



**Environmental  
Protection Agency**

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

August 24, 2012

RE: ASHTABULA COUNTY  
CONNEAUT CITY WWTP  
OHIO EPA PERMIT 3PD00002  
COMPLIANCE EVALUATION INSPECTION

Mr. Craig Pierce, Wastewater Superintendent  
City of Conneaut  
294 Main Street  
Conneaut, OH 44030

Dear Mr. Pierce:

On August 21, 2012, a site inspection was conducted at the above referenced facility at 1206 Broad Street Extension, Conneaut City. The inspection was conducted by John Schmidt, Tim Fulks, and Katie Holcomb of Ohio EPA. You, Bob DeMarco, and Brian Bidwell represented the City of Conneaut on the inspection. The purpose of the inspection was to evaluate the facility's compliance status with respect to the terms and conditions of the facility's National Pollutant Discharge Elimination System (NPDES) permit and in conjunction with the renewal of said permit. The last compliance inspection was conducted on September 15, 2012.

The initial plant was constructed as a primary treatment facility in 1899-1901 and upgraded to secondary treatment in 1972. Various improvements have been made since 1972. The system consists of a parshall flume, screening and grit removal, equalization tank, comminutor, primary clarifiers, sodium aluminate addition, aeration tanks, mixed liquor meters, secondary clarification, chlorine disinfection, sodium bisulfate dechlorination, and post disinfection aeration. Sodium aluminate is fed for phosphate control, and sodium bisulfate is fed for chlorine residual control. Sludge management consists of anaerobic digestion and settling tanks, dewatering with a belt filter press, with sludge land applied to farmer's fields as Class B sludge in Monroe Township. The facility discharges to Lake Erie adjacent to the east side of the facility. Generators provide backup power to the entire facility. A schematic diagram of the plant is attached.

Ohio EPA understands that the plant has two bypasses in the system; one is from the equalization tank when flows exceed 5.5 MGD and the other is from the primary clarifier splitter box. The primary clarifier bypass discharges to the chlorine contact tank. Prior to September 15, 2011, the equalization tank bypass discharged to the effluent line downstream of the effluent sampling station. Through implementation of your approved permit-to-install (PTI), Outfall 001 has been relocated to capture the equalization tank bypass. As a result, the equalization tank bypass was not tributary to the permitted outfall prior to September 15, 2011.

**Observations**

Following are observations made during the inspection:

1. The overall condition of the treatment plant during this inspection was satisfactory with the plant well kept. Screenings and grit was containerized for disposal at a solid waste landfill.
2. The east rake was out of service during the inspection, with all plant flow directed to the west rake. Mr. Pierce indicated that a total rebuild of the headworks is needed.

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3. Primary clarifiers were observed with good settling with effluent weirs in acceptable condition. You noted during the inspection that one of your SIUs that generate activated carbon has been causing settling problems in the primary clarifiers. Effluent channels and weirs are scrubbed weekly.
4. Conneaut has completed WWTP improvements to allow greater flows to be treated through the plant, decreasing the volume and frequency of equalization tank bypasses.
5. The content of the east aeration tank had good color and mixing. Sludge returns were a chocolate brown color, with minimal foaming. No odor was noted. The west aeration tank was out of service and is currently being retrofitted with the fine bubble aeration system. Conneaut WWTP has had half its aeration capacity out of service for the past three months while the new blowers and diffusers have been installed. New fine bubble aeration headers and new blowers were installed in May-August 2012.
6. The surface of the clarifier was somewhat cloudy, with about 5 feet of depth visible. The effluent trough was clean and there was no scum around the effluent baffle or the trough. Effluent channels and weirs are scrubbed weekly. Some growth was noted along the effluent weirs, typical for this time of year.
7. Some grease/sludge balls are noted in the chlorine contact tank, but are captured by the baffles. Grease is hauled to the Erie City WWTP in Pennsylvania. The tank was not cleaned this year prior to being placed into service due to the construction activities.
8. Conneaut contracts with Synergrow to conduct belt pressing of sludge and to haul sludge and land apply it. Sludge pressing was not occurring at the time of the inspection.
9. Influent and effluent composite samples are collected with a flow proportional sampler. The proper temperature was noted in the samplers.
10. The WWTP laboratory performs monitoring of BOD, suspended solids, pH, phosphorus, chlorine, and ammonia nitrogen. Conneaut contracts with Cardinal Laboratories of Youngstown, OH for volatile organic compounds (VOCs), metals, oil and grease, nitrate-nitrite, bacteria (E. Coli), and quality assurance samples from the WWTP laboratory.
11. The final effluent at the outlet to Lake Erie could not be observed due to the outlet being submerged. Per Mr. Pierce this outfall dates to the original construction of the plant in 1901. The final outfall at Station 001 was observed at the new sampling location and found of acceptable visual quality.
12. The facility has a no exposure certification regarding storm water runoff.

#### **NPDES Permit Compliance Review**

A review of the electronic discharge self-monitoring reports (eDMRs) received by Ohio EPA for the period August 1, 2011 through August 1, 2012 indicates apparent noncompliance of the terms and conditions of your NPDES permit. Specific instances of noncompliance are as follows:

#### **Limit Violations**

The following limit violations were noted:

Station	Reporting Code	Parameter	Limit Type	Limit	Reported Value	Violation Date
001	50060	Chlorine, Total Residual	1D Conc	0.038	.32	8/10/2011
001	50060	Chlorine, Total Residual	1D Conc	0.038	.1	8/28/2011
001	50060	Chlorine, Total Residual	1D Conc	0.038	.23	8/29/2011
001	61942	pH, Minimum	1D Conc	6.5	6.4	9/18/2011
001	50092	Mercury, Total (Low Level)	30D Qty	0.0000	.00011	10/1/2011
001	00552	Oil and Grease, Hexane	1D Conc	10	19.2	10/7/2011
001	50060	Chlorine, Total Residual	1D Conc	0.038	.05	10/22/2011
001	00665	Phosphorus, Total (P)	7D Conc	1.5	1.606	11/1/2011
001	00665	Phosphorus, Total (P)	7D Qty	17	17.0688	11/1/2011
001	00665	Phosphorus, Total (P)	7D Qty	17	24.1779	12/1/2011
001	00530	Total Suspended Solids	30D Qty	227	261.412	1/1/2012
001	50092	Mercury, Total (Low Level)	30D Qty	0.0000	.00006	1/1/2012
001	50092	Mercury, Total (Low Level)	30D Conc	3.6	5.92	6/1/2012
001	50092	Mercury, Total (Low Level)	30D Qty	0.0000	.00006	6/1/2012
001	50060	Chlorine, Total Residual	1D Conc	0.038	.22	6/6/2012
001	50060	Chlorine, Total Residual	1D Conc	0.038	.35	6/7/2012
001	50060	Chlorine, Total Residual	1D Conc	0.038	.16	7/5/2012
001	61942	pH, Minimum	1D Conc	6.5	6.19	7/10/2012
001	61942	pH, Minimum	1D Conc	6.5	6.47	7/30/2012

The City of Conneaut provided explanations and measures to assure that they will not be repeated in response reports dated August 31, 2012 (August 2011 violations), September 22, 2012 (September 2011 violations), October 7 and 22, 2011 (October 2011 violations), November 18, 2011 (November 2011 violations), January 13, 2012 (December 2011 violations), February 3, 2012 (January 2012 violations), July 23, 2012 (June 2012 violations), and August 20, 2012 (July 2012 violations). Most of these violations have been due to operational issues associated with various wastewater plant improvements at the facility in 2011 and 2012. No additional response is need to these exceedence events at this time.

#### Reporting Violations

No reporting violations were noted for the period reviewed. It is noted that the eDMR system is reporting violations of quarterly monitoring for May 2012 and July 2012. Conneaut reports quarterly data in the months of March, June, August, and December as defined in Part III, Item 1 of the NPDES permit. Therefore eDMR reporting issues are not considered a violation by Ohio EPA.

#### SSO Reporting

SSOs 311 (Gateway Ave), 313 (Park Place), 314 (Primary Distribution Chamber), and 315 (McKinley Ave) were eliminated on October 21, 2011, May 25, 2011, and October 29, 2011, and November 16, 2011, respectively. SSO 308 (Harper Street) was determined that the sanitary sewer is leaking into the storm sewer, with no direct connections. Conneaut relined 659 LF of sewer line in 2011 and an additional 610 LF of sewer line in 2012. On Hiler Street, Conneaut transferred 9 residences and 1 business from the storm sewer to the sanitary sewer, and verified that 24 residences are connected to the sanitary sewers. SSO elimination, sewer repairs and transfers are detailed in the March 6, 2012 SSO report.

In 2012, an SSO was reported due to a pipe failure on July 25, 2012. An SSO was reported on June 23, 2012 due to a blockage problem at the City of Conneaut Port Authority.

Conneaut continues to dye test and identify residential and commercial connections that are connected to the storm sewer system and not the sanitary sewer system. A summary of additional activities conducted in 2012 and those planned for 2013 were provided during the inspection.

Industrial Pretreatment Program

Ohio EPA conducted a comprehensive audit of Conneaut's Industrial Pretreatment Program (IPP) on August 21-23, 2012. The findings of this audit will be transmitted under separate cover.

Bioassay Monitoring

Bioassay monitoring required by the NPDES permit is scheduled to be conducted by EnviroScience of Stow, OH the week of August 28, 2012.

Compliance Schedule

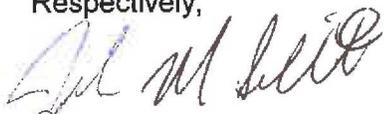
Regarding the compliance schedule, Ohio EPA notes the following:

Permit Effective Date	Permit Expiration Date	Schedule Due Date	Completion Date	Event Code	Schedule Type	Schedule Milestone
3/1/2012	7/31/2016	9/1/2012	Not Complete	N/A	Pretreatment	Evaluate Industrial User Limits
3/1/2012	7/31/2016	4 mo from	Not Complete	N/A	Pretreatment	Incorporate Approved LLs
3/1/2012	7/31/2016	9/1/2012	2/28/2012	N/A	Pretreatment	Evaluate LLs for Hg
3/1/2012	7/31/2016	9/1/2012	2/28/2012	N/A	Pretreatment	Submit IPP Modification for Streamlining, incl ERP

During the course of the pretreatment audit, it was determined that additional changes are needed to the industrial pretreatment program (IPP) that will require a modification request to be submitted. Discussions with both Conneaut and their consultant, CT Consultants, indicated that a technical justification report is currently being prepared. Based upon the preliminary findings of the IPP audit discussed with Conneaut and CT Consultant on August 22, 2012, Ohio EPA will expect a schedule to complete the technical justification report, revised local limits, revised enforcement response plan, draft IU permit application, and revised draft discharge permits to be submitted to Ohio EPA Northeast District Office and Central Office no later than September 1, 2012.

If you have any questions or comments regarding this inspection, please feel free to contact me at (330) 963-1175.

Respectively,



John M. Schmidt P.E., R.S.  
Environmental Engineer  
Division of Surface Water

JMS/cs

ec: Donna Kniss, Ohio EPA, DSW, NEDO  
Sara Hise, Ohio EPA, DSW, CO

File: Municipal/Conneaut City WWTP (Ashtabula Co.)/PC  
Municipal/Conneaut City WWTP (Ashtabula County)/Pretreatment

