



**Environmental  
Protection Agency**

John R. Kasich, Governor

Mary Taylor, Lt. Governor

Scott J. Nally, Director

May 18, 2012

RE: GEAUGA COUNTY  
CHARDON TWP  
CHARDON UNITED METHODIST CHURCH  
NPDES PERMIT #3PR00179\*ED

Ms. Cathy Comerford  
Chardon United Methodist Church  
515 North Street  
Chardon, Ohio 44024

Dear Ms. Comerford,

On May 17, 2012, this writer conducted an inspection of the sewage treatment plant serving the above referenced facility. The intent of the inspection was to review operations and maintenance of the sewage treatment system and gather information needed to renew the NPDES permit. Compliance with the current NPDES permit was reviewed and the system was inspected.

According to Agency records, the wastewater treatment system was installed under Ohio EPA permit-to-install (PTI) 02-10614, which was effective May 12, 1997. The wastewater system consists of a 500-gallon trash trap, 900-gallon flow equalization tank, 3,000 gallon extended aeration unit, clarifier, dosing station, 272-square foot surface sand filters and ultraviolet disinfection. The wastewater treatment plant (WWTP) discharges to an unnamed tributary of Big Creek at the north side of the property. At the time of the inspection, a connection to the City of Chardon sewers was not planned as the City has no plans to extend sewers to this service area.

At the time of the inspection, the WWTP was well maintained and was producing what appeared to be a satisfactory quality effluent.

**NPDES PERMIT COMPLIANCE**

Discharge monitoring reports from January 1, 2009 through May 1, 2012 were reviewed for compliance with the current NPDES permit. A violation summary has been attached to this letter. Please notify this office of any reporting errors or eDMR errors so the error may be resolved. You may contact Mr. James Roberts of this Agency's Central Office at (614) 644-2054 to discuss this issue directly.

According to the discharge monitoring report data from January 1, 2009 through May 1, 2012, the flow reported averaged 5,751 gpd. The average flow reported is in excess of the average daily design flow of 2,830 gpd. The reported flow values for the length of the current permit reveal 50 % were above the average design flow of the WWTP.

The approved PTI shows the WWTP was designed to handle the Sunday peak loading. The average flow for the past two years has been over 5,000 gpd. The NPDES permitted average daily design flow for this facility is 2830 gpd. It appears the treatment plant is operating at or above capacity the majority of the time. This facility must review all flow monitoring for accuracy and consistency. If these values are accurate, the facility must evaluate the source of these high flows (inflow and infiltration, clean water connections, etc). Please notify this office regarding the increased flow to the plant and whether any plans are underway to address the high flows.

The WWTP is currently classified by the Ohio EPA as a Class A wastewater treatment works. This classification is located in the NPDES permit, which was modified on February 1, 2011. The facility has obtained the services of a Class A operator and has the operator's certificate on file in the church office.

#### INSPECTION SUMMARY

Below are the findings and recommendations from the inspection:

The flow equalization tank was in satisfactory condition and was provided with adequate air circulation. Both blowers were in operation at the time of the inspection and appeared to be providing a satisfactory air supply to both the flow equalization tank and the aeration tank. The contents of the aeration portion of the plant were a chocolate brown color and there was satisfactory rollover within the tank. The sludge return line was in operation and returning solids to the aeration tank.

The clarifier was in satisfactory condition. The southern portion of the clarifier contained an accumulation of solids, which appeared to be mostly on the surface of the tank. The skimmer was visible and was set at a satisfactory depth within the tank. The effluent weir and trough were clean with no visible solids accumulation. Please ensure the weirs are level and set at an acceptable depth within the clarifier tank.

The dosing chamber was in good condition and both pumps were well maintained and operational. The sand filter beds were in good condition with no solids or vegetation present on the media. The UV unit was in good maintenance condition. Please be aware, the facility is required to disinfect from May 1, through October 31 every year. The effluent in the UV appeared clear. The final outfall pipe was inspected and appeared to be in good condition. A slow trickle of final effluent was observed discharging from the pipe. The final effluent was clear and the receiving stream appeared to be in satisfactory condition.

#### IN SUMMARY

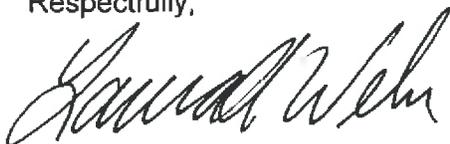
The following items are of concern to this office and must be addressed:

- Notify this office regarding the possible causes for the increased flows to the WWTP. The notification must include a plan of how the facility will address the increased flow.

CHARDON UNITED METHODIST CHURCH  
MAY 18, 2012  
PAGE 3 OF 5

The NPDES permit for this facility expires September 30, 2012. Your NPDES renewal permit will be drafted in the near future and public noticed. Once the permit is public noticed, you will have 30 days to make any comments. If you have any questions or comments regarding this letter, please contact this office at (330) 963-1299.

Respectfully,

A handwritten signature in cursive script, appearing to read "Laura A. Weber".

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

LAW/cs

cc: Geauga County Health Department

File: Semi-Public/Gauga/Chardon Twp/Chardon UMC

**Violation Summary:**

**Discharge Violations**

Reporting Period	Station	Reporting Code	Parameter	Limit Type	Limit	Reported Value	Violation Date
August 2011	001	00530	Total Suspended Solids	30D Conc	12	13.25	8/1/2011
August 2011	001	00530	Total Suspended Solids	7D Conc	18	30.	8/1/2011

**Frequency Violations**

Reporting Period	Station	Reporting Code	Parameter	Sample Frequency	Expected	Reported	Violation Date
April 2009	001	00083	Color, Severity	1/Week	1	0	4/22/2009
September 2009	001	00083	Color, Severity	1/Week	1	0	9/22/2009
February 2010	001	00083	Color, Severity	1/Week	1	0	2/22/2010
April 2010	001	00083	Color, Severity	1/Week	1	0	4/8/2010
July 2010	001	00083	Color, Severity	1/Week	1	0	7/1/2010
March 2011	001	00083	Color, Severity	1/Week	1	0	3/15/2011
June 2011	001	00083	Color, Severity	1/Week	1	0	6/8/2011
September 2011	001	00083	Color, Severity	1/Week	1	0	9/1/2011
September 2011	001	00083	Color, Severity	1/Week	1	0	9/15/2011
April 2009	001	01330	Odor, Severity	1/Week	1	0	4/22/2009
September 2009	001	01330	Odor, Severity	1/Week	1	0	9/22/2009
February 2010	001	01330	Odor, Severity	1/Week	1	0	2/22/2010
April 2010	001	01330	Odor, Severity	1/Week	1	0	4/8/2010
July 2010	001	01330	Odor, Severity	1/Week	1	0	7/1/2010
March 2011	001	01330	Odor, Severity	1/Week	1	0	3/15/2011
June 2011	001	01330	Odor, Severity	1/Week	1	0	6/8/2011
September 2011	001	01330	Odor, Severity	1/Week	1	0	9/1/2011
September 2011	001	01330	Odor, Severity	1/Week	1	0	9/15/2011
April 2009	001	01350	Turbidity, Severity	1/Week	1	0	4/22/2009
September 2009	001	01350	Turbidity, Severity	1/Week	1	0	9/22/2009
February 2010	001	01350	Turbidity, Severity	1/Week	1	0	2/22/2010
April 2010	001	01350	Turbidity, Severity	1/Week	1	0	4/8/2010
July 2010	001	01350	Turbidity, Severity	1/Week	1	0	7/1/2010
March 2011	001	01350	Turbidity, Severity	1/Week	1	0	3/15/2011
June 2011	001	01350	Turbidity, Severity	1/Week	1	0	6/8/2011
September 2011	001	01350	Turbidity, Severity	1/Week	1	0	9/1/2011

CHARDON UNITED METHODIST CHURCH  
MAY 18, 2012  
PAGE 5 OF 5

September 2011	001	01350	Turbidity, Severity	1/Week	1	0	9/15/2011
April 2009	001	00010	Water Temperature	1/Week	1	0	4/22/2009
September 2009	001	00010	Water Temperature	1/Week	1	0	9/22/2009
February 2010	001	00010	Water Temperature	1/Week	1	0	2/22/2010
April 2010	001	00010	Water Temperature	1/Week	1	0	4/8/2010
July 2010	001	00010	Water Temperature	1/Week	1	0	7/1/2010
March 2011	001	00010	Water Temperature	1/Week	1	0	3/15/2011
June 2011	001	00010	Water Temperature	1/Week	1	0	6/8/2011
September 2011	001	00010	Water Temperature	1/Week	1	0	9/1/2011
September 2011	001	00010	Water Temperature	1/Week	1	0	9/15/2011