



**Environmental
Protection Agency**

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

September 26, 2012

RE: MAHONING COUNTY
LOWELLVILLE POTW
NPDES PERMIT NO 3PC00007
FFY 2013 CEI

Mayor and Council
Village of Lowellville City Hall
P.O. Box 124
Lowellville, OH 44436

Gentlemen:

On September 10, 2012, this writer conducted an unannounced Compliance Evaluation Inspection (CEI) of the Lowellville publicly owned treatment works (POTW). The intent of the inspection was to evaluate operations and maintenance, and to review the compliance record for the facility.

Observations

Following are observations during the inspection:

1. The equalization tank was empty at the time of the inspection.
2. It was understood that the ditches were recently switched from the east ditch to the west ditch. The color in the active ditch was light to medium brown. The floc formation was not as complete as in previous inspections. A settling test showed significant pin floc in the sample. The amount of sludge in the sample was light at approximately 50 ml. It was understood that sludge was also recently wasted from the system. The poor settling characteristic of sludge in the system was attributed to the light mixed liquor concentration and the recent switch to the west ditch.
3. The pin floc observed in the settling test was apparent in the clarifiers. The clarifiers also had floating scum on the surface. However, the scum was being removed with the scum collectors and was not observed leaving the clarifiers with the treated wastewater.
4. The final effluent appeared clear at the discharge to the Mahoning River. No sludge deposition was apparent in the river at the discharge location.
5. The facility appeared well maintained. All treatment systems observed during the inspection were operational.

Inflow and Infiltration

Inflow and Infiltration (I/I) has historically been an issue at the Lowellville wastewater treatment plant (WWTP). Collection systems can leak storm water into the system which reduces the capacity of the plant to treat wastewater. Leakage can be excessive at times. This is especially true of older collection systems that may have cracked and separated pipes. It is recommended

that the village continue to locate and remove sources of excessive I/I that may result from failed joints and cracked pipes.

Compliance Review

The compliance record for the Lowellville WWTP was reviewed as part of this inspection. The period of review was January 2011 through August 2012. Following are violations reported during the review period.

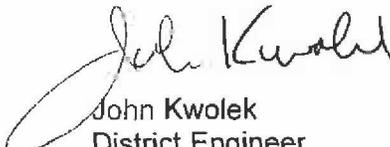
Reporting Period	Parameter	Limit Type	Limit	Reported Value	Violation Date
April 2011	Total Suspended Solids	7D Conc	45.0	77.6	4/1/2011
April 2011	Total Suspended Solids	30D Qty	58.1	129.898	4/1/2011
April 2011	Total Suspended Solids	7D Qty	87.1	319.510	4/1/2011
April 2011	CBOD 5 day	7D Qty	77.5	77.5622	4/1/2011
August 2011	pH	1D Conc	6.5	6.4	8/24/2011
September 2011	Mercury, Total (Low Level)	30D Conc	12.0	20.4	9/1/2011

A review of the monitoring data for April 2011 showed that on April 5, 2011, the village reported a Total Suspended Solids concentration of 150 mg/l. This one day is most likely the cause for Total Suspended Solids violations identified in the first week of April 2011 (April 1, 2011) and for the 30-day period. It is recommended that the village review the Total Suspended Solids concentration for April 5, 2011 to ensure that it is correct. If it is not correct, the village should revise the report for April 2011. If the report is correct, please provide a response indicating the cause of the elevated Total Suspended Solids concentration.

Further review of the self-monitoring data indicated that in August 2012, the effluent metals concentrations were all elevated. Though the NPDES Permit does not include metals limits, the reported concentrations for all metals were elevated when compared to other reporting periods. It is recommended that the village review metals concentrations each reporting period and initiate a program to locate the source in the event concentrations remain elevated.

You may contact this writer at (330) 963-1251 or at john.kwolek@epa.state.oh.us to discuss any questions you may have.

Respectfully,


John Kwolek
District Engineer
Division of Surface Water

JK/cs

cc. Marty Komensky, Village of Lowellville
Rich DeLuca