



**Environmental
Protection Agency**

Rep. Robert R. Taylor, Governor
Rep. Robert R. Taylor, Lt. Governor
Rep. Robert R. Taylor, Director

May 19, 2010

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

Mr. Kenneth Lynch, Chairman of Trustees
Chardon United Methodist Church
515 North Street
Chardon, Ohio 44024

Dear Mr. Lynch,

On May 12, 2010, this writer conducted an inspection of the sewage treatment plant serving the above referenced facility. The intent of the inspection was to assess the operations and maintenance of the treatment system and review compliance with the National Pollutant Discharge Elimination System (NPDES) permit issued to your facility.

According to Agency records, the wastewater treatment system was installed under Ohio EPA 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 discharges to an unnamed tributary of Big Creek at the north side of the property. At the time of the inspection, a connection to 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 wastewater treatment plant was well maintained and was producing what appeared to be a satisfactory quality effluent.

NPDES PERMIT COMPLIANCE

A summary of the wastewater treatment plant monitoring and reporting violations for the period of January 1, 2008 through April 1, 2010 has been attached to this letter. There are frequency violations reported during this review period. Please note, any reporting errors or eDMR errors must be reported to this office 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.

The wastewater treatment plant is currently classified by the Ohio EPA as a Class 1 wastewater treatment works. This classification is located in the NPDES permit which had an effective date of October 1, 2007. As such, the facility is required to obtain the services of a Class 1 state certified operator. Please notify this office by June 21, 2010 regarding the status of a certified operator for your wastewater treatment plant. If you have obtained an operator, please provide the operator name and license.

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New operator and plant certification rules have gone in effect and are found in OAC 3745-7-04. The new regulations provide the plant classification rankings and operator staffing requirements. The minimum staffing requirements for a Class I facility is 3 days per week for a minimum of 1.5 hours per week and a Class A facility is 2 days per week for a minimum of 1 hour per week. According to OAC 3745-7-04, the wastewater treatment plant will be classified a Class A facility upon permit renewal. Please be aware, the owner has an opportunity to obtain a Class A license and operate the system. More information on obtaining a Class A license can be found at <http://www.epa.ohio.gov/dsw/opcert/opcert.aspx>.

The reported flow values for the length of the current permit revealed that 50% of the values were above the average design flow of the wastewater treatment plant, 2830 gpd. The PTI shows the wastewater treatment plant 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. Please notify this office regarding the increased flow to the plant and whether any plans are underway to address the high flows.

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 the tank was provided with adequate rollover. The sludge return line was in operation and returning solids to the aeration. The clarifier contained a minor amount of solids on the surface of the tank. The skimmer was visible and was set over 1-inch above the liquid level of the tank. Please note, in order for effective skimming to occur within the clarifier, the skimmer must be set at a depth of 1/8-inch below the liquid level. The effluent trough was set above the liquid level of the tank and there was no effluent visually observed going through the weirs. Please ensure the weirs are level to avoid short circuiting in the tank.

The dosing chamber was in good condition and both pumps were well maintained and operational. The sand filter beds had a small accumulation of solids along with some vegetation. There was a concrete slab located in the north bed which must be removed. The UV unit was in operation at the time of the visit. The effluent in the UV appeared clear but the effluent trough contained a buildup of solids which must be cleaned.

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.

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The NPDES permit for this facility expires September 30, 2012. The renewal application for the NPDES permit is required to be submitted 180 days prior to the permit expiration date.

IN SUMMARY

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

- 1) No later than June 21, 2010, notify this office of the operator status at the wastewater treatment plant.
- 2) Notify this office regarding the possible causes for the increased flows to the wastewater treatment plant. The notification must include a plan of how the facility will address the increased flow.

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: Geauga County Health Department

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

Violation Summary:

Discharge Violations

Reporting Period	Station	Parameter	Limit Type	Limit	Reported Value	Violation Date
December 2008	001	Nitrogen, Ammonia (NH3)	30D Conc	3.0	4.83	12/1/2008
December 2008	001	Nitrogen, Ammonia (NH3)	7D Conc	4.5	4.83	12/8/2008

Frequency Violations

Reporting Period	Station	Parameter	Sample Frequency	Expected	Reported	Violation Date
July 2008	001	Water Temperature	1/Week	1	0	07/08/2008
July 2008	001	Color, Severity	1/Week	1	0	07/08/2008
July 2008	001	Odor, Severity	1/Week	1	0	07/08/2008
July 2008	001	Turbidity, Severity	1/Week	1	0	07/08/2008
July 2008	001	Water Temperature	1/Week	1	0	07/22/2008
July 2008	001	Color, Severity	1/Week	1	0	07/22/2008
July 2008	001	Odor, Severity	1/Week	1	0	07/22/2008
July 2008	001	Turbidity, Severity	1/Week	1	0	07/22/2008
April 2009	001	Water Temperature	1/Week	1	0	04/22/2009
April 2009	001	Color, Severity	1/Week	1	0	04/22/2009
April 2009	001	Odor, Severity	1/Week	1	0	04/22/2009
April 2009	001	Turbidity, Severity	1/Week	1	0	04/22/2009
September 2009	001	Water Temperature	1/Week	1	0	09/22/2009
September 2009	001	Color, Severity	1/Week	1	0	09/22/2009
September 2009	001	Odor, Severity	1/Week	1	0	09/22/2009
September 2009	001	Turbidity, Severity	1/Week	1	0	09/22/2009
February 2010	001	Water Temperature	1/Week	1	0	02/22/2010
February 2010	001	Color, Severity	1/Week	1	0	02/22/2010
February 2010	001	Odor, Severity	1/Week	1	0	02/22/2010
February 2010	001	Turbidity, Severity	1/Week	1	0	02/22/2010