



John R. Kasich, Governor
Mary Taylor, Lt. Governor
Scott J. Nally, Director

May 17, 2013

RE: GEAUGA COUNTY
CHARDON TWP
HAWKEN SCHOOL
NPDES PERMIT 3PT00110

Mr. Tony Wanner
Director of Facilities
Hawken School
PO Box 8002
Gates Mills, OH 44040

Dear Mr. Wanner:

On May 8, 2013, this writer met with Mr. James Baker and 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. Mr. James Baker was present during the inspection.

According to Agency records, an upgraded wastewater treatment system was installed under Ohio EPA, permit-to-install (PTI) 02-17142, which was effective March 17, 2003. The wastewater treatment plant (WWTP) is permitted to discharge 15,000 gpd. The updates to the WWTP included a flow equalization tank, a scum tank, dechlorination and an additional sludge holding tank. The existing WWTP (installed under PTI #02-600) includes a trash trap, extended aeration tank with a clarifier, dosing chamber slow surface sand filters divided into four beds, chlorination, sludge holding tank and sludge drying beds.

Below are the findings and recommendations from the inspection:

NPDES PERMIT COMPLIANCE

- 1) The NPDES permit for this facility has an expiration date of June 30, 2014. NPDES permit renewal applications are required to be submitted at least 180 days before the expiration date of the permit.
- 2) According to the discharge monitoring report (DMR) data from January 1, 2011 through April 1, 2013, the report flow averaged 12,483 gpd. Upon further review of all flow data reported, this office noted a high flow of 98 MGD reported on January 25, 2013. This appears to be an error as no other flows were this high and it appeared to be isolated. Please review the flow reporting data for January 25, 2013 and make any corrections needed.

Discharge monitoring report effluent data for the same review period were also reviewed for compliance with the current NPDES permit. A violation summary is shown below:

Reporting Period	Station	Reporting Code	Parameter	Limit Type	Limit	Reported Value	Violation Date
June 2011	001	50060	Chlorine, Total Residu	1D Conc	0.019	.17	6/16/2011
February 2012	001	00610	Nitrogen, Ammonia (NH3	7D Conc	4.5	6.56	2/8/2012
February 2012	001	00610	Nitrogen, Ammonia (NH3	7D Qty	0.25	32278	2/8/2012
February 2012	001	00300	Dissolved Oxygen	1D Conc	6.0	5.56	2/17/2012
April 2012	001	00610	Nitrogen, Ammonia (NH3	7D Conc	4.5	5.25	4/8/2012
September 2012	001	50060	Chlorine, Total Residu	1D Conc	0.019	.47	9/27/2012
October 2012	001	00530	Total Suspended Solids	30D Conc	12	18	10/1/2012
October 2012	001	00400	pH	1D Conc	6.5	6.3	10/18/2012

- 3) According to the NPDES permit, the wastewater treatment system is listed as a Class A Wastewater Treatment system. Our records indicate Tom Frank and Todd Frank are the certified operator of record (ORC) for this facility.
- 4) The operator log book was located onsite at the time of the inspection. The log book was completed and maintained by Mr. James Baker. The log book contained the correct information but was missing information from the ORC's. More specifically, the dates and times the ORC was present at the facility was not shown in the log book. The ORC for the school must be present at the WWTP for the required hours which, for a Class A, are, 2 days per week for a minimum of 1 hour per week. The ORC must sign the log book to show the dates and times they were at the WWTP and what work was completed while they were at the plant.

INSPECTION SUMMARY

The inspection revealed the WWTP was in operation and producing what appeared to be a satisfactory quality effluent. The treatment plant is located adjacent to the main entrance drive, just south of County Line Road. A fence is provided around the WWTP.

At the time of the inspection, all treatment system components were in operation. It is understood the trash trap is pumped out, at minimum, every six months. The flow equalization appeared to be in satisfactory operation and maintenance condition. The blower serving the flow equalization tank was in service and appeared to be providing a satisfactory amount of air to the tank.

The aeration portion of the treatment system contained mixed liquor that appeared to be a dark brown color and was provided with what appeared to be a satisfactory amount of air. The sludge return was in operation and appeared to be in satisfactory condition. The rollover within the tank appeared to be slight and mixing noted on one side of the tank. It is understood the diffusers for the aeration tank are all located on the same side. As such, mixing may be occurring on one side with only slight mixing occurring as the wastewater flows to the opposite side of the tanks. The current condition of the aeration tank is not unsatisfactory and therefore this office is not recommending any updates at this time. However, should the circulation within the tanks worsen or cause effluent violations, this office may request the diffusers to be evaluated.

The clarifier appeared to be in satisfactory condition. Some solids were located on the surface of the tank, influent baffle and the effluent weir. It is understood the tank is scraped down about every two weeks. The effluent from the clarifier portion of the plant appeared clear. The dosing chamber was in operation and appeared to be in satisfactory condition. The surface sand filter in operation appeared flooded. The sand beds contained some solids and all the sand raked off the media was piled on the corners of the beds. It is understood the beds are alternated every 2 to 3 weeks. As a part of routine maintenance for the sand filter beds, the solids removed from the filter beds must not be piled on the sand beds for an extensive length of time. These solids should be effectively removed from the sand beds so not to interfere with the treatment of the wastewater.

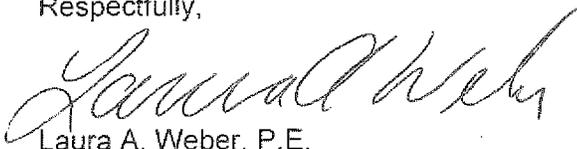
The chlorination and dechlorination were in operation and provided with tablets. The chlorine contact tank contained grass clippings on the surface of the tank and worms and sediments on the floor of the tank. These worms and sediments should be removed and evaluated to ensure they are not interfering with adequate treatment of the effluent. The final effluent from the treatment system appeared to be clear and the final outfall appeared satisfactory.

SUMMARY

- 1) Have the ORC write in all visits in the log book provided onsite. Ensure Mr. Baker submits all finalized paperwork to Ohio EPA Operator Certification Unit to finalize his Wastewater Operator License. The Operator Certification Unit can be reached at 1-866-411-6728.
- 2) Evaluate the DMR reported for January 2013 and whether the flow reported on January 25, 2013 is correct. The DMR for January shows a flow of 98 MGD reported for January 25, 2013. Ensure any updates and corrections are provided to the DMR.
- 3) Clean out the chlorine contact tank and ensure there is no interference with treatment. This work must be completed as soon as possible.

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

Respectfully,



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

LAW/cs

cc: Geauga County Health Department
Mr. Jim Baker, Maintenance Supervisor Hawken School

