

Howell Industries, Inc./Howell Cattle Feedlot
Inspection Date 09/20/2022



Region 6 - Enforcement & Compliance Assurance Division
INSPECTION REPORT

Inspection Date(s):	09/20/2022	
Media Program:	Water	
Regulatory Program(s)	CAFO	
Company Name:	Howell Industries, Inc.	
Facility Name:	Howell Cattle Feedlot (27.351956, -98.226426)	
Facility Physical Location:	3306 County Road 420	
(city, state, zip code)	Premont, TX 78375	
Mailing address:	P.O. Drawer 809	
(city, state, zip code)	Premont, TX 78375	
County/Parish:	Jim Wells	
Facility Phone Number	361-348-3845 office	
Facility Contact:	Tyler Reagan	Cattle Manager
	tylerreagan.howellcattle@gmail.com	
FRS Number:	110020547924	
Identification/Permit Number:	TXG920229	
Media Identifier Number:	N/A	
NAICS:	112112	
SIC:	0211	
Personnel participating in inspection:		
Tyler Reagan	Howell Cattle Feedlot	Cattle Manager
Lucas Bomar	EPA/6ECAD-WA	Inspector
Juan Ibarra	EPA/6ECAD-WA	Inspector
EPA Lead Inspector Signature/Date		
	{Inspector name}	Date
Supervisor Signature/Date		
	{Supervisor name}	Date

Section I – INTRODUCTION**PURPOSE OF THE INSPECTION**

EPA Region 6 inspectors Juan Ibarra and Lucas Bomar arrived at the Howell Cattle Feedlot at 0941 on September 20, 2022, for an unannounced inspection. We met with Mr. Tyler Reagan/Cattle Manager at the opening conference. I presented my credentials to Mr. Reagan and informed him that this was an EPA inspection to determine the facility's compliance status with the requirements of the Clean Water Act (CWA) and the Texas Pollutant Discharge Elimination System (TPDES) Concentrated Animal Feeding Operation (CAFO) regulations stipulated within the facility's Texas Commission on Environmental Quality (TCEQ) CAFO general permit. The scope of the inspection included a compliance evaluation of the facility's site operations, lagoon maintenance, nutrient management plan, and record keeping requirements of their permit. For biosecurity purposes, the inspectors toured the site in Mr. Reagan's vehicle and wore over-boots.

FACILITY DESCRIPTION

Howell Cattle Feedlot is a large CAFO with a current TCEQ CAFO general permit for 17,000 total beef cattle. The original CAFO permit dates to 10/1/2004. On the day of the inspection the feedlot had 12,727 head of cattle. All the cattle are kept in open lot pens year-round. Most of the pens are located within the watershed of the single Retention Control Structure (RCS), but a few far east pens are outside of that watershed. The feedlot's RCS consists of a playa lake which is located on the eastern side of the 422.8-acre Land Management Unit 1 (LMU). LMU 1 is bordered on the east side by County Road 417, and on the south side by County Road 420.

The facility has eight (8) land management units (LMUs). LMU 1 has 422.8 acres, LMU 2 has 10 acres, LMU 3 has 20.1 acres, LMU 4 has 203.9 acres, LMU 5 has 299.4 acres, LMU 6 has 200 acres LMU 7 has 160 acres and LMU 8 has 132.5 acres totaling 1448.7 acres available for land application. The feedlot grows silage sorghum on LMU 6 which they cut once or twice a year (depending on rainfall) and store as silage feed within a pair of silage bunkers. The other LMUs grow hay which is cut once per year.

Only manure solids are land applied by a facility owned manure spreader. Wastewater has not been land applied as the RCS was designed as an evaporative system, and evaporation has been sufficient to manage the wastewater levels.

The Texas Cattle Feeders Association (TCFA) prepared and manages the pollution prevention plan (PPP) which serves as the nutrient management plan (NMP). The TCFA also takes the annual LMU soil samples and manure analysis, as well as track the four freshwater wells which they sample annually for Nitrate/Nitrite levels. The TCFA provides a phosphorus-based land application recommendation for the feedlot's LMUs based on either a single year or multi-year application. The last manure applications occurred in January 2022 through June 2022 (on LMUs 1, 3, 5, 6 and 8) where a total of 16,337 tons of manure solids were land applied.

Pens are scrapped between pen cycles and all pens except the most eastern pens are properly sloped to the RCSs. The RCS, which is not fenced-off, is located within LMU 1. LMU 1 has a single perimeter fence for the 422 acres. Mortalities are composted in LMU1, upslope of RCS 1 (mostly old compost), and in a borrow pit located near LMU 6 (which is the sorghum silage land application field).

Section II – OBSERVATIONS

RCS:

The RCS has the original lagoon certifications from 10/22/2001 by Ben Weinheimer, P.E., showing a liner permeability of 6.6×10^{-9} . The RCS was recertified on 5/10/2018. The RCS has three issues which do not meet the TCEQ requirements for operation and maintenance. 1) The RCS is not fenced-off from the rest of LMU 1 which has allowed cattle to graze and walk around the RCS. The unit must be fenced to prevent animal intrusion onto the RCS liner. 2) The pole marker has faded-out and is not readable. The pole marker must be clearly marked in 1-ft increments so that weekly lagoon measurements can be made, and the 25-yr/24-hr rain event mark must also be designated to ensure that adequate capacity is available. These marks must be accurately posted on the pole marker. 3) There are four small trees growing in the RCS which must be removed. See Appendix 1 photolog (photos 5-6) showing the 286 acre-ft RCS.

Pens:

All but the most eastern cattle pens (called G3 pens) were sloped to drain storm water runoff toward the RCS. G3 pens, however, sloped in the opposite direction of the RCS. The facility contour map showed the location of a ridge that ran north-south along a crest situated at 109 feet elevation. The crest slopes downward from that point toward the east and west. The location of this crest was clearly visible during the site inspection with the majority of the cattle pens on the western slope which drains toward the RCS. The G3 pens and possibly other G pens fell outside of that slope (see photo 13). The use of these pens must either be discontinued, or provisions made to capture storm water runoff from a 25-yr/24-hr rain event into an RCS.

Commodity Discharge:

Commodities stored near the cattle pens and grain mill were either under cover, in tanks, and otherwise within the watershed of the RCS. These include corn, cotton seed hulls, whole cotton seed, cotton seed meal, fats, finisher liquids, pasture mix with molasses and hay. The feedlot also raises sorghum for sorghum silage. This silage was stored uncovered within two silage bunkers located next to LMU 6 (the sorghum land application site) and outside of the drainage area of an RCS. The two silage bunkers have a discharge of silage liquor which discharged from the east and west sides of the bunkers into LMU 6. See photos 8-9 and 11-12.

Improper Composting:

The old mortality compost area is located within LMU 1, upslope of the RCS. The piles were large and appeared to be quite old. However, the piles have many hundreds of bones sticking out of them and scattered on the surface of the piles. This is not proper for the disposal of the mortalities, and the bones should be screened, landfilled or re-composted, and the finished compost should be land applied at an agronomic rate or given/sold to a third party (see photo 7). This includes the finished composted mortality materials in the new borrow pit near LMU 6 (see photo 10).

Routine Maintenance:

The drainage culvert going under County Road 417, leading into the RCS, did not appear to be freely flowing and could possibly cause a back-up of production area wastewater onto the county's property. The culvert and the slopes leading to and from the culvert need to be cleared to prevent ponding and back-ups during rain events. See photos 1-4.

No other issues were found during the inspection as it appeared that the facilities four monitoring wells which serve as fresh water for the feedlot and office had nitrate levels below 10 mg/l for the past two years (2020 and 2021), and the facility was appropriately land applying manure solids at an agronomic rate. The PPP was up to date and contained the required records and inspection logs including the weekly lagoon level measurements and all relevant land application records.

Section III – AREAS OF CONCERN

AOC 1: 1) The RCS (the playa lake) is not fenced-off from the rest of LMU 1 which has allowed cattle to graze and walk around the RCS. The unit must be fenced to prevent animal intrusion onto the RCS liner as required by the TCEQ CAFO General Permit (Permit) Part III.10.(f)(2) which states that "Liners must be protected from animals by fences or other protective devices". 2) The pole marker has faded-out and is not readable. The pole marker must be clearly marked in 1-ft increments so that weekly lagoon measurements can be made, and the 25-yr/24-hr rain event mark must also be designated to ensure that adequate capacity is available. These marks must be accurately posted on the pole marker as required by the Permit Part III.10.(c) . 3) There are four small trees growing in the RCS. The TCEQ Permit states that "No tree shall be allowed to grow such that the root zone would intrude or compromise the structure of the liner or embankment" and as such must be removed as required by the Permit Part III.10.(f)(3).

AOC 2: The G3 pens and possibly other G pens located at the far east side of the cattle pen area fell outside of the watershed of the RCS. Per the Permit Part III.6.(d) "The operator of the CAFO shall design, construct, operate, and maintain RCSs to contain all volumes required by this section including the runoff and direct precipitation from the design rainfall event for the location of the facility."

AOC 3: There are discharges of silage leachate going into LMU 6 which is the sorghum land application site. The silage stored within two bunkers within LMU 6 is completely uncovered and exposed to the elements including rainfall. The silage bunkers have a discharge of silage liquor from the east and west sides of the bunkers into LMU 6. The bunkers are outside of the drainage area of an RCS. Per the Permit Part III.4.(a) Potential pollutant sources include "...silage stockpiles...". Furthermore, "An evaluation of potential pollutant sources shall identify the sources, "and indicate all measures that will be used to prevent contamination from the pollutant sources." Also, per Part III.5.(a).(2). "Manure, sludge, and wastewater generated by a CAFO shall be retained and used in an appropriate and beneficial manner as provided in this general permit." Additionally, the facility NMP requires that production area runoff be discharged into an RCS.

AOC 4: The old mortality compost area is located within LMU 1, upslope of the RCS. The piles were large and appeared to be quite old with many hundreds of bones sticking out of them and scattered on the surface of the piles. This is not proper for the disposal of the mortalities, and the bones should be screened, landfilled or re-composted, and the finished compost should be land applied at an agronomic

Howell Industries, Inc./Howell Cattle Feedlot
Inspection Date 09/20/2022

rate or given/sold to a third party. The mortality management area must be properly managed as required by the Permit Part III.A.11.(c) (which further references 4 TAC Sections 31.3, 58.31(b), and RG-419). Also the requirements of 30 TAC Chapter 332.(4) were not met due to the apparent scavenging that occurred and nuisance conditions generated.

AOC 5: The drainage culvert going under County Road 417, leading into the RCS, did not appear to be freely flowing and could possibly cause a back-up of production area wastewater onto the county's property. The culvert and the slopes leading to and from the culvert need to be cleared to prevent ponding and back-ups during normal operating periods and rain events as required by the Permit Part III.A.6.(c).(3).

Section IV – FOLLOW UP

None.

Section V – LIST OF APPENDICES

Appendix 1 – Photo Log – Thirteen photos taken 9/20/2022

Appendix 1

Photograph Log



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 1

Location: Howell Cattle Feedlot		
City: Premont	County: Jim Wells	State: Texas



Photo File Name: P9200006.JPG

Date of Photo: 09/20/2022

Time of Photo: 1334

Photographer: Lucas Bomar

Description: Looking east at the discharge from the pens and feed mill. The discharge is flowing toward the RCS.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 2

Location: Howell Cattle Feedlot		
City: Premont	County: Jim Wells	State: Texas



Photo File Name: P9200007.JPG

Date of Photo: 09/20/2022

Time of Photo: 1335

Photographer: Lucas Bomar

Description: Looking west at the production area discharge channel leading from the production area (pens and feed mill) to the RCS.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 3

Location: Howell Cattle Feedlot		
City: Premont	County: Jim Wells	State: Texas



Photo File Name: P9200008.JPG

Date of Photo: 09/20/2022

Time of Photo: 1350

Photographer: Lucas Bomar

Description: The drainage channel shown in photos 1 and 2 has ponded near the culvert that goes under County Road 417. The view is toward the east-southeast.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 4

Location: Howell Cattle Feedlot		
City: Premont	County: Jim Wells	State: Texas



Photo File Name: P9200009.JPG

Date of Photo: 09/20/2022

Time of Photo: 1351

Photographer: Lucas Bomar

Description: The ponded discharge at the culvert going under County Road 417. The flow appears to be somewhat obstructed and not free flowing. The photo was taken from the upstream side of the culvert on the east side of the road.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 5

Location: Howell Cattle Feedlot		
City: Premont	County: Jim Wells	State: Texas



Photo File Name: P9200010.JPG

Date of Photo: 09/20/2022

Time of Photo: 1351

Photographer: Lucas Bomar

Description: Looking west at the playa RCS. The RCS is not fenced and cattle are in the unit. The pole marker located in the center of the photograph shows <1' of water in the RCS. The photo was taken from County Road 417.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 6

Location: Howell Cattle Feedlot		
City: Premont	County: Jim Wells	State: Texas



Photo File Name: P9200011.JPG

Date of Photo: 09/20/2022

Time of Photo: 1412

Photographer: Lucas Bomar

Description: A close-up view of the playa RCS showing the cattle in the unit and small trees growing within the RCS. The RCS is not fenced-off from the rest of LMU 1. The view is toward the west.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 7

Location: Howell Cattle Feedlot		
City: Premont	County: Jim Wells	State: Texas



Photo File Name: P9200012.JPG

Date of Photo: 09/20/2022

Time of Photo: 1426

Photographer: Lucas Bomar

Description: The old mortality composting area located in LMU 1, upslope of the RCS, has hundreds of exposed cattle bones on the surface of the manure compost piles. Mortality composting must be managed consistent with the TCEQ regulations and appropriate NRCS procedures. The view is toward the west.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 8

Location: Howell Cattle Feedlot		
City: Premont	County: Jim Wells	State: Texas



Photo File Name: P9200013.JPG

Date of Photo: 09/20/2022

Time of Photo: 1445

Photographer: Lucas Bomar

Description: One of the two silage bunkers located within LMU 6, but outside of the watershed of an RCS, is discharging silage liquor from the west side of the silage pile. This discharge flows into LMU 6. The view is toward the east.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 9

Location: Howell Cattle Feedlot		
City: Premont	County: Jim Wells	State: Texas



Photo File Name: P9200014.JPG

Date of Photo: 09/20/2022

Time of Photo: 1446

Photographer: Lucas Bomar

Description: The silage liquor shown in photo 8 is discharging into the 200-acre LMU 6, but outside of the watershed of an RCS. LMU 6 is used for growing sorghum. The view is toward the west.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 10

Location: Howell Cattle Feedlot		
City: Premont	County: Jim Wells	State: Texas



Photo File Name: P9200015.JPG

Date of Photo: 09/20/2022

Time of Photo: 1451

Photographer: Lucas Bomar

Description: The new mortality compost pile located within a borrow pit near LMU 6. The composting appears to be well managed with only a small portion of one dead calf exposed (hence the vultures). All mortalities must be properly covered and the finished product properly land applied for beneficial use. The view is toward the south.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 11

Location: Howell Cattle Feedlot		
City: Premont	County: Jim Wells	State: Texas



Photo File Name: P9200016.JPG

Date of Photo: 09/20/2022

Time of Photo: 1506

Photographer: Lucas Bomar

Description: One of the two silage bunkers located within LMU 6, but outside of the watershed of an RCS, is discharging silage liquor from the east side of the silage pile. This discharge flows into LMU 6. The view is toward the south. See photos 8 and 9 for the view of the discharge from the west side of the silage bunkers.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 12

Location: Howell Cattle Feedlot		
City: Premont	County: Jim Wells	State: Texas



Photo File Name: P9200017.JPG

Date of Photo: 09/20/2022

Time of Photo: 1506

Photographer: Lucas Bomar

Description: The silage liquor discharge from the east side of the silage pile flows into a wooded area located near LMU 6 and outside the drainage area of an RCS. The view is toward the east. See photos 8 and 9 for the view of the discharge from the west side of the silage bunkers.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 13

Location: Howell Cattle Feedlot		
City: Premont	County: Jim Wells	State: Texas



Photo File Name: P9200018.JPG

Date of Photo: 09/20/2022

Time of Photo: 1526

Photographer: Lucas Bomar

Description: The G3 cattle pens (and possibly other G pens as well) located on the far east side of the production area slope away from the watershed of an RCS. All pens must be located within the drainage area of an RCS. The view is toward the west.