OhioEPA
State of Ohio Environmental Protection Agency
Northeast District Office

2110 East Aurora Rd.
Twinsburg, Ohio 44087

TELE: (330) 963-1200 FAX: (330) 487-0769
www.epa.state.oh.us

Ted Strickland, Governor
Lee Fisher, Lieutenant Governor
Chris Korleski, Director

March 26, 2010

RE: GEAUGA COUNTY
NPDES PERMIT COMPLIANCE INSPECTION
MCFARLAND CREEK WWTP

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

Dear Commissioners,

On February 23, 2010, an inspection was conducted at the McFarland Creek Wastewater treatment plant. This writer, Rich Blasick and John Schmidt of this office met with Bob Januska and the wastewater plant was inspected in his presence. The intent of the inspection was to evaluate the operation and maintenance of the system as part of a routine compliance inspection. Discharge monitoring reports from January 1, 2008 through March 1, 2010 were reviewed for compliance with the current NPDES permit.

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

INSPECTION

The wastewater treatment plant 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 wastewater treatment plant has an average design flow of 1.8 mgd. It is understood the collection system is a completely separate system. The final effluent from the wastewater treatment plant discharges to the 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 MBRs were in good condition and have been performing well since the previous inspection.

NPDES PERMIT

A review of the discharge monitoring reports revealed permit excursions for lead. The discharge limit and frequency violations have been attached to this letter. Please review the violation summary and respond in writing regarding the potential cause for the violations.

In addition, a review of the copper monitoring data revealed a few elevated copper monitoring results. The copper monitoring results have been attached for reference. Although the NPDES permit currently does not have a limit for Copper, the PEL for copper, according to Part II, Item L of your permit, is an average of 16 ug/l and a maximum of 25 ug/L. According to copper results reported over the last two years, the wastewater plant reported an average for the two year period of 17.7 ug/l with two excursions above the PEL maximum. Please review the copper monitoring results and provide a written response regarding what steps are being taken to prevent excursions from occurring.

If you have any questions or comments regarding this letter, please contact this office at (330) 963-1299.

Respectfully,

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

LAW/mt

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

ec: Rich Blasick, Ohio EPA, DSW, NEDO

File: Public/Geauga County

McFarland Creek WWTP: 1/1/08-3/1/10

Discharge Violations

Reporting Period	Station	Reporting Code	Parameter	Limit Type	Limit	Reported Value	Violation Date
May 2008	001	01114	Lead, Total Recoverabl	30D Conc	17.6	23.	5/1/2008
March 2008	001	01114	Lead, Total Recoverabl	30D Qty	0.12	.17025	3/1/2008

Frequency Violations

Reporting Period	Station	Reporting Code	Parameter	Sample Frequency	Expected	Reported	Violation Date
January 2008	601	80082	CBOD 5 day	2/Week	2	1	01/22/2008
March 2008	601	50092	Mercury, Total (Low Le	1/Month	1	0	03/01/2008

Copper Monitoring

Permit No	Station	Parameter	Units	Date	Reported Value	A Code
3PK00010*JD	1	Copper, Total Recoverable	ug/l	1/4/2008	17	
3PK00010*JD	1	Copper, Total Recoverable	ug/l	2/1/2008	13.6	
3PK00010*JD	1	Copper, Total Recoverable	ug/l	2/4/2008	18	
3PK00010*JD	1	Copper, Total Recoverable	ug/l	2/14/2008	26.3	
3PK00010*JD	1	Copper, Total Recoverable	ug/l	2/25/2008	21.9	
3PK00010*JD	1	Copper, Total Recoverable	ug/l	3/4/2008	26	
3PK00010*JD	1	Copper, Total Recoverable	ug/l	3/10/2008	18.6	
3PK00010*JD	1	Copper, Total Recoverable	ug/l	4/3/2008	15.3	
3PK00010*JD	1	Copper, Total Recoverable	ug/l	4/8/2008	18.9	
3PK00010*JD	1	Copper, Total Recoverable	ug/l	4/23/2008	15.6	
3PK00010*JD	1	Copper, Total Recoverable	ug/l	5/13/2008	9.6	
3PK00010*JD	1	Copper, Total Recoverable	ug/l	6/4/2008	12.1	
3PK00010*JD	1	Copper, Total Recoverable	ug/l	6/19/2008	17.2	
3PK00010*JD	1	Copper, Total Recoverable	ug/l	7/10/2008	15	
3PK00010*JD	1	Copper, Total Recoverable	ug/l	7/16/2008	15.3	
3PK00010*JD	1	Copper, Total Recoverable	ug/l	7/24/2008	17.4	
3PK00010*JD	1	Copper, Total Recoverable	ug/l	8/7/2008	19	
3PK00010*JD	1	Copper, Total Recoverable	ug/l	9/4/2008	19.1	
3PK00010*JD	1	Copper, Total Recoverable	ug/l	9/11/2008	16.2	
3PK00010*JD	1	Copper, Total Recoverable	ug/l	9/18/2008	21	
3PK00010*JD	1	Copper, Total Recoverable	ug/l	9/25/2008	19.6	
3PK00010*JD	1	Copper, Total Recoverable	ug/l	10/8/2008	22.1	
3PK00010*JD	1	Copper, Total Recoverable	ug/l	10/16/2008	18.4	
3PK00010*JD	1	Copper, Total Recoverable	ug/l	10/27/2008	17.5	
3PK00010*JD	1	Copper, Total Recoverable	ug/l	11/5/2008	18.4	
3PK00010*JD	1	Copper, Total Recoverable	ug/l	11/14/2008	18.1	
3PK00010*JD	1	Copper, Total Recoverable	ug/l	11/20/2008	17.2	

Permit No	Station	Parameter	Units	Date	Reported Value	A Code
3PK00010*JD	1	Copper, Total Recoverable	ug/l	11/26/2008	17	
3PK00010*JD	1	Copper, Total Recoverable	ug/l	12/4/2008	21.7	
3PK00010*JD	1	Copper, Total Recoverable	ug/l	12/18/2008	18.8	
3PK00010*JD	1	Copper, Total Recoverable	ug/l	12/24/2008	18.6	
3PK00010*JD	1	Copper, Total Recoverable	ug/l	1/7/2009	13.5	
3PK00010*JD	1	Copper, Total Recoverable	ug/l	1/13/2009	12.5	
3PK00010*JD	1	Copper, Total Recoverable	ug/l	1/22/2009	17.1	
3PK00010*JD	1	Copper, Total Recoverable	ug/l	2/4/2009		AA
3PK00010*JD	1	Copper, Total Recoverable	ug/l	3/12/2009		AA
3PK00010*JD	1	Copper, Total Recoverable	ug/l	4/9/2009		AA
3PK00010*JD	1	Copper, Total Recoverable	ug/l	5/5/2009	10.4	
3PK00010*JD	1	Copper, Total Recoverable	ug/l	5/13/2009	23.5	
3PK00010*JD	1	Copper, Total Recoverable	ug/l	5/21/2009	15.7	
3PK00010*JD	1	Copper, Total Recoverable	ug/l	5/28/2009	18.4	
3PK00010*JD	1	Copper, Total Recoverable	ug/l	6/2/2009	19.7	
3PK00010*JD	1	Copper, Total Recoverable	ug/l	7/1/2009	15	
3PK00010*JD	1	Copper, Total Recoverable	ug/l	7/7/2009	21.9	
3PK00010*JD	1	Copper, Total Recoverable	ug/l	7/22/2009	19	
3PK00010*JD	1	Copper, Total Recoverable	ug/l	7/28/2009	20.4	
3PK00010*JD	1	Copper, Total Recoverable	ug/l	8/6/2009	20.1	
3PK00010*JD	1	Copper, Total Recoverable	ug/l	8/13/2009	23.1	
3PK00010*JD	1	Copper, Total Recoverable	ug/l	9/3/2009	28.2	
3PK00010*JD	1	Copper, Total Recoverable	ug/l	9/17/2009	21.3	
3PK00010*JD	1	Copper, Total Recoverable	ug/l	9/22/2009	17.4	
3PK00010*JD	1	Copper, Total Recoverable	ug/l	10/6/2009	11.3	
3PK00010*JD	1	Copper, Total Recoverable	ug/l	10/15/2009	16	
3PK00010*JD	1	Copper, Total Recoverable	ug/l	10/27/2009	15	
3PK00010*JD	1	Copper, Total Recoverable	ug/l	11/10/2009	15.4	
3PK00010*JD	1	Copper, Total Recoverable	ug/l	11/17/2009	15	
3PK00010*JD	1	Copper, Total Recoverable	ug/l	11/24/2009	16.5	
3PK00010*JD	1	Copper, Total Recoverable	ug/l	12/8/2009	17	
3PK00010*JD	1	Copper, Total Recoverable	ug/l	1/14/2010	15	
3PK00010*JD	1	Copper, Total Recoverable	ug/l	2/9/2010	17	
3PK00010*JD	1	Copper, Total Recoverable	ug/l	2/18/2010	17	
3PK00010*JD	1	Copper, Total Recoverable	ug/l	2/25/2010	14	
3PK00010*JD	601	Copper, Total Recoverable	ug/l	1/4/2008	86	
3PK00010*JD	601	Copper, Total Recoverable	ug/l	2/1/2008	311	
3PK00010*JD	601	Copper, Total Recoverable	ug/l	2/4/2008	250	
3PK00010*JD	601	Copper, Total Recoverable	ug/l	2/14/2008	144	
3PK00010*JD	601	Copper, Total Recoverable	ug/l	2/26/2008	251	
3PK00010*JD	601	Copper, Total Recoverable	ug/l	3/4/2008	155	
3PK00010*JD	601	Copper, Total Recoverable	ug/l	4/3/2008	449	
3PK00010*JD	601	Copper, Total Recoverable	ug/l	4/8/2008	191	
3PK00010*JD	601	Copper, Total Recoverable	ug/l	4/23/2008	189	
3PK00010*JD	601	Copper, Total Recoverable	ug/l	5/13/2008	382	

Permit No	Station	Parameter	Units	Date	Reported Value	A Code
3PK00010*JD	601	Copper, Total Recoverable	ug/l	5/22/2008	162	
3PK00010*JD	601	Copper, Total Recoverable	ug/l	6/4/2008	195	
3PK00010*JD	601	Copper, Total Recoverable	ug/l	6/19/2008	147	
3PK00010*JD	601	Copper, Total Recoverable	ug/l	7/10/2008	161	
3PK00010*JD	601	Copper, Total Recoverable	ug/l	7/16/2008	248	
3PK00010*JD	601	Copper, Total Recoverable	ug/l	7/24/2008	141	
3PK00010*JD	601	Copper, Total Recoverable	ug/l	8/7/2008	228	
3PK00010*JD	601	Copper, Total Recoverable	ug/l	9/4/2008	146	
3PK00010*JD	601	Copper, Total Recoverable	ug/l	9/11/2008	306	
3PK00010*JD	601	Copper, Total Recoverable	ug/l	9/18/2008	183	
3PK00010*JD	601	Copper, Total Recoverable	ug/l	9/25/2008	261	
3PK00010*JD	601	Copper, Total Recoverable	ug/l	10/8/2008	145	
3PK00010*JD	601	Copper, Total Recoverable	ug/l	10/16/2008	107	
3PK00010*JD	601	Copper, Total Recoverable	ug/l	10/27/2008	187	
3PK00010*JD	601	Copper, Total Recoverable	ug/l	11/5/2008	138	
3PK00010*JD	601	Copper, Total Recoverable	ug/l	11/14/2008	443	
3PK00010*JD	601	Copper, Total Recoverable	ug/l	11/20/2008	145	
3PK00010*JD	601	Copper, Total Recoverable	ug/l	11/26/2008	131	
3PK00010*JD	601	Copper, Total Recoverable	ug/l	12/4/2008	171	
3PK00010*JD	601	Copper, Total Recoverable	ug/l	12/18/2008	130	
3PK00010*JD	601	Copper, Total Recoverable	ug/l	12/24/2008	53	
3PK00010*JD	601	Copper, Total Recoverable	ug/l	1/7/2009	61.4	
3PK00010*JD	601	Copper, Total Recoverable	ug/l	1/13/2009	76.5	
3PK00010*JD	601	Copper, Total Recoverable	ug/l	1/22/2009	205	
3PK00010*JD	601	Copper, Total Recoverable	ug/l	2/4/2009	226	
3PK00010*JD	601	Copper, Total Recoverable	ug/l	3/12/2009	36.6	
3PK00010*JD	601	Copper, Total Recoverable	ug/l	4/9/2009	84	
3PK00010*JD	601	Copper, Total Recoverable	ug/l	5/5/2009	320	
3PK00010*JD	601	Copper, Total Recoverable	ug/l	5/13/2009	286	
3PK00010*JD	601	Copper, Total Recoverable	ug/l	5/21/2009	251	
3PK00010*JD	601	Copper, Total Recoverable	ug/l	5/28/2009	210	
3PK00010*JD	601	Copper, Total Recoverable	ug/l	6/2/2009	280	
3PK00010*JD	601	Copper, Total Recoverable	ug/l	7/1/2009	200	
3PK00010*JD	601	Copper, Total Recoverable	ug/l	7/7/2009	206	
3PK00010*JD	601	Copper, Total Recoverable	ug/l	7/28/2009	289	
3PK00010*JD	601	Copper, Total Recoverable	ug/l	8/6/2009	240	
3PK00010*JD	601	Copper, Total Recoverable	ug/l	8/13/2009	251	
3PK00010*JD	601	Copper, Total Recoverable	ug/l	9/3/2009	292	
3PK00010*JD	601	Copper, Total Recoverable	ug/l	9/17/2009	296	
3PK00010*JD	601	Copper, Total Recoverable	ug/l	9/22/2009	581	
3PK00010*JD	601	Copper, Total Recoverable	ug/l	10/6/2009	277	
3PK00010*JD	601	Copper, Total Recoverable	ug/l	10/15/2009	314	
3PK00010*JD	601	Copper, Total Recoverable	ug/l	10/27/2009	176	
3PK00010*JD	601	Copper, Total Recoverable	ug/l	11/10/2009	205	
3PK00010*JD	601	Copper, Total Recoverable	ug/l	11/17/2009	221	

Permit No	Station	Parameter	Units	Date	Reported Value	A Code
3PK00010*JD	601	Copper, Total Recoverable	ug/l	11/24/2009	49	
3PK00010*JD	601	Copper, Total Recoverable	ug/l	12/8/2009	180	
3PK00010*JD	601	Copper, Total Recoverable	ug/l	1/14/2010	273	
3PK00010*JD	601	Copper, Total Recoverable	ug/l	1/21/2010	168	
3PK00010*JD	601	Copper, Total Recoverable	ug/l	1/28/2010	255	
3PK00010*JD	601	Copper, Total Recoverable	ug/l	2/9/2010	182	
3PK00010*JD	601	Copper, Total Recoverable	ug/l	2/18/2010	91	
3PK00010*JD	601	Copper, Total Recoverable	ug/l	2/25/2010	83	
3PK00010*JD	901	Copper, Total Recoverable	ug/l	1/4/2008		AA
3PK00010*JD	901	Copper, Total Recoverable	ug/l	2/4/2008	8	
3PK00010*JD	901	Copper, Total Recoverable	ug/l	3/10/2008	11	
3PK00010*JD	901	Copper, Total Recoverable	ug/l	4/8/2008	9	
3PK00010*JD	901	Copper, Total Recoverable	ug/l	5/13/2008	9	
3PK00010*JD	901	Copper, Total Recoverable	ug/l	6/4/2008	10.3	
3PK00010*JD	901	Copper, Total Recoverable	ug/l	7/10/2008	11.1	
3PK00010*JD	901	Copper, Total Recoverable	ug/l	8/7/2008	15	
3PK00010*JD	901	Copper, Total Recoverable	ug/l	9/11/2008	14	
3PK00010*JD	901	Copper, Total Recoverable	ug/l	10/8/2008	11.9	
3PK00010*JD	901	Copper, Total Recoverable	ug/l	11/5/2008	12.1	
3PK00010*JD	901	Copper, Total Recoverable	ug/l	12/4/2008	11.6	
3PK00010*JD	901	Copper, Total Recoverable	ug/l	1/13/2009	6.2	
3PK00010*JD	901	Copper, Total Recoverable	ug/l	2/4/2009		AA
3PK00010*JD	901	Copper, Total Recoverable	ug/l	3/12/2009		AA
3PK00010*JD	901	Copper, Total Recoverable	ug/l	4/9/2009		AA
3PK00010*JD	901	Copper, Total Recoverable	ug/l	5/5/2009	10.4	
3PK00010*JD	901	Copper, Total Recoverable	ug/l	6/2/2009	15	
3PK00010*JD	901	Copper, Total Recoverable	ug/l	7/1/2009	14.4	
3PK00010*JD	901	Copper, Total Recoverable	ug/l	8/6/2009	13.2	
3PK00010*JD	901	Copper, Total Recoverable	ug/l	9/22/2009		AA
3PK00010*JD	901	Copper, Total Recoverable	ug/l	10/6/2009	11.3	
3PK00010*JD	901	Copper, Total Recoverable	ug/l	11/10/2009	10.5	
3PK00010*JD	901	Copper, Total Recoverable	ug/l	12/8/2009	10	
3PK00010*JD	901	Copper, Total Recoverable	ug/l	1/14/2010	15	
3PK00010*JD	901	Copper, Total Recoverable	ug/l	2/9/2010		AA