

REPORT OF CONCENTRATED ANIMAL FEEDING OPERATION INSPECTION

AT

Double B Cattle Company
2876 280th St.,
Lincolnvill, KS 66858
620-924-5712
NPDES Permit # KS0099716

ON

May 21, 2024

BY

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

1. INTRODUCTION

On May 21, 2024, I conducted a Concentrated Animal Feeding Operation (CAFO) Compliance Evaluation Inspection (CEI) of the Double B Cattle Company facility. 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. PARTICIPANTS

Double B Cattle Company:
Michael Beneke, Owner/Operator

Kansas Department of Health and Environment (KDHE):
Casey Guccione, Section Chief, Livestock Waste Management
Virgil Cane, Environmental Specialist, Livestock Waste Management

U.S. Environmental Protection Agency (EPA), Region 7, Enforcement Compliance and Assurance Division (ECAD), Water Branch:
Zachary Leibowitz, Physical Scientist 913-551-7553 (Lead Inspector)
Adam Hendrickson, Physical Scientist 913-551-7253 (Credentialed Inspector)

3. INSPECTION PROCEDURES

I conducted this inspection in accordance with EPA Region 7 Standard Operating Procedures (SOPs) No. 2332.09 Bio-Security Procedures for Conducting NPDES Compliance Evaluations at Animal Feeding Operations and No. 2332.08 Animal Feeding Operation Inspection Program unless otherwise noted.

Prior to the inspection, I reviewed documents for Double B Cattle Company, including aerial imagery, previous KDHE inspection reports and correspondence, and the permit conditions of the NPDES permit # KS0099716 for familiarization with the requirements specific to this facility.

I attempted to contact Michael Beneke, Owner/Operator, on Monday, May 20, 2024, to schedule an inspection at Double B Cattle Company for Tuesday May 21, 2024. However, after leaving voicemails, I was unable to make contact with Mr. Beneke before the inspection.

I arrived near the entrance of Double B Cattle Company on May 21, 2024, at 10:00 a.m. Prior to entering the facility, I conducted visual reconnaissance from 280th Street to identify any areas of concern visible from the public right-of-way. At approximately 10:05 a.m. we met with Casey Guccione (KDHE) and Virgil Cane (KDHE) at the entrance of the facility. I spoke with Blaise Holloway (Day Laborer) who was working in the pens and asked him if Mr. Beneke was around. Mr. Holloway told me that Mr. Beneke was in town and to call his phone. After I called and left a voicemail, I received a call back from Mr. Beneke. I informed him that I was with the EPA and was there to conduct an inspection of the facility. I explained that the purpose of the inspection was to evaluate the facility's compliance status with the Clean Water Act (CWA) and permit requirements under the authority of Section 308(a) of the Federal Water Pollution Control Act. I explained that the scope of the inspection would include a records review, a review of operations, waste generation and management practices, and a visual inspection of the facility, which may include the collection of photographs, documents, and samples. Mr. Beneke granted access to begin a visual inspection of the facility while he drove back to the site. I asked if there were additional safety or biosecurity concerns or procedures we should follow and was told no. During the inspection of the facility I was accompanied by Adam Hendrickson of EPA Region 7 as well as Casey Guccione and Virgil Cane of KDHE.

While conducting the inspection of the pens, we were met by Mr. Beneke. I presented my EPA identification to Mr. Beneke and Mr. Hendrickson presented his inspector credentials. We discussed how to proceed with the inspection and agreed to complete the visual inspection of the feedstock storage area located on a separate part of the property near his office and thereafter conduct an exit briefing conference in his office.

At the exit briefing conference, I provided Mr. Beneke with a printed copy of the following documents:

- U.S. EPA Notice Regarding Propriety/Confidential Business Information (CBI) Information Sheet and Form. I made Mr. Beneke aware of Double B Cattle Company's confidentiality rights and informed him that they had 10 business days to return the form signed if they needed to make any claims. He did not raise CBI claims during the inspection and returned the signed form to me before I departed.

- Livestock and Poultry Operation Inspections Under EPA's National Pollutant Discharge Elimination System Program Fact Sheet (EPA 305-F-14-001).
- U.S. EPA Small Business Resources Information Sheet (EPA-300-F-21-002).

I asked questions and requested records pertaining to the operation of the facility. Mr. Beneke provided answers to questions but directed records request to his wife Mrs. Cynthia Beneke who was unavailable during the inspection. I told Mr. Beneke that I would follow up with Mrs. Beneke via email to obtain the records following the inspection. I summarized the findings and recommendations to Mr. Beneke and concluded the inspection of the facility at approximately 2:30 p.m.

I did not collect samples. I took 109 photographs during the visual inspection. Descriptions of all photos taken are listed in Attachment 01. I received some - but not all - electronic documents requested from Mrs. Beneke following the on-site inspection.

4. FACILITY DESCRIPTION

A. Facility Operations

Double B Cattle Company's permit, (Federal Permit #KS0099716, State Permit #A-NEMN-C003; Attachment 02), was last issued on October 16, 2018, and was set to expire on October 15, 2023. KDHE received the renewal application (Attachment 03) on January 30, 2023, prior to expiration of the previous permit cycle. However, in an April 24, 2023, letter in response to the application (Attachment 04), KDHE stated that the permit renewal application package did not include the required Nutrient Management Plan (NMP) and without action, the permit would expire. Additional letters warning the facility of permit expiration were sent by KDHE on October 19, 2023 (Attachment 05), and January 22, 2024 (Attachment 06). The previously issued permit (administratively continued by KDHE) sets forth requirements and conditions that the permittee is to follow. For the purposes of this inspection, I evaluated the facility to determine compliance with the administratively continued permit.

Michael and Cynthia Beneke own and operate the Double B Cattle Company facility. According to Mr. Beneke, they don't have any full-time employees but have limited help as needed from local day laborers. The facility took its current form in 2018 when the operations were combined with the Hanging Tree Cattle Company (State Permit #A-NEMN-B025) facility, which formerly operated open lot pens near the facility's current office, feedstock storage, and mortality composting areas. The facility is located at 2876 280th St., Lincolnvill, KS 66858 in Marion County. The legal description is S 1/2, Section 15, Township 18S, Range 5E. Mr. and Mrs. Beneke own eight parcels (including the parcels where the Double B Cattle Company operates) in the area totaling approximately 779 acres (Table 1).

Table 1. Parcel IDs, calculated areas, and corresponding names in 2018 Comprehensive NMP of parcels owned by Mr. and Mrs. Beneke.

Parcel ID	Calculated Area (Acres)	Comprehensive NMP Field Name
570941900000001000	43.04	Stikas
570941900000001000	37.69	Stikas
570941700000001000	157.89	Otte
570941700000006000	108.27	Lehman
570941700000005000	35.31	Lehman
570951500000003000*	158.36	-
570951500000004000**	160.54	Home1 and Home2
570961400000003000	77.71	Peterson1 and Peterson2

*-Pens, sediment basins and waste storage pond in this parcel

** -Feed storage and mortality compost area in this parcel.

Double B Cattle Company is permitted for a maximum capacity of 5,000 head of cattle. According to the Facility Description in Section A of the permit, the facility consists of approximately 25.7 acres of open lot pens, a wastewater control system consisting of four sediment basins covering 5.4 acres and a waste storage pond with a surface area of 5.14 acres. Mr. Beneke confirmed the facility description and provided information on the pen names, storage ponds, and sediment basins (Attachment 07).

B. Compliance History

KDHE conducted Livestock Waste Compliance Inspections of the facility on November 6, 2019 (Attachment 08), November 9, 2021 (Attachment 09 and Attachment 10), and January 31, 2023 (Attachment 11). KDHE inspectors found the facility to be out of compliance during all inspections. During the November 2019 and November 2021 inspections, the facility did not have the required freeboard (6 ft) in its waste storage pond (WSP-1). Additionally, the November 2019 and November 2021 inspection reports noted issues with sediment and liquid storage in the sedimentation basins. All inspection reports noted that construction of WSP-2 had not begun. According to the permit (see Section F – Schedule of Compliance, Attachment 02), WSP-2 was to be constructed between October 2020 and October 2021 to control process wastewater from the feed storage area. During the November 2021 inspection (Attachment 09), the inspector observed runoff from the feed storage area entering the field Home1 and flowing towards Middle Creek.

5. FINDINGS AND OBSERVATIONS

A. Records Review

Prior to the inspection, I reviewed KDHE's records of the facility. The records I reviewed included KDHE inspection reports (2019, 2021 and 2023) and annual reports (2018-2019, 2021-2023) as well as the permit, permit application and permit expiration correspondence. I also reviewed aerial imagery of the facility from 2018-Present.

Following the inspection, I received the facility's Comprehensive NMP from KDHE (Attachment 12) and requested records from the facility including manure/wastewater analysis and applications/exports, soil analysis, annual reports from 2019-2023 as well as monthly operations reports from January 2019 to May 2024.

B. CAFO Status

This facility is permitted for a maximum capacity of 5,000 head of cattle. Mr. Beneke stated there were less than 1,000 cattle at the time of inspection. He estimated there were around 680 head of cattle on the north end pens (Pens 23-24). I observed during the time of the inspection that the pens were devoid of vegetation. The most recent operations reports from the facility stated there were 2,000 head of cattle on site between October 2023 and April 2024 and 1,000 head of cattle in May 2024 (Attachment 13). I determined that Double B Cattle Company meets the definition of a Large CAFO as it is defined in Title 40 of the Code of Federal Regulations, Part 122.23.

C. Visual Inspection

The weather conditions on May 21, 2024, at the time of the inspection were partly cloudy, windy and approximately 80°F. According to the Operations Report for May 2024 provided by the facility, it rained 2 inches on May 20, 2024.

During the inspection I evaluated stormwater drainage patterns from production pens through ditches and conveyances into sediment basins and the waste storage pond as well as the center pivot. I also traced evidence of uncontrolled process wastewater from the feed storage and mortality compost area across field Home1 into Middle Creek. Finally, I inspected Middle Creek proper and an unnamed tributary to Middle Creek both upstream and downstream of the facility. Observations I made during the Records Review and Visual Inspection are documented below.

i. Receiving Water

The Double B Cattle Company is located in the Headwaters Middle Creek watershed (HUC 110702030102). Middle Creek (Waterbody ID: KS-110702035) is classified as a general purpose water with designated uses including special aquatic life, primary contact recreation C, domestic water supply, food procurement, ground water recharge, industrial water supply, irrigation, and livestock watering.

Middle Creek proper is located east of the facility while an unnamed tributary to Middle Creek is located west of the facility (Attachment 07). The National Hydrography Dataset (NHD) line representing the unnamed tributary in Attachment 07 appears to show it flowing through WSP-1. However, the unnamed tributary currently flows through a manmade channel to the west of WSP-1 which was created when WSP-1 was constructed sometime between 2008 and 2010. Attachment 14 shows the areas of Middle Creek and its tributaries inspected upstream, onsite and downstream of the Double B Cattle Company facility. I completed the EPA Stream Characteristics and Water Nexus form for the waterbodies after I concluded the inspection (Attachments 14 and 15, Photos 94-109). I observed standing or flowing water in all areas identified in Attachment 14 except for the east branch of Middle Creek (Photos 98-99).

D. Proposed Facility or Modifications

According to the permit (Sections A and F, Attachment 2), the facility proposed to construct a collection channel and berm along with a waste storage pond (WSP-2) east of the current feed storage area to control process wastewater. Construction of WSP-2 has not begun and Mr. Beneke said that he did not like the drawings previously completed and submitted as part of the

2018 CAFO Permit application package. Process wastewater from the feed storage area and compost area remains uncontrolled.

E. Operations and Maintenance Requirements

The permit requires runoff containing livestock and related agricultural wastes to be collected, retained, and disposed.

i. Animal confinement area

a. Open lot pens

This facility confines cattle in 19 open lot pens arranged and numbered from #7 to 24 and also has a sick pen (Attachment 16). Mr. Beneke said that pens #1-6 no longer exist as they were at the previous Hanging Tree Cattle Company facility. I observed that the pens were sloped such that during precipitation events, process wastewater from the open pens would flow into sediment basins.

Northeast of Pen 21 I observed solids outside of the pen, a puddle, and solids across the dirt road (Photos 15-17). Stormwater that falls on this area would flow through the pictured vegetation and into the section of field Home1 that drains to a farm pond west of food storage area. On the south side of Pen #7 I observed staining and erosional patterns indicating process wastewater was crossing the facility road that runs parallel to 280th St. (Photo 1-2, 40-41). This would then flow, uncontrolled, adjacent to 280th St. and into the unnamed tributary to Middle Creek shown in Photos 100 and 101.

Pens are equipped with water tanks and 2" PVC pipes carrying well water to the pens. I observed a 2" PCV pipe above ground in Pen #18 (Photo 13). Mr. Beneke said this pipe was recently replaced after the previous one was broken by machinery used to clean the pen.

ii. Solid Wastes

Section B of the permit requires manure accumulations in open pens to be cleaned at specific intervals. The pens appeared to be free of excessive accumulations of manure during the inspection (Photos 3-7, 13-15, 18-19, 22, 37 and 40).

a. Manure storage area

The facility's permit and NMP did not have a designated area for manure storage. Previous inspections noted manure storage in sedimentation basins (Photo #9 in Attachment 11). Mr. Beneke said manure is stored north of SSB. I did not observe manure stored north of SSB (Photos 8, 10, 11, 33). However, I did observe a pile of what appeared to be old manure with vegetation growing on it south of NSB-N (Photo 20-21). Process wastewater from manure stored in this area would drain into the sedimentation basin.

b. Sedimentation Basins

Mr. Beneke did not have a naming convention for the sediment basins and names were inconsistently used in KDHE inspection reports. For the purpose of this inspection report I assigned the sediment basins the following names (from north to south): North Sediment Basin – North (NSB-N), North Sediment Basin – South (NSB-S), Middle Sediment Basin (MSB) and South Sediment Basin (SSB; Attachment 16). Process wastewater from pen #24 drains to NSB-

N, Process wastewater from pen #23 drains to NSB-S. Process wastewater from pens #17-22 drains to MSB and process wastewater from pens #7-16 drains to SSB. There is a ~18" PVC pipe that connects NSB-N to NSB-S (Photo 24-25) and another ~18" PVC pipe that connects NSB-S to WSP-1 (Photo 26). Another pipe near the middle of MSB connects it to WSP-1. Wastewater from SSB is pumped to WSP-1. The SSB pump intake is seen in Photos 10 and 33, the outlet to WSP-1 is seen in Photo 32. Mr. Beneke activated the pump while we were conducting the inspection (Photo 31).

During the inspection I observed standing water in all sedimentation basins. The SSB did not have a well-defined eastern berm and appeared to be nearing the service road that runs on the west side of Pens #12-16 (Photos 33-38). Previous inspection reports noted liquid overflowing the SSB in this area (Photo #6 in Attachment 09).

Before the inspection, I looked at current and historical aerial imagery of the facility. On Google Earth Imagery dated 6/27/2019, there appeared to be a breach near the south end of MSB (Attachment 17). Section E (#2) of the permit requires the facility to report all overflows or discharges from water pollution control structures. There was no record of a breach in the monthly operations reports provided by the facility, although WSP-1 was at 0 ft freeboard at the time. I did not observe any breach during the inspection; however, there appeared to be significant solids accumulation in MSB (Photos 8 and 11). Section B (Solid Wastes) of the permit requires sedimentation basins be cleaned whenever solids accumulations exceed one half the depth of the basin. Mr. Beneke said he had all the sedimentation basins cleaned out in the last year, but MSB is just built too shallow.

c. Mortality Compost Area

According to Section C (Mortality Management) of the permit (Attachment 02) and Section 2.5 (Normal Mortality Management) of the NMP (Attachment 12), routine mortalities shall be handled by rendering. The NMP calls for a temporary storage area to be installed such that it "will minimize odors, wild animal access and provide visual screening of dead animals." However, at the time of inspection, mortalities were being improperly composted on a hillside north of the feed storage area (Photos 61-73, 75-77, 81 and 83-84, Attachment 21). There was saw dust and what appeared to be manure in the compost pile (Photos 62 and 66). There were also large piles of exposed bones, nearly intact bovine carcasses, and the odor of decomposing flesh (Photos 66-67 and 76). I observed canine tracks and bone fragments in field Home1 between Middle Creek and the compost pile (Photos 73, 77-82). There was also a flow pathway leading from the compost pile. Process wastewater from the compost pile would flow through the pathway south then east through field Home1 and ending at Middle Creek (Photos 75, 84-85, 89-93). This flow path can be observed in aerial imagery as well (Attachment 18).

When I discussed mortality management with Mr. Beneke, he said he was unaware of the permit and NMP conditions for rendering. He said the facility had always composted mortalities, but used to do it in a different area. This is supported by aerial imagery from 2022 which does not show evidence of composting at the current Mortality Compost area. Mr. Beneke said that there were especially high (~20%) mortalities with the cattle he recently purchased. I requested mortality numbers as part of a follow up request to the facility. The facility provided mortality records from December 31, 2018, to June 25, 2024 (Attachment 23). The records did not include any mortalities for 2024 but noted 168 mortalities in 2023.

d. Feed storage area

The feed storage area is located south of the current Mortality Compost area (Attachment 21). It consists of an estimated 1.25-acre concrete trench silo where silage and other feed is stored (Photos 42-44). To the south of this concrete area is an estimated 0.5 acre bale storage area (Photos 45, 51-52). I observed feed residues tracked out of the south side of the trench silo and the bale storage area towards field Home1 (Photos 46-47, 51, 55). Process wastewater from this area would flow across field Home1 into Middle Creek (Photos 48-51, 53-54). I also observed staining from process wastewater leaving the north side of the trench silo towards Home1 and Middle Creek (Photos 58-61).

iii. Liquid wastes

a. Waste Storage Ponds

Section B of the permit requires the permittee to maintain wastewater below a maximum level in both WSP-1 and WSP-2. The permitted levels are specified in vertical feet below the lowest point of the top of the berm. Section B and the Standard Conditions require a permanent water level measurement device using feet as the units marked every ½ foot to be installed in each WSP. As discussed above, WSP-2 has not been constructed. I observed a permanent water level measurement device in WSP-1. I observed WSP-1 had 4.5 ft of freeboard during the visual inspection (Photo 27), which is less freeboard than the minimum allowed in the permit (6 ft). Mr. Beneke stated that they had received around 2.5 inches of precipitation a day or two before the inspection, which brought the level up about 2 ft.

b. Center Pivot

Wastewater is pumped from WSP-1 (Photos 29-31) to the center pivot on the west side of field Home1 (Photo 57, Attachment 07). According to the NMP, the center pivot irrigates around 71 acres. I noticed an eroded channel in the field leading from the pivot to a small pond (Photos 56-57) which is also present in aerial imagery from October 18, 2023 (Attachment 18). According to the overview map in the permit (Attachment 02), the small pond was formerly the waste storage pond used by the Hanging Tree facility. I noted that the small pond smelled of wastewater similar to WSP-1.

F. Reporting and Recordkeeping

The permit requires the facility to document and retain records related to their operations. I asked to review records while on site. Mr. Beneke provided a few annual reports and said Mrs. Beneke (who was not available at the time of the inspection) had all other records. I followed up with Mrs. Beneke via email following the inspection and requested facility records. Records requested and received are summarized below.

- Requested: Operations Reports (January 2021-Present)
 - Received: Operations Reports from 1/1/19- 6/9/24.
- Requested: Annual manure sampling results (2019-Present)
 - Received: Manure sampling result from 11/29/22.
- Requested: Soil Sampling Records from fields in NMP (2019-Present)
 - Received: Soil sampling results from 3/29/19, 4/18/20, 3/8/22, 10/21/22, 3/28/23, and 11/21/23.

- Requested: Manure application records (2019-Present)
 - Received: Only relevant record received was annual weight applied in Annual Operations Reports from 2019-2023
- Requested: Annual wastewater sampling results (2019-Present)
 - Received: Only relevant record received was a 10/20/16 lagoon analysis.
- Requested: Wastewater application records (2019-Present)
 - Received: Only relevant record received was annual volumes applied in Annual Operations Reports from 2019-2023
- Requested: Mortality numbers and disposal methods (2019-Present)
 - Received: Only relevant record received was purchases, sales, and mortalities from 12/31/18 to 6/25/24.
- Requested: Annual mortality compost sampling results (2019-Present)
 - Received: None provided.

i. Soil Sampling

The facility provided six soil sampling results from March 2019 to November 2023 (Attachment 19). Except for field Otte, the soil phosphorous generally increased in all fields. P1 (Weak Bray) Phosphorus from the most recent analysis (November 2023) was high in the field where the pivot operates (Home1 West, 215 ppm) as well as the field downgradient of the compost and feed storage area (Home1 East, 164 ppm).

ii. Manure and Liquid Waste Generation, Storage, Application and Exportation

The facility provided annual reports from 2019-2023 (Attachment 13). The values in the annual reports are summarized in Table 2. The results in this table are discussed in the relevant sections below.

Table 2. Summaries of head of cattle, solid and liquid waste generation, application and exportation from Double B Cattle Company based on annual reports provided by the facility from 2019-2023.

Year	Annual Maximum Head (>700 lbs)	Annual Maximum Head (<700 lbs)	Manure Generated (tons)	Wastewater Generated (gallons)	Manure Applied (tons)	Manure Exported (tons)	Wastewater Applied (gallons)	Area where liquid/solid waste spread (acres)
2019	2,400	-	3,233	0	0	9,000	0	0
2020	2,747	-	3,548	0	252	5,705	0	250
2021	4,200	4,200	5,554	0	5,832	1,560	0	225
2022	3,240	2,661	3,893	264,720	0	0	4,108,740*	245
2023	2,361	2,000	998	2,112,539	1,620	2,325	0	90

**According to notes in the annual report, this value was updated from original submission of 200,000 gallons.*

a. *Liquid Waste*

I. *Waste Storage Pond Records*

The facility provided monthly operations reports from January 1, 2019, to June 9, 2024 (Attachment 13). Facility reported levels in WSP-1 during this period are presented in Figure 1. Section E (#3) of the permit requires the facility to note the wastewater level in the waste storage pond weekly unless the water level infringes on the required operating level, in which case daily records are required. The facility did not record WSP-1 levels in monthly operations reports from August 1, 2021, to November 30, 2021. Section B (Table 1) sets the operating level (minimum freeboard requirements) of WSP-1 at 6 ft. Except for July 25, 2022, to August 28, 2022, the facility did not meet the 6 ft freeboard permit requirements in WSP-1. The facility reported 0 ft freeboard from May 18, 2019, to June 26, 2021, and June 23, 2022, to July 5, 2022.

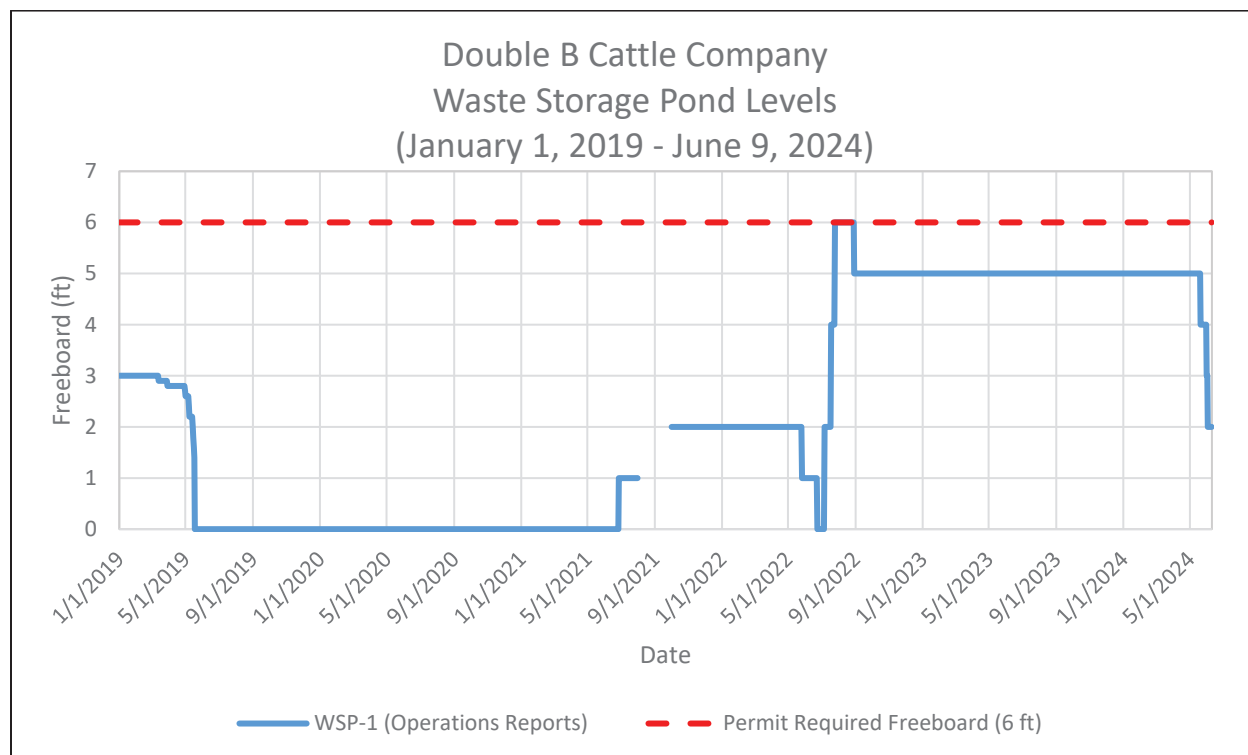


Figure 1. Graph of reported and permit-required freeboard in WSP-1 from January 1, 2019, to June 9, 2024.

II. *Wastewater Generation Records*

As shown in Table 2, the only years the facility reported wastewater generation was 2022 (264,720 gallons) and 2023 (2,112,539 gallons). This is despite large fluctuations in reported levels in WSP-1, including a loss of all freeboard in 2019 (Figure 1).

III. *Land Application of Liquid Wastes*

Section B (Liquid or Slurry Wastes) of the permit requires the facility to initiate dewatering on all days suitable for land application should the maximum levels be exceeded. The facility reported maximum level exceedances in WSP-1 from January 1, 2019, to June 9, 2024, with the exception of the July 25, 2022, to August 28, 2022, time period. The facility only reported using

the center pivot between July 6, 2022, and July 24, 2022, where they reported applying over four million gallons of wastewater (Attachment 13).

I asked Mr. Beneke how he measures the volume of wastewater being applied. He said that he did not measure it, but would turn the pump on and try not to flood the field. He also said that due to the high evaporation from the ponds, he used the center pivot very rarely – almost exclusively during rainy years.

Section C (Land Application) of the permit requires wastes to be applied as listed in the “Planned Crops and Fertilizer Recommendations” table in the NMP. It was not possible to evaluate if the facility met this permit requirement because the facility did not provide records of nutrient analysis for the wastewater applied to field Home1 via the center pivot. The only relevant record received was an analysis of wastewater in WSP-1 from 2016 (Attachment 22) Additionally, the annual Land Application Summary tables submitted by the facility do not include the other required information such as “NMP Maximum Allowable Amount” or “Other Fertilizer”, the latter of which is needed to perform agronomic rate calculations.

b. Solid Waste

IV. Manure generation records

As shown in Table 2, the facility reported manure generation every year between 2019 and 2023. However, in 2023 the facility reported only 998 tons of manure generated while also reporting over two million gallons of wastewater generated that year.

V. Land Application of Solid Wastes

According to Section 1.1 (General Description of Operation) of the NMP and Section C (Land Application) of the permit, all solid livestock wastes are exported. However, as shown in Table 2, the facility reported applying manure in 2020 (252 tons), 2021 (5,832 tons) and 2023 (1,620 tons).

There appeared to be discrepancies between what was reported on the annual report cover page and the supplemental *Land Application Summary* pages (Attachment 13). Specifically, there appeared to be differences in the “Total Acres Applied on” and “Previous Year After Harvest Application” columns on the *Land Application Summary* pages compared to the annual report cover pages. For example, the 2022 *Land Application Summary* page showed 4,625 tons of manure were spread on 160 acres on field Otte in the previous year after harvest. However, the 2021 report did not report any applications after harvest. Additionally, the annual Land Application Summary tables submitted by the facility do not include the other required information such as “NMP Maximum Allowable Amount” or “Other Fertilizer”, the latter of which is needed to perform agronomic rate calculations.

The facility only provided records of nutrient analysis for manure in 2022.

VI. Manure Export Records

As shown in Table 2, the facility exported manure in 2019 (9,000 tons), 2020 (5,705 tons), 2021 (1,560 tons) and 2023 (2,325 tons). Section C (Land Application) of permit requires that prior to

transfer, the permittee provide the recipient the most current nutrient analysis of the waste. However, the only nutrient analysis provided by the facility was for 2022 (Attachment 20). In the *Exported Waste Report* page, the facility only reported providing the recipient a copy of waste nutrient analysis in 2019.

VII. Mortality Compost Records

As noted above, the facility is composting mortalities. It is unclear if the compost is being land applied or exported. I requested mortality records and mortality compost sampling results. The facility provided mortality records from December 31, 2018, to June 25, 2024 (Attachment 23) but no compost sampling results. The facility reported 120 mortalities in 2020, 76 mortalities in 2021, and 168 mortalities in 2023.

6. SUMMARY

Double B Cattle Company is a large CAFO located approximately five miles southeast of Lincolnville, Kansas on 280th St.

The facility's permit was set to expire on October 15, 2023, but was administratively continued. KDHE did not renew the permit because the facility did not submit a nutrient management plan along with the permit renewal application.

The facility's waste storage pond (WSP-1) did not have the 6 ft freeboard required by the permit at the time of the inspection. Operations Reports provided by the facility show that, since 2019, the required freeboard was only maintained between July 25, 2022, and August 28, 2022. Additionally, the facility did not record WSP-1 levels in monthly operations reports from August 1, 2021, to November 30, 2021.

The facility's permit and nutrient management plan specify that mortalities be handled by rendering. However, at the time of inspection I observed mortalities being improperly buried/composted which was attracting wild animals. Additionally, during precipitation events, process wastewater from the composting area would flow, uncontrolled, across field Home1 and into Middle Creek.

An additional waste storage pond (WSP-2) was supposed to be constructed by October 16, 2021, to control process wastewater from the feed storage area. At the time of inspection, no pond had been constructed. During precipitation events, process wastewater from the feed storage area would flow, uncontrolled, across field Home1 and into Middle Creek.

The facility provided annual reports of the generation, application and exportation of both solid manure and liquid waste. There were large interannual fluctuations in the generation and application of liquid waste. The facility did not provide any recent wastewater sample analysis results and only provided one year (2022) of solid waste sample analysis results. The facility did not provide solid waste recipients with sample analysis results in 2020, 2021 or 2023. Both the permit and the NMP specify that all solids are to be exported. However, the facility applied solids in 2020, 2021 and 2023. Given the lack of documentation provided by the facility, it was not possible to determine if wastes were being applied at agronomic rates.

Zachary Leibowitz
Physical Scientist

Nicole Moran
Section Chief

ATTACHMENTS:

- Attachment 01 – Photo Log (166 pages)
- Attachment 02 – Double B Cattle Company NPDES Permit (15 pages)
- Attachment 03 – Double B Cattle Company NPDES Permit Renewal Application (11 pages)
- Attachment 04 – April 24, 2023 Letter from KDHE to Double B Cattle Company RE: NMP permit application (1 page)
- Attachment 05 – October 19, 2023 Letter from KDHE to Double B Cattle Company RE: NMP permit application (1 page)
- Attachment 06 – January 22, 2024 Email from KDHE to Double B Cattle Company RE: NMP and expired permit (1 page)
- Attachment 07 – Double B Cattle Company Operations Map (1 page)
- Attachment 08 – November 6, 2019 KDHE Inspection Report (13 pages)
- Attachment 09 – November 9, 2021 KDHE Inspection Report (17 pages)
- Attachment 10 – December 15, 2021 KDHE Inspection Report Follow Up (1 page)
- Attachment 11 – January 31, 2023 KDHE Inspection Report (12 pages)
- Attachment 12 – Double B Cattle Company 2018 Comprehensive Nutrient Management Plan (87 pages)
- Attachment 13 – Annual and Monthly Operations Reports from January 1, 2019 to June 9, 2024 Provided by Double B Cattle Company (86 pages)
- Attachment 14 – Man of photos of waterbodies near Double B Cattle Company (1 page)
- Attachment 15 – Stream Nexus Form (2 pages)
- Attachment 16 – Map of Pens, Sediment Basins, and Waste Storage Pond with Photo Locations (1 page)
- Attachment 17 – Aerial imagery of Middle Sediment Basin – June 27, 2019 (1 page)
- Attachment 18 – Aerial imagery of field Home1 – October 18, 2023 (1page)
- Attachment 19 – Soil Sample Results 2019-2023 (8 pages)
- Attachment 20 – Manure Sample Results 2022 (1 page)
- Attachment 21 – Map of Compost Area, Field Storage Area, Field Home1, and Middle Creek with Photo Locations (1 page)
- Attachment 22 – WSP-1 Wastewater Sample Analysis 2016 (1 page)
- Attachment 23 – Cattle Purchase, Sales and Mortality Numbers from December 2018 to June 2024 (9 pages)