



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

March 12, 2013

RE: MEDINA COUNTY  
CITY OF WADSWORTH  
WADSWORTH WTP  
NPDES NO. 3IW00015

Mr. Dana Moore, Supervisor  
City of Wadsworth WTP  
365 Broad St.  
Wadsworth, Ohio 44281

Dear Mr. Moore:

On February 14, 2013, a Compliance Evaluation Inspection (CEI) was conducted at the Wadsworth Water Treatment Plant (WTP), located at 365 Broad Street, in the City of Wadsworth. Present for the inspection were you and Mr. Adam Coates, representing the City of Wadsworth, and this writer. The last National Pollutant Discharge Elimination System (NPDES) permit-based inspection of the dewatering lagoons was December 19, 2007.

The purpose of the inspection was to observe the water treatment process, and evaluate the operation and maintenance of the WTP sludge dewatering lagoons, prior to renewal of the National Pollutant Discharge Elimination System (NPDES) permit to discharge for the facility.

At the time of the February 14<sup>th</sup> inspection, the following items were discussed and/or information was obtained:

- 1) Raw water is withdrawn from a well field of 12 separate wells, 3 of which are in the vicinity of the WTP.
- 2) Water from the wells is passed through an aeration chamber, where oxidation of iron and manganese in the water begins. The water then enters a reactor basin where iron and manganese precipitates begin to form and partially settle.
- 3) A lime solution is then flash mixed with the water, to create iron, manganese, calcium, and magnesium floc particles in the 2 flocculation tanks.
- 4) The water enters 2 settling tanks, where the floc particles are allowed to settle out.
- 5) Settled water enters a recarbonation tank, then post settling tank, prior to being chlorinated and fluoridated, en route to the sand/gravel polishing filter.
- 6) Following the sand/gravel filters, treated water is stored in an underground clearwell.
- 7) Backwash from the sand/gravel filters is sent to a holding tank, where the lime sludge settles out, and tank supernate is returned to the head of the WTP. Backwash of the filters occurs approximately every 100 hours of operation, and approximately 50,000 gallons of water is backwashed over an 8-9 hour period.

- 8) Lime sludge from the backwash holding tank, and sludge from the settling tanks, is discharged to one of two sludge storage lagoons at the rear of the property.
- 9) Sludge is wasted 3 times per day, once per each shift, generating a total of approximately 8000 gallons per day of sludge sent to the lagoons.
- 10) At the time of the inspection the north lagoon was in use. Beginning in the spring, sludge storage will be switched to the south lagoon.
- 11) Discharge from the north lagoon was visibly clear at the time of the inspection, and there was no visible evidence of sediment in the stream. Discharge from both lagoons is to a stream located to the west of the property (Blockers Creek).
- 12) The current NPDES permit to discharge for the Wadsworth WTP sludge storage lagoon discharge (3IW00015\*DD) will expire on July 31, 2013. The application for renewal of the NPDES permit was due into the Ohio EPA 180 days prior to the permit expiration date. The application for renewal of the permit has been received, and the renewed permit should be forthcoming within the next several months.
- 13) The Wadsworth WTP is rated at approximately 3.1 million gallons of water per day, and serves a population of about 23,000 persons living within the City of Wadsworth and a portion of Sharon Center.
- 14) Effluent parameters sampled and tested for include: pH, total dissolved residue, total suspended solids, suspended iron, suspended manganese, chlorine residual, and total trihalomethane.
- 15) The pH, chlorine residual, and suspended solids tests are run at the WTP lab. The iron, manganese, total dissolved residue, and trihalomethane samples are analyzed by Eastern Lab Services in Medina, OH. A chain of custody form is employed for samples not analyzed at the WTP lab.

A review of the electronic Discharge Monitoring Reports (eDMR's) submitted for the Wadsworth WTP for the period since the last inspection (January 1, 2008 through February 1, 2013), found the following effluent limit numeric violations:

**WADSWORTH WATER TREATMENT PLANT  
NPDES PERMIT NO. 3IW00015  
EFFLUENT NUMERIC VIOLATIONS  
(JAN. 1, 2008 – FEB. 1, 2013)**

Reporting Period	Parameter	Limit Type	Limit	Reported Value	Violation Date
February 2010	pH	1D Conc	9.0	9.2	2/24/2010
September 2011	Total Suspended Solids	1D Conc	30.0	35.	9/12/2011
September 2011	pH	1D Conc	9.0	9.1	9/12/2011
September 2011	pH	1D Conc	9.0	9.1	9/29/2011

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The City of Wadsworth should continue current operation and maintenance practices, which allow the Wadsworth WTP to consistently meet its NPDES Permit limits for the facility.

If you have any comments or questions regarding this correspondence, you may contact me at (330) 963-1110.

Respectfully,



Charles E. Allen  
Environmental Engineer  
Division of Surface Water

CA/cs