



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

February 13, 2013

RE: LORAIN COUNTY  
CITY OF NORTH RIDGEVILLE  
WESTFIELD ALLOTMENT WWTP  
(NPDES No. 3PA00024)  
CEI

Mayor and Council  
City of North Ridgeville  
7307 Avon Belden Rd.  
N. Ridgeville, OH 44039

Dear Mayor and Council:

A Compliance Evaluation Inspection (CEI) was conducted January 29, 2013, at the City of North Ridgeville's Westfield Allotment Wastewater Treatment Plant (WWTP). Present during the inspection were Messers. Bob Roth and Brian O'Grady, representing the City of North Ridgeville; Mr. John Sabo, of the Lorain County Health Department; and this writer, of the Ohio EPA. The WWTP is located at 36656 Westfield Drive, North Ridgeville.

The purpose of the inspection was to evaluate the WWTP operation and maintenance, as well the facility's compliance with NPDES Permit effluent limits and conditions. The most recent CEI conducted on the Westfield Allotment WWTP was August 25, 2011.

At the time of the January 29<sup>th</sup> inspection the following observations were made:

- 1) The influent pump station collects wastewater from the development, and the water is pumped up to the trash trap. Both influent pumps were in 'AUTO' mode and were operational. The influent pump station pit has be refurbished since the last inspection.

**The metal lid covering the opening to the influent pump station is severely rusted, and should be replaced as a safety measure.**

- 2) Contents of the trash trap were typical. The trash trap is pumped by Ray Johnson Septic approximately every by 3 months, and hauled to the French Creek WWTP. Last year the trash trap was pumped 5 times.
- 3) The piping from the trash trap to the influent splitter box, as well as the piping at the end of the WWTP, has been replaced since the last inspection.
- 4) There are 2 blower/motors providing air to the treatment plant. Both blower/motors were in operation at the time of the inspection. The blower/motors were well maintained.
- 5) The extended aeration tank contents were medium brown, and were being well aerated. There was a lighter brown foam on the surface of the aeration tank contents,

and the return sludge line was returning medium brown sludge from the settling to the aeration tanks.

Mixed Liquor Suspended Solids (MLSS) in the aeration tanks are estimated utilizing a 30 minute settling test. Mr. Roth indicated solids are wasted from the aeration tank when the 30 minute settling test results for MLSS reach approximately 50%.

- 6) Contents of both east and west settling tanks were relatively clear, and the settling tank effluent troughs were clean and free of solids or algae. The east settling tank did have a small amount of floating solids on the water surface, and there was a buildup of scum behind the influent baffle of the west settling tank. An air valve in the west settling tank was replaced since the last inspection.

The skimmers in both settling tanks were not in operation, and were not level with the surface of the water. Mr. O'Grady indicated the skimmers are only run about 4 hours daily, when plant personnel are working at the treatment plant. If the skimmers are left to run continuously, the sludge blanket in the settling tank has a tendency to rise and flow over into the troughs.

- 7) Both surface sand filter dosing station pumps were operational, as was the high water level alarm.
- 8) The surface sand filter northeast cell was in use when the filter was dosed. The southeast and northwest cells contained drying solids, and sand in the southwest cell contained some solids in the east corner of that cell. A small amount of dead vegetation was observed in the south end of the southeast filter cell.

The sand filter splitter box and dosing pipes have been replaced since the last inspection.

- 9) The Ultra Violet (UV) disinfection unit was not in service, as disinfection is not required from November 1<sup>st</sup> through April 30<sup>th</sup>. The UV disinfection unit consists of one bank of lights, with two (2) bulbs in the rack. UV bulbs are replaced approximately every two (2) years.
- 10) The aerated sludge holding tank was full of light brown colored sludge, and was well aerated. Sludge wasted from the aerated sludge holding tank is hauled to the North Ridgeville French Creek WWTP by Ray Johnson Septic Service.
- 11) Treated effluent being discharged from the WWTP was clear, and visually free of solids or foam.

White foam was observed upstream of the WWTP outfall, before the mixing zone of the effluent. It was discussed, and theorized that the foam may be coming from the Chestnut Ridge development, upstream of the WWTP.

A review of Electronic Discharge Monitoring Reports (eDMR's) for the period since the last inspection (September 1, 2011 through January 1, 2013), indicates the Westfield Allotment WWTP has experienced the following incidences of non-compliance with its National Pollutant Discharge Elimination System (NPDES) permit effluent limits:

**WESTFIELD ALLOTMENT WWTP  
 NPDES PERMIT NO. 3PA00024  
 NUMERIC EFFLUENT VIOLATIONS  
 (SEPT. 1, 2011 – JAN. 1, 2013)**

Reporting Period	Parameter	Limit Type	Limit	Reported Value	Violation Date
September 2011	Nitrogen, Ammonia (NH3-N)	30D Conc	2.0	5.9	9/1/2011
September 2011	Nitrogen, Ammonia (NH3-N)	7D Conc	3.0	11.8	9/1/2011
September 2011	Nitrogen, Ammonia (NH3-N)	30D Qty	0.19	.49129	9/1/2011
September 2011	Nitrogen, Ammonia (NH3-N)	7D Qty	0.28	.98259	9/1/2011
October 2011	Fecal Coliform	30D Conc	1000	9400.	10/1/2011
October 2011	Fecal Coliform	7D Conc	2000	9400.	10/8/2011
February 2012	Nitrogen, Ammonia (NH3-N)	30D Conc	2.0	5.4	2/1/2012
February 2012	Nitrogen, Ammonia (NH3-N)	30D Qty	0.19	.38834	2/1/2012
February 2012	Total Suspended Solids	7D Conc	18	20.	2/22/2012
February 2012	Nitrogen, Ammonia (NH3-N)	7D Conc	3.0	10.8	2/22/2012
February 2012	Nitrogen, Ammonia (NH3-N)	7D Qty	0.28	.77668	2/22/2012
February 2012	CBOD 5 day	7D Conc	15	20.8	2/22/2012
February 2012	CBOD 5 day	7D Qty	1.42	1.49583	2/22/2012
April 2012	pH	1D Conc	9.0	10.3	4/24/2012
May 2012	Nitrogen, Ammonia (NH3-N)	7D Conc	3.0	3.3	5/8/2012
December 2012	Nitrogen, Ammonia (NH3-N)	7D Conc	3.0	3.3	12/22/2012

*NOTE: A review of the electronic Discharge Monitoring Reports (eDMRs) submitted to the Ohio EPA for the WWTP, for the period of Sep.1, 2011 through Jan. 1, 2013, found no frequency reporting violations.*

Other items discussed with Messers. Roth and O'Grady during the January 29<sup>th</sup> inspection include:

- The NPDES permit for the facility expires October 31, 2013, and the permit renewal application was submitted by the City on January 22, 2013. The NPDES permit renewal process is anticipated to take place by the Ohio EPA within the next several months.
- The renewed permit will include additional operator record keeping requirements in the form of an operator's log book. The log book will need to be hardbound, with numbered pages, and at a minimum, contain the following recorded information:
  - Date and times of arrival and departure for the operator of record, and another operator in attendance.
  - Specific O&M activities performed at the WWTP, which affect, or have the potential to affect the quality or quantity of effluent being produced.
  - Results of tests performed, and samples taken, unless documented on a lab sheet.
  - Performance of preventative maintenance and repairs, or requests for repairs of equipment, having the potential to affect the quality or quantity of effluent being produced.
  - Identification of the persons making entries into the log book for that day.

- The renewed NPDES permit will also require posting of a sign at the plant outfall, which identifies the discharge as effluent from the WWTP, its permit number, and a contact telephone number.
- Design flow of the Westfield Allotment WWTP is 25,000 gpd. Average dry weather flow to the WWTP is 19 – 20,000 gpd. Flow readings for the WWTP are obtained using pump totalizer readings at the head of the plant.

There are approximately 54 residences, and 2 businesses (1 active) connected to the sewer system.

- The WWTP has been experiencing problems with rags in the influent to the WWTP, causing operational problems at the plant. It is believed the source of the rags is the business user.
- Operating conditions at the WWTP are monitored by computer, and in the event of upset or malfunction, the operators are notified on their cell phone.

Please submit written correspondence to this office within 14 days of the receipt of this letter, as to what the suspected causes were for the above-outlined effluent violations, and what procedures will be taken to prevent further exceedence.

The City should continue the implementation of operation and maintenance practices which will enable the WWTP to consistently meet its NPDES Permit limits.

If there are questions or comments regarding this correspondence, please contact this office.

Respectfully,



Charles E. Allen  
Environmental Engineer  
Division of Surface Water

CEA/cs

File: Muni/N.Ridgeville/WestfieldP&C