



State of Ohio Environmental Protection Agency

Northeast District Office

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

August 30, 2007

RE: CITY OF STRUTHERS  
NPDES PERMIT NO. 3PD00026  
2008 CEI

Mayor and Council  
City Offices  
6 Elm Street  
Struthers, OH 44471

Dear Ladies and Gentlemen:

On August 7, 2007, this writer conducted an inspection of the Struthers wastewater treatment system. The intent of the inspection was to evaluate operations and maintenance of the system and to review the compliance record over the past twelve months. Representing the city during the inspection were Rich DeLuca and Bob Gentile.

At the time of the inspection, the condition of the treatment system was considered satisfactory. The plant seems to be well maintained. Effluent discharged from the facility was clear and had no odor.

Observations

Following are observations during the August 7, 2007 inspection.

1. The modified storm water tanks appeared to be operating as expected. The first three aeration tanks had good color and mixing. The effluent being discharged was clear; however, floating sludge was being discharged from tank #6. The floating sludge must be held in the system and prevented from discharging.
2. The preliminary treatment system, which includes screening and grit removal, was operating at the time of the inspection. However, the grit removal system is at its design life and the influent bar screen is inefficient and should be replaced with a more efficient process. One significant concern noted during the inspection was that the ventilation system in the influent screen room was inoperable. Proper ventilation in such areas of the plant is mandatory for the health of plant employees.
3. The trickling filters were operating properly. The distribution arms were providing an even distribution of wastewater across the surface of the filters.
4. One of the secondary clarifiers was out of service at the time of the inspection. The clarifiers are being completely rebuilt. The internal equipment, such as the bridges and sweeps, were in need of replacement.

5. The secondary anaerobic sludge digester was inoperable at the time of the inspection. The digester is scheduled within the next twelve months to be cleaned and the internal structure and workings will be replaced. This is a necessary project in order to effectively process sludge prior to pressing. The primary anaerobic digester was in good working order at the time of the inspection.
6. The sludge filter press was operating at the time of the inspection. However, the press had operational problems that required considerable attention by plant personnel. The filter press is scheduled for replacement within the next 12 months.

### Compliance

A review of the Monthly Operating Reports was completed by this writer to identify any violations of the National Pollutant Discharge Elimination System (NPDES) permit during the review period of August 2006 through July 2007. Following are NPDES permit limit violations identified during the review period.

Parameter	Date	Limit Type	Limit	Reported Value
Total Suspended Solids	Nov. 06	30-Day Conc.	45 mg/l	45.7 mg/l
Total Suspended Solids	Nov. 06 – 1 <sup>st</sup> Week	7-Day Conc.	30 mg/l	33.1 mg/l
Total Suspended Solids	Mar. 07 – 3 <sup>rd</sup> Week	7-Day Quantity	1022 kg/d	1152 kg/d

Though the violations noted above are not considered significant, the Struthers POTW must maintain consistent compliance with the requirements of the NPDES permit No. 3PD00026.

### Necessary Actions

Following are actions that must be taken by the city to address several concerns noted during the inspection. The following items were discussed with Rich DeLuca and Bob Gentile during this most recent inspection:

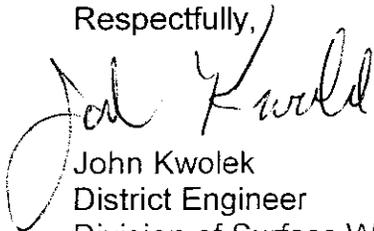
- A. As mentioned in Item 1 above, floating sludge is able to enter tank six of the modified storm water treatment system. The city must prevent the discharge of the floating sludge through the outfall from tank six. A baffle was discussed during the inspection as a means to prevent the discharge of floatable material. The baffle must be properly engineered to provide sufficient capacity for anticipated flows. The baffle should extend sufficiently below the outlet invert to prevent the discharge of floatables when the tank is drawn down. The mechanism to prevent the discharge of floatables from tank six must be in place as soon as possible but not later than 12 months from the date of this letter. The city should investigate actions to prevent the release of floatable material from tank four in addition to constructing a baffle in tank six.

- B. The city must evaluate the grit removal system and the influent screen for replacement. As mentioned in Item 2 above, both the grit removal system and the influent screen are at their design age and may be inefficient at removing inert material. Ineffective removal of inert material at the head of the plant will create problems throughout the rest of the plant. For example, grit and other inert material can cause premature wearing of pumps and valves resulting in frequent and expensive maintenance.
- C. The ventilation system in the influent screen room must be immediately repaired to provide adequate ventilation to the area. Sewer gases are hazardous for individuals working in the area and must be properly ventilated from the site. The exhaust vent should be extended to the floor of the room since many sewer gases are heavier than ambient air.
- D. The city must continue to refurbish the secondary anaerobic sludge digester and replace the belt filter press. Both scheduled projects must be completed as scheduled in order to properly process sludge generated at the treatment plant. Sludge processing is a critical component of the treatment process.

Finally, on two occasions in 2007, this writer observed an overflowing manhole on State Street. The manhole overflows during precipitation events. The renewed NPDES permit scheduled to be issued to the city of Struthers in 2007 will include a schedule to identify the cause and to modify the system to eliminate the overflow. It is recommended that the city begin to investigate possible actions so that a reasonable schedule can be incorporated into the NPDES permit when it is renewed.

You may contact this office at (330) 963-1251 to discuss any questions you may have regarding this inspection report or to discuss the necessary actions identified above.

Respectfully,



John Kwolek  
District Engineer  
Division of Surface Water

JK/mt

cc: Rich DeLuca, POTW Superintendent

File: Public/City of Struthers/permit and Compliance