IOWA DEPARTMENT OF NATURAL RESOURCES ADMINISTRATIVE CONSENT ORDER

IN THE MATTER OF:

BERNARD BAKKER

Lyon County Iowa AFO #62058 ADMINISTRATIVE CONSENT ORDER NO. 2022-AFO- 24

TO: Bernard Bakker

2096 Elmwood Avenue Alvord, Iowa 51230

I. SUMMARY

This administrative consent order is entered into between the Iowa Department of Natural Resources (DNR) and Bernard Bakker for the purpose of resolving water quality violations and a fish kill resulting from a manure discharge from a manure irrigation malfunction in Lyon County. This administrative consent order requires Mr. Bakker to: 1) develop and implement Standard Operating Procedures for employee training and manure irrigation methods; 2) pay fish restitution and investigative costs in the amount of \$26,086.07; and 3) pay a \$10,000.00 administrative penalty.

Questions regarding this administrative consent order should be directed to:

Relating to technical requirements:

Scott Wilson, Field Office 3 Iowa Department of Natural Resources 1900 N. Grand Ave., Suite E17 Spencer, Iowa 51301 Phone: 712/262-4177

Payment of penalty to:

Director of the Iowa DNR Wallace State Office Building 502 East Ninth Street Des Moines, Iowa 50319-0034

Relating to legal requirements:

Kelli Book, Attorney for the DNR Wallace State Office Building 502 East Ninth Street Des Moines, Iowa 50319-0034 Phone: 515/210-3408

II. JURISDICTION

This administrative consent 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; Iowa Code chapter 459 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. Iowa Code section 481A.151 authorizes the assessment and recovery of damages to natural resources.

III. STATEMENT OF FACTS

- 1. Bernard Bakker owns and operates a confined dairy facility known as Rock Bottom Dairy. The facility is located at 1243 Elder Avenue; Rock Rapids, Iowa (Section 20, Allison Township, Lyon County) and has an animal capacity of 3,600 head of mature dairy cattle and 200 head of immature dairy cattle.
- 2. On April 14, 2021, Mr. Bakker contacted DNR Field Office 3 to report a manure spill at Rock Bottom Dairy. Mr. Bakker stated an employee forgot to turn the irrigator off the previous evening. The irrigator got stuck in one location near the intersection of 120th Street and Elder Avenue and ran for a couple hours. Mr. Bakker explained the spill was discovered at 6:00 a.m. in morning of April 14 and the manure had created a channel to a tributary of Mud Creek. Mr. Bakker observed manure in the tributary about a half mile downstream from where it entered the tributary. It was estimated that a couple hundred thousand gallons of manure had been released to the tributary. Mr. Bakker indicated it was too late to berm the area as the manure was already too far downstream.
- 3. On the same day, Cindy Martens, DNR Field Office 3 environmental specialist senior, and Andrea Errthum, DNR Field Office 3 environmental specialist, began the investigation of the manure release. They travelled to Rock Bottom Dairy and noted the tributary near the facility had a strong manure odor and was brown with foam. Two other locations downstream of the manure release where the tributary crossed under 120th Street also had a strong manure odor and was murky and brown with foam. The field office personnel drove downstream to the bridge where the tributary flows under Dove Avenue. The water was opaque with foam from bank to bank. At this point in the investigation, the field office personnel contacted the DNR Fisheries Bureau to notify them of a fish kill. The field office personnel continued downstream to the 140th Avenue Bridge and a bridge over Highway 9 west of Lester, Iowa. The water was clear and there were no fish, dead or alive observed in this area. The field office personnel also travelled to the tributary area above the manure release location and the water was clear.

- 4. The field office personnel returned to the Dove Avenue area and continued to evaluate the impact of the manure release on the tributary. The water smelled of manure and was brownish green in color. Several dead fish were observed in this area. The field office personnel returned to the 120th Street area and noted that someone was using a loader to move dirt to create a berm to prevent the manure pooling in the field from entering the tributary.
- 5. The field office personnel conducted field tests and collected laboratory samples of the impacted area. The results of the tests and samples are as follows:

Location	Field Test Ammonia (mg/L)	Laboratory Sample – E.Coli ([MPN]/100mL)	Laboratory Sample – Ammonia (mg/L)	Laboratory Sample – BOD (mg/L)	Laboratory Sample – TSS (mg/L)
Elder Avenue (upstream)	n/a	85	<0.50	<2	21
120 th Street (downstream)	n/a	650,000	160	5,200	15,000
Dove Avenue bridge (downstream)	n/a	920,000	200	1,900	1,600
140 th Street (downstream)	5	n/a	n/a	n/a	n/a
Eagle Avenue (downstream)	60	n/a	n/a	n/a	n/a
180 th Street (downstream)	60	n/a	n/a	n/a	n/a
190 th Street (downstream)	<30	n/a	n/a	n/a	n/a

- 6. On April 15, 2021, Ms. Martens and Ms. Errthum returned to the impacted area. They travelled to the Eagle Avenue bridge between 170th Street and 180th Street, downstream of the release location. The water was murky, with a manure odor and dying fish were observed on the edges of the water. They continued to 180th Street between Eagle Avenue and Elmwood Avenue. The water was murky and foamy, with a slight manure odor and dead fish were observed. The next location was 190th Street between Eagle Avenue and Elmwood Avenue. The water was less murky, but still had some foam and no fish were observed. The field office personnel continued to 200th Street between Eagle Avenue and Elmwood Avenue. The water was clear and no fish were observed.
- 7. The field office personnel returned to 180th Street to collect laboratory samples. While at the location the odor became stronger and ripples from a large number of small dying fish were observed. As the field office personnel returned to the 190th Street location and the water was murkier than the first visits to the

location. As the field office personnel continued downstream they noted murky water with foam, a manure odor, and dead and dying fish.

8. The field office personnel conducted field tests and collected laboratory samples of the impacted area. The results of the tests and samples are as follows:

Location	Field Test	Laboratory Sample – E.Coli	Laboratory Sample –	Laboratory Sample –	Laboratory Sample –
	Ammoṇia (mg/L)	([MPN]/100mL)	Ammonia (mg/L)	BOD (mg/L)	TSS (mg/L)
Eagle Avenue	n/a	170,000	47	490	200
bridge					
(downstream)					
180 th Street	n/a	120,000	39	430	170
(downstream)					
190 th Street	2.8	n/a	n/a	n/a	n/a
(downstream)					
200 th Street	<i>7</i> ⋅5	n/a	n/a	n/a	n/a
(downstream)					
210 th Street	15	n/a	n/a	n/a	n/a
(downstream)					
230 th Street	20	n/a	n/a	n/a	n/a
(downstream)					
240 th Street	0.8	n/a	n/a	n/a	n/a
(downstream)					
250 th Street	0	n/a	n/a	n/a	n/a
(downstream)					

- 9. On April 16, 2021, Jennifer Christian, DNR Field Office 3 environmental specialist, and Ms. Errthum returned to the impacted areas. They began at the Highway 9 bridge near Lester. Dead fish were observed, but the water was less murky than the previous day. Downstream at 190th Street, 210th Street, 230th Street, 240th, and Fig Avenue, the water was murky and dead fish were observed at all locations. At 250th Street at the confluence of Mud Creek and Lizard Creek, the water was clear.
- 10. The field office personnel collected laboratory samples of the impacted area. The results of the samples are as follows:

Location	Field Test - Ammonia (mg/L)	Laboratory Sample – E.Coli ([MPN]/100mL)	Laboratory Sample – Ammonia (mg/L)	Laboratory Sample – BOD (mg/L)	Laboratory Sample – TSS (mg/L)
200 th Street (downstream)	n/a	5,200	7.4	71	43
210 th Street (downstream)	n/a	27,000	12	120	72

230 th Street	n/a	68,000	20	270	98
(downstream)					

- 11. On April 17, 2021, Scott Wilson, DNR Field Office 3 Supervisor and Ms. Errthum returned to the impacted area. The water remained murky and foam. Dead and dying fish were still observed.
- 12. The field office personnel conducted field tests and collected laboratory samples of the impacted area. The results of the tests and samples are as follows:

Location	Field Test	Laboratory	Laboratory	Laboratory	Laboratory
	a	Sample – E.Coli	Sample –	Sample –	Sample –
	Ammonia	([MPN]/100mL)	Ammonia	BOD (mg/L)	TSS
	(mg/L)		(mg/L)		(mg/L)
120 th Street	5	n/a	n/a	n/a	n/a
Highway 9	1.2	n/a	n/a	n/a	n/a
200 th Street	0.7	n/a	n/a	n/a	n/a
230 th Street	2.6	n/a	2.3	n/a	n/a
(downstream)					
240 th Street	5	n/a	4.5	n/a	n/a
(downstream)					
250 th Street	7.5	n/a	6.6	n/a	n/a
(downstream)				1	
260th Street	1	n/a	n/a	n/a	n/a
(downstream)					

- 13. The field office personnel returned to Rock Bottom Dairy and observed several feet of freeboard in the basin. Manure was pooled in the field in the area where the irrigation equipment was stopped.
- 14. Between April 14-16, 2021, DNR's Fisheries Bureau personnel surveyed the impacted area of Mud Creek. Mike Hawkins, Jed Siegwarth, Vaughn Wassink, and Chris Seylar conducted the fish kill investigation. The Fisheries personnel determined the fish kill started in a tributary of Mud Creek and extended downstream for over 13 miles. The Fisheries Bureau personnel surveyed the impacted area in accordance with the "Narrow Stream, Incompletely Accessible stream accessible at road crossings and beyond" method outlined in American Fisheries Society, Special Publication 35. This method was chosen based on the following factors: length of the kill and the remoteness of the kill location.
- 15. The fish kill assessment determined that 96,168 fish were killed, valued at \$24,127.26. The Fisheries Bureau investigative costs were \$1,958.82. The total fish value and investigative costs totaled \$26,086.07.

- 16. On May 13, 2021, DNR issued a Notice of Violation letter to Mr. Bakker for the violations observed during the April investigation. The letter informed Mr. Bakker that the matter would be referred for further formal enforcement.
- 17. The facility has a past history of manure releases. In 2004, Mr. Bakker was issued a Notice of Violation letter for open lot manure and silage being discharged to the tributary. In 2008, Mr. Bakker was issued a Notice of Violation letter for a manure release at the facility, but it did not reach the tributary. In 2009, Mr. Bakker was issued an Administrative Order for a manure discharge that resulted in a fish kill. The manure release was caused by a clamp coming off a hose during application. In 2013, a crack in the retaining wall at the facility was noted with some manure entering the ditch.

IV. CONCLUSIONS OF LAW

- 1. Iowa Code section 455B.173 provides that the Environmental Protection Commission (Commission) shall adopt rules related to water quality standards, pretreatment standards, and effluent standards. The Commission has adopted such rules at 567 IAC chapters 61 and 62.
- 2. Iowa Code section 455B.186 and 567 IAC 62.1(1) prohibit the discharge of pollutants into a water of the state, except for adequately treated pollutants discharged pursuant to a permit from the DNR. During the April 2021 investigation, DNR Field Office 3 noted that a release from the manure application by Rock Bottom Dairy entered the tributary of Mud Creek. The above-mentioned facts indicate a violation of these provisions.
- 3. 567 IAC 61.3(2) provides general water quality criteria and prohibits discharges that will produce objectionable color, odor or other aesthetically objectionable conditions; settle to form sludge deposits; interfere with livestock watering; or are toxic to animal or plant life. During the April 2021 investigation, DNR Field Office 3 noted that a release from the manure application by Rock Bottom Dairy entered the tributary of Mud Creek and caused discolored water, an odor in the water, a fish kill and elevated pollutant levels. The above-mentioned facts indicate violations of the general water quality criteria.
- 4. Iowa Code section 459.103 provides that the Environmental Protection Commission (Commission) shall adopt rules related to the construction or operation of animal feeding operations, including permit and minimum manure control requirements. The Commission has adopted such rules at 567 IAC chapter 65.
- 5. 567 IAC 65.2(3) states that the minimum level of control for a confinement feeding operation shall be the retention of all wastes between periods of application. In no case shall manure from a confinement feeding operation be discharged directly into a water of the state or into a tile line that discharges to a

water of the state. During the April 2021 investigation, DNR Field Office 3 noted that a release from the manure application by Rock Bottom Dairy entered the tributary of Mud Creek. The above-mentioned facts indicate a violation of this provision.

- 6. 567 IAC 65.2(7) states that all manure removed from an animal feeding operation shall be land applied in a manner that will not cause surface or ground water pollutions. During the April 2021 investigation, DNR Field Office 3 noted a release from the manure application by Rock Bottom Dairy entered the tributary of Mud Creek causing water quality violation. The above-mentioned facts indicate a violation of this provision.
 - 7. Iowa Code section 481A.151 provides that a person who is liable for polluting a water of the state in violation of state law shall also be liable to pay restitution to the DNR for injury caused to a wild animal by the pollution. The DNR has adopted 571 IAC 113. 571 IAC 113 provides that a person who is liable for polluting a water of this state in violation of state law shall also be liable to pay restitution to the DNR for injury caused to a wild animal by the pollution. A fish kill resulted from the land application of manure from the Rock Bottom Dairy facility.
 - 8. DNR has determined that there is no likelihood that the violations identified in this administrative consent order will recur if Bernard Bakker complies with the provisions listed in Paragraph 1, Section V Order of this administrative consent order.

V. ORDER

THEREFORE, the DNR orders and Bernard Bakker agrees to do the following:

- 1. Mr. Bakker shall submit a written plan with Standard Operating Procedures for land application methods; including but not limited to inspection of all equipment prior to application. The plan shall also include specific procedures for employee training and manure irrigation methods. The Standard Operating Procedures shall be submitted to DNR Field Office 3 for approval within 30 days of the date the Director signs this administrative consent order. Mr. Bakker shall immediately implement the Standard Operating Procedures upon approval by DNR Field Office 3; and
- 2. Mr. Bakker shall pay fish restitution and investigative costs in the amount of \$26,086.07 and an administrative penalty in the amount of \$10,000.00 in accordance with the following payment plan:

\$18,041.07 due August 1, 2022 **pd**

\$18,045.00 due August 1, 2023

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 each of the water quality violations involved in this matter. Iowa Code section 455B.146 authorizes the assessment of civil penalties of up to \$10,000.00 per day of violation for the air quality 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 \$10,000.00, 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 this chapter, the DNR 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 of \$10,000.00. The administrative penalty is determined as follows:

Economic Benefit – 567 IAC chapter 10 requires that the DNR 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." Mr. Bakker had room in the storage basin and the manure was being applied in preparation for the upcoming planting season. Mr. Bakker gained little to no economic benefit; therefore, no amount is being assessed for this factor.

Gravity — 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 that type of violation. As indicated above, substantial civil penalties are authorized by statute. Despite the high penalties authorized, the DNR has decided to handle the violations administratively at this time, as the most equitable and efficient means of resolving the matter. The discharge of manure from the land application ultimately resulted in the degradation of water quality and caused a fish kill. The manure discharge from the land application threatens the integrity of the animal feeding operation regulations. Therefore, \$3,000.00 is assessed for the violations noted in Paragraphs 2 and 3, Section IV Conclusions of Law; \$2,000.00 is assessed for the violations noted in Paragraph 5, Section IV Conclusions of Law; and \$2,000.00 is assessed for the violations noted in Paragraph 6, Section IV Conclusions of Law for a total amount of \$7,000.00 assessed for the Gravity portion of this administrative consent order.

<u>Culpability</u> – Mr. Bakker has a duty to know the regulations and to be aware that hist actions are subject to the regulations. Mr. Bakker's facility has had multiple

manure releases in the past and at least one of those releases resulted in a fish kill. Based on the information above, \$3,000.00 is being assessed.

VII. WAIVER OF APPEAL RIGHTS

This administrative consent order is entered into knowingly and with the consent of Mr. Bakker. For that reason, Mr. Bakker waives the right to appeal this administrative consent order or any part thereof.

VIII. NONCOMPLIANCE

Compliance with Section V of this administrative consent order constitutes full satisfaction of all requirements pertaining to the violations described in this administrative consent order. Failure to comply with this administrative consent 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.

KAYLA LYON, DIRECTOR Iowa Department of Natural Resources

Rernard Bakker

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