

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

IN THE MATTER OF:

**MEADOWVALE DAIRY, LLC and
GREEN EARTH NUTRIENTS, INC.**

Sioux County, Iowa

ADMINISTRATIVE CONSENT ORDER
NO. 20 10 -AFO- 01

TO: David L. Updegraff, Registered Agent
Meadowvale Dairy, LLC
505 5th Street, Suite 204
Sioux City, Iowa 51101

Sjerp Ysselstein, Registered Agent
Green Earth Nutrients, Inc.
1760 300th Street
Rock Valley, Iowa 51247

I. SUMMARY

This administrative consent order is entered into between the Iowa Department of Natural Resources (DNR) and Meadowvale Dairy, LLC (Meadowvale) and Green Earth Nutrients, Inc. (Green Earth) for the purpose of resolving violations resulting from manure discharges from manure application and from the Meadowvale facility. In the interest of avoiding litigation, the parties have agreed to the provisions below.

Questions regarding this administrative consent order should be directed to:

Relating to technical requirements:

Jeff Prier, Field Office 3
Iowa Department of Natural Resources
1900 N. Grand – Gateway North, Suite E17
Spencer, Iowa 51301-2200
Phone: 712/262-4177

Relating to legal requirements:

Kelli Book, Attorney for the DNR
Iowa Department of Natural Resources
7900 Hickman Road, Suite 1
Windsor Heights, Iowa 50324
Phone: 515/281-8563

Payment of penalty to:

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

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IOWA DEPARTMENT OF NATURAL RESOURCES
ADMINISTRATIVE CONSENT ORDER
ISSUED TO: MEADOWVALE DAIRY, LLC and GREEN EARTH NUTRIENTS, INC.

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; Iowa Code chapter 459A 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. Meadowvale and Green Earth are operated by Sjerp Ysselstein. Meadowvale is a combined 3,850 head confinement building and 3,500 head open feedlot. The facility is located at 1760 300th Street, Rock Valley, Iowa. Meadowvale has a National Pollutant Discharge Elimination System (NPDES) permit, NPDES permit number 2-84-00-3-02. The NPDES permit requires the facility to have a nutrient management plan (NMP) and to properly following the manure application regulations. The facility has several lagoons on site to store manure. Green Earth handles the manure for the Meadowvale facility. Meadowvale was formerly operated under the name Ysselstein Dairy, Inc. and the NPDES permit is still under the name Ysselstein Dairy, Inc.

2. On May 12, 2009, DNR Field Office 3 received a complaint stating there was foam, discoloration, and a manure odor in a creek west of 1672 300th Street, Rock Valley. The complainant stated that Meadowvale had a center pivot in an application field about one mile north of the creek. On May 12, 2009, Jeff Prier and Krysti Clayton, DNR Field Office 3 environmental specialists, conducted a complaint investigation. They began the investigation at the stream near 1672 300th Street and observed brown water in the stream. They noted a small tributary to the east that appeared gray in color and had floating scum. The stream led to the west side of Meadowvale. The field office personnel proceeded downstream west of the intersection of 310th Street and Cherry Avenue. The stream appeared greenish brown in color and field tests indicated the following results: pH of 7.9, ammonia 30 mg/L, dissolved oxygen 0.0 mg/L, and a temperature of 14°C. The laboratory samples indicated the following: E.coli 19,000/100mL, fecal coliform 23,000/100mL, ammonia 28 mg/L, and biochemical oxygen demand (BOD) 130 mg/L. The field office personnel proceeded downstream to a bridge at 340th Street. The stream was brown in color. The field office personnel proceeded further downstream to the 350th Street and County Road C-18 bridge. The field tests indicated the following results: pH 7.9, ammonia 0.7 mg/L, dissolved oxygen 7.0 mg/L, and a temperature of 14°C. The laboratory samples indicated the following results: E.coli 40/100mL, fecal coliform 30/100mL, ammonia 0.39 mg/L, and BOD 8 mg/L.

3. Mr. Prier and Ms. Clayton proceeded to the Meadowvale facility. No one was present when they arrived at the facility. While they waited at the facility for an

IOWA DEPARTMENT OF NATURAL RESOURCES
ADMINISTRATIVE CONSENT ORDER

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employee to return, they continued with the investigation to the west side of the buildings. They observed an area that discharges process wastewater from the silage pile and open feedlot effluent. Sjerp Yesselstein, Meadowvale representative, contacted Mr. Prier a short time later and stated that the manure spill had originated in a field located northwest of the facility. The field location was approximately one and a half miles north of where the investigation started. Mr. Yesselstein informed Mr. Prier that Green Earth handles the manure for the Meadowvale facility. He stated the center pivot had gotten stuck in a freshly disked field. The manure ran down the drainage ditch and into the stream. The farm manager had reported the spill to Mr. Yesselstein at approximately 12:00 pm and Mr. Yesselstein contacted DNR Field Office 3 at approximately 4:00 pm to report the spill. The field office personnel went to the application field and collected laboratory samples and conducted field tests upstream of the application field. The field tests indicated the following results: pH 7.6, ammonia 0.5 mg/L, dissolved oxygen 8.0 mg/L, and a temperature of 9° C. The laboratory samples indicated the following results: E. coli <10/100mL, Membrane Fecal Coliform <10/100mL, and ammonia 0.09 mg/L.

4. On May 13, 2009, Mr. Prier and Ms. Clayton returned to Meadowvale to monitor the impact of the manure release. They met with the Meadowvale farm manager who stated he had started the pump on May 11, 2009 at approximately 6:00 pm and turned it off at approximately 5:30 am the following morning when he noticed the pivot wasn't functioning properly. He stated he was applying approximately 5,000 gallons/acre. The farm manager called Mr. Yesselstein on May 12, 2009 at approximately 6:30 am and left a message stating the pivot was not working properly and manure was reaching the neighbor's field. The farm manager again called Mr. Yesselstein at approximately 12:00 pm and left a message stating the manure was going to enter the creek and provided Mr. Yesselstein with the number to call to report the spill. Mr. Prier and Ms. Clayton left the facility to conduct sampling at Soldberg pond and the stream downstream of the application field. The field office personnel conducted field tests at the bridge at 350th Street and County Road K-18. The field tests indicated the following results: pH 7.6, ammonia 10 mg/L, dissolved oxygen 0.0 mg/L, and a temperature of 15.5° C. The field office personnel proceeded to Soldberg pond and noted dead and stressed fish. Dead fish were observed in the northwest and southeast corners. The stream enters the pond at the southeast corner. The field office personnel collected laboratory samples and conducted field tests in the northwest corner of the pond. The field tests indicated the following results: pH 7.5, ammonia 10 mg/L, dissolved oxygen 0.0 mg/L, and a temperature of 15.5° C. The laboratory samples indicated the following results: E. coli 4,700/100mL, fecal coliform 5,000/100mL, ammonia 2.3 mg/L, and BOD 88 mg/L. Mr. Prier and Ms. Clayton continued downstream to the Cherry Avenue bridge. They collected laboratory samples and conducted field tests. The field tests indicated the following results: pH 8.0, ammonia 2.6 mg/L, dissolved oxygen 8.0 mg/L, and a temperature of 18° C. The laboratory samples indicated the following results: E. coli 2,300/100mL, membrane fecal coliform 2,000/100mL, ammonia 1.8 mg/L and BOD 39 mg/L. At the end of the inspection, Mr. Prier and Ms. Clayton met with Mr. Yesselstein and he informed the field office personnel that he would be installing devices that will automatically shut down the center pivots when problems are detected.

IOWA DEPARTMENT OF NATURAL RESOURCES
ADMINISTRATIVE CONSENT ORDER
ISSUED TO: MEADOWVALE DAIRY, LLC and GREEN EARTH NUTRIENTS, INC.

5. On June 3, 2009, DNR Field Office 3 issued a Notice of Violation letter to Meadowvale and Green Earth for manure discharge and failure to report a release violations discovered on May 12 and 13, 2009 by Mr. Prier and Ms. Clayton. The companies were required to submit a written spill report within 30 days of the verbal report. The companies were required to submit a written spill report within 30 days of the verbal report. The letter informed the companies that the matter would be referred for further enforcement.

6. In early July 2009, DNR Field Office 3 received two complaints regarding odor and manure runoff from the Meadowvale facility. The complainant described the odor as a chemical smell and believed it was related to the fact that the facility was storing sludge from a cheese plant. The complainant also stated that manure application was running off and entering the creek.

7. On July 8, 2009, Cindy Martens, DNR Field Office senior environmental specialist investigated the complaint. Ms. Martens visited the basin at the Meadowvale facility where the cheese sludge was being stored and did not observe any problems. She spoke with the farm manager who stated that the sludge had not been land applied and the irrigation units had not been operated since the May release.

8. On July 15, 2009, Ms. Martens visited the site to investigate an open lot basin that ran over. The release was located on the west side of the large western/middle most settled open feedlot effluent basin (SOFEB). The basin was full and the manure flowed out of the lower point on the west, towards the south and then flowed to the east and entered the creek that began at the facility just east of the open feedlots. Ms. Martens noted that the creek was polluted with manure and other runoff water from the facility. Ms. Martens also noted that the other large SOFEB to the east was full and that the two confinement basins were within inches of overflowing. Ms. Martens collected laboratory samples as the creek crosses Highway 18 and the sample results indicated the following: ammonia 82 mg/L, fecal coliform and 32,000/100mL. Ms. Martens also collected laboratory samples as the creek crosses a gravel road east of the facility and the sample results indicated the following: ammonia 76 mg/L and fecal coliform 25,000 mg/L.

9. On July 21, 2009, Ms. Martens returned to the facility to check the basins and the SOFEB depths as well as the discharge from the manure release and runoff. The two large SOFEB's had about one foot of freeboard and were being pumped to the south site where irrigation equipment was being operated east of the SOFEB about 3 miles further south. Ms. Martens noted that manure and slime was still in the creek east of the facility and saw evidence of runoff from the open lot barns and storage pads. The water was still discolored, foamy, and had a manure odor. Ms. Martens collected laboratory samples as the creek crosses a gravel road to the east of the facility and the sample results indicated the following: total suspended solids 240 mg/L, E.coli 24,000 MPN/100 mL, BOD 27 mg/L, ammonia 76 mg/L, and fecal coliform 25,000 mg/L. Ms. Martens also noted that the two confinement basins were still completely full with only a few inches of freeboard. Ms.

IOWA DEPARTMENT OF NATURAL RESOURCES
ADMINISTRATIVE CONSENT ORDER
ISSUED TO: MEADOWVALE DAIRY, LLC and GREEN EARTH NUTRIENTS, INC.

Martens also looked at a tile intake to the west of the facility. The facility had previously been required to close the tile intake so that process wastewater and manure was not being released to the creek. Ms. Martens noted that at the beginning of her sampling (10:30 am) the water was quite stagnant and low amounts were in the creek bed and within five minutes (10:35 am) the water began to flow quickly and rose in depth. Ms. Martens spoke to the farm manager who stated the tile inlet had been plugged and that he had unplugged it. The tile line began draining all the runoff to the creek. The samples collected by Ms. Martens at 10:30 am indicated the following: total suspended solids 54 mg/L and BOD 420 mg/L/ The samples collected by Ms. Martens at 10:35 am indicated the following: total suspended solids 590 mg/L, BOD 1,100 mg/L, and E.coli > 2,4000,000 MPN/100 mL. Ms. Martens told the farm manager that the tile intake must be plugged and that the water that builds up behind the cement wall must be pumped to one of the confinement basins. Ms. Martens also noted that confinement manure was being placed in basins that were constructed for and permitted for open lot basins.

10. On August 6, 2009, DNR Field Office 3 issued a Notice of Violation letter to Meadowvale for the animal feeding, water quality, and NPDES permit violations discovered by Ms. Martens during her July 2009 inspections at Meadowvale. The letter informed the facility the matter was being referred for further enforcement review.

11. When the facility was being operated under the name of Ysselstein Dairy, the company was issued two administrative orders. On June 6, 2005, Administrative Consent Order No. 05-AFO-16 was issued. The consent order was issued for manure discharge violations and a fish kill at a Ysselstein facility which is near the Meadowvale facility. On February 13, 2003, Administrative Order No. 03-AFO-10 was issued. The order was issued for manure applicator certification violations.

IV. CONCLUSIONS OF LAW

1. Iowa Code section 455B.186 and 567 IAC 62.1(1) prohibit the discharge of pollutants into water of the state, except for adequately treated pollutants discharged pursuant to a permit from the DNR. On May 12, 2009, DNR Field Office 3 documented that over application of manure caused manure to enter a creek. Manure from the Meadowvale facility was being applied by Green Earth when a center pivot malfunctioned leading to the over application. Meadowvale's NPDES permit requires the facility to have a NMP and to properly follow the manure application regulations. In July 2009, DNR Field Office 3 documented at least two unauthorized discharges from the Meadowvale facility. The above-mentioned facts indicate violations of this provision.

2. 567 IAC 65.2(9) "a" states that a person storing, handling, transporting, or land applying manure from an animal feeding operation who becomes aware of the release shall notify the DNR of the release as soon as possible, but not later than six hours after the onset or discovery of the release. Meadowvale's farm manager noticed the over application

IOWA DEPARTMENT OF NATURAL RESOURCES
ADMINISTRATIVE CONSENT ORDER
ISSUED TO: MEADOWVALE DAIRY, LLC and GREEN EARTH NUTRIENTS, INC.

of manure at approximately 5:30 am on May 12, 2009, but the DNR was not notified of the release until 4:00 pm on that date. The above-mentioned facts indicate a violation of this provision.

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 May 2009 investigation, DNR Field Office 3 observed that the manure from the over application of manure caused floating scum, discolored water, dead fish, and high levels of ammonia, E.coli, and fecal coliform in the creek and a pond. During the July investigation of the manure discharge and runoff from the Meadowvale facility, DNR Field Office 3 personnel observed discolored water, foamy water, a manure odor, and high levels of ammonia, E.coli, biological oxygen demand, total suspended solids, and fecal coliform in the creek on several occasions. The above-facts disclose several violations of one or more of these criteria.

4. 567 IAC 65.2(3) states the minimum level of manure control for a confinement feeding operation shall be the retention of all manure produced in the confinement enclosures between periods of manure 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 waters of the state.

a. Control of manure from confinement feeding operations may be accomplished through use of manure storage structures or other manure control methods. Sufficient capacity shall be provided in the manure storage structure to store all manure between periods of manure application. Additional capacity shall be provided if precipitation, manure or wastes from other sources can enter the manure storage structure.

b. Manure shall be removed from the control facilities as necessary to prevent overflow or discharge of manure from the facilities. Manure stored in unformed manure storage structures or earthen waste slurry storage basins shall be removed from the structures as necessary to maintain a minimum of two feet of freeboard in the structure, unless a greater level of freeboard is required to maintain the structural integrity of the structure or prevent manure overflow. Manure stored in unroofed formed manure storage structures shall be removed from the structures as necessary to maintain a minimum of one foot of freeboard in the structure unless a greater level of freeboard is required to maintain the structural integrity of the structure or prevent manure overflow.

c. To ensure that adequate capacity exists in the manure storage structure to retain all manure produced during periods when manure application cannot be conducted (due to inclement weather conditions, lack of available land disposal areas, or other factors), the manure shall be removed from the manure storage structure as needed prior to these periods. During Ms. Martens' investigation in July 2009, she noted the manure storage structures did not have adequate freeboard. The above-mentioned facts indicate violations of this provision.

IOWA DEPARTMENT OF NATURAL RESOURCES
ADMINISTRATIVE CONSENT ORDER
ISSUED TO: MEADOWVALE DAIRY, LLC and GREEN EARTH NUTRIENTS, INC.

5. Iowa Code section 459A.401(1) and 567 IAC 65.101(1) require the minimum level of manure control for any open feedlot shall be the removal of settleable solids from the manure prior to discharge into a water of the state. Iowa Code section 459A.401(3) and 567 IAC 65.101(3) prohibit open feedlot operations with an animal unit capacity of 1,000 animal units or more from discharging open feedlot effluent¹ into any waters of the United States unless the discharge is pursuant to an NPDES permit. In July 2009, DNR Field Office 3 documented at least two unauthorized discharges from the Meadowvale facility. The above-mentioned facts indicate violations of this provision.

6. Section 1 of Meadowvale's NPDES permit provides the requirements for an authorized discharge. The permit states that "when a precipitation event cause an overflow, then manure in the overflow may be discharged into waters of the United States provided the manure control system is designed, constructed, operated and maintained to contain all manure including runoff and the direct precipitation from a 25-year, 24-hour rainfall event (5.0 inches)." The largest rainfall in the month preceding the release was 1.12 inches on June 7, 2009. The manure discharges observed by Ms. Martens on July 15, 2009 and July 21, 2009 were not authorized discharges under the facility's NPDES permit. The above-mentioned facts indicate violations of the facility's NPDES permit.

V. ORDER

THEREFORE, the DNR orders and Green Earth and Meadowvale agrees to do the following:

- 1: Green Earth and Meadowvale shall install an alarm system on all center pivots to detect system malfunctions with 30 days of the date the Director signs this administrative consent order;
- 2: Meadowvale shall submit a permit modification to update its NPDES permit to properly identify the owner of the facility as Meadowvale within 30 days from the date the Director signs this administrative consent order;
- 3: Green Earth and Meadowvale shall pay an administrative penalty of \$10,000.00 within 30 days from the date the Directors signs this administrative consent 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 each of the water quality violations involved in this matter.

¹ Pursuant to 567 IAC 65.101(3) this discharge prohibition also applies to manure, process wastewater, settled open feedlot effluent and settleable solids as those terms are defined in 567 IAC 65.100

IOWA DEPARTMENT OF NATURAL RESOURCES
ADMINISTRATIVE CONSENT ORDER
ISSUED TO: MEADOWVALE DAIRY, LLC and GREEN EARTH NUTRIENTS, INC.

2. Iowa Code section 455B.109 authorizes the Environmental Protection Commission (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, with Green Earth and Meadowvale jointly and severally liable. The administrative penalty is determined as follows:

Economic Benefit – Meadowvale and Green Earth have gained an economic benefit from the violations stated in this administrative consent order. They avoided the costs of proper manure controls and proper land application. 567 IAC 10.2(1) states, “reasonable estimates of economic benefit should be made where clear data are not available.” A reasonable estimate is that Meadowvale and Green Earth have gained an economic benefit of at least \$2,000.00 and that amount is 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. Manure from the over application in May 2009 caused waters of the state to become polluted. The discharge caused discoloration, floating scum, dead fish, and high levels of pollutants in the creek and a pond. Manure from the runoff and discharge in July 2009 caused waters of the state to become polluted. The runoff and discharge caused discoloration, floating scum and high levels of pollutants in the creek. Additionally, the runoff and discharge in July 2009 violated the facility’s NPDES permit. The violations cited in this administrative consent order threaten the integrity of the animal feeding operation program and the water quality program. Additionally, DNR Field Office 3 has expended a large amount of time in investigating the manure discharges in May and July. Therefore, \$2,500.00 is assessed for the May 2009 violations and \$3,000.00 is assessed for the July 2009 violations for a total of \$5,500.00 being assessed for this factor.

Culpability – Meadowvale and Green Earth have a duty to remain knowledgeable of DNR’s requirements and to be alert to the probability that their conduct is subject to DNR’s rules. The facility and other facilities operated under the same owner have received administrative orders in the past for manure discharge violations. Therefore, \$2,500.00 is assessed for this factor.

VII. WAIVER OF APPEAL RIGHTS

This administrative consent order is entered into knowingly and with the consent of Meadowvale and Green Earth. For that reason Meadowvale and Green Earth waive the right to appeal this administrative consent order or any part thereof.

IOWA DEPARTMENT OF NATURAL RESOURCES
ADMINISTRATIVE CONSENT ORDER
ISSUED TO: MEADOWVALE DAIRY, LLC and GREEN EARTH NUTRIENTS, INC.

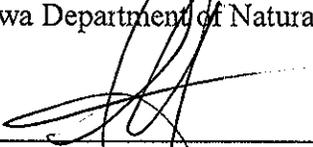
VIII. NONCOMPLIANCE

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.



RICHARD A. LEOPOLD, DIRECTOR
Iowa Department of Natural Resources

Dated this 4 day of
Jan, 2010



MEADOWVALE DAIRY, LLC

Dated this 11 day of
December, 2009



GREEN EARTH NUTRIENTS, INC.

Dated this 11 day of
DECEMBER, 2009

Facility # 62015; Kelli Book, Field Office 3 EPA, I.C 1 and VIII.D.1, VIII D.2 a, VIII D 2.d, VIII D 3.a