



Environmental
Protection Agency

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

February 8, 2011

RE: NEW MIDDLETOWN POTW
NPDES PERMIT NO 3PH00016
FFY 2011 CEI

Board of Mahoning County Commissioners
21 West Boardman Street
Youngstown, OH 44503

Ladies and Gentlemen:

On February 7, 2011, this writer conducted an inspection of the New Middletown POTW. Mr. Guy Maiorana represented the county during the inspection.

The inspection was in preparation for renewing the NPDES Permit for the plant. The NPDES Permit is issued to the county for the discharge of wastewater from the New Middletown plant to waters of the state. The permit sets limits and monitoring requirements for different pollutants discharged from the POTW. The limits are set in order to protect the integrity of Meander Creek. In addition to touring the plant, this inspection included a review of the compliance record for the plant.

Observations:

The New Middletown POTW is a 0.550 mgd plant that includes influent screening, equalization, a lift system to transfer wastewater into four batch reactors and a UV disinfection system.

The effluent discharging to Honey Creek was clear. No significant sludge was apparent in the riprap immediately downstream of the outfall. However, residual sludge is apparent in Honey Creek as a result of releases in the past. Mr. Maiorana indicated that plant personnel had made adjustments in operations to limit or prevent the discharge of solids to Honey Creek.

The aeration tanks in the sequencing batch reactor system had good color and mixing. The system appeared to generate a floc with good settling characteristics. One jet pump was out of service for repairs at the time of the inspection. All other processes appeared to be online at the time of the inspection.

The effluent in the final tank following the UV system was clear but had debris floating on the surface. Mr. Maiorana indicated that the influent screen was malfunctioning and permitting debris to pass the filter into the aeration tanks. As the aeration tanks decant to the disinfection system, the debris accumulates behind the baffle in the final tank. It was understood that the screening device is over 20 years old and may be in need of replacement at some time in the future. No debris from the treatment plant was observed in Honey Creek at the time of the inspection.

Compliance Review:

The compliance record for the New Middletown plant was reviewed for the period covering January through December 2010. The compliance record identifies any violations of the NPDES Permit during the review period. Following is a list of violations recorded at the New Middletown POTW over the review period.

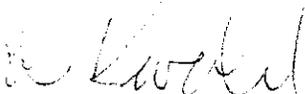
Reporting Period	Parameter	Limit Type	Limit	Reported Value	Violation Date
February 2010	Nitrogen, Ammonia (NH3	30D Conc	3.0	3.03625	2/1/2010
February 2010	Nitrogen, Ammonia (NH3	7D Conc	5.0	7.81	2/22/2010
February 2010	Nitrogen, Ammonia (NH3	7D Qty	10.4	18.9769	2/22/2010
March 2010	Nitrogen, Ammonia (NH3	30D Conc	3.0	7.505	3/1/2010
March 2010	Nitrogen, Ammonia (NH3	7D Conc	5.0	9.175	3/1/2010
March 2010	Nitrogen, Ammonia (NH3	30D Qty	6.2	17.2434	3/1/2010
March 2010	Nitrogen, Ammonia (NH3	7D Qty	10.4	16.7189	3/1/2010
March 2010	Nitrogen, Ammonia (NH3	7D Conc	5.0	8.61	3/8/2010
March 2010	Nitrogen, Ammonia (NH3	7D Qty	10.4	21.3441	3/8/2010
March 2010	Nitrogen, Ammonia (NH3	7D Conc	5.0	9.28	3/22/2010
March 2010	Nitrogen, Ammonia (NH3	7D Qty	10.4	22.5029	3/22/2010
April 2010	Nitrogen, Ammonia (NH3	30D Conc	3.0	6.82375	4/1/2010
April 2010	Nitrogen, Ammonia (NH3	7D Conc	5.0	10.4	4/1/2010
April 2010	Nitrogen, Ammonia (NH3	30D Qty	6.2	10.9694	4/1/2010
April 2010	Nitrogen, Ammonia (NH3	7D Qty	10.4	17.4382	4/1/2010
April 2010	Nitrogen, Ammonia (NH3	7D Conc	5.0	13.3	4/8/2010
April 2010	Nitrogen, Ammonia (NH3	7D Qty	10.4	18.9984	4/8/2010
May 2010	Nitrogen, Ammonia (NH3	30D Conc	1.0	2.50125	5/1/2010
May 2010	Nitrogen, Ammonia (NH3	30D Qty	2.08	5.91586	5/1/2010
May 2010	Nitrogen, Ammonia (NH3	7D Conc	1.5	4.12	5/8/2010
May 2010	Nitrogen, Ammonia (NH3	7D Qty	3.13	9.81678	5/8/2010
May 2010	Nitrogen, Ammonia (NH3	7D Conc	1.5	5.07	5/15/2010
May 2010	Nitrogen, Ammonia (NH3	7D Qty	3.13	12.3037	5/15/2010
July 2010	Nitrogen, Ammonia (NH3	30D Conc	1.0	1.945	7/1/2010
July 2010	Nitrogen, Ammonia (NH3	7D Conc	1.5	3.35	7/1/2010
July 2010	Nitrogen, Ammonia (NH3	30D Qty	2.08	2.19043	7/1/2010
July 2010	Nitrogen, Ammonia (NH3	7D Qty	3.13	3.68443	7/1/2010
July 2010	Nitrogen, Ammonia (NH3	7D Conc	1.5	2.045	7/15/2010
July 2010	Nitrogen, Ammonia (NH3	7D Conc	1.5	1.825	7/22/2010
August 2010	Nitrogen, Ammonia (NH3	30D Conc	1.0	8.67	8/1/2010
August 2010	Nitrogen, Ammonia (NH3	7D Conc	1.5	3.765	8/1/2010
August 2010	Nitrogen, Ammonia (NH3	30D Qty	2.08	10.4741	8/1/2010
August 2010	Nitrogen, Ammonia (NH3	7D Qty	3.13	4.12595	8/1/2010
August 2010	Nitrogen, Ammonia (NH3	7D Conc	1.5	3.81	8/8/2010
August 2010	Nitrogen, Ammonia (NH3	7D Qty	3.13	4.08814	8/8/2010
August 2010	Nitrogen, Ammonia (NH3	7D Conc	1.5	7.555	8/15/2010
August 2010	Nitrogen, Ammonia (NH3	7D Qty	3.13	10.9997	8/15/2010
August 2010	Nitrogen, Ammonia (NH3	7D Conc	1.5	19.55	8/22/2010
August 2010	Nitrogen, Ammonia (NH3	7D Qty	3.13	22.6829	8/22/2010
September 2010	Nitrogen, Ammonia (NH3	30D Conc	1.0	1.75625	9/1/2010
September 2010	Nitrogen, Ammonia (NH3	7D Conc	1.5	2.07	9/1/2010
September 2010	Nitrogen, Ammonia (NH3	7D Conc	1.5	2.165	9/8/2010
September 2010	Nitrogen, Ammonia (NH3	7D Conc	1.5	2.075	9/22/2010

Reporting Period	Parameter	Limit Type	Limit	Reported Value	Violation Date
October 2010	Nitrogen, Ammonia (NH3)	30D Conc	1.0	7.6925	10/1/2010
October 2010	Nitrogen, Ammonia (NH3)	7D Conc	1.5	8.99	10/1/2010
October 2010	Nitrogen, Ammonia (NH3)	30D Qty	2.08	9.42198	10/1/2010
October 2010	Nitrogen, Ammonia (NH3)	7D Qty	3.13	12.0456	10/1/2010
October 2010	Nitrogen, Ammonia (NH3)	7D Conc	1.5	4.22	10/8/2010
October 2010	Nitrogen, Ammonia (NH3)	7D Qty	3.13	5.47979	10/8/2010
October 2010	Nitrogen, Ammonia (NH3)	7D Conc	1.5	11.15	10/15/2010
October 2010	Nitrogen, Ammonia (NH3)	7D Qty	3.13	11.9628	10/15/2010
October 2010	Nitrogen, Ammonia (NH3)	7D Conc	1.5	6.41	10/22/2010
October 2010	Nitrogen, Ammonia (NH3)	7D Qty	3.13	8.19963	10/22/2010
November 2010	Nitrogen, Ammonia (NH3)	30D Conc	3.0	4.20375	11/1/2010
November 2010	Nitrogen, Ammonia (NH3)	7D Conc	5.0	5.525	11/1/2010
November 2010	Nitrogen, Ammonia (NH3)	7D Conc	5.0	5.04	11/8/2010
December 2010	Nitrogen, Ammonia (NH3)	30D Conc	3.0	4.84125	12/1/2010
December 2010	Nitrogen, Ammonia (NH3)	30D Qty	6.2	6.99811	12/1/2010
December 2010	Nitrogen, Ammonia (NH3)	7D Conc	5.0	15.25	12/15/2010
December 2010	Nitrogen, Ammonia (NH3)	7D Qty	10.4	19.858	12/15/2010

The above violations place the New Middletown POTW in significant noncompliance with the NPDES Permit. However, it is understood that the county has been working on long-term solutions to problems causing the violations. In response to the permit violations identified above, a schedule will be placed in the NPDES permit that will require the county to submit to Ohio EPA, a plan outlining actions that will be taken to eliminate the instances of noncompliance.

You may contact this writer at (330) 963-1251 to discuss any questions you may have regarding this inspection report.

Sincerely,


John Kwolek
District Engineer
Division of Surface Water

JK/mt

cc: Bob Lyden, Mahoning County Sanitary Engineer
Guy Maiorana, Field Supervisor, Boardman POTW