

REPORT OF CONCENTRATED ANIMAL FEEDING OPERATION INSPECTION

At

Gosch Farms
(b) (6)
Auburn, Iowa 51433

ON

September 11, 2024

BY

U. S. ENVIRONMENTAL PROTECTION AGENCY
Region 7
Enforcement and Compliance Assurance Division (ECAD)

1.0 INTRODUCTION

I performed a Concentrated Animal Feeding Operation (CAFO) inspection at the Gosch Farms facility on September 11, 2024. This inspection was performed pursuant to Section 308(a) of the Federal Water Pollution Control Act, as amended. This narrative report and Attachments present the findings and observations made during the inspection.

2.0 PARTICIPANTS

Mark Gosch, Owner/Operator

U.S. Environmental Protection Agency (EPA):
Stephen Pollard, (Lead Inspector) (913) 551-7582
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Zachary Leibowitz, Physical Scientist
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3.0 INSPECTION PROCEDURES

I contacted Mark Gosch via telephone on Friday, September 6, 2024, and stated that I was planning to perform an inspection of the Gosch Farms facility on Wednesday, September 11, 2024. Mr. Gosch stated that he would be available, and we agreed to meet at 8:00 am. I also stated that I would have another EPA employee with me during the inspection.

Prior to entering the facility, I conducted a visual reconnaissance of the property and its land application areas, searching for areas of concern observable from the county roads such as discharges, drainage patterns, flow directions, distance and direction of nearest perennial waters, visual condition of perennial waters, facility location and layout. The facility is located approximately 3 miles north of Auburn, Iowa. The nearest receiving waterbody is the North Raccoon River and is located approximately 0.75 miles south of the facility. The North Raccoon

River was flowing at the time of the inspection and is identified as a perennial water per the USGS topography maps.

I arrived at the facility at approximately 8:00 am and met with Mr. Gosch and his consultant, Becky Sexton with Twin Lakes Environmental, Inc. I presented my credentials and explained both the purpose of the inspection and the procedures I would follow during the inspection. Mr. Gosch stated that he was the operator of the facility and took care of day-to-day operations. I asked Mr. Gosch if the facility had a bio-security protocol and he asked that we wear disposable boot covers while on the property and to not enter the buildings. I informed Mr. Gosch that since the facility did not have a formal bio-security protocol, I would also be following the EPA Region VII bio-security protocol. Mr. Gosch and Mrs. Sexton accompanied me during the entire inspection.

I explained to Mr. Gosch that I would be conducting the CAFO inspection under the authority of Section 308(a) of the Federal Water Pollution Control Act to evaluate the facility's compliance status with the requirements of the Clean Water Act (CWA). I explained that the inspection would consist of a review of facility operations, required records, waste generation and management practices, and a visual inspection of the facility. I stated that I would document my findings and observations by taking photographs and/or videos, obtaining statements from facility staff, obtaining land application/inventory records, and collecting samples of any observed discharges. I conducted this inspection in accordance with the most current procedures described herein and the following EPA Region VII Standard Operating Procedures (SOPs), unless otherwise noted.

I completed my inspection, and I summarized the findings and recommendations with Mr. Gosch during the exit briefing. I did not issue a Notice of Preliminary Findings at the time of the inspection. Twenty-nine digital images were taken the day of the inspection. See Attachment 1 for the digital images chain of custody/image log and images #1 - #29. See Attachment 2 for the facility layout and image locations. See Attachment 9 for my observations of the North Racoon River at the 350th Street Bridge and Drainage Ditch 25 at the Xavier Avenue bridge and its tributary near the compost pile.

4.0 FACILITY DESCRIPTION

4.1 Facility Operations

The main facility is located approximately three miles north of Auburn, Iowa in the Upper North Racoon River Watershed (HUC12 071000060702). The facility's physical address is (b) (6), Auburn, Iowa 51433. The legal description for the facility is the (b) (6), in Township 86N, Range 35W, in Sac County, Iowa.

Mr. Gosch stated that the facility receives piglets, and they are then fed out to approximately 280-320 pounds. The facility will have two turns per year with placements typically occurring in winter and spring. There were no pigs onsite on the day of my inspection.

The main facility is approximately 2 acres in size and consists of two confinement barns with a total capacity of 2,200 head and accompanying feed bins. Manure is stored in deep pits underneath the barns. Mortalities are taken to a separate location and composted along with mortalities associated with a small swine confinement barn on that property. This property is located at 3280 Xavier Avenue, Auburn, Iowa and is approximately 1.4 miles north of the main facility. The State

of Iowa requires Gosch Farms to have a Manure Management Plan (MMP) that identifies how and where manure will be land applied. The 2021 MMP identifies 251 acres on nine fields available for land application. The facility uses commercial applicators for manure application in the spring and fall.

4.2 CAFO Status

Mr. Gosch stated that the facility has confined at least 2,200 swine weighing over 55 pounds for more than 45 days during the last 12-month period. All animals are confined in areas where crops, vegetation, forage growth or post-harvest residues are not sustained. I requested 5 years of inventory records, and they were provided via email on December 10, 2024 (Attachment 3). My review of these records indicates between January 2020 through November 2024 the Facility confined an average of 1,994 head. The minimum number confined was 896 head from June 2022 through January 2023. The maximum number confined was 2,439 head from April 2024 through September 2024. As a result of my observations, I determined that the facility meets the definition of an animal feeding operation as it is defined in Title 40 of the Code of Federal Regulations (CFR), Part 122.23. There are man-made structures (concrete pads) associated with the facility's composting area that would convey process wastewater towards a tributary of Drainage Ditch 25 located approximately 150 feet east of the compost pile. I reminded Mr. Gosch that discharging from an AFO confining between 750 and 2,499 head of swine weighing greater than 55lbs via a man-made conveyance to a water of the U.S. would change his classification from AFO to a Medium CAFO and any discharges would need to be pursuant to an NPDES permit.

4.3 Regulatory History

The facility does not have an NPDES permit and prior to this inspection had never been inspected by EPA. IDNR's last onsite inspection was performed on May 21, 2012. A desktop compliance review was performed on March 10, 2016.

5.0 FINDINGS AND OBSERVATIONS

The weather conditions at the time of the inspection were partly cloudy and mild (80°F). I met with Mr. Gosch and Ms. Sexton and discussed operational processes being performed at the facility. I performed a visual inspection of the facility and reviewed a MMP provided by Mrs. Sexton. The facility has been operating as an animal feeding operation since it began operations in 1994.

5.1 Production Areas

Confinement Barns - During the visual inspection of the production area, I observed two confinement barns and feed bulk bins (Images 1-8). As discussed above, manure is captured in pits below the confinement barns. I did observe a very small amount of manure outside of the access door located on the west end of building #2 (Images #4 and #5) and a small amount of spilled feed around the bulk bin associated with building #2 (Image 3). I recommended to Mr. Gosch that he clean up around these two areas. Land application records indicate the last time manure was pumped from the pits was on October 13, 2023.

Mortality Management/Composting Area - As discussed above, mortalities are taken to a separate location north of the main facility and composted along with mortalities associated with a small swine confinement barn on the property. This composting area was uncovered, and I estimated it to be about 600 yds³ of material (Images #10-12 & 15). Many bones and partially decomposed pigs were visible and there did not appear to be adequate cover material to effectively compost the mortalities. This area was exposed to precipitation and there were no structures in place to control runoff. During significant precipitation events, runoff from this compost pile will flow south and east for approximately 150 feet before discharging into a tributary of Drainage Ditch 25. The tributary was flowing at the time of my inspection (Image 17). There is a small pen located between the compost pile and the tributary that had several cattle in it at the time of the inspection. A portion of this pen has a concrete apron that slopes to the east and will convey runoff from the compost pile east towards the unnamed tributary (Image #15).

In addition to the composting area, I observed a confinement barn used to feed organic pigs. At the time of the inspection there were less than 100 head confined in the barn. The barn is approximately 100 ft x 40 ft. There is also a 10 ft concrete alleyway along the southern side of building that is used to store manure and used bedding material. This alley way is exposed to precipitation and runoff from precipitation will flow to the southeast corner and discharge into a very small retention/settling structure (Image #20). Overflow from this structure will flow east-southeast for approximately 65 feet before discharging into the tributary of Drainage Ditch 25. South of the confinement building was a large stockpile of used bedding, hog manure, pooled process wastewater and several decomposing pigs. Precipitation related runoff from this area is not controlled and during significant precipitation events, runoff will flow approximately 150 feet before discharging into the tributary of Drainage Ditch 25.

See Attachment 2 for an aerial image showing approximate flow paths from the compost pile, confinement building and used bedding/manure stockpile. I recommended to Mr. Gosch that these areas be cleaned up and that process wastewater be managed so that it does not result in a discharge to the unnamed tributary of Drainage Ditch 25.

5.2 Land Application Areas

The discharge of manure, litter, or process wastewater from a land application area under the control of an unpermitted CAFO is a discharge subject to NPDES permitting requirements, unless the discharge is an agricultural stormwater discharge. To be considered an agricultural stormwater discharge, the CAFO must land apply manure, litter, or process wastewater in accordance with site-specific nutrient management practices that ensure appropriate agricultural utilization of the nutrients in the manure, litter, or process wastewater, as specified in § 122.42(e)(1)(vi)–(ix). Nutrient management practices and rates of application meet these requirements when they are done in accordance with state technical standards. To ensure that CAFOs meet these technical standards, the State of Iowa requires a site-specific MMP be developed that identifies the nutrient management practices the CAFO will follow.

The IDNR requires all facilities that confine greater than 1,250 head of swine weighing greater than 55 pounds to submit a complete “original” or “long form” version of their MMP every four years to IDNR and an annual update or “short form” each of the remaining three years that identifies any changes to the existing MMP. The facility’s last “long form” MMP was received by IDNR on May 12, 2021 (Attachment 4), and annual updates were submitted for 2022 through

2024. None of the updates on file with IDNR indicated changes to land application fields and/or crop rotations from the original 2021 MMP. However, Ms. Sexton indicated that land application rates are recalculated each growing season using the most current optimum yield estimates. She also stated that until 2024, IDNR did not consider these revised rates to be “changes” to the MMP. These revised rate calculations were provided to me and are included as Attachment 6. Pumping and spreading records were provided to me via email prior to the inspection and are included as Attachment 7.

To determine if precipitation-related runoff from the facility meets the definition of agricultural stormwater discharge and therefore exempt from the NPDES permitting requirements, I reviewed the MMP, annual updates, pumping/spreading records, manure analysis and soil analysis records that were provided by the facility.

Based on my review of the above listed documents, I made the following findings:

1. The 2021 long form MMP identifies 201.5 acres on six fields available for manure application.
2. From 2020 through 2024, Gosch Farms has exceeded the stated maximum capacity of 2,200 head during at least 5 turns between 2020 and 2024. 2,243 head confined between May and September 2020. 2,311 head confined between January and November 2021. 2,212 head confined between June and December 2023. 2,439 head confined between April and September 2024 and there are 2,312 head onsite as of the date of this inspection report.
3. Since 2017, IDNR has issued four Notices of Violation for failure to submit annual MMP updates. These were issued on May 11, 2021, May 10, 2019, May 10, 2018, and May 1, 2017.

6.0 Water Sampling

Fields “West 80”, “Northeast 80” and “Southeast 80” have subsurface drainage tiles in them. Mr. Leibowitz and I observed both an intake located on the north side of 335th Street (Image #22) and the outlet (Image #25) which will discharge into the North Raccoon River. According to the facilities land application records, these fields have not had manure applied to them since April 2, 2021. The tile outlet was not discharging on the day of the inspection, but a sample of the North Raccoon River was collected at this location. See Attachment 2 for the specific location.

One sample was also collected from Drainage Ditch 25 before it flows under the Xavier Avenue bridge. See Attachment 2 for the specific location. This location is downstream of the composting area discussed above. A summary of the analytical results from these two samples is included in Table 1 below. The complete analytical results are included as Attachment 8.

Table 1. Analytical Result Summary – Gosch Farms

Analyte	Raccoon River	Drainage Ditch 25
N, Nitrate+Nitrite (mg/L)	5.88	0.466
Total Kjeldahl Nitrogen (mg/L)	2.06	1.24
Ammonia (mg/L)	0.046	0.179
Phosphorus (mg/L)	0.38	0.19
Chloride (mg/L)	54.7	24.3
BOD5 (mg/L)	8.77	2.99
E. coli (MPN/100mL)	308	921
Total Coliforms (MPN/100mL)	1,203	1,414
Total Suspended Solids (mg/L)	35	11

6.0 SUMMARY

Gosch Farms is located approximately three miles north of Auburn, Iowa. The site has two confinement barns with a total capacity of 2,200 head of swine with deep pits below the barns for manure storage. The facility is operating as a AFO confining between 750 and 2,499 head of swine weighing greater than 55lbs. The Facility does not have an NPDES permit.

I observed a very small amount of manure outside of the access door located on the west end of building #2 and a small amount of spilled feed around the bulk bin associated with building #2.

I observed a composting area utilized by Gosch Farms that is located at 3280 Xavier Avenue, Auburn, Iowa and is approximately 1.4 miles north of the main facility. This composting area was not controlled, and I determined that during significant precipitation events, uncontrolled process wastewater from this area will flow south and east over concrete aprons towards a tributary of Drainage Ditch 25 located approximately 150 feet from the compost pile.

I observed a confinement barn with exposed alley way used to feed organic pigs (not part of Gosch Farms). At the time of the inspection there were less than 100 head confined in the barn. Runoff from this barn will flow east-southeast for approximately 65 feet before discharging into the tributary of Drainage Ditch 25. South of this confinement building was a large stockpile of used bedding, hog manure, pooled process wastewater and several decomposing pigs. Precipitation related runoff from this area is not controlled and during significant precipitation events, runoff will flow approximately 150 feet before discharging into the tributary of Drainage Ditch 25.

My review of the MMP and associated land application documentation identified that Gosch Farms has exceeded the maximum number of animals listed (2,200 head) in the MMP during 5 turns between 2020 and 2024. Between 2024 and 2017, IDNR has issued four Notices of Violation for failure to submit annual MMP updates.

I collected two water samples associated with Gosch Farms from the North Raccoon River and Drainage Ditch 25.

STEPHEN
POLLARD

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Nicole Moran
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ATTACHMENTS:

1. Digital Image Chain of Custody/Image Log and Images #1 - #29 (31 pages)
2. Facility Layout-Image Locations-Land App Areas (5 pages)
3. Inventory Record (1 page)
4. 2021 Manure Management Plan "Long Form" (68 pages)
5. 2024 Manure Management Plan "Long Form" (73 pages)
6. Annual Revisions to Land Application Rates (5 Pages)
7. Manure Application Records (9 Pages)
8. Stream Sampling Results (2 Pages)
9. Stream Characteristics Form (1 page)