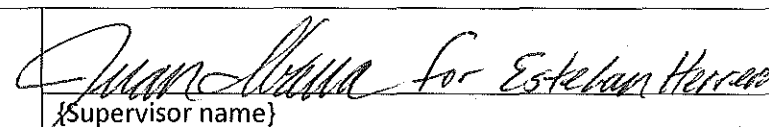


**Region 6 Compliance Assurance and Enforcement Division
INSPECTION REPORT**

Inspection Date(s):	06/20/2018		
Media:	Water		
Regulatory Program(s)	NPDES		
Company Name:	N/A		
Facility Name:	Petal Dairy		
Facility Physical Location:	336 CR 3368		
(city, state, zip code)	Saltillo, TX, 75478		
Mailing address:	336 CR 3368		
(city, state, zip code)	Saltillo, TX, 75478		
County/Parish:	Hopkins		
Facility Contact:	Peter Boekhorst	Owner	
	N/A		
FRS Number:	N/A		
Identification/Permit Number:	WQ0004905000 (TX0132357)		
Media Number:	N/A		
NAICS:	112120		
SIC:	0241		
Personnel participating in inspection:			
Collin Martin	6EN-WC	Inspector	214-665-8380
Paul Juarez	6EN-WC	Inspector	214-665-8493
Steph Meyers	6EN-WC	Inspector	214-665-6496
Peter Boekhorst	N/A	Owner	903-285-0894
EPA Lead Inspector Signature/Date	 {Inspector name}		8/9/18 Date
Supervisor Signature/Date	 {Supervisor name}		8/9/18 Date

Section I – INTRODUCTION

PURPOSE OF THE INSPECTION

EPA Region 6 inspectors Collin Martin, Paul Juarez, and Stephanie Meyers arrived at Petal Dairy at 9:30 A.M. on 06/20/2018 for an unannounced inspection. We met with the owner of the facility, Peter Boekhorst, at the opening conference. I presented my credentials to Mr. Boekhorst as I informed him that this was an EPA inspection to determine the facility's compliance with the Clean Water Act (CWA) National Pollutant Discharge Elimination System (NPDES) Concentrated Animal Feeding Operation (CAFO) regulations and the facility's Texas Commission on Environmental Quality (TCEQ) Permit. The scope of the inspection was a Compliance Evaluation Inspection and included an evaluation of the compliance of the facility with their TCEQ CAFO permit. Following the opening conference, Mr. Boekhorst accompanied us for a portion of the site inspection.

FACILITY DESCRIPTION

Petal Dairy is a permitted facility that has approximately 1110 cattle. At the time of the inspection, according to Mr. Boekhorst, the facility was milking 850 cows. In addition to the milking cows, Mr. Boekhorst notified us that there were approximately 80 head of dry cows on site in addition to 180 calves. The cows are milked twice per day and between sessions kept in either two freestall barns, a loafing shed, or cattle pens situated to the south and to the west of the commodities storage area. Wastewater from the milking parlor holding pen and freestall barns was routed to a concrete receiving pit attached to the milking parlor's northern edge. From there, wastewater was conveyed through a concrete-lined channel to the facility's first of six Retention Control Structures (RCSs). Wastewater then flowed from the first RCS through the third before entering the final Retention Control Structure (RCS #4) from which Mr. Boekhorst removes wastewater for land application. Flush water from the western half of the western freestall barn is routed to RCS #5 and ultimately RCS #4 via underground pipe. Additionally, RCS #6 served to catch all wastewater associated with cattle pens. Mr. Boekhorst informed us that most of the facility's solids are hauled off-site. At the time of our inspection, the facility had approximately 275 acres across four (4) Land Management Units (LMUs) to which it could apply nutrients. All wastewater is applied to fields owned or leased by the facility operator. Silage was stored under large plastic tarps which were secured by tires and excess silage. The mortality management area was in the northeast corner of the facility's primary LMU.

Section II - OBSERVATIONS

Wastewater & Solids Conveyance

On the day of our inspection, we observed an area approximately 0.5 acres in size which was covered in dried solids (Photo #6). Mr. Boekhorst informed us that this was a result of a pipe blockage and subsequent overflow from the concrete-lined solid conveyance channel (Photo #4). Additionally, we observed that the wastewater collection pit on the east side of the loafing shed contained a significant accumulation of solids which might inhibit the flow of wastewater as designed (Photo #5).

Retention Control Structures

On the day of our inspection we observed that the first three RCSs were filled with accumulated solids (Photos #8-12). The berms of these RCSs were overgrown with grasses which prohibited us from

inspecting them more thoroughly. In addition, the fences surrounding these RCSs were largely in disrepair. We observed RCS #3 to have less than one foot of available freeboard as well as evidence of a recent overflow event (Photo #13). RCS #4, the final RCS in series, had approximately two feet of available freeboard (Photo #16). We observed the berms of this RCS to be generally in good condition except for the one tree which was rooted within the west berm (Photo #17). This RCS contained a pole marker which appeared to be representative of the freeboard which was available. While observing RCS #5, we noticed excess accumulated solids in addition to berms which had not been maintained (Photo #19). On the day of the inspection, we observed that cattle had direct access to RCS #6 and were using it as a cooling pond (Photo #18).

Land Management Units

On the day of our inspection, we observed the Land Management Units to be in good condition and free from any evidence of overapplication such as ponding or puddling. We spoke with Mr. Boekhorst to confirm that he was adhering to the application buffers set by his Nutrient Management Plan (NMP).

Silage and Commodities Storage

On the day of our inspection we observed the commodity storage barns to be in good condition. We observed silage which was stored under large plastic tarps secured by both tires and old silage (Photo #21).

Records Review

I reviewed the records which were available on-site at Petal Dairy. Since the consultant had recently taken the records off-site for updating, I received the following records on 07/11/2018.

- 2017 and 2018 land-application records
- 2017 and 2018 wastewater analysis
- 2017 and 2018 manure solid analysis
- Most recent RCS liner permeability certifications
- Most recent Nutrient Management Plan (NMP)

Section III – AREAS OF CONCERN

The following Areas of Concern were conveyed to Mr. Boekhorst during the closing conference:

- We observed evidence of an overflow of wastewater and manure solids from the solids settling channel. The wastewater and manure solids flowed to a low spot south of RCS #1 and were contained there. This overflow resulted from manure solids blocking the conveyance leading to RCS #1. At the time of the inspection, these manure solids were still present in this low spot. The manure solids will need to be cleaned out of this area and the permittee shall resume proper operation and maintenance of this system per WQ0004905000 Part IX.E.
- There were no fences protecting the liners of RCSs #1-5 from damage by livestock per WQ0004905000 Part VII.A.3(f)(6). We observed that cattle had direct access to RCS #6 and were using it as a cooling pond. Cattle should be kept out of all RCSs always.
- The lagoon embankments on RCS #1-5 have not been maintained according to TCEQ CAFO General Permit WQ0004905000 Part VII.A.5(f) or Natural Resource Conservation Service (NRCS) Best Management Practices (BMPs), which prohibit trees and woody vegetation from growing on the lagoon embankment to minimize the potential for lagoon and/or liner failure.

- The wastewater and manure solid level in RCSs #1-3 had encroached into the storage volume reserved for the 25-yr/24-hr rain event and the two feet of freeboard required by the facility's permit. The facility needs to adhere to its sludge cleanout schedule per part VII.A.5(f) and maintain the storage volume reserved for the 25-yr/24-hr rain event per VII.A.5(b).

Section IV – LIST OF APPENDICES

Appendix 1 – Photo Log – 22 photos taken 06/20/18 and Aerial Image of Significant Photos

Appendix 1

Significant Photo Log



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Significant Photos

Photo No. 1

Location: Petal Dairy		
City: Saltillo	County/Parish: Hopkins	State: TX





UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Significant Photos

Photo No. 2

Location: Petal Dairy		
City: Saltillo	County/Parish: Hopkins	State: TX



Photo File Name: DSCN3244.JPG

Date of Photo: 06/20/18

Time of Photo: 10:31 A.M.

Photographer: Collin Martin

Description: This photo was taken facing southwest towards one of the facility's recycled wastewater flush tanks.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Significant Photos

Photo No. 3

Location: Petal Dairy		
City: Saltillo	County/Parish: Hopkins	State: TX



Photo File Name: DSCN3245.JPG

Date of Photo: 06/20/18

Time of Photo: 10:34 A.M.

Photographer: Collin Martin

Description: This photo was taken facing west towards the point at which wastewater exits the milking parlor holding pen. Note the in-ground catchment basin which collects this wastewater and routes it to the nearby solid settling structures.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Significant Photos

Photo No. 4

Location: Petal Dairy		
City: Saltillo	County/Parish: Hopkins	State: TX



Photo File Name: DSCN3247.JPG

Date of Photo: 06/20/18

Time of Photo: 10:35 A.M.

Photographer: Collin Martin

Description: This photo was taken facing north across the solids settling channel which led to RCS #1.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Significant Photos

Photo No. 5

Location: Petal Dairy		
City: Saltillo	County/Parish: Hopkins	State: TX



Photo File Name: DSCN3249.JPG

Date of Photo: 06/20/18

Time of Photo: 10:37 A.M.

Photographer: Collin Martin

Description: This photo was taken facing north towards the basin on the east end of the north freestall barn which received freestall barn flushwater. Note the accumulation of solids at the point where the flushwater exits the basin.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Significant Photos

Photo No. 6

Location: Petal Dairy		
City: Saltillo	County/Parish: Hopkins	State: TX



Photo File Name: DSCN3250.JPG

Date of Photo: 06/20/18

Time of Photo: 10:42 A.M.

Photographer: Collin Martin

Description: This photo was taken facing northeast towards the 0.5-acre area of dried out solids which were deposited during an overflow of the solids settling channel.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Significant Photos

Photo No. 7

Location: Petal Dairy		
City: Saltillo	County/Parish: Hopkins	State: TX



Photo File Name: DSCN3251.JPG

Date of Photo: 06/20/18

Time of Photo: 10:44 A.M.

Photographer: Collin Martin

Description: This photo was taken facing north towards the area in which the solids settling channel joins with RCS #1.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Significant Photos

Photo No. 8

Location: Petal Dairy		
City: Saltillo	County/Parish: Hopkins	State: TX



Photo File Name: DSCN3252.JPG

Date of Photo: 06/20/18

Time of Photo: 10:46 A.M.

Photographer: Collin Martin

Description: This photo was taken facing northwest from the southeast corner of RCS #1. Note the accumulation of solids and lack of berm maintenance.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Significant Photos

Photo No. 9

Location: Petal Dairy		
City: Saltillo	County/Parish: Hopkins	State: TX



Photo File Name: DSCN3253.JPG

Date of Photo: 06/20/18

Time of Photo: 10:51 A.M.

Photographer: Collin Martin

Description: This photo was taken facing east from the southwest corner of RCS #1. Note the accumulation of solids and lack of berm maintenance.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Significant Photos

Photo No. 10

Location: Petal Dairy		
City: Saltillo	County/Parish: Hopkins	State: TX



Photo File Name: DSCN3254.JPG

Date of Photo: 06/20/18

Time of Photo: 10:51 A.M.

Photographer: Collin Martin

Description: This photo was taken facing northeast across RCS #2. Note the accumulation of solids and the lack of berm maintenance.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Significant Photos

Photo No. 11

Location: Petal Dairy		
City: Saltillo	County/Parish: Hopkins	State: TX



Photo File Name: DSCN3257.JPG

Date of Photo: 06/20/18

Time of Photo: 11:05 A.M.

Photographer: Collin Martin

Description: This photo was taken facing east across RCS #2. Note the accumulation of solids and the lack of berm maintenance.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Significant Photos

Photo No. 12

Location: Petal Dairy		
City: Saltillo	County/Parish: Hopkins	State: TX



Photo File Name: DSCN3258.JPG

Date of Photo: 06/20/18

Time of Photo: 11:06 A.M.

Photographer: Collin Martin

Description: This photo was taken facing northwest across RCS #3. Note the accumulation of solids and the lack of berm maintenance.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Significant Photos

Photo No. 13

Location: Petal Dairy		
City: Saltillo	County/Parish: Hopkins	State: TX



Photo File Name: DSCN3259.JPG

Date of Photo: 06/20/18

Time of Photo: 11:11 A.M.

Photographer: Collin Martin

Description: This photo was taken facing northwest towards a low point in RCS #3. Note the overflow of wastewater into the pasture adjacent to RCS #3.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Significant Photos

Photo No. 14

Location: Petal Dairy		
City: Saltillo	County/Parish: Hopkins	State: TX



Photo File Name: DSCN3260.JPG

Date of Photo: 06/20/18

Time of Photo: 11:16 A.M.

Photographer: Collin Martin

Description: This photo was taken facing north. This photo was taken just north and downhill from the previous photo.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Significant Photos

Photo No. 15

Location: Petal Dairy		
City: Saltillo	County/Parish: Hopkins	State: TX



Photo File Name: DSCN3262.JPG

Date of Photo: 06/20/18

Time of Photo: 11:18 A.M.

Photographer: Collin Martin

Description: This photo was taken facing northwest across RCS #6.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Significant Photos

Photo No. 16

Location: Petal Dairy		
City: Saltillo	County/Parish: Hopkins	State: TX



Photo File Name: DSCN3263.JPG

Date of Photo: 06/20/18

Time of Photo: 11:29 A.M.

Photographer: Collin Martin

Description: This photo was taken facing northeast across RCS #4.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Significant Photos

Photo No. 17

Location: Petal Dairy		
City: Saltillo	County/Parish: Hopkins	State: TX



Photo File Name: DSCN3264.JPG

Date of Photo: 06/20/18

Time of Photo: 11:30 A.M.

Photographer: Collin Martin

Description: This photo was taken facing east across RCS #4. Note the tree which is rooted within the berm of the RCS.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Significant Photos

Photo No. 18

Location: Petal Dairy		
City: Saltillo	County/Parish: Hopkins	State: TX



Photo File Name: DSCN3265.JPG

Date of Photo: 06/20/18

Time of Photo: 11:33 A.M.

Photographer: Collin Martin

Description: This photo was taken facing northeast across RCS #6. Note that the animals had direct access to the RCS and were utilizing it as a cooling pond.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Significant Photos

Photo No. 19

Location: Petal Dairy		
City: Saltillo	County/Parish: Hopkins	State: TX



Photo File Name: DSCN3266.JPG

Date of Photo: 06/20/18

Time of Photo: 11:37 A.M.

Photographer: Collin Martin

Description: This photo was taken facing south across RCS #5. Note the accumulation of solids and the lack of berm maintenance.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Significant Photos

Photo No. 20

Location: Petal Dairy		
City: Saltillo	County/Parish: Hopkins	State: TX



Photo File Name: DSCN3268.JPG

Date of Photo: 06/20/18

Time of Photo: 12:00 P.M.

Photographer: Collin Martin

Description: This photo was taken facing north across a stock tank.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Significant Photos

Photo No. 21

Location: Petal Dairy		
City: Saltillo	County/Parish: Hopkins	State: TX



Photo File Name: DSCN3271.JPG

Date of Photo: 06/20/18

Time of Photo: 12:18 P.M.

Photographer: Collin Martin

Description: This photo was taken facing north toward the facility's silage storage area. Note the use of silage to secure the plastic tarp. The owner should verify that no contaminated stormwater from the silage storage area is being discharged off-site.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Significant Photos

Photo No. 22

Location: Petal Dairy		
City: Saltillo	County/Parish: Hopkins	State: TX



Photo File Name: DSCN3275.JPG

Date of Photo: 06/20/18

Time of Photo: 12:37 P.M.

Photographer: Collin Martin

Description: This photo was taken facing northeast towards the facility's mortality management area.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Significant Photos

Photo No. 23

Location: Petal Dairy		
City: Saltillo	County/Parish: Hopkins	State: TX



Photo File Name: DSCN3306.JPG

Date of Photo: 06/20/18

Time of Photo: 2:45 P.M.

Photographer: Collin Martin

Description: This photo was taken facing northeast toward the facility's calf hutch area. Note that the area is well vegetated.