Administrative Package Cover Page

This file contains the following documents:

1. Summary of application (in plain language)
   - English
   - Alternative Language (Spanish)
2. First Notice (NORI-Notice of Receipt of Application and Intent to Obtain a Permit)
   - English
   - Alternative Language (Spanish)
3. Application materials

Portada de Paquete Administrativo

Este archivo contiene los siguientes documentos:

1. Resumen en lenguaje sencillo (PLS, por sus siglas en inglés) de la actividad propuesta
   - Inglés
   - Idioma alternativo (español)
2. Primer aviso (NORI, por sus siglas en inglés)
   - Inglés
   - Idioma alternativo (español)
3. Solicitud original

ENGLISH LANGUAGE TEMPLATE FOR CAFO PERMIT APPLICATIONS

The following summary is provided for this pending water quality permit application being reviewed by the Texas Commission on Environmental Quality as required by the TCEQ Public Participation Plan and Language Access Plan. The information provided in this summary may change during the technical review of the application and is not a federal enforceable representation of the permit application.

1) Applicant's Name: Eemster West, LLC
2) Enter Customer Number: CN603723602
3) Name of facility: Eemster West
4) Enter Regulated Entity Number: RN101528511
5) Provide your permit Number: WQ0002922000
6) Facility Business: The facility confines 900 head of cattle in which 700 are milking. The facility has seven (7) land management units (LMUs) with the following acreages: LMU #1 - 16, LMU #2 - 13, LMU #3 - 3, LMU #5 - 20, LMU #7 - 11, LMU #8 - 8 and LMU #9 - 38 acres. One (1) retention control structure (RCS), and two (2) earthen settling basins. The required capacity is RCS #1 - 34.86 ac-ft. There is one (1) onsite well that is producing. The facility is located in the Upper North Bosque River in Segment No. 1255 of the Brazos River Basin.
7) Facility Location: The facility is located at 19184 North Farm-to-Market Road 219, Dublin, Erath County, Texas
8) Application Type: Major Amendment
9) Description of your request: Change the facility from a dairy milking facility to a heifer replacement facility, increase the headcount from 900 total and 700 milking to 2,500 dairy heifer replacements, reconfigure the drainage area, addition of two feedlanes, reconfigure pens, reconfigure LMUs. LMU #1 now includes LMUs 1, 2, 3, 7 & 8.
10) Potential pollutant sources at the facility include (list the pollutant sources): Manure, manure stockpiles, wastewater, sludge, slurry, compost, feed & bedding, silage stockpiles, dead animals, dust, lubricants, parlor chemicals, pesticides and fuel storage tanks.
11) The following best management practices will be implemented at the site to manage pollutants from the listed pollutant sources (describe the best management practices that are used): stormwater is stored in the lagoon (RCS) until land applied through irrigation and manure and sludge are stockpiled in the drainage area of the RCS until land applied or hauled offsite for beneficial use. Manure and sludge generated by the CAFO will be retained and used in an appropriate and beneficial manner in accordance with a certified site-specific nutrient management plan. Wastewater will be contained in the RCS properly designed (25-year frequency 10-day duration (25 year/10 day), constructed, operated and maintained according to the provision of the permit. Maintain 100-foot buffer for all irrigation wells or 150-foot for all supply wells. Dust - control speed and regular pen maintenance. Fertilizers - store under roof and handle according to specified label directions. Fuel Tanks - provide secondary containment and prevent overfills/spills. Dead

animals - dispose by a third-party rendering service, compost on-site. Collected within 24 hours of death and disposed within three days.

12) Unless otherwise limited, manure, sludge, or wastewater will not be discharged from a land management unit (LMU) or a retention control structure (RCS) into or adjacent to water in the state from a CAFO except resulting from any of the following conditions:

1) a discharge of manure, sludge, or wastewater that the permittee cannot reasonably prevent or control resulting from a catastrophic condition other than a rainfall event;

2) overflow of manure, sludge, or wastewater from a RCS resulting from a chronic/catastrophic rainfall event; or

3) a chronic/catastrophic rainfall discharge from a LMU that occurs because the permittee takes measures to de-water the RCS if the RCS is in danger of imminent overflow.

SPANISH

El siguiente resumen se proporciona para esta solicitud pendiente de permiso de calidad del agua que está siendo revisada por la Comisión de Calidad Ambiental de Texas según lo exige el Plan de Participación Pública y el Plan de Acceso Lingüístico de la TCEQ. La información provista en este resumen puede cambiar durante la revisión técnica de la solicitud y no es una representación federal exigible de la solicitud del permiso.

1) Nombre del solicitante: Eemster West, LLC

2) Ingrese el número de cliente: CN603723602

3) Nombre de la instalación: Eemster West

4) Ingresar Número de Entidad Regulada: RN101528511

5) Proporcione su número de permiso: WQ0002922000

6) Instalación Comercial: La instalación alberga 900 cabezas de ganado vacuno de las cuales 700 están ordeñando. La instalación tiene siete (7) unidades de administración de tierras (LMU) con las siguientes superficies: LMU #1 – 16, LMU #2 – 13, LMU #3 – 3, LMU #5 – 20, LMU #7 – 11, LMU #8 - 8 y LMU #9 – 38 acres. Una (1) estructura de control de retención (RCS) y dos (2) estanques de sedimentación de tierra. La capacidad requerida es RCS #1 – 34.86 ac-ft. Hay un (1) pozo en el sitio que está produciendo. La instalación está ubicada en el Río Upper North Bosque en el Segmento No. 1255 de la Cuenca del Río Brazos.

7) Ubicación de la instalación: La instalación está ubicada en 19184 North Farm-to-Market Road 219, Dublin, Condado de Erath, Texas.

8) Tipo de Solicitud: Enmienda Mayor

9) Descripción de su solicitud: Cambiar la instalación de una instalación de ordeño a una instalación de reemplazo de novillas, aumentar el número de cabezas de 900 en total y 700 de ordeño a 2,500 reemplazos de novillas lecheras, reconfigurar el área de drenaje, agregar dos carriles de alimentación, reconfigurar corrales, reconfigurar LMU. La LMU # 1 ahora incluye las LMU 1, 2, 3, 7 y 8.

10) Las posibles fuentes de contaminantes en la instalación incluyen (enumere las fuentes de contaminantes): Estiércol, reservas de estiércol, aguas residuales, lodos, purines, compost, piensos y camas, reservas de ensilaje, animales muertos, polvo, lubricantes, químicos de salón, pesticidas y tanques de almacenamiento de combustible.

11) Las siguientes mejores prácticas de manejo se implementarán en el sitio para manejar los contaminantes de las fuentes de contaminantes enumeradas (describa las mejores prácticas de manejo que se utilizan): las aguas pluviales se almacenan en la laguna (RCS) hasta que se aplican a la tierra mediante riego y estiércol y lodo se almacenan en el área de drenaje del RCS hasta que se aplican a la tierra o se transportan fuera del sitio para un uso beneficioso. El estiércol y los lodos generados

por CAFO se conservarán y utilizarán de manera apropiada y beneficiosa de acuerdo con un plan certificado de manejo de nutrientes específico del sitio. Las aguas residuales estarán contenidas en el RCS adecuadamente diseñado ((frecuencia de 25 años y duración de 10 días (25 años/10 días), construido, operado y mantenido de acuerdo con lo dispuesto en el permiso. Mantener una zona de amortiguamiento de 100 pies para todos los pozos de riego o 150 pies para todos los pozos de suministro. Polvo - velocidad de control y mantenimiento regular del corral. Fertilizantes - almacénelos bajo techo y manipúlelos de acuerdo con las instrucciones especificadas en la etiqueta. Tanques de combustible - proporcionan contención secundaria y evitan sobrellenados/derrames. Animales muertos - elimínelos a través de un servicio de procesamiento de terceros o entierre en el sitio. Recolectado dentro de las 24 horas posteriores a la muerte y eliminado dentro de los tres días.

12) A menos que se limite de otro modo, el estiércol, los lodos o las aguas residuales no se descargarán desde una unidad de administración de tierra (LMU) o una estructura de control de retención (RCS) hacia el agua en el estado o junto a ella desde una CAFO, excepto que resulte de cualquiera de las siguientes condiciones:

1) una descarga de estiércol, lodo o aguas residuales que el tenedor del permiso no puede prevenir o controlar razonablemente como resultado de una condición catastrófica que no sea un evento de lluvia;

2) desbordamiento de estiércol, lodo o aguas residuales de un RCS como resultado de un evento de lluvia crónica/catastrófica; o

3) una descarga de lluvia crónica/catastrófica de una LMU que ocurre porque el tenedor del permiso toma medidas para vaciar el RCS si el RCS está en peligro de desbordamiento inminente.

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

NOTICE OF RECEIPT OF APPLICATION AND INTENT TO OBTAIN WATER QUALITY PERMIT AMENDMENT

PERMIT NO. WQ0002922000

APPLICATION. Eemster West, LLC, 777 Private Road 1006, Dublin, Texas 76446, has applied to the Texas Commission on Environmental Quality (TCEQ) to amend Wastewater Permit No. WQ0002922000 (EPA I.D. No. TX0130966) for a Concentrated Animal Feeding Operation (CAFO) to authorize: changing the facility from a dairy milking facility to a heifer replacement facility; increasing the head count from 900 total and 700 milking to 2,500 dairy heifer replacements; reconfiguring the drainage area; adding two feedlanes; reconfiguring pens; and reconfiguring the LMUs – LMU #1 now includes LMUs 1, 2, 3, 7 & 8. The facility is located at 19184 North Farm-to-Market Road 219, near the city of Dublin, in Erath County, Texas 76446. TCEQ received this application on August 29, 2025. The permit application will be available for viewing and copying at Erath County Courthouse, Erath County Extension Office, 100 West Washington Street, Room 206, Stephenville, in Erath County, Texas prior to the date this notice is published in the newspaper. The application, including any updates, and associated notices are available electronically at the following webpage: https://www.tceq.texas.gov/permitting/wastewater/pending-permits/cafo-applications. This link to an electronic map of the site or facility's general location is provided as a public courtesy and not part of the application or notice. For the exact location, refer to the application. https://gisweb.tceq.texas.gov/LocationMapper/?marker=-98.366111,32.224166&level=18

ALTERNATIVE LANGUAGE NOTICE. Alternative language notice in Spanish is available at: https://www.tceq.texas.gov/permitting/wastewater/pending-permits/cafo-applications. El aviso de idioma alternativo en español está disponible en https://www.tceq.texas.gov/permitting/wastewater/pending-permits/cafo-applications.

ADDITIONAL NOTICE. TCEQ's Executive Director has determined the application is administratively complete and will conduct a technical review of the application. After technical review of the application is complete, the Executive Director may prepare a draft permit and will issue a preliminary decision on the application. **Notice of the Application and Preliminary Decision will be published and mailed to those who are on the county-wide mailing list and to those who are on the mailing list for this application. That notice will contain the deadline for submitting public comments.**

PUBLIC COMMENT / PUBLIC MEETING. You may submit public comments or request a public meeting on this application. The purpose of a public meeting is to provide the opportunity to submit comments or to ask questions about the application. TCEQ will hold 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, and the Executive Director's decision on the application, 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 reconsideration of the Executive Director's decision and for requesting a contested case hearing.** A contested case hearing is a legal proceeding similar to a civil trial in 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 proposed permit number; the location and distance of your property/activities relative to the proposed 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 relevant 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 may only grant a request for a contested case hearing on issues the requestor submitted in their timely 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.**

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.

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. All 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. Please be aware that any contact information you provide, including your name, phone number, email address and physical address will become part of the agency's public record. 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 Eemster West, LLC at the address stated above or by calling Mr. Johan Koke, Managing Member, at 254-968-2371.

Issuance Date: September 19, 2025

Comisión de Calidad Ambiental del Estado de Texas

AVISO DE RECEPCIÓN DE LA SOLICITUD Y
LA INTENCIÓN DE OBTENER CALIDAD DEL AGUA PERMISO
MODIFICACION

PERMISO NO. WQ0002922000

SOLICITUD. Eemster West, LLC, 777 Private Road 1006, Dublin, Texas 76446, ha solicitado a la Comisión de Calidad Ambiental de Texas (TCEQ) modificar el Permiso de Aguas Residuales No. WQ0002922000 (EPA I.D. No. TX0130966) para una Operación Concentrada de Alimentación Animal (CAFO) para autorizar: cambiar la instalación de una instalación de ordeño de lácteos a una instalación de reemplazo de novillas; aumentar el número de cabezas de 900 en total y 700 en ordeño a 2,500 reemplazos de novillas lecheras; reconfigurar el área de drenaje; agregar dos carriles de alimentación; reconfigurar corrales; y reconfigurar las LMU: la LMU #1 ahora incluye las LMU 1, 2, 3, 7 y 8. La instalación está ubicada en 19184 North Farm-to-Market Road 219, cerca de la ciudad de Dublin, en el condado de Erath, Texas 76446. La TCEQ recibió esta solicitud el 29 de agosto de 2025. La solicitud de permiso estará disponible para ver y copiar en el Palacio de Justicia del Condado de Erath, Oficina de Extensión del Condado de Erath, 100 West Washington Street, Sala 206, Stephenville, en el Condado de Erath, Texas, antes de la fecha de publicación de este aviso en el periódico. La aplicación, incluidas las actualizaciones y los avisos asociados, están disponibles electrónicamente en la siguiente página web: https://www.tceq.texas.gov/permitting/wastewater/pending-permits/cafo-applications. Este enlace a un mapa electrónico de la ubicación general del sitio o instalación se proporciona como cortesía pública y no forma parte de la solicitud o aviso. Para conocer la ubicación exacta, consulte la solicitud. https://gisweb.tceq.texas.gov/LocationMapper/?marker=-98.366111,32.224166&level=18

AVISO DE IDIOMA ALTERNATIVO. El aviso de idioma alternativo en español está disponible en https://www.tceq.texas.gov/permitting/wastewater/pending-permits/cafo-applications.

AVISO ADICIONAL. El Director Ejecutivo de la TCEQ ha determinado que la solicitud es administrativamente completa y conducirá una revisión técnica de la solicitud. Después de completar la revisión técnica, el Director Ejecutivo puede preparar un borrador del permiso y emitirá una Decisión Preliminar sobre la solicitud. **El aviso de la solicitud y la decisión preliminar serán publicados y enviado a los que están en la lista de correo de las personas a lo largo del condado que desean recibir los avisos y los que están en la lista de correo que desean recibir avisos de esta solicitud. El aviso dará la fecha límite para someter comentarios públicos.**

COMENTARIO PUBLICO / REUNION PUBLICA. Usted puede presentar comentarios públicos

o pedir una reunión pública sobre esta solicitud. El propósito de una reunión pública es dar la oportunidad de presentar comentarios o hacer preguntas acerca de la solicitud. La TCEQ realiza una reunión pública si el Director Ejecutivo determina que hay un grado de interés público suficiente en la solicitud o si un legislador local lo pide. Una reunión pública no es una audiencia administrativa de lo contencioso.

OPORTUNIDAD DE UNA AUDIENCIA ADMINISTRATIVA DE LO CONTENCIOSO. Después del plazo para presentar comentarios públicos, el Director Ejecutivo considerará todos los comentarios apropiados y preparará una respuesta a todo los comentarios públicos esenciales, pertinentes, o significativos. **A menos que la solicitud haya sido referida directamente a una audiencia administrativa de lo contencioso, la respuesta a los comentarios y la decisión del Director Ejecutivo sobre la solicitud serán enviados por correo a todos los que presentaron un comentario público y a las personas que están en la lista para recibir avisos sobre esta solicitud. Si se reciben comentarios, el aviso también proveerá instrucciones para pedir una reconsideración de la decisión del Director Ejecutivo y para pedir una audiencia administrativa de lo contencioso.** Una audiencia administrativa de lo contencioso es un procedimiento legal similar a un procedimiento legal civil en un tribunal de distrito del estado.

PARA SOLICITAR UNA AUDIENCIA DE CASO IMPUGNADO, USTED DEBE INCLUIR EN SU SOLICITUD LOS SIGUIENTES DATOS: su nombre, dirección, y número de teléfono; el nombre del solicitante y número del permiso; la ubicación y distancia de su propiedad/actividad con respecto a la instalación; una descripción específica de la forma cómo usted sería afectado adversamente por el sitio de una manera no común al público en general; una lista de todas las cuestiones de hecho en disputa que usted presente durante el período de comentarios; y la declaración "[Yo/nosotros] solicito/solicitamos una audiencia de caso impugnado". Si presenta la petición para una audiencia de caso impugnado de parte de un grupo o asociación, debe identificar una persona que representa al grupo para recibir correspondencia en el futuro; identificar el nombre y la dirección de un miembro del grupo que sería afectado adversamente por la planta o la actividad propuesta; proveer la información indicada anteriormente con respecto a la ubicación del miembro afectado y su distancia de la planta o actividad propuesta; explicar cómo y porqué el miembro sería afectado; y explicar cómo los intereses que el grupo desea proteger son pertinentes al propósito del grupo.

Después del cierre de todos los períodos de comentarios y de petición que aplican, el Director Ejecutivo enviará la solicitud y cualquier petición para reconsideración o para una audiencia de caso impugnado a los Comisionados de la TCEQ para su consideración durante una reunión programada de la Comisión. La Comisión sólo puede conceder una solicitud de una audiencia de caso impugnado sobre los temas que el solicitante haya presentado en sus comentarios oportunos que no fueron retirados posteriormente. Si se concede una audiencia, el tema de la audiencia estará limitado a cuestiones de hecho en disputa o cuestiones mixtas de hecho y de derecho relacionadas a intereses pertinentes y materiales de calidad del agua que se hayan presentado durante el período de comentarios.

LISTA DE CORREO. Si somete comentarios públicos, un pedido para una audiencia administrativa de lo contencioso o una reconsideración de la decisión del Director Ejecutivo, la Oficina del Secretario Principal enviará por correo los avisos públicos en relación con la

solicitud. Ademas, puede pedir que la TCEQ ponga su nombre en una or mas de las listas correos siguientes (1) la lista de correo permanente para recibir los avisos de el solicitante indicado por nombre y número del permiso específico y/o (2) la lista de correo de todas las solicitudes en un condado especifico. Si desea que se agrega su nombre en una de las listas designe cual lista(s) y envia por correo su pedido a la Oficina del Secretario Principal de la TCEQ.

CONTACTOS E INFORMACIÓN A LA AGENCIA. Todos los comentarios públicos y solicitudes deben ser presentadas electrónicamente vía http://www14.tceq.texas.gov/epic/eComment/ o por escrito dirigidos a la Comisión de Texas de Calidad Ambiental, Oficial de la Secretaría (Office of Chief Clerk), MC-105, P.O. Box 13087, Austin, Texas 78711-3087. Tenga en cuenta que cualquier información personal que usted proporcione, incluyendo su nombre, número de teléfono, dirección de correo electrónico y dirección física pasarán a formar parte del registro público de la Agencia. Para obtener más información acerca de esta solicitud de permiso o el proceso de permisos, llame al programa de educación pública de la TCEQ, gratis, al 1-800-687-4040. Si desea información en Español, puede llamar al 1-800-687-4040.

También se puede obtener información adicional del Eemster West, LLC a la dirección indicada arriba o llamando a Mr. Johan Koke, al 254-968-2371.

Fecha de emisión: 19 de septiembre de 2025

Leah Whallon

From: Jourdan Mullin <jmullin@enviroag.com>
Sent: Wednesday, September 10, 2025 11:32 AM
To: Leah Whallon; Corey Mullin
Subject: RE: Application to Amend Permit No. WQ0002922000; Eemster West Dairy
Attachments: Eemster West PLS SPANISH.docx; CAFO - Spanish-amend-NORI-template.docx; ADJACENT LANDOWNER LABELS.docx

Follow Up Flag: Follow up
Flag Status: Flagged

Good Wednesday Afternoon Leah,

Attached is the information you requested for Eemster West, LLC WQ0002922000. Please let me know if you have any questions.

Respectfully,

Jourdan Mullin

Enviro-Ag Engineering, Inc.
9855 FM 847
Dublin, TX 76446

254/965-3500 – Work
806/679-5570 - Mobile

From: Leah Whallon <Leah.Whallon@Tceq.Texas.Gov>
Sent: Tuesday, September 09, 2025 9:55 AM
To: Corey Mullin <cmullin@enviroag.com>
Cc: Jourdan Mullin <jmullin@enviroag.com>
Subject: Application to Amend Permit No. WQ0002922000; Eemster West Dairy

Good Morning,

Please see the attached Notice of Deficiency letter dated September 9, 2025, requesting additional information needed to declare the application administratively complete. Please send the complete response by September 23, 2025.

Please let me know if you have any questions.

Thank you,

Leah Whallon
Texas Commission on Environmental Quality
Water Quality Division
512-239-0084
leah.whallon@tceq.texas.gov

How is our customer service? Fill out our online customer satisfaction survey at
www.tceq.texas.gov/customersurvey

Disclaimer

ELMER & NORMA PARKS TRUST
2272 CR 413
STEPHENVILLE TX 76401

JOHAN KOKE
777 PR 1006
DUBLIN TX 76446

LARRY BOSTICK
18064 N FM 219
DUBLIN TX 76446

JOHAN & SONYA KOKE
777 PR 1006
DUBLIN TX 76446

ARMANDINA VAZUEZ
18626 N FM 219
DUBLIN TX 76446

HOWARD & MARIE MITCHELL
18565 N FM 219
DUBLIN TX 76446

HOWARD MITCHELL
18656 N FM 219
DUBLIN TX 76446

KELLI ROBERSON
19341 FM 219
DUBLIN TX 76446

LOVING FAMILY LIVING TRUST
20483 N FM 219
DUBLIN TX 76446

SPANISH

El siguiente resumen se proporciona para esta solicitud pendiente de permiso de calidad del agua que está siendo revisada por la Comisión de Calidad Ambiental de Texas según lo exige el Plan de Participación Pública y el Plan de Acceso Lingüístico de la TCEQ. La información provista en este resumen puede cambiar durante la revisión técnica de la solicitud y no es una representación federal exigible de la solicitud del permiso.

1) Nombre del solicitante: Eemster West, LLC

2) Ingrese el número de cliente: CN603723602

3) Nombre de la instalación: Eemster West

4) Ingresar Número de Entidad Regulada: RN101528511

5) Proporcione su número de permiso: WQ0002922000

6) Instalación Comercial: La instalación alberga 900 cabezas de ganado vacuno de las cuales 700 están ordeñando. La instalación tiene siete (7) unidades de administración de tierras (LMU) con las siguientes superficies: LMU #1 – 16, LMU #2 – 13, LMU #3 – 3, LMU #5 – 20, LMU #7 – 11, LMU #8 - 8 y LMU #9 – 38 acres. Una (1) estructura de control de retención (RCS) y dos (2) estanques de sedimentación de tierra. La capacidad requerida es RCS #1 – 34.86 ac-ft. Hay un (1) pozo en el sitio que está produciendo. La instalación está ubicada en el Río Upper North Bosque en el Segmento No. 1255 de la Cuenca del Río Brazos.

7) Ubicación de la instalación: La instalación está ubicada en 19184 North Farm-to-Market Road 219, Dublin, Condado de Erath, Texas.

8) Tipo de Solicitud: Enmienda Mayor

9) Descripción de su solicitud: Cambiar la instalación de una instalación de ordeño a una instalación de reemplazo de novillas, aumentar el número de cabezas de 900 en total y 700 de ordeño a 2,500 reemplazos de novillas lecheras, reconfigurar el área de drenaje, agregar dos carriles de alimentación, reconfigurar corrales, reconfigurar LMU. La LMU # 1 ahora incluye las LMU 1, 2, 3, 7 y 8.

10) Las posibles fuentes de contaminantes en la instalación incluyen (enumere las fuentes de contaminantes): Estiércol, reservas de estiércol, aguas residuales, lodos, purines, compost, piensos y camas, reservas de ensilaje, animales muertos, polvo, lubricantes, químicos de salón, pesticidas y tanques de almacenamiento de combustible.

11) Las siguientes mejores prácticas de manejo se implementarán en el sitio para manejar los contaminantes de las fuentes de contaminantes enumeradas (describa las mejores prácticas de manejo que se utilizan): las aguas pluviales se almacenan en la laguna (RCS) hasta que se aplican a la tierra mediante riego y estiércol y lodo se almacenan en el área de drenaje del RCS hasta que se aplican a la tierra o se transportan fuera del sitio para un uso beneficioso. El estiércol y los lodos generados

por CAFO se conservarán y utilizarán de manera apropiada y beneficiosa de acuerdo con un plan certificado de manejo de nutrientes específico del sitio. Las aguas residuales estarán contenidas en el RCS adecuadamente diseñado ((frecuencia de 25 años y duración de 10 días (25 años/10 días), construido, operado y mantenido de acuerdo con lo dispuesto en el permiso. Mantener una zona de amortiguamiento de 100 pies para todos los pozos de riego o 150 pies para todos los pozos de suministro. Polvo - velocidad de control y mantenimiento regular del corral. Fertilizantes - almacénelos bajo techo y manipúlelos de acuerdo con las instrucciones especificadas en la etiqueta. Tanques de combustible - proporcionan contención secundaria y evitan sobrellenados/derrames. Animales muertos - elimínelos a través de un servicio de procesamiento de terceros o entierre en el sitio. Recolectado dentro de las 24 horas posteriores a la muerte y eliminado dentro de los tres días.

12) A menos que se limite de otro modo, el estiércol, los lodos o las aguas residuales no se descargarán desde una unidad de administración de tierra (LMU) o una estructura de control de retención (RCS) hacia el agua en el estado o junto a ella desde una CAFO, excepto que resulte de cualquiera de las siguientes condiciones:

1) una descarga de estiércol, lodo o aguas residuales que el tenedor del permiso no puede prevenir o controlar razonablemente como resultado de una condición catastrófica que no sea un evento de lluvia;

2) desbordamiento de estiércol, lodo o aguas residuales de un RCS como resultado de un evento de lluvia crónica/catastrófica; o

3) una descarga de lluvia crónica/catastrófica de una LMU que ocurre porque el tenedor del permiso toma medidas para vaciar el RCS si el RCS está en peligro de desbordamiento inminente.

Comisión de Calidad Ambiental del Estado de Texas

AVISO DE RECEPCIÓN DE LA SOLICITUD Y LA INTENCIÓN DE OBTENER CALIDAD DEL AGUA PERMISO MODIFICACION

PERMISO NO. WQ0002922000

SOLICITUD. Eemster West, LLC, 777 Private Road 1006, Dublin, Texas 76446, ha solicitado a la Comisión de Calidad Ambiental de Texas (TCEQ) modificar el Permiso de Aguas Residuales No. WQ0002922000 (EPA I.D. No. TX0130966) para una Operación Concentrada de Alimentación Animal (CAFO) para autorizar: cambiar la instalación de una instalación de ordeño de lácteos a una instalación de reemplazo de novillas; aumentar el número de cabezas de 900 en total y 700 en ordeño a 2,500 reemplazos de novillas lecheras; reconfigurar el área de drenaje; agregar dos carriles de alimentación; reconfigurar corrales; y reconfigurar las LMU: la LMU #1 ahora incluye las LMU 1, 2, 3, 7 y 8. La instalación está ubicada en 19184 North Farm-to-Market Road 219, cerca de la ciudad de Dublin, en el condado de Erath, Texas 76446. La TCEQ recibió esta solicitud el 29 de agosto de 2025. La solicitud de permiso estará disponible para ver y copiar en el Palacio de Justicia del Condado de Erath, Oficina de Extensión del Condado de Erath, 100 West Washington Street, Sala 206, Stephenville, en el Condado de Erath, Texas, antes de la fecha de publicación de este aviso en el periódico. La aplicación, incluidas las actualizaciones y los avisos asociados, están disponibles electrónicamente en la siguiente página web: https://www.tceq.texas.gov/permitting/wastewater/pending-permits/cafo-applications. Este enlace a un mapa electrónico de la ubicación general del sitio o instalación se proporciona como cortesía pública y no forma parte de la solicitud o aviso. Para conocer la ubicación exacta, consulte la solicitud. https://gisweb.tceq.texas.gov/LocationMapper/?marker=-98.366111,32.224166&level=18
También se puede obtener más información de Eemster West, LLC en la dirección indicada anteriormente o llamando al Sr. Johan Koke, Miembro Gerente, al 254-968-2371.

Include the following non-italicized sentence if the facility is located in the Coastal Management Program boundary and is an application for a major amendment which will increase the pollutant loads to coastal waters or would result in relocation of an outfall to a critical areas, or a renewal with such a major amendment. The Coastal Management Program boundary is the area along the Texas Coast of the Gulf of México as depicted on the map in 31 TAC §503.1 and includes part or all of the following counties: Cameron, Willacy, Kenedy, Kleberg, Nueces, San Patricio, Aransas, Refugio, Calhoun, Victoria, Jackson, Matagorda, Brazoria, Galveston, Harris, Chambers, Jefferson y Orange. If the application is for amendment that does not meet the above description, do not include the sentence: El Director Ejecutivo de la TCEQ ha revisado esta medida para ver si está de acuerdo con los objetivos y las regulaciones del Programa de Administración Costero de Texas (CMP) de acuerdo con las regulaciones del Consejo Coordinador de la Costa (CCC) y ha determinado que la acción es conforme con las metas y regulaciones pertinentes del CMP.

AVISO ADICIONAL. El Director Ejecutivo de la TCEQ ha determinado que la solicitud es administrativamente completa y conducirá una revisión técnica de la solicitud. Después de completar la revisión técnica, el Director Ejecutivo puede preparar un borrador del permiso y emitirá una Decisión Preliminar sobre la solicitud. **El aviso de la solicitud y la decisión preliminar serán publicados y enviado a los que están en la lista de correo de las personas a lo largo del condado que desean recibir los avisos y los que están en la lista de correo que desean recibir avisos de esta solicitud. El aviso dará la fecha límite para someter comentarios públicos.**

COMENTARIO PUBLICO / REUNION PUBLICA. Usted puede presentar comentarios públicos o pedir una reunión pública sobre esta solicitud. El propósito de una reunión pública es dar la oportunidad de presentar comentarios o hacer preguntas acerca de la solicitud. La TCEQ realiza una reunión pública si el Director Ejecutivo determina que hay un grado de interés público suficiente en la solicitud o si un legislador local lo pide. Una reunión pública no es una audiencia administrativa de lo contencioso.

OPORTUNIDAD DE UNA AUDIENCIA ADMINISTRATIVA DE LO CONTENCIOSO. Después del plazo para presentar comentarios públicos, el Director Ejecutivo considerará todos los comentarios apropiados y preparará una respuesta a todo los comentarios públicos esenciales, pertinentes, o significativos. **A menos que la solicitud haya sido referida directamente a una audiencia administrativa de lo contencioso, la respuesta a los comentarios y la decisión del Director Ejecutivo sobre la solicitud serán enviados por correo a todos los que presentaron un comentario público y a las personas que están en la lista para recibir avisos sobre esta solicitud. Si se reciben comentarios, el aviso también proveerá instrucciones para pedir una reconsideración de la decisión del Director Ejecutivo y para pedir una audiencia administrativa de lo contencioso.** Una audiencia administrativa de lo contencioso es un procedimiento legal similar a un procedimiento legal civil en un tribunal de distrito del estado.

PARA SOLICITAR UNA AUDIENCIA DE CASO IMPUGNADO, USTED DEBE INCLUIR EN SU SOLICITUD LOS SIGUIENTES DATOS: su nombre, dirección, y número de teléfono; el nombre del solicitante y número del permiso; la ubicación y distancia de su propiedad/actividad con respecto a la instalación; una descripción específica de la forma cómo usted sería afectado adversamente por el sitio de una manera no común al público en general; una lista de todas las cuestiones de hecho en disputa que usted presente durante el período de comentarios; y la declaración "[Yo/nosotros] solicito/solicitamos una audiencia de caso impugnado". Si presenta la petición para una audiencia de caso impugnado de parte de un grupo o asociación, debe identificar una persona que representa al grupo para recibir correspondencia en el futuro; identificar el nombre y la dirección de un miembro del grupo que sería afectado adversamente por la planta o la actividad propuesta; proveer la información indicada anteriormente con respecto a la ubicación del miembro afectado y su distancia de la planta o actividad propuesta; explicar cómo y porqué el miembro sería afectado; y explicar cómo los intereses que el grupo desea proteger son pertinentes al propósito del grupo.

Después del cierre de todos los períodos de comentarios y de petición que aplican, el Director Ejecutivo enviará la solicitud y cualquier petición para reconsideración o para una audiencia de caso impugnado a los Comisionados de la TCEQ para su consideración durante una reunión programada de la Comisión. La Comisión sólo puede conceder una solicitud de una audiencia de caso impugnado sobre los temas

que el solicitante haya presentado en sus comentarios oportunos que no fueron retirados posteriormente. Si se concede una audiencia, el tema de la audiencia estará limitado a cuestiones de hecho en disputa o cuestiones mixtas de hecho y de derecho relacionadas a intereses pertinentes y materiales de calidad del agua que se hayan presentado durante el período de comentarios.

LISTA DE CORREO. Si somete comentarios públicos, un pedido para una audiencia administrativa de lo contencioso o una reconsideración de la decisión del Director Ejecutivo, la Oficina del Secretario Principal enviará por correo los avisos públicos en relación con la solicitud. Ademas, puede pedir que la TCEQ ponga su nombre en una or mas de las listas correos siguientes (1) la lista de correo permanente para recibir los avisos de el solicitante indicado por nombre y número del permiso específico y/o (2) la lista de correo de todas las solicitudes en un condado especifico. Si desea que se agrega su nombre en una de las listas designe cual lista(s) y envia por correo su pedido a la Oficina del Secretario Principal de la TCEQ.

CONTACTOS E INFORMACIÓN A LA AGENCIA. Todos los comentarios públicos y solicitudes deben ser presentadas electrónicamente vía http://www14.tceq.texas.gov/epic/eComment/ o por escrito dirigidos a la Comisión de Texas de Calidad Ambiental, Oficial de la Secretaría (Office of Chief Clerk), MC-105, P.O. Box 13087, Austin, Texas 78711-3087. Tenga en cuenta que cualquier información personal que usted proporcione, incluyendo su nombre, número de teléfono, dirección de correo electrónico y dirección física pasarán a formar parte del registro público de la Agencia. Para obtener más información acerca de esta solicitud de permiso o el proceso de permisos, llame al programa de educación pública de la TCEQ, gratis, al 1-800-687-4040. Si desea información en Español, puede llamar al 1-800-687-4040.

También se puede obtener información adicional del Eemster West, LLC *[name of applicant]* a la dirección indicada arriba o llamando a Mr. Johan Koke, Managing Member *[name of applicant's representative]* al 254/968-2371 *[applicant's telephone number]*.

Fecha de emisión _____ *[Date notice issued]*

ENVIRO-AG ENGINEERING, INC.
EAE
AMARILLO · STEPHENVILLE · ARTESIA

Corporate Office:
3404 Airway Blvd
Amarillo TX 79118

Central Texas:
9855 FM 847
Dublin TX 76446

New Mexico:
203 East Main Street
Artesia NM 88210

August 26, 2025

TCEQ
Registration, Review and Reporting Division
Permits Administration Review Section
Water Quality Applications Team, MC-148
PO Box 13087
Austin, TX 78711-3087

Re: Eemster West Dairy – Permit No. WQ#2922
Erath County, Texas.

Dear Administrative Review Section,

Enclosed please find the Major Amendment application for the above referenced facility. The $350 application fee was paid electronically, and the voucher is attached. Should you have any questions please do not hesitate to contact me.

Respectfully Submitted,

Jourdan Mullin

Enviro-Ag Engineering, Inc.

Cc: TCEQ Region 4, Stephenville
Eemster West Dairy
EAE file

30 TAC 321, SUBCHAPTER B APPLICATION, POLLUTION PREVENTION PLAN & CNMP

Eemster West Dairy

Major Amendment

Prepared For:

Eemster West, LLC

777 Private Road 1006

Dublin, TX 76446

August 26, 2025

Prepared By:

ENVIRO-AG ENGINEERING, INC.
EAE
AMARILLO · STEPHENVILLE · ARTESIA

9855 FM 847 ♦ Dublin, TX 76446 ♦ Tel 254/965-3500 ♦ Fax 254/965-8000

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

ELECTRONIC WAIVER REQUEST FOR A CONCENTRATED ANIMAL FEEDING OPERATION (CAFO)

A Large CAFO, as defined in the CAFO rules at 30 TAC 321.32(14)(A), must request a waiver from e-reporting requirements codified in 40 Code of Federal Regulations §127.15 OR be required to submit CAFO annual reports electronically.

Are you requesting a waiver from e-reporting requirements?

☒ Yes, Indicate the type of waiver below.

☒ Temporary Waiver

☐ Permanent Waiver (available to facilities and entities owned or operated by members of religious communities that choose not to use certain modern technologies (e.g., computers, electricity))

☐ No, you must submit your application electronically through TCEQ ePermits system (STEERS) at https://www3.tceq.texas.gov/steers/index.cfm. Check How to Apply through STEERS.

If an electronic waiver request is granted, the Applicant(s) seeking authorization, or an authorized permittee(s) may continue to submit CAFO annual reports to TCEQ in a paper format.

Note:

- An approved waiver is not transferrable.
- Each Owner or Operator must request his own waiver.
- Temporary waiver will not extend beyond five years. However, permittees may re-apply for a new temporary waiver, if needed.

State Only CAFOs are exempt from this requirement.

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

INDIVIDUAL PERMIT APPLICATION FOR A CONCENTRATED ANIMAL FEEDING OPERATION (CAFO)

If you have questions about completing this form, please contact the Applications Review and Processing Team at 512-239-4671.

SECTION 1. APPLICATION FEE

Minor Amendment - $150.00
Renewal - $315.00
New or Major Amendment - $350.00

Mailed	Check/Money Order Number:	
	Check/Money Order Amount:	
	Name Printed on Check:	
EPAY	Voucher Number: 781067 & 781068	
	Copy of Payment Voucher enclosed?	Yes ☒

SECTION 2. TYPE OF APPLICATION

A. Coverage: State Only ☐ TPDES ☒

B. Media Type: Water Quality ☐ Air and Water Quality ☐

C. Application Type: New ☐ Major Amendment ☒
Renewal ☐ Minor Amendment ☐

D. For amendments, describe the proposed changes: Change the facility from a dairy milking facility to a heifer replacement facility, increase the head count from 900 total and 700 milking to 2,500 dairy heifer replacements, reconfigure the drainage area, addition of two feedlanes, reconfigure pens, reconfigure the LMUs. LMU #1 now includes LMUs 1, 2, 3, 7 & 8.

E. For existing permits:
What is the permit number? WQ0002922000
What is the EPA I.D. Number? TX 0130966

SECTION 3. FACILITY OWNER (APPLICANT) INFORMATION

A. What is the legal name of the facility owner?

Print this voucher for your records. If you are sending the TCEQ hardcopy documents related to this payment, include a copy of this voucher.

Transaction Information

Voucher Number:	781067
Trace Number:	582EA000682726
Date:	08/27/2025 09:00 AM
Payment Method:	CC - Authorization 000001144G
Voucher Amount:	$300.00
Fee Type:	CAFO PERMIT - NEW OR MAJOR AMENDMENT
ePay Actor:	JOURDAN MULLIN
Actor Email:	jmullin@enviroag.com
IP:	156.146.244.233

Payment Contact Information

Name:	JOURDAN MULLIN
Company:	ENVIRO-AG ENGINEERING INC
Address:	3404 AIRWAY BLVD, AMARILLO, TX 79118
Phone:	806-679-5570

Site Information

Site Name:	EEMSTER WEST
Site Location:	19184 N FM 219 DUBLIN TX 76446

Customer Information

Customer Name:	EEMSTER WEST LLC
Customer Address:	777 PRIVATE ROAD 1006, DUBLIN, TX 76446

Other Information

Program Area ID:	2922

Close

Print this voucher for your records. If you are sending the TCEQ hardcopy documents related to this payment, include a copy of this voucher.

Transaction Information

Voucher Number:	781068
Trace Number:	582EA000682726
Date:	08/27/2025 09:00 AM
Payment Method:	CC - Authorization 000001144G
Voucher Amount:	$50.00
Fee Type:	30 TAC 305.53B WQ NOTIFICATION FEE
ePay Actor:	JOURDAN MULLIN
Actor Email:	jmullin@enviroag.com
IP:	156.146.244.233

Payment Contact Information

Name:	JOURDAN MULLIN
Company:	ENVIRO-AG ENGINEERING INC
Address:	3404 AIRWAY BLVD, AMARILLO, TX 79118
Phone:	806-679-5570

Close

Eemster West, LLC

B. If the applicant is an existing TCEQ customer, provide the Customer Number (CN) issued to this entity? CN 603723602

C. What is the contact information for the owner?

Mailing Address: 777 Private Road 1006

City, State and Zip Code: Dublin, TX 76446

Phone Number: 254/968-2371 Fax Number: n/a

E-mail Address: sonya@milk4you.com

D. Indicate the type of customer:

- ☐ Individual
- ☐ Limited Partnership
- ☐ General Partnership
- ☐ Trust
- ☐ Sole Proprietorship (D.B.A.)
- ☒ Corporation
- ☐ Estate
- ☐ Federal Government
- ☐ County Government
- ☐ State Government
- ☐ City Government
- ☐ Other Government
- ☐ Other, specify:

E. If the customer type is individual, complete Attachment 1.

F. Is this customer an independent entity?

☒ Yes ☐ No government, subsidiary, or part of a larger corporation

G. Number of employees:

☒ 0-20 ☐ 21-100 ☐ 101-250 ☐ 251-500 ☐ 501 or higher

H. For Corporations and Limited Partnerships:

What is the Tax Identification Number issued by the State Comptroller: 32041486450

What is the Charter Filing Number issued by the Texas Secretary of State: 0801246593

SECTION 4. CO-APPLICANT INFORMATION

Complete this section only if another person or entity is required to apply as a co-permittee.

A. What is the legal name of the co-applicant?

B. If the applicant is an existing TCEQ customer, provide the Customer Number (CN) issued to this entity? CN

C. What is the contact information for the co-applicant?

Mailing Address:

City, State and Zip Code:

Phone Number: Fax Number:

E-mail Address:

D. Indicate the type of customer:

- ☐ Individual
- ☐ Limited Partnership
- ☐ General Partnership
- ☐ Trust
- ☐ Sole Proprietorship (D.B.A.)
- ☐ Corporation
- ☐ Estate
- ☐ Federal Government
- ☐ County Government
- ☐ State Government
- ☐ City Government
- ☐ Other Government
- ☐ Other, specify:

E. If the customer type is individual, complete Attachment 1.

F. Is this customer an independent entity?

☐ Yes ☐ No government, subsidiary, or part of a larger corporation

G. Number of employees:

☐ 0-20 ☐ 21-100 ☐ 101-250 ☐ 251-500 ☐ 501 or higher

H. For Corporations and Limited Partnerships:

What is the Tax Identification Number issued by the State Comptroller:

What is the Charter Filing Number issued by the Texas Secretary of State:

SECTION 5. APPLICATION CONTACT INFORMATION

This is the person TCEQ will contact if additional information is needed about this application.

Prefix (Mr., Ms., Miss): Mr.

Application Contact First and Last Name: Corey Mullin

Title: Consultant Credentials:

Company Name: Enviro-Ag Engineering, Inc.

Mailing Address: 9855 FM 847

City, State and Zip Code: Dublin, TX 76446

Phone Number: 254/965-3500 Fax Number: 254/965-8000

E-mail Address: cmullin@enviroag.com

SECTION 6. PERMIT CONTACT INFORMATION

Provide two names of individuals that TCEQ can contact during the term of the permit.

A. Prefix (Mr., Ms., Miss): Mr.

Permit Contact First and Last Name: Corey Mullin

Title: Consultant Credentials:

Company Name: Enviro-Ag Engineering, Inc.

Mailing Address: 9855 FM 847

City, State and Zip Code: Dublin, TX 76446

Phone Number: 254/965-3500 Fax Number: 254/965-8000 E-mail Address: cmullin@enviroag.com

B. Prefix (Mr., Ms., Miss): Mr.

Permit Contact First and Last Name: Johan Koke

Title: Managing Member Credentials:

Company Name: Eemster West, LLC

Mailing Address: 777 Private Road 1006

City, State and Zip Code: Dublin, TX 76446

Phone Number: 254/968-2371 Fax Number: n/a E-mail Address: sonya@milk4you.com

SECTION 7. ANNUAL BILLING CONTACT INFORMATION

Please identify the individual for receiving the annual fee invoices.

Is the billing contact and contact information the same as the Owner or the Co-Applicant identified in Section 3) or Section 4) above?

☒ Yes, specify which applicant on the line below and go to Section 8)

Owner, Eemster West, LLC

☐ No, complete this section

Prefix (Mr., Ms., Miss):

First and Last Name:

Title: Credentials:

Company Name:

Mailing Address:

City, State and Zip Code:

Phone Number: Fax Number: E-mail Address:

SECTION 8. LANDOWNER INFORMATION

A. Landowner where the production area is or will be located

Landowner Name: Eemster West, LLC

B. Landowner of the land management units (LMUs)

Landowner Name: Eemster West, LLC

SECTION 9. PUBLIC NOTICE INFORMATION

A. Individual responsible for publishing the notices in the newspaper

Prefix (Mr., Ms., Miss): Mrs. First and Last Name: Jourdan Mullin

Title: Consultant Credentials:

Company Name: Enviro-Ag Engineering, Inc.

Mailing Address: 9855 FM 847

City, State and Zip Code: Dublin, TX 76446

Phone Number: 254/965-3500 Fax Number: 254/965-8000 E-mail Address: jmullin@enviroag.com

B. Method for receiving the notice package for the Notice of Receipt and Intent

☒ E-mail: jmullin@enviroag.com

☐ Fax Number:

☒ Regular Mail:

Mailing Address: 9855 FM 847

City, State and Zip Code: Dublin, TX 76446

C. Contact person to be listed in the notice

Prefix (Mr., Ms., Miss): Mr.

First and Last Name: Johan Koke

Title: Managing Member Credentials:

Company Name: Eemster West, LLC

Phone Number: 254/968-2371

D. Public viewing location

If the facility is located in more than one county, a public viewing location for each county must be provided.

Public Building Name: Erath County Extension Office-Erath County Courthouse

Physical Address of Building: 100 Washington St. Room 206

City: Stephenville County: Erath

Phone Number: 254/965-1460

E. **Bilingual Notice Requirement**

For new, major amendment, and renewal applications. This information can be obtained by contacting the bilingual/ESL coordinator at the nearest elementary or middle school.

1. Is a bilingual education program required by the Texas Education Code at the nearest elementary or middle school to the facility or proposed facility?
Yes ☒ No ☐

(**If No**, alternative language notice publication is not required; skip to Section 10. Regnlated Entity (Site) Information.)

2. Are the students who attend either the elementary school or the middle school enrolled in a bilingual education program at that school?
Yes ☒ No ☐

3. Do the students at these schools attend a bilingual edncation program at another location?
Yes ☒ No ☐

4. Would the school be required to provide a bilingual education program but the school has waived out of this requirement under 19 TAC §89.1205(g)?
Yes ☒ No ☐

5. If the answer is yes to 1, 2, 3, or 4, public notice in an alternative language is required. Which language is required by the bilingual program? Spanish
6. Complete the CAFO Plain Language Summary Template (English) for CAFO Permit Applications for a new, renewal, major or minor amendment and submit with this application.

If a bilingual education program is required by the Texas Education Code at the nearest elementary or middle school to the facility or proposed facility, also complete the CAFO Plain Language Summary Template (Spanish) or provide a translated copy of the completed English plain language summary in the appropriate alternative language if different from Spanish.

F. **Public Involvement Plan Form**

Complete and attach one Public Involvement Plan (PIP) Form (TCEQ Form 20960) for each application for a new permit or major amendment to a permit.

SECTION 10. REGULATED ENTITY (SITE) INFORMATION

A. Site Name as known by the local community: Eemster West

B. If this is an existing permitted site, provide the Regulated Entity Number (RN) issued to this site? RN 101528511

C. Site Address/Location:

If the site has a physical address such as 12100 Park 35 Circle, Austin, TX 78753, complete Item 1.

If the site does not have a physical address, provide a location description in Item 2. Example: located on the north side of FM 123, 2 miles west of the intersection of FM 123 and Highway 1.

ENGLISH LANGUAGE TEMPLATE FOR CAFO PERMIT APPLICATIONS

The following summary is provided for this pending water quality permit application being reviewed by the Texas Commission on Environmental Quality as required by the TCEQ Public Participation Plan and Language Access Plan. The information provided in this summary may change during the technical review of the application and is not a federal enforceable representation of the permit application.

1) Applicant's Name: Eemster West, LLC
2) Enter Customer Number: CN603723602
3) Name of facility: Eemster West
4) Enter Regulated Entity Number: RN101528511
5) Provide your permit Number: WQ0002922000
6) Facility Business: The facility confines 900 head of cattle in which 700 are milking. The facility has seven (7) land management units (LMUs) with the following acreages: LMU #1 - 16, LMU #2 - 13, LMU #3 - 3, LMU #5 - 20, LMU #7 - 11, LMU #8 - 8 and LMU #9 - 38 acres. One (1) retention control structure (RCS), and two (2) earthen settling basins. The required capacity is RCS #1 - 34.86 ac-ft. There is one (1) onsite well that is producing. The facility is located in the Upper North Bosque River in Segment No. 1255 of the Brazos River Basin.
7) Facility Location: The facility is located at 19184 North Farm-to-Market Road 219, Dublin, Erath County, Texas
8) Application Type: Major Amendment
9) Description of your request: Change the facility from a dairy milking facility to a heifer replacement facility, increase the headcount from 900 total and 700 milking to 2,500 dairy heifer replacements, reconfigure the drainage area, addition of two feedlanes, reconfigure pens, reconfigure LMUs. LMU #1 now includes LMUs 1, 2, 3, 7 & 8.
10) Potential pollutant sources at the facility include (list the pollutant sources): Manure, manure stockpiles, wastewater, sludge, slurry, compost, feed & bedding, silage stockpiles, dead animals, dust, lubricants, parlor chemicals, pesticides and fuel storage tanks.
11) The following best management practices will be implemented at the site to manage pollutants from the listed pollutant sources (describe the best management practices that are used): stormwater is stored in the lagoon (RCS) until land applied through irrigation and manure and sludge are stockpiled in the drainage area of the RCS until land applied or hauled offsite for beneficial use. Manure and sludge generated by the CAFO will be retained and used in an appropriate and beneficial manner in accordance with a certified site-specific nutrient management plan. Wastewater will be contained in the RCS properly designed (25-year frequency 10-day duration (25 year/10 day), constructed, operated and maintained according to the provision of the permit. Maintain 100-foot buffer for all irrigation wells or 150-foot for all supply wells. Dust - control speed and regular pen maintenance. Fertilizers - store under roof and handle according to specified label directions. Fuel Tanks - provide secondary containment and prevent overfills/spills. Dead

animals - dispose by a third-party rendering service, compost on-site. Collected within 24 hours of death and disposed within three days.

12) Unless otherwise limited, manure, sludge, or wastewater will not be discharged from a land management unit (LMU) or a retention control structure (RCS) into or adjacent to water in the state from a CAFO except resulting from any of the following conditions:

1) a discharge of manure, sludge, or wastewater that the permittee cannot reasonably prevent or control resulting from a catastrophic condition other than a rainfall event;

2) overflow of manure, sludge, or wastewater from a RCS resulting from a chronic/catastrophic rainfall event; or

3) a chronic/catastrophic rainfall discharge from a LMU that occurs because the permittee takes measures to de-water the RCS if the RCS is in danger of imminent overflow.

Texas Commission on Environmental Quality

Public Involvement Plan Form for Permit and Registration Applications

The Public Involvement Plan is intended to provide applicants and the agency with information about how public outreach will be accomplished for certain types of applications in certain geographical areas of the state. It is intended to apply to new activities; major changes at existing plants, facilities, and processes; and to activities which are likely to have significant interest from the public. This preliminary screening is designed to identify applications that will benefit from an initial assessment of the need for enhanced public outreach.

All applicable sections of this form should be completed and submitted with the permit or registration application. For instructions on how to complete this form, see TCEQ-20960-inst.

Section 1. Preliminary Screening

☐ New Permit or Registration Application

☒ New Activity – modification, registration, amendment, facility, etc. (see instructions)

If neither of the above boxes are checked, completion of the form is not required and does not need to be submitted.

Section 2. Secondary Screening

☒ Requires public notice,

☐ Considered to have significant public interest, **and**

☐ Located within any of the following geographical locations:

- Austin
- Dallas
- Fort Worth
- Houston
- San Antonio
- West Texas
- Texas Panhandle
- Along the Texas/Mexico Border
- Other geographical locations should be decided on a case-by-case basis

If all the above boxes are not checked, a Public Involvement Plan is not necessary. Stop after Section 2 and submit the form.

☐ Public Involvement Plan not applicable to this application. Provide **brief** explanation.

Section 3. Application Information

Type of Application (check all that apply):

Air ☐ Initial ☐ Federal ☐ Amendment ☐ Standard Permit ☐ Title V

Waste ☐ Municipal Solid Waste ☐ Industrial and Hazardous Waste ☐ Scrap Tire
☐ Radioactive Material Licensing ☐ Underground Injection Control

Water Quality

☒ Texas Pollutant Discharge Elimination System (TPDES)

- ☐ Texas Land Application Permit (TLAP)
- ☒ State Only Concentrated Animal Feeding Operation (CAFO)
- ☐ Water Treatment Plant Residuals Disposal Permit

☐ Class B Biosolids Land Application Permit

☐ Domestic Septage Land Application Registration

Water Rights New Permit

☐ New Appropriation of Water

☐ New or existing reservoir

Amendment to an Existing Water Right

☐ Add a New Appropriation of Water

☐ Add a New or Existing Reservoir

☐ Major Amendment that could affect other water rights or the environment

Section 4. Plain Language Summary

Pulido Calf Ranch is a dairy heifer replacement

facility.

Section 5. Community and Demographic Information

Community information can be found using EPA's EJ Screen, U.S. Census Bureau information, or generally available demographic tools.

Information gathered in this section can assist with the determination of whether alternative language notice is necessary. Please provide the following information.

Stephenville
(City)

Erath
(County)

(Census Tract)
Please indicate which of these three is the level used for gathering the following information.

☐ City ☐ County ☒ Census Tract

(a) Percent of people over 25 years of age who at least graduated from high school

88.9%

(b) Per capita income for population near the specified location

$24,810

(c) Percent of minority population and percent of population by race within the specified location

White = 75.6%. Black or African American = 3.29%. Hispanic = 12.7%. Two or More Races = 2.11%. Other = 2.68%. Asian = 1.3%. Indian = 1.6%. Multiracial = 0.72%

(d) Percent of Linguistically Isolated Households by language within the specified location

0%

(e) Languages commonly spoken in area by percentage

English = 89.4%
Spanish = 10.6%

(f) Community and/or Stakeholder Groups

N/A

(g) Historic public interest or involvement

N/A

Section 6. Planned Public Outreach Activities

(a) Is this application subject to the public participation requirements of Title 30 Texas Administrative Code (30 TAC) Chapter 39?

[X] Yes [ ] No

(b) If yes, do you intend at this time to provide public outreach other than what is required by rule?

[ ] Yes [X] No

If Yes, please describe.

If you answered "yes" that this application is subject to 30 TAC Chapter 39, answering the remaining questions in Section 6 is not required.

(c) Will you provide notice of this application in alternative languages?

[ ] Yes [ ] No

Please refer to Section 5. If more than 5% of the population potentially affected by your application is Limited English Proficient, then you are required to provide notice in the alternative language.

If yes, how will you provide notice in alternative languages?

[ ] Publish in alternative language newspaper

[ ] Posted on Commissioner's Integrated Database Website

[ ] Mailed by TCEQ's Office of the Chief Clerk

[ ] Other (specify)

(d) Is there an opportunity for some type of public meeting, including after notice?

[ ] Yes [ ] No

(e) If a public meeting is held, will a translator be provided if requested?

[ ] Yes [ ] No

(f) Hard copies of the application will be available at the following (check all that apply):

[ ] TCEQ Regional Office [ ] TCEQ Central Office

[ ] Public Place (specify)

Section 7. Voluntary Submittal

For applicants voluntarily providing this Public Involvement Plan, who are not subject to formal public participation requirements.

Will you provide notice of this application, including notice in alternative languages?

[X] Yes [ ] No

What types of notice will be provided?

[X] Publish in alternative language newspaper

[ ] Posted on Commissioner's Integrated Database Website

[ ] Mailed by TCEQ's Office of the Chief Clerk

[ ] Other (specify)

Item 1: Physical Address of Project or Site:

Street Number and Name: 19184 N FM 219

City, State and Zip Code: Dublin, TX 76446

Item 2: Site Location Description:

Location description:

City where the site is located or, if not in a city, what is the nearest city:

Zip Code where the site is located:

D. County or counties if more than 1: Erath

E. Latitude: 32 31' 27" N Longitude: 98 21' 58" W

F. Animal Type:

- ☒ Dairy-0241
- ☐ Beef Cattle- 0211
- ☐ Swine-0213
- ☐ Broiler-0251
- ☐ Laying Hens-0252
- ☐ Sheep/Goats-0214
- ☐ Auction-5154
- ☐ Other, specify:

G. Existing Maximum Number of Animals: 900 Total; 700 Milking

Proposed Maximum Number of Animals: 2,500 Total no milking

H. What is the total LMU acreage? 117

SECTION 11. MISCELLANEOUS INFORMATION

A. Did any person who was formerly employed by the TCEQ represent your company and get paid for service regarding this application? Yes ☐ No ☒
If yes, provide the name(s) of the former TCEQ employee(s):

B. Is the facility located on Indian Country Lands? Yes ☐ No ☒
If yes, do not submit this application. You must obtain authorization through EPA Region 6.

C. Is the production area located within the protection zone of a sole source drinking water supply? Yes ☐ No ☒

D. Is any permanent school fund land affected by this application? Yes ☐ No ☒

If yes, provide the location and foreseeable impacts and effects this application has on the land(s).

E. Delinquent Fees and Penalties:

Do you owe fees to the TCEQ? Yes ☐ No ☒

Do you owe any penalties to the TCEQ? Yes ☐ No ☒

If you answered yes to either of the above questions, provide the amount owed, the type of fee or penalty, and an identifying number.

SECTION 12. AFFECTED LANDOWNER INFORMATION

This section must be completed if the application type is new or major amendment. If the application type is renewal or minor amendment, skip to Section 13.

A. Landowner map. Attach a landowner map or drawing, with scale, that includes the following. Each landowner should be designated by a letter or number on both the list and the map.

- The applicant's property boundaries, including onsite and offsite LMUs; and
- The property boundaries of all landowners within 500 feet of the applicant's property.

B. Landowner list. Attach a separate list of the landowners' names and mailing addresses. The list must be cross-referenced to the landowners map.

C. Landowner list media. Indicate the format of the landowners list.

☒ Read/Writeable CD

☐ 4 sets of mailing labels

D. Landowner data source. Provide the source of the landowners' names and mailing addresses.

Erath County Appraisal District

SECTION 13. ATTACHMENTS

A. All applications

- Supplemental Permit Information Form, if required by instructions on that form
- Current copy of tax records or deed showing ownership of the land
- Lease agreement, if LMUs are not owned by the applicant or co-applicant

B. New, Major amendment, or Renewal

- Completed Technical Information Packet (TCEQ-00760).

C. New and Major amendment

- Public Involvement Plan Form (TCEQ-20960)

D. Minor Amendment

Attach the following items if applicable:

- Current vicinity map, site map, runoff control map, and LMU map
- RCS design calculations
- Nutrient Management Plan or Land application rate calculations
- Other technical documents affected by the proposed amendment

SIGNATURE PAGE

If co-applicants are required, each co-applicant must submit an original, separate signature page.

Permit Number: WQ0002922000

Applicant: Eemster West, LLC

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

I further certify that I am authorized under 30 Texas Administrative Code

§305.44 to sign and submit this document, and can provide documentation in proof of such authorization upon request.

Signatory Name: Johan Koke

Title: Managing Member

Signature: _____ Date: 8/25/25

SUBSCRIBED AND SWORN to before me by the said Johan Koke on this 25th day of August, 2025

My commission expires on the 21st day of October, 2028

COREY MULLIN
ID #126609838
My Commission Expires
October 21, 2028

_____
Notary Public

_____
County, Texas

TCEQ USE ONLY

Application type: ☐ Renewal ☐ Major Amendment ☐ Minor Amendment ☐ New
County: _____ Admin Complete Date: _____
Agency Receiving SPIF: ☐ Texas Historical Commission ☐ U.S. Fish and Wildlife
☐ Texas Parks and Wildlife ☐ Army Corps of Engineers

SUPPLEMENTAL PERMIT INFORMATION FORM (SPIF)

This form is required for all TPDES applications

1. Applicant: Ecmster West, LLC
2. Permit Number: WQ0002922000 EPA ID Number: TX0130966
3. Address of the project (location description that includes street/highway, city/vicinity, and county). The facility is located on the East side of FM 219, approximately 1.3 miles South of the city of Lingleville in Erath County, Texas
4. Provide the name, address, telephone and fax number of an individual that can be contacted to answer specific questions about the property.

   First and Last Name: Corey Mullin

   Company Name: Enviro-Ag Engineering, Inc.

   Mailing Address: 9855 FM 847

   City, State, and Zip Code: Dublin, TX 76446

   Phone Number: 254/965-3500 Fax Number: 254/965-8000
5. County where the facility is located: Erath
6. If the property is publicly owned and the owner is different than the permittee/applicant, please identify the owner. n/a
7. Identify the name of the water body (receiving waters) and TCEQ segment number that will receive the discharge. Upper North Bosque River Segment 1255 of the Brazos River Basin
8. Provide a 7.5-minute USGS quadrangle map with the project boundaries plotted and a general location map showing the project area. (This map is required in addition to the map in the administrative report.)
9. Provide photographs of any structures 50 years or older on the property.
10. Does your project involve any of the following? Select all that apply.
    - ☐ Proposed access roads, utility lines, and construction easements
    - ☐ Visual effects that could damage or detract from a historic property's integrity
    - ☐ Vibration effects during construction or as a result of project design
    - ☐ Additional phases of development that are planned for the future
    - ☐ Sealing of caves, fractures, sinkholes, or other karst features
    - ☐ Disturbance of vegetation or wetlands
11. List proposed construction impact (surface acres to be impacted, depth of excavation, sealing of caves or other karst features): No proposed construction

12. Describe existing disturbances, vegetation & land use (plowing, other ground disturbances): The land management units (LMUs) at the facility are planted in coastal grass. Normal expected farming practices to maintain crops are utilized.

The following applies to New TPDES and Major Amendment to TPDES Permits:

13. List construction dates of any buildings or structures on the property: n/a

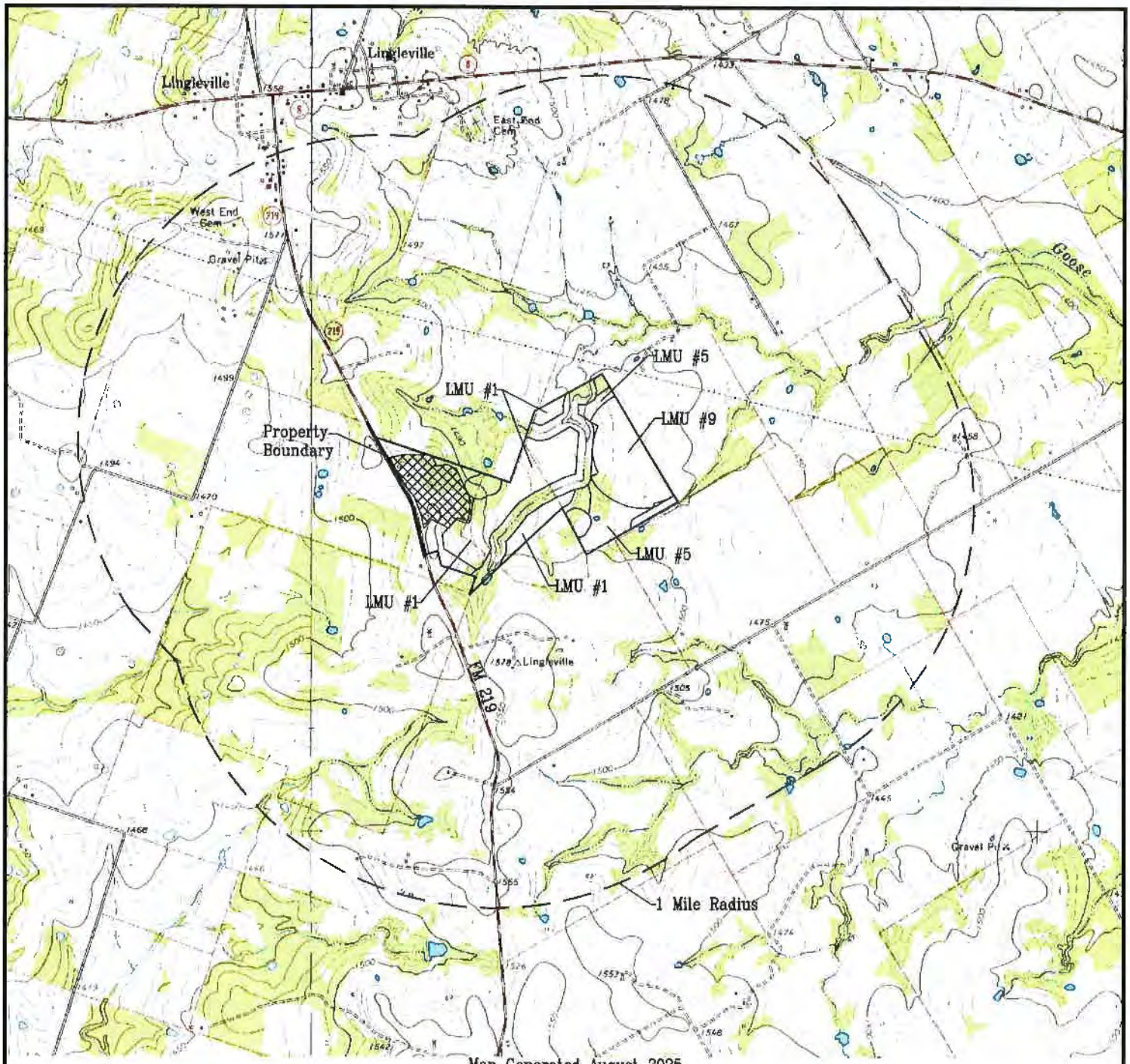
14. Provide a brief history of the property, and name of the architect/builder, if known: n/a

The following applies to New, Amended and Renewal TPDES applications:

15. List each Retention Control Structure and its required capacity (Acre Feet). RCS #1 – 28.56 ac-ft

16. Provide the location and number of acres where wastewater and manure are land applied: The applicant has 117 on-site acres for waste and wastewater application. See attached Figure 1.3 for exact locations of LMUs.

17. List the maximum number of head to be permitted. 2,500



Map Generated August 2025

LEGEND:

Denotes Prodnction Area

N

W E

S

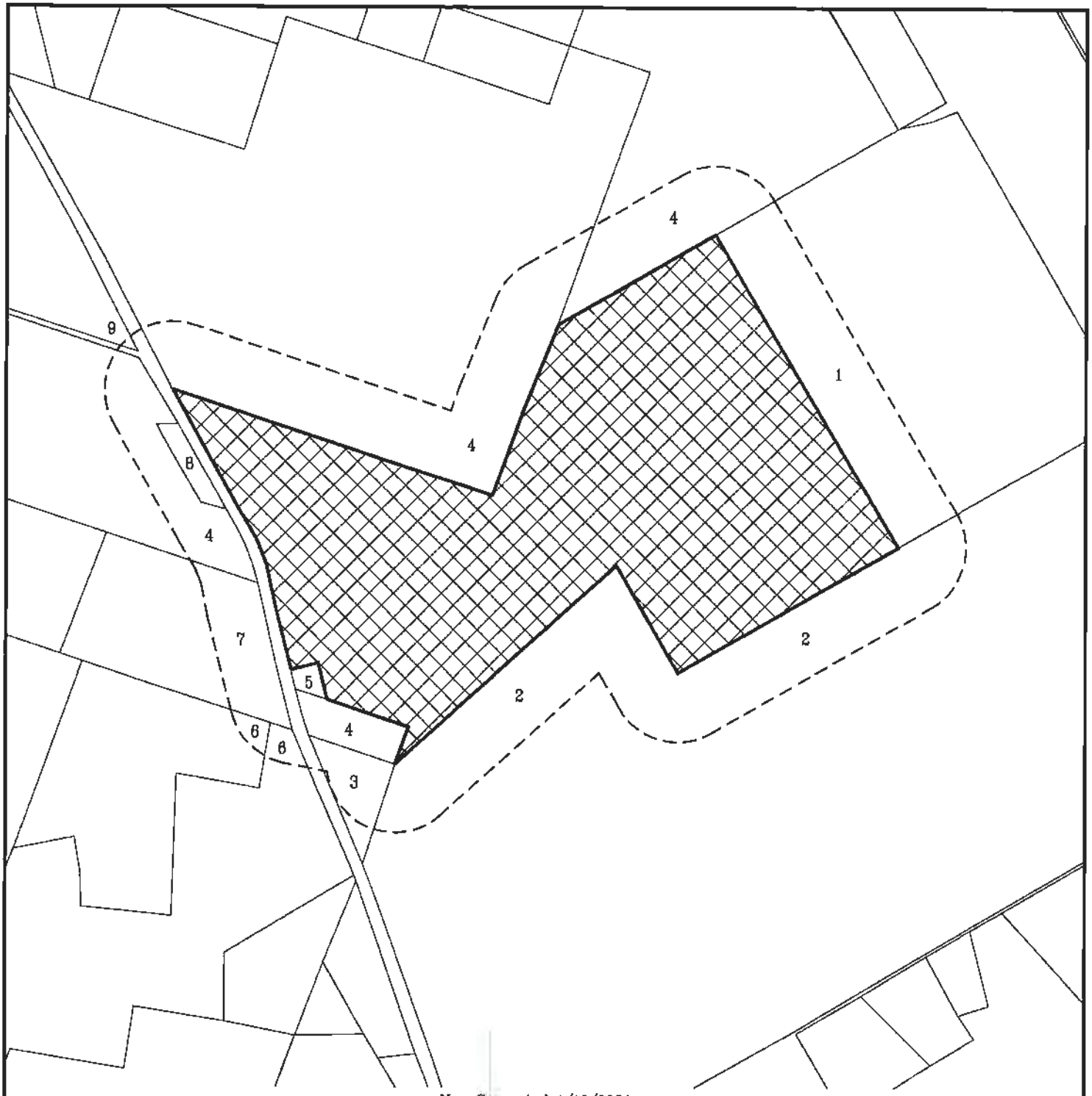
1250' 0 1250' 2500'

SCALE: 1" = 2000'

Source: USDS-NRCS. Geospatial Data Gateway. Available at: http://datagateway.nrcs.usda.gov/. Digital Raster Graphic County Mosaic by NRCS - Accessed November, 2017.

- Refer to Figures 1.3 & 1.4 for overall facility maps.

Eemster West, LLC. Dublin, TX Erath County	SPIF Map	ENVIRO-AG ENGINEERING, INC. Enviro-Ag Engineering, Inc. ENGINEERING CONSULTANTS 3404 Airway Boulevard AMARILLO, TEXAS 79118 TEL (806) 353-6123 FAX (806) 353-4132



Map Generated 1/10/2024

LEGEND:

——— Denotes Adjacent Landowner Tract

- - - Denotes 500 ft. Radius from Eemster West, LLC. Property

Denotes Eemster West, LLC. Property

N

W E

S

500' 0 500' 1000'

SCALED AS SHOWN

Eemster West, LLC. Dublin, TX Erath County	ALO Map	ENVIRO-AG ENGINEERING, INC. Enviro-Ag Engineering, Inc. ENGINEERING CONSULTANTS 3404 Airway Boulevard AMARILLO, TEXAS 79118 TEL (806) 353-6123 FAX (806) 353-4132

ADJACENT LANDOWNERS LIST

Name Elmer J & Norma B Parks Number on Map 1 Address 2272 CR 413 Address Stephenville, TX 76401	Name Johan Koke Number on Map 2 Address 777 PR 1006 Address Dublin, TX 76446
Name Larry Bostick Number on Map 3 Address 18064 N FM 219 Address Dublin, TX 76446	Name Johan & Sonya Koke Number on Map 4 Address 777 PR 1006 Address Dublin, TX 76446
Name Armandina Vazquez Number on Map 5 Address 18626 FM 219 Address Dublin, TX 76446	Name Howard & Marie Mitchell Number on Map 6 Address 18565 FM 219 Address Dublin, TX 76446
Name Howard Mitchell Number on Map 7 Address 18565 FM 219 Address Dublin, TX 76446	Name Kelli Roberson Number on Map 8 Address 19341 FM 219 Address Dublin, TX 76446
Name Loving Family Living Trust Number on Map 9 Address 20483 N FM 219 Address Dublin, TX 76446	

Please identify where you obtained the landowner information.

Erath County Appraisal District Angust 2025

Facility Name Eemster West, LLC.

FRANCHISE TAX ACCOUNT STATUS

This record as of August 15, 2025 at 15:52:22

EEMSTER WEST, LLC

Texas Taxpayer Number:	32041486450
Mailing Address:	777 PR 1006 DUBLIN, TX 76446 - 0000
Right to Transact Business in Texas:	ACTIVE
State of Formation:	TX
SOS Registration Status (SOS status updated each business day):	ACTIVE
Effective SOS Registration Date:	03/23/2010
Texas SOS File Number:	0801246593
Registered Agent Name:	JOHAN KOKE
Registered Office Street Address:	777 PR 1006 DUBLIN, TX 76446

Public Information Report for Year

2024

Title	Name and Address
MEMBER	**JOHAN KOKE** 777 PR 1006 DUBLIN, TX 76446

Property Details

Account

Property ID:	R000015523	**Geographic ID:**	R 0055 00060.00.0
Type:	Real	**Zoning:**	
Property Use:		**Condo:**	

Location

Situs Address:	19300 N FM219
Map ID:	18-14-1
Mapsco:	
Legal Description:	Acres 63.280, A0055 BROWNING JOHN H; DAIRY, LABEL TEX0564237, MAKE FLEETWOOD HOMES OF TEXAS INC, SERIAL TXFLS12A74453FD11, MODEL M00293, MODEL 14X48, YR 1996, OWNER: RAY CAPPS
Abstract/Subdivision:	

Owner

Name:	EEMSTER WEST LLC
Agent:	
Mailing Address:	777 PR1006 DUBLIN, TX 76446
% Ownership:	100.00%
Exemptions:	For privacy reasons not all exemptions are shown online.

Property Values

Improvement Homesite Value:	N/A (+)
Improvement Non-Homesite Value:	N/A (+)
Land Homesite Value:	N/A (+)
Land Non-Homesite Value:	N/A (+)
Agricultural Market Valuation:	N/A (+)
Market Value:	N/A (=)

Agricultural Value Loss:	N/A (-)
Appraised Value:	N/A (=)
HS Cap Loss:	N/A (-)
CB Cap Loss:	N/A (-)
Assessed Value:	N/A
Ag Use Value:	N/A

Information provided for research purposes only. Legal descriptions and acreage amounts are for Appraisal District use only and should be verified prior to using for legal purpose and or documents. Please contact the Appraisal District to verify all information for accuracy.

Property Taxing Jurisdiction

Owner: EEMSTER WEST LLC **%Ownership:** 100.00%

Entity	Description	Market Value	Taxable Value
072	ERATH COUNTY	N/A	N/A
909	LINGLEVILLE ISD	N/A	N/A
MTD	MIDDLE TRINITY WATER	N/A	N/A
RER	ERATH ROAD & BRIDGE	N/A	N/A

Property Improvement - Building

Type: MA **State Code:** E **Value:** N/A

Type	Description	Year Built	SQFT
MA	MAIN AREA	1990	1,200.00
P	COVERPORCH	1990	200.00
UTIL2	UTILITIES 2	2023	1.00

Type: MA **State Code:** E **Value:** N/A

Type	Description	Year Built	SQFT
MA	MAIN AREA	1985	1,970.00
SHED	SHED	1985	4,792.00
SL	SLAB	1985	240.00
AS	ANIMALSHADE	1985	1,296.00
FSL	LOCKED FEED STANCHION	1990	780.00
WH	WELLHOUSE	2010	256.00
UTIL1	UTILITIES 1	2023	1.00

Type: AS **State Code:** E **Value:** N/A

Type	Description	Year Built	SQFT
AS	ANIMALSHADE	1999	15,680.00
AS	ANIMALSHADE	1999	21,400.00

Type: MA **State Code:** E **Value:** N/A

Type	Description	Year Built	SQFT
MA	MAIN AREA	1963	1,404.00
SHED	SHED	1963	600.00
P	COVERPORCH	1963	42.00
DCP	DET CARPRT	2010	405.00

Type: AS **State Code:** E **Value:** N/A

Type	Description	Year Built	SQFT
AS	ANIMALSHADE	1990	800.00
AS	ANIMALSHADE	1990	3,600.00

AS	ANIMALSHADE	1990	2,000.00

State Code: E **Value:** N/A

Type	Description	Year Built	SQFT
AS	ANIMALSHADE	1990	2,000.00

Type: MA **State Code:** E1 **Value:** N/A

Type	Description	Year Built	SQFT
MA	MAIN AREA	1995	644.00
CWD	WD DECK COVERED	2024	180.00

Property Land

Type	Description	Acreage	Sqft	Eff Front	Eff Depth	Market Value	Prod. Value
SAW		61.28	2,669,357.00	0.00	0.00	N/A	N/A
SAW		1.00	43,560.00	0.00	0.00	N/A	N/A
SAW		1.00	43,560.00	0.00	0.00	N/A	N/A

Property Roll Value History

Year	Improvements	Land Market	Ag Valuation	Appraised	HS Cap Loss	Assessed
2026	N/A	N/A	N/A	N/A	N/A	N/A
2025	$292,020	$221,480	$19,170	$513,500	$0	$318,190
2024	$270,670	$221,480	$18,380	$492,150	$0	$296,050
2023	$211,000	$289,480	$17,980	$500,480	$0	$303,980
2022	$188,900	$259,480	$19,240	$449,380	$0	$254,140
2021	$190,210	$193,960	$20,020	$384,170	$0	$238,730
2020	$178,110	$193,960	$19,810	$372,070	$0	$226,420
2019	$168,190	$193,960	$19,700	$362,150	$0	$216,390
2018	$160,120	$256,980	$19,680	$417,100	$0	$206,300
2017	$155,160	$218,880	$19,880	$373,040	$0	$204,540
2016	$161,980	$141,110	$19,330	$303,090	$0	$203,810
2015	$161,980	$141,110	$19,330	$303,090	$0	$203,810

Property Deed History

Deed Date	Type	Description	Grantor	Grantee	Volume	Page	Number
7/23/2010	LI		TRIPLE DUTCH DAIRY LLC	EEMSTER WEST LLC			2010-04536
2/13/2009			TRIPLE DUTCH DAIRY LLC	TRIPLE DUTCH DAIRY LLC			2010-01138
2/13/2009			VAN LEEUWEN & ANDY VAN DIE	TRIPLE DUTCH DAIRY LLC	1416	156	
2/13/2009			TRIPLE DUTCH DAIRY	VAN LEEUWEN & ANDY VAN DIE	1416	165	
1/1/1968			LLOYD & TEUNE	LLOYD MIKE	687	012	
1/1/1968			OUTLAW L L JR	LLOYD & TEUNE	611	182	
1/1/1968			LLOYD & TEUNE	OUTLAW L L JR			
8/28/1990			LLOYD MIKE	TRIPLE DUTCH DAIRY	799	322	

7/23/1996	LLOYD MIKE	LLOYD MIKE	708	169	
11/9/1992	MULTI	STAFFFORD BARBARA ANN LLOYD	TRIPLE DUTCH DAIRY	829	722
7/3/1997		TRIPLE DUTCH DAIRY	TRIPLE DUTCH DAIRY	950	636

Property Details

Account

Property ID:	R000055729	**Geographic ID:**	R 0332.00443 00 0
Type:	Real	**Zoning:**	
Property Use:		**Condo:**	
Location			
Situs Address:	277 PR1008 OFF FM219		
Map ID:	18-14-1	**Mapsco:**	
Legal Description:	Acres 26 070, A0332 HENSON ABSALOM;		
Abstract/Subdivision:	/		

Owner

Name:	EEMSTER WEST LLC
Agent:	
Mailing Address:	777 PR1006 DUBLIN, TX 76446
% Ownership:	100.00%
Exemptions:	For privacy reasons not all exemptions are shown online

Property Values

Improvement Homesite Value:	N/A (+)
Improvement Non-Homesite Value:	N/A (+)
Land Homesite Value:	N/A (+)
Land Non-Homesite Value:	N/A (+)
Agricultural Market Valuation:	N/A (+)
Market Value:	N/A (=)
Agricultural Value Loss:	N/A (-)

Appraised Value:	N/A (=)
HS Cap Loss:	N/A (-)
CB Cap Loss:	N/A (-)
Assessed Value:	N/A
Ag Use Value:	N/A

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Property Taxing Jurisdiction

Owner: EEMSTER WEST LLC **%Ownership:** 100.00%

Entity	Description	Market Value	Taxable Value
072	ERATH COUNTY	N/A	N/A
909	LINGLEVILLE ISD	N/A	N/A
MTD	MIDDLE TRINITY WATER	N/A	N/A
RER	ERATH ROAD & BRIDGE	N/A	N/A

Property Land

Type	Description	Acreage	Sqft	Eff Front	Eff Depth	Market Value	Prod. Value
SAW		26.07	1,135,609.00	0.00	0.00	N/A	N/A

Property Roll Value History

Year	Improvements	Land Market	Ag Valuation	Appraised	HS Cap Loss	Assessed
2026	N/A	N/A	N/A	N/A	N/A	N/A
2025	$0	$91,250	$4,220	$91,250	$0	$4,220
2024	$0	$91,250	$4,070	$91,250	$0	$4,070
2023	$0	$91,250	$4,070	$91,250	$0	$4,070
2022	$0	$91,250	$4,430	$91,250	$0	$4,430
2021	$0	$70,390	$4,850	$70,390	$0	$4,850
2020	$0	$70,390	$4,590	$70,390	$0	$4,590
2019	$0	$70,390	$4,560	$70,390	$0	$4,560
2018	$0	$88,530	$4,560	$88,530	$0	$4,560
2017	$0	$82,580	$4,560	$82,580	$0	$4,560
2016	$0	$74,380	$4,300	$74,380	$0	$4,300
2015	$0	$74,380	$4,300	$74,380	$0	$4,300

Property Deed History

Deed Date	Type	Description	Grantor	Grantee	Volume	Page	Number
7/23/2010			TRIPLE DUTCH DAIRY LLC	EEMSTER WEST LLC			2010-04536
2/13/2009			TRIPLE DUTCH DAIRY LLC	TRIPLE DUTCH DAIRY LLC			2010-01138
2/13/2009			VAN LEEUWEN & ANDY VAN DIE	TRIPLE DUTCH DAIRY LLC	1416	156	
2/13/2009			TRIPLE DUTCH DAIRY	VAN LEEUWEN & ANDY VAN DIE	1416	155	
7/3/1997			TRIPLE DUTCH DAIRY	TRIPLE DUTCH DAIRY	950	636	
8/28/1990			LLOYD MIKE	TRIPLE DUTCH DAIRY	799	322	

9/2/1990	MULTI	STAFFORD BARBARA ANN LLOYD STA	TRIPLE DUTCH DAIRY	829	722

Property Details

Account

Property ID:	R000059564	**Geographic ID:**	R 0332 00167 00.0
Type:	Real	**Zoning:**	
Property Use:		**Condo:**	

Location

Situs Address:	277 PR1008 OFF FM219
Map ID:	18-14-1 **Mapsco:**
Legal Description:	Acres 109.920, A0332 HENSON ABSALOM;
Abstract/Subdivision:	/

Owner

Name:	EEMSTER WEST LLC
Agent:	
Mailing Address:	777 PR1006 DUBLIN, TX 76446
% Ownership:	100.00%
Exemptions:	For privacy reasons not all exemptions are shown online.

Property Values

Improvement Homesite Value:	N/A (+)
Improvement Non-Homesite Value:	N/A (+)
Land Homesite Value:	N/A (+)
Land Non-Homesite Value:	N/A (+)
Agricultural Market Valuation:	N/A (+)
Market Value:	N/A (=)
Agricultural Value Loss:	N/A (-)

Appraised Value:	N/A (=)
HS Cap Loss:	N/A (-)
CB Cap Loss:	N/A (-)
Assessed Value:	N/A
Ag Use Value:	N/A

Information provided for research purposes only. Legal descriptions and acreage amounts are for Appraisal District use only and should be verified prior to using for legal purpose and or documents. Please contact the Appraisal District to verify all information for accuracy.

Property Taxing Jurisdiction

Owner: EEMSTER WEST LLC **%Ownership:** 100.00%

Entity	Description	Market Value	Taxable Value
072	ERATH COUNTY	N/A	N/A
909	LINGLEVILLE ISD	N/A	N/A
MTD	MIDDLE TRINITY WATER	N/A	N/A
RER	ERATH ROAD & BRIDGE	N/A	N/A

Property Land

Type	Description	Acreage	Sqft	Eff Front	Eff Depth	Market Value	Prod. Value
SAW		109.92	4,788,115.00	0.00	0.00	N/A	N/A

Property Roll Value History

Year	Improvements	Land Market	Ag Valuation	Appraised	HS Cap Loss	Assessed
2026	N/A	N/A	N/A	N/A	N/A	N/A
2025	$0	$384,720	$17,810	$384,720	$0	$17,810
2024	$0	$384,720	$17,150	$384,720	$0	$17,150
2023	$0	$384,720	$17,150	$384,720	$0	$17,150
2022	$0	$384,720	$18,690	$384,720	$0	$18,690
2021	$0	$296,780	$20,450	$296,780	$0	$20,450
2020	$0	$296,780	$19,350	$296,780	$0	$19,350
2019	$0	$296,780	$19,240	$296,780	$0	$19,240
2018	$0	$280,850	$19,240	$280,850	$0	$19,240
2017	$0	$224,680	$19,240	$224,680	$0	$19,240
2016	$0	$192,580	$18,140	$192,580	$0	$18,140
2015	$0	$192,580	$18,140	$192,580	$0	$18,140

Property Deed History

Deed Date	Type	Description	Grantor	Grantee	Volume	Page	Number
7/23/2010			TRIPLE DUTCH DAIRY LLC	EEMSTER WEST LLC			2010-04536
2/13/2009			TRIPLE DUTCH DAIRY LLC	TRIPLE DUTCH DAIRY LLC			2010-01138
2/13/2009			VAN LEEUWEN & ANDY VAN DIE	TRIPLE DUTCH DAIRY LLC	1416	156	
2/13/2009			TRIPLE DUTCH DAIRY	VAN LEEUWEN & ANDY VAN DIE	1416	165	
7/3/1997			TRIPLE DUTCH DAIRY	TRIPLE DUTCH DAIRY	950	636	
9/3/1993	L		LANDES COY D	TRIPLE DUTCH DAIRY	837:8	624:9	

TECHNICAL INFORMATION PACKET FOR CONCENTRATED ANIMAL FEEDING OPERATIONS (CAFOS)

Submit this Form with your Individual Permit Application (TCEQ – 000728)

Name of Site: Eemster West

TCEQ Permit Number, if assigned: WQ000 2922000

Date Prepared: August 2025

SECTION 1. POLLUTANT SOURCES MANAGEMENT

For each potential pollutant source listed in the table below, provide the management practices utilized or enter "Not Applicable". Management practices should address the collection, storage and final disposition of each potential pollutant source. You may attach your list.

Table 1: Potential Pollutant Sources and Best Management Practices

Potential Pollutant Source	Best Management Practices
Manure and Manure Stockpiles	See Attached BMPs
Wastewater	See Attached BMPs
Sludge	See Attached BMPs
Compost	See Attached BMPs
Feed and Bedding	See Attached BMPs
Silage stockpiles	See Attached BMPs
Dead animals	See Attached BMPs
Dust	See Attached BMPs
Lubricants	See Attached BMPs
Pesticides	See Attached BMPs
Bulk cleaning chemicals	N/A
Inorganic fertilizers	N/A
Fuel storage tanks	See Attached BMPs
Other, specify:	N/A

SECTION 2. RETENTION CONTROL STRUCTURE DESIGN

A. Design Summary

1) Design Standards, Characteristic, and Values Sources Used

- ☒ Natural Resource Conservation Service
- ☐ American Society of Agricultural and Biological Engineers
- ☐ Other; specify:

I. POLLUTANT SOURCES AND MANAGEMENT

B. For each potential pollutant source, provide the management practices utilized.

Note: A Best Management Practice, as defined in 30 TAC §321.32(7), is the schedule of activities, prohibitions of practices, maintenance procedures, and other management and conservation practices to prevent or reduce the pollution of water in the state. BMPs also include treatment requirements, operating procedures, and practices to control site runoff, spillage or leaks, sludge, land application, or drainage from raw material storage. The following practices should be updated in the on-site PPP as changes to facility operating procedures occur. Employee training should be provided upon development & implementation of any BMP.

Potential Pollutant Sources:	Potential Best Management Practices (BMPs)
Manure, Sludge, Stockpiles, Slurry, Bedding, Feed Waste & Compost	Temporary (< 30 days) & Permanent Storage (>30 days) Store in drainage area of the RCS - OR - If not located within drainage area, berm area to contain runoff. Annually sample manure/manure stockpiles/compost/slurry for nutrient concentrations. Manure, Sludge, Slurry and/or Compost -Land application on-site or to third-party fields. Regular pen maintenance (scraping & drainage)
Dust - Vehicle Traffic	Control speeds around the facility. Reduce travel on unpaved facility roads, or manage dust by sprinkling road with water and/or a suppressant on an as needed basis. Utilize paving products and/or gravel to manage dust on facility roads.
Dust - Feed Handling/Processing	Utilize dust abatement measures for feed handling equipment, Utilize choke feeding when handling feed ingredients & Utilize feed ingredients, such as moisture or other additives, to manage dust.
Feedstuff/Silage Stockpiles	Contain leachate in an earthen berm or in the RCS Minimize feed spoilage & utilize plastic covers or roofed areas for storage when applicable.
Lubricants/Pesticides/Herbicides/Parlor Chemicals	Store under roof Handle and dispose according to label directions
Fuel Tanks	Provide secondary containment Prevent overfills/spills
Wastewater	Store in RCS Land applicatiou according to NUP/NMP Land application will not occur duriug periods of saturation or frozen conditions (except in the event of immiuent overflow) Annually sample for nutrient concentrations Maintain liner and capacity certifications Maintain adequate capacity as determined by the pond marker schematic
Dead Animals	Disposed by a third-party rendering service or composted on-site Collected within 24 hours of death and disposed within three days of death

2) Total Number of Animals:

In Open Lots: 2,500 In Buildings: 0

3) Animal Housing Location, hours/day:

Open Lots: 24 Buildings: 0

4) Average Liveweight, pounds per head: 330 lbs

5) Volatile Solids Removed by Separator System: 0.00

6) Volatile Solids Loading Rate, lbs/day/1000 ft³: 0.00

7) Spilled Drinking Water, gallons/day:

8) Water for Cleanup, gallons/day: 0

9) Water for Manure Removal, gallons/day: 0

10) Recycled Wastewater, gallons/day: 0

B. Wastewater Runoff

1) Design Rainfall Amount, inches: 11.8

2) Design Rainfall Event:

- ☐ 25-year, 24 hour
- ☐ Soil Plant Air and Water (SPAW) Field and Pond Hydrology Model
- ☒ 25-year, 10 day
- ☐ Other; specify:

C. Retention Control Structure(s) (RCS) Volume Allocations

Table 2. RCS Volume Allocations (Acre-Feet)

RCS Name	Design Rainfall Event Runoff	Process Generated Wastewater	Minimum Treatment Volume	Sludge Accumulation	Water Balance	Required Capacity	Actual Capacity
1	23.32	0.00	0.00	0.40	4.84	28.56	39.80

Indicate which RCSs are in-series: N/A

D. RCS Liner or Lack of Hydrologic Connection Certification

Table 3: RCS Hydrologic Connection

RCS Name	Construction Date	Type of Hydrologic Connection Certification
RCS #1	July 2008	Liner Cert., Norman Mullin, P.E., 2008
Settling Basin #1	Prior 1998	Liner Cert., Norman Mullin, P.E., 2005
Settling Basin #2	Approx. 1988	Liner Cert., K. Akerman P.E., 1991

E. Playa Lakes

Are any playa lakes used for RCSs? Yes ☐ No ☒

SECTION 3. MANURE, SLUDGE, AND WASTEWATER HANDLING

A. Manure:

1) Use or Disposal Method:
   - ☒ Land Application to LMUs
   - ☒ Transfer to other persons
   - ☒ Third Party Fields
   - ☐ Other; specify:
2) Land Application Location:
   - ☒ Onsite ☒ Offsite ☐ Not Applicable
3) Composting Location:
   - ☒ Onsite ☐ Offsite ☐ Not Applicable

B. Sludge:

1) Use or Disposal Method:
   - ☒ Land Application to LMUs
   - ☒ Transfer to other persons
   - ☒ Third Party Fields
   - ☐ Other; specify:
2) Land Application Location:
   - ☒ Onsite ☒ Offsite ☐ Not Applicable

C. Wastewater:

1) Use or Disposal Method:

☒ Land Application to LMUs

☐ Total Evaporation

☒ Third Party Fields

☐ Other; specify:

2) Land Application Location:

☒ Onsite ☒ Offsite ☐ Not Applicable

D. Land Application Summary from the Nutrient Management Plan

For each Land Management Unit (LMU), provide the name, acre, crops/yield goals and application rates on Table 4 below. Add rows if needed or attach additional pages.

Table 4: Land Management Unit Summary from the Current NMP

LMU Name	Acre	Crop(s) and Yield Goal(s)	Application Rate (Ac-ft/Ac/Year OR Tons/Ac/Year)
1	59	Coastal Hay 3 Cut; SG Mod Graze	0.158 Ac-ft/Ac/Yr
5	20	Coastal Hay 3 Cut; SG Mod Graze	16.0 Tons/Ac/Yr
9	38	Coastal Hay 4 Cut; SG Mod Graze	0.342 Ac-ft/Ac/Yr

1) Wastewater production, ac-in/year: 422.88 ac-in/yr (Table 2.3, Col. 4)

2) Estimated Wastewater application, ac-in/year: 254.16 ac-in/yr (Table 2.3, Col. 10)

3) Manure production, tons/year: 1,460 tons/yr (Table 2.1)

4) Estimated manure application, tons/year: 173.3 tons/yr (NMP)

5) Estimated manure transferred to other persons, tons/year: 1,286.5 tons/yr (NMP)

E. Floodplain Information

1) Is any part of the production area within a 100-year floodplain? Yes ☐ No ☒

If YES, describe management practices to protect the sites.

2) Is land application or temporary storage of manure in a 100-year floodplain or near a water course? Yes ☒ No ☐

If YES, describe management practices. Vegetative buffers will be maintained between all waters of the state and waste/wastewater application.

F. Soil Limitations

Table 5: Soil Limiting Characteristics and Best Management Practices

Soil Types	Limiting Characteristics	Best Management Practices
DwD	Slope Seepage	-No land application to inundated soils. - Land Application not to exceed agronomic rates for nutrients and soil hydraulic rates (refer to NMP).
Ma	Doughty Depth to Bedrock	-No land application to inundated soils. -Land Application not to exceed agronomic rates for nutrients and soil hydraulic rates (refer to NMP). - Irrigation events will be managed to assist in maintaining soil moisture levels within the range of the available water holding capacity of that Land Management Unit.
Pd	Droughty Depth to Bedrock Slow Water Movement Large Surface Stones on the Surface	-No land application to inundated soils. -Land Application not to exceed agronomic rates for nutrients and soil hydraulic rates (refer to NMP). - Irrigation events will be managed to assist in maintaining soil moisture levels within the range of the available water holding capacity of that Land Management Unit.
FhC2	Slow Water Movement Seepage	-No land application to inundated soils. - Land Application not to exceed agronomic rates for nutrients and soil hydraulic rates (refer to NMP).
WaB	Slow Water Movement Depth to Saturated Zone	- Land Application not to exceed agronomic rates for nutrients and soil hydraulic rates (refer to NMP). -No land application to inundated soils.

G. Well Protection

Table 6: Water Well Status and Protective Measures

Well ID Number	Well Type	Producing or Non-Producing	Open, Cased, or Capped	Protective Measures
1	Domestic	Producing	Cased	See Attached Approved Well Buffer Exception

SECTION 4. AIR AUTHORIZATION SUMMARY

A. Type of Air Authorization

☒ Air Standard Permit in 30 TAC § 321.43

- ☐ Permit By Rule in 30 TAC Chapter 106 Subchapter F
- ☐ Individual Air Quality Permit

If Air Standard Permit is selected, then complete Sections B and C below.

B. Indicate the AFO Status and Buffer Option.

☐ Operation started after August 19, 1998:
- ☐ ½ mile buffer*
- ☐ ¼ mile buffer* and an odor control plan

☒ Operation started on or before August 19, 1998:
- ☐ ¼ mile buffer*
- ☒ odor control plan

*A written letter of consent from an affected landowner may be used in lieu of meeting the buffer distances specified.

C. Odor Receptors

Identify the number of occupied residences or business structures, schools (including associated recreational areas), places of worship, or public parks located within the following distances from permanent odor sources as defined in 30 TAC §321.32(43):

0 - ¼ mile: 13 (3 applicant owned)

¼ - ½ mile: 4

½ - 1 mile: 31

SECTION 5. ATTACHMENTS

A. Maps

1) Site Map
2) Land Management Unit Map
3) Vicinity Map
4) Original United States Geological Survey 7.5 Minute Quadrangle Map
5) 100 Year Floodplain Map (if applicable)
6) Runoff Control Map
7) Natural Resource Conservation Service (NRCS) Soil Survey Map

B. Professional Certifications

1) Recharge Feature Certification Statement and Supporting Documents
2) RCS Design Calculations (Water Nutr, Animal Waste Management (AWM), or equivalent)
3) RCS As-Built Capacity Certifications (if constructed)
4) RCS Hydrologic Connection Certifications (if constructed)

C. Land Application

1) Nutrient Management Plan
2) Nutrient Utilization Plan. If the NUP is already approved, include the approval letter.
3) Copy of Annual Soil Sampling Analyses (used for the NMP that was submitted with the application)

4) Copy of Annual Manure and Wastewater Analyses (used for the NMP that was submitted with the application

D. Air Standard Permit Documentation (if required)

1) Area Land Use Map,
2) Odor Control Plan, if applicable
3) Written Consent Letters, if applicable

E. Groundwater Monitoring (if required)

1) Groundwater Monitoring Plan
2) Groundwater Monitoring Analyses

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LIST OF FIGURES

LIST OF TABLES

1.0 FACILITY MAPS

1.1 Vicinity Map

Figure 1.1, Vicinity Map, is a general highway map generated in AutoCAD using Tiger Primary and Secondary roads data from geospatial Data Gateway at http://datagateway.nrcs.usda.gov/ (retrieved April 2018). The location of the facility is depicted on the map.

1.2 USGS Quadrangle Map

Figure 1.2, entitled 7.5-Minute USGS Map is a seamless, high-quality copy of the 7.5-minute USGS quadrangle map (Bunyan, TX, quadrangle) that shows the boundaries of land owned, operated, or controlled by Eemster West, LLC and used as part of the concentrated animal feeding operation; and all springs, lakes, or ponds located on-site and within 1 mile of the property boundary.

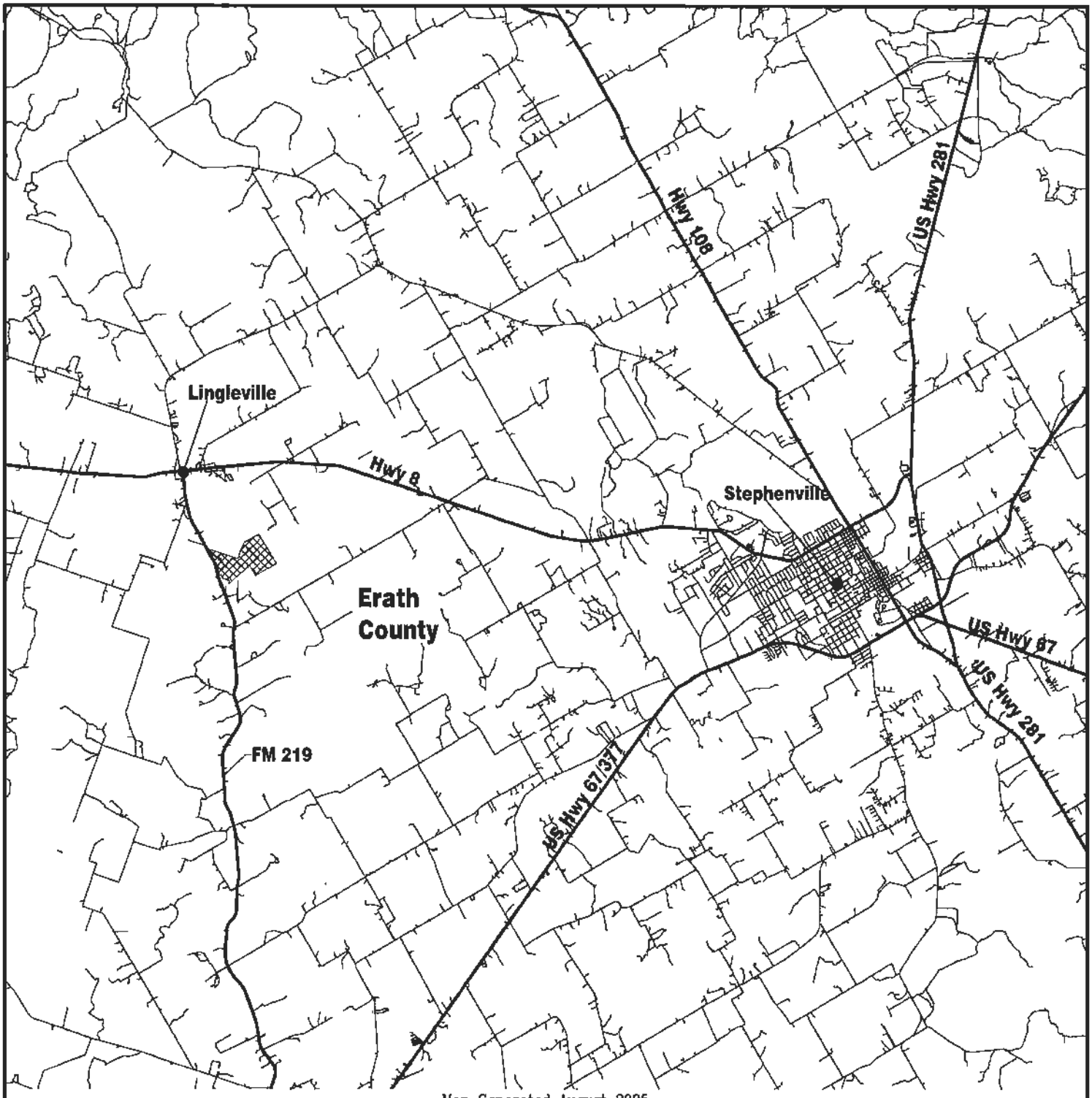
1.3 Site Map

Figure 1.3, Site Map, is a scaled drawing of the entire property to be permitted showing the locations of the following information:

- Pens/Open Lots
- Barns
- Retention Control Structures
- Land Management Units
- Buffer zones
- Well
- Freshwater Ponds
- Calf Hutch Area
- Composting Area
- Manure/Compost Storage Areas

1.4 Runoff Control Map

Figure 1.4 is a scaled drawing of the production area showing the pens, barns, well, RCSs, permanent manure storage and compost areas, calf hutch area, drainage area boundaries and flow directions.



Map Generated August 2025

LEGEND:

——— Denotes City/County Roads

▬▬▬ Denotes Major Roads

▩ Denotes Facility

N

W E

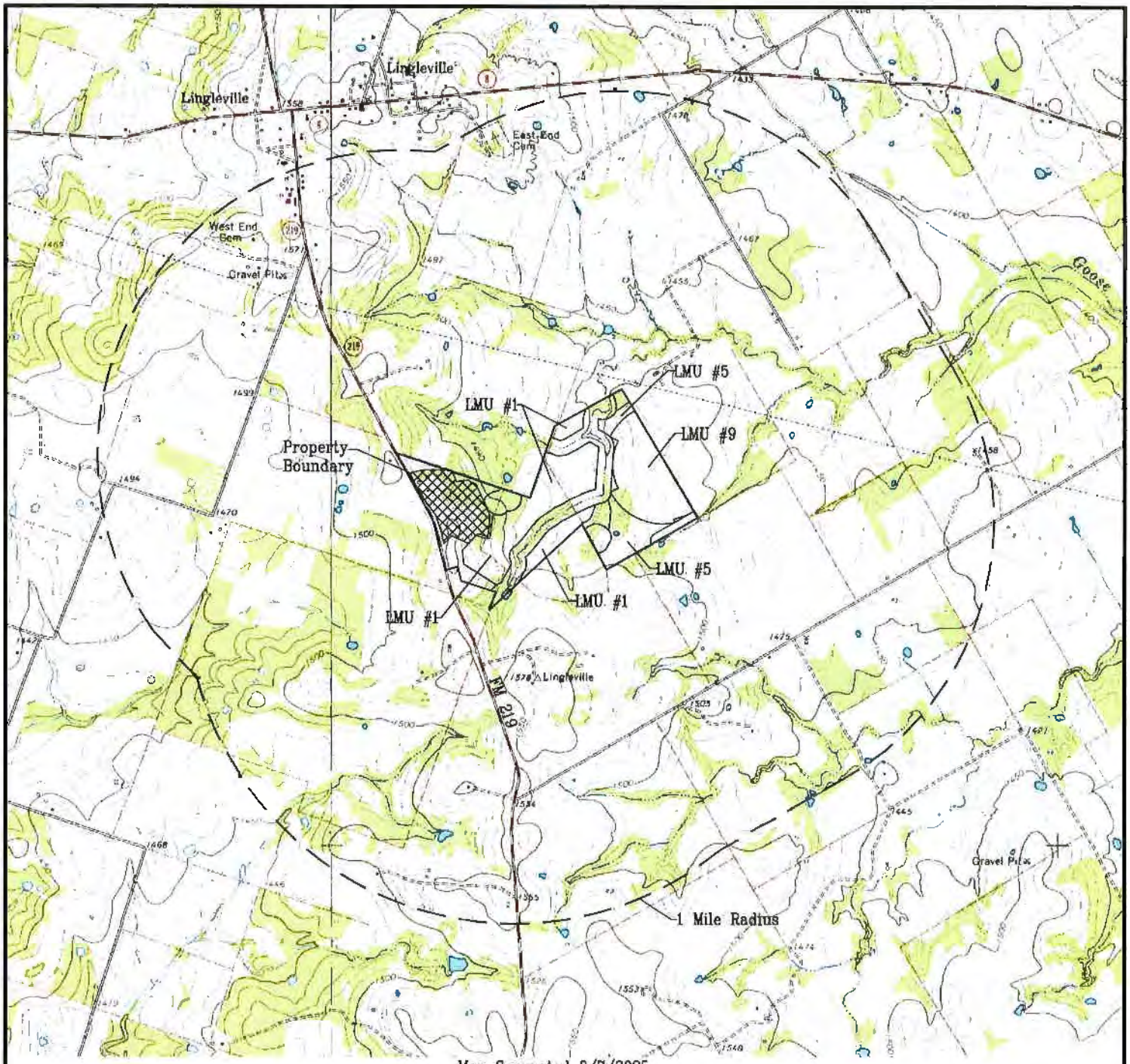
S

1 Mile 0 1 Mile 2 Miles

SCALED AS SHOWN

Source: USDA-NRCS. Geospatial Data Gateway. Available at: http://datagateway.nrcs.usda.gov/. Tiger 2010 Primary and Secondary Roads – Accessed May, 2014.

Eemster West, LLC. Dublin, TX Erath County	Vicinity Map Figure 1.1 Page 2	ENVIRO-AG ENGINEERING, INC. Enviro-Ag Engineering, Inc. ENGINEERING CONSULTANTS 3404 Airway Boulevard AMARILLO, TEXAS 79118 TEL (806) 353-6123 FAX (806) 353-4132



Map Generated 8/7/2025

LEGEND:

Denotes Production Area

N

W E

S

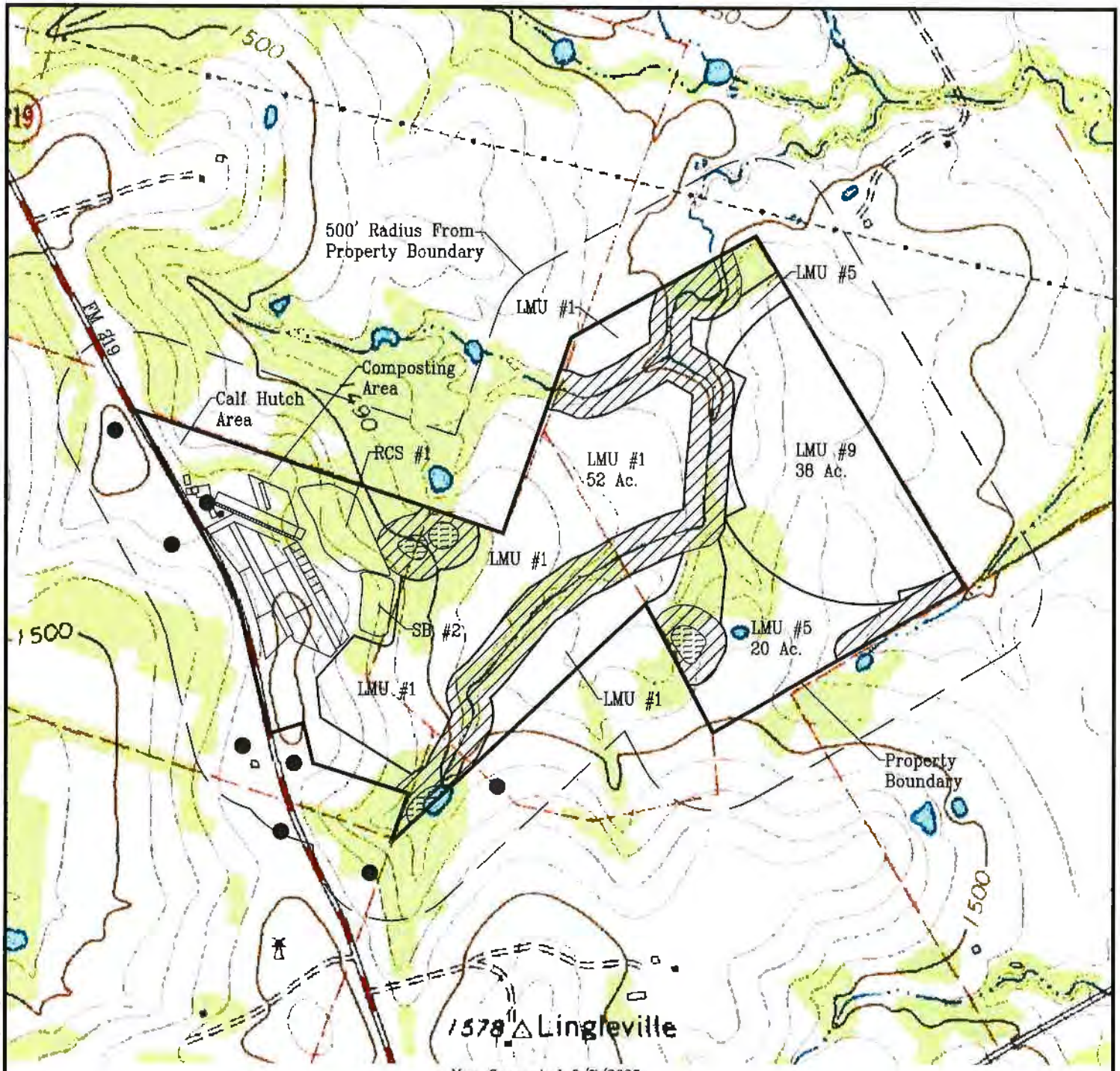
1250' 0 1250' 2500'

SCALE: 1" = 2500'

Source: USDS-NRCS. Geospatial Data Gateway. Available at: http://datagateway.nrcs.usda.gov/. Digital Raster Graphic County Mosaic by NRCS - Accessed November, 2017.

- Refer to Figures 1.3 & 1.4 for overall facility maps.

Eemster West, LLC. Dublin, TX Erath County	USGS 7.5 Min. Quadrangle Map Figure 1.2 Page 3	ENVIRO-AG ENGINEERING, INC. Enviro-Ag Engineering, Inc. ENGINEERING CONSULTANTS 3404 Airway Boulevard AMARILLO, TEXAS 79118 TEL (806) 353-6123 FAX (806) 353-4132



Map Generated 8/7/2025

LEGEND:

- Denotes Water Well
- Denotes 133' Buffer Zone
- Denotes Freshwater Pond

N
W E
S

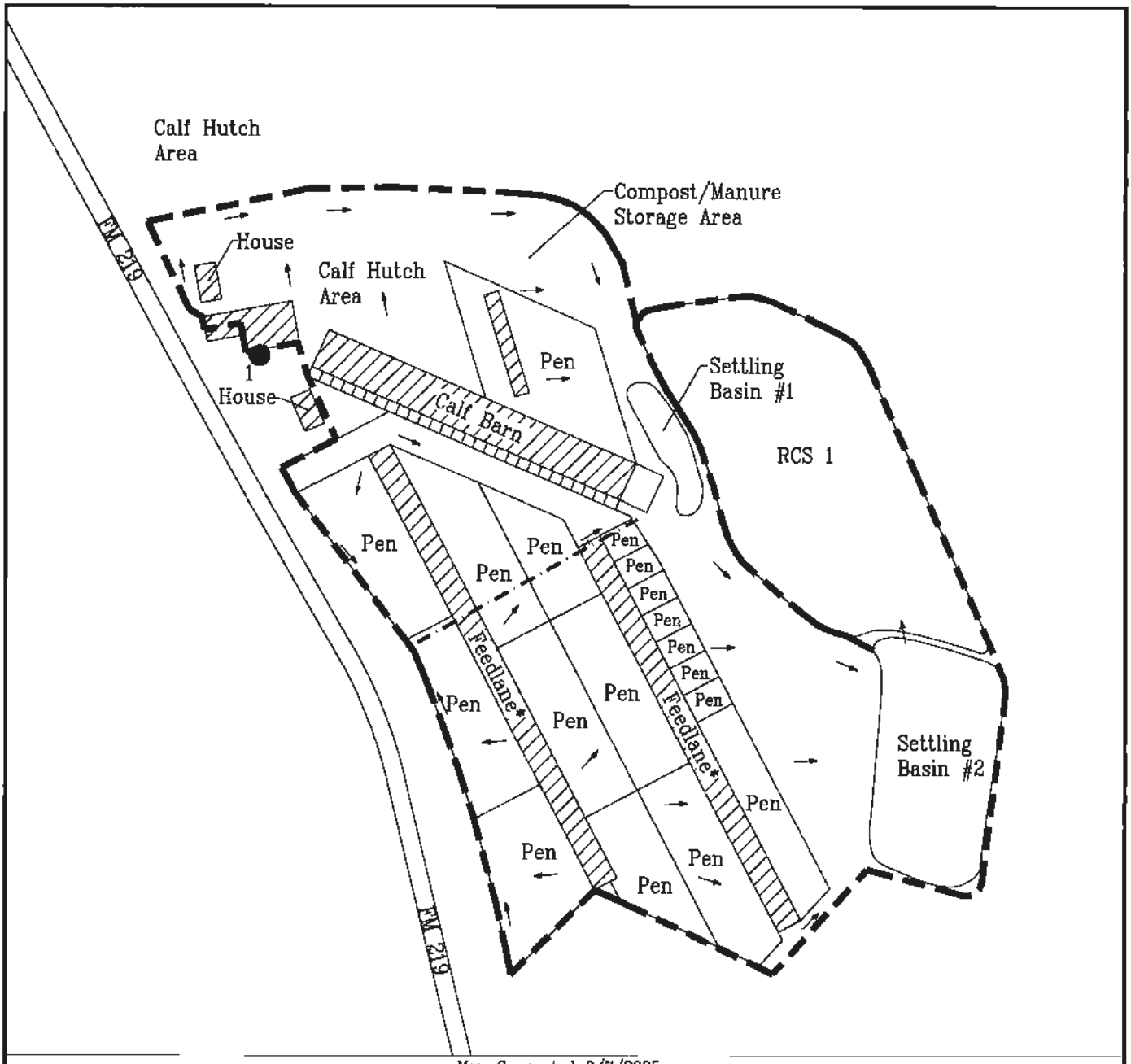
450' 0 450' 900'

SCALED AS SHOWN

Source: USDA-NRCS. Geospatial Data Gateway. Available at: http://datagateway.nrcs.usda.gov/. Digital Raster Graphic County Mosaic by NRCS – Accessed December 2016.

- Refer to Figure 1.4 for a production area map.

Eemster West, LLC. Dublin, TX Erath County	Site Map Figure 1.3 Page 4	ENVIRO-AG ENGINEERING, INC. Enviro-Ag Engineering, Inc. ENGINEERING CONSULTANTS 3404 Airway Boulevard AMARILLO, TEXAS 79118 TEL (806) 353-6123 FAX (806) 353-4132



Map Generated 8/7/2025

LEGEND:

- ● Denotes Water Well
- Denotes Ditches and/or Berms
- Denotes Underground Pipe
- Denotes Barns/Roofed Areas
- * Denotes Proposed Modifications

N
W E
S

125' 0 125' 250'

SCALED AS SHOWN

Runoff Control:
Drainage is depicted by arrows shown on maps. The drainage will be directed to the RCS via ditches, berms or underground pipe.

* Refer to Figure 1.3 for an overall facility map.

Eemster West, LLC. Dublin, TX Erath County	Runoff Control Map Figure 1.4 Page 5	ENVIRO-AG ENGINEERING, INC. Enviro-Ag Engineering, Inc. ENGINEERING CONSULTANTS 3404 Airway Boulevard AMARILLO, TEXAS 79118 TEL (806) 353-8123 FAX (806) 353-4132

2.0 CALCULATIONS & SPECIFICATIONS

2.1 Facility Overview

The existing facility consists of open lots, a freestall barn, a milking parlor, two earthen settling basins, and one retention control structures to confine 900 head, of which 700 head are milking. The RCS and earthen settling basins have been certified as meeting TCEQ requirements for soil liner.

This major amendment is for the changing af the facility from a dairy milking facility ta a heifer replacement facility, increase the head count from 900 total and 700 milking to 2,500 dairy heifer replacements, reconfigure the drainage area, addition of two feedlanes, reconfigure pens, reconfigure the LMUs. LMU #1 now includes LMUs 1, 2, 3, 7 & 8. The existing manure and/or wastewater storage structures have been certified as meeting TCEQ requirements for soil liner. Figure 2.1, Manure & Wastewater Flow Chart, shows the waste handling procedures and storage practices at the facility.

2.2 Manure Production

Table 2.1, As-Excreted Manure Characteristics Existing Dairy Facility, is included as a summary of the annual manure and nutrient production for the facility. The totals in Table 2.1 represent as-excreted manure and nutrient values for the maximum head count shown in the application.

Note: This data is intended for planning and design purposes and is not to be used for whole-farm nutrient mass balance calculations.

ESTIMATED MANURE PRODUCTION
for a DAIRY FACILITY
Table 2.1
ENVIRO-AG ENGINEERING, INC.

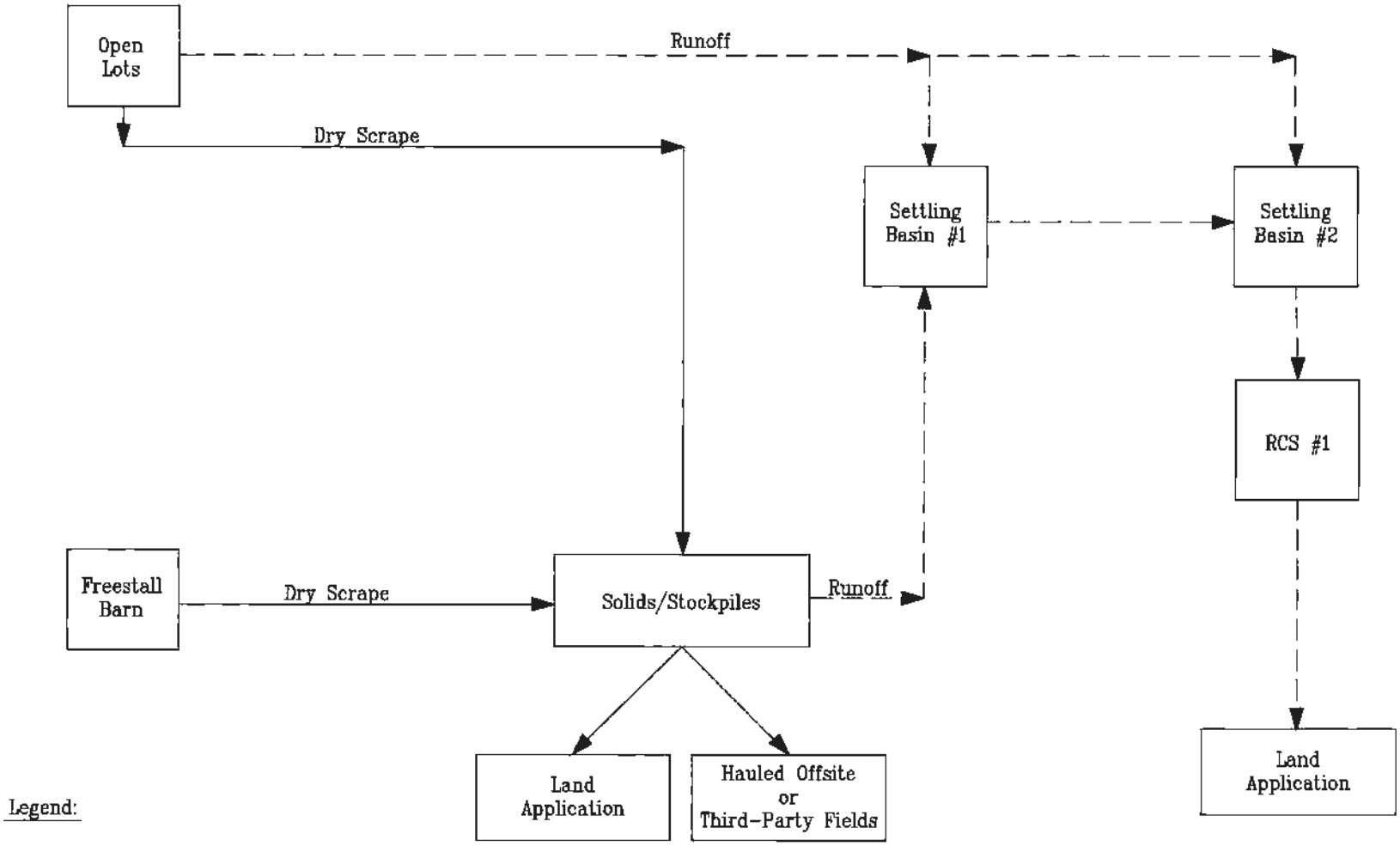
NAME OF CAFO: Eemster West Dairy
LOCATION: Erath County
DATE: August-25

FACILITY TOTAL	MANURE PRODUCTION CRITERIA (a) Young Stock	Total
1. Maximum Number of Animals Confined (head):	**2,500**	**2,500**
2. Confinement period, hrs/hd/day	24	24
3. Percent of time in Confinement	100%	100%
4. Total Manure Production, lbs/day	47,500	47,500
5. Total Solids Production, lbs/day	8,000	8,000
6. Manure Production, tons/year	1,460	1,460
7. Volatile Solids Production, lbs/day	23,000	23,000
8. Total Nitrogen Production, lbs/day	350	350
9. Total Phosphorus, P2O5 lbs/day (b)	378	378
10. Total Potassium, K2O lbs/day (b)	990	990

NOTES:

(a) - Manure and nutrient production values are taken from American Society of Agricultural and Biological Engineers Data: (ASABE D384.2 MAR05_R2010) Manure Production and Characteristics, Table 1.b - Section 3.
Production values given in terms of lb/day-animal (wet-basis).

(b) - The ASAE Manure Production and Characteristics Tables give P and K in the elemental forms. Convert to P2O5 by multiplying by 2.29 and to K2O by multiplying by 1.2.



Eemster West, LLC. Dublin, TX Erath County	Manure & Wastewater Flow Chart Figure 2.1 Page 7	Enviro-Ag Engineering, Inc. ENGINEERING CONSULTANTS 3404 Airway Boulevard AMARILLO, TEXAS 79118 TEL (806) 353-6123 FAX (806) 353-4132

2.3 Process-Generated Wastewater Volume

The primary source of process-generated wastewater is wash water from the milking parlor operations, which is directed to earthen settling basin #1, then to earthen settling basin #2 and then into RCS #1. The freestall barn is vacuumed for manure removal. All open lot pens are dry scraped for manure removal. The volume of process wastewater (including wet manure from the milking parlor) generated daily is estimated to be 28 gallons per head (based on data for Eemster West Dairy). The design storage volume in RCS #1 for process-generated wastewater is 30 days and is calculated in Table 2.2.

2.4 25-Year, 10-Day Rainfall Storage Volume

In accordance with 30 TAC §321.42(c)(1), RCS #1 is designed to maintain a margin of safety to contain the runoff and direct precipitation from the 25-year, 10-day storm event for this location, which is 11.8 inches of rainfall. Drainage area runoff volumes are calculated using the SCS method with curve numbers (CN) selected based on soil type and land use. The pen area runoff and compost area were calculated using a CN of 90, the pond area was calculated using a CN of 100, and the adjacent areas were calculated a CN of 85. Roofed/concrete areas were calculated using a CN of 100. Run-on from areas outside the control facility is directed away from the RCS. Table 2.2 shows the calculated storage volume required for the rainfall runoff from a 25-year, 10-day storm.

2.5 Sludge Accumulation Volume

Sludge accumulation from the milking parlor wash water was calculated using a rate of 0.0729 cubic feet of sludge per pound total solids (from USDA-NRCS Agricultural Waste Management Handbook) and a sludge storage period of 5 years. Parlor waste/wastewater is directed into the earthen settling basins, with an estimated collection/removal efficiency of 50% (Midwest Plan Services) to reduce the amount of solids entering the RCS, thereby reducing the demand for sludge storage. The required sludge accumulation volume calculations are shown in Table 2.2

2.6 Water Balance Model

Table 2.3, Water Balance Model, estimates the inflows and withdrawals from RCS #1 including runoff, direct rainfall, process-generated wastewater, evaporation, and irrigation withdrawal based on crop demand in accordance with 30 TAC §321.38(e)(7)(C). Actual pond withdrawal amounts will vary with changing weather conditions. An additional volume is included in the RCS to provide flexibility in managing RCS levels.

2.7 RCS Management Plan

A RCS Management Plan was developed by a licensed Texas professional engineer and has been implemented to incorporate the margin of safety, as specified in 30 TAC §321.42(g). The plan includes the elements specified in §321.42(g)(1)-(6), and a copy is maintained in the onsite PPP.

REQUIRED STORAGE VOLUMES FOR RUNOFF RETENTION CONTROL STRUCTURES

Table 2.2

ENVIRO-AG ENGINEERING, INC.

NAME OF CAFO:	Eemster West Dairy
LOCATION:	Erath County
DATE:	August-25

RCS #1 - RUNOFF POND REQUIREMENT

RAINFALL VOLUME

Drainage Area Characteristics:	(acres)	CN
Pen Area:	8.42	90
Adjacent Areas:	8.40	90
Paved/Roof Areas:	3.02	100
Settling Basin Surface Areas:	2.30	100
RCS #1 Surface Area:	3.34	100
Total Drainage Area	25.48	

25-year, 10-day rainfall:	(inches)	11.8

Runoff Volume Determination (a):	(inches)	(ac-ft)
Pen Area:	10.6	7.41
Adjacent Areas:	10.6	7.39
Paved/Roof Areas:	11.8	2.97
Settling Basin Surface Areas:	11.8	2.26
RCS #1 Surface Area:	11.8	3.28

Rainfall Volume:	(ac-ft)	23.32

TOTAL RCS VOLUME REQUIRED

Runoff Sludge Volume (b):	(ac-ft)	0.40
Rainfall Volume:	(ac-ft)	23.32
Additional from Water Balance:	(ac-ft)	4.84
Total Required RCS #1 Volume:	**(ac-ft)**	**28.56**

NOTES:

(a) Using SCS method:

Where:

S = (1000/CN) - 10
Q = ((I - 0.2S)^2)/(I + 0.8S)
S = Potential maximum retention after runoff begins in
Q = Runoff (in)
I = 25-year, 10-day rainfall (in)
CN = Curve Number from SCS 210-VI-TR-55, 2nd Edition, June 1986

(b) USDA Agricultural Field Waste Handbook, Kansas, Part 651.1082, Suggested procedures for sediment volume estimation (SC = 1.5% for 1 year).

STATE OF TEXAS
NORMAN H. MULLIN
66107
LICENSED
PROFESSIONAL ENGINEER
8/26/25

NOTE: Calculations were performed in Microsoft Excel using floating point arithmetic in order to maintain the accuracy of the data. Any inconsistencies in rounding of the displayed values are not to be construed as errors in the calculation. For more information, please refer to http://support.microsoft.com/kb/42980

WATER BALANCE MODEL
IRRIGATION AND EVAPORATION for RCS #1
Table 2.3
ENVIRO-AG ENGINEERING, INC.

NAME: Eemster West Dairy
LOCATION: Erath County
DATE: August-25

HYDROLOGIC CHARACTERISTICS

Pen Area (acres):	8.42	
Adjacent Areas (acres):	8.40	
Paved/Roof Area (acres):	3.02	
Total SEWRCS Surface Area (acres):	5.64	
Total Irrigated Area (acres)(12):	38	38
Cropping scheme:	Coastal	Wheat
Effective Evaporation Surface Area (acres)	2.84	

IRRIGATION CELL VOLUME SUMMARY DATA

25-Year, 10-Day Rainfall Volume (ac-ft):	23.32
Process Generated Wastewater Volume (ac-ft):	0.00
Sludge Accumulation Volume (ac-ft):	0.40
Additional Volume (ac-ft):	4.84
Total Required Capacity (ac-ft):	28.56

	RCS INFLOW CALCULATIONS					HYDRAULIC CROP DEMAND CALCULATIONS					RCS STORAGE SUMMARY			
MONTH	(1) (inches)	(2) (inches)	(2) (inches)	(3) (ac-ft)	(4) (ac-ft)	(5) (inches)	(6) (inches)	(6) (inches)	(7) (ac-ft)	(7) (ac-ft)	(8) (inches)	(9) (ac-ft)	(10) (ac-ft)	(11) (ac-ft)
													start value -->	0.00
JAN	1.55	0.23	0.23	0.00	1.44	1.49	2.10	2.74	1.93	3.96	2.37	0.56	0.48	0.40
FEB	1.89	0.39	0.39	0.00	1.91	1.75	2.46	3.11	2.26	4.31	2.70	0.64	1.28	0.40
MAR	2.16	0.54	0.54	0.00	2.32	1.93	4.06	4.97	6.74	9.62	4.27	1.01	1.31	0.40
APR	2.89	1.00	1.00	0.00	3.49	2.36	4.98	5.74	8.31	10.72	5.19	1.23	2.26	0.40
MAY	4.35	2.10	2.10	0.00	6.08	2.98	5.73	5.33	8.71	7.45	5.24	1.24	4.84	0.40
JUN	3.23	1.24	1.24	0.00	4.07	2.52	6.82	3.22	13.61	2.21	7.01	1.66	2.41	0.40
JUL	2.12	0.52	0.52	0.00	2.25	1.91	7.66	0.00	18.22	0.00	8.23	1.95	0.31	0.40
AUG	2.24	0.59	0.59	0.00	2.44	1.98	7.56	0.00	17.66	0.00	7.73	1.83	0.61	0.40
SEP	3.05	1.11	1.11	0.00	3.76	2.44	5.78	0.00	10.59	0.00	5.97	1.41	2.35	0.40
OCT	3.20	1.22	1.22	0.00	4.01	2.51	4.29	2.15	5.64	0.00	4.91	1.16	2.85	0.40
NOV	1.90	0.40	0.40	0.00	1.93	1.75	2.81	1.70	3.34	0.00	3.32	0.79	1.14	0.40
DEC	1.62	0.26	0.26	0.00	1.54	1.55	2.24	2.33	2.20	2.48	2.47	0.58	0.95	0.40
TOTALS	30.20	9.59	9.59	0.00	35.24	25.16	56.49	31.29	99.21	40.75	59.41	14.06	20.78	

NOTES:

(1) AVERAGE PRECIPITATION - Average precipitation taken from the Texas Water Development Board, Erath County, Quad #509, retrieved August 7, 2025

(2) RUNOFF PENS AND ADJACENT AREA - Runoff from pens, adjacent areas calculated using SCS Curve Number Method adjusted from 1 to 30-day Curve Number (Pen CN-77, Adj CN-67). (Ref. NRCS Animal Waste Management Software Help File-Program Documentation for Runoff)

(3) INFLOW -No process generated wastewater

(4) TOTAL INFLOW - Total Inflow is calculated as that volume of rainfall that falls on the RCS and process water that enters the RCS

(5) RAINFALL ON IRRIGATED AREA - Effective monthly rainfall on the irrigated area calculated using SCS Curve Number Method adjusted from 1 to 30-day Curve Number (Irr. CN-67) (Ref. NRCS Animal Waste Management Software Help File-Program Documentation for Runoff)

(6) CONSUMPTIVE USE values from Borrelli, et al., 1998 Mean Crop Consumptive Use and Free-Water Evaporation for Texas, Dept. of Civil Engineering, Texas Tech University, Lubbock, Texas (Tables 16 & 25)

(7) NET CROP DEMAND - Net Crop Demand = ((Consumptive Use(6) - Effective Rainfall(5))/12) x Irrigated Area

(8) MONTHLY LAKE SURFACE EVAPORATION - Average monthly lake surface evaporation taken from the Texas Water Development Board, Erath County, Quad #509, retrieved August 7, 2025

(9) NET POND EVAPORATION - Net Evaporation from the water surface is taken as (Monthly Lake Surface Evap/12) x (RCS Surface Area)

(10) ACTUAL WITHDRAWAL - Actual Withdrawal from the irrigation cell not to exceed Net Crop Demand. (No consideration given for nutrient demand of crop)

(11) STORAGE AT END OF MONTH - Storage volume in the irrigation cell at the end of the month. The storage calculated in this column should not encroach in the volume reserved for the 25-year, 10-day rainfall event

(12) TOTAL IRRIGATED ACRES - LMC #9

NOTE: Calculations were performed in Microsoft Excel using floating point arithmetic in order to maintain the accuracy of the data. Any inconsistencies in rounding of the displayed values are not to be construed as errors in the calculation. For more information, please refer to http://support.microsoft.com/kb/42980

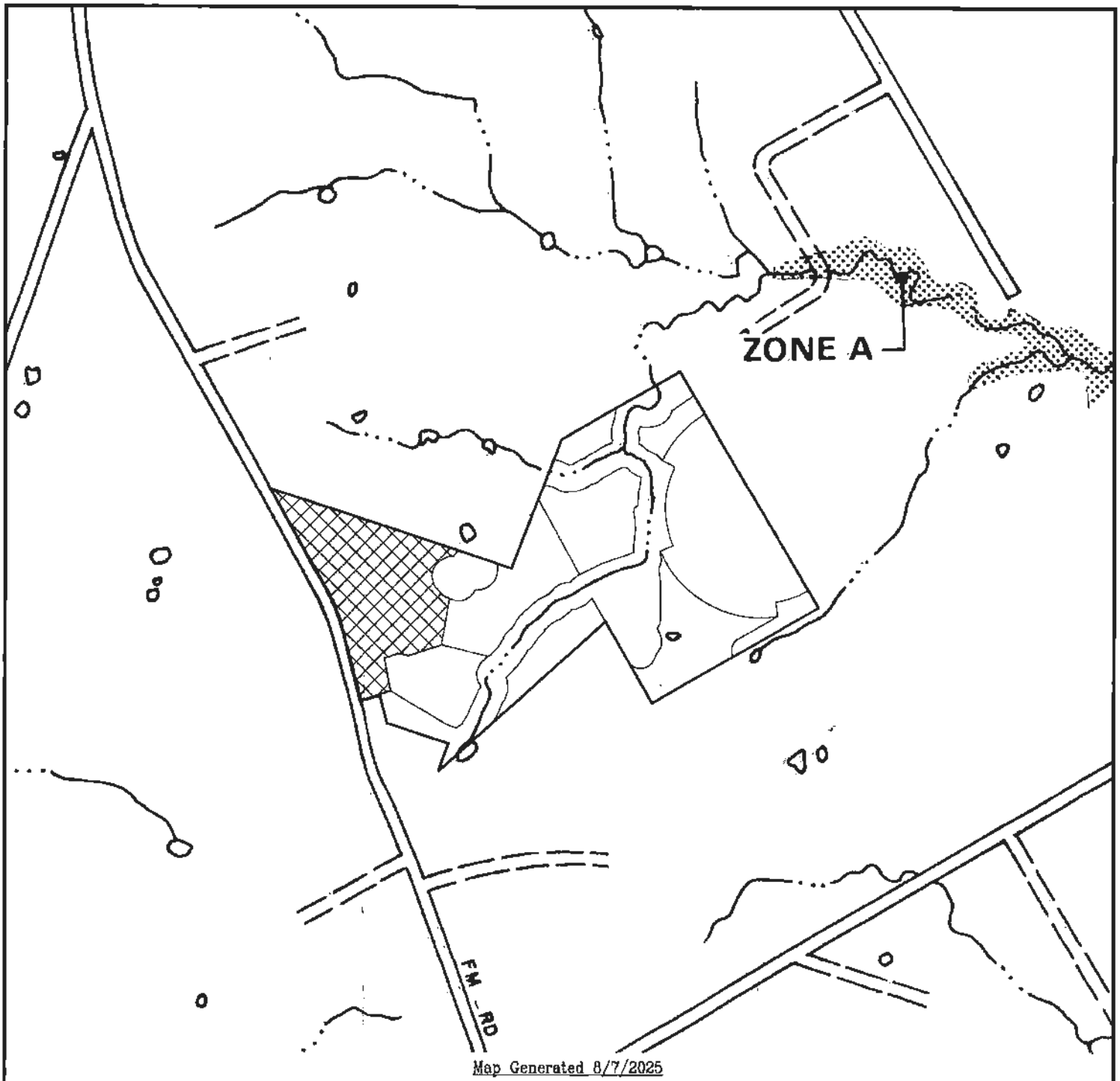
3.0 FACILITY INFORMATION

3.1 Required Certifications

RCS #1, settling basin #1 and settling basin #2 have been certified by a licensed Texas professional engineer as meeting the liner requirements of the TCEQ. Existing liner and capacity certifications are attached.

3.2 100-Year Flood Plain Evaluation

The location for this facility is overlain on a FEMA 100-year flood plain map (Figure 3.1). The production area and land application area are not located within a 100-year flood plain.



Map Generated 8/7/2025

LEGEND:

Denotes Property Boundary

Denotes Production Area

N

W E

S

No Scale

Source: FEMA, Flood Plain Maps

- Refer to Figure 1.3 for an overall facility map.

Eemster West, LLC. Dublin, TX Erath County	FEMA Map Figure 3.1 Page 14	ENVIRO-AG ENGINEERING, INC. Enviro-Ag Engineering, Inc. ENGINEERING CONSULTANTS 3404 Airway Boulevard AMARILLO, TEXAS 79118 TEL (806) 353-6123 FAX (806) 353-4132

ENVIRO-AG
EAE
ENGINEERING, INC.

Triple Dutch Dairy
Alliance Holsteins
Erath County, Texas
RCS #1 Capacity Certification

The survey capacity for retention control structure (RCS) #1 at Triple Dutch Dairy/Alliance Holsteins at spillway level with 2 vertical feet of freeboard is as follows:

RCS #1	39.8 ac-ft	3.34 surface acres @ Spillway Elevation

Respectfully Submitted,

Norman Mullin, P.E.
Enviro-Ag Engineering, Inc.

(Supporting Documentation Attached)

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www.enviroag.com

ENVIRO-AG
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ENGINEERING, INC.

Triple Dutch/Alliance Holsteins Dairy
Erath County, Texas
RCS #1 Liner Certification

Four Shelby tube core samples were collected from a newly constructed RCS #1 to document that the liner meets the requirements of the TCEQ guidelines for soil liner (321.38(g)(3)(c)). The liner thickness was documented to be a minimum of 18 inches thick.

The hydraulic conductivity of the soil liner is documented as follows:

- RCS #1 (#769) 1.7 x 10-8 cm/sec
- RCS #1 (#770) 7.9 x 10-8 cm/sec
- RCS #1 (#771) 6.8 x 10-9 cm/sec
- RCS #1 (#772) 4.0 x 10-8 cm/sec

The liner present in RCS #1 is determined to be in accordance with TCEQ requirements for soil liners. The observed hydraulic conductivity is considered protective of ground and surface water resources.

Respectfully Submitted,

Norman Mullin, P.E.
Enviro-Ag Engineering, Inc.

(Supporting Documentation Attached)

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www.enviroag.com

Enviro-Ag Engineering, Inc.

3404 Airway Blvd., Amarillo, TX 79118 (806) 353-6123

LABORATORY SERVICES

EAE

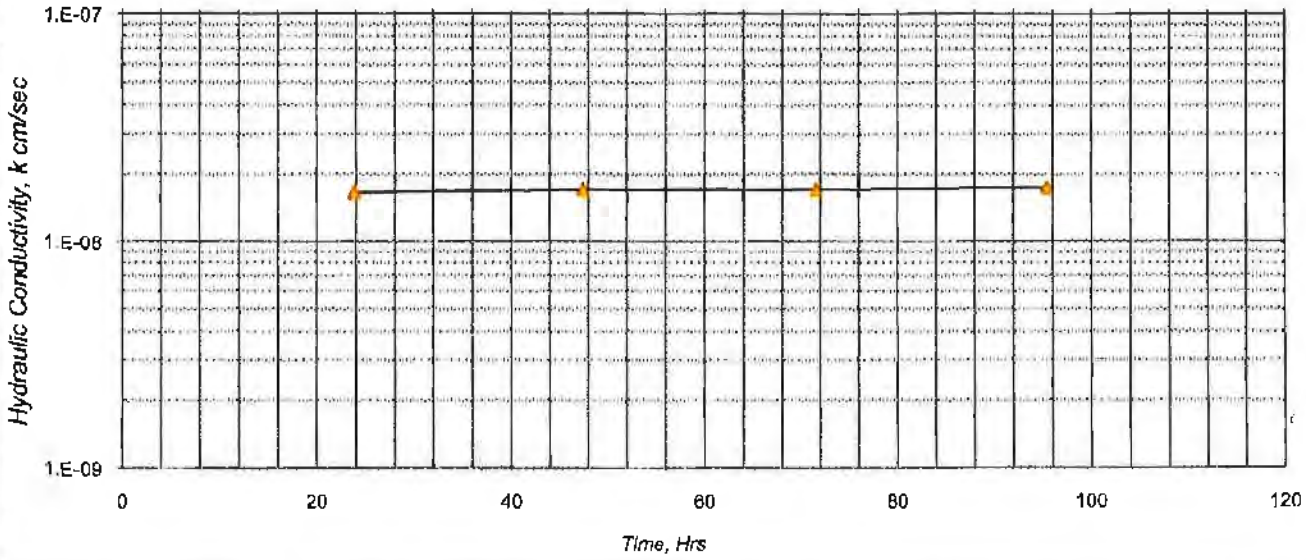
HYDRAULIC CONDUCTIVITY

REPORT

ASTM D-5084, Method C

Client / Project Name:	Project No:	Lab Sample Number:
Alliance Holsteins	**08-05-09**	**769**
Sample ID:	**Sample Location:**	**Report Date:**
1	**#1**	**July 2, 2008**

Hydraulic Conductivity vs Time



SPECIMEN DATA

SAMPLE ID:	1	
DESCRIPTION:	#1	
	INITIAL	FINAL
HEIGHT, in.	2.9	2.9
DIAMETER, in.	2.8	2.8
WATER CONTENT, %	12.6	24.9
DRY DENSITY, pcf	102	100
SATURATION, %	52	97
(Specific Gravity assumed as 2.7)		
SAMPLE COLOR	Light Brown	
SAMPLE CONSISTENCY	Clay	

COMMENTS:

Tap water used as permeant.

TEST DATA

ASTM D-5084, Method C

EFFECTIVE STRESS:	5 psi
GRADIENT RANGE:	3 - 4
IN / OUT RATIO:	1.00

TRIAL nos.	TIME hrs.	HYDRAULIC CONDUCTIVITY cm / sec
1	23.9	1.7E-08
2	47.5	1.7E-08
3	71.6	1.7E-08
4	95.5	1.7E-08

AVERAGE LAST 4 : **1.7E-08**

Z : Soils Lab\Perms \2008 \ 08-05-09 \ 769	Print Date:	Reviewed By:	LSN:
DCN: EAE-QC-GRAPH (rev. 11/10/04)	07/02/08	Micah Mullin	769

Enviro-Ag Engineering, Inc.

3404 Airway Blvd., Amarillo, TX 79118 (806) 353-6123

LABORATORY SERVICES

EAE

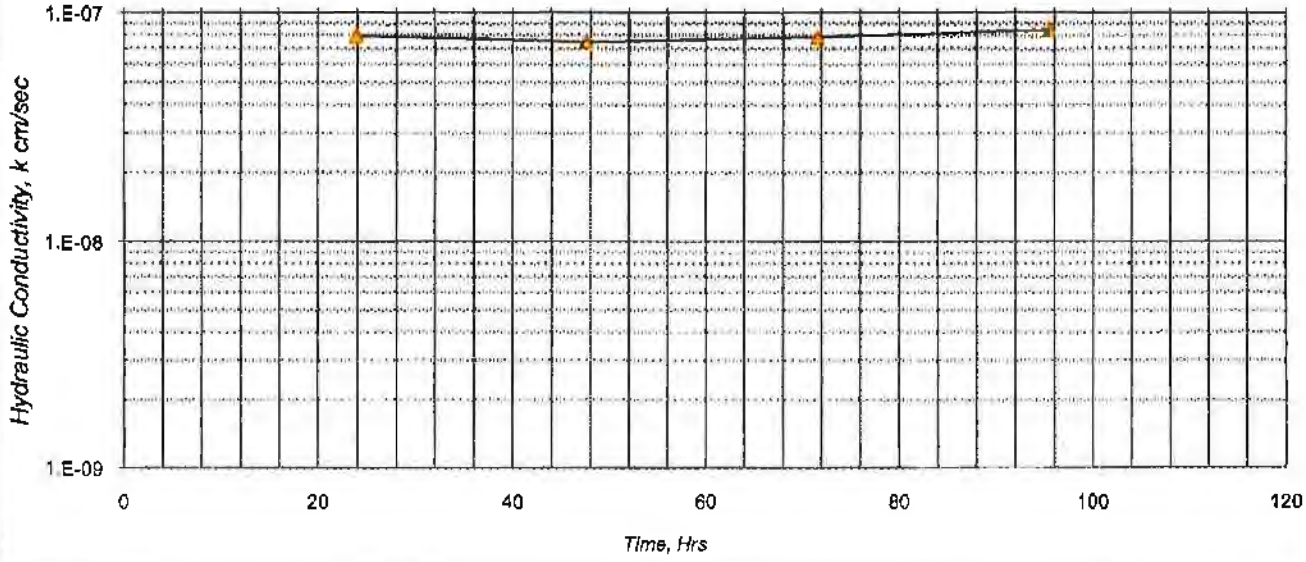
HYDRAULIC CONDUCTIVITY

REPORT

ASTM D-5084, Method C

Client / Project Name:	Project No:	Lab Sample Number:
Alliance Holsteins	**08-05-09**	**770**
Sample ID:	**Sample Location:**	**Report Date:**
2	**#2**	**July 2, 2008**

Hydraulic Conductivity vs Time



SPECIMEN DATA

SAMPLE ID:	2
DESCRIPTION:	#2

	INITIAL	FINAL
HEIGHT, in.	3.3	3.3
DIAMETER, in.	2.7	2.8
WATER CONTENT, %	16.6	28.4
DRY DENSITY, pcf	97	96
SATURATION, %	62	101
(Specific Gravity assumed as 2.7)		
SAMPLE COLOR	Reddish Brown	
SAMPLE CONSISTENCY	Clay	

COMMENTS:

Tap water used as permeant.

TEST DATA

ASTM D-5084, Method C

EFFECTIVE STRESS:	5 psi
GRADIENT RANGE:	2 - 3
IN / OUT RATIO:	1.00

TRIAL nos.	TIME hrs.	HYDRAULIC CONDUCTIVITY cm / sec
1	23.9	7.9E-08
2	47.5	7.5E-08
3	71.6	7.8E-08
4	95.5	8.5E-08

AVERAGE LAST 4 : **7.9E-08**

Enviro-Ag Engineering, Inc.

3404 Airway Blvd., Amarillo, TX 79118 (806) 353-6123

LABORATORY SERVICES

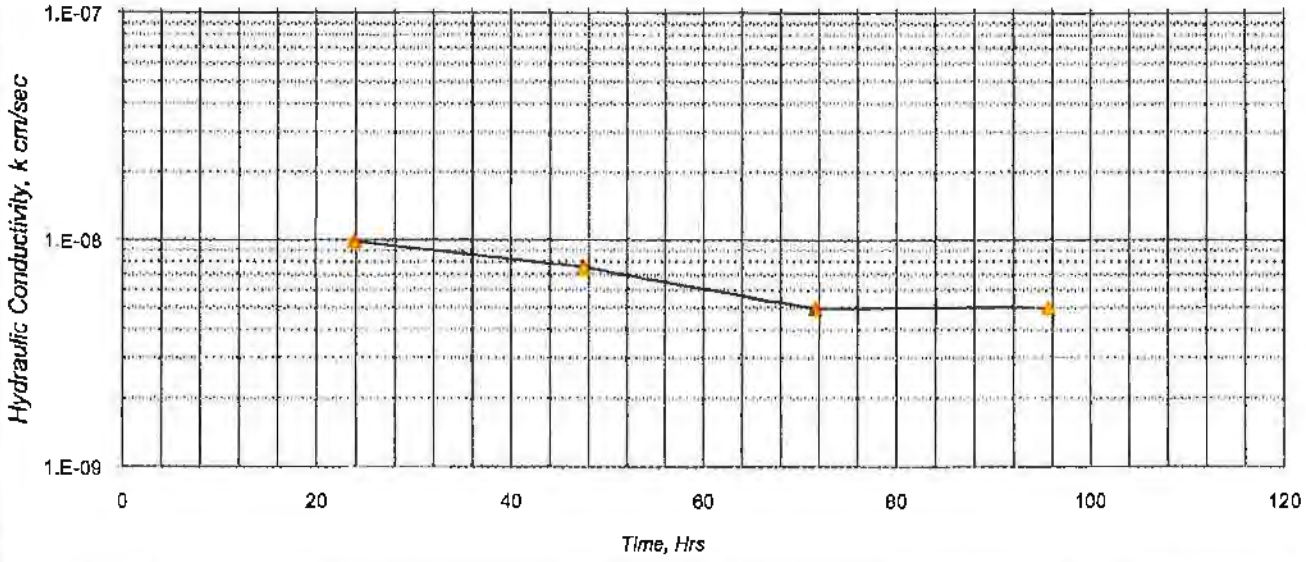
EAE

HYDRAULIC CONDUCTIVITY REPORT

ASTM D-5084, Method C

Client / Project Name:	Project No:	Lab Sample Number:
Alliance Holsteins	08-05-09	771
Sample ID:	**Sample Location:**	**Report Date:**
3	#3	July 2, 2008

Hydraulic Conductivity vs Time



SPECIMEN DATA

SAMPLE ID:	3
DESCRIPTION:	#3

	INITIAL	FINAL
HEIGHT, in.	3.4	3.4
DIAMETER, in.	2.7	2.8
WATER CONTENT, %	18.0	30.9
DRY DENSITY, pcf	94	92
SATURATION, %	61	100
(Specific Gravity assumed as 2.7)		
SAMPLE COLOR	Brown	
SAMPLE CONSISTENCY	Clay	

COMMENTS:

Tap water used as permeant.

TEST DATA

ASTM D-5084, Method C

EFFECTIVE STRESS:	5 psi
GRADIENT RANGE:	3 - 3
IN / OUT RATIO:	0.87

TRIAL nos.	TIME hrs.	HYDRAULIC CONDUCTIVITY cm / sec
1	23.9	9.8E-09
2	47.5	7.5E-09
3	71.6	5.0E-09
4	95.5	5.0E-09

AVERAGE LAST 4 : **6.8E-09**

Enviro-Ag Engineering, Inc.

3404 Airway Blvd., Amarillo, TX 79118 (806) 353-6123
LABORATORY SERVICES

EAE

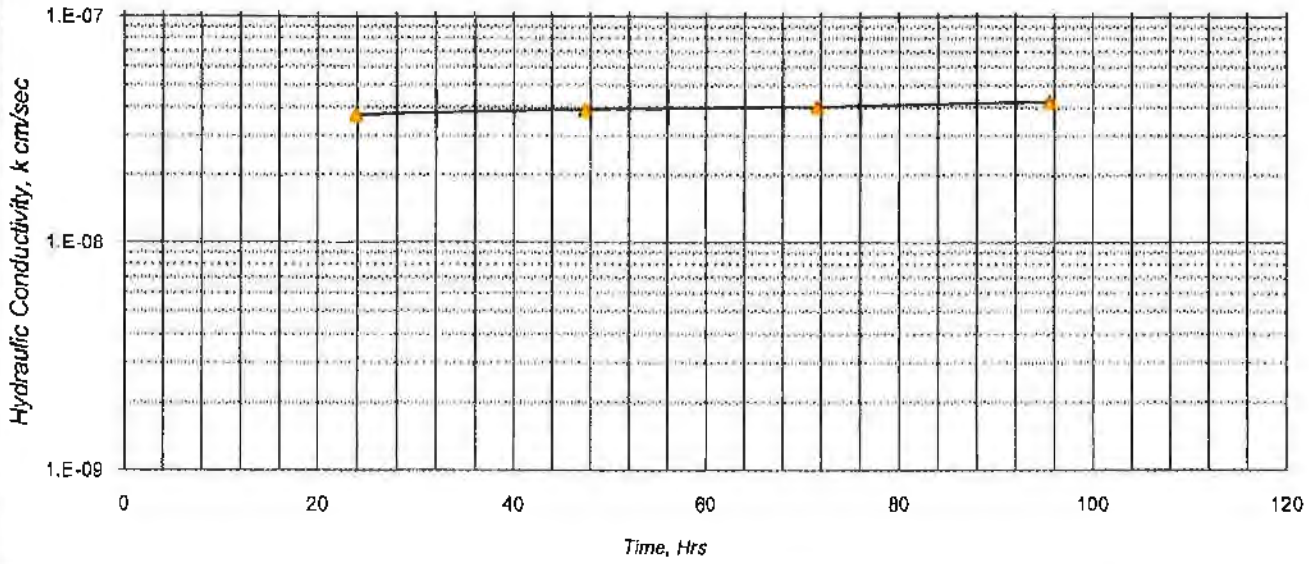
HYDRAULIC CONDUCTIVITY

REPORT

ASTM D-5084, Method C

Client / Project Name:	Project No:	Lab Sample Number:
Alliance Holsteins	08-05-09	772
Sample ID:	**Sample Location:**	**Report Date:**
4	#4	July 2, 2008

Hydraulic Conductivity vs Time



SPECIMEN DATA

SAMPLE ID:	4
DESCRIPTION:	#4

	INITIAL	FINAL
HEIGHT, in.	2.7	2.7
DIAMETER, in.	2.8	2.8
WATER CONTENT, %	12.4	23.5
DRY DENSITY, pcf	105	104
SATURATION, %	56	101
(Specific Gravity assumed as 2.7)		
SAMPLE COLOR	Brown	
SAMPLE CONSISTENCY	Clay	

TEST DATA

ASTM D-5084, Method C

EFFECTIVE STRESS:	5 psi
GRADIENT RANGE:	3 - 4
IN / OUT RATIO:	1.00

TRIAL nos.	TIME hrs.	HYDRAULIC CONDUCTIVITY cm / sec
1	23.9	3.7E-08
2	47.5	3.9E-08
3	71.6	4.0E-08
4	95.5	4.3E-08

AVERAGE LAST 4 : **4.0E-08**

COMMENTS:
Tap water used as permeant.

TRIAXIAL PERMEABILITY CHAIN of CUSTODY

STRUCTURE	PERM REPORT I.D.	LAB LOG
#	1	769
#	2	770
#	3	771
#	4	772

Facility Name: Alliance Holsteins

Project Engineer: Norman Mullin

Sampled by: Corey Mullin

Date Sampled: 5/9/2008

Date to Lab: 5/12/2008 Received: Kirk Baker

ENVIRO-AG ENGINEERING, INC.
Enviro-Ag Engineering, Inc.
ENGINEERING CONSULTANTS
3404 Airway Boulevard
AMARILLO, TEXAS 79118
TEL (806) 353-8123 FAX (806) 353-4122

Settling Basin #1

ENVIRO-AG ENGINEERING, INC.

LINER CERTIFICATION
Settling Basin
Triple Dutch Dairy
Erath County, Texas

In September 2005, the clay liner for the settling basin at Triple Dutch Dairy was sampled due to cleaning the structure. A liner core sample was collected to verify the liner thickness and then submitted to Dyess-Peterson Testing Laboratory, Inc. in Amarillo, Texas for permeability determination. The core hole was plugged with clay. Results of the permeability test is as follows:

- Settling Basin - 8.07 x 10E-08 cm/sec

Based on the above permeability test results the liner present in the settling basin at Triple Dutch Dairy meets the TCEQ allowable seepage requirement for the runoff control structure (1.5 ft thickness of 1.0 x 10E-07 cm/sec equivalent materials).

Respectfully submitted,

STATE OF TEXAS NORMAN H. MULLIN 86107 REGISTERED PROFESSIONAL ENGINEER

9/21/05

Norman H. Mullin, P.E.
President

(Supporting Documentation Attached)

RECEIVED
SEP 2[illegible]
TCEQ
REGION 4 - STE

702 QUAIL CREEK DRIVE • AMARILLO, TEXAS 79124 • TEL (806) 353-6123 • FAX (806) 353-4132
www.enviroagengineers.com

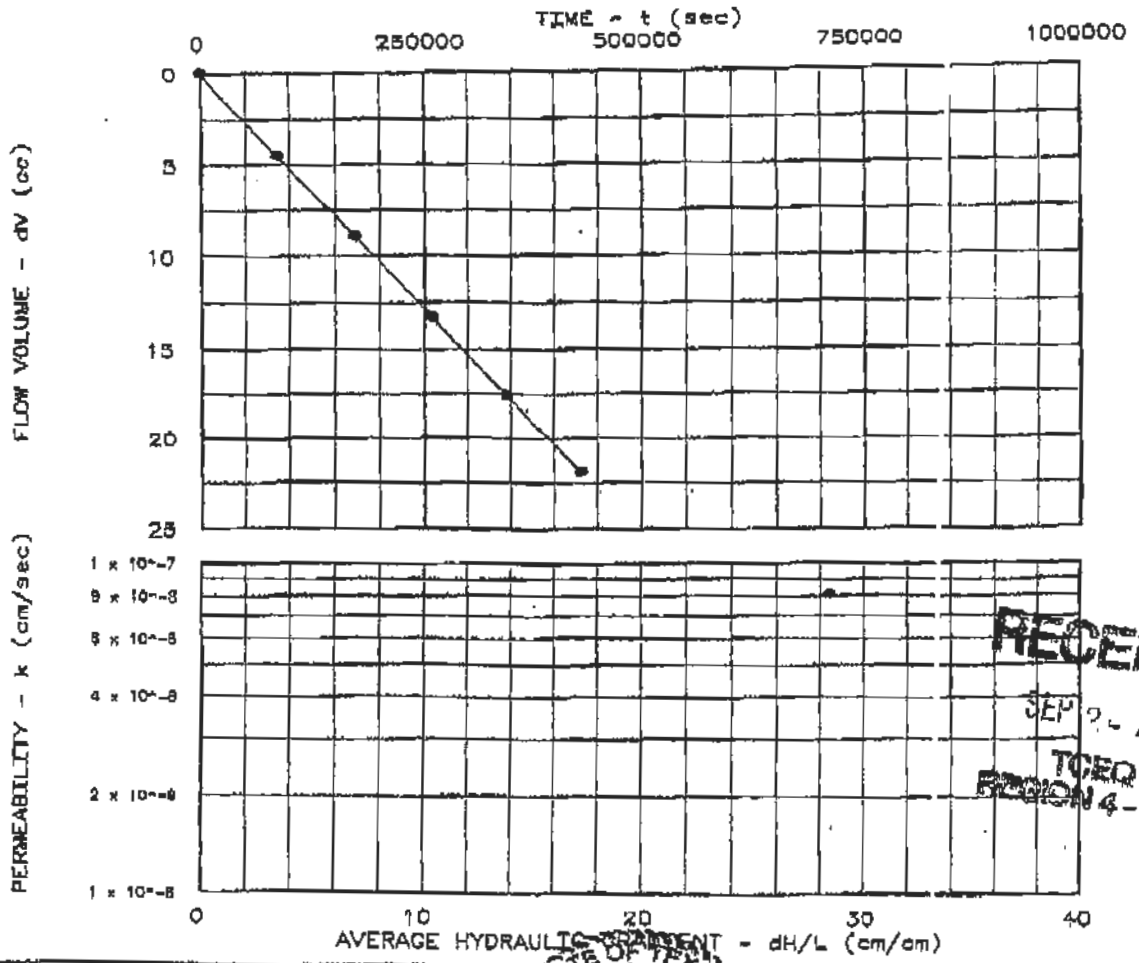
PERMEABILITY TEST REPORT

TEST DATA:
Specimen Height (cm): 12.70
Specimen Diameter (cm): 5.30
Dry Unit Weight (pcf): 100.9
Moisture Before Test (%): 13.7
Moisture After Test (%): 24.6
Run Number: 1 • 2 ▲
Cell Pressure (psi): 80.0
Test Pressure(psi): 50.3
Back Pressure(psi): 45.2
Diff. Head (psi): 5.1
Flow Rate (cc/sec): 5.09 x 10^-5
Perm. (cm/sec): 8.07 x 10^-8

SAMPLE DATA:
Sample Identification: Sample Labeled Settling Basin
Visual Description: Yellowish Tan Clayey Sand w/Rust Streaks & Caliche Nodules
Remarks: Dublin, Texas

Maximum Dry Density (pcf):
Optimum Moisture Content (%):

Percent Compaction:
Permeameter type: Flexible Wall
Sample type: In-Place



RECEIVED
SEP 2[illegible]
TCEQ
REGION 4-STE

Project: Enviro-Ag Engineering, Inc.
Location: Triple Dutch Dairy Lagoon
Date: 9-3-2005

Project No.: DP-[illegible]
File No.: PT-1
Lab No.: DP-4736
Tested by:
Checked by:

PERMEABILITY TEST REPORT

DYESS-PETERSON TESTING LABORATORY, INC.

Test: CH - Constant Head

MICHAEL D. COPELAND 72032 REGISTERED

Settling Basin #2

SwL SOUTHWESTERN LABORATORIES

Materials, environmental and geotechnical engineering, nondestructive, metallurgical and analytical services

2200 Gravel Dr. • P. O. Box 1378, Fort Worth, Texas 76101-1378 • 817/284-7755

April 26, 1991 File No.: 5853140

Triple Dutch Dairy
Route 4, Box 195F
Dublin, Texas 76446

Attn: Mr. Bruce Haringa

Re: Soil Testing -
Wastewater Retention
Ponds 1, 2, & 3

Gentlemen:

We have completed the laboratory testing of the soil samples which were obtained on April 8, 1991. The test results comply with our understanding of the requirements set forth by the Texas Water Commission.

Attached is a cover letter for submittal to the Texas Water Commission and the test results. If the information appears correct you may sign the letter and forward the results to your consultant or to the Water Commission.

We appreciate the opportunity to provide this service. Please do not hesitate to contact us if we may provide additional information or be of further service.

Yours very truly,

SOUTHWESTERN LABORATORIES

Kemp E. Akeman, P.E.
Materials Engineer

Roland S. Jary, P.E.
Vice President

tj

LINER CERTIFICATION

SWL SOUTHWESTERN LABORATORIES

Materials, environmental and geotechnical engineering, nondestructive, metallurgical and analytical services

2200 Gravel Dr • P. O. Box 1375, Fort Worth, Texas 76101-1375 • 817/284-7755

April 26, 1991

Texas Water Commission
P.O. Box 13087 Capitol Station
Austin, Texas 78711-3087

Attn: Tom Haberle
Water Quality Division

Re: Triple Dutch Dairy
Erath County, Texas

Gentlemen:

Southwestern Laboratories has completed sampling and testing of the soils exposed in three (3) wastewater retention ponds at the Triple Dutch Dairy in Erath County. The test results including sample thickness, Atterberg limits, and percent passing the number 200 sieve are tabulated on the attached report. Our findings indicate the soils meet the criteria established by the Texas Water Commission.

Very truly yours,

SOUTHWESTERN LABORATORIES

Kemp E. Akeman, P.E.
Materials Engineer

STATE OF TEXAS
Kemp E. Akeman
64975
REGISTERED
PROFESSIONAL ENGINEER

Roland S. Jary, P.E.
Vice President

RECEIVED
JAN 30 1999
TNRCC-AGRICULTURESECTION
AGRICULTURETEAM

tj

Submitted by: Triple Dutch Dairy

Signed by: _____

Date: _____

Triple Dutch Dairy, April 8, 1991 -

Test Location	Pond Number 1 No. 1	No. 2	No. 3	No. 4	Minimum Requirement
Soil Description					
Color	Yellow & Gray	Yellow & Gray	Yellow & Gray	Brown & Yellow	
Texture	Clay	Clay	Clay	Clay	
Unified Classification	CL	CL	CL	CL	
Sample Depth, Inches	12"+	12"+	12"+	12"+	12
Atterberg Limits					
Liquid Limit, (%)	41	41	40	40	30
Plastic Limit, (%)	15	16	15	16	
Plasticity Index	26	25	25	24	15
Passing No. 200 Sieve, (%)	87.7	87.5	59.4	61.2	30

SwL Report No. 103108

SOUTHWESTERN LABORATORIES

LINER CERTIFICATION

Triple Dutch Dairy, April 8, 1991 -

Test Location	Pond Number 2 No. 1	Pond Number 2 No. 2	Pond Number 3 No. 1	Pond Number 3 No. 2	Minimum Requiremer
Soil Description					
Color	Yellow & Gray	Yellow	Gray	Yallc[illegible]	
Texture	Clay	Clay	Clay	[illegible]	
Unified Classification	CH	CH	CH	CL	
mple Depth, Inches	12"+	12"+	12[illegible]	12"+	12
terberg Limits					
Liquid Limit, (%)	[illegible]	51	54	44	30
Plastic Limit, (%)	15	15	15	15	
Plasticity Index	37	36	39	29	15
assing No. 200 Sieve, (%)	87[illegible]	86	79.0	88.0	30

SwL Report No. 103108

4.0 WASTE UTILIZATION & NUTRIENT MANAGEMENT PLAN

4.1 Nutrient Utilization

Agronomic application of dairy wastewater enhances soil productivity and provides the crop and forage growth with needed nutrients for optimum growth and vigor. Land application of wastewater will take place according to a Nutrient Utilization/Nutrient Management Plan (NUP/NMP) in accordance with NRCS Codes 590 and 633. The NUP/NMP for crop year 2025 is attached.

Per 30 TAC §321.42(j), existing dairy facilities located in a major sole-source impairment zone may request the TCEQ to allow the operator to provide manure, litter ond wastewater to owners of third-party fields (areas not owned, operated, controlled, rented, or leased by the permittee) that have been identified in the PPP. Eemster West, LLC requests access to third-party fields to be operated in accordance with 30 TAC §321.42(j)(1)-(4). Third-party written contracts between the permittee and the third-party recipient will be maintained in the PPP. These contracts will confirm that the third party will allow manure, wastewater and slurry from the facility to be beneficiolly applied at agronomic rates based on the soil test phosphorus in accordance with applicable requirements of 30 TAC §321.36 and §321.40.

A Texas State Soil and Water Conservation Board (TSSWCB) certified Comprehensive Nutrient Management Plan (CNMP) has been developed.

4.2 Waste Handling Procedures

The dairy shall operate under the provisions of 30 TAC §321.42, which describes certain waste management and disposal requirements for individual water quality permits for dairy concentrated animal feeding operations (CAFOs) when an operation is located in a major sole-source impairment zone. Waste disposal options include:

- Beneficial use outside the watershed
- Disposed in permitted landfills outside the watershed
- Delivered to a composting facility opproved by the Executive Director
- Other beneficial use approved by the Executive Director
- Applied on-site in accordance with a certified NRCS Code 590/633 NMP or NUP, as dictated by annual soil test results
- Provided to third parties as discussed above in Section 4.1

2025
Executive Summary
Eemster West Dairy
WQ0002922000

LMU Summary:

All fields are established in coastal bermudagrass overseeded with small grains for perennial coverage.

Nutrient Summary:

LMU#	Max N Lb/ac Application Rates	Max P205 Lb/ac Application Rates	Planned N Lb/ac Application Rates	Planned P Lb/ac Application Rates	Crop Re-moval Rate N Lbs/ac	Crop Re-moval Rate P205 Lbs/ac Rate
1	116	96	58	48	319	96
5	460	275	230	137	319	96
9	128	106	129	108	357	108

Although no application of manure is planned for certain fields, this does not prohibit manure application to a particular LMU. The producer may apply manure to each of these fields as long as the maximum rate is not exceeded for that LMU. Monthly updates of the application calculations based on current wastewater and manure analysis will monitor the rate to which the applicant can apply within the limitations given in the plan.

Supplemental nutrients will be necessary to achieve the desired yields. Commercial fertilizer applications should be split such that individual application events do not exceed 100 lb/Ac.

All remaining manure is to be hauled off by a contract hauler for beneficial use. Offsite manure transfer activities will be in accordance with NRCS and TCEQ requirements for sampling, recordkeeping, and land application.

Waste Utilization and Nutrient Management Plan

Eemster West Dairy
777 PR 1006
Dublin, TX 76446
(254) 968-6629

TCEQ Permit Number:
WQ0002922000

Owner
Johan Koke
777 PR 1006
Dublin, TX 76446

Type of Organic Nutrient Management Plan:
Other AFO-CAFO Waste Plan
located in Erath County

Prepared By:

(Signature)
Stephen Colby
Certified Nutrient Management Specialist
Certificate Number = TX2025004
Expiration Date = December 31, 2025
Enviro-Ag Engineering
9855 FM 847
Dublin, TX 76446
(254)965-3500

This plan is based on:
590 Organic Nutrient Management Plan V 5.0

8/19/25 11:44 AM

Waste Utilization and Nutrient Management Plan

EXECUTIVE SUMMARY: Permit #: WQ0002922000

This Nutrient Management Plan has fields that meet NMP and/or NUP requirements.

LOCATION AND PURPOSE OF THE PLAN

This animal operation is located in **Erath** County (see attached topo map and plan map for location.) The purpose of this plan is to outline the details of the land application of the effluent and solids produced by this operation. When the plan is fully implemented, it should minimize the effects of the land application of animal wastes on the soil, water, air, plant, and animal resources in and around the application area. This plan, when applied, will meet the requirements of the Natural Resources Conservation Service Waste Utilization Standard and Nutrient Management Standard.

The plan is for the year of **2025** and will remain in effect until revision based on new soil or manure analysis or crop change (yield or crop) result in a new P-Index rating or plan classification (NMP-NUP). The waste has been stored in a **Dairy Lagoon** . Approximately **2500** head will be confined with the average weight of **330** pounds. The animals will be confined **24** hours per day for **365** days per year.

Values in Table 1 may be based on actual analysis or "book" values during the initial planning to determine land application rates for the initial plan. When "book" values are used, they will be from NRCS, Texas Cooperative Extension or averages from other TX testing lab sources. Site specific data will be used as soon as feasible after production begins. Manure and/or effluent will be tested at least annually or in the year of application if it is stored for more than one year. If the actual values are more than 10% higher or lower than the estimated values, this plan will need to be revised accordingly.

Application of waste products may be made up to the Maximum Rate given in Table 2 or 2a as applicable. Table 2 applies to those that are subject to Nutrient Management Plan (NMP) requirements while Table 2a applies when subject to Nutrient Utilization Plan (NUP) requirements. Current requirements for both the NMP and NUP are given in the headers of the tables. Table 2a has a criteria involving the distance to a named stream when the Soil Test P Level is above 200 ppm in arid areas as well as special requirements when the site is in a TMDL watershed designated by TCEQ. For various P Index Ratings, the maximum rates in Table 2 are based on crop requirements, whereas the maximum rates in Table 2a are based on crop removal rates. County avg. rainfall information can be found in the TX Agronomy Technical Note 15, Phosphorus Assessment Tool for Texas, located in the eFOTG at the address given in the section entitled **"Collecting Soil Samples for Analyses"**.

CROP REMOVAL RATES:

Crop Removal Rates of nitrogen (N), phosphorus (P), and potassium (K) in pounds per acre are given in Table 3 for the crop and yield planned for each field. This Table is included for information only, and should be used during the planning process to compare planned or maximum application rates to crop removal. Crop removal rates may be based on actual analysis of harvested material or default values in the database. P build-up will occur at higher rates when crop removal rates are exceeded..

SOLIDS APPLICATION:

The maximum solids application rates are given in Table 4 along with the current soil test P level, maximum P_2O_5 application rate, maximum tons per acre of solids and the total tons of solids per field that can be applied to each field. The maximum tons of solids that can be utilized on the fields planned is indicated in the box near the lower left corner of Table 4. When the total application acres of the fields are adequate to allow all of the solids to be applied, "Adequate" will be indicated below the tonnage in this box. If "Not Adequate" is indicated, then the lower box will indicate the tons of solids that must be utilized off-site unless more fields/acres are added. This plan is valid only if the application of waste to the crops listed does not exceed the per acre rates by more than 10%. If the yield of a crop does not meet the expected goal, the application rate should be adjusted the following year.

The estimated amounts of N, P_2O_5, and K_2O contained in the solids are provided in Table 5 for the maximum application rate. Supplemental N and K_2O will be applied to achieve the yield goals in Table 4 when recommended by the soil test and the maximum rate of the solids does not meet the crop needs. When the maximum application rate is applied and Table 5 indicates additional commercial nutrients, they **must** be applied to fields as indicated. **NOTE:** If additional nitrogen is recommended, the producer should consider collecting soil samples from the 6 - 36 inch layer to see if there is any additional deep nitrogen available. Additional deep nitrogen within the root zone of the crop can be substituted for supplemental commercial nitrogen, and should be included in the soil test N ppm entry.

In situations where more land is available than is needed to utilize the maximum application rate on each field, the application rates in Table 6 have been reduced to the level that does not exceed the amount of solids produced. Table 7 indicates the amount of nutrients provided and, if needed, the supplemental nutrients which **must** be applied when the application is based on these rates. The amounts of supplemental nutrients in Table 7 are based on the actual amount of waste available rather than the **maximum** rate that **"could"** be applied.

The second line from the bottom of Table 6 on the right has a box that will be **"YES"** or **"NO"**. When the reduced rates use all solids to be produced in a year, this box will be **"Yes"**. If the percentages are too low, it will be **"No"**. If **"No"**, either more acreage is needed on which to apply the solids or the solids will need to be transported off-site. The amount is located on the bottom line on the extreme right of the page.

Actual application will be based on the quantities produced, as well as, current manure analyses. **Application at the MAXIMUM rates shown in Table 4 will result in a more rapid build-up of phosphorus than if applied at lower rates. A different percentage may be used as long as the rate does not exceed the maximum shown in Table 4 for the field and the proper amount of supplemental nutrients are applied. Applying a lower rate to the fields with higher soil test P levels will slow down the P buildup and extend their land application life. Phosphorus will also build up more rapidly on pastureland than on hayland or cropland, since very few nutrients are actually removed by grazing animals.**

The solids may be applied to the same acreage every year according to Table 2 or 2a. The annual rates in both Table 4 and 6 may be doubled not to exceed the 2X the annual nitrogen requirement or nitrogen removal rate, as applicable. When the full biennial rate has been used, no additional phosphorus fertilizer or animal wastes may be applied in the alternate year. A column in both tables indicates whether the rates given are Annual Rates (A) or Biennial Rates (B). Rates given are based on Table 2 or 2a as applicable. Annual application rate for fields in a TMDL area with a Soil Test P level equal to or greater than 500 ppm or any field in a TMDL area with P Index Rating of Very High is 0.5 annual crop removal rate.

EFFLUENT APPLICATION:

The maximum effluent application rates are given in Table 8 for each field. This table provides the current soil test P level, maximum P_2O_5 application rate, effluent either in gallons per acre or acre inches per acre and the amount of effluent that can be applied per field. The maximum amount of effluent that can be utilized on the fields planned is indicated in a box near the lower left corner of Table 8. When the total application acres are adequate to allow all of the effluent to be applied, "Adequate" will be indicated below this box. If "Not Adequate" is indicated, then the lower box will indicate the amount of effluent that must be utilized off-site unless more field acres are added.

The estimated amounts of N, P, and K contained in the effluent are provided in Table 9 for the maximum application rate indicated in Table 8. Supplemental N and K_2O will be applied to achieve the yield goals when recommended by the soil test and the maximum rates of the effluent do not meet the crop requirements. **NOTE:** If additional nitrogen is recommended, the producer should consider collecting soil samples from the 6 - 36 inch layer to see if there is any additional deep nitrogen available. Additional deep nitrogen within the root zone of the crop can be substituted for supplemental commercial nitrogen.

In situations where more land is available than is needed to utilize the maximum application rate on each field, the application rates in Table 10 have been reduced to the level that does not exceed the amount of effluent produced. Table 11 indicates the amount of nutrients provided and, if needed, the supplemental nutrients which **must** be applied when application is made based on the rates in Table 10. These amounts of supplemental nutrients in Table 11 are based on the planned amount of effluent available rather than the **maximum** rate that **"could"** be applied.

The bottom line on the right of Table 10 has a box that will be **"YES"** or **"NO"**. When the reduced rates uses all effluent to be produced in a year, this box will be **"Yes"**. If the percentages are too low, it will be **"No"**. If **"No"** is indicated, either more acreage is needed on which to apply the effluent or the effluent will need to be transported off-site.

Actual application will be based on the quantities produced, as well as, current manure analyses. **Application at the MAXIMUM rates shown in Table 8 will result in a more rapid build-up of phosphorus than if applied at lower rates. A different percentage may be used as long as the rate does not exceed the maximum shown in Table 8 for the field and the proper amount of supplemental nutrients are applied. Applying a lower rate to fields with higher soil test P levels will slow down the P buildup and extend their land application life. Phosphorus will also build up more rapidly on pastureland than on hayland or cropland, since very few nutrients are actually removed by grazing animals.**

The effluent may be applied to the same acreage every year according to Table 2 or 2a. The annual rates in both Table 8 and 10 may be doubled not to exceed the 2X the annual nitrogen requirement or nitrogen removal rate, as applicable, when the full biennial rate has been used, no additional phosphorus fertilizer or animal wastes may be applied in the alternate year. A column in both tables indicates whether the rates given are Annual Rates (A) or Biennial Rates (B). Rates given are based on Table 2 or 2a as applicable. Annual application rate for fields in a TMDL area with a Soil Test P level equal to or greater than 500 ppm or any field in a TMDL area with P Index Rating of Very High is 0.5 annual crop removal rate.

Maximum Hourly Application Rate - The maximum hourly application rate is determined by the texture of the soil layer with the lowest permeability within the upper 24 inches of the of the predominant soil in each field. The hourly application rate must be low enough to avoid runoff and/or ponding. For effluent with 0.5% solids or less, **DO NOT** exceed the rates shown in Table 1 of the attached Job Sheet titled, *"Waste Utilization, Determining Effluent Application Rates"*. If the effluent contains more than 0.5% solids, those values must be reduced by the appropriate amount shown in Table 2 of the attached *"Waste Utilization, Determining Effluent Application Rates"* Job Sheet.

Maximum One-Time Application Rate - The maximum amount of effluent that can be applied to a given field at any one-time is the amount that will bring the top 24 inches of the soil to 100% field capacity. This amount is determined by subtracting the amount of water stored in the soil (estimated by feel and appearance method) from the available water holding capacity (AWC) of the soil. The available water holding capacity of the top 24 inches of the predominant soil of each field receiving effluent and the texture of the most restrictive layer in the upper 24 inches are given in Table 12.

To determine any one-time application amount, the current percent of field capacity (FC) of the upper 24 inches of the predominant soil in the field should be estimated using the guidance in Table 3 of the attached Job Sheet, *"Waste Utilization, Determining Effluent Application Rates, rev 4/06"*. Additional information on estimating soil moisture can be found in the NRCS Program Aid 1619, *"Estimating Soil Moisture by Feel and Appearance"*, or from the University of Nebraska Extension publication No. G84-690-A by the same name. Both of these publications have pictures of various soils at different percentages of field capacity to be used as a guide to estimating soil moisture. Once the current percent of FC is estimated, it is subtracted from the AWC amount in Table 12 for the given field and the difference is the maximum application for those soil conditions on that day. Remember, the maximum hourly application and the maximum one time application rates are only estimates to be used as a guide.

Solids/Effluent Land Application: - Land application of solids and/or effluent should be made at appropriate times to meet crop needs, but can be made at any time as long as the total annual (or biennial) rate, maximum hourly rate, and the maximum one time application rates are not exceeded. Effluent should be surface applied uniformly. No runoff or ponding should occur during application thus frequent observations should be made. Neither effluent or solids will be applied to slopes >8% with a runoff curve >80, or steeper than 16% slope with a runoff curve of 70 or greater, unless the application is part of an erosion control plan. Waste will not be spread at night, during rainfall events, or on frozen or saturated soils if a potential risk for runoff exists. Waste will not be applied to frequently flooded soils during months when the soils typically flood. If frequently flooded soil occur on any potential application field see attached, "Water Features Table", for months when flooding is expected. Solids should be applied with a manure spreader as uniformly as feasible. Surface applications with trucks should only be made when soil conditions are favorable in order to minimize soil compaction.

Managing Runoff -
A minimum 100 ft. setback or vegetated buffer (Filter Strip, Field Border, Riparian Forested Buffer, etc.) will be established and maintained between the application area and all surface water bodies, sink holes, and watercourses as designated on Soil Survey sheets or USGS topographic maps. A minimum application distance from private and public will be 150 ft. and 500 ft. respectively. A minimum application distance from water wells used exclusively for agricultural irrigation will be 100 ft. Table 9 provides a summary of the setbacks and out areas of each field.

Managing Leaching -
When soils with sandy, loamy sand, or gravelly surface textures have a Nitrogen Leaching Index score of >2 appropriate measures will be used to minimize the potential of leaching. These measures will include, split applications of waste, and may include double cropping, or cover crops, and irrigation water management (on fields that receive supplemental or full irrigation).

MORTALITY MANAGEMENT:
All mortality will be disposed of properly within 3 days according to the Texas Commission on Environmental Quality (TCEQ) rules. The preferred method for disposal of routine mortality is by a rendering plant. Before planning this method, contact the facility or its representative to be informed of special handling procedures, equipment needs, scheduling requirements, etc. Maintain a list of contact phone numbers so information will be readily available following a catastrophic die-off. Verify that local companies which have previously picked up and/or rendered dead animals are still doing so. A number of rendering companies across the state have stopped dead animal pick up service, and others have raised their fees significantly. Periodically review the availability and cost of rendering so that the plan can be modified if necessary. This can be an excellent option if mortality can be loaded and transported while still fresh or the mortality can be refrigerated until loaded and transported.

Disposal in a landfill may be an option in some locations. Before planning this option, the closest commercial, regional, county, or municipal landfill should be contacted to determine if the landfill has a permit which would allow acceptance of dead animals (swine, sheep, cattle, etc.). Also ask if there are any restrictions on type and volume of animal mortality that will be accepted at the facility. Landfill fees and transport, offloading, and handling procedures should be discussed with landfill managers and documented for reference when needed. The landfill is not a viable option if the producer does not own or have access to a vehicle capable of transporting mortality quickly in an emergency situation. After a catastrophic die-off is not a good time to find out that a driver and truck to transport mortality will not be available for several weeks **(MAKE ARRANGEMENTS NOW, NOT AFTER THE ANIMALS ARE DEAD).**

On-farm disposal of catastrophic mortality may be considered if site conditions permit. On-farm methods include burial, composting, and incineration. Incinerators and composters are excellent options for routine mortality but usually do not have the capacity to handle mortality volumes associated with catastrophic events. Composting and incineration should not be relied on for catastrophic mortality handling without a documented evaluation of worst anticipated mortality condition (number, type, and weight of animals), and the anticipated capacity of the system (i.e., lb./hr. incineration rate, hrs/day of operation). NRCS Mortality Facility Standard 316 will be used for all mortality management.

See the attached soil interpretation, ENG - Animal Mortality Disposal (Catastrophic) Trench, to make a preliminary assessment of the limitations of the soils on this farm for burial of catastrophic mortality. The attached TX NRCS Technical Guidance, Catastrophic Animal Mortality Management (Burial Method) should be used as a guide to overcome minor limitations and as design criteria for the construction of burial pits for catastrophic mortality. Mortality burial sites shall be located outside the 100 -year floodplain. Mortality burial will not be less than 200 feet from a well, spring, or water course. A FIELD INVESTIGATION BY A QUALIFIED PROFESSIONAL SHOULD BE MADE BEFORE AN AREA IS USED FOR A BURIAL SITE FOR CATASTROPHIC MORTALITY EVENTS. **The TCEQ Industrial and Hazardous Waste Permits Section, MC-130, must be contacted before burial of catastrophic mortality.**

TCEQ
Industrial and Hazardous Waste Permits Section, MC-130
PO Box 13087
Austin, TX 78711-3087
Phone: 512-239-2334 Fax: 512-239-6383

Air Quality:

The following steps should be taken when spreading effluent or solids to reduce problems associated with odor.
1. Avoid spreading effluent or solids when wind will blow odors toward populated areas.
2. Avoid spreading effluent or solids immediately before weekends or holidays, if people are likely to be engaged in nearby outdoor activities.
3. Avoid spreading effluent or solids near heavily traveled highways.
4. Make applications in the morning when the air is warming, rather than in the late afternoon.
5. All materials will be handled in a manner to minimize the generation of particulate matter, odors, and greenhouse gas emissions.

EFFLUENT AND SOLIDS STORAGE & TESTING: Permit #: WQ0002922000

Effluent and solids will be stored in facilities designed, constructed, and maintained according to USDA NRCS Standards and specifications.

Effluent and solids sampling is needed to get a better idea of the nutrients actually being applied. Effluent and/or solids samples will be collected at least annually, or in the year of its use if waste is typically stored for more than 1 year. The samples will be submitted immediately to a lab for testing. If sent to Texas A&M soil lab or SFASU Soil Testing Lab for analysis, use the "plant and forage analysis" form and note the type of operation. Request that the manure be analyzed for percent dry matter, solids, total nitrogen, total phosphorus, and total potassium. Further information on collecting effluent and manure samples for analysis can be found in the TCE publication No. L-5175, *"Managing Crop Nutrients Through Soil, Manure and Effluent Testing"*. **TCEQ sampling rules and testing requirements will be followed on permitted sites.**

COLLECTING SOIL SAMPLES FOR ANALYSIS:

Collect a composite sample for each field (or area of similar soils and management not more than 40 acres in size) comprised of 10 - 15 randomly selected cores. Each core should represent 0 - 6 inches below the surface except for when injection has been done over 6" in depth, then the core should represent the 3-9" layer. Thoroughly mix each set of core samples, and select about a pint of the mixture as the sample for analysis. Label each sample for the field that it represents. Request that the samples be analyzed for nitrate nitrogen, plant-available phosphorus, potassium, sodium, magnesium, calcium, sulfur, boron, conductivity; and pH. Also note on the samples that they are from an effluent or solids application area. **TCEQ sampling rules and testing requirements will be followed on permitted sites.** A weighted average of 0-2 and 2-6 inch layers will be used for calculations on permitted sites.

Further information on collecting soil samples can be found on the TCE Form D-494, p 2, TCE Publication No. L-1793, and TCEQ RG-408. Additional NRCS guidance and requirements can be found in the Nutrient Management (590) standard located in the Texas electronic Field Office Technical Guide (eFOTG) at:

http://efotg.nrcs.usda.gov/efotg_locator.aspx?map=TX

Click the county desired.
Click Section IV in the left column under eFOTG
Type: 590 in the Search Menu above eFOTG and click: **GO**
Click on the desired item under Nutrient Management in the left column

SOIL ANALYSIS:

A soil analysis will be completed for all areas to be used for all effluent or solids application areas. The soil test analysis method will be **Mehlich III with inductively coupled plasma (ICP)**. The area will be tested and analyzed at least annually to monitor P build up.

Waste Utilization and Nutrient Management Plan

RECORD KEEPING: Permit #: WQ0002922000

Detailed records should be maintained by the producer for all application of animal waste to land owned and operated by the producer. Records should include date, time, location, amount of application, weather conditions, estimated wind speed and direction, etc. A rain gauge should be in place at the application site and accurate records of rainfall should be maintained at the site. All records must be kept for at least 5 years. **TCEQ requirements will be followed on permitted sites.**

Records should also be kept showing amounts of litter given or sold to others. **A copy of the effluent analysis and/or solids analysis and a Waste Utilization Guidelines Sheet should be given to anyone who will use either the effluent or solids off-site. If they routinely use animal wastes for fertilizer, they should be directed to the local Soil and Water Conservation District or NRCS office to develop a Waste Utilization and Nutrient Management Plan for their land.**

This portion may be completed by producer, if desired or recorded elsewhere.

Record of waste leaving the farm or used as feed. **Estimated Annual Excess**

Date	Amount	Hauler or Recipient

Excess Remaining

May be continued on additional sheets

OPERATION AND MAINTENANCE: Permit #: WQ0002922000

Application equipment should be maintained in good working order and it should be calibrated annually so that the desired rate and amount of effluent and solids will be applied.

Information on calibrating manure spreaders can be found in the TCE publication No. L-5175, *"Managing Crop Nutrients Through Soil, Manure and Effluent Testing"*. Information on calibrating big gun sprinklers can be found in the Arkansas Extension publication, *"Calibrating Stationary Big Gun Sprinklers for Manure Application"*. For information on calibrating tank spreaders, traveling guns, and additional information on other manure spreading equipment, see Nebraska Extension publication No. G95-1267-A, *"Manure Applicator Calibration"*. Observe and follow manufacturer's recommended maintenance schedules for all equipment and facilities involved in the waste management system. For information on lagoon functions, refer to TCE publication E9, *"Proper Lagoon Management"*.

Any changes in this system should be discussed with the local Soil and Water Conservation District, USDA Natural Resources Conservation Service, or other qualified professional prior to their implementation.

Plan Prepared by: **Stephen Colby** Date: **8/19/2025**

Plan Approved by: Date: 8/19/25

Producer Signature: Discussed with Producer Date: 8/19/25

The producer's signature indicates that this plan has been discussed with him/her.
If this plan is not signed by the producer, indicate how the plan was provided to the producer.

Waste Utilization and Nutrient Management Plan

Table 1 - Estimated Effluent and Solids Quantities Produced Permit #: WQ0002922000

Avg. Number of Animals	Type of Waste
2,500	Dairy Lagoon
	Dairy Solids

Contact the local Soil and Water Conservation District or USDA Natural Resources Conservation Service office if the total number of animals change by more than 10% so your plan can be revised.

Estimated Acre Inches of Effluent to be Available Annually* 249

Estimated Tons Solids to be Land Applied Annually (on or off site)* 2,698.7

*From engineering design.

Estimated Nutrient Availabilty Effluent

	pounds/yr	Pounds / 1000 gal	Pounds / Acre Inch	
N	7,776	1.15	31.2	**
P2O5	6,471	0.96	25.9	
K2O	70,529	10.42	282.8	

** Effluent Values Based on Analysis dated: June 26, 2025

Estimated Nutrient Availabilty Solids

	pounds / yr	pounds / ton	
N	38,731	14.4	**
P2O5	23,136	8.6	
K2O	42,398	15.7	

** Solids Values Based on Analysis dated: June 26, 2025

Default values were used on all fields for plant removal of nutrients and yield levels.

Waste Utilization and Nutrient Management Plan

TABLE 2. A Nutrient Management Plan (NMP) is required where Soil Test P Level [1/] is:

- **less than 200 ppm statewide or**
- **or < 350 ppm in arid areas 2/ with a named stream > one mile.**

P – Index Rating	Maximum TMDL Annual P Application Rate [5/]	Maximum Annual P Application	Maximum Biennial Application Rate
Very Low, Low	Annual Nitrogen (N) Requirement	Annual Nitrogen (N) Requirement	2.0 Times Annual N Requirement
Medium	2.0 Times Annual Crop P Requirement [3/]	2.0 Times Annual Crop P Requirement [3/]	2.0 Times Annual N Requirement
High [5]	1.5 Times Annual Crop P Requirement [3/]	1.5 Times Annual Crop P Requirement [3/]	Double the Maximum Annual P Application Not to Exceed 2 times the Annual N Requirement
Very High [5]	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 N Requirement

TABLE 2a. A Nutrient Utilization Plan (NUP) is required by TCEQ where Soil Test P Level [1/] is:

- **equal to or greater than 200 ppm in non-arid areas [2/] or**
- **equal to or greater than 350 ppm in arid areas [2/] with a named stream greater than one mile or**
- **equal to or greater than 200 ppm in arid areas [2/] with a named stream less than one mile.**

P – Index Rating	Maximum TMDL Annual P Application Rate [5/]	Maximum Annual P Application	Maximum Biennial Application Rate
Very Low, Low	1.0 Times Annual Crop P Removal [4/]	Annual N Crop Removal	2.0 Times Annual 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 N Crop Removal
High [5]	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 N Crop Removal
Very High [5]	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 N Crop Removal

Footnotes Applicable to both Tables

1/ Soil test P will be Mehlich III by inductively coupled plasma (ICP).

2/ Non-arid areas, counties receiving => 25 inches annual rainfall, will use the 200 ppm P level while arid areas, counties receiving < 25 inches of annual rainfall, will use the 350 ppm P level. See map in TX Agronomy Technical Note 15, Phosphorus Assessment Tool for Texas, for county designations.

3/ Not to exceed the annual nitrogen requirement rate.

4/ Not to exceed the annual nitrogen removal rate.

5/ When soil test phosphorus levels are ≥ 500 ppm, with a P-Index rating of "High" or "Very High", there will be no additional application of phosphorus to a CMU or field.

PI Index by Field

Printed on: 8/19/25 11:44 AM
This plan is based on: Nutrient Management Plan V 5.0
Permit #: WQ0002922000
Client Name: Eemster West Dairy
Date: 8/19/2025
Planner: Stephen Colby
Location: Erath
Rainfall: >25.0 inches

LMU or Fields	Crop	Slope	Runoff Curve	Soil Test P Level	Inorganic P_2O_5 Appl Rate	Organic P_2O_5 Appl Rate	Inorganic Method & Timing	Organic Method & Timing	Proximity of Appl to Named Stream	Runoff Class	Soil Erosion	Total Index Points	P Runoff Potential	Soil Test Date:
1	Coastal Hay 3 cut, SG mod graze	4.0%	85	8	0	6	0	4	0	2	0	20	Medium	10/29/24
5	Coastal Hay 3 cut, SG mod graze	4.6%	74	8	0	6	0	4	0	2	0	20	Medium	10/29/24
9	Coastal Hay 4 cut, SG mod graze	2.4%	74	8	0	6	0	0.5	0	2	0	16.5	Medium	10/29/24

Waste Utilization and Nutrient Management Plan

Table 3 - Crop Removal Rates (For Information Only) Permit #: WQ0002922000

LMU or Field No.	Acres	Crop and P Index Level	TCEQ Plan Type	Actual Crop Analysis or Default	Total Est. N Removal lbs/Ac/Yr	Total Est. P_2O_5 Removal lbs/Ac/Yr	Total Est. K_2O Removal lbs/Ac/Yr
1	52.0	Coastal Hay 3 cut, SG mod graze M	NUP	Default	319	96	284
5	20.0	Coastal Hay 3 cut, SG mod graze M	NMP	Default	319	96	284
9	38.0	Coastal Hay 4 cut, SG mod graze M	NUP	Default	357	108	318

NOTE: When crops are used for grazing, only a portion of the nutrients used by the crop are removed from the field in the live weight gain of the livestock, the remainder is returned to the land in manure and urine. The book "Southern Forages" estimates the N, P, & K removed in 100 pounds live weight gain as follows: **2.5 lbs N, 0.68 lbs P, 0.15 lbs K**

Waste Utilization and Nutrient Management Plan

Table 4 - Maximum Solids Application per Field

Permit #: WQ0002922000

Est. Solids Produced Annually (wet tons)	LMU or Field No.	Acres	Crop Management and PI runoff potential	Current Soil Test P Level (ppm)	Max Annual P2O5 lbs/acre	Annual/Biennial	Maximum Solids Allowable Tons/Acre	Maximum Allowable Application Per field (Tons)
2,699	1							
	5	20.0	Coastal Hay 3 cut, SG mod graze M	135	275	A	32.1	641
	9							

Total Solids Application Acres
20

Application Allowable on-site (tons)
641.0
Not Adequate

Solids to be used off-site (tons)
2,057.7

End of Table 4

Waste Utilization and Nutrient Management Plan

Table 5 - Nutrients Applied/Needs at Maximum Solids Rates Permit #: WQ0002922000

	Nutrients Applied When Application is at Maximum Rates			Supplemental Nutrients Needed When Application is at Maximum Rates			
LMU / Field #	N Lb/ac	P_2O_5 Lb/ac	K_2O Lb/ac	N Lb/ac	P_2O_5 Lb/ac	K_2O Lb/ac	Lime T/Ac
1							
5	460	275	504	0	0	0	0
9							

Waste Utilization and Nutrient Management Plan

Table 6 - Planned Solids Application Rates

Permit #: WQ0002922000

LMU or Field No.	Double crop	Acres	Crop Management and PI runoff potential	Current Soil Test P ppm	Annual / Biennial	Max Rate tons/ac	% of Maximum to apply	Planned Solids tons/ac	Planned Solids per field (tons)
1 5 9		20.0	Coastal Hay 3 cut, SG mod graze M	135	A	32.1	50	16.0	320.5
Acres		20.0							320.5
2699			Tons of wet solids produced Annually					Will the planned per acre application rates use all of the Solids?	NO
0			Tons to be used off-site at Max. rates					Tons to be used off-site at planned rates	2378

Waste Utilization and Nutrient Management Plan

Table 7 - Nutrients Applied/Needed at Planned Solids Rates Permit #: WQ0002922000

Red cells? Proceed to adjustment page and fix.

	Nutrients Applied at Planned Rates			Supplemental Nutrients Needed at Planned Rates			
LMU / Field #	N Lb/ac	P_2O_5 Lb/ac	K_2O Lb/ac	N Lb/ac	P_2O_5 Lb/ac	K_2O Lb/ac	Lime T/Ac
1 5 9	230	137	252	215	0	0	0

Waste Utilization and Nutrient Management Plan

Table 8 - Maximum Effluent Application Per Field Permit #: WQ0002922000

Est. Available Effluent (ac inches)	LMU or Field No.	Acres	Double crop	Crop Management and PI runoff potential	Current Soil Test P Level (ppm)	Max Annual P_2O_5 (lbs/acre)	Annual/Biennial	Maximum Effluent Allowable (ac in/ac)	Maximum Effluent Allowable / Field (ac in)
249	1	52.0		Coastal Hay 3 cut, SG mod graze M	466	96	A	3.7	193
Source:	5								
	9	38.0		Coastal Hay 4 cut, SG mod graze M	252	108	A	4.1	156
Dairy Lagoon									
Total Effluent Application Acres									
90									
Maximum Effluent Application Allowable On-Site (ac in)									
349									
Adequate									
Effluent to be used Off-Site (ac in)									
0									

End of Table 8

Waste Utilization and Nutrient Management Plan

Table 9 - Nutrients Applied/Needed at Maximum Effluent Rates Permit #: WQ0002922000

	Nutrients Applied When Application is at Maximum Rates			Supplemental Nutrients Needed When Application is at Maximum Rates			
LMU / Field #	N Lb/ac	P_2O_5 Lb/ac	K_2O Lb/ac	N Lb/ac	P_2O_5 Lb/ac	K_2O Lb/ac	Lime T/Ac
1	116	96	1048	310	0	0	0
5							
9	128	106	1160	400	0	0	0

Waste Utilization and Nutrient Management Plan

Table 10 - Planned Effluent Application Rates Permit #: WQ0002922000

LMU or Field No.	Acres	Double crop	Crop Management and PI runoff potential	Current Soil Test P ppm	Annual / Biennial	Maximum Effluent (ac in/ac)	% of Maximum to apply	Planned Effluent (ac in/ac)	Planned Effluent / field (Ac. In)
1	52.0		Coastal Hay 3 cut, SG mod graze M	466	A	3.7	**50.0**	1.9	96
5									
9	38.0		Coastal Hay 4 cut, SG mod graze M	252	A	4.1	**100.0**	4.1	156
Acres	**90.0**								

Will the planned application rates use all of the Effluent? **252** **YES**

Plan is based on: 590 Organic Nutrient Management Plan

Waste Utilization and Nutrient Management Plan

Table 11 - Nutrients Applied/Needed at the Planned Effluent Rates Permit #: WQ0002922000

Red cells? Proceed to adjustment page and fix.

	Nutrients Applied at Planned Rates			Supplemental Nutrients Needed at Planned Rates			
LMU / Field #	N Lb/ac	P_2O_5 Lb/ac	K_2O Lb/ac	N Lb/ac	P_2O_5 Lb/ac	K_2O Lb/ac	Lime T/Ac
1	58	48	524	370	0	0	0
5							
9	129	108	1173	395	0	0	0

Waste Utilization and Nutrient Management Plan

Table 12 - Available Water Capacity to 24 inches(or less) of predominant soil in fields receiving effluent and Texture of the most restrictive soil layer in the upper 24 inches

Permit #: WQ0002922000

LMU / Field #	AWC (inches)	Restrictive Texture
1	3.44	Fine Sandy Loam
5		
9	3.44	Fine Sandy Loam

LMU / Field #	AWC (inches)	Restrictive Texture

Waste Utilization and Nutrient Management Plan

Table 13 - Non Application Areas by Field

Permit #: WQ0002922000

FS = 393-Filter Strip; **FB** = 386-Field Border, **RFB** = 391-Riparian Forest Buffer; **OLEA** = Other Land Excluded Ar

LMU / Field #	FS Acres	FB Acres	RFB Acres	OLEA Acres	Total Excluded
1	0.0	0.0			
5	0.0	0.0			
9	0.0	0.0			

LMU / Field #	FS Acres	FB Acres	RFB Acres	OLEA Acres	Total Excluded

See Application Map for location of buffers

Total 590-633 application acres: 110.0

Totals	0.0	0.0	0.0	0.0	0.0

Total 590-633 Field Acres: 110.0

Waste Utilization and Nutrient Management Data Entries

General Data

Date :	8/19/2025
Farmer Name :	Eemster West Dairy
County in which the Land is located :	Erath
Type of Waste Plan :	Other AFO-CAFO Waste Plan
Is this plan in a TMDL watershed for nutrients? Yes or No :	Yes
Is any field PERMITTED by TCEQ? Yes or No :	Yes
Permit # :	WQ0002922000

All other entries on General Page appear on the Cover Page

Animal Information

Plan Year :	2025
Are you receiving waste from another producer?	No
Number of animals :	2500
Approximate Weight :	330
Days per year in confinement :	365
Hours per day confined :	24
ACRE FEET of effluent to be irrigated* :	20.78
Estimated annual gallons of effluent to be irrigated/applied annually :	6771121.44
For effluent, do you want application rates shown in gallons or acre inches? :	acre inches
Estimated Tons Solids to be Land Applied Annually (on or off site)* :	1460
Is this the first Year of the AFO-CAFO Operation? :	No

Analysis Information

Effluent Information

Date of Analysis:	6/26/2025
Manure Source:	Dairy Lagoon
Nitrogen % From Analysis:	0.0172
Phosphorus % From Analysis:	0.005
Potassium % From Analysis:	0.104
Moisture % From Analysis:	99.4

Manure / Solids Information

Date of Analysis:	6/26/2025
Manure Source:	Dairy Solids
Nitrogen % From Analysis:	1.658
Phosphorus % From Analysis:	0.346
Potassium % From Analysis:	1.21
Moisture % From Analysis:	45.9
What will be Applied to Fields on this Farm?	Both Effluent and Solids
Is this Farm part of an AFO-CAFO?	No

This plan is based on: rganic Nutrient Management Plar

Printed on: 8/19/25 11:45 AM

Field and Buffer Entries

Permit #: WQ0002922000

Printed on: 8/19/25 11:45 AM

Plan is based on: 590 Organic Nutrient Management Plan

FS = 393-Filter Strip, FB = 386-Field Border, RFB = 391-Riparian Forest Buffer, OLEA = Other Land Exclusion Areas or non-application areas (i.e. headquarters, freq. flooded areas, wooded areas, water bodies, etc)

NOTE: Field Border (FB) is expressed in ACRES on this spreadsheet, but as LINEAR FEET on the CPO.

Field No.	Total LMU or Field Acres	FS	FB	RFB	OLEA	Total Buffer Acres	Actual Application Acres	This Column Intentionally Left Blank
1	52					0.0	52.0	
5	20					0.0	20.0	
9	38					0.0	38.0	

Soil Test, Crop Information and Plant Analysis Data Entries

Printed on: 8/19/25 11:45 AM Plan is based on: 590 Organic Nutrient Management Plan V 5.0 Permit #: WQ0002922000

Soil Test Analysis				This column only for Dry Poultry	LMU or Field #	Appl. Area Acres	Crop/Land-Use and P Index Runoff Potential VL - L; M; H; or VH	E = Effluent S = Solids	Plant Analysis (Y / N)	Plant Analysis & Yield (optional) Use Only When Crop Removal is Required			
N (ppm)	P (ppm)	K (ppm)	Lime (enter amt or leave blank)							% N	% P	% K	Yield Air Dry Production (lbs/ac/yr)
16.989	466	794			1	52.0	Coastal Hay 3 cut, SG mod graze M	E	N				
7.495	135	276			5	20.0	Coastal Hay 3 cut, SG mod graze M	S	N				
16.628	252	630			9	38.0	Coastal Hay 4 cut, SG mod graze M	E	N				

Solids Application Rate Entries

Solids - Set the Planned Application Rates

Permit #: WQ

2699 "Wet tons" of solids produced Annually							Will the planned rates use all of the Tons to be used off-site at plann
LMU or Field No.	Acres	Crop Management and PI runoff potential	Current Soil Test P ppm	Crop P_2O_5 Req.	Annual or Biennial Application Cycle	Maximum Solids Allowable Tons/Ac	Enter % of Maximum Planned to Apply
1 5 9	20.0	Coastal Hay 3 cut, SG mod graze M	135	230	Annual	32.1	50.0

Printed on: 8/19/25 11:45 AM

Plan is based on: 590 Organi

Effluent Application Rate Entries

Effluent - Set the Planned Application Rates

Permit #: WQ0002922000

6771121	Gallons of Effluent to be used annually							Will the planned rates use all of the effluent?	Yes
249	Acre Inches of Effluent to be used annually								
LMU or Field No.	Acres	Crop Management and PI runoff potential	Current Soil Test P (ppm)	Crop P2O5 Req.	Annual or Biennial Application Cycle	Max Effluent Allowable (ac in/ac)	Enter % of Maximun Planned to Apply	Planned Effluent (ac in/ac)	Planned Effluent per field (acre inches)
1	52.0	Coastal Hay 3 cut, SG mod graze M	466	230	Annual	3.7	50.0	1.85	96
5									
9	38.0	Coastal Hay 4 cut, SG mod graze M	252	175	Annual	4.1	100.0	4.1	156
								Total Effluent This Page	252

Printed on: 8/19/25 11:45 AM

Plan is based on: 590 Organic Nutrient Management Plan

Available Water Capacity Entries

Printed on: 8/19/25 11:45 AM Plan is based on: 590 Organic Nutrient Management Pla Permit #: WQ0002922000

LMU or Fields receiving Effluent	Texture of the soil layer within the upper 24 inches of the soil profile that has the lowest permeability (Don't Abbreviate)	Depth of First Layer (inches)		AWC of First Layer (in/in)		Depth of Second Layer (inches)		AWC of Second Layer (in/in)		Depth of Third Layer (inches)		AWC of Third Layer (in/in)		Depth of Fourth Layer (inches)		AWC of Fourth Layer (in/in)		Available Water Holding Capacity (AWC) of the upper 24 inches of the soil profile (Inches)
	EXAMPLE ENTRIES	0	3	0.12	0.2	3	14	0.16	0.21	14	18	0.08	0.12	18	24	0	0	
		Enter Data for the top 24" only																
1	Fine Sandy Loam	0	8	0.12	0.16	8	34	0.12	0.17	34				0				3.44
9	Fine Sandy Loam	0	8	0.12	0.16	8	34	0.12	0.17	34				0				3.44

SOIL MONITORING REPORT FOR CAFO INDIVIDUAL PERMITS IN THE SOLE SOURCE IMPAIRMENT ZONES

A. Sample collection

1) Samples were collected for the land management unit (LMU) identified below.

☑ Yes, complete this form and Tables 1 and 2 below. **Attach a copy of the laboratory analyses to this soil monitoring report form.**

☐ No, provide the facility information for the LMU below with the exception of the tables.

2) Reporting Year: 2024 Sample Collection Date: 10/29/2024

B. Facility Information

1) Permit Number: WQ0002922000
2) Site Name: Eemster West Dairy
3) Name of LMU (**LMU Name should correspond to field designation located on the Map included in the PPP**): 1
4) Name of Owner/Operator: Johan Koke
5) Mailing Address for Owner/Operator: 777 Private Road 1006, Dublin, TX 76446

Table 1. Soil Analysis Report Where Manure, Sludge and Wastewater are not Incorporated

Soil Sample Parameter	0-2 inches soil depth	2-6 inches soil depth	6-24 inches soil depth
Nitrate-Nitrogen (NO_3-N), ppm			
Phosphorus (extractable), ppm			
Potassium (extractable), ppm			
Sodium (extractable), ppm			
Magnesium (extractable), ppm			
Calcium (extractable), ppm			
Electrical Conductivity/Soluble Salts, dS/m			
pH, SU			

Table 2. Soil Analysis Report Where Manure, Sludge and Wastewater are Incorporated

Soil Sample Parameter	0-6 inches soil depth	6-24 inches soil depth
Nitrate-Nitrogen (NO_3-N), ppm	16.989	26.772
Phosphorus (extractable), ppm	466	97.3
Potassium (extractable), ppm	794	702
Sodium (extractable), ppm	68.7	190
Magnesium (extractable), ppm	470	625
Calcium (extractable), ppm	4716	6333
Electrical Conductivity/Soluble Salts, dS/m	0.211	0.596
pH, SU	7.66	7.69

Note: ppm = parts per million, considered to be equivalent to milligrams per liter (mg/l); dS/m = decisiemins per meter, equivalent to millimhols per centimeter (mmhols/cm); SU = standard units.

C. Certification

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Print Name and Title of Responsible Official or Authorized Agent: Johan Koke, Owner

Signature: John Koke for →

Date: 1/31/23

Telephone Number: 254/965-3510

D. How to Submit

The soil monitoring report with attached soil analyses should be included in the Annual Report that is required to be submitted by March 31 of each year. For State Only CAFOs, submit this soil monitoring report form to the TCEQ, Enforcement Division (MC-224), P.O. Box 13087, Austin, Texas 78711-3087 and provide a copy to the TCEQ Regional Office.

If you have any additional questions about this form or soil sample collection and soil analyses requirements, contact:

By e-mail: CAFO@tceq.texas.gov or call (512) -239-4671

SOIL MONITORING REPORT FOR CAFO INDIVIDUAL PERMITS IN THE SOLE SOURCE IMPAIRMENT ZONES

A. Sample collection

1) Samples were collected for the land management unit (LMU) identified below.

☑ Yes, complete this form and Tables 1 and 2 below. **Attach a copy of the laboratory analyses to this soil monitoring report form.**

☐ No, provide the facility information for the LMU below with the exception of the tables.

2) Reporting Year: 2024 Sample Collection Date: 10/29/2024

B. Facility Information

1) Permit Number: WQ0002922000
2) Site Name: Eemster West Dairy
3) Name of LMU (**LMU Name should correspond to field designation located on the Map included in the PPP**): 2
4) Name of Owner/Operator: Johan Koke
5) Mailing Address for Owner/Operator: 777 Private Road 1006, Dublin, TX 76446

Table 1. Soil Analysis Report Where Manure, Sludge and Wastewater are not Incorporated

Soil Sample Parameter	0-2 inches soil depth	2-6 inches soil depth	6-24 inches soil depth
Nitrate-Nitrogen (NO_3-N), ppm			
Phosphorus (extractable), ppm			
Potassium (extractable), ppm			
Sodium (extractable), ppm			
Magnesium (extractable), ppm			
Calcium (extractable), ppm			
Electrical Conductivity/Soluble Salts, dS/m			
pH, SU			

Table 2. Soil Analysis Report Where Manure, Sludge and Wastewater are Incorporated

Soil Sample Parameter	0-6 inches soil depth	6-24 inches soil depth
Nitrate-Nitrogen (NO_3-N), ppm	15.558	4.766
Phosphorus (extractable), ppm	217	25.0
Potassium (extractable), ppm	461	200
Sodium (extractable), ppm	22.5	151
Magnesium (extractable), ppm	299	355
Calcium (extractable), ppm	5922	9740
Electrical Conductivity/Soluble Salts, dS/m	0.23	0.318
pH, SU	7.23	7.94

Note: ppm = parts per million, considered to be equivalent to milligrams per liter (mg/l); dS/m = decisiemins per meter, equivalent to millimhols per centimeter (mmhols/cm); SU = standard units.

C. Certification

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Print Name and Title of Responsible Official or Authorized Agent: Johan Koke, Owner

Signature: John Mallin for

Date: 1/31/25

Telephone Number: 254/965-3500

D. How to Submit

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SOIL MONITORING REPORT FOR CAFO INDIVIDUAL PERMITS IN THE SOLE SOURCE IMPAIRMENT ZONES

A. Sample collection

1) Samples were collected for the land management unit (LMU) identified below.

☑ Yes, complete this form and Tables 1 and 2 below. **Attach a copy of the laboratory analyses to this soil monitoring report form.**

☐ No, provide the facility information for the LMU below with the exception of the tables.

2) Reporting Year: 2024 Sample Collection Date: 10/29/2024

B. Facility Information

1) Permit Number: WQ0002922000
2) Site Name: Eemster West Dairy
3) Name of LMU (**LMU Name should correspond to field designation located on the Map included in the PPP**): 3
4) Name of Owner/Operator: Johan Koke
5) Mailing Address for Owner/Operator: 777 Private Road 1006, Dublin, TX 76446

Table 1. Soil Analysis Report Where Manure, Sludge and Wastewater are not Incorporated

Soil Sample Paramcter	0-2 inches soil depth	2-6 inches soil depth	6-24 inches soil depth
Nitrate-Nitrogen (NO_3-N), ppm			
Phosphorus (extractable), ppm			
Potassium (extractable), ppm			
Sodium (extractable), ppm			
Magnesium (extractable), ppm			
Calcium (extractable), ppm			
Electrical Conductivity/Soluble Salts, dS/m			
pII, SU			

Table 2. Soil Analysis Report Where Manure, Sludge and Wastewater are Incorporated

Soil Sample Parameter	0-6 inches soil depth	6-24 inches soil depth
Nitrate-Nitrogen (NO_3-N), ppm	9.171	1.718
Phosphorus (extractable), ppm	165	15.9
Potassium (extractable), ppm	305	210
Sodium (extractable), ppm	26.1	131
Magnesium (extractable), ppm	366	477
Calcium (extractable), ppm	4658	6282
Electrical Conductivity/Soluble Salts, dS/m	0.157	0.161
pH, SU	7.27	7.89

Note: ppm = parts per million, considered to be equivalent to milligrams per liter (mg/l); dS/m = decisiemins per meter, equivalent to millimhols per centimeter (mmhols/cm); SU = standard units.

C. Certification

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Print Name and Title of Responsible Official or Authorized Agent: Johan Koke, Owner

Signature: John Mullin for

Date: 1/31/25

Telephone Number: 254/965-3500

D. How to Submit

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SOIL MONITORING REPORT FOR CAFO INDIVIDUAL PERMITS IN THE SOLE SOURCE IMPAIRMENT ZONES

A. Sample collection

1) Samples were collected for the land management unit (LMU) identified below.

☑ Yes, complete this form and Tables 1 and 2 below. **Attach a copy of the laboratory analyses to this soil monitoring report form.**

☐ No, provide the facility information for the LMU below with the exception of the tables.

2) Reporting Year: 2024 Sample Collection Date: 10/29/2024

B. Facility Information

1) Permit Number: WQ0002922000
2) Site Name: Eemster West Dairy
3) Name of LMU (**LMU Name should correspond to field designation located on the Map included in the PPP**): 5
4) Name of Owner/Operator: Johan Koke
5) Mailing Address for Owner/Operator: 777 Private Road 1006, Dublin, TX 76446

Table 1. Soil Analysis Report Where Manure, Sludge and Wastewater are not Incorporated

Soil Sample Parameter	0-2 inches soil depth	2-6 inches soil depth	6-24 inches soil depth
Nitrate-Nitrogen (NO_3-N), ppm			
Phosphorus (extractable), ppm			
Potassium (extractable), ppm			
Sodium (extractable), ppm			
Magnesium (extractable), ppm			
Calcium (extractable), ppm			
Electrical Conductivity/Soluble Salts, dS/m			
pH, SU			

Table 2. Soil Analysis Report Where Manure, Sludge and Wastewater are Incorporated

Soil Sample Parameter	0-6 inches soil depth	6-24 inches soil depth
Nitrate-Nitrogen (NO_3-N), ppm	7.495	4.032
Phosphorus (extractable), ppm	135	9.43
Potassium (extractable), ppm	276	230
Sodium (extractable), ppm	23.4	81.8
Magnesium (extractable), ppm	324	474
Calcium (extractable), ppm	3798	6004
Electrical Conductivity/Soluble Salts, dS/m	0.152	0.197
pH, SU	7.01	7.74

Note: ppm = parts per million, considered to be equivalent to milligrams per liter (mg/l); dS/m = decisiemins per meter, equivalent to millimhols per centimeter (mmhols/cm); SU = standard units.

C. Certification

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Print Name and Title of Responsible Official or Authorized Agent: Johan Koke, Owner

Signature: John Mulli for

Date: 1/31/25

Telephone Number: 254/965-3500

D. How to Submit

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SOIL MONITORING REPORT FOR CAFO INDIVIDUAL PERMITS IN THE SOLE SOURCE IMPAIRMENT ZONES

A. Sample collection

1) Samples were collected for the land management unit (LMU) identified below.

☑ Yes, complete this form and Tables 1 and 2 below. **Attach a copy of the laboratory analyses to this soil monitoring report form.**

☐ No, provide the facility information for the LMU below with the exception of the tables.

2) Reporting Year: 2024 Sample Collection Date: 10/29/2024

B. Facility Information

1) Permit Number: WQ0002922000
2) Site Name: Eemster West Dairy
3) Name of LMU (**LMU Name should correspond to field designation located on the Map included in the PPP**): 7
4) Name of Owner/Operator: Johan Koke
5) Mailing Address for Owner/Operator: 777 Private Road 1006, Dublin, TX 76446

Table 1. Soil Analysis Report Where Manure, Sludge and Wastewater are not Incorporated

Soil Sample Parameter	0-2 inches soil depth	2-6 inches soil depth	6-24 inches soil depth
Nitrate-Nitrogen (NO_3-N), ppm			
Phosphorus (extractable), ppm			
Potassium (extractable), ppm			
Sodium (extractable), ppm			
Magnesium (extractable), ppm			
Calcium (extractable), ppm			
Electrical Conductivity/Soluble Salts, dS/m			
pH, SU			

Table 2. Soil Analysis Report Where Manure, Sludge and Wastewater are Incorporated

Soil Sample Parameter	0-6 inches soil depth	6-24 inches soil depth
Nitrate-Nitrogen (NO_3-N), ppm	22.76	13.931
Phosphorus (extractable), ppm	369	146
Potassium (extractable), ppm	654	565
Sodium (extractable), ppm	39.1	86.5
Magnesium (extractable), ppm	427	367
Calcium (extractable), ppm	10750	5871
Electrical Conductivity/Soluble Salts, dS/m	0.28	0.306
pH, SU	7.3	7.82

Note: ppm = parts per million, considered to be equivalent to milligrams per liter (mg/l); dS/m = decisiemins per meter, equivalent to millimhols per centimeter (mmhols/cm); SU = standard units.

C. Certification

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Print Name and Title of Responsible Official or Authorized Agent: Johan Koke, Owner

Signature: John Mulder for

Date: 1/31/25

Telephone Number: 254/965-3500

D. How to Submit

The soil monitoring report with attached soil analyses should be included in the Annual Report that is required to be submitted by March 31 of each year. For State Only CAFOs, submit this soil monitoring report form to the TCEQ, Enforcement Division (MC-224), P.O. Box 13087, Austin, Texas 78711-3087 and provide a copy to the TCEQ Regional Office.

If you have any additional questions about this form or soil sample collection and soil analyses requirements, contact:

By e-mail: CAFO@tceq.texas.gov or call (512) -239-4671

SOIL MONITORING REPORT FOR CAFO INDIVIDUAL PERMITS IN THE SOLE SOURCE IMPAIRMENT ZONES

A. Sample collection

1) Samples were collected for the land management unit (LMU) identified below.

☑ Yes, complete this form and Tables 1 and 2 below. **Attach a copy of the laboratory analyses to this soil monitoring report form.**

☐ No, provide the facility information for the LMU below with the exception of the tables.

2) Reporting Year: 2024 Sample Collection Date: 10/29/2024

B. Facility Information

1) Permit Number: WQ0002922000
2) Site Name: Eemster West Dairy
3) Name of LMU (**LMU Name should correspond to field designation located on the Map included in the PPP**): 8
4) Name of Owner/Operator: Johan Koke
5) Mailing Address for Owner/Operator: 777 Private Road 1006, Dublin, TX 76446

Table 1. Soil Analysis Report Where Manure, Sludge and Wastewater are not Incorporated

Soil Sample Parameter	0-2 inches soil depth	2-6 inches soil depth	6-24 inches soil depth
Nitrate-Nitrogen (NO_3-N), ppm			
Phosphorus (extractable), ppm			
Potassium (extractable), ppm			
Sodium (extractable), ppm			
Magnesium (extractable), ppm			
Calcium (extractable), ppm			
Electrical Conductivity/Soluble Salts, dS/m			
pH, SU			

Table 2. Soil Analysis Report Where Manure, Sludge and Wastewater are Incorporated

Soil Sample Parameter	0-6 inches soil depth	6-24 inches soil depth
Nitrate-Nitrogen (NO_3-N), ppm	11.818	2.973
Phosphorus (extractable), ppm	425	53.2
Potassium (extractable), ppm	412	354
Sodium (extractable), ppm	28.5	61.2
Magnesium (extractable), ppm	457	529
Calcium (extractable), ppm	5977	5641
Electrical Conductivity/Soluble Salts, dS/m	0.276	0.259
pH, SU	7.22	7.7

Note: ppm = parts per million, considered to be equivalent to milligrams per liter (mg/l); dS/m = decisiemins per meter, equivalent to millimhols per centimeter (mmhols/cm); SU = standard units.

C. Certification

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Print Name and Title of Responsible Official or Authorized Agent: Johan Koke, Owner

Signature: John Mulki for

Date: 1/31/25

Telephone Number: 254/965-3500

D. How to Submit

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If you have any additional questions about this form or soil sample collection and soil analyses requirements, contact:

By e-mail: CAFO@tceq.texas.gov or call (512) -239-4671

SOIL MONITORING REPORT FOR CAFO INDIVIDUAL PERMITS IN THE SOLE SOURCE IMPAIRMENT ZONES

A. Sample collection

1) Samples were collected for the land management unit (LMU) identified below.

☑ Yes, complete this form and Tables 1 and 2 below. **Attach a copy of the laboratory analyses to this soil monitoring report form.**

☐ No, provide the facility information for the LMU below with the exception of the tables.

2) Reporting Year: 2024 Sample Collection Date: 10/29/2024

B. Facility Information

1) Permit Number: WQ0002922000
2) Site Name: Eemster West Dairy
3) Name of LMU (**LMU Name should correspond to field designation located on the Map included in the PPP**): 9
4) Name of Owner/Operator: Johan Koke
5) Mailing Address for Owner/Operator: 777 Private Road 1006, Dublin, TX 76446

Table 1. Soil Analysis Report Where Manure, Sludge and Wastewater are not Incorporated

Soil Sample Parameter	0-2 inches soil depth	2-6 inches soil depth	6-24 inches soil depth
Nitrate-Nitrogen (NO_3-N), ppm			
Phosphorus (extractable), ppm			
Potassium (extractable), ppm			
Sodium (extractable), ppm			
Magnesium (extractable), ppm			
Calcium (extractable), ppm			
Electrical Conductivity/Soluble Salts, dS/m			
pH, SU			

Table 2. Soil Analysis Report Where Manure, Sludge and Wastewater are Incorporated

Soil Sample Parameter	0-6 inches soil depth	6-24 inches soil depth
Nitrate-Nitrogen (NO_3-N), ppm	16.628	14.486
Phosphorus (extractable), ppm	252	26.8
Potassium (extractable), ppm	630	641
Sodium (extractable), ppm	59.0	173
Magnesium (extractable), ppm	469	611
Calcium (extractable), ppm	3327	3003
Electrical Conductivity/Soluble Salts, dS/m	0.215	0.389
pH, SU	7.28	7.91

Note: ppm = parts per million, considered to be equivalent to milligrams per liter (mg/l); dS/m = decisiemins per meter, equivalent to millimhols per centimeter (mmhols/cm); SU = standard units.

C. Certification

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Print Name and Title of Responsible Official or Authorized Agent: Johan Koke, Owner

Sigoature: John Mulki for

Date: 1/31/25

Telephone Number: 254/965-3500

D. How to Submit

The soil monitoring report with attached soil analyses should he included in the Annual Report that is required to be submitted by March 31 of each year. For State Only CAFOs, submit this soil monitoring report form to the TCEQ, Enforcement Division (MC-224), P.O. Box 13087, Austin, Texas 78711-3087 and provide a copy to the TCEQ Regional Office.

If you have any additional questions about this form or soil sample collection and soil analyses requirements, contact:

By e-mail: CAFO@tceq.texas.gov or call (512) -239-4671

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

January 23, 2025

CERTIFIED MAIL 7022 2410 0000 5131 8183
RETURN RECEIPT REQUESTED

Mr. Johan Koke
Eemster West, LLC
Eemster West Dairy
777 Private Road 1006
Dublin, Texas 76446

Re: Annual Soil Sample Analysis Results at Eemster West Dairy
CAFO Permit No.: WQ0002922000

Dear Mr. Koke:

Attached are the analytical results for the soil samples that were collected at your facility on October 29, 2024. A copy of the sampling map is attached. Please utilize these results to update your nutrient management plan.

In addition, if any of the results are greater than 200 parts per million for phosphorus, please develop a new nutrient utilization plan (NUP) or revise your existing NUP, in accordance with your permit. All new or revised NUPs that are required to be submitted for TCEQ review and approval shall be mailed to the following address:

Water Quality Assessment Section Manager
Water Quality Division, MC 150
Texas Commission on Environmental Quality
P.O. Box 13087
Austin, Texas 78711-3087

If you collected a duplicate sample following RG-408 protocol during the TCEQ sampling event that indicates a significant difference in the TCEQ analysis results (greater than 20% difference), you may choose to dispute the TCEQ findings. You must notify the TCEQ, in writing, of your intent to dispute the TCEQ sample results within 20 calendar days from the date of this letter. You must provide copies of all supporting documentation, including but not limited to your sample results, chain of custody documentation and laboratory quality assurance documentation.
Please submit this information in writing to the TCEQ at the following address:

ATTN: Annual CAFO Soil Sample Analysis Disputes
Water Section Manager
Dallas/Fort Worth Regional Office
Texas Commission on Environmental Quality
2309 Gravel Drive
Fort Worth, Texas 76118-6951

An analysis dispute received after the time allocated above will not be eligible for re-analysis. If you have any questions, please feel free to contact Mr. Michael Martin in the Stephenville Office at 254-552-1900.

Sincerely,

Michael Martin, Team Leader, Water Section
Dallas/Fort Worth Regional Office

MM/dm

Enclosures: Laboratory Analysis Reports

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Chain of Custody Record

55821

B

Location: EEMSTER Dairy
(Do not fill in this shaded area if the facility information must be confidential)

Permit #: 2922

Region:	Organization #:	PCA Code:	Program: WQ	Sampler telephone number: (254) 552-1900
E-Mail ID:	Sampler: (signature)			Sampler: (please print clearly) Cody Chastain

Lab ID Number	Sample ID	Date	Time	# of Bottles	Grab/ Comp.	Matrix L,S,M,O,T	CL2	pH	Cond.	Analyses Requested	REMARKS
14386	-01	10-29-24	10:16							See RFA	LMU 1 0-6
14387	-02		10:16								LMU 1 6-24
14388	-03		10:37								LMU 2 0-6
14389	-04		10:37								LMU 2 6-24
14390	-05		11:53								LMU 3 0-6
14391	-06		11:53								LMU 3 6-24
14392	-07		12:07								LMU 5 0-6
14393	-08		12:07								LMU 5 6-24
14394	-09		10:00								LMU 7 0-6
14395	-10		10:00								LMU 7 6-24

Relinquished by:	Date	Time	Received by:	For Laboratory Use:
Vanessa Gardner	11/15/24	1200	11-19-24	
Relinquished by:	Date	Time	Received by:	Received on ice: Y N deg. C
Relinquished by:	Date	Time	Received by:	Preservatives: Y N
Relinquished by:	Date	Time	Received by:	COC Seal: Y N
Shipper name: Fed Ex	Shipper Number: 7700 3141 7387			Seals Intact: Y N

TCEQ-10065 (11/02) White (Original) -Lab Yellow-Lab Pink-Contract Lab Manager Goldenrod-Collector Copy

Report for Samples analyzed Under Contract Number: 582-10-99518

Report ID: 055821a-45667
Print Date: 10-Jan-25

Texas A&M AgriLife Extension Service Soil, Water and Forage Testing Laboratory
108 Soil Testing Laboratory, 2478 TAMU
College Station, TX 77843-2478
979-862-4955

Client Name: Eemster Dairy
Client address: not provided

Standard Sample Report TCEQ COC# 055821

Laboratory ID:	TCEQ/client Sample ID:	Sample Depth (inches)	Sample Coll. Date:	Collector Name:	TCEQ Region #	Date Received	Sample Type:	Sample opened Date	Sample Ground Date	Process Tech.
14386	55821-01	0-6	10/29/2024	Cody Christian	4	11/19/2024	soil	11/25/2024	12/8/2024	TLP
14387	55821-02	6-24	10/29/2024	Cody Christian	4	11/19/2024	soil	11/25/2024	12/8/2024	TLP
14388	55821-03	0-6	10/29/2024	Cody Christian	4	11/19/2024	soil	11/25/2024	12/8/2024	TLP
14389	55821-04	6-24	10/29/2024	Cody Christian	4	11/19/2024	soil	11/25/2024	12/8/2024	TLP
14390	55821-05	0-6	10/29/2024	Cody Christian	4	11/19/2024	soil	11/25/2024	12/8/2024	TLP
14391	55821-06	6-24	10/29/2024	Cody Christian	4	11/19/2024	soil	11/25/2024	12/8/2024	TLP
14392	55821-07	0-6	10/29/2024	Cody Christian	4	11/19/2024	soil	11/25/2024	12/8/2024	TLP
14393	55821-08	6-24	10/29/2024	Cody Christian	4	11/19/2024	soil	11/25/2024	12/8/2024	TLP
14394	55821-09	0-6	10/29/2024	Cody Christian	4	11/19/2024	soil	11/25/2024	12/8/2024	TLP
14395	55821-10	6-24	10/29/2024	Cody Christian	4	11/19/2024	soil	11/25/2024	12/8/2024	TLP

Methods and Sample Preparation:

Receiving of samples Processing - SWFTL0097R0.SOP

Upon opening of sample chests, all samples are identified and organized as listed on COC to insure completeness and condition of shipment. Individually each sample is spread across a non-reactive tray where foreign materials is physically removed and discarded. The sample(s) are then placed inside a 65C drying oven and allow to remain until dry. Individual samples were then removed from drying oven and pulverized with an Agvise soil pulzerized fitted with a shaking 2mm screen. Every attempt was again made to remove any remaining plant tissue in the pulverized sample(s). Soil was then transferred to the laboratory sample cups and while additional sample was stored.

Analytical Methods:

Soil pH 2:1 DI water:soil SOIL pH AND CONDUCTIVITY - SWFTL0015R1.SOP

Schofield, R.K. and A.W. Taylor. 1955. The measurement of soil pH. Soil Sci. Soc. Am. Proc. 19:164-167.

Soil Conductivity 2:1 DI Water:Soil SOIL pH AND CONDUCTIVITY - SWFTL0015R1.SOP

Rhoades, J.D. 1982. Soluble salts. p. 167-178. In: A.L. Page, et al. (ed.). Methods of Soil Analysis: Part 2. Agronomy Monogr. 9. 2nd ed. ASA and SSSA, Madison, WI.

Soil Nitrate-N KCl Extractable with Cd-Reduction Analyses NO3-N EXTRACTION - SWFTL0014R5.SOP/NO3-N ANALYSIS - SWFTL0089R1.SOP

Keeney, D.R. and D.W. Nelson. 1982. Nitrogen - inorganic forms. p. 643-687. In: A.L. Page, et al. (ed.). Methods of Soil Analysis: Part 2. Agronomy Monogr. 9. 2nd ed. ASA and SSSA, Madison, WI.

Soil P, K, Ca, Mg, S and Na -- Mehlich III by ICP M3 EXTRACTION - SWFTL0079R1.SOP/M3 ANALYSIS - SWFTL0081R2.SOP

Mehlich-3 soil test extractant: a modification of Mehlich-2 extractant. Commun. Soil Sci. Plant Anal. 15(12):1409-1416

Report ID: 055821a-45667 Print Date: 10-Jan-25

Standard Sample Report TCEQ COC# 055821

Laboratory ID:	TCEQ/client Sample ID:	Mehlich III P conc.	Mehlich III P units	Mehlich III K conc.	Mehlich III K units	Mehlich III Ca conc.	Mehlich III Ca units	Mehlich III Mg conc.	Mehlich III Mg units	Mehlich III S conc.	Mehlich III S units	Mehlich III Na conc.	Mehlich III Na units
14386	55821-01	466	ppm	794	ppm	4716	ppm	470	ppm	62.1	ppm	68.7	ppm
14387	55821-02	97.3	ppm	702	ppm	6333	ppm	625	ppm	112	ppm	190	ppm
14388	55821-03	217	ppm	461	ppm	5922	ppm	299	ppm	58.7	ppm	22.5	ppm
14389	55821-04	25.0	ppm	200	ppm	9740	ppm	355	ppm	93.7	ppm	151	ppm
14390	55821-05	165	ppm	305	ppm	4658	ppm	366	ppm	46.6	ppm	26.1	ppm
14391	55821-06	15.9	ppm	210	ppm	6282	ppm	477	ppm	54.7	ppm	131	ppm
14392	55821-07	135	ppm	276	ppm	3798	ppm	324	ppm	39.2	ppm	23.4	ppm
14393	55821-08	9.43	ppm	230	ppm	6004	ppm	474	ppm	58.9	ppm	81.8	ppm
14394	55821-09	369	ppm	654	ppm	10750	ppm	427	ppm	100	ppm	39.1	ppm
14395	55821-10	146	ppm	565	ppm	5871	ppm	367	ppm	67.5	ppm	86.5	ppm

Laboratory ID:	Mehlich III P conc.	Mehlich III P units	Mehlich III K conc.	Mehlich III K units	Mehlich III Ca conc.	Mehlich III Ca units	Mehlich III Mg conc.	Mehlich III Mg conc.	Mehlich III S conc.	Mehlich III S units	Mehlich III Na conc.	Mehlich III Na units
Detection Limit	0.2367	ppm	0.1308	ppm	0.0436	ppm	0.0250	ppm	0.0010	ppm	0.0269	ppm
Reporting Limit	1	ppm	1	ppm	1	ppm	1	ppm	1	ppm	1	ppm

Laboratory ID:	TCEQ/client Sample ID:	Mehlich III Extract Date	Mehlich III Extract Tech	Mehlich III Anal.Date	Mehlich III Anal. Tech
14386	55821-01	1/8/2025	FMR	1/9/2025	JLP
14387	55821-02	1/8/2025	FMR	1/9/2025	JLP
14388	55821-03	1/8/2025	FMR	1/9/2025	JLP
14389	55821-04	1/8/2025	FMR	1/9/2025	JLP
14390	55821-05	1/8/2025	FMR	1/9/2025	JLP
14391	55821-06	1/8/2025	FMR	1/9/2025	JLP
14392	55821-07	1/8/2025	FMR	1/9/2025	JLP
14393	55821-08	1/8/2025	FMR	1/9/2025	JLP
14394	55821-09	1/8/2025	FMR	1/9/2025	JLP
14395	55821-10	1/8/2025	FMR	1/9/2025	JLP

Report ID: 055821a-45667 Print Date: 10-Jan-25

Standard Sample Report TCEQ COC# 055821

Laboratory ID:	TCEQ/client Sample ID:	pH	pH units	Conductivity	Conductivity units	Nitrate-N	Nitrate-N units
14386	55821-01	7.66	NA	0.211	dS/M	16.989	ppm
14387	55821-02	7.69	NA	0.596	dS/M	26.772	ppm
14388	55821-03	7.23	NA	0.23	dS/M	15.558	ppm
14389	55821-04	7.94	NA	0.318	dS/M	4.766	ppm
14390	55821-05	7.27	NA	0.157	dS/M	9.171	ppm
14391	55821-06	7.89	NA	0.161	dS/M	1.718	ppm
14392	55821-07	7.01	NA	0.152	dS/M	7.495	ppm
14393	55821-08	7.74	NA	0.197	dS/M	4.032	ppm
14394	55821-09	7.3	NA	0.28	dS/M	22.76	ppm
14395	55821-10	7.82	NA	0.306	dS/M	13.931	ppm

Laboratory ID:	pH	pH units	Conductivity	Conductivity units	Nitrate-N	Nitrate-N units
Detection Limit	0.01	na	0.001	dS/M	0.01	ppm
Reporting Limit	0.1	na	0.001	dS/M	1	ppm

Laboratory ID:	TCEQ/client	pH/Conductivity prep		pH Analysis		Conductivity		Nitate-N Extract		Nitrate-N Analysis	
	Sample ID:	Date	Tech	Date	Tech	Date	Tech	Date	Tech	Date	Tech
14386	55821-01	12/13/2024	DEC	12/16/2024	DEC	12/16/2024	DEC	12/16/2024	FMR	12/17/2024	JW
14387	55821-02	12/13/2024	DEC	12/16/2024	DEC	12/16/2024	DEC	12/16/2024	FMR	12/17/2024	JW
14388	55821-03	12/13/2024	DEC	12/16/2024	DEC	12/16/2024	DEC	12/16/2024	FMR	12/17/2024	JW
14389	55821-04	12/13/2024	DEC	12/16/2024	DEC	12/16/2024	DEC	12/16/2024	FMR	12/17/2024	JW
14390	55821-05	12/13/2024	DEC	12/16/2024	DEC	12/16/2024	DEC	12/16/2024	FMR	12/17/2024	JW
14391	55821-06	12/13/2024	DEC	12/16/2024	DEC	12/16/2024	DEC	12/16/2024	FMR	12/17/2024	JW
14392	55821-07	12/13/2024	DEC	12/16/2024	DEC	12/16/2024	DEC	12/16/2024	FMR	12/17/2024	JW
14393	55821-08	12/13/2024	DEC	12/16/2024	DEC	12/16/2024	DEC	12/16/2024	FMR	12/17/2024	JW
14394	55821-09	12/13/2024	DEC	12/16/2024	DEC	12/16/2024	DEC	12/16/2024	FMR	12/17/2024	JW
14395	55821-10	12/13/2024	DEC	12/16/2024	DEC	12/16/2024	DEC	12/16/2024	FMR	12/17/2024	JW

Report ID: 055821a-45667 Print Date: 10-Jan-25
Quality Control Report TCEQ COC# 055821

Laboratory ID:		Mehlich III P conc.	Mehlich III P units	Mehlich III K conc.	Mehlich III K units	Mehlich III Ca conc.	Mehlich III Ca units	Mehlich III Mg conc.	Mehlich III Mg conc.	Mehlich III S conc.	Mehlich III S units	Mehlich III Na conc.	Mehlich III Na units
14399	IC1037	51.8	ppm	345	ppm	2615	ppm	386	ppm	42.7	ppm	52.1	ppm
14400	IC1038	50.4	ppm	339	ppm	2567	ppm	380	ppm	41.8	ppm	51.4	ppm
	Mean IC	0	ppm	0	ppm	0	ppm	0	ppm	0	ppm	0	ppm
	IC Lower	45.9	ppm	305.0	ppm	2320.0	ppm	335.0	ppm	27.0	ppm	30.0	ppm
	IC Upper	53.4	ppm	365.0	ppm	2545.0	ppm	409.0	ppm	49.0	ppm	55.0	ppm
	blk223	<0.237	ppm	<0.131	ppm	<0.0436	ppm	<0.0250	ppm	<0.0100	ppm	0.48	ppm

Laboratory ID:	Mehlich III P conc.	Mehlich III P units	Mehlich III K conc.	Mehlich III K units	Mehlich III Ca conc.	Mehlich III Ca units	Mehlich III Mg conc.	Mehlich III Mg conc.	Mehlich III S conc.	Mehlich III S units	Mehlich III Na conc.	Mehlich III Na units
Detection Limit	0.2367	ppm	0.1308	ppm	0.0436	ppm	0.0250	ppm	0.0010	ppm	0.0269	ppm
Reporting Limit	1	ppm	1	ppm	1	ppm	1	ppm	1	ppm	1	ppm

Laboratory ID:	Mehlich III Extract Date	Mehlich III Extract Tech	Mehlich III Anal.Date	Mehlich III Anal. Tech
IC1037	1/8/2025	FMR	1/9/2025	JLP
IC1038	1/8/2025	FMR	1/9/2025	JLP
blk223	1/8/2025	FMR	1/9/2025	JLP

Report ID: 055821a-45667 Print Date: 10-Jan-25

Quality Control Report TCEQ COC# 055821

Laboratory ID:		pH	pH units	Conducitity conc.	Conducitity units	Nitrate-N conc.	Nitrate-N units	Nitrate-N % recovery
14399	IC1037	5.9	na	0.254	dS/M	4.948	ppm	
14400	IC1038	5.9	na	0.254	dS/M	4.546	ppm	
	Mean IC	5.875	na	0.254	dS/M	4.747	ppm	
14400spike	Spiked sample	-	-	-	-	3.6	ppm	82.2
	IC lower	5.760	na	0.241	dS/M	3.5	ppm	
	IC Upper	5.990	na	0.299	dS/M	5.5	ppm	
	blk223	-	na	0	dS/M	0.749	ppm	

Laboratory ID:	pH	pH units	Conducitity conc.	Conducitity units	Nitrate-N conc.	Nitrate-N units
Detection Limit	0.01	na	0.001	dS/M	0.01	ppm
Reporting Limit	0.1	na	0.001	dS/M	1	ppm

Laboratory ID:	pH/Conductivity prep		pH Analysis		Conductivity		Nitate-N Extract		Nitrate-N Analysis	
	Date	Tech	Date	Tech	Date	Tech	Date	Tech	Date	Tech
IC1037	12/13/2024	DEC	12/16/2024	DEC	12/16/2024	DEC	12/16/2024	FMR	12/17/2024	JW
IC1038	12/13/2024	DEC	12/16/2024	DEC	12/16/2024	DEC	12/16/2024	FMR	12/17/2024	JW
blk223	12/13/2024	DEC	12/16/2024	DEC	12/16/2024	DEC	12/16/2024	FMR	12/17/2024	JW

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Chain of Custody Record

55822

Location: E EMSTER Dairy
(Do not fill in this shaded area if the facility information must be confidential)

Permit #: 2922

Region:	Organization #:	PCA Code:	Program: WQ	Sampler telephone number: (254) 552-1900
E-Mail ID:	Sampler: (signature)			Sampler: (please print clearly) Cody Christian

Lab ID Number	Sample ID	Date	Time	# of Bottles	Grab/ Comp.	Matrix L,S,M,O,T	CL2	pH	Cond.	Analyses Requested	REMARKS
14396	-01	10-29-24	12:45							SEE REA	Lmu8 0-6
14397	-02		12:45								Lmu8 6-24
14398	-03		12:30								Lmu9 0-6
14401	-04		12:30								Lmu9 6-24
	-05										
	-06										
	-07										
	-08										
	-09										
	-10										

Relinquished by:	Date	Time	Received by:	For Laboratory Use:
Vanessa Gardner	11/18/24	1200	11-19-24	
Relinquished by:	Date	Time	Received by:	Received on ice: Y N deg. C
Relinquished by:	Date	Time	Received by:	Preservatives: Y N
Relinquished by:	Date	Time	Received by:	COC Seal: Y N
Shipper name: Fed Ex	Shipper Number: 7700 3141 7381			Seals Intact: Y N

TCEQ-10065 (11/02) White (Original) -Lab Yellow-Lab Pink-Contract Lab Manager Goldenrod-Collector Copy

Report for Samples analyzed Under Contract Number: 582-10-99518

Report ID: 055822a-45667
Print Date: 10-Jan-25

Texas A&M AgriLife Extension Service Soil, Water and Forage Testing Laboratory
108 Soil Testing Laboratory, 2478 TAMU
College Station, TX 77843-2478
979-862-4955

Client Name: Eemster Dairy
Client address: not provided

Standard Sample Report TCEQ COC# 055822

Laboratory ID:	TCEQ/client Sample ID:	Sample Depth (inches)	Sample Coll. Date:	Collector Name:	TCEQ Region #	Date Received	Sample Type:	Sample opened Date	Sample Ground Date	Process Tech.
14396	55822-01	0-6	10/29/2024	Cody Christian	4	11/19/2024	soil	11/25/2024	12/8/2024	TLP
14397	55822-02	6-24	10/29/2024	Cody Christian	4	11/19/2024	soil	11/25/2024	12/8/2024	TLP
14398	55822-03	0-6	10/29/2024	Cody Christian	4	11/19/2024	soil	11/25/2024	12/8/2024	TLP

Methods and Sample Preparation:

Receiving of samples Processing - SWFTL0097R0.SOP

Upon opening of sample chests, all samples are identified and organized as listed on COC to insure completeness and condition of shipment. Individually each sample is spread across a non-reactive tray where foreign materials is physically removed and discarded. The sample(s) are then placed inside a 65C drying oven and allow to remain until dry. Individual samples were then removed from drying oven and pulverized with an Agvise soil pulzerizud fitted with a shaking 2mm screen. Every attempt was again made to remove any remaining plant tissue in the pulverized sample(s). Soil was then transferred to the laboratory sample cups and while additional sample was stored.

Analytical Methods:

Soil pH 2:1 DI water:soil SOIL pH AND CONDUCTIVITY - SWFTL0015R1.SOP

Schofield, R.K. and A.W. Taylor. 1955. The measurement of soil pH. Soil Sci. Soc. Am. Proc. 19:164-167.

Soil Conductivity 2:1 DI Water:Soil SOIL pH AND CONDUCTIVITY - SWFTL0015R1.SOP

Rhoades, J.D. 1982. Soluble salts. p. 167-178. In: A.L. Page, et al. (ed.). Methods of Soil Analysis: Part 2. Agronomy Monogr. 9. 2nd ed. ASA and SSSA, Madison, WI.

Soil Nitrate-N KCl Extractable with Cd-Reduction Analyses NO3-N EXTRACTION - SWFTL0014R5.SOP/NO3-N ANALYSIS - SWFTL0089R1.SOP

Keeney, D.R. and D.W. Nelson. 1982. Nitrogen - inorganic forms. p. 643-687. In: A.L. Page, et al. (ed.). Methods of Soil Analysis: Part 2. Agronomy Monogr. 9. 2nd ed. ASA and SSSA, Madison, WI.

Soil P, K, Ca, Mg, S and Na -- Mehlich III by ICP M3 EXTRACTION - SWFTL0079R1.SOP/M3 ANALYSIS - SWFTL0081R2.SOP

Mehlich-3 soil test extractant: a modification of Mehlich-2 extractant. Commun. Soil Sci. Plant Anal. 15(12):1409-1416

Report ID: 055822a-45667 Print Date: 10-Jan-25

Standard Sample Report TCEQ COC# 055822

Laboratory ID:	TCEQ/client Sample ID:	Mehlich III P conc.	Mehlich III P units	Mehlich III K conc.	Mehlich III K units	Mehlich III Ca conc.	Mehlich III Ca units	Mehlich III Mg conc.	Mehlich III Mg units	Mehlich III S conc.	Mehlich III S units	Mehlich III Na conc.	Mehlich III Na units
14396	55822-01	425	ppm	412	ppm	5977	ppm	457	ppm	60.1	ppm	28.5	ppm
14397	55822-02	53.2	ppm	354	ppm	5641	ppm	529	ppm	50.7	ppm	61.2	ppm
14398	55822-03	252	ppm	630	ppm	3327	ppm	469	ppm	38.9	ppm	59.0	ppm

Laboratory ID:	Mehlich III P conc.	Mehlich III P units	Mehlich III K conc.	Mehlich III K units	Mehlich III Ca conc.	Mehlich III Ca units	Mehlich III Mg conc.	Mehlich III Mg conc.	Mehlich III S conc.	Mehlich III S units	Mehlich III Na conc.	Mehlich III Na units
Detection Limit	0.2367	ppm	0.1308	ppm	0.0436	ppm	0.0250	ppm	0.0010	ppm	0.0269	ppm
Reporting Limit	1	ppm	1	ppm	1	ppm	1	ppm	1	ppm	1	ppm

Laboratory ID:	TCEQ/client Sample ID:	Mehlich III Extract Date	Mehlich III Extract Tech	Mehlich III Anal.Date	Mehlich III Anal. Tech
14396	55822-01	1/8/2025	FMR	1/9/2025	JLP
14397	55822-02	1/8/2025	FMR	1/9/2025	JLP
14398	55822-03	1/8/2025	FMR	1/9/2025	JLP

Report ID: 055822a-45667 Print Date: 10-Jan-25

Standard Sample Report TCEQ COC# 055822

Laboratory ID:	TCEQ/client Sample ID:	pH	pH units	Conductivity	Conductivity units	Nitrate-N	Nitrate-N units
14396	55822-01	7.22	NA	0.276	dS/M	11.818	ppm
14397	55822-02	7.7	NA	0.259	dS/M	2.973	ppm
14398	55822-03	7.28	NA	0.215	dS/M	16.628	ppm

Laboratory ID:	pH	pH units	Conductivity	Conductivity units	Nitrate-N	Nitrate-N units
Detection Limit	0.01	na	0.001	dS/M	0.01	ppm
Reporting Limit	0.1	na	0.001	dS/M	1	ppm

Laboratory ID:	TCEQ/client	pH/Conductivity prep		pH Analysis		Conductivity		Nitate-N Extract		Nitrate-N Analysis	
	Sample ID:	Date	Tech	Date	Tech	Date	Tech	Date	Tech	Date	Tech
14396	55822-01	12/13/2024	DEC	12/16/2024	DEC	12/16/2024	DEC	12/16/2024	FMR	12/17/2024	JW
14397	55822-02	12/13/2024	DEC	12/16/2024	DEC	12/16/2024	DEC	12/16/2024	FMR	12/17/2024	JW
14398	55822-03	12/13/2024	DEC	12/16/2024	DEC	12/16/2024	DEC	12/16/2024	FMR	12/17/2024	JW

Report ID: 055822a-45667 Print Date: 10-Jan-25
Quality Control Report TCEQ COC# 055822

Laboratory ID:		Mehlich III P conc.	Mehlich III P units	Mehlich III K conc.	Mehlich III K units	Mehlich III Ca conc.	Mehlich III Ca units	Mehlich III Mg conc.	Mehlich III Mg conc.	Mehlich III S conc.	Mehlich III S units	Mehlich III Na conc.	Mehlich III Na units
14399	IC1037	51.8	ppm	345	ppm	2616	ppm	386	ppm	42.7	ppm	52.1	ppm
14400	IC1038	50.4	ppm	339	ppm	2567	ppm	380	ppm	41.8	ppm	51.4	ppm
	Mean IC	0	ppm	0	ppm	0	ppm	0	ppm	0	ppm	0	ppm
	IC Lower	45.9	ppm	305.0	ppm	2320.0	ppm	335.0	ppm	27.0	ppm	30.0	ppm
	IC Upper	53.4	ppm	365.0	ppm	2645.0	ppm	409.0	ppm	49.0	ppm	55.0	ppm
	blk223	<0.237	ppm	<0.131	ppm	<0.0436	ppm	<0.0250	ppm	<0.0100	ppm	0.48	ppm

Laboratory ID:	Mehlich III P conc.	Mehlich III P units	Mehlich III K conc.	Mehlich III K units	Mehlich III Ca conc.	Mehlich III Ca units	Mehlich III Mg conc.	Mehlich III Mg conc.	Mehlich III S conc.	Mehlich III S units	Mehlich III Na conc.	Mehlich III Na units
Detection Limit	0.2367	ppm	0.1308	ppm	0.0436	ppm	0.0250	ppm	0.0010	ppm	0.0269	ppm
Reporting Limit	1	ppm	1	ppm	1	ppm	1	ppm	1	ppm	1	ppm

Laboratory ID:	Mehlich III Extract Date	Mehlich III Extract Tech	Mehlich III Anal.Date	Mehlich III Anal. Tech
IC1037	1/8/2025	FMR	1/9/2025	JLP
IC1038	1/8/2025	FMR	1/9/2025	JLP
blk223	1/8/2025	FMR	1/9/2025	JLP

Report ID: 055822a-45667 Print Date: 10-Jan-25

Quality Control Report TCEQ COC# 055822

Laboratory ID:		pH	pH units	Conducitity conc.	Conducitity units	Nitrate-N conc.	Nitrate-N units	Nitrate-N % recovery
14399	IC1037	5.9	na	0.254	dS/M	4.948	ppm	
14400	IC1038	5.9	na	0.254	dS/M	4.546	ppm	
	Mean IC	5.875	na	0.254	dS/M	4.747	ppm	
14400spike	Spiked sample	-	-	-	-	3.6	ppm	82.2
	IC lower	5.760	na	0.241	dS/M	3.5	ppm	
	IC Upper	5.990	na	0.299	dS/M	5.5	ppm	
	blk223	-	na	0	dS/M	0.749	ppm	

Laboratory ID:	pH	pH units	Conducitity conc.	Conducitity units	Nitrate-N conc.	Nitrate-N units
Detection Limit	0.01	na	0.001	dS/M	0.01	ppm
Reporting Limit	0.1	na	0.001	dS/M	1	ppm

Laboratory ID:	pH/Conductivity prep		pH Analysis		Conductivity		Nitate-N Extract		Nitrate-N Analysis	
	Date	Tech	Date	Tech	Date	Tech	Date	Tech	Date	Tech
IC1037	12/13/2024	DEC	12/16/2024	DEC	12/16/2024	DEC	12/16/2024	FMR	12/17/2024	JW
IC1038	12/13/2024	DEC	12/16/2024	DEC	12/16/2024	DEC	12/16/2024	FMR	12/17/2024	JW
blk223	12/13/2024	DEC	12/16/2024	DEC	12/16/2024	DEC	12/16/2024	FMR	12/17/2024	JW

Report for Samples analyzed Under Contract Number: 582-10-99518

Report ID: 055822b-45667
Print Date: 10-Jan-25

Texas A&M AgriLife Extension Service Soil, Water and Forage Testing Laboratory
108 Soil Testing Laboratory, 2478 TAMU
College Station, TX 77843-2478
979-862-4955

Client Name: Eemster Dairy
Client address: not provided

Standard Sample Report TCEQ COC# 055822

Laboratory ID:	TCEQ/client Sample ID:	Sample Depth (inches)	Sample Coll. Date:	Collector Name:	TCEQ Region #	Date Received	Sample Type:	Sample opened Date	Sample Ground Date	Process Tech.
14401	55822-04	6-24	10/29/2024	Cody Christian	4	11/19/2024	soil	11/25/2024	12/8/2024	TLP

Methods and Sample Preparation:

Receiving of samples Processing - SWFTL0097R0.SOP

Upon opening of sample chests, all samples are identified and organized as listed on COC to insure completeness and condition of shipment. Individually each sample is spread across a non-reactive tray where foreign materials is physically removed and discarded. The sample(s) are then placed inside a 65C drying oven and allow to remain until dry. Individual samples were then removed from drying oven and pulverized with an Agvise soil pulzerized fitted with a shaking 2mm screen. Every attempt was again made to remove any remaining plant tissue in the pulverized sample(s). Soil was then transferred to the laboratory sample cups and while additional sample was stored.

Analytical Methods:

Soil pH 2:1 DI water:soil SOIL pH AND CONDUCTIVITY - SWFTL0015R1.SOP

Schofield, R.K. and A.W. Taylor. 1955. The measurement of soil pH. Soil Sci. Soc. Am. Proc. 19:164-167.

Soil Conductivity 2:1 DI Water:Soil SOIL pH AND CONDUCTIVITY - SWFTL0015R1.SOP

Rhoades, J.D. 1982. Soluble salts. p. 167-178. In: A.L. Page, et al. (ed.). Methods of Soil Analysis: Part 2. Agronomy Monogr. 9. 2nd ed. ASA and SSSA, Madison, WI.

Soil Nitrate-N KCl Extractable with Cd-Reduction Analyses NO3-N EXTRACTION - SWFTL0014R5.SOP/NO3-N ANALYSIS - SWFTL0089R1.SOP

Keeney, D.R. and D.W. Nelson. 1982. Nitrogen - inorganic forms. p. 643-687. In: A.L. Page, et al. (ed.). Methods of Soil Analysis: Part 2. Agronomy Monogr. 9. 2nd ed. ASA and SSSA, Madison, WI.

Soil P, K, Ca, Mg, S and Na -- Mehlich III by ICP M3 EXTRACTION - SWFTL0079R1.SOP/M3 ANALYSIS - SWFTL0081R2.SOP

Mehlich-3 soil test extractant: a modification of Mehlich-2 extractant. Commun. Soil Sci. Plant Anal. 15(12):1409-1416

Report ID: 055822b-45667 Print Date: 10-Jan-25

Standard Sample Report TCEQ CQC# 055822

Laboratory ID:	TCEQ/client Sample ID:	Mehlich III P conc.	Mehlich III P units	Mehlich III K conc.	Mehlich III K units	Mehlich III Ca conc.	Mehlich III Ca units	Mehlich III Mg conc.	Mehlich III Mg units	Mehlich III S conc.	Mehlich III S units	Mehlich III Na conc.	Mehlich III Na units
14401	55822-04	26.8	ppm	641	ppm	3003	ppm	611	ppm	29.8	ppm	173	ppm

Laboratory ID:	Mehlich III P conc.	Mehlich III P units	Mehlich III K conc.	Mehlich III K units	Mehlich III Ca conc.	Mehlich III Ca units	Mehlich III Mg conc.	Mehlich III Mg conc.	Mehlich III S conc.	Mehlich III S units	Mehlich III Na conc.	Mehlich III Na units
Detection Limit	0.2367	ppm	0.1308	ppm	0.0436	ppm	0.0250	ppm	0.0010	ppm	0.0269	ppm
Reporting Limit	1	ppm	1	ppm	1	ppm	1	ppm	1	ppm	1	ppm

Laboratory ID:	TCEQ/client Sample ID:	Mehlich III Extract Date	Mehlich III Extract Tech	Mehlich III Anal.Date	Mehlich III Anal. Tech
14401	55822-04	1/8/2025	FMR	1/9/2025	JLP

Report ID: 055822b-45667 Print Date: 10-Jan-25

Standard Sample Report TCEQ COC# 055822

Laboratory ID:	TCEQ/client Sample ID:	pH	pH units	Conductivity	Conductivity units	Nitrate-N	Nitrate-N units
14401	55822-04	7.91	NA	0.389	dS/M	14.486	ppm

Laboratory ID:	pH	pH units	Conductivity	Conductivity units	Nitrate-N	Nitrate-N units
Detection Limit	0.01	na	0.001	dS/M	0.01	ppm
Reporting Limit	0.1	na	0.001	dS/M	1	ppm

Laboratory ID:	TCEQ/client	pH/Conductivity prep		pH Analysis		Conductivity		Nitate-N Extract		Nitrate-N Analysis	
	Sample ID:	Date	Tech	Date	Tech	Date	Tech	Date	Tech	Date	Tech
14401	55822-04	12/13/2024	DEC	12/16/2024	DEC	12/16/2024	DEC	12/16/2024	FMR	12/17/2024	JW

Report ID: 055822b-45667 Print Date: 10-Jan-25
Quality Control Report TCEQ COC# 055822

Laboratory ID:		Mehlich III P conc.	Mehlich III P units	Mehlich III K conc.	Mehlich III K units	Mehlich III Ca conc.	Mehlich III Ca units	Mehlich III Mg conc.	Mehlich III Mg conc.	Mehlich III S conc.	Mehlich III S units	Mehlich III Na conc.	Mehlich III Na units
14419	IC1039	50.4	ppm	336	ppm	2621	ppm	370	ppm	42.2	ppm	49.9	ppm
14420	IC1040	50.7	ppm	343	ppm	2607	ppm	383	ppm	43.5	ppm	51.2	ppm
	Mean IC	0	ppm	0	ppm	0	ppm	0	ppm	0	ppm	0	ppm
	IC Lower	45.9	ppm	305.0	ppm	2320.0	ppm	335.0	ppm	27.0	ppm	30.0	ppm
	IC Upper	53.4	ppm	365.0	ppm	2645.0	ppm	409.0	ppm	49.0	ppm	55.0	ppm
	blk223	<0.237	ppm	<0.131	ppm	<0.0436	ppm	<0.0250	ppm	<0.0100	ppm	0.48	ppm

Laboratory ID:	Mehlich III P conc.	Mehlich III P units	Mehlich III K conc.	Mehlich III K units	Mehlich III Ca conc.	Mehlich III Ca units	Mehlich III Mg conc.	Mehlich III Mg conc.	Mehlich III S conc.	Mehlich III S units	Mehlich III Na conc.	Mehlich III Na units
Detection Limit	0.2367	ppm	0.1308	ppm	0.0436	ppm	0.0250	ppm	0.0010	ppm	0.0269	ppm
Reporting Limit	1	ppm	1	ppm	1	ppm	1	ppm	1	ppm	1	ppm

Laboratory ID:	Mehlich III Extract Date	Mehlich III Extract Tech	Mehlich III Anal.Date	Mehlich III Anal. Tech
IC1039	1/8/2025	FMR	1/9/2025	JLP
IC1040	1/8/2025	FMR	1/9/2025	JLP
blk223	1/8/2025	FMR	1/9/2025	JLP

Report ID: 055822b-45667 Print Date: 10-Jan-25

Quality Control Report TCEQ COC# 055822

Laboratory ID:		pH	pH units	Conducitity conc.	Conducitity units	Nitrate-N conc.	Nitrate-N units	Nitrate-N % recovery
14419	IC1039	5.9	na	0.257	dS/M	4.884	ppm	
14420	IC1040	5.9	na	0.256	dS/M	4.562	ppm	
	Mean IC	5.87	na	0.2565	dS/M	4.723	ppm	
14420spike	Spiked sample	-	-	-	-	3.6	ppm	82.2
	IC lower	5.760	na	0.241	dS/M	3.5	ppm	
	IC Upper	5.990	na	0.299	dS/M	5.5	ppm	
	blk223	-	na	0	dS/M	0.749	ppm	

Laboratory ID:	pH	pH units	Conducitity conc.	Conducitity units	Nitrate-N conc.	Nitrate-N units
Detection Limit	0.01	na	0.001	dS/M	0.01	ppm
Reporting Limit	0.1	na	0.001	dS/M	1	ppm

Laboratory ID:	pH/Conductivity prep		pH Analysis		Conductivity		Nitate-N Extract		Nitrate-N Analysis	
	Date	Tech	Date	Tech	Date	Tech	Date	Tech	Date	Tech
IC1039	12/13/2024	DEC	12/16/2024	DEC	12/16/2024	DEC	12/16/2024	FMR	12/17/2024	JW
IC1040	12/13/2024	DEC	12/16/2024	DEC	12/16/2024	DEC	12/16/2024	FMR	12/17/2024	JW
blk223	12/13/2024	DEC	12/16/2024	DEC	12/16/2024	DEC	12/16/2024	FMR	12/17/2024	JW

servi tech
6921 S. Bell • Amarillo, TX 79109
www.servitech.com

Phone: 806.677.0093
800.557.7509
Fax: 806.677.0329

Lab No: **4479**

LABORATORY ANALYSIS REPORT

Report Date: 07/03/2025 10:56 am

Send To: 6224	ENVIRO-AG ENGINEERING INC 3404 AIRWAY BLVD AMARILLO, TX 79118

Amy Meier
Data Review Coordinator

Client Name:	EMSTER WEST	**Received:**	06/26/2025
Sample ID:	RCS #1	**Sampled:**	06/24/2025
Location	ERATH COUNTY	**Invoice No:**	428584
		P.O. #:	COREY MULLIN

	Analysis results		lbs/acre-in	meq/L
NUTRIENTS				
Nitrogen				
Total Nitrogen	172	ppm	39	12.3
Organic Nitrogen	87	ppm	20	6.2
Ammonium Nitrogen	85.0	ppm	19	6.1
Nitrate+Nitrite Nitrogen	0.20	ppm	0	<0.1
Major and Secondary Nutrients				
Phosphorus	50	ppm		
Phosphorus as P2O5	110	ppm	25	
Potassium	1040	ppm		26.6
Potassium as K2O	1250	ppm	283	
OTHER PROPERTIES				
Moisture	99.4	%		
Total Solids	0.6	%	1360	
Organic Matter	0.3	%	680	
Ash	0.3	%		
C:N Ratio	10.1	ratio		

ENVIRO-AG ENGINEERING, INC.
EAE
AMARILLO · STEPHENVILLE · ARTESIA

Enviro-Ag Engineering, Inc.
9855 FM 847, Dublin, TX 76446
Tel. 254-965-3500 Fax 254-965-8000

WASTEWATER CHAIN OF CUSTODY RECORD

Producer/Facility: Eemster West

County: Erath

Date Sampled: 6/24/2025

Date Shipped: 6/25/2025

Project Manager: Corey Mullin

Sample Type	Sample ID	Number of Containers	Test Package	Proper Preservation	Matrix
Wastewater	4479 RCS #1	2	EAE TX CO KS LAGOON	Y	OT

Relinquished By: Ref. Internal COC
Company: EAE

Relinquished By: Lisa Postmus
Company: EAE
Date/Time: 6/26 1000
Received By: KB

Relinquished By:
Company: ServiTech Lab

servi tech
6921 S. Bell • Amarillo, TX 79109
www.servitech.com

Phone: 806.677.0093
800.557.7509
Fax: 806.677.0329

Lab No.: **4500**

LABORATORY ANALYSIS REPORT

Report Date: 07/03/2025 01:26 pm

Send To: 6224

ENVIRO-AG ENGINEERING INC
3404 AIRWAY BLVD
AMARILLO, TX 79118

Amy Meier
Data Review Coordinator

Results For: EEMSTER WEST
Sample ID: MANURE
Location ERATH COUNTY

Received: 06/26/2025
Sampled: 06/24/2025
Invoice No: 428584
P.O. #: COREY MULLIN

		Analysis (dry basis)	Analysis (as rec'd)	Total content lbs per ton (as rec'd)	Estimated available first year* lbs per ton (as rec'd)
NUTRIENTS					
Nitrogen					
Total Nitrogen	%	1.658	0.897	17.9	8.2
Organic Nitrogen	%	1.573	0.851	17.0	7.3
Ammonium Nitrogen	%	0.085	0.046	0.9	0.9
Nitrate+Nitrite Nitrogen	%	0.0037	0.002	<0.1	<0.1
Major and Secondary Nutrients					
Phosphorus	%	0.346	0.187		
Phosphorus as P2O5	%	0.793	0.429	8.6	7.7
Potassium	%	1.21	0.653		
Potassium as K2O	%	1.44	0.781	15.6	15.6
OTHER PROPERTIES					
Moisture	%		45.9		
Total Solids	%		54.1	1082	
Organic Matter	%	32.7	17.7	354	
Ash	%		36.4	728	
C:N Ratio	ratio		11.4		

* Assumes 43% of organic nitrogen available during first crop year after application. Assumes 100% of ammonium and nitrate nitrogen available, but should be adjusted for potential field losses at application site.

Your opinion is valuable to us. Please let us know what you think about our services! Send an email to feedback@servitech.com.

ENVIRO-AG ENGINEERING, INC.
EAE
AMARILLO · STEPHENVILLE · ARTESIA

Enviro-Ag Engineering, Inc.
9855 FM 847, Dublin, TX 76446
Tel. 254-965-3500 Fax 254-965-8000

MANURE CHAIN OF CUSTODY RECORD

Producer/Facility: Eemster West

County: Erath

Date Sampled: 6/24/2025

Date Shipped: 6/25/2025

Project Manager: Corey Mullin

Sample Type	Sample ID	Number of Containers	Test Package	Proper Preservation	Matrix
Manure	4500 Manure	1	EAE TX CO KS MANURE	Y	OT

Relinquished By: Ref. Internal COC Relinquished By: Lisa Postmus Relinquished By:

Company: EAE Company: EAE Company: ServiTech Lab

Date/Time: 6/26 1000

Received By: KB

5.0 RECHARGE FEATURE CERTIFICATION

CERTIFICATION

I certify that potential Recharge Features in the form of artificial penetrations and natural features exist on property utilized under this application as defined in 30 TAC §321.32(50). The protective measures in the form of best management practices identified in this report, when implemented, are designed to avoid adverse impacts to these features and associated graundwater formations.

All information presented on this page and in the following supporting documents is true and accurate to the best of my knowledge.

Narman Mullin, P.E.

Enviro-Ag Engineering, Inc.

Firm #F-2507

5.1 General

This recharge feature certification report was authorized by Mr. Johan Koke representing Eemster West, LLC. The findings and recommendations contained herein were compiled by Ms. Jourdan Mullin and Mr. Norman Mullin, P.E., of Enviro-Ag Engineering, Inc., Amarillo, Texas.

5.2 Purpose of Report

Eemster West, LLC is applying for a major amendment of current TPDES #2922 under 30 TAC, Chapter 321, Subchapter B, Concentrated Animal Feeding Operations. The purpose of this report is to determine if the subject property has ony natural or artificial features, either on or beneath the ground surface, which would provide a significant pathway for effluent or solids from the facility into the underlying aquifer. At a minimum, the records and/or maps of the following entities/agencies were reviewed to locate any artificial recharge features: A) Texas Railroad Commission, B) local water district, C) Texas Water Development Board, D) TCEQ, E) Natural Resource Conservation Service (NRCS), F) current land owners and G) onsite inspection. The TCEQ Regulatory Guidance RG-433 was followed to identify recharge features and recommend best management practices.

5.3 Property Under Evaluation

The property under evaluation consists of approximately 207 acres in Earth County, Texas. The area is within the jurisdiction of Middle Trinity Ground Water Conservation District.

5.4 Definition of Waste Production

The process of wastewater production involves the accumulation of manure solids in the open confinement lots. Rain falling on the open lots comes into contact with the manure layer and absorbs some of the excreted nutrients present in manure. The nutrient enriched runoff is considered wastewater, which flows by designed slopes from the open lots toward the settling basins and into the RCS.

Manure solids accumulated in the open confinement lots are collected at least annually and hauled off-site to farmland by a waste transporter. While in the open lots, manure becomes compacted and slowly permeable due to hoof action by the cattle. This compacted manure layer results in an increase of the overall runoff volume during rainfall events. Infiltration of nutrients downward through the manure layer into the underlying soils is considered minimal as a result of pen surface compaction (Sweeten, 1990).

5.5 Definition of Recharge Feature

TCEQ rules define a "Recharge Feature" as: *"Those natural or artificial features either on or beneath the ground surface at the site under evaluation that provide or create a significant hydrologic connection between the ground surface and the underlying groundwater within an aquifer. Significant artificial features include, but are not limited*

to, wells and excavation or material pits. Significant natural hydrologic connections include, but are not limited to: faults, fractures, sinkholes or other macro pores that allow direct surface infiltration; a permeable or shallow soil material that overlies and aquifer; exposed geologic formations that are identified as an aquifer; or a water course bisecting an aquifer." (30 TAC §321.32(50))

The TCEQ Regulatory Guidance RG-433 further defines a "recharge feature" as: *"A natural or artificial feature either on or beneath the ground surface that provides or creates a significant hydrologic connection (or pathway) between the ground surface and the underlying groundwater within an aquifer."*

The guidance document also defines a "significant pathway" as: *"A significant pathway between the land surface and the subsurface has the ability to transmit waste, wastewater, or precipitation mixed with waste to groundwater. The wastewater may impact the groundwater quality within an aquifer or migrate laterally to discharge as seeps that may impact surface water quality. Recharge features with significant pathways include geomorphologic, geologic, soil, and artificial features. Agricultural practices may also enhance existing recharge features."*

EVALUATION OF NATURAL FEATURES

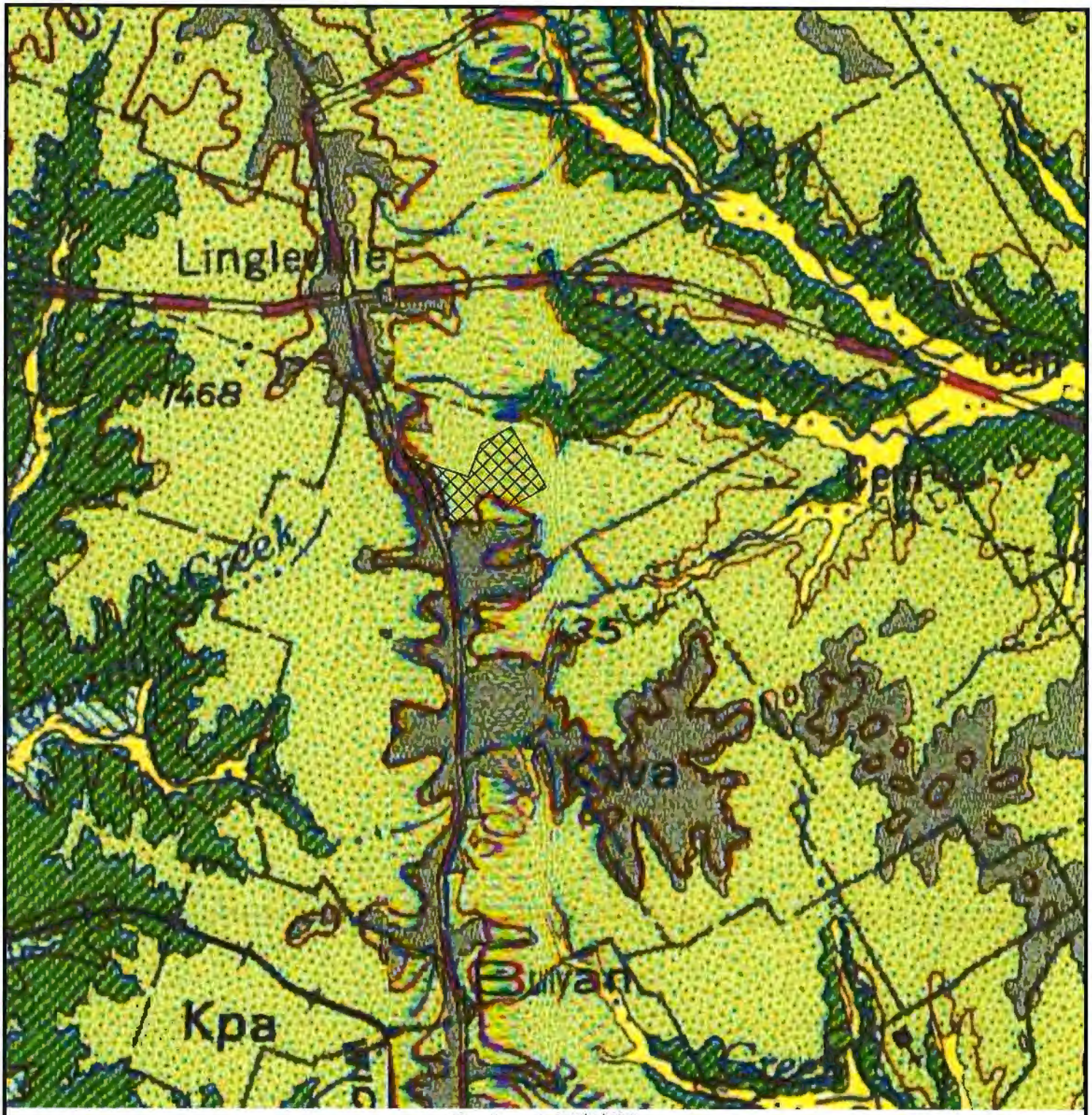
5.6 Geomorphologic/Geologic Features

The Maloterre-Purves-Dugout soils in this area of Erath County are immediately underlain by the Cretaceous Walnut and Paluxy Formations as shown in Figure 5.1, Geologic Atlas. Bedrock from the Paluxy Formation outcrops through a majority of the site.

The Walnut Formation comprises the beds of clay and nonchalky limestones at the base of the Fredericksburg division. They consist of alternations of calcareous laminated clays, weather yellow on oxidation, semicrystalline limestone flags, and shell agglomerate, all of which grade upward without break into the more chalky beds of the Edwards limestone. In places they weather into rich black soils and make extensive agricultural belts (Hill, 1901).

Forming the upper unit of the Trinity Group, the Paluxy Formation consists of up to 400 feet of predominantly fine to coarse-grained sand interbedded with clay and shale. Underlying the Paluxy, the Glen Rose Formation forms a gulfward-thickening wedge of marine carbonates consisting primarily of limestone. Paluxy bedrock outcrops along the northeast portion of this site. Limiting application rates of wastewater and manure will protect this feature form adverse impacts.

The basal unit of the Trinity Group consists of the Twin Mountains and Travis Peak formations, which are laterally separated by a facies change. To the north, the Twin Mountains Formation consists mainly of medium-to coarse-grained sands, silty clays, and conglomerates (Ashworth, 1995).



Map Generated 8/7/2025

Legend:
⊠ Denotes Facility
Kpa – Cretaceous Paluxy Formation
Kwa – Cretaceous Walnut Formation

N
W E
S

No Scale

Sources: Geologic Atlas of Texas, Abilene Sheet, 1972.

Eemster West, LLC. Dublin, TX Erath County	Geologic Atlas of Texas Figure 5.1 Page 21	ENVIRO-AG ENGINEERING, INC. Enviro-Ag Engineering, Inc. ENGINEERING CONSULTANTS 3404 Airway Boulevard AMARILLO, TEXAS 79118 TEL (806) 353-6123 FAX (806) 353-4132

5.6.1 Outcrops/Stream Interception

An inspection of the CAFO property and review of the USGS topographic map of the area shows intermittent stream tributaries from Goose Branch bisecting the property from southwest ta the northeast. All of these areas are protected from land application with a 133ft buffer. The freshwater ponds located in LMU #1 and LMU #5 are protected from land application with a 133ft buffer.

5.6.2 Excessive Slopes

No slopes of greater than 8 percent are present on the property.

5.6.3 Other Large-Scale Conduits

No faults, fractured sediments, caves, sinkholes, solution cavities, vugs or concentrated or extensive animal burrowing was observed during an on-site visit, nor is identified on the geologic atlas, soil surveys or USGS maps.

5.6.4 Surface Water

The "water in the state" designation is based on Enviro-Ag Engineering, Inc., site inspections, the permittee's knowledge of the property and the USDA-FSA aerial photograph (2017). The buffer zones and LMU boundaries in Figure 6.1 (Refer to Section 6) are submitted with this application for TCEQ approval.

5.6.5 Aquifer

The Trinity aquifer consist of early Cretaceous age formations of the Trinity Group where they occur in a band extending through the central part of the state in all or parts of 55 counties, from the Red River in North Texas to the Hill Country of South-Central Texas.

Formations comprising the Trinity Group are (from youngest to oldest) the Paluxy, Glen Rose, and Twin Mountains-Travis peak. Updip, where the Glen Rose thins or is missing, the Paluxy and Twin Mountains coalesce to form the Antlers Formation. The Antlers consists of up to 900 feet of sand and gravel, with clay beds in the middle section. Water from the Antlers is mainly used for irrigation in the outcrop area of North and Central Texas (Ashworth and Hopkins, 1995).

The aquifer is underlain and confined by low-permeability rocks that range in age from Precambrian to Jurassic. Where the aquifer does not crop out, it is confined above by the Walnut Formation in most of the area.

Recharge to the Trinity aquifer is generally as precipitation that falls on aquifer outcrop areas and as seepage from streams and ponds where the head gradient is downward. In the Hill Country, water might flow laterally into the Trinity aquifer form the adjacent Edwards-Trinity aquifer. The aquifer discharges by evapotranspiration, spring discharges, diffuse lateral or upward leakage into shallower aquifers, and withdrawals from wells (USGS, 2003). Land application at agronomic rates and maintain permanent cover crops will protect the feature from adverse impacts associated with this operation.

5.7 Soil Features

Soil mapping units included in this section for the production area and land application areas were taken from the electronic NRCS Soil Survey for Erath County. Soils descriptions are included in the supporting documentation and were obtained from the most current version of the NRCS electronic soil information database for Erath County available on the NRCS Web Soil Survey.

5.7.1 Production Area

Soils underlying the pen and pond areas are predominately of the Duffau-Weatherford complex (DwD), Maloterre (Ma), Purves-Dugout-Maloterre (Pd) and Winthorst (WoB2) series. The RCS has been certified as meeting TCEQ guidelines for soil liner (30 TAC §321.38(g). Best management practices pertaining to surface drainage, surface compaction and manure management within the open lot confinement area will be followed. Steve Evans, Ph.D., soil physicist with the USDA Agricultural Research Service in Bushland, Texas, stated that his work with lysimeters and potential evapotranspiration indicated limited infiltration and even less deep percolation will occur on areas with sloped surfaces (1996). Work performed by the NRCS calculated the feedlot surface curve number (potential for runoff) as 90 on a scale of 100.

5.7.2 Land Application Areas

Soils underlying the land application areas are primarily of the Clairette (CtC), Purves-Dugout-Maloterre (Pd), Fairy-Hico Complex (FhC2), Windthorst (WoB and WoB2) series. The application of wastewater and/or manure will be performed at agronomic rates according to an approved NUP/NMP. No pooling or ponding is anticipated due to application through sprinklers.

Figure 5.2 shows the soils underlying the property as delineated from the electronic NRCS Soil Survey map for Erath County. The electronic version of the soil survey is considered the most current soils information available. Table 5.1 is a summary of the estimated physical properties of the soils in the subject area, obtained from the NRCS Web Soil Survey.

Table 5.1: Estimated Soil Properties

Soil Series (Map ID)	Slope (%)	HSG	Depth (in)	USDA Soil Texture	Permeability / Infiltration Rate (in/hr)	Available Water Capacity (in/in of soil)
Fairy (FhC2)	1-5	B	0-13	Very Fine Sandy	2.0-6.0	0.10-0.17
			13-45	Loam	0.6-2.0	0.05-0.17
Hico		B	0-12	Fine Sandy	2.0-6.0	0.10-0.15
			12-51	Loam	0.6-2.0	0.05-0.17
Duffau (DwD)	3-8	B	0-6	Fine Sandy	2.0-6.0	0.11-0.14
			6-11	Loam	2.0-6.0	0.10-0.13
			11-28		0.6-2.0	0.10-0.18
Weatherford		B	0-7		2.0-6.0	0.12-0.15

			7-22 22-35	Fine Sandy Loam	0.6-2.0 0.6-2.0	0.13-0.14 0.10-0.12
Maloterre (Ma)	——	D	0-5 5-20	Gravelly Clay Loam	0.6-2.0 0.06-2.0	0.14-0.16 ——
Purves (Pd)	——	D	0-8 8-12 12-14 14-24	Stoney Clay	0.06-0.20 0.06-0.6 0.06-0.6 0.06-2.0	0.11-0.20 0.08-0.18 0.04-0.07 ——
Dugout		D	0-8 8-18 18-28	Gravelly Clay Loam	0.20-0.6 0.20-0.6 0.06-2.0	0.06-.015 0.07-0.16 ——
Maloterre		D	0-8 8-18	Gravelly Clay Loam	0.6-2.0 0.001-0.06	0.06-0.11 ——
Hassee (WaB)	1-3	D	0-12 12-50	Fine Sandy Loam	0.6-2.0 .001-0.06	0.11-0.17 0.12-0.18
Windthorst (WoB)	1-5	C	0-8 8-33	Very Fine Sandy Loam	2.0-6.0 0.20-0.6	0.10-0.17 0.10-0.20
Windthorst (WoB2)	1-5	C	0-4 4-33	Fine Sandy Loam	2.0-6.0 0.20-0.6	0.10-0.17 0.10-0.20
Clairette (CtC)	3-5	C	0-4 4-10 10-26	Loam	0.6-2.0 0.6-2.0 0.20-0.6	0.15-0.19 0.15-0.19 0.10-0.18

The major soil series within each LMU are identified in Table 5.2. All soils at the site that have been identified by NRCS as being at high risk for various limitations are presented in Table 5.3. Associated best management practices will be implemented, as appropriate, based on physical and economic conditions.

Table 5.2: Major Soil Types

LMU ID	Major Soil Type
1	Windhorst (WoB)
5	Clairette (CtC)
9	Duffau (FhC2)

Table 5.3: Potential Soil Limitations for Land Application

Soil Series	Potential Soil Limitations	Best Management Practices
DwD	Slope Seepage	-No land application to inundated soils. – Land Application not to exceed agronomic rates for nutrients and soil hydraulic rates (refer to NMP).
Ma	Droughty Depth to Bedrock	-No land application to inundated soils. -Land Application not to exceed agronomic rates for nutrients and soil hydraulic rates (refer to NMP). – Irrigation events will be managed to assist in maintaining soil moisture levels within the range of the

Soil Series	Potential Soil Limitations	Best Management Practices
		available water holding capacity of that Land Management Unit.
Pd	Droughty Depth to Bedrock Slow Water Movement Large Stones on the Surface	-No land application to inundated soils. -Land Application not to exceed agronomic rates for nutrients and soil hydraulic rates (refer to NMP). - Irrigation events will be managed to assist in maintaining soil moisture levels within the range of the available water holding capacity of that Land Management Unit.
FhC2	Slow Water Movement Seepage	-No land application to inundated soils. - Land Application not to exceed agronomic rates for nutrients and soil hydraulic rates (refer to NMP).
WaB	Slow Water Movement Depth to Saturated Zone	- Land Application not to exceed agronomic rates for nutrients and soil hydraulic rates (refer to NMP). -No land application to inundated soils.

5.7.3 Erosion

Figure 5.2 shows the onsite soils classified by NRCS as Highly Erodible Land (HEL), including Duffau-Weatherford (DwD) and Windthorst (WoB). LMUs will be protected with typical conservation farming practices within the standards of the NRCS. The following methods will be used to control/prevent erosion of exposed soils in the production area:

- Seeding/sprigging exposed areas with forage or cover crops,
- Constructing terraces or berms (shortening the length and steepness of slopes),
- Covering erosive areas with road surfacing materials,
- Implementing reduced tillage practices,
- Maintaining a cover of plants or crop residue.

Map Generated 8/7/2025

LEGEND:

Denotes Production Area

For specific soil data, refer to Table 5.2.

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500' 0 500' 1000'

SCALED AS SHOWN

Source: USDA-NRCS Soil Survey, Soil Survey Geographic Database for (Erath County, TX). Available at: http://soildatamart.nrcs.usda.gov. Accessed Jan, 2024.

- Refer to Figures 1.3 & 1.4 for overall facility maps.

Eemster West, LLC. Dublin, TX Erath County	NRCS Soils Map Figure 5.2 Page 26	ENVIRO-AG ENGINEERING, INC. Enviro-Ag Engineering, Inc. ENGINEERING CONSULTANTS 3404 Airway Boulevard AMARILLO, TEXAS 79118 TEL (806) 353-6123 FAX (806) 353-4132

ARTIFICIAL FEATURES

5.8 Railroad Commission Records

A search of the RRC database files was performed by a search of the online RRC map viewer was conducted. No proposed locations or existing penetrations for oil and gas were identified on the subject property. Railroad Commission database information is included as an attachment to this document.

5.9 Ground Water Conservation District Records

The Middle Trinity Groundwater Conservation District (GCD) online database was reviewed for artificial penetrations. Should an abandoned penetration be encountered anywhere on the subject property at any time, the penetration will be marked, inspected and properly sealed to prevent a potential impact to the underlying aquifer. Appropriate well plugging reports shall be submitted as required to the Texas Department of Licensing and Regulation (TDLR) and will be maintained in the onsite PPP.

5.10 GeoSearch

GeoSearch was not utilized in this application.

5.11 Texas Water Development Board Water Data Interactive (WDI)

The TWDB WDI online database was reviewed for artificial penetrations. The database revealed no water wells registered with the TWDB as being located on the subject property.

5.12 Natural Resource Conservation Service

The historical NRCS Soil Survey of Erath County (1973) was reviewed for locations of potential recharge features. No potential recharge features were identified.

5.13 Other Artificial Features

Numerous features, such as irrigation tail water pits and stock ponds, exist on the subject property and are shown to be buffered on Figure 5.3. These areas shall be buffered during land application events or backfilled prior to the first land application event.

5.14 Previous/Current Landowner

Mr. Johan Koke was contacted regarding then presence of any potential recharge features on the property. Mr. Koke is considered the most knowledgeable about the property. The previous landowner could not be located. Mr. Koke confirmed the locations of all active water wells.

5.15 Onsite Inspection

The property has been inspected both on the ground and by historical mapping. All active water wells were documented on the property during the onsite inspection and are shown on Figure 5.3. The BMPs for all wells are listed in Table 5.4. Should any open

well or test hole be encountered, it will be marked, reported to the Engineer, included on Figure 5.3 and properly plugged (30 TAC §321.34(f)(3)(B)). Well plugging reports shall be submitted as required to the Texas Department of Licensing and Registration (Well Drillers Board) and will be maintained in the onsite PPP.

All well data listed in Table 5.4 is based on information received from the water district, TCEQ and TWDB files, onsite inspection, and interviews of persons knowledgeable of the property. The map number corresponds to the location shown in Figure 5.3. The well identification number corresponds to the database number or drilling report number used by the water district, TCEQ or TWDB Commission.

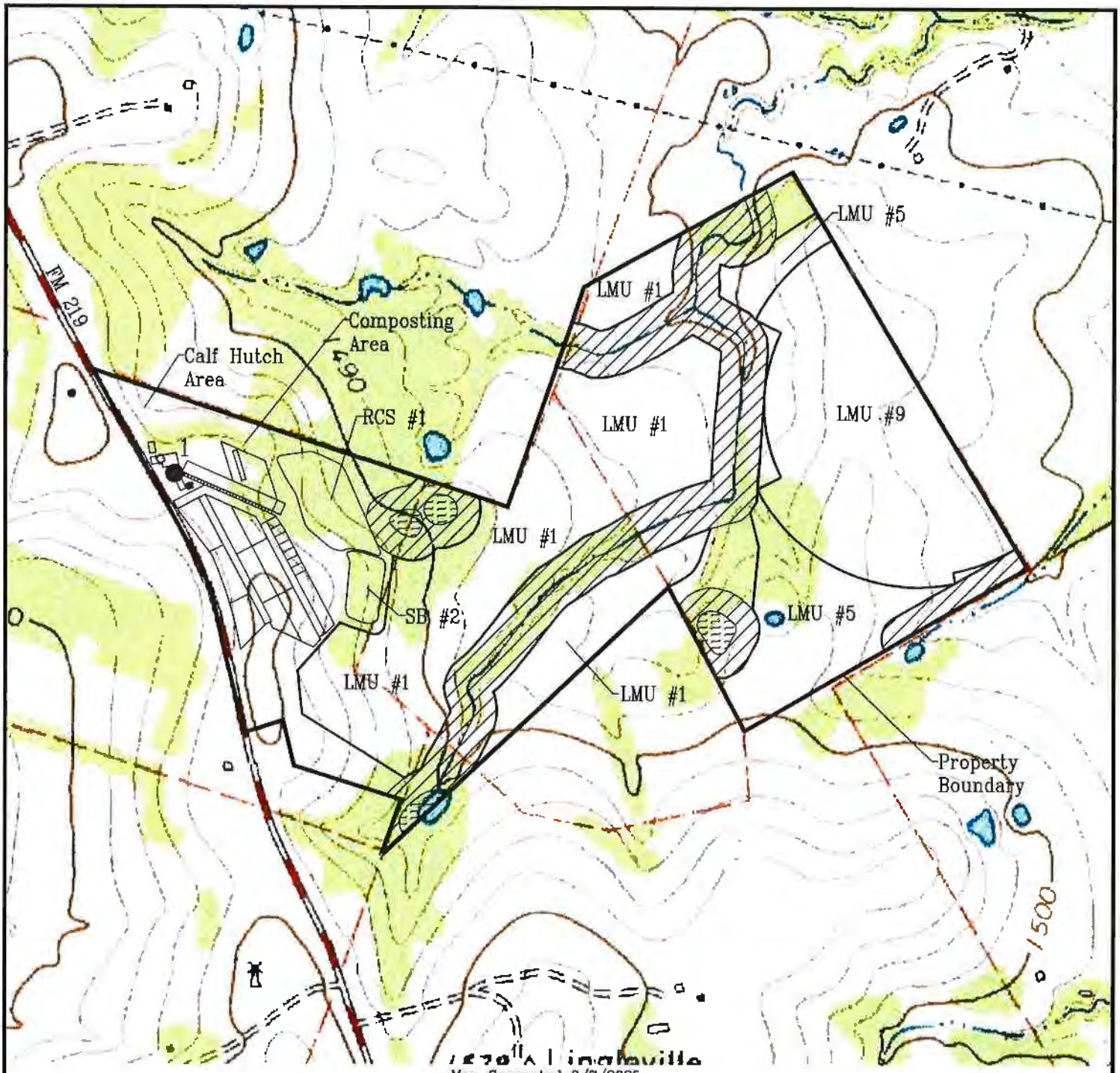
Table 5.4: Well Information

Map No.	Well ID	Best Management Practices
1	19367	• See attached approved well buffer exception.

Note: A copy of the well logs for onsite wells are attached.

No public water supply wells are located within 500 feet of the property boundary. All off-site wells within the required buffer distances required by this authorization are shown (on the Site Map) with their appropriate buffers. Wells outside the required buffer distances are shown for reference only.

All irrigation systems or water distribution systems into which any type of chemical or foreign substance, such as wastewater, is distributed into the water pumped from the well are required by 16 TAC §76 to install an in-line, automatic quick-closing check valve capable of preventing pollution of groundwater.



Map Generated 8/7/2025

LEGEND:

- Denotes Water Well
- Denotes 133' Buffer Zone
- Denotes Freshwater Pond

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450' 0 450' 900'

SCALED AS SHOWN

Source: USDA-NRCS. Geospatial Data Gateway. Available at: http://datagateway.nrcs.usda.gov/. Digital Raster Graphic County Mosaic by NRCS – Accessed December 2016.

- Refer to Figure 1.4 for a production area map.

Eemster West, LLC. Dublin, TX Erath County	Recharge Feature Map Figure 5.3 Page 29	ENVIRO-AG ENGINEERING, INC. Enviro-Ag Engineering, Inc. ENGINEERING CONSULTANTS 3404 Airway Boulevard AMARILLO, TEXAS 79118 TEL (806) 353-6123 FAX (806) 353-4132

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Supporting Documentation

USDA Soil Descriptions & Limitations

Texas Railroad Commission Map

Water District Well Location Map (if available)

Onsite Well Logs (if available)

Physical Soil Properties

This table shows estimates of some physical characteristics and features that affect soil behavior. These estimates are given for the layers of each soil in the survey area. The estimates are based on field observations and on test data for these and similar soils.

Depth to the upper and lower boundaries of each layer is indicated.

Particle size is the effective diameter of a soil particle as measured by sedimentation, sieving, or micrometric methods. Particle sizes are expressed as classes with specific effective diameter class limits. The broad classes are sand, silt, and clay, ranging from the larger to the smaller.

Sand as a soil separate consists of mineral soil particles that are 0.05 millimeter to 2 millimeters in diameter. In this table, the estimated sand content of each soil layer is given as a percentage, by weight, of the soil material that is less than 2 millimeters in diameter.

Silt as a soil separate consists of mineral soil particles that are 0.002 to 0.05 millimeter in diameter. In this table, the estimated silt content of each soil layer is given as a percentage, by weight, of the soil material that is less than 2 millimeters in diameter.

Clay as a soil separate consists of mineral soil particles that are less than 0.002 millimeter in diameter. In this table, the estimated clay content of each soil layer is given as a percentage, by weight, of the soil material that is less than 2 millimeters in diameter.

The content of sand, silt, and clay affects the physical behavior of a soil. Particle size is important for engineering and agronomic interpretations, for determination of soil hydrologic qualities, and for soil classification.

The amount and kind of clay affect the fertility and physical condition of the soil and the ability of the soil to adsorb cations and to retain moisture. They influence shrink-swell potential, saturated hydraulic conductivity (Ksat), plasticity, the ease of soil dispersion, and other soil properties. The amount and kind of clay in a soil also affect tillage and earthmoving operations.

Moist bulk density is the weight of soil (ovendry) per unit volume. Volume is measured when the soil is at field moisture capacity, that is, the moisture content at 1/3- or 1/10-bar (33kPa or 10kPa) moisture tension. Weight is determined after the soil is dried at 105 degrees C. In the table, the estimated moist bulk density of each soil horizon is expressed in grams per cubic centimeter of soil material that is less than 2 millimeters in diameter. Bulk density data are used to compute linear extensibility, shrink-swell potential, available water capacity, total pore space, and other soil properties. The moist bulk density of a soil indicates the pore space available for water and roots. Depending on soil texture, a bulk density of more than 1.4 can restrict water storage and root penetration. Moist bulk density is influenced by texture, kind of clay, content of organic matter, and soil structure.

Saturated hydraulic conductivity (Ksat) refers to the ease with which pores in a saturated soil transmit water. The estimates in the table are expressed in terms of micrometers per second. They are based on soil characteristics observed in the field, particularly structure, porosity, and texture. Saturated hydraulic conductivity (Ksat) is considered in the design of soil drainage systems and septic tank absorption fields.

Available water capacity refers to the quantity of water that the soil is capable of storing for use by plants. The capacity for water storage is given in inches of water per inch of soil for each soil layer. The capacity varies, depending on soil properties that affect retention of water. The most important properties are the content of organic matter, soil texture, bulk density, and soil structure. Available water capacity is an important factor in the choice of plants or crops to be grown and in the design and management of irrigation systems. Available water capacity is not an estimate of the quantity of water actually available to plants at any given time.

Linear extensibility refers to the change in length of an unconfined clod as moisture content is decreased from a moist to a dry state. It is an expression of the volume change between the water content of the clod at 1/3- or 1/10-bar tension (33kPa or 10kPa tension) and oven dryness. The volume change is reported in the table as percent change for the whole soil. The amount and type of clay minerals in the soil influence volume change.

Linear extensibility is used to determine the shrink-swell potential of soils. The shrink-swell potential is low if the soil has a linear extensibility of less than 3 percent; moderate if 3 to 6 percent; high if 6 to 9 percent; and very high if more than 9 percent. If the linear extensibility is more than 3, shrinking and swelling can cause damage to buildings, roads, and other structures and to plant roots. Special design commonly is needed.

Organic matter is the plant and animal residue in the soil at various stages of decomposition. In this table, the estimated content of organic matter is expressed as a percentage, by weight, of the soil material that is less than 2 millimeters in diameter. The content of organic matter in a soil can be maintained by returning crop residue to the soil.

Organic matter has a positive effect on available water capacity, water infiltration, soil organism activity, and tilth. It is a source of nitrogen and other nutrients for crops and soil organisms.

Erosion factors are shown in the table as the K factor (Kw and Kf) and the T factor. Erosion factor K indicates the susceptibility of a soil to sheet and rill erosion by water. Factor K is one of six factors used in the Universal Soil Loss Equation (USLE) and the Revised Universal Soil Loss Equation (RUSLE) to predict the average annual rate of soil loss by sheet and rill erosion in tons per acre per year. The estimates are based primarily on percentage of silt, sand, and organic matter and on soil structure and Ksat. Values of K range from 0.02 to 0.69. Other factors being equal, the higher the value, the more susceptible the soil is to sheet and rill erosion by water.

Erosion factor Kw indicates the erodibility of the whole soil. The estimates are modified by the presence of rock fragments.

Erosion factor Kf indicates the erodibility of the fine-earth fraction, or the material less than 2 millimeters in size.

Erosion factor T is an estimate of the maximum average annual rate of soil erosion by wind and/or water that can occur without affecting crop productivity over a sustained period. The rate is in tons per acre per year.

Wind erodibility groups are made up of soils that have similar properties affecting their susceptibility to wind erosion in cultivated areas. The soils assigned to group 1 are the most susceptible to wind erosion, and those assigned to group 8 are the least susceptible. The groups are described in the "National Soil Survey Handbook."

Wind erodibility index is a numerical value indicating the susceptibility of soil to wind erosion, or the tons per acre per year that can be expected to be lost to wind erosion. There is a close correlation between wind erosion and the texture of the surface layer, the size and durability of surface clods, rock fragments, organic matter, and a calcareous reaction. Soil moisture and frozen soil layers also influence wind erosion.

Reference:
United States Department of Agriculture, Natural Resources Conservation Service. National soil survey handbook, title 430-VI. (http://soils.usda.gov)

Report—Physical Soil Properties

Physical Soil Properties–Erath County, Texas															
Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensibility	Organic matter	Erosion factors			Wind erodibility group	Wind erodibility index
										Kw	Kf	T		
	In	*Pct*	*Pct*	*Pct*	*g/cc*	*micro m/sec*	*In/In*	*Pct*	*Pct*					
CtC—Clairette loam, 3 to 5 percent slopes														
Clairette, loam	0-4	35-44-75	9-36-50	10-20-24	1.47-1.62	4.00-14.00	0.15-0.19	0.7-2.3	0.5-1.5	.37	.37	5	6	48
	4-10	35-49-75	5-32-50	10-19-24	1.44-1.57	4.00-14.00	0.15-0.19	0.7-2.3	0.5-1.5	.37	.37			
	10-26	20-31-60	0-31-48	32-38-55	1.42-1.66	1.40-4.00	0.10-0.18	3.7-8.7	0.3-1.0	.28	.28			
	26-56	25-40-60	0-27-53	18-33-45	1.46-1.54	4.00-14.00	0.16-0.20	1.1-6.3	0.1-0.8	.24	.24			
	56-74	25-47-70	0-27-53	15-26-45	1.54-1.64	4.00-14.00	0.12-0.13	0.8-6.2	0.1-0.6	.28	.28			
	74-80	10-56-75	0-27-73	10-17-45	1.50-1.70	14.00-42.00	0.12-0.17	0.4-6.3	0.1-0.5	.32	.32			

Physical Soil Properties–Erath County, Texas														
Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensibility	Organic matter	Erosion factors			Wind erodibility group	Wind erodibility index
										Kw	Kf	T		
	In	*Pct*	*Pct*	*Pct*	*g/cc*	*micro m/sec*	*In/In*	*Pct*	*Pct*					
DwD—Duffau-Weatherford complex, 3 to 8 percent slopes														
Duffau, fine sandy loam	0-6	63-73-77	12-17-19	7-10-18	1.43-1.46	14.00-42.00	0.11-0.14	0.5-2.0	0.7-6.6	.32	.32	5	3	86
	6-11	63-72-80	12-20-23	6-8-16	1.58-1.62	14.00-42.00	0.10-0.13	0.4-1.7	0.5-0.7	.37	.37			
	11-28	42-54-66	12-18-23	21-28-35	1.48-1.53	4.00-14.00	0.10-0.18	2.3-4.5	0.6-1.2	.28	.28			
	28-52	42-54-68	11-20-23	17-26-37	1.50-1.60	4.00-14.00	0.11-0.18	1.7-4.8	0.3-0.6	.32	.32			
	52-60	42-56-69	11-19-25	15-25-39	1.53-1.62	4.00-14.00	0.12-0.18	1.4-5.1	0.1-0.5	.37	.37			
	60-79	49-58-83	8-27-38	6-15-22	1.49-1.56	4.00-42.00	0.13-0.17	0.4-2.3	0.1-0.4	.55	.55			
Weatherford, fine sandy loam	0-7	63-71-78	12-21-23	4-8-14	1.43-1.51	14.00-42.00	0.12-0.15	0.2-1.4	0.6-5.2	.37	.37	4	3	86
	7-22	44-62-67	12-14-24	18-24-32	1.49-1.61	4.00-14.00	0.13-0.14	1.9-4.0	0.6-1.2	.28	.28			
	22-35	43-55-70	12-17-23	18-28-34	1.54-1.60	4.00-14.00	0.10-0.12	1.8-4.3	0.2-1.1	.32	.32			
	35-41	19-60-82	9-28-50	6-12-33	1.43-1.61	4.00-42.00	0.11-0.15	0.4-4.0	0.1-0.5	.49	.49			
	41-79	28-63-85	8-25-56	2-12-25	1.74-1.91	0.42-4.00	0.01-0.03	0.0-2.7	0.0-0.2	.64	.64			

Physical Soil Properties–Erath County, Texas														
Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensibility	Organic matter	Erosion factors			Wind erodibility group	Wind erodibility index
										Kw	Kf	T		
	In	*Pct*	*Pct*	*Pct*	*g/cc*	*micro m/sec*	*In/In*	*Pct*	*Pct*					
FhC2—Fairy-Hico complex, 1 to 5 percent slopes, moderately eroded														
Fairy, moderately eroded	0-13	52-68-80	6-26-43	5-6-18	1.47-1.51	14.00-42.00	0.10-0.17	0.3-1.8	0.5-2.0	.55	.55	5	3	86
	13-45	30-55-75	0-21-52	17-24-34	1.40-1.60	4.00-14.00	0.05-0.17	1.3-4.6	0.3-1.3	.24	.24			
	45-68	40-45-90	0-33-56	4-22-31	1.50-1.66	4.00-42.00	0.05-0.17	0.0-2.8	0.1-0.5	.32	.32			
	68-80	5-15-75	0-43-53	5-42-45	1.60-1.76	0.42-42.00	0.12-0.18	0.0-6.1	0.0-0.5	.32	.32			
Hico, moderately eroded	0-12	55-65-80	6-24-39	6-11-18	1.46-1.51	14.00-42.00	0.10-0.15	0.4-2.0	0.5-2.0	.28	.28	5	3	86
	12-51	30-55-75	0-17-48	17-28-34	1.44-1.64	4.00-14.00	0.05-0.17	1.7-4.4	0.3-1.3	.20	.20			
	51-80	40-60-90	0-24-50	4-16-31	1.53-1.64	4.00-42.00	0.05-0.17	0.1-3.5	0.1-0.5	.28	.28			
Ma—Maloterre gravelly clay loam, 1 to 8 percent slopes														
Maloterre	0-5	20-31-45	20-35-45	30-34-40	1.37-1.39	4.00-14.00	0.14-0.16	2.6-5.6	0.5-1.0	.15	.28	1	5	56
	5-20	—	—	—	—	0.42-14.00	—	—	—					

Physical Soil Properties–Erath County, Texas														
Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensibility	Organic matter	Erosion factors			Wind erodibility group	Wind erodibility index
										Kw	Kf	T		
	In	*Pct*	*Pct*	*Pct*	*g/cc*	*micro m/sec*	*In/In*	*Pct*	*Pct*					
Pd—Purves-Dugout-Maloterre complex, 1 to 20 percent slopes														
Purves, stony clay	0-8	8-25-40	7-28-40	40-48-55	1.16-1.35	0.42-1.40	0.11-0.20	4.1-9.3	1.0-5.0	.05	.10	1	5	56
	8-12	8-26-40	20-29-54	35-45-55	1.17-1.47	0.42-4.00	0.08-0.18	2.9-10.8	1.0-4.0	.15	.15			
	12-14	8-26-40	20-29-54	35-45-55	1.21-1.47	0.42-4.00	0.04-0.07	1.0-7.3	1.0-3.0	.05	.17			
	14-24	—	—	—	—	0.42-14.00	—	—	—					
Dugout, gravelly clay loam	0-8	22-30-42	28-42-51	27-28-35	1.31-1.47	1.40-4.00	0.06-0.15	1.9-5.4	1.0-2.0	.15	.28	1	5	56
	8-18	20-23-40	28-48-60	15-29-35	1.40-1.53	1.40-4.00	0.07-0.16	0.0-4.9	0.1-1.2	.28	.28			
	18-28	—	—	—	—	0.42-14.00	—	—	—					
Maloterre, gravelly clay loam	0-8	30-35-45	24-36-43	27-29-35	1.18-1.40	4.00-14.00	0.06-0.11	1.8-6.0	1.0-7.0	.15	.24	1	5	56
	8-18	—	—	—	—	0.01-0.42	—	—	—					
WaB—Hassee fine sandy loam, 1 to 3 percent slopes														
Hassee	0-12	-69-	-16-	10-15-20	1.50-1.65	4.00-14.00	0.11-0.17	0.0-2.9	0.5-2.0	.32	.32	5	3	86
	12-50	-18-	-29-	45-53-60	1.30-1.55	0.01-0.42	0.12-0.18	6.0-8.9	0.5-1.0	.24	.24			
	50-60	-24-	-29-	35-48-60	1.30-1.55	0.01-0.42	0.12-0.18	6.0-8.9	0.0-0.5	.28	.28			

Physical Soil Properties–Erath County, Texas															
Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensibility	Organic matter	Erosion factors			Wind erodibility group	Wind erodibility index
										Kw	Kf	T		
	In	*Pct*	*Pct*	*Pct*	*g/cc*	*micro m/sec*	*In/In*	*Pct*	*Pct*					
WoB—Windthorst very fine sandy loam, 1 to 5 percent slopes														
Windthorst, very fine sandy loam	0-8	52-68-80	5-21-40	5-11-18	1.42-1.60	14.00-42.00	0.10-0.17	0.2-1.5	0.5-2.0	.43	.43	5	3	86
	8-33	30-46-60	5-16-35	35-38-50	1.43-1.60	1.40-4.00	0.10-0.20	4.4-7.6	0.2-1.0	.28	.28			
	33-46	30-46-70	5-18-35	25-36-50	1.38-1.60	1.40-14.00	0.10-0.20	2.4-7.6	0.2-1.0	.32	.32			
	46-80	30-65-75	0-25-53	5-10-45	1.45-1.70	1.40-42.00	0.11-0.18	0.1-6.5	0.0-0.5	.55	.55			
WoB2—Windthorst fine sandy loam, 1 to 5 percent slopes, moderately eroded														
Windthorst, moderately eroded	0-4	52-67-80	5-21-40	5-12-18	1.42-1.60	14.00-42.00	0.10-0.17	0.3-1.5	0.5-2.0	.28	.28	5	3	86
	4-33	30-46-60	5-16-35	35-38-50	1.43-1.60	1.40-4.00	0.10-0.20	4.4-7.6	0.2-1.0	.28	.28			
	33-46	30-46-70	5-18-35	25-36-50	1.38-1.60	1.40-14.00	0.10-0.20	2.4-7.6	0.2-1.0	.32	.32			
	46-80	30-65-75	0-25-53	5-10-45	1.45-1.70	1.40-42.00	0.11-0.18	0.1-6.5	0.0-0.5	.55	.55			

Data Source Information

Soil Survey Area: Erath County, Texas
Survey Area Data: Version 21, Aug 30, 2024

RUSLE2 Related Attributes

This report summarizes those soil attributes used by the Revised Universal Soil Loss Equation Version 2 (RUSLE2) for the map units in the selected area. The report includes the map unit symbol, the component name, and the percent of the component in the map unit. Soil property data for each map unit component include the hydrologic soil group, erosion factor Kf for the surface horizon, erosion factor T, and the representative percentage of sand, silt, and clay in the mineral surface horizon. Missing surface data may indicate the presence of an organic layer.

Report—RUSLE2 Related Attributes

Soil properties and interpretations for erosion runoff calculations. The surface mineral horizon properties are displayed or the first mineral horizon below an organic surface horizon. Organic horizons are not displayed.

RUSLE2 Related Attributes–Erath County, Texas

Map symbol and soil name	Pct. of map unit	Slope length (ft)	Hydrologic group	Kf	T factor	Representative value		
						% Sand	% Silt	% Clay
CtC—Clairette loam, 3 to 5 percent slopes								
Clairette, loam	90	180	C	.37	5	44.0	36.0	20.0
DwD—Duffau-Weatherford complex, 3 to 8 percent slopes								
Duffau, fine sandy loam	48	151	B	.32	5	73.0	17.0	10.0
Weatherford, fine sandy loam	29	141	B	.37	4	71.0	21.0	8.0
FhC2—Fairy-Hico complex, 1 to 5 percent slopes, moderately eroded								
Fairy, moderately eroded	45	180	B	.55	5	68.0	26.0	6.0
Hico, moderately eroded	35	200	B	.28	5	65.0	24.0	11.0
Ma—Maloterre gravelly clay loam, 1 to 8 percent slopes								
Maloterre	80	161	D	.28	1	31.0	35.0	34.0
Pd—Purves-Dugout-Maloterre complex, 1 to 20 percent slopes								
Purves, stony clay	37	200	D	.10	1	25.0	27.5	47.5
Dugout, gravelly clay loam	25	161	D	.28	1	30.0	42.0	28.0
Maloterre, gravelly clay loam	22	180	D	.24	1	35.0	36.0	29.0
WaB—Hassee fine sandy loam, 1 to 3 percent slopes								
Hassee	100	200	D	.32	5	68.8	16.2	15.0

RUSLE2 Related Attributes–Erath County, Texas								
Map symbol and soil name	Pct. of map unit	Slope length (ft)	Hydrologic group	Kf	T factor	Representative value		
						% Sand	% Silt	% Clay
WoB—Windthorst very fine sandy loam, 1 to 5 percent slopes								
Windthorst, very fine sandy loam	85	298	C	.43	5	68.0	21.0	11.0
WoB2—Windthorst fine sandy loam, 1 to 5 percent slopes, moderately eroded								
Windthorst, moderately eroded	85	298	C	.28	5	67.0	21.0	12.0

Data Source Information

Soil Survey Area: Erath County, Texas
Survey Area Data: Version 21, Aug 30, 2024

Selected Soil Interpretations

This report allows the customer to produce a report showing the results of the soil interpretation(s) of his or her choice. It is useful when a standard report that displays the results of the selected interpretation(s) is not available.

When customers select this report, they are presented with a list of interpretations with results for the selected map units. The customer may select up to three interpretations to be presented in table format.

For a description of the particular interpretations and their criteria, use the "Selected Survey Area Interpretation Descriptions" report.

Report—Selected Soil Interpretations

Selected Soil Interpretations–Erath County, Texas							
Map symbol and soil name	Pct. of map unit	AWM - Irrigation Disposal of Wastewater		AWM - Land Application of Municipal Sewage Sludge		ENG - Sewage Lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
CtC—Clairette loam, 3 to 5 percent slopes							
Clairette, loam	90	Somewhat limited		Somewhat limited		Somewhat limited	
		Slow water movement	0.37	Slow water movement	0.37	Seepage	0.50
		Too steep for surface application	0.08			Slope	0.32
DwD—Duffau-Weatherford complex, 3 to 8 percent slopes							
Duffau, fine sandy loam	48	Somewhat limited		Not limited		Somewhat limited	
		Too steep for surface application	0.68			Slope	0.92
						Seepage	0.50
Weatherford, fine sandy loam	29	Somewhat limited		Somewhat limited		Very limited	
		Slow water movement	0.96	Slow water movement	0.96	Slope	1.00
		Too steep for surface application	0.92	Too acid	0.31	Seepage	1.00
		Too acid	0.31	Droughty	0.13	Depth to soft bedrock	0.99
		Droughty	0.13				
		Too steep for sprinkler application	0.03				

Selected Soil Interpretations–Erath County, Texas							
Map symbol and soil name	Pct. of map unit	AWM - Irrigation Disposal of Wastewater		AWM - Land Application of Municipal Sewage Sludge		ENG - Sewage Lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
FhC2—Fairy-Hico complex, 1 to 5 percent slopes, moderately eroded							
Fairy, moderately eroded	45	Very limited		Very limited		Very limited	
		Slow water movement	1.00	Slow water movement	1.00	Seepage	1.00
		Seepage, porous bedrock	0.50			Slope	0.32
		Too steep for surface application	0.08				
Hico, moderately eroded	35	Not limited		Not limited		Very limited	
						Seepage	1.00
						Slope	0.08
Ma—Maloterre gravelly clay loam, 1 to 8 percent slopes							
Maloterre	80	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to hard bedrock	1.00
		Droughty	1.00	Droughty	1.00	Slope	0.68
		Seepage, porous bedrock	0.50			Seepage	0.21
		Too steep for surface application	0.32				

Selected Soil Interpretations–Erath County, Texas							
Map symbol and soil name	Pct. of map unit	AWM - Irrigation Disposal of Wastewater		AWM - Land Application of Municipal Sewage Sludge		ENG - Sewage Lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
Pd—Purves-Dugout-Maloterre complex, 1 to 20 percent slopes							
Purves, stony clay	37	Very limited		Very limited		Very limited	
		Droughty	1.00	Droughty	1.00	Depth to hard bedrock	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00	Slope	0.08
		Slow water movement	1.00	Slow water movement	1.00		
		Large stones on the surface	1.00	Large stones on the surface	1.00		
		Seepage, porous bedrock	0.50				
Dugout, gravelly clay loam	25	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to hard bedrock	1.00
		Droughty	1.00	Droughty	1.00	Slope	0.68
		Seepage, porous bedrock	0.50	Slow water movement	0.37	Seepage	0.21
		Slow water movement	0.37				
		Too steep for surface application	0.32				
Maloterre, gravelly clay loam	22	Very limited		Very limited		Very limited	
		Slow water movement	1.00	Slow water movement	1.00	Depth to hard bedrock	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00	Slope	0.32
		Droughty	1.00	Droughty	1.00		
		Seepage, porous bedrock	0.50				
		Too steep for surface application	0.08				
WaB—Hassee fine sandy loam, 1 to 3 percent slopes							
Hassee	100	Very limited		Very limited		Very limited	
		Slow water movement	1.00	Slow water movement	1.00	Depth to saturated zone	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00		

Selected Soil Interpretations–Erath County, Texas							
Map symbol and soil name	Pct. of map unit	AWM - Irrigation Disposal of Wastewater		AWM - Land Application of Municipal Sewage Sludge		ENG - Sewage Lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
WoB—Windthorst very fine sandy loam, 1 to 5 percent slopes							
Windthorst, very fine sandy loam	85	Somewhat limited		Somewhat limited		Somewhat limited	
		Slow water movement	0.37	Slow water movement	0.37	Depth to soft bedrock	0.77
		Too acid	0.08	Too acid	0.08	Seepage	0.50
WoB2—Windthorst fine sandy loam, 1 to 5 percent slopes, moderately eroded							
Windthorst, moderately eroded	85	Somewhat limited		Somewhat limited		Somewhat limited	
		Slow water movement	0.37	Slow water movement	0.37	Depth to soft bedrock	0.77
		Too acid	0.08	Too acid	0.08	Seepage	0.50

Data Source Information

Soil Survey Area: Erath County, Texas
Survey Area Data: Version 21, Aug 30, 2024

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	Located upgradient from the pens outside the production area. Well head is enclosed in a well house with a surface slab. A backflow device is installed on the well.

*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*
Duffau: DuD Hassee: WaB	Slope; Seepage Slow Water Movement Depth to Saturated Zone Percs Slowly	No land application to inundated soils. Land application will not exceed agronomic rates for nutrients and soil hydraulic rates. Refer to the nutrient management plan (NMP).
Purves Dugout: Pd	Droughty Bedrock Depth to Hard Bedrock	Land application not to exceed agronomic rates for nutrients and soil hydraulic rates (refer to NMP). Irrigation events shall be managed to assist in maintaining soil moisture levels within the range of available water holding capacity of that land management unit.

*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 / Parlor Chemicals / Lubricants	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.

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, tbe 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 tbirty (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.

(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 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) The permittee may continue the operation and use of any existing holding pens and RCSs located within the required well buffer zones provided they are in accordance with the facility's approved recharge feature evaluation and certification. Buffer zone variance documentation must be kept on-site and made available to TCEQ personnel upon request. A Well Buffer Exception request for Well #1 was submitted to and approved by the TCEQ Water Quality Assessment Team. Permittee shall implement the requirements of the Well Buffer Exception approval by TCEQ. Table 3 below

Eemster West

Texas Water Development Board

August 18, 2025

Well Reports

TWDB Groundwater

0 0.07 0.15 0.3 mi

0 0.1 0.2 0.4 km

1:9,028

Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

Public GIS Viewer Legend

Well Number

Well Locations

- Permitted Location
- Dry Hole
- Oil
- Gas
- Oil / Gas
- Plugged Oil
- Plugged Gas
- Canceled / Abandoned Location
- Plugged Oil / Gas
- Injection / Disposal
- Core Test
- Sulfur Test
- Storage from Oil
- Storage from Gas
- Shut-In Oil
- Shut-In Gas
- Injection / Disposal from Oil
- Injection / Disposal from Gas
- Injection / Disposal from Oil / Gas
- Geothermal
- Brine Mining
- Water Supply
- Water Supply from Oil
- Water Supply from Gas
- Water Supply from Oil / Gas
- Observation
- Observation from Oil
- Observation from Gas
- Observation from Oil / Gas
- Storage
- Service
- Service from Oil
- Service from Gas
- Service from Oil / Gas
- Storage from Oil / Gas
- Injection / Disposal from Storage
- Injection / Disposal from Storage / Oil
- Injection / Disposal from Storage / Gas
- Injection / Disposal from Storage / Oil / Gas
- Observation from Storage
- Observation from Storage / Oil
- Observation from Storage / Gas
- Observation from Storage / Oil / Gas
- Service from Storage
- Service from Storage / Oil
- Service from Storage / Gas
- Service from Storage / Oil / Gas
- Plugged Storage
- Plugged Storage / Oil

Public GIS Viewer Legend

- Plugged Storage / Gas
- Plugged Storage Oil / Gas
- Brine Mining
- Brine Mining / Oil
- Brine Mining / Gas
- Brine Mining / Oil / Gas
- Injection / Disposal from Brine Mining
- Injection / Disposal from Brine Mining / Oil
- Injection / Disposal from Brine Mining / Gas
- Injection / Disposal from Brine Mining / Oil / Gas
- Observation from Brine Mining
- Observation from Brine Mining / Oil
- Observation from Brine Mining / Gas
- Observation from Brine Mining / Oil / Gas
- Service from Brine Mining
- Service from Brine Mining / Oil
- Service from Brine Mining / Gas
- Service from Brine Mining / Oil / Gas
- Plugged Brine Mining
- Plugged Brine Mining / Oil
- Plugged Brine Mining / Gas
- Plugged Brine Mining / Oil / Gas
- Storage / Brine Mining
- Storage / Brine Mining / Oil
- Storage / Brine Mining / Gas
- Storage / Brine Mining / Oil / Gas
- Injection / Disposal from Storage / Brine Mining
- Injection / Disposal from Storage / Brine Mining / Oil
- Injection / Disposal from Storage / Brine Mining / Gas
- Injection / Disposal from Storage / Brine Mining / Oil / Gas
- Observation from Storage / Brine Mining
- Observation from Storage / Brine Mining / Oil
- Observation from Storage / Brine Mining / Gas
- Observation from Storage / Brine Mining / Oil / Gas
- Plugged Storage / Brine Mining
- Plugged Storage / Brine Mining / Oil
- Plugged Storage / Brine Mining / Gas
- Plugged Storage / Brine Mining / Oil / Gas

Orphan Wells

Commercial Disposal

Injection/Disposal

HCTS Deeper than 15,000 ft.

Public GIS Viewer Legend

High Cost Tight Sands

EOR H13 Oil Wells

Well Logs

Horiz/Dir Surface Locations

- Horizontal Well
- Directional Well

Horizontal/Directional Lines

LPGAS Sites

QPipelines

Pipelines

Bay Tracts

Offshore Areas

Offshore Tracts

Water Lines

Subdivisions

Railroads

Surveys

Quads

Alert Areas

Water

City Limits

Counties

Operator Cleanup Program Sites

- Active
- Closed

Voluntary Cleanup Program Sites

- VCP, Accepted
- VCP, Closed

Brownfield Response Program Sites

- Brownfield, Accepted
- Brownfield, Closed

Commercial Waste Disposal Sites & Discharge Permits

- Commercial Waste Disposal
- Discharge Permits

Oil and Gas Districts

AED Districts

Pipeline Safety Regions

August 18, 2025

1:18,056

0 0.13 0.25 0.5 mi

0 0.2 0.4 0.8 km

Maxar

6.0 SURFACE WATER & TMDL ASSESSMENT

6.1 Surface Water Assessment

Figure 6.1, Aerial Photograph, shows the existing land features, production area, Land Management Unit boundaries, and areas designated as "water in the state," as defined by 30 TAC §321.32(63). Buffer zones between waters in the state and LMUs will be maintained as required in 30 TAC §321.40(h) plus additional filter strips specified by NRCS Code 393, as required in 30 TAC §321.42(w)(2). Based on NRCS Code 393, Appendix 3, Table 1, and LMU slope and soil types, the buffer zones shown in the attached map will be maintained. According to NRCS, Codes 601 (applied to severely eroded areas) and 332 (applied to cropland) are not currently applicable to the LMUs at this facility. Should field conditions or cropping systems change, Codes 601 and 332 will be implemented as necessary.

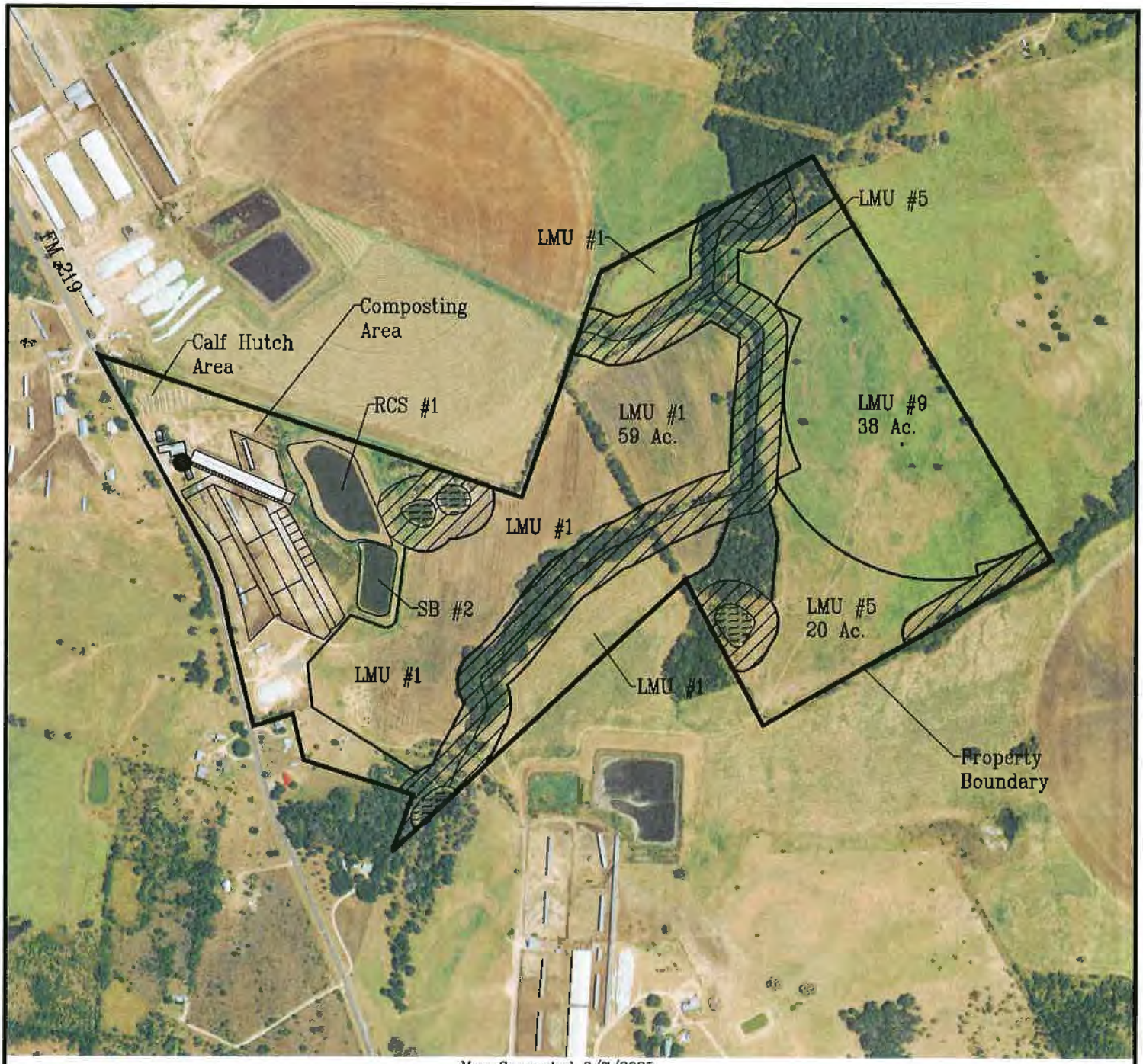
The "water in the state" designation is based on Enviro-Ag Engineering, Inc., site inspections, the permittee's knowledge of the property and the USDA-FSA aerial photograph (2017). The buffer zones and LMU boundaries in Figure 6.1 are submitted with this application for TCEQ approval.

6.2 TMDL Assessment

Eemster West, LLC is located in Segment 1255, Upper North Bosque River, Brazos River Basin, which is a 303(d)-listed watershed. To demonstrate that Eemster West Dairy is designed and will be constructed and operated in a manner that is consistent with the Phosphorus Total Maximum Daily Load (TMDL) and Implementation Plan approved in 2001 and to address the other listed impairments for this segment, the following practices have been or will be implemented:

1. Implement a Nutrient Utilization Plan that limits P application to crop requirement and incorporates a P reduction component on fields over 200 ppm P.
2. Limit maximum P level in soils to 200 ppm.
3. Perform annual soil sampling in accordance with the provisions of 30 TAC §321.42(k)-(m) and with Texas Cooperative Extension guidelines for composite sampling.
4. Implement a certified Comprehensive Nutrient Management Plan that meets the NRCS requirements for a whole-farm Resource Management System.
5. Maintain contracts with owners of third-party fields in accordance with 30 TAC §321.42(j)(1)-(4) and with applicable requirements of 30 TAC §321.36 and §321.40.
6. Operate the facility in accordance with 30 TAC §321.42 with additional Best Management Practices as follows:
    a. Scrape freestalls and cattle lanes to reduce or eliminate the need for flushing
    b. Excluding extraneous drainage areas from the RCSs (roof areas, etc.)

c. Reduce the potential for soil erosion and downgradient sediment deposition by maintaining permanent pastures and additional filter strips adjacent to waters in the state, as described above in Section 6.1



Map Generated 8/7/2025

LEGEND:

- Denotes Water Well
- Denotes 133' Buffer Zone
- Denotes Freshwater Pond

N
W E
S

400' 0 400' 800'

SCALED AS SHOWN

Source: USDA–NRCS. Geospatial Data Gateway. Available at: http://datagateway.nrcs.usda.gov/. Digital Raster Graphic County Mosaic by NRCS – Accessed Nov 2017.

• Refer to Figure 1.3 & 1.4 for overall facility maps.

Eemster West, LLC. Dublin, TX Erath County	Aerial Photograph Figure 6.1 Page 34	ENVIRO–AG ENGINEERING, INC. Enviro-Ag Engineering, Inc. ENGINEERING CONSULTANTS 3404 Airway Boulevard AMARILLO, TEXAS 79118 TEL (806) 353-6123 FAX (806) 353-4132

7.0 AIR STANDARD PERMIT REQUIREMENTS

7.1 Permit Requirements

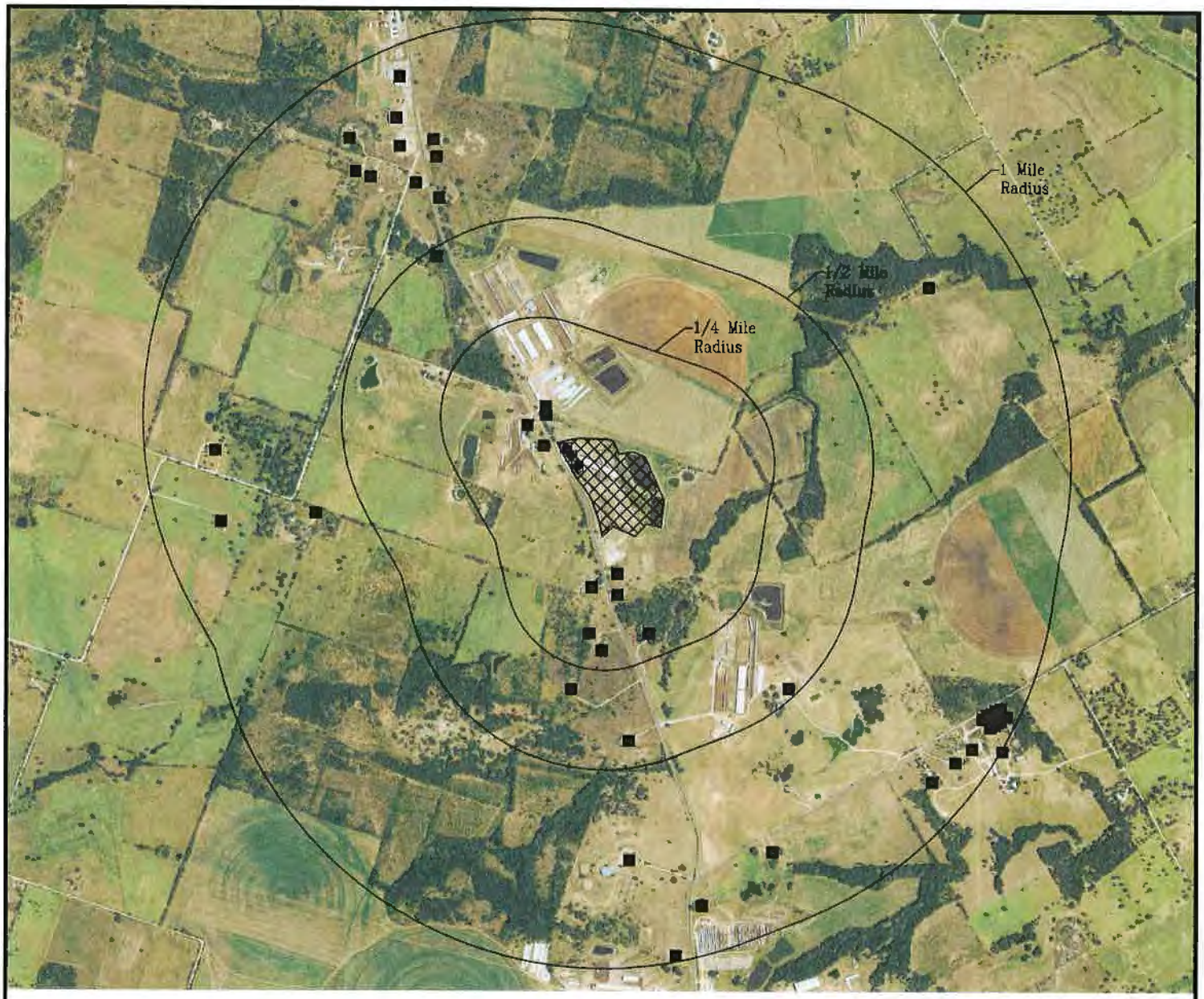
This facility was constructed prior to August 19, 1998. The facility meets the ¼-mile buffer option required in 30 TAC §321.43(j)(2) for facility expansion. The facility is designed, and will be operated, in accordance with the provisions and emissions limitations of the air standard permit in 30 TAC §321.43(j) regarding abatement of nuisance conditions, wastewater treatment, dust control and maintenance and housekeeping procedures. The facility uses an anaerobic treatment pond to minimize odors from process generated wastewater in accordance with §321.43(j)(3).

An Area Land Use Map (Figure 7.1) is attached depicting the locations of all occupied residences or business structures, schools (including associated recreational areas), churches, or public parks within 1 mile of the permanent odor sources of the facility. The map includes a north arrow, direction of prevailing wind, and scale. For the purposes of this application, the measurement of buffer distances is from the nearest edge of the permanent odor source to the occupied structure or designated recreational area identified on the Area Land Use Map (30 TAC §321.32(43)).

7.2 Odor control Plan

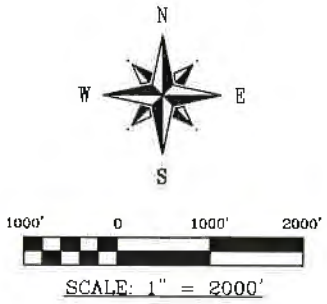
Per 30 TAC §321.43(j)(2)(F), the following Best Management Practices have been or will be implemented to control and reduce odors, dust and other air contaminants at Pulido Calf Ronch.

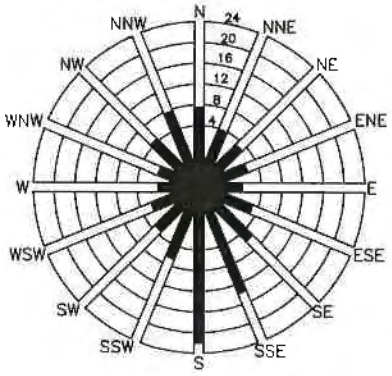
- Pen surfaces will be maintained to reduce ponding.
- The manure in the confinement pens will be removed on a regular basis (at least once annually) to prevent the manure from building up in the pens.
- Removal of manure and pond solids will be done in favorable wind conditions carrying odors away from nearby receptors. The TCEQ must be notified prior to RCS cleanout.
- Land application shall only occur from one hour after sunrise until one hour before sunset, unless written consent is obtained from current occupants of all residences within ¼-mile of the LMU boundary that receives waste or wastewater.
- Dust will be controlled on facility roads with the use of a portable water truck on an as-needed basis to minimize fugitive dust emissions.
- Dead animals will be disposed of by a commercial rendering service within 72-hours or composed on site.



Legend:
- ■ Denotes Occupied Structure
- ■ Denotes Applicant Owned Structure

Site Visit – August 4, 2025
Map Generated – August 7, 2025





ANNUAL WIND ROSE
LOCATION: STEPHENVILLE, TEXAS
PERIOD OF RECORD: 1984 – 1992
SOURCE: TCEQ WINDROSE DATA

Note:
Hatched area represents permanent odor sources. These include, but are not limited to, pens, confinement buildings, lagoons, RCSs, manure stockpile areas, separators. Permanent odor sources do not include any feed handling facilities, land application equipment or fields.

Source:
USDS-NRCS. Geospatial Data Gateway. Available at: http://datagateway.nrcs.usda.gov/. Digital Raster Graphic County Mosaic by NRCS – Accessed November 2017.

Eemster West, LLC. Dublin, TX Erath County	Area Land Use Map Figure 7.1 Page 36	ENVIRO-AG ENGINEERING, INC. Enviro-Ag Engineering, Inc. ENGINEERING CONSULTANTS 3404 Airway Boulevard AMARILLO, TEXAS 79118 TEL (806) 352-6122 FAX (806) 353-4132