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

November 21, 2011

RE: GEAUGA COUNTY
MCFARLAND CREEK WWTP
NPDES NO. 3PK00010

Geauga County Board of Commissioners
470 Center Street, Building #3
Chardon, OH 44024

Dear Commissioners:

On October 26, 2011, an inspection was conducted at the McFarland Creek Wastewater treatment plant. This writer, accompanied by Katie Holcomb of Ohio EPA, Central Office met with representatives of the Geauga County Water Resources and conducted an inspection. Those present from Geauga County Water Resources were Jim Reider, George Haggerty, Gerald Morgan and Doug Bowen. The intent of the inspection was to evaluate the operation and maintenance of the system in preparation for the renewal of the National Pollutant Discharge Elimination System (NPDES) permit. Discharge monitoring reports from January 1, 2009, through September 1, 2011, were reviewed for compliance with the current NPDES permits.

The inspection revealed the wastewater treatment plant (WWTP) was in satisfactory operation, maintenance condition and producing a satisfactory quality effluent. Below are the findings and recommendations from the inspection:

INSPECTION

The WWTP was upgraded in 2005 to include membrane bioreactor (MBR) technology. The current treatment system includes grit removal, flow equalization, activated sludge aeration, MBR and UV disinfection. The WWTP has an average design flow of 1.32 mgd. It is understood the collection system is a completely separate system. The final effluent from the WWTP discharges to Aurora Branch of the Chagrin River at River Mile 3.4. According to discharge monitoring report data, the flow to the wastewater plant over the past two years averaged 1.34 mgd. At the time of the inspection, all treatment units were in good operating and maintenance condition.

The wastewater plant includes a septage receiving station. The inspection of the receiving station revealed all components to be in good operation and maintenance condition. Reportedly, the MBR's were in good condition and have been performing well since the previous inspection.

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NPDES PERMIT

A mercury variance was submitted to the Ohio EPA on November 10, 2011, and is currently being reviewed. The NPDES permit is being drafted and will be finalized once all the information has been reviewed.

If you have any questions or comments regarding this letter or the draft renewal permit, please contact this writer at (330) 963-1299 or Katie Holcomb at (614) 644-4824.

Respectfully,

Laura A. Weber, P.E.
Environmental Engineer
Division of Surface Water

LAW/cs

Cc: Doug Bowen, Department of Water Resources
Jerry Morgan, Department of Water Resources
Jim Reider, Department of Water Resources
Geauga County Health Department

File: Public/Geauga County/McFarland

McFarland Creek WWTP: 1/1/09-9/30/11

Discharge Violations

Reporting Period	Station	Parameter	Limit Type	Limit	Reported Value	Violation Date
February 2011	001	Total Suspended Solids	7D Conc	8	8.33333	2/22/2011
February 2011	001	Total Suspended Solids	7D Qty	55	55.0465	2/22/2011
February 2011	001	Nitrogen, Ammonia (NH3	30D Conc	1.0	2.0468	2/1/2011
February 2011	001	Nitrogen, Ammonia (NH3	7D Conc	1.5	1.956	2/8/2011
February 2011	001	Nitrogen, Ammonia (NH3	7D Conc	1.5	2.6614	2/15/2011
February 2011	001	Nitrogen, Ammonia (NH3	7D Conc	1.5	2.5925	2/22/2011
February 2011	001	Nitrogen, Ammonia (NH3	30D Qty	6.8	12.8175	2/1/2011
February 2011	001	Nitrogen, Ammonia (NH3	7D Qty	10.2	19.7572	2/15/2011
February 2011	001	Nitrogen, Ammonia (NH3	7D Qty	10.2	15.4112	2/22/2011
February 2011	001	CBOD 5 day	7D Conc	8	8.63333	2/15/2011
February 2011	001	CBOD 5 day	7D Qty	55	62.4323	2/15/2011
February 2011	001	Mercury, Total (Low Le	30D Conc	1.3	3.55	2/1/2011
October 2010	001	Lead, Total Recoverabl	30D Conc	17.6	20.1	10/1/2010
November 2010	001	Lead, Total Recoverabl	30D Conc	17.6	21.	11/1/2010
May 2011	001	Mercury, Total (Low Le	30D Conc	1.3	1.96	5/1/2011
July 2011	001	Lead, Total Recoverabl	30D Conc	17.6	20.3	7/1/2011
July 2011	001	Mercury, Total (Low Le	30D Conc	1.3	2.39	7/1/2011
March 2011	001	Total Suspended Solids	30D Qty	36	37.0551	3/1/2011
March 2011	001	Total Suspended Solids	7D Qty	55	77.7817	3/8/2011
March 2011	001	Nitrogen, Ammonia (NH3	30D Conc	1.0	1.02792	3/1/2011
March 2011	001	Nitrogen, Ammonia (NH3	7D Conc	1.5	1.88667	3/1/2011
March 2011	001	Nitrogen, Ammonia (NH3	30D Qty	6.8	9.32378	3/1/2011
March 2011	001	Nitrogen, Ammonia (NH3	7D Qty	10.2	14.0137	3/1/2011
March 2011	001	Nitrogen, Ammonia (NH3	7D Qty	10.2	15.1177	3/8/2011
March 2011	001	CBOD 5 day	7D Qty	55	58.0076	3/8/2011
March 2011	001	Mercury, Total (Low Le	30D Conc	1.3	4.46	3/1/2011
April 2011	001	Nitrogen, Ammonia (NH3	30D Conc	1.0	1.06	4/1/2011
April 2011	001	Nitrogen, Ammonia (NH3	7D Conc	1.5	1.52667	4/1/2011
April 2011	001	Nitrogen, Ammonia (NH3	30D Qty	6.8	7.67434	4/1/2011
April 2011	001	Nitrogen, Ammonia (NH3	7D Qty	10.2	10.5385	4/1/2011
April 2011	001	Mercury, Total (Low Le	30D Conc	1.3	1.48	4/1/2011
June 2011	001	Lead, Total Recoverabl	30D Conc	17.6	21.	6/1/2011
June 2011	001	Mercury, Total (Low Le	30D Conc	1.3	7.66	6/1/2011

Frequency Violations

Reporting Period	Station	Reporting Code	Parameter	Sample Frequency	Expected	Reported	Violation Date
January 2008	001	00300	Dissolved Oxygen	1/Day	1	0	01/01/2008
January 2008	001	00300	Dissolved Oxygen	1/Day	1	0	01/05/2008
January 2008	001	00300	Dissolved Oxygen	1/Day	1	0	01/06/2008
January 2008	001	00300	Dissolved Oxygen	1/Day	1	0	01/12/2008
January 2008	001	00300	Dissolved Oxygen	1/Day	1	0	01/13/2008
January 2008	001	00300	Dissolved Oxygen	1/Day	1	0	01/19/2008
January 2008	001	00300	Dissolved Oxygen	1/Day	1	0	01/20/2008
January 2008	001	00300	Dissolved Oxygen	1/Day	1	0	01/26/2008
January 2008	001	00300	Dissolved Oxygen	1/Day	1	0	01/27/2008
June 2008	001	00719	Cyanide, Free	2/Year	1	0	06/01/2008