



Environmental  
Protection Agency

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

February 9, 2011

RE: DIEHL LAKE POTW  
NPDES PERMIT NO 3PG00157  
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 Diehl Lake 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 Diehl Lake 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 and its tributaries. In addition to touring the plant, this inspection included a review of the compliance record for the plant.

Observations:

The wastewater treatment plant is a 0.03 mgd plant that services the Diehl Lake and Ellsworth areas. The treatment system includes an equalization tank, an aeration system followed by clarification, a dual pump dosing system, four slow surface sand filters and UV disinfection system. A generator is on site as a backup power source in the event the primary source is interrupted. The treatment plant was satisfactory at the time of the inspection. Following are observations made during the inspection.

1. The aeration tank had good color and mixing. The return sludge was medium brown indicating a good colony of microbes for treatment.
2. The clarifiers were clear with no scum on the surface or at the weir.
3. The effluent discharging to the slow surface sand filter was clear. No sludge deposits were evident on the surface of the sand filters.
4. All processes were operational at the time of the inspection.

Compliance Review:

The compliance record for the Diehl Lake 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 Diehl Lake POTW over the review period.

Reporting Period	Parameter	Limit Type	Limit	Reported Value	Violation Date
May 2010	Nitrogen, Ammonia	7D Conc	1.5	1.8	5/15/2010
June 2010	Nitrogen, Ammonia	30D Conc	1.0	4.415	6/1/2010
June 2010	Nitrogen, Ammonia	30D Qty	0.11	.16711	6/1/2010
June 2010	Nitrogen, Ammonia	7D Conc	1.5	2.84	6/8/2010
June 2010	Nitrogen, Ammonia	7D Conc	1.5	5.675	6/15/2010
June 2010	Nitrogen, Ammonia	7D Qty	0.17	.2148	6/15/2010
June 2010	Nitrogen, Ammonia	7D Conc	1.5	3.47	6/22/2010
July 2010	Nitrogen, Ammonia	30D Conc	1.0	1.48475	7/1/2010
July 2010	Nitrogen, Ammonia	7D Conc	1.5	2.62	7/1/2010
July 2010	Nitrogen, Ammonia	7D Conc	1.5	2.9	7/15/2010
August 2010	Nitrogen, Ammonia	30D Conc	1.0	3.356	8/1/2010
August 2010	Nitrogen, Ammonia	7D Conc	1.5	6.62	8/8/2010
August 2010	Nitrogen, Ammonia	7D Qty	0.17	.1754	8/8/2010

During the period covering June through August, the county was in noncompliance for ammonia at the Diehl Lake facility. However, in a September 18, 2010 letter to this office, the county stated that changes to clarifier maintenance were implemented following the August violations. The changes were made in order to address the ammonia violations. It appears that the actions taken by the county have corrected the problem.

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 Superintendent, Boardman POTW