

Texas Commission on Environmental Quality

INTEROFFICE MEMORANDUM

To: Office of Chief Clerk Date: December 10, 2024
From: Michael Parr, Staff Attorney, Environmental Law Division
Subject: Transmittal of Documents for Administrative Record

Applicant: Peter Henry Schouten Sr. and Nova Darlene Schouten
Proposed Permit No.: WQ0005387000
Program: Water Quality Division
TCEQ Docket No.: 2023-1586-AGR

In a contested case hearing, the administrative record includes copies of the public notices relating to the permit application, as well as affidavits of public notices filed by the applicant directly with the Office of the Chief Clerk (OCC). In addition, the record includes the following documents provided to the OCC by the Executive Director's(ED) staff. See 30 TAC § 80.118.

This transmittal serves to also request that the OCC transmit the attached items, together with (a) the public notice documents (including notice of hearing), and (b) where available for direct referral cases only, the ED's Response to Comments to the State Office of Administrative Hearings.

Indicated below are the documents included with this transmittal:

1. The Executive Director's Response to Hearing Request.
2. The Executive Director's Technical Backup Memos (Fact Sheet, Draft Permit and the Executive Director's Preliminary Decision and the Compliance History).
3. Notice Of Application And Preliminary Decision
4. The Executive Director's Final Decision letter.

Sincerely,



Michael Parr II
Staff Attorney
Environmental Law Division

TCEQ DOCKET NO. 2023-1586-AGR

**APPLICATION BY
PETER H. SCHOUTEN SR.
AND NOVA D. SCHOUTEN
FOR NEW TPDES PERMIT
NO. WQ0005387000**

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**BEFORE
THE TEXAS
COMMISSION ON
ENVIRONMENTAL
QUALITY**

EXECUTIVE DIRECTOR'S RESPONSE TO HEARING REQUESTS

I. INTRODUCTION

The Executive Director (ED) of the Texas Commission on Environmental Quality (TCEQ) files this Response to Hearing Requests on the application by Peter Henry Schouten Sr. and Nova Darlene Schouten (Applicants) for new Texas Pollutant Discharge Elimination System (TPDES) permit number (No.) WQ0005387000 (proposed permit). Clifford Norris and James Karels both filed timely, written, requests for a Contested Case Hearing (Request(s)).

A. Attachments for Commission Consideration

Attachment A – ED's GIS Map

II. BACKGROUND

A. Application Request

The Applicants applied to the TCEQ for new TPDES permit No. WQ0005387000, to operate under an individual Concentrated Animal Feeding Operation (CAFO) permit to confine a maximum of 2,000 head of dairy cattle replacement heifers, none of which will be milking, with 43 acres making up the total land application area. The proposed permit authorizes the collection and placement of manure in a Retention Control Structure (RCS) and then land applied at the permitted facility along with associated wastewater from the RCS. No discharge of pollutants into Water in the State is authorized by the proposed permit.

B. Description of the Facility and its Authorization

The Golden Star Heifer Ranch (Permitted facility) is located on the north side of State Highway (SH) 6 on County Road 2495, which is nearly 5.5 miles east of the intersection of SH 6 and US Highway 281 in Bosque County, Texas.

The land application area is divided into two Land Management Units (LMU) with LMU No.1 covering 35 acres and LMU No.2 covering 8 acres. The list of alternative crops to be grown on the LMUs includes Alfalfa, Bahia, Cantaloupes, Coastal, Common grass, Corn, Cotton, Cowpea, Eastern Gama grass, Fescue, Sorghum grain, Guar, Johnsongrass, Klein, Legume, Midland Bermuda, Millet, Oats, Old World Bluestem, Peanut, Rice, Rye Grass, Small Grain, Sorghum Sudan, Soybean, Sunflower, Triticale, Watermelons, Weeping lovegrass, Popcorn, Vetch, Wheat and Winter Pea with various yield goals.

The Permitted facility includes one RCS with 16.85 acre-feet without freeboard of required capacity, and one domestic water well with the required 150-foot buffer.

The Permitted facility is in the drainage area of the North Bosque River in Segment No. 1226 of the Brazos River Basin and is subject to TWC §§ 26.502 and 26.503(d) that relates to a feeding operation confining cattle in a major sole source impairment zone that have been or may be used for dairy purposes, or otherwise associated with a dairy, including cows, calves, and bulls. No discharge is authorized by the proposed permit except as allowed by the provisions in the proposed permit and 40 Code of Federal Regulations Chapter 412, which is adopted by reference in 30 TAC § 305.541, and are related to a 25-year, 24-hour rainfall event.

The Applicant is required to obtain and operate under an individual permit because the Permitted facility is in a watershed of a river segment listed on the current EPA-approved CWA § 303(d) list of impaired waters where a TMDL implementation plan has been adopted by the TCEQ that establishes additional WQ protection measures for CAFOs as required by 33 USC § 1313(d).

The basis for the ED's Technical Review of a TPDES permit application comes from the Texas Legislature's passage of Chapter 26 (Water Quality Control) of the TWC into law, which gives the TCEQ primary authority over WQ in Texas. Chapter 26 combines the TCEQ's WQ authority with federally delegated CWA regulatory authority for the TPDES program, which controls discharges of pollutants into Texas' surface waterbodies, otherwise defined by the TWC as "Water in the State." To implement TCEQ's WQ control regime, Chapter 26 grants the TCEQ the authority to issue permits (and amendments) for the disposal of wastewater adjacent to Water in the State, so long as the parameters established through the ED's Technical Review of the application, comply with the TWC, TCEQ rules, and the TSWQS. However, the TCEQ may refuse to issue a permit when the ED's Technical Review finds that issuing the permit would violate the provisions of any state or federal law or rules or regulations derived from those laws, or when it finds that issuing the permit would interfere with the TCEQ's WQ control regime.

C. Procedural Background

The Permitted facility was previously permitted as a State-only dairy cattle facility with 480 head, all of which were milking cows under a CAFO individual TPDES permit No. WQ0003656000 that was canceled on October 12, 2021.

The TCEQ received the application on May 12, 2022, and declared it administratively complete on July 1, 2022. The Applicant published the NORI in Bosque County, Texas in the *Clifton Record* on July 13, 2022. The ED completed the technical review of the application on March 10, 2023, and prepared the proposed permit that if approved, would establish the conditions under which the Permitted facility must operate. The Applicant published the NAPD in Bosque County, Texas in the *Meridian Tribune* on June 7, 2023, the public comment period ended on July 7, 2023, the ED's Response to Comments (RTC) was filed on September 21, 2023, the ED's Final Decision Letter was mailed on September 28, 2023, and the time for filing a Request For Reconsideration (RFR) was October 27, 2023.

Because this application was received after September 1, 2015, and because it was declared administratively complete after September 1, 1999, it is subject to both the procedural requirements adopted pursuant to House Bill 801, 76th Legislature, 1999, and the procedural requirements and rules implementing Senate Bill 709, 84th Legislature, 2015, which are implemented by the Commission in its rules in 30 TAC Chapters 39, 50, and 55.

D. Access to Rules, Laws, and Records

- All administrative rules: Secretary of State Website: www.sos.state.tx.us
- TCEQ rules: Title 30 of the Texas Administrative Code: www.sos.state.tx.us/tac/ (select TAC Viewer on the right, then Title 30 Environmental Quality)
- Texas statutes: www.statutes.capitol.texas.gov
- TCEQ website: www.tceq.texas.gov (for downloadable rules in WordPerfect or Adobe PDF formats, select “Rules, Policy, & Legislation,” then “Current TCEQ Rules,” then “Download TCEQ Rules”).
- Federal rules: Title 40 of the Code of Federal Regulations (C.F.R.)
http://www.ecfr.gov/cgi-bin/text-idx?tpl=/ecfrbrowse/Title40/40tab_02.tpl
- Federal environmental laws: <http://www.epa.gov/lawsregs/>
- **Environmental or citizen complaints may be filed electronically at:**
<https://www.tceq.texas.gov/compliance/complaints/index.html> (select “use our online form”) or by sending an email to the following address:
complaint@TCEQ.Texas.gov.
- Alternative language notice in Spanish is available at:
<https://www.tceq.texas.gov/permitting/wastewater/plain-language-summaries-and-public-notices>.
El aviso de idioma alternativo en español está disponible en
<https://www.tceq.texas.gov/permitting/wastewater/plain-language-summaries-and-public-notices>.

Commission records for the Permitted facility are available for viewing and copying at TCEQ’s main office in Austin at 12100 Park 35 Circle, Building F, 1st Floor in the OCC, for the current application until final action is taken. Some documents located at the OCC may also be found in the TCEQ Commissioners’ Integrated Database at www.tceq.texas.gov/goto/cid.

The permit application, proposed permit, factsheet, and the ED’s preliminary decision have been available for viewing and copying at Bosque County Extension Office, located at 104 South Fuller Street, Meridian, Texas 76665, since publication of the NORI. The final permit application, proposed permit, statement of basis/technical summary, and the ED’s preliminary decision were available for viewing and copying at the same location since publication of the NAPD.

The ED has determined that the proposed permit, if issued, meets all statutory and regulatory requirements and is protective of the environment, water quality, and human health. However, if individuals wish to file a complaint about the proposed facility concerning its compliance with the provisions of its permit or with TCEQ rules, the TCEQ’s OCE may be contacted through the TCEQ’s statewide toll-free number at 1-888-777-3186, the DFW Regional Office (Region 4) in Fort Worth, Texas at (817) 588-5800, or the TCEQ Stephenville Office at (254) 552-1900 or 1-800-687-7078 to address potential permit violations. In addition, complaints may be filed electronically by using the methods described above at the seventh bullet under “Access to Rules, Laws, and Records.” If an inspection by the TCEQ finds that the Applicant is not complying with all requirements of the proposed permit, or that the proposed facility is out of compliance with TCEQ rules, enforcement actions may arise.

III. EVALUATION OF HEARING REQUESTS

House Bill 801 established statutory procedures for public participation in certain environmental permitting proceedings, specifically regarding public notice and public comment and the Commission's consideration of hearing requests (Requests). The Commission implemented HB 801 by adopting procedural rules in 30 TAC chapters 39, 50, and 55. Senate Bill 709 revised the requirements for submitting public comment and the commission's consideration of Requests. This application was declared administratively complete on September 14, 2022; therefore, it is subject to the procedural requirements adopted pursuant to both HB 801 and SB 709.

A. LEGAL AUTHORITY TO RESPOND TO HEARING REQUESTS

"The executive director, the public interest counsel, and applicant may submit written responses to [hearing] requests... [which must specifically address:]"

1. whether the requestor is an affected person;
2. whether issues raised in the hearing request are disputed;
3. whether the dispute involves questions of fact or law;
4. whether the issues were raised during the public comment period;
5. whether the hearing request is based on issues raised solely in a public comment withdrawn by the commenter by filing a written withdrawal letter with the chief clerk prior to the filing of the ED's Response to Comment;
6. whether the issues are relevant and material to the decision on the application; and
7. a maximum expected duration for the contested case hearing.¹

The issues described above in subparagraph A.6. are often referred to as "relevant and material fact issues."

B. HEARING REQUEST REQUIREMENTS

To consider a Request, the Commission must first conclude that the requirements in 30 TAC §§ 55.201 and 55.203, are met as follows.

A request for a contested case hearing by an affected person must be in writing, filed with the chief clerk within the time provided . . . , based only on the requester's timely comments, and not based on an issue that was raised solely in a public comment withdrawn by the commenter in writing by filing a withdrawal letter with the chief clerk prior to the filing of the ED's Response to Comment.²

A hearing request must substantially comply with the following:

- (1) give the name, address, telephone number, and where possible, fax number of the person who files the request. If the request is made by a group or association, the request must identify one person by name, address, daytime telephone number, and where possible, fax number, who is responsible for receiving all official communications and documents for the group.
- (2) identify the person's justiciable interest affected by the application, including a brief, but specific, written statement explaining in plain language the requestor's

¹ 30 TAC §§ 55.209(d) and (e) [combined].

² 30 TAC § 55.201(c).

location and distance relative to the facility or activity that is the subject of the application and how and why the requestor believes he or she will be adversely affected by the facility or activity in a manner not common to members of the general public;

(3) request a contested case hearing.

(4) for applications filed.

(B) on or after September 1, 2015, list all relevant and material disputed issues of fact that were raised by the requestor during the public comment period and that are the basis of the hearing request. To facilitate the commission's determination of the number and scope of issues to be referred to hearing, the requestor should, to the extent possible, specify any of the ED's responses to the requestor's comments that the requestor disputes, the factual basis of the dispute, list any disputed issues of law; and

(5) provide any other information specified in the public notice of application.³

C. REQUIREMENT THAT REQUESTOR BE AN AFFECTED PERSON

To grant a contested case hearing, the commission must determine, pursuant to 30 TAC § 55.203, that a requestor is an affected person.

- (a) For any application, an affected person is one who has a personal justiciable interest related to a legal right, duty, privilege, power, or economic interest affected by the application. An interest common to members of the public does not qualify as a personal justiciable interest.
- (b) Governmental entities, including local governments and public agencies with authority under state law over issues raised by the application, may be considered affected persons.
- (c) In determining whether a person is an affected person, all factors shall be considered, including, but not limited to, the following:
 - (1) whether the interest claimed is one protected by the law under which the application will be considered;
 - (2) distance restrictions or other limitations imposed by law on the affected interest;
 - (3) whether a reasonable relationship exists between the interest claimed and the activity regulated;
 - (4) likely impact of the regulated activity on the health and safety of the person, and on the use of property of the person;
 - (5) likely impact of the regulated activity on use of the impacted natural resource by the person; and
 - (6) whether the requester timely submitted comments on the application which were not withdrawn; and
 - (7) for governmental entities, their statutory authority over or interest in the issues relevant to the application.⁴

³ *Id.* at § 55.201(d).

⁴ 30 TAC § 55.203(a)-(c).

- (d) In making this determination, the commission may also consider, to the extent consistent with case law:
- (1) the merits of the underlying application and supporting documentation in the commission's administrative record, including whether the application meets the requirements for permit issuance;
 - (2) the analysis and opinions of the ED; and
 - (3) any other expert reports, affidavits, opinions, or data submitted by the ED, the applicant, or hearing requestor.⁵

D. REFERRAL TO THE STATE OFFICE OF ADMINISTRATIVE HEARINGS

"When the commission grants a request for a contested case hearing, the commission shall issue an order specifying the number and scope of the issues to be referred to State Office of Administrative Hearing (SOAH) for a hearing."⁶ "The commission may not refer an issue to SOAH for a contested case hearing unless the commission determines that the issue:

- (1) involves a disputed question of fact or a mixed question of law and fact;
- (2) was raised during the public comment period by an affected person; and
- (3) is relevant and material to the decision on the application."⁷

E. REQUESTS FOR RECONSIDERATION

According to 30 TAC § 55.201(e), any person may file a RFR of the ED's decision no later than 30 days after the Chief Clerk mails the ED's decision and RTC, if it expressly states that the person is requesting reconsideration of the ED's decision, is in writing, and gives reasons why the decision should be reconsidered.

IV. ANALYSIS OF THE HEARING REQUESTS

The ED analyzed whether the Requests followed TCEQ rules, the requestor's Affected Person qualifications, what issues to refer for a possible hearing, and the appropriate length of any hearing. After reviewing the Requests with the following analysis, the ED respectfully recommends granting the Requests of Clifford Norris and James Karels.

A. WHETHER THE REQUEST COMPLIED WITH 30 TAC §§ 55.201(C) AND (D).

1. **Clifford Norris** filed a timely, written Request that provided the requisite contact information, raised relevant and material issues that form the basis of his Request in timely comments not withdrawn before the RTC was filed, and requested a hearing.

Mr. Norris' Request complied with 30 TAC §§ 55.201(c), and (d) because it effectively identified a personal justiciable interest in a written explanation plainly describing why Mr. Norris believes he will be affected by the application differently than the public. Mr. Norris' Request stated he owns property that is downwind, downstream, and in close proximity to the Permitted facility and raised issues relevant to a decision on the application,

⁵ *Id.* at § 55.203(d).

⁶ 30 TAC § 50.115(b).

⁷ *Id.* at § 55.203(d).

like nuisances such as odors and flies, which are issues addressed by the law under which the application is being considered.

The ED recommends finding that Clifford Norris' Request substantially complied with 30 TAC §§ 55.201(c) and 55.201(d).

2. **James Karels** filed a timely, written Request that provided the requisite contact information, raised relevant and material issues that form the basis of his Request in timely comments not withdrawn before the RTC was filed, and requested a hearing.

Mr. Karels' Request complied with 30 TAC §§ 55.201(c), and (d) because it effectively identified a personal justiciable interest in a written explanation plainly describing why Mr. Karels believes he will be affected by the application differently than the public. Mr. Karels' Request stated he owns property that is less than 100 yards away from the Permitted facility and raised issues relevant to a decision on the application, like decreased air quality from dust, and nuisances, such as odors and flies, which are issues addressed by the law under which the application is being considered.

The ED recommends finding that James Karels' Request substantially complied with 30 TAC §§ 55.201(c) and 55.201(d).

B. WHETHER THE REQUESTOR IS AN AFFECTED PERSON UNDER 30 TAC § 55.203

1. **Clifford Norris**' Request effectively identified a personal, justiciable interest affected by the application.

Mr. Norris' Request raised relevant and material fact issues because of proximity to the Permitted facility. GIS map prepared by the ED's staff locates Mr. Norris 165 feet from the permitted facility and 327 feet from the RCS. Not only did Mr. Norris raise issues of odors and excessive flies, Mr. Norris' Request also raised concerns about runoff containing wastewater from the Permitted facility flowing onto his property, all of which are issues addressed in the proposed permit and are interests unique to him because of his proximity to the permitted facility, which increases the likelihood that Mr. Norris may be affected in a way not common to the public.

Because Mr. Norris' location is near the permitted facility, a reasonable relationship exists between the interests claimed and the activity regulated. Because Mr. Norris' Request demonstrated a personal justiciable interest not common to the general public as required by TWC § 5.115, the ED recommends the Commission find that Mr. Norris is an affected person.

The ED recommends that the Commission find that Clifford Norris is an Affected Person under 30 TAC § 55.203.

2. **James Karels**' Request effectively identified a personal, justiciable interest affected by the application.

Mr. Karels' Request raised relevant and material fact issues because of proximity to the Permitted facility. GIS map prepared by the ED's staff locates Mr. Karels 400 feet from the Permitted facility and 2,312 feet from the RCS. Not only did Mr. Karels raise issues of odors and excessive flies, but Mr. Karels' Request also raised concerns about groundwater contamination, and adverse impacts to air quality from dust from the permitted facility, all

of which are issues addressed in the proposed permit and are interests unique to him because of his proximity to the permitted facility and the health of Mr. Karels and his wife.

Because Mr. Karels' location is near the permitted facility, a reasonable relationship exists between the interests claimed and the activity regulated. Because Mr. Karels' Request demonstrated a personal justiciable interest not common to the general public as required by TWC § 5.115, the ED recommends the Commission find that Mr. Karels is an affected person.

The ED recommends that the Commission find that James Karels is an Affected Person under 30 TAC § 55.203.

V. ISSUES RAISED IN THE REQUESTS

The ED's analysis of the issues raised in Mr. Norris' and Mr. Karels' Requests identified the following relevant and material fact issues of:

1. Whether the proposed permit includes, according to the TCEQ rules, adequate provisions to protect against nuisances such as odors and flies.

(RTC Response Nos. 2 & 3) This is an issue of fact. If it can be shown that the proposed permit does not have adequate protections to protect against nuisances such as odors and flies consistent with state law and the TCEQ's rules, that information would be relevant and material to a decision on the application.

The ED concludes this issue is relevant and material, and if this case is referred to SOAH, the ED recommends the Commission refer this issue.

2. Whether the proposed permit includes, according to the TCEQ rules, adequate provisions to protect against groundwater contamination.

(RTC Response Nos. 1 & 4) This is an issue of fact. If it can be shown that the proposed permit does not have adequate protections to protect against groundwater contamination consistent with state law and the TCEQ's rules, that information would be relevant and material to a decision on the application.

The ED concludes this issue is relevant and material, and if this case is referred to SOAH, the ED recommends the Commission refer this issue.

3. Whether the proposed permit includes, according to the TCEQ rules, adequate provisions to protect against wastewater leaving the site.

(RTC Response Nos. 1 & 4) This is an issue of fact. If it can be shown that the proposed permit does not have adequate protections to protect against wastewater leaving the site consistent with state law and the TCEQ's rules, that information would be relevant and material to a decision on the application.

The ED concludes this issue is relevant and material, and if this case is referred to SOAH, the ED recommends the Commission refer this issue.

4. Whether the proposed permit includes, according to the TCEQ rules, adequate provisions to be protective of human health and the environment as it relates specifically to dust control.

(RTC Response No. 2) This is an issue of fact. If it can be shown that the proposed permit does not have adequate protections to be protective of human health and the environment as it relates specifically to dust control, that are consistent with

state law and the TCEQ's rules, that information would be relevant and material to a decision on the application.

The ED concludes this issue is relevant and material, and if this case is referred to SOAH, the ED recommends the Commission refer this issue.

VI. CONTESTED CASE HEARING DURATION

If the Commission grants a hearing on this application, the ED recommends that the duration of the hearing be 180 days from the preliminary hearing to the presentation of a proposal for decision to the Commission.

VII. EXECUTIVE DIRECTOR'S RECOMMENDATIONS

The ED recommends the following actions by the Commission:

1. Find that Clifford Norris and James Karels are affected persons under 30 TAC § 55.203.
2. Grant the Requests of Clifford Norris and James Karels.
3. Should the Commission decide to refer this case to SOAH.
 - a. refer the case to Alternative Dispute Resolution for a reasonable time.
 - b. refer the identified issues in section V. to SOAH for a Hearing.

Respectfully submitted,

Texas Commission on Environmental Quality

Kelly Keel, Executive Director

Erin Chancellor, Director
Office of Legal Services

Charmaine Backens, Deputy Director
Environmental Law Division



Michael T. Parr II, Staff Attorney
Environmental Law Division
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REPRESENTING THE EXECUTIVE DIRECTOR
OF THE TEXAS COMMISSION ON
ENVIRONMENTAL QUALITY

VIII. CERTIFICATE OF SERVICE

I certify that on March 18, 2024, the Executive Director's Response to Hearing Requests for Permit No. WQ0005387000 was filed with the Texas Commission on Environmental Quality's Office of the Chief Clerk, and a copy was served to all persons listed on the attached mailing list via hand delivery, electronic delivery, inter-agency mail, or by deposit in the U.S. Mail.

A handwritten signature in black ink, appearing to read "Michael T. Parr II". The signature is fluid and cursive, with the last name "Parr" being particularly prominent.

Michael T. Parr II, Staff Attorney
State Bar No. 24062936

MAILING LIST

Nova Darlene Schouten and Peter Henry Schouten, Sr.
TCEQ Docket No. 2023-1586-AGR TPDES Permit No. WQ0005387000

FOR THE APPLICANT:

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Peter Henry Schouten, Sr. and Nova
Darlene Schouten
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Hico, Texas 76457

Jourdan Mullin, Consultant
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FOR THE EXECUTIVE DIRECTOR

via electronic mail:

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FOR THE CHIEF CLERK

via eFilings:

Docket Clerk
Texas Commission on Environmental
Quality
Office of Chief Clerk, MC-105
P.O. Box 13087
Austin, Texas 78711

<https://www.tceq.texas.gov/goto/efilings>

REQUESTER(S):

James Karels
16303 State Highway 6
Hico, Texas 76457

Clifford M. Norris
16443 State Highway 6
Hico, Texas 76457

INTERESTED PERSON(S):

Harold P. Gervais
DDR Ranch
P.O. Box 540
Hico, Texas 76457

Attachment A

GOLDEN STAR DAIRY GIS MAP

Map Requested by TCEQ Office of Legal Services
for Commissioners' Agenda



*Protecting Texas by
Reducing and
Preventing Pollution*

Texas Commission on Environmental Quality
GIS Team (Mail Code 197)
P.O. Box 13087
Austin, Texas 78711-3087
Date: 3/14/2024
CRF 0097949
Cartographer: MAttoh



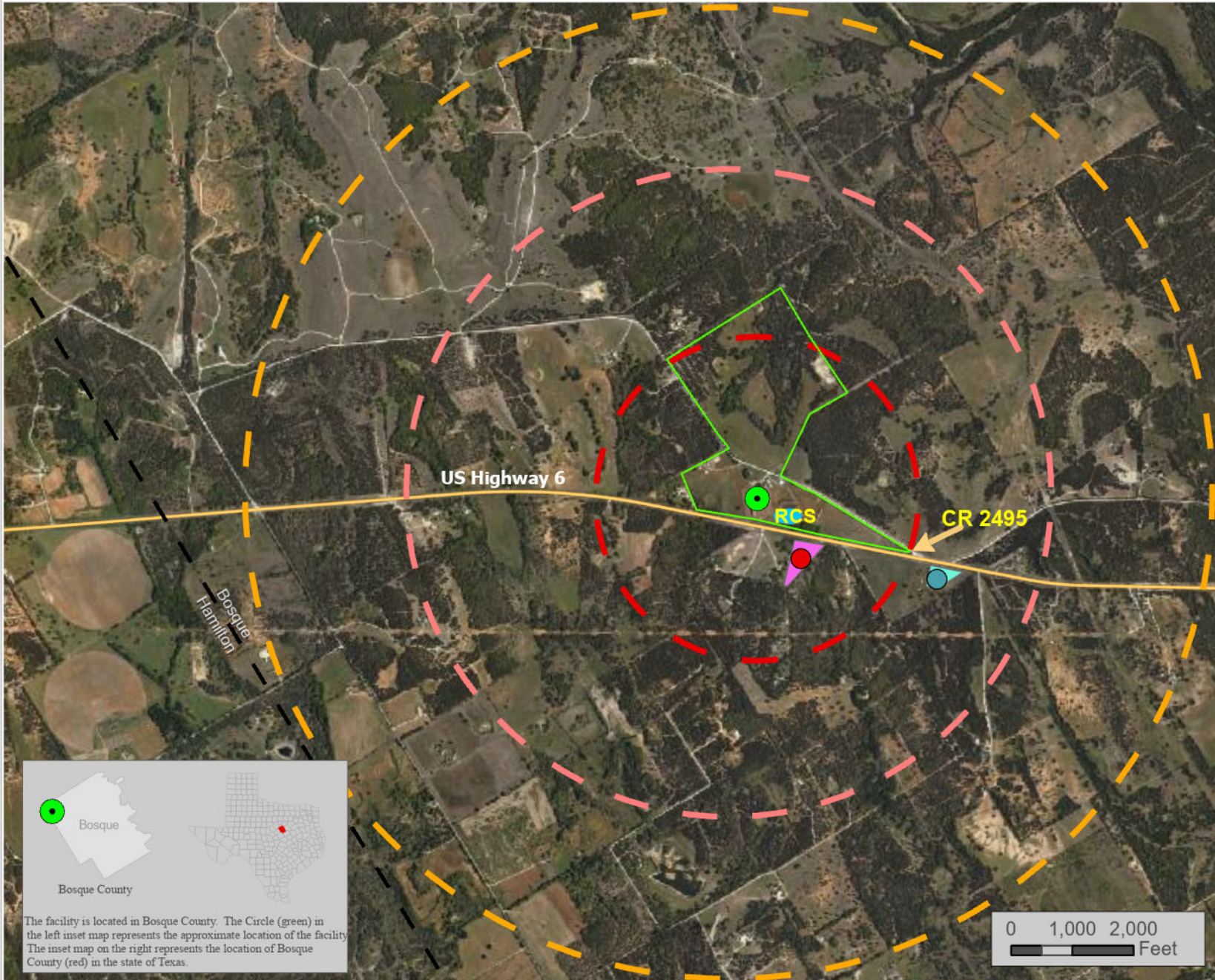
- Clifford Norris, No. 14 - approx 165 ft from facility boundary
- James Karels, No. 18 approx - 400 ft from facility boundary
- Facility Point
- Facility Boundary
- James Karels facility boundary
- Clifford Norris facility boundary
- Retention Control Structure
- 0.5 Mile From Facility Point
- 1.0 Mile From Facility Point
- 1.5 Mile From Facility Point
- US Highway 6
- County Road 2495

Approx distance from big pond on applicant's property to:

Clifford Norris - 327 ft
James Karels - 2312 ft

Source: The location of the facility was provided by the TCEQ Office of Legal Services (OLS). OLS obtained the site location information from the applicant and the requestor information from the requestor.

This map was generated by the Information Resources Division of the Texas Commission on Environmental Quality. This product is for informational purposes and may not have been prepared for or be suitable for legal, engineering, or surveying purposes. It does not represent an on-the-ground survey and represents only the approximate relative location of property boundaries. For more information concerning this map, contact the Information Resource Division at (512) 239-0800.



The facility is located in Bosque County. The Circle (green) in the left inset map represents the approximate location of the facility. The inset map on the right represents the location of Bosque County (red) in the state of Texas.

Texas Commission on Environmental Quality

INTEROFFICE MEMORANDUM

To: Final Documents Team Leader
Chief Clerk's Office

DATE: March 22, 2024

From: Michael Parr
Staff Attorney
Environmental Law Division

Subject: Backup Filed for the ED's Response to Hearing Requests

Applicant:	Peter Henry Schouten Sr. and Nova Darlene Schouten
Proposed Permit No.:	WQ0005387000
Program:	Water
Docket No.:	2023-1586-AGR

Enclosed please find a copy of the following documents for inclusion in the background material for this permit application:

- Technical Summary & Proposed Permit
- The Compliance History Reports

Texas Commission on Environmental Quality

Fact Sheet and Executive Director's Preliminary Decision

I. Description of Application

Applicant: Peter Henry Schouten, Sr. and Nova Darlene Schouten

Permit No.: WQ0005387000

Regulated Activity: Concentrated Animal Feeding Operation; Dairy Heifer Replacement

Permit Action: New

Authorization: Air & Water Quality Authorization

II. Executive Director's Recommendation

The Executive Director has made a preliminary decision that this permit, if issued, meets all statutory and regulatory requirements. The proposed permit shall be issued for a 5 year term in accordance with 30 TAC Chapter 305.

III. Reason for Proposed Project

The applicant has applied to the Texas Commission on Environmental Quality (TCEQ) for a new Texas Pollutant Discharge Elimination System Permit No. WQ0005387000 to authorize the permittee to confine 2,000 head of dairy heifers. The location of this proposed operation was previously permitted as a State-only dairy cattle facility with 480 head, all of which were milking cows, under the CAFO individual permit with Permit Number WQ0003656000. The permit was canceled on October 12, 2021. The proposed operation will confine dairy heifers only, none of which will be milking.

IV. Facility Description and Location

Maximum Capacity: 2,000 Head Dairy Heifers

Land Management Units (LMUs) (acres): LMU#1 – 35, LMU#2 – 8

Location: The facility is located on the north side of State Highway 6 on County Road 2495 which is approximately 5.5 miles east of the intersection of State Highway 6 and US Highway 281, in Bosque County, Texas. Latitude: 31.983056° N and Longitude: 97.949722° W.

Drainage Basin: The facility is located in the drainage area of the North Bosque River in Segment No. 1226 of the Brazos River Basin.

The facility consists of one Retention Control Structure (RCS) and one Settling Basin. The table below indicates the volume allocations for the RCS:

Table 1: Volume Allocations for RCS (Acre-Feet)

RCS Name	Design Rainfall Event Runoff	Process Generated Wastewater	Minimum Treatment Volume	Sludge	Water Balance	Required Capacity	Actual Capacity (if existing)
RCS #1	14.24	0	0	0.23	2.38	16.85	20.47

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Peter Henry Schouten & Nova Darlene Schouten, TPDES Permit No. WQ0005387000

The volume allocations are determined using Natural Resource Conservation Service standards, American Society of Agricultural and Biological Engineers standards, and/or site specific data submitted in the permit application.

The Design Rainfall Event is the volume of runoff from the 25 year, 10 day storm event. The RCS is required to include adequate capacity to contain this amount of runoff as a margin of safety to protect against discharges during rainfall events that may exceed the average monthly values used to design the RCS, but do not constitute chronic or catastrophic rainfall. This volume allocation accommodates runoff from open lot surfaces, all areas between the open lots and the RCS, runoff from roofed areas that contribute to the RCS and direct rainfall on the surface of the RCS. Runoff curve numbers used to calculate the runoff volume from the open lot surfaces are reflective of the characteristics of open lot surfaces and range between 90 and 95. Runoff curve numbers used to compute the runoff from areas between the open lots and the RCS are reflective of the land use and condition of the areas between the open lots and RCS. A curve number of 100 is used for the RCS surface and all roofed areas.

Process Generated Wastewater is the volume of wet manure and wastewater generated by the facility that is flushed or otherwise directed to the RCS. Wastewater includes all water used directly or indirectly by the facility that comes in contact with manure or other waste. The RCS must contain the process generated wastewater from a 21 day period or greater. RCS #1 is not required to contain process generated wastewater because no process generated wastewater is produced by the facility.

This facility is not required to maintain a treatment volume in the RCS because there is no process generated wastewater.

Sludge accumulation volumes are required in the RCS that receives runoff from open lots. The sludge accumulation volume allocated for runoff from open lots is calculated using USDA Agricultural Field Waste Handbook, Kansas, Part 651.1083, which uses the following equation: $(\%SC) \times (MAR) \times (DA) \times (SP)$, where %SC = percent solids content of runoff, MAR = mean annual runoff (in inches), DA = contributing drainage area (in acres), and SP = sediment storage period (in years). A minimum of one year of sludge storage is required in the RCS. Design sludge volumes in this permit reflect a one (1) year sludge accumulation period.

The RCS volume designated as Water Balance is the capacity needed in addition to the Process Generated Wastewater volume to provide adequate operating capacity so that the operating volume does not encroach into the design storm volume. The water balance is an analysis of the inflow into the RCS, all outflows from the RCS and the consumptive use requirements of the crops on the land areas being irrigated. The water balance is developed on a monthly basis. It estimates all inflows into the RCS including process generated wastewater and runoff from open lots, areas between open lots and the RCS, roofed areas and direct rainfall onto the RCS surface. Consumptive use potential for the areas to be irrigated is developed based on the potential evapotranspiration of the crops and the effective average monthly rainfall on the area to be irrigated. Runoff curve numbers used for the water balance are adjusted from one (1) day to 30 day curve numbers to more accurately reflect monthly values. Evaporation from the RCS surface is computed on a monthly basis. Monthly withdrawals from the RCS are developed based on the total inflow to the RCS minus evaporation from the RCS surface and limited by the monthly crop consumptive use potential.

V. Summary of Changes from Existing Authorization

The location of this proposed operation was previously permitted as a State-only dairy cattle facility with 480 head, all of which were milking cows, under the CAFO individual permit with Permit Number WQ0003656000. The permit was canceled on October 12, 2021. The proposed operation will operate as a large CAFO that will confine 2,000 head dairy heifers only, none of which will be milking.

The facility will comply with the federal regulations in 40 CFR 412 that relates to CAFO point source category and the requirements in 30 TAC 321 Subchapter B that relates CAFOs.

VI. Proposed Permit Conditions and Monitoring Requirements

A. Effluent Limitations

Compost, manure, sludge and wastewater may only be discharged from a LMU or a properly designed, constructed, operated and maintained RCS into water in the state from this CAFO if any of the following conditions are met:

- discharge resulting from a catastrophic condition other than a rainfall event that the permittee cannot reasonably prevent or control;
- a discharge resulting from a catastrophic rainfall event from a RCS;
- a discharge resulting from a chronic rainfall event from a RCS; or
- a discharge resulting from a chronic rainfall event from a LMU that occurs because the permittee takes measures to de-water the RCS in accordance with the individual permit, relating to imminent overflow.

40 CFR §122.44 specifies that any requirements, in addition to or more stringent than promulgated effluent limitation guidelines, must be applied when they are necessary to achieve state water quality standards. Water quality based effluent limitations must be established when the TCEQ determines there is a reasonable potential to cause or to contribute to an in-stream excursion above the allowable ambient concentration of a state numeric criterion. For CAFO discharges the TCEQ must consider:

1. existing controls on point and non-point sources of pollution;
2. variability of the pollutant in the effluent; and
3. dilution of the effluent in the receiving water.

In proposing this permit, the TCEQ addresses considerations 2 and 3 since continuous discharges are prohibited and effluent discharges are authorized only during catastrophic conditions or a chronic or catastrophic rainfall event from a RCS properly designed, constructed, operated and maintained. The effluent pollutant levels are variable and effluent is usually not discharged. Additionally, during these climatic events, water bodies receiving a contribution of CAFO wastewater should be significantly diluted by other rainfall runoff.

Consideration 1 requires permit controls on CAFO discharges which will result in the numeric criteria of the water quality standards being met, thus ensuring that applicable uses of water in the state are attained. The principal pollutants of concern include organic matter causing biochemical oxygen demand, the discharge of ammonia-nitrogen, phosphorus and *Escherichia coli*. This permit requires discharges to be monitored for the pollutants of concern. Existing technology does not allow for practicable or economically achievable numeric effluent limitations at this time. The Environmental Protection Agency (EPA) has not promulgated

effluent guidelines or numeric effluent limitations that would allow regular discharges of CAFO process wastewater or process-generated wastewater. The proposed permit addresses potential pollutant impacts through requirements including numerous narrative (non-numeric) controls on CAFO process wastewater and non-point sources of pollutant discharges associated with CAFOs. Setting specific water quality-based effluent limitations in this permit is not feasible (see 40 CFR §122.44 (k)(3)).

The general and site specific provisions which are expected to result in compliance with water quality criteria and protection of attainable water quality are discussed in the following sections of this fact sheet: RCS Design and Operational Requirements; Requirements for Beneficial Use of Manure, Sludge, and Wastewater; Additional Water Quality Requirements; and Monitoring and Reporting Requirements.

B. RCS Design and Operational Requirements

The draft permit includes the following requirements related to proper RCS design, construction, operation and maintenance:

1. The RCS(s) must be designed and constructed to meet or exceed the margin of safety, equivalent to the volume of runoff and direct precipitation from the 25 year/10 day rainfall event. The design rainfall event, at which time the CAFO is authorized to discharge, is **12.2** inches. The application includes design calculations and certification by a Professional Engineer, which determine the design criteria for the RCS(s).
2. A RCS management plan is required to be implemented. This plan must establish expected end of the month water storage volumes for each RCS. These maximum levels are based on the design assumptions used to determine the required size of the RCS. This plan assures the permittee will maintain wastewater volumes within the designed operating capacity of the structures, except during chronic or catastrophic rainfall events. The permittee must document and provide an explanation for all occasions where the water level exceeds the expected end of the month storage volumes. By maintaining the wastewater level at or below the expected monthly volume, the RCS will be less likely to encroach into the volume reserved for the design rainfall event and/or discharge during smaller rainfall events.
3. The pond marker must have one foot increments. This requirement identifies the level of wastewater storage to assist the permittee in the implementation of the RCS management plan. It also acts as an enforcement tool for TCEQ to determine compliance with the RCS management plan.
4. The wastewater level in the RCS(s) must be recorded daily. This requirement will assist the permittee in the implementation of the RCS management plan and will provide a visual indication of compliance.
5. The amount of sludge in the RCS(s) must be maintained at or below the designed sludge volume. Proper sludge management will reduce overflows associated with insufficient wastewater storage capacity. This permit requires that sludge accumulations in the RCS(s) be measured annually.
6. The RCS(s) must be adequately lined and certified by a Texas Professional Engineer; alternatively, certification must document that in situ material meets the requirements of constructed and installed liners. Groundwater has the potential to resurface as surface water. Therefore, preventing impacts to groundwater also provides protection to surface

water. A liner certification, certified by a Professional Engineer, for the existing RCSs were submitted with the application.

Table 2: Existing RCS Liner Certifications

RCS Name	Liner Certification Date
RCS #1	March 2, 2010
Settling Basin #1	March 2, 2010

7. The RCS(s) must maintain two vertical feet of material equivalent to construction materials between the top of the embankment and the structure's spillway to protect from overtopping the structure. RCS(s) without spillways must have a minimum of two vertical feet between the top of the embankment and the required storage capacity.
8. The entry of uncontaminated stormwater runoff into RCS(s) must be minimized. The site includes diversion structures to direct contaminated runoff into the RCS(s) and to prevent uncontaminated stormwater runoff from entering the RCS(s).

C. Requirements for Beneficial Use of Manure, Sludge, and Wastewater

Nutrient pollutants of concern have narrative criteria and are discharged in CAFO wastewater. Nutrient pollutants have been addressed through imposition of BMPs. No water quality impacts are expected to occur from land application based upon properly prepared and implemented nutrient management practices. The proposed permit contains requirements related to the collection, handling, storage and beneficial use of manure, wastewater, and sludge. These requirements were established based on TCEQ rules, EPA guidance, NRCS Field Operations Technical Guidance and the Animal Waste Management Field Handbook, recommendations from the TCEQ's Water Quality Assessment Team, and best professional judgment.

The elements of a NMP as listed in 40 CFR §122.42(e)(1) have been incorporated into this permit. This permit requires a NMP developed by a certified nutrient management specialist, based on United States Department of Agriculture/Natural Resource Conservation Service (NRCS) Practice Standard 590 and each of the required elements to be implemented upon issuance of this permit. In relation to these items, the proposed permit meets federal requirements.

1. For LMUs with a soil phosphorus concentration of less than 200 ppm in Zone 1 depth (0-6 inches if incorporated, 0-2 or 2-6 inch if not incorporated), land application of commercial fertilizer, compost, manure, sludge and wastewater must be in accordance with a certified NMP. This plan is based on the NRCS Practice Standard Code 590. This plan involves a site specific evaluation of the LMU to include soils, crops, nutrient need and includes the phosphorus index tool. The phosphorus index is a site specific evaluation of the risk potential for phosphorus movement into watercourses. The risk potential is determined by site characteristics such as soil phosphorus level, proposed phosphorus application rate, application method and timing, proximity of the nearest field edge to a named stream or lake, runoff class, and soil erosion potential. The application rates are adjusted according to the risk potential. The higher the risk potential, the lower the application rate; thus there is minimal potential to have excess nutrients available to leave the site and affect water quality.

2. For LMUs with a soil phosphorus concentration of 200-500 ppm in Zone 1 depth (0-6 inches if incorporated, 0-2 or 2-6 inch if not incorporated), land application of commercial fertilizer, compost, manure, sludge and wastewater must be in accordance with a nutrient utilization plan (NUP). The NUP is a revised NMP based on crop removal. A crop removal application rate is the amount of nutrients contained in and removed by the proposed crop. At the discretion of the certified nutrient management specialist, the NUP may also include a phosphorus reduction component. This NUP must be submitted to the TCEQ for review and approval.
3. For LMUs with a soil phosphorus concentration of greater than 500 ppm in Zone 1 depth (0-6 inches if incorporated, 0-2 or 2-6 inch if not incorporated), land application of commercial fertilizer, compost, manure, sludge and wastewater must be in accordance with a NUP based on crop removal which also includes a phosphorus reduction component. A phosphorus reduction component is a management practice, incorporated into the NUP, which is designed to further reduce the soil phosphorus concentration by means such as phosphorus mining, moldboard plowing, or other practices utilized by the permittee. This revised NUP must also be submitted to the TCEQ for review and approval. Permittees required to operate under a NUP with a phosphorus reduction component must show a reduction in the soil phosphorus concentration within twelve (12) months or may be subject to enforcement actions.
4. Table 3 below identifies the maximum application rate, as shown in the NMP submitted in the permit application. NMPs are routinely updated and the values shown below are subject to change.

**Table 3: LMU Maximum Application Rates and
Soil Phosphorus Levels**

LMU Name	Soil Test P (ppm)	Max Annual P₂O₅ (lbs/ac)
LMU #1	326	82
LMU #2	130	228

5. All generated manure, sludge or wastewater in excess of the amount allowed to be land applied by the NMP or NUP must be delivered to a composting facility authorized by the Executive Director, delivered to a permitted landfill, beneficially used by land application on land located outside of the major sole source impairment zone, or provided to operators of third-party fields for beneficial use subject to specified land application requirements and testing. By requiring specific outlets for excess manure, sludge and wastewater, the permit limits unregulated use of manure, sludge and wastewater within the watershed.
6. The permittee must continue to operate under a Comprehensive NMP (CNMP) certified by the Texas State Soil and Water Conservation Board (TSSWCB). The CNMP must be developed by a qualified individual(s) in accordance with TSSWCB regulations. The CNMP is a whole farm plan that addresses nutrient management from the origin in the feed rations to final disposition. The CNMP considers all nutrient inputs, onsite use and treatment, outputs, and losses. Inputs include animal feed, purchased animals, and commercial fertilizer. Outputs include animals sold, harvested crops removed from the facility, and manure removed from the facility. Losses include volatilization, stormwater runoff, and leaching.

7. The permittee must implement additional conservation practices on LMUs adjacent to water in the state. These conservation practices include a 100 foot vegetative buffer, filter strips, vegetative barrier, and/or contour buffer strips. Site specific conditions and NRCS practice standards specify which conservation practices, in addition to the required 100 foot vegetative buffer, must be implemented. The conservation practices reduce erosion, suspended solids and nutrients in runoff from LMUs. This will improve the quality of stormwater runoff prior to entering water in the state.
8. In Table 4 below, the Additional Buffer Setback distance was determined by using the NRCS Conservation Practice Code 393, Filter Strip. The practice code uses a combination of hydrologic soil groups and field slope percentages to calculate an appropriate filter strip length.

Table 4: Buffer Distances for Each LMU

LMU Name	Vegetative Buffer Setback (feet)	Additional Buffer Setback NRCS Code 393 Filter Strip flow length (feet)
LMU #1	100	40
LMU #2	100	40

9. Land application is prohibited between the hours of 12 a.m. and 4 a.m. This provision reduces the potential of irrigation related discharges associated with equipment malfunctions.
10. Discharge of wastewater from irrigation is prohibited, except a discharge resulting from irrigation events associated with imminent overflow conditions. Precipitation-related runoff from LMUs is allowed by the permit, when land application practices are consistent with a NMP or NUP.
11. Terms of the NMP and Changes to the Terms of the NMP

The permit addresses the terms of the NMP and changes to the terms of the NMP to clarify substantial and non-substantial changes.

Attachment E of the draft permit describes the methodology for calculating maximum application rates and annual recalculation of application rates and Attachment F of the draft permit shows the list of the proposed alternative crops, their yield goals, and the N and P requirements and removal rates for each crop and yield goal. To the extent that the alternative crops were identified in the application, annual recalculations do not constitute a substantial change to the terms of the NMP, and therefore will not require a permit amendment.

The maximum amounts of N and P from all sources of nutrients and the amounts of manure and process wastewater to be applied on alternative crops will be determined in accordance with the methodology described in Attachment E of the draft permit when such crops are being used.

Nutrient recommendations and maximum amount of nutrients derived from all sources have been established for both nitrogen (N) and phosphorus (P) based on the NMP that was submitted with the application. The permittee is required to recalculate these values annually based on the most recent analyses of wastewater, manure, and soil.

Section VII.A.8(a)(2) of the permit lists changes to the terms of the NMP that will require a major amendment to the permit. Changes that would result in a major amendment are:

- Increase in animal headcount;
- Increase in LMU acreage or a change in LMU location; or
- Change in crop and yield goal (not listed in Attachment F of the proposed permit).

Any changes (substantial or non-substantial) to the NMP, other than the annual recalculation of application rates outlined in Attachment E, must be submitted to the ED for review. If the ED determines that the changes to the NMP are non-substantial, the revised NMP will be made publicly available and included in the permit record. If the ED determines that the changes to the NMP are substantial, the information provided by the permittee will be subject to the major amendment process.

12. The proposed permit authorizes the use of third-party fields, i.e. land not owned, operated, controlled, rented, or leased by the CAFO owner or operator that have been identified in the Pollution Prevention Plan (PPP). The permittee must have a contract with the operator of the third-party fields. The written contract must require all transferred manure, wastewater, and sludge to be beneficially applied to third-party fields in accordance with the applicable requirements in 30 Texas Administrative Code §321.36 and §321.40 at an agronomic rate based on soil test phosphorus in Zone 1 depth (0-6 inches if incorporated, 0-2 or 2-6 inch if not incorporated). A certified nutrient management specialist must annually collect soil samples from each third-party field used and have the samples analyzed in accordance with the requirements for permitted LMUs. The permittee is prohibited from delivering manure, wastewater, and sludge to an operator of a third-party field once the soil test phosphorus analysis shows a level equal to or greater than 200 ppm in Zone 1 depth (0-6 inches if incorporated, 0-2 or 2-6 inch if not incorporated) or after becoming aware that the third-party operator is not following the specified requirements and the contract. The permittee will be subject to enforcement action for violations of the land application requirements on any third-party field. The third-party fields must be identified in the PPP. The permittee must submit a quarterly report with the name, locations, and amounts of manure, wastewater, and sludge transferred to operators of third-party fields.

VII. Additional Water Quality Requirements

The approved recharge feature certification submitted in the permit application must be updated and maintained in the onsite PPP. The recharge feature certification identifies any natural or artificial features on the CAFO site, either on or beneath the ground surface, which could provide or create significant pathways for wastewater or manure to enter the underlying aquifer, and describes measures to prevent adverse impacts to groundwater. Groundwater has the potential to resurface as surface water. Therefore, preventing impacts to groundwater also provides protection to surface water.

Table 5 below shows potential soil limitations identified in the recharge feature evaluation and the proposed management practices to address those limitations.

Table 5: Soil Limitations

Soil Series and Map ID	Potential Limitations	BMPs*
Hico-Windthorst: – HwD3	Depth to soft bedrock	Land application will be based upon the Available Water Capacity (Refer to the nutrient management plan (NMP)) of the soil and will not exceed agronomic rates for nutrients. No land application to inundated soils.
Purves-Maloterre Complex:- PmC	Droughty Depth to Bedrock	Land application will be based upon the Available Water Capacity (Refer to the NMP) of the soil and will not exceed agronomic rates for nutrients. Maintain clay liners in RCS. No land application to inundated soils.

Table 6 below lists all wells on the facility, their status, and what BMP will be implemented to protect groundwater.

Table 6: Water Well Protection

Well Number	Status	BMPs
1	Producing	Maintain 150 ft buffer

VIII. Monitoring and Reporting Requirements

- A. The permittee is required to report all discharges to TCEQ. Discharges resulting from a chronic or catastrophic rainfall event or catastrophic conditions must be reported orally within one hour of the discovery of the discharge and in writing within fourteen (14) working days. For any discharges, grab samples must be collected and analyzed for Biochemical Oxygen Demand, *Escherichia coli*, Total Dissolved Solids, Total Suspended Solids, Nitrate, Total Phosphorus, Ammonia Nitrogen and pesticides (if suspected).
- B. The permittee must provide a report to the TCEQ to substantiate a chronic rainfall discharge. After review of the report, if required by the Executive Director, the permittee must have an engineering evaluation by a licensed Texas Professional Engineer developed and submitted to the Executive Director. The report and engineering evaluation may be used to verify that the facility was maintained and operated according to the permit conditions. Information reviewed may include rainfall records at the CAFO, RCS wastewater levels preceding the discharge, irrigation records, and the current sludge volume. This requirement allows for closer scrutiny by TCEQ for discharges resulting from chronic conditions and provides documentation for enforcement of unauthorized discharges.
- C. Soil samples must be taken annually from LMUs and analyzed for Nitrate, Phosphorus, Potassium, Sodium, Magnesium, Calcium, Soluble salts/electrical conductivity, and pH. The results are used in the NMP to determine land application rates. Annual soil samples must be collected by one of the following persons: the NRCS; a certified nutrient management specialist; the Texas State Soil and Water Conservation Board; the Texas AgriLife Extension; or an agronomist or soil scientist on full-time staff at an accredited

university located in the State of Texas. The TCEQ Regional Office must be notified ten (10) days prior to annual soil sample collection activities. The permittee is required to submit soil analyses to TCEQ.

- D. The permittee is required to annually collect and analyze at least one (1) representative sample of wastewater, sludge (if applicable), or manure for total nitrogen, total phosphorus, and total potassium. The results are used in the NMP to determine land application rates.
- E. Some of the land application records maintained by the permittee must be submitted to the TCEQ annually. These records include: date of compost, manure, sludge and wastewater application to each LMU; location of the specific LMU and the volume applied during each application event; acreage of each individual crop on which compost, manure, sludge and wastewater is applied; basis for and the total amount of nitrogen and phosphorus applied per acre to each LMU, including sources of nutrients and amount of nutrients on a dry weight basis other than compost, manure, sludge and wastewater and; weather conditions, such as temperature, precipitation, and cloud cover, during the land application and twenty-four (24) hours before and after the land application.
- F. Other recordkeeping requirements include: daily records of RCS wastewater levels and measurable rainfall; weekly records of manure, wastewater, and sludge removed from the facility, inspections of control facilities and land application equipment; and monthly records of compost, manure, sludge and wastewater land applied.

IX. 303(D) Listing and Total Maximum Daily Load (TMDL)

The facility for this permit action is located within the watershed of the North Bosque River in Segment No. 1226 of the Brazos River River Basin. The designated uses and dissolved oxygen criterion as stated in Appendix A of the Texas Surface Water Quality Standards (30 TAC §307.10) for Segment No. 1226 are primary contact recreation, public water supply, high aquatic life use, and 5.0 mg/L dissolved oxygen.

Segment 1226 is not listed on the 2022 Clean Water Act Section 303 (d) list. The facility is located in the watershed of an unnamed tributary and is not listed on the 2022 Clean Water Act Section 303 (d) list for any bacteria impairments. However, some tributaries within the watershed of Segment 1226 are listed on the State's inventory of impaired and threatened waters (the 2022 Clean Water Act Section 303(d) list) for dissolved oxygen and elevated bacteria. Green Creek in Segment No. 1226B is listed for depressed dissolved oxygen, Spring Creek in Segment No. 1226G and Little Duffau Creek in Segment No. 1226K are listed for bacteria.

The North Bosque River (Segments 1226 and 1255) was included in the 1998 Texas Clean Water Act 303(d) List and deemed impaired under narrative water quality standards related to nutrients and aquatic plant growth. Segment No. 1226 is included in the Agency's document Two Total Maximum Daily Loads for Phosphorus in the North Bosque River, adopted by the Commission on February 9, 2001 and approved by EPA on December 13, 2001. An Implementation Plan for Soluble Reactive Phosphorus in the North Bosque River Watershed (I-Plan) was approved by the Commission on December 13, 2002 and approved by the Texas State Soil and Water Conservation Board on January 16, 2003. According to the TMDL I-Plan, management measures for control of phosphorus loading will also have some corollary effect on reducing bacteria loading, since the nonpoint source nutrient and bacteria loads largely

originate from the same sites and materials and are transported via the same processes and pathways.

The TMDL for the North Bosque River, Segments 1226 and 1255, identified the amount of phosphorus introduced into these segments, i.e. the load. Phosphorus load from two categories of sources was modeled to calculate the expected reductions in phosphorus load to meet instream water quality standards. Point sources included wastewater treatment plants; non-point sources included all other sources, such as CAFOs. The TMDL called for an average 50% reduction in the average concentration of soluble reactive phosphorus loadings from both point sources and non-point sources. The TMDL was developed assuming implementation of specific best management practices. This set of best management practices represents one way to achieve the water quality targets in stream and the overall reduction goal of the TMDL.

The TMDL was approved with the understanding that an adaptive management approach was an appropriate means to manage phosphorus load to the stream. The I-Plan emphasized this approach to achieve the phosphorus reductions targeted in the TMDL. Adaptive management envisions adjustment of management practices over time as necessary to reach this target. The TMDL anticipated that, to control loading to the stream, dairy CAFO permittees would implement those best management practices which best addressed site-specific conditions. Accordingly, the TMDL is not directly tied to the number of animal units permitted in the watershed; it is instead tied to the amount of nutrients that may be land applied consistent with management practices that ensure appropriate agricultural utilization of nutrients.

Primary management strategies for dairies, both voluntary and regulatory, were identified in the I-Plan which included: phosphorus-based application rates in LMUs, voluntarily measures to reduce the amount of phosphorus in dairy cow diets, voluntarily removing 50% of dairy-generated manure from the watershed, more stringent RCS design requirements to reduce the potential for overflows from RCSs, evaluation of chronic rainfall and incidences of RCS overflows, additional tailwater requirements, additional protective measures to prevent runoff caused by excessive irrigation, CNMPs, educational requirements for dairy operators and employees.

The proposed permit includes the following requirements to address the recommendations in the I-Plan:

- RCS(s) designed and constructed for 25 year, 10 day rainfall event
- RCS management plan
- pond marker with one foot increments
- daily recordkeeping of wastewater levels
- chronic rainfall discharge notification, including records that substantiate that the overflow was a result of cumulative rainfall that exceeded the design rainfall event without the opportunity for dewatering
- NMP and NUP based on phosphorus risk index
- CNMP
- specific outlets for excess manure, sludge and wastewater

- additional record-keeping for exported manure, sludge and wastewater to track each permittee's contribution toward the 50% voluntary removal goal in the Bosque River Total Maximum Daily Load (TMDL)
- prohibition of discharges from LMUs, except as related to imminent overflow
- minimize ponding and puddling of wastewater and prevent tailwater discharges
- additional conservation practices between land application areas and water in the state
- prohibition of land application between 12 a.m. and 4 a.m.
- automatic shutdown or alarm system may be required if unauthorized discharge occurs from irrigation system
- employee and operator required training related to land application of manure, sludge, and wastewater, proper operation and maintenance of the facility, good housekeeping, material management practices, recordkeeping requirements, and spill response and clean up

The voluntary phosphorus diet reductions may be implemented through consultations between a nutritionist and the permittee. Any such dietary phosphorus reductions will result in reduced phosphorus concentrations in manure. These strategies are facets of CNMPs.

The RCS storage capacity requirements, nutrient management practices, increased TCEQ oversight of operational activities, and requirements of the I-Plan, which are incorporated into the draft permit, are designed to reduce the potential for this CAFO to contribute to further impairment from bacteria, oxygen-demanding constituents and nutrients such as total phosphorus. Furthermore, it is anticipated the implementation of the primary management strategies and permit provisions identified above will result in phosphorus load reduction in the watershed and achieve the reductions targeted in the TMDL. The draft permit provisions are consistent with the approved TMDL and I-Plan that establish measures for reductions in loading of phosphorus (and consequently other potential pollutants) to the North Bosque River Watershed. Therefore, the draft permit is consistent with the requirements of the antidegradation implementation procedures in 30 Texas Administrative Code Section 307.5 (c)(2)(G) of the Texas Surface Water Quality Standards.

X. Threatened or Endangered Species

The discharge from this permit action is not expected to have an effect on any federal endangered or threatened aquatic or aquatic dependent species or proposed species or their critical habitat. This determination is based on the United States Fish and Wildlife Service's (USFWS) Biological Opinion on the State of Texas authorization of the Texas Pollutant Discharge Elimination System (TPDES) dated September 14, 1998 and the October 21, 1998 update. To make this determination for TPDES permits, TCEQ and Environmental Protection Agency only considered aquatic or aquatic dependent species occurring in watersheds of critical concern or high priority as listed in Appendix A of the USFWS Biological Opinion. This determination is subject to reevaluation due to subsequent updates or amendments to the Biological Opinion. The permit does not require Environmental Protection Agency review with respect to the presence of endangered or threatened species.

XI. Procedures for Final Decision

When an application is declared administratively complete, the Chief Clerk sends a letter to the applicant instructing the applicant to publish the Notice of Receipt of Application and Intent to Obtain Permit in the newspaper. In addition, the Chief Clerk instructs the applicant to place a copy of the application in a public place for review and copying in the county where the facility is or will be located. This application will be in a public place throughout the comment period. The Chief Clerk also mails this notice to any interested persons and, if required, to landowners identified in the permit application. This notice informs the public about the application, and provides that an interested person may file comments on the application or request a contested case hearing or a public meeting.

Once a draft permit is completed, it is sent, along with the Fact Sheet and Executive Director's Preliminary Decision, to the Office of the Chief Clerk. At that time, Notice of Application and Preliminary Decision will be mailed to the individuals identified on the Office of the Chief Clerk mailing list and published in the newspaper. This notice sets a deadline for making public comments. The applicant must place a copy of the Executive Director's Preliminary Decision and draft permit in the public place with the application.

Any interested person may request a public meeting on the application. A public meeting is intended for the taking of public comment, and is not a contested case proceeding.

After the public comment deadline, the Executive Director prepares a response to all timely, relevant and material, or significant public comments significant on the application or the draft permit raised during the public comment period. The Office of the Chief Clerk then mails the Executive Director's Response to Comments and Final Decision to individuals who have filed comments, requested a contested case hearing, or requested to be on the mailing list. This notice provides that a person may request a contested case hearing or file a request for reconsideration of the Executive Director's decision within thirty (30) days after the notice is mailed.

The Executive Director will issue the permit unless a written hearing request or request for reconsideration is filed within thirty (30) days after the Executive Director's Response to Comments and Final Decision is mailed. If a hearing request or request for reconsideration is filed, the Executive Director will not issue the permit and will forward the application and request to the TCEQ's Commissioners for their consideration at a scheduled Commission meeting. If a contested case hearing is held, it will be a legal proceeding similar to a civil trial in state district court.

If the Executive Director calls a public meeting or the Commission grants a contested case hearing as described above, the Commission will give notice of the date, time, and place of the meeting or hearing. If a hearing request or request for reconsideration is made, the Commission will consider all public comments in making its decision and shall either adopt the Executive Director's response to public comments or prepare its own response.

For additional information about this application, contact Sean See at (806) 468-0504.

XII. Administrative Record

The following items were considered in developing the proposed draft permit:

- TCEQ State Permit No. WQ0003656000 issued March 17, 2017.
- The application received on May 12, 2022 and subsequent revisions.

Fact Sheet and Executive Director's Preliminary Decision

Peter Henry Schouten & Nova Darlene Schouten, TPDES Permit No. WQ0005387000

- Interoffice Memorandum for groundwater review from the Water Quality Assessment Team, Water Quality Assessment Section, Water Quality Division June 1, 2022.
- Interoffice Memorandum for NMP review from the Water Quality Assessment Team, Water Quality Assessment Section, Water Quality Division, dated June 6, 2022.
- Interoffice Memorandum from the Standards Implementation Team, Water Quality Assessment Section, Water Quality Division, dated May 24, 2022.
- Bosque River TMDL Implementation Plan.
- Federal Clean Water Act - Section 402; Section 382.051 of the Texas Clean Air Act; Texas Water Code §26.027; 30 TAC §39, §305, §321 Subchapter B; Commission Policies; and EPA Guidelines.
- Texas 2022 Clean Water Act Section 303(d) List, Texas Commission on Environmental Quality, June 1, 2022; approved by EPA on July 7, 2022.
- NRCS Animal Waste Management Field Handbook and Field Office Technical Guidance for Texas.
- NRCS, ASABE and ASTM Standards.



TPDES Permit No. WQ0005387000
[For TCEQ use only EPA ID No. TX0142948]

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
P.O. Box 13087
Austin, Texas 78711-3087

TPDES PERMIT FOR CONCENTRATED ANIMAL FEEDING OPERATIONS

under provisions of
Section 402 of the Clean Water Act
Chapter 26 of the Texas Water Code and
Section 382.051 of the Texas Clean Air Act

I. Permittee:

- A. Owner: Peter Henry Schouten, Sr. & Nova Darlene Schouten
- B. Business Name: Golden Star Heifer Ranch
- C. Owner Address: 3728 County Road 229
Hico, Texas 76457

II. Type of Permit: New/ Air & Water Quality

III. Nature of Business Producing Waste: Concentrated Animal Feeding Operation (CAFO): **Dairy Heifer Replacement**; SIC No. **0241**

IV. General Description and Location of Waste Disposal System:

Maximum Capacity: 2,000 Head

Site Plan: See Attachment A

Retention Control Structures (RCSs) total required capacities without freeboard (Acre-Feet): RCS #1 – 16.85

Land Management Units (LMUs) (Acres): LMU #1 – 35, LMU #2 – 8; See Attachment B for locations

Terms of the Nutrient Management Plan (NMP): See Attachments E and F

Location: The facility is located on the north side of State Highway 6 on County Road 2495 which is approximately 5.5 miles east of the intersection of State Highway 6 and US Highway 281, Bosque County, Texas. Latitude: 31.983056° N and Longitude: 97.949722° W. See Attachment C

Drainage Basin: The facility is located in the drainage area of the North Bosque River in Segment No. 1226 of the Brazos River Basin

This permit contained herein shall expire at midnight, five years after the date of Commission approval.

ISSUED DATE:

For the Commission

V. Rule and Statute Applicability

- A. Definitions.** All definitions in Chapter 26 of the Texas Water Code, 30 Texas Administrative Code (TAC) Chapters 305 and 321, Subchapter B shall apply to this permit and are incorporated by reference.
- B. Amendments, renewals, transfers, corrections, revocation, and suspension of permit.** The requirements in 30 TAC Chapter 305, Subchapter D apply to this permit.

VI. Permit Applicability and Coverage

- A. Discharge Authorization.** No discharge is authorized by this permit except as allowed by the provisions in this permit and 40 Code of Federal Regulations Chapter 412, which is adopted by reference in 30 TAC Chapter 305.541.
- B. Application Applicability.** The application pursuant to which the permit has been issued is incorporated herein; provided, however, that in the event of a conflict between the provisions of this permit and the application, the provisions of the permit shall control.
- C. Air Quality Authorization.** The permittee shall comply with the requirements listed in Section VII.D. of this permit and shall maintain a copy of the odor control plan in the Pollution Prevention Plan.

VII. Pollution Prevention Plan (PPP) Requirements**A. Technical Requirements**

1. PPP General Requirements.
 - (a) The permittee shall update and implement a PPP for this facility upon issuance of this permit. The PPP shall:
 - (1) be prepared in accordance with good engineering practices;
 - (2) include measures necessary to limit the discharge of pollutants to surface water in the state;
 - (3) describe and ensure the implementation of practices which are to be used to assure compliance with the limitations and conditions of this permit;
 - (4) include all information listed in Section VII.A.;
 - (5) identify specific individual(s) who is/are responsible for development, implementation, operation, maintenance, inspections, recordkeeping, and revision of the PPP. The activities and responsibilities of the pollution prevention personnel shall address all aspects of the facility's PPP;
 - (6) be signed by the permittee or other signatory authority in accordance with 30 TAC §305.44 (relating to Signatories to Applications); and
 - (7) be retained on-site.
 - (b) The permittee shall amend the PPP:
 - (1) before any change in the number or configuration of LMUs;
 - (2) before any increase in the maximum number of animals;
 - (3) before operation of any new control facilities;
 - (4) before any change that has a significant effect on the potential for the discharge of pollutants to water in the state;
 - (5) if the PPP is not effective in achieving the general objectives of controlling discharges of pollutants from the production area or LMUs; or
 - (6) within 90 days following written notification from the Executive Director that the plan does not meet one or more of the minimum requirements of this permit.

- (c) Maps. The permittee shall maintain the following maps as part of the PPP.
 - (1) Site Map. The permittee shall update the site map as needed, by permit amendment, to reflect the layout of the facility. The map shall include, at a minimum, the following information: facility boundaries; pens; barns; berms; open lots; manure storage areas; areas used for composting; dead animal burial sites; RCSs or other control facilities; LMUs; water wells, abandoned and in use, which are on-site or within 500 feet of the facility boundary; and all springs, lakes, or ponds located on-site or within one mile of the facility boundary.
 - (2) Land Application Map. Natural Resource Conservation Service (NRCS) soil survey maps of all LMUs shall depict:
 - (i) the boundary of each LMU and acreage;
 - (ii) all buffer zones required by this permit; and
 - (iii) the unit name and symbol of all soils in the LMU(s).
 - (d) Potential Pollutant Sources/Site Evaluation.
 - (1) Potential Pollutant Sources. The PPP shall include a description of potential pollutant sources and indicate all measures that will be used to prevent contamination from the pollutant sources. Potential pollutant sources include any activity or material that may reasonably be expected to add pollutants to surface water in the state from the facility.
 - (2) Soil Erosion. The PPP shall identify areas that, due to topography, activities, or other factors, have a high potential for significant soil erosion. If these areas have the potential to contribute pollutants to surface water in the state, the PPP shall identify measures used to limit erosion and pollutant runoff.
 - (3) Control Facilities. The PPP shall include the location and a description of control facilities. The control facilities shall be appropriate for the identified sources of pollutants at the CAFO.
 - (4) Recharge Feature Certification. The recharge feature certification submitted in the permit application shall be implemented, updated by the permittee as often as necessary, and maintained in the PPP.
 - (5) 100-year Floodplain. All control facilities, including holding pens and RCSs, shall be located outside of the 100-year floodplain or protected from inundation and damage that may occur during the flood.
 - (e) Spill Prevention and Recovery. The permittee shall take appropriate measures necessary to prevent spills and to clean up spills of any toxic pollutant. Where potential spills can occur, materials, handling procedures and storage shall be specified. The permittee shall identify the procedures for cleaning up spills and shall make available the necessary equipment to personnel to implement a clean up. The permittee shall store, use, and dispose of all pesticides in accordance with label instructions. There shall be no disposal of pesticides, solvents or heavy metals, or of spills or residues from storage or application equipment or containers, into RCSs. Incidental amounts of such substances entering a RCS as a result of stormwater transport of properly applied chemicals is not a violation of this permit.
- 2. Discharge Restrictions and Monitoring Requirements.
 - (a) Discharge Restrictions. Wastewater may be discharged to water in the state from a properly designed (25-year frequency 10-day duration (25 year/10 day)),

constructed, operated and maintained RCS whenever chronic or catastrophic rainfall, or catastrophic conditions cause an overflow. There shall be no effluent limitations on discharges from RCSs which meet the above criteria.

- (b) Monitoring Requirements. The permittee shall sample all discharges from the RCS(s) and LMU(s). The effluent shall be analyzed by a National Environmental Laboratory Accreditation Conference (NELAC) accredited lab for the parameters shown in Table 1.

Table 1: Monitoring Requirements

Parameter	Sample Type	Sample Frequency
5 Day Biochemical Oxygen Demand (BOD ₅)	Grab	1/day ¹
<i>Escherichia coli</i>	Grab	1/day ¹
Total Dissolved Solids (TDS)	Grab	1/day ¹
Total Suspended Solids (TSS)	Grab	1/day ¹
Nitrate (N)	Grab	1/day ¹
Total Phosphorus	Grab	1/day ¹
Ammonia Nitrogen	Grab	1/day ¹
Pesticides ²	Grab	1/day ¹

¹Sample shall be taken within the first thirty (30) minutes following the initial discharge and then once per day while discharging.

²Any pesticide which the permittee has reason to believe could be present in the wastewater.

- (c) If the permittee is unable to collect samples due to climatic conditions that create dangerous conditions for personnel (such as local flooding, high winds, hurricane, tornadoes, electrical storms, etc.), the permittee shall document why discharge samples could not be collected. Once dangerous conditions have passed, the permittee shall conduct the required sampling.
3. RCS Design and Construction.
- (a) RCS Certifications
- (1) The permittee shall ensure that the design and completed construction of the RCS(s) (See Special Provision X.A.1) is certified by a licensed Texas Professional Engineer prior to use. The certification shall be signed and sealed in accordance with the Texas Board of Professional Engineers requirements.
- (2) Documentation of liner and capacity certifications must be completed for each RCS prior to use and kept on-site in the PPP. Table 2 below shows the current RCS liner and capacity certifications.

Table 2: Current Liner and Capacity Certifications

RCS Name	Liner Certification Date	Capacity Certification Date	Certified Capacity (Acre-Feet)
RCS #1	March 2, 2010	March 2, 2010	20.47
Settling Basin #1	March 2, 2010	Not Applicable	

- (b) Design and Construction Standards. The permittee shall ensure that each RCS is designed and constructed in accordance with the technical standards developed by the NRCS, American Society of Agricultural and Biological Engineers,

American Society of Civil Engineers, or American Society of Testing Materials that are in effect at the time of construction. Where site-specific variations are warranted, a licensed Texas Professional Engineer must document these variations and their appropriateness to the design.

- (c) RCS Drainage Area.
 - (1) The permittee shall describe in the PPP and implement measures that will be used to minimize entry of uncontaminated stormwater into the RCS(s).
 - (2) Stormwater must be diverted, as indicated in Attachment A - Site Map from contact with feedlots and holding pens, and manure and/or process wastewater storage systems. In cases where it is not feasible to divert stormwater from the production area, the retention structures shall include adequate storage capacity for the additional stormwater. Stormwater includes rain falling on the roofs of facilities, runoff from adjacent land, or other sources.
 - (3) The permittee shall maintain the drainage area to minimize ponding or puddling of water outside the RCS(s).
- (d) RCS Sizing
 - (1) The design plan must include documentation describing the sources of information, assumptions and calculations used in determining the appropriate volume capacity and structural features of each RCS, including embankment and liners.
 - (2) Design Rainfall Event. Each RCS authorized under this permit shall be designed and constructed to meet or exceed the margin of safety, equivalent to the volume of runoff and direct precipitation from the 25 year/10 day rainfall event. The design rainfall event for this CAFO is **12.2** inches.
 - (3) Any RCS capacity that is greater than the minimum capacity required by this permit may be allocated to additional sludge storage volume, which will increase the design sludge cleanout interval for the RCS. The new sludge cleanout interval will be identified in the RCS management plan maintained in the PPP, the stage storage tables will accurately reflect the new volumes, and the pond markers will visually identify the new volume levels.
- (e) Irrigation Equipment Design. The permittee shall ensure that the irrigation system design is capable of removing wastewater from the RCS(s) on a regular schedule. Equipment capable of dewatering the RCS(s) shall be available and operational whenever needed to restore the operating capacity required by the RCS management plan.
- (f) Embankment Design and Construction. The RCS(s) have a depth of water impounded against the embankment at the spillway elevation of three feet or more, therefore the RCS(s) are considered to be designed with an embankment. The PPP shall include a description of the design specifications for the RCS embankments. The following design specifications are required for all new construction and/or the modified portions of existing RCSs.
 - (1) Soil Requirements. Soils used in the embankment shall be free of foreign material such as rocks larger than four (4) inches, trash, brush, and fallen trees.
 - (2) Embankment Lifts. The embankment shall be constructed in lifts or layers no more than eight (8) inches compacted to six (6) inches thick at a

- minimum compaction effort of 95 per cent (%) Standard Proctor Density (ASTM D698) at -1% to +3% of optimum moisture content.
- (3) Stabilize Embankment Walls. All embankment walls shall be stabilized to prevent erosion or deterioration.
 - (4) Compaction Testing. Embankment construction must be accompanied by certified compaction tests including in place density and moisture in accordance with the American Society of Testing Materials (ASTM) D1556, D2167 or D2937 for density and D2216, D4643, D4944 or D4959 for moisture, or D6938 for moisture and density or equivalent testing standards. Compaction tests will provide support for the liner certification performed by a licensed Texas Professional Engineer as meeting a permeability no greater than 1×10^{-7} centimeters per second (cm/sec) over a thickness of 18 inches or its equivalency in other materials, and not to exceed a specific discharge through the liner of 1.1×10^{-6} cm/sec with a water level at spillway depth.
 - (5) Spillway or Equivalent Protection. The new or modified RCS(s), which are constructed with embankments, shall be constructed with a spillway or other outflow device properly sized according to NRCS design and specifications to protect the integrity of the embankment.
 - (6) Embankment Protection. The new or modified RCS(s) must have a minimum of two (2) vertical feet of materials equivalent to those used at the time of design and construction between the top of the embankment and the structure's spillway. RCS(s) without spillways must have a minimum of two (2) vertical feet between the top of the embankment and the required storage capacity.
 - (g) RCS Liner Requirements. For all new construction and for all structural modifications of existing RCS(s), the RCS must have a liner consistent with one of the following:
 - (1) In-situ Material. In-situ material is undisturbed, in-place, native soil material. In-situ materials must at least meet the minimum criteria for hydraulic conductivity and thickness and specific discharge as described in Section VII.A.3(g)(2) of this permit. Samples shall be collected and analyzed in accordance with Section VII.A.3(g)(3) of this permit. This documentation must be certified by a licensed Texas Professional Engineer or licensed Texas Professional Geoscientist.
 - (2) Constructed or Installed Liner.
 - (i) Constructed or installed liners must be designed by a licensed Texas Professional Engineer. The liner must be constructed in accordance with the design and certified as such by a licensed Texas Professional Engineer. Compaction tests and post construction sampling and analyses, conducted in accordance with Sections VII.A.3(f)(4) and VII.A.3(g)(3) of this permit, will provide support for the liner certification.
 - (ii) Liners shall be designed and constructed to have hydraulic conductivities no greater than 1×10^{-7} centimeters per second (cm/sec), with a thickness of 18 inches or its equivalency in other materials, and not to exceed a specific discharge through the liner of 1.1×10^{-6} cm/sec with a water level at spillway depth.

- (iii) Constructed or installed liners must be designed and constructed to meet the soil requirements, lift requirements, and compaction testing requirements as listed in Section VII.A.3(f)(1), (2) and (4) of this permit.
 - (3) Liner Sampling and Analyses
 - (i) The licensed Texas Professional Engineer or licensed Texas Professional Geoscientist shall use best professional practices to ensure that corings or other liner samples will be appropriately plugged with material that also meets liner requirements of this subsection.
 - (ii) Samples shall be collected in accordance with ASTM D1587 or other method approved by the Executive Director. For each RCS, a minimum of two core samples collected from the bottom of the RCS and a minimum of at least one core sample from each sidewall shall be collected. Additional samples may be necessary based on the best professional judgment of the licensed Professional Engineer. Distribution of the samples shall be representative of liner characteristics, and proportional to the surface area of the sidewalls and floor. Documentation shall be provided identifying the sample locations with respect to the RCS liner.
 - (iii) Undisturbed samples shall be analyzed for hydraulic conductivity in accordance with ASTM D5084 or other method approved by the Executive Director.
 - (4) Leak Detection System. If notified by the Executive Director that significant potential exists for the adverse impact of water in the state or drinking water from leakage of a RCS, the permittee shall install a leak detection system or monitoring well(s) in accordance with that notice. Documentation of compliance with the notification must be kept with the PPP, as well as copies of all sampling data.
- 4. Special Considerations for Existing RCS(s). An existing RCS that has been properly maintained without any modifications and has no apparent structural problems or leakage is considered to be properly designed with respect to the embankment design and construction and liner requirements of this permit, provided that any required documentation was completed in accordance with the requirements at the time of construction. If no documentation exists, the RCS must be certified by a licensed Texas Professional Engineer as providing protection equivalent to the requirements of this permit.
- 5. Operation and Maintenance of RCSs.
 - (a) The permittee must operate and maintain a margin of safety in the RCS(s) to contain the volume of runoff and direct precipitation from the 25 year/10 day rainfall event.
 - (b) The permittee shall implement a RCS management plan incorporating the margin of safety developed by a licensed Texas Professional Engineer (See Special Provision X.A.2). The management plan shall become a component of the PPP, shall be developed for each RCS, and must describe or include:
 - (1) RCS management controls appropriate for the CAFO and the methods and procedures for implementing such controls;

- (2) the methods and procedures for proper operation and maintenance of each RCS consistent with the system design;
 - (3) the appropriateness and priorities of any controls reflecting the identified sources of pollutants at the facility;
 - (4) a stage/storage table for each RCS with minimum depth increments of one-foot, including the storage volume provided at each depth;
 - (5) a second table or sketch that includes increments of water level ranges for volumes of total design storage, including the storage volume provided at each specified depth (or water level) and the type of storage designated by that depth; and
 - (6) the planned end of month storage volume anticipated for each RCS for each month of the year and the corresponding operating depth expected at the end of each month of the year, based on the design assumptions.
- (c) The wastewater level in the RCS shall be maintained at or below the maximum operating level expected during that month, according to the design of the RCS. When rainfall volumes exceed average rainfall data used in design calculations planned end of month storage volumes may encroach into the design storm event storage provided that documentation is available to support that the design parameters have been exceeded and that the RCS is otherwise being managed according to the RCS management plan criteria. In circumstances where the RCS has a water level exceeding the expected end of the month depth, the permittee shall document in the PPP why the level of water in the structure is not at or below the expected depth. Also, if the water level in the RCS encroaches into the storage volume reserved for the design rainfall event, the permittee must document, in the PPP, the conditions that resulted in this occurrence. As soon as irrigation is feasible and not prohibited by Section VII.A.8(f) and (g), the permittee shall irrigate until the RCS water level is at or below the maximum operating level expected during that month.
- (d) Imminent Overflow. If a RCS is in danger of imminent overflow from chronic or catastrophic rainfall or catastrophic conditions, the permittee shall take reasonable steps to irrigate wastewater to the LMU(s) only to the extent necessary to prevent overflow from the RCS. If irrigation results in a discharge from a LMU, the permittee shall collect samples from the drainage pathway at the point of the discharge from the edge of the LMU where the discharge occurs, analyze the samples for the parameters listed in Section VII.A.2.(b), and provide the appropriate notifications as required by Section VIII.B of this permit and 30 TAC §321.44.
- (e) Permanent Pond Marker. The permittee shall install and maintain a permanent pond marker (measuring device) in the RCS(s), visible from the top of the levee to show the following:
- (1) the volume for the design rainfall event;
 - (2) one-foot increments beginning from the bottom of the RCS to the top of the embankment or spillway; and
 - (3) design volume levels for maximum sludge accumulation and operating volume (calculated process generated wastewater plus rainfall runoff minus evaporation) must be identifiable on the marker.
- (f) Rain Gauge. A rain gauge capable of measuring the design rainfall event shall be kept on-site and properly maintained.

- (g) **Sludge Removal.** The permittee shall monitor sludge accumulation and depth, based upon the design sludge storage volume in the RCS. (See Special Provision X.E for additional requirements related to sludge monitoring.) Sludge shall be removed from the RCS(s) in accordance with the design schedule for cleanout in the RCS Management Plan to prevent the accumulation of sludge from exceeding the designed sludge volume of the structure. Removal of sludge shall be conducted during favorable wind conditions that carry odors away from nearby receptors. Sludge may only be beneficially utilized by land application to a LMU if in accordance with a nutrient management plan or disposed of in accordance with Section VII.A.8(e) of this permit. A sludge sample must be collected and analyzed in accordance with Section VII.A.9(a) prior to each clean out.
 - (h) **Liner Protection and Maintenance.** The permittee shall maintain the liner to inhibit infiltration of wastewater. Liners must be protected from animals by fences or other protective devices. No tree shall be allowed to grow such that the root zone would intrude or compromise the structure of the liner or embankment. Any mechanical or structural damage to the liner shall be evaluated by a licensed Texas Professional Engineer within thirty (30) days of the damage.
 - (i) **Closure Requirements.** A closure plan must be developed when a RCS will no longer be used and/or when the CAFO ceases or plans to cease operation. The closure plan shall be submitted to the appropriate regional office and the CAFO Permits Team of the Water Quality Division in Austin (MC-150) within ninety (90) days of when operation of the CAFO or the RCS terminates. The closure plan for the RCS must, at a minimum, be developed using standards contained in the NRCS Practice Standard Code 360 (Closures of Waste Impoundments), as amended, and using the guidelines contained in the Texas AgriLife Extension/ NRCS publication #B-6122 (Closure of Lagoons and Earthen Manure Storage Structures), as amended. The permittee shall maintain or renew its existing authorization and maintain compliance with the requirements of this permit until the facility has been closed.
6. **General Operating Requirements.**
- (a) **Flush/Scrape Systems.** Flush/scrape systems shall be flushed/scraped in accordance with design criteria in the application.
 - (b) **Pen Maintenance.** The permittee shall maintain earthen pens to ensure good drainage, minimize ponding, and minimize the entrance of uncontaminated storm water to the RCSs.
 - (c) **Carcass Disposal.** Carcasses shall be collected within twenty four (24) hours of death and properly disposed of within three days of death in accordance with Texas Water Code, Chapter 26; Texas Health and Safety Code, Chapter 361; and 30 TAC Chapter 335 (relating to Industrial Solid Waste and Municipal Hazardous Waste) unless otherwise provided for by the commission. Animals must not be disposed of in any liquid manure or process wastewater system. Disposal of diseased animals shall also be conducted in a manner that prevents a public health hazard in accordance with Texas Agriculture Code, §161.004, and 4 TAC §31.3, §58.31(b), and §59.12. The collection area for carcasses shall be addressed in the potential pollutant sources section of the PPP with the management practices to prevent contamination of surface or groundwater, control access, and minimize odor.

- (d) Manure and Sludge Storage
 - (1) Manure and sludge storage capacity requirements shall be based on manure and sludge production, land availability, and the NRCS Field Office Technical Guide (Part 651, Chapter 10) or equivalent standards.
 - (2) When manure is stockpiled, it shall be stored in a well-drained area, and the top and sides of stockpiles shall be adequately sloped to ensure proper drainage and prevent ponding of water. Runoff from manure or sludge storage piles must be retained on-site. If the manure or sludge areas are not roofed or covered with impermeable material, protected from external rainfall, or bermed to protect from runoff during the design rainfall event, the manure or sludge areas must be located within the drainage area of a RCS and accounted for in the design calculations of the RCS.
 - (3) Manure or sludge stored for more than thirty (30) days must be stored within the drainage area of a RCS or stored in a manner (i.e. storage shed, bermed area, tarp covered area, etc.) that otherwise prevents contaminated storm water runoff from leaving the storage area. All storage sites and structures located outside the drainage area shall be designated on the site map. Storage for more than thirty (30) days is prohibited in the 100-year floodplain.
 - (4) Temporary storage of manure or sludge shall not exceed thirty (30) days and is allowed only in a LMU or a RCS drainage area. Temporary storage of manure and sludge in the 100-year floodplain, near water courses or near recharge features may be allowed if protected by berms or other structures to prevent inundation or damage that may occur.
 - (e) Composting. Composting on-site shall be performed in accordance with 30 TAC Chapter 332 (relating to Composting). The permittee may compost waste generated on-site, including manure, sludge, bedding, feed and dead animals. The permittee may add agricultural products to provide an additional carbon source or bulking agent to aid in the composting process. If the compost areas are not roofed or covered with impermeable material, protected from external rainfall, or bermed to protect from runoff in the case of the design rainfall event, the compost areas must be located within the drainage of an RCS and must be shown on the site plan and accounted for in the design calculations of the RCS.
7. Site Specific Conservation Practice.
- (a) Well Protection Requirements
 - (1) The permittee shall not locate or operate a new RCS, holding pen, or LMU within the following buffer zones:
 - (i) public water supply wells 500 feet;
 - (ii) wells used exclusively for private water supply 150 feet; or
 - (iii) wells used exclusively for agriculture irrigation 100 feet.
 - (2) Irrigation of wastewater directly over a well head will require a structure protective of the wellhead that will prevent contact from irrigated wastewater.
 - (3) Construction of any new water wells must be done by a licensed water well driller.
 - (4) All abandoned and unuseable wells shall be plugged according to 16 TAC §76.104.

- (5) Table 3 below shows the status of all wells on the facility and the best management practices (BMPs) used to protect them.

Table 3: Well Status and Best Management Practices

Well Number*	Status	BMPs
1	Producing	Maintain 150 ft buffer

*Well Numbers correspond with Attachment D

- (b) Soil Limitations. The permittee shall implement the BMPs on Table 4 for the specified soil series.

Table 4: Soil Limitations and Best Management Practices

Soil Series and Map ID	Potential Limitations	BMPs*
Hico-Windthorst: – HwD3	Depth to soft bedrock	Land application will be based upon the Available Water Capacity (Refer to the nutrient management plan (NMP)) of the soil and will not exceed agronomic rates for nutrients. No land application to inundated soils.
Purves-Maloterre Complex:- PmC	Droughty Depth to Bedrock	Land application will be based upon the Available Water Capacity (Refer to the NMP) of the soil and will not exceed agronomic rates for nutrients. Maintain clay liners in RCS. No land application to inundated soils.

*or an equivalent protective measure identified in an NRCS Practice Standard.

- (c) Pollutant Sources and Management. The permittee shall implement the BMPs on Table 5 for handling dead animals and pesticides.

Table 5: Pollutant Sources and Best Management Practices

Potential Pollutant Source	BMPs*
Dead Animals	Collect within 24 hours of death and remove within three days of death by a third-party rendering service or compost in accordance with Section VII.A.6(e) of this permit
Pesticides	Store under roof Handle and dispose according to label directions

*or an alternative BMP as allowed by 30 TAC 321 Subchapter B or an equivalent protective measure identified in an NRCS Practice Standard.

8. Land Application.

- (a) Nutrient Management Plan (NMP) Required. The certified NMP submitted in the permit application shall be implemented upon issuance of this permit. The plan shall be updated as appropriate or at a minimum of annually according to NRCS Practice Standard Code 590. The permittee shall make available to the Executive Director, upon request, a copy of the site specific NMP and documentation of the implementation.

- (1) For Terms of the NMP see Attachments E and F.
- (2) The following changes to the terms of the NMP are substantial:
 - (i) Increase in animal headcount;
 - (ii) Increase in LMU acreage or a change in LMU location;
 - (iii) Change in crop and yield goal (not listed in Attachment F);
- (3) Substantial and Non-Substantial Change to the terms of the NMP
 - (i) Any changes (substantial or non- substantial) to the NMP, other than the Annual Recalculation of Application Rates outlined in Attachment E, must be submitted to the Executive Director for review, and may be subject to public comment;
 - (ii) If the Executive Director determines that the changes to the NMP are not substantial, the revised NMP will be made publicly available and included in the permit record; and
 - (iii) If the Executive Director determines that the changes to the NMP are substantial, the information provided by the permittee will be subject to a major amendment process as set in 30 TAC §§305.61-305.72.
- (b) Comprehensive Nutrient Management Plan (CNMP) required. The permittee must continue to operate under a CNMP certified by the Texas State Soil and Water Conservation Board.
- (c) Critical Phosphorus Level
 - (1) When results of the annual soil analysis show a phosphorus level in the soil of more than 200 ppm but not more than 500 ppm in Zone 1 depth (0-6 inch incorporated; 0-2 or 2-6 inch if not incorporated) for a particular LMU or if ordered by the commission to do so in order to protect the quality of water in the state, then the permittee shall:
 - (i) file with the Executive Director a new or amended nutrient utilization plan (NUP) with a phosphorus reduction component based on crop removal that is certified as acceptable by a person described in (3) below; or
 - (ii) show that the level is supported by a NUP that is certified as acceptable by a person described in (3) below.
 - (2) The permittee shall cease land application of compost, manure, sludge and wastewater to the affected area until the NUP has been approved by the TCEQ. After a NUP is approved, the permittee shall land apply in accordance with the NUP until soil phosphorus is reduced below the critical phosphorus level of 200 ppm extractable phosphorus. Thereafter, the permittee shall implement the requirements of the nutrient management plan.
 - (3) NUP. A NUP is a NMP, based on NRCS Practice Standard Code 590, which utilizes a crop removal application rate. The NUP, based on crop removal, must be developed and certified by one of the following individuals or entities:
 - (i) an employee of the NRCS;
 - (ii) a nutrient management specialist certified by the NRCS;
 - (iii) the Texas State Soil and Water Conservation Board;
 - (iv) the Texas AgriLife Extension;
 - (v) an agronomist or soil scientist on full-time staff at an accredited university located in the State of Texas; or

- (vi) a Certified Professional Agronomist certified by the American Society of Agronomy, a Certified Professional Soil Scientist certified by the Soil Science Society of America, or a licensed Texas Professional Geoscientist-soil scientist after approval by the Executive Director based on a determination by the Executive Director that another person or entity identified in this paragraph cannot develop the plan in a timely manner.
- (4) When results of the annual soil analysis for extractable phosphorus indicate a level greater than 500 ppm in Zone 1 depth (0-6 inch incorporated; 0-2 or 2-6 inch if not incorporated), the permittee shall file with the Executive Director a new or amended NUP with a phosphorus reduction component, based on crop removal, that is certified as acceptable by a person described in (3) above. After the new or amended NUP is approved, the permittee shall land apply in accordance with the NUP until soil phosphorus is reduced below 500 ppm extractable phosphorus.
- (5) If the permittee is required to have a NUP with a phosphorus reduction component based on crop removal, and if the results of tests performed on composite soil samples collected 12 months or more after the plan is filed do not show a reduction in phosphorus concentration in Zone 1 depth (0-6 inch incorporated; 0-2 or 2-6 inch if not incorporated), then the permittee is subject to enforcement action at the discretion of the Executive Director.
- (d) Buffer Requirements. The permittee shall meet the following buffer requirements for each LMU:
 - (1) Water in the State. The permittee shall not apply compost, manure, sludge and wastewater within the buffer distances as noted on Attachment B and Special Provision X.D. Vegetative buffers shall be maintained in accordance with NRCS Field Office Technical Guidance. The permittee shall maintain the filter strip (according to NRCS Code 393) between the vegetative buffer and the land application area. If the land application area is cropland, the permittee shall install and maintain contour buffer strips (according to NRCS Code 332) within the land application area in addition to the buffer distances required by this permit.
 - (2) Water Wells. The permittee shall comply with the well protection requirements listed in Section VII.A.7.(a).
- (e) Exported wastewater, sludge, and/or manure. Wastewater, sludge, and/or manure removed from the operation shall be disposed of by:
 - (1) delivery to a composting facility authorized by the Executive Director;
 - (2) delivery to a permitted landfill located outside of the major sole source impairment zone;
 - (3) beneficial use by land application to land located outside of the major sole source impairment zone;
 - (4) put to another beneficial use approved by the Executive Director; or
 - (5) providing wastewater, sludge, and/or manure to operators of third-party fields, i.e. areas of land in the major sole source impairment zone not owned, operated, controlled, rented, or leased by the CAFO owner or operator, that have been identified in the PPP.
 - (i) There must be a written contract between the permittee and the recipient that includes, but is not limited to, the following provisions:

- (A) All transferred wastewater, sludge, and/or manure shall be beneficially applied to third-party fields identified in the PPP in accordance with the applicable requirements in 30 TAC §321.36 and §321.40 at an agronomic rate based on soil test phosphorus. The requirements for development or implementation of a nutrient management plan or nutrient utilization plan, under 30 TAC §321.40, do not apply to third-party fields.
- (B) Manure and sludge must be incorporated on cultivated fields within forty-eight (48) hours after land application.
- (C) Land application rates shall not exceed the crop nitrogen requirement when the soil phosphorus concentration in Zone 1 depth (0-6 inch if incorporated; 0-2 or 2-6 inch if not incorporated) is less than or equal to 50 ppm phosphorus.
- (D) Land application rates shall not exceed two times the phosphorus crop removal rate, and not to exceed the crop nitrogen requirement, when soil phosphorus concentration in Zone 1 depth (0-6 inch if incorporated; 0-2 or 2-6 inch if not incorporated) is greater than 50 ppm phosphorus and less than or equal to 150 ppm phosphorus.
- (E) Land application rates shall not exceed one times the phosphorus crop removal rate, and not to exceed the crop nitrogen requirement, when soil phosphorus concentration in Zone 1 depth (0-6 inch if incorporated; 0-2 or 2-6 inch if not incorporated) is greater than 150 ppm phosphorus and less than 200 ppm phosphorus.
- (F) Before commencing manure, wastewater, compost, and/or sludge application to third-party fields, at least one representative soil sample from each third-party field must be collected by a certified nutrient management specialist and analyzed in accordance with 30 TAC §321.36. Third-party fields which have had wastewater, sludge, compost, and/or manure applied during the preceding year must be sampled annually by a certified nutrient management specialist and the samples analyzed in accordance with 30 TAC §321.36. For third-party fields that have not received wastewater, sludge, compost, and/or manure during the preceding year, initial sampling must be completed before re-starting land application to the third-party field.
- (G) A copy of the annual soil analyses shall be provided to the permittee within sixty (60) days of the date the samples were taken.
- (H) Temporary storage of wastewater, sludge, and/or manure is prohibited on third-party fields.
- (ii) The permittee is prohibited from delivering wastewater, sludge, and/or manure to an operator of a third-party field once the soil test phosphorus analysis shows a level equal to or greater than 200 ppm or after becoming aware that the third-party operator is not following appropriate provisions of 30 TAC §321.36, §321.40 and/or the contract.

- (iii) The permittee will be subject to enforcement action for violations of the land application requirements on any third-party field under contract.
 - (iv) The permittee shall submit records to the appropriate regional office quarterly that contain the name, locations, and amounts of wastewater, sludge, and/or manure transferred to operators of third-party fields.
 - (f) Irrigation Operating Requirements
 - (1) Minimize Ponding. Irrigation practices shall be managed so as to minimize ponding or puddling of wastewater on the site, prevent tailwater discharges to water in the state, and prevent the occurrence of nuisance conditions.
 - (2) Discharge Prohibited
 - (i) The drainage of compost, manure, sludge and wastewater is prohibited from the LMU(s), unless authorized under Section VII.A.5(d).
 - (ii) Where compost, manure, sludge and wastewater is applied in accordance with the nutrient management plan and/or NUP, precipitation-related runoff from the LMU(s) under the control of the permittee is authorized.
 - (iii) If a discharge from the irrigation system is documented as a violation, the permittee may be required by the Executive Director to install an automatic emergency shut-down or alarm system to notify the permittee of system problems.
 - (3) Backflow Prevention. If the permittee introduces wastewater or chemicals to water well heads for the purpose of irrigation, then backflow prevention devices shall be installed according to 16 TAC Chapter 76 (related to Water Well Drillers and Water Well Pump Installers).
 - (g) Nighttime Application
 - (1) Land application at night shall only be allowed if there is no occupied residence(s) within one quarter (0.25) of a mile from the outer boundary of the actual area receiving compost, manure, sludge and wastewater application. In areas with an occupied residence within one quarter (0.25) of a mile from the outer boundary of the actual area receiving compost, manure, sludge and wastewater application, application shall only be allowed from one (1) hour after sunrise until one (1) hour before sunset, unless the current occupant of such residences have, in writing, agreed to specified nighttime applications.
 - (2) Land application of compost, manure, sludge and wastewater is prohibited between 12 a.m. and 4 a.m. during normal operating conditions.
- 9. Sampling and Testing.
 - (a) Manure and Wastewater. The permittee shall collect and analyze at least one representative sample of wastewater and one representative sample of manure each year for total nitrogen, total phosphorus, and total potassium. The results of these analyses shall be used in determining application rates.
 - (b) Soils
 - (1) Initial Sampling. Before commencing compost, manure, sludge and wastewater application to the LMU(s), the permittee shall have at least one representative soil sample from each LMU, collected and analyzed according to the following procedures.

- (2) Annual Sampling. The TCEQ or its designee shall have soil samples collected annually for each current and historical LMU.
 - (3) Sampling Procedures. Sampling procedures shall employ accepted techniques of soil science for obtaining representative samples and analytical results, and be consistent with approved methods described in the Executive Director's guidance entitled "Soil Sampling for Concentrated Animal Feeding Operations (CAFOs) (RG-408)."
 - (i) Soil samples must be collected by one of the following persons:
 - (A) the NRCS;
 - (B) a certified nutrient management specialist;
 - (C) the Texas State Soil and Water Conservation Board;
 - (D) the Texas AgriLife Extension; or
 - (E) an agronomist or soil scientist on full-time staff at an accredited university located in the State of Texas.
 - (ii) Samples shall be collected and analyzed within the same forty-five (45) day time frame each year, except when crop rotations or inclement weather require a change in the sampling time. The reason for a change in sampling timeframe shall be documented in the PPP.
 - (iii) Obtain one composite sample for each soil depth zone per uniform soil type (soils with the same characteristics and texture) within each LMU.
 - (iv) Composite samples shall be comprised of 10 - 15 randomly sampled cores obtained from each of the following soil depth zones:
 - (A) Zone 1: 0-6 inches (where the manure, sludge, or compost is physically incorporated or injected directly into the soil) or 0-2 inches (where the manure, or sludge is not incorporated into the soil). Wastewater is considered to be incorporated upon land application if it is less than two percent (2%) solids. If a 0-2 inch sample is required, then an additional sample from the 2-6 inch soil depth zone shall be obtained in accordance with the provisions of this section; and
 - (B) Zone 2: 6-24 inches.
 - (4) Laboratory Analysis. Samples shall be analyzed by a soil testing laboratory. Physical and chemical parameters and analytical procedures for laboratory analysis of soil samples shall include the following:
 - (i) nitrate reported as nitrogen in ppm;
 - (ii) phosphorus (extractable, ppm) using Mehlich III with Inductively Coupled Plasma (ICP);
 - (iii) potassium (extractable, ppm);
 - (iv) sodium (extractable, ppm);
 - (v) magnesium (extractable, ppm);
 - (vi) calcium (extractable, ppm);
 - (vii) soluble salts (ppm) or electrical conductivity (dS/m) – determined from extract of 2:1 (v/v) water/soil mixture; and
 - (viii) soil water pH (soil:water, 1:2 ratio).
10. Preventative Maintenance Program.
- (a) Facility Inspections
 - (1) General Requirements

- (i) Inspections shall include visual inspections and equipment testing to determine conditions that could cause breakdowns or failures resulting in discharge of pollutants to water in the state or the creation of a nuisance condition.
 - (ii) The permittee shall draft a report, to be maintained in the PPP, to document the date of inspections, observations and actions taken in response to deficiencies identified during the inspection. The permittee shall correct all the deficiencies within thirty (30) days or shall document the factors preventing immediate correction.
 - (2) Daily Inspections. The permittee shall conduct daily inspections on all water lines, including drinking water and cooling water lines, which are located within the drainage area of a RCS.
 - (3) Weekly Inspections. The permittee shall conduct weekly inspections on:
 - (i) all control facilities, including RCSs, storm water diversion devices, runoff diversion structures, control devices for management of potential pollutant sources, and devices channeling contaminated storm water to RCSs; and
 - (ii) equipment used for land application of compost, manure, sludge and wastewater.
 - (4) Monthly Inspections. The permittee shall conduct monthly inspections on:
 - (i) mortality management systems, including collection areas; and
 - (ii) disposal and storage of toxic pollutants, including pesticide containers.
 - (5) Annual Site Inspection.
 - (i) The permittee shall annually conduct a complete site inspection of the production area and the LMU(s).
 - (ii) The inspection shall verify that:
 - (A) the description of potential pollutant sources is accurate;
 - (B) the site plan/map has been updated or otherwise modified to reflect current conditions; and
 - (C) the controls outlined in the PPP to reduce pollutants and avoid nuisance conditions are being implemented and are adequate.
 - (b) Five Year Evaluation. Once every five years the permittee shall have a licensed Texas Professional Engineer review the existing engineering documentation, complete a site evaluation of the structural controls, review existing liner and RCS capacity documentation, and complete and certify a report of their findings. The report must be kept in the PPP.
- 11. Management Documentation. The permittee shall maintain the following records in the PPP:
 - (a) a copy of the administratively complete and technically complete individual water quality permit application and the written authorization issued by the commission or Executive Director;
 - (b) a copy of the approved recharge feature certification and appropriate updates;
 - (c) a copy of the comprehensive nutrient management plan, nutrient management plan, nutrient utilization plan and appropriate updates to these plans, if required;
 - (d) the RCS liner certification(s);
 - (e) any written agreement with a landowner which documents the allowance of nighttime application of compost, manure, sludge and wastewater;

- (f) documentation of employee and operator training, including verification of the date, time of attendance, and completion of training;
- (g) the RCS management plan;
- (h) the capacity of each RCS as certified by a licensed Texas Professional Engineer; and
- (i) a copy of all third-party field contracts.

B. General Requirements

1. The permittee shall not construct any component of the production area in any stream, river, lake, wetland, or playa (except as defined by and in accordance with the Texas Water Code §26.048).
2. Animals confined on the CAFO shall be restricted from coming into direct contact with surface water in the state through the use of fences or other controls.
3. The permittee shall prevent the discharge of pesticide contaminated waters into water in the state. All wastes from dipping vats, pest and parasite control units, and other facilities used for the application of potentially hazardous or toxic chemicals shall be handled and disposed of in a manner that prevents any significant pollutants from entering water in the state or creating a nuisance condition.
4. The permittee shall operate the CAFO in such a manner as to prevent nuisance conditions of air pollution as mandated by Texas Health and Safety Code, Chapters 341 and 382.
5. The permittee shall take reasonable steps necessary to prevent adverse effects to human health or safety, or to the environment.
6. The permittee shall maintain control of the RCS(s), required LMU(s), and control facilities identified on the site map submitted in the application. In the event the permittee loses control of any of these areas, the permittee shall notify the Executive Director within five (5) working days.
7. If animals are maintained in pastures, the permittee shall maintain crops, vegetation, forage growth or post harvest residues in those pastures during the normal growing season, excluding the feed and/or water trough areas.

C. Training

1. Employee Training
 - (a) Employees at the CAFO facility who are responsible for work activities relating to compliance with provisions of this permit must be regularly trained or informed of any information pertinent to the proper operation and maintenance of the facility and land application of manure, sludge, and wastewater.
 - (b) Employee training shall address all levels of responsibility of the general components and goals of the PPP. Training shall include appropriate topics, such as land application of manure, sludge, and wastewater, proper operation and maintenance of the facility, good housekeeping, material management practices, recordkeeping requirements, and spill response and clean up.
 - (c) The permittee is responsible for determining the appropriate training frequency for different levels of personnel. The PPP shall identify periodic dates for such training.

2. Operator Training. The operator shall attend at least eight (8) hours of continuing education in animal waste management or its equivalent, developed by the Executive Director and the Texas AgriLife Extension, for each two year period.
3. Verification of the date and time(s) of attendance and completion of required training shall be documented in the PPP.

D. Air Standard Permit Requirements

1. Air emission limitations.
 - (a) Facilities shall be operated in such a manner as to prevent the creation of a nuisance as defined by Texas Health and Safety Code, 30 TAC §§341.011 and 321.32(32), and as prohibited by 30 TAC §101.4. Facilities shall be operated in such a manner as to prevent a condition of air pollution as defined by Texas Health and Safety Code and 30 TAC §382.003(3).
 - (b) The permittee shall take necessary action to identify any nuisance condition that occurs. The permittee shall take action to abate any nuisance condition as soon as practicable or as specified by the Executive Director.
2. Wastewater treatment. The permittee shall design and operate RCSs to minimize odors in accordance with accepted engineering practices. Each RCS shall be operated in accordance with the design and an operation and maintenance plan that minimizes odors.
3. Dust Control. To minimize dust emissions, the CAFO shall be operated and maintained as follows:
 - (a) Fugitive emissions from all grain receiving pits, where a pit is used, shall be minimized through the use of “choke feeding” or through an equivalent method of control. If choke feeding is used, operation of conveyors associated with receiving shall not commence until the receiving pits are full.
 - (b) As necessary, emissions from all in-plant roads, truck loading and unloading areas, parking areas, and other traffic areas shall be controlled with one or more of the following methods to minimize nuisance conditions and maintain compliance with all applicable commission requirements:
 - (1) sprinkled with water;
 - (2) treated with effective dust suppressant(s); or
 - (3) paved with a cohesive hard surface and cleaned.
 - (c) All non-vehicular external conveyors or other external conveying systems associated with the feedmill shall be enclosed.
 - (d) On-site feed milling operations with processing equipment using a pneumatic conveying system (which may include, but are not limited to, pellet mill/pellet cooler systems, flaker systems, grinders, and roller-mills) shall vent the exhaust air through a properly-sized high efficiency cyclone collector or an equivalent control device before releasing the exhaust air to the atmosphere. This requirement does not include cyclones used as product separators.
 - (e) If the Executive Director determines that the implementation and employment of these practices is not effective in controlling dust, the permittee shall implement any necessary additional abatement measures to control and minimize this contaminant within the time period specified by the Executive Director.
4. Maintenance and Housekeeping. The permittee shall comply with the following to help prevent nuisance conditions.

- (a) The premises shall be maintained to prevent the occurrence of nuisance conditions from odors and dust. Spillage of any raw products or waste products causing a nuisance condition shall be picked up and properly disposed of daily.
- (b) Proper pen drainage shall be maintained at all times. Earthen pen areas shall be maintained by scraping uncompacted manure and shaping pen surfaces as necessary to minimize odors and ponding.

VIII. Recordkeeping, Reporting, and Notification Requirements

A. Recordkeeping

The permittee shall keep records on-site for a minimum of five (5) years from the date the record was created and shall submit them within five (5) days of a written request by the Executive Director.

1. The permittee shall update records daily to include:
 - (a) all measurable rainfall events; and
 - (b) the wastewater levels in each RCS, as shown on the depth marker. In circumstances where a RCS has a water level exceeding the expected end of the month depth, the permittee shall document in the PPP why the level of water in the structure is not at or below the expected depth.
2. The permittee shall update records weekly to include:
 - (a) records of all wastewater, sludge, and/or manure removed from the CAFO that shows the dates, amount, and recipient. The permittee must make the most recent nutrient analysis available to any hauler; and
 - (b) inspections of control facilities and land application equipment.
3. The permittee shall update records monthly to include:
 - (a) records describing mortality management practices;
 - (b) storage and disposal of chemicals, including pesticide containers; and
 - (c) records of all compost, manure, sludge and wastewater applied on the LMU(s). Such records must include the following information:
 - (i) date of compost, manure, sludge and wastewater application to each LMU;
 - (ii) location of the specific LMU and the volume applied during each application event;
 - (iii) acreage on which compost, manure, sludge and wastewater is applied;
 - (iv) basis for and the total amount of nitrogen and phosphorus applied per acre to each LMU on a dry basis, including sources of nutrients other than compost, manure, sludge and wastewater; and
 - (v) weather conditions, such as temperature, precipitation, and cloud cover, during the land application and twenty-four (24) hours before and after the land application.
4. The permittee shall update records annually to include:
 - (a) annual nutrient analysis for at least one representative sample of wastewater and one representative sample of manure for total nitrogen, total phosphorus, and total potassium;
 - (b) any initial and annual soil analysis reports;
 - (c) the annual site inspection report;
 - (d) percent moisture content of the manure, sludge, and wastewater; and
 - (e) actual annual yield of each harvested crop for each LMU.
5. The Five Year Evaluation report must be updated every five (5) years.

6. The permittee shall keep the following records on-site:
 - (a) a list of any significant spills of potential pollutants at the CAFO that have a significant potential to reach water in the state;
 - (b) documentation of liner maintenance by an NRCS engineer, a licensed Texas Professional Engineer or a licensed Texas Professional Geoscientist;
 - (c) RCS design calculations and as built capacity certification;
 - (d) embankment certification;
 - (e) liner certification;
 - (f) a copy of current and amended site plans; and
 - (g) copies of all notifications to the Executive Director, including any made to a regional office.

B. Reporting and Notifications

1. The permittee shall provide written notice to the appropriate TCEQ regional office as soon as the RCS cleaning is scheduled, but not less than ten (10) days before cleaning. The permittee shall also provide written verification of completion to the same regional office within five (5) days after the cleaning has been completed. This paragraph does not apply to the cleaning of solid separators or settling basins that are functioning as solid separators.
2. The permittee shall notify the appropriate TCEQ regional office in writing or by electronic mail with the date, time, and location at least ten (10) working days before collecting soil samples from current and historical LMUs; and third-party fields.
3. Discharge Notification. If for any reason there is a discharge of manure, sludge or wastewater into water in the state, the permittee shall notify the appropriate TCEQ regional office orally within one (1) hour of discovery; unless it is not reasonably possible to do so in which event the discharge shall be reported as soon as reasonably possible, but in no event later than twenty-four (24) hours from when the discharge occurred. The permittee shall also submit written notice, within fourteen (14) working days of the discharge to the Office of Compliance and Enforcement, Enforcement Division (MC 224). In addition, the permittee shall document the following information, keep the information on-site, and submit the information to the appropriate regional office within fourteen (14) working days of becoming aware of such discharge. The written notification must include:
 - (a) a description and cause of the discharge, including a description of the flow path to the receiving water body and an estimation of the volume discharged;
 - (b) the period of discharge, including exact dates and times, and, if not corrected, the anticipated time the discharge is expected to continue, and steps being taken to reduce, eliminate and prevent recurrence of the discharge;
 - (c) if caused by a precipitation event(s), the date(s) of the event(s) and the rainfall amount(s) recorded from an on-site rain gauge; and
 - (d) discharge monitoring analyses required by this permit.
4. In the event of a discharge of manure, sludge, or wastewater from a RCS or a LMU during a chronic or catastrophic rainfall event or resulting from catastrophic conditions, the permittee shall orally notify the appropriate TCEQ regional office within one (1) hour of the discovery of the discharge. The permittee shall send written notification to the appropriate regional office within fourteen (14) working days.
5. Chronic Rainfall Discharge. In the event of a discharge of manure, sludge or wastewater from a RCS or a LMU due to chronic rainfall, the permittee shall submit a

report to the appropriate TCEQ regional office showing the CAFO records that substantiates that the overflow was a result of cumulative rainfall that exceeded the design rainfall event without the opportunity for dewatering, and was beyond the control of the permittee. After review of the report, if required by the Executive Director, the permittee shall have an engineering evaluation by a licensed Texas Professional Engineer developed and submitted to the Executive Director. This requirement is in addition to the discharge notification requirement in this permit.

6. Impacts to Human Health or Safety, or the Environment. The permittee shall provide the following noncompliance notifications:
 - (a) Any noncompliance which may endanger human health or safety, or the environment shall be reported by the permittee to the TCEQ. Report of such information shall be provided orally, by e-mail, or electronic facsimile transmission (Fax) to the TCEQ regional office within twenty four (24) hours of becoming aware of the noncompliance. A written submission of such information shall also be provided by the permittee to the TCEQ regional office and the Enforcement Division (MC 224) within five (5) days of becoming aware of the noncompliance. The written submission shall contain a description of the noncompliance and its cause; the potential danger to human health or safety, or the environment; the period of noncompliance, including exact dates and times. If the noncompliance has not been corrected, the anticipated time it is expected to continue, and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance and to mitigate its adverse effects.
 - (b) In the event the permittee discharges manure, sludge, or wastewater other than as authorized in the permit, the permittee shall give twenty four (24) hour oral, e-mail, or fax notice and five (5) day written notice to TCEQ as required by paragraph (a) above.
7. The permittee shall submit an annual report to the appropriate regional office and the Enforcement Division (MC 224) by March 31 of each year for the 12-month reporting period of January 1 to December 31 of the previous year. The report shall be submitted on forms prescribed by the Executive Director to include, but not limited to:
 - (a) number and type of animals, whether in open confinement or housed under roof;
 - (b) estimated total manure, sludge, and wastewater generated during the reporting period;
 - (c) total compost, manure, sludge and wastewater land applied during the last twelve (12) months on-site at the CAFO facility;
 - (d) total wastewater, sludge, and/or manure transferred to other persons during the reporting period;
 - (e) total number of acres for land application under the control of the permittee and all third-party acreage;
 - (f) summary of discharges of manure, sludge, or wastewater from the production area that occurred during the reporting period including dates, times, and approximate volume;
 - (g) a statement indicating that the NMP/NUP, under which the CAFO is operating, was developed and approved by a certified nutrient management specialist;
 - (h) a copy of the initial soil analysis for each new LMU, regardless of whether manure, wastewater, or sludge has been applied;
 - (i) soil monitoring reports of all soil samples collected in accordance with the requirements of this permit;

- (j) groundwater monitoring reports (if applicable);
 - (k) the actual crop(s) planted and yield(s) for each LMU;
 - (l) the actual nitrogen and phosphorus content of manure, sludge or process wastewater that was land applied;
 - (m) the results of data used in calculations and the results of calculations conducted in accordance with Attachment E;
 - (n) the results of any soil testing for nitrogen and phosphorus conducted during the previous 12 months;
 - (o) the amount of any supplemental fertilizer applied during the previous 12 months; and
 - (p) any other information requested by the Executive Director.
8. The permittee shall furnish to the appropriate regional office, and the Enforcement Division (MC 224), soil testing analysis for third-party fields of all soil samples within sixty (60) days of the date the samples were taken in accordance with the requirements of this permit.

IX. Standard Permit Conditions

- A. The permittee has a duty to comply with all permit conditions. Failure to comply with any permit conditions is a violation of the permit and statutes under which it was issued and is ground for enforcement action, for permit amendment, revocation or suspension, or for denial of a permit renewal application or an application for a permit for another facility.
- B. The permittee must apply for an amendment or renewal before the expiration of the existing permit in order to continue a permitted activity after the expiration date of the permit. Authorization to continue such activity terminates upon the effective denial of said permit.
- C. It is not a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity to maintain compliance with the permit conditions.
- D. The permittee shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal or other permit violation which has a reasonable likelihood of adversely affecting human health or the environment.
- E. The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) installed or used by the permittee to achieve compliance with the permit conditions. Proper operation and maintenance also includes adequate laboratory and process controls, and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems only when necessary to achieve compliance with the permit conditions.
- F. The permittee shall furnish any information, at the request of the Executive Director, which is necessary to determine whether cause exists for revoking, suspending, or terminating authorization under this permit. The requested information must be provided within a reasonable time frame and in no case later than thirty (30) days from the date of the request.
- G. The permittee shall give notice to the Executive Director before physical alterations or additions to the permitted facility if such alterations or additions would require a permit amendment or result in a violation of permit requirements.
- H. Authorization from the Commission is required before beginning any change in the permitted facility or activity that would result in noncompliance with other permit requirements.

- I. Inspection and entry shall be allowed under Texas Water Code, Chapters 26-28, Health and Safety Code, §§361.032-361.033 and §361.037, and 40 Code of Federal Regulations (CFR) §122.41(I). The statement in Texas Water Code, §26.014 that the Commission entry of a facility shall occur in accordance with an establishment's rules and regulations concerning safety, internal security, and fire protection is not grounds for denial or restriction of entry to any part of the facility, but merely describes the Commission's duty to observe appropriate rules and regulations during inspection.
- J. Standard Monitoring Requirements
 - 1. Samples required by this permit shall be collected and measurements shall be taken at times and in a manner so as to be representative of the monitored discharge or activity. Samples shall be delivered to the laboratory immediately upon collection, in accordance with any applicable analytical method and required maximum holding time. Unless otherwise specified in this permit, test procedures for the analysis of pollutants shall comply with procedures specified in 30 TAC §§319.11 – 319.12. Measurements, tests and calculations shall be accurately accomplished in a representative manner.
 - 2. Records of monitoring activities must include:
 - (a) the date, time, and place of sample or measurement;
 - (b) the identity of any individual who collected the sample or made the measurement;
 - (c) the chain-of-custody procedures used to maintain sample integrity from sample collection to laboratory delivery;
 - (d) the date and time of laboratory analysis;
 - (e) the identity of the individual and laboratory who performed the analysis;
 - (f) the technique or method of analysis; and
 - (g) the results of the analysis or measurement and quality assurance/quality control records.
 - 3. The permittee shall ensure that properly trained and authorized personnel monitor and sample the soil or wastewater related to any permitted activity.
- K. Any noncompliance other than that specified in this section, or any required information not submitted or submitted incorrectly shall be reported to the Executive Director as promptly as possible.
- L. A permit may be transferred only according to the provisions of 30 TAC §305.64 (relating to Transfer of Permits) and 30 TAC §305.97 (relating to Action on Application for Transfer).
- M. PPPs, reports, and other information requested or required by the Executive Director shall be signed in accordance with the requirements of 30 TAC §305.128 (relating to Signatories to Reports).
- N. A permit may be amended, suspended and re-issued, or revoked for cause. The filing of a request by the permittee for a permit amendment, suspension and re-issuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition.
- O. A permit does not convey any property rights of any sort or any exclusive privilege.
- P. Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of the permit shall be submitted no later than fourteen (14) days following each schedule date.

- Q. If the permittee becomes aware that he/she failed to submit any relevant facts in a permit application, or submitted incorrect information in an application, or in any report to the Executive Director, the permittee shall promptly submit such facts or information.
- R. The permittee is subject to administrative, civil, and criminal penalties, as applicable, under Texas Water Code, §§26.136, 26.212, and 26.213, for violations including but not limited to the following:
1. negligently or knowingly violating Clean Water Act (CWA) §§301, 302, 306, 307, 308, 318, or 405 or any condition or limitation implementing any sections in a permit issued under CWA §402, or any requirement imposed in a pretreatment program approved under CWA §402(a)(3) or §402(b)(8);
 2. falsifying, tampering with, or knowingly rendering inaccurate any monitoring device or method required to be maintained under a permit; or
 3. knowingly making any false statement, representation, or certification in any record or other document submitted or required to be maintained under a permit, including monitoring reports or reports of compliance or noncompliance.
- S. The permittee shall comply with all applicable rules and regulations of the commission, including 30 TAC 321, Subchapter B.
- T. This permit is granted on the basis of the information supplied and representations made by the permittee during action on an application, and relying upon the accuracy and completeness of that information and those representations. After notice and opportunity for a hearing, this permit may be modified, suspended, or revoked, in whole or in part, in accordance with 30 TAC Chapter 305, Subchapter D, during its term for good cause including, but not limited to, the following:
1. Violation of any terms or conditions of this permit;
 2. Obtaining this permit by misrepresentation or failure to disclose fully all relevant facts; or
 3. A change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge.
- U. Acceptance of the permit by the person to whom it is issued constitutes acknowledgement and agreement that such person will comply with all the terms and conditions embodied in the permit, and the rules and other orders of the Commission.
- V. In accordance with the Texas Water Code §26.029(b), after a public hearing, notice of which shall be given to the permittee, the Commission may require the permittee, from time to time, for good cause, in accordance with applicable laws, to conform to new or additional conditions.
- W. The conditions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstances, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.
- X. Notice of Bankruptcy.
1. Each permittee shall notify the Executive Director, in writing, immediately following the filing of a voluntary or involuntary petition for bankruptcy under any chapter of Title 11 (Bankruptcy) of the United States Code (11 USC) by or against:
 - (a) the permittee;
 - (b) an entity (as that term is defined in 11 USC, §101(14)) controlling the permittee or listing the permit or permittee as property of the estate; or
 - (c) an affiliate (as that term is defined in 11 USC, §101(2)) of the permittee.
 2. This notification must indicate:

- (a) the name of the permittee;
- (b) the permit number(s);
- (c) the bankruptcy court in which the petition for bankruptcy was filed; and
- (d) the date of filing of the petition.

X. Special Provisions

A. RCS Volumes.

1. The permittee shall maintain the wastewater volumes in each RCS in accordance with Table 6.

Table 6: Volume Allocations for RCS (Acre-Feet)

RCS Name	Design Rainfall Event Runoff	Process Generated Wastewater	Minimum Treatment Volume	Sludge Accumulation	Water Balance	Required Capacity Without Freeboard	Actual Capacity Without Freeboard
RCS #1	14.25	0	0	0.23	2.38	16.85	20.47

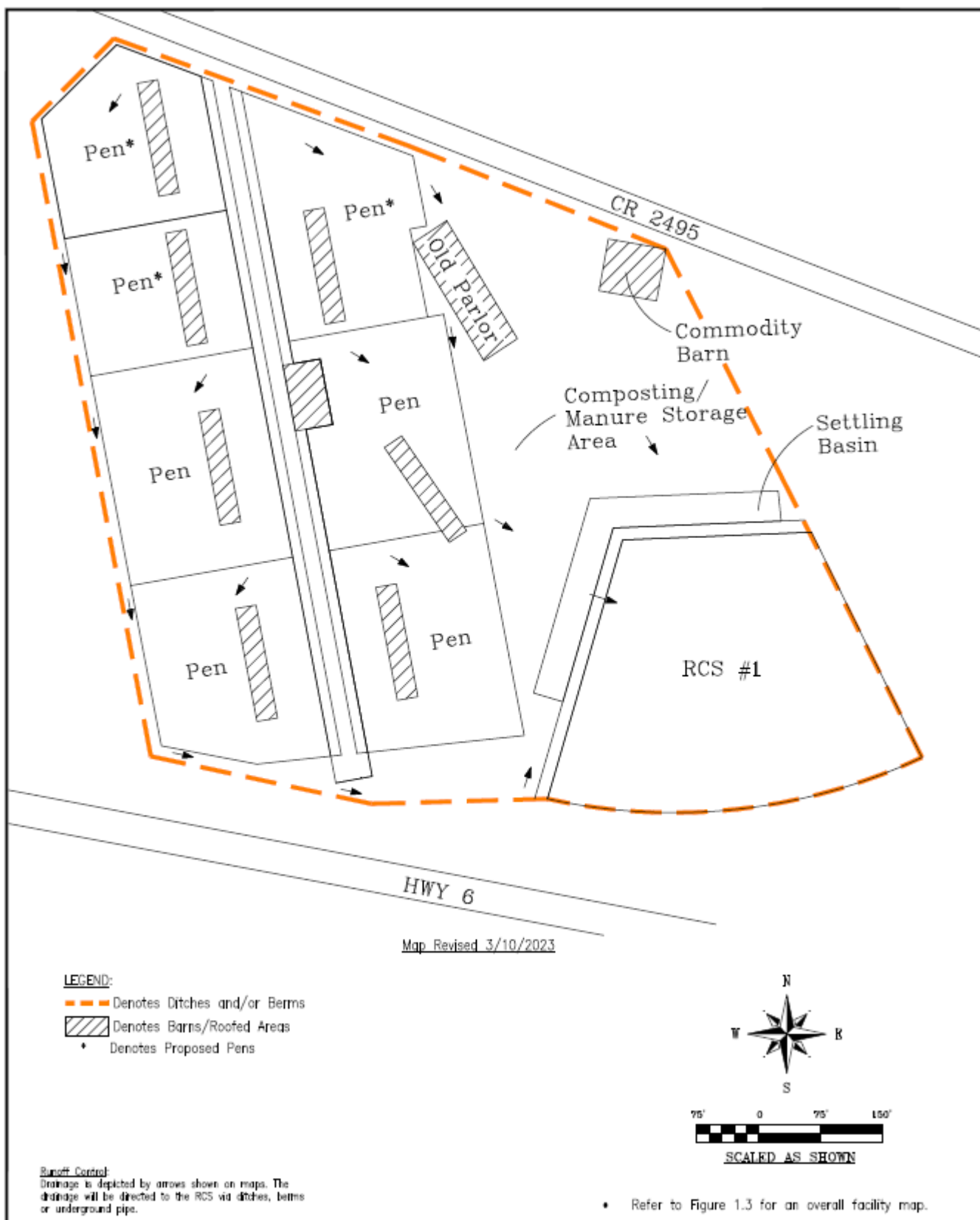
2. The RCS management plan shall be developed and implemented within thirty (30) days of permit issuance.
 3. All certifications required by Section VII.A.3(a) of this permit shall be submitted to the TCEQ Regional Office and CAFO Permitting, Water Quality Division (MC 150) within 30 days of completing construction and/or modification.
- B. Future Revisions to Bosque River Total Maximum Daily Load (TMDL).** The permittee is hereby placed on notice that this permit may be amended by the TCEQ in order to make the terms and conditions of this permit consistent with any revisions to the Bosque River TMDL, associated Implementation Plan, and any revisions to federal regulations.
- C. The permittee shall submit the following record to the appropriate Regional Office and the Enforcement Division (MC 224) by March 31 of each year for the 12-month reporting period of January 1 to December 31 of the previous year.**
1. date of compost, manure, sludge and wastewater application to each LMU;
 2. location of the specific LMU and the volume applied during each application event;
 3. acreage of each individual crop on which compost, manure, sludge and wastewater is applied;
 4. basis for and the total amount of nitrogen and phosphorus applied per acre to each LMU, including sources of nutrients other than compost, manure, sludge and wastewater on a dry basis;
 5. weather conditions, such as temperature, precipitation, and cloud cover, during the land application and twenty-four (24) hours before and after the land application;
 6. annual nutrient analysis for at least one (1) representative sample of manure, sludge (if applicable), and wastewater for total nitrogen, total phosphorus, and total potassium; and
 7. any measurements of sludge accumulations as required in each RCS.
- D. Table 7 describes the buffers that the permittee is required to install and maintain according to the NRCS practice standards in the referenced code. The map in Attachment B includes the location and distance requirements for all buffers.**

Table 7: Buffer Distances

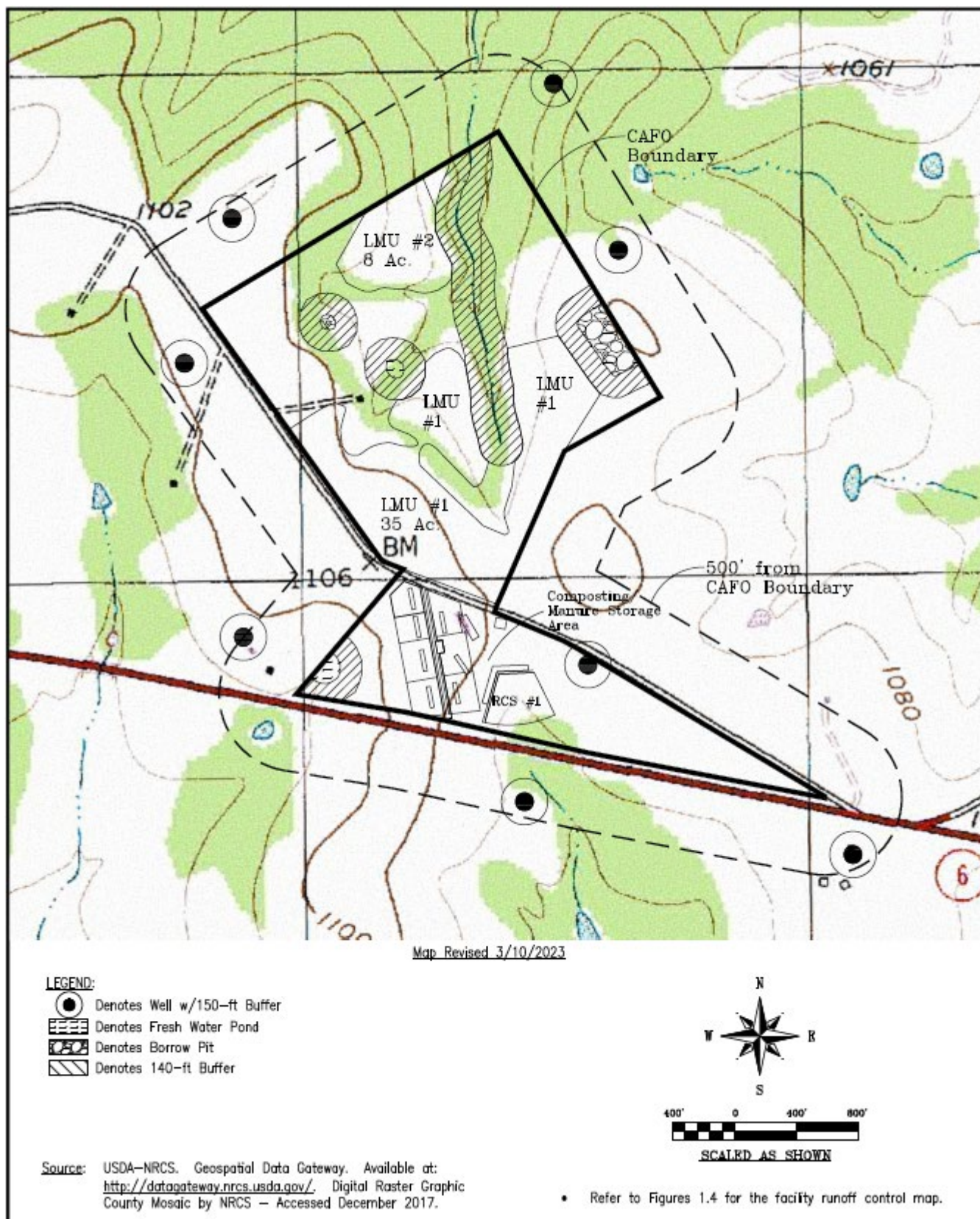
LMU Name	Vegetative Buffer Setback (feet)	Additional Buffer Setback NRCS Code 393 Filter Strip Flow Length (feet)
LMU #1	100	40
LMU #2	100	40

- E. The sludge volume in each RCS will be measured and recorded in the PPP as necessary, but at least annually.
- F. There will be no grazing of livestock on the LMUs for this CAFO unless the NMP reflects grazing and the grazing practices mentioned in the NRCS Conservation Practice Code 393, Filter Strip, are implemented to protect buffers.
- G. Settling Basin Solids.
 - 1. For the purpose of this permit, settling basin solids shall be defined as manure.
 - 2. If settling basin solids are land applied, an annual sample must be collected and analyzed in accordance with Section VII.A.9(a), in addition to other manure and wastewater.
 - 3. Settling basin solids shall be cleaned out regularly to maintain the percent settling basin design efficiency.
- H. All runoff from silage, commodity, and hay storage outside the RCS drainage area will be contained. Appropriate provisions for that containment will be stated in the PPP upon issuance of the permit. This permit does not authorize any discharge from the silage, commodity, or hay storage areas located outside the drainage area of the RCSs.
- I. Upon issuance of the permit, prior to land application of manure or wastewater, a current NMP must be in place and it shall thereafter be updated annually with the most recent soil, manure, and wastewater analyses. For LMUs that have a phosphorus level in the soil of more than 200 ppm, a NUP must be developed or updated in accordance with Section VII.A.8(c).
- J. Sludge must be analyzed for nutrient content prior to routing offsite for any land application. The analysis for each haul off shall be maintained in the PPP. (See Section VII.A.5(g) for additional requirements relating to sludge cleanout.)
- K. Old Parlor, noted in Attachment A- Site Map
 - 1. There shall be no milking in the old parlor, and no process generated wastewater or wash water entering the RCS from the old parlor at any time.
 - 2. The permittee shall obtain a major amendment to the permit prior to milking onsite.
- L. A LMU map showing historical LMUs shall be maintained in the PPP.

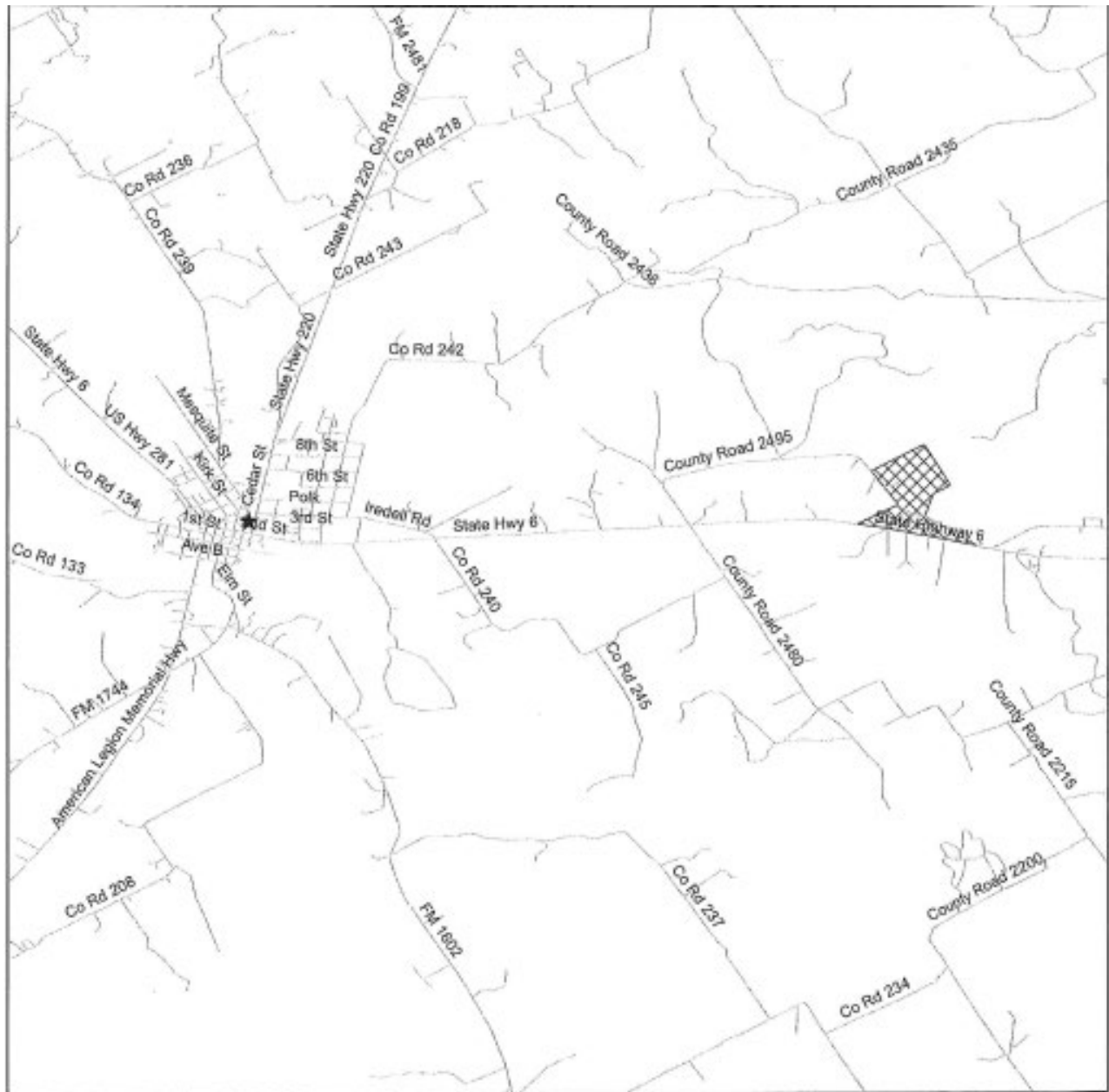
ATTACHMENT A - SITE MAP



ATTACHMENT B - LAND MANAGEMENT UNITS



ATTACHMENT C - VICINITY MAP



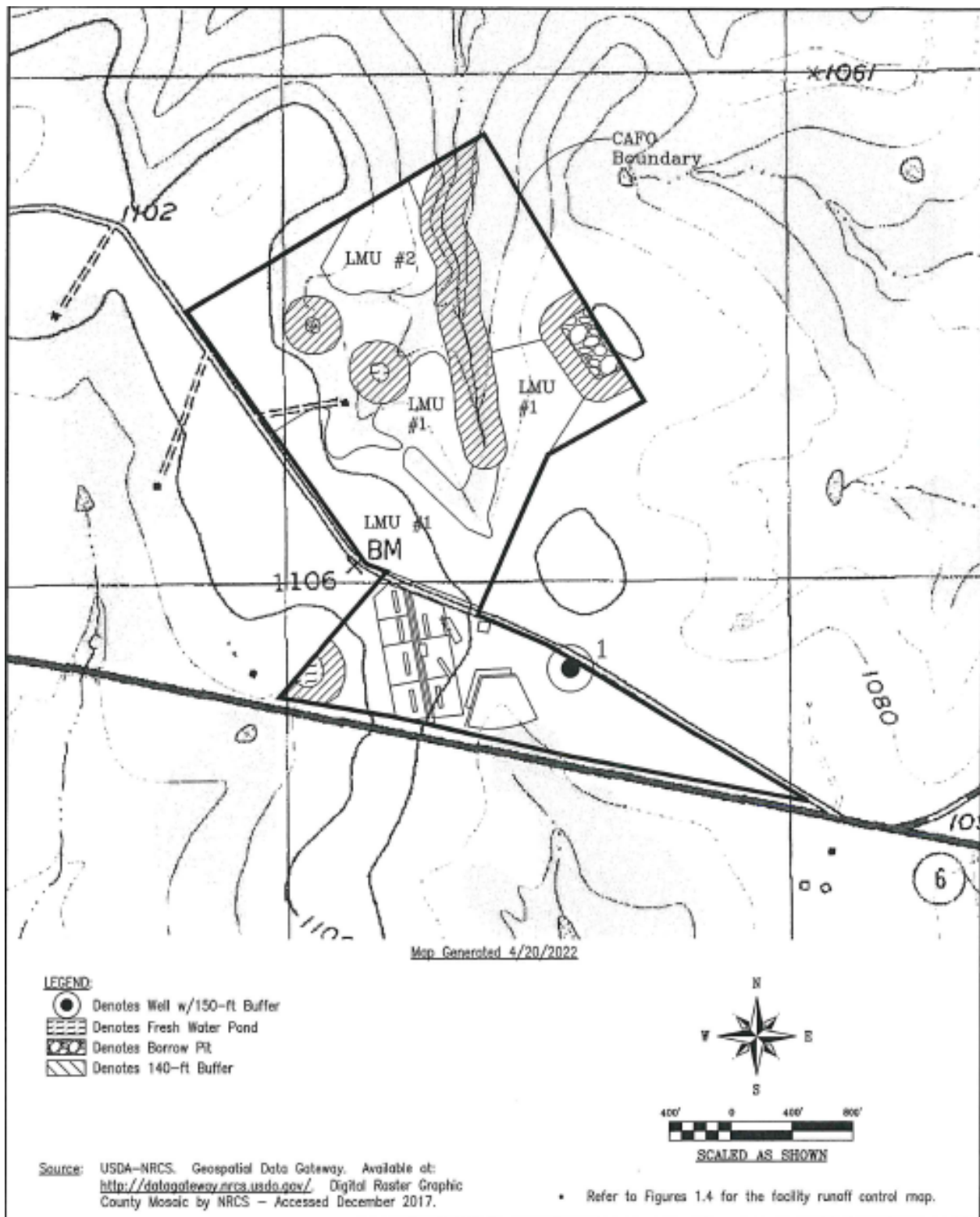
Legend

- ★ Town
-  Golden Star Heifer Ranch
- Bosque County Roads
- Hamilton County Roads
- Erath County Roads



0 0.375 0.75 1.5 2.25 3 Miles

ATTACHMENT D - WELL LOCATION AREA



ATTACHMENT E

METHODOLOGY FOR CALCULATING MAXIMUM APPLICATION RATES AND ANNUAL RECALCULATION OF APPLICATION RATES

1. Identify the Soil Test Phosphorus (P) Level (Extremely Low, Very Low- Low, Medium, High, Very High) on the soil test analysis.

Soil Test P Rating	Soil Test P Levels (ppm*)
Extremely Low	Less than 5
Very Low - Low	5 to less than 20
Medium	20 to less than 50
High	50 to less than 100
Very High	Greater than or equal to 100

*ppm is equivalent to mg/kg of solids

2. Update Table 1 to Attachment E:
 - (a) Populate the Sub Total column with the point value that corresponds to the Site Characteristic for each.
 - (b) Calculate the Total Index Points
 - (c) Select the P Runoff Potential from the total sum of the Index Points of the Site Characteristics using the Phosphorus Index Classification Table.
3. Determine which of the tables (Table 2A or Table 2B) of Table 2 to Attachment E on the following page is appropriate to use. Each table describes the criteria for its use.
4. Determine which application rate column is appropriate using the following criteria:
 - (a) Use the Maximum TMDL Annual P Rate if this LMU is located in a segment with an approved TMDL.
 - (b) Use Maximum Annual P Application if this LMU is not located in a segment with an approved TMDL and you wish to apply annually.
 - (c) Use Maximum Biennial Application Rate if this LMU is not located in a segment with an approved TMDL and you wish to apply biennially.
5. Determine the Maximum Application Rate using the table identified in Step 3, the column identified in Step 4, and the P Runoff Potential identified in Step 2.(c).
6. Using one of the approved crops and yield goals identified on Attachment F for this LMU, determine the maximum application rate (in lbs/ac) for that crop and yield goal and the Maximum Application Rate identified in Step 5 from the S-Crop Table.
 - (a) Example 1: If the Maximum Application Rate in Step 5 is “1.5 Times Annual Crop P Requirement”, find the number identified on the S-Crop Table under the column “Crop P₂O₅ requirement” for your crop/yield goal, then multiply that number by 1.5 to determine your maximum application rate (in lbs/ac P₂O₅).
 - (b) Example 2: If the Maximum Application Rate in Step 5 is “0.5 Times Annual Crop P Removal”, find the number identified on the S-Crop Table under the column “Crop P₂O₅ Removal Rate” for your crop/yield goal, then multiply that number by 0.5 to determine your maximum application rate (in lbs/ac P₂O₅).

ATTACHMENT E

TABLE 1: PHOSPHORUS INDEX WORKSHEET FOR EAST TEXAS FROM NRCS PRACTICE STANDARD 590

Client Name:			Field(s):			Date:	
Planner:			Location:			Crop:	
Impaired Watershed (Y or N):			Runoff Curve No.:			% Slope:	
Site Characteristic (Weighting Factor)	[Weighting Factor Times the Column Factor]					Sub Total	
	0	1	2	4	8		
Soil Test P Rating (1.00)	N/A	Very Low – Low	Moderate	High	Very High		
	[0]	[1.0]	[2.0]	[4.0]	[8.0]		
Fertilizer Phosphorus (P ₂ O ₅) Application Rate (0.75)	None Applied	1-40 lbs/ac P ₂ O ₅	41-90 lbs/ac P ₂ O ₅	91-150 lbs/ac P ₂ O ₅	>150 lbs/ac P ₂ O ₅		
	[0]	[0.75]	[1.5]	[3.0]	[6.0]		
Organic Phosphorus (P ₂ O ₅) Application Rate (0.75)	None Applied	1-40 lbs/ac P ₂ O ₅	41-90 lbs/ac P ₂ O ₅	91-150 lbs/ac P ₂ O ₅	>150 lbs/ac P ₂ O ₅		
	[0]	[0.75]	[1.5]	[3.0]	[6.0]		
Phosphorus Fertilizer Application Method and Timing (0.50)	None Applied	Placed deeper than 2 in. or broadcast and incorporated within 48 hours	Surface applied 12/1-2/15	Surface applied 2/16-4/15 or 6/16-11/30	Surface Applied 4/16-6/15		
	[0]	[0.50]	[1.0]	[2.0]	[4.0]		
Organic Phosphorus source Application Method and Timing (0.50)	None Applied	Placed deeper than 2 in. or broadcast and incorporated within 48 hours	Surface applied 12/1-2/15	Surface applied 2/16-4/15 or 6/16-11/30	Surface Applied 4/16-6/15		
	[0]	[0.50]	[1.0]	[2.0]	[4.0]		
Proximity of nearest field edge to named stream or lake (1.25)	> 2000 feet	1000 – 1999 feet	500 – 999 feet	100 – 499 feet	< 100 feet		
	[0]	[1.25]	[2.5]	[5.0]	[10.0]		
Runoff Class (Runoff Class Table 3) (1.00)	Negligible	Low	Moderate	High	Very High		
	[0]	[1.0]	[2.0]	[4.0]	[8.0]		
Soil Erosion (all sources) (1.50)	Very Low <1 t/ac	Low 1-3 t/ac	Medium 3-5 t/ac	High 5-10 t/ac	Very High >10 t/ac		
	[0]	[1.5]	[3.0]	[6.0]	[12.0]		
Total Index Points:							

ATTACHMENT E

TABLE 2: APPLICATION RATES FROM NRCS PRACTICE STANDARD 590

Commercial fertilizers must be applied in accordance with SWFTL* recommendations. Application of all organic soil amendments must not exceed the values in Table 2A or 2B.

Table 2A. A Nutrient Management Plan (NMP)¹ is required where any organic soil amendments are applied where Soil Test P Level is less than 200 ppm statewide or, less than 350 ppm in arid areas² with distance to a named stream greater than one mile.

P – Index Rating	Maximum TMDL Annual P Application Rate	Maximum Annual P Application Rate	Maximum Biennial Application Rate
Very Low, Low	Annual Crop Nitrogen (N) Requirement	1.0 Times Annual Crop N Requirement	2.0 Times Annual Crop N Requirement
Medium	2.0 Times Annual Crop P Requirement ³	2.0 Times Annual Crop P Requirement ³	2.0 Times Annual Crop N Requirement
High	1.5 Times Annual Crop P Requirement ³	1.5 Times Annual Crop P Requirement	Double the Maximum Annual P Application Not to Exceed 2 Times the Annual Crop N Requirement
Very High	1.0 Times Annual Crop P Requirement ³	1.0 Times Annual Crop P Requirement ³	Double the Maximum Annual P Application Not to Exceed 2 Times the Annual Crop N Requirement

Table 2B. A Nutrient Utilization Plan (NUP)¹ is required where Soil Test P Level is: equal to or greater than 200 ppm in nonarid areas², or equal to or greater than 350 ppm in arid areas² with distance to a named stream greater than one mile and erosion control is adequate to keep erosion at the soil loss tolerance (T) or less, or equal to or greater than 200 ppm in arid areas² with distance to a named stream less than one mile.

P – Index Rating	Maximum TMDL Annual P Application Rate	Maximum Annual P Application Rate	Maximum Biennial Application Rate
Very Low, Low	1.0 Times Annual Crop P Removal ⁴	Annual Crop N Removal	2.0 Times Crop N Removal
Medium	1.0 Times Annual Crop P Removal ⁴	1.5 Times Annual Crop P Removal ⁴	Double the Maximum Annual P Application Not to Exceed 2 Times the Annual Crop N Removal
High	1.0 Times Annual Crop P Removal ⁴	1.0 Times Annual Crop P Removal ⁴	Double the Maximum Annual P Application Not to Exceed 2 Times the Annual Crop N Removal
Very High	0.5 Times Annual Crop P Removal ⁴	0.5 Times Annual Crop P Removal ⁴	Double the Maximum Annual P Application Not to Exceed 2 Times the Annual Crop N Removal

Footnotes Applicable to both Tables

¹NMP and NUP designations are consistent with 30 TAC §321.40.

²All counties must use the 200 ppm P level limit to determine whether to use Table 2A or Table 2B. However, in counties receiving less than 25 inches of annual rainfall, the 350 ppm P level limit applies if the field application area is greater than 1 mile from a named stream or lake. See map in current Texas Agronomy Technical Note 15, Phosphorus Assessment Tool for Texas for county rainfall designations.

³Not to exceed the annual nitrogen requirement rate.

⁴Not to exceed the annual nitrogen removal rate.

SWFTL* Texas A&M AgriLife Extension Soil, Water and Forage Testing Laboratory

ATTACHMENT F

SITE SPECIFIC INFORMATION FOR LAND MANAGEMENT UNITS FROM NUTRIENT MANAGEMENT PLAN

**Table 1: Alternative Crops and Yield Goals
Applicable to ALL Land Management Units:- 43 Acres**

Crop and Yield Goal	Nitrogen		P2O5	
	Requirement	Removal	Requirement	Removal
Alfalfa 1 Hay 10 Tons	530	532	180	101
Alfalfa Hay 12 Tons	640	638	180	121
Alfalfa Hay 2 Tons	120	106	35	20
Alfalfa Hay 4 Tons	210	213	80	40
Alfalfa Hay 6 Tons	300	319	130	60
Alfalfa Hay 8 Tons	420	426	180	81
Bahia 2 Cut Hay 7000 #	140	89	70	21
Bahia 3 Cut Hay 8000 #	210	102	80	24
Bahia 4 Cut Hay 9000 #	280	114	115	27
Bahia Grazing + 1 Hay	110	83	70	19
Bahia Grazing 1 AU/1 ac	260	114	70	27
Bahia Grazing 1 AU/2 ac	220	108	45	25
Bahia Grazing 1 AU/3 ac	180	102	45	24
Bahia Grazing 1 AU/4 ac	140	95	45	22
Bahia Grazing 1 AU/5 ac	100	79	45	18
Bahia Grazing 1 AU/6 ac	60	65	45	15
Cantaloupes 15-20 tons	120	88	105	82
Coastal 2 Cut + Graze	260	198	125	62
Coastal 2 Cut Hay	200	169	125	39
Coastal 3 Cut + Graze	360	257	125	80
Coastal 3 Cut Hay	300	238	125	74
Coastal 4 Cut Hay	400	257	170	80
Coastal 5-6 Cut Hay	500	297	170	93
Coastal Grazing + 1 Hay	160	145	70	34
Coastal Grazing 1 AU/0.5 ac	300	218	70	68
Coastal Grazing 1 AU/1 ac	240	198	70	62
Coastal Grazing 1 AU/2 ac	200	169	70	39
Coastal Grazing 1 AU/3 ac	160	145	70	34
Coastal Grazing 1 AU/4 ac	120	120	70	28
Coastal Grazing 1 AU/5 ac	90	103	70	24
Coastal Grazing 1 AU/6 ac	60	86	70	20
Coastal GC (30%DM) 21-23 Ton	400	345	170	95
Coastal GC (30%DM) 18-20 Ton	350	300	170	82
Coastal GC (30%DM) 15-17 Ton	300	255	125	70
Coastal GC (30%DM) 9-11 Ton	200	170	125	47
Common 2 Cut Hay 6000 #	140	113	80	26
Common 3 Cut Hay 7400 #	210	141	80	46
Common 4 Cut Hay 8000 #	280	152	80	49
Common 5-6 Cut Hay 9000 #	350	171	80	56
Common Grazing + 1 Hay	110	100	70	23
Common Grazing + 2 Hay	180	132	80	30
Common Grazing + 3 Hay	250	148	80	48
Common Grazing 1 AU/1 ac	260	152	70	49
Common Grazing 1 AU/2 ac	220	143	45	46
Common Grazing 1 AU/3 ac	180	132	45	30
Common Grazing 1 AU/4 ac	140	113	45	26
Common Grazing 1 AU/5 ac	100	94	45	22
Common Grazing 1 AU/6 ac	60	79	45	18

ATTACHMENT F

SITE SPECIFIC INFORMATION FOR LAND MANAGEMENT UNITS FROM NUTRIENT MANAGEMENT PLAN

**Table 1: Alternative Crops and Yield Goals
Applicable to ALL Land Management Units:- 43 Acres**

Crop and Yield Goal	Nitrogen		P2O5	
	Requirement	Removal	Requirement	Removal
Corn 111 - 130 bu	144	117	105	47
Corn 131 - 150 bu	164	135	105	54
Corn 151 - 170 bu	180	153	130	61
Corn 171 - 190 bu	210	171	130	68
Corn 191 - 210 bu	250	189	130	75
Corn 211 - 230 bu	280	207	130	83
Corn 231 - 250 bu	300	225	130	90
Corn 250 - 275 bu	325	243	130	97
Corn 276 - 300 bu	350	261	130	104
Corn 301 - 350 bu	375	279	130	111
Corn 50 - 70 bu	70	63	80	25
Corn 71 - 90 bu	90	81	80	32
Corn 91 - 110 bu	120	99	105	39
Cotton 0.5 Bale	25	18	30	9
Cotton 1.0 Bale	50	36	55	18
Cotton 2.0 Bale	100	71	105	35
Cotton 3.0 Bale	150	107	105	53
Cotton 3.5 Bale	175	125	105	62
Cotton 4.0 Bale	200	142	105	71
Cotton 4.5 Bale	225	160	105	80
Cotton 5.0 Bale	250	178	105	89
Eastern gamagrass- 3000 #	80	57	40	21
Eastern gamagrass- 6000 #	120	114	60	41
Fescue, Tall Hay/Graze 7000#	150	140	80	42
Grain Sorg. 1000 #	20	17	30	8
Grain Sorg. 10000 #	200	167	130	82
Grain Sorg. 1500 #	30	25	30	12
Grain Sorg. 2000 #	40	33	30	16
Grain Sorg. 3000 #	60	50	55	25
Grain Sorg. 4000 #	80	67	55	33
Grain Sorg. 5000 #	100	84	80	41
Grain Sorg. 6000 #	120	100	80	49
Grain Sorg. 7000 #	140	117	130	58
Grain Sorg. 8000 #	160	134	130	66
Grain Sorg. 9000 #	180	150	130	74
Guar 3500 lbs	25	22	80	76
Johnsongrass Hay 6000 #	140	101	80	32
Klein 3 Cut Hay 7200 #	150	83	55	16
Klein 4 Cut Hay 7800 #	150	90	55	18
Klein Grazing + 1 Hay	80	69	55	14
Klein Grazing 1 AU/1.5 ac	150	90	80	18
Klein Grazing 1 AU/2.5 ac	80	69	55	14
Klein Grazing 1 AU/6 ac	40	58	55	11
Legume Overseeded	80	60	105	15
Legume w/ryegrass	160	94	160	38
Midland Bermuda 4000 #	120	75	80	17
Midland Bermuda 6000 #	150	113	105	26
Midland Bermuda 8000 #	200	150	105	35

ATTACHMENT F

SITE SPECIFIC INFORMATION FOR LAND MANAGEMENT UNITS FROM NUTRIENT MANAGEMENT PLAN

**Table 1: Alternative Crops and Yield Goals
Applicable to ALL Land Management Units:- 43 Acres**

Crop and Yield Goal	Nitrogen		P2O5	
	Requirement	Removal	Requirement	Removal
Native Grazing or Hay 4000#	80	44	70	34
Native Grazing or Hay 3000#	40	33	55	25
Native Grazing or Hay 1500#	20	17	27	13
Native Grazing or Hay 750#	10	8	13	6
Oat Light Grazing	120	107	55	40
Oat Moderate Grazing	160	110	80	41
Oats Hay 2-3 tons	120	100	55	37
Oats Heavy Grazing plus Hay	200	117	80	43
Old World Bluestem- 3000 #	40	33	55	25
Old World Bluestem- 6000 #	80	66	55	51
Peanut Hay Dryland 1 Ton	50	47	70	11
Peanut Hay Dryland 2 Tons	100	93	70	22
Peanut Hay Irrigated 3 Tons	150	140	95	33
Peanuts Irrigated 4500 #	180	162	95	18
Rice Early 7500 #	195	104	45	41
Rice Late 7500 #	180	104	45	41
Rice plus Ratoon Early 10000 #	295	139	60	55
Rice plus Ratoon Late 10000 #	280	139	60	55
Rye Forage 5000 #	140	84	55	31
Rye Forage 7000 #	240	117	80	43
Ryegrass Hay 6000	140	100	55	37
Ryegrass Heavy Grazing	200	117	80	43
Ryegrass Moderate Grazing	140	84	55	31
SG Green Chop(25% DM) 8 to 9 tons	260	203	90	73
SG Green Chop(25% DM) 6 to 7 tons	200	150	80	57
SG Green Chop(25% DM) 4 to 5 tons	135	113	60	41
SG Green Chop(25% DM) 2 to 3 tons	75	68	40	24
SG Silage(35% DM) 12 to 14 tons	160	128	90	67
SG Silage(35% DM) 10 to 11 tons	120	101	70	53
SG Silage(35% DM) 8 to 9 tons	95	83	40	43
SG Silage(35% DM) 5 to 7 tons	70	64	30	34
Silage - Corn(35% DM) 11 - 15 Ton	140	119	80	58
Silage - Corn(35% DM) 16 - 20 Ton	240	183	100	77
Silage - Corn(35% DM) 21 - 25 Ton	350	263	105	96
Silage - Corn(35% DM) 26 - 30 Ton	420	315	135	115
Silage - Corn(33% DM) 7 - 10 Ton	83	79	60	38
Silage - Sorg(35% DM) 11 - 15 Ton	200	179	75	55
Silage - Sorg(35% DM) 16 - 20 Ton	280	238	95	74
Silage - Sorg(35% DM) 21 - 25 Ton	360	298	115	92
Silage - Sorg(35% DM) 26 - 30 Ton	380	315	130	111
Silage - Sorg(35% DM) 31 - 40 Ton	450	364	155	135
Silage - Sorg(35% DM) 41 - 50 Ton	580	455	190	168
Silage - Sorg(35% DM) 51 - 60 Ton	700	550	220	202
Silage - Sorg(35% DM) 7 - 10 Ton	125	119	60	37
Small Grain Heavy Grazing	240	112	105	41
Small Grain Light Grazing	60	75	80	28
Small Grain Moderate Grazing	160	97	105	36
Sorg. - Sudan Hay/Graze 11000 #	240	219	105	83

ATTACHMENT F

SITE SPECIFIC INFORMATION FOR LAND MANAGEMENT UNITS FROM NUTRIENT MANAGEMENT PLAN

**Table 1: Alternative Crops and Yield Goals
Applicable to ALL Land Management Units:- 43 Acres**

Crop and Yield Goal	Nitrogen		P2O5	
	Requirement	Removal	Requirement	Removal
Sorg. - Sudan Hay/Graze 7500 #	160	149	55	57
Sorg Forage Hay/Graze 11000 #	240	219	105	83
Sorg Forage Hay/Graze 7500 #	160	151	55	57
Soybean 30 bu	110	119	60	24
Soybean 50 bu	180	180	80	40
Sunflower 2000#	100	71	56	30
Sunflower 3000#	175	107	65	45
Triticale Graze or Hay 7000 #	160	117	105	43
Triticale Graze or Hay 9000 #	240	150	105	56
Watermelons 12 tons	80	53	55	49
Weeping Lovegrass 3500 #	70	39	55	30
Wheat Forage 2000 #	60	33	80	12
Wheat Forage 4000 #	160	67	105	25
Wheat Forage 6000 #	240	100	105	37
Wheat Grain 20 - 30 bu + Grazing	60	58	55	40
Wheat Grain 20 - 30 bu	45	37	55	26
Wheat Grain 31 - 40 bu + Grazing	80	71	75	48
Wheat Grain 31 - 40 bu	60	50	75	34
Wheat Grain 41 - 50 bu + Grazing	100	83	75	57
Wheat Grain 41 - 50 bu	75	62	75	43
Wheat Grain 51 - 60 bu + Grazing	120	96	90	65
Wheat Grain 51 - 60 bu	90	75	90	51
Wheat Grain 61 - 70 bu + Grazing	140	108	90	74
Wheat Grain 61 - 70 bu	105	87	90	60
Wheat Grain 71 - 80 bu + Grazing	160	121	95	82
Wheat Grain 71 - 80 bu	120	100	95	68
Wheat Grain 81 - 90 bu + Grazing	180	133	95	91
Wheat Grain 81 - 90 bu	135	112	95	77
Wheat Grain 91 - 100 bu + Grazing	200	146	95	99
Wheat Grain 91 - 100 bu	150	125	95	85
Wheat Heavy Grazing	240	114	105	42
Wheat Light Grazing	60	75	80	28
Wheat Moderate Grazing	160	97	105	36
Millet GC (25% DM) 18 - 24 Ton	180	140	60	46
Millet Hay/Graze 11000 #	150	95	45	40
Silage - Millet(35% DM) 15 - 18 Ton	190	139	60	46
Popcorn Shelled 3000 - 4000 #	80	74	80	27
Popcorn Shelled 4000 - 5000 #	100	92	80	33
Popcorn Shelled 5000 - 6000 #	120	110	80	40
Vetch Hay 1 Ton	70	60	105	14
Vetch Hay 2 Tons	140	120	105	28
Vetch Green chop(25%DM) 4 Tons	70	56	105	7
Vetch Green chop(25%DM) 8 Tons	140	112	105	14
Winter Pea Hay 5000#	140	137	105	35
Winter Pea Green chop(25%DM)8-9 Tons	140	123	105	32
Cowpea Hay 2 Tons	140	120	105	26
Cowpea GreenChop 8Tons(25%DM) Tons	140	120	105	26

ATTACHMENT F

SITE SPECIFIC INFORMATION FOR LAND MANAGEMENT UNITS (LMUs) FROM NUTRIENT MANAGEMENT PLAN**Table 2: Current Site Specific Information from NMP**

LMU Name	Acreage	Crop(s) and Yield Goal(s)	*Nitrogen Recommendation (lbs/ac)(*1)	*Phosphorus as P₂O₅ Recommendation (lbs/ac)(*1)	Nitrogen Maximum Application Rates (lbs/ac)* (*1)	Phosphorus as P₂O₅ Maximum Application Rates (lbs/ac)* (*1)
LMU #1	35	Coastal Graze: 1 AU/1 Acre Small Grain: Moderate Graze	300	82	300	82
LMU #2	8	Coastal Graze: 1 AU/1 Acre Small Grain: Moderate Graze	400	228	400	228

NOTE

*Nutrients Applied When Application is At Maximum Rates from NMP 590-633 Plan V 5.0 with the Print Date 10/12/2022. Any future revision to the NMP will be based on the current version of the 590-633 CNMP Component (NMP/NUP) Worksheet. Maximum rates are based on wastewater and manure analyses dated 07/23/2021 and 05/17/2018 and soil analysis report dated 10/25/2021 by the Soil, Water and Forage Testing Laboratory, AgriLife Extension, College Station, Texas. The Maximum Rates (lb/ac) for nitrogen (N) and phosphorus (P₂O₅) will be updated based on most recent annual analyses of soil and waste.

(*1) Nutrient recommendations and maximum amount of nutrients derived from all sources have been established for both nitrogen and phosphorus based on the NMP submitted with the application. The permittee is required to recalculate these values annually in accordance with the requirements of this permit. These annual recalculations do not constitute a substantial change and therefore do not require an amendment of this permit.



Compliance History Report

Compliance History Report for CN601479512, RN102804879, Rating Year 2022 which includes Compliance History (CH) components from September 1, 2017, through August 31, 2022.

Customer, Respondent, or Owner/Operator:	CN601479512, SCHOUTEN, PETER HENRY	Classification: SATISFACTORY	Rating: 51.56
Regulated Entity:	RN102804879, GOLDEN STAR DAIRY	Classification: HIGH	Rating: 0.00
Complexity Points:	1	Repeat Violator:	NO
CH Group:	12 - Agriculture, Forestry, Fishing, and Hunting		
Location:	THE FACILITY IS LOCATED ON THE N SIDE OF HWY 6 APPROX FOUR MILES N OF THE INTERSECTION OF HWY 6 AND FM 1238 IN BOSQUE COUNTY BOSQUE, TX, BOSQUE COUNTY		
TCEQ Region:	REGION 09 - WACO		
ID Number(s):	WASTEWATER AGRICULTURE EPA ID TX0142948 WASTEWATER AGRICULTURE PERMIT WQ0005387000		
Compliance History Period:	September 01, 2017 to August 31, 2022	Rating Year: 2022	Rating Date: 09/01/2022
Date Compliance History Report Prepared:	March 09, 2023		
Agency Decision Requiring Compliance History:	Enforcement		
Component Period Selected:	September 01, 2017 to August 31, 2022		
TCEQ Staff Member to Contact for Additional Information Regarding This Compliance History.			
Name:	JOY ALABI		Phone: (512) 239-1318

Site and Owner/Operator History:

- | | |
|--|-----|
| 1) Has the site been in existence and/or operation for the full five year compliance period? | YES |
| 2) Has there been a (known) change in ownership/operator of the site during the compliance period? | NO |

Components (Multimedia) for the Site Are Listed in Sections A - J

A. Final Orders, court judgments, and consent decrees:

N/A

B. Criminal convictions:

N/A

C. Chronic excessive emissions events:

N/A

D. The approval dates of investigations (CCEDS Inv. Track. No.):

Item 1	July 20, 2018	(1504716)
Item 2	May 10, 2019	(1557993)
Item 3	August 27, 2020	(1640059)
Item 4	February 12, 2021	(1701724)
Item 5	February 16, 2022	(1794447)

E. Written notices of violations (NOV) (CCEDS Inv. Track. No.):

A notice of violation represents a written allegation of a violation of a specific regulatory requirement from the commission to a regulated entity. A notice of violation is not a final enforcement action, nor proof that a violation has actually occurred.

N/A

F. Environmental audits:

N/A

G. Type of environmental management systems (EMSs):

N/A

H. Voluntary on-site compliance assessment dates:

N/A

I. Participation in a voluntary pollution reduction program:

N/A

J. Early compliance:

N/A

Sites Outside of Texas:

N/A



Compliance History Report

Compliance History Report for CN601479520, RN102804879, Rating Year 2022 which includes Compliance History (CH) components from September 1, 2017, through August 31, 2022.

Customer, Respondent, or Owner/Operator:	CN601479520, SCHOUTEN, NOVA DARLENE	Classification: SATISFACTORY	Rating: 51.56
Regulated Entity:	RN102804879, GOLDEN STAR DAIRY	Classification: HIGH	Rating: 0.00
Complexity Points:	1	Repeat Violator:	NO
CH Group:	12 - Agriculture, Forestry, Fishing, and Hunting		
Location:	THE FACILITY IS LOCATED ON THE N SIDE OF HWY 6 APPROX FOUR MILES N OF THE INTERSECTION OF HWY 6 AND FM 1238 IN BOSQUE COUNTY BOSQUE, TX, BOSQUE COUNTY		
TCEQ Region:	REGION 09 - WACO		
ID Number(s):	WASTEWATER AGRICULTURE EPA ID TX0142948 WASTEWATER AGRICULTURE PERMIT WQ0005387000		
Compliance History Period:	September 01, 2017 to August 31, 2022	Rating Year: 2022	Rating Date: 09/01/2022
Date Compliance History Report Prepared:	March 09, 2023		
Agency Decision Requiring Compliance History:	Enforcement		
Component Period Selected:	September 01, 2017 to August 31, 2022		
TCEQ Staff Member to Contact for Additional Information Regarding This Compliance History.			
Name:	JOY ALABI	Phone:	(512) 239-1318

Site and Owner/Operator History:

- | | |
|--|-----|
| 1) Has the site been in existence and/or operation for the full five year compliance period? | YES |
| 2) Has there been a (known) change in ownership/operator of the site during the compliance period? | NO |

Components (Multimedia) for the Site Are Listed in Sections A - J

A. Final Orders, court judgments, and consent decrees:
N/A

B. Criminal convictions:
N/A

C. Chronic excessive emissions events:
N/A

D. The approval dates of investigations (CCEDS Inv. Track. No.):

Item 1	July 20, 2018	(1504716)
Item 2	May 10, 2019	(1557993)
Item 3	August 27, 2020	(1640059)
Item 4	February 12, 2021	(1701724)
Item 5	February 16, 2022	(1794447)

E. Written notices of violations (NOV) (CCEDS Inv. Track. No.):

A notice of violation represents a written allegation of a violation of a specific regulatory requirement from the commission to a regulated entity. A notice of violation is not a final enforcement action, nor proof that a violation has actually occurred.

N/A

F. Environmental audits:
N/A

G. Type of environmental management systems (EMSs):

N/A

H. Voluntary on-site compliance assessment dates:

N/A

I. Participation in a voluntary pollution reduction program:

N/A

J. Early compliance:

N/A

Sites Outside of Texas:

N/A

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY



NOTICE OF APPLICATION AND PRELIMINARY DECISION FOR CAFO WATER QUALITY PERMIT NEW PERMIT NO. WQ0005387000

APPLICATION AND PRELIMINARY DECISION. Peter Henry Schouten, Sr. and Nova Darlene Schouten, 3728 County Road 229, Hico, Texas 76457 have applied to the Texas Commission on Environmental Quality (TCEQ) for a new Texas Pollutant Discharge Elimination System (TPDES) Permit No. WQ0005387000, for a Concentrated Animal Feeding Operation (CAFO), to authorize the applicant to confine 2,000 head of dairy heifers. The location of this proposed operation was previously permitted as a State-only dairy cattle facility with 480 head, all of which were milking cows, under the CAFO individual permit with Permit Number WQ0003656000. The permit was canceled on October 12, 2021. TCEQ received this application on May 12, 2022.

The facility is located on the north side of State Highway 6 on County Road 2495 which is approximately 5.5 miles east of the intersection of State Highway 6 and US Highway 281, in Bosque County, Texas. The facility is located in the drainage area of the North Bosque River in Segment No. 1226 of the Brazos River Basin. This link to an electronic map of the site or facility's general location is provided as a public courtesy and is not part of the application or notice. <https://gisweb.tceq.texas.gov/LocationMapper/?marker=-97.949722,31.983055&level=18>. For the exact location, refer to the application.

The TCEQ Executive Director has completed the technical review of the application and prepared a draft permit. The draft permit, if approved, would establish the conditions under which the facility must operate. This permit is consistent with the requirements of the antidegradation implementation procedures in 30 Texas Administrative Code §307.5 (c)(2)(G) of the Texas Surface Water Quality Standards and no lowering of water quality is anticipated. The TCEQ Executive Director has made a preliminary decision that this permit, if issued, meets all statutory and regulatory requirements. The permit application, Executive Director's Preliminary Decision, and draft permit are available for viewing and copying at the **Bosque County Extension Office, 104 S Fuller Street, Meridian, Texas.**

CHANGE IN LAW. The Texas Legislature enacted **Senate Bill 709**, effective **September 1, 2015**, amending the requirements for comments and contested case hearings. This application is subject to those changes in law.

PUBLIC COMMENT / PUBLIC MEETING. You may submit public comments or request a public meeting about this application. The purpose of a public meeting is to provide the opportunity to submit comments or to ask questions about the application. TCEQ holds a public meeting if the Executive Director determines that there is a significant degree of public interest in the application or if requested by a local legislator. A public meeting is not a contested case hearing.

OPPORTUNITY FOR A CONTESTED CASE HEARING. After the deadline for submitting public comments, the Executive Director will consider all timely comments and prepare a

response to all relevant and material, or significant public comments. **Unless the application is directly referred for a contested case hearing, the response to comments will be mailed to everyone who submitted public comments and to those persons who are on the mailing list for this application. If comments are received, the mailing will also provide instructions for requesting a contested case hearing or reconsideration of the Executive Director's decision.** A contested case hearing is a legal proceeding similar to a civil trial in a state district court.

TO REQUEST A CONTESTED CASE HEARING, YOU MUST INCLUDE THE FOLLOWING ITEMS IN YOUR REQUEST: your name, address, phone number, applicant's name and permit number, the location and distance of your property/activities relative to the facility, a specific description of how you would be adversely affected by the facility in a way not common to the general public, a list of all disputed issues of fact that you submit during the comment period and the statement "[I/we] request a contested case hearing." If the request for contested case hearing is filed on behalf of a group or association, the request must designate the group's representative for receiving future correspondence, identify by name and physical address an individual member of the group who would be adversely affected by the proposed facility or activity, provide the information discussed above regarding the affected member's location and distance from the facility or activity, explain how and why the member would be affected, and explain how the interests the group seeks to protect are germane to the group's purpose.

Following the close of all applicable comment and request periods, the Executive Director will forward the application and any requests for reconsideration or for a contested case hearing to the TCEQ Commissioners for their consideration at a scheduled Commission meeting.

The Commission will only grant a contested case hearing on disputed issues of fact that are relevant and material to the Commission's decision on the application. Further, the Commission will only grant a hearing on issues that were raised in timely filed comments that were not subsequently withdrawn. **If a hearing is granted, the subject of a hearing will be limited to disputed issues of fact or mixed questions of fact and law relating to relevant and material water quality concerns submitted during the comment period.**

EXECUTIVE DIRECTOR ACTION. The Executive Director may issue final approval of the application unless a timely contested case hearing request or request for reconsideration is filed. If a timely hearing request or request for reconsideration is filed, the Executive Director will not issue final approval of the permit and will forward the application and request to the TCEQ Commissioners for their consideration at a scheduled Commission meeting.

MAILING LIST. If you submit public comments, a request for a contested case hearing or a reconsideration of the Executive Director's decision, you will be added to the mailing list for this specific application to receive future public notices mailed by the Office of the Chief Clerk. In addition, you may request to be placed on: (1) the permanent mailing list for a specific applicant name and permit number; and/or (2) the mailing list for a specific county. If you wish to be placed on the permanent and/or the county mailing list, clearly specify which list(s) and send your request to TCEQ Office of the Chief Clerk at the address below.

All written public comments and public meeting requests must be submitted to the Office of the Chief Clerk, MC 105, TCEQ, P.O. Box 13087, Austin, TX 78711-3087 or

electronically at <https://www14.tceq.texas.gov/epic/eComment/> within 30 days from the date of newspaper publication of this notice.

INFORMATION AVAILABLE ONLINE. For details about the status of the application, visit the Commissioners' Integrated Database at www.tceq.texas.gov/goto/cid. Search the database using the permit number for this application, which is provided at the top of this notice.

AGENCY CONTACTS AND INFORMATION. Public comments and requests must be submitted either electronically at <https://www14.tceq.texas.gov/epic/eComment/>, or in writing to the Texas Commission on Environmental Quality, Office of the Chief Clerk, MC-105, P.O. Box 13087, Austin, Texas 78711-3087. Any personal information you submit to the TCEQ will become part of the agency's record; this includes email addresses. For more information about this permit application or the permitting process, please call the TCEQ Public Education Program, Toll Free, at 1-800-687-4040 or visit their website at www.tceq.texas.gov/goto/pep. Si desea información en Español, puede llamar al 1-800-687-4040.

Further information may also be obtained from Mr. Peter Henry Schouten, Sr. at the address stated above or by calling Mr. Corey Mullin, Enviro-Ag Engineering, Inc. at (254) 965-3500.

Issuance Date:



TPDES Permit No. WQ0005387000
[For TCEQ use only EPA ID No. TX0142948]

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
P.O. Box 13087
Austin, Texas 78711-3087

TPDES PERMIT FOR CONCENTRATED ANIMAL FEEDING OPERATIONS

under provisions of
Section 402 of the Clean Water Act
Chapter 26 of the Texas Water Code and
Section 382.051 of the Texas Clean Air Act

I. Permittee:

- A. Owner: Peter Henry Schouten, Sr. & Nova Darlene Schouten
- B. Business Name: Golden Star Heifer Ranch
- C. Owner Address: 3728 County Road 229
Hico, Texas 76457

II. Type of Permit: New/ Air & Water Quality

III. Nature of Business Producing Waste: Concentrated Animal Feeding Operation (CAFO): **Dairy Heifer Replacement**; SIC No. **0241**

IV. General Description and Location of Waste Disposal System:

Maximum Capacity: 2,000 Head

Site Plan: See Attachment A

Retention Control Structures (RCSs) total required capacities without freeboard (Acre-Feet): RCS #1 – 16.85

Land Management Units (LMUs) (Acres): LMU #1 – 35, LMU #2 – 8; See Attachment B for locations

Terms of the Nutrient Management Plan (NMP): See Attachments E and F

Location: The facility is located on the north side of State Highway 6 on County Road 2495 which is approximately 5.5 miles east of the intersection of State Highway 6 and US Highway 281, Bosque County, Texas. Latitude: 31.983056° N and Longitude: 97.949722° W. See Attachment C

Drainage Basin: The facility is located in the drainage area of the North Bosque River in Segment No. 1226 of the Brazos River Basin

This permit contained herein shall expire at midnight, five years after the date of Commission approval.

ISSUED DATE:

For the Commission

V. Rule and Statute Applicability

- A. Definitions.** All definitions in Chapter 26 of the Texas Water Code, 30 Texas Administrative Code (TAC) Chapters 305 and 321, Subchapter B shall apply to this permit and are incorporated by reference.
- B. Amendments, renewals, transfers, corrections, revocation, and suspension of permit.** The requirements in 30 TAC Chapter 305, Subchapter D apply to this permit.

VI. Permit Applicability and Coverage

- A. Discharge Authorization.** No discharge is authorized by this permit except as allowed by the provisions in this permit and 40 Code of Federal Regulations Chapter 412, which is adopted by reference in 30 TAC Chapter 305.541.
- B. Application Applicability.** The application pursuant to which the permit has been issued is incorporated herein; provided, however, that in the event of a conflict between the provisions of this permit and the application, the provisions of the permit shall control.
- C. Air Quality Authorization.** The permittee shall comply with the requirements listed in Section VII.D. of this permit and shall maintain a copy of the odor control plan in the Pollution Prevention Plan.

VII. Pollution Prevention Plan (PPP) Requirements**A. Technical Requirements**

1. PPP General Requirements.
 - (a) The permittee shall update and implement a PPP for this facility upon issuance of this permit. The PPP shall:
 - (1) be prepared in accordance with good engineering practices;
 - (2) include measures necessary to limit the discharge of pollutants to surface water in the state;
 - (3) describe and ensure the implementation of practices which are to be used to assure compliance with the limitations and conditions of this permit;
 - (4) include all information listed in Section VII.A.;
 - (5) identify specific individual(s) who is/are responsible for development, implementation, operation, maintenance, inspections, recordkeeping, and revision of the PPP. The activities and responsibilities of the pollution prevention personnel shall address all aspects of the facility's PPP;
 - (6) be signed by the permittee or other signatory authority in accordance with 30 TAC §305.44 (relating to Signatories to Applications); and
 - (7) be retained on-site.
 - (b) The permittee shall amend the PPP:
 - (1) before any change in the number or configuration of LMUs;
 - (2) before any increase in the maximum number of animals;
 - (3) before operation of any new control facilities;
 - (4) before any change that has a significant effect on the potential for the discharge of pollutants to water in the state;
 - (5) if the PPP is not effective in achieving the general objectives of controlling discharges of pollutants from the production area or LMUs; or
 - (6) within 90 days following written notification from the Executive Director that the plan does not meet one or more of the minimum requirements of this permit.

- (c) Maps. The permittee shall maintain the following maps as part of the PPP.
 - (1) Site Map. The permittee shall update the site map as needed, by permit amendment, to reflect the layout of the facility. The map shall include, at a minimum, the following information: facility boundaries; pens; barns; berms; open lots; manure storage areas; areas used for composting; dead animal burial sites; RCSs or other control facilities; LMUs; water wells, abandoned and in use, which are on-site or within 500 feet of the facility boundary; and all springs, lakes, or ponds located on-site or within one mile of the facility boundary.
 - (2) Land Application Map. Natural Resource Conservation Service (NRCS) soil survey maps of all LMUs shall depict:
 - (i) the boundary of each LMU and acreage;
 - (ii) all buffer zones required by this permit; and
 - (iii) the unit name and symbol of all soils in the LMU(s).
 - (d) Potential Pollutant Sources/Site Evaluation.
 - (1) Potential Pollutant Sources. The PPP shall include a description of potential pollutant sources and indicate all measures that will be used to prevent contamination from the pollutant sources. Potential pollutant sources include any activity or material that may reasonably be expected to add pollutants to surface water in the state from the facility.
 - (2) Soil Erosion. The PPP shall identify areas that, due to topography, activities, or other factors, have a high potential for significant soil erosion. If these areas have the potential to contribute pollutants to surface water in the state, the PPP shall identify measures used to limit erosion and pollutant runoff.
 - (3) Control Facilities. The PPP shall include the location and a description of control facilities. The control facilities shall be appropriate for the identified sources of pollutants at the CAFO.
 - (4) Recharge Feature Certification. The recharge feature certification submitted in the permit application shall be implemented, updated by the permittee as often as necessary, and maintained in the PPP.
 - (5) 100-year Floodplain. All control facilities, including holding pens and RCSs, shall be located outside of the 100-year floodplain or protected from inundation and damage that may occur during the flood.
 - (e) Spill Prevention and Recovery. The permittee shall take appropriate measures necessary to prevent spills and to clean up spills of any toxic pollutant. Where potential spills can occur, materials, handling procedures and storage shall be specified. The permittee shall identify the procedures for cleaning up spills and shall make available the necessary equipment to personnel to implement a clean up. The permittee shall store, use, and dispose of all pesticides in accordance with label instructions. There shall be no disposal of pesticides, solvents or heavy metals, or of spills or residues from storage or application equipment or containers, into RCSs. Incidental amounts of such substances entering a RCS as a result of stormwater transport of properly applied chemicals is not a violation of this permit.
- 2. Discharge Restrictions and Monitoring Requirements.
 - (a) Discharge Restrictions. Wastewater may be discharged to water in the state from a properly designed (25-year frequency 10-day duration (25 year/10 day)),

constructed, operated and maintained RCS whenever chronic or catastrophic rainfall, or catastrophic conditions cause an overflow. There shall be no effluent limitations on discharges from RCSs which meet the above criteria.

- (b) Monitoring Requirements. The permittee shall sample all discharges from the RCS(s) and LMU(s). The effluent shall be analyzed by a National Environmental Laboratory Accreditation Conference (NELAC) accredited lab for the parameters shown in Table 1.

Table 1: Monitoring Requirements

Parameter	Sample Type	Sample Frequency
5 Day Biochemical Oxygen Demand (BOD ₅)	Grab	1/day ¹
<i>Escherichia coli</i>	Grab	1/day ¹
Total Dissolved Solids (TDS)	Grab	1/day ¹
Total Suspended Solids (TSS)	Grab	1/day ¹
Nitrate (N)	Grab	1/day ¹
Total Phosphorus	Grab	1/day ¹
Ammonia Nitrogen	Grab	1/day ¹
Pesticides ²	Grab	1/day ¹

¹Sample shall be taken within the first thirty (30) minutes following the initial discharge and then once per day while discharging.

²Any pesticide which the permittee has reason to believe could be present in the wastewater.

- (c) If the permittee is unable to collect samples due to climatic conditions that create dangerous conditions for personnel (such as local flooding, high winds, hurricane, tornadoes, electrical storms, etc.), the permittee shall document why discharge samples could not be collected. Once dangerous conditions have passed, the permittee shall conduct the required sampling.
3. RCS Design and Construction.
- (a) RCS Certifications
- (1) The permittee shall ensure that the design and completed construction of the RCS(s) (See Special Provision X.A.1) is certified by a licensed Texas Professional Engineer prior to use. The certification shall be signed and sealed in accordance with the Texas Board of Professional Engineers requirements.
- (2) Documentation of liner and capacity certifications must be completed for each RCS prior to use and kept on-site in the PPP. Table 2 below shows the current RCS liner and capacity certifications.

Table 2: Current Liner and Capacity Certifications

RCS Name	Liner Certification Date	Capacity Certification Date	Certified Capacity (Acre-Feet)
RCS #1	March 2, 2010	March 2, 2010	20.47
Settling Basin #1	March 2, 2010	Not Applicable	

- (b) Design and Construction Standards. The permittee shall ensure that each RCS is designed and constructed in accordance with the technical standards developed by the NRCS, American Society of Agricultural and Biological Engineers,

American Society of Civil Engineers, or American Society of Testing Materials that are in effect at the time of construction. Where site-specific variations are warranted, a licensed Texas Professional Engineer must document these variations and their appropriateness to the design.

- (c) RCS Drainage Area.
 - (1) The permittee shall describe in the PPP and implement measures that will be used to minimize entry of uncontaminated stormwater into the RCS(s).
 - (2) Stormwater must be diverted, as indicated in Attachment A - Site Map from contact with feedlots and holding pens, and manure and/or process wastewater storage systems. In cases where it is not feasible to divert stormwater from the production area, the retention structures shall include adequate storage capacity for the additional stormwater. Stormwater includes rain falling on the roofs of facilities, runoff from adjacent land, or other sources.
 - (3) The permittee shall maintain the drainage area to minimize ponding or puddling of water outside the RCS(s).
- (d) RCS Sizing
 - (1) The design plan must include documentation describing the sources of information, assumptions and calculations used in determining the appropriate volume capacity and structural features of each RCS, including embankment and liners.
 - (2) Design Rainfall Event. Each RCS authorized under this permit shall be designed and constructed to meet or exceed the margin of safety, equivalent to the volume of runoff and direct precipitation from the 25 year/10 day rainfall event. The design rainfall event for this CAFO is **12.2** inches.
 - (3) Any RCS capacity that is greater than the minimum capacity required by this permit may be allocated to additional sludge storage volume, which will increase the design sludge cleanout interval for the RCS. The new sludge cleanout interval will be identified in the RCS management plan maintained in the PPP, the stage storage tables will accurately reflect the new volumes, and the pond markers will visually identify the new volume levels.
- (e) Irrigation Equipment Design. The permittee shall ensure that the irrigation system design is capable of removing wastewater from the RCS(s) on a regular schedule. Equipment capable of dewatering the RCS(s) shall be available and operational whenever needed to restore the operating capacity required by the RCS management plan.
- (f) Embankment Design and Construction. The RCS(s) have a depth of water impounded against the embankment at the spillway elevation of three feet or more, therefore the RCS(s) are considered to be designed with an embankment. The PPP shall include a description of the design specifications for the RCS embankments. The following design specifications are required for all new construction and/or the modified portions of existing RCSs.
 - (1) Soil Requirements. Soils used in the embankment shall be free of foreign material such as rocks larger than four (4) inches, trash, brush, and fallen trees.
 - (2) Embankment Lifts. The embankment shall be constructed in lifts or layers no more than eight (8) inches compacted to six (6) inches thick at a

- minimum compaction effort of 95 per cent (%) Standard Proctor Density (ASTM D698) at -1% to +3% of optimum moisture content.
- (3) Stabilize Embankment Walls. All embankment walls shall be stabilized to prevent erosion or deterioration.
 - (4) Compaction Testing. Embankment construction must be accompanied by certified compaction tests including in place density and moisture in accordance with the American Society of Testing Materials (ASTM) D1556, D2167 or D2937 for density and D2216, D4643, D4944 or D4959 for moisture, or D6938 for moisture and density or equivalent testing standards. Compaction tests will provide support for the liner certification performed by a licensed Texas Professional Engineer as meeting a permeability no greater than 1×10^{-7} centimeters per second (cm/sec) over a thickness of 18 inches or its equivalency in other materials, and not to exceed a specific discharge through the liner of 1.1×10^{-6} cm/sec with a water level at spillway depth.
 - (5) Spillway or Equivalent Protection. The new or modified RCS(s), which are constructed with embankments, shall be constructed with a spillway or other outflow device properly sized according to NRCS design and specifications to protect the integrity of the embankment.
 - (6) Embankment Protection. The new or modified RCS(s) must have a minimum of two (2) vertical feet of materials equivalent to those used at the time of design and construction between the top of the embankment and the structure's spillway. RCS(s) without spillways must have a minimum of two (2) vertical feet between the top of the embankment and the required storage capacity.
 - (g) RCS Liner Requirements. For all new construction and for all structural modifications of existing RCS(s), the RCS must have a liner consistent with one of the following:
 - (1) In-situ Material. In-situ material is undisturbed, in-place, native soil material. In-situ materials must at least meet the minimum criteria for hydraulic conductivity and thickness and specific discharge as described in Section VII.A.3(g)(2) of this permit. Samples shall be collected and analyzed in accordance with Section VII.A.3(g)(3) of this permit. This documentation must be certified by a licensed Texas Professional Engineer or licensed Texas Professional Geoscientist.
 - (2) Constructed or Installed Liner.
 - (i) Constructed or installed liners must be designed by a licensed Texas Professional Engineer. The liner must be constructed in accordance with the design and certified as such by a licensed Texas Professional Engineer. Compaction tests and post construction sampling and analyses, conducted in accordance with Sections VII.A.3(f)(4) and VII.A.3(g)(3) of this permit, will provide support for the liner certification.
 - (ii) Liners shall be designed and constructed to have hydraulic conductivities no greater than 1×10^{-7} centimeters per second (cm/sec), with a thickness of 18 inches or its equivalency in other materials, and not to exceed a specific discharge through the liner of 1.1×10^{-6} cm/sec with a water level at spillway depth.

- (iii) Constructed or installed liners must be designed and constructed to meet the soil requirements, lift requirements, and compaction testing requirements as listed in Section VII.A.3(f)(1), (2) and (4) of this permit.
 - (3) Liner Sampling and Analyses
 - (i) The licensed Texas Professional Engineer or licensed Texas Professional Geoscientist shall use best professional practices to ensure that corings or other liner samples will be appropriately plugged with material that also meets liner requirements of this subsection.
 - (ii) Samples shall be collected in accordance with ASTM D1587 or other method approved by the Executive Director. For each RCS, a minimum of two core samples collected from the bottom of the RCS and a minimum of at least one core sample from each sidewall shall be collected. Additional samples may be necessary based on the best professional judgment of the licensed Professional Engineer. Distribution of the samples shall be representative of liner characteristics, and proportional to the surface area of the sidewalls and floor. Documentation shall be provided identifying the sample locations with respect to the RCS liner.
 - (iii) Undisturbed samples shall be analyzed for hydraulic conductivity in accordance with ASTM D5084 or other method approved by the Executive Director.
 - (4) Leak Detection System. If notified by the Executive Director that significant potential exists for the adverse impact of water in the state or drinking water from leakage of a RCS, the permittee shall install a leak detection system or monitoring well(s) in accordance with that notice. Documentation of compliance with the notification must be kept with the PPP, as well as copies of all sampling data.
- 4. Special Considerations for Existing RCS(s). An existing RCS that has been properly maintained without any modifications and has no apparent structural problems or leakage is considered to be properly designed with respect to the embankment design and construction and liner requirements of this permit, provided that any required documentation was completed in accordance with the requirements at the time of construction. If no documentation exists, the RCS must be certified by a licensed Texas Professional Engineer as providing protection equivalent to the requirements of this permit.
- 5. Operation and Maintenance of RCSs.
 - (a) The permittee must operate and maintain a margin of safety in the RCS(s) to contain the volume of runoff and direct precipitation from the 25 year/10 day rainfall event.
 - (b) The permittee shall implement a RCS management plan incorporating the margin of safety developed by a licensed Texas Professional Engineer (See Special Provision X.A.2). The management plan shall become a component of the PPP, shall be developed for each RCS, and must describe or include:
 - (1) RCS management controls appropriate for the CAFO and the methods and procedures for implementing such controls;

- (2) the methods and procedures for proper operation and maintenance of each RCS consistent with the system design;
 - (3) the appropriateness and priorities of any controls reflecting the identified sources of pollutants at the facility;
 - (4) a stage/storage table for each RCS with minimum depth increments of one-foot, including the storage volume provided at each depth;
 - (5) a second table or sketch that includes increments of water level ranges for volumes of total design storage, including the storage volume provided at each specified depth (or water level) and the type of storage designated by that depth; and
 - (6) the planned end of month storage volume anticipated for each RCS for each month of the year and the corresponding operating depth expected at the end of each month of the year, based on the design assumptions.
- (c) The wastewater level in the RCS shall be maintained at or below the maximum operating level expected during that month, according to the design of the RCS. When rainfall volumes exceed average rainfall data used in design calculations planned end of month storage volumes may encroach into the design storm event storage provided that documentation is available to support that the design parameters have been exceeded and that the RCS is otherwise being managed according to the RCS management plan criteria. In circumstances where the RCS has a water level exceeding the expected end of the month depth, the permittee shall document in the PPP why the level of water in the structure is not at or below the expected depth. Also, if the water level in the RCS encroaches into the storage volume reserved for the design rainfall event, the permittee must document, in the PPP, the conditions that resulted in this occurrence. As soon as irrigation is feasible and not prohibited by Section VII.A.8(f) and (g), the permittee shall irrigate until the RCS water level is at or below the maximum operating level expected during that month.
- (d) Imminent Overflow. If a RCS is in danger of imminent overflow from chronic or catastrophic rainfall or catastrophic conditions, the permittee shall take reasonable steps to irrigate wastewater to the LMU(s) only to the extent necessary to prevent overflow from the RCS. If irrigation results in a discharge from a LMU, the permittee shall collect samples from the drainage pathway at the point of the discharge from the edge of the LMU where the discharge occurs, analyze the samples for the parameters listed in Section VII.A.2.(b), and provide the appropriate notifications as required by Section VIII.B of this permit and 30 TAC §321.44.
- (e) Permanent Pond Marker. The permittee shall install and maintain a permanent pond marker (measuring device) in the RCS(s), visible from the top of the levee to show the following:
- (1) the volume for the design rainfall event;
 - (2) one-foot increments beginning from the bottom of the RCS to the top of the embankment or spillway; and
 - (3) design volume levels for maximum sludge accumulation and operating volume (calculated process generated wastewater plus rainfall runoff minus evaporation) must be identifiable on the marker.
- (f) Rain Gauge. A rain gauge capable of measuring the design rainfall event shall be kept on-site and properly maintained.

- (g) **Sludge Removal.** The permittee shall monitor sludge accumulation and depth, based upon the design sludge storage volume in the RCS. (See Special Provision X.E for additional requirements related to sludge monitoring.) Sludge shall be removed from the RCS(s) in accordance with the design schedule for cleanout in the RCS Management Plan to prevent the accumulation of sludge from exceeding the designed sludge volume of the structure. Removal of sludge shall be conducted during favorable wind conditions that carry odors away from nearby receptors. Sludge may only be beneficially utilized by land application to a LMU if in accordance with a nutrient management plan or disposed of in accordance with Section VII.A.8(e) of this permit. A sludge sample must be collected and analyzed in accordance with Section VII.A.9(a) prior to each clean out.
 - (h) **Liner Protection and Maintenance.** The permittee shall maintain the liner to inhibit infiltration of wastewater. Liners must be protected from animals by fences or other protective devices. No tree shall be allowed to grow such that the root zone would intrude or compromise the structure of the liner or embankment. Any mechanical or structural damage to the liner shall be evaluated by a licensed Texas Professional Engineer within thirty (30) days of the damage.
 - (i) **Closure Requirements.** A closure plan must be developed when a RCS will no longer be used and/or when the CAFO ceases or plans to cease operation. The closure plan shall be submitted to the appropriate regional office and the CAFO Permits Team of the Water Quality Division in Austin (MC-150) within ninety (90) days of when operation of the CAFO or the RCS terminates. The closure plan for the RCS must, at a minimum, be developed using standards contained in the NRCS Practice Standard Code 360 (Closures of Waste Impoundments), as amended, and using the guidelines contained in the Texas AgriLife Extension/ NRCS publication #B-6122 (Closure of Lagoons and Earthen Manure Storage Structures), as amended. The permittee shall maintain or renew its existing authorization and maintain compliance with the requirements of this permit until the facility has been closed.
6. **General Operating Requirements.**
- (a) **Flush/Scrape Systems.** Flush/scrape systems shall be flushed/scraped in accordance with design criteria in the application.
 - (b) **Pen Maintenance.** The permittee shall maintain earthen pens to ensure good drainage, minimize ponding, and minimize the entrance of uncontaminated storm water to the RCSs.
 - (c) **Carcass Disposal.** Carcasses shall be collected within twenty four (24) hours of death and properly disposed of within three days of death in accordance with Texas Water Code, Chapter 26; Texas Health and Safety Code, Chapter 361; and 30 TAC Chapter 335 (relating to Industrial Solid Waste and Municipal Hazardous Waste) unless otherwise provided for by the commission. Animals must not be disposed of in any liquid manure or process wastewater system. Disposal of diseased animals shall also be conducted in a manner that prevents a public health hazard in accordance with Texas Agriculture Code, §161.004, and 4 TAC §31.3, §58.31(b), and §59.12. The collection area for carcasses shall be addressed in the potential pollutant sources section of the PPP with the management practices to prevent contamination of surface or groundwater, control access, and minimize odor.

- (d) Manure and Sludge Storage
 - (1) Manure and sludge storage capacity requirements shall be based on manure and sludge production, land availability, and the NRCS Field Office Technical Guide (Part 651, Chapter 10) or equivalent standards.
 - (2) When manure is stockpiled, it shall be stored in a well-drained area, and the top and sides of stockpiles shall be adequately sloped to ensure proper drainage and prevent ponding of water. Runoff from manure or sludge storage piles must be retained on-site. If the manure or sludge areas are not roofed or covered with impermeable material, protected from external rainfall, or bermed to protect from runoff during the design rainfall event, the manure or sludge areas must be located within the drainage area of a RCS and accounted for in the design calculations of the RCS.
 - (3) Manure or sludge stored for more than thirty (30) days must be stored within the drainage area of a RCS or stored in a manner (i.e. storage shed, bermed area, tarp covered area, etc.) that otherwise prevents contaminated storm water runoff from leaving the storage area. All storage sites and structures located outside the drainage area shall be designated on the site map. Storage for more than thirty (30) days is prohibited in the 100-year floodplain.
 - (4) Temporary storage of manure or sludge shall not exceed thirty (30) days and is allowed only in a LMU or a RCS drainage area. Temporary storage of manure and sludge in the 100-year floodplain, near water courses or near recharge features may be allowed if protected by berms or other structures to prevent inundation or damage that may occur.
 - (e) Composting. Composting on-site shall be performed in accordance with 30 TAC Chapter 332 (relating to Composting). The permittee may compost waste generated on-site, including manure, sludge, bedding, feed and dead animals. The permittee may add agricultural products to provide an additional carbon source or bulking agent to aid in the composting process. If the compost areas are not roofed or covered with impermeable material, protected from external rainfall, or bermed to protect from runoff in the case of the design rainfall event, the compost areas must be located within the drainage of an RCS and must be shown on the site plan and accounted for in the design calculations of the RCS.
7. Site Specific Conservation Practice.
- (a) Well Protection Requirements
 - (1) The permittee shall not locate or operate a new RCS, holding pen, or LMU within the following buffer zones:
 - (i) public water supply wells 500 feet;
 - (ii) wells used exclusively for private water supply 150 feet; or
 - (iii) wells used exclusively for agriculture irrigation 100 feet.
 - (2) Irrigation of wastewater directly over a well head will require a structure protective of the wellhead that will prevent contact from irrigated wastewater.
 - (3) Construction of any new water wells must be done by a licensed water well driller.
 - (4) All abandoned and unuseable wells shall be plugged according to 16 TAC §76.104.

- (5) Table 3 below shows the status of all wells on the facility and the best management practices (BMPs) used to protect them.

Table 3: Well Status and Best Management Practices

Well Number*	Status	BMPs
1	Producing	Maintain 150 ft buffer

*Well Numbers correspond with Attachment D

- (b) Soil Limitations. The permittee shall implement the BMPs on Table 4 for the specified soil series.

Table 4: Soil Limitations and Best Management Practices

Soil Series and Map ID	Potential Limitations	BMPs*
Hico-Windthorst: – HwD3	Depth to soft bedrock	Land application will be based upon the Available Water Capacity (Refer to the nutrient management plan (NMP)) of the soil and will not exceed agronomic rates for nutrients. No land application to inundated soils.
Purves-Maloterre Complex:- PmC	Droughty Depth to Bedrock	Land application will be based upon the Available Water Capacity (Refer to the NMP) of the soil and will not exceed agronomic rates for nutrients. Maintain clay liners in RCS. No land application to inundated soils.

*or an equivalent protective measure identified in an NRCS Practice Standard.

- (c) Pollutant Sources and Management. The permittee shall implement the BMPs on Table 5 for handling dead animals and pesticides.

Table 5: Pollutant Sources and Best Management Practices

Potential Pollutant Source	BMPs*
Dead Animals	Collect within 24 hours of death and remove within three days of death by a third-party rendering service or compost in accordance with Section VII.A.6(e) of this permit
Pesticides	Store under roof Handle and dispose according to label directions

*or an alternative BMP as allowed by 30 TAC 321 Subchapter B or an equivalent protective measure identified in an NRCS Practice Standard.

8. Land Application.

- (a) Nutrient Management Plan (NMP) Required. The certified NMP submitted in the permit application shall be implemented upon issuance of this permit. The plan shall be updated as appropriate or at a minimum of annually according to NRCS Practice Standard Code 590. The permittee shall make available to the Executive Director, upon request, a copy of the site specific NMP and documentation of the implementation.

- (1) For Terms of the NMP see Attachments E and F.
- (2) The following changes to the terms of the NMP are substantial:
 - (i) Increase in animal headcount;
 - (ii) Increase in LMU acreage or a change in LMU location;
 - (iii) Change in crop and yield goal (not listed in Attachment F);
- (3) Substantial and Non-Substantial Change to the terms of the NMP
 - (i) Any changes (substantial or non- substantial) to the NMP, other than the Annual Recalculation of Application Rates outlined in Attachment E, must be submitted to the Executive Director for review, and may be subject to public comment;
 - (ii) If the Executive Director determines that the changes to the NMP are not substantial, the revised NMP will be made publicly available and included in the permit record; and
 - (iii) If the Executive Director determines that the changes to the NMP are substantial, the information provided by the permittee will be subject to a major amendment process as set in 30 TAC §§305.61-305.72.
- (b) Comprehensive Nutrient Management Plan (CNMP) required. The permittee must continue to operate under a CNMP certified by the Texas State Soil and Water Conservation Board.
- (c) Critical Phosphorus Level
 - (1) When results of the annual soil analysis show a phosphorus level in the soil of more than 200 ppm but not more than 500 ppm in Zone 1 depth (0-6 inch incorporated; 0-2 or 2-6 inch if not incorporated) for a particular LMU or if ordered by the commission to do so in order to protect the quality of water in the state, then the permittee shall:
 - (i) file with the Executive Director a new or amended nutrient utilization plan (NUP) with a phosphorus reduction component based on crop removal that is certified as acceptable by a person described in (3) below; or
 - (ii) show that the level is supported by a NUP that is certified as acceptable by a person described in (3) below.
 - (2) The permittee shall cease land application of compost, manure, sludge and wastewater to the affected area until the NUP has been approved by the TCEQ. After a NUP is approved, the permittee shall land apply in accordance with the NUP until soil phosphorus is reduced below the critical phosphorus level of 200 ppm extractable phosphorus. Thereafter, the permittee shall implement the requirements of the nutrient management plan.
 - (3) NUP. A NUP is a NMP, based on NRCS Practice Standard Code 590, which utilizes a crop removal application rate. The NUP, based on crop removal, must be developed and certified by one of the following individuals or entities:
 - (i) an employee of the NRCS;
 - (ii) a nutrient management specialist certified by the NRCS;
 - (iii) the Texas State Soil and Water Conservation Board;
 - (iv) the Texas AgriLife Extension;
 - (v) an agronomist or soil scientist on full-time staff at an accredited university located in the State of Texas; or

- (vi) a Certified Professional Agronomist certified by the American Society of Agronomy, a Certified Professional Soil Scientist certified by the Soil Science Society of America, or a licensed Texas Professional Geoscientist-soil scientist after approval by the Executive Director based on a determination by the Executive Director that another person or entity identified in this paragraph cannot develop the plan in a timely manner.
- (4) When results of the annual soil analysis for extractable phosphorus indicate a level greater than 500 ppm in Zone 1 depth (0-6 inch incorporated; 0-2 or 2-6 inch if not incorporated), the permittee shall file with the Executive Director a new or amended NUP with a phosphorus reduction component, based on crop removal, that is certified as acceptable by a person described in (3) above. After the new or amended NUP is approved, the permittee shall land apply in accordance with the NUP until soil phosphorus is reduced below 500 ppm extractable phosphorus.
- (5) If the permittee is required to have a NUP with a phosphorus reduction component based on crop removal, and if the results of tests performed on composite soil samples collected 12 months or more after the plan is filed do not show a reduction in phosphorus concentration in Zone 1 depth (0-6 inch incorporated; 0-2 or 2-6 inch if not incorporated), then the permittee is subject to enforcement action at the discretion of the Executive Director.
- (d) Buffer Requirements. The permittee shall meet the following buffer requirements for each LMU:
 - (1) Water in the State. The permittee shall not apply compost, manure, sludge and wastewater within the buffer distances as noted on Attachment B and Special Provision X.D. Vegetative buffers shall be maintained in accordance with NRCS Field Office Technical Guidance. The permittee shall maintain the filter strip (according to NRCS Code 393) between the vegetative buffer and the land application area. If the land application area is cropland, the permittee shall install and maintain contour buffer strips (according to NRCS Code 332) within the land application area in addition to the buffer distances required by this permit.
 - (2) Water Wells. The permittee shall comply with the well protection requirements listed in Section VII.A.7.(a).
- (e) Exported wastewater, sludge, and/or manure. Wastewater, sludge, and/or manure removed from the operation shall be disposed of by:
 - (1) delivery to a composting facility authorized by the Executive Director;
 - (2) delivery to a permitted landfill located outside of the major sole source impairment zone;
 - (3) beneficial use by land application to land located outside of the major sole source impairment zone;
 - (4) put to another beneficial use approved by the Executive Director; or
 - (5) providing wastewater, sludge, and/or manure to operators of third-party fields, i.e. areas of land in the major sole source impairment zone not owned, operated, controlled, rented, or leased by the CAFO owner or operator, that have been identified in the PPP.
 - (i) There must be a written contract between the permittee and the recipient that includes, but is not limited to, the following provisions:

- (A) All transferred wastewater, sludge, and/or manure shall be beneficially applied to third-party fields identified in the PPP in accordance with the applicable requirements in 30 TAC §321.36 and §321.40 at an agronomic rate based on soil test phosphorus. The requirements for development or implementation of a nutrient management plan or nutrient utilization plan, under 30 TAC §321.40, do not apply to third-party fields.
- (B) Manure and sludge must be incorporated on cultivated fields within forty-eight (48) hours after land application.
- (C) Land application rates shall not exceed the crop nitrogen requirement when the soil phosphorus concentration in Zone 1 depth (0-6 inch if incorporated; 0-2 or 2-6 inch if not incorporated) is less than or equal to 50 ppm phosphorus.
- (D) Land application rates shall not exceed two times the phosphorus crop removal rate, and not to exceed the crop nitrogen requirement, when soil phosphorus concentration in Zone 1 depth (0-6 inch if incorporated; 0-2 or 2-6 inch if not incorporated) is greater than 50 ppm phosphorus and less than or equal to 150 ppm phosphorus.
- (E) Land application rates shall not exceed one times the phosphorus crop removal rate, and not to exceed the crop nitrogen requirement, when soil phosphorus concentration in Zone 1 depth (0-6 inch if incorporated; 0-2 or 2-6 inch if not incorporated) is greater than 150 ppm phosphorus and less than 200 ppm phosphorus.
- (F) Before commencing manure, wastewater, compost, and/or sludge application to third-party fields, at least one representative soil sample from each third-party field must be collected by a certified nutrient management specialist and analyzed in accordance with 30 TAC §321.36. Third-party fields which have had wastewater, sludge, compost, and/or manure applied during the preceding year must be sampled annually by a certified nutrient management specialist and the samples analyzed in accordance with 30 TAC §321.36. For third-party fields that have not received wastewater, sludge, compost, and/or manure during the preceding year, initial sampling must be completed before re-starting land application to the third-party field.
- (G) A copy of the annual soil analyses shall be provided to the permittee within sixty (60) days of the date the samples were taken.
- (H) Temporary storage of wastewater, sludge, and/or manure is prohibited on third-party fields.
- (ii) The permittee is prohibited from delivering wastewater, sludge, and/or manure to an operator of a third-party field once the soil test phosphorus analysis shows a level equal to or greater than 200 ppm or after becoming aware that the third-party operator is not following appropriate provisions of 30 TAC §321.36, §321.40 and/or the contract.

- (iii) The permittee will be subject to enforcement action for violations of the land application requirements on any third-party field under contract.
 - (iv) The permittee shall submit records to the appropriate regional office quarterly that contain the name, locations, and amounts of wastewater, sludge, and/or manure transferred to operators of third-party fields.
 - (f) Irrigation Operating Requirements
 - (1) Minimize Ponding. Irrigation practices shall be managed so as to minimize ponding or puddling of wastewater on the site, prevent tailwater discharges to water in the state, and prevent the occurrence of nuisance conditions.
 - (2) Discharge Prohibited
 - (i) The drainage of compost, manure, sludge and wastewater is prohibited from the LMU(s), unless authorized under Section VII.A.5(d).
 - (ii) Where compost, manure, sludge and wastewater is applied in accordance with the nutrient management plan and/or NUP, precipitation-related runoff from the LMU(s) under the control of the permittee is authorized.
 - (iii) If a discharge from the irrigation system is documented as a violation, the permittee may be required by the Executive Director to install an automatic emergency shut-down or alarm system to notify the permittee of system problems.
 - (3) Backflow Prevention. If the permittee introduces wastewater or chemicals to water well heads for the purpose of irrigation, then backflow prevention devices shall be installed according to 16 TAC Chapter 76 (related to Water Well Drillers and Water Well Pump Installers).
 - (g) Nighttime Application
 - (1) Land application at night shall only be allowed if there is no occupied residence(s) within one quarter (0.25) of a mile from the outer boundary of the actual area receiving compost, manure, sludge and wastewater application. In areas with an occupied residence within one quarter (0.25) of a mile from the outer boundary of the actual area receiving compost, manure, sludge and wastewater application, application shall only be allowed from one (1) hour after sunrise until one (1) hour before sunset, unless the current occupant of such residences have, in writing, agreed to specified nighttime applications.
 - (2) Land application of compost, manure, sludge and wastewater is prohibited between 12 a.m. and 4 a.m. during normal operating conditions.
- 9. Sampling and Testing.
 - (a) Manure and Wastewater. The permittee shall collect and analyze at least one representative sample of wastewater and one representative sample of manure each year for total nitrogen, total phosphorus, and total potassium. The results of these analyses shall be used in determining application rates.
 - (b) Soils
 - (1) Initial Sampling. Before commencing compost, manure, sludge and wastewater application to the LMU(s), the permittee shall have at least one representative soil sample from each LMU, collected and analyzed according to the following procedures.

- (2) Annual Sampling. The TCEQ or its designee shall have soil samples collected annually for each current and historical LMU.
 - (3) Sampling Procedures. Sampling procedures shall employ accepted techniques of soil science for obtaining representative samples and analytical results, and be consistent with approved methods described in the Executive Director's guidance entitled "Soil Sampling for Concentrated Animal Feeding Operations (CAFOs) (RG-408)."
 - (i) Soil samples must be collected by one of the following persons:
 - (A) the NRCS;
 - (B) a certified nutrient management specialist;
 - (C) the Texas State Soil and Water Conservation Board;
 - (D) the Texas AgriLife Extension; or
 - (E) an agronomist or soil scientist on full-time staff at an accredited university located in the State of Texas.
 - (ii) Samples shall be collected and analyzed within the same forty-five (45) day time frame each year, except when crop rotations or inclement weather require a change in the sampling time. The reason for a change in sampling timeframe shall be documented in the PPP.
 - (iii) Obtain one composite sample for each soil depth zone per uniform soil type (soils with the same characteristics and texture) within each LMU.
 - (iv) Composite samples shall be comprised of 10 - 15 randomly sampled cores obtained from each of the following soil depth zones:
 - (A) Zone 1: 0-6 inches (where the manure, sludge, or compost is physically incorporated or injected directly into the soil) or 0-2 inches (where the manure, or sludge is not incorporated into the soil). Wastewater is considered to be incorporated upon land application if it is less than two percent (2%) solids. If a 0-2 inch sample is required, then an additional sample from the 2-6 inch soil depth zone shall be obtained in accordance with the provisions of this section; and
 - (B) Zone 2: 6-24 inches.
 - (4) Laboratory Analysis. Samples shall be analyzed by a soil testing laboratory. Physical and chemical parameters and analytical procedures for laboratory analysis of soil samples shall include the following:
 - (i) nitrate reported as nitrogen in ppm;
 - (ii) phosphorus (extractable, ppm) using Mehlich III with Inductively Coupled Plasma (ICP);
 - (iii) potassium (extractable, ppm);
 - (iv) sodium (extractable, ppm);
 - (v) magnesium (extractable, ppm);
 - (vi) calcium (extractable, ppm);
 - (vii) soluble salts (ppm) or electrical conductivity (dS/m) – determined from extract of 2:1 (v/v) water/soil mixture; and
 - (viii) soil water pH (soil:water, 1:2 ratio).
10. Preventative Maintenance Program.
- (a) Facility Inspections
 - (1) General Requirements

- (i) Inspections shall include visual inspections and equipment testing to determine conditions that could cause breakdowns or failures resulting in discharge of pollutants to water in the state or the creation of a nuisance condition.
 - (ii) The permittee shall draft a report, to be maintained in the PPP, to document the date of inspections, observations and actions taken in response to deficiencies identified during the inspection. The permittee shall correct all the deficiencies within thirty (30) days or shall document the factors preventing immediate correction.
 - (2) Daily Inspections. The permittee shall conduct daily inspections on all water lines, including drinking water and cooling water lines, which are located within the drainage area of a RCS.
 - (3) Weekly Inspections. The permittee shall conduct weekly inspections on:
 - (i) all control facilities, including RCSs, storm water diversion devices, runoff diversion structures, control devices for management of potential pollutant sources, and devices channeling contaminated storm water to RCSs; and
 - (ii) equipment used for land application of compost, manure, sludge and wastewater.
 - (4) Monthly Inspections. The permittee shall conduct monthly inspections on:
 - (i) mortality management systems, including collection areas; and
 - (ii) disposal and storage of toxic pollutants, including pesticide containers.
 - (5) Annual Site Inspection.
 - (i) The permittee shall annually conduct a complete site inspection of the production area and the LMU(s).
 - (ii) The inspection shall verify that:
 - (A) the description of potential pollutant sources is accurate;
 - (B) the site plan/map has been updated or otherwise modified to reflect current conditions; and
 - (C) the controls outlined in the PPP to reduce pollutants and avoid nuisance conditions are being implemented and are adequate.
 - (b) Five Year Evaluation. Once every five years the permittee shall have a licensed Texas Professional Engineer review the existing engineering documentation, complete a site evaluation of the structural controls, review existing liner and RCS capacity documentation, and complete and certify a report of their findings. The report must be kept in the PPP.
- 11. Management Documentation. The permittee shall maintain the following records in the PPP:
 - (a) a copy of the administratively complete and technically complete individual water quality permit application and the written authorization issued by the commission or Executive Director;
 - (b) a copy of the approved recharge feature certification and appropriate updates;
 - (c) a copy of the comprehensive nutrient management plan, nutrient management plan, nutrient utilization plan and appropriate updates to these plans, if required;
 - (d) the RCS liner certification(s);
 - (e) any written agreement with a landowner which documents the allowance of nighttime application of compost, manure, sludge and wastewater;

- (f) documentation of employee and operator training, including verification of the date, time of attendance, and completion of training;
- (g) the RCS management plan;
- (h) the capacity of each RCS as certified by a licensed Texas Professional Engineer; and
- (i) a copy of all third-party field contracts.

B. General Requirements

1. The permittee shall not construct any component of the production area in any stream, river, lake, wetland, or playa (except as defined by and in accordance with the Texas Water Code §26.048).
2. Animals confined on the CAFO shall be restricted from coming into direct contact with surface water in the state through the use of fences or other controls.
3. The permittee shall prevent the discharge of pesticide contaminated waters into water in the state. All wastes from dipping vats, pest and parasite control units, and other facilities used for the application of potentially hazardous or toxic chemicals shall be handled and disposed of in a manner that prevents any significant pollutants from entering water in the state or creating a nuisance condition.
4. The permittee shall operate the CAFO in such a manner as to prevent nuisance conditions of air pollution as mandated by Texas Health and Safety Code, Chapters 341 and 382.
5. The permittee shall take reasonable steps necessary to prevent adverse effects to human health or safety, or to the environment.
6. The permittee shall maintain control of the RCS(s), required LMU(s), and control facilities identified on the site map submitted in the application. In the event the permittee loses control of any of these areas, the permittee shall notify the Executive Director within five (5) working days.
7. If animals are maintained in pastures, the permittee shall maintain crops, vegetation, forage growth or post harvest residues in those pastures during the normal growing season, excluding the feed and/or water trough areas.

C. Training

1. Employee Training
 - (a) Employees at the CAFO facility who are responsible for work activities relating to compliance with provisions of this permit must be regularly trained or informed of any information pertinent to the proper operation and maintenance of the facility and land application of manure, sludge, and wastewater.
 - (b) Employee training shall address all levels of responsibility of the general components and goals of the PPP. Training shall include appropriate topics, such as land application of manure, sludge, and wastewater, proper operation and maintenance of the facility, good housekeeping, material management practices, recordkeeping requirements, and spill response and clean up.
 - (c) The permittee is responsible for determining the appropriate training frequency for different levels of personnel. The PPP shall identify periodic dates for such training.

2. Operator Training. The operator shall attend at least eight (8) hours of continuing education in animal waste management or its equivalent, developed by the Executive Director and the Texas AgriLife Extension, for each two year period.
3. Verification of the date and time(s) of attendance and completion of required training shall be documented in the PPP.

D. Air Standard Permit Requirements

1. Air emission limitations.
 - (a) Facilities shall be operated in such a manner as to prevent the creation of a nuisance as defined by Texas Health and Safety Code, 30 TAC §§341.011 and 321.32(32), and as prohibited by 30 TAC §101.4. Facilities shall be operated in such a manner as to prevent a condition of air pollution as defined by Texas Health and Safety Code and 30 TAC §382.003(3).
 - (b) The permittee shall take necessary action to identify any nuisance condition that occurs. The permittee shall take action to abate any nuisance condition as soon as practicable or as specified by the Executive Director.
2. Wastewater treatment. The permittee shall design and operate RCSs to minimize odors in accordance with accepted engineering practices. Each RCS shall be operated in accordance with the design and an operation and maintenance plan that minimizes odors.
3. Dust Control. To minimize dust emissions, the CAFO shall be operated and maintained as follows:
 - (a) Fugitive emissions from all grain receiving pits, where a pit is used, shall be minimized through the use of “choke feeding” or through an equivalent method of control. If choke feeding is used, operation of conveyors associated with receiving shall not commence until the receiving pits are full.
 - (b) As necessary, emissions from all in-plant roads, truck loading and unloading areas, parking areas, and other traffic areas shall be controlled with one or more of the following methods to minimize nuisance conditions and maintain compliance with all applicable commission requirements:
 - (1) sprinkled with water;
 - (2) treated with effective dust suppressant(s); or
 - (3) paved with a cohesive hard surface and cleaned.
 - (c) All non-vehicular external conveyors or other external conveying systems associated with the feedmill shall be enclosed.
 - (d) On-site feed milling operations with processing equipment using a pneumatic conveying system (which may include, but are not limited to, pellet mill/pellet cooler systems, flaker systems, grinders, and roller-mills) shall vent the exhaust air through a properly-sized high efficiency cyclone collector or an equivalent control device before releasing the exhaust air to the atmosphere. This requirement does not include cyclones used as product separators.
 - (e) If the Executive Director determines that the implementation and employment of these practices is not effective in controlling dust, the permittee shall implement any necessary additional abatement measures to control and minimize this contaminant within the time period specified by the Executive Director.
4. Maintenance and Housekeeping. The permittee shall comply with the following to help prevent nuisance conditions.

- (a) The premises shall be maintained to prevent the occurrence of nuisance conditions from odors and dust. Spillage of any raw products or waste products causing a nuisance condition shall be picked up and properly disposed of daily.
- (b) Proper pen drainage shall be maintained at all times. Earthen pen areas shall be maintained by scraping uncompacted manure and shaping pen surfaces as necessary to minimize odors and ponding.

VIII. Recordkeeping, Reporting, and Notification Requirements

A. Recordkeeping

The permittee shall keep records on-site for a minimum of five (5) years from the date the record was created and shall submit them within five (5) days of a written request by the Executive Director.

1. The permittee shall update records daily to include:
 - (a) all measurable rainfall events; and
 - (b) the wastewater levels in each RCS, as shown on the depth marker. In circumstances where a RCS has a water level exceeding the expected end of the month depth, the permittee shall document in the PPP why the level of water in the structure is not at or below the expected depth.
2. The permittee shall update records weekly to include:
 - (a) records of all wastewater, sludge, and/or manure removed from the CAFO that shows the dates, amount, and recipient. The permittee must make the most recent nutrient analysis available to any hauler; and
 - (b) inspections of control facilities and land application equipment.
3. The permittee shall update records monthly to include:
 - (a) records describing mortality management practices;
 - (b) storage and disposal of chemicals, including pesticide containers; and
 - (c) records of all compost, manure, sludge and wastewater applied on the LMU(s). Such records must include the following information:
 - (i) date of compost, manure, sludge and wastewater application to each LMU;
 - (ii) location of the specific LMU and the volume applied during each application event;
 - (iii) acreage on which compost, manure, sludge and wastewater is applied;
 - (iv) basis for and the total amount of nitrogen and phosphorus applied per acre to each LMU on a dry basis, including sources of nutrients other than compost, manure, sludge and wastewater; and
 - (v) weather conditions, such as temperature, precipitation, and cloud cover, during the land application and twenty-four (24) hours before and after the land application.
4. The permittee shall update records annually to include:
 - (a) annual nutrient analysis for at least one representative sample of wastewater and one representative sample of manure for total nitrogen, total phosphorus, and total potassium;
 - (b) any initial and annual soil analysis reports;
 - (c) the annual site inspection report;
 - (d) percent moisture content of the manure, sludge, and wastewater; and
 - (e) actual annual yield of each harvested crop for each LMU.
5. The Five Year Evaluation report must be updated every five (5) years.

6. The permittee shall keep the following records on-site:
 - (a) a list of any significant spills of potential pollutants at the CAFO that have a significant potential to reach water in the state;
 - (b) documentation of liner maintenance by an NRCS engineer, a licensed Texas Professional Engineer or a licensed Texas Professional Geoscientist;
 - (c) RCS design calculations and as built capacity certification;
 - (d) embankment certification;
 - (e) liner certification;
 - (f) a copy of current and amended site plans; and
 - (g) copies of all notifications to the Executive Director, including any made to a regional office.

B. Reporting and Notifications

1. The permittee shall provide written notice to the appropriate TCEQ regional office as soon as the RCS cleaning is scheduled, but not less than ten (10) days before cleaning. The permittee shall also provide written verification of completion to the same regional office within five (5) days after the cleaning has been completed. This paragraph does not apply to the cleaning of solid separators or settling basins that are functioning as solid separators.
2. The permittee shall notify the appropriate TCEQ regional office in writing or by electronic mail with the date, time, and location at least ten (10) working days before collecting soil samples from current and historical LMUs; and third-party fields.
3. Discharge Notification. If for any reason there is a discharge of manure, sludge or wastewater into water in the state, the permittee shall notify the appropriate TCEQ regional office orally within one (1) hour of discovery; unless it is not reasonably possible to do so in which event the discharge shall be reported as soon as reasonably possible, but in no event later than twenty-four (24) hours from when the discharge occurred. The permittee shall also submit written notice, within fourteen (14) working days of the discharge to the Office of Compliance and Enforcement, Enforcement Division (MC 224). In addition, the permittee shall document the following information, keep the information on-site, and submit the information to the appropriate regional office within fourteen (14) working days of becoming aware of such discharge. The written notification must include:
 - (a) a description and cause of the discharge, including a description of the flow path to the receiving water body and an estimation of the volume discharged;
 - (b) the period of discharge, including exact dates and times, and, if not corrected, the anticipated time the discharge is expected to continue, and steps being taken to reduce, eliminate and prevent recurrence of the discharge;
 - (c) if caused by a precipitation event(s), the date(s) of the event(s) and the rainfall amount(s) recorded from an on-site rain gauge; and
 - (d) discharge monitoring analyses required by this permit.
4. In the event of a discharge of manure, sludge, or wastewater from a RCS or a LMU during a chronic or catastrophic rainfall event or resulting from catastrophic conditions, the permittee shall orally notify the appropriate TCEQ regional office within one (1) hour of the discovery of the discharge. The permittee shall send written notification to the appropriate regional office within fourteen (14) working days.
5. Chronic Rainfall Discharge. In the event of a discharge of manure, sludge or wastewater from a RCS or a LMU due to chronic rainfall, the permittee shall submit a

report to the appropriate TCEQ regional office showing the CAFO records that substantiates that the overflow was a result of cumulative rainfall that exceeded the design rainfall event without the opportunity for dewatering, and was beyond the control of the permittee. After review of the report, if required by the Executive Director, the permittee shall have an engineering evaluation by a licensed Texas Professional Engineer developed and submitted to the Executive Director. This requirement is in addition to the discharge notification requirement in this permit.

6. Impacts to Human Health or Safety, or the Environment. The permittee shall provide the following noncompliance notifications:
 - (a) Any noncompliance which may endanger human health or safety, or the environment shall be reported by the permittee to the TCEQ. Report of such information shall be provided orally, by e-mail, or electronic facsimile transmission (Fax) to the TCEQ regional office within twenty four (24) hours of becoming aware of the noncompliance. A written submission of such information shall also be provided by the permittee to the TCEQ regional office and the Enforcement Division (MC 224) within five (5) days of becoming aware of the noncompliance. The written submission shall contain a description of the noncompliance and its cause; the potential danger to human health or safety, or the environment; the period of noncompliance, including exact dates and times. If the noncompliance has not been corrected, the anticipated time it is expected to continue, and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance and to mitigate its adverse effects.
 - (b) In the event the permittee discharges manure, sludge, or wastewater other than as authorized in the permit, the permittee shall give twenty four (24) hour oral, e-mail, or fax notice and five (5) day written notice to TCEQ as required by paragraph (a) above.
7. The permittee shall submit an annual report to the appropriate regional office and the Enforcement Division (MC 224) by March 31 of each year for the 12-month reporting period of January 1 to December 31 of the previous year. The report shall be submitted on forms prescribed by the Executive Director to include, but not limited to:
 - (a) number and type of animals, whether in open confinement or housed under roof;
 - (b) estimated total manure, sludge, and wastewater generated during the reporting period;
 - (c) total compost, manure, sludge and wastewater land applied during the last twelve (12) months on-site at the CAFO facility;
 - (d) total wastewater, sludge, and/or manure transferred to other persons during the reporting period;
 - (e) total number of acres for land application under the control of the permittee and all third-party acreage;
 - (f) summary of discharges of manure, sludge, or wastewater from the production area that occurred during the reporting period including dates, times, and approximate volume;
 - (g) a statement indicating that the NMP/NUP, under which the CAFO is operating, was developed and approved by a certified nutrient management specialist;
 - (h) a copy of the initial soil analysis for each new LMU, regardless of whether manure, wastewater, or sludge has been applied;
 - (i) soil monitoring reports of all soil samples collected in accordance with the requirements of this permit;

- (j) groundwater monitoring reports (if applicable);
 - (k) the actual crop(s) planted and yield(s) for each LMU;
 - (l) the actual nitrogen and phosphorus content of manure, sludge or process wastewater that was land applied;
 - (m) the results of data used in calculations and the results of calculations conducted in accordance with Attachment E;
 - (n) the results of any soil testing for nitrogen and phosphorus conducted during the previous 12 months;
 - (o) the amount of any supplemental fertilizer applied during the previous 12 months; and
 - (p) any other information requested by the Executive Director.
8. The permittee shall furnish to the appropriate regional office, and the Enforcement Division (MC 224), soil testing analysis for third-party fields of all soil samples within sixty (60) days of the date the samples were taken in accordance with the requirements of this permit.

IX. Standard Permit Conditions

- A. The permittee has a duty to comply with all permit conditions. Failure to comply with any permit conditions is a violation of the permit and statutes under which it was issued and is ground for enforcement action, for permit amendment, revocation or suspension, or for denial of a permit renewal application or an application for a permit for another facility.
- B. The permittee must apply for an amendment or renewal before the expiration of the existing permit in order to continue a permitted activity after the expiration date of the permit. Authorization to continue such activity terminates upon the effective denial of said permit.
- C. It is not a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity to maintain compliance with the permit conditions.
- D. The permittee shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal or other permit violation which has a reasonable likelihood of adversely affecting human health or the environment.
- E. The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) installed or used by the permittee to achieve compliance with the permit conditions. Proper operation and maintenance also includes adequate laboratory and process controls, and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems only when necessary to achieve compliance with the permit conditions.
- F. The permittee shall furnish any information, at the request of the Executive Director, which is necessary to determine whether cause exists for revoking, suspending, or terminating authorization under this permit. The requested information must be provided within a reasonable time frame and in no case later than thirty (30) days from the date of the request.
- G. The permittee shall give notice to the Executive Director before physical alterations or additions to the permitted facility if such alterations or additions would require a permit amendment or result in a violation of permit requirements.
- H. Authorization from the Commission is required before beginning any change in the permitted facility or activity that would result in noncompliance with other permit requirements.

- I. Inspection and entry shall be allowed under Texas Water Code, Chapters 26-28, Health and Safety Code, §§361.032-361.033 and §361.037, and 40 Code of Federal Regulations (CFR) §122.41(I). The statement in Texas Water Code, §26.014 that the Commission entry of a facility shall occur in accordance with an establishment's rules and regulations concerning safety, internal security, and fire protection is not grounds for denial or restriction of entry to any part of the facility, but merely describes the Commission's duty to observe appropriate rules and regulations during inspection.
- J. Standard Monitoring Requirements
 - 1. Samples required by this permit shall be collected and measurements shall be taken at times and in a manner so as to be representative of the monitored discharge or activity. Samples shall be delivered to the laboratory immediately upon collection, in accordance with any applicable analytical method and required maximum holding time. Unless otherwise specified in this permit, test procedures for the analysis of pollutants shall comply with procedures specified in 30 TAC §§319.11 – 319.12. Measurements, tests and calculations shall be accurately accomplished in a representative manner.
 - 2. Records of monitoring activities must include:
 - (a) the date, time, and place of sample or measurement;
 - (b) the identity of any individual who collected the sample or made the measurement;
 - (c) the chain-of-custody procedures used to maintain sample integrity from sample collection to laboratory delivery;
 - (d) the date and time of laboratory analysis;
 - (e) the identity of the individual and laboratory who performed the analysis;
 - (f) the technique or method of analysis; and
 - (g) the results of the analysis or measurement and quality assurance/quality control records.
 - 3. The permittee shall ensure that properly trained and authorized personnel monitor and sample the soil or wastewater related to any permitted activity.
- K. Any noncompliance other than that specified in this section, or any required information not submitted or submitted incorrectly shall be reported to the Executive Director as promptly as possible.
- L. A permit may be transferred only according to the provisions of 30 TAC §305.64 (relating to Transfer of Permits) and 30 TAC §305.97 (relating to Action on Application for Transfer).
- M. PPPs, reports, and other information requested or required by the Executive Director shall be signed in accordance with the requirements of 30 TAC §305.128 (relating to Signatories to Reports).
- N. A permit may be amended, suspended and re-issued, or revoked for cause. The filing of a request by the permittee for a permit amendment, suspension and re-issuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition.
- O. A permit does not convey any property rights of any sort or any exclusive privilege.
- P. Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of the permit shall be submitted no later than fourteen (14) days following each schedule date.

- Q. If the permittee becomes aware that he/she failed to submit any relevant facts in a permit application, or submitted incorrect information in an application, or in any report to the Executive Director, the permittee shall promptly submit such facts or information.
- R. The permittee is subject to administrative, civil, and criminal penalties, as applicable, under Texas Water Code, §§26.136, 26.212, and 26.213, for violations including but not limited to the following:
1. negligently or knowingly violating Clean Water Act (CWA) §§301, 302, 306, 307, 308, 318, or 405 or any condition or limitation implementing any sections in a permit issued under CWA §402, or any requirement imposed in a pretreatment program approved under CWA §402(a)(3) or §402(b)(8);
 2. falsifying, tampering with, or knowingly rendering inaccurate any monitoring device or method required to be maintained under a permit; or
 3. knowingly making any false statement, representation, or certification in any record or other document submitted or required to be maintained under a permit, including monitoring reports or reports of compliance or noncompliance.
- S. The permittee shall comply with all applicable rules and regulations of the commission, including 30 TAC 321, Subchapter B.
- T. This permit is granted on the basis of the information supplied and representations made by the permittee during action on an application, and relying upon the accuracy and completeness of that information and those representations. After notice and opportunity for a hearing, this permit may be modified, suspended, or revoked, in whole or in part, in accordance with 30 TAC Chapter 305, Subchapter D, during its term for good cause including, but not limited to, the following:
1. Violation of any terms or conditions of this permit;
 2. Obtaining this permit by misrepresentation or failure to disclose fully all relevant facts; or
 3. A change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge.
- U. Acceptance of the permit by the person to whom it is issued constitutes acknowledgement and agreement that such person will comply with all the terms and conditions embodied in the permit, and the rules and other orders of the Commission.
- V. In accordance with the Texas Water Code §26.029(b), after a public hearing, notice of which shall be given to the permittee, the Commission may require the permittee, from time to time, for good cause, in accordance with applicable laws, to conform to new or additional conditions.
- W. The conditions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstances, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.
- X. Notice of Bankruptcy.
1. Each permittee shall notify the Executive Director, in writing, immediately following the filing of a voluntary or involuntary petition for bankruptcy under any chapter of Title 11 (Bankruptcy) of the United States Code (11 USC) by or against:
 - (a) the permittee;
 - (b) an entity (as that term is defined in 11 USC, §101(14)) controlling the permittee or listing the permit or permittee as property of the estate; or
 - (c) an affiliate (as that term is defined in 11 USC, §101(2)) of the permittee.
 2. This notification must indicate:

- (a) the name of the permittee;
- (b) the permit number(s);
- (c) the bankruptcy court in which the petition for bankruptcy was filed; and
- (d) the date of filing of the petition.

X. Special Provisions

A. RCS Volumes.

1. The permittee shall maintain the wastewater volumes in each RCS in accordance with Table 6.

Table 6: Volume Allocations for RCS (Acre-Feet)

RCS Name	Design Rainfall Event Runoff	Process Generated Wastewater	Minimum Treatment Volume	Sludge Accumulation	Water Balance	Required Capacity Without Freeboard	Actual Capacity Without Freeboard
RCS #1	14.25	0	0	0.23	2.38	16.85	20.47

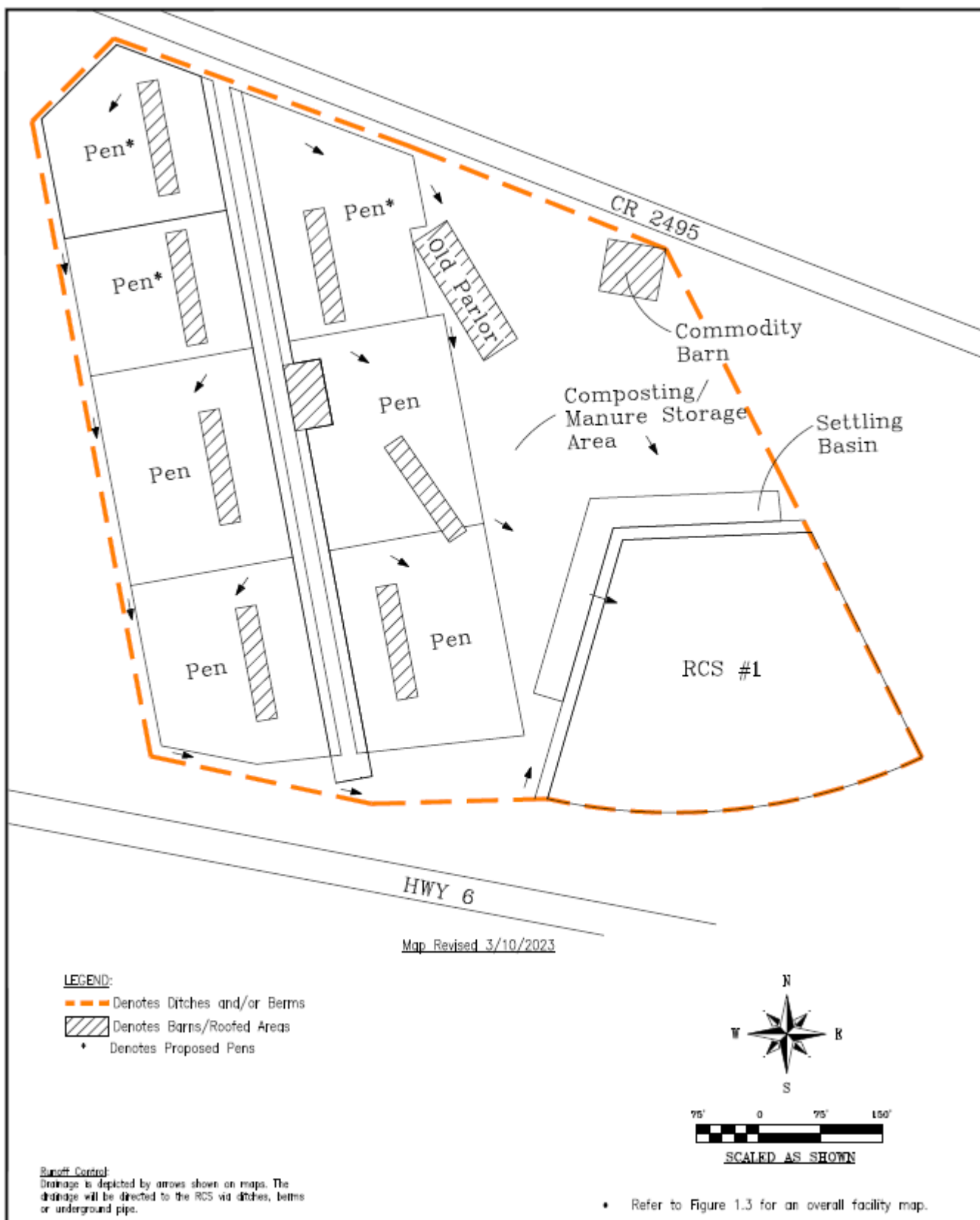
2. The RCS management plan shall be developed and implemented within thirty (30) days of permit issuance.
 3. All certifications required by Section VII.A.3(a) of this permit shall be submitted to the TCEQ Regional Office and CAFO Permitting, Water Quality Division (MC 150) within 30 days of completing construction and/or modification.
- B. Future Revisions to Bosque River Total Maximum Daily Load (TMDL).** The permittee is hereby placed on notice that this permit may be amended by the TCEQ in order to make the terms and conditions of this permit consistent with any revisions to the Bosque River TMDL, associated Implementation Plan, and any revisions to federal regulations.
- C. The permittee shall submit the following record to the appropriate Regional Office and the Enforcement Division (MC 224) by March 31 of each year for the 12-month reporting period of January 1 to December 31 of the previous year.**
1. date of compost, manure, sludge and wastewater application to each LMU;
 2. location of the specific LMU and the volume applied during each application event;
 3. acreage of each individual crop on which compost, manure, sludge and wastewater is applied;
 4. basis for and the total amount of nitrogen and phosphorus applied per acre to each LMU, including sources of nutrients other than compost, manure, sludge and wastewater on a dry basis;
 5. weather conditions, such as temperature, precipitation, and cloud cover, during the land application and twenty-four (24) hours before and after the land application;
 6. annual nutrient analysis for at least one (1) representative sample of manure, sludge (if applicable), and wastewater for total nitrogen, total phosphorus, and total potassium; and
 7. any measurements of sludge accumulations as required in each RCS.
- D. Table 7 describes the buffers that the permittee is required to install and maintain according to the NRCS practice standards in the referenced code. The map in Attachment B includes the location and distance requirements for all buffers.**

Table 7: Buffer Distances

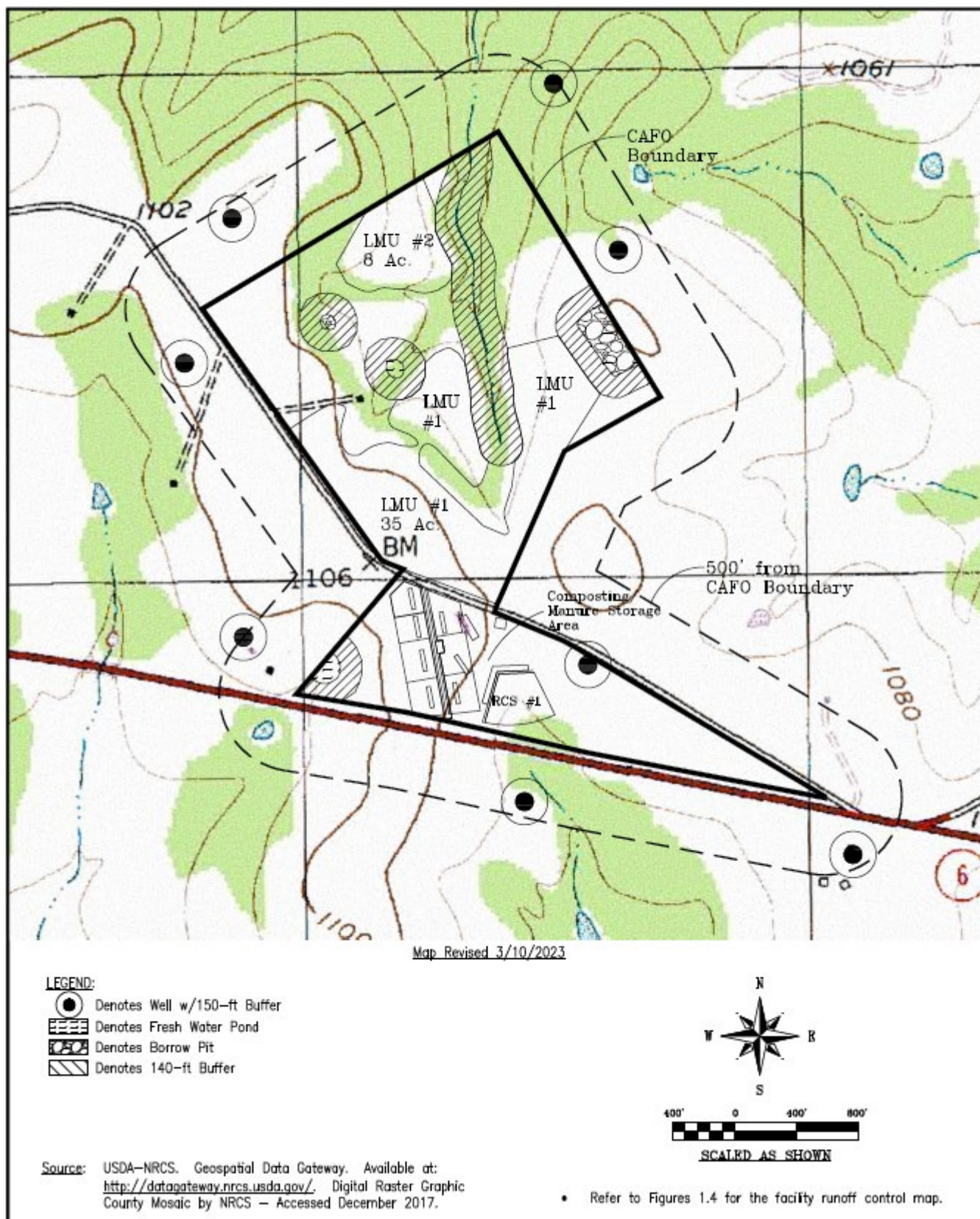
LMU Name	Vegetative Buffer Setback (feet)	Additional Buffer Setback NRCS Code 393 Filter Strip Flow Length (feet)
LMU #1	100	40
LMU #2	100	40

- E. The sludge volume in each RCS will be measured and recorded in the PPP as necessary, but at least annually.
- F. There will be no grazing of livestock on the LMUs for this CAFO unless the NMP reflects grazing and the grazing practices mentioned in the NRCS Conservation Practice Code 393, Filter Strip, are implemented to protect buffers.
- G. Settling Basin Solids.
 - 1. For the purpose of this permit, settling basin solids shall be defined as manure.
 - 2. If settling basin solids are land applied, an annual sample must be collected and analyzed in accordance with Section VII.A.9(a), in addition to other manure and wastewater.
 - 3. Settling basin solids shall be cleaned out regularly to maintain the percent settling basin design efficiency.
- H. All runoff from silage, commodity, and hay storage outside the RCS drainage area will be contained. Appropriate provisions for that containment will be stated in the PPP upon issuance of the permit. This permit does not authorize any discharge from the silage, commodity, or hay storage areas located outside the drainage area of the RCSs.
- I. Upon issuance of the permit, prior to land application of manure or wastewater, a current NMP must be in place and it shall thereafter be updated annually with the most recent soil, manure, and wastewater analyses. For LMUs that have a phosphorus level in the soil of more than 200 ppm, a NUP must be developed or updated in accordance with Section VII.A.8(c).
- J. Sludge must be analyzed for nutrient content prior to routing offsite for any land application. The analysis for each haul off shall be maintained in the PPP. (See Section VII.A.5(g) for additional requirements relating to sludge cleanout.)
- K. Old Parlor, noted in Attachment A- Site Map
 - 1. There shall be no milking in the old parlor, and no process generated wastewater or wash water entering the RCS from the old parlor at any time.
 - 2. The permittee shall obtain a major amendment to the permit prior to milking onsite.
- L. A LMU map showing historical LMUs shall be maintained in the PPP.

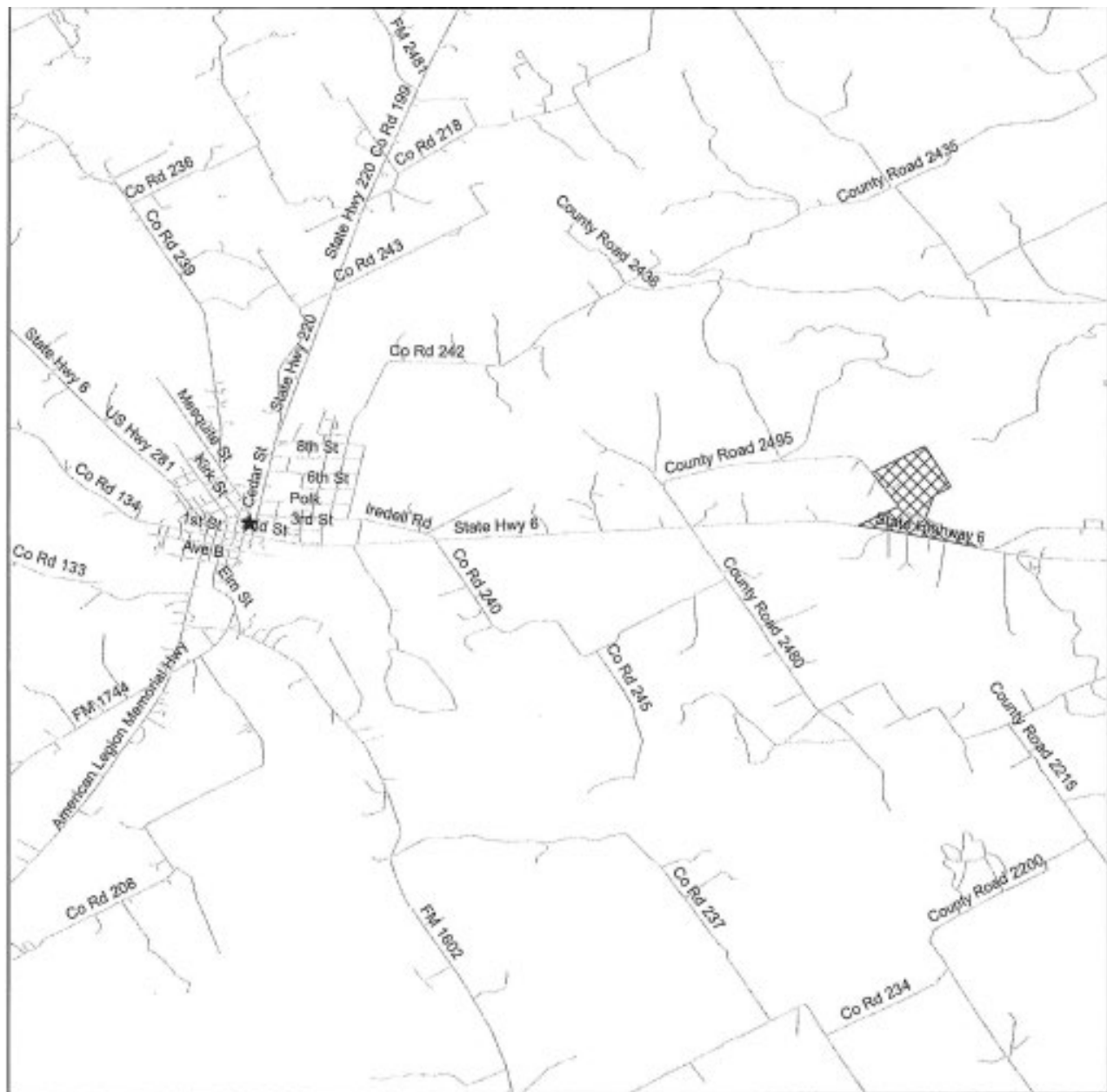
ATTACHMENT A - SITE MAP



ATTACHMENT B - LAND MANAGEMENT UNITS



ATTACHMENT C - VICINITY MAP

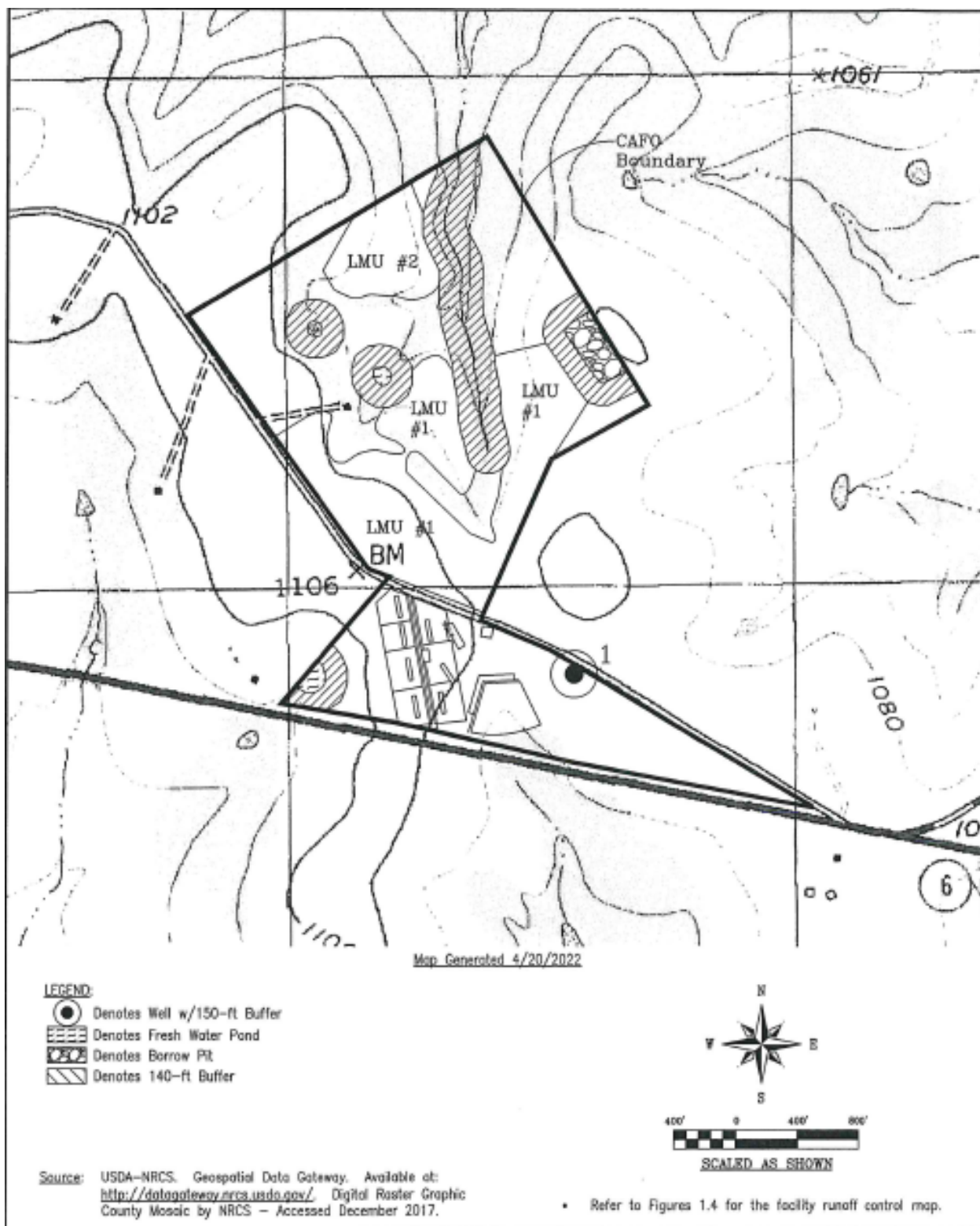


Legend

- ★ Town
 Golden Star Heifer Ranch
 ——— Bosque County Roads
 ——— Hamilton County Roads
 ——— Erath County Roads



ATTACHMENT D - WELL LOCATION AREA



ATTACHMENT E

METHODOLOGY FOR CALCULATING MAXIMUM APPLICATION RATES AND ANNUAL RECALCULATION OF APPLICATION RATES

1. Identify the Soil Test Phosphorus (P) Level (Extremely Low, Very Low- Low, Medium, High, Very High) on the soil test analysis.

Soil Test P Rating	Soil Test P Levels (ppm*)
Extremely Low	Less than 5
Very Low - Low	5 to less than 20
Medium	20 to less than 50
High	50 to less than 100
Very High	Greater than or equal to 100

*ppm is equivalent to mg/kg of solids

2. Update Table 1 to Attachment E:
 - (a) Populate the Sub Total column with the point value that corresponds to the Site Characteristic for each.
 - (b) Calculate the Total Index Points
 - (c) Select the P Runoff Potential from the total sum of the Index Points of the Site Characteristics using the Phosphorus Index Classification Table.
3. Determine which of the tables (Table 2A or Table 2B) of Table 2 to Attachment E on the following page is appropriate to use. Each table describes the criteria for its use.
4. Determine which application rate column is appropriate using the following criteria:
 - (a) Use the Maximum TMDL Annual P Rate if this LMU is located in a segment with an approved TMDL.
 - (b) Use Maximum Annual P Application if this LMU is not located in a segment with an approved TMDL and you wish to apply annually.
 - (c) Use Maximum Biennial Application Rate if this LMU is not located in a segment with an approved TMDL and you wish to apply biennially.
5. Determine the Maximum Application Rate using the table identified in Step 3, the column identified in Step 4, and the P Runoff Potential identified in Step 2.(c).
6. Using one of the approved crops and yield goals identified on Attachment F for this LMU, determine the maximum application rate (in lbs/ac) for that crop and yield goal and the Maximum Application Rate identified in Step 5 from the S-Crop Table.
 - (a) Example 1: If the Maximum Application Rate in Step 5 is “1.5 Times Annual Crop P Requirement”, find the number identified on the S-Crop Table under the column “Crop P₂O₅ requirement” for your crop/yield goal, then multiply that number by 1.5 to determine your maximum application rate (in lbs/ac P₂O₅).
 - (b) Example 2: If the Maximum Application Rate in Step 5 is “0.5 Times Annual Crop P Removal”, find the number identified on the S-Crop Table under the column “Crop P₂O₅ Removal Rate” for your crop/yield goal, then multiply that number by 0.5 to determine your maximum application rate (in lbs/ac P₂O₅).

ATTACHMENT E

TABLE 1: PHOSPHORUS INDEX WORKSHEET FOR EAST TEXAS FROM NRCS PRACTICE STANDARD 590

Client Name:			Field(s):			Date:	
Planner:			Location:			Crop:	
Impaired Watershed (Y or N):			Runoff Curve No.:			% Slope:	
Site Characteristic (Weighting Factor)	[Weighting Factor Times the Column Factor]					Sub Total	
	0	1	2	4	8		
Soil Test P Rating (1.00)	N/A	Very Low – Low	Moderate	High	Very High		
	[0]	[1.0]	[2.0]	[4.0]	[8.0]		
Fertilizer Phosphorus (P ₂ O ₅) Application Rate (0.75)	None Applied	1-40 lbs/ac P ₂ O ₅	41-90 lbs/ac P ₂ O ₅	91-150 lbs/ac P ₂ O ₅	>150 lbs/ac P ₂ O ₅		
	[0]	[0.75]	[1.5]	[3.0]	[6.0]		
Organic Phosphorus (P ₂ O ₅) Application Rate (0.75)	None Applied	1-40 lbs/ac P ₂ O ₅	41-90 lbs/ac P ₂ O ₅	91-150 lbs/ac P ₂ O ₅	>150 lbs/ac P ₂ O ₅		
	[0]	[0.75]	[1.5]	[3.0]	[6.0]		
Phosphorus Fertilizer Application Method and Timing (0.50)	None Applied	Placed deeper than 2 in. or broadcast and incorporated within 48 hours	Surface applied 12/1-2/15	Surface applied 2/16-4/15 or 6/16-11/30	Surface Applied 4/16-6/15		
	[0]	[0.50]	[1.0]	[2.0]	[4.0]		
Organic Phosphorus source Application Method and Timing (0.50)	None Applied	Placed deeper than 2 in. or broadcast and incorporated within 48 hours	Surface applied 12/1-2/15	Surface applied 2/16-4/15 or 6/16-11/30	Surface Applied 4/16-6/15		
	[0]	[0.50]	[1.0]	[2.0]	[4.0]		
Proximity of nearest field edge to named stream or lake (1.25)	> 2000 feet	1000 – 1999 feet	500 – 999 feet	100 – 499 feet	< 100 feet		
	[0]	[1.25]	[2.5]	[5.0]	[10.0]		
Runoff Class (Runoff Class Table 3) (1.00)	Negligible	Low	Moderate	High	Very High		
	[0]	[1.0]	[2.0]	[4.0]	[8.0]		
Soil Erosion (all sources) (1.50)	Very Low <1 t/ac	Low 1-3 t/ac	Medium 3-5 t/ac	High 5-10 t/ac	Very High >10 t/ac		
	[0]	[1.5]	[3.0]	[6.0]	[12.0]		
Total Index Points:							

ATTACHMENT E

TABLE 2: APPLICATION RATES FROM NRCS PRACTICE STANDARD 590

Commercial fertilizers must be applied in accordance with SWFTL* recommendations. Application of all organic soil amendments must not exceed the values in Table 2A or 2B.

Table 2A. A Nutrient Management Plan (NMP)¹ is required where any organic soil amendments are applied where Soil Test P Level is less than 200 ppm statewide or, less than 350 ppm in arid areas² with distance to a named stream greater than one mile.

P – Index Rating	Maximum TMDL Annual P Application Rate	Maximum Annual P Application Rate	Maximum Biennial Application Rate
Very Low, Low	Annual Crop Nitrogen (N) Requirement	1.0 Times Annual Crop N Requirement	2.0 Times Annual Crop N Requirement
Medium	2.0 Times Annual Crop P Requirement ³	2.0 Times Annual Crop P Requirement ³	2.0 Times Annual Crop N Requirement
High	1.5 Times Annual Crop P Requirement ³	1.5 Times Annual Crop P Requirement	Double the Maximum Annual P Application Not to Exceed 2 Times the Annual Crop N Requirement
Very High	1.0 Times Annual Crop P Requirement ³	1.0 Times Annual Crop P Requirement ³	Double the Maximum Annual P Application Not to Exceed 2 Times the Annual Crop N Requirement

Table 2B. A Nutrient Utilization Plan (NUP)¹ is required where Soil Test P Level is: equal to or greater than 200 ppm in nonarid areas², or equal to or greater than 350 ppm in arid areas² with distance to a named stream greater than one mile and erosion control is adequate to keep erosion at the soil loss tolerance (T) or less, or equal to or greater than 200 ppm in arid areas² with distance to a named stream less than one mile.

P – Index Rating	Maximum TMDL Annual P Application Rate	Maximum Annual P Application Rate	Maximum Biennial Application Rate
Very Low, Low	1.0 Times Annual Crop P Removal ⁴	Annual Crop N Removal	2.0 Times Crop N Removal
Medium	1.0 Times Annual Crop P Removal ⁴	1.5 Times Annual Crop P Removal ⁴	Double the Maximum Annual P Application Not to Exceed 2 Times the Annual Crop N Removal
High	1.0 Times Annual Crop P Removal ⁴	1.0 Times Annual Crop P Removal ⁴	Double the Maximum Annual P Application Not to Exceed 2 Times the Annual Crop N Removal
Very High	0.5 Times Annual Crop P Removal ⁴	0.5 Times Annual Crop P Removal ⁴	Double the Maximum Annual P Application Not to Exceed 2 Times the Annual Crop N Removal

Footnotes Applicable to both Tables

¹NMP and NUP designations are consistent with 30 TAC §321.40.

²All counties must use the 200 ppm P level limit to determine whether to use Table 2A or Table 2B. However, in counties receiving less than 25 inches of annual rainfall, the 350 ppm P level limit applies if the field application area is greater than 1 mile from a named stream or lake. See map in current Texas Agronomy Technical Note 15, Phosphorus Assessment Tool for Texas for county rainfall designations.

³Not to exceed the annual nitrogen requirement rate.

⁴Not to exceed the annual nitrogen removal rate.

SWFTL* Texas A&M AgriLife Extension Soil, Water and Forage Testing Laboratory

ATTACHMENT F

SITE SPECIFIC INFORMATION FOR LAND MANAGEMENT UNITS FROM NUTRIENT MANAGEMENT PLAN

**Table 1: Alternative Crops and Yield Goals
Applicable to ALL Land Management Units:- 43 Acres**

Crop and Yield Goal	Nitrogen		P2O5	
	Requirement	Removal	Requirement	Removal
Alfalfa 1 Hay 10 Tons	530	532	180	101
Alfalfa Hay 12 Tons	640	638	180	121
Alfalfa Hay 2 Tons	120	106	35	20
Alfalfa Hay 4 Tons	210	213	80	40
Alfalfa Hay 6 Tons	300	319	130	60
Alfalfa Hay 8 Tons	420	426	180	81
Bahia 2 Cut Hay 7000 #	140	89	70	21
Bahia 3 Cut Hay 8000 #	210	102	80	24
Bahia 4 Cut Hay 9000 #	280	114	115	27
Bahia Grazing + 1 Hay	110	83	70	19
Bahia Grazing 1 AU/1 ac	260	114	70	27
Bahia Grazing 1 AU/2 ac	220	108	45	25
Bahia Grazing 1 AU/3 ac	180	102	45	24
Bahia Grazing 1 AU/4 ac	140	95	45	22
Bahia Grazing 1 AU/5 ac	100	79	45	18
Bahia Grazing 1 AU/6 ac	60	65	45	15
Cantaloupes 15-20 tons	120	88	105	82
Coastal 2 Cut + Graze	260	198	125	62
Coastal 2 Cut Hay	200	169	125	39
Coastal 3 Cut + Graze	360	257	125	80
Coastal 3 Cut Hay	300	238	125	74
Coastal 4 Cut Hay	400	257	170	80
Coastal 5-6 Cut Hay	500	297	170	93
Coastal Grazing + 1 Hay	160	145	70	34
Coastal Grazing 1 AU/0.5 ac	300	218	70	68
Coastal Grazing 1 AU/1 ac	240	198	70	62
Coastal Grazing 1 AU/2 ac	200	169	70	39
Coastal Grazing 1 AU/3 ac	160	145	70	34
Coastal Grazing 1 AU/4 ac	120	120	70	28
Coastal Grazing 1 AU/5 ac	90	103	70	24
Coastal Grazing 1 AU/6 ac	60	86	70	20
Coastal GC (30%DM) 21-23 Ton	400	345	170	95
Coastal GC (30%DM) 18-20 Ton	350	300	170	82
Coastal GC (30%DM) 15-17 Ton	300	255	125	70
Coastal GC (30%DM) 9-11 Ton	200	170	125	47
Common 2 Cut Hay 6000 #	140	113	80	26
Common 3 Cut Hay 7400 #	210	141	80	46
Common 4 Cut Hay 8000 #	280	152	80	49
Common 5-6 Cut Hay 9000 #	350	171	80	56
Common Grazing + 1 Hay	110	100	70	23
Common Grazing + 2 Hay	180	132	80	30
Common Grazing + 3 Hay	250	148	80	48
Common Grazing 1 AU/1ac	260	152	70	49
Common Grazing 1 AU/2 ac	220	143	45	46
Common Grazing 1 AU/3 ac	180	132	45	30
Common Grazing 1 AU/4 ac	140	113	45	26
Common Grazing 1 AU/5 ac	100	94	45	22
Common Grazing 1 AU/6 ac	60	79	45	18

ATTACHMENT F

SITE SPECIFIC INFORMATION FOR LAND MANAGEMENT UNITS FROM NUTRIENT MANAGEMENT PLAN

**Table 1: Alternative Crops and Yield Goals
Applicable to ALL Land Management Units:- 43 Acres**

Crop and Yield Goal	Nitrogen		P2O5	
	Requirement	Removal	Requirement	Removal
Corn 111 - 130 bu	144	117	105	47
Corn 131 - 150 bu	164	135	105	54
Corn 151 - 170 bu	180	153	130	61
Corn 171 - 190 bu	210	171	130	68
Corn 191 - 210 bu	250	189	130	75
Corn 211 - 230 bu	280	207	130	83
Corn 231 - 250 bu	300	225	130	90
Corn 250 - 275 bu	325	243	130	97
Corn 276 - 300 bu	350	261	130	104
Corn 301 - 350 bu	375	279	130	111
Corn 50 - 70 bu	70	63	80	25
Corn 71 - 90 bu	90	81	80	32
Corn 91 - 110 bu	120	99	105	39
Cotton 0.5 Bale	25	18	30	9
Cotton 1.0 Bale	50	36	55	18
Cotton 2.0 Bale	100	71	105	35
Cotton 3.0 Bale	150	107	105	53
Cotton 3.5 Bale	175	125	105	62
Cotton 4.0 Bale	200	142	105	71
Cotton 4.5 Bale	225	160	105	80
Cotton 5.0 Bale	250	178	105	89
Eastern gamagrass- 3000 #	80	57	40	21
Eastern gamagrass- 6000 #	120	114	60	41
Fescue, Tall Hay/Graze 7000#	150	140	80	42
Grain Sorg. 1000 #	20	17	30	8
Grain Sorg. 10000 #	200	167	130	82
Grain Sorg. 1500 #	30	25	30	12
Grain Sorg. 2000 #	40	33	30	16
Grain Sorg. 3000 #	60	50	55	25
Grain Sorg. 4000 #	80	67	55	33
Grain Sorg. 5000 #	100	84	80	41
Grain Sorg. 6000 #	120	100	80	49
Grain Sorg. 7000 #	140	117	130	58
Grain Sorg. 8000 #	160	134	130	66
Grain Sorg. 9000 #	180	150	130	74
Guar 3500 lbs	25	22	80	76
Johnsongrass Hay 6000 #	140	101	80	32
Klein 3 Cut Hay 7200 #	150	83	55	16
Klein 4 Cut Hay 7800 #	150	90	55	18
Klein Grazing + 1 Hay	80	69	55	14
Klein Grazing 1 AU/1.5 ac	150	90	80	18
Klein Grazing 1 AU/2.5 ac	80	69	55	14
Klein Grazing 1 AU/6 ac	40	58	55	11
Legume Overseeded	80	60	105	15
Legume w/ryegrass	160	94	160	38
Midland Bermuda 4000 #	120	75	80	17
Midland Bermuda 6000 #	150	113	105	26
Midland Bermuda 8000 #	200	150	105	35

ATTACHMENT F

SITE SPECIFIC INFORMATION FOR LAND MANAGEMENT UNITS FROM NUTRIENT MANAGEMENT PLAN

**Table 1: Alternative Crops and Yield Goals
Applicable to ALL Land Management Units:- 43 Acres**

Crop and Yield Goal	Nitrogen		P2O5	
	Requirement	Removal	Requirement	Removal
Native Grazing or Hay 4000#	80	44	70	34
Native Grazing or Hay 3000#	40	33	55	25
Native Grazing or Hay 1500#	20	17	27	13
Native Grazing or Hay 750#	10	8	13	6
Oat Light Grazing	120	107	55	40
Oat Moderate Grazing	160	110	80	41
Oats Hay 2-3 tons	120	100	55	37
Oats Heavy Grazing plus Hay	200	117	80	43
Old World Bluestem- 3000 #	40	33	55	25
Old World Bluestem- 6000 #	80	66	55	51
Peanut Hay Dryland 1 Ton	50	47	70	11
Peanut Hay Dryland 2 Tons	100	93	70	22
Peanut Hay Irrigated 3 Tons	150	140	95	33
Peanuts Irrigated 4500 #	180	162	95	18
Rice Early 7500 #	195	104	45	41
Rice Late 7500 #	180	104	45	41
Rice plus Ratoon Early 10000 #	295	139	60	55
Rice plus Ratoon Late 10000 #	280	139	60	55
Rye Forage 5000 #	140	84	55	31
Rye Forage 7000 #	240	117	80	43
Ryegrass Hay 6000	140	100	55	37
Ryegrass Heavy Grazing	200	117	80	43
Ryegrass Moderate Grazing	140	84	55	31
SG Green Chop(25% DM) 8 to 9 tons	260	203	90	73
SG Green Chop(25% DM) 6 to 7 tons	200	150	80	57
SG Green Chop(25% DM) 4 to 5 tons	135	113	60	41
SG Green Chop(25% DM) 2 to 3 tons	75	68	40	24
SG Silage(35% DM) 12 to 14 tons	160	128	90	67
SG Silage(35% DM) 10 to 11 tons	120	101	70	53
SG Silage(35% DM) 8 to 9 tons	95	83	40	43
SG Silage(35% DM) 5 to 7 tons	70	64	30	34
Silage - Corn(35% DM) 11 - 15 Ton	140	119	80	58
Silage - Corn(35% DM) 16 - 20 Ton	240	183	100	77
Silage - Corn(35% DM) 21 - 25 Ton	350	263	105	96
Silage - Corn(35% DM) 26 - 30 Ton	420	315	135	115
Silage - Corn(33% DM) 7 - 10 Ton	83	79	60	38
Silage - Sorg(35% DM) 11 - 15 Ton	200	179	75	55
Silage - Sorg(35% DM) 16 - 20 Ton	280	238	95	74
Silage - Sorg(35% DM) 21 - 25 Ton	360	298	115	92
Silage - Sorg(35% DM) 26 - 30 Ton	380	315	130	111
Silage - Sorg(35% DM) 31 - 40 Ton	450	364	155	135
Silage - Sorg(35% DM) 41 - 50 Ton	580	455	190	168
Silage - Sorg(35% DM) 51 - 60 Ton	700	550	220	202
Silage - Sorg(35% DM) 7 - 10 Ton	125	119	60	37
Small Grain Heavy Grazing	240	112	105	41
Small Grain Light Grazing	60	75	80	28
Small Grain Moderate Grazing	160	97	105	36
Sorg. - Sudan Hay/Graze 11000 #	240	219	105	83

ATTACHMENT F

SITE SPECIFIC INFORMATION FOR LAND MANAGEMENT UNITS FROM NUTRIENT MANAGEMENT PLAN

**Table 1: Alternative Crops and Yield Goals
Applicable to ALL Land Management Units:- 43 Acres**

Crop and Yield Goal	Nitrogen		P2O5	
	Requirement	Removal	Requirement	Removal
Sorg. - Sudan Hay/Graze 7500 #	160	149	55	57
Sorg Forage Hay/Graze 11000 #	240	219	105	83
Sorg Forage Hay/Graze 7500 #	160	151	55	57
Soybean 30 bu	110	119	60	24
Soybean 50 bu	180	180	80	40
Sunflower 2000#	100	71	56	30
Sunflower 3000#	175	107	65	45
Triticale Graze or Hay 7000 #	160	117	105	43
Triticale Graze or Hay 9000 #	240	150	105	56
Watermelons 12 tons	80	53	55	49
Weeping Lovegrass 3500 #	70	39	55	30
Wheat Forage 2000 #	60	33	80	12
Wheat Forage 4000 #	160	67	105	25
Wheat Forage 6000 #	240	100	105	37
Wheat Grain 20 - 30 bu + Grazing	60	58	55	40
Wheat Grain 20 - 30 bu	45	37	55	26
Wheat Grain 31 - 40 bu + Grazing	80	71	75	48
Wheat Grain 31 - 40 bu	60	50	75	34
Wheat Grain 41 - 50 bu + Grazing	100	83	75	57
Wheat Grain 41 - 50 bu	75	62	75	43
Wheat Grain 51 - 60 bu + Grazing	120	96	90	65
Wheat Grain 51 - 60 bu	90	75	90	51
Wheat Grain 61 - 70 bu + Grazing	140	108	90	74
Wheat Grain 61 - 70 bu	105	87	90	60
Wheat Grain 71 - 80 bu + Grazing	160	121	95	82
Wheat Grain 71 - 80 bu	120	100	95	68
Wheat Grain 81 - 90 bu + Grazing	180	133	95	91
Wheat Grain 81 - 90 bu	135	112	95	77
Wheat Grain 91 - 100 bu + Grazing	200	146	95	99
Wheat Grain 91 - 100 bu	150	125	95	85
Wheat Heavy Grazing	240	114	105	42
Wheat Light Grazing	60	75	80	28
Wheat Moderate Grazing	160	97	105	36
Millet GC (25% DM) 18 - 24 Ton	180	140	60	46
Millet Hay/Graze 11000 #	150	95	45	40
Silage - Millet(35% DM) 15 - 18 Ton	190	139	60	46
Popcorn Shelled 3000 - 4000 #	80	74	80	27
Popcorn Shelled 4000 - 5000 #	100	92	80	33
Popcorn Shelled 5000 - 6000 #	120	110	80	40
Vetch Hay 1 Ton	70	60	105	14
Vetch Hay 2 Tons	140	120	105	28
Vetch Green chop(25%DM) 4 Tons	70	56	105	7
Vetch Green chop(25%DM) 8 Tons	140	112	105	14
Winter Pea Hay 5000#	140	137	105	35
Winter Pea Green chop(25%DM)8-9 Tons	140	123	105	32
Cowpea Hay 2 Tons	140	120	105	26
Cowpea GreenChop 8Tons(25%DM) Tons	140	120	105	26

ATTACHMENT F

SITE SPECIFIC INFORMATION FOR LAND MANAGEMENT UNITS (LMUs) FROM NUTRIENT MANAGEMENT PLAN**Table 2: Current Site Specific Information from NMP**

LMU Name	Acreage	Crop(s) and Yield Goal(s)	*Nitrogen Recommendation (lbs/ac)(*1)	*Phosphorus as P₂O₅ Recommendation (lbs/ac)(*1)	Nitrogen Maximum Application Rates (lbs/ac)* (*1)	Phosphorus as P₂O₅ Maximum Application Rates (lbs/ac)* (*1)
LMU #1	35	Coastal Graze: 1 AU/1 Acre Small Grain: Moderate Graze	300	82	300	82
LMU #2	8	Coastal Graze: 1 AU/1 Acre Small Grain: Moderate Graze	400	228	400	228

NOTE

*Nutrients Applied When Application is At Maximum Rates from NMP 590-633 Plan V 5.0 with the Print Date 10/12/2022. Any future revision to the NMP will be based on the current version of the 590-633 CNMP Component (NMP/NUP) Worksheet. Maximum rates are based on wastewater and manure analyses dated 07/23/2021 and 05/17/2018 and soil analysis report dated 10/25/2021 by the Soil, Water and Forage Testing Laboratory, AgriLife Extension, College Station, Texas. The Maximum Rates (lb/ac) for nitrogen (N) and phosphorus (P₂O₅) will be updated based on most recent annual analyses of soil and waste.

(*1) Nutrient recommendations and maximum amount of nutrients derived from all sources have been established for both nitrogen and phosphorus based on the NMP submitted with the application. The permittee is required to recalculate these values annually in accordance with the requirements of this permit. These annual recalculations do not constitute a substantial change and therefore do not require an amendment of this permit.

Fact Sheet and Executive Director's Preliminary Decision

I. Description of Application

Applicant: Peter Henry Schouten, Sr. and Nova Darlene Schouten

Permit No.: WQ0005387000

Regulated Activity: Concentrated Animal Feeding Operation; Dairy Heifer Replacement

Permit Action: New

Authorization: Air & Water Quality Authorization

II. Executive Director's Recommendation

The Executive Director has made a preliminary decision that this permit, if issued, meets all statutory and regulatory requirements. The proposed permit shall be issued for a 5 year term in accordance with 30 TAC Chapter 305.

III. Reason for Proposed Project

The applicant has applied to the Texas Commission on Environmental Quality (TCEQ) for a new Texas Pollutant Discharge Elimination System Permit No. WQ0005387000 to authorize the permittee to confine 2,000 head of dairy heifers. The location of this proposed operation was previously permitted as a State-only dairy cattle facility with 480 head, all of which were milking cows, under the CAFO individual permit with Permit Number WQ0003656000. The permit was canceled on October 12, 2021. The proposed operation will confine dairy heifers only, none of which will be milking.

IV. Facility Description and Location

Maximum Capacity: 2,000 Head Dairy Heifers

Land Management Units (LMUs) (acres): LMU#1 – 35, LMU#2 – 8

Location: The facility is located on the north side of State Highway 6 on County Road 2495 which is approximately 5.5 miles east of the intersection of State Highway 6 and US Highway 281, in Bosque County, Texas. Latitude: 31.983056° N and Longitude: 97.949722° W.

Drainage Basin: The facility is located in the drainage area of the North Bosque River in Segment No. 1226 of the Brazos River Basin.

The facility consists of one Retention Control Structure (RCS) and one Settling Basin. The table below indicates the volume allocations for the RCS:

Table 1: Volume Allocations for RCS (Acre-Feet)

RCS Name	Design Rainfall Event Runoff	Process Generated Wastewater	Minimum Treatment Volume	Sludge	Water Balance	Required Capacity	Actual Capacity (if existing)
RCS #1	14.24	0	0	0.23	2.38	16.85	20.47

The volume allocations are determined using Natural Resource Conservation Service standards, American Society of Agricultural and Biological Engineers standards, and/or site specific data submitted in the permit application.

The Design Rainfall Event is the volume of runoff from the 25 year, 10 day storm event. The RCS is required to include adequate capacity to contain this amount of runoff as a margin of safety to protect against discharges during rainfall events that may exceed the average monthly values used to design the RCS, but do not constitute chronic or catastrophic rainfall. This volume allocation accommodates runoff from open lot surfaces, all areas between the open lots and the RCS, runoff from roofed areas that contribute to the RCS and direct rainfall on the surface of the RCS. Runoff curve numbers used to calculate the runoff volume from the open lot surfaces are reflective of the characteristics of open lot surfaces and range between 90 and 95. Runoff curve numbers used to compute the runoff from areas between the open lots and the RCS are reflective of the land use and condition of the areas between the open lots and RCS. A curve number of 100 is used for the RCS surface and all roofed areas.

Process Generated Wastewater is the volume of wet manure and wastewater generated by the facility that is flushed or otherwise directed to the RCS. Wastewater includes all water used directly or indirectly by the facility that comes in contact with manure or other waste. The RCS must contain the process generated wastewater from a 21 day period or greater. RCS #1 is not required to contain process generated wastewater because no process generated wastewater is produced by the facility.

This facility is not required to maintain a treatment volume in the RCS because there is no process generated wastewater.

Sludge accumulation volumes are required in the RCS that receives runoff from open lots. The sludge accumulation volume allocated for runoff from open lots is calculated using USDA Agricultural Field Waste Handbook, Kansas, Part 651.1083, which uses the following equation: $(\%SC) \times (MAR) \times (DA) \times (SP)$, where %SC = percent solids content of runoff, MAR = mean annual runoff (in inches), DA = contributing drainage area (in acres), and SP = sediment storage period (in years). A minimum of one year of sludge storage is required in the RCS. Design sludge volumes in this permit reflect a one (1) year sludge accumulation period.

The RCS volume designated as Water Balance is the capacity needed in addition to the Process Generated Wastewater volume to provide adequate operating capacity so that the operating volume does not encroach into the design storm volume. The water balance is an analysis of the inflow into the RCS, all outflows from the RCS and the consumptive use requirements of the crops on the land areas being irrigated. The water balance is developed on a monthly basis. It estimates all inflows into the RCS including process generated wastewater and runoff from open lots, areas between open lots and the RCS, roofed areas and direct rainfall onto the RCS surface. Consumptive use potential for the areas to be irrigated is developed based on the potential evapotranspiration of the crops and the effective average monthly rainfall on the area to be irrigated. Runoff curve numbers used for the water balance are adjusted from one (1) day to 30 day curve numbers to more accurately reflect monthly values. Evaporation from the RCS surface is computed on a monthly basis. Monthly withdrawals from the RCS are developed based on the total inflow to the RCS minus evaporation from the RCS surface and limited by the monthly crop consumptive use potential.

V. Summary of Changes from Existing Authorization

The location of this proposed operation was previously permitted as a State-only dairy cattle facility with 480 head, all of which were milking cows, under the CAFO individual permit with Permit Number WQ0003656000. The permit was canceled on October 12, 2021. The proposed operation will operate as a large CAFO that will confine 2,000 head dairy heifers only, none of which will be milking.

The facility will comply with the federal regulations in 40 CFR 412 that relates to CAFO point source category and the requirements in 30 TAC 321 Subchapter B that relates CAFOs.

VI. Proposed Permit Conditions and Monitoring Requirements

A. Effluent Limitations

Compost, manure, sludge and wastewater may only be discharged from a LMU or a properly designed, constructed, operated and maintained RCS into water in the state from this CAFO if any of the following conditions are met:

- discharge resulting from a catastrophic condition other than a rainfall event that the permittee cannot reasonably prevent or control;
- a discharge resulting from a catastrophic rainfall event from a RCS;
- a discharge resulting from a chronic rainfall event from a RCS; or
- a discharge resulting from a chronic rainfall event from a LMU that occurs because the permittee takes measures to de-water the RCS in accordance with the individual permit, relating to imminent overflow.

40 CFR §122.44 specifies that any requirements, in addition to or more stringent than promulgated effluent limitation guidelines, must be applied when they are necessary to achieve state water quality standards. Water quality based effluent limitations must be established when the TCEQ determines there is a reasonable potential to cause or to contribute to an in-stream excursion above the allowable ambient concentration of a state numeric criterion. For CAFO discharges the TCEQ must consider:

1. existing controls on point and non-point sources of pollution;
2. variability of the pollutant in the effluent; and
3. dilution of the effluent in the receiving water.

In proposing this permit, the TCEQ addresses considerations 2 and 3 since continuous discharges are prohibited and effluent discharges are authorized only during catastrophic conditions or a chronic or catastrophic rainfall event from a RCS properly designed, constructed, operated and maintained. The effluent pollutant levels are variable and effluent is usually not discharged. Additionally, during these climatic events, water bodies receiving a contribution of CAFO wastewater should be significantly diluted by other rainfall runoff.

Consideration 1 requires permit controls on CAFO discharges which will result in the numeric criteria of the water quality standards being met, thus ensuring that applicable uses of water in the state are attained. The principal pollutants of concern include organic matter causing biochemical oxygen demand, the discharge of ammonia-nitrogen, phosphorus and *Escherichia coli*. This permit requires discharges to be monitored for the pollutants of concern. Existing technology does not allow for practicable or economically achievable numeric effluent limitations at this time. The Environmental Protection Agency (EPA) has not promulgated

effluent guidelines or numeric effluent limitations that would allow regular discharges of CAFO process wastewater or process-generated wastewater. The proposed permit addresses potential pollutant impacts through requirements including numerous narrative (non-numeric) controls on CAFO process wastewater and non-point sources of pollutant discharges associated with CAFOs. Setting specific water quality-based effluent limitations in this permit is not feasible (see 40 CFR §122.44 (k)(3)).

The general and site specific provisions which are expected to result in compliance with water quality criteria and protection of attainable water quality are discussed in the following sections of this fact sheet: RCS Design and Operational Requirements; Requirements for Beneficial Use of Manure, Sludge, and Wastewater; Additional Water Quality Requirements; and Monitoring and Reporting Requirements.

B. RCS Design and Operational Requirements

The draft permit includes the following requirements related to proper RCS design, construction, operation and maintenance:

1. The RCS(s) must be designed and constructed to meet or exceed the margin of safety, equivalent to the volume of runoff and direct precipitation from the 25 year/10 day rainfall event. The design rainfall event, at which time the CAFO is authorized to discharge, is **12.2** inches. The application includes design calculations and certification by a Professional Engineer, which determine the design criteria for the RCS(s).
2. A RCS management plan is required to be implemented. This plan must establish expected end of the month water storage volumes for each RCS. These maximum levels are based on the design assumptions used to determine the required size of the RCS. This plan assures the permittee will maintain wastewater volumes within the designed operating capacity of the structures, except during chronic or catastrophic rainfall events. The permittee must document and provide an explanation for all occasions where the water level exceeds the expected end of the month storage volumes. By maintaining the wastewater level at or below the expected monthly volume, the RCS will be less likely to encroach into the volume reserved for the design rainfall event and/or discharge during smaller rainfall events.
3. The pond marker must have one foot increments. This requirement identifies the level of wastewater storage to assist the permittee in the implementation of the RCS management plan. It also acts as an enforcement tool for TCEQ to determine compliance with the RCS management plan.
4. The wastewater level in the RCS(s) must be recorded daily. This requirement will assist the permittee in the implementation of the RCS management plan and will provide a visual indication of compliance.
5. The amount of sludge in the RCS(s) must be maintained at or below the designed sludge volume. Proper sludge management will reduce overflows associated with insufficient wastewater storage capacity. This permit requires that sludge accumulations in the RCS(s) be measured annually.
6. The RCS(s) must be adequately lined and certified by a Texas Professional Engineer; alternatively, certification must document that in situ material meets the requirements of constructed and installed liners. Groundwater has the potential to resurface as surface water. Therefore, preventing impacts to groundwater also provides protection to surface

water. A liner certification, certified by a Professional Engineer, for the existing RCSs were submitted with the application.

Table 2: Existing RCS Liner Certifications

RCS Name	Liner Certification Date
RCS #1	March 2, 2010
Settling Basin #1	March 2, 2010

7. The RCS(s) must maintain two vertical feet of material equivalent to construction materials between the top of the embankment and the structure's spillway to protect from overtopping the structure. RCS(s) without spillways must have a minimum of two vertical feet between the top of the embankment and the required storage capacity.
8. The entry of uncontaminated stormwater runoff into RCS(s) must be minimized. The site includes diversion structures to direct contaminated runoff into the RCS(s) and to prevent uncontaminated stormwater runoff from entering the RCS(s).

C. Requirements for Beneficial Use of Manure, Sludge, and Wastewater

Nutrient pollutants of concern have narrative criteria and are discharged in CAFO wastewater. Nutrient pollutants have been addressed through imposition of BMPs. No water quality impacts are expected to occur from land application based upon properly prepared and implemented nutrient management practices. The proposed permit contains requirements related to the collection, handling, storage and beneficial use of manure, wastewater, and sludge. These requirements were established based on TCEQ rules, EPA guidance, NRCS Field Operations Technical Guidance and the Animal Waste Management Field Handbook, recommendations from the TCEQ's Water Quality Assessment Team, and best professional judgment.

The elements of a NMP as listed in 40 CFR §122.42(e)(1) have been incorporated into this permit. This permit requires a NMP developed by a certified nutrient management specialist, based on United States Department of Agriculture/Natural Resource Conservation Service (NRCS) Practice Standard 590 and each of the required elements to be implemented upon issuance of this permit. In relation to these items, the proposed permit meets federal requirements.

1. For LMUs with a soil phosphorus concentration of less than 200 ppm in Zone 1 depth (0-6 inches if incorporated, 0-2 or 2-6 inch if not incorporated), land application of commercial fertilizer, compost, manure, sludge and wastewater must be in accordance with a certified NMP. This plan is based on the NRCS Practice Standard Code 590. This plan involves a site specific evaluation of the LMU to include soils, crops, nutrient need and includes the phosphorus index tool. The phosphorus index is a site specific evaluation of the risk potential for phosphorus movement into watercourses. The risk potential is determined by site characteristics such as soil phosphorus level, proposed phosphorus application rate, application method and timing, proximity of the nearest field edge to a named stream or lake, runoff class, and soil erosion potential. The application rates are adjusted according to the risk potential. The higher the risk potential, the lower the application rate; thus there is minimal potential to have excess nutrients available to leave the site and affect water quality.

2. For LMUs with a soil phosphorus concentration of 200-500 ppm in Zone 1 depth (0-6 inches if incorporated, 0-2 or 2-6 inch if not incorporated), land application of commercial fertilizer, compost, manure, sludge and wastewater must be in accordance with a nutrient utilization plan (NUP). The NUP is a revised NMP based on crop removal. A crop removal application rate is the amount of nutrients contained in and removed by the proposed crop. At the discretion of the certified nutrient management specialist, the NUP may also include a phosphorus reduction component. This NUP must be submitted to the TCEQ for review and approval.
3. For LMUs with a soil phosphorus concentration of greater than 500 ppm in Zone 1 depth (0-6 inches if incorporated, 0-2 or 2-6 inch if not incorporated), land application of commercial fertilizer, compost, manure, sludge and wastewater must be in accordance with a NUP based on crop removal which also includes a phosphorus reduction component. A phosphorus reduction component is a management practice, incorporated into the NUP, which is designed to further reduce the soil phosphorus concentration by means such as phosphorus mining, moldboard plowing, or other practices utilized by the permittee. This revised NUP must also be submitted to the TCEQ for review and approval. Permittees required to operate under a NUP with a phosphorus reduction component must show a reduction in the soil phosphorus concentration within twelve (12) months or may be subject to enforcement actions.
4. Table 3 below identifies the maximum application rate, as shown in the NMP submitted in the permit application. NMPs are routinely updated and the values shown below are subject to change.

**Table 3: LMU Maximum Application Rates and
Soil Phosphorus Levels**

LMU Name	Soil Test P (ppm)	Max Annual P₂O₅ (lbs/ac)
LMU #1	326	82
LMU #2	130	228

5. All generated manure, sludge or wastewater in excess of the amount allowed to be land applied by the NMP or NUP must be delivered to a composting facility authorized by the Executive Director, delivered to a permitted landfill, beneficially used by land application on land located outside of the major sole source impairment zone, or provided to operators of third-party fields for beneficial use subject to specified land application requirements and testing. By requiring specific outlets for excess manure, sludge and wastewater, the permit limits unregulated use of manure, sludge and wastewater within the watershed.
6. The permittee must continue to operate under a Comprehensive NMP (CNMP) certified by the Texas State Soil and Water Conservation Board (TSSWCB). The CNMP must be developed by a qualified individual(s) in accordance with TSSWCB regulations. The CNMP is a whole farm plan that addresses nutrient management from the origin in the feed rations to final disposition. The CNMP considers all nutrient inputs, onsite use and treatment, outputs, and losses. Inputs include animal feed, purchased animals, and commercial fertilizer. Outputs include animals sold, harvested crops removed from the facility, and manure removed from the facility. Losses include volatilization, stormwater runoff, and leaching.

7. The permittee must implement additional conservation practices on LMUs adjacent to water in the state. These conservation practices include a 100 foot vegetative buffer, filter strips, vegetative barrier, and/or contour buffer strips. Site specific conditions and NRCS practice standards specify which conservation practices, in addition to the required 100 foot vegetative buffer, must be implemented. The conservation practices reduce erosion, suspended solids and nutrients in runoff from LMUs. This will improve the quality of stormwater runoff prior to entering water in the state.
8. In Table 4 below, the Additional Buffer Setback distance was determined by using the NRCS Conservation Practice Code 393, Filter Strip. The practice code uses a combination of hydrologic soil groups and field slope percentages to calculate an appropriate filter strip length.

Table 4: Buffer Distances for Each LMU

LMU Name	Vegetative Buffer Setback (feet)	Additional Buffer Setback NRCS Code 393 Filter Strip flow length (feet)
LMU #1	100	40
LMU #2	100	40

9. Land application is prohibited between the hours of 12 a.m. and 4 a.m. This provision reduces the potential of irrigation related discharges associated with equipment malfunctions.
10. Discharge of wastewater from irrigation is prohibited, except a discharge resulting from irrigation events associated with imminent overflow conditions. Precipitation-related runoff from LMUs is allowed by the permit, when land application practices are consistent with a NMP or NUP.
11. Terms of the NMP and Changes to the Terms of the NMP

The permit addresses the terms of the NMP and changes to the terms of the NMP to clarify substantial and non-substantial changes.

Attachment E of the draft permit describes the methodology for calculating maximum application rates and annual recalculation of application rates and Attachment F of the draft permit shows the list of the proposed alternative crops, their yield goals, and the N and P requirements and removal rates for each crop and yield goal. To the extent that the alternative crops were identified in the application, annual recalculations do not constitute a substantial change to the terms of the NMP, and therefore will not require a permit amendment.

The maximum amounts of N and P from all sources of nutrients and the amounts of manure and process wastewater to be applied on alternative crops will be determined in accordance with the methodology described in Attachment E of the draft permit when such crops are being used.

Nutrient recommendations and maximum amount of nutrients derived from all sources have been established for both nitrogen (N) and phosphorus (P) based on the NMP that was submitted with the application. The permittee is required to recalculate these values annually based on the most recent analyses of wastewater, manure, and soil.

Section VII.A.8(a)(2) of the permit lists changes to the terms of the NMP that will require a major amendment to the permit. Changes that would result in a major amendment are:

- Increase in animal headcount;
- Increase in LMU acreage or a change in LMU location; or
- Change in crop and yield goal (not listed in Attachment F of the proposed permit).

Any changes (substantial or non-substantial) to the NMP, other than the annual recalculation of application rates outlined in Attachment E, must be submitted to the ED for review. If the ED determines that the changes to the NMP are non-substantial, the revised NMP will be made publicly available and included in the permit record. If the ED determines that the changes to the NMP are substantial, the information provided by the permittee will be subject to the major amendment process.

12. The proposed permit authorizes the use of third-party fields, i.e. land not owned, operated, controlled, rented, or leased by the CAFO owner or operator that have been identified in the Pollution Prevention Plan (PPP). The permittee must have a contract with the operator of the third-party fields. The written contract must require all transferred manure, wastewater, and sludge to be beneficially applied to third-party fields in accordance with the applicable requirements in 30 Texas Administrative Code §321.36 and §321.40 at an agronomic rate based on soil test phosphorus in Zone 1 depth (0-6 inches if incorporated, 0-2 or 2-6 inch if not incorporated). A certified nutrient management specialist must annually collect soil samples from each third-party field used and have the samples analyzed in accordance with the requirements for permitted LMUs. The permittee is prohibited from delivering manure, wastewater, and sludge to an operator of a third-party field once the soil test phosphorus analysis shows a level equal to or greater than 200 ppm in Zone 1 depth (0-6 inches if incorporated, 0-2 or 2-6 inch if not incorporated) or after becoming aware that the third-party operator is not following the specified requirements and the contract. The permittee will be subject to enforcement action for violations of the land application requirements on any third-party field. The third-party fields must be identified in the PPP. The permittee must submit a quarterly report with the name, locations, and amounts of manure, wastewater, and sludge transferred to operators of third-party fields.

VII. Additional Water Quality Requirements

The approved recharge feature certification submitted in the permit application must be updated and maintained in the onsite PPP. The recharge feature certification identifies any natural or artificial features on the CAFO site, either on or beneath the ground surface, which could provide or create significant pathways for wastewater or manure to enter the underlying aquifer, and describes measures to prevent adverse impacts to groundwater. Groundwater has the potential to resurface as surface water. Therefore, preventing impacts to groundwater also provides protection to surface water.

Table 5 below shows potential soil limitations identified in the recharge feature evaluation and the proposed management practices to address those limitations.

Table 5: Soil Limitations

Soil Series and Map ID	Potential Limitations	BMPs*
Hico-Windthorst: – HwD3	Depth to soft bedrock	Land application will be based upon the Available Water Capacity (Refer to the nutrient management plan (NMP)) of the soil and will not exceed agronomic rates for nutrients. No land application to inundated soils.
Purves-Maloterre Complex:- PmC	Droughty Depth to Bedrock	Land application will be based upon the Available Water Capacity (Refer to the NMP) of the soil and will not exceed agronomic rates for nutrients. Maintain clay liners in RCS. No land application to inundated soils.

Table 6 below lists all wells on the facility, their status, and what BMP will be implemented to protect groundwater.

Table 6: Water Well Protection

Well Number	Status	BMPs
1	Producing	Maintain 150 ft buffer

VIII. Monitoring and Reporting Requirements

- A. The permittee is required to report all discharges to TCEQ. Discharges resulting from a chronic or catastrophic rainfall event or catastrophic conditions must be reported orally within one hour of the discovery of the discharge and in writing within fourteen (14) working days. For any discharges, grab samples must be collected and analyzed for Biochemical Oxygen Demand, *Escherichia coli*, Total Dissolved Solids, Total Suspended Solids, Nitrate, Total Phosphorus, Ammonia Nitrogen and pesticides (if suspected).
- B. The permittee must provide a report to the TCEQ to substantiate a chronic rainfall discharge. After review of the report, if required by the Executive Director, the permittee must have an engineering evaluation by a licensed Texas Professional Engineer developed and submitted to the Executive Director. The report and engineering evaluation may be used to verify that the facility was maintained and operated according to the permit conditions. Information reviewed may include rainfall records at the CAFO, RCS wastewater levels preceding the discharge, irrigation records, and the current sludge volume. This requirement allows for closer scrutiny by TCEQ for discharges resulting from chronic conditions and provides documentation for enforcement of unauthorized discharges.
- C. Soil samples must be taken annually from LMUs and analyzed for Nitrate, Phosphorus, Potassium, Sodium, Magnesium, Calcium, Soluble salts/electrical conductivity, and pH. The results are used in the NMP to determine land application rates. Annual soil samples must be collected by one of the following persons: the NRCS; a certified nutrient management specialist; the Texas State Soil and Water Conservation Board; the Texas AgriLife Extension; or an agronomist or soil scientist on full-time staff at an accredited

university located in the State of Texas. The TCEQ Regional Office must be notified ten (10) days prior to annual soil sample collection activities. The permittee is required to submit soil analyses to TCEQ.

- D. The permittee is required to annually collect and analyze at least one (1) representative sample of wastewater, sludge (if applicable), or manure for total nitrogen, total phosphorus, and total potassium. The results are used in the NMP to determine land application rates.
- E. Some of the land application records maintained by the permittee must be submitted to the TCEQ annually. These records include: date of compost, manure, sludge and wastewater application to each LMU; location of the specific LMU and the volume applied during each application event; acreage of each individual crop on which compost, manure, sludge and wastewater is applied; basis for and the total amount of nitrogen and phosphorus applied per acre to each LMU, including sources of nutrients and amount of nutrients on a dry weight basis other than compost, manure, sludge and wastewater and; weather conditions, such as temperature, precipitation, and cloud cover, during the land application and twenty-four (24) hours before and after the land application.
- F. Other recordkeeping requirements include: daily records of RCS wastewater levels and measurable rainfall; weekly records of manure, wastewater, and sludge removed from the facility, inspections of control facilities and land application equipment; and monthly records of compost, manure, sludge and wastewater land applied.

IX. 303(D) Listing and Total Maximum Daily Load (TMDL)

The facility for this permit action is located within the watershed of the North Bosque River in Segment No. 1226 of the Brazos River River Basin. The designated uses and dissolved oxygen criterion as stated in Appendix A of the Texas Surface Water Quality Standards (30 TAC §307.10) for Segment No. 1226 are primary contact recreation, public water supply, high aquatic life use, and 5.0 mg/L dissolved oxygen.

Segment 1226 is not listed on the 2022 Clean Water Act Section 303 (d) list. The facility is located in the watershed of an unnamed tributary and is not listed on the 2022 Clean Water Act Section 303 (d) list for any bacteria impairments. However, some tributaries within the watershed of Segment 1226 are listed on the State's inventory of impaired and threatened waters (the 2022 Clean Water Act Section 303(d) list) for dissolved oxygen and elevated bacteria. Green Creek in Segment No. 1226B is listed for depressed dissolved oxygen, Spring Creek in Segment No. 1226G and Little Duffau Creek in Segment No. 1226K are listed for bacteria.

The North Bosque River (Segments 1226 and 1255) was included in the 1998 Texas Clean Water Act 303(d) List and deemed impaired under narrative water quality standards related to nutrients and aquatic plant growth. Segment No. 1226 is included in the Agency's document Two Total Maximum Daily Loads for Phosphorus in the North Bosque River, adopted by the Commission on February 9, 2001 and approved by EPA on December 13, 2001. An Implementation Plan for Soluble Reactive Phosphorus in the North Bosque River Watershed (I-Plan) was approved by the Commission on December 13, 2002 and approved by the Texas State Soil and Water Conservation Board on January 16, 2003. According to the TMDL I-Plan, management measures for control of phosphorus loading will also have some corollary effect on reducing bacteria loading, since the nonpoint source nutrient and bacteria loads largely

originate from the same sites and materials and are transported via the same processes and pathways.

The TMDL for the North Bosque River, Segments 1226 and 1255, identified the amount of phosphorus introduced into these segments, i.e. the load. Phosphorus load from two categories of sources was modeled to calculate the expected reductions in phosphorus load to meet instream water quality standards. Point sources included wastewater treatment plants; non-point sources included all other sources, such as CAFOs. The TMDL called for an average 50% reduction in the average concentration of soluble reactive phosphorus loadings from both point sources and non-point sources. The TMDL was developed assuming implementation of specific best management practices. This set of best management practices represents one way to achieve the water quality targets in stream and the overall reduction goal of the TMDL.

The TMDL was approved with the understanding that an adaptive management approach was an appropriate means to manage phosphorus load to the stream. The I-Plan emphasized this approach to achieve the phosphorus reductions targeted in the TMDL. Adaptive management envisions adjustment of management practices over time as necessary to reach this target. The TMDL anticipated that, to control loading to the stream, dairy CAFO permittees would implement those best management practices which best addressed site-specific conditions. Accordingly, the TMDL is not directly tied to the number of animal units permitted in the watershed; it is instead tied to the amount of nutrients that may be land applied consistent with management practices that ensure appropriate agricultural utilization of nutrients.

Primary management strategies for dairies, both voluntary and regulatory, were identified in the I-Plan which included: phosphorus-based application rates in LMUs, voluntarily measures to reduce the amount of phosphorus in dairy cow diets, voluntarily removing 50% of dairy-generated manure from the watershed, more stringent RCS design requirements to reduce the potential for overflows from RCSs, evaluation of chronic rainfall and incidences of RCS overflows, additional tailwater requirements, additional protective measures to prevent runoff caused by excessive irrigation, CNMPs, educational requirements for dairy operators and employees.

The proposed permit includes the following requirements to address the recommendations in the I-Plan:

- RCS(s) designed and constructed for 25 year, 10 day rainfall event
- RCS management plan
- pond marker with one foot increments
- daily recordkeeping of wastewater levels
- chronic rainfall discharge notification, including records that substantiate that the overflow was a result of cumulative rainfall that exceeded the design rainfall event without the opportunity for dewatering
- NMP and NUP based on phosphorus risk index
- CNMP
- specific outlets for excess manure, sludge and wastewater

- additional record-keeping for exported manure, sludge and wastewater to track each permittee's contribution toward the 50% voluntary removal goal in the Bosque River Total Maximum Daily Load (TMDL)
- prohibition of discharges from LMUs, except as related to imminent overflow
- minimize ponding and puddling of wastewater and prevent tailwater discharges
- additional conservation practices between land application areas and water in the state
- prohibition of land application between 12 a.m. and 4 a.m.
- automatic shutdown or alarm system may be required if unauthorized discharge occurs from irrigation system
- employee and operator required training related to land application of manure, sludge, and wastewater, proper operation and maintenance of the facility, good housekeeping, material management practices, recordkeeping requirements, and spill response and clean up

The voluntary phosphorus diet reductions may be implemented through consultations between a nutritionist and the permittee. Any such dietary phosphorus reductions will result in reduced phosphorus concentrations in manure. These strategies are facets of CNMPs.

The RCS storage capacity requirements, nutrient management practices, increased TCEQ oversight of operational activities, and requirements of the I-Plan, which are incorporated into the draft permit, are designed to reduce the potential for this CAFO to contribute to further impairment from bacteria, oxygen-demanding constituents and nutrients such as total phosphorus. Furthermore, it is anticipated the implementation of the primary management strategies and permit provisions identified above will result in phosphorus load reduction in the watershed and achieve the reductions targeted in the TMDL. The draft permit provisions are consistent with the approved TMDL and I-Plan that establish measures for reductions in loading of phosphorus (and consequently other potential pollutants) to the North Bosque River Watershed. Therefore, the draft permit is consistent with the requirements of the antidegradation implementation procedures in 30 Texas Administrative Code Section 307.5 (c)(2)(G) of the Texas Surface Water Quality Standards.

X. Threatened or Endangered Species

The discharge from this permit action is not expected to have an effect on any federal endangered or threatened aquatic or aquatic dependent species or proposed species or their critical habitat. This determination is based on the United States Fish and Wildlife Service's (USFWS) Biological Opinion on the State of Texas authorization of the Texas Pollutant Discharge Elimination System (TPDES) dated September 14, 1998 and the October 21, 1998 update. To make this determination for TPDES permits, TCEQ and Environmental Protection Agency only considered aquatic or aquatic dependent species occurring in watersheds of critical concern or high priority as listed in Appendix A of the USFWS Biological Opinion. This determination is subject to reevaluation due to subsequent updates or amendments to the Biological Opinion. The permit does not require Environmental Protection Agency review with respect to the presence of endangered or threatened species.

XI. Procedures for Final Decision

When an application is declared administratively complete, the Chief Clerk sends a letter to the applicant instructing the applicant to publish the Notice of Receipt of Application and Intent to Obtain Permit in the newspaper. In addition, the Chief Clerk instructs the applicant to place a copy of the application in a public place for review and copying in the county where the facility is or will be located. This application will be in a public place throughout the comment period. The Chief Clerk also mails this notice to any interested persons and, if required, to landowners identified in the permit application. This notice informs the public about the application, and provides that an interested person may file comments on the application or request a contested case hearing or a public meeting.

Once a draft permit is completed, it is sent, along with the Fact Sheet and Executive Director's Preliminary Decision, to the Office of the Chief Clerk. At that time, Notice of Application and Preliminary Decision will be mailed to the individuals identified on the Office of the Chief Clerk mailing list and published in the newspaper. This notice sets a deadline for making public comments. The applicant must place a copy of the Executive Director's Preliminary Decision and draft permit in the public place with the application.

Any interested person may request a public meeting on the application. A public meeting is intended for the taking of public comment, and is not a contested case proceeding.

After the public comment deadline, the Executive Director prepares a response to all timely, relevant and material, or significant public comments significant on the application or the draft permit raised during the public comment period. The Office of the Chief Clerk then mails the Executive Director's Response to Comments and Final Decision to individuals who have filed comments, requested a contested case hearing, or requested to be on the mailing list. This notice provides that a person may request a contested case hearing or file a request for reconsideration of the Executive Director's decision within thirty (30) days after the notice is mailed.

The Executive Director will issue the permit unless a written hearing request or request for reconsideration is filed within thirty (30) days after the Executive Director's Response to Comments and Final Decision is mailed. If a hearing request or request for reconsideration is filed, the Executive Director will not issue the permit and will forward the application and request to the TCEQ's Commissioners for their consideration at a scheduled Commission meeting. If a contested case hearing is held, it will be a legal proceeding similar to a civil trial in state district court.

If the Executive Director calls a public meeting or the Commission grants a contested case hearing as described above, the Commission will give notice of the date, time, and place of the meeting or hearing. If a hearing request or request for reconsideration is made, the Commission will consider all public comments in making its decision and shall either adopt the Executive Director's response to public comments or prepare its own response.

For additional information about this application, contact Sean See at (806) 468-0504.

XII. Administrative Record

The following items were considered in developing the proposed draft permit:

- TCEQ State Permit No. WQ0003656000 issued March 17, 2017.
- The application received on May 12, 2022 and subsequent revisions.

Fact Sheet and Executive Director's Preliminary Decision

Peter Henry Schouten & Nova Darlene Schouten, TPDES Permit No. WQ0005387000

- Interoffice Memorandum for groundwater review from the Water Quality Assessment Team, Water Quality Assessment Section, Water Quality Division June 1, 2022.
- Interoffice Memorandum for NMP review from the Water Quality Assessment Team, Water Quality Assessment Section, Water Quality Division, dated June 6, 2022.
- Interoffice Memorandum from the Standards Implementation Team, Water Quality Assessment Section, Water Quality Division, dated May 24, 2022.
- Bosque River TMDL Implementation Plan.
- Federal Clean Water Act - Section 402; Section 382.051 of the Texas Clean Air Act; Texas Water Code §26.027; 30 TAC §39, §305, §321 Subchapter B; Commission Policies; and EPA Guidelines.
- Texas 2022 Clean Water Act Section 303(d) List, Texas Commission on Environmental Quality, June 1, 2022; approved by EPA on July 7, 2022.
- NRCS Animal Waste Management Field Handbook and Field Office Technical Guidance for Texas.
- NRCS, ASABE and ASTM Standards.



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

September 28, 2023

TO: All interested persons.

RE: Peter Henry Schouten Sr. and Nova Darlene Schouten
TPDES Permit No. WQ0005387000

Decision of the Executive Director.

The executive director has made a decision that the above-referenced permit application meets the requirements of applicable law. **This decision does not authorize construction or operation of any proposed facilities.** This decision will be considered by the commissioners at a regularly scheduled public meeting before any action is taken on this application unless all requests for contested case hearing or reconsideration have been withdrawn before that meeting.

Enclosed with this letter are instructions to view the Executive Director's Response to Public Comment (RTC) on the Internet. Individuals who would prefer a mailed copy of the RTC or are having trouble accessing the RTC on the website, should contact the Office of the Chief Clerk, by phone at (512) 239-3300 or by email at chiefclk@tceq.texas.gov. A complete copy of the RTC (including the mailing list), complete application, draft permit and related documents, including public comments, are available for review at the TCEQ Central Office. Additionally, a copy of the complete application, the draft permit, and executive director's preliminary decision are available for viewing and copying at the Bosque County Extension Office, 104 South Fuller Street, Meridian, Texas.

If you disagree with the executive director's decision, and you believe you are an "affected person" as defined below, you may request a contested case hearing. In addition, anyone may request reconsideration of the executive director's decision. The procedures for the commission's evaluation of hearing requests/requests for reconsideration are located in 30 Texas Administrative Code Chapter 55, Subchapter F. A brief description of the procedures for these two requests follows.

How to Request a Contested Case Hearing.

It is important that your request include all the information that supports your right to a contested case hearing. Your hearing request must demonstrate that you meet the applicable legal requirements to have your hearing request granted. The commission's consideration of your request will be based on the information you provide.

The request must include the following:

- (1) Your name, address, daytime telephone number, and, if possible, a fax number.

- (2) The name of the applicant, the permit number and other numbers listed above so that your request may be processed properly.
- (3) A statement clearly expressing that you are requesting a contested case hearing. For example, the following statement would be sufficient: “I request a contested case hearing.”
- (4) If the request is made by a group or association, the request must identify:
 - (A) one person by name, address, daytime telephone number, and, if possible, the fax number, of the person who will be responsible for receiving all communications and documents for the group;
 - (B) the comments on the application submitted by the group that are the basis of the hearing request; and
 - (C) by name and physical address one or more members of the group that would otherwise have standing to request a hearing in their own right. The interests the group seeks to protect must relate to the organization’s purpose. Neither the claim asserted nor the relief requested must require the participation of the individual members in the case.

Additionally, your request must demonstrate that you are an **“affected person.”** An affected person is one who has a personal justiciable interest related to a legal right, duty, privilege, power, or economic interest affected by the application. Your request must describe how and why you would be adversely affected by the proposed facility or activity in a manner not common to the general public. For example, to the extent your request is based on these concerns, you should describe the likely impact on your health, safety, or uses of your property which may be adversely affected by the proposed facility or activities. To demonstrate that you have a personal justiciable interest, you must state, as specifically as you are able, your location and the distance between your location and the proposed facility or activities.

Your request must raise disputed issues of fact that are relevant and material to the commission’s decision on this application that were raised **by you** during the public comment period. The request cannot be based solely on issues raised in comments that you have withdrawn.

To facilitate the commission’s determination of the number and scope of issues to be referred to hearing, you should: 1) specify any of the executive director’s responses to **your** comments that you dispute; 2) the factual basis of the dispute; and 3) list any disputed issues of law.

How to Request Reconsideration of the Executive Director’s Decision.

Unlike a request for a contested case hearing, anyone may request reconsideration of the executive director’s decision. A request for reconsideration should contain your name, address, daytime phone number, and, if possible, your fax number. The request must state that you are requesting reconsideration of the executive director’s decision, and must explain why you believe the decision should be reconsidered.

Deadline for Submitting Requests.

A request for a contested case hearing or reconsideration of the executive director’s decision must be **received by** the Chief Clerk’s office no later than **30 calendar days** after the date

of this letter. You may submit your request electronically at www.tceq.texas.gov/agency/decisions/cc/comments.html or by mail to the following address:

Laurie Gharis, Chief Clerk
TCEQ, MC-105
P.O. Box 13087
Austin, Texas 78711-3087

Processing of Requests.

Timely requests for a contested case hearing or for reconsideration of the executive director's decision will be referred to the TCEQ's Alternative Dispute Resolution Program and set on the agenda of one of the commission's regularly scheduled meetings. Additional instructions explaining these procedures will be sent to the attached mailing list when this meeting has been scheduled.

How to Obtain Additional Information.

If you have any questions or need additional information about the procedures described in this letter, please call the Public Education Program, toll free, at 1-800-687-4040.

Sincerely,

A handwritten signature in black ink that reads "Laurie Gharis". The signature is written in a cursive, flowing style.

Laurie Gharis
Chief Clerk

LG/cb

Enclosure

EXECUTIVE DIRECTOR'S RESPONSE TO PUBLIC COMMENT
for
Peter Henry Schouten Sr. and Nova Darlene Schouten
TPDES Permit No. WQ0005387000

The Executive Director has made the Response to Public Comment (RTC) for the application by Peter Henry Schouten Sr. and Nova Darlene Schouten for TPDES Permit No. WQ0005387000 available for viewing on the Internet. You may view and print the document by visiting the TCEQ Commissioners' Integrated Database at the following link:
<https://www.tceq.texas.gov/goto/cid>

In order to view the RTC at the link above, enter the TCEQ ID Number for this application (WQ0005387000) and click the "Search" button. The search results will display a link to the RTC.

Individuals who would prefer a mailed copy of the RTC or are having trouble accessing the RTC on the website, should contact the Office of the Chief Clerk, by phone at (512) 239-3300 or by email at chiefclk@tceq.texas.gov.

Additional Information

For more information on the public participation process, you may contact the Office of the Public Interest Counsel at (512) 239-6363 or call the Public Education Program, toll free, at (800) 687-4040.

A complete copy of the RTC (including the mailing list), the complete application, the draft permit, and related documents, including comments, are available for review at the TCEQ Central Office in Austin, Texas. Additionally, a copy of the complete application, the draft permit, and executive director's preliminary decision are available for viewing and copying at the Bosque County Extension Office, 104 South Fuller Street, Meridian, Texas.

MAILING LIST
for
Peter Henry Schouten Sr. and Nova Darlene Schouten
TPDES Permit No. WQ0005387000

FOR THE APPLICANT:

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NEW TPDES PERMIT NO. WQ0005387000

APPLICATION BY
PETER H. SCHOUTEN SR.
AND NOVA D. SCHOUTEN
FOR NEW TPDES PERMIT
NO. WQ0005387000

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BEFORE
THE TEXAS
COMMISSION ON
ENVIRONMENTAL
QUALITY

EXECUTIVE DIRECTOR'S RESPONSE TO PUBLIC COMMENT

I. INTRODUCTION

The Executive Director of the Texas Commission on Environmental Quality, or "TCEQ," files this Response to Public Comment on the application by Peter Henry Schouten Sr. and Nova Darlene Schouten for new TPDES permit number No. WQ0005387000 and on the Executive Director's preliminary decision on the application. Before a permit is issued, the Executive Director is required by Title 30 of the Texas Administrative Code, Section 55.156 to prepare a response to all timely, relevant, and material, or significant comments. The TCEQ's Office of the Chief Clerk, or "OCC," received timely comments from Harold Gervais, Clifford Norris, and James Karels. This response addresses all comments received by the OCC, whether withdrawn or not. If anyone needs more information about this permit application or the TPDES permitting process, please call the TCEQ's Public Education Program at 1-800-687-4040. General information about the TCEQ can be found on TCEQ's website at <https://www.tceq.texas.gov>.

A. Terms, Acronyms, or Abbreviations Used in this Response to Comments

- §: Section
- SB: Senate Bill
- SH: State Highway
- HB: House Bill
- ED: TCEQ's Executive Director
- CR: County Road
- No.: Number
- P.E.: Professional Engineer
- WQ: Water Quality
- PPP: Pollution Prevention Plan
- EPA: United States Environmental Protection Agency
- RCS: Retention Control Structure
- LMU: Land Management Unit
- OCE: TCEQ's Office of Compliance and Enforcement
- OCC: TCEQ's Office of the Chief Clerk
- TWC: Texas Water Code
- DFW: Dallas-Fort Worth
- CWA: Clean Water Act
- WQD: TCEQ's Water Quality Division
- TMDL: Total Maximum Daily Load
- NORI: Notice of Receipt & Intent to Obtain a Water Quality Permit
- THSC: Texas Health and Safety Code
- CAFO: Concentrated Feeding Animal Operation

- **NAPD:** Notice of Application & Preliminary Decision
- **ASCE:** American Society of Civil Engineers
- **NRCS:** Natural Resources Conservation Code
- **ASTM:** American Society of Testing Materials
- **ASABE:** American Society of Agricultural and Biological Engineers
- **33 USC:** Title 33 of the United States Code
- **TSWQS:** Texas Surface Water Quality Standards - 30 TAC Chapter 307
- **30 TAC:** Title 30 of the Texas Administrative Code
- **Applicant:** Peter Henry Schouten Sr. and Nova Darlene Schouten
- **WQD staff:** TCEQ Staff from the Water Quality Division
- **TCEQ Rules:** Title 30 of the Texas Administrative Code
- **Commission:** Texas Commission on Environmental Quality
- **CAFO facility:** Golden Star Heifer Ranch/site
- **The Application:** The application for TPDES permit No. WQ0005387000
- **Proposed permit:** Draft-TPDES permit No. WQ0005387000
- **TCEQ's CAFO Rules:** 30 TAC Chapter 321, Subchapter B

II. BACKGROUND

B. Application Request

The Applicant applied to the TCEQ for new TPDES permit No. WQ0005387000 to operate under an individual CAFO permit to confine a maximum of 2,000 head of dairy cattle replacement heifers, none of which will be milking, with 43 acres making up the total land application area. No discharge of pollutants into Water in the State is authorized by the proposed permit.

C. Description of the Facility and its Authorization

The CAFO facility is located roughly 1.55 miles east of the intersection of CR 2480 and SH 6, on the north side of SH 6 on County Road 2495, which is nearly 5.5 miles east of the intersection of SH 6 and US Highway 281 in Bosque County, Texas.

No discharge is authorized by the proposed permit except as allowed by the provisions in the proposed permit and 40 Code of Federal Regulations Chapter 412, which is adopted by reference in 30 TAC § 305.541.

The land application area is divided into two LMUs with LMU No.1 covering 35 acres and LMU No.2 covering 8 acres. The list of alternative crops to be grown on the LMUs includes Alfalfa, Bahia, Cantaloupes, Coastal, Common grass, Corn, Cotton, Cowpea, Eastern Gama grass, Fescue, Sorghum grain, Guar, Johnsongrass, Klein, Legume, Midland Bermuda, Millet, Oats, Old World Bluestem, Peanut, Rice, Rye Grass, Small Grain, Sorghum Sudan, Soybean, Sunflower, Triticale, Watermelons, Weeping lovegrass, Popcorn, Vetch, Wheat, and Winter Pea with various yield goals.

The CAFO facility includes one RCS with 16.85 acre-feet without freeboard of required capacity, and one domestic water well with the required 150-foot buffer.

The CAFO facility is in the drainage area of the North Bosque River in Segment No. 1226 of the Brazos River Basin and is subject to TWC §§ 26.502 and 26.503(d) that relates to a feeding operation confining cattle in a major sole source impairment zone that have been or may be used for dairy purposes, or otherwise associated with a dairy, including cows, calves, and bulls.

The Applicant is required to obtain and operate under an individual permit because the CAFO facility is in a watershed of a river segment listed on the current EPA-approved CWA § 303(d) list of impaired waters where a TMDL implementation plan has been adopted by the TCEQ that establishes additional WQ protection measures for CAFOs as required by 33 USC § 1313(d).

The basis for the ED's Technical Review of a TPDES permit application comes from the Texas Legislature's passage of Chapter 26 (Water Quality Control) of the TWC into law, which gives the TCEQ primary authority over WQ in Texas. Chapter 26 combines the TCEQ's WQ authority with federally delegated CWA regulatory authority for the TPDES program, which controls discharges of pollutants into Texas' surface waterbodies, otherwise defined by the TWC as "Water in the State." To implement TCEQ's WQ control regime, Chapter 26 grants the TCEQ the authority to issue permits (and amendments) for the disposal of wastewater adjacent to Water in the State, so long as the parameters established through the ED's Technical Review of the application, comply with the TWC, TCEQ rules, and the TSWQS. However, the TCEQ may refuse to issue a permit when the ED's Technical Review finds that issuing the permit would violate the provisions of any state or federal law or rules or regulations derived from those laws, or when it finds that issuing the permit would interfere with the TCEQ's WQ control regime.

D. Procedural Background

This CAFO facility was previously permitted as a State-only dairy cattle facility with 480 head, all of which were milking cows under CAFO individual TPDES permit No. WQ0003656000 that was canceled on October 12, 2021.

The TCEQ received the current application on May 12, 2022, and declared it administratively complete on July 1, 2022. The Applicant published the NORI in Bosque County, Texas in the *Meridian Tribune* on July 13, 2022. The ED completed the technical review of the application on March 10, 2023, and prepared the proposed permit that if approved, would establish the conditions under which the CAFO facility must operate. The Applicant published the NAPD in Bosque County, Texas in the *Meridian Tribune* on June 7, 2023. The public comment period ended on July 7, 2023.

Because this application was received after September 1, 2015, and because it was declared administratively complete after September 1, 1999, it is subject to both the procedural requirements adopted pursuant to House Bill 801, 76th Legislature, 1999, and the procedural requirements and rules implementing Senate Bill 709, 84th Legislature, 2015, which are implemented by the Commission in its rules in 30 TAC Chapters 39, 50, and 55.

E. Access to Rules, Laws, and Records

- All administrative rules: Secretary of State Website: www.sos.state.tx.us
- TCEQ rules: Title 30 of the Texas Administrative Code: www.sos.state.tx.us/tac/ (select TAC Viewer on the right, then Title 30 Environmental Quality)
- Texas statutes: www.statutes.capitol.texas.gov
- TCEQ website: www.tceq.texas.gov (for downloadable rules in WordPerfect or Adobe PDF formats, select "Rules, Policy, & Legislation," then "Current TCEQ Rules," then "Download TCEQ Rules").
- Federal rules: Title 40 of the Code of Federal Regulations (C.F.R.) http://www.ecfr.gov/cgi-bin/text-idx?tpl=/ecfrbrowse/Title40/40tab_02.tpl

- Federal environmental laws: <http://www.epa.gov/lawsregs/>
- **Environmental or citizen complaints may be filed electronically at:** <https://www.tceq.texas.gov/compliance/complaints/index.html> (select “use our online form”) or by sending an email to the following address: complaint@TCEQ.Texas.gov.

Commission records for the CAFO facility are available for viewing and copying at TCEQ’s main office in Austin at 12100 Park 35 Circle, Building F, 1st Floor in the OCC, for the current application until final action is taken. Some documents located at the OCC may also be found in the TCEQ Commissioners’ Integrated Database at www.tceq.texas.gov/goto/cid.

The permit application, proposed permit, factsheet, and the ED’s preliminary decision have been available for viewing and copying at Bosque County Extension Office, located at 104 South Fuller Street, Meridian, Texas 76665, since publication of the NORI. The final permit application, proposed permit, statement of basis/technical summary, and the ED’s preliminary decision were available for viewing and copying at the same location since publication of the NAPD.

The ED has determined that the proposed permit, if issued, meets all statutory and regulatory requirements and is protective of the environment, water quality, and human health. However, if individuals wish to file a complaint about the proposed facility concerning its compliance with the provisions of its permit or with TCEQ rules, the TCEQ’s OCE may be contacted through the TCEQ’s statewide toll-free number at 1-888-777-3186, the DFW Regional Office (Region 4) in Fort Worth, Texas at (817) 588-5800, or the TCEQ Stephenville Office at (254) 552-1900 or 1-800-687-7078 to address potential permit violations. In addition, complaints may be filed electronically by using the methods described above at the seventh bullet under “Access to Rules, Laws, and Records.” If an inspection by the TCEQ finds that the Applicant is not complying with all requirements of the proposed permit, or that the proposed facility is out of compliance with TCEQ rules, enforcement actions may arise.

III. COMMENTS AND RESPONSES

COMMENT 1:

Harold Gervais and Clifford Norris commented that unless there will be environmental guards in place for the increase in the number of head, they are concerned about the proposed 2,000 head of dairy heifers in the proposed permit because the canceled permit was only authorized to confine 480 head total dairy cattle, all of which were milking cows. Mr. Gervais also asked what provisions will be implemented to prevent the overflow of the storage ponds because any overflow of the storage pond at the CAFO facility will contaminate his stock pond.

RESPONSE 1:

The CAFO facility has the required amount of storage for the wastewater generated by the proposed operation according to the TCEQ CAFO rules. Because the proposed animal type will not be milking cows, and therefore there is no parlor wash water, the amount of process generated wastewater generated by the proposed operation will be reduced. The runoff from rainfall at all open lots will drain into the RCS that has a required capacity of 16.85 acre-feet (certified capacity 20.47 are-feet), which was designed for the 25-year, 10-day rainfall event with 12.2 inches of rainfall.

The TCEQ implements and enforces standards that are established to protect human health, safety, and the environment. The Applicant is required to operate the CAFO facility according to the TWC, the TCEQ CAFO rules, and the terms of the proposed permit.

Consistent with TCEQ CAFO rules (30 TAC § 321.46) and the proposed permit, the Applicant is required to develop a PPP, which must be prepared in accordance with good engineering practices and must include control measures necessary to limit the discharge of pollutants to or adjacent to water in the state. The PPP must describe and ensure the implementation of practices which are to be used to assure compliance with the limitations and conditions of the TCEQ CAFO rules and the proposed permit. The PPP must include the following provisions:

- 1) The CAFO facility must have a description of waste handling procedures, which are subject to review by WQD Staff for compliance with TCEQ rules.
- 2) Application rates of wastewater must not exceed the nutrient uptake, or agronomic rate, and the hydrologic capacity of the cover crop. This helps to prevent odors and other nuisance conditions caused by standing water or excess water.
- 3) Application of wastewater must be managed to minimize ponding or puddling of wastewater on the site, prevent tailwater discharges to waters in the state, and prevent the occurrence of nuisance conditions.
- 4) When manure is stockpiled, it must be stored in a well-drained area so no ponding of water occurs, and the top and sides of stockpiles must be adequately sloped to ensure proper drainage. Manure storage areas must be bermed to contain drainage from manure stockpiles or otherwise located within the drainage area of an RCS.
- 5) The solids must be cleaned out of the RCSs to prevent the accumulation of solids from exceeding the sludge volume designed for the structure. The Applicant is required to remove solids only when there are favorable wind conditions that carry odors away from nearby receptors.
- 6) Dead animals must be properly disposed of within three days of death, unless otherwise authorized by the ED.

Under the proposed permit, no discharges of wastewater into Water in the State are authorized from the CAFO facility except where chronic or catastrophic rainfall events cause an overflow of wastewater from a facility designed, constructed, and properly operated to contain process generated wastewaters and the stormwater from a 25-year, 10-day storm event for the location of the CAFO facility (approximately 12.2 inches).

The language of Section VII.A.3(c)(2) of the proposed permit (below) requires that clean water must be diverted from the CAFO facility, and all contaminated stormwaters must be retained in the RCS for beneficial use.

Stormwater must be diverted, as indicated in Attachment A - Site Map, from contact with feedlots and holding pens, and manure and/or process wastewater storage systems. In cases where it is not feasible to divert stormwater from the production area, the retention structures shall include adequate storage capacity for the additional stormwater. Stormwater includes rain falling on the roofs of facilities, runoff from adjacent land, or other sources.

Additional conservation practices are imposed on LMUs adjacent to water in the state. These conservation practices include a 100-foot vegetative buffer, filter strips, vegetative barrier, and/or contour buffer strips. Site-specific conditions and NRCS

practice standards specify which conservation practices, in addition to the required 100-foot vegetative buffer, must be implemented. These conservation practices reduce erosion, suspended solids, and nutrients in runoff from LMUs. This will improve the quality of stormwater runoff prior to entering water in the state.

Section VII.A.8(d)(1) of the proposed permit (below) addresses buffers from LMU(s).

(d) Buffer Requirements. The Applicant must meet the following buffer requirements for each LMU:

(1) Water in the State. The Applicant must not apply compost, manure, sludge and wastewater within the buffer distances as noted on Attachment B and Special Provision X.D. Vegetative buffers must be maintained according to the NRCS Field Office Technical Guidance. The Applicant must maintain the filter strip (according to NRCS Code 393) between the vegetative buffer and the land application area. If the land application area is cropland, the Applicant must install and maintain contour buffer strips (according to NRCS Code 332) within the LMU(s), in addition to the buffer distances required by the proposed permit.

Table 7 of the proposed permit (below) includes the buffer distances for each LMU that must be maintained between water in the state and the land application areas. The Additional Buffer Setback distance was determined by using the NRCS Practice Code 393 (Filter Strip). The practice code uses a combination of hydrologic soil groups and field slope percentages to calculate an appropriate filter strip length to reduce sediment, particulate organics, and sediment-adsorbed contaminate loading in runoff.

LMU No.	Vegetative Buffer Setback (feet)	Additional Buffer Setback NRCS Code 393 Filter Strip Flow Length (feet)
1	100	40
2	100	40

COMMENT 2:

Clifford Norris and James Karels commented they are concerned, based on experience with this site, about air quality and odors that will arise from the proposed operation.

RESPONSE 2:

The ED carefully considers the health concerns of area residents, as well as those of the public, in reviewing all applications. As such, the proposed permit is intended to be protective of human health and the environment provided the Applicant operates and maintains the CAFO facility according to TCEQ rules and the requirements in the proposed permit. The TCEQ CAFO rules (30 TAC § 321.32(32)) define “nuisance” as:

Any discharge of air contaminant(s), including but not limited to odors, of sufficient concentration and duration that are or may tend to be injurious to or that adversely affects human health or welfare, animal life, vegetation, or property, or that interferes with the normal use and enjoyment of animal life, vegetation, or property.

Several requirements in the TCEQ CAFO Rules (30 TAC Chapter 321, Subchapter B) and the proposed permit are designed to address the potential for nuisance odors or air pollution conditions. For example, 30 TAC § 321.43(j)(1)(A) requires the CAFO facility be operated in such a manner as to prevent the creation of a nuisance or air pollution conditions as defined by the definitions section of the TCEQ CAFO Rules (30

TAC § 321.32(32)) and THSC § 341.011, and as prohibited by the TCEQ Air Rules (30 TAC § 101.4) (relating to nuisance). The THSC also requires the CAFO facility to be operated in such a manner as to prevent a condition of air pollution as defined by THSC § 382.003(3). Additionally, the TCEQ rules require an operator to take the necessary action to identify any nuisance conditions that occur and to take action to abate such conditions as soon as practicable or as specified by the ED.

With respect to a facility's operation and maintenance, the proposed permit, requires the Applicant to develop a PPP, which describes the conditions under which the CAFO facility must operate and has maintenance and operational safeguards intended to minimize the occurrence of nuisances.

The PPP's technical requirements, specifically General Requirement 4. requires the Applicant to ensure operation of the CAFO facility prevents nuisance conditions of air pollution as mandated by THSC, Chapters 341 and 382. The PPP's Air Standard Permit Requirements 1(a) and (b) mirror the obligations of 30 TAC § 321.43(j)(1)(A) referenced above. So that the Applicant can prevent nuisance conditions, the PPP's Air Standard Permit Requirements 4(a) and (b) require the Applicant to maintain the premises of the CAFO facility to prevent the occurrence of nuisance conditions from odors through always maintaining proper pen drainage and by scraping uncompacted manure in earthen pens and shaping the pen surface to minimize odors.

These and other requirements in the PPP have historically been effective at preventing nuisance from odors because the PPP also contains Standard Permit Conditions U, S, A, and R.

Standard Permit Condition U. requires the Applicant to tacitly acknowledge that acceptance of an issued permit is an agreement to comply with all the terms and conditions embodied in the permit, and the rules and other orders of the Commission.

Standard Permit Condition S. requires the Applicant to comply with all applicable rules and regulations of the commission, including the TCEQ CAFO Rules (30 TAC 321, Subchapter B).

Standard Permit Condition A. requires the Applicant to comply with all conditions of the proposed permit, and failure to do so constitutes a violation of the permit and statutes under which it was issued and is grounds for enforcement actions, permit amendments, revocation, or suspension, or for denial of a permit renewal application or an application for a permit for another CAFO facility.

Lastly, Standard Permit Condition R. ties all these proposed permit conditions together and allows them to function as intended because it subjects the Applicant to administrative, civil, and criminal penalties from Chapter 7 of the TWC (Enforcement), for violations of the proposed permit and TCEQ rules, including, but not limited to, negligently or knowingly violating the federal Clean Water Act (CWA) §§ 301, 302, 306, 307, 308, 318, or 405, or any condition or limitation implementing any sections in the proposed permit issued under the CWA § 402.

Additionally, and as provided by Chapter 7 of the TWC (Enforcement), the Applicant is subject to applicable administrative (TWC §§ 7.051 - 7.075), civil (TWC §§ 7.101 - 7.111), and criminal penalties (TWC §§ 7.141 - 7.202) for violations including, but not limited to, negligently or knowingly violating the federal CWA §§ 301, 302, 306, 307, 308, 318, or 405, or any condition or limitation implementing any sections in a permit issued under CWA § 402.

For the present and future operation of the facility, if individuals wish to file a complaint about the proposed facility concerning its compliance with the provisions of its permit or with TCEQ rules, the TCEQ's OCE may be contacted through the TCEQ's statewide toll-free number at 1-888-777-3186, the DFW Regional Office (Region 4) in Fort Worth, Texas at (817) 588-5800, or the TCEQ Stephenville Office at (254) 552-1900 or 1-800-687-7078 to address potential permit violations. In addition, complaints may be filed electronically by using the methods described above at the seventh bullet under "Access to Rules, Laws, and Records." If an inspection by the TCEQ's regional staff finds that the Applicant is not complying with all requirements of the proposed permit, or that the proposed facility is out of compliance with TCEQ rules, enforcement actions may arise.

Additionally, the proposed permit does not limit the ability of a landowner to use common law remedies for trespass, nuisance, or other causes of action in response to activities that may or actually do result in injury or adverse effects on human health or welfare, animal life, vegetation, or property, or that may or actually do interfere with the normal use and enjoyment of animal life, vegetation, or property.

COMMENT 3:

Clifford Norris and James Karels commented they are concerned, based on experience with this site, about the excessive flies that the proposed operation will attract.

RESPONSE 3:

Regarding insects, such as flies, the odor control BMPs discussed above, if properly implemented, should reduce the potential for insect breeding.

COMMENT 4:

James Karels commented that he is concerned that the new retention pond proposed may result in groundwater contamination.

RESPONSE 4:

The application did not propose construction of a new pond. The proposed operation will utilize the retention pond that was approved in 2009 under the previous authorization with permit number WQ0003656000.

The CAFO rules require that RCSs be designed and operated to contain all process generated wastewater and any contaminated runoff from the facility resulting from a 25-year, 10-day (25-year frequency/10-day duration) rainfall event. No discharge of manure or wastewater from this facility is allowed, except when chronic or catastrophic rainfall events, that exceed the design rainfall event noted above, cause an overflow.

Each lagoon must be properly designed, constructed, and operated to contain all stormwater runoff from the design storm event and a minimum of one year sludge accumulation. Pesticides and other toxic chemicals that may be linked to human health problems are required to be stored, used, and disposed of in a manner that prevents significant pollutants from entering water in the state or creating a nuisance condition.

The Applicant submitted a liner certification with the application that was certified by a licensed Texas P.E. that met the liner requirements of the TCEQ CAFO rules.

Seepage of contaminants into groundwater is minimized in the pen area by maintaining slopes and surface compaction, which limits infiltration into the soil and groundwater and directs wastewater runoff into an RCS. Seepage is minimized in the RCS using liners. The proposed permit requires that each RCS is designed and constructed in accordance with the technical standards developed by the NRCS, ASABE, ASCE, and ASTM that are in effect at the time of construction. Where site-specific variations are warranted, a licensed Texas P.E. must document these variations and their appropriateness to the design.

The TCEQ CAFO rules (30 TAC § 321.31) requires that all manure and wastewater generated by the heifer facility be retained and utilized in an appropriate and beneficial manner. The proposed permit and 30 TAC § 321.36 (c) require that the CAFO facility implement an NMP according to the Texas NRCS Practice Standard Code 590.

The recharge feature certification describes the location of the CAFO facility relative to certain natural and artificial features that could result in adverse groundwater impacts. Because groundwater has the potential to resurface as surface water, preventing impacts to groundwater also provides protection to surface water. The Applicant has identified soil series Hico-Windthorst and Purves-Malotierre Complex to have limiting features, which are addressed in the proposed permit through BMPs.

The Applicant has identified one well onsite that is producing. All producing wells must maintain a 150-foot buffer distance.

COMMENT 5:

Harold Gervais commented that in his eight years of living in the area and calling Mr. Schouten on the phone, Mr. Schouten has never answered his phone.

RESPONSE 5:

The ED encourages the participation of all individuals in the environmental permitting process. However, there are certain concerns of individuals that the TCEQ cannot address in the review of a wastewater permit, as the scope of the ED's jurisdiction in a TPDES application is limited to the issues set out by statute.

While the Texas Legislature has given the TCEQ the responsibility to protect WQ, and TWC § 26.027 authorizes the TCEQ to issue permits to control the disposal of wastes or pollutants adjacent to state waters and to protect the WQ of the state's rivers, lakes and coastal waters, and while the proposed permit establishes terms and conditions that are intended to provide WQ pollution control, which focuses on controlling the disposal of pollutants adjacent to water in the state, the ED through the WQD has no jurisdiction, in its determination of whether to issue a water quality permit, to address the Applicant's availability to answer questions from the public, if water quality is maintained. Rather the ED is limited to controlling the disposal of pollutants adjacent to waters in the state and protecting the WQ of the state's waterbodies.

IV. CHANGES MADE TO THE PERMIT IN RESPONSE TO COMMENT

- No changes to the proposed permit were made in response to comment.

Respectfully submitted,

Texas Commission on Environmental Quality

Kelly Keel, Interim Executive Director

Erin Chancellor, Director
Office of Legal Services

Charmaine Backens, Deputy Director
Environmental Law Division



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REPRESENTING THE EXECUTIVE DIRECTOR
OF THE TEXAS COMMISSION ON
ENVIRONMENTAL QUALITY

V. CERTIFICATE OF SERVICE

I certify that on September 21, 2023, the Executive Director's Response to Public Comment for Permit No. WQ0005387000 was filed with the Texas Commission on Environmental Quality's Office of the Chief Clerk.



Michael T. Parr II, Staff Attorney
State Bar No. 24062936