



State of Ohio Environmental Protection Agency

Northeast District Office

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Ted Strickland, Governor  
Lee Fisher, Lieutenant Governor  
Chris Korleski, Director

October 28, 2008

RE: CITY OF YOUNGSTOWN  
NPDES PERMIT NO. 3PE00006  
2009 CEI

Mayor and Council  
City of Youngstown  
City Hall  
Youngstown, Ohio 44503

Dear Ladies and Gentlemen:

On September 9, 2008, this writer completed a Compliance Evaluation Inspection (CEI) of the Youngstown POTW. Representing the city during the inspection was Tom Mirante, Assistant Superintendent.

The intent of the inspection was to evaluate Operations and Maintenance (O&M) at the POTW. Discussions during the inspection also included procedures to implement the Nine Minimum Controls which are intended to reduce impacts from the city's combined sewer system. Finally, compliance with NPDES Permit No. 3PE00006\*LD and the March 5, 2002 Consent Agreement with USEPA and Ohio EPA was evaluated.

Following is a report of findings from this inspection.

**POTW Inspection**

1. The condition of the treatment system was satisfactory at the time of the inspection.
2. Two primary settling tanks and one secondary clarifier were out of service for routine maintenance. All other treatment processes were operational at the time of the inspection.
3. The contents of the secondary aeration tanks had good color and good mixing. The mixed liquor in the secondary clarifiers had good settling characteristics.
4. The effluent was visually satisfactory at the time of the inspection. No color or odor was detectable to this writer.
5. Mr. Mirante indicated that the disinfection system capacity may need to be modified in order to provide adequate disinfection of the wastewater on a consistent basis. This issue, along with increasing the wet weather capacity of the treatment plant, was discussed during a September 29, 2008 meeting

regarding the Combined Sewer System (CSS) Long Term Control Plan. It is the understanding of this writer that the city is to make a proposal for expanding the wet weather capacity of the treatment system to Ohio EPA and USEPA by October 31, 2008. The proposal was to include upgrading and/or expanding the disinfection system to account for the increased flow through the system.

### **Nine Minimum Controls**

During this inspection, a discussion was conducted with treatment plant personnel regarding the ongoing efforts by the city to comply with the Nine Minimum Control requirements. The requirements are intended to reduce Combined Sewer Overflows (CSOs) and reduce impacts of CSOs on receiving water bodies. The Nine Minimum Control requirements are not intended to require significant engineering studies or major construction and can be implemented in a relatively short period of time. Following is a summary of the Nine Minimum Controls and this writer's understanding of the efforts the city has made to comply with the requirements.

#### **1. Proper Operation and Maintenance Programs for the Sewer System and CSO Outfalls**

The city implements a CSS maintenance program. The city has implemented a computerized sewer tracking system to monitor complaints and routine maintenance of the collection system. According to city personnel, work orders are issued to city crews for routine maintenance and sewer system repairs resulting from citizen complaints. The work orders are tracked by the city until completed.

An example of the routine maintenance implemented by the city involves the sewer system siphons. It is the understanding of this writer that the siphons are cleaned on a bi-annual basis. This is necessary to maximize capacity in the siphons and to minimize CSOs resulting from reduced capacity of the CSS.

A second example that was discussed involved routine inspection of overflow structures. It was the understanding of this writer that overflow structures are inspected at least once every two weeks. If maintenance of the structures is required, a work order is issued and tracked until completed.

#### **2. Maximization of Storage**

During discussions the city indicated that weir adjustments were made in the past to maximize the storage capacity of the CSS. These locations were identified in the 2003 Nine Minimum Controls Reports submitted by Youngstown. The report also indicated that the CSS does not have significant storage capabilities.

The routine maintenance program implemented by the city will help to maximize the storage capacity of the CSS. Regular cleaning of the interceptors and siphons will remove material (e.g., bricks, grit, etc.) that would otherwise reduce the capacity of the system.

### 3. Review and Modification of the Pretreatment Requirements

The city maintains a pretreatment program that is considered by the Agency to be satisfactory. The program is considered capable of minimizing impacts on the CSS resulting from the discharge of wastewater from nondomestic sources.

### 4. Maximizing of Flow to the POTW

As stated in Items 1 and 2, the city has taken steps to maximize the capacity of the CSS. In addition, the city has proposed an increase of the wet weather capacity of the POTW. Other projects are under consideration by the city to store excess wastewater for discharge back to the CSS once high flows recede.

### 5. Elimination of Overflows During Dry Weather

The maintenance program implemented by the city is also intended to avoid dry weather overflows by preventing obstructions. Periodically dry weather overflows do occur. When they do, the city is known to repair the system in a timely manner and report the overflows to Ohio EPA as required.

### 6. Control of Solid and Floatable Material

According to the city, the only activities for controlling solids and floatable material are directed at preventing such material from entering Mill Creek Park. Eight screens in the park are checked and cleaned to ensure that they are operational.

### 7. Pollution Prevention Programs to Reduce Contaminants in CSOs

City representatives indicated that the city is not heavily engaged in pollution prevention efforts. It was understood that the city does not have a public education program to help reduce litter and other objectionable material that can create water quality problems in the event of a CSO. It is also understood that the city does not fund a pollution prevention program at industries to help them identify objectionable material and re-direct it away from the CSS.

However, the city does carry out the following programs that are considered pollution prevention.

- a. The city does place trash receptacles throughout the city for disposal of trash. The receptacles are maintained by being periodically emptied and cleaned. The receptacles provide a means for proper disposal of trash, and in turn, help to keep the material from finding its way to the CSS.
- b. The pretreatment coordinator for the city does conduct periodic inspections of the significant industrial users tributary to the CSS. If during an inspection the pretreatment coordinator identifies substances that could be harmful, he will inform the industrial user of a potential problem and work with the user to find a disposal alternative so as to redirect the material away from the CSS.

It is recommended that the city review its efforts towards pollution prevention. Mahoning County does carry out a recycling program and is involved with pollution prevention efforts. As an example, Mahoning County sponsors a hazardous waste drop off day at the Mahoning County fair grounds. The city should review the possibility of sponsoring its own hazardous waste drop off day in the city. Such a program, in coordination with a city sponsored public education program, will reduce the amount of objectionable material, including hazardous wastes, discharged to the CSS.

#### 8. Public Notification

It is understood by this writer that the only public notification of CSOs includes the posting of signs at the outfall to notify. The signs provide warning to the public that the outfall may discharge wastewater containing human waste.

#### 9. Monitoring to Characterize CSO Impacts and Efficacy of CSO Controls

The city is required to monitor 39 specific outfalls to identify overflow occurrences. Other remaining outfalls are periodically inspected to monitor the condition of the outfalls. No records regarding this requirement were reviewed during this inspection. The city should inform this office of additional efforts in the event other activities to characterize CSO impacts are performed.

The city appears to generally be in compliance with the Nine Minimum Controls requirements. In particular, the sewer maintenance program and the industrial pretreatment program appear to be effective at controlling the discharge of pollutants through the combined sewer system. At the time the NPDES Permit is renewed, the permit will require the submission of a report to Ohio EPA that includes an evaluation of the city's Nine Minimum Controls program.

**NPDES Compliance**

A review of the compliance record was conducted to determine compliance with the NPDES Permit. The period of record was September 2007 through July 2008. Following are instances of noncompliance with the NPDES Permit pollutant limitations identified during the review period.

Reporting Period	Station	Parameter	Limit Type	Limit	Reported Value	Violation Date
January 2008	001	Mercury, Total	30D Conc.	12	39.3	1/1/2008
January 2008	001	Mercury, Total	30D Qty	0.002	.00604	1/1/2008
February 2008	001	Mercury, Total	30D Conc.	12	14.55	2/1/2008
February 2008	001	Mercury, Total	30D Qty	0.002	.0034	2/1/2008
March 2008	001	Total Suspended Solids	30D Qty	3980	5985.42	3/1/2008
March 2008	001	Mercury, Total	30D Qty	0.002	.00327	3/1/2008
March 2008	001	Total Suspended Solids	7D Conc.	45	48.48	3/22/2008
March 2008	001	Total Suspended Solids	7D Qty	5969	10131.0	3/22/2008
May 2008	001	Total Suspended Solids	30D Qty	2653	2926.77	5/1/2008
May 2008	001	Total Suspended Solids	7D Qty	3980	4139.69	5/8/2008
July 2008	001	Chlorine, Total Residual	1D Conc.	0.024	.18	7/17/2008

Be advised that noncompliance with the NPDES Permit is considered a violation of Ohio Revised Code 6111.07. Such noncompliance is subject to potential enforcement action.

**2002 Consent Agreement**

The 2002 Consent Agreement and the Part I,C schedules were reviewed for compliance. Following is a summary of the requirements and the completion dates for each item.

ITEM	DOCUMENT	REQUIRED COMPLETION DATE	DATE COMPLETED
CSS Characterization Monitoring and Modeling Results	NP	6/1/2000	5/30/2000
Antidegradation Plan	NP	6/1/2001	5/31/2001
CSO Control Alternatives Identification	NP	1/1/2002	2002
Implement Revised CSO Inspection Schedule in lieu of 5 Monthly Insp.	CO	5/1/2002	Incorp. into NPDES Permit 3/1/2003
Submit CSO Controls Evaluation & Cost Performance Curves	NP, CO	6/1/2002	5/31/2002
PTI Due for Eliminating Tod and Irving	CO	6/9/2002	Jan. 2001

ITEM	DOCUMENT	REQUIRED COMPLETION DATE	DATE COMPLETED
East (West Ave. Pump Station)			
Undertake Collection System Maintenance Data Management Improvements.	CO	8/31/2002	Coordinator Hired 9/2/2002
Submit the Implementation Schedule of the LTCP	NP, CO	1/1/2003	12/30/2002
Complete the Tod and Irving West Pump Station	CO	5/9/2003	5/9/2003
Submit PTI for Elimination of OF#6108 (Orchard Meadows)	CO	6/2/2003	5/29/2003
Complete Tod and Irving East Pump Station (West Ave. Pump Station)	CO	8/8/2003	7/2/2003
Submit Operation Plan	NP, CO	1/1/2004	12/16/2003
Replace Meadowbrook Pump Station	CO	3/25/2004	7/8/2003
Install Level Sensing Equipment in OF#20 (6003), OF#39 (6025), RC#101 (6004)	CO	1/27/2005	1/27/2005
Eliminate OF#6108 (Orchard Meadows)	CO	5/17/2006	5/25/2007
Submit PTI for Replacement of Old Lansdowne Pump Station	CO	5/27/2006	5/17/2006
Submit Post Construction Compliance Monitoring Plan	NP, CO	6/1/2006	5/26/2006
Implement Computerized Collection System Maintenance Data Management System	CO	8/5/2006	Continuing to Improve System. Phase 2 Underway.
Replace Old Lansdowne Pump Station	CO	10/12/2007	10/12/2007

NP – NPDES Permit

CO – March 5, 2002 Consent Order

It appears that the city has completed activities required by the NPDES Permit and the Consent Agreement. The only outstanding issue is final approval of the CSS Long Term Control Plan. A September 29, 2008 meeting which included Youngstown, USEPA and Ohio EPA was held to discuss details regarding the Plan. A follow-up meeting to further discuss the Long Term Control Plan was tentatively scheduled for the middle of November 2008.

**Summary**

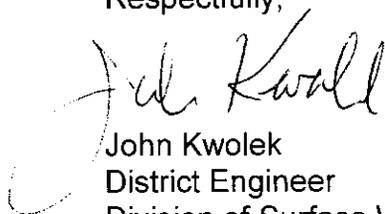
Following is a summary of findings from this most recent inspection of the Youngstown POTW.

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1. The wastewater treatment plant was in satisfactory condition at the time of the inspection. It was agreed during a September 29, 2008 meeting that the city will be proposing to Ohio EPA and USEPA, a plan for expanding the wet weather capacity of the treatment plant. This will increase the wet weather treatment and disinfection of wastewater currently discharged directly to area streams without treatment.
2. The city has implemented the Nine Minimum Controls. It is recommended that the city evaluate the benefits of a pollution prevention program to educate the public and to provide an alternative to disposing of hazardous material to the combined sanitary sewer system.
3. The city has appeared to submit all requested documents required by the Schedule in Part I.C of the NPDES Permit and the 2002 Consent Agreement.

You may contact this writer at (330) 963-1251 to discuss any questions you may have.

Respectfully,



John Kwolek  
District Engineer  
Division of Surface Water

JK/mt

cc: Charles Shasho, Dept. of Public Works  
Tom Mirante, Assistant Superintendent, Youngstown POTW  
Peggy Malone, Ohio AGO