



**Environmental
Protection Agency**

John R. Kasich, Governor

Mary Taylor, Lt. Governor

Scott J. Nally, Director

July 10, 2012

RE: GEAUGA COUNTY
NPDES PERMIT COMPLIANCE INSPECTIONS
VALLEY VIEW
AUBURN CORNERS

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

Dear Commissioners,

On June 21, 2012, inspections were conducted at two wastewater treatment plants (WWTP) operated and maintained by Geauga County. Mr. Jim Reider of Geauga County Water Resources was interviewed and the facilities were inspected in his presence. The intent of the inspections was to gather information for the renewal of the National Pollutant Discharge Elimination System (NPDES) permits for Auburn Corners and Valley View. The operations, maintenance and construction progress were inspected at Infirmity.

Discharge monitoring reports (DMR) from January 1, 2008 through June 1, 2012 were reviewed for compliance with the current NPDES permits at each facility. A violation summary for each treatment system has been attached to this letter. The following is a summary of the inspections conducted at each facility:

AUBURN CORNERS #3PG00154

The current WWTP has an average design flow of 70,000 gpd. According to discharge monitoring report data, the flow reported at the WWTP averaged 25,369 gpd. The WWTP service area includes a mostly residential area with some commercial.

At the time of the inspection, all WWTP units were operational. The treatment system consists of a trash trap, flow equalization, extended aeration tanks, clarifier, rapid sand filters, ultraviolet (UV) disinfection and aerated sludge holding. The plant discharges to a polishing pond prior to the discharge at an unnamed tributary of LaDue Reservoir.

The aeration tank contained mixed liquor that was a chocolate brown color. The tank was provided with good mixing and there appeared to be adequate air supplied to the tank. The clarifier portion of the plant was in satisfactory condition. The skimmer was set at an adequate level and the weirs and baffles were free of solids. There were minimal solids accumulating on the surface of the tank and the tank effluent appeared clear. The filters are a Dyna Sand type sand filtration system. There was one filter in operation at the time of the inspection. The filter effluent appeared clear. The digester was about half full and was aerated. The digester is emptied about once or twice per year, depending on how well sludge settling is occurring at the plant. The UV system was in operation and the final effluent was free of odors and foam. The final effluent discharges to an aerated polishing pond prior to being discharged to an unnamed tributary to LaDue Reservoir. At the time of the inspection, the elevation in the polishing pond was low and the pond was not discharging.

The WWTP has reported high ammonia and phosphorus levels over the DMR review period. These elevated levels have caused NPDES permit violations. It is understood a meth lab was recently raided in the WWTP service area. The meth lab may have resulted in higher ammonia phosphorus loads to the WWTP. This office has reviewed the phosphorus and ammonia data for the WWTP. The higher levels were not routinely noted until 2010 and 2011. This office will watch the ammonia and phosphorus levels and review the results reported by the facility in the next few months to assess the effluent after the removal of the meth lab.

The sand filter air compressor line was out of service for a while. This prevented the filtration system from getting enough air for scrubbing the media clean during backwash cycles. This malfunction caused total suspended solids violations to occur.

The ORC on file for this WWTP is for Brandon Willman. It is understood he is no longer employed by Geauga County. As such, an updated Operator of Record Certification (ORC) must be submitted and Brandon Willman should be removed as the ORC for this facility.

VALLEY VIEW 3PG00153

The WWTP has an average design flow of 200,000 gpd. According to discharge monitoring report data, the flow to the wastewater plant over the DMR review period averaged 177,808 gpd.

On November 4, 2010, the Director of the Ohio EPA approved a 10-hour staffing reduction at this facility. Geauga County had requested a 10-hour staffing reduction at the Valley View WWTP and the reduction was based on automation/continuous monitoring. The service area to the treatment system includes residential and commercial areas. Although the facility has no industrial users in the collection system, Geauga County has established an informal pretreatment program for this area. The inflow and infiltration for the collection area has been estimated at 1,000 gallons. This is due to older areas in the collection system and Sherman Hills is now discharging to the collection system. It is understood the county is continually working to replace laterals.

At the time of the inspection, all treatment units were in good operation and maintenance condition. The grit /auger unit was not in operation at the time of the inspection. It was understood the grit/auger device is not in use because the pump station at Mayfield road is used for grit and trash trap. The influent pump station was in satisfactory condition. It is understood the pump station is cleaned out once per year.

The facility consists of three blowers, which appeared to be in satisfactory operating and maintenance condition. At the time of the inspection, two of the blowers were in operation. The flow equalization tank was in satisfactory condition with adequate air distribution noted throughout the tank. The aeration tank was in satisfactory condition and the mixed liquor was a chocolate brown color. The fine bubble diffusers within the tank were providing satisfactory air circulation within the tank. The aerated sludge digester was in satisfactory condition. Sludge is pumped out approximately every two months.

The WWTP includes two final clarifiers. One clarifier was in operation at the time of the inspection. The clarifier appeared to be in satisfactory condition with limited algae and solids buildup on the effluent weir. The effluent leaving the clarifier was visually clear. The scum baffle and influent baffling system contained some solids. There are two rapid sand filters at this

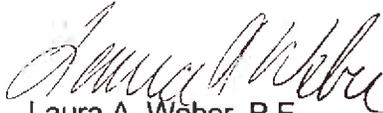
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The effluent composite sampler is located within the rapid sand filter building. The sampler appeared to be in satisfactory condition with an automatic temperature gauge provided for the internal temperature reading. The flow meter is located in the filter building and appeared to be in satisfactory condition. The flow meter reading taken during the inspection was 0.1094 MGD.

SUMMARY

The renewal NPDES permits for Auburn Corners (NPDES 3PG00154) and Valley View (NPDES 3PG00153) will be public noticed in the near future. These permits will be public noticed for 30 days. Once the permits are 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,



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

LAW/cs

Attachments: Violation Summary

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

File: Public/Geauga County



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