



STATE OF IOWA

CHESTER J. CULVER, GOVERNOR
PATTY JUDGE, LT. GOVERNOR

DEPARTMENT OF NATURAL RESOURCES
RICHARD A. LEOPOLD, DIRECTOR

June 10, 2010

City of Bettendorf
1609 State Street
Bettendorf, IA 52722

ATTENTION: Honorable Mayor and Council

NOTICE OF VIOLATION: Unpermitted Discharge, 455B.186, Iowa Code and 567 IAC 62.1(1)

SUBJECT: Wastewater Collection System Inspection Report

City Officials:

Please find enclosed one copy of the inspection report prepared by Jim Sievers of this office. The inspection report should be self-explanatory.


The inspection report notes the occurrence of frequent unpermitted discharges of wastewater from several locations in Bettendorf. Section 455B.186, Iowa Code and Subrule 567 IAC 62.1(1) prohibit the discharge of any pollutant which is not authorized by an NPDES permit. The city must continue to identify and eliminate significant sources of inflow and infiltration in the collection system.

This matter is being referred to the DNR Legal Services Section in Des Moines for review and additional compliance action.

If you have questions about the report or this letter, please contact me or Jim Sievers at 319/653-2135.

Sincerely,

FIELD SERVICES & COMPLIANCE BUREAU


Dennis Ostwinkle
Field Office Supervisor

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Encl. ✓ Inspection Report

xc: ✓ DNR Records Section, DNR, Des Moines
File - Municipal File

IOWA DEPARTMENT OF NATURAL RESOURCES

ENVIRONMENTAL SERVICES DIVISION

Field Office 6,

1023 West Madison, Washington, IA 52353-1623

Tel: (319) 653-2135 Fax: 2856

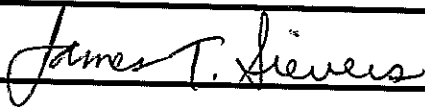
INSPECTION DATE & TIME: 5/25/10 @ 10:00 a.m.

TO: City of Bettendorf
1609 State Street
Bettendorf, IA 52722

PERSONS CONTACTED:
Wallace Mook, P.E., Public Works Director
Michelle Javornik, Public Works Deputy Dir.
Mike Spurrier, Lead Equipment Operator

RE: Wastewater Collection System Inspection

INSPECTOR: James T. Sievers



DATE: 6/9/10

REVIEWER: Dennis Ostwinkle

DATE:

DISTRIBUTION: FIELD OFFICE: CENTRAL OFFICE: INSPECTED FACILITY

General Information:

I met with the three public works officials listed above and talked with them about the Bettendorf wastewater collection system. Bettendorf does not have its own treatment facility but the city owns 20% of the wastewater treatment facility located in Davenport. All wastewater from Bettendorf is treated at the plant in Davenport. The City of Bettendorf owns and maintains the collection system in Bettendorf. The population is approximately 32,000 people. The service area is 22.5 square miles. There are approximately 12,500 residential service connections, 800 commercial service connections, and six industrial service connections. There are approximately 980,000 lineal feet of gravity sewer, one mile of force main, 4400 manholes, and four pump stations.

Collection System Maintenance Program:

The city has 2 vacuum trucks and sewer jetting/cleaning equipment. The city also owns sewer televising equipment. City employees cleaned 187,000 feet of sanitary sewer lines in 2009. The goal is to clean approximately 40% of the sewer system each year. The city also has a system in place to receive calls and respond to basement backups.

Lift Stations:

The lift stations were not observed during this inspection. Mr. Spurrier stated that city employees routinely inspect the lift stations. There have been no bypasses reported from any of the lift stations. None of the lift stations have back up power. Mr. Spurrier stated that in the event of a power outage the vacuum truck could be used to pump out the wet wells to prevent overflows. The city may be a purchasing a portable emergency generator.

Inflow/Infiltration (I/I) Investigations:

In 2008 the city hired Stanley Consultants to develop and implement a comprehensive study for identifying defects in sanitary sewer pipes and manholes that may be contributing excess I/I to the sanitary sewer system. The first step in the study was to conduct city-wide flow monitoring. The flow monitoring was conducted in late summer and early fall of 2008. The findings revealed that about 21% of the total inflow measured during the flow monitoring study was inflow entering directly through manhole defects. Stanley issued a report on this study in 2009. The report stated that the inflow was excessive and should be eliminated. The city is now planning to eliminate these defects to reduce inflow in the manholes. The city is planning on doing additional investigations this year by smoke testing and televising certain areas in the collection system.

Wet Weather Pumping:

The treatment plant has to restrict influent flow when flows approach 45 million gallons per day because flows that exceed that amount can damage equipment at the plant. When this occurs sewage backs up into the collection system. In Bettendorf the sewage rises into manholes and backs up into basements, according to city officials. In order to prevent basement backups, the city pumps wastewater out of manholes with large, portable pumps. The pumps were observed during this inspection and are set up at 13th and Gilbert, east of Interstate 74 near the levee, and 21st Street pump station (east of the Isle of Capri casino). The wastewater is pumped out of the sanitary sewer and into a storm sewer system that discharges to the Mississippi River. Photographs of the pumps are attached to this report. Listed below are the dates during 2009 when pumping occurred and the volume of wastewater pumped:

<u>DATE(S)</u>	<u>VOLUME PUMPED (in million gallons)</u>
03/8-11	22.7
04/25-28	10.8
04/30-05/01	8.3
05/15-16	1.8
06/18	1.4
07/10-11	8.5
07/25	0.8
08/8-9	2.6
08/17	4.8
10/30	5.6

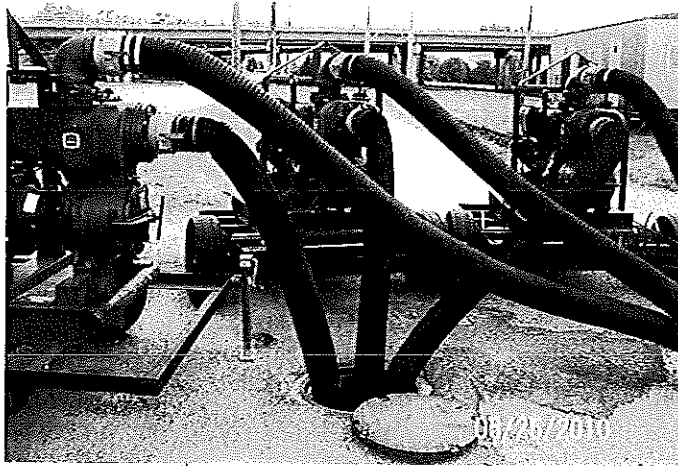
SUMMARY

The City of Bettendorf has a good preventive maintenance plan for the sewer system. The city is also continuing to identify defects in the collection system and make repairs as needed. However, the city does not have a permit to pump wastewater out of the sanitary sewer system and into the storm sewer. Section 455B.186, Iowa Code and Subrule 567 IAC 62.1(1) prohibit the discharge of any pollutant which is not authorized by an NPDES permit.

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PHOTOGRAPHS OF PORTABLE PUMPS LOCATED AT THREE LOCATIONS IN BETTENDORF



Three pumps at 13th and Gilbert



Three pumps east of Interstate 74 bridge near the levee



Two pumps east of the Isle of Capri Casino near the 21st St. pump station

It should be noted that the pumps were not in operation at the time of this inspection. Mr. Spurrier stated that the pumps are left in place so that pumping can begin as soon as wastewater begins backing up into the collection system.