

Appendix C

Maier Inspection Report, July 14, 2022



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 8**

1595 Wynkoop Street
Denver, CO 80202-1129
Phone 800-227-8917
www.epa.gov/region8

Ref: 8ENF-W-NW

SENT VIA EMAIL
DIGITAL READ RECEIPT REQUESTED

Patrick Maher
Owner
Maher Cattle LLC
[REDACTED]

Re: Inspection Report for Maher Cattle LLC, Unpermitted Site

Dear Mr. Maher:

On July 14, 2022, representatives of the U.S. Environmental Protection Agency inspected the Maher Cattle LLC Concentrated Animal Feeding Operation (CAFO) in Timber Lake, South Dakota. At the time of the inspection, the CAFO was not covered by a National Pollutant Discharge Elimination System (NPDES) permit for animal feeding operations. The inspection was conducted under the authority of Section 308 of the Clean Water Act (Act). Enclosed is a report of the inspection.

Inspection findings are summarized within the enclosed inspection report in a table titled "Findings, Corrective Actions and Recommendations." Within **thirty (30) days** of receipt of this report, please provide the EPA and Standing Rock Sioux Tribe Environmental Program with a summary of corrective actions taken to address each of the findings identified in the report and any information that may change the findings or content of the report. This summary should be sent to:

Stephanie Meyers
meyers.stephanie@epa.gov

Jake Luger
jluger@standingrock.org

Please contact me at 303-312-6938 or meyers.stephanie@epa.gov if you have any questions regarding this letter or the enclosed report.

Sincerely,

Stephanie Meyers
NPDES and Wetlands Enforcement Section
Enforcement and Compliance Assurance Division

Enclosures:

- 1) NPDES CAFO Inspection Report – Maher Cattle LLC
- 2) NPDES Inspection Photo Log – Maher Cattle LLC

3) Maher Cattle Facility Schematic

cc: Nathan Pesta, Engineer, DGA Engineering (via email)
Jake Luger, Acting Environmental Director, Standing Rock Sioux Tribe (via email)
Ronni Chase Alone, Water Quality Specialist, Standing Rock Sioux Tribe (via email)
Qian Zhang, Permit Writer, EPA Region 8 (via email)

NPDES Inspection Report – Concentrated Animal Feeding Operations

National Database Information	
Inspection Date: July 14, 2022	Inspection Type: Concentrated Animal Feeding Operation
Entry/Exit Time: 7:54 am / 9:50 am	NPDES ID Number: Unpermitted Site
NAICS Code: 112112	Inspection ID: 202207_Maher Cattle
Lead inspector and affiliation: Stephanie Meyers, EPA Region 8	
Inspector and affiliation: Emilio Llamozas, EPA Region 8	

Facility Location Information (Name/Location/ Mailing Address)	
Site/Facility Name & Location: Maher Cattle LLC 13031 248th Avenue Timber Lake, South Dakota 57656	Email Report to: Patrick Maher Nathan Pesta nate@dgaengineering.com

Contact Information	
	Name(s)/Title
Facility Contacts: <i>(indicate primary lead and present during inspection)</i>	Patrick Maher / Owner / Maher Cattle LLC / primary lead during the inspection
	Nathan Pesta / Engineer / DGA Engineering / present during the inspection
	Tyler Timmons / Tribal Utility Consultant / Indian Health Service (IHS) / present during the inspection
Person/Company meeting definition of “Operator”	Maher Cattle LLC
Authorized Official(s)	Patrick Maher / Owner / Maher Cattle LLC

Permit Information		
Is the permit on site and available? N/A, the site is not permitted	Effective Date: N/A Expiration Date: N/A	
Receiving Water(s): High Bank Creek, thence to the Grand River, thence to the Missouri River	Latitude (from inspection): 45.503559°N	Longitude (from inspection): -101.162005°W
Regulatory Inspector’s source of information: Site inspection and facility representatives.		
Weather conditions during inspection (e.g., temperature, sky, precipitation): Cloudy and warm, no precipitation		

Areas Evaluated During Inspection		
Permit	Self-Monitoring Program	Pretreatment
Records	Compliance Schedule	Pollution Prevention
<u>Facility Site Review</u>	Laboratory	Stormwater
<u>Effluent/Receiving Waters</u>	<u>Operations and Maintenance</u>	Combined Sewer Overflow
Flow Measurement	Sludge Handling/Disposal	Sanitary Sewer Overflow

Site Information					
Permitted Capacity of Facility		N/A	Type of Confinement (open lot, roofed confinement, etc.)		Open lot
Max. Capacity of Facility		12,000 cattle	Annual Report Submission		N/A
Animal Type	# confined	Large/Medium Definition	Animal Type	# confined	Large/Medium Definition
Cattle	2,233	≥1,000/≥300	Sheep	0	≥10,000/≥3,000
Dairy mature	0	≥700/≥200	Dairy (heifers)	0	≥1,000/≥300
Swine (≥55#)	0	≥2,500/≥750	Swine (<55#)	0	≥10,000/≥3,000
Chickens (solid manure)	0	≥125,000/≥37,500	Chickens (liquid manure)	0	≥30,000/≥9,000
Turkeys	0	≥55,000/≥16,500	Other (specify) Bison – kept in pastures.	120	

Report Review and Signature		
Drafter Name	Address/Phone Number	Date
	U.S. EPA Region 8 1595 Wynkoop Street 8ENF-W-NW Denver, Colorado 80202	08/29/2022
Stephanie Meyers	303-312-6938	
Reviewer Name	Address/Phone Number	Date
	U.S. EPA Region 8 1595 Wynkoop Street 8ENF-W-NW Denver, Colorado 80202	08/31/2022
Emilio Llamozas	303-312-6407	
Supervisor Signature/Name	Address/Phone Number	Date
	U.S. EPA Region 8 1595 Wynkoop Street 8ENF-W-NW Denver, Colorado 80202	09/26/2022
Michael Boeglin	303-312-6250	

Inspection Narrative and Site Description

The inspection was conducted at the Maher Cattle LLC Concentrated Animal Feeding Operation (CAFO or facility) located in Timber Lake, South Dakota to evaluate the facility's discharge status and permit application status. Currently, the facility is unpermitted and facility representatives are working to develop a permit application for coverage under an NPDES permit. The facility is located within the boundaries of the Standing Rock Sioux Reservation. The EPA is responsible for implementing the NPDES program in Indian Country within the State of South Dakota. The inspection was announced approximately one week prior to the inspection to coordinate logistics and ensure a facility representative would be on site. On July 14, 2022, U.S. Environmental Protection Agency (EPA) inspectors Stephanie Meyers and Emilio Llamozas met with owner Patrick Maher and consultant Nathan Pesta with DGA Engineering. The EPA inspectors presented their credentials and had an opening conference to explain the purpose of the inspection. The inspectors proceeded to inspect the facility and asked questions to the facility representatives to help the inspectors evaluate the facility's discharge status and to obtain facility information for NPDES permit coverage. Throughout the inspection, the inspectors noted their observations in a checklist. Photographs taken during the inspection are included in the attached photo log.

Construction of the feedlot began in August 2019 and the facility has been in operation since January 2020. At the time of the inspection, the facility had 2,233 head of cattle on site. There were also 120 bison on site in pastures at the time of the inspection. Facility representatives indicated that the maximum capacity of the facility is 12,000 head of cattle. Cattle are confined to open lots within the production area from approximately October to June currently, and facility representatives indicated they are working towards housing cattle year-round. Cattle are also contained within surrounding fields for grazing.

The production area is approximately 72.8 acres, and 10,000 acres of cropland is available for land application of manure solids and 320 acres is available for application of liquid waste. The holding ponds have a capacity of 49 acre-feet to the top and approximately 33.9 acre-feet of capacity to the freeboard. Facility representatives indicated manure from the settling basins is currently being land applied, and that wastewater from the holding ponds is not being land applied. Manure is land applied using box spreaders and liquid waste can be land applied via piping.

After the opening conference, inspectors proceeded to inspect the facility. Mr. Maher escorted the EPA inspectors, IHS Tribal Utility Consultant, and the facility's engineering consultant. Inspectors first observed the settling basins and holding pens. There are four rows of pens, each row containing between six and nine pens which drain via gravity flow to the north to settling basins (photos 126 and 127) that are along the northern end of each row of pens. Wastewater in settling basin 3 drains to the east to settling basin 4, settling basin 4 drains to settling basin 5, and settling basin 5 drains to holding pond 2. Settling basin 6 drains directly to holding pond 2 (photos 128 and 131) via gravity flow. Inspectors then observed a portion of High Bank Creek near a dam and culvert (photo 129) to the north of the holding pens and concrete feed pad, where significant erosion was observed. The facility representatives indicated that a beaver had plugged the culvert and in June 2021 there was a large rain event that caused the water to divert to the side creating a new channel for the creek. The inspectors also observed High Bank Creek on the northside of holding pond 2 (photo 130). The facility representatives indicated that holding pond 2 does not discharge to High Bank Creek. Inspectors then drove around to the southern end of the holding pens (photo 132) that drain to holding pond 2. After

that, inspectors observed settling basin 1 (photo 133), which drains to holding pond 1 (photo 134). Settling basin 2 also drains to holding pond 1 and settling basins 1 and 2 receive manure and wastewater via gravity flow from a separate set of pens to the west of the main holding pens, which drain to the east. Facility representatives indicated manure is removed from the settling basins and land applied to the oat field.

Inspectors then drove by the concrete feed pad where various types of feed are stored. At the time of the inspection, feed was not covered, and facility representatives indicated the oatlage pile was being cut (photo 135). Inspectors had asked about the facility's mortality management procedures, and facility representatives had indicated they compost dead cattle using manure and land apply the manure once the composting process is completed. They indicated that the carcasses dissolve in the manure in approximately nine days. There were no mortalities at the time of the inspection.

Inspectors then headed north on 248th Avenue and observed the yearling pens along the western side of 248th Avenue. It was observed that High Bank Creek runs through the middle of the northernmost yearling pen (photos 136-138) and continues to flow east through a large culvert pipe underneath the road (photo 139). Except for the southernmost yearling pen, the remaining pens are sloped to the north and would drain to the pen that High Bank Creek runs through (photos 136-137). A facility representative indicated yearlings are housed for a short amount of time in the yearling pens, are then moved to grazing fields to the west of the yearling pens, and then are eventually moved to the holding pens to the east of 248th Avenue.

At the end of the inspection, the inspectors held a closing conference with Mr. Maher and Mr. Pesta where they discussed preliminary findings. On July 21, 2022, the EPA sent an email to Mr. Maher and Mr. Pesta with the preliminary findings from the inspection. On July 25, 2022, Mr. Maher and Mr. Pesta provided a response to the preliminary findings.

Findings, Corrective Actions and Recommendations

Finding #1: The site did not have a concentrated animal feeding operation NPDES permit. Maher Cattle LLC has been operating without an NPDES permit since January 2020 and has not yet submitted a permit application for NPDES permit coverage. In prior conversations and during the inspection, facility representatives indicated a permit application will be submitted by October 1, 2022. The facility, by definition, is a large CAFO and was discharging wastewater to High Bank Creek from the yearling pens.

Regulatory requirement:

In accordance with 40 C.F.R. 122.21(a)(1), "Any person who discharges or proposes to discharge pollutants or who owns or operates a "sludge-only facility" whose sewage sludge use or disposal practice is regulated by part 503 of this chapter, and who does not have an effective permit, except persons covered by general permits under § 122.28, excluded under § 122.3, or a user of a privately owned treatment works unless the Director requires otherwise under § 122.44(m), must submit a complete application to the Director in accordance with this section and part 124 of this chapter. The requirements for concentrated animal feeding operations are described in § 122.23(d)."

In accordance with 40 C.F.R. 122.23(f), "A CAFO must be covered by a permit at the time that it discharges."

40 C.F.R. 122.23(d)(1) states “A CAFO must not discharge unless the discharge is authorized by an NPDES permit. In order to obtain authorization under an NPDES permit, the CAFO owner or operator must either apply for an individual NPDES permit or submit a notice of intent for coverage under an NPDES general permit.”

Corrective Action:

Prepare and submit a permit application for NPDES permit coverage. Provide a copy of the permit application to the EPA and the Standing Rock Sioux Tribe Environmental Program (Tribe). Comply with the requirements of the permit.

Finding #2: There were unauthorized discharges of wastewater to High Bank Creek.

There were unauthorized discharges of wastewater from the yearling pens to High Bank Creek due to the location of the yearling pens in close proximity to High Bank Creek, the slope of the yearling pens towards High Bank Creek and the rainfall in the area. The yearling pens are located around and inside of High Bank Creek and contain manure (photos 136-138).

Regulatory requirement:

Under the provisions of the Clean Water Act, as amended (33 U.S.C. 1251 et. seq.), federal law prohibits discharges to waters of the U.S. unless that discharge is covered under a National Pollutant Discharge Elimination System (NPDES) permit.

40 C.F.R. 122.23(d)(1) states, “A CAFO must not discharge unless the discharge is authorized by an NPDES permit. In order to obtain authorization under an NPDES permit, the CAFO owner or operator must either apply for an individual NPDES permit or submit a notice of intent for coverage under an NPDES general permit.”

Corrective Action:

Ensure that wastewater from the yearling pens is not discharged to High Bank Creek. Provide the EPA and the Tribe with a description of the corrective actions taken to address this finding.

Finding #3: Manure was land applied and the rate at which manure can be land applied at an agronomic rate was not calculated.

A facility representative indicated that solid manure from the settling basins (photos 126 and 127) was land applied to crops in 2020 and 2021. At the time of the inspection, there were no agronomic rate calculations records for the application of the manure. It appears the appropriate agronomic rate at which manure is being land applied is not being calculated.

Regulatory requirement:

40 C.F.R. 122.23(e) states, “The discharge of manure, litter or process wastewater to waters of the United States from a CAFO as a result of the application of that manure, litter or process wastewater by the CAFO to land areas under its control is a discharge from that CAFO subject to NPDES permit requirements, except where it is an agricultural storm water discharge as provided in 33 U.S.C. 1362(14). For purposes of this paragraph, where the manure, litter or process wastewater has been applied 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), a precipitation-related discharge of manure, litter or process wastewater from land areas under the control of a CAFO is an agricultural stormwater discharge.

(1) For unpermitted Large CAFOs, a precipitation-related discharge of manure, litter, or process wastewater from land areas under the control of a CAFO shall be considered an agricultural stormwater discharge only where the manure, litter, or process wastewater has been land applied 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) through (ix).

(2) Unpermitted Large CAFOs must maintain documentation specified in § 122.42(e)(1)(ix) either on site or at a nearby office, or otherwise make such documentation readily available to the Director or Regional Administrator upon request.”

Corrective Action:

Ensure manure is land applied in accordance with site-specific nutrient management practices and documentation of land application of manure is maintained. Provide the EPA and the Tribe with a description of the corrective actions taken to address this finding.

Finding #4: Feed was stored uncovered on the concrete feed pad.

Feed, including oatlage, is stored on a concrete pad uncovered and susceptible to being transported by wind and coming into contact with storm runoff (photo 135). High Bank Creek is in close proximity to the north of the feed concrete pad. On July 25, 2022, facility representatives had sent EPA inspectors a photo showing the pile of oatlage has since been covered.

Regulatory requirement:

According to 40 CFR 122.23(b)(7) process wastewater also includes any water which comes into contact with any raw materials, products, or byproducts including manure, litter, feed, milk, eggs or bedding.

Recommendation:

Ensure runoff from the concrete feed pad is contained within the production area and not discharged to High Bank Creek. Provide the EPA and the Tribe with a description of the corrective actions taken to address this finding.

Finding #5: Cattle have direct access to High Bank Creek.

A facility representative indicated that grazing cattle have direct access to High Bank Creek in the field to the west of the yearling pens.

Recommendation:

Ensure cattle do not have direct access to High Bank Creek within the production area. Provide the EPA and the Tribe with a description of the corrective actions taken to address this finding.



Photographs for Maher Cattle Concentrated Animal Feeding Operation

Inspection Type: CAFO

Photo number 126 taken by Stephanie Meyers on 7/14/2022.

The direction of the photo is South.

Description:

Overview of cattle pens in the background and Settling Basin 3 in the foreground. The water flows to the north towards the settling basin. Solids settle out in the settling basin and the water flows to Settling Basin 4, which then flows into Settling Basin 5, which flows to Holding Pond 2.



Photo number 127 taken by Stephanie Meyers on 7/14/2022.

The direction of the photo is Southeast.

Description:

Overview of cattle pens in the background and Settling Basin 3 in the foreground. The water flows to the north towards the settling basin. Solids settle out in the settling basin and the water flows to Settling Basin 4, which then flows into Settling Basin 5, which flows to Holding Pond 2.





Photographs for Maher Cattle Concentrated Animal Feeding Operation

Inspection Type: CAFO

Photo number 128 taken by Stephanie Meyers on 7/14/2022.

The direction of the photo is Southeast.

Description:

Overview of Holding Pond 2 showing the inlet pipes coming from Settling Basin 5 and Settling Basin 6.



Photo number 129 taken by Stephanie Meyers on 7/14/2022.

The direction of the photo is Southwest.

Description:

Overview of High Bank Creek near a dam on the north side of the feed pad area. The water flows to the north towards the foreground of the photo. Note erosion of the banks.





Photographs for Maher Cattle Concentrated Animal Feeding Operation

Inspection Type: CAFO

Photo number 130 taken by Stephanie Meyers on 7/14/2022.

The direction of the photo is East.

Description:

Overview of High Bank Creek north of Holding Pond 2. The water flows to the east towards the background of the photo.



Photo number 131 taken by Stephanie Meyers on 7/14/2022.

The direction of the photo is South.

Description:

Overview of Holding Pond 2 with cattle pens and settling basins in the background.





Photographs for Maher Cattle Concentrated Animal Feeding Operation

Inspection Type: CAFO

Photo number 132 taken by Stephanie Meyers on 7/14/2022.

The direction of the photo is North.

Description:

Overview of drainage from cattle pens to the north towards Holding Pond 2.



Photo number 133 taken by Stephanie Meyers on 7/14/2022.

The direction of the photo is South.

Description:

Overview of settling basin for the receiving pens.
Solids accumulate in the settling basin and the water goes to Holding Pond 1.





Photographs for Maher Cattle Concentrated Animal Feeding Operation

Inspection Type: CAFO

Photo number 134 taken by Stephanie Meyers on 7/14/2022.

The direction of the photo is Southeast.

Description:

Overview of Holding Pond 1 that receives water from Settling Basin 1 and 2 for the receiving pens.



Photo number 135 taken by Stephanie Meyers on 7/14/2022.

The direction of the photo is Northeast.

Description:

Overview of feed pad. Note the feed was not covered at the time of the inspection.





Photographs for Maher Cattle Concentrated Animal Feeding Operation

Inspection Type: CAFO

Photo number 136 taken by Stephanie Meyers on 7/14/2022.

The direction of the photo is West.

Description:

Overview of High Bank Creek with yearling pens on both sides of the creek. The GPS coordinates were 45.50857 N, -101.16221 W. Note this was on the west side of 248th Avenue. High Bank Creek flows to the east.



Photo number 137 taken by Stephanie Meyers on 7/14/2022.

The direction of the photo is Southwest.

Description:

Overview of High Bank Creek with yearling pens on the south side of the creek. Note this was on the west side of 248th Avenue. High Bank Creek flows to the east.





Photographs for Maher Cattle Concentrated Animal Feeding Operation

Inspection Type: CAFO

Photo number 138 taken by Stephanie Meyers on 7/14/2022.

The direction of the photo is Northwest.

Description:

Overview of High Bank Creek with yearling pens on the north side of the creek. Note this was on the west side of 248th Avenue. High Bank Creek flows to the east.



Photo number 139 taken by Stephanie Meyers on 7/14/2022.

The direction of the photo is East.

Description:

Overview of High Bank Creek. Note this was on the east side of 248th Avenue. High Bank Creek flows to the east.

