addition to the sewer system study a 10 year waste water treatment capital improvement study is being performed. To this end a question was raised concerning changes to the National Pollutant Discharge Elimination System (NPDES) permit. Our initial response is the permit should remain about the same, possibly phosphorus monitoring. Before nutrient limits would be added to the permit, either a Total Maximum Daily Load (TMDL) study would need to be performed or new water quality standards would need to be adopted.

In order to improve filter performance, in both the random media filters and nitrification towers, plant personnel have been working on different return flow options. This flow is needed to enhance filter sloughing. Filter ventilation also is being looked at. Ammonia violations have been attributed to sloughing and flow issues.

A review of final effluent sampling data from January 1, 2007 to March 31, 2008 revealed the following final effluent violations: 8 ammonia violations, 39 AB code violations, and 156 AF violations. The AF code violations occurred from January, 08 to March, 08 and were attributed to flooding caused by frozen ground and heavy rain / snow melt.

Items Requiring a Response

1. What is the anticipated time line for completion of the initial collection system study / model development? As part of the study a schedule for elimination of all sewer system overflows will need to be developed.
2. A storm water trading program must be developed to address future sewer extensions tributary to sanitary sewer overflow points. A credit bank (based upon clear water removed and / or expanded treatment capacity) will need to be developed for the various interceptors / communities. Future sanitary sewer Permit to Install application will need to be accompanied by a letter from the authority identifying the credits to be used (proposed 5 to 1 trade ratio). A credit bank spread sheet which identifies the various interceptors and existing credits must be submitted to this office. The sewer authority will be responsible for keeping the bank updated as credits are accrued and used.