IOWA DEPARTMENT OF NATURAL RESOURCES ADMINISTRATIVE CONSENT ORDER

IN THE MATTER OF:

Prairie Farms Dairy, Inc. **NPDES Permit #2200100 Clayton County, Iowa**

ADMINISTRATIVE CONSENT ORDER

NO. 2023-WW-24

TO: Frank Doll, President

1144 IL Route 143

Pocahontas, IL

62275

Corporation Service Company,

Registered Agent 505 5th Ave Ste 729

Des Moines, IA

50309

Ray Downes, General Manager

11744 Edgewood Ave.,

Monona, IA

52808

Prairie Farms Dairy

247 Research Parkway

Davenport, IA

52808

T. **SUMMARY**

This administrative consent order (Order) is entered into between the Prairie Farms Dairy, Inc. (Prairie Farms) 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). Prairie Farms neither admits nor denies the contents of this Order and enters into it solely for the purposes of settlement.

Any questions regarding this Order should be directed to:

Relating to technical requirements:

Michele Smith, Environmental Specialist Senior

DNR Field Office #1

1101 Commercial Court Suite 10

Manchester, Iowa 52057 michele.smith@dnr.iowa.gov

Phone: 563-927-2640 ext 308

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

Prairie Farms neither admits nor denies the following statement of facts:

- 1. Prairie Farms operates a WWTF located at Section 16, T95N, R05W in Clayton County, Iowa. This location is locally known as 11744 Edgewood Ave. Monona, IA. This WWTF is operated pursuant to NPDES permit No. 2200100. This permit was most recently amended on August 1, 2022. Pursuant to this permit, Prairie Farms discharges wastewater to an unnamed tributary which flows to another unnamed tributary of Silver Creek. This NPDES permit contains effluent limits for numerous parameters, which include the following: ammonia nitrogen (N), Total Suspended Solids (TSS), potential hydrogen (pH), Biochemical Oxygen Demand (BOD5), Carbonaceous Biochemical Oxygen Demand (CBOD5), Chloride (CL), Total Residual Chlorine (TRC), Temperature, Dissolved Oxygen (DO) and Escherichia coli (E. coli).
- 2. On December 7, 2020, September 30, 2021, March 9, 2022, June 1, 2022, November 2, 2022, January 19, 2023, and April 21, 2023, the Department sent Prairie Farms a Notice of Violation (NOV) for failure to meet effluent limits contained in its NPDES permit. Included in each NOV was a summary of the relevant law and recommended corrective actions. The table below contains all NPDES permit violations from September 2019 to date.

Effluent Limit Violations 9/1/2019 - 10/24/2023 PRAIRIE FARMS DAIRY - 2200100 Outfall 001

| MONONA EPA #:IA0003808 | | AVERAGE - LBS/DAY | | Outfall 001 DAILY MAXIMUM - LBS/DAY | | AVERAGE - MG/L | | DAILY MAXIMUM - MG/L | | DAILY MINIMUM - MG/L | | Parameter Monthly Total |
|---------------------------|----------|----------------------|---------|--|---------|-------------------|--------|----------------------------|--------|----------------------------|-----|-------------------------------|
| | | Limit | DMR | Limit | DMR | Limit | DMR | Limit | DMR | Limit | DMR | |
| 3/2020 | TSS | | | | | | | 81.9 | 136.00 | | | 1 |
| 4/2020 | NH3-N | 8.8 | 9.60 | | | 1.5 | 3.82 | 8.8 | 12.10 | | | 3 |
| | DO | | | | | | | | | 5 | 4.9 | 1 |
| 5/2020 | NH3-N | | | | | 1.7 | 2.74 | | | | | 1 |
| 6/2020 | NH3-N | | | | | 1.3 | 2.68 | | | | | 1 |
| 7/2020 | NH3-N | 5.8 | 5.87 | | | 1 | 2.81 | 3.3 | 4.49 | | | 3 |
| 8/2020 | NH3-N | 5.5 | 17.42 | 20.7 | 38.336 | 1 | 6.84 | 3.6 | 16.30 | | | 4 |
| 9/2020 | NH3-N | 6.1 | 9.25 | | | 1.1 | 3.43 | 6.3 | 6.82 | | | 3 |
| | DO | | | | | | | | | 5 | 4 | 1 |
| | E. COLI | 151 | 803.17 | | | | | | | | | 1 |
| 10/2020 | NH3-N | | | | | 1.6 | 2.96 | | | | | 1 |
| | DO | | | | | | | | | 5 | 0.5 | 1 |
| 11/2020 | NH3-N | | | | | 2.3 | 3.98 | | | | | 1 |
| 12/2020 | NH3-N | 14.2 | 16.87 | | | 2.5 | 6.14 | 10.1 | 13.10 | | | 3 |
| 1/2021 | NH3-N | | | | | 3.4 | 6.87 | 11.9 | 12.90 | | | 2 |
| 2/2021 | NH3-N | 22.7 | 39.49 | 55.2 | 64.707 | 4 | 12.86 | 9.6 | 20.10 | | | 4 |
| | TSS | | | | | 32.8 | 37.00 | | | | | 1 |
| | E. COLI | 151 | 1371.27 | | | | | | | | | 1 |
| 3/2021 | NH3-N | 19.6 | 28.73 | 60.4 | 61.159 | 3.4 | 12.15 | 10.5 | 19.00 | | | 4 |
| 4/2021 | NH3-N | | | | | 1.5 | 1.73 | | | | | 1 |
| 6/2021 | NH3-N | 7.5 | 8.25 | | | 1.3 | 2.92 | | | | | 2 |
| 7/2021 | NH3-N | 5.8 | 9.72 | | | 1 | 3.22 | 3.3 | 3.98 | | | 3 |
| | BOD5 | | | | | 21.8 | 28.64 | | | | | 1 |
| 8/2021 | NH3-N | 5.5 | 8.05 | | | 1 | 2.61 | 3.6 | 5.31 | | | 3 |
| 1/2022 | CHLORIDE | | | | | 389 | 438.80 | | | | | 1 |
| | E. COLI | 151 | 265.80 | | | | | | | | | 1 |
| | BOD5 | | | | | 21.8 | 30.33 | 54.6 | 59.82 | | | 2 |
| | CBOD5 | | | | | | | 45 | 52.00 | | | 1 |
| | CHLORIDE | | | | | 389 | 410.60 | 629 | 644.00 | | | 2 |
| 2/2022 | BOD5 | | | | | 21.8 | 38.63 | 54.6 | 70.50 | | | 2 |
| | CBOD5 | | | | | | | 45 | 69.00 | | | 1 |
| 3/2022 | NH3-N | | | | | 3.4 | 3.94 | | | | | 1 |
| | BOD5 | 126 | 219.89 | 314 | 316.332 | 21.8 | 75.43 | 54.6 | 103.35 | | | 4 |
| | CBOD5 | | | 259 | 405.764 | | | 45 | 126.70 | | | 2 |
| | CHLORIDE | | | | | 389 | 518.00 | 629 | 791.00 | | | 2 |
| | DO | | | | | | | | | 5 | 3.2 | 1 |
| | TSS | | | | | 32.8 | 35.06 | | | | | 1 |
| | E. COLI | 151 | 6647.88 | | | | | | | | | 1 |
| 4/2022 | NH3-N | 8.8 | 11.92 | | | 1.5 | 3.74 | | | | | 2 |
| | BOD5 | 126 | 211.77 | 314 | 333.642 | 21.8 | 66.93 | 54.6 | 105.00 | | | 4 |
| | CBOD5 | | | 259 | 407.004 | | | 45 | 134.07 | | | 2 |
| 5/2022 | CHLORIDE | | | | | 389 | 471.50 | 629 | 726.00 | | | 2 |
| | NH3-N | | | | | 1.7 | 2.74 | 6.4 | 6.89 | | | 2 |
| | BOD5 | | | | | 21.8 | 33.09 | | | | | 1 |
| | CBOD5 | | | | | | | 45 | 53.36 | | | 1 |
| 6/2022 | NH3-N | 7.5 | 11.51 | 25.3 | 27.630 | 1.3 | 3.98 | 4.4 | 9.52 | | | 4 |
| | BOD5 | | | | | 21.8 | 29.09 | | | | | 1 |
| 7/2022 | NH3-N | 5.8 | 15.14 | 19 | 52.017 | 1 | 4.87 | 3.3 | 16.50 | | | 4 |
| | BOD5 | | | | | 21.8 | 25.93 | | | | | 1 |

| 8/2022 | NH3-N | 5.5 | 15.31 | 20.7 | 40.217 | 1 | 5.26 | 3.6 | 14.10 | 4 |
|--------------------|----------|------|---------|------|----------|------|--------|------|---------|---|
| | BOD5 | 126 | 130.55 | | | 21.8 | 42.20 | 54.6 | 80.56 | 3 |
| | CBOD5 | | | | | | | 45 | 64.94 | 1 |
| 9/2022 | NH3-N | | | | | 1.1 | 1.57 | | | 1 |
| | BOD5 | | | | | 21.8 | 29.09 | 54.6 | 62.08 | 2 |
| | CBOD5 | | | | | | | 45 | 48.00 | 1 |
| 10/2022 | NH3-N | 9 | 11.89 | | | 1.6 | 3.98 | 8.8 | 16.80 | 3 |
| | BOD5 | | | | | 21.8 | 34.06 | | | 1 |
| | E. COLI | 151 | 1894.75 | | | | | | | 1 |
| 11/2022 | NH3-N | 13.4 | 1894.75 | | | 2.3 | 4.49 | 8.9 | 8.99 | 3 |
| | BOD5 | 126 | 129.09 | | | 21.8 | 42.94 | 54.6 | 76.00 | 3 |
| | CBOD5 | | | | | | | 45 | 76.00 | 1 |
| 12/2022 | NH3-N | 14.2 | 17.92 | | | 2.5 | 5.91 | 10.1 | 11.10 | 3 |
| | BOD5 | 126 | 149.27 | | | 21.8 | 48.60 | 54.6 | 93.00 | 3 |
| | CBOD5 | | | 259 | 320.414 | | | 45 | 103.00 | 2 |
| 1/2023 | NH3-N | 19.6 | 29.88 | | | 3.4 | 10.14 | 11.9 | 16.40 | 3 |
| | BOD5 | | | | | 21.8 | 35.19 | 54.6 | 65.00 | 2 |
| | CBOD5 | | | | | | | 45 | 76.25 | 1 |
| 2/2023 | NH3-N | | | | | 4 | 7.21 | 9.6 | 13.60 | 2 |
| | BOD5 | 126 | 133.76 | | | 21.8 | 44.84 | 54.6 | 59.98 | 3 |
| | CHLORIDE | | | 3619 | 4468.572 | 389 | 639.75 | 629 | 1410.00 | 3 |
| | E. COLI | 151 | 542.01 | | | | | | | 1 |
| 3/2023 | NH3-N | 19.6 | 20.38 | | | 3.4 | 7.20 | 10.5 | 17.60 | 3 |
| | BOD5 | 126 | 161.11 | | | 21.8 | 52.50 | 54.6 | 73.80 | 3 |
| | CBOD5 | | | | | | | 45 | 67.50 | 1 |
| | CHLORIDE | | | | | | | 629 | 813.00 | 1 |
| 4/2023 | NH3-N | 8.8 | 12.69 | | | 1.5 | 3.93 | | | 2 |
| | BOD5 | | | | | 21.8 | 32.31 | | | 1 |
| | CBOD5 | | | | | | | 45 | 52.29 | 1 |
| 5/2023 | NH3-N | | | | | 1.7 | 2.30 | | | 1 |
| | BOD5 | | | | | 21.8 | 28.72 | | | 1 |
| 6/2023 | NH3-N | 7.5 | 9.01 | | | 1.3 | 3.04 | 4.4 | 4.99 | 3 |
| | BOD5 | | | | | 21.8 | 32.81 | | | 1 |
| 7/2023 | NH3-N | 5.8 | 5.81 | | | 1.0 | 1.86 | | | 2 |
| .,_0_0 | BOD5 | | | | | 21.8 | 33.63 | | | 1 |
| | CHLORIDE | | | | | | | 629 | 688.00 | 1 |
| 8/2023 | NH3-N | 5.5 | 20.69 | 20.7 | 43.895 | 1.0 | 6.44 | 3.6 | 13.60 | 4 |
| | BOD5 | | 20.07 | 20.7 | | 21.8 | 24.87 | 2.0 | 12.00 | 1 |
| 9/2023 | NH3-N | 6.1 | 21.83 | 36.3 | 58.126 | 1.1 | 6.84 | 6.3 | 17.60 | 4 |
| 7/ 2023 | BOD5 | 0.1 | 21.03 | 30.3 | 30.120 | 21.8 | 31.21 | 0.5 | 17.00 | 1 |
| | CBOD5 | | | | | 21.0 | 31.41 | 45 | 49.00 | 1 |

Total: 173

- 3. On February 23, 2021, the Department sent Prairie Farms a NOV for failure to submit an antidegradation alternatives analysis or cease use of chemicals identified on page 13 of its NPDES permit by June 30, 2020. Included with this NOV was a summary of the relevant law and recommended corrective actions.
- 4. On May 7, 2021, the antidegradation alternatives analysis was submitted to the Department.

- 5. On December 15, 2022, the Department conducted an NPDES permit compliance inspection of Prairie Farms. During this inspection the Department documented that during the review period of July 1, 2018, through November 30, 2022, the plant experienced 139 effluent limit violations. The BOD5 design capacity of the facility (3300 pounds per day (lbs/day)) was exceeded 27 out of 53 months and the design load for BOD5 had been exceeded since approximately August 2020. Further, the plant is designed to treat a daily average of 819 lbs/day of TSS and this average was exceeded 51 out of the 53 months reviewed.
- 6. On January 19, 2023, the Department sent Prairie Farms an NOV for the above discussed violations. Included with this NOV was a copy of the inspection report, a summary of the law and recommended corrective actions.

Prairie Farms Responses to NOVs

- 7. On December 16, 2020, Prairie Farms responded to the December 7, 2020, NOV. This response set forth Prairie Farms' corrective actions which include programing new equipment, conducting operator retraining, ordering new membranes for the reverse osmosis system and installing new proximity switches.
- 8. On October 7, 2021, Prairie Farms submitted a response to the September 30, 2021 NOV. This response set forth Prairie Farms' corrective actions which include the rebuilding water booster pumps and operational changes to the reverse osmosis system and evaporator.
- 9. On March 10, 2022, Prairie Farms submitted a response to the March 9, 2022, NOV. This response set forth Prairie Farms' corrective actions which include the installation of a new impeller in the water booster pump, installation of new membranes for the reverse osmosis system and setting a new chemical pump to its proper dosage rate.
- 10. On June 8, 2022, Prairie Farms submitted a response to the June 1, 2022, NOV. This response set forth Prairie Farms' corrective actions which include improved product flushes in the cream cheese and Swiss cheese departments.
- 11. On November 9, 2022, Prairie Farms submitted a response to the November 2, 2022, NOV. This response set forth Prairie Farms' corrective actions which include the installation of a water pressure tank directly in line with the polymer make-down unit and repairs to the evaporator system and vacuum line.
- 12. On February 16, 2023, Prairie Farms submitted a response to the January 19, 2023 NOV. This response set forth Prairie Farms' corrective actions which include the engagement of two third-party firms: 1) a water solutions provider to assess the facility and

identify areas for potential improvement, and 2) a wastewater engineering firm to perform an engineering analysis.

- 13. On May 1, 2023, Prairie Farms submitted a response to the April 21, NOV. This response set forth Prairie Farms' corrective actions which include draining and cleaning the septic sludge from the bottom of the aeration basin and the replacement of all diffusers in conjunction with emptying the aeration basin.
- 14. On August 9, 2023, Prairie Farms submitted a response to the August 1, 2023, NOV. This response set forth Prairie Farms' corrective actions which include ongoing evaluation of recommendations by the two third-party firms for engineered solutions.

IV. CONCLUSIONS OF LAW

Prairie Farms neither admits nor denies the following 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. 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.

V. ORDER

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

- 1. Prairie Farms shall retain and maintain the services of a Certified Wastewater Operator with a certification of Grade 2 or higher at all times when the WWTF is in operation;
- 2. Prairie Farms shall begin construction on upgrades to the WWTF no later than August 31, 2028;
- 3. Prairie Farms shall complete construction on the upgrades to the WWTF no later than August 31, 2030; and
- 4. Prairie Farms shall pay a penalty in the amount of \$10,000.00 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:
- 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 delaying necessary upgrades to the WWTF. Therefore, \$4,000.00 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. Prairie Farms operates a WWTF. This is a highly regulated activity and therefore it has an obligation to be aware of the applicable regulations and comply with those regulations. Prairie Farms 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 Prairie Farms for the purposes of settlement. 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.

| RI LIDE | Dated this 1st day of November, 2023 |
|--------------------------------------|--------------------------------------|
| Raymond W. Downes | |
| On behalf of Prairie Farms, Inc. | |
| | |
| | |
| | |
| Kayla Lyon, DIRECTOR | |
| Iowa Department of Natural Resources | |

NPDES #2200100; Field Office #1; Carrie Schoenebaum; EPA; Water Quality Bureau; I.B.2.c.C.1