Ohio | Environmental Protection Agency
John R. Kasich, Governor
Mary Taylor, Lt. Governor
Scott J. Nally, Director

March 11, 2013

RE: GUILFORD LAKE WWTP
33395 STATE ROUTE 172
COMPLIANCE EVALUATION INSPECTION
NPDES PERMIT NO. 3PH00043
HANOVER TOWNSHIP
COLUMBIANA COUNTY

Mr. Troy Graft, P.E.
Chief Engineer
Columbiana County Engineer
105 South Market Street
Lisbon, OH 44432

Dear Mr. Graft:

On March 6, 2013, this writer conducted a compliance evaluation inspection of the Columbiana County Guilford Lake Wastewater Treatment Plant (WWTP) located at the above referenced address. The County was represented by Mr. Don Harrison.

The following is a summary of the inspection:

1) The WWTP consists of a comminutor, influent pumps, oxidation ditch, final clarifiers, and chlorination/dechlorination facilities. At the time of the inspection, the comminutor was not in service. The County has purchased a new comminutor that is capable of being submerged during times of flooding. This will be installed by April. The facility is currently utilizing the by-pass bar screen. The oxidation ditches had a nice brown color and the effluent being produced by the clarifiers appeared clear.

2) The WWTP effluent data was reviewed from May 11, 2011 through January, 2013. The effluent violations for this facility are attached to this letter. It should be noted there have been no violations since October of 2011. The County has done a good job of returning the plant to continued and reliable compliance.

3) The County has begun feeding chemical (Alum) for phosphorus removal and is currently meeting the 1.0 mg/l limit. It should be noted that the schedule of Compliance Part I,C,B,3 requires the submission of a General Plan to meet the final allowable Phosphorus load of 0.77 kg/day (0.5 mg/l) by June 1, 2013. The General Plan allows for a demonstration that the biological indices of the West Fork of Little Beaver Creek are in full attainment, or stream data is collected to verify the median total phosphorus concentration at this site is equal to or less than 0.08 mg/l target concentration for two consecutive years. If this could be done it may not be necessary to meet the lower phosphorus limit. Any type of stream study or evaluation must be coordinated with Mr. Bill Zawiski (330-963-1134), of our Water Quality group.

4) The County has added some additional staffing and all the plants are better maintained. Also, additional supervision, Mr. Don Harrison, has been employed and there is now a regimented maintenance schedule for facility repairs at all the treatment plants. The County now has multiple spare parts available and repairs to the various systems are completed in a timely fashion.

5) Recent work on the collection system seems to have reduced daily and peak flows to the plant. The County should continue to do additional rehab work and eliminate Infiltration and Inflow. The current work is having a positive impact and maintains existing capacity at the plant.

Should you have any comments or questions, feel free to contact me at (330) 963-1193.

Respectfully,

Joseph E. Trocchio, P.E.
Environmental Engineer
Division of Surface Water

JET/cs

cc: Lori J. Barnes, Columbiana County Health Dept.
Bert Dawson, P.E., Columbiana County Engineer
Don Harrison, P.E., P.S., Columbiana County Engineers
Columbiana County Commissioners

ec: Bill Zawiski, Ohio EPA, DSW, NEDO

File: Public/Permit Compliance/Columbiana County/Guilford Lake WWTP

COLUMBIANA CO. GUILFORD LAKE EFFLUENT VIOLATIONS: MAY 2011 - JAN 2013

Permit No	Reporting Period	Parameter	Limit Type	Limit	Reported Value	Violation Date
3PH00043*GD	May 2011	Total Suspended Solids	30D Conc	12	15.8125	5/1/2011
3PH00043*GD	May 2011	Total Suspended Solids	7D Conc	18	46.5	5/1/2011
3PH00043*GD	May 2011	Total Suspended Solids	30D Qty	18.2	33.1362	5/1/2011
3PH00043*GD	May 2011	Total Suspended Solids	7D Qty	27.3	97.9028	5/1/2011
3PH00043*GD	May 2011	Phosphorus, Total (P)	30D Qty	1.52	1.64295	5/1/2011
3PH00043*GD	May 2011	Chlorine, Total Residu	1D Conc	0.019	.26	5/6/2011
3PH00043*GD	May 2011	Chlorine, Total Residu	1D Conc	0.019	.23	5/9/2011
3PH00043*GD	May 2011	Chlorine, Total Residu	1D Conc	0.019	.23	5/10/2011
3PH00043*GD	May 2011	Chlorine, Total Residu	1D Conc	0.019	.07	5/11/2011
3PH00043*GD	May 2011	Chlorine, Total Residu	1D Conc	0.019	.1	5/12/2011
3PH00043*GD	May 2011	Chlorine, Total Residu	1D Conc	0.019	.24	5/13/2011
3PH00043*GD	May 2011	Chlorine, Total Residu	1D Conc	0.019	.18	5/16/2011
3PH00043*GD	May 2011	Chlorine, Total Residu	1D Conc	0.019	.17	5/17/2011
3PH00043*GD	May 2011	Chlorine, Total Residu	1D Conc	0.019	.16	5/18/2011
3PH00043*GD	May 2011	Chlorine, Total Residu	1D Conc	0.019	.06	5/19/2011
3PH00043*GD	May 2011	Chlorine, Total Residu	1D Conc	0.019	.16	5/20/2011
3PH00043*GD	May 2011	Chlorine, Total Residu	1D Conc	0.019	.21	5/23/2011
3PH00043*GD	May 2011	Chlorine, Total Residu	1D Conc	0.019	.16	5/24/2011
3PH00043*GD	May 2011	Chlorine, Total Residu	1D Conc	0.019	.12	5/25/2011
3PH00043*GD	May 2011	Chlorine, Total Residu	1D Conc	0.019	.1	5/26/2011
3PH00043*GD	June 2011	Phosphorus, Total (P)	30D Conc	1.0	1.16	6/1/2011
3PH00043*GD	June 2011	Phosphorus, Total (P)	30D Qty	1.52	1.61574	6/1/2011
3PH00043*GD	June 2011	Chlorine, Total Residu	1D Conc	0.019	.1	6/2/2011
3PH00043*GD	June 2011	Chlorine, Total Residu	1D Conc	0.019	.13	6/3/2011
3PH00043*GD	June 2011	Chlorine, Total Residu	1D Conc	0.019	.1	6/6/2011
3PH00043*GD	June 2011	Chlorine, Total Residu	1D Conc	0.019	.08	6/7/2011
3PH00043*GD	June 2011	Chlorine, Total Residu	1D Conc	0.019	.2	6/13/2011
3PH00043*GD	July 2011	Phosphorus, Total (P)	30D Conc	1.0	2.12	7/1/2011
3PH00043*GD	July 2011	Phosphorus, Total (P)	7D Conc	1.5	2.12	7/1/2011
3PH00043*GD	July 2011	Phosphorus, Total (P)	30D Qty	1.52	2.10234	7/1/2011
3PH00043*GD	July 2011	Chlorine, Total Residu	1D Conc	0.019	.07	7/22/2011
3PH00043*GD	August 2011	Phosphorus, Total (P)	30D Conc	1.0	1.88	8/1/2011
3PH00043*GD	August 2011	Phosphorus, Total (P)	7D Conc	1.5	1.88	8/1/2011
3PH00043*GD	August 2011	Phosphorus, Total (P)	30D Qty	1.52	1.60817	8/1/2011
3PH00043*GD	September 2011	Phosphorus, Total (P)	30D Conc	1.0	2.18	9/1/2011
3PH00043*GD	September 2011	Phosphorus, Total (P)	7D Conc	1.5	2.18	9/1/2011
3PH00043*GD	September 2011	Phosphorus, Total (P)	30D Qty	1.52	1.69977	9/1/2011
3PH00043*GD	October 2011	Oil and Grease, Total	1D Conc	10.0	13.3	10/5/2011