IOWA DEPARTMENT OF NATURAL RESOURCES
ADMINISTRATIVE CONSENT ORDER

IN THE MATTER OF:
City of Grimes, Iowa
NPDES Permit #7736001
Polk County, Iowa

TO: Honorable Mayor, Scott Mikkelsen
City of Grimes
101 North Harvey,
Grimes, IA
50111

I. SUMMARY

This administrative consent order (Order) is entered into between the City of Grimes (City) and the Iowa Department of Natural Resources (Department) for the purpose of addressing discharges of wastewater in violation of its National Pollution Discharge Elimination System (NPDES) permit from its wastewater treatment facility (WWTF).

Any questions regarding this Order should be directed to:

**Relating to technical requirements:**
Tom Atkinson, Environmental Specialist
Senior
DNR Field Office #5
502 E. 9th Street
Des Moines, Iowa 50319
Phone: 515-577-9296

**Relating to legal requirements:**
Carrie Schoenebaum, Attorney for the DNR
Iowa Department of Natural Resources
502 E. 9th Street
Des Moines, Iowa 50319
Phone: 515-444-8165

II. JURISDICTION

This Order is issued pursuant to the provisions of 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 (wastewater) and the
rules adopted or permits issued pursuant to that part; 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

The Department and the City agree to the following statement of facts:

1. The City operates a WWTF located at Section 29, T80N, R25W in Polk County, Iowa. This location is locally known as 1801 North James Street Grimes, Iowa. This WWTF is operated pursuant to NPDES permit No.7736001, which was issued on February 2, 2016 and was amended last on July 1, 2020. This permit is expired; however, a timely renewal application was submitted. Therefore, it has been administratively extended until the new permit is issued. Pursuant to this permit, the City discharges wastewater to Little Beaver Creek which is a tributary to the Des Moines River. This NPDES permit contains effluent limits for numerous parameters, which include the following: Carbonaceous Biochemical Oxygen Demand five day (CBOD5), total suspended solids (TSS), ammonia nitrogen (as N), nitrate nitrogen (as N), acute toxicity ceriodaphnia and pimephales, dissolved oxygen, potential hydrogen (pH) and Escherichia Coli (E. coli). The NPDES permit also contains a compliance schedule to allow the WWTF time to comply with the final E. coli limits which were effective March 1, 2022.

2. On October 23, 2019, the Department conducted an inspection of the City’s WWTF. During this inspection the Department reviewed self-monitoring reports and discharge monthly reports (DMUs). During this investigation NPDES permit effluent violations were documented and are presented in the below table. The below table contains all NPDES effluent violations to date:
IOWA DEPARTMENT OF NATURAL RESOURCES
ADMINISTRATIVE CONSENT ORDER
ISSUED TO: The City of Grimes

Effluent Limit Violations 7/1/2019 - 3/31/2022

GRIMES, CITY OF STP - 7736001

<table>
<thead>
<tr>
<th>Outfall: 001</th>
<th>AVERAGE - LBS/DAY</th>
<th>DAILY MAXIMUM - LBS/DAY</th>
<th>AVERAGE - MG/L</th>
<th>DAILY MAXIMUM - MG/L</th>
<th>DAILY MINIMUM - MG/L</th>
<th>DAILY MAXIMUM - NO TOXICITY</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Limit</td>
<td>DMR</td>
<td>Limit</td>
<td>DMR</td>
<td>Limit</td>
<td>DMR</td>
</tr>
<tr>
<td>7/2019</td>
<td>NH3-N</td>
<td>19.2</td>
<td>85.017126</td>
<td>51</td>
<td>166.25039</td>
<td>1.1</td>
</tr>
<tr>
<td>8/2019</td>
<td>NH3-N</td>
<td>17.5</td>
<td>27.326016</td>
<td>6</td>
<td>1</td>
<td>1.7156</td>
</tr>
<tr>
<td>9/2019</td>
<td>DO</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10/2019</td>
<td>DO</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5/2020</td>
<td>NH3-N</td>
<td>32.6</td>
<td>100.53880</td>
<td>42</td>
<td>59</td>
<td>285.3948</td>
</tr>
<tr>
<td>6/2020</td>
<td>NH3-N</td>
<td>23.9</td>
<td>221.51168</td>
<td>89</td>
<td>59</td>
<td>280.48254</td>
</tr>
<tr>
<td>7/2020</td>
<td>NH3-N</td>
<td>19.2</td>
<td>116.33030</td>
<td>46</td>
<td>51</td>
<td>238.09032</td>
</tr>
<tr>
<td>8/2020</td>
<td>NH3-N</td>
<td>17.5</td>
<td>35.503936</td>
<td>51</td>
<td>62.82522</td>
<td>1</td>
</tr>
<tr>
<td>9/2020</td>
<td>NH3-N</td>
<td>26.3</td>
<td>73.946392</td>
<td>2</td>
<td>59</td>
<td>173.19244</td>
</tr>
<tr>
<td></td>
<td>DO</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11/2020</td>
<td>NH3-N</td>
<td>33</td>
<td>56.522265</td>
<td>59</td>
<td>94.2837</td>
<td>2.8</td>
</tr>
<tr>
<td></td>
<td>DO</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12/2020</td>
<td>NH3-N</td>
<td>33</td>
<td>58.152818</td>
<td>4</td>
<td>59</td>
<td>169.91916</td>
</tr>
<tr>
<td>Date</td>
<td>DO</td>
<td>Substance</td>
<td>Sample Size</td>
<td>Concentration</td>
<td>Unit</td>
<td>Value</td>
</tr>
<tr>
<td>--------</td>
<td>-----</td>
<td>-----------</td>
<td>-------------</td>
<td>---------------</td>
<td>------</td>
<td>-------------</td>
</tr>
<tr>
<td>1/2021</td>
<td>NH3-N</td>
<td>70</td>
<td>5</td>
<td>71.295949</td>
<td></td>
<td>128.54275</td>
</tr>
<tr>
<td>2/2022</td>
<td>NH3-N</td>
<td>70</td>
<td>124</td>
<td>297.65</td>
<td>5</td>
<td>5.88</td>
</tr>
<tr>
<td>3/2022</td>
<td>TSS</td>
<td>533</td>
<td>799</td>
<td>4153.32</td>
<td>30</td>
<td>64.87</td>
</tr>
<tr>
<td></td>
<td>E. coli</td>
<td>126</td>
<td>45</td>
<td>7960.5</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
3. On January 21, 2020, a letter of non-compliance was sent to the City of Grimes. Included with this letter was a copy of the above-referenced inspection report, a summary of the law, and the recommended corrective action.

4. On July 16, 2021, the Department conducted an inspection of the City's WWTF. During this inspection the Department reviewed self-monitoring reports and discharge monitoring reports (DMRs). During this investigation NPDES permit effluent violations were documented and are presented in the above table.

The Department also documented that the City was working through the design and construction of WWTF modifications to meet the compliance schedule contained in its NPDES permit for E. coli. It was documented that the City's plans have changed and that it now intends to connect to the Des Moines Metropolitan Wastewater Reclamation Authority (WRA) and eliminate its direct discharge.

5. On September 28, 2021, the Department received a complaint alleging strong odor and cloudy water in Little Beaver Creek. Upon receipt of this complaint the Department went to the site to investigate. Once on site the Department observed and/or documented that the discharge from the City's outfall 001 (outfall) was fairly clear because it was aerated over rocks at the discharge location. However, when the discharge entered the receiving stream the water turned gray and milky within approximately 50 yards of outfall. At this location the water was pooled and stagnant. Staff from the WRA collected water samples which indicated that the dissolved oxygen levels decreased rapidly moving downhill from the outfall. At the location of a trail bridge approximately 650 feet downstream of the outfall the dissolved oxygen levels in the stream were near 0 mg/l. Evidence of "sewer fungus" (Sphaerotilus natans) was observed downstream of the outfall to east of the Highway 141 bridge. Gray to black deposits were observed at multiple locations along the stream and red worms were also observed at various locations. These observations indicate poor water quality.

6. On September 29, 2021, the Department returned to the location of the outfall to conduct a follow-up investigation. The Department documented that a rain event had occurred which improved the water clarity and increased the dissolved oxygen levels in Little Beaver Creek. The Department also documented that the odor had dissipated but was still present.

7. On October 13, 2021, the Department sent the City a Notice of Violation (NOV) for the violations documented on July 16, 2021, and September 28, 2021. Included with this NOV was a copy of the inspection report, a summary of the law and the recommended corrective actions.

8. On October 20, 2021, the City's WWTF staff requested that the Department authorize the addition of hydrogen peroxide to the raw wastewater entering the facility to reduce odor generation and add oxygen to the waste stream. This request was approved by the
Department on October 20, 2021, and in early December 2021 the City began adding hydrogen peroxide.

9. Beginning on December 6, 2021, the City's consulting engineer (Veenstra and Kimm) submitted construction permit applications to the Department for the projects necessary to complete the connection the WRA. The Department issued construction permits for the following contracts on the following dates: Contract 1, December 6, 2021; Contract 2, February 2, 2022; Contract 3, February 4, 2022; and Contract 4, February 8, 2022.

10. On January 21, 2022, the Department authorized the addition of plastic media to one of the City's aeration basins to attempt to enhance the treatment plant efficiency.

11. During the week of February 4, 2022, the City added plastic media to one of the aeration basins to create a moving bed bioreactor. The modification was intended to enhance the treatment efficiency of the WWTF.

12. On March 1, 2022, the compliance schedule in the NPDES permit required compliance with the final E. coli effluent limits.

IV. CONCLUSIONS OF LAW

The Department and the City agree that the following conclusions of law are applicable in this case:

1. Iowa Code section 455B.186 prohibits the discharge of pollutants into waters of the state, except for adequately treated pollutants discharged pursuant to a permit. The above stated facts demonstrate noncompliance with this provision of law.

2. Iowa Code section 455B.173(3) authorizes and requires the Environmental Protection Commission (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 60 through 69. 567 IAC 64.3(1) prohibits the operation of a waste disposal system without or contrary to the terms of a permit. 567 IAC 64.6 specifies the conditions that are to be included in a permit, including applicable effluent limitations as established in Chapters 61 and 62 of the rules. The above stated facts demonstrate noncompliance with these provisions.

3. 567 IAC 61.3(2)“c” and “e” state:

c. Such waters shall be free from materials attributable to wastewater discharges or agricultural practices producing objectional color, odor or other aesthetically objectional conditions. [and]
e. Such waters shall be free from substances, attributable to wastewater discharges or agricultural practices, in quantities which would produce undesirable or nuisance aquatic life.

The above stated facts demonstrate noncompliance with these provisions of law.

V. ORDER

By the execution of this Order, the Department orders and the City agrees to do the following:

1. By June 1, 2022, update the City’s website regarding the intent to connect to the WRA, the timeline associated with the connection to the WRA, and information related to any mitigating efforts that have been completed by the City;
2. By July 1, 2022, develop and submit a plan for limiting new loadings to the treatment plant until it is connected to the WRA;
3. By December 31, 2022, conduct an Industrial Waste Survey to identify industrial contributions that may be inhibiting the treatment process;
4. By September 30, 2024, eliminate the discharge from the City’s WWTF to Little Beaver Creek by connecting to the WRA;
5. Every three months (July, October, January, and April) until the connection to the WRA is complete, submit a quarterly report detailing progress made towards complying with this Order; and
6. Pay a penalty in the amount of $9,000.00 within 30 days of the date the Director signs this Order.

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.

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. Pursuant to this chapter, the Department has determined that the most effective and efficient means of addressing the above-cited violations is the issuance of an administrative order with an administrative penalty. The administrative penalty is determined as follows:
IOWA DEPARTMENT OF NATURAL RESOURCES  
ADMINISTRATIVE CONSENT ORDER  
 ISSUED TO: The City of Grimes  

a. Economic Benefit. 567 IAC chapter 10 requires that the Department consider the costs saved or likely to be saved by noncompliance. 567 IAC 10.2(1) states that “where the violator received an economic benefit through the violation or by not taking timely compliance or corrective measures, the department shall take enforcement action which includes penalties which at least offset the economic benefit.” 567 IAC 10.2(1) further states, “reasonable estimates of economic benefit should be made where clear data are not available.” An economic benefit was obtained by the City by delaying the cost of upgrading its WWTF. The economic benefit is estimated to be substantially higher then the amount the Department can collect via an administrative consent order. Each day the City has delayed upgrades to its WWTF thousands of dollars are saved. However, in light of the administrative penalty cap $3,000.00 is assessed for this factor.

b. Gravity of the Violation. One of the factors to be considered in determining the gravity of a violation is the amount of penalty authorized by the Iowa Code for the type of violation. As indicated above, substantial civil penalties are authorized by statute. Failure to comply with an NPDES permit degrades water quality. Degradation of Iowa’s waterways is a serious problem. Degraded water quality harms aquatic life, prevents the attainment of state water quality goals, and causes a decline in the quality of life generally. Further, noncompliance with an NPDES permit thwarts the integrity of the NPDES permit and water quality program. Therefore, the amount of $3,000.00 is assessed for this factor.

c. Culpability. The City operates a WWTF. This is a highly regulated activity and therefore the City has an obligation to be aware of the applicable regulations and comply with those regulations. The City was issued an NPDES permit and on multiple occasions the Department communicated the need to comply with that permit. Nevertheless, the permit was not complied with and illegal discharges have occurred. Therefore, the amount of $3,000.00 is assessed for this factor.

VII. WAIVER OF APPEAL RIGHTS

This Order is entered into knowingly by and with the consent of the City. For that reason, it waives its right to appeal this Order or any part thereof.

III. 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.

On behalf of the City of Grimes  
Scott Mikkelsen  

Dated this 24 day of
IOWA DEPARTMENT OF NATURAL RESOURCES
ADMINISTRATIVE CONSENT ORDER
ISSUED TO: The City of Grimes

Digitally signed by Kayla Lyon
Date: 2022.05.26 09:33:44
-05'00'

Kayla Lyon, DIRECTOR
Iowa Department of Natural Resources

NPDES #9926001; Field Office #2; Carrie Schoenebaum; EPA; Water Quality Bureau; I.B.2.o.C.1