

IOWA DEPARTMENT OF NATURAL RESOURCES

ADMINISTRATIVE ORDER

IN THE MATTER OF: CITY OF BONDURANT Wastewater Facility No. 06-77-17-0-01	ADMINISTRATIVE ORDER NO. 2010-WW-02
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TO: City of Bondurant
c/o Honorable Mayor and Council
200 2nd Street NE, P.O. Box 37
Bondurant, Iowa 50035

I. SUMMARY

This administrative order (order) requires the City of Bondurant (City) to comply with the schedule contained in this administrative order and to pay an administrative penalty in the amount of \$10,000.00. The order provides for connection to the Des Moines Metropolitan Wastewater Reclamation Authority (WRA).

Any questions regarding this order should be directed to:

Relating to technical requirements:

James Stricker, Supervisor
IDNR Field Office No. 5
407 S.W. 7th, Suite M
Des Moines, IA 50309
Ph: 515/725-0268

Relating to legal requirements:

Diana Hansen, Attorney at Law
Iowa Department of Natural Resources
502 East 9th Street
Des Moines, Iowa 50319-0034
Ph: 515/281-6267

Payment of Penalty to:

Iowa Department of
Natural Resources
502 East 9th Street
Des Moines, Iowa 50319-0034

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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 promulgated 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. The City owns and operates Wastewater Facility No. 06-77-17-0-01, located in Polk County, Iowa. Wastewater treatment is provided by a four-cell aerated lagoon system providing 10.6 total surface acres. The lagoon system was constructed in 1985. The total retention time for the system is 45.7 days. Cell nos. 1, 2 and 3 are aerated, while cell no. 4 is quiescent. Although there is a chlorine contact chamber after cell no. 4, the chlorination equipment has been removed. Effluent disinfection is not used or required.

The collection system has six lift stations. The lift station located at the lagoon conveys wastewater into cell no. 1 and serves the old part of the City, Reeks Development, and Adams Development. This lift station is equipped with three 15-hp pumps, which operate individually on an as needed basis. The lift station located at 2nd Street NE serves Paine Heights. A second lift station located at Grant Street South serves Middle Brook. Both of these lift stations are equipped with two pumps. A newer lift station is located at NE 62nd Street to serve a 500 lot modular home park and a truck stop, which is closed. Mallard Pointe lift station serves an 80 home development on the northwest part of town and the Cove lift station serves another newer residential development on the east side of Highway 65. There are no bypasses in the collection system.

2. The inspection conducted for the City's wastewater treatment facility (WWTF) on August 14, 2001 documented permit effluent limit violations for ammonia nitrogen and CBOD5. The July 12, 2002 inspection documented ammonia nitrogen effluent limit violations. The 2003 and 2004 inspections did not indicate any effluent limit violations.

3. On March 17, 2005 the Department issued the City a notice of violation for exceeding the 30 day average concentration limit for CBOD5 for February 2005. The City responded that it appeared that the violation was due to broken air lines in the aeration system that occurred during the winter months. The City was waiting for the ice to recede to repair the air lines. On April 4, 2005 the City sent a letter stating that a diver had made the necessary repairs to five large air lines in the wastewater lagoon. The Field Office No. 5 investigator noted that during a visit on April 20, 2005, he observed an inadequate aeration pattern in the first three of the four aerated cells. He also observed some leaks in the aeration lines in cell no. 3.

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4. Field Office No. 5 staff conducted a site visit on October 13, 2005. The inspector observed green effluent, broken or plugged air lines in three aerated cells, unlocked lagoon control structures, and standing water on the lift station floor. The inspector also observed deficiencies that included no warning signs on the perimeter fence, an unlocked facility gate, and an unlocked and open sampling house door.

5. On February 21, 2006 Field Office No. 5 staff inspected this facility. The inspection report cited minimum pH limit violations for January and February 2005, 30 day average CBOD5 violations for February 2005 and January 2006, and 7 day average CBOD5 violations for November 2005 and January 2006. The inspection report required the City to submit a facility plan by December 31, 2006 addressing interim measures that the City would take to ensure consistent compliance with the NPDES permit limitations. During the interval between February and December 2006 the City was required to implement certain measures to achieve compliance. These measures included adding a bacterial feeder system, performing representative sludge depth readings in the aerated cells, replacing all air lines in the three aerated cells and adding an additional 15 lines in cells 2 and 3. The City was required to install an influent flow measuring device.

6. By letters dated April 11 and 12, 2006 the City informed the field office that a bacteria feeder system and an influent flow meter had been installed. On April 26, 2006 the field office notified the City that it exceeded the thirty day average concentration limit for CBOD5 for March 2006.

7. The field office received two complaints of terrible lagoon odors on April 26, 2006. When contacted about the complaints the City administrator and wastewater superintendent stated the City would add sodium nitrate and discharge more wastewater. A May 3, 2006 letter from the City stated that the City was aware of the lagoon odor problem and had taken steps to improve lagoon operation. The letter stated that the City was making plans to remove sludge from the lagoons later in 2006 and had located a farmer to apply and incorporate sludge following the crop harvest. The letter stated that the City intended to replace all air lines after the sludge was removed from the lagoons.

8. By a letter dated August 21, 2006 the City contacted the field office concerning the need to develop a facility plan for the wastewater treatment plant. The City's letter stated the City had begun the process of replacing the air lines in lagoon cell no. 3, that sludge would be removed in cells nos. 1 and 3 by October 2006, and that new air lines would be installed. The City had begun work on selecting an engineer to design the Mud Creek sewer connection to the Des Moines Metropolitan Wastewater Reclamation Authority (WRA). While no formal construction schedule had been set, the City anticipated completion of construction in 2008.

9. By a letter dated September 4, 2006 the City informed the field office that it had replaced the air line in cell no. 3 on August 15, 2006. The field office inspector conducted an unannounced visit to the WWTF on September 25, 2006. The inspector

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noted that there were two significant leaks in cell no. 2 air lines along with little aeration and that cell no. 1 had a leak also. The inspector transmitted these comments and sample results to the City on October 25, 2006.

10. Field Office No. 5 conducted inspections of this facility on November 6 and December 26, 2006. The inspection report and cover letter were sent to the City on January 4, 2007. The inspection report determined that the influent CBOD5 load to the treatment plant exceeded the treatment plant design capacity. The report cited the City for 30 day average concentration CBOD5 effluent limit violations for February and March 2006 and a 7 day average concentration CBOD5 violation for March 2006. The report also stated that there had been 30 day average and daily maximum ammonia nitrogen violations for the months of April, May, July and August, 2006. The inspection report stated that the facility plan that was due by December 31, 2006 had not been received. The report noted that although NutriJect began sludge removal the third week of December, only 15 percent of lagoon cell no. 1 had been completed. The report requested that the City contact the field office to set up a meeting to discuss effluent violations and steps that would be needed to return to compliance with the NPDES permit.

11. City officials and the City's consulting engineer met with Department staff on January 11, 2007 concerning the City's plan to return to compliance. As a follow-up to that meeting and the January 4, 2007 inspection of the City's WWTF, the City's engineering consultant sent the City a February 16, 2007 letter that evaluated the City's lagoon system and provided the design calculations that the field office requested in a January 16, 2007 letter to the City. The City's engineering consultant provided the City an update to the January 16, 2007 letter by a letter dated October 12, 2007. The updated letter provided an update of the earlier evaluation based on projected population growth through 2010.

During the January 11, 2007 meeting the Department and the City agreed that the City would construct a stream gauge on Mud Creek to allow the discharge of increased flow above 1 cfs, in conjunction with the variable ammonia nitrogen limitations in the City's NPDES permit. The City administrator informed the Department that this stream gauge had been installed and was operational on October 12, 2007.

12. The City's WWTF experienced 30 day average concentration violations for CBOD5 for the months of February 2005, January 2006, February 2006, and March 2006. The thirty day average in the permit for CBOD5 is 25 mg/L. Violations ranged from 28 mg/L in March 2006 to 46 mg/L in January 2006. For 2007 the City's WWTF had 30 day average concentration violations for CBOD5 for the months of January, February and March with values of 26.26 mg/L, 36.25 mg/L, and 30 mg/L. There was also a 30 day average mass violation for CBOD5 for the month of March 2007.

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The City had 30 day average concentration violations for CBOD5 for the months of February and March 2008 with values of 38.00 mg/L and 36.50 mg/L. There were seven day average CBOD5 concentration violations for the same months. Through May 31, 2009 the City has not experienced CBOD5 violations.

The City's WWTF experienced 30 day average mass violations for ammonia nitrogen for the months of April, May, July and August 2006. The violations exceeded the permit limits by 0.5 lb. for April 2006 to 7.5 lb for May 2006. In November 2006 the WWTF experienced a daily maximum mass violation for ammonia nitrogen.

The design capacity for this WWTF is 643 lb/day for the 30 day average and the daily maximum effluent limits. Influent loadings to the WWTF indicate that the design capacity was exceeded for the months of May 2006, July 2006, October 2006, November 2006, December 2006, and January 2007. The daily maximum design loading was exceeded in May 2006 through February 2007, April 2007, May 2007, July 2007, August 2007, September 2007, December 2007, January 2008, May 2008, June 2008, July August 2008, September 2008, October 2008, December 2008, and March 2009. Receipt of influent loadings in excess of the design basis for a WWTF is a violation of Standard Condition No. 8 of the permit requiring proper operation and maintenance of the lagoon system.

13. A meeting was held with city officials on May 12, 2008. At the meeting the Department discussed effluent violations at the City's WWTF, especially in the winter months. Interim measures that might eliminate or reduce such violations were discussed. Also discussed were the City's plans for connection to the Des Moines Metropolitan Wastewater Reclamation Authority (WRA). Department staff was informed that the WRA planned to begin connection to the City of Bondurant in 2012 and complete the connection in mid 2013.

14. The City's engineer requested and received a wastewater construction permit from the Department's Wastewater Construction Permits Section staff on October 9, 2008. The permit was issued for a wastewater lagoon floating baffle curtain for cell number 1 of the City's aerated lagoon system. The baffle curtain was intended to limit the short circuiting of flow. Following taking that action the City did not experience CBOD5 violations in the winter months of January through March 2009 as occurred in prior years.

IV. CONCLUSIONS OF LAW

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. Iowa Code section 455B.183 prohibits the operation of a wastewater disposal system without a permit from the Department.

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2. Iowa Code section 455B.173 authorizes and requires the Environmental Protection Commission (Commission) to promulgate rules relating to the operation of waste disposal systems, including rules relating to monitoring and reporting requirements. The Commission has done so at 567 IAC chapters 60- 64. Subrule 64.3(1) prohibits the operation of a waste disposal system without or contrary to the terms of a permit. Rule 64.7 specifies the conditions that are to be included in a permit, including applicable effluent limitations in chapters 61 and 62 of the rules. The facts noted above indicate violations of the permit effluent limit violations and the above-cited rules.

3. This facility's NPDES permit requires these facilities to be adequately operated and maintained. Standard Condition 8 of the permit provides that all facilities and control systems shall be operated as efficiently as possible and maintained in good working order. This standard permit condition is based upon subrule 64.7(5)"f". This subrule states "the permittee at all times shall maintain in good working order and operate as efficiently as possible any facilities or systems of control to achieve compliance with the terms and conditions of the permit." The facts set forth previously establish that the City has not complied with the operation and maintenance requirement of the permit and Department rules.

V. ORDER

THEREFORE, the Department orders the City to comply with the following provisions in order to cease, abate, and redress the above-cited violations:

1. The City is required to begin connection to the Des Moines Metropolitan Wastewater Reclamation Authority (WRA) and complete connection to the WRA by December 31, 2013.
2. In the interim period until the connection to the WRA is complete, the City is required to properly operate and adequately maintain its existing wastewater treatment facilities.
3. An administrative penalty of \$10,000.00 is assessed and is due within sixty days after receipt of 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. More serious criminal sanctions are also available pursuant to that provision.

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2. Iowa Code section 455B.109 authorizes the Commission to establish by rule a schedule of civil penalties up to \$10,000.00, which may be assessed administratively. The Commission has adopted this schedule with procedures and criteria for assessment of penalties in 567 IAC chapter 10. Pursuant to these rules, the Department has determined that the most effective and efficient means of addressing the above-cited violations is the issuance of an administrative consent order with an administrative penalty for past violations of the compliance schedule in this order. The administrative penalty is calculated as follows.

a. Economic Benefit. The City saved approximately \$1,000.00 per month for additional power costs by not operating additional blowers so it could comply with effluent limits. Use of additional blowers may have allowed the facility to comply with effluent limits. Other cost savings were realized in not making timely equipment repairs and delayed maintenance. The amount of \$5,000.00 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. Maintaining compliance with pollution control standards and the effluent limits and conditions in NPDES permits is a program priority in the water quality area for federal and state pollution control agencies. For these reasons, \$2,500.00 is assessed for this factor, in view of multiple violations.

c. Culpability. The City failed to comply with the effluent limits and the proper operation and maintenance condition of its NPDES permit. Through the issuance and receipt of the permit and inspection reports and letters noting permit violations, the City was on notice concerning the permit terms and conditions that it was required to meet. The amount of \$2,500.00 is assessed for this factor, due to multiple violations.

VII. APPEAL RIGHTS

Pursuant to Iowa Code section 455B.175(1), and 561 IAC chapter 7, as adopted by reference by 567 IAC chapter 7, a written notice of appeal to the Commission may be filed within 30 days of receipt of this order. The notice of appeal should be filed with the Director of the Department, and must identify the specific portion or portions of this order being appealed and include a short and plain statement of the reasons for appeal. A contested case hearing will then be commenced pursuant to Iowa Code chapter 17A and 561 IAC chapter 7.

VIII. NONCOMPLIANCE

Compliance with section "V. Order" constitutes full satisfaction of all requirements pertaining to the violations described in this order. Failure to comply with this order may

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result in the imposition of further administrative penalties or referral to the Attorney General to obtain injunctive relief and civil penalties under Iowa Code section 455B.191.



RICHARD A. LEOPOLD, DIRECTOR
IOWA DEPARTMENT OF NATURAL RESOURCES

Dated this 19 day of
Feb, 2010

City of Bondurant- Wastewater Facility No. 06-77-17-0-01- Copy to Central Office
Wastewater Records File, James Stricker- Field Office No. 5, Diana Hansen- Legal
Services, I.B.2.c. and I.B.2.d.