



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

August 6, 2013

RE: MAHONING COUNTY
STRUTHERS WWTP
NPDES PERMIT 3PD00026
SFY 2013 CEI

Terry Stocker, Mayor
Struthers WWTP
6 Elm St.
Struthers, OH 44471

Dear Mr. Stocker:

On June 13, 2013, a Compliance Evaluation Inspection was conducted at the Struthers wastewater treatment plant (WWTP). Bob Gentile represented the city during the inspection.

The purpose of the inspection was to evaluate compliance with the terms and conditions of your National Pollutant Discharge Elimination System (NPDES) permit and to evaluate the operation and maintenance of the plant. A review of the compliance record was also conducted as part of the inspection

Observations

No concerns regarding the condition of the treatment system were identified during the inspection. Work on the primary anaerobic digester was being initiated to install the draft tube mixers. No sludge digestion was occurring at the time of the inspection. Sludge from the secondary digester is transferred to the belt filter press for dewatering before hauling to the Carbon Landfill in Lowellville.

Other than the primary digester, all treatment facilities were on-line at the time of the inspection. No concerns about maintenance of the publicly owned treatment works (POTW) were identified considering all facilities were operational. Wastewater effluent was clear and had no odor.

During sample collection, it was discussed that composite samples are to be refrigerated to 4° Celsius. In order to monitor temperature, a thermometer must be placed in each composite sampler during sample collection. The thermometers should be placed in a small beaker of water in each samplers.

Compliance Review

The compliance record of the POTW was reviewed for this inspection. A summary of the review is included in Section D of this report. One violation for mercury was identified throughout the review period of June 2012 through May 2013.

The NPDES Permit for Struthers currently includes a relaxed mercury limit of 31 ng/l. However, on July 1, 2015, a more stringent limit of 12 ng/l for mercury will go into effect.

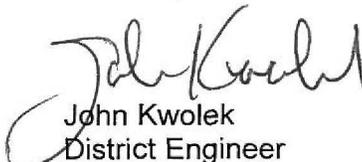
The following table includes effluent results for mercury over the period covering June 2012 through May 2013. Of the twelve samples collected for mercury throughout the review period, five exceeded the 12 ng/l limit. This data demonstrates that the city will be unable to consistently comply with the final mercury limit unless steps are taken to reduce effluent mercury levels.

Mercury, Total (Low Level)	ng/l	6/21/2012	12.3
Mercury, Total (Low Level)	ng/l	7/3/2012	14.9
Mercury, Total (Low Level)	ng/l	8/1/2012	3.16
Mercury, Total (Low Level)	ng/l	9/5/2012	2.1
Mercury, Total (Low Level)	ng/l	10/3/2012	19.8
Mercury, Total (Low Level)	ng/l	11/3/2012	10.4
Mercury, Total (Low Level)	ng/l	12/5/2012	7.8
Mercury, Total (Low Level)	ng/l	1/2/2013	33.4
Mercury, Total (Low Level)	ng/l	2/6/2013	9.5
Mercury, Total (Low Level)	ng/l	3/19/2013	11
Mercury, Total (Low Level)	ng/l	4/3/2013	8.9
Mercury, Total (Low Level)	ng/l	5/14/2013	14

In order to address the elevated mercury concentrations, the Struthers POTW is required by its NPDES Permit to develop a Pollutant Minimization Program (PMP) for mercury. The goal of the PMP is to enable the POTW to consistently achieve an effluent concentration for mercury below the final permit limit of 12 ng/l. The city is currently implementing the PMP in order to consistently reduce effluent mercury levels to below 12 ng/l by July 1, 2015.

If you have any questions or comments concerning the enclosed inspection report, please contact this office at (330) 963-1251 or at john.kwolek@epa.ohio.gov.

Sincerely


John Kwolek
District Engineer
Division of Surface Water
Northeast District Office

JK/cs

cc: Bob Gentile, Superintendent, Struthers POTW

NPDES Compliance Inspection Report

SECTION A: NATIONAL DATA SYSTEM CODING				
Permit #	NPDES #	Inspection Type	Inspector	Facility Type
3PD00026	OH0027600	CEI	S	P
Inspection Date	Entry Time	Exit Time	Notice of Violation	Significant Non-Compliance
6/13/2013			No	No

SECTION B: FACILITY DATA	
Name and Location of Facility Inspected	Permit Effective Date
Struthers WWTP	7/1/2012
	Permit Expiration Date
	1/31/2017
Name(s) and Title(s) of On-Site Representatives	Phone Numbers
Name and Title of Responsible Official	Phone Number
Terry Stocker, Mayor	(330) 755-9847

SECTION C: AREAS EVALUATED DURING INSPECTION	
Key: S = Satisfactory, M = Marginal, U = Unsatisfactory, N = Not Evaluated	
S	NPDES Compliance
S	Operations & Maintenance
S	Facility Site Review
N	Collection System
S	Flow Measurement
N	Receiving Waters
N	Laboratory

Comments:

Signatures	
	8/6/13
John Kwolek Division of Surface Water Northeast District Office	Date

Section D: eDMR Data for Struthers WWTP between 6/1/2012 to 5/31/2013

Compliance Record Summary

Overall Summary	
Total Limit Violations	1
Months with Limit Violations	1
Frequency Violations	0
Code Violations	0
Missing DMRs	0
SSO Events	3
SNC between 12/1/2012 to 5/31/2013	No

Flow Record Summary

Flows between 6/1/2012 and 5/31/2013	
Percentile	Flow Rate (MGD)
Minimum	0.01
10%	3.334
20%	3.548
30%	3.742
40%	4.072
50%	4.32
60%	4.56
70%	4.936
80%	5.292
90%	6.128
Maximum Flow	9.12
Design Flow (MGD)	6
% Exceeding Design	10.68%

Flow Data for Struthers WWTP between 6/1/2012 and 5/31/2013		
	Date	Flows (MGD)
Ten Highest Flows	10/30/2012	9.120
	12/10/2012	8.430
	1/12/2013	8.210
	2/27/2013	8.080
	4/11/2013	7.750
	4/12/2013	7.660
	12/11/2012	7.610
	2/28/2013	7.600
	4/13/2013	7.510
	12/21/2012	7.490
Average Flow Rate		4.515

Limit Violations

Limit Violations						
Reporting Period	Station	Parameter	Limit Type	Limit	Reported Value	Violation Date
January 2013	001	Mercury, Total	30D Conc	31	33.4	1/1/2013

Reported Sanitary Sewer Overflows

Overflow Occurrences Reported			
Parameter	Units	Date	Reported Value
Overflow Occurrence	No./Month	10/30/2012	1
Overflow Occurrence	No./Month	10/31/2012	1
Overflow Occurrence	No./Month	4/12/2013	1

SECTION E: PERMIT VERIFICATION

- (a) Correct name and mailing address of permittee Y
- (b) Correct name and location of receiving waters Y
- (c) Products and production rates conform with permit application N/A
- (d) Flows and loadings conform with NPDES permit..... Y
- (e) Treatment processes are as described in permit application Y
- (f) New treatment process added since last inspection Y

- (g) Notification given to State of new, different or increased discharges N/A
- (h) All discharges are permitted Y
- (i) Number and location of discharge points are as described in permit Y

Comments:

SECTION F: COMPLIANCE

- (a) Any significant violations since the last inspection N
- (b) Permittee is taking actions to resolve violations N/A
- (c) Permittee has a compliance schedule Y
- (d) Permittee is meeting compliance schedule N

Comments:

Permittee has mercury variance with deadlines to reduce annual mercury concentration to 12 ppt.

SECTION G: OPERATION AND MAINTENANCE

- (a) Standby power available Y
 If yes, what type? Methane gas generators
- (b) Adequate alarm system available for power or equipment failures Y
- (c) All treatment units in service other than backup units N
- (d) Wastewater Treatment Works classification
- (e) Operator of Record holds unexpired license of class required by Permit
 Class held:
- (f) Copy of certificate of Operator of Record displayed on-site
- (g) Minimum operator staffing requirements fulfilled.....
- (h) Routine and preventative maintenance scheduled and performed
- (i) Any major equipment breakdown since last inspection.....
- (j) Operation and maintenance manual provided and maintained
- (k) Any plant bypasses since last inspection.....
- (l) Regulatory agency notified of bypasses
 By MOR and/or Spill Hotline (1-800-282-9378)
- (m) Any hydraulic or organic overloads since last inspection

Comments:

Accident at sludge digester caused digester to be out of service. The city is currently making repairs to the digester.

SECTION H: COLLECTION SYSTEM

- a) Percent combined system: 0%
- b) Any collection system overflows since last inspection Y
- c) Regulatory agency notified of overflows Y
- d) CSO O&M plan provided and implemented N/A
- e) CSOs monitored and reported in accordance with permit..... Y
- f) Portable pumps are used to relieve system N
- g) Lift station alarms provided and maintained..... Y
- h) Lift stations equipped with permanent standby power or equivalent Y
- i) Is there an inflow/infiltration problem (separate sewer system), or were there any major repairs to collection system since last inspection.
- j) Any complaints received since last inspection of basement flooding 1
- k) Are any portions of the sewer system at or near capacity..... N

Comments:

The city had 3 overflow events in the period covering June 2012 through May 2013. This will be reviewed with the city in future inspections.

SECTION I: SLUDGE MANAGEMENT

- a) Sludge management plan (SMP) last audited by Ohio EPA:
 Audit Date:
- b) Sludge adequately disposed Y
 Method: **CARBON LANDFILL IN LOWELLVILLE**
- c) If sludge is incinerated, where is ash disposed of..... N/A
- d) Is sludge disposal contracted N/A
 Name:
- e) Has amount of sludge generated changed significantly N
- f) Adequate sludge storage provided at plant Y
- g) Records kept in accordance with State and Federal law Y
- h) Any complaints received last year regarding sludge N
- i) Is sludge adequately processed (digestion, pathogen control) Y

Comments:

SECTION J: SELF-MONITORING PROGRAM

- a) Primary flow measuring device operated and maintained..... Y
 Type of device: **Parshall Flume** Device location: **Effluent**
 Type of device: **Broad crest weir** Device location: **Internal**
- b) Calibration frequency adequate..... y
 Date of last calibration: **March 2013**
- c) Secondary instruments operated and maintained..... N
- d) Flow measurements equipment adequate to handle full range of flows Y
- e) Actual flow discharged is measured Y
- f) Sampling location(s) are as specified by permit..... Y
- g) Parameters and sampling frequency agree with permit..... Y
- h) Monitoring records (i.e., flow, pH, DO) maintained for a minimum of three years including all original strip chart recordings (i.e. continuous monitoring instrumentation, calibration and maintenance records)..... Y

Comments: