



1202 Musser Street  
Muscatine, IA 52761-1645  
(563) 263-2752  
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**WATER & RESOURCE RECOVERY FACILITY**

**MEMORANDUM**

To: Gregg Mandsager, City Administrator

CC: Nancy Lueck, Finance Director  
Cinda Hilger, Secretary

From: Jon Koch, WRRF Director

Date: November 6, 2018

Re: Papoose Line DNR Consent Order

**INTRODUCTION:** The Iowa Department of Natural Resources (IDNR) has filed an Administrative Consent Order (Order) against the City of Muscatine (City) for violations of its National Pollutant Discharge Elimination System (NPDES) permit. This Order stems from the October 2017 discovery of a leak in the Papoose Lift Station (Station) force main to the Water and Resource Recovery Facility (WRRF). This Order directs the City to pay a penalty of \$10,000 and construct a redundant line for the Station by December 31, 2023.

**BACKGROUND:** On October 30, 2017, the City was notified by Muscatine Power and Water (MPW) of a leak near the intersection of Day and Nebraska Streets. It was apparent by color and odor that it was not a drinking water main leak and was later confirmed by lab testing. Excavation began October 31 once locates and equipment were procured. The water was filling the hole dug quickly and the Station was shut down to allow for inspection of the line. This caused a Combined Sewer Overflow to occur at the Station.

It was eventually determined that there was at least a four-foot-long rip in the bottom of the pipe near the leak location. Excavation in the area was difficult as it was sandy soil and dangerous for workers. It was also located directly below a 16" water main that MPW was not confident they could safely isolate. The rip was extensive and while short term banding may have been successful it was not guaranteed and with the age of the pipe (1963 installation) the integrity could not be verified for the entire length in question. The decision was made by City staff to run a new line through the existing to ensure the best and longest lasting outcome. IDNR concurred that this was the best course of action. Through many difficulties in equipment and pipe deliveries, installation was not completed until February 12, 2018.

The IDNR considered the factors surrounding the discharge from the Station and came to the legal conclusion that the City should be assessed a \$5,000.00 penalty for the gravity of the violation and \$5,000.00 for culpability for failure “to address impending infrastructure problem until a failure occurred”. It has also ordered that the City “shall complete construction of a redundant line” between the Station and the WRRF.

The City attorney has advised that the City may be able to negotiate a lower penalty by hiring engineering and legal experts but would more than likely eat up any savings in the fees for these professionals. The City had already stated that they were committed to installing a redundant line in the next five years.

**RECOMMENDATION/RATIONALE:** Staff recommends paying the \$10,000.00 penalty and agreeing to install the redundant line by December 31, 2023. There does not seem to be any savings in hiring experts to fight this injunction.

**BACKGROUND:**

1. IDNR Administrative Consent Order No. 2018-WW-



October 22, 2018

City of Muscatine  
Attn: Mayor Diana Broderson  
215 Sycamore Street  
Muscatine, IA 52761

Dear Mayor Broderson,

In late 2017, the City of Muscatine reported to DNR Field Office 6 that a force main was leaking between the Papoose Lift Station and the water pollution control facility. This broken force main, and delays associated with its repair, resulted in untreated wastewater being discharged to the Mississippi River for approximately three months. Muscatine's wastewater discharge permit requires that its wastewater facilities be maintained in good working order. Field Office 6 has referred this matter to me for enforcement.

I propose that we settle this matter consensually. Enclosed with this letter is a proposed administrative consent order. By signing the consent order, you agree to the payment of an administrative penalty and to take action to prevent unauthorized discharges to waters of the state in the future. Please review the enclosed consent order and consult an attorney, if you wish. Please sign and return the document to me, or otherwise contact me to discuss your intentions, **by November 15, 2018**. Please contact me at the phone number or email address below if you have any questions or would like to discuss this matter further.

John Crotty  
Attorney, Iowa Department of Natural Resources  
502 E. 9<sup>th</sup> Street  
Des Moines, IA 50319

Phone: 515-725-8249  
Email: john.crotty@dnr.iowa.gov

Copy:  
Jon Koch  
Water Pollution Control Director  
1202 Musser Street  
Muscatine, IA 52761

**IOWA DEPARTMENT OF NATURAL RESOURCES  
ADMINISTRATIVE CONSENT ORDER**

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**IN THE MATTER OF:**

**CITY OF MUSCATINE  
NPDES Permit #7048001**

**ADMINISTRATIVE CONSENT ORDER  
NO. 2018-WW-**

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**TO:** City of Muscatine  
Water Pollution Control Dept.  
1202 Musser Street  
Muscatine, IA 52761-1645

This administrative consent order (“Order”) is entered into between the City of Muscatine (“Muscatine”) and the Iowa Department of Natural Resources (“DNR”) for the purpose of resolving violations of Muscatine’s National Pollutant Discharge Elimination System (“NPDES”) permit. In the interest of avoiding litigation, the parties have agreed to the provisions below.

Any questions regarding this Order should be directed to:

**Relating to technical requirements:**

Terry Jones  
Field Office 6  
Iowa Department of Natural Resources  
1023 W Madison Street  
Washington, IA 52353  
Ph. 319-653-2135

**Relating to legal requirements:**

John Crotty  
Legal Services Bureau  
Iowa Department of Natural Resources  
502 E. 9<sup>th</sup> Street  
Des Moines, Iowa 50319-0034  
Ph. 515-725-8249

**Payment of penalty to:**

Iowa Department of Natural Resources  
502 E. 9<sup>th</sup> Street  
Des Moines, IA 50319

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**II. JURISDICTION**

This Order is issued pursuant to Iowa Code section 455B.175(1), which authorizes the Director to issue any order necessary to secure compliance with or prevent a violation of Iowa Code chapter 455B, Division III, Part 1 and the rules adopted or permits issued pursuant thereto and Iowa Code section 455B.109 and 567 Iowa Administrative Code (“IAC”) chapter 10, which authorize the Director to assess administrative penalties.

**III. STATEMENT OF FACTS**

1. Muscatine’s Water Pollution Control Plant (“WPCP”) is permitted to treat an average of 5.15 million gallons of wastewater per day. Approximately three million gallons per day of this total pass through the Papoose Lift Station.
2. From the Papoose Lift Station, wastewater flows through a force main approximately 1.5 miles to the headworks of the WPCP. Muscatine has no redundant line which can convey wastewater from the lift station to the WPCP in the event of a major leak in the force main between the two facilities. In the event of such a leak, Muscatine must discharge untreated wastewater from the lift station to the Mississippi River until the leak can be repaired.
3. The force main which conveys wastewater from the lift station to the WPCP was originally installed in 1963. In the 1990s, Muscatine replaced a portion of the original force main due to corrosion problems. During this repair, Muscatine televised a portion of the remaining original force main to inspect it for additional corrosion. Based on this partial inspection of the remaining original force main, Muscatine determined that no further replacement of the original force main was required. Muscatine conducted no further televising of the force main until a leak occurred on October 30, 2017.
4. Muscatine promptly reported the October 30, 2017 leak to DNR and worked diligently to pinpoint its exact location. On October 31, 2017, Muscatine began discharging untreated wastewater from the Papoose Lift Station to the Mississippi River at a rate of approximately 2,100 gallons per minute.
5. After determining the location and severity of the leak, Muscatine and DNR agreed on a repair plan. Muscatine worked expeditiously to repair the force main. The situation was complicated due to the proximity of the leak to potable water infrastructure, cold weather, and equipment procurement delays that were outside of Muscatine’s control.
6. Muscatine completed repairs and ended the discharge on February 12, 2018. The discharge lasted 104 days and resulted in over 300 million gallons of untreated wastewater being released to the Mississippi River.

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7. Muscatine has reported to DNR that it plans to install a redundant line from the Papoose Lift Station to the WPCP in order to prevent the occurrence of a similar incident in the future.

**IV. CONCLUSIONS OF LAW**

DNR and Muscatine agree that the following Conclusions of Law are applicable to this matter:

1. Iowa Code section 455B.186 prohibits the discharge of pollutants into waters of the state, except for adequately treated pollutants discharged in accordance with rules adopted by the Environmental Protection Commission (“Commission”).
2. Iowa Code section 455B.173(3) authorizes the Commission to promulgate rules relating to the operation of waste disposal systems, the discharge of pollutants into waters of the state, and the issuance of permits to waste disposal systems. The Commission has done so at 567 IAC chapters 60 through 69.
3. 567 IAC subrule 64.3(1) prohibits the operation of a waste disposal system without or contrary to the terms of a permit. Standard Condition number 9 of Muscatine’s NPDES permit provides that all facilities and control systems shall be operated as efficiently as possible and maintained in good working order.
4. The facts stated in Section III constitute violations of Iowa Code section 455B.186 and 567 IAC subrule 64.3(1).

**V. ORDER**

Therefore, DNR orders and Muscatine agrees to do the following:

1. By December 31, 2019, Muscatine shall submit to DNR a comprehensive plan for ongoing, routine evaluation and inspection of the integrity of its wastewater collection system.
2. By December 31, 2023, Muscatine shall complete construction of a redundant line between the Papoose Lift Station and the WPCP.
3. Within 30 days of the date the Acting Director signs this Order, Muscatine shall pay an administrative penalty in the amount of \$10,000.

**VI. PENALTY**

1. Iowa Code section 455B.191 authorizes the assessment of civil penalties of up to \$5,000.00 per day of violation for the violations involved in this matter.

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2. Iowa Code section 455B.109 authorizes the Commission to establish by rule a schedule of civil penalties up to \$10,000 that may be assessed administratively. The Commission has adopted this schedule with procedures and criteria for assessment of penalties at 567 IAC chapter 10. DNR is assessing a penalty of \$10,000 for the violations described above. DNR considered the following factors in the assessment of this penalty:

a. Economic benefit: \$0

Muscatine avoided costs associated with conducting preventive maintenance and inspection on the force main between the Papoose Lift Station and the WPCP. Muscatine also delayed costs associated with replacing the force main. This savings was likely negated, however, due to the higher cost of conducting the replacement under emergency conditions. In addition, due to increasing construction costs, Muscatine will likely spend more installing the redundant line in the coming years than if it had undertaken the project several years ago. DNR assesses no penalty for this factor.

b. Gravity of the violation: \$5,000.00

Muscatine's failure to adequately maintain its wastewater facilities resulted in a discharge of over 300 million gallons of untreated wastewater to the Mississippi River over the course of 104 consecutive days. The environmental impact of the discharge was likely limited due to high flow in the river and the fact that the discharge occurred outside of the recreational season. The sheer volume and duration of the discharge make it a significant violation, however. DNR assesses a penalty of \$2,500.00 for violations of Iowa Code section 455B.186 and \$2,500.00 for violations of 567 IAC subrule 64.3(1) for a total of \$5,000.00 for this factor.

c. Culpability: \$5,000.00

Muscatine has a duty to ensure that its facilities are kept in good working order. Fulfilling this duty requires regular inspections and preventive maintenance. Muscatine knew that there was no redundant line between the Papoose Lift Station and the WPCP, and that a major leak in the force main would necessarily result in a discharge of approximately three million gallons of wastewater per day to the river. Nevertheless, Muscatine neglected to televise portions of the force main since its installation in 1963. Muscatine should have recognized the potential impact of a major leak in the force main and preemptively constructed a redundant line, or conducted frequent inspections so as to learn of a potential problem well in advance of its occurrence. Muscatine failed to address this impending infrastructure problem until a failure occurred. DNR assesses a penalty of \$2,500.00 for violations of Iowa Code section 455B.186 and \$2,500.00 for violations of 567 IAC subrule 64.3(1) for a total of \$5,000.00 for this factor.

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**VII. WAIVER OF APPEAL RIGHTS**

Iowa Code section 455B.175(1) and 561 IAC 7.4(1), as adopted by reference by 567 IAC chapter 7, authorize a written notice of appeal to the Commission. This Order is entered into knowingly by and with the consent of Muscatine. By signing this Order, all rights to appeal this Order are waived.

**VIII. NONCOMPLIANCE**

Compliance with section V of this Order constitutes full satisfaction of all requirements pertaining to the violations described in this Order. Failure to comply with this Order may result in the imposition of administrative penalties pursuant to an administrative order or referral to the Attorney General to obtain injunctive relief and civil penalties pursuant to Iowa Code section 455B.191.

Dated this \_\_\_\_\_ day of

BRUCE TRAUTMAN, ACTING DIRECTOR  
IOWA DEPARTMENT OF NATURAL RESOURCES

\_\_\_\_\_, \_\_\_\_\_

Dated this \_\_\_\_\_ day of

CITY OF MUSCATINE

\_\_\_\_\_, \_\_\_\_\_

