

# Technical 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. Second notice (NAPD-Notice of Preliminary Decision)
  - English
  - Alternative Language (Spanish)
- 4. Application materials \*
- 5. Draft permit \*
- 6. Technical summary or fact sheet \*



# Portada de Paquete Técnico

### Este archivo contiene los siguientes documentos:

- 1. Resumen de la solicitud (en lenguaje sencillo)
  - Inglés
  - Idioma alternativo (español)
- 2. Primer aviso (NORI, Aviso de Recepción de Solicitud e Intención de Obtener un Permiso)
  - Inglés
  - Idioma alternativo (español)
- 3. Segundo aviso (NAPD, Aviso de Decisión Preliminar)
  - Inglés
  - Idioma alternativo (español)
- 4. Materiales de la solicitud \*\*
- 5. Proyecto de permiso \*\*
- 6. Resumen técnico u hoja de datos \*\*



## PLAIN LANGUAGE SUMMARY FOR TPDES OR TLAP PERMIT APPLICATIONS

### Plain Language Summary Template and Instructions for Texas Pollutant Discharge Elimination System (TPDES) and Texas Land Application (TLAP) Permit Applications

Applicants should use this template to develop a plain language summary as required by <u>Title 30, Texas Administrative Code (30 TAC), Chapter 39, Subchapter H</u>. Applicants may modify the template as necessary to accurately describe their facility as long as the summary includes the following information: (1) the function of the proposed plant or facility; (2) the expected output of the proposed plant or facility; (3) the expected pollutants that may be emitted or discharged by the proposed plant or facility; and (4) how the applicant will control those pollutants, so that the proposed plant will not have an adverse impact on human health or the environment.

Fill in the highlighted areas below to describe your facility and application in plain language. Instructions and examples are provided below. Make any other edits necessary to improve readability or grammar and to comply with the rule requirements.

If you are subject to the alternative language notice requirements in <u>30 TAC Section 39.426</u>, <u>you must provide a translated copy of the completed plain language summary in the</u> <u>appropriate alternative language as part of your application package</u>. For your convenience, a Spanish template has been provided below.

## ENGLISH TEMPLATE FOR TPDES or TLAP NEW/RENEWAL/AMENDMENT APPLICATIONS DOMESTIC WASTEWATER/STORMWATER

*The following summary is provided for this pending water quality permit application being reviewed by the Texas Commission on Environmental Quality as required by 30 TAC Chapter 39. 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.* 

Four Seasons Ranch MUD 1 (CN603401316) proposes to operate Four Seasons Ranch WWTP (RN TBD), an activated sludge process operating in the complete mix mode. The facility will be located at 0.6 miles southeast of the intersection of County Line Rd and Gorrell Rd, in , Denton County, Texas 76258. This is a new application to discharge at a daily flow up to 2,000,000 gallons per day of treated domestic wastewater.

Discharges from the facility are expected to contain five-day carbonaceous biochemical oxygen demand (CBOD<sub>5</sub>), total suspended solids (TSS), ammonia nitrogen (NH<sub>4</sub>-N) and E. *coli*. Domestic wastewater will be treated by an activated sludge process plant.

# PLANTILLA EN ESPAÑOL PARA SOLICITUDES NUEVAS/RENOVACIONES/ENMIENDAS DE TPDES o TLAP

#### AGUAS RESIDUALES DOMÉSTICAS /AGUAS PLUVIALES

*El siguiente resumen se proporciona para esta solicitud de permiso de calidad del agua pendiente que está siendo revisada por la Comisión de Calidad Ambiental de Texas según lo requerido por el Capítulo 39 del Código Administrativo de Texas 30. La información proporcionada en este resumen puede cambiar durante la revisión técnica de la solicitud y no es una representación ejecutiva fedérale de la solicitud de permiso.* 

Four Seasons Ranch MUD 1 (CN603401316) propone operar Four Seasons Ranch WWTP (RN TBD), un proceso de lodos activados que opera en el modo de mezcla completa. La instalación estará ubicada a 1.8 millas al noreste de la intersección de County Line Rd y Gorrell Rd, en Condado de Denton, Texas 76258. Esta es una nueva aplicación para descargar a un flujo diario de hasta 2,000,000 de galones por día de aguas residuales domésticas tratadas.

Se espera que las descargas de la instalación contengan una demanda bioquímica carbonosa de oxígeno (CBOD5) de cinco días, sólidos suspendidos totales (SST), nitrógeno amoniacal (NH4-N) y E. coli. Las aguas residuales domésticas serán tratadas por una planta de tratamiento de lodos activados.

## **TEXAS COMMISSION ON ENVIRONMENTAL QUALITY**



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

#### PROPOSED PERMIT NO. WQ0016620001

**APPLICATION.** Four Seasons Ranch Municipal Utility District 1 of Denton County, 16000 Dallas Parkway, Suite 350, Dallas, Texas 75248, has applied to the Texas Commission on Environmental Ouality (TCEO) for proposed Texas Pollutant Discharge Elimination System (TPDES) Permit No. WO0016620001 (EPA I.D. No. TX0146587) to authorize the discharge of treated wastewater at a volume not to exceed a daily average flow of 2,000,000 gallons per day. The domestic wastewater treatment facility will be located approximately 0.6 miles southeast of the intersection of Berend Road and Gorrell Road, near the city of Gunter, in Denton County, Texas 76258. The discharge route will be from the plant site to Mustang Creek; thence to Little Elm Creek; thence to Lake Lewisville. TCEQ received this application on September 12, 2024. The permit application will be available for viewing and copying at Pilot Point Community Library, 324 South Washington Street, Pilot Point, in Denton County, Texas and at Gunter Library and Museum, 110 South Highway 289, Suite 4, Gunter, in Grayson 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/tpdesapplications. 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=-96.846747,33.406575&level=18

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

**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 <u>www.tceq.texas.gov/goto/cid</u>. 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 <u>https://www14.tceq.texas.gov/epic/eComment/</u>, 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 <u>www.tceq.texas.gov/goto/pep</u>. Si desea información en Español, puede llamar al 1-800-687-4040.

Further information may also be obtained from Four Seasons Ranch Municipal Utility District 1 of Denton County at the address stated above or by calling Ms. Laura Preston, P.E., Assistant Project Manager, at 214-442-6579.

Issuance Date: October 18, 2024

## Comisión de Calidad Ambiental del Estado de Texas



#### MODIFICADO AVISO DE RECIBO DE LA SOLICITUD Y EL INTENTO DE OBTENER PERMISO PARA LA CALIDAD DEL AGUA

#### PERMISO PROPUESTO NO. WQ0016620001

SOLICITUD. Four Seasons Ranch Municipal Utility District 1 of Denton County, 16000 Dallas Parkway, Suite 350, Dallas, Texas 75248, ha solicitado a la Comisión de Calidad Ambiental del Estado de Texas (TCEQ) para el propuesto Permiso No. WQ0016620001 (EPA I.D. No. TX0146587) del Sistema de Eliminación de Descargas de Contaminantes de Texas (TPDES) para autorizar la descarga de aguas residuales tratadas en un volumen que no sobrepasa un flujo promedio diario de 2,000,000 galones por día. La planta está ubicada 0.6 millas al sudeste de la intersección de Berend Road y Gorrell Road en el Condado de Denton, Texas. La ruta de descarga es del sitio de la planta a hasta Mustang Creek, de allí a Little Elm Creek, de allí a Lewisville lago. La TCEQ recibió esta solicitud el 12 de septiembre de 2024. La solicitud para el permiso está disponible para leerla y copiarla en Pilot Point Community Library, 324 South Washington Street, Pilot Point in Denton County, Texas and at Van Alstvne Public Library, 151 West Cooper Street, Van Alstyne, in Grayson County, Texas. La solicitud (cualquier actualización y aviso inclusive) está disponible electrónicamente en la siguiente página web: https://www.tceq.texas.gov/permitting/wastewater/pending-permits/tpdes-applications. Este enlace a un mapa electrónico de la ubicación general del sitio o de la instalación es proporcionado como una cortesía y no es parte de la solicitud o del aviso. Para la ubicación exacta, consulte la solicitud.

https://gisweb.tceq.texas.gov/LocationMapper/?marker=-96.846747,33.406575&level=18

**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 reconsideración de la solicitud de lo contencioso. Una audiencia administrativa de lo contencios 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 específico. 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 DE LA TCEQ. Todos los comentarios escritos del

público y los para pedidos una reunión deben ser presentados a la Oficina del Secretario Principal, MC 105, TCEQ, P.O. Box 13087, Austin, TX 78711-3087 o por el internet at <u>www.tceq.texas.gov/about/comments.html</u>. 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. Si necesita más información en Español sobre esta solicitud para un permiso o el proceso del permiso, por favor llame a El Programa de Educación Pública de la TCEQ, sin cobro, al 1-800-687-4040. La información general sobre la TCEQ puede ser encontrada en nuestro sitio de la red: <u>www.tceq.texas.gov</u>.

También se puede obtener información adicional del Four Seasons Ranch Municipal Utility District 1 of Denton County a la dirección indicada arriba o llamando a Ms. Laura Preston, P.E. al <u>214-442-6579</u>.

Fecha de emission: 8 de noviembre de 2024

**Texas Commission on Environmental Quality** 



#### NOTICE OF APPLICATION AND PRELIMINARY DECISION FOR TPDES PERMIT FOR MUNICIPAL WASTEWATER

#### NEW

#### PERMIT NO. WQ0016620001

**APPLICATION AND PRELIMINARY DECISION.** Four Seasons Ranch Municipal Utility District 1 of Denton County, 16000 Dallas Parkway, Suite 350, Dallas, Texas 75248, has applied to the Texas Commission on Environmental Quality (TCEQ) for new Texas Pollutant Discharge Elimination System (TPDES) Permit No. WQ0016620001, to authorize the discharge of treated domestic wastewater at an annual average flow not to exceed 2,000,000 gallons per day. TCEQ received this application on September 12, 2024.

The facility will be located approximately 0.6 miles southeast of the intersection of Berend Road and Gorrell Road, in Denton County, Texas 76258. The treated effluent will be discharged to Mustang Creek, thence to Little Elm Creek, thence to Lake Lewisville in Segment No. 0823 of the Trinity River Basin. The unclassified receiving water use is limited aquatic life use for Mustang Creek. The designated uses for Segment No. 0823 are primary contact recreation, public water supply, and high aquatic life use. In accordance with 30 TAC § 307.5 and TCEQ's Procedures to Implement the Texas Surface Water Quality Standards (June 2010), an antidegradation review of the receiving waters was performed. A Tier 1 antidegradation review has preliminarily determined that existing water quality uses will not be impaired by this permit action. Numerical and narrative criteria to protect existing uses will be maintained. This review has preliminarily determined that no water bodies with exceptional, high, or intermediate aquatic life uses are present within the stream reach assessed; therefore, no Tier 2 degradation determination is required. No significant degradation of water quality is expected in water bodies with exceptional, high, or intermediate aquatic life uses downstream, and existing uses will be maintained and protected. The preliminary determination can be reexamined and may be modified if new information is received. This link to an electronic map of the site or facility's general location is provided as a public courtesy and is not part of the application or notice. For the exact location, refer to the application.

https://gisweb.tceq.texas.gov/LocationMapper/?marker=-96.846747,33.406575&level=18

The TCEQ Executive Director has completed the technical review of the application and prepared a draft permit. The draft permit, if approved, would establish the conditions under which the facility must operate. The Executive Director has made a preliminary decision that this permit, if issued, meets all statutory and regulatory requirements. The permit application, Executive Director's preliminary decision, and draft permit are available for viewing and copying at Pilot Point Community Library, 324 South Washington Street, Pilot Point, in Denton County, Texas and at Van Alstyne Public Library, 151 West Cooper Street, Van Alstyne, in

Grayson County, Texas. The application, including any updates, and associated notices are available electronically at the following webpage: https://www.tceq.texas.gov/permitting/wastewater/pending-permits/tpdes-applications.

**ALTERNATIVE LANGUAGE NOTICE.** Alternative language notice in Spanish is available at <u>https://www.tceq.texas.gov/permitting/wastewater/plain-language-summaries-and-public-notices</u>.

El aviso de idioma alternativo en español está disponible en <u>https://www.tceq.texas.gov/permitting/wastewater/plain-language-summaries-and-public-</u>notices

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

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

TO REQUEST A CONTESTED CASE HEARING, YOU MUST INCLUDE THE FOLLOWING ITEMS IN YOUR REQUEST: your name, address, phone number; applicant's name and 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.

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

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

All written public comments and public meeting requests must be submitted to the Office of the Chief Clerk, MC 105, Texas Commission on Environmental Quality, P.O. Box 13087, Austin, TX 78711-3087 or electronically at <a href="http://www.tceq.texas.gov/goto/comment">www.tceq.texas.gov/goto/comment</a> within 30 days from the date of newspaper publication of this notice.

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

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

Further information may also be obtained from Four Seasons Ranch Municipal Utility District 1 of Denton County at the address stated above or by calling Ms. Laura Preston, P.E., Assistant Project Manager, at 214-442-6579.

Issuance Date: April 22, 2025

### **Comisión De Calidad Ambiental Del Estado De Texas**



#### AVISO DE LA SOLICITUD Y DECISIÓN PRELIMINAR PARA EL PERMISO DEL SISTEMA DE ELIMINACION DE DESCARGAS DE CONTAMINANTES DE TEXAS (TPDES) PARA AGUAS RESIDUALES MUNICIPALES

#### NUEVO

#### PERMISO NO. WQ0016620001

**SOLICITUD Y DECISIÓN PRELIMINAR.** Four Seasons Ranch Municipal Utility District 1 of Denton County, 16000 Dallas Parkway, Suite 350, Dallas, Texas 75248 ha solicitado a la Comisión de Calidad Ambiental del Estado de Texas (TCEQ) por un nuevo para autorizar la descarga de aguas residuales tratadas en un volumen que no sobrepasa un flujo promedio diario de 2,000,000 galones por día. La TCEQ recibió esta solicitud el 12 de septiembre de 2024.

La planta está ubicada en aproximadamente 0,6 millas al sureste de la intersección de Berend Road y Gorrell Road en el Condado de Denton, Texas. Este enlace a un mapa electrónico de la ubicación general del sitio o de la instalación es proporcionado como una cortesía y no es parte de la solicitud o del aviso. Para la ubicación exacta, consulte la solicitud. <u>https://gisweb.tceq.texas.gov/LocationMapper/?marker=-96.846747,33.406575&level=18</u>

El efluente tratado es descargado al Mustang Creek, de allí a Little Elm Creek, de allí al lago Lewisville en el Segmento No. 0823 de la Cuenca del Río Trinity. Los usos no clasificados de las aguas receptoras son limitados usos de la vida acuática para Mustang Creek. Los usos designados para el Segmento No. 0823 son elevados uso de vida acuática; abastecimiento de agua potable; recreación contacto.

**Option 1:** De acuerdo con la 30 TAC §307.5 y los procedimientos de implementación de la TCEQ (Enero 2010) para las Normas de Calidad de Aguas Superficiales en Texas, fue realizada una revisión de la antidegradación de las aguas recibidas. Una revisión de antidegradación del Nivel 1 ha determinado preliminarmente que los usos de la calidad del agua existente no serán perjudicados por la acción de este permiso. Se mantendrá un criterio narrativo y numérico para proteger los usos existentes. Una revisión del Nivel 2 ha determinado preliminarmente que no se espera ninguna degradación significativa en Clear Creek, Little Elm Creek, y lago Lewisville, el cual se ha identificado que tiene altos usos en la vida acuática. Los usos existentes serán mantenidos y protegidos. La determinación preliminar puede ser reexaminada y puede ser modificada, si se recibe alguna información nueva.

El Director Ejecutivo de la TCEQ ha completado la revisión técnica de la solicitud y ha preparado un borrador del permiso. El borrador del permiso, si es aprobado, establecería las condiciones bajo las cuales la instalación debe operar. El Director Ejecutivo ha tomado una decisión preliminar que si este permiso es emitido, cumple con todos los requisitos normativos y legales. La solicitud del permiso, la decisión preliminar del Director Ejecutivo y el borrador del permiso están disponibles para leer y copiar en Pilot Point Community Library, 324 South Washington Street, Pilot Point, in Denton County, Texas y Van Alstyne Public Library, 151 West Cooper Street, Van Alstyne, in Grayson County, Texas. La solicitud (cualquier actualización y aviso inclusive) está disponible electrónicamente en la siguiente página web: <a href="https://www.tceq.texas.gov/permitting/wastewater/pending-permits/tpdes-applications">https://www.tceq.texas.gov/permitting/wastewater/pending-permits/tpdes-applications</a>.

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

**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 de la fecha límite para presentar comentarios públicos, el Director Ejecutivo considerará los comentarios y preparará una respuesta a todos los comentarios públicos relevantes y materiales, o significativos. A menos que la solicitud sea remitida directamente para una audiencia de caso impugnado, la respuesta a los comentarios se enviará por correo a todos los que enviaron comentarios públicos y a aquellas personas que estén en la lista de correo para esta solicitud. Si se reciben comentarios, el correo también proporcionará instrucciones para solicitar una audiencia de caso impugnado o reconsiderar la decisión del Director Ejecutivo. Una audiencia de caso impugnado es un procedimiento legal similar a un juicio civil en un tribunal de distrito estatal.

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.

Tras el cierre de todos los periodos de comentarios y solicitudes aplicables, el Director Ejecutivo remitirá la solicitud y cualquier solicitud de reconsideración o de una audiencia de caso impugnado a los Comisionados de la TCEQ para su consideración en 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.

**ACCIÓN DEL DIRECTOR EJECUTIVO.** El Director Ejecutivo puede emitir la aprobación final de la solicitud a menos que se presente una solicitud de audiencia de caso impugnado oportunamente o una solicitud de reconsideración. Si se presenta una solicitud de audiencia oportuna o una solicitud de reconsideración, el Director Ejecutivo no emitirá la aprobación final del permiso y enviará la solicitud y la solicitud a los Comisionados de TCEQ para su consideración en una reunión programada de la Comisión.

**LISTA DE CORREO**. Si envía comentarios públicos, una solicitud de una audiencia de caso impugnado o una reconsideración de la decisión del Director Ejecutivo, se le agregará a la lista de correo de esta solicitud específica para recibir futuros avisos públicos enviados por correo por la Oficina del Secretario Oficial. Además, puede solicitar ser colocado en: (1) la lista de correo permanente para un nombre de solicitante específico y número de permiso; y/o (2) la lista de correo para un condado específico. Si desea ser colocado en la lista de correo permanente y / o del condado, especifique claramente qué lista (s) y envíe su solicitud a la Oficina del Secretario Oficial de la TCEQ a la dirección a continuación.

Todos los comentarios públicos escritos y las solicitudes de reunión pública deben enviarse a Office of the Chief Clerk, MC 105, TCEQ, P.O. Box 13087, Austin, TX 78711-3087 o electrónicamente a <u>www.tceq.texas.gov/goto/comment</u> dentro de los 30 días a partir de la fecha de publicación de este aviso en el periódico.

**CONTACTOS E INFORMACIÓN DE LA AGENCIA.** Los comentarios y solicitudes públicas deben enviarse electrónicamente a <u>www.tceq.texas.gov/goto/comment</u>, o por escrito a Texas Commission on Environmental Quality, Office of the Chief Clerk, MC-105, P.O. Box 13087, Austin, Texas 78711-3087. Cualquier información personal que envíe a la TCEQ pasará a formar parte del registro de la agencia; esto incluye las direcciones de correo electrónico. Para obtener más información sobre esta solicitud de permiso o el proceso de permisos, llame al Programa de Educación Pública de TCEQ, línea gratuita, al 1-800-687-4040 o visite su sitio web en <u>www.tceq.texas.gov/goto/pep</u>. Si desea información en español, puede llamar al 1-800-687-4040.

También se puede obtener información adicional del Four Seasons Ranch Municipal Utility District 1 of Denton County a la dirección indicada arriba o llamando a Ms. Laura Preston, P.E., Assistant Project Manager, al 214-442-6579.

Fecha de emission: 22 de abril de 2025



TPDES PERMIT NO. WQ0016620001 [For TCEQ office use only - EPA I.D. No. TX0146587]

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

#### <u>PERMIT TO DISCHARGE WASTES</u> under provisions of Section 402 of the Clean Water Act and Chapter 26 of the Texas Water Code

Four Seasons Ranch Municipal Utility District 1 of Denton County

whose mailing address is

16000 Dallas Parkway, Suite 350 Dallas, Texas 75248

is authorized to treat and discharge wastes from the Four Seasons Ranch Wastewater Treatment Facility, SIC Code 4952

located approximately 0.6 miles southeast of the intersection of Berend Road and Gorrell Road, in Denton County, Texas 76258

to Mustang Creek, thence to Little Elm Creek, thence to Lake Lewisville in Segment No. 0823 of the Trinity River Basin

only according to effluent limitations, monitoring requirements, and other conditions set forth in this permit, as well as the rules of the Texas Commission on Environmental Quality (TCEQ), the laws of the State of Texas, and other orders of the TCEQ. The issuance of this permit does not grant to the permittee the right to use private or public property for conveyance of wastewater along the discharge route described in this permit. This includes, but is not limited to, property belonging to any individual, partnership, corporation, or other entity. Neither does this permit authorize any invasion of personal rights nor any violation of federal, state, or local laws or regulations. It is the responsibility of the permittee to acquire property rights as may be necessary to use the discharge route.

This permit shall expire at midnight, five years from the date of issuance.

ISSUED DATE:

For the Commission

#### **INTERIM I EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS**

1. During the period beginning upon the date of issuance and lasting through the completion of expansion to the 0.30 million gallons per day (MGD) facility, the permittee is authorized to discharge subject to the following effluent limitations:

The daily average flow of effluent shall not exceed 0.15 MGD, nor shall the average discharge during any two-hour period (2-hour peak) exceed 417 gallons per minute.

Effluent Characteristic	Discharge Limitations			Min. Self-Monitoring Requirements		
	Daily Avg	7-day Avg	Daily Max	Single Grab	Report Daily A	vg. & Max. Single Grab
	mg/l (lbs/day)	mg/l	mg/l	mg/l	Measurement Frequency	Sample Type
Flow, MGD	Report	N/A	Report	N/A	Continuous	Totalizing Meter
Carbonaceous Biochemical Oxygen Demand (5-day)	10 (13)	15	25	35	One/week	Grab
Total Suspended Solids	15 (19)	25	40	60	One/week	Grab
Ammonia Nitrogen	3 (3.8)	6	10	15	One/week	Grab
<i>E. coli</i> , colony-forming units or most probable number per 100 ml	126	N/A	N/A	399	One/month	Grab

- 2. The effluent shall contain a total chlorine residual of at least 1.0 mg/l and shall not exceed a total chlorine residual of 4.0 mg/l after a detention time of at least 20 minutes (based on peak flow) and shall be monitored five times per week by grab sample. An equivalent method of disinfection may be substituted only with prior approval of the Executive Director.
- 3. The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units and shall be monitored once per month by grab sample.
- 4. There shall be no discharge of floating solids or visible foam in other than trace amounts and no discharge of visible oil.
- 5. Effluent monitoring samples shall be taken at the following location(s): Following the final treatment unit.
- 6. The effluent shall contain a minimum dissolved oxygen of 4.0 mg/l and shall be monitored once per week by grab sample.

#### **INTERIM II EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS**

1. During the period beginning upon the completion of expansion to the 0.30 million gallons per day (MGD) facility and lasting through the completion of expansion to the 2.0 MGD facility, the permittee is authorized to discharge subject to the following effluent limitations:

The daily average flow of effluent shall not exceed 0.30 MGD, nor shall the average discharge during any two-hour period (2-hour peak) exceed 833 gallons per minute.

Effluent Characteristic	Discharge Limitations			Min. Self-Monitoring Requirements		
	Daily Avg	7-day Avg	Daily Max	aily Max Single Grab	Report Daily Avg. & Max. Single Grab	
	mg/l (lbs/day)	mg/l	mg/l	mg/l	Measurement Frequency	Sample Type
Flow, MGD	Report	N/A	Report	N/A	Continuous	Totalizing Meter
Carbonaceous Biochemical Oxygen Demand (5-day)	10 (25)	15	25	35	One/week	Grab
Total Suspended Solids	15 (38)	25	40	60	One/week	Grab
Ammonia Nitrogen	3 (7.5)	6	10	15	One/week	Grab
<i>E. coli</i> , colony-forming units or most probable number per 100 ml	126	N/A	N/A	399	One/month	Grab

- 2. The effluent shall contain a total chlorine residual of at least 1.0 mg/l and shall not exceed a total chlorine residual of 4.0 mg/l after a detention time of at least 20 minutes (based on peak flow) and shall be monitored five times per week by grab sample. An equivalent method of disinfection may be substituted only with prior approval of the Executive Director.
- 3. The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units and shall be monitored once per month by grab sample.
- 4. There shall be no discharge of floating solids or visible foam in other than trace amounts and no discharge of visible oil.
- 5. Effluent monitoring samples shall be taken at the following location(s): Following the final treatment unit.
- 6. The effluent shall contain a minimum dissolved oxygen of 4.0 mg/l and shall be monitored once per week by grab sample.

#### Outfall Number 001

#### FINAL EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

1. During the period beginning upon the completion of expansion to the 2.0 million gallons per day (MGD) facility and lasting through the date of expiration, the permittee is authorized to discharge subject to the following effluent limitations:

The annual average flow of effluent shall not exceed 2.0 MGD, nor shall the average discharge during any two-hour period (2-hour peak) exceed 5,556 gallons per minute.

Effluent Characteristic	Discharge Limitations			Min. Self-Monitoring Requirements		
	Daily Avg mg/l (lbs/day)	7-day Avg mg/l	Daily Max mg/l	Single Grab mg/l	Report Daily Measurement Frequency	y Avg. & Daily Max. Sample Type
Flow, MGD	Report	N/A	Report	N/A	Continuous	Totalizing Meter
Carbonaceous Biochemical Oxygen Demand (5-day)	10 (167)	15	25	35	Two/week	Composite
Total Suspended Solids	15 (250)	25	40	60	Two/week	Composite
Ammonia Nitrogen	3 (50)	6	10	15	Two/week	Composite
<i>E. coli</i> , colony-forming units or most probable number per 100 ml	126	N/A	399	N/A	One/week	Grab

- 2. The effluent shall contain a total chlorine residual of at least 1.0 mg/l after a detention time of at least 20 minutes (based on peak flow) and shall be monitored daily by grab sample at each chlorine contact chamber. The permittee shall dechlorinate the chlorinated effluent to less than 0.1 mg/l total chlorine residual and shall monitor total chlorine residual daily by grab sample after the dechlorination process. An equivalent method of disinfection may be substituted only with prior approval of the Executive Director.
- 3. The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units and shall be monitored once per week by grab sample.
- 4. There shall be no discharge of floating solids or visible foam in other than trace amounts and no discharge of visible oil.
- 5. Effluent monitoring samples shall be taken at the following location(s): Following the final treatment unit.
- 6. The effluent shall contain a minimum dissolved oxygen of 4.0 mg/l and shall be monitored twice per week by grab sample.
- 7. The annual average flow and maximum 2-hour peak flow shall be reported monthly.

#### **DEFINITIONS AND STANDARD PERMIT CONDITIONS**

As required by Title 30 Texas Administrative Code (TAC) Chapter 305, certain regulations appear as standard conditions in waste discharge permits. 30 TAC § 305.121 - 305.129 (relating to Permit Characteristics and Conditions) as promulgated under the Texas Water Code (TWC) §§ 5.103 and 5.105, and the Texas Health and Safety Code (THSC) §§ 361.017 and 361.024(a), establish the characteristics and standards for waste discharge permits, including sewage sludge, and those sections of 40 Code of Federal Regulations (CFR) Part 122 adopted by reference by the Commission. The following text includes these conditions and incorporates them into this permit. All definitions in TWC § 26.001 and 30 TAC Chapter 305 shall apply to this permit and are incorporated by reference. Some specific definitions of words or phrases used in this permit are as follows:

- 1. Flow Measurements
  - a. Annual average flow the arithmetic average of all daily flow determinations taken within the preceding 12 consecutive calendar months. The annual average flow determination shall consist of daily flow volume determinations made by a totalizing meter, charted on a chart recorder and limited to major domestic wastewater discharge facilities with one million gallons per day or greater permitted flow.
  - b. Daily average flow the arithmetic average of all determinations of the daily flow within a period of one calendar month. The daily average flow determination shall consist of determinations made on at least four separate days. If instantaneous measurements are used to determine the daily flow, the determination shall be the arithmetic average of all instantaneous measurements taken during that month. Daily average flow determination for intermittent discharges shall consist of a minimum of three flow determinations on days of discharge.
  - c. Daily maximum flow the highest total flow for any 24-hour period in a calendar month.
  - d. Instantaneous flow the measured flow during the minimum time required to interpret the flow measuring device.
  - e. 2-hour peak flow (domestic wastewater treatment plants) the maximum flow sustained for a two-hour period during the period of daily discharge. The average of multiple measurements of instantaneous maximum flow within a two-hour period may be used to calculate the 2-hour peak flow.
  - f. Maximum 2-hour peak flow (domestic wastewater treatment plants) the highest 2-hour peak flow for any 24-hour period in a calendar month.
- 2. Concentration Measurements
  - a. Daily average concentration the arithmetic average of all effluent samples, composite or grab as required by this permit, within a period of one calendar month, consisting of at least four separate representative measurements.
    - i. For domestic wastewater treatment plants When four samples are not available in a calendar month, the arithmetic average (weighted by flow) of all values in the previous four consecutive month period consisting of at least four measurements shall be utilized as the daily average concentration.

- ii. For all other wastewater treatment plants When four samples are not available in a calendar month, the arithmetic average (weighted by flow) of all values taken during the month shall be utilized as the daily average concentration.
- b. 7-day average concentration the arithmetic average of all effluent samples, composite or grab as required by this permit, within a period of one calendar week, Sunday through Saturday.
- c. Daily maximum concentration the maximum concentration measured on a single day, by the sample type specified in the permit, within a period of one calendar month.
- d. Daily discharge the discharge of a pollutant measured during a calendar day or any 24hour period that reasonably represents the calendar day for purposes of sampling. For pollutants with limitations expressed in terms of mass, the daily discharge is calculated as the total mass of the pollutant discharged over the sampling day. For pollutants with limitations expressed in other units of measurement, the daily discharge is calculated as the average measurement of the pollutant over the sampling day.

The daily discharge determination of concentration made using a composite sample shall be the concentration of the composite sample. When grab samples are used, the daily discharge determination of concentration shall be the arithmetic average (weighted by flow value) of all samples collected during that day.

- e. Bacteria concentration (*E. coli* or Enterococci) Colony Forming Units (CFU) or Most Probable Number (MPN) of bacteria per 100 milliliters effluent. The daily average bacteria concentration is a geometric mean of the values for the effluent samples collected in a calendar month. The geometric mean shall be determined by calculating the nth root of the product of all measurements made in a calendar month, where n equals the number of measurements made; or, computed as the antilogarithm of the arithmetic mean of the logarithms of all measurements made in a calendar month. For any measurement of bacteria equaling zero, a substituted value of one shall be made for input into either computation method. If specified, the 7-day average for bacteria is the geometric mean of the values for all effluent samples collected during a calendar week.
- f. Daily average loading (lbs/day) the arithmetic average of all daily discharge loading calculations during a period of one calendar month. These calculations must be made for each day of the month that a parameter is analyzed. The daily discharge, in terms of mass (lbs/day), is calculated as (Flow, MGD x Concentration, mg/l x 8.34).
- g. Daily maximum loading (lbs/day) the highest daily discharge, in terms of mass (lbs/day), within a period of one calendar month.

#### 3. Sample Type

a. Composite sample - For domestic wastewater, a composite sample is a sample made up of a minimum of three effluent portions collected in a continuous 24-hour period or during the period of daily discharge if less than 24 hours, and combined in volumes proportional to flow, and collected at the intervals required by 30 TAC § 319.9 (a). For industrial wastewater, a composite sample is a sample made up of a minimum of three effluent portions collected in a continuous 24-hour period or during the period of daily discharge if less than 24 hours, and combined in volumes proportional to flow, and collected in a continuous 24-hour period or during the period of daily discharge if less than 24 hours, and combined in volumes proportional to flow, and collected at the intervals required by 30 TAC § 319.9 (b).

- b. Grab sample an individual sample collected in less than 15 minutes.
- 4. Treatment Facility (facility) wastewater facilities used in the conveyance, storage, treatment, recycling, reclamation and/or disposal of domestic sewage, industrial wastes, agricultural wastes, recreational wastes, or other wastes including sludge handling or disposal facilities under the jurisdiction of the Commission.
- 5. The term "sewage sludge" is defined as solid, semi-solid, or liquid residue generated during the treatment of domestic sewage in 30 TAC Chapter 312. This includes the solids that have not been classified as hazardous waste separated from wastewater by unit processes.
- 6. The term "biosolids" is defined as sewage sludge that has been tested or processed to meet Class A, Class AB, or Class B pathogen standards in 30 TAC Chapter 312 for beneficial use.
- 7. Bypass the intentional diversion of a waste stream from any portion of a treatment facility.

#### MONITORING AND REPORTING REQUIREMENTS

1. Self-Reporting

Monitoring results shall be provided at the intervals specified in the permit. Unless otherwise specified in this permit or otherwise ordered by the Commission, the permittee shall conduct effluent sampling and reporting in accordance with 30 TAC §§ 319.4 - 319.12. Unless otherwise specified, effluent monitoring data shall be submitted each month, to the Enforcement Division (MC 224), by the 20th day of the following month for each discharge which is described by this permit whether or not a discharge is made for that month. Monitoring results must be submitted online using the NetDMR reporting system available through the TCEQ website unless the permittee requests and obtains an electronic reporting waiver. Monitoring results must be signed and certified as required by Monitoring and Reporting Requirements No. 10.

As provided by state law, the permittee is subject to administrative, civil and criminal penalties, as applicable, for negligently or knowingly violating the Clean Water Act (CWA); TWC §§ 26, 27, and 28; and THSC § 361, including but not limited to knowingly making any false statement, representation, or certification on any report, record, or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or noncompliance, or falsifying, tampering with or knowingly rendering inaccurate any monitoring device or method required by this permit or violating any other requirement imposed by state or federal regulations.

- 2. Test Procedures
  - a. Unless otherwise specified in this permit, test procedures for the analysis of pollutants shall comply with procedures specified in 30 TAC §§ 319.11 319.12. Measurements, tests, and calculations shall be accurately accomplished in a representative manner.
  - b. All laboratory tests submitted to demonstrate compliance with this permit must meet the requirements of 30 TAC § 25, Environmental Testing Laboratory Accreditation and Certification.
- 3. Records of Results
  - a. Monitoring samples and measurements shall be taken at times and in a manner so as to be representative of the monitored activity.

- b. Except for records of monitoring information required by this permit related to the permittee's sewage sludge or biosolids use and disposal activities, which shall be retained for a period of at least five years (or longer as required by 40 CFR Part 503), monitoring and reporting records, including strip charts and records of calibration and maintenance, copies of all records required by this permit, records of all data used to complete the application for this permit, and the certification required by 40 CFR § 264.73(b)(9) shall be retained at the facility site, or shall be readily available for review by a TCEQ representative for a period of three years from the date of the record or sample, measurement, report, application or certification. This period shall be extended at the request of the Executive Director.
- c. Records of monitoring activities shall include the following:
  - i. date, time and place of sample or measurement;
  - ii. identity of individual who collected the sample or made the measurement.
  - iii. date and time of analysis;
  - iv. identity of the individual and laboratory who performed the analysis;
  - v. the technique or method of analysis; and
  - vi. the results of the analysis or measurement and quality assurance/quality control records.

The period during which records are required to be kept shall be automatically extended to the date of the final disposition of any administrative or judicial enforcement action that may be instituted against the permittee.

4. Additional Monitoring by Permittee

If the permittee monitors any pollutant at the location(s) designated herein more frequently than required by this permit using approved analytical methods as specified above, all results of such monitoring shall be included in the calculation and reporting of the values submitted on the approved self-report form. Increased frequency of sampling shall be indicated on the self-report form.

5. Calibration of Instruments

All automatic flow measuring or recording devices and all totalizing meters for measuring flows shall be accurately calibrated by a trained person at plant start-up and as often thereafter as necessary to ensure accuracy, but not less often than annually unless authorized by the Executive Director for a longer period. Such person shall verify in writing that the device is operating properly and giving accurate results. Copies of the verification shall be retained at the facility site and/or shall be readily available for review by a TCEQ representative for a period of three years.

6. Compliance Schedule Reports

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of the permit shall be submitted no later than 14 days following each schedule date to the Regional Office and the Enforcement

Division (MC 224).

- 7. Noncompliance Notification
  - a. In accordance with 30 TAC § 305.125(9) any noncompliance which may endanger human health or safety, or the environment shall be reported by the permittee to the TCEQ. Except as allowed by 30 TAC § 305.132, report of such information shall be provided orally or by facsimile transmission (FAX) to the Regional Office within 24 hours of becoming aware of the noncompliance. A written submission of such information shall also be provided by the permittee to the Regional Office and the Enforcement Division (MC 224) within five working days of becoming aware of the noncompliance. For Publicly Owned Treatment Works (POTWs), effective December 21, 2025, the permittee must submit the written report for unauthorized discharges and unanticipated bypasses that exceed any effluent limit in the permit using the online electronic reporting system available through the TCEQ website unless the permittee requests and obtains an electronic reporting waiver. The written submission shall contain a description of the noncompliance and its cause; the potential danger to human health or safety, or the environment; the period of noncompliance, including exact dates and times; if the noncompliance has not been corrected, the time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance, and to mitigate its adverse effects.
  - b. The following violations shall be reported under Monitoring and Reporting Requirement 7.a.:
    - i. Unauthorized discharges as defined in Permit Condition 2(g).
    - ii. Any unanticipated bypass that exceeds any effluent limitation in the permit.
    - iii. Violation of a permitted maximum daily discharge limitation for pollutants listed specifically in the Other Requirements section of an Industrial TPDES permit.
  - c. In addition to the above, any effluent violation which deviates from the permitted effluent limitation by more than 40% shall be reported by the permittee in writing to the Regional Office and the Enforcement Division (MC 224) within 5 working days of becoming aware of the noncompliance.
  - d. Any noncompliance other than that specified in this section, or any required information not submitted or submitted incorrectly, shall be reported to the Enforcement Division (MC 224) as promptly as possible. For effluent limitation violations, noncompliances shall be reported on the approved self-report form.
- 8. In accordance with the procedures described in 30 TAC §§ 35.301 35.303 (relating to Water Quality Emergency and Temporary Orders) if the permittee knows in advance of the need for a bypass, it shall submit prior notice by applying for such authorization.
- 9. Changes in Discharges of Toxic Substances

All existing manufacturing, commercial, mining, and silvicultural permittees shall notify the Regional Office, orally or by facsimile transmission within 24 hours, and both the Regional Office and the Enforcement Division (MC 224) in writing within five (5) working days, after becoming aware of or having reason to believe:

- a. That any activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant listed at 40 CFR Part 122, Appendix D, Tables II and III (excluding Total Phenols) which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":
  - i. One hundred micrograms per liter (100  $\mu$ g/L);
  - ii. Two hundred micrograms per liter (200  $\mu$ g/L) for acrolein and acrylonitrile; five hundred micrograms per liter (500  $\mu$ g/L) for 2,4-dinitrophenol and for 2-methyl-4,6-dinitrophenol; and one milligram per liter (1 mg/L) for antimony;
  - iii. Five (5) times the maximum concentration value reported for that pollutant in the permit application; or
  - iv. The level established by the TCEQ.
- b. That any activity has occurred or will occur which would result in any discharge, on a nonroutine or infrequent basis, of a toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":
  - i. Five hundred micrograms per liter (500  $\mu$ g/L);
  - ii. One milligram per liter (1 mg/L) for antimony;
  - iii. Ten (10) times the maximum concentration value reported for that pollutant in the permit application; or
  - iv. The level established by the TCEQ.
- 10. Signatories to Reports

All reports and other information requested by the Executive Director shall be signed by the person and in the manner required by 30 TAC § 305.128 (relating to Signatories to Reports).

- 11. All POTWs must provide adequate notice to the Executive Director of the following:
  - a. Any new introduction of pollutants into the POTW from an indirect discharger which would be subject to CWA § 301 or § 306 if it were directly discharging those pollutants;
  - b. Any substantial change in the volume or character of pollutants being introduced into that POTW by a source introducing pollutants into the POTW at the time of issuance of the permit; and
  - c. For the purpose of this paragraph, adequate notice shall include information on:
    - i. The quality and quantity of effluent introduced into the POTW; and
    - ii. Any anticipated impact of the change on the quantity or quality of effluent to be discharged from the POTW.

#### **PERMIT CONDITIONS**

- 1. General
  - a. When the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in an application or in any report to the Executive Director, it shall promptly submit such facts or information.
  - b. This permit is granted on the basis of the information supplied and representations made by the permittee during action on an application, and relying upon the accuracy and completeness of that information and those representations. After notice and opportunity for a hearing, this permit may be modified, suspended, or revoked, in whole or in part, in accordance with 30 TAC Chapter 305, Subchapter D, during its term for good cause including, but not limited to, the following:
    - i. Violation of any terms or conditions of this permit;
    - ii. Obtaining this permit by misrepresentation or failure to disclose fully all relevant facts; or
    - iii. A change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge.
  - c. The permittee shall furnish to the Executive Director, upon request and within a reasonable time, any information to determine whether cause exists for amending, revoking, suspending or terminating the permit. The permittee shall also furnish to the Executive Director, upon request, copies of records required to be kept by the permit.
- 2. Compliance
  - a. Acceptance of the permit by the person to whom it is issued constitutes acknowledgment and agreement that such person will comply with all the terms and conditions embodied in the permit, and the rules and other orders of the Commission.
  - b. The permittee has a duty to comply with all conditions of the permit. Failure to comply with any permit condition constitutes a violation of the permit and the Texas Water Code or the Texas Health and Safety Code, and is grounds for enforcement action, for permit amendment, revocation, or suspension, or for denial of a permit renewal application or an application for a permit for another facility.
  - c. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit.
  - d. The permittee shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal or other permit violation that has a reasonable likelihood of adversely affecting human health or the environment.
  - e. Authorization from the Commission is required before beginning any change in the permitted facility or activity that may result in noncompliance with any permit requirements.
  - f. A permit may be amended, suspended and reissued, or revoked for cause in accordance

with 30 TAC §§ 305.62 and 305.66 and TWC § 7.302. The filing of a request by the permittee for a permit amendment, suspension and reissuance, or termination, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition.

- g. There shall be no unauthorized discharge of wastewater or any other waste. For the purpose of this permit, an unauthorized discharge is considered to be any discharge of wastewater into or adjacent to water in the state at any location not permitted as an outfall or otherwise defined in the Other Requirements section of this permit.
- h. In accordance with 30 TAC § 305.535(a), the permittee may allow any bypass to occur from a TPDES permitted facility which does not cause permitted effluent limitations to be exceeded or an unauthorized discharge to occur, but only if the bypass is also for essential maintenance to assure efficient operation.
- i. The permittee is subject to administrative, civil, and criminal penalties, as applicable, under TWC §§ 7.051 7.075 (relating to Administrative Penalties), 7.101 7.111 (relating to Civil Penalties), and 7.141 7.202 (relating to Criminal Offenses and Penalties) for violations including, but not limited to, negligently or knowingly violating the federal CWA §§ 301, 302, 306, 307, 308, 318, or 405, or any condition or limitation implementing any sections in a permit issued under the CWA § 402, or any requirement imposed in a pretreatment program approved under the CWA §§ 402 (a)(3) or 402 (b)(8).
- 3. Inspections and Entry
  - a. Inspection and entry shall be allowed as prescribed in the TWC Chapters 26, 27, and 28, and THSC § 361.
  - b. The members of the Commission and employees and agents of the Commission are entitled to enter any public or private property at any reasonable time for the purpose of inspecting and investigating conditions relating to the quality of water in the state or the compliance with any rule, regulation, permit or other order of the Commission. Members, employees, or agents of the Commission and Commission contractors are entitled to enter public or private property at any reasonable time to investigate or monitor or, if the responsible party is not responsive or there is an immediate danger to public health or the environment, to remove or remediate a condition related to the quality of water in the state. Members, employees, Commission contractors, or agents acting under this authority who enter private property shall observe the establishment's rules and regulations concerning safety, internal security, and fire protection, and if the property has management in residence, shall notify management or the person then in charge of his presence and shall exhibit proper credentials. If any member, employee, Commission contractor, or agent is refused the right to enter in or on public or private property under this authority, the Executive Director may invoke the remedies authorized in TWC § 7.002. The statement above, that Commission entry shall occur in accordance with an establishment's rules and regulations concerning safety, internal security, and fire protection, is not grounds for denial or restriction of entry to any part of the facility, but merely describes the Commission's duty to observe appropriate rules and regulations during an inspection.

- 4. Permit Amendment and/or Renewal
  - a. The permittee shall give notice to the Executive Director as soon as possible of any planned physical alterations or additions to the permitted facility if such alterations or additions would require a permit amendment or result in a violation of permit requirements. Notice shall also be required under this paragraph when:
    - i. The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in accordance with 30 TAC § 305.534 (relating to New Sources and New Dischargers); or
    - ii. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants that are subject neither to effluent limitations in the permit, nor to notification requirements in Monitoring and Reporting Requirements No. 9; or
    - iii. The alteration or addition results in a significant change in the permittee's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan.
  - b. Prior to any facility modifications, additions, or expansions that will increase the plant capacity beyond the permitted flow, the permittee must apply for and obtain proper authorization from the Commission before commencing construction.
  - c. The permittee must apply for an amendment or renewal at least 180 days prior to expiration of the existing permit in order to continue a permitted activity after the expiration date of the permit. If an application is submitted prior to the expiration date of the permit, the existing permit shall remain in effect until the application is approved, denied, or returned. If the application is returned or denied, authorization to continue such activity shall terminate upon the effective date of the action. If an application is not submitted prior to the expiration date of the permit, the permit shall expire and authorization to continue such activity shall terminate upon the effective shall terminate.
  - d. Prior to accepting or generating wastes which are not described in the permit application or which would result in a significant change in the quantity or quality of the existing discharge, the permittee must report the proposed changes to the Commission. The permittee must apply for a permit amendment reflecting any necessary changes in permit conditions, including effluent limitations for pollutants not identified and limited by this permit.
  - e. In accordance with the TWC § 26.029(b), after a public hearing, notice of which shall be given to the permittee, the Commission may require the permittee, from time to time, for good cause, in accordance with applicable laws, to conform to new or additional conditions.
  - f. If any toxic effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is promulgated under CWA § 307(a) for a toxic pollutant which is present in the discharge and that standard or prohibition is more stringent than any limitation on the pollutant in this permit, this permit shall be modified or revoked and reissued to conform to the toxic effluent standard or

prohibition. The permittee shall comply with effluent standards or prohibitions established under CWA § 307(a) for toxic pollutants within the time provided in the regulations that established those standards or prohibitions, even if the permit has not yet been modified to incorporate the requirement.

- 5. Permit Transfer
  - a. Prior to any transfer of this permit, Commission approval must be obtained. The Commission shall be notified in writing of any change in control or ownership of facilities authorized by this permit. Such notification should be sent to the Applications Review and Processing Team (MC 148) of the Water Quality Division.
  - b. A permit may be transferred only according to the provisions of 30 TAC § 305.64 (relating to Transfer of Permits) and 30 TAC § 50.133 (relating to Executive Director Action on Application or WQMP update).
- 6. Relationship to Hazardous Waste Activities

This permit does not authorize any activity of hazardous waste storage, processing, or disposal that requires a permit or other authorization pursuant to the Texas Health and Safety Code.

7. Relationship to Water Rights

Disposal of treated effluent by any means other than discharge directly to water in the state must be specifically authorized in this permit and may require a permit pursuant to TWC Chapter 11.

8. Property Rights

A permit does not convey any property rights of any sort, or any exclusive privilege.

9. Permit Enforceability

The conditions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstances, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

10. Relationship to Permit Application

The application pursuant to which the permit has been issued is incorporated herein; provided, however, that in the event of a conflict between the provisions of this permit and the application, the provisions of the permit shall control.

- 11. Notice of Bankruptcy
  - a. Each permittee shall notify the Executive Director, in writing, immediately following the filing of a voluntary or involuntary petition for bankruptcy under any chapter of Title 11 (Bankruptcy) of the United States Code (11 USC) by or against:
    - i. the permittee;
    - ii. an entity (as that term is defined in 11 USC, § 101(14)) controlling the permittee or listing the permit or permittee as property of the estate; or

- iii. an affiliate (as that term is defined in 11 USC, § 101(2)) of the permittee.
- b. This notification must indicate:
  - i. the name of the permittee;
  - ii. the permit number(s);
  - iii. the bankruptcy court in which the petition for bankruptcy was filed; and
  - iv. the date of filing of the petition.

#### **OPERATIONAL REQUIREMENTS**

- 1. The permittee shall at all times ensure that the facility and all of its systems of collection, treatment, and disposal are properly operated and maintained. This includes, but is not limited to, the regular, periodic examination of wastewater solids within the treatment plant by the operator in order to maintain an appropriate quantity and quality of solids inventory as described in the various operator training manuals and according to accepted industry standards for process control. Process control, maintenance, and operations records shall be retained at the facility site, or shall be readily available for review by a TCEQ representative, for a period of three years.
- 2. Upon request by the Executive Director, the permittee shall take appropriate samples and provide proper analysis in order to demonstrate compliance with Commission rules. Unless otherwise specified in this permit or otherwise ordered by the Commission, the permittee shall comply with all applicable provisions of 30 TAC Chapter 312 concerning sewage sludge or biosolids use and disposal and 30 TAC §§ 319.21 319.29 concerning the discharge of certain hazardous metals.
- 3. Domestic wastewater treatment facilities shall comply with the following provisions:
  - a. The permittee shall notify the Municipal Permits Team, Wastewater Permitting Section (MC 148) of the Water Quality Division, in writing, of any facility expansion at least 90 days prior to conducting such activity.
  - b. The permittee shall submit a closure plan for review and approval to the Municipal Permits Team, Wastewater Permitting Section (MC 148) of the Water Quality Division, for any closure activity at least 90 days prior to conducting such activity. Closure is the act of permanently taking a waste management unit or treatment facility out of service and includes the permanent removal from service of any pit, tank, pond, lagoon, surface impoundment and/or other treatment unit regulated by this permit.
- 4. The permittee is responsible for installing prior to plant start-up, and subsequently maintaining, adequate safeguards to prevent the discharge of untreated or inadequately treated wastes during electrical power failures by means of alternate power sources, standby generators, and/or retention of inadequately treated wastewater.
- 5. Unless otherwise specified, the permittee shall provide a readily accessible sampling point and, where applicable, an effluent flow measuring device or other acceptable means by which effluent flow may be determined.

- 6. The permittee shall remit an annual water quality fee to the Commission as required by 30 TAC Chapter 21. Failure to pay the fee may result in revocation of this permit under TWC § 7.302(b)(6).
- 7. Documentation

For all written notifications to the Commission required of the permittee by this permit, the permittee shall keep and make available a copy of each such notification under the same conditions as self-monitoring data are required to be kept and made available. Except for information required for TPDES permit applications, effluent data, including effluent data in permits, draft permits and permit applications, and other information specified as not confidential in 30 TAC §§ 1.5(d), any information submitted pursuant to this permit may be claimed as confidential by the submitter. Any such claim must be asserted in the manner prescribed in the application form or by stamping the words confidential business information on each page containing such information. If no claim is made at the time of submission, information may be made available to the public without further notice. If the Commission or Executive Director agrees with the designation of confidentiality, the TCEQ will not provide the information for public inspection unless required by the Texas Attorney General or a court pursuant to an open records request. If the Executive Director does not agree with the designation of confidentiality, the person submitting the information will be notified.

- 8. Facilities that generate domestic wastewater shall comply with the following provisions; domestic wastewater treatment facilities at permitted industrial sites are excluded.
  - a. Whenever flow measurements for any domestic sewage treatment facility reach 75% of the permitted daily average or annual average flow for three consecutive months, the permittee must initiate engineering and financial planning for expansion and/or upgrading of the domestic wastewater treatment and/or collection facilities. Whenever the flow reaches 90% of the permitted daily average or annual average flow for three consecutive months, the permittee shall obtain necessary authorization from the Commission to commence construction of the necessary additional treatment and/or collection facilities. In the case of a domestic wastewater treatment facility which reaches 75% of the permitted daily average or annual average flow for three consecutive months, and the planned population to be served or the quantity of waste produced is not expected to exceed the design limitations of the treatment facility, the permittee shall submit an engineering report supporting this claim to the Executive Director of the Commission.

If in the judgment of the Executive Director the population to be served will not cause permit noncompliance, then the requirement of this section may be waived. To be effective, any waiver must be in writing and signed by the Director of the Enforcement Division (MC 219) of the Commission, and such waiver of these requirements will be reviewed upon expiration of the existing permit; however, any such waiver shall not be interpreted as condoning or excusing any violation of any permit parameter.

b. The plans and specifications for domestic sewage collection and treatment works associated with any domestic permit must be approved by the Commission and failure to secure approval before commencing construction of such works or making a discharge is a violation of this permit and each day is an additional violation until approval has been secured.

- c. Permits for domestic wastewater treatment plants are granted subject to the policy of the Commission to encourage the development of area-wide waste collection, treatment, and disposal systems. The Commission reserves the right to amend any domestic wastewater permit in accordance with applicable procedural requirements to require the system covered by this permit to be integrated into an area-wide system, should such be developed; to require the delivery of the wastes authorized to be collected in, treated by or discharged from said system, to such area-wide system; or to amend this permit in any other particular to effectuate the Commission's policy. Such amendments may be made when the changes required are advisable for water quality control purposes and are feasible on the basis of waste treatment technology, engineering, financial, and related considerations existing at the time the changes are required, exclusive of the loss of investment in or revenues from any then existing or proposed waste collection, treatment or disposal system.
- 9. Domestic wastewater treatment plants shall be operated and maintained by sewage plant operators holding a valid certificate of competency at the required level as defined in 30 TAC Chapter 30.
- 10. For Publicly Owned Treatment Works (POTWs), the 30-day average (or monthly average) percent removal for BOD and TSS shall not be less than 85%, unless otherwise authorized by this permit.
- 11. Facilities that generate industrial solid waste as defined in 30 TAC § 335.1 shall comply with these provisions:
  - a. Any solid waste, as defined in 30 TAC § 335.1 (including but not limited to such wastes as garbage, refuse, sludge from a waste treatment, water supply treatment plant or air pollution control facility, discarded materials, discarded materials to be recycled, whether the waste is solid, liquid, or semisolid), generated by the permittee during the management and treatment of wastewater, must be managed in accordance with all applicable provisions of 30 TAC Chapter 335, relating to Industrial Solid Waste Management.
  - b. Industrial wastewater that is being collected, accumulated, stored, or processed before discharge through any final discharge outfall, specified by this permit, is considered to be industrial solid waste until the wastewater passes through the actual point source discharge and must be managed in accordance with all applicable provisions of 30 TAC Chapter 335.
  - c. The permittee shall provide written notification, pursuant to the requirements of 30 TAC § 335.8(b)(1), to the Corrective Action Section (MC 127) of the Remediation Division informing the Commission of any closure activity involving an Industrial Solid Waste Management Unit, at least 90 days prior to conducting such an activity.
  - d. Construction of any industrial solid waste management unit requires the prior written notification of the proposed activity to the Registration and Reporting Section (MC 129) of the Permitting and Registration Support Division. No person shall dispose of industrial solid waste, including sludge or other solids from wastewater treatment processes, prior to fulfilling the deed recordation requirements of 30 TAC § 335.5.

- e. The term "industrial solid waste management unit" means a landfill, surface impoundment, waste-pile, industrial furnace, incinerator, cement kiln, injection well, container, drum, salt dome waste containment cavern, or any other structure vessel, appurtenance, or other improvement on land used to manage industrial solid waste.
- f. The permittee shall keep management records for all sludge (or other waste) removed from any wastewater treatment process. These records shall fulfill all applicable requirements of 30 TAC § 335 and must include the following, as it pertains to wastewater treatment and discharge:
  - i. Volume of waste and date(s) generated from treatment process;
  - ii. Volume of waste disposed of on-site or shipped off-site;
  - iii. Date(s) of disposal;
  - iv. Identity of hauler or transporter;
  - v. Location of disposal site; and
  - vi. Method of final disposal.

The above records shall be maintained on a monthly basis. The records shall be retained at the facility site, or shall be readily available for review by authorized representatives of the TCEQ for at least five years.

12. For industrial facilities to which the requirements of 30 TAC § 335 do not apply, sludge and solid wastes, including tank cleaning and contaminated solids for disposal, shall be disposed of in accordance with THSC § 361.

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#### **SLUDGE PROVISIONS**

The permittee is authorized to dispose of sludge only at a Texas Commission on Environmental Quality (TCEQ) authorized land application site, co-disposal landfill, wastewater treatment facility, or facility that further processes sludge. **The disposal of sludge or biosolids by land application on property owned, leased or under the direct control of the permittee is a violation of the permit unless the site is authorized with the TCEQ. This provision does not authorize Distribution and Marketing of Class A or Class AB Biosolids. This provision does not authorize the permittee to land apply biosolids on property owned, leased or under the direct control of the permittee.** 

#### SECTION I. REQUIREMENTS APPLYING TO ALL SEWAGE SLUDGE OR BIOSOLIDS LAND APPLICATION

#### A. General Requirements

- 1. The permittee shall handle and dispose of sewage sludge or biosolids in accordance with 30 TAC § 312 and all other applicable state and federal regulations in a manner that protects public health and the environment from any reasonably anticipated adverse effects due to any toxic pollutants that may be present in the sludge or biosolids.
- 2. In all cases, if the person (permit holder) who prepares the sewage sludge supplies the sewage sludge to another person for land application use or to the owner or lease holder of the land, the permit holder shall provide necessary information to the parties who receive the sludge to assure compliance with these regulations.
- 3. The land application of processed or unprocessed chemical toilet waste, grease trap waste, grit trap waste, milk solids, or similar non-hazardous municipal or industrial solid wastes, or any of the wastes listed in this provision combined with biosolids, WTP residuals or domestic septage is prohibited unless the grease trap waste is added at a fats, oil and grease (FOG) receiving facility as part of an anaerobic digestion process.

#### **B.** Testing Requirements

1. Sewage sludge or biosolids shall be tested once during the term of this permit in the Interim I and Interim II phases, and annually in the Final phase in accordance with the method specified in both 40 CFR Part 261, Appendix II and 40 CFR Part 268, Appendix I [Toxicity Characteristic Leaching Procedure (TCLP)] or other method that receives the prior approval of the TCEQ for the contaminants listed in 40 CFR Part 261.24. Table 1. Sewage sludge or biosolids failing this test shall be managed according to RCRA standards for generators of hazardous waste, and the waste's disposition must be in accordance with all applicable requirements for hazardous waste processing, storage, or disposal. Following failure of any TCLP test, the management or disposal of sewage sludge or biosolids at a facility other than an authorized hazardous waste processing, storage, or disposal facility shall be prohibited until such time as the permittee can demonstrate the sewage sludge or biosolids no longer exhibits the hazardous waste toxicity characteristics (as demonstrated by the results of the TCLP tests). A written report shall be provided to both the TCEQ Registration and Reporting Section (MC 129) of the Permitting and Registration Support Division and the Regional Director (MC Region 4) within seven (7) days after failing the TCLP Test.

The report shall contain test results, certification that unauthorized waste management has stopped, and a summary of alternative disposal plans that comply with RCRA standards for the management of hazardous waste. The report shall be addressed to: Director, Permitting and Registration Support Division (MC 129), Texas Commission on Environmental Quality, P.O. Box 13087, Austin, Texas 78711-3087. In addition, the permittee shall prepare an annual report on the results of all sludge toxicity testing. The permittee shall submit the following information in an annual report to the TCEQ by September 30<sup>th</sup> of each year. The permittee must submit this annual report using the online electronic reporting system available through TCEQ's website. If the permittee requests and obtains an electronic reporting waiver, the annual report can be submitted in hard copy to the TCEQ Regional Office (MC Region 4) and the Enforcement Division (MC 224).

2. Biosolids shall not be applied to the land if the concentration of the pollutants exceeds the pollutant concentration criteria in Table 1. The frequency of testing for pollutants in Table 1 is found in Section I.C. of this permit.

Pollutant	<u>Ceiling Concentration</u> ( <u>Milligrams per kilogram</u> )*
Arsenic	75
Cadmium	85
Chromium	3000
Copper	4300
Lead	840
Mercury	57
Molybdenum	75
Nickel	420
PCBs	49
Selenium	100
Zinc	7500

#### TABLE 1

\* Dry weight basis

#### 3. Pathogen Control

All sewage sludge that is applied to agricultural land, forest, a public contact site, or a reclamation site must be treated by one of the following methods to ensure that the sludge meets either the Class A, Class AB or Class B biosolids pathogen requirements.

a. For sewage sludge to be classified as Class A biosolids with respect to pathogens, the density of fecal coliform in the sewage sludge must be less than 1,000 most probable number (MPN) per gram of total solids (dry weight basis), or the density of Salmonella sp. bacteria in the sewage sludge must be less than three MPN per four grams of total solids (dry weight basis) at the time the sewage sludge is used or disposed. In addition, one of the alternatives listed below must be met:

<u>Alternative 1</u> - The temperature of the sewage sludge that is used or disposed shall be maintained at or above a specific value for a period of time. See 30 TAC §

312.82(a)(2)(A) for specific information;

Alternative 5 (PFRP) - Sewage sludge that is used or disposed of must be treated in one of the Processes to Further Reduce Pathogens (PFRP) described in 40 CFR Part 503, Appendix B. PFRP include composting, heat drying, heat treatment, and thermophilic aerobic digestion; or

Alternative 6 (PFRP Equivalent) - Sewage sludge that is used or disposed of must be treated in a process that has been approved by the U. S. Environmental Protection Agency as being equivalent to those in Alternative 5.

b. For sewage sludge to be classified as Class AB biosolids with respect to pathogens, the density of fecal coliform in the sewage sludge must be less than 1,000 MPN per gram of total solids (dry weight basis), or the density of *Salmonella* sp. bacteria in the sewage sludge be less than three MPN per four grams of total solids (dry weight basis) at the time the sewage sludge is used or disposed. In addition, one of the alternatives listed below must be met:

<u>Alternative 2</u> - The pH of the sewage sludge that is used or disposed shall be raised to above 12 std. units and shall remain above 12 std. units for 72 hours.

The temperature of the sewage sludge shall be above 52° Celsius for 12 hours or longer during the period that the pH of the sewage sludge is above 12 std. units.

At the end of the 72-hour period during which the pH of the sewage sludge is above 12 std. units, the sewage sludge shall be air dried to achieve a percent solids in the sewage sludge greater than 50%; or

<u>Alternative 3</u> - The sewage sludge shall be analyzed for enteric viruses prior to pathogen treatment. The limit for enteric viruses is less than one Plaque-forming Unit per four grams of total solids (dry weight basis) either before or following pathogen treatment. See 30 TAC § 312.82(a)(2)(C)(i-iii) for specific information. The sewage sludge shall be analyzed for viable helminth ova prior to pathogen treatment. The limit for viable helminth ova is less than one per four grams of total solids (dry weight basis) either before or following pathogen treatment. See 30 TAC § 312.82(a)(2)(C)(iv-vi) for specific information; or

<u>Alternative 4</u> - The density of enteric viruses in the sewage sludge shall be less than one Plaque-forming Unit per four grams of total solids (dry weight basis) at the time the sewage sludge is used or disposed. The density of viable helminth ova in the sewage sludge shall be less than one per four grams of total solids (dry weight basis) at the time the sewage sludge is used or disposed.

c. Sewage sludge that meets the requirements of Class AB biosolids may be classified a Class A biosolids if a variance request is submitted in writing that is supported by substantial documentation demonstrating equivalent methods for reducing odors and written approval is granted by the executive director. The executive director may deny the variance request or revoke that approved variance if it is determined that the variance may potentially endanger human health or the environment, or create nuisance odor conditions.

d. Three alternatives are available to demonstrate compliance with Class B biosolids criteria.

### Alternative 1

- i. A minimum of seven random samples of the sewage sludge shall be collected within 48 hours of the time the sewage sludge is used or disposed of during each monitoring episode for the sewage sludge.
- ii. The geometric mean of the density of fecal coliform in the samples collected shall be less than either 2,000,000 MPN per gram of total solids (dry weight basis) or 2,000,000 Colony Forming Units per gram of total solids (dry weight basis).

<u>Alternative 2</u> - Sewage sludge that is used or disposed of shall be treated in one of the Processes to Significantly Reduce Pathogens (PSRP) described in 40 CFR Part 503, Appendix B, so long as all of the following requirements are met by the generator of the sewage sludge.

- i. Prior to use or disposal, all the sewage sludge must have been generated from a single location, except as provided in paragraph v. below;
- ii. An independent Texas Licensed Professional Engineer must make a certification to the generator of a sewage sludge that the wastewater treatment facility generating the sewage sludge is designed to achieve one of the PSRP at the permitted design loading of the facility. The certification need only be repeated if the design loading of the facility is increased. The certification shall include a statement indicating the design meets all the applicable standards specified in Appendix B of 40 CFR Part 503;
- iii. Prior to any off-site transportation or on-site use or disposal of any sewage sludge generated at a wastewater treatment facility, the chief certified operator of the wastewater treatment facility or other responsible official who manages the processes to significantly reduce pathogens at the wastewater treatment facility for the permittee, shall certify that the sewage sludge underwent at least the minimum operational requirements necessary in order to meet one of the PSRP. The acceptable processes and the minimum operational and record keeping requirements shall be in accordance with established U.S. Environmental Protection Agency final guidance;
- iv. All certification records and operational records describing how the requirements of this paragraph were met shall be kept by the generator for a minimum of three years and be available for inspection by commission staff for review; and
- v. If the sewage sludge is generated from a mixture of sources, resulting from a person who prepares sewage sludge from more than one wastewater treatment facility, the resulting derived product shall meet one of the PSRP, and shall meet the certification, operation, and record keeping requirements of this paragraph.

<u>Alternative 3</u> - Sewage sludge shall be treated in an equivalent process that has been approved by the U.S. Environmental Protection Agency, so long as all of the following requirements are met by the generator of the sewage sludge.

- i. Prior to use or disposal, all the sewage sludge must have been generated from a single location, except as provided in paragraph v. below;
- ii. Prior to any off-site transportation or on-site use or disposal of any sewage sludge generated at a wastewater treatment facility, the chief certified operator of the wastewater treatment facility or other responsible official who manages the processes to significantly reduce pathogens at the wastewater treatment facility for the permittee, shall certify that the sewage sludge underwent at least the minimum operational requirements necessary in order to meet one of the PSRP. The acceptable processes and the minimum operational and record keeping requirements shall be in accordance with established U.S. Environmental Protection Agency final guidance;
- iii. All certification records and operational records describing how the requirements of this paragraph were met shall be kept by the generator for a minimum of three years and be available for inspection by commission staff for review;
- iv. The Executive Director will accept from the U.S. Environmental Protection Agency a finding of equivalency to the defined PSRP; and
- v. If the sewage sludge is generated from a mixture of sources resulting from a person who prepares sewage sludge from more than one wastewater treatment facility, the resulting derived product shall meet one of the Processes to Significantly Reduce Pathogens, and shall meet the certification, operation, and record keeping requirements of this paragraph.

In addition to the Alternatives 1 - 3, the following site restrictions must be met if Class B biosolids are land applied:

- i. Food crops with harvested parts that touch the biosolids/soil mixture and are totally above the land surface shall not be harvested for 14 months after application of biosolids.
- ii. Food crops with harvested parts below the surface of the land shall not be harvested for 20 months after application of biosolids when the biosolids remain on the land surface for 4 months or longer prior to incorporation into the soil.
- iii. Food crops with harvested parts below the surface of the land shall not be harvested for 38 months after application of biosolids when the biosolids remain on the land surface for less than 4 months prior to incorporation into the soil.
- iv. Food crops, feed crops, and fiber crops shall not be harvested for 30 days after application of biosolids.
- v. Domestic livestock shall not be allowed to graze on the land for 30 days after application of biosolids.
- vi. Turf grown on land where biosolids are applied shall not be harvested for 1 year after application of the biosolids when the harvested turf is placed on either land with a high potential for public exposure or a lawn.
- vii. Public access to land with a high potential for public exposure shall be restricted

for 1 year after application of biosolids.

- viii. Public access to land with a low potential for public exposure shall be restricted for 30 days after application of biosolids.
- ix. Land application of biosolids shall be in accordance with the buffer zone requirements found in 30 TAC 312.44.
- 4. Vector Attraction Reduction Requirements

All bulk sewage sludge that is applied to agricultural land, forest, a public contact site, or a reclamation site shall be treated by one of the following Alternatives 1 through 10 for vector attraction reduction.

- <u>Alternative 1</u> The mass of volatile solids in the sewage sludge shall be reduced by a minimum of 38%.
- <u>Alternative 2</u> If Alternative 1 cannot be met for an anaerobically digested sludge, demonstration can be made by digesting a portion of the previously digested sludge anaerobically in the laboratory in a bench-scale unit for 40 additional days at a temperature between 30° and 37° Celsius. Volatile solids must be reduced by less than 17% to demonstrate compliance.
- <u>Alternative 3</u> If Alternative 1 cannot be met for an aerobically digested sludge, demonstration can be made by digesting a portion of the previously digested sludge with percent solids of two percent or less aerobically in the laboratory in a bench-scale unit for 30 additional days at 20° Celsius. Volatile solids must be reduced by less than 15% to demonstrate compliance.
- <u>Alternative 4</u> The specific oxygen uptake rate (SOUR) for sewage sludge treated in an aerobic process shall be equal to or less than 1.5 milligrams of oxygen per hour per gram of total solids (dry weight basis) at a temperature of 20° Celsius.
- <u>Alternative 5</u> Sewage sludge shall be treated in an aerobic process for 14 days or longer. During that time, the temperature of the sewage sludge shall be higher than 40° Celsius and the average temperature of the sewage sludge shall be higher than 45° Celsius.
- <u>Alternative 6</u> The pH of sewage sludge shall be raised to 12 or higher by alkali addition and, without the addition of more alkali shall remain at 12 or higher for two hours and then remain at a pH of 11.5 or higher for an additional 22 hours at the time the sewage sludge is prepared for sale or given away in a bag or other container.
- <u>Alternative 7</u> The percent solids of sewage sludge that does not contain unstabilized solids generated in a primary wastewater treatment process shall be equal to or greater than 75% based on the moisture content and total solids prior to mixing with other materials. Unstabilized solids are defined as organic materials in sewage sludge that have not been

treated in either an aerobic or anaerobic treatment process.

- <u>Alternative 8</u> The percent solids of sewage sludge that contains unstabilized solids generated in a primary wastewater treatment process shall be equal to or greater than 90% based on the moisture content and total solids prior to mixing with other materials at the time the sludge is used. Unstabilized solids are defined as organic materials in sewage sludge that have not been treated in either an aerobic or anaerobic treatment process.
- <u>Alternative 9</u> i. Biosolids shall be injected below the surface of the land.
  - ii. No significant amount of the biosolids shall be present on the land surface within one hour after the biosolids are injected.
  - iii. When sewage sludge that is injected below the surface of the land is Class A or Class AB with respect to pathogens, the biosolids shall be injected below the land surface within eight hours after being discharged from the pathogen treatment process.
- <u>Alternative 10</u>- i. Biosolids applied to the land surface or placed on a surface disposal site shall be incorporated into the soil within six hours after application to or placement on the land.
  - ii. When biosolids that are incorporated into the soil is Class A or Class AB with respect to pathogens, the biosolids shall be applied to or placed on the land within eight hours after being discharged from the pathogen treatment process.

# **C.** Monitoring Requirements

Toxicity Characteristic Leaching Procedure	- once during the term of this permit in the
(TCLP) Test	Interim I and Interim II phases, and
	annually in the Final phase
PCBs	- once during the term of this permit in the
	Interim I and Interim II phases, and
	annually in the Final phase

All metal constituents and fecal coliform or *Salmonella* sp. bacteria shall be monitored at the appropriate frequency shown below, pursuant to 30 TAC § 312.46(a)(1):

Amount of biosolids (*) <u>metric tons per 365-day period</u>	Monitoring Frequency
0 to less than 290	Once/Year
290 to less than 1,500	Once/Quarter
1,500 to less than 15,000	Once/Two Months
15,000 or greater	Once/Month

(\*) The amount of bulk biosolids applied to the land (dry wt. basis).

Representative samples of sewage sludge shall be collected and analyzed in accordance with the methods referenced in 30 TAC § 312.7

Identify each of the analytic methods used by the facility to analyze enteric viruses, fecal coliforms, helminth ova, *Salmonella* sp., and other regulated parameters.

Identify in the following categories (as applicable) the sewage sludge or biosolids treatment process or processes at the facility: preliminary operations (e.g., sludge or biosolids grinding and degritting), thickening (concentration), stabilization, anaerobic digestion, aerobic digestion, composting, conditioning, disinfection (e.g., beta ray irradiation, gamma ray irradiation, pasteurization), dewatering (e.g., centrifugation, sludge drying beds, sludge lagoons), heat drying, thermal reduction, and methane or biogas capture and recovery.

Identify the nature of material generated by the facility (such as a biosolid for beneficial use or land-farming, or sewage sludge or biosolids for disposal at a monofill) and whether the material is ultimately conveyed off-site in bulk or in bags.

#### SECTION II. REQUIREMENTS SPECIFIC TO BULK SEWAGE SLUDGE OR BIOSOLIDS FOR APPLICATION TO THE LAND MEETING CLASS A, CLASS AB or B PATHOGEN REDUCTION AND THE CUMULATIVE LOADING RATES IN TABLE 2, OR CLASS B PATHOGEN REDUCTION AND THE POLLUTANT CONCENTRATIONS IN TABLE 3

For those permittees meeting Class A, Class AB or B pathogen reduction requirements and that meet the cumulative loading rates in Table 2 below, or the Class B pathogen reduction requirements and contain concentrations of pollutants below listed in Table 3, the following conditions apply:

Table 2

# A. Pollutant Limits

	Table 2	
<u>Pollutant</u> Arsenic Cadmium Chromium Copper Lead Mercury Molybdenum Nickel Selenium Zinc		Cumulative Pollutant Loading Rate ( <u>pounds per acre</u> )* 36 35 2677 1339 268 15 Report Only 375 89 2500
	Table 3	
<u>Pollutant</u> Arsenic Cadmium Chromium Copper Lead		Monthly Average Concentration ( <u>milligrams per kilogram</u> )* 41 39 1200 1500 300

17

420

2800

36

Report Only

**B.** Pathogen Control

Mercury

Selenium

Nickel

Zinc

Molvbdenum

All bulk sewage sludge that is applied to agricultural land, forest, a public contact site, a reclamation site, shall be treated by either Class A, Class AB or Class B biosolids pathogen reduction requirements as defined above in Section I.B.3.

\*Dry weight basis

# **C.** Management Practices

- 1. Bulk biosolids shall not be applied to agricultural land, forest, a public contact site, or a reclamation site that is flooded, frozen, or snow-covered so that the bulk sewage sludge enters a wetland or other waters in the State.
- 2. Bulk biosolids not meeting Class A requirements shall be land applied in a manner which complies with Applicability in accordance with 30 TAC §312.41 and the Management Requirements in accordance with 30 TAC § 312.44.
- 3. Bulk biosolids shall be applied at or below the agronomic rate of the cover crop.
- 4. An information sheet shall be provided to the person who receives bulk Class A or AB biosolids sold or given away. The information sheet shall contain the following information:
  - a. The name and address of the person who prepared the Class A or AB biosolids that are sold or given away in a bag or other container for application to the land.
  - b. A statement that application of the biosolids to the land is prohibited except in accordance with the instruction on the label or information sheet.
  - c. The annual whole sludge application rate for the biosolids application rate for the biosolids that does not cause any of the cumulative pollutant loading rates in Table 2 above to be exceeded, unless the pollutant concentrations in Table 3 found in Section II above are met.

# **D.** Notification Requirements

- 1. If bulk biosolids are applied to land in a State other than Texas, written notice shall be provided prior to the initial land application to the permitting authority for the State in which the bulk biosolids are proposed to be applied. The notice shall include:
  - a. The location, by street address, and specific latitude and longitude, of each land application site.
  - b. The approximate time period bulk biosolids will be applied to the site.
  - c. The name, address, telephone number, and National Pollutant Discharge Elimination System permit number (if appropriate) for the person who will apply the bulk biosolids.
- 2. The permittee shall give 180 days prior notice to the Executive Director in care of the Wastewater Permitting Section (MC 148) of the Water Quality Division of any change planned in the biosolids disposal practice.

# E. Record Keeping Requirements

The documents will be retained at the facility site and/or shall be readily available for review by a TCEQ representative. The person who prepares bulk sewage sludge or a biosolids material shall develop the following information and shall retain the information at the facility site and/or shall be readily available for review by a TCEQ representative for a period of <u>five years</u>. If the permittee supplies the sludge to another person who land applies the sludge, the permittee shall notify the land applier of the requirements for record keeping found in 30 TAC § 312.47 for persons who land apply.

- 1. The concentration (mg/kg) in the sludge of each pollutant listed in Table 3 above and the applicable pollutant concentration criteria (mg/kg), <u>or</u> the applicable cumulative pollutant loading rate and the applicable cumulative pollutant loading rate limit (lbs/ac) listed in Table 2 above.
- 2. A description of how the pathogen reduction requirements are met (including site restrictions for Class AB and Class B biosolids, if applicable).
- 3. A description of how the vector attraction reduction requirements are met.
- 4. A description of how the management practices listed above in Section II.C are being met.
- 5. The following certification statement:

"I certify, under penalty of law, that the applicable pathogen requirements in 30 TAC § 312.82(a) or (b) and the vector attraction reduction requirements in 30 TAC § 312.83(b) have been met for each site on which bulk biosolids are applied. This determination has been made under my direction and supervision in accordance with the system designed to ensure that qualified personnel properly gather and evaluate the information used to determine that the management practices have been met. I am aware that there are significant penalties for false certification including fine and imprisonment."

- 6. The recommended agronomic loading rate from the references listed in Section II.C.3. above, as well as the actual agronomic loading rate shall be retained. The person who applies bulk biosolids shall develop the following information and shall retain the information at the facility site and/or shall be readily available for review by a TCEQ representative <u>indefinitely</u>. If the permittee supplies the sludge to another person who land applies the sludge, the permittee shall notify the land applier of the requirements for record keeping found in 30 TAC § 312.47 for persons who land apply:
  - a. A certification statement that all applicable requirements (specifically listed) have been met, and that the permittee understands that there are significant penalties for false certification including fine and imprisonment. See 30 TAC § 312.47(a)(4)(A)(ii) or 30 TAC § 312.47(a)(5)(A)(ii), as applicable, and to the permittee's specific sludge treatment activities.
  - b. The location, by street address, and specific latitude and longitude, of each site on which biosolids are applied.
  - c. The number of acres in each site on which bulk biosolids are applied.
  - d. The date and time biosolids are applied to each site.
  - e. The cumulative amount of each pollutant in pounds/acre listed in Table 2 applied to each site.
  - f. The total amount of biosolids applied to each site in dry tons.

The above records shall be maintained on-site on a monthly basis and shall be made available to the Texas Commission on Environmental Quality upon request.

# F. Reporting Requirements

The permittee shall submit the following information in an annual report to the TCEQ by September 30<sup>th</sup> of each year. The permittee must submit this annual report using the online electronic reporting system available through TCEQ's website. If the permittee requests and obtains an electronic reporting waiver, the annual report can be submitted in hard copy to the TCEQ Regional Office (MC Region 4) and the Enforcement Division (MC 224).

- 1. Identify in the following categories (as applicable) the sewage sludge or biosolids treatment process or processes at the facility: preliminary operations (e.g., sludge or biosolids grinding and degritting), thickening (concentration), stabilization, anaerobic digestion, aerobic digestion, composting, conditioning, disinfection (e.g., beta ray irradiation, gamma ray irradiation, pasteurization), dewatering (e.g., centrifugation, sludge drying beds, sludge lagoons), heat drying, thermal reduction, and methane or biogas capture and recovery.
- 2. Identify the nature of material generated by the facility (such as a biosolid for beneficial use or land-farming, or sewage sludge for disposal at a monofill) and whether the material is ultimately conveyed off-site in bulk or in bags.
- 3. Results of tests performed for pollutants found in either Table 2 or 3 as appropriate for the permittee's land application practices.
- 4. The frequency of monitoring listed in Section I.C. that applies to the permittee.
- 5. Toxicity Characteristic Leaching Procedure (TCLP) results.
- 6. PCB concentration in sludge or biosolids in mg/kg.
- 7. Identity of hauler(s) and TCEQ transporter number.
- 8. Date(s) of transport.
- 9. Texas Commission on Environmental Quality registration number, if applicable.
- 10. Amount of sludge or biosolids disposal dry weight (lbs/acre) at each disposal site.
- 11. The concentration (mg/kg) in the sludge of each pollutant listed in Table 1 (defined as a monthly average) as well as the applicable pollutant concentration criteria (mg/kg) listed in Table 3 above, or the applicable pollutant loading rate limit (lbs/acre) listed in Table 2 above if it exceeds 90% of the limit.
- 12. Level of pathogen reduction achieved (Class A, Class AB or Class B).
- 13. Alternative used as listed in Section I.B.3.(a. or b.). Alternatives describe how the pathogen reduction requirements are met. If Class B biosolids, include information on how site restrictions were met.
- 14. Identify each of the analytic methods used by the facility to analyze enteric viruses, fecal coliforms, helminth ova, *Salmonella* sp., and other regulated parameters.
- 15. Vector attraction reduction alternative used as listed in Section I.B.4.

- 16. Amount of sludge or biosolids transported in dry tons/year.
- 17. The certification statement listed in either 30 TAC § 312.47(a)(4)(A)(ii) or 30 TAC § 312.47(a)(5)(A)(ii) as applicable to the permittee's sludge or biosolids treatment activities, shall be attached to the annual reporting form.
- 18. When the amount of any pollutant applied to the land exceeds 90% of the cumulative pollutant loading rate for that pollutant, as described in Table 2, the permittee shall report the following information as an attachment to the annual reporting form.
  - a. The location, by street address, and specific latitude and longitude.
  - b. The number of acres in each site on which bulk biosolids are applied.
  - c. The date and time bulk biosolids are applied to each site.
  - d. The cumulative amount of each pollutant (i.e., pounds/acre) listed in Table 2 in the bulk biosolids applied to each site.
  - e. The amount of biosolids (i.e., dry tons) applied to each site.

The above records shall be maintained on a monthly basis and shall be made available to the Texas Commission on Environmental Quality upon request.

#### SECTION III. REQUIREMENTS APPLYING TO ALL SEWAGE SLUDGE OR BIOSOLIDS DISPOSED IN A MUNICIPAL SOLID WASTE LANDFILL

- A. The permittee shall handle and dispose of sewage sludge or biosolids in accordance with 30 TAC § 330 and all other applicable state and federal regulations to protect public health and the environment from any reasonably anticipated adverse effects due to any toxic pollutants that may be present. The permittee shall ensure that the sewage sludge meets the requirements in 30 TAC § 330 concerning the quality of the sludge or biosolids disposed in a municipal solid waste landfill.
- B. If the permittee generates sewage sludge and supplies that sewage sludge or biosolids to the owner or operator of a municipal solid waste landfill (MSWLF) for disposal, the permittee shall provide to the owner or operator of the MSWLF appropriate information needed to be in compliance with the provisions of this permit.
- C. The permittee shall give 180 days prior notice to the Executive Director in care of the Wastewater Permitting Section (MC 148) of the Water Quality Division of any change planned in the sewage sludge or biosolids disposal practice.
- D. Sewage sludge or biosolids shall be tested once during the term of this permit in the Interim I and Interim II phases, and annually in the Final phase in accordance with the method specified in both 40 CFR Part 261, Appendix II and 40 CFR Part 268, Appendix I (Toxicity Characteristic Leaching Procedure) or other method, which receives the prior approval of the TCEQ for contaminants listed in Table 1 of 40 CFR § 261.24. Sewage sludge or biosolids failing this test shall be managed according to RCRA standards for generators of hazardous waste, and the waste's disposition must be in accordance with all applicable requirements for hazardous waste processing, storage, or disposal.

Following failure of any TCLP test, the management or disposal of sewage sludge or biosolids at a facility other than an authorized hazardous waste processing, storage, or disposal facility shall be prohibited until such time as the permittee can demonstrate the sewage sludge or biosolids no longer exhibits the hazardous waste toxicity characteristics (as demonstrated by the results of the TCLP tests). A written report shall be provided to both the TCEQ Registration and Reporting Section (MC 129) of the Permitting and Registration Support Division and the Regional Director (MC Region 4) of the appropriate TCEQ field office within 7 days after failing the TCLP Test.

The report shall contain test results, certification that unauthorized waste management has stopped, and a summary of alternative disposal plans that comply with RCRA standards for the management of hazardous waste. The report shall be addressed to: Director, Permitting and Registration Support Division (MC 129), Texas Commission on Environmental Quality, P. O. Box 13087, Austin, Texas 78711-3087. In addition, the permittee shall prepare an annual report on the results of all sludge toxicity testing. This annual report shall be submitted to the TCEQ Regional Office (MC Region 4) and the Enforcement Division (MC 224), by September 30 of each year.

- E. Sewage sludge or biosolids shall be tested as needed, in accordance with the requirements of 30 TAC Chapter 330.
- F. Record Keeping Requirements

The permittee shall develop the following information and shall retain the information for five years.

- 1. The description (including procedures followed and the results) of all liquid Paint Filter Tests performed.
- 2. The description (including procedures followed and results) of all TCLP tests performed.

The above records shall be maintained on-site on a monthly basis and shall be made available to the Texas Commission on Environmental Quality upon request.

G. Reporting Requirements

The permittee shall submit the following information in an annual report to the TCEQ by September 30<sup>th</sup> of each year. The permittee must submit this annual report using the online electronic reporting system available through TCEQ's website. If the permittee requests and obtains an electronic reporting waiver, the annual report can be submitted in hard copy to the TCEQ Regional Office (MC Region 4) and the Enforcement Division (MC 224).

- 1. Identify in the following categories (as applicable) the sewage sludge or biosolids treatment process or processes at the facility: preliminary operations (e.g., sludge or biosolids grinding and degritting), thickening (concentration), stabilization, anaerobic digestion, aerobic digestion, composting, conditioning, disinfection (e.g., beta ray irradiation, gamma ray irradiation, pasteurization), dewatering (e.g., centrifugation, sludge drying beds, sludge lagoons), heat drying, thermal reduction, and methane or biogas capture and recovery.
- 2. Toxicity Characteristic Leaching Procedure (TCLP) results.
- 3. Annual sludge or biosolids production in dry tons/year.
- 4. Amount of sludge or biosolids disposed in a municipal solid waste landfill in dry tons/year.
- 5. Amount of sludge or biosolids transported interstate in dry tons/year.
- 6. A certification that the sewage sludge or biosolids meets the requirements of 30 TAC § 330 concerning the quality of the sludge disposed in a municipal solid waste landfill.
- 7. Identity of hauler(s) and transporter registration number.
- 8. Owner of disposal site(s).
- 9. Location of disposal site(s).
- 10. Date(s) of disposal.

The above records shall be maintained on-site on a monthly basis and shall be made available to the Texas Commission on Environmental Quality upon request.

#### SECTION IV. REQUIREMENTS APPLYING TO SLUDGE OR BIOSOLIDS TRANSPORTED TO ANOTHER FACILITY FOR FURTHER PROCESSING

These provisions apply to sludge or biosolids that is transported to another wastewater treatment facility or facility that further processes sludge or biosolids. These provisions are intended to allow transport of sludge or biosolids to facilities that have been authorized to accept sludge or biosolids. These provisions do not limit the ability of the receiving facility to determine whether to accept the sludge or biosolids, nor do they limit the ability of the receiving facility to request additional testing or documentation.

# A. General Requirements

- 1. The permittee shall handle and dispose of sewage sludge or biosolids in accordance with 30 TAC Chapter 312 and all other applicable state and federal regulations in a manner that protects public health and the environment from any reasonably anticipated adverse effects due to any toxic pollutants that may be present in the sludge.
- 2. Sludge or biosolids may only be transported using a registered transporter or using an approved pipeline.

# **B. Record Keeping Requirements**

- 1. For sludge transported by an approved pipeline, the permittee must maintain records of the following:
  - a. the amount of sludge or biosolids transported;
  - b. the date of transport;
  - c. the name and TCEQ permit number of the receiving facility or facilities;
  - d. the location of the receiving facility or facilities;
  - e. the name and TCEQ permit number of the facility that generated the waste; and
  - f. copy of the written agreement between the permittee and the receiving facility to accept sludge or biosolids.
- 2. For sludge or biosolids transported by a registered transporter, the permittee must maintain records of the completed trip tickets in accordance with 30 TAC § 312.145(a)(1)-(7) and amount of sludge or biosolids transported.
- 3. The above records shall be maintained on-site on a monthly basis and shall be made available to the TCEQ upon request. These records shall be retained for at least five years.

# **C.** Reporting Requirements

The permittee shall submit the following information in an annual report to the TCEQ by September 30<sup>th</sup> of each year. The permittee must submit this annual report using the online electronic reporting system available through TCEQ's website. If the permittee requests and obtains an electronic reporting waiver, the annual report can be submitted in hard copy to the TCEQ Regional Office (MC Region 4) and the Enforcement Division (MC 224).

- 1. Identify in the following categories (as applicable) the sewage sludge or biosolids treatment process or processes at the facility: preliminary operations (e.g., sludge or biosolids grinding and degritting), thickening (concentration), stabilization, anaerobic digestion, aerobic digestion, composting, conditioning, disinfection (e.g., beta ray irradiation, gamma ray irradiation, pasteurization), dewatering (e.g., centrifugation, sludge drying beds, sludge lagoons), heat drying, thermal reduction, and methane or biogas capture and recovery.
- 2. the annual sludge or biosolids production;
- 3. the amount of sludge or biosolids transported;
- 4. the owner of each receiving facility;
- 5. the location of each receiving facility; and
- 6. the date(s) of disposal at each receiving facility.

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# **OTHER REQUIREMENTS**

1. The permittee shall employ or contract with one or more licensed wastewater treatment facility operators or wastewater system operations companies holding a valid license or registration according to the requirements of 30 TAC Chapter 30, Occupational Licenses and Registrations, and in particular 30 TAC Chapter 30, Subchapter J, Wastewater Operators and Operations Companies.

This Category C (Interim I and Interim II phases) and Category B (Final phase) facility must be operated by a chief operator or an operator holding a Class C license or higher in the Interim I and Interim II phases, and a Class B license or higher in the Final phase. The facility must be operated a minimum of five days per week by the licensed chief operator or an operator holding the required level of license or higher. The licensed chief operator or operator holding the required level of license or higher must be available by telephone or pager seven days per week. Where shift operation of the wastewater treatment facility is necessary, each shift that does not have the on-site supervision of the licensed chief operator must be supervised by an operator in charge who is licensed not less than one level below the category for the facility.

- 2. The facility is not located in the Coastal Management Program boundary.
- 3. There is no mixing zone established for this discharge to an intermittent stream with perennial pools. Chronic toxic criteria apply at the point of discharge.
- 4. Prior to construction of the Interim I, Interim II, and Final phases, the permittee shall submit sufficient evidence of legal restrictions prohibiting residential structures within the part of the buffer zone not owned by the permittee according to 30 TAC § 309.13(e)(3). The evidence of legal restrictions shall be submitted to the Executive Director in care of the TCEQ Wastewater Permitting Section (MC 148). The permittee shall comply with the requirements of 30 TAC § 309.13(a) through (d). See Attachment A.
- 5. The permittee shall provide facilities for the protection of its wastewater treatment facility from a 100-year flood.
- 6. In accordance with 30 TAC § 319.9, a permittee that has at least twelve months of uninterrupted compliance with its bacteria limit may notify the commission in writing of its compliance and request a less frequent measurement schedule. To request a less frequent schedule, the permittee shall submit a written request to the TCEO Wastewater Permitting Section (MC 148) for each phase that includes a different monitoring frequency. The request must contain all of the reported bacteria values (Daily Avg. and Daily Max/Single Grab) for the twelve consecutive months immediately prior to the request. If the Executive Director finds that a less frequent measurement schedule is protective of human health and the environment, the permittee may be given a less frequent measurement schedule. For this permit, One/month may be reduced to One/quarter in the Interim I and Interim II phases, and One/week may be reduced to Two/month in the Final phase. A violation of any bacteria limit by a facility that has been granted a less frequent measurement schedule will require the permittee to return to the standard frequency schedule and submit written notice to the TCEQ Wastewater Permitting Section (MC 148). The permittee may not apply for another reduction in measurement frequency for at least 24 months from the date of the last violation. The Executive Director may establish a more frequent measurement schedule if necessary to protect human health or the

environment.

- 7. Prior to construction of the treatment facilities for each phase, the permittee shall submit to the TCEQ Wastewater Permitting Section (MC 148) a summary transmittal letter in accordance with the requirements in 30 TAC § 217.6(d). If requested by the Wastewater Permitting Section, the permittee shall submit plans, specifications, and a final engineering design report which comply with 30 TAC Chapter 217, Design Criteria for Domestic Wastewater Systems. The permittee shall clearly show how the treatment system will meet the effluent limitations required on Pages 2, 2a, and 2b of this permit. A copy of the summary transmittal letter shall be available at the plant site for inspection by authorized representatives of the TCEQ.
- 8. Within 120 days from the start-up of the facility, the permittee shall complete Attachment B with the analytical results for Outfall 001. The completed tables with the results of these analysis and laboratory reports shall be submitted to the Municipal Permits Team, Wastewater Permitting Section MC 148, TCEQ Water Quality Division. Based on a technical review of the submitted analytical results, an amendment may be initiated by TCEQ staff to include additional effluent limitations and/or monitoring requirements. Test methods utilized to complete the tables shall be according to the test procedures specified in the Definitions and Standard Permit Conditions section of this permit and sensitive enough to detect the parameters listed in Attachment B at the minimum analytical level (MAL).
- 9. Reporting requirements according to 30 TAC §§ 319.1-319.11 and any additional effluent reporting requirements contained in this permit are suspended from the effective date of the permit until plant startup or discharge from the facility described by this permit, whichever occurs first. The permittee shall provide written notice to the TCEQ Regional Office (MC Region 4) and the Applications Review and Processing Team (MC 148) of the Water Quality Division, in writing at least forty-five days prior to plant startup or anticipated discharge, whichever occurs first, and prior to completion of each additional phase on Notification of Completion Form 20007.

### CONTRIBUTING INDUSTRIES AND PRETREATMENT REQUIREMENTS

- 1. The following pollutants may not be introduced into the treatment facility:
  - a. Pollutants which create a fire or explosion hazard in the publicly owned treatment works (POTW), including, but not limited to, waste streams with a closed-cup flash point of less than 140° Fahrenheit (60° Celsius) using the test methods specified in 40 CFR § 261.21;
  - b. Pollutants which will cause corrosive structural damage to the POTW, but in no case shall there be discharges with a pH lower than 5.0 standard units, unless the works are specifically designed to accommodate such discharges;
  - c. Solid or viscous pollutants in amounts which will cause obstruction to the flow in the POTW, resulting in Interference;
  - d. Any pollutant, including oxygen-demanding pollutants (e.g., biochemical oxygen demand), released in a discharge at a flow rate and/or pollutant concentration which will cause Interference with the POTW;
  - e. Heat in amounts which will inhibit biological activity in the POTW, resulting in Interference, but in no case shall there be heat in such quantities that the temperature at the POTW treatment plant exceeds 104° Fahrenheit (40° Celsius) unless the Executive Director, upon request of the POTW, approves alternate temperature limits;
  - f. Petroleum oil, nonbiodegradable cutting oil, or products of mineral oil origin in amounts that will cause Interference or Pass Through;
  - g. Pollutants which result in the presence of toxic gases, vapors, or fumes within the POTW in a quantity that may cause acute worker health and safety problems; and
  - h. Any trucked or hauled pollutants except at discharge points designated by the POTW.
- 2. The permittee shall require any indirect discharger to the treatment works to comply with the reporting requirements of Sections 204(b), 307, and 308 of the Clean Water Act, including any requirements established under 40 CFR Part 403 [*rev. Federal Register/ Vol.* 70/ No. 198/ Friday, October 14, 2005/ Rules and Regulations, pages 60134-60798].
- 3. The permittee shall provide adequate notification to the Executive Director, care of the Wastewater Permitting Section (MC 148) of the Water Quality Division, within 30 days subsequent to the permittee's knowledge of either of the following:
  - a. Any new introduction of pollutants into the treatment works from an indirect discharger which would be subject to Sections 301 and 306 of the Clean Water Act if it were directly discharging those pollutants; and
  - b. Any substantial change in the volume or character of pollutants being introduced into the treatment works by a source introducing pollutants into the treatment works at the time of issuance of the permit.

Any notice shall include information on the quality and quantity of effluent to be introduced into the treatment works and any anticipated impact of the change on the quality or quantity of effluent to be discharged from the POTW.

Revised July 2007

# **BIOMONITORING REQUIREMENTS**

### CHRONIC BIOMONITORING REQUIREMENTS: FRESHWATER

The provisions of this section apply to Outfall 001 for whole effluent toxicity (WET) testing.

- 1. <u>Scope, Frequency, and Methodology</u>
  - a. The permittee shall test the effluent for toxicity in accordance with the provisions below. Such testing will determine if an appropriately dilute effluent sample adversely affects the survival, reproduction, or growth of the test organisms.
  - b. Within 90 days of initial discharge of the 2.0 MGD facility, the permittee shall conduct the following toxicity tests using the test organisms, procedures, and quality assurance requirements specified in this part of this permit and in accordance with "Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms," fourth edition (EPA-821-R-02-013) or its most recent update:
    - 1) Chronic static renewal survival and reproduction test using the water flea (*Ceriodaphnia dubia*) (Method 1002.0). This test should be terminated when 60% of the surviving adults in the control produce three broods or at the end of eight days, whichever occurs first. This test shall be conducted once per quarter.
    - 2) Chronic static renewal 7-day larval survival and growth test using the fathead minnow (*Pimephales promelas*) (Method 1000.0). A minimum of five replicates with eight organisms per replicate shall be used in the control and in each dilution. This test shall be conducted once per quarter.

The permittee must perform and report a valid test for each test species during the prescribed reporting period. An invalid test must be repeated during the same reporting period. An invalid test is defined as any test failing to satisfy the test acceptability criteria, procedures, and quality assurance requirements specified in the test methods and permit.

- c. The permittee shall use five effluent dilution concentrations and a control in each toxicity test. These effluent dilution concentrations are 32%, 42%, 56%, 75%, and 100% effluent. The critical dilution, defined as 100% effluent, is the effluent concentration representative of the proportion of effluent in the receiving water during critical low flow or critical mixing conditions.
- d. This permit may be amended to require a WET limit, a chemical-specific effluent limit, a best management practice, or other appropriate actions to address toxicity. The permittee may be required to conduct a toxicity reduction evaluation (TRE) after multiple toxic events.
- e. Testing Frequency Reduction
  - 1) If none of the first four consecutive quarterly tests demonstrates

significant toxicity, the permittee may submit this information in writing and, upon approval, reduce the testing frequency to once per six months for the invertebrate test species and once per year for the vertebrate test species.

2) If one or more of the first four consecutive quarterly tests demonstrates significant toxicity, the permittee shall continue quarterly testing for that species until this permit is reissued. If a testing frequency reduction had been previously granted and a subsequent test demonstrates significant toxicity, the permittee shall resume a quarterly testing frequency for that species until this permit is reissued.

### 2. <u>Required Toxicity Testing Conditions</u>

- a. Test Acceptance The permittee shall repeat any toxicity test, including the control and all effluent dilutions, which fail to meet the following criteria:
  - 1) a control mean survival of 80% or greater;
  - 2) a control mean number of water flea neonates per surviving adult of 15 or greater;
  - 3) a control mean dry weight of surviving fathead minnow larvae of 0.25 mg or greater;
  - 4) a control coefficient of variation percent (CV%) of 40 or less in between replicates for the young of surviving females in the water flea test; and the growth and survival endpoints in the fathead minnow test;
  - 5) a critical dilution CV% of 40 or less for the young of surviving females in the water flea test; and the growth and survival endpoints for the fathead minnow test. However, if statistically significant lethal or nonlethal effects are exhibited at the critical dilution, a CV% greater than 40 shall not invalidate the test;
  - 6) a percent minimum significant difference of 47 or less for water flea reproduction; and
  - 7) a percent minimum significant difference of 30 or less for fathead minnow growth.
- b. Statistical Interpretation
  - 1) For the water flea survival test, the statistical analyses used to determine if there is a significant difference between the control and an effluent dilution shall be the Fisher's exact test as described in the manual referenced in in Part 1.b.
  - 2) For the water flea reproduction test and the fathead minnow larval survival and growth tests, the statistical analyses used to determine if there is a significant difference between the control and an effluent

dilution shall be in accordance with the manual referenced in Part 1.b..

- 3) The permittee is responsible for reviewing test concentration-response relationships to ensure that calculated test-results are interpreted and reported correctly. The document entitled "Method Guidance and Recommendation for Whole Effluent Toxicity (WET) Testing (40 CFR Part 136)" (EPA 821-B-00-004) provides guidance on determining the validity of test results.
- 4) If significant lethality is demonstrated (that is, there is a statistically significant difference in survival at the critical dilution when compared to the survival in the control), the conditions of test acceptability are met, and the survival of the test organisms are equal to or greater than 80% in the critical dilution and all dilutions below that, then the permittee shall report a survival No Observed Effect Concentration (NOEC) of not less than the critical dilution for the reporting requirements.
- 5) The NOEC is defined as the greatest effluent dilution at which no significant effect is demonstrated. The Lowest Observed Effect Concentration (LOEC) is defined as the lowest effluent dilution at which a significant effect is demonstrated. A significant effect is defined as a statistically significant difference between the survival, reproduction, or growth of the test organism in a specified effluent dilution when compared to the survival, reproduction, or growth of the test organism in the control (0% effluent).
- 6) The use of NOECs and LOECs assumes either a monotonic (continuous) concentration-response relationship or a threshold model of the concentration-response relationship. For any test result that demonstrates a non-monotonic (non-continuous) response, the NOEC should be determined based on the guidance manual referenced in Item 3.
- 7) Pursuant to the responsibility assigned to the permittee in Part 2.b.3), test results that demonstrate a non-monotonic (non-continuous) concentration-response relationship may be submitted, prior to the due date, for technical review. The guidance manual referenced in Item 3 will be used when making a determination of test acceptability.
- 8) TCEQ staff will review test results for consistency with rules, procedures, and permit requirements.
- c. Dilution Water
  - 1) Dilution water used in the toxicity tests must be the receiving water collected at a point upstream of the discharge point as close as possible to the discharge point but unaffected by the discharge. Where the toxicity tests are conducted on effluent discharges to receiving waters that are classified as intermittent streams, or where the toxicity tests are conducted on effluent discharges where no receiving water is available due to zero flow conditions, the permittee shall:

- a) substitute a synthetic dilution water that has a pH, hardness, and alkalinity similar to that of the closest downstream perennial water unaffected by the discharge; or
- b) use the closest downstream perennial water unaffected by the discharge.
- 2) Where the receiving water proves unsatisfactory as a result of pre-existing instream toxicity (i.e. fails to fulfill the test acceptance criteria of Part 2.a.), the permittee may substitute synthetic dilution water for the receiving water in all subsequent tests provided the unacceptable receiving water test met the following stipulations:
  - a) a synthetic lab water control was performed (in addition to the receiving water control) which fulfilled the test acceptance requirements of Part 2.a;
  - b) the test indicating receiving water toxicity was carried out to completion (i.e., 7 days); and
  - c) the permittee submitted all test results indicating receiving water toxicity with the reports and information required in Part 3.
- 3) The synthetic dilution water shall consist of standard, moderately hard, reconstituted water. Upon approval, the permittee may substitute other appropriate dilution water with chemical and physical characteristics similar to that of the receiving water.
- d. Samples and Composites
  - 1) The permittee shall collect a minimum of three composite samples from Outfall 001. The second and third composite samples will be used for the renewal of the dilution concentrations for each toxicity test.
  - 2) The permittee shall collect the composite samples such that the samples are representative of any periodic episode of chlorination, biocide usage, or other potentially toxic substance being discharged on an intermittent basis.
  - 3) The permittee shall initiate the toxicity tests within 36 hours after collection of the last portion of the first composite sample. The holding time for any subsequent composite sample shall not exceed 72 hours. Samples shall be maintained at a temperature of 0-6 degrees Centigrade during collection, shipping, and storage.
  - 4) If Outfall 001 ceases discharging during the collection of effluent samples, the requirements for the minimum number of effluent samples, the minimum number of effluent portions, and the sample holding time are waived during that sampling period. However, the permittee must have collected an effluent composite sample volume sufficient to complete the required toxicity tests with renewal of the effluent. When possible, the

effluent samples used for the toxicity tests shall be collected on separate days if the discharge occurs over multiple days. The sample collection duration and the static renewal protocol associated with the abbreviated sample collection must be documented in the full report.

5) The effluent samples shall not be dechlorinated after sample collection.

#### 3. <u>Reporting</u>

All reports, tables, plans, summaries, and related correspondence required in this section shall be submitted to the attention of the Standards Implementation Team (MC 150) of the Water Quality Division.

- a. The permittee shall prepare a full report of the results of all tests conducted in accordance with the manual referenced in Part 1.b. for every valid and invalid toxicity test initiated whether carried to completion or not.
- b. The permittee shall routinely report the results of each biomonitoring test on the Table 1 forms provided with this permit.
  - 1) Annual biomonitoring test results are due on or before January 20th for biomonitoring conducted during the previous 12-month period.
  - 2) Semiannual biomonitoring test results are due on or before July 20th and January 20th for biomonitoring conducted during the previous 6-month period.
  - 3) Quarterly biomonitoring test results are due on or before April 20th, July 20th, October 20th, and January 20th for biomonitoring conducted during the previous calendar quarter.
  - 4) Monthly biomonitoring test results are due on or before the 20th day of the month following sampling.
- c. Enter the following codes for the appropriate parameters for valid tests only:
  - 1) For the water flea, Parameter TLP3B, enter a "1" if the NOEC for survival is less than the critical dilution; otherwise, enter a "0."
  - 2) For the water flea, Parameter TOP3B, report the NOEC for survival.
  - 3) For the water flea, Parameter TXP3B, report the LOEC for survival.
  - 4) For the water flea, Parameter TWP3B, enter a "1" if the NOEC for reproduction is less than the critical dilution; otherwise, enter a "0."
  - 5) For the water flea, Parameter TPP3B, report the NOEC for reproduction.
  - 6) For the water flea, Parameter TYP3B, report the LOEC for reproduction.
  - 7) For the fathead minnow, Parameter TLP6C, enter a "1" if the NOEC for

survival is less than the critical dilution; otherwise, enter a "0."

- 8) For the fathead minnow, Parameter TOP6C, report the NOEC for survival.
- 9) For the fathead minnow, Parameter TXP6C, report the LOEC for survival.
- 10) For the fathead minnow, Parameter TWP6C, enter a "1" if the NOEC for growth is less than the critical dilution; otherwise, enter a "0."
- 11) For the fathead minnow, Parameter TPP6C, report the NOEC for growth.
- 12) For the fathead minnow, Parameter TYP6C, report the LOEC for growth.
- d. Enter the following codes for retests only:
  - 1) For retest number 1, Parameter 22415, enter a "1" if the NOEC for survival is less than the critical dilution; otherwise, enter a "0."
  - 2) For retest number 2, Parameter 22416, enter a "1" if the NOEC for survival is less than the critical dilution; otherwise, enter a "0."
- 4. <u>Persistent Toxicity</u>

The requirements of this Part apply only when a test demonstrates a significant effect at the critical dilution. Significant lethality and significant effect were defined in Part 2.b. Significant sublethality is defined as a statistically significant difference in growth/reproduction at the critical dilution when compared to the growth/reproduction in the control.

- a. The permittee shall conduct a total of 2 additional tests (retests) for any species that demonstrates a significant effect (lethal or sublethal) at the critical dilution. The two retests shall be conducted monthly during the next two consecutive months. The permittee shall not substitute either of the two retests in lieu of routine toxicity testing. All reports shall be submitted within 20 days of test completion. Test completion is defined as the last day of the test.
- b. If the retests are performed due to a demonstration of significant lethality, and one or both of the two retests specified in Part 4.a. demonstrates significant lethality, the permittee shall initiate the TRE requirements as specified in Part 5. The provisions of Part 4.a. are suspended upon completion of the two retests and submittal of the TRE action plan and schedule defined in Part 5.

If neither test demonstrates significant lethality and the permittee is testing under the reduced testing frequency provision of Part 1.e., the permittee shall return to a quarterly testing frequency for that species.

c. If the two retests are performed due to a demonstration of significant sublethality, and one or both of the two retests specified in Part 4.a. demonstrates significant lethality, the permittee shall again perform two retests as stipulated in Part 4.a.

- d. If the two retests are performed due to a demonstration of significant sublethality, and neither test demonstrates significant lethality, the permittee shall continue testing at the quarterly frequency.
- e. Regardless of whether retesting for lethal or sublethal effects, or a combination of the two, no more than one retest per month is required for a species.

### 5. <u>Toxicity Reduction Evaluation</u>

- a. Within 45 days of the retest that demonstrates significant lethality, or within 45 days of being so instructed due to multiple toxic events, the permittee shall submit a general outline for initiating a TRE. The outline shall include, but not be limited to, a description of project personnel, a schedule for obtaining consultants (if needed), a discussion of influent and effluent data available for review, a sampling and analytical schedule, and a proposed TRE initiation date.
- b. Within 90 days of the retest that demonstrates significant lethality, or within 90 days of being so instructed due to multiple toxic events, the permittee shall submit a TRE action plan and schedule for conducting a TRE. The plan shall specify the approach and methodology to be used in performing the TRE. A TRE is a step-wise investigation combining toxicity testing with physical and chemical analyses to determine actions necessary to eliminate or reduce effluent toxicity to a level not effecting significant lethality at the critical dilution. The TRE action plan shall describe an approach for the reduction or elimination of lethality for both test species defined in Part 1.b. At a minimum, the TRE action plan shall include the following:
  - Specific Activities The TRE action plan shall specify the approach the 1) permittee intends to utilize in conducting the TRE, including toxicity characterizations, identifications, confirmations, source evaluations, treatability studies, and alternative approaches. When conducting characterization analyses, the permittee shall perform multiple characterizations and follow the procedures specified in the document entitled "Toxicity Identification Evaluation: Characterization of Chronically Toxic Effluents, Phase I" (EPA/600/6-91/005F) or alternate procedures. The permittee shall perform multiple identifications and follow the methods specified in the documents entitled "Methods for Aquatic Toxicity Identification Evaluations, Phase II Toxicity Identification Procedures for Samples Exhibiting Acute and Chronic Toxicity" (EPA/600/R-92/080) and "Methods for Aquatic Toxicity Identification Evaluations: Phase III Toxicity Confirmation Procedures for Samples Exhibiting Acute and Chronic Toxicity" (EPA/600/R-92/081). All characterization, identification, and confirmation tests shall be conducted in an orderly and logical progression;
  - 2) Sampling Plan The TRE action plan should describe sampling locations, methods, holding times, chain of custody, and preservation techniques. The effluent sample volume collected for all tests shall be adequate to perform the toxicity characterization/identification/confirmation procedures, and chemical-specific analyses when the toxicity tests show significant lethality. Where the permittee has identified or suspects a

specific pollutant and source of effluent toxicity, the permittee shall conduct, concurrent with toxicity testing, chemical-specific analyses for the identified and suspected pollutant and source of effluent toxicity;

- 3) Quality Assurance Plan The TRE action plan should address record keeping and data evaluation, calibration and standardization, baseline tests, system blanks, controls, duplicates, spikes, toxicity persistence in the samples, randomization, reference toxicant control charts, and mechanisms to detect artifactual toxicity; and
- 4) Project Organization The TRE action plan should describe the project staff, project manager, consulting engineering services (where applicable), consulting analytical and toxicological services, etc.
- c. Within 30 days of submittal of the TRE action plan and schedule, the permittee shall implement the TRE.
- d. The permittee shall submit quarterly TRE activities reports concerning the progress of the TRE. The quarterly reports are due on or before April 20th, July 20th, October 20th, and January 20th. The report shall detail information regarding the TRE activities including:
  - 1) results and interpretation of any chemical-specific analyses for the identified and suspected pollutant performed during the quarter;
  - 2) results and interpretation of any characterization, identification, and confirmation tests performed during the quarter;
  - 3) any data and substantiating documentation which identifies the pollutant(s) and source of effluent toxicity;
  - 4) results of any studies/evaluations concerning the treatability of the facility's effluent toxicity;
  - 5) any data that identifies effluent toxicity control mechanisms that will reduce effluent toxicity to the level necessary to meet no significant lethality at the critical dilution; and
  - 6) any changes to the initial TRE plan and schedule that are believed necessary as a result of the TRE findings.
- e. During the TRE, the permittee shall perform, at a minimum, quarterly testing using the more sensitive species. Testing for the less sensitive species shall continue at the frequency specified in Part 1.b.
- f. If the effluent ceases to effect significant lethality, i.e., there is a cessation of lethality, the permittee may end the TRE. A cessation of lethality is defined as no significant lethality for a period of 12 consecutive months with at least monthly testing. At the end of the 12 months, the permittee shall submit a statement of intent to cease the TRE and may then resume the testing frequency specified in Part 1.b.

This provision accommodates situations where operational errors and upsets, spills, or sampling errors triggered the TRE, in contrast to a situation where a single toxicant or group of toxicants cause lethality. This provision does not apply as a result of corrective actions taken by the permittee. Corrective actions are defined as proactive efforts that eliminate or reduce effluent toxicity. These include, but are not limited to, source reduction or elimination, improved housekeeping, changes in chemical usage, and modifications of influent streams and effluent treatment.

The permittee may only apply this cessation of lethality provision once. If the effluent again demonstrates significant lethality to the same species, the permit will be amended to add a WET limit with a compliance period, if appropriate. However, prior to the effective date of the WET limit, the permittee may apply for a permit amendment removing and replacing the WET limit with an alternate toxicity control measure by identifying and confirming the toxicant and an appropriate control measure.

- g. The permittee shall complete the TRE and submit a final report on the TRE activities no later than 28 months from the last test day of the retest that confirmed significant lethal effects at the critical dilution. The permittee may petition the Executive Director (in writing) for an extension of the 28-month limit. However, to warrant an extension the permittee must have demonstrated due diligence in its pursuit of the toxicity identification evaluation/TRE and must prove that circumstances beyond its control stalled the toxicity identification evaluation/TRE. The report shall provide information pertaining to the specific control mechanism selected that will, when implemented, result in the reduction of effluent toxicity to no significant lethality at the critical dilution. The report shall also provide a specific corrective action schedule for implementing the selected control mechanism.
- h. Based on the results of the TRE and proposed corrective actions, this permit may be amended to modify the biomonitoring requirements, where necessary, require a compliance schedule for implementation of corrective actions, specify a WET limit, specify a best management practice, and specify a chemical-specific limit.
- i. Copies of any and all required TRE plans and reports shall also be submitted to the U.S. EPA Region 6 office, 6WQ-PO.

# TABLE 1 (SHEET 1 OF 4)

#### **BIOMONITORING REPORTING**

# CERIODAPHNIA DUBIA SURVIVAL AND REPRODUCTION

		Date	Time	Date	Time	
Dates and Times Composites	No. 1 FROM: _			TO:		
Collected	No. 2 FROM: _			TO:		
	No. 3 FROM: _			TO:		
Test initiated:			am/pm _			date
Dilution wa	ter used:	Rece	iving water	8	Synthetic Dilutio	on water

# NUMBER OF YOUNG PRODUCED PER ADULT AT END OF TEST

	Percent effluent					
REP	0%	32%	42%	56%	75%	100%
A						
В						
C						
D						
Е						
F						
G						
Н						
Ι						
J						
Survival Mean						
Total Mean						
CV%*						
PMSD						

\*Coefficient of Variation = standard deviation x 100/mean (calculation based on young of the surviving adults)

Designate males (M), and dead females (D), along with number of neonates (x) released prior to death.

# TABLE 1 (SHEET 2 OF 4)

### CERIODAPHNIA DUBIA SURVIVAL AND REPRODUCTION TEST

1. Dunnett's Procedure or Steel's Many-One Rank Test or Wilcoxon Rank Sum Test (with Bonferroni adjustment) or t-test (with Bonferroni adjustment) as appropriate:

Is the mean number of young produced per adult significantly less than the number of young per adult in the control for the % effluent corresponding to significant nonlethal effects?

CRITICAL DILUTION (100%): \_\_\_\_\_ YES \_\_\_\_\_ NO

# PERCENT SURVIVAL

	Percent effluent					
Time of Reading	0%	32%	42%	56%	75%	100%
24h						
48h						
End of Test						

### 2. Fisher's Exact Test:

Is the mean survival at test end significantly less than the control survival for the % effluent corresponding to lethality?

CRITICAL DILUTION (100%): \_\_\_\_\_ YES \_\_\_\_\_ NO

3. Enter percent effluent corresponding to each NOEC\LOEC below:

a.) NOEC survival = \_\_\_\_% effluent

b.) LOEC survival = \_\_\_\_% effluent

c.) NOEC reproduction = \_\_\_\_% effluent

d.) LOEC reproduction = \_\_\_\_% effluent

# TABLE 1 (SHEET 3 OF 4)

#### **BIOMONITORING REPORTING**

# FATHEAD MINNOW LARVAE GROWTH AND SURVIVAL

		Date Time	Date Time
Dates and Times Composites	No. 1 FROM: _		_ TO:
Composites Collected	No. 2 FROM: _		_ TO:
	No. 3 FROM: _		_ TO:
Test initiated: _		am/pm	date
Dilution wat	er used:	Receiving water	Synthetic dilution water

# FATHEAD MINNOW GROWTH DATA

Effluent	Averag	ge Dry We	Mean Dry	CV%*			
Concentration	А	В	C	D	E	Weight	
0%							
32%							
42%							
56%							
75%							
100%							
PMSD							

\* Coefficient of Variation = standard deviation x 100/mean

1. Dunnett's Procedure or Steel's Many-One Rank Test or Wilcoxon Rank Sum Test (with Bonferroni adjustment) or t-test (with Bonferroni adjustment) as appropriate:

Is the mean dry weight (growth) at 7 days significantly less than the control's dry weight (growth) for the % effluent corresponding to significant nonlethal effects?

CRITICAL DILUTION (100%): \_\_\_\_\_ YES \_\_\_\_\_ NO

# TABLE 1 (SHEET 4 OF 4)

### **BIOMONITORING REPORTING**

### FATHEAD MINNOW GROWTH AND SURVIVAL TEST

### FATHEAD MINNOW SURVIVAL DATA

Effluent	Percent Survival in replicate chambers Mean percent survival					CV%*			
Concentration	А	В	C	D	E	24h	48h	7 day	
0%									
32%									
42%									
56%									
75%									
100%									

\* Coefficient of Variation = standard deviation x 100/mean

2. Dunnett's Procedure or Steel's Many-One Rank Test or Wilcoxon Rank Sum Test (with Bonferroni adjustment) or t-test (with Bonferroni adjustment) as appropriate:

Is the mean survival at 7 days significantly less than the control survival for the % effluent corresponding to lethality?

CRITICAL DILUTION (100%): \_\_\_\_\_ YES \_\_\_\_\_ NO

3. Enter percent effluent corresponding to each NOEC\LOEC below:

a.) NOEC survival = \_\_\_\_% effluent

b.) LOEC survival = \_\_\_\_% effluent

- c.) NOEC growth = \_\_\_\_% effluent
- d.) LOEC growth = \_\_\_\_% effluent

### 24-HOUR ACUTE BIOMONITORING REQUIREMENTS: FRESHWATER

The provisions of this section apply to Outfall 001 for whole effluent toxicity (WET) testing.

- 1. <u>Scope, Frequency, and Methodology</u>
  - a. The permittee shall test the effluent for lethality in accordance with the provisions in this section. Such testing will determine compliance with Texas Surface Water Quality Standard 30 TAC § 307.6(e)(2)(B), which requires greater than 50% survival of the appropriate test organisms in 100% effluent for a 24-hour period.
  - b. Within 90 days of initial discharge of the 2.0 MGD facility, the toxicity tests specified shall be conducted once per six months. The permittee shall conduct the following toxicity tests using the test organisms, procedures, and quality assurance requirements specified in this section of the permit and in accordance with "Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms," fifth edition (EPA-821-R-02-012) or its most recent update:
    - 1) Acute 24-hour static toxicity test using the water flea (*Daphnia pulex* or *Ceriodaphnia dubia*). A minimum of five replicates with eight organisms per replicate shall be used in the control and each dilution.
    - 2) Acute 24-hour static toxicity test using the fathead minnow (*Pimephales promelas*). A minimum of five replicates with eight organisms per replicate shall be used in the control and each dilution.

A valid test result must be submitted for each reporting period. The permittee must report, and then repeat, an invalid test during the same reporting period. The repeat test shall include the control and the 100% effluent dilution and use the appropriate number of organisms and replicates, as specified above. An invalid test is defined as any test failing to satisfy the test acceptability criteria, procedures, and quality assurance requirements specified in the test methods and permit.

- c. In addition to an appropriate control, a 100% effluent concentration shall be used in the toxicity tests. Except as discussed in item 2.b., the control and dilution water shall consist of standard, synthetic, moderately hard, reconstituted water.
- d. This permit may be amended to require a WET limit, a Best Management Practice (BMP), Chemical-Specific (CS) limits, or other appropriate actions to address toxicity. The permittee may be required to conduct a Toxicity Reduction Evaluation after multiple toxic events.
- e. As the dilution series specified in the Chronic Biomonitoring Requirements includes a 100% effluent concentration, the results from those tests may fulfill the requirements of this Section; any tests performed in the proper time interval may be substituted. Compliance will be evaluated as specified in item a. The 50% survival in 100% effluent for a 24-hour period standard applies to all tests utilizing a 100% effluent dilution, regardless of whether the results are submitted

to comply with the minimum testing frequency defined in item b.

#### 2. <u>Required Toxicity Testing Conditions</u>

- a. Test Acceptance The permittee shall repeat any toxicity test, including the control, if the control fails to meet a mean survival equal to or greater than 90%.
- b. Dilution Water In accordance with item 1.c., the control and dilution water shall normally consist of standard, synthetic, moderately hard, reconstituted water. If the permittee utilizes the results of a chronic test to satisfy the requirements in item 1.e., the permittee may use the receiving water or dilution water that meets the requirements of item 2.a as the control and dilution water.
- c. Samples and Composites
  - 1) The permittee shall collect one composite sample from Outfall 001.
  - 2) The permittee shall collect the composite sample such that the sample is representative of any periodic episode of chlorination, biocide usage, or other potentially toxic substance being discharged.
  - 3) The permittee shall initiate the toxicity tests within 36 hours after collection of the last portion of the composite sample. The sample shall be maintained at a temperature of 0-6 degrees Centigrade during collection, shipping, and storage.
  - 4) If Outfall 001 ceases discharging during the collection of the effluent composite sample, the requirements for the minimum number of effluent portions are waived. However, the permittee must have collected a composite sample volume sufficient for completion of the required test. The abbreviated sample collection, duration, and methodology must be documented in the full report.
  - 5) The effluent sample shall not be dechlorinated after sample collection.

# 3. <u>Reporting</u>

All reports, tables, plans, summaries, and related correspondence required in this section shall be submitted to the attention of the Standards Implementation Team (MC 150) of the Water Quality Division.

- a. The permittee shall prepare a full report of the results of all tests conducted in accordance with the manual referenced in Part 1.b. for every valid and invalid toxicity test initiated.
- b. The permittee shall routinely report the results of each biomonitoring test on the Table 2 forms provided with this permit.
  - 1) Semiannual biomonitoring test results are due on or before July 20th and January 20th for biomonitoring conducted during the previous 6-month period.

- 2) Quarterly biomonitoring test results are due on or before April 20th, July 20th, and October 20th, and January 20th for biomonitoring conducted during the previous calendar quarter.
- c. Enter the following codes for the appropriate parameters for valid tests only:
  - 1) For the water flea, Parameter TIE3D, enter a "0" if the mean survival at 24 hours is greater than 50% in the 100% effluent dilution; if the mean survival is less than or equal to 50%, enter a "1."
  - 2) For the fathead minnow, Parameter TIE6C, enter a "0" if the mean survival at 24 hours is greater than 50% in the 100% effluent dilution; if the mean survival is less than or equal to 50%, enter a "1."
- d. Enter the following codes for retests only:
  - 1) For retest number 1, Parameter 22415, enter a "0" if the mean survival at 24 hours is greater than 50% in the 100% effluent dilution; if the mean survival is less than or equal to 50%, enter a "1."
  - 2) For retest number 2, Parameter 22416, enter a "0" if the mean survival at 24 hours is greater than 50% in the 100% effluent dilution; if the mean survival is less than or equal to 50%, enter a "1."
- 4. <u>Persistent Mortality</u>

The requirements of this part apply when a toxicity test demonstrates significant lethality, which is defined as a mean mortality of 50% or greater of organisms exposed to the 100% effluent concentration for 24 hours.

- a. The permittee shall conduct 2 additional tests (retests) for each species that demonstrates significant lethality. The two retests shall be conducted once per week for 2 weeks. Five effluent dilution concentrations in addition to an appropriate control shall be used in the retests. These effluent concentrations are 6%, 13%, 25%, 50% and 100% effluent. The first retest shall be conducted within 15 days of the laboratory determination of significant lethality. All test results shall be submitted within 20 days of test completion of the second retest. Test completion is defined as the 24th hour.
- b. If one or both of the two retests specified in Part 4.a. demonstrates significant lethality, the permittee shall initiate the TRE requirements as specified in Part 5.

# 5. <u>Toxicity Reduction Evaluation</u>

a. Within 45 days of the retest that demonstrates significant lethality, the permittee shall submit a general outline for initiating a TRE. The outline shall include, but not be limited to, a description of project personnel, a schedule for obtaining consultants (if needed), a discussion of influent and effluent data available for review, a sampling and analytical schedule, and a proposed TRE initiation date.

- b. Within 90 days of the retest that demonstrates significant lethality, the permittee shall submit a TRE action plan and schedule for conducting a TRE. The plan shall specify the approach and methodology to be used in performing the TRE. A TRE is a step-wise investigation combining toxicity testing with physical and chemical analyses to determine actions necessary to eliminate or reduce effluent toxicity to a level not effecting significant lethality at the critical dilution. The TRE action plan shall lead to the successful elimination of significant lethality for both test species defined in Part 1.b. At a minimum, the TRE action plan shall include the following:
  - 1) Specific Activities - The TRE action plan shall specify the approach the permittee intends to utilize in conducting the TRE, including toxicity characterizations, identifications, confirmations, source evaluations, treatability studies, and alternative approaches. When conducting characterization analyses, the permittee shall perform multiple characterizations and follow the procedures specified in the document entitled "Methods for Aquatic Toxicity Identification Evaluations: Phase I Toxicity Characterization Procedures" (EPA/600/6-91/003) or alternate procedures. The permittee shall perform multiple identifications and follow the methods specified in the documents entitled "Methods for Aquatic Toxicity Identification Evaluations: Phase II Toxicity Identification Procedures for Samples Exhibiting Acute and Chronic Toxicity" (EPA/600/R-92/080) and "Methods for Aquatic Toxicity Identification Evaluations: Phase III Toxicity Confirmation Procedures for Samples Exhibiting Acute and Chronic Toxicity" (EPA/600/R-92/081). All characterization, identification, and confirmation tests shall be conducted in an orderly and logical progression;
  - 2) Sampling Plan The TRE action plan should describe sampling locations, methods, holding times, chain of custody, and preservation techniques. The effluent sample volume collected for all tests shall be adequate to perform the toxicity characterization/identification/confirmation procedures and chemical-specific analyses when the toxicity tests show significant lethality. Where the permittee has identified or suspects specific pollutant and source of effluent toxicity, the permittee shall conduct, concurrent with toxicity testing, chemical-specific analyses for the identified and suspected pollutant and source of effluent toxicity;
  - 3) Quality Assurance Plan The TRE action plan should address record keeping and data evaluation, calibration and standardization, baseline tests, system blanks, controls, duplicates, spikes, toxicity persistence in the samples, randomization, reference toxicant control charts, and mechanisms to detect artifactual toxicity; and
  - 4) Project Organization The TRE Action Plan should describe the project staff, project manager, consulting engineering services (where applicable), consulting analytical and toxicological services, etc.
- c. Within 30 days of submittal of the TRE action plan and schedule, the permittee shall implement the TRE.

- d. The permittee shall submit quarterly TRE activities reports concerning the progress of the TRE. The quarterly TRE activities reports are due on or before April 20th, July 20th, October 20th, and January 20th. The report shall detail information regarding the TRE activities including:
  - 1) results and interpretation of any chemical-specific analyses for the identified and suspected pollutant performed during the quarter;
  - 2) results and interpretation of any characterization, identification, and confirmation tests performed during the quarter;
  - 3) any data and substantiating documentation that identifies the pollutant and source of effluent toxicity;
  - 4) results of any studies/evaluations concerning the treatability of the facility's effluent toxicity;
  - 5) any data that identifies effluent toxicity control mechanisms that will reduce effluent toxicity to the level necessary to eliminate significant lethality; and
  - 6) any changes to the initial TRE plan and schedule that are believed necessary as a result of the TRE findings.
- e. During the TRE, the permittee shall perform, at a minimum, quarterly testing using the more sensitive species. Testing for the less sensitive species shall continue at the frequency specified in Part 1.b.
- f. If the effluent ceases to effect significant lethality, i.e., there is a cessation of lethality, the permittee may end the TRE. A cessation of lethality is defined as no significant lethality for a period of 12 consecutive weeks with at least weekly testing. At the end of the 12 weeks, the permittee shall submit a statement of intent to cease the TRE and may then resume the testing frequency specified in Part 1.b.

This provision accommodates situations where operational errors and upsets, spills, or sampling errors triggered the TRE, in contrast to a situation where a single toxicant or group of toxicants cause lethality. This provision does not apply as a result of corrective actions taken by the permittee. Corrective actions are defined as proactive efforts that eliminate or reduce effluent toxicity. These include, but are not limited to, source reduction or elimination, improved housekeeping, changes in chemical usage, and modifications of influent streams and effluent treatment.

The permittee may only apply this cessation of lethality provision once. If the effluent again demonstrates significant lethality to the same species, the permit will be amended to add a WET limit with a compliance period, if appropriate. However, prior to the effective date of the WET limit, the permittee may apply for a permit amendment removing and replacing the WET limit with an alternate toxicity control measure by identifying and confirming the toxicant and an appropriate control measure.

- g. The permittee shall complete the TRE and submit a final report on the TRE activities no later than 18 months from the last test day of the retest that demonstrates significant lethality. The permittee may petition the Executive Director (in writing) for an extension of the 18-month limit. However, to warrant an extension the permittee must have demonstrated due diligence in its pursuit of the toxicity identification evaluation/TRE and must prove that circumstances beyond its control stalled the toxicity identification evaluation/TRE. The report shall specify the control mechanism that will, when implemented, reduce effluent toxicity as specified in Part 5.h. The report shall also specify a corrective action schedule for implementing the selected control mechanism. A copy of the TRE final report shall also be submitted to the U.S. EPA Region 6 office.
- h. Within 3 years of the last day of the test confirming toxicity, the permittee shall comply with 30 TAC § 307.6(e)(2)(B), which requires greater than 50% survival of the test organism in 100% effluent at the end of 24-hours. The permittee may petition the Executive Director (in writing) for an extension of the 3-year limit. However, to warrant an extension the permittee must have demonstrated due diligence in its pursuit of the toxicity identification evaluation/TRE and must prove that circumstances beyond its control stalled the toxicity identification evaluation/TRE.

The permittee may be exempted from complying with 30 TAC § 307.6(e)(2)(B) upon proving that toxicity is caused by an excess, imbalance, or deficiency of dissolved salts. This exemption excludes instances where individually toxic components (e.g., metals) form a salt compound. Following the exemption, this permit may be amended to include an ion-adjustment protocol, alternate species testing, or single species testing.

- i. Based upon the results of the TRE and proposed corrective actions, this permit may be amended to modify the biomonitoring requirements where necessary, require a compliance schedule for implementation of corrective actions, specify a WET limit, specify a best management practice, and specify a chemical-specific limit.
- j. Copies of any and all required TRE plans and reports shall also be submitted to the U.S. EPA Region 6 office, 6WQ-PO.

# TABLE 2 (SHEET 1 OF 2)

# WATER FLEA SURVIVAL

# GENERAL INFORMATION

	Time	Date
Composite Sample Collected		
Test Initiated		

#### PERCENT SURVIVAL

Time	Bon		Percent effluent				
Time	Rep	0%	6%	13%	25%	50%	100%
	Α						
	В						
o th	C						
24h	D						
	E						
	MEAN						

Enter percent effluent corresponding to the LC50 below:

24 hour LC50 = \_\_\_\_% effluent

# TABLE 2 (SHEET 2 OF 2)

# FATHEAD MINNOW SURVIVAL

#### GENERAL INFORMATION

	Time	Date
Composite Sample Collected		
Test Initiated		

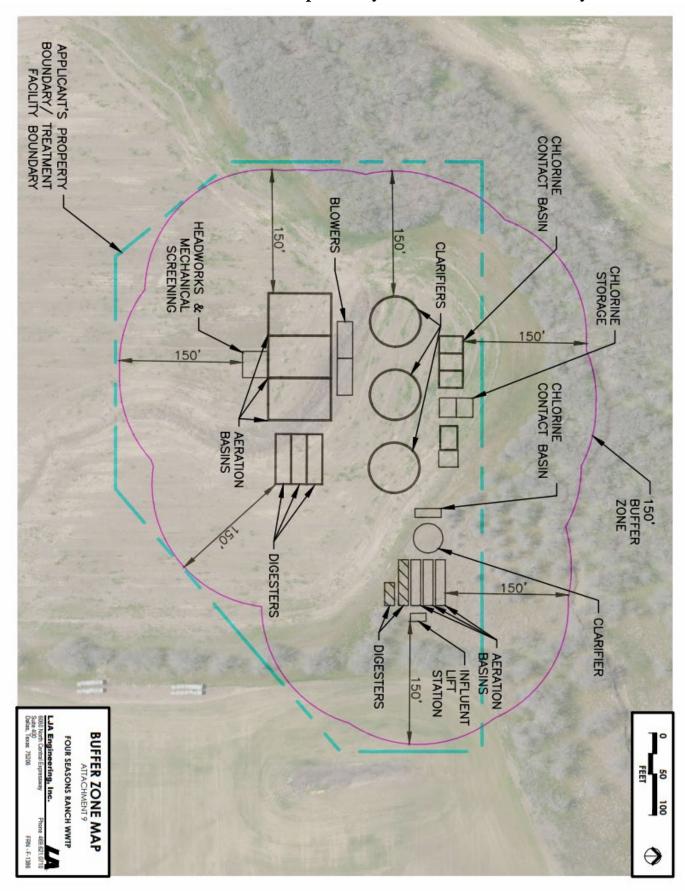
# PERCENT SURVIVAL

Timo Pon		Percent effluent					
Time Rep	0%	6%	13%	25%	50%	100%	
	А						
	В						
o 4h	С						
24h	D						
	E						
	MEAN						

Enter percent effluent corresponding to the LC50 below:

24 hour LC50 = \_\_\_\_% effluent

#### Attachment A Buffer Zone Map WQ0016620001 Four Seasons Ranch Municipal Utility District 1 of Denton County



# DOMESTIC WASTEWATER PERMIT APPLICATION

# WORKSHEET 4.0: POLLUTANT ANALYSIS REQUIREMENTS

The following **is required** for facilities with a permitted or proposed flow of **1.0 MGD or greater**, facilities with an approved **pretreatment** program, or facilities classified as a **major** facility. See instructions for further details.

This worksheet is not required **minor amendments without renewal**.

# Section 1. Toxic Pollutants (Instructions Page 76)

For pollutants identified in Table 4.0(1), indicate the type of sample.

Grab  $\Box$  Composite  $\Box$ 

Date and time sample(s) collected:

# Table 4.0(1) – Toxics Analysis

Pollutant	AVG Effluent Conc. (μg/l)	MAX Effluent Conc. (μg/l)	Number of Samples	MAL (µg/l)
Acrylonitrile				50
Aldrin				0.01
Aluminum				2.5
Anthracene				10
Antimony				5
Arsenic				0.5
Barium				3
Benzene				10
Benzidine				50
Benzo(a)anthracene				5
Benzo(a)pyrene				5
Bis(2-chloroethyl)ether				10
Bis(2-ethylhexyl)phthalate				10
Bromodichloromethane				10
Bromoform				10
Cadmium				1
Carbon Tetrachloride				2
Carbaryl				5

TCEQ-10054 (10/17/2024) Domestic Wastewater Permit Application Technical Report

Pollutant	AVG Effluent Conc. (μg/l)	MAX Effluent Conc. (µg/l)	Number of Samples	MAL (µg/l)
Chlordane*				0.2
Chlorobenzene				10
Chlorodibromomethane				10
Chloroform				10
Chlorpyrifos				0.05
Chromium (Total)				3
Chromium (Tri) <b>(*1)</b>				N/A
Chromium (Hex)				3
Copper				2
Chrysene				5
p-Chloro-m-Cresol				10
4,6-Dinitro-o-Cresol				50
p-Cresol				10
Cyanide (*2)				10
4,4'- DDD				0.1
4,4'- DDE				0.1
4,4'- DDT				0.02
2,4-D				0.7
Demeton (O and S)				0.20
Diazinon				0.5/0.1
1,2-Dibromoethane				10
m-Dichlorobenzene				10
o-Dichlorobenzene				10
p-Dichlorobenzene				10
3,3'-Dichlorobenzidine				5
1,2-Dichloroethane				10
1,1-Dichloroethylene				10
Dichloromethane				20
1,2-Dichloropropane				10

Pollutant	AVG Effluent Conc. (μg/l)	MAX Effluent Conc. (μg/l)	Number of Samples	MAL (µg/l)
1,3-Dichloropropene				10
Dicofol				1
Dieldrin				0.02
2,4-Dimethylphenol				10
Di-n-Butyl Phthalate				10
Diuron				0.09
Endosulfan I (alpha)				0.01
Endosulfan II (beta)				0.02
Endosulfan Sulfate				0.1
Endrin				0.02
Epichlorohydrin				
Ethylbenzene				10
Ethylene Glycol				
Fluoride				500
Guthion				0.1
Heptachlor				0.01
Heptachlor Epoxide				0.01
Hexachlorobenzene				5
Hexachlorobutadiene				10
Hexachlorocyclohexane (alpha)				0.05
Hexachlorocyclohexane (beta)				0.05
gamma-Hexachlorocyclohexane				0.05
(Lindane)				
Hexachlorocyclopentadiene				10
Hexachloroethane				20
Hexachlorophene				10
4,4'-Isopropylidenediphenol				1
Lead				0.5
Malathion				0.1

Pollutant	AVG Effluent Conc. (μg/l)	MAX Effluent Conc. (µg/l)	Number of Samples	MAL (µg/l)
Mercury				0.005
Methoxychlor				2
Methyl Ethyl Ketone				50
Methyl tert-butyl ether				
Mirex				0.02
Nickel				2
Nitrate-Nitrogen				100
Nitrobenzene				10
N-Nitrosodiethylamine				20
N-Nitroso-di-n-Butylamine				20
Nonylphenol				333
Parathion (ethyl)				0.1
Pentachlorobenzene				20
Pentachlorophenol				5
Phenanthrene				10
Polychlorinated Biphenyls (PCB's) (*3)				0.2
Pyridine				20
Selenium				5
Silver				0.5
1,2,4,5-Tetrachlorobenzene				20
1,1,2,2-Tetrachloroethane				10
Tetrachloroethylene				10
Thallium				0.5
Toluene				10
Toxaphene				0.3
2,4,5-TP (Silvex)				0.3
Tributyltin (see instructions for explanation)				0.01
1,1,1-Trichloroethane				10

Pollutant	AVG Effluent Conc. (μg/l)	MAX Effluent Conc. (µg/l)	Number of Samples	MAL (µg/l)
1,1,2-Trichloroethane				10
Trichloroethylene				10
2,4,5-Trichlorophenol				50
TTHM (Total Trihalomethanes)				10
Vinyl Chloride				10
Zinc				5

(\*1) Determined by subtracting hexavalent Cr from total Cr.

(\*2) Cyanide, amenable to chlorination or weak-acid dissociable.

(\*3) The sum of seven PCB congeners 1242, 1254, 1221, 1232, 1248, 1260, and 1016.

# Section 2. Priority Pollutants

For pollutants identified in Tables 4.0(2)A-E, indicate type of sample.

Grab  $\Box$  Composite  $\Box$ 

Date and time sample(s) collected:

# Table 4.0(2)A – Metals, Cyanide, and Phenols

Pollutant	AVG Effluent	MAX Effluent		MAL
	Conc. (µg/l)	Conc. (µg/l)	Samples	(µg/l)
Antimony				5
Arsenic				0.5
Beryllium				0.5
Cadmium				1
Chromium (Total)				3
Chromium (Hex)				3
Chromium (Tri) (*1)				N/A
Copper				2
Lead				0.5
Mercury				0.005
Nickel				2
Selenium				5
Silver				0.5
Thallium				0.5
Zinc				5
Cyanide (*2)				10
Phenols, Total				10

(\*1) Determined by subtracting hexavalent Cr from total Cr.

(\*2) Cyanide, amenable to chlorination or weak-acid dissociable

# Table 4.0(2)B – Volatile Compounds

Pollutant	AVG Effluent Conc. (µg/l)	MAX Effluent Conc. (μg/l)	Number of Samples	MAL (µg/l)
Acrolein				50
Acrylonitrile				50
Benzene				10
Bromoform				10
Carbon Tetrachloride				2
Chlorobenzene				10
Chlorodibromomethane				10
Chloroethane				50
2-Chloroethylvinyl Ether				10
Chloroform				10
Dichlorobromomethane [Bromodichloromethane]				10
1,1-Dichloroethane				10
1,2-Dichloroethane				10
1,1-Dichloroethylene				10
1,2-Dichloropropane				10
1,3-Dichloropropylene				10
[1,3-Dichloropropene]				
1,2-Trans-Dichloroethylene				10
Ethylbenzene				10
Methyl Bromide				50
Methyl Chloride				50
Methylene Chloride				20
1,1,2,2-Tetrachloroethane				10
Tetrachloroethylene				10
Toluene				10
1,1,1-Trichloroethane				10
1,1,2-Trichloroethane				10
Trichloroethylene				10

Pollutant	AVG Effluent Conc. (μg/l)	MAX Effluent Conc. (µg/l)	Number of Samples	MAL (µg/l)
Vinyl Chloride				10

# Table 4.0(2)C – Acid Compounds

Pollutant	AVG Effluent Conc. (µg/l)	MAX Effluent Conc. (μg/l)	Number of Samples	MAL (µg/l)
2-Chlorophenol				10
2,4-Dichlorophenol				10
2,4-Dimethylphenol				10
4,6-Dinitro-o-Cresol				50
2,4-Dinitrophenol				50
2-Nitrophenol				20
4-Nitrophenol				50
P-Chloro-m-Cresol				10
Pentalchlorophenol				5
Phenol				10
2,4,6-Trichlorophenol				10

# Table 4.0(2)D – Base/Neutral Compounds

Pollutant	AVG Effluent Conc. (μg/l)	MAX Effluent Conc. (µg/l)	Number of Samples	MAL (µg/l)
Acenaphthene				10
Acenaphthylene				10
Anthracene				10
Benzidine				50
Benzo(a)Anthracene				5
Benzo(a)Pyrene				5
3,4-Benzofluoranthene				10
Benzo(ghi)Perylene				20
Benzo(k)Fluoranthene				5
Bis(2-Chloroethoxy)Methane				10
Bis(2-Chloroethyl)Ether				10
Bis(2-Chloroisopropyl)Ether				10
Bis(2-Ethylhexyl)Phthalate				10
4-Bromophenyl Phenyl Ether				10
Butyl benzyl Phthalate				10
2-Chloronaphthalene				10
4-Chlorophenyl phenyl ether				10
Chrysene				5
Dibenzo(a,h)Anthracene				5
1,2-(o)Dichlorobenzene				10
1,3-(m)Dichlorobenzene				10
1,4-(p)Dichlorobenzene				10
3,3-Dichlorobenzidine				5
Diethyl Phthalate				10
Dimethyl Phthalate				10
Di-n-Butyl Phthalate				10
2,4-Dinitrotoluene				10
2,6-Dinitrotoluene				10

Pollutant	AVG Effluent Conc. (µg/l)	MAX Effluent Conc. (µg/l)	Number of Samples	MAL (µg/l)
Di-n-Octyl Phthalate				10
1,2-Diphenylhydrazine (as Azo-benzene)				20
Fluoranthene				10
Fluorene				10
Hexachlorobenzene				5
Hexachlorobutadiene				10
Hexachlorocyclo-pentadiene				10
Hexachloroethane				20
Indeno(1,2,3-cd)pyrene				5
Isophorone				10
Naphthalene				10
Nitrobenzene				10
N-Nitrosodimethylamine				50
N-Nitrosodi-n-Propylamine				20
N-Nitrosodiphenylamine				20
Phenanthrene				10
Pyrene				10
1,2,4-Trichlorobenzene				10

# Table 4.0(2)E - Pesticides

Pollutant	AVG Effluent Conc. (μg/l)	MAX Effluent Conc. (μg/l)	Number of Samples	MAL (µg/l)
Aldrin				0.01
alpha-BHC (Hexachlorocyclohexane)				0.05
beta-BHC (Hexachlorocyclohexane)				0.05
gamma-BHC (Hexachlorocyclohexane)				0.05
delta-BHC (Hexachlorocyclohexane)				0.05
Chlordane				0.2
4,4-DDT				0.02
4,4-DDE				0.1
4,4,-DDD				0.1
Dieldrin				0.02
Endosulfan I (alpha)				0.01
Endosulfan II (beta)				0.02
Endosulfan Sulfate				0.1
Endrin				0.02
Endrin Aldehyde				0.1
Heptachlor				0.01
Heptachlor Epoxide				0.01
PCB-1242				0.2
PCB-1254				0.2
PCB-1221				0.2
PCB-1232				0.2
PCB-1248				0.2
PCB-1260				0.2
PCB-1016				0.2
Toxaphene	1			0.3

\* For PCBS, if all are non-detects, enter the highest non-detect preceded by a "<".

#### FACT SHEET AND EXECUTIVE DIRECTOR'S PRELIMINARY DECISION

For draft Texas Pollutant Discharge Elimination System (TPDES) Permit No. WQ0016620001, EPA I.D. No. TX0146587, to discharge to water in the state.

Issuing Office:	Texas Commission on Environmental Quality P.O. Box 13087 Austin, Texas 78711-3087
Applicant:	Four Seasons Ranch Municipal Utility District 1 of Denton County 16000 Dallas Parkway, Suite 350 Dallas, Texas 75248
Prepared By:	Shaun M. Speck Municipal Permits Team Wastewater Permitting Section (MC 148) Water Quality Division (512) 239-4549
Date:	March 5, 2025

Permit Action: New Permit

#### **1. EXECUTIVE DIRECTOR RECOMMENDATION**

The Executive Director has made a preliminary decision that this permit, if issued, meets all statutory and regulatory requirements. The draft permit includes an expiration date of **five years from the date of issuance**.

## 2. APPLICANT ACTIVITY

The applicant has applied to the Texas Commission on Environmental Quality (TCEQ) for a new permit to authorize the discharge of treated domestic wastewater at an daily average flow not to exceed 0.15 million gallons per day (MGD) in the Interim I phase, a daily average flow not to exceed 0.30 MGD in the Interim II phase, and an annual average flow not to exceed 2.0 MGD in the Final phase. The proposed wastewater treatment facility will serve the Four Seasons Ranch Municipal Utility District (MUD) 1.

#### 3. FACILITY AND DISCHARGE LOCATION

The plant site will be located approximately 0.6 miles southeast of the intersection of Berend Road and Gorrell Road, in Denton County, Texas 76258.

**Outfall Location:** 

Outfall Number	Latitude	Longitude
001	33.411875 N	96.835289 W

The treated effluent will be discharged to Mustang Creek, thence to Little Elm Creek, thence to Lake Lewisville in Segment No. 0823 of the Trinity River Basin. The unclassified receiving water use is limited aquatic life use for Mustang Creek. The

designated uses for Segment No. 0823 are primary contact recreation, public water supply, and high aquatic life use.

#### 4. TREATMENT PROCESS DESCRIPTION AND SEWAGE SLUDGE DISPOSAL

The Four Seasons Ranch Wastewater Treatment Facility will be an activated sludge process plant operated in the complete mix mode. Treatment units in the Interim I phase will include a bar screen, two aeration basins, a final clarifier, two aerobic sludge digesters, and a chlorine contact basin. Treatment units in the Interim II phase will include a bar screen, three aeration basins, a final clarifier, three aerobic sludge digesters, and a chlorine contact basin. Treatment units in the Final phase will include a bar screen, three aeration basins, three final clarifiers, three aerobic sludge digesters, three chlorine contact chambers, and a dechlorination basin. The facility has not been constructed.

The draft permit authorizes the disposal of sludge at a TCEQ-authorized land application site, co-disposal landfill, wastewater treatment facility, or facility that further processes sludge.

#### 5. INDUSTRIAL WASTE CONTRIBUTION

The draft permit includes pretreatment requirements that are appropriate for a facility of this size and complexity. The facility does not appear to receive significant industrial wastewater contributions. Based on the information provided by the permittee in the most recent TPDES permit application, the TCEQ determined that there are no significant industrial wastewater contributions currently being discharged to the permittee's POTW.

#### 6. SUMMARY OF SELF-REPORTED EFFLUENT ANALYSES

Self-reporting data is not available since the facility is not in operation.

#### 7. DRAFT PERMIT CONDITIONS AND MONITORING REQUIREMENTS

The effluent limitations and monitoring requirements for those parameters that are limited in the draft permit are as follows:

#### A. INTERIM I PHASE EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

The daily average flow of effluent shall not exceed 0.15 MGD, nor shall the average discharge during any two-hour period (2-hour peak) exceed 417 gallons per minute (gpm).

<u>Parameter</u>	<u>30-Da</u>	<u>30-Day Average</u>		<u>Daily</u>
			Average	Maximum
	<u>mg/l</u>	<u>lbs/day</u>	<u>mg/l</u>	<u>mg/l</u>
$CBOD_5$	10	13	15	25
TSS	15	19	25	40
$NH_3$ -N	3	3.8	6	10

DO (minimum)	4.0	N/A	N/A	N/A
E. coli, CFU or MPN	126	N/A	N/A	N/A
per 100 ml				

The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units and shall be monitored once per month by grab sample. There shall be no discharge of floating solids or visible foam in other than trace amounts and no discharge of visible oil.

The effluent shall contain a total chlorine residual of at least 1.0 mg/l and shall not exceed a total chlorine residual of 4.0 mg/l after a detention time of at least 20 minutes (based on peak flow) and shall be monitored five times per week by grab sample. An equivalent method of disinfection may be substituted only with prior approval of the Executive Director.

<u>Parameter</u>	Monitoring Requirement
Flow, MGD	Continuous
CBOD <sub>5</sub>	One/week
TSS	One/week
NH <sub>3</sub> -N	One/week
DO	One/week
E. coli	One/month

#### B. INTERIM II PHASE EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

The daily average flow of effluent shall not exceed 0.30 MGD, nor shall the average discharge during any two-hour period (2-hour peak) exceed 833 gpm.

Parameter	<u>30-Day Average</u>		<u>7-Day</u>	<u>Daily</u>
			<u>Average</u>	<u>Maximum</u>
	<u>mg/l</u>	<u>lbs/day</u>	<u>mg/l</u>	<u>mg/l</u>
$CBOD_5$	10	25	15	25
TSS	15	38	25	40
NH <sub>3</sub> -N	3	7.5	6	10
DO (minimum)	4.0	N/A	N/A	N/A
<i>E. coli,</i> CFU or MPN	126	N/A	N/A	N/A
per 100 ml				

The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units and shall be monitored once per month by grab sample. There shall be no discharge of floating solids or visible foam in other than trace amounts and no discharge of visible oil.

The effluent shall contain a total chlorine residual of at least 1.0 mg/l and shall not exceed a total chlorine residual of 4.0 mg/l after a detention time of at least 20 minutes (based on peak flow) and shall be monitored five times per week by grab sample. An equivalent method of disinfection may be substituted only with prior approval of the Executive Director.

<u>Parameter</u>	Monitoring Requirement
Flow, MGD	Continuous
$CBOD_5$	One/week
TSS	One/week
NH <sub>3</sub> -N	One/week
DO	One/week
E. coli	One/month

#### C. FINAL PHASE EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

The annual average flow of effluent shall not exceed 2.0 MGD, nor shall the average discharge during any two-hour period (2-hour peak) exceed 5,556 gpm.

<u>Parameter</u>	<u>30-Da</u>	<u>30-Day Average</u>		<u>Daily</u>
				<u>Maximum</u>
	<u>mg/l</u>	<u>lbs/day</u>	<u>mg/l</u>	<u>mg/l</u>
$CBOD_5$	10	167	15	25
TSS	15	250	25	40
$NH_3$ -N	3	50	6	10
DO (minimum)	4.0	N/A	N/A	N/A
<i>E. coli</i> , CFU or	126	N/A	N/A	399
MPN/100 ml				

The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units and shall be monitored once per week by grab sample. There shall be no discharge of floating solids or visible foam in other than trace amounts and no discharge of visible oil.

The effluent shall contain a total chlorine residual of at least 1.0 mg/l after a detention time of at least 20 minutes (based on peak flow) and shall be monitored daily by grab sample at each chlorine contact chamber. The permittee shall dechlorinate the chlorinated effluent to less than 0.1 mg/l total chlorine residual and shall monitor total chlorine residual daily by grab sample after the dechlorination process. An equivalent method of disinfection may be substituted only with prior approval of the Executive Director.

<u>Parameter</u>	Monitoring Requirement
Flow, MGD	Continuous
C BOD <sub>5</sub>	Two/week
TSS	Two/week
NH <sub>3</sub> -N	Two/week
DO	Two/week
E. coli	One/week

#### D. SEWAGE SLUDGE REQUIREMENTS

The draft permit includes Sludge Provisions according to the requirements of 30 TAC Chapter 312, Sludge Use, Disposal, and Transportation. The draft permit authorizes the disposal of sludge at a TCEQ-authorized land application site, co-

disposal landfill, wastewater treatment facility, or facility that further processes sludge.

#### E. PRETREATMENT REQUIREMENTS

Permit requirements for pretreatment are based on TPDES regulations contained in 30 TAC Chapter 305, which references 40 Code of Federal Regulations (CFR) Part 403, "General Pretreatment Regulations for Existing and New Sources of Pollution" *[rev. Federal Register/ Vol. 70/ No. 198/ Friday, October 14, 2005/ Rules and Regulations, pages 60134-60798].* The permit includes specific requirements that establish responsibilities of local government, industry, and the public to implement the standards to control pollutants which pass through or interfere with treatment processes in publicly owned treatment works or which may contaminate the sewage sludge. This permit has appropriate pretreatment language for a facility of this size and complexity.

#### F. WHOLE EFFLUENT TOXICITY (BIOMONITORING) REQUIREMENTS

- (1) The draft permit includes chronic freshwater biomonitoring requirements as follows. The permit requires five dilutions in addition to the control (0% effluent) to be used in the toxicity tests. These additional effluent concentrations shall be 32%, 42%, 56%, 75%, and 100%. The low-flow effluent concentration (critical dilution) is defined as 100% effluent. The critical dilution is in accordance with the "Aquatic Life Criteria" section of the "Water Quality Based Effluent Limitations/Conditions" section.
  - (a) Chronic static renewal survival and reproduction test using the water flea (*Ceriodaphnia dubia*). The frequency of the testing is once per quarter for at least the first year of testing, after which the permittee may apply for a testing frequency reduction.
  - (b) Chronic static renewal 7-day larval survival and growth test using the fathead minnow (*Pimephales promelas*). The frequency of the testing is once per quarter for at least the first year of testing, after which the permittee may apply for a testing frequency reduction.
- (2) The draft permit includes the following minimum 24-hour acute freshwater biomonitoring requirements at a frequency of once per six months.
  - (a) Acute 24-hour static toxicity test using the water flea (*Daphnia pulex* or *Ceriodaphnia dubia*).
  - (b) Acute 24-hour static toxicity test using the fathead minnow (*Pimephales promelas*).

#### G. BUFFER ZONE REQUIREMENTS

The draft permit includes a requirement for the permittee to obtain legal restrictions prohibiting residential structures within the part of the buffer zone

not owned by the permittee according to 30 TAC § 309.13(e)(3).

#### H. SUMMARY OF CHANGES FROM APPLICATION

None.

#### 8. DRAFT PERMIT RATIONALE

#### A. TECHNOLOGY-BASED EFFLUENT LIMITATIONS/CONDITIONS

Regulations promulgated in Title 40 of the CFR require that technology-based limitations be placed in wastewater discharge permits based on effluent limitations guidelines, where applicable, or on best professional judgment (BPJ) in the absence of guidelines.

Effluent limitations for maximum and minimum pH are in accordance with 40 CFR § 133.102(c) and 30 TAC § 309.1(b).

#### B. WATER QUALITY SUMMARY AND COASTAL MANAGEMENT PLAN

#### (1) WATER QUALITY SUMMARY

The treated effluent is discharged to Mustang Creek, thence to Little Elm Creek, thence to Lake Lewisville in Segment No. 0823 of the Trinity River Basin. The unclassified receiving water use is limited aquatic life use for Mustang Creek. The designated uses for Segment No. 0823 are primary contact recreation, public water supply, and high aquatic life use. The effluent limitations in the draft permit will maintain and protect the existing instream uses. In accordance with 30 TAC § 307.5 and TCEQ's Procedures to Implement the Texas Surface Water Quality Standards (June 2010), an antidegradation review of the receiving waters was performed. A Tier 1 antidegradation review has preliminarily determined that existing water quality uses will not be impaired by this permit action. Numerical and narrative criteria to protect existing uses will be maintained. This review has preliminarily determined that no water bodies with exceptional, high, or intermediate aquatic life uses are present within the stream reach assessed; therefore, no Tier 2 degradation determination is required. No significant degradation of water quality is expected in water bodies with exceptional, high, or intermediate aquatic life uses downstream, and existing uses will be maintained and protected. The preliminary determination can be reexamined and may be modified if new information is received.

The discharge from this permit action is not expected to have an effect on any federal endangered or threatened aquatic or aquatic-dependent species or proposed species or their critical habitat. This determination is based on the United States Fish and Wildlife Service's (USFWS's) biological opinion on the State of Texas authorization of the TPDES (September 14, 1998; October 21, 1998, update). To make this determination for TPDES permits, TCEQ and EPA only considered

aquatic or aquatic-dependent species occurring in watersheds of critical concern or high priority as listed in Appendix A of the USFWS biological opinion. The determination is subject to reevaluation due to subsequent updates or amendments to the biological opinion. The permit does not require EPA review with respect to the presence of endangered or threatened species.

Segment No. 0823 is not currently listed on the state's inventory of impaired and threatened waters (the 2022 CWA § 303(d) list).

The effluent limitations and conditions in the draft permit comply with EPA-approved portions of the 2018 Texas Surface Water Quality Standards (TSWQS), 30 TAC §§ 307.1 - 307.10, effective March 1, 2018; 2014 TSWQS, effective March 6, 2014; 2010 TSWQS, effective July 22, 2010; and 2000 TSWQS, effective July 26, 2000.

#### (2) CONVENTIONAL PARAMETERS

Effluent limitations for the conventional effluent parameters (i.e., Five-Day Biochemical Oxygen Demand or Five-Day Carbonaceous Biochemical Oxygen Demand, Ammonia Nitrogen, etc.) are based on stream standards and waste load allocations for water quality-limited streams as established in the TSWQS and the State of Texas Water Quality Management Plan (WQMP).

The effluent limitations in the draft permit have been reviewed for consistency with the WQMP. The proposed effluent limitations are not contained in the approved WQMP. However, these limits will be included in the next WQMP update.

The effluent limitations in the draft permit meet the requirements for secondary treatment and the requirements for disinfection according to 30 TAC Chapter 309, Subchapter A: Effluent Limitations.

#### (3) COASTAL MANAGEMENT PLAN

The facility is not located in the Coastal Management Program boundary.

#### C. WATER QUALITY-BASED EFFLUENT LIMITATIONS/CONDITIONS

#### (1) GENERAL COMMENTS

The Texas Surface Water Quality Standards (30 TAC Chapter 307) state that surface waters will not be toxic to man, or to terrestrial or aquatic life. The methodology outlined in the "Procedures to Implement the Texas Surface Water Quality Standards, June 2010" is designed to ensure compliance with 30 TAC Chapter 307. Specifically, the methodology is designed to ensure that no source will be allowed to discharge any wastewater that: (1) results in instream aquatic toxicity; (2) causes a violation of an applicable narrative or numerical state water quality

standard; (3) results in the endangerment of a drinking water supply; or (4) results in aquatic bioaccumulation that threatens human health.

#### (2) AQUATIC LIFE CRITERIA

#### (a) SCREENING

Water quality-based effluent limitations are calculated from freshwater aquatic life criteria found in Table 1 of the Texas Surface Water Quality Standards (30 TAC Chapter 307).

There is no mixing zone for this discharge directly to an intermittent stream with perennial pools; acute and chronic freshwater criteria apply at the end of pipe. The following critical effluent percentages are being used:

Acute Effluent % 100% Chronic Effluent % 100%

Waste load allocations (WLAs) are calculated using the above estimated effluent percentages, criteria outlined in the Texas Surface Water Quality Standards, and partitioning coefficients for metals (when appropriate and designated in the implementation procedures). The WLA is the end-ofpipe effluent concentration that can be discharged when, after mixing in the receiving stream, instream numerical criteria will not be exceeded. From the WLA, a long-term average (LTA) is calculated using a log normal probability distribution, a given coefficient of variation (0.6), and a 90<sup>th</sup> percentile confidence level. The LTA is the long-term average effluent concentration for which the WLA will never be exceeded using a selected percentile confidence level. The LTA is used to calculate a daily average and daily maximum effluent limitation for the protection of aquatic life using the same statistical considerations with the 99<sup>th</sup> percentile confidence level and a standard number of monthly effluent samples collected (12). Assumptions used in deriving the effluent limitations include segment values for hardness, chlorides, pH, and total suspended solids (TSS) according to the segment-specific values contained in the TCEQ guidance document "Procedures to Implement the Texas Surface Water Quality Standards, June 2010." The segment values are 106 mg/l for hardness (as calcium carbonate), 89 mg/l chlorides, 7.7 standard units for pH, and 7 mg/l for TSS. For additional details on the calculation of water quality-based effluent limitations, refer to the TCEO guidance document.

TCEQ practice for determining significant potential is to compare the reported analytical data against percentages of the calculated daily average water quality-based effluent limitation. Permit limitations are required when analytical data reported in the application exceeds 85% of the calculated daily average water quality-based effluent limitation. Monitoring and reporting is required when analytical data reported in the application exceeds 70% of the calculated daily average water quality-based effluent limitation. See Attachment A of this Fact Sheet.

#### (b) PERMIT ACTION

No analytical data is available for screening against water quality-based effluent limitations because the facility is not in operation.

## (3) AQUATIC ORGANISM BIOACCUMULATION CRITERIA

#### (a) SCREENING

Water quality-based effluent limitations for the protection of human health are calculated using criteria for the consumption of freshwater fish tissue found in Table 2 of the Texas Surface Water Quality Standards (30 TAC Chapter 307). The discharge point is to an intermittent stream with perennial pools or to an intermittent stream within 3 miles upstream of an intermittent stream with perennial pools. Human health screening using incidental freshwater fish tissue criteria (= 10 X freshwater fish tissue criteria) is applicable due to the perennial pools that support incidental freshwater fisheries. TCEQ uses the mass balance equation to estimate dilution in the intermittent stream with perennial pools during average flow conditions. The estimated dilution for human health protection is calculated using the permitted flow of 2.0 MGD and the harmonic mean flow of 0.10 cfs for Mustang Creek. The following effluent percentage is being used:

Human Health Effluent % 96.87%

Water quality-based effluent limitations for human health protection against the consumption of fish tissue are calculated using the same procedure as outlined for calculation of water quality-based effluent limitations for aquatic life protection. A 99<sup>th</sup> percentile confidence level in the long-term average calculation is used with only one long-term average value being calculated.

Significant potential is again determined by comparing reported analytical data against 70% and 85% of the calculated daily average water quality-based effluent limitation. See Attachment A of this Fact Sheet.

(b) PERMIT ACTION

No analytical data is available for screening against water quality-based effluent limitations because the facility is not in operation.

#### (4) DRINKING WATER SUPPLY PROTECTION

#### (a) SCREENING

Water Quality Segment No. 0823, which receives the discharge from this facility, is designated as a public water supply. The discharge point is located at a distance greater than three miles from the classified segment.

> Screening reported analytical data of the effluent against water qualitybased effluent limitations calculated for the protection of a drinking water supply is not applicable due to the distance between the discharge point and the classified segment.

(b) PERMIT ACTION

No analytical data is available for screening against water quality-based effluent limitations because the facility is not in operation.

#### (5) WHOLE EFFLUENT TOXICITY (BIOMONITORING) CRITERIA

#### (a) SCREENING

TCEQ has determined that there may be pollutants present in the effluent that may have the potential to cause toxic conditions in the receiving stream. Whole effluent biomonitoring is the most direct measure of potential toxicity that incorporates the effects of synergism of effluent components and receiving stream water quality characteristics. Biomonitoring of the effluent is, therefore, required as a condition of this permit to assess potential toxicity.

The applicant is not currently monitoring whole effluent toxicity because the facility is not in operation and the requirements do not take effect until the Final phase.

#### (b) PERMIT ACTION

The test species are appropriate to measure the toxicity of the effluent consistent with the requirements of the State water quality standards. The biomonitoring frequency has been established to reflect the likelihood of ambient toxicity and to provide data representative of the toxic potential of the facility's discharge. This permit may be reopened to require effluent limits, additional testing, and/or other appropriate actions to address toxicity if biomonitoring data show actual or potential ambient toxicity to be the result of the permittee's discharge to the receiving stream or water body.

No analytical data is available because the facility is not in operation.

#### (6) WHOLE EFFLUENT TOXICITY CRITERIA (24-HOUR ACUTE)

#### (a) SCREENING

The applicant is not currently monitoring whole effluent toxicity because the facility is not in operation and the requirements do not take effect until the Final phase.

#### (b) PERMIT ACTION

The draft permit includes 24-hour 100% acute biomonitoring tests for the life of the permit.

#### 9. WATER QUALITY VARIANCE REQUESTS

No variance requests have been received.

#### 10. PROCEDURES FOR FINAL DECISION

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

Once a draft permit is completed, it is sent, along with the Executive Director's preliminary decision, as contained in the technical summary or fact sheet, to the Chief Clerk. At that time, the Notice of Application and Preliminary Decision will be mailed to the same people and published in the same newspaper as the prior notice. This notice sets a deadline for making public comments. The applicant must place a copy of the Executive Director's preliminary decision and draft permit in the public place with the application.

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

After the public comment deadline, the Executive Director prepares a response to all significant public comments on the application or the draft permit raised during the public comment period. The Chief Clerk then mails the Executive Director's response to comments and final decision to people who have filed comments, requested a contested case hearing, or requested to be on the mailing list. This notice provides that if a person is not satisfied with the Executive Director's response and decision, they can request a contested case hearing or file a request to reconsider the Executive Director's decision within 30 days after the notice is mailed.

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

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

For additional information about this application, contact Shaun M. Speck at (512) 239-4549.

#### 11. ADMINISTRATIVE RECORD

The following items were considered in developing the draft permit:

#### A. APPLICATION

Application received on September 12, 2024, and additional information received on March 4, 2025.

#### C. MEMORANDA

Interoffice Memoranda from the Water Quality Assessment Section of the TCEQ Water Quality Division. Interoffice Memorandum from the Pretreatment Team of the TCEQ Water Quality Division.

#### D. MISCELLANEOUS

Federal Clean Water Act § 402; Texas Water Code § 26.027; 30 TAC Chapters 30, 305, 309, 312, and 319; Commission policies; and U.S. Environmental Protection Agency guidelines.

Texas Surface Water Quality Standards, 30 TAC §§ 307.1 - 307.10.

*Procedures to Implement the Texas Surface Water Quality Standards* (IP), Texas Commission on Environmental Quality, June 2010, as approved by the U.S. Environmental Protection Agency, and the IP, January 2003, for portions of the 2010 IP not approved by the U.S. Environmental Protection Agency.

Texas 2022 Clean Water Act Section 303(d) List, Texas Commission on Environmental Quality, June 1, 2022; approved by the U.S. Environmental Protection Agency on July 7, 2022.

Texas Natural Resource Conservation Commission, Guidance Document for Establishing Monitoring Frequencies for Domestic and Industrial Wastewater Discharge Permits, Document No. 98-001.000-OWR-WQ, May 1998.

# **Attachment A: Calculated Water Quality Based Effluent Limitations**

#### TEXTOX MENU #7 - INTERMITTENT STREAM WITH PERENNIAL POOLS

The water quality-based effluent limitations developed below are calculated using:

Table 1, 2014 Texas Surface Water Quality Standards (30 TAC 307) for Freshwater Aquatic Life Table 2, 2018 Texas Surface Water Quality Standards for Human Health, Incidental Fishery "Procedures to Implement the Texas Surface Water Quality Standards," TCEQ, June 2010

PERMIT INFORMATION	
Permittee Name:	Four Seasons Ranch MUD 1 of Denton County
TPDES Permit No.:	WQ0016620001
Outfall No.:	001
Prepared by:	Shaun Speck
Date:	March 5, 2025

DISCHARGE INFORMATION	
Intermittent Receiving Waterbody:	Mustang Creek
Segment No.:	823
TSS (mg/L):	7
pH (Standard Units):	7.7
Hardness (mg/L as CaCO₃):	106
Chloride (mg/L):	89
Effluent Flow for Aquatic Life (MGD):	2
Critical Low Flow [7Q2] (cfs):	0
% Effluent for Chronic Aquatic Life:	100
% Effluent for Acute Aquatic Life:	100
Effluent Flow for Human Health (MGD):	2
Harmonic Mean Flow (cfs):	0.1
% Effluent for Human Health:	96.870

#### CALCULATE DISSOLVED FRACTION (AND ENTER WATER EFFECT RATIO IF APPLICABLE):

			Partition	Dissolve d		Water Effect	
	Intercep	Slope	Coefficie	Fraction	<b>6</b>	Ratio	<b>C</b>
Stream/River Metal	t (b)	(m)	nt (Kp)	(Cd/Ct)	Source	(WER)	Source
							Assum
Aluminum	N/A	N/A	N/A	1.00	Assumed	1.00	ed
			115632.				Assum
Arsenic	5.68	-0.73	10	0.553		1.00	ed
			441610.				Assum
Cadmium	6.60	-1.13	32	0.244		1.00	ed
			542074.				Assum
Chromium (total)	6.52	-0.93	31	0.209		1.00	ed
			542074.				Assum
Chromium (trivalent)	6.52	-0.93	31	0.209		1.00	ed
• •							Assum
Chromium (hexavalent)	N/A	N/A	N/A	1.00	Assumed	1.00	ed
	· · · ·		248100.				Assum
Copper	6.02	-0.74	39	0.365		1.00	ed
		-	594184.				Assum
Lead	6.45	-0.80	84	0.194		1.00	ed
							Assum
Mercury	N/A	N/A	N/A	1.00	Assumed	1.00	ed
e.ediy	,,,	,,,	161545.	2.00	, loounieu	1.00	Assum
Nickel	5.69	-0.57	22	0.469		1.00	ed
							Assum
Selenium	N/A	N/A	N/A	1.00	Assumed	1.00	ed
Seleman	14/7	14/74	14/73	1.00	Assumed	1.00	cu

			323257.			Assum
Silver	6.38	-1.03	80	0.306	1.00	ed
			322426.			Assum
Zinc	6.10	-0.70	98	0.307	1.00	ed

AQUATIC LIFE

CALCULATE DAILY AVERAGE AND DAILY MAXIMUM EFFLUENT LIMITATIONS:

	FW	FW						
	Acute	Chronic	14// 4	14/1 4 -	174.	174.	Daily	Daily
Parameter	Criterion (μg/L)	Criterion (µg/L)	WLAa (µg/L)	WLAc (µg/L)	LTAa (µg/L)	LTAc (µg/L)	Avg. (μg/L)	Max. (µg/L)
Aldrin	3.0	N/A	3.00	N/A	1.72	N/A	2.52	5.34
Aluminum	991	N/A N/A	991	N/A N/A	568	N/A N/A	834	1765
				-				
Arsenic	340	150	615	271	353	209	307	649
Cadmium	9.1	0.256	37.2	1.05	21.3	0.807	1.18	2.50
Carbaryl	2.0	N/A	2.00	N/A	1.15	N/A 0.0030	1.68 0.0045	3.56 0.0095
Chlordane	2.4	0.004	2.40	0.00400	1.38	0.0050	0.0045	0.0093
Chlorpyrifos	0.083	0.041	0.0830	0.0410	0.0476	0.0316	0.0464	0.0981
Chromium (+3)	598	78	2865	373	1642	287	421	892
Chromium (+6)	15.7	10.6	15.7	10.6	9.00	8.16	11.9	25.3
Copper	15.0	10.0	41.1	27.2	23.5	21.0	30.8	65.2
Cyanide (free)	45.8	10.0	45.8	10.7	25.5	8.24	12.1	25.6
	43.8	10.7	45.8	10.7	20.2	0.0007	0.0011	0.0023
4,4'-DDT	1.1	0.001	1.10	0.00100	0.630	70	3	0.0023 S
Demeton	N/A	0.1	N/A	0.100	N/A	0.0770	0.113	0.239
Diazinon	0.17	0.17	0.170	0.170	0.0974	0.131	0.143	0.302
Dicofol	59.3	19.8	59.3	19.8	34.0	15.2	22.4	47.4
	0010	1010	0010	1010	0.110	0.0015	0.0022	0.0047
Dieldrin	0.24	0.002	0.240	0.00200	0.138	4	6	8
Diuron	210	70	210	70.0	120	53.9	79.2	167
Endosulfan I (alpha)	0.22	0.056	0.220	0.0560	0.126	0.0431	0.0633	0.134
Endosulfan II (beta)	0.22	0.056	0.220	0.0560	0.126	0.0431	0.0633	0.134
Endosulfan sulfate	0.22	0.056	0.220	0.0560	0.126	0.0431	0.0633	0.134
						0.0015	0.0022	0.0047
Endrin	0.086	0.002	0.0860	0.00200	0.0493	4	6	8
						0.0077		
Guthion	N/A	0.01	N/A	0.0100	N/A	0.0030	0.0113	0.0239
Heptachlor	0.52	0.004	0.520	0.00400	0.298	0.0030	0.0045 2	0.009
Hexachlorocyclohexane (Lindane)	1.126	0.08	1.13	0.0800	0.645	0.0616	0.0905	0.191
Lead	69	2.68	355	13.8	203	10.7	15.6	
Lead	09	2.00	500	15.0	205	0.0077	15.0	33.1
Malathion	N/A	0.01	N/A	0.0100	N/A	0.0077	0.0113	0.0239
Mercury	2.4	1.3	2.40	1.30	1.38	1.00	1.47	3.11
Methoxychlor	N/A	0.03	N/A	0.0300	N/A	0.0231	0.0339	0.0718
	,,.	0.00	,,,	0.0000	,,,	0.0007	0.0011	0.0023
Mirex	N/A	0.001	N/A	0.00100	N/A	70	3	ç
Nickel	492	54.6	1048	116	601	89.6	131	278
Nonylphenol	28	6.6	28.0	6.60	16.0	5.08	7.47	15.8
Parathion (ethyl)	0.065	0.013	0.0650	0.0130	0.0372	0.0100	0.0147	0.0311
Pentachlorophenol	17.6	13.5	17.6	13.5	10.1	10.4	14.8	31.4
Phenanthrene	30	30	30.0	30.0	17.2	23.1	25.2	53.4
Polychlorinated Biphenyls (PCBs)	2.0	0.014	2.00	0.0140	1.15	0.0108	0.0158	0.0335
Selenium	20	5	20.0	5.00	11.5	3.85	5.65	11.9
Silver	0.8	N/A	19.4	N/A	11.1	N/A	16.3	34.6

				0.00020		0.0001	0.0002	0.0004
Toxaphene	0.78	0.0002	0.780	0	0.447	54	26	78
Tributyltin (TBT)	0.13	0.024	0.130	0.0240	0.0745	0.0185	0.0271	0.0574
2,4,5 Trichlorophenol	136	64	136	64.0	77.9	49.3	72.4	153
Zinc	123	124	401	404	230	311	337	714

#### HUMAN HEALTH (APPLIES FOR INCIDENTAL FRESHWATER FISH TISSUE)

CALCULATE DAILY AVERAGE AND DAILY MAXIMUM EFFLUENT LIMITATIONS:

	Incident al Fish			Daily	Daily
	Criterion	WLAh	LTAh	Avg.	Max.
Parameter	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(μg/L)
Acrylonitrile	1150	1187	1104	1622	3433
	1.147E-	0.00011	0.00011	0.00016	0.00034
Aldrin	04	8	0	1	Ĩ
Anthracene	13170	13596	12644	18586	39322
Antimony	10710	11056	10282	15114	3197
Arsenic	N/A	N/A	N/A	N/A	N//
Barium	N/A	N/A	N/A	N/A	N//
Benzene	5810	5998	5578	8199	1734
Benzidine	1.07	1.10	1.03	1.51	3.1
Benzo( <i>a</i> )anthracene	0.25	0.258	0.240	0.352	0.74
Benzo( <i>a</i> )pyrene	0.025	0.0258	0.0240	0.0352	0.074
Bis(chloromethyl)ether	2.745	2.83	2.64	3.87	8.1
Bis(2-chloroethyl)ether	428.3	442	411	604	127
Bis(2-ethylhexyl) phthalate [Di(2-ethylhexyl)					
phthalate]	75.5	77.9	72.5	106	22
Bromodichloromethane [Dichlorobromomethane]	2750	2839	2640	3881	821
Bromoform [Tribromomethane]	10600	10943	10177	14959	3164
Cadmium	N/A	N/A	N/A	N/A	N/
Carbon Tetrachloride	460	475	442	649	137
Chlordane	0.025	0.0258	0.0240	0.0352	0.074
Chlorobenzene	27370	28254	26277	38626	8172
Chlorodibromomethane	27570	20234	20277	50020	0172
[Dibromochloromethane]	1830	1889	1757	2582	546
Chloroform [Trichloromethane]	76970	79457	73895	108626	22981
Chromium (hexavalent)	5020	5182	4819	7084	1498
Chrysene	25.2	26.0	24.2	35.5	75.
Cresols [Methylphenols]	93010	96016	89295	131263	27770
Cyanide (free)	N/A	N/A	N/A	N/A	N/.
4,4'-DDD	0.02	0.0206	0.0192	0.0282	0.059
4,4'-DDE	0.0013	0.00134	0.00125	0.00183	0.0038
4,4'-DDT	0.004	0.00413	0.00384	0.00564	0.011
2,4'-D	N/A	N/A	N/A	N/A	N//
Danitol [Fenpropathrin]	4730	4883	4541	6675	1412
1,2-Dibromoethane [Ethylene Dibromide]	42.4	43.8	40.7	59.8	12
<i>m</i> -Dichlorobenzene [1,3-Dichlorobenzene]	5950	6142	5712	8397	1776
o-Dichlorobenzene [1,2-Dichlorobenzene]	32990	34056	31672	46558	9850
<i>p</i> -Dichlorobenzene [1,4-Dichlorobenzene]	N/A	N/A	N/A	N/A	N//
3,3'-Dichlorobenzidine	22.4	23.1	21.5	31.6	66.
1,2-Dichloroethane	3640	3758	3495	5137	1086
1,1-Dichloroethylene [1,1-Dichloroethene]	551140	568951	529124	777812	164557
Dichloromethane [Methylene Chloride]	133330	137639	128004	188165	39809
1,2-Dichloropropane	2590	2674	2487	3655	773

1,3-Dichloropropene [1,3- Dichloropropylene]	1190	1228	1142	1679	3553
Dicofol [Kelthane]	3	3.10	2.88	4.23	8.95
		0.00020	0.00019	0.00028	0.00059
Dieldrin	2.0E-04	6	2	2	7
2,4-Dimethylphenol	84360	87086	80990	119055	251879
Di-n-Butyl Phthalate	924	954	887	1304	2758
		0 005 07		0.00000	0.00000
Dioxins/Furans [TCDD Equivalents]	7.97E-07	8.23E-07	7.65E-07	11	24
Endrin	0.2	0.206	0.192	0.282	0.597
Epichlorohydrin	20130	20781	19326	28409	60103
Ethylbenzene	18670	19273	17924	26348	55744
Ethylene Glycol	1.68E+0 8	1734290 88	1612890 52	2370949 06	5016089 52
Fluoride	N/A	N/A	N/A	N/A	N/4
Fluoride	N/A	IN/A	0.00096	IN/A	11/7
Heptachlor	0.001	0.00103	0.000000	0.00141	0.00298
Heptachlor Epoxide	0.0029	0.00299	0.00278	0.00409	0.00865
Hexachlorobenzene	0.0068	0.00702	0.00653	0.00959	0.0203
Hexachlorobutadiene	2.2	2.27	2.11	3.10	6.5
Hexachlorocyclohexane (alpha)	0.084	0.0867	0.0806	0.118	0.25
Hexachlorocyclohexane (beta)	2.6	2.68	2.50	3.66	7.70
Hexachlorocyclohexane ( <i>gamma</i> ) [Lindane]	3.41	3.52	3.27	4.81	10.1
Hexachlorocyclopentadiene	116	120	111	163	340
Hexachloroethane	23.3	24.1	22.4	32.8	69.
Hexachlorophene	23:5	29.9	27.8	40.9	86.
4,4'-Isopropylidenediphenol [Bisphenol A]	159820	164985	153436	225550	47718
Lead	38.3	204	190	223330	589
	0.122	0.126	0.117	0.172	0.36
Mercury Methowschlor	30	31.0		42.3	89.
Methoxychlor	9.92E+0	1024057	28.8	1399988	296188
Methyl Ethyl Ketone	5.52210	1024037	9523734	9	250100
Methyl <i>tert</i> -butyl ether [MTBE]	104820	108207	100633	147930	31296
Nickel	11400	25076	23321	34281	7252
Nitrate-Nitrogen (as Total Nitrogen)	N/A	N/A	N/A	N/A	N//
Nitrobenzene	18730	19335	17982	26433	5592
N-Nitrosodiethylamine	21	21.7	20.2	29.6	62.
N-Nitroso-di- <i>n</i> -Butylamine	42	43.4	40.3	59.2	12
Pentachlorobenzene	3.55	3.66	3.41	5.01	10.
Pentachlorophenol	2.9	2.99	2.78	4.09	8.6
Polychlorinated Biphenyls [PCBs]	6.40E-03	0.00661	0.00614	0.00903	0.019
Pyridine	9470	9776	9092	13364	2827
Selenium	N/A	N/A	N/A	N/A	N/A
1,2,4,5-Tetrachlorobenzene	2.4	2.48	2.30	3.38	7.10
1,1,2,2-Tetrachloroethane	263.5	2.48	2.30	3.38	7.10
Tetrachloroethylene [Tetrachloroethylene]	2800	2890	2688	3951	836
Thallium	2.3	2.37	2.21	3.24	6.8
Toluene	N/A	N/A	N/A	N/A	N//
Toxaphene	0.11	0.114	0.106	0.155	0.32
2,4,5-TP [Silvex]	3690	3809	3543	5207	1101
1,1,1-Trichloroethane	7843540	8097012	7530221	1106942 4	234189
1,1,2-Trichloroethane				2342	495
	1660	1714	1594		
Trichloroethylene [Trichloroethene]	719 18670	742 19273	690 17924	1014 26348	214 5574
2,4,5-Trichlorophenol					

TTHM [Sum of Total Trihalomethanes]	N/A	N/A	N/A	N/A	N/A
Vinyl Chloride	165	170	158	232	492

# CALCULATE 70% AND 85% OF DAILY AVERAGE EFFLUENT LIMITATIONS:

Aquatic Life	70% of Daily Avg.	85% of Daily Avg.
Parameter	 (μg/L)	(μg/L)
Aldrin	1.76	2.14
Aluminum	584	709
Arsenic	215	261
Cadmium	0.830	1.00
Carbaryl	1.17	1.00
Chlordane	0.00316	0.00384
Chlorpyrifos	0.0324	0.0394
Chromium (+3)	295	358
Chromium (+6)	8.39	10.1
	21.5	26.2
Copper		
Cyanide (free)	8.47 0.00079	10.2 0.00096
4,4'-DDT	2	2
Demeton	0.0792	0.0962
Diazinon	0.100	0.121
Dicofol	15.6	19.0
Dieldrin	0.00158	0.00192
Diuron	55.4	67.3
Endosulfan (alpha)	0.0443	0.0538
Endosulfan (beta)	0.0443	0.0538
Endosulfan sulfate	0.0443	0.0538
Endrin	0.00158	0.00192
Guthion	0.00792	0.00962
Heptachlor	0.00316	0.00384
Hexachlorocyclohexane (Lindane)	0.0633	0.0769
Lead	10.9	13.3
Malathion	0.00792	0.00962
Mercury	1.03	1.25
Methoxychlor	0.0237	0.0288
Methoxychiol	0.00079	0.0286
Mirex	2	2
Nickel	92.2	112
Nonylphenol	5.22	6.34
Parathion (ethyl)	0.0103	0.0125
Pentachlorophenol	10.3	12.6
Phenanthrene	17.6	21.4
Polychlorinated Biphenyls (PCBs)	0.0110	0.0134
Selenium	3.96	4.81
Silver	11.4	13.9
	0.00015	0.00019
Toxaphene	8	2
Tributyltin (TBT)	0.0190	0.0230
2,4,5 Trichlorophenol	50.7	61.5
Zinc	236	287

Human Health	70% of Daily Avg.	85% of Daily Avg.
Parameter	(µg/L)	(µg/L)
Acrylonitrile	1136	1379
	0.00011	0.00013
Aldrin	3	7
Anthracene	13010	15798
Antimony	10580	12847
Arsenic	N/A	N/A
Barium	N/A	N/A
Benzene	5739	6969
Benzidine	1.05	1.28
Benzo(a)anthracene	0.246	0.299
Benzo( <i>a</i> )pyrene	0.0246	0.0299
Bis(chloromethyl)ether	2.71	3.29
Bis(2-chloroethyl)ether	423	513
Bis(2-ethylhexyl) phthalate [Di(2-ethylhexyl)		
phthalate]	74.5	90.5
Bromodichloromethane	2746	2200
[Dichlorobromomethane]	2716	3298
Bromoform [Tribromomethane]	10471	12715
Cadmium	N/A	N/A
Carbon Tetrachloride	454	551
Chlordane	0.0246	0.0299
Chlorobenzene	27038	32832
Chlorodibromomethane	1007	2105
[Dibromochloromethane]	1807	2195
Chloroform [Trichloromethane]	76038	92332
Chromium (hexavalent)	4959	6021
Chrysene	24.8	30.2
Cresols [Methylphenols]	91884	111573
Cyanide (free)	N/A	N/A
4,4'-DDD	0.0197	0.0239
4,4'-DDE	0.00128	0.00155
4,4'-DDT	0.00395	0.00479
2,4'-D	N/A	N/A
Danitol [Fenpropathrin]	4672	5674
1,2-Dibromoethane [Ethylene Dibromide]	41.8	50.8
<i>m</i> -Dichlorobenzene [1,3-Dichlorobenzene]	5877	7137
o-Dichlorobenzene [1,2-Dichlorobenzene]	32590	39574
<i>p</i> -Dichlorobenzene [1,4-Dichlorobenzene]	N/A	N/A
3,3'-Dichlorobenzidine	22.1	26.8
1,2-Dichloroethane	3595	4366
1,1-Dichloroethylene [1,1-Dichloroethene]	544468	661140
Dichloromethane [Methylene Chloride]	131716	159940
1,2-Dichloropropane	2558	3106
1,3-Dichloropropene [1,3- Dichloropropylene]	1175	1427
Dicofol [Kelthane]	2.96	3.59
	0.00019	0.00023
Dieldrin	7	9
2,4-Dimethylphenol	83338	101197
Di- <i>n</i> -Butyl Phthalate	912	1108
Dioxins/Furans [TCDD Equivalents]	7.87E-07	9.56E-07
Endrin	0.197	0.239

Epichlorohydrin	19886	24147
Ethylbenzene	18444	22396
	1659664	2015306
Ethylene Glycol	34	70
Fluoride	N/A	N/A
	0.00098	
Heptachlor	7	0.00119
Heptachlor Epoxide	0.00286	0.00347
Hexachlorobenzene	0.00671	0.00815
Hexachlorobutadiene	2.17	2.63
Hexachlorocyclohexane (alpha)	0.0829	0.100
Hexachlorocyclohexane (beta)	2.56	3.11
Hexachlorocyclohexane (gamma) [Lindane]	3.36	4.09
Hexachlorocyclopentadiene	114	139
Hexachloroethane	23.0	27.9
Hexachlorophene	28.6	34.7
4,4'-Isopropylidenediphenol [Bisphenol A]	157885	191718
Lead	195	237
Mercury	0.120	0.146
Methoxychlor	29.6	35.9
		1189990
Methyl Ethyl Ketone	9799922	6
Methyl tert-butyl ether [MTBE]	103551	125740
Nickel	23997	29139
Nitrate-Nitrogen (as Total Nitrogen)	N/A	N/A
Nitrobenzene	18503	22468
N-Nitrosodiethylamine	20.7	25.1
N-Nitroso-di-n-Butylamine	41.4	50.3
Pentachlorobenzene	3.50	4.25
Pentachlorophenol	2.86	3.47
Polychlorinated Biphenyls [PCBs]	0.00632	0.00767
Pyridine	9355	11360
Selenium	N/A	N/A
1,2,4,5-Tetrachlorobenzene	2.37	2.87
1,1,2,2-Tetrachloroethane	260	316
Tetrachloroethylene [Tetrachloroethylene]	2766	3358
Thallium	2.27	2.75
Toluene	N/A	N/A
Toxaphene	0.108	0.131
2,4,5-TP [Silvex]	3645	4426
1,1,1-Trichloroethane	7748597	9409011
1,1,2-Trichloroethane	1639	1991
Trichloroethylene [Trichloroethene]		
, , ,	18444	862
2,4,5-Trichlorophenol	18444	22396
TTHM [Sum of Total Trihalomethanes]	N/A	N/A
Vinyl Chloride	163	197

# Section 3. Dioxin/Furan Compounds

Indicate which of the following	compounds from may be	e present in the i	nfluent from a	contributing
industrial user or significant	industrial user. Check a	ull that apply.		

2,4,5-trichlorophenoxy acetic acid
Common Name 2,4,5-T, CASRN 93-76-5
2-(2,4,5-trichlorophenoxy) propanoic acid
Common Name Silvex or 2,4,5-TP, CASRN 93-72-1
2-(2,4,5-trichlorophenoxy) ethyl 2,2-dichloropropionate
Common Name Erbon, CASRN 136-25-4
0,0-dimethyl 0-(2,4,5-trichlorophenyl) phosphorothioate
Common Name Ronnel, CASRN 299-84-3
2,4,5-trichlorophenol
Common Name TCP, CASRN 95-95-4
hexachlorophene
Common Name HCP, CASRN 70-30-4

For each compound identified, provide a brief description of the conditions of its/their presence at the facility.

Do you know or have any reason to believe that 2,3,7,8 Tetrachlorodibenzo-P-Dioxin (TCDD) or any congeners of TCDD may be present in your effluent?

Yes	No
105	110

If **yes**, provide a brief description of the conditions for its presence.

If any of the compounds in Subsection A or B are present, complete Table 4.0(2)F.

For pollutants identified in Table 4.0(2)F, indicate the type of sample.

Grab  $\Box$  Composite  $\Box$ 

Date and time sample(s) collected:

# Table 4.0(2)F – Dioxin/Furan Compounds

Come com	Torio	147o ctorestor	Mosteriater	Cludge	Chudae	ЛЛАТ
Compound	Toxic Equivalency Factors	Wastewater Concentration (ppq)	Wastewater Equivalents (ppq)	Sludge Concentration (ppt)	Sludge Equivalents (ppt)	MAL (ppq)
2,3,7,8 TCDD	1					10
1,2,3,7,8 PeCDD	0.5					50
2,3,7,8 HxCDDs	0.1					50
1,2,3,4,6,7,8 HpCDD	0.01					50
2,3,7,8 TCDF	0.1					10
1,2,3,7,8 PeCDF	0.05					50
2,3,4,7,8 PeCDF	0.5					50
2,3,7,8 HxCDFs	0.1					50
2,3,4,7,8 HpCDFs	0.01					50
OCDD	0.0003					100
OCDF	0.0003					100
PCB 77	0.0001					0.5
PCB 81	0.0003					0.5
PCB 126	0.1					0.5
PCB 169	0.03					0.5
Total						



September 9, 2024

Texas Commission on Environmental Quality Applications Review and Processing Team Building F, Room 2101 12100 Park 35 Circle Austin, Texas 78753

RE: Four Seasons Ranch WWTP Domestic Wastewater Discharge Permit Application

Project Name:Four Seasons Ranch WWTP Domestic Wastewater Discharge Permit ApplicationCounty:DentonLJA Job No:NT860B-0314

Dear Applications Review and Processing Team:

The purpose of this letter is to provide the Texas Commission on Environmental Quality (TCEQ) with the information necessary to comply with the submittal requirements of Domestic Wastewater Discharge Permit Applications. Attached to this letter is one copy of the Domestic Wastewater Discharge Permit Application with original documents, including full size exhibits and original signatures. Also attached are two additional copies of the permit application. We look forward to your review. An original application and signatures along with 2 copies have have also been sent USPS in accordance with the requirements.

1. The Engineering Firm (Preparer) is:

LJA Engineering, Inc. 6060 N. Central Expressway, Suite 400 Dallas, Texas 75206 Firm # 1386

2. The county is:

Denton

3. The project name is:

Four Seasons Ranch WWTP Domestic Wastewater Discharge Permit Application

For any questions or comments, please contact Laura Preston using the information below.

Sincerely,

Laura Preston, PE

Project Engineer 214.442.6579 <u>lpreston@lja.com</u> Firm #1386



#### LETTER OF TRANSMITTAL

Date: 09/09/2024	
------------------	--

LJA Job No. NT860B-0314

From: Laura Preston, P.E.

LJA Engineering

RE: Four Seasons Ranch WWTP Domestic Wastewater Permit

WE ARE SENDING YOU the following items:

Shop Drawings Prints Plans Samples Specifications

Copy of Letter Change Order Application

Texas Commission on

Environmental Quality Applications Review and

Building F, Room 2101

12100 Park 35 Circle

Austin, Texas 78753

Processing Team

To:

Copies	Date	Description
1	September 2024	Original Copy with Original Signatures and full-size documents
2	September 2024	Additional Copies of the domestic wastewater permit application

Contract

THESE ARE TRANSMITTED as checked below:

K For approval For your use

C:

Approved as submitted Approved as noted

As requested  $\boxtimes$  For review & comment  $\square$  For signatures

Returned for corrections

Resubmit \_ copies for approval Submit \_\_\_\_ copies for distribution Return executed agreement

Other: Domestic Wastewater Permit

REMARKS: Please find the enclosed Four Seasons Ranch WWTP Domestic Wastewater Discharge Permit Application. An original application and two copies have also been sent USPS in accordance with the requirements.

SIGNED: Laura Preston, P.E.

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY



# DOMESTIC WASTEWATER PERMIT APPLICATION **CHECKLIST**

### Complete and submit this checklist with the application.

#### APPLICANT NAME: Four Seasons Ranch MUD 1

PERMIT NUMBER (If new, leave blank): WQ00 TBD - This is an application for a new permit Indicate if each of the following items is included in your application.

	Y	Ν
Administrative Report 1.0	$\boxtimes$	
Administrative Report 1.1		$\boxtimes$
SPIF	$\boxtimes$	
Core Data Form	$\boxtimes$	
Public Involvement Plan Form	$\boxtimes$	
Technical Report 1.0	$\boxtimes$	
Technical Report 1.1	$\boxtimes$	
Worksheet 2.0	$\boxtimes$	
Worksheet 2.1		$\boxtimes$
Worksheet 3.0		$\boxtimes$
Worksheet 3.1		$\boxtimes$
Worksheet 3.2		$\boxtimes$
Worksheet 3.3		$\boxtimes$
Worksheet 4.0		$\boxtimes$
Worksheet 5.0		$\boxtimes$
Worksheet 6.0	$\boxtimes$	
Worksheet 7.0		$\boxtimes$

	Y	Ν
Original USGS Map	$\boxtimes$	
Affected Landowners Map	$\boxtimes$	
Landowner Disk or Labels	$\boxtimes$	
Buffer Zone Map	$\boxtimes$	
Flow Diagram	$\boxtimes$	
Site Drawing		
Original Photographs	$\boxtimes$	
Design Calculations	$\boxtimes$	
Solids Management Plan	$\boxtimes$	
Water Balance		$\boxtimes$

### For TCEQ Use Only

Segment Numbe	rCounty
Expiration Date	Region
Permit Number	

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY



# DOMESTIC WASTEWATER PERMIT APPLICATION ADMINISTRATIVE REPORT 1.0

For any questions about this form, please contact the Applications Review and Processing Team at 512–239–4671.

# Section 1. Application Fees (Instructions Page 26)

Indicate the amount submitted for the application fee (check only one).

Flow	New/Major Amendment	Renewal
<0.05 MGD	\$350.00 🗆	\$315.00 🗆
≥0.05 but <0.10 MGD	\$550.00	\$515.00 🗆
≥0.10 but <0.25 MGD	\$850.00	\$815.00
≥0.25 but <0.50 MGD	\$1,250.00	\$1,215.00 🗆
≥0.50 but <1.0 MGD	\$1,650.00	\$1,615.00 🗆
≥1.0 MGD	\$2,050.00	\$2,015.00 🗆

Minor Amendment (for any flow) \$150.00 □

#### **Payment Information:**

Mailed Check/Money Order Number: <u>N/A</u>		
	Check/Money Order Amount: <u>N/</u>	<u>'A</u>
	Name Printed on Check: <u>N/A</u>	
EPAY	Voucher Number: <u>720521 &amp; 72052</u>	22
Copy of Payment Voucher enclosed? Yes D		

# Section 2. Type of Application (Instructions Page 26)

- **a.** Check the box next to the appropriate authorization type.
  - □ Publicly-Owned Domestic Wastewater
  - □ Privately-Owned Domestic Wastewater
  - Conventional Wastewater Treatment
- **b.** Check the box next to the appropriate facility status.
  - $\Box$  Active  $\boxtimes$  Inactive

- **c.** Check the box next to the appropriate permit type.
  - ⊠ TPDES Permit
  - □ TLAP
  - **TPDES** Permit with TLAP component
  - Subsurface Area Drip Dispersal System (SADDS)
- **d.** Check the box next to the appropriate application type
  - ⊠ New
  - Major Amendment <u>with</u> Renewal
    Minor Amendment <u>with</u> Renewal

- □ Major Amendment <u>without</u> Renewal
- Minor Amendment without Renewal
- □ Renewal without changes □ Minor Modification of permit
- e. For amendments or modifications, describe the proposed changes: N/A

## f. For existing permits:

Permit Number: WQ00 <u>N/A</u> EPA I.D. (TPDES only): TX <u>N/A</u> Expiration Date: <u>N/A</u>

# Section 3. Facility Owner (Applicant) and Co-Applicant Information (Instructions Page 26)

A. The owner of the facility must apply for the permit.

What is the Legal Name of the entity (applicant) applying for this permit?

#### Four Seasons Ranch MUD 1

(The legal name must be spelled exactly as filed with the Texas Secretary of State, County, or in the legal documents forming the entity.)

If the applicant is currently a customer with the TCEQ, what is the Customer Number (CN)? You may search for your CN on the TCEQ website at <u>http://www15.tceq.texas.gov/crpub/</u>

#### CN: <u>603401316</u>

What is the name and title of the person signing the application? The person must be an executive official meeting signatory requirements in *30 TAC § 305.44*.

Title: <u>Board President</u> Credential: <u>N/A</u>

**B. Co-applicant information.** Complete this section only if another person or entity is required to apply as a co-permittee.

What is the Legal Name of the co-applicant applying for this permit?

<u>N/A</u>

(The legal name must be spelled exactly as filed with the TX SOS, with the County, or in the legal documents forming the entity.)

If the co-applicant is currently a customer with the TCEQ, what is the Customer Number (CN)? You may search for your CN on the TCEQ website at: <u>http://www15.tceq.texas.gov/crpub/</u>

CN: <u>N/A</u>

What is the name and title of the person signing the application? The person must be an executive official meeting signatory requirements in *30 TAC § 305.44*.

Prefix: <u>N/A</u>	Last Name, First Name: <u>N/A</u>
Title: <u>N/A</u>	Credential: <u>N/A</u>

Provide a brief description of the need for a co-permittee: N/A

#### C. Core Data Form

Complete the Core Data Form for each customer and include as an attachment. If the customer type selected on the Core Data Form is **Individual**, complete **Attachment 1** of Administrative Report 1.0.  $\underline{1}$ 

## Section 4. Application Contact Information (Instructions Page 27)

This is the person(s) TCEQ will contact if additional information is needed about this application. Provide a contact for administrative questions and technical questions.

A.	Prefix: <u>Ms.</u>	Last Name, First	Name: <u>Prest</u>	on, Lau	<u>ira</u>
	Title: <u>Assistant Project Manager</u>	Credential: <u>P.E.</u>			
	Organization Name: LJA Engineer	<u>ring, Inc.</u>			
	Mailing Address: <u>6060 N Central H</u>	<u>Expy, Ste 400</u>	City, State, 2	Zip Co	de: <u>Dallas, Texas 75206</u>
	Phone No.: <u>214-442-6579</u>	E-mail Address	: <u>lpreston@lja</u>	<u>.com</u>	
	Check one or both: $\square$ Adr	ninistrative Conta	act	$\boxtimes$	Technical Contact
B.	Prefix: <u>Mr.</u>	Last Name, First	Name: <u>Wend</u>	<u>lling, D</u>	<u>allas</u>
	Title: <u>Project Manager</u>	Credential: <u>P.E.</u>			
	Organization Name: LJA Engineer	<u>ring, Inc.</u>			
	Mailing Address: 2150 S Central E	<u>xpy, Ste 300</u> City, S	State, Zip Coo	le: <u>Mcl</u>	<u>Kinney, Texas 75070</u>
	Phone No.: <u>214-620-2772</u>	E-mail Address	: <u>dwendling@</u>	<u>lja.com</u>	<u>l</u>
	Check one or both: $\square$ Adr	ninistrative Conta	act	$\boxtimes$	Technical Contact

# Section 5. Permit Contact Information (Instructions Page 27)

Provide the names and contact information for two individuals that can be contacted throughout the permit term.

A. Prefix: <u>Ms.</u>	Last Name, First	t Name: <u>Preston, Laura</u>
Title: <u>Assistant Project Manager</u>	Credential: <u>P.E.</u>	
Organization Name: LJA Engineer	<u>ring, Inc.</u>	
Mailing Address: <u>6060 N Central I</u>	Expy, Ste 400	City, State, Zip Code: <u>Dallas, Texas 75206</u>
Phone No.: <u>214-442-6579</u>	E-mail Address	: <u>lpreston@lja.com</u>

B.	Prefix: <u>Mr.</u>	Last Name, First Name: <u>Wendling, Dallas</u>
	Title: <u>Project Manager</u>	Credential: <u>P.E.</u>
	Organization Name: LJA Engineer	ing, Inc.
	Mailing Address: 2150 S Central Ex	xpy, Ste 300City, State, Zip Code: McKinney, Texas 75070
	Phone No.: 214-620-2772	E-mail Address: dwendling@lja.com

## Section 6. Billing Contact Information (Instructions Page 27)

The permittee is responsible for paying the annual fee. The annual fee will be assessed to permits *in effect on September 1 of each year*. The TCEQ will send a bill to the address provided in this section. The permittee is responsible for terminating the permit when it is no longer needed (using form TCEQ-20029).

Prefix: <u>N/A</u>	Last Name, First Name: <u>Bethke, Joshua</u>
Title: <u>N/A</u>	Credential: <u>N/A</u>
Organization Name: Four Seasons	Ranch MUD 1
Mailing Address: <u>16000 Dallas Pkv</u>	vy Ste 350 City, State, Zip Code: <u>Dallas, TX 75248</u>
Phone No.: 972-788-1600	E-mail Address: jbethke@coatsrose.com

# Section 7. DMR/MER Contact Information (Instructions Page 27)

Provide the name and complete mailing address of the person delegated to receive and submit Discharge Monitoring Reports (DMR) (EPA 3320-1) or maintain Monthly Effluent Reports (MER).

Prefix: <u>Mr.</u> Last Name, First Name: <u>Bethke, Joshua</u>

Title: N/ACredential: N/A

Organization Name: Four Seasons Ranch MUD 1

Mailing Address: 16000 Dallas Pkwy, Ste 350 City, State, Zip Code: Dallas, TX 75248-6637

Phone No.: <u>972-788-1600</u> E-mail Address: <u>jbethke@coatsrose.com</u>

# Section 8. Public Notice Information (Instructions Page 27)

A. Individual Publishing the Notices

Prefix: <u>Ms.</u> Last Name, First Name: <u>Preston, Laura</u>

Title: <u>Assistant Project Manager</u> Credential: <u>P.E.</u>

Organization Name: LJA Engineering, Inc.

Mailing Address: 6060 N Central Expy, Ste 400City, State, Zip Code: Dallas, Texas 75206Phone No.: 214-442-6579E-mail Address: lpreston@lja.com

# B. Method for Receiving Notice of Receipt and Intent to Obtain a Water Quality Permit Package

Indicate by a check mark the preferred method for receiving the first notice and instructions:

- E-mail Address: lpreston@lja.com
- □ Fax
- Regular Mail

#### C. Contact permit to be listed in the Notices

Prefix: Ms.Last Name, First Name: Preston, LauraTitle:Assistant Assistant Project ManagerCredential: P.E.Organization Name: LJA Engineering, Inc.Mailing Address: 6060 N Central Expy, Ste 400City, State, Zip Code: Dallas, Texas 75206Phone No.: 214-442-6579E-mail Address: Ipreston@lja.comDescriptionE-mail Address: Ipreston@lja.comDif the facility or outfall is located in more than one county, a public viewing place for each county must be provided.

Public building name: Pilot Point Community Library

Location within the building: Service Desk

Physical Address of Building: <u>324 S Washington St</u>

City: <u>Pilot Point</u> County: <u>Denton</u>

Contact (Last Name, First Name): <u>Library Staff</u>

Phone No.: <u>940-686-5004</u> Ext.: <u>N/A</u>

Public building name: <u>Gunter Library & Museum</u> Location within the building: <u>Service Desk</u> Physical Address of Building: <u>110 S Hwy 289, Ste 4</u> City: <u>Gunter</u> County: <u>Grayson</u> Contact (Last Name, First Name): <u>Library Staff</u> Phone No.: 903-771-3066 Ext.: N/A

#### E. Bilingual Notice Requirements

# This information **is required** for **new, major amendment, minor amendment or minor modification, and renewal** applications.

This section of the application is only used to determine if alternative language notices will be needed. Complete instructions on publishing the alternative language notices will be in your public notice package.

Please call the bilingual/ESL coordinator at the nearest elementary and middle schools and obtain the following information to determine whether an alternative language notices are required.

1. Is a bilingual education program required by the Texas Education Code at the elementary or middle school nearest to the facility or proposed facility?

🖾 Yes 🗆 No

If **no**, publication of an alternative language notice is not required; **skip to** Section 9 below.

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 education 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 **question 1, 2, 3, or 4**, public notices in an alternative language are required. Which language is required by the bilingual program? <u>Spanish</u>

#### F. Plain Language Summary Template

Complete the Plain Language Summary (TCEQ Form 20972) and include as an attachment.

#### Attachment: 2

#### G. Public Involvement Plan Form

Complete the Public Involvement Plan Form (TCEQ Form 20960) for each application for a **new permit or major amendment to a permit** and include as an attachment.

Attachment: <u>3</u>

# Section 9. Regulated Entity and Permitted Site Information (Instructions Page 29)

**A.** If the site is currently regulated by TCEQ, provide the Regulated Entity Number (RN) issued to this site. **RN** <u>N/A</u>

Search the TCEQ's Central Registry at <u>http://www15.tceq.texas.gov/crpub/</u> to determine if the site is currently regulated by TCEQ.

- **B.** Name of project or site (the name known by the community where located): Four Seasons Ranch WWTP
- C. Owner of treatment facility: Four Seasons Ranch MUD 1

Ownership of Facility:		Public	$\boxtimes$	Private		Both		Federal
------------------------	--	--------	-------------	---------	--	------	--	---------

**D.** Owner of land where treatment facility is or will be:

Prefix: <u>N/A</u>	Last Name, First Name: <u>N/A</u>
Title: <u>N/A</u>	Credential: <u>N/A</u>

Organization Name: Four Seasons Ranch MUD 1

Mailing Address: 16000 Dallas Pkwy, Ste 350 City, State, Zip Code: Dallas, Tx 75248

Phone No.: <u>972-788-1600</u> E-mail Address: <u>jbethke@coatsrose.com</u>

If the landowner is not the same person as the facility owner or co-applicant, attach a lease agreement or deed recorded easement. See instructions.

#### Attachment: $\underline{N/A}$

**E.** Owner of effluent disposal site:

Prefix: <u>N/A</u>	Last Name, First Name: <u>N/A</u>
Title: <u>N/A</u>	Credential: <u>N/A</u>
Organization Name: <u>N/A</u>	
Mailing Address: <u>N/A</u>	City, State, Zip Code: <u>N/A</u>
Phone No.: <u>N/A</u>	E-mail Address: <u>N/A</u>

If the landowner is not the same person as the facility owner or co-applicant, attach a lease agreement or deed recorded easement. See instructions.

#### Attachment: <u>N/A</u>

**F.** Owner sewage sludge disposal site (if authorization is requested for sludge disposal on property owned or controlled by the applicant)::

Prefix: <u>N/A</u>	Last Name, First Name: <u>N/A</u>
Title: <u>N/A</u>	Credential: <u>N/A</u>
Organization Name: <u>N/A</u>	
Mailing Address: <u>N/A</u>	City, State, Zip Code: <u>N/A</u>
Phone No.: <u>N/A</u>	E-mail Address: <u>N/A</u>

If the landowner is not the same person as the facility owner or co-applicant, attach a lease agreement or deed recorded easement. See instructions.

Attachment: <u>N/A</u>

## Section 10. TPDES Discharge Information (Instructions Page 31)

A. Is the wastewater treatment facility location in the existing permit accurate?

🗆 Yes 🖾 No

If **no**, **or a new permit application**, please give an accurate description:

Approximately 0.6 miles southeast of the intersection of County Line Rd and Gorrell Rd in Denton County

**B.** Are the point(s) of discharge and the discharge route(s) in the existing permit correct?

🗆 Yes 🖾 No

If **no**, **or a new or amendment permit application**, provide an accurate description of the point of discharge and the discharge route to the nearest classified segment as defined in 30 TAC Chapter 307:

To unnamed tributary, thence to Little Elm Creek, thence to Lake Lewisville in segment o823 of the Trinity River Basin.

City nearest the outfall(s): <u>Gunter</u>

County in which the outfalls(s) is/are located: Grayson

- **C.** Is or will the treated wastewater discharge to a city, county, or state highway right-of-way, or a flood control district drainage ditch?
  - 🗆 Yes 🖾 No

If **yes**, indicate by a check mark if:

□ Authorization granted □ Authorization pending

For **new and amendment** applications, provide copies of letters that show proof of contact and the approval letter upon receipt.

Attachment: <u>N/A</u>

**D.** For all applications involving an average daily discharge of 5 MGD or more, provide the names of all counties located within 100 statute miles downstream of the point(s) of discharge: <u>N/A</u>

# Section 11. TLAP Disposal Information (Instructions Page 32)

A. For TLAPs, is the location of the effluent disposal site in the existing permit accurate?

🗆 Yes 🗆 No

If **no, or a new or amendment permit application**, provide an accurate description of the disposal site location:

N/A – This is not an application for a TLAP

- **B.** City nearest the disposal site: <u>N/A</u>
- **C.** County in which the disposal site is located: <u>N/A</u>
- **D.** For **TLAPs**, describe the routing of effluent from the treatment facility to the disposal site:

N/A

**E.** For **TLAPs**, please identify the nearest watercourse to the disposal site to which rainfall runoff might flow if not contained: N/A

## Section 12. Miscellaneous Information (Instructions Page 32)

A. Is the facility located on or does the treated effluent cross American Indian Land?

🗆 Yes 🖾 No

B. If the existing permit contains an onsite sludge disposal authorization, is the location of the

sewage sludge disposal site in the existing permit accurate?

□ Yes □ No ⊠ Not Applicable

If No, or if a new onsite sludge disposal authorization is being requested in this permit application, provide an accurate location description of the sewage sludge disposal site.

N/A – no sludge disposal authorization is requested in this permit

**C.** Did any person formerly employed by the TCEQ represent your company and get paid for service regarding this application?

🗆 Yes 🛛 No

If yes, list each person formerly employed by the TCEQ who represented your company and was paid for service regarding the application: N/A

- **D.** Do you owe any fees to the TCEQ?
  - 🗆 Yes 🖾 No

If **yes**, provide the following information:

Account number: <u>N/A</u>

Amount past due: <u>N/A</u>

**E.** Do you owe any penalties to the TCEQ?

🗆 Yes 🖾 No

If **yes**, please provide the following information:

Enforcement order number: <u>N/A</u>

Amount past due: <u>N/A</u>

# Section 13. Attachments (Instructions Page 33)

Indicate which attachments are included with the Administrative Report. Check all that apply:

□ Lease agreement or deed recorded easement, if the land where the treatment facility is located or the effluent disposal site are not owned by the applicant or co-applicant.

Original full-size USGS Topographic Map with the following information:

- Applicant's property boundary
- Treatment facility boundary
- Labeled point of discharge for each discharge point (TPDES only)
- Highlighted discharge route for each discharge point (TPDES only)
- Onsite sewage sludge disposal site (if applicable)
- Effluent disposal site boundaries (TLAP only)
- New and future construction (if applicable)
- 1 mile radius information
- 3 miles downstream information (TPDES only)
- All ponds.
- □ Attachment 1 for Individuals as co-applicants
- Other Attachments. Please specify: <u>Core Data Form</u>

## Section 14. Signature Page (Instructions Page 34)

If co-applicants are necessary, each entity must submit an original, separate signature page.

#### Permit Number: <u>N/A</u>

Applicant: Four Seasons Ranch MUD 1

#### Certification:

ounty, Texas

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 (typed or printed): Michael Teeling

Signature: Michaellelin Date: 8/15/2024
(Use blue ink)
Subscribed and Sworn to before me by the said Michael Teeling on this, 20 27 . My commission expires on the day of February, 20 28 .
Notary Public State of Texas Notary Public State of Texas Comm. Expires 02-24-2028 Notary ID 1658281

# DOMESTIC WASTEWATER PERMIT APPLICATION ADMINISTRATIVE REPORT 1.0

The following information is required for new and amendment applications.

## Section 1. Affected Landowner Information (Instructions Page 36)

- **A.** Indicate by a check mark that the landowners map or drawing, with scale, includes the following information, as applicable:
  - The applicant's property boundaries
  - The facility site boundaries within the applicant's property boundaries
  - The distance the buffer zone falls into adjacent properties and the property boundaries of the landowners located within the buffer zone
  - The property boundaries of all landowners surrounding the applicant's property (Note: if the application is a major amendment for a lignite mine, the map must include the property boundaries of all landowners adjacent to the new facility (ponds).)
  - The point(s) of discharge and highlighted discharge route(s) clearly shown for one mile downstream
  - The property boundaries of the landowners located on both sides of the discharge route for one full stream mile downstream of the point of discharge
  - The property boundaries of the landowners along the watercourse for a one-half mile radius from the point of discharge if the point of discharge is into a lake, bay, estuary, or affected by tides
  - □ The boundaries of the effluent disposal site (for example, irrigation area or subsurface drainfield site) and all evaporation/holding ponds within the applicant's property
  - □ The property boundaries of all landowners surrounding the effluent disposal site
  - □ The boundaries of the sludge land application site (for land application of sewage sludge for beneficial use) and the property boundaries of landowners surrounding the applicant's property boundaries where the sewage sludge land application site is located
  - □ The property boundaries of landowners within one-half mile in all directions from the applicant's property boundaries where the sewage sludge disposal site (for example, sludge surface disposal site or sludge monofill) is located
- **B.** Indicate by a check mark that a separate list with the landowners' names and mailing addresses cross-referenced to the landowner's map has been provided.
- **C.** Indicate by a check mark in which format the landowners list is submitted:
  - $\boxtimes$  USB Drive  $\square$  Four sets of labels
- **D.** Provide the source of the landowners' names and mailing addresses: <u>Collin County CAD</u>, <u>Denton County CAD</u>, <u>Grayson County CAD</u>
- **E.** As required by *Texas Water Code § 5.115*, 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):

N/A

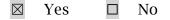
# Section 2. Original Photographs (Instructions Page 38)

Provide original ground level photographs. Indicate with checkmarks that the following information is provided.

- At least one original photograph of the new or expanded treatment unit location
- At least two photographs of the existing/proposed point of discharge and as much area downstream (photo 1) and upstream (photo 2) as can be captured. If the discharge is to an open water body (e.g., lake, bay), the point of discharge should be in the right or left edge of each photograph showing the open water and with as much area on each respective side of the discharge as can be captured.
- At least one photograph of the existing/proposed effluent disposal site
- A plot plan or map showing the location and direction of each photograph

## Section 3. Buffer Zone Map (Instructions Page 38)

- **A.** Buffer zone map. Provide a buffer zone map on 8.5 x 11-inch paper with all of the following information. The applicant's property line and the buffer zone line may be distinguished by using dashes or symbols and appropriate labels.
  - The applicant's property boundary;
  - The required buffer zone; and
  - Each treatment unit; and
  - The distance from each treatment unit to the property boundaries.
- **B.** Buffer zone compliance method. Indicate how the buffer zone requirements will be met. Check all that apply.
  - ⊠ Ownership
  - ☑ Restrictive easement
  - □ Nuisance odor control
  - □ Variance
- **C.** Unsuitable site characteristics. Does the facility comply with the requirements regarding unsuitable site characteristic found in 30 TAC § 309.13(a) through (d)?



# DOMESTIC WASTEWATER PERMIT APPLICATION SUPPLEMENTAL PERMIT INFORMATION FORM (SPIF)

This form applies to TPDES permit applications only. Complete and attach the Supplemental Permit information Form (SPIF) (TCEQ Form 20971).

Attachment: 7

# DOMESTIC WASTEWATER PERMIT APPLICATION CHECKLIST OF COMMON DEFICIENCIES

Below is a list of common deficiencies found during the administrative review of domestic wastewater permit applications. To ensure the timely processing of this application, please review the items below and indicate by checking Yes that each item is complete and in accordance applicable rules at 30 TAC Chapters 21, 281, and 305. If an item is not required this application, indicate by checking N/A where appropriate. Please do not submit the application until the items below have been addressed.

Core Data Form (TCEQ Form No. 10400) (Required for all application types. Must be completed in its entirety of Note: Form may be signed by applicant representative.)	and s	rigned.	$\boxtimes$	Yes
Correct and Current Industrial Wastewater Permit Application Form (TCEQ Form Nos. 10053 and 10054. Version dated 6/25/2018 or late			$\boxtimes$	Yes
Water Quality Permit Payment Submittal Form (Page 19) (Original payment sent to TCEQ Revenue Section. See instructions for	r mai	iling ad	⊠ Idress	Yes s.)
7.5 Minute USGS Quadrangle Topographic Map Attached (Full–size map if seeking "New" permit. 8 ½ x 11 acceptable for Renewals and Amendments)			$\boxtimes$	Yes
Current/Non-Expired, Executed Lease Agreement or Easement	$\boxtimes$	N/A		Yes
Landowners Map (See instructions for landowner requirements)		N/A	$\boxtimes$	Yes

#### Things to Know:

- All the items shown on the map must be labeled.
- The applicant's complete property boundaries must be delineated which includes boundaries of contiguous property owned by the applicant.
- The applicant cannot be its own adjacent landowner. You must identify the landowners immediately adjacent to their property, regardless of how far they are from the actual facility.
- If the applicant's property is adjacent to a road, creek, or stream, the landowners on the opposite side must be identified. Although the properties are not adjacent to applicant's property boundary, they are considered potentially affected landowners. If the adjacent road is a divided highway as identified on the USGS topographic map, the applicant does not have to identify the landowners on the opposite side of the highway.

Landowners Cross Reference List (See instructions for landowner requirements)		N/A	$\boxtimes$	Yes
Landowners Labels or USB Drive attached (See instructions for landowner requirements)		N/A	$\boxtimes$	Yes
Original signature per 30 TAC § 305.44 – Blue Ink Preferred ( <i>If signature page is not signed by an elected official or principle exec a copy of signature authority/delegation letter must be attached</i> )	utive	officer	, ⊠	Yes
Plain Language Summary			$\boxtimes$	Yes

TCEQ-10053 (01/09/2024) Domestic Wastewater Permit Application Administrative Report

Shopping Cart Select Fee Search Transactions Sign Out

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:	720521
Trace Number:	582EA000624690
Date:	09/09/2024 03:38 PM
Payment Method:	CC - Authorization 000005454D
Voucher Amount:	\$2,000.00
Fee Type:	WW PERMIT - FACILITY WITH FLOW >= 1.0 MGD - NEW AND MAJOR AMENDMENTS
ePay Actor:	LAURA PRESTON
Actor Email:	lpreston@lja.com
IP:	170.55.94.226

-Payment Contact Information

Name:	LAURA PRESTON
Company:	LJA ENGINEERING
Address:	6060 N CENTRAL EXPY SUITE 400, DALLAS, TX 75206
Phone:	325-668-2952

Site Information

Site Name:FOUR SEASONS RANCH WWTPSite Location:APPROX 0.6 MI SE OF THE INTERSECTION OF COUNTY LINE RD AND GORRELL ROAD

Customer Information

Customer Name: FOUR SEASONS RANCH MUD 1 Customer Address: 16000 DALLAS PKWY STE 350, DALLAS, TX 75248

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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:	720522
Trace Number:	582EA000624690
Date:	09/09/2024 03:38 PM
Payment Method:	CC - Authorization 000005454D
Voucher Amount:	\$50.00
Fee Type:	30 TAC 305.53B WQ NOTIFICATION FEE
ePay Actor:	LAURA PRESTON
Actor Email:	lpreston@lja.com
IP:	170.55.94.226
Payment Contact Information	I
Name:	LAURA PRESTON
Company:	LJA ENGINEERING

Company: LJA ENGINEERING Address: 6060 N CENTRAL EXPY SUITE 400, DALLAS, TX 75206 Phone: 325-668-2952

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TEXAS COMMISSION ON ENVIRONMENTAL QUALITY



# DOMESTIC WASTEWATER PERMIT APPLICATION TECHNICAL REPORT 1.0

For any questions about this form, please contact the Domestic Wastewater Permitting Team at 512-239-4671.

The following information is required for all renewal, new, and amendment applications.

## Section 1. Permitted or Proposed Flows (Instructions Page 43)

### A. Existing/Interim I Phase

Design Flow (MGD): <u>0.15</u> 2-Hr Peak Flow (MGD): <u>0.6</u> Estimated construction start date: <u>06/2025</u> Estimated waste disposal start date: <u>08/2025</u>

### B. Interim II Phase

Design Flow (MGD): <u>0.3</u> 2-Hr Peak Flow (MGD): <u>1.2</u> Estimated construction start date: <u>12/2025</u> Estimated waste disposal start date: <u>02/2026</u>

#### C. Final Phase

Design Flow (MGD): <u>2.0</u> 2-Hr Peak Flow (MGD): <u>8.0</u> Estimated construction start date: <u>02/2029</u> Estimated waste disposal start date: <u>04/2029</u>

#### **D.** Current Operating Phase

Provide the startup date of the facility: N/A

# Section 2. Treatment Process (Instructions Page 43)

#### A. Current Operating Phase

Provide a detailed description of the treatment process. **Include the type of treatment plant, mode of operation, and all treatment units.** Start with the plant's head works and

finish with the point of discharge. Include all sludge processing and drying units. **If more than one phase exists or is proposed, a description of** *each phase* **must be provided**.

See Attachment 11

#### **B.** Treatment Units

In Table 1.0(1), provide the treatment unit type, the number of units, and dimensions (length, width, depth) **of each treatment unit, accounting for** *all* **phases of operation**.

#### Table 1.0(1) - Treatment Units

Treatment Unit Type	Number of Units	Dimensions (L x W x D)
See Attachment 12		

#### C. Process Flow Diagram

Provide flow diagrams for the existing facilities and **each** proposed phase of construction. **Attachment**: <u>See Attachments 13.1, 13.2, 13.3, & 13.4</u>

## Section 3. Site Information and Drawing (Instructions Page 44)

Provide the TPDES discharge outfall latitude and longitude. Enter N/A if not applicable.

- Latitude: <u>33.411875</u>
- Longitude: <u>-96.835289</u>

Provide the TLAP disposal site latitude and longitude. Enter N/A if not applicable.

- Latitude: <u>N/A</u>
- Longitude: <u>N/A</u>

Provide a site drawing for the facility that shows the following:

- The boundaries of the treatment facility;
- The boundaries of the area served by the treatment facility;
- If land disposal of effluent, the boundaries of the disposal site and all storage/holding ponds; and
- If sludge disposal is authorized in the permit, the boundaries of the land application or disposal site.

#### Attachment: <u>14</u>

Provide the name **and** a description of the area served by the treatment facility.

Four Seasons Ranch WWTP will support single family residential development on an adjacent/nearby property.

Collection System Information **for wastewater TPDES permits only**: Provide information for each **uniquely owned** collection system, existing and new, served by this facility, including satellite collection systems. **Please see the instructions for a detailed explanation and examples.** 

#### **Collection System Information**

Collection System Name	Owner Name	Owner Type	Population Served
N/A	N/A	Choose an item.	N/A
		Choose an item.	
		Choose an item.	
		Choose an item.	

## Section 4. Unbuilt Phases (Instructions Page 45)

Is the application for a renewal of a permit that contains an unbuilt phase or phases?

🗆 Yes 🗵 No

**If yes**, does the existing permit contain a phase that has not been constructed **within five years** of being authorized by the TCEQ?

🗆 Yes 🗆 No

**If yes**, provide a detailed discussion regarding the continued need for the unbuilt phase. **Failure to provide sufficient justification may result in the Executive Director recommending denial of the unbuilt phase or phases**.

N<u>/A</u>

# Section 5. Closure Plans (Instructions Page 45)

Have any treatment units been taken out of service permanently, or will any units be taken out of service in the next five years?

🗆 Yes 🖾 No

If yes, was a closure plan submitted to the TCEQ?

If yes, provide a brief description of the closure and the date of plan approval.

N<u>/A</u>

# Section 6. Permit Specific Requirements (Instructions Page 45)

For applicants with an existing permit, check the Other Requirements or Special Provisions of the permit.

#### A. Summary transmittal

Have plans and specifications been approved for the existing facilities and each proposed phase?

🗆 Yes 🖾 No

If yes, provide the date(s) of approval for each phase: <u>N/A</u>

Provide information, including dates, on any actions taken to meet a *requirement or provision* pertaining to the submission of a summary transmittal letter. **Provide a copy of an approval letter from the TCEQ, if applicable**.

 $N/\underline{A}$ 

#### **B.** Buffer zones

Have the buffer zone requirements been met?

🖾 Yes 🗆 No

Provide information below, including dates, on any actions taken to meet the conditions of the buffer zone. If available, provide any new documentation relevant to maintaining the buffer zones.

Buffer zone requirements will be met by ownership and restrictive easement.

#### C. Other actions required by the current permit

Does the *Other Requirements* or *Special Provisions* section in the existing permit require submission of any other information or other required actions? Examples include Notification of Completion, progress reports, soil monitoring data, etc.

🗆 Yes 🖾 No

**If yes**, provide information below on the status of any actions taken to meet the conditions of an *Other Requirement* or *Special Provision*.

N/A – This is an application for a new permit.	

#### D. Grit and grease treatment

#### 1. Acceptance of grit and grease waste

Does the facility have a grit and/or grease processing facility onsite that treats and decants or accepts transported loads of grit and grease waste that are discharged directly to the wastewater treatment plant prior to any treatment?

🗆 Yes 🖾 No

If No, stop here and continue with Subsection E. Stormwater Management.

#### 2. Grit and grease processing

Describe below how the grit and grease waste is treated at the facility. In your description, include how and where the grit and grease is introduced to the treatment works and how it is separated or processed. Provide a flow diagram showing how grit and grease is processed at the facility.

N/A

#### 3. Grit disposal

Does the facility have a Municipal Solid Waste (MSW) registration or permit for grit disposal?



**If No**, contact the TCEQ Municipal Solid Waste team at 512-239-2335. Note: A registration or permit is required for grit disposal. Grit shall not be combined with treatment plant sludge. See the instruction booklet for additional information on grit disposal requirements and restrictions.

Describe the method of grit disposal.

#### 4. Grease and decanted liquid disposal

Note: A registration or permit is required for grease disposal. Grease shall not be combined with treatment plant sludge. For more information, contact the TCEQ Municipal Solid Waste team at 512-239-2335.

Describe how the decant and grease are treated and disposed of after grit separation.

N/A

#### E. Stormwater management

#### 1. Applicability

Does the facility have a design flow of 1.0 MGD or greater in any phase?

🖾 Yes 🗆 No

Does the facility have an approved pretreatment program, under 40 CFR Part 403?

🗆 Yes 🖾 No

If no to both of the above, then skip to Subsection F, Other Wastes Received.

#### 2. MSGP coverage

Is the stormwater runoff from the WWTP and dedicated lands for sewage disposal currently permitted under the TPDES Multi-Sector General Permit (MSGP), TXR050000?

🗆 Yes 🖂 No

**If yes**, please provide MSGP Authorization Number and skip to Subsection F, Other Wastes Received:

TXR05 <u>N/A</u> or TXRNE <u>N/A</u>

If no, do you intend to seek coverage under TXR050000?

🗆 Yes 🖾 No

#### 3. Conditional exclusion

Alternatively, do you intend to apply for a conditional exclusion from permitting based TXR050000 (Multi Sector General Permit) Part II B.2 or TXR050000 (Multi Sector General Permit) Part V, Sector T 3(b)?

🗆 Yes 🖾 No

If yes, please explain below then proceed to Subsection F, Other Wastes Received:

#### 4. Existing coverage in individual permit

Is your stormwater discharge currently permitted through this individual TPDES or TLAP permit?

🗆 Yes 🖂 No

**If yes**, provide a description of stormwater runoff management practices at the site that are authorized in the wastewater permit then skip to Subsection F, Other Wastes Received.

N/A

#### 5. Zero stormwater discharge

Do you intend to have no discharge of stormwater via use of evaporation or other means?

🗆 Yes 🖾 No

If yes, explain below then skip to Subsection F. Other Wastes Received.

N/A

Note: If there is a potential to discharge any stormwater to surface water in the state as the result of any storm event, then permit coverage is required under the MSGP or an individual discharge permit. This requirement applies to all areas of facilities with treatment plants or systems that treat, store, recycle, or reclaim domestic sewage, wastewater or sewage sludge (including dedicated lands for sewage sludge disposal located within the onsite property boundaries) that meet the applicability criteria of above. You have the option of obtaining coverage under the MSGP for direct discharges, (recommended), or obtaining coverage under this individual permit.

#### 6. Request for coverage in individual permit

Are you requesting coverage of stormwater discharges associated with your treatment plant under this individual permit?

🗆 Yes 🖾 No

**If yes**, provide a description of stormwater runoff management practices at the site for which you are requesting authorization in this individual wastewater permit and describe whether you intend to comingle this discharge with your treated effluent or discharge it via a separate dedicated stormwater outfall. Please also indicate if you intend to divert stormwater to the treatment plant headworks and indirectly discharge it to water in the state.

Note: Direct stormwater discharges to waters in the state authorized through this individual permit will require the development and implementation of a stormwater pollution prevention plan (SWPPP) and will be subject to additional monitoring and reporting requirements. Indirect discharges of stormwater via headworks recycling will require compliance with all individual permit requirements including 2-hour peak flow limitations. All stormwater discharge authorization requests will require additional information during the technical review of your application.

#### F. Discharges to the Lake Houston Watershed

Does the facility discharge in the Lake Houston watershed?

🗆 Yes 🖂 No

If yes, attach a Sewage Sludge Solids Management Plan. See Example 5 in the instructions.  $\underline{\rm N/A}$ 

#### G. Other wastes received including sludge from other WWTPs and septic waste

#### 1. Acceptance of sludge from other WWTPs

Does or will the facility accept sludge from other treatment plants at the facility site?

🗆 Yes 🖾 No

# If yes, attach sewage sludge solids management plan. See Example 5 of the instructions.

In addition, provide the date the plant started or is anticipated to start accepting sludge, an estimate of monthly sludge acceptance (gallons or millions of gallons), an

estimate of the BOD<sub>5</sub> concentration of the sludge, and the design BOD<sub>5</sub> concentration of the influent from the collection system. Also note if this information has or has not changed since the last permit action.

N/A

Note: Permits that accept sludge from other wastewater treatment plants may be required to have influent flow and organic loading monitoring.

#### 2. Acceptance of septic waste

Is the facility accepting or will it accept septic waste?

🗆 Yes 🖾 No

If yes, does the facility have a Type V processing unit?

🗆 Yes 🗆 No

If yes, does the unit have a Municipal Solid Waste permit?

🗆 Yes 🗆 No

If yes to any of the above, provide the date the plant started or is anticipated to start accepting septic waste, an estimate of monthly septic waste acceptance (gallons or millions of gallons), an estimate of the  $BOD_5$  concentration of the septic waste, and the

design BOD<sub>5</sub> concentration of the influent from the collection system. Also note if this information has or has not changed since the last permit action.

N/A

Note: Permits that accept sludge from other wastewater treatment plants may be required to have influent flow and organic loading monitoring.

3. Acceptance of other wastes (not including septic, grease, grit, or RCRA, CERCLA or as discharged by IUs listed in Worksheet 6)

Is or will the facility accept wastes that are not domestic in nature excluding the categories listed above?

🗆 Yes 🖾 No

**If yes**, provide the date that the plant started accepting the waste, an estimate how much waste is accepted on a monthly basis (gallons or millions of gallons), a description of the entities generating the waste, and any distinguishing chemical or other physical characteristic of the waste. Also note if this information has or has not changed since the last permit action.

N/A

# Section 7. Pollutant Analysis of Treated Effluent (Instructions Page 50)

Is the facility in operation?

🗆 Yes 🖂 No

If no, this section is not applicable. Proceed to Section 8.

**If yes**, provide effluent analysis data for the listed pollutants. *Wastewater treatment facilities* complete Table 1.0(2). *Water treatment facilities* discharging filter backwash water, complete Table 1.0(3). Provide copies of the laboratory results sheets. **These tables are not applicable for a minor amendment without renewal.** See the instructions for guidance.

Note: The sample date must be within 1 year of application submission.

	Table1.0(2) - Pollutant Analysis for Wastewater Treatment Facilities	
--	--	--

Pollutant	Average Conc.	Max Conc.	No. of Samples	Sample Type	Sample Date/Time
CBOD <sub>5</sub> , mg/l	N/A				
Total Suspended Solids, mg/l	N/A				
Ammonia Nitrogen, mg/l	N/A				
Nitrate Nitrogen, mg/l	N/A				
Total Kjeldahl Nitrogen, mg/l	N/A				

Sulfate, mg/l	N/A		
Chloride, mg/l	N/A		
Total Phosphorus, mg/l	N/A		
pH, standard units	N/A		
Dissolved Oxygen*, mg/l	N/A		
Chlorine Residual, mg/l	N/A		
<i>E.coli</i> (CFU/100ml) freshwater	N/A		
Entercocci (CFU/100ml) saltwater	N/A		
Total Dissolved Solids, mg/l	N/A		
Electrical Conductivity, µmohs/cm, †	N/A		
Oil & Grease, mg/l	N/A		
Alkalinity (CaCO <sub>3</sub> )*, mg/l	N/A		

\*TPDES permits only †TLAP permits only

#### Table1.0(3) – Pollutant Analysis for Water Treatment Facilities

Pollutant	Average Conc.	Max Conc.	No. of Samples	Sample Type	Sample Date/Time
Total Suspended Solids, mg/l	N/A				
Total Dissolved Solids, mg/l	N/A				
pH, standard units	N/A				
Fluoride, mg/l	N/A				
Aluminum, mg/l	N/A				
Alkalinity (CaCO <sub>3</sub> ), mg/l	N/A				

# Section 8. Facility Operator (Instructions Page 50)

Facility Operator Name: <u>TBD</u>

Facility Operator's License Classification and Level: <u>TBD</u>

Facility Operator's License Number: <u>TBD</u>

# Section 9. Sludge and Biosolids Management and Disposal (Instructions Page 51)

## A. WWTP's Biosolids Management Facility Type

Check all that apply. See instructions for guidance

- $\boxtimes$  Design flow>= 1 MGD
- $\Box \quad Serves >= 10,000 \text{ people}$
- Class I Sludge Management Facility (per 40 CFR § 503.9)

- Biosolids generator
- □ Biosolids end user land application (onsite)
- Biosolids end user surface disposal (onsite)
- Biosolids end user incinerator (onsite)

#### **B. WWTP's Biosolids Treatment Process**

Check all that apply. See instructions for guidance.

- Aerobic Digestion
- Air Drying (or sludge drying beds)
- Lower Temperature Composting
- □ Lime Stabilization
- □ Higher Temperature Composting
- □ Heat Drying
- □ Thermophilic Aerobic Digestion
- Beta Ray Irradiation
- □ Gamma Ray Irradiation
- □ Pasteurization
- □ Preliminary Operation (e.g. grinding, de-gritting, blending)
- Thickening (e.g. gravity thickening, centrifugation, filter press, vacuum filter)
- □ Sludge Lagoon
- □ Temporary Storage (< 2 years)
- □ Long Term Storage (>= 2 years)
- Methane or Biogas Recovery
- □ Other Treatment Process: <u>N/A</u>

#### C. Biosolids Management

Provide information on the *intended* biosolids management practice. Do not enter every management practice that you want authorized in the permit, as the permit will authorize all biosolids management practices listed in the instructions. Rather indicate the management practice the facility plans to use.

#### **Biosolids Management**

Management Practice	Handler or Preparer Type	Bulk or Bag Container	Amount (dry metric tons)	Pathogen Reduction Options	Vector Attraction Reduction Option
Disposal in Landfill	Off-site Third-Party Handler or Preparer	Bulk		Class B: PSRP Aerobic Digestion	Option 3: Lab demonstration of volatile solids

Management Practice	Handler or Preparer Type	Bulk or Bag Container	Amount (dry metric tons)	Pathogen Reduction Options	Vector Attraction Reduction Option
					reduction aerobically
Choose an item.	Choose an item.	Choose an item.		Choose an item.	Choose an item.
Choose an item.	Choose an item.	Choose an item.		Choose an item.	Choose an item.

If "Other" is selected for Management Practice, please explain (e.g. monofill or transport to another WWTP): <u>Facility is not in operation</u>. <u>Biosolids management method may vary based on final design</u>.

#### D. Disposal site

Disposal site name: <u>TBD</u>

TCEQ permit or registration number: <u>TBD</u>

County where disposal site is located: <u>TBD</u>

#### E. Transportation method

Method of transportation (	(truck, tra	rain, pipe, o	other): <u>TBD</u>
----------------------------	-------------	---------------	--------------------

Name of the hauler: <u>TBD</u>

Hauler registration number: <u>TBD</u>

Sludge is transported as a:

Liquid □ semi-l

semi-liquid 🖂

semi-solid 🗆

solid 🗆

## Section 10. Permit Authorization for Sewage Sludge Disposal (Instructions Page 53)

#### A. Beneficial use authorization

Does the existing permit include authorization for land application of sewage sludge for beneficial use?

🗆 Yes 🖂 No

**If yes**, are you requesting to continue this authorization to land apply sewage sludge for beneficial use?

🗆 Yes 🗆 No

**If yes**, is the completed **Application for Permit for Beneficial Land Use of Sewage Sludge (TCEQ Form No. 10451)** attached to this permit application (see the instructions for details)?

🗆 Yes 🗆 No

#### B. Sludge processing authorization

Does the existing permit include authorization for any of the following sludge processing, storage or disposal options?

Sludge Composting	□ Yes	🖾 No
Marketing and Distribution of sludge	□ Yes	🖾 No
Sludge Surface Disposal or Sludge Monofill	□ Yes	🖾 No
Temporary storage in sludge lagoons	□ Yes	🖂 No

**If yes** to any of the above sludge options and the applicant is requesting to continue this authorization, is the completed **Domestic Wastewater Permit Application: Sewage Sludge Technical Report (TCEQ Form No. 10056)** attached to this permit application?

🗆 Yes 🗆 No

# Section 11. Sewage Sludge Lagoons (Instructions Page 53)

Does this facility include sewage sludge lagoons?

🗆 Yes 🖾 No

If yes, complete the remainder of this section. If no, proceed to Section 12.

#### A. Location information

The following maps are required to be submitted as part of the application. For each map, provide the Attachment Number.

• Original General Highway (County) Map:

```
Attachment: <u>N/A</u>
```

• USDA Natural Resources Conservation Service Soil Map:

Attachment: <u>N/A</u>

• Federal Emergency Management Map:

Attachment: <u>N/A</u>

• Site map:

#### Attachment: N/A

Discuss in a description if any of the following exist within the lagoon area. Check all that apply.

- □ Overlap a designated 100-year frequency flood plain
- □ Soils with flooding classification
- □ Overlap an unstable area
- □ Wetlands
- □ Located less than 60 meters from a fault
- $\Box$  None of the above

#### Attachment: <u>N/A</u>

If a portion of the lagoon(s) is located within the 100-year frequency flood plain, provide the protective measures to be utilized including type and size of protective structures:

#### B. Temporary storage information

Provide the results for the pollutant screening of sludge lagoons. These results are in addition to pollutant results in *Section 7 of Technical Report 1.0.* 

Nitrate Nitrogen, mg/kg: N/A Total Kjeldahl Nitrogen, mg/kg: N/A Total Nitrogen (=nitrate nitrogen + TKN), mg/kg: N/A Phosphorus, mg/kg: N/A Potassium, mg/kg: N/A pH, standard units: N/A Ammonia Nitrogen mg/kg: <u>N/A</u> Arsenic: <u>N/A</u> Cadmium: N/A Chromium: N/A Copper: N/A Lead: N/A Mercury: <u>N/A</u> Molybdenum: N/A Nickel: N/A Selenium: N/A Zinc: N/A Total PCBs: N/A Provide the following information: Volume and frequency of sludge to the lagoon(s): N/A

Total dry tons stored in the lagoons(s) per 365-day period: <u>N/A</u>

Total dry tons stored in the lagoons(s) over the life of the unit: N/A

#### C. Liner information

Does the active/proposed sludge lagoon(s) have a liner with a maximum hydraulic conductivity of  $1 \times 10^{-7}$  cm/sec?

□ Yes □ No

If yes, describe the liner below. Please note that a liner is required.

#### D. Site development plan

Provide a detailed description of the methods used to deposit sludge in the lagoon(s):

N/A

Attach the following documents to the application.

- Plan view and cross-section of the sludge lagoon(s)
   Attachment: <u>N/A</u>
- Copy of the closure plan

Attachment: <u>N/A</u>

• Copy of deed recordation for the site

```
Attachment: <u>N/A</u>
```

- Size of the sludge lagoon(s) in surface acres and capacity in cubic feet and gallons Attachment: N/A
- Description of the method of controlling infiltration of groundwater and surface water from entering the site

Attachment: <u>N/A</u>

• Procedures to prevent the occurrence of nuisance conditions

Attachment: N/A

#### E. Groundwater monitoring

Is groundwater monitoring currently conducted at this site, or are any wells available for groundwater monitoring, or are groundwater monitoring data otherwise available for the sludge lagoon(s)?

□ Yes □ No

If groundwater monitoring data are available, provide a copy. Provide a profile of soil types encountered down to the groundwater table and the depth to the shallowest groundwater as a separate attachment.

Attachment: <u>N/A</u>

## Section 12. Authorizations/Compliance/Enforcement (Instructions

#### Page 55)

#### A. Additional authorizations

Does the permittee have additional authorizations for this facility, such as reuse authorization, sludge permit, etc?

🗆 Yes 🖂 No

If yes, provide the TCEQ authorization number and description of the authorization:

N/A

#### B. Permittee enforcement status

Is the permittee currently under enforcement for this facility?

🗆 Yes 🖾 No

Is the permittee required to meet an implementation schedule for compliance or enforcement?

🗆 Yes 🖾 No

**If yes** to either question, provide a brief summary of the enforcement, the implementation schedule, and the current status:

N/A

# Section 13. RCRA/CERCLA Wastes (Instructions Page 55)

#### A. RCRA hazardous wastes

Has the facility received in the past three years, does it currently receive, or will it receive RCRA hazardous waste?

🗆 Yes 🖾 No

#### B. Remediation activity wastewater

Has the facility received in the past three years, does it currently receive, or will it receive CERCLA wastewater, RCRA remediation/corrective action wastewater or other remediation activity wastewater?

🗆 Yes 🖂 No

### C. Details about wastes received

**If yes** to either Subsection A or B above, provide detailed information concerning these wastes with the application.

Attachment: N/A

## Section 14. Laboratory Accreditation (Instructions Page 56)

All laboratory tests performed must meet the requirements of 30 TAC Chapter 25, Environmental Testing Laboratory Accreditation and Certification, which includes the following general exemptions from National Environmental Laboratory Accreditation Program (NELAP) certification requirements:

- The laboratory is an in-house laboratory and is:
  - periodically inspected by the TCEQ; or
  - located in another state and is accredited or inspected by that state; or
  - o performing work for another company with a unit located in the same site; or
  - performing pro bono work for a governmental agency or charitable organization.
- The laboratory is accredited under federal law.
- The data are needed for emergency-response activities, and a laboratory accredited under the Texas Laboratory Accreditation Program is not available.
- The laboratory supplies data for which the TCEQ does not offer accreditation.

The applicant should review 30 TAC Chapter 25 for specific requirements.

The following certification statement shall be signed and submitted with every application. See the Signature Page section in the Instructions, for a list of designated representatives who may sign the certification.

#### CERTIFICATION:

I certify that all laboratory tests submitted with this application meet the requirements of 30 TAC Chapter 25, Environmental Testing Laboratory Accreditation and Certification.

Printed Name: Michael Teeling

**Title: Board President** Signature: Date: \_

## DOMESTIC WASTEWATER PERMIT APPLICATION TECHNICAL REPORT 1.1

The following information is required for new and amendment major applications.

## Section 1. Justification for Permit (Instructions Page 57)

#### A. Justification of permit need

Provide a detailed discussion regarding the need for any phase(s) not currently permitted. Failure to provide sufficient justification may result in the Executive Director recommending denial of the proposed phase(s) or permit.

This permit is needed to support single family residential development on an adjacent/nearby property.

#### B. Regionalization of facilities

For additional guidance, please review <u>TCEQ's Regionalization Policy for Wastewater</u> <u>Treatment</u><sup>1</sup>.

Provide the following information concerning the potential for regionalization of domestic wastewater treatment facilities:

#### 1. Municipally incorporated areas

If the applicant is a city, then Item 1 is not applicable. Proceed to Item 2 Utility CCN areas.

Is any portion of the proposed service area located in an incorporated city?

 $\Box$  Yes  $\boxtimes$  No  $\Box$  Not Applicable

If yes, within the city limits of: <u>N/A</u>

If yes, attach correspondence from the city.

#### Attachment: <u>N/A</u>

If consent to provide service is available from the city, attach a justification for the proposed facility and a cost analysis of expenditures that includes the cost of connecting to the city versus the cost of the proposed facility or expansion attached.

#### Attachment: N/A

#### 2. Utility CCN areas

Is any portion of the proposed service area located inside another utility's CCN area?

🖾 Yes 🗆 No

<sup>&</sup>lt;sup>1</sup> <u>https://www.tceq.texas.gov/permitting/wastewater/tceq-regionalization-for-wastewater</u>

**If yes**, attach a justification for the proposed facility and a cost analysis of expenditures that includes the cost of connecting to the CCN facilities versus the cost of the proposed facility or expansion.

#### Attachment: 21

#### 3. Nearby WWTPs or collection systems

Are there any domestic permitted wastewater treatment facilities or collection systems located within a three-mile radius of the proposed facility?

🖾 Yes 🗆 No

**If yes**, attach a list of these facilities and collection systems that includes each permittee's name and permit number, and an area map showing the location of these facilities and collection systems.

#### Attachment: 15

**If yes**, attach proof of mailing a request for service to each facility and collection system, the letters requesting service, and correspondence from each facility and collection system.

#### Attachment: 16

If the facility or collection system agrees to provide service, attach a justification for the proposed facility and a cost analysis of expenditures that includes the cost of connecting to the facility or collection system versus the cost of the proposed facility or expansion.

#### Attachment: $\underline{N/A}$

## Section 2. Proposed Organic Loading (Instructions Page 59)

Is this facility in operation?

🗆 Yes 🖂 No

If no, proceed to Item B, Proposed Organic Loading.

If yes, provide organic loading information in Item A, Current Organic Loading

#### A. Current organic loading

Facility Design Flow (flow being requested in application): <u>N/A</u>

Average Influent Organic Strength or BOD<sub>5</sub> Concentration in mg/l: <u>N/A</u>

Average Influent Loading (lbs/day = total average flow X average BOD<sub>5</sub> conc. X 8.34): <u>N/A</u>

Provide the source of the average organic strength or BOD<sub>5</sub> concentration.

N/A

#### B. Proposed organic loading

This table must be completed if this application is for a facility that is not in operation or if this application is to request an increased flow that will impact organic loading.

Source	Total Average Flow (MGD)	Influent BOD5 Concentration (mg/l)
Municipality		
Subdivision	2.0	325 mg/L
Trailer park – transient		
Mobile home park		
School with cafeteria and showers		
School with cafeteria, no showers		
Recreational park, overnight use		
Recreational park, day use		
Office building or factory		
Motel		
Restaurant		
Hospital		
Nursing home		
Other		
TOTAL FLOW from all sources		
AVERAGE BOD <sub>5</sub> from all sources		

Table 1.1(1) – Design Organic Loading

# Section 3. Proposed Effluent Quality and Disinfection (Instructions Page 59)

#### A. Existing/Interim I Phase Design Effluent Quality

Biochemical Oxygen Demand (5-day), mg/l: 10

Total Suspended Solids, mg/l: <u>15</u>

Ammonia Nitrogen, mg/l: <u>3</u>

Total Phosphorus, mg/l: <u>N/A</u>

Dissolved Oxygen, mg/l: 4

Other: <u>N/A</u>

#### B. Interim II Phase Design Effluent Quality

Biochemical Oxygen Demand (5-day), mg/l: 10

Total Suspended Solids, mg/l: <u>15</u> Ammonia Nitrogen, mg/l: <u>3</u> Total Phosphorus, mg/l: <u>N/A</u> Dissolved Oxygen, mg/l: <u>4</u> Other: N/A

### C. Final Phase Design Effluent Quality

Biochemical Oxygen Demand (5-day), mg/l: <u>10</u> Total Suspended Solids, mg/l: <u>15</u> Ammonia Nitrogen, mg/l: <u>3</u> Total Phosphorus, mg/l: <u>N/A</u> Dissolved Oxygen, mg/l: <u>4</u> Other: <u>N/A</u>

#### **D. Disinfection Method**

Identify the proposed method of disinfection.

 $\boxtimes$  Chlorine: 4 mg/l after <u>20</u> minutes detention time at peak flow

Dechlorination process: N/A

- $\Box$  Ultraviolet Light: <u>N/A</u> seconds contact time at peak flow
- □ Other: <u>N/A</u>

### Section 4. Design Calculations (Instructions Page 59)

Attach design calculations and plant features for each proposed phase. Example 4 of the instructions includes sample design calculations and plant features.

Attachment: <u>17</u>

#### Section 5. Facility Site (Instructions Page 60)

#### A. 100-year floodplain

Will the proposed facilities be located <u>above</u> the 100-year frequency flood level?

🖾 Yes 🗆 No

**If no**, describe measures used to protect the facility during a flood event. Include a site map showing the location of the treatment plant within the 100-year frequency flood level. If applicable, provide the size and types of protective structures.

N/A

Provide the source(s) used to determine 100-year frequency flood plain.

FEMA FIRM 48121C0140G, see attachment 18

For a new or expansion of a facility, will a wetland or part of a wetland be filled?

🗆 Yes 🖾 No

If yes, has the applicant applied for a US Corps of Engineers 404 Dredge and Fill Permit?

🗆 Yes 🗆 No

If yes, provide the permit number: N/A

If no, provide the approximate date you anticipate submitting your application to the Corps:  $\underline{\rm N/A}$ 

#### B. Wind rose

Attach a wind rose: 19

## Section 6. Permit Authorization for Sewage Sludge Disposal (Instructions Page 60)

#### A. Beneficial use authorization

Are you requesting to include authorization to land apply sewage sludge for beneficial use on property located adjacent to the wastewater treatment facility under the wastewater permit?

🗆 Yes 🖾 No

If yes, attach the completed Application for Permit for Beneficial Land Use of Sewage Sludge (TCEQ Form No. 10451):  $\underline{\rm N/A}$ 

#### B. Sludge processing authorization

Identify the sludge processing, storage or disposal options that will be conducted at the wastewater treatment facility:

- □ Sludge Composting
- □ Marketing and Distribution of sludge
- □ Sludge Surface Disposal or Sludge Monofill

**If any of the above**, sludge options are selected, attach the completed **Domestic Wastewater Permit Application: Sewage Sludge Technical Report (TCEQ Form No. 10056**): <u>N/A</u>

## Section 7. Sewage Sludge Solids Management Plan (Instructions Page 61)

Attach a solids management plan to the application.

#### Attachment: 20

The sewage sludge solids management plan must contain the following information:

- Treatment units and processes dimensions and capacities
- Solids generated at 100, 75, 50, and 25 percent of design flow
- Mixed liquor suspended solids operating range at design and projected actual flow
- Quantity of solids to be removed and a schedule for solids removal
- Identification and ownership of the ultimate sludge disposal site
- For facultative lagoons, design life calculations, monitoring well locations and depths, and the ultimate disposal method for the sludge from the facultative lagoon

An example of a sewage sludge solids management plan has been included as Example 5 of the instructions.

## DOMESTIC WASTEWATER PERMIT APPLICATION WORKSHEET 2.0: RECEIVING WATERS

The following information is required for all TPDES permit applications.

## Section 1. Domestic Drinking Water Supply (Instructions Page 64)

Is there a surface water intake for domestic drinking water supply located within 5 miles downstream from the point or proposed point of discharge?

🗆 Yes 🖾 No

If **no**, proceed it Section 2. **If yes**, provide the following:

Owner of the drinking water supply:  $\underline{N/A}$ 

Distance and direction to the intake:  $\underline{N/A}$ 

Attach a USGS map that identifies the location of the intake.

Attachment:  $\underline{N/A}$ 

# Section 2. Discharge into Tidally Affected Waters (Instructions Page 64)

Does the facility discharge into tidally affected waters?

🗆 Yes 🖾 No

If **no**, proceed to Section 3. **If yes**, complete the remainder of this section. If no, proceed to Section 3.

#### A. Receiving water outfall

Width of the receiving water at the outfall, in feet: N/A

#### **B.** Oyster waters

Are there oyster waters in the vicinity of the discharge?

🗆 Yes 🖾 No

If yes, provide the distance and direction from outfall(s).

N/A

#### C. Sea grasses

Are there any sea grasses within the vicinity of the point of discharge?

🗆 Yes 🖾 No

If yes, provide the distance and direction from the outfall(s).

N/A

### Section 3. Classified Segments (Instructions Page 64)

Is the discharge directly into (or within 300 feet of) a classified segment?

🗆 Yes 🖂 No

If yes, this Worksheet is complete.

If no, complete Sections 4 and 5 of this Worksheet.

# Section 4. Description of Immediate Receiving Waters (Instructions Page 65)

Name of the immediate receiving waters: <u>Unnamed Tributary to Little Elm Creek</u>

#### A. Receiving water type

Identify the appropriate description of the receiving waters.

- ⊠ Stream
- □ Freshwater Swamp or Marsh
- □ Lake or Pond
  - Surface area, in acres: <u>N/A</u>

Average depth of the entire water body, in feet:  $\underline{N/A}$ 

Average depth of water body within a 500-foot radius of discharge point, in feet:  $\underline{\rm N/A}$ 

- □ Man-made Channel or Ditch
- Open Bay
- □ Tidal Stream, Bayou, or Marsh
- $\Box$  Other, specify: <u>N/A</u>

#### **B.** Flow characteristics

If a stream, man-made channel or ditch was checked above, provide the following. For existing discharges, check one of the following that best characterizes the area *upstream* of the discharge. For new discharges, characterize the area *downstream* of the discharge (check one).

Intermittent - dry for at least one week during most years

□ Intermittent with Perennial Pools - enduring pools with sufficient habitat to maintain significant aquatic life uses

□ Perennial - normally flowing

Check the method used to characterize the area upstream (or downstream for new dischargers).

- $\Box$  USGS flow records
- □ Historical observation by adjacent landowners
- ☑ Personal observation
- □ Other, specify: <u>Click to enter text.</u>

#### C. Downstream perennial confluences

List the names of all perennial streams that join the receiving water within three miles downstream of the discharge point.

Little Elm Creek

#### **D.** Downstream characteristics

Do the receiving water characteristics change within three miles downstream of the discharge (e.g., natural or man-made dams, ponds, reservoirs, etc.)?

🗆 Yes 🖂 No

If yes, discuss how.

N/A

#### E. Normal dry weather characteristics

Provide general observations of the water body during normal dry weather conditions.

The receiving water body is generally an intermittent stream with low flow, which is dry much of the year.

Date and time of observation: 07/11/2024, Afternoon

Was the water body influenced by stormwater runoff during observations?

🖾 Yes 🗆 No

# Section 5. General Characteristics of the Waterbody (Instructions Page 66)

#### A. Upstream influences

Is the immediate receiving water upstream of the discharge or proposed discharge site influenced by any of the following? Check all that apply.

- Oil field activities
   Upstream discharges
   Agricultural runoff
- □ Septic tanks

□ Other(s), specify: <u>Click to enter text</u>.

#### **B.** Waterbody uses

Observed or evidences of the following uses. Check all that apply.

- □ Livestock watering
- □ Irrigation withdrawal
- □ Fishing
- Domestic water supply
- □ Park activities

- □ Contact recreation
- Non-contact recreation
- □ Navigation
- □ Industrial water supply
- □ Other(s), specify: <u>Click to enter text</u>.

#### C. Waterbody aesthetics

Check one of the following that best describes the aesthetics of the receiving water and the surrounding area.

- Wilderness: outstanding natural beauty; usually wooded or unpastured area; water clarity exceptional
- Natural Area: trees and/or native vegetation; some development evident (from fields, pastures, dwellings); water clarity discolored
- Common Setting: not offensive; developed but uncluttered; water may be colored or turbid
- Offensive: stream does not enhance aesthetics; cluttered; highly developed; dumping areas; water discolored

## DOMESTIC WASTEWATER PERMIT APPLICATION WORKSHEET 6.0: INDUSTRIAL WASTE CONTRIBUTION

The following is required for all publicly owned treatment works.

### Section 1. All POTWs (Instructions Page 89)

#### A. Industrial users (IUs)

Provide the number of each of the following types of industrial users (IUs) that discharge to your POTW and the daily flows from each user. See the Instructions for definitions of Categorical IUs, Significant IUs – non-categorical, and Other IUs.

#### If there are no users, enter 0 (zero).

Categorical IUs:

Number of IUs: <u>o</u>

Average Daily Flows, in MGD: o

Significant IUs – non-categorical:

Number of IUs: o

Average Daily Flows, in MGD: o

Other IUs:

Number of IUs: <u>o</u>

Average Daily Flows, in MGD: o

#### B. Treatment plant interference

In the past three years, has your POTW experienced treatment plant interference (see instructions)?

🗆 Yes 🖾 No

**If yes**, identify the dates, duration, description of interference, and probable cause(s) and possible source(s) of each interference event. Include the names of the IUs that may have caused the interference.

N/A – Facility has not yet been constructed.

#### C. Treatment plant pass through

In the past three years, has your POTW experienced pass through (see instructions)?

🗆 Yes 🖾 No

**If yes**, identify the dates, duration, a description of the pollutants passing through the treatment plant, and probable cause(s) and possible source(s) of each pass through event. Include the names of the IUs that may have caused pass through.

N/A – Facility has not yet been constructed.

#### D. Pretreatment program

Does your POTW have an approved pretreatment program?

🗆 Yes 🖾 No

If yes, complete Section 2 only of this Worksheet.

Is your POTW required to develop an approved pretreatment program?

🗆 Yes 🖾 No

If yes, complete Section 2.c. and 2.d. only, and skip Section 3.

**If no to either question above**, skip Section 2 and complete Section 3 for each significant industrial user and categorical industrial user.

#### E. Service Area Map

Attach a map indicating the service area of the POTW. The map should include the applicant's service area boundaries and the location of any known industrial users discharging to the POTW. Please see the instructions for guidance.

Attachment: 22

# Section 2. POTWs with Approved Programs or Those Required to Develop a Program (Instructions Page 90)

#### A. Substantial modifications

Have there been any **substantial modifications** to the approved pretreatment program that have not been submitted to the TCEQ for approval according to *40 CFR §403.18*?

🗆 Yes 🗆 No

**If yes**, identify the modifications that have not been submitted to TCEQ, including the purpose of the modification.

N/A

#### **B.** Non-substantial modifications

Have there been any **non-substantial modifications** to the approved pretreatment program that have not been submitted to TCEQ for review and acceptance?

🗆 Yes 🗆 No

If yes, identify all non-substantial modifications that have not been submitted to TCEQ, including the purpose of the modification.

N/A

#### C. Effluent parameters above the MAL

In Table 6.0(1), list all parameters measured above the MAL in the POTW's effluent monitoring during the last three years. Submit an attachment if necessary.

#### Table 6.0(1) – Parameters Above the MAL

Pollutant	Concentration	MAL	Units	Date

#### D. Industrial user interruptions

Has any SIU, CIU, or other IU caused or contributed to any problems (excluding interferences or pass throughs) at your POTW in the past three years?

🗆 Yes 🗆 No

**If yes**, identify the industry, describe each episode, including dates, duration, description of the problems, and probable pollutants.

N/A

## Section 3. Significant Industrial User (SIU) Information and Categorical Industrial User (CIU) (Instructions Page 90)

#### A. General information

Company Name: <u>N/A</u> SIC Code: <u>N/A</u> Contact name: <u>N/A</u> Address: <u>N/A</u> City, State, and Zip Code: <u>N/A</u> Telephone number: <u>N/A</u> Email address: <u>N/A</u>

#### **B.** Process information

Describe the industrial processes or other activities that affect or contribute to the SIU(s) or CIU(s) discharge (i.e., process and non-process wastewater).

N/A

#### C. Product and service information

Provide a description of the principal product(s) or services performed.

N/A

#### D. Flow rate information

See the Instructions for definitions of "process" and "non-process wastewater."

Process Wastewater:

Discharge, in gallon	s/day: <u>N/A</u>		
Discharge Type: 🗆	Continuous	Batch	Intermittent
Non-Process Wastewate	er:		
Discharge, in gallon	s/day: <u>N/A</u>		

Discharge Type: 
Continuous 
Batch 
Intermittent

#### E. Pretreatment standards

Is the SIU or CIU subject to technically based local limits as defined in the *instructions*?

🗆 Yes 🗆 No

Is the SIU or CIU subject to categorical pretreatment standards found in *40 CFR Parts 405-471*?

□ Yes □ No

**If subject to categorical pretreatment standards**, indicate the applicable category and subcategory for each categorical process.

Category: Subcategories: N/A

Click or tap here to enter text. N/A

Category: <u>N/A</u>

Subcategories: <u>N/A</u>

Category: <u>N/A</u>

Subcategories: N/A

Category: N/A

Subcategories: N/A

Category: <u>N/A</u>

Subcategories: N/A

#### F. Industrial user interruptions

Has the SIU or CIU caused or contributed to any problems (e.g., interferences, pass through, odors, corrosion, blockages) at your POTW in the past three years?

🗆 Yes 🗆 No

**If yes**, identify the SIU, describe each episode, including dates, duration, description of problems, and probable pollutants.

N/A

#### **List of Included Attachments**

- $1-Core \ Data \ Form$
- 2 Plain Language Summary
- 3 Public Involvement Plan
- 4 USGS Topo 3-mile
- 5 Affected Landowner Map
- 6-Affected Landowner List
- 7 Supplemental Permit Information Form
- 8 Photo Location Map
- 8 Photos Document
- 9 Buffer Zone Map
- 10-USGS Topo 1-mile
- 11 Plant Treatment Process Description
- 12 Proposed Plant Units
- 13 Process Flow Diagrams
- 14 Site Plan Map
- 15 Adjacent Utilities/Outfall Map
- 16 Capacity Request Letters
- 17 Design Calculations
- 18 FEMA FIRMette
- 19 Wind Rose
- 20 Solids Management
- 21 Justification of Facility
- 22 Service Area Map



## **TCEQ Core Data Form**

For detailed instructions on completing this form, please read the Core Data Form Instructions or call 512-239-5175.

### **SECTION I: General Information**

1. Reason for Submission (If other is checked please desc	cribe in space provided.)	
New Permit, Registration or Authorization (Core Data H	Form should be submitted with	the program application.)
Renewal (Core Data Form should be submitted with the	e renewal form)	Other
2. Customer Reference Number (if issued)	Follow this link to search	3. Regulated Entity Reference Number (if issued)
	for CN or RN numbers in	
01 000 000 000	Central Registry**	
CN 603401316	central negistry	RN N/A
	J	

## **SECTION II: Customer Information**

4. General Cu	istomer In	nformati	on	5. Effective	5. Effective Date for Customer Information Updates (mm/dd/yyyy)     7/1/2024					7/1/2024			
	New Customer       Update to Customer Information       Change in Regulated Entity Ownership         Change in Legal Name (Verifiable with the Texas Secretary of State or Texas Comptroller of Public Accounts)												
Change in Le	egal Name	(Verifiabl	e with the Tex	as Secretary o	f State or Tex	as Com	ptroll	er of Public	Accour	nts)			
			-	•	utomatical	ly base	ed on	what is c	urrent	and active	with th	ne Texas Secr	etary of State
(SOS) or Texa	s Comptro	oller of I	Public Accou	nts (CPA).									
6. Customer I	egal Nam	<b>ne</b> (If an i	individual, prii	nt last name fi	rst: eg: Doe, J	lohn)			<u>lf nev</u>	v Customer, o	enter pre	evious Custom	er below:
Four Seasons R	anch MUD	1											
7. TX SOS/CP	A Filing N	umber		8. TX State	<b>Tax ID</b> (11 d	igits)			9. Fe	deral Tax II	D	10. DUNS	Number (if
N/A				N/A			(9 digits) applicable						
									N/A N/A				
11. Type of C	ustomer:		Corporat	ion				🗌 Individ	lual		Partne	ership: 🗌 Gen	eral 🗌 Limited
Government:	City 🗌 🤇	County [	Federal	Local 🗌 State	e 🛛 Other			Sole Pr	roprieto	orship	🗌 Otl	her:	
12. Number o	of Employ	ees							13. lı	ndepender	tly Ow	ned and Ope	erated?
⊠ 0-20 □ 2	21-100 [	101-25	50 🗌 251-	500 🗌 501	and higher			🗌 Yes 🛛 No					
14. Customer	<b>Role</b> (Pro	posed or	Actual) – <i>as i</i> i	t relates to the	Regulated E	ntity list	ted on	this form.	Please o	check one of	the follo	owing	
Owner		<u> </u>	erator		vner & Opera					Other:			
	al Licensee	Re	esponsible Par	rty 🗌	VCP/BSA App	olicant							
	16000 Da	allas Pkw	y Ste 350										
15. Mailing													
Address:	City	Dallas							6627				
	City	Dallas		State         TX         ZIP         75248         ZIP + 4         6637					0037				
16. Country N	Mailing Inf	formatio	<b>on</b> (if outside	USA)			17.	E-Mail Ac	dress	(if applicable	e)		
							jbet	thke@coats	srose.cc	om			
18. Telephon	e Number	•			19. Extension or Code     20. Fax Number (if applicable)								

## **SECTION III: Regulated Entity Information**

21. General Regulated En	itity Informat	ion (If 'New Regulated	d Entity" is select	ed, a new pe	rmit applica	tion is also required.)		
New Regulated Entity	Update to I	Regulated Entity Name	Update to	Regulated E	intity Inform	ation		
The Regulated Entity Name submitted may be updated, in order to meet TCEQ Core Data Standards (removal of organizational endings such as Inc, LP, or LLC).								
22. Regulated Entity Nam	<b>1e</b> (Enter name	of the site where the i	regulated action	is taking pla	ce.)			
Four Seasons Ranch WWTP	Ranch WWTP							
23. Street Address of								
the Regulated Entity:								
<u>(No PO Boxes)</u>	City State ZIP ZIP + 4							
24. County	Denton County							
If no Street Address is provided, fields 25-28 are required.								

25. Description to	Located 0.6	miles southeast o	f the intersection of C	ounty Line Ro	d and Gorrell	Rd in Denton County		
Physical Location:								
26. Nearest City						State	Nea	rest ZIP Code
Gunter	TX 76258						8	
Latitude/Longitude are re	-	-			ata Standai	rds. (Geocoding of tl	he Physical	Address may be
used to supply coordinate	es where no	ne have been p	rovided or to gain a	accuracy).				
27. Latitude (N) In Decim	al:	33.406575		28. Lo	ongitude (W	) In Decimal:	96.84674	7
Degrees	Minutes		Seconds	Degree	es	Minutes		Seconds
33		24	23.67		96 50 48.2			
29. Primary SIC Code	30.	Secondary SIC (	Code	31. Primar	y NAICS Cod	de 32. Seco	ondary NAI	CS Code
(4 digits)	(4 d	igits)		<b>(</b> 5 or 6 digit	s)	(5 or 6 di	gits)	
4952				221320				
33. What is the Primary E	Business of t	his entity? (Do	o not repeat the SIC or	NAICS descri	ption.)			
Municipal Domestic Wastew	ater Treatmer	nt						
	Four Seaso	ons Ranch MUD 1						
34. Mailing	16000 Dal	as Pkwy Ste 350						
Address:	City	Dallas	State	тх	ZIP	75248	ZIP + 4	6637
	City	Dallas	State		۲IF	73240	216 1 4	0037
35. E-Mail Address:	jbet	hke@coatsrose.c	om					
36. Telephone Number			37. Extension or (	Code	38. Fa	<b>x Number</b> (if applicat	ble)	
( 972 ) 788-1600					( )	-		

**39. TCEQ Programs and ID Numbers** Check all Programs and write in the permits/registration numbers that will be affected by the updates submitted on this form. See the Core Data Form instructions for additional guidance.

Dam Safety	Districts	Edwards Aquifer	Emissions Inventory Air	Industrial Hazardous Waste
		<i>i</i> .		
Municipal Solid Waste	Review Air	OSSF	Petroleum Storage Tank	D PWS
Sludge	Storm Water	Title V Air		Used Oil
Voluntary Cleanup	Wastewater	Wastewater Agriculture	Water Rights	Other:

### **SECTION IV: Preparer Information**

40. Name:	Laura Preston			41. Title:	Assistant Project Manager		
42. Telephone	Number	43. Ext./Code	44. Fax Number	45. E-Mail Address			
( 214 ) 442-6579			( ) -	lpreston@lja	.com		

## **SECTION V: Authorized Signature**

46. By my signature below, I certify, to the best of my knowledge, that the information provided in this form is true and complete, and that I have signature authority to submit this form on behalf of the entity specified in Section II, Field 6 and/or as required for the updates to the ID numbers identified in field 39.

Company:	Four Seasons Ranch MUD 1	Job Title:	Board Pre	sident	
Name (In Print):	Michael Teeling			Phone:	( 972 ) 755- <b>1000</b>
Signature:	michaed tel	in .		Date:	08/15/2024
		5			



## PLAIN LANGUAGE SUMMARY FOR TPDES OR TLAP PERMIT APPLICATIONS

## Plain Language Summary Template and Instructions for Texas Pollutant Discharge Elimination System (TPDES) and Texas Land Application (TLAP) Permit Applications

Applicants should use this template to develop a plain language summary as required by <u>Title 30, Texas Administrative Code (30 TAC), Chapter 39, Subchapter H</u>. Applicants may modify the template as necessary to accurately describe their facility as long as the summary includes the following information: (1) the function of the proposed plant or facility; (2) the expected output of the proposed plant or facility; (3) the expected pollutants that may be emitted or discharged by the proposed plant or facility; and (4) how the applicant will control those pollutants, so that the proposed plant will not have an adverse impact on human health or the environment.

Fill in the highlighted areas below to describe your facility and application in plain language. Instructions and examples are provided below. Make any other edits necessary to improve readability or grammar and to comply with the rule requirements.

If you are subject to the alternative language notice requirements in <u>30 TAC Section 39.426</u>, <u>you must provide a translated copy of the completed plain language summary in the</u> <u>appropriate alternative language as part of your application package</u>. For your convenience, a Spanish template has been provided below.

## ENGLISH TEMPLATE FOR TPDES or TLAP NEW/RENEWAL/AMENDMENT APPLICATIONS DOMESTIC WASTEWATER/STORMWATER

*The following summary is provided for this pending water quality permit application being reviewed by the Texas Commission on Environmental Quality as required by 30 TAC Chapter 39. 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.* 

Four Seasons Ranch MUD 1 (CN603401316) proposes to operate Four Seasons Ranch WWTP (RN TBD), an activated sludge process operating in the complete mix mode. The facility will be located at 0.6 miles southeast of the intersection of County Line Rd and Gorrell Rd, in , Denton County, Texas 76258. This is a new application to discharge at a daily flow up to 2,000,000 gallons per day of treated domestic wastewater.

Discharges from the facility are expected to contain five-day carbonaceous biochemical oxygen demand (CBOD<sub>5</sub>), total suspended solids (TSS), ammonia nitrogen (NH<sub>4</sub>-N) and E. *coli*. Domestic wastewater will be treated by an activated sludge process plant.

## PLANTILLA EN ESPAÑOL PARA SOLICITUDES NUEVAS/RENOVACIONES/ENMIENDAS DE TPDES o TLAP

#### AGUAS RESIDUALES DOMÉSTICAS /AGUAS PLUVIALES

*El siguiente resumen se proporciona para esta solicitud de permiso de calidad del agua pendiente que está siendo revisada por la Comisión de Calidad Ambiental de Texas según lo requerido por el Capítulo 39 del Código Administrativo de Texas 30. La información proporcionada en este resumen puede cambiar durante la revisión técnica de la solicitud y no es una representación ejecutiva fedérale de la solicitud de permiso.* 

Four Seasons Ranch MUD 1 (CN603401316) propone operar Four Seasons Ranch WWTP (RN TBD), un proceso de lodos activados que opera en el modo de mezcla completa. La instalación estará ubicada a 1.8 millas al noreste de la intersección de County Line Rd y Gorrell Rd, en Condado de Denton, Texas 76258. Esta es una nueva aplicación para descargar a un flujo diario de hasta 2,000,000 de galones por día de aguas residuales domésticas tratadas.

Se espera que las descargas de la instalación contengan una demanda bioquímica carbonosa de oxígeno (CBOD5) de cinco días, sólidos suspendidos totales (SST), nitrógeno amoniacal (NH4-N) y E. coli. Las aguas residuales domésticas serán tratadas por una planta de tratamiento de lodos activados.



<sup>7</sup> 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	B. Applicat	tion Inform	nation		
Type of A	pplication	(check all t	hat apply):		
Air	Initial	Federal	Amendment	Standard Permit	Title V
Waste	-	ll Solid Wast ive Material		and Hazardous Waste Underground I	e Scrap Tire injection Control
Water Qua	ality				
Texas	Pollutant D	oischarge Eli	mination System	(TPDES)	
Те	xas Land A	pplication P	ermit (TLAP)		
Sta	ate Only Co	ncentrated A	Animal Feeding O	peration (CAFO)	
Wa	ater Treatm	ient Plant Re	siduals Disposal	Permit	
Class I	B Biosolids	Land Applic	ation Permit		
Domes	stic Septage	e Land Appli	cation Registratio	on	
147 A. D. 1					
0	hts New Pe				
		on of Water			
New o	r existing r	eservoir			
Amendme	ent to an Ex	isting Water	Right		
Add a	New Appro	priation of	Water		
Add a	New or Exi	sting Reserv	oir		
Major	Amendmer	nt that could	affect other wat	er rights or the enviro	nment

## Section 4. Plain Language Summary

Provide a brief description of planned activities.

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.
inguage notice to necessary) i rease provide the ronoving mornation
(City)
(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
(b) Per capita income for population near the specified location
(c) Percent of minority population and percent of population by race within the specified location
(d) Percent of Linguistically Isolated Households by language within the specified location
(a) referre of Englistically isolated flousenoids by language within the specifica location
(e) Languages commonly spoken in area by percentage
(f) Community and/or Stakeholder Groups
(g) Historic public interest or involvement

Section 6. Plann	ed Public Outreach Activities	
	ion subject to the public participation requirements of Title 30 Texas de (30 TAC) Chapter 39?	
Yes	No	
(b) If yes, do you in	ntend at this time to provide public outreach other than what is required by rule?	
Yes	No	
If Yes, please desc	ribe.	
	answered "yes" that this application is subject to 30 TAC Chapter 39, answering the remaining questions in Section 6 is not required. le notice of this application in alternative languages?	
Yes	No	
	ction 5. If more than 5% of the population potentially affected by your nited English Proficient, then you are required to provide notice in the age.	
If yes, how will you	u 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 (spe	cify)	
(d) Is there an opp	oortunity for some type of public meeting, including after notice?	
Yes	No	
(e) If a public mee	ting 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 Regi	ional Office TCEQ Central Office	
Public Plac	ce (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?

Yes No

What types of notice will be provided?

Publish in alternative language newspaper

Posted on Commissioner's Integrated Database Website

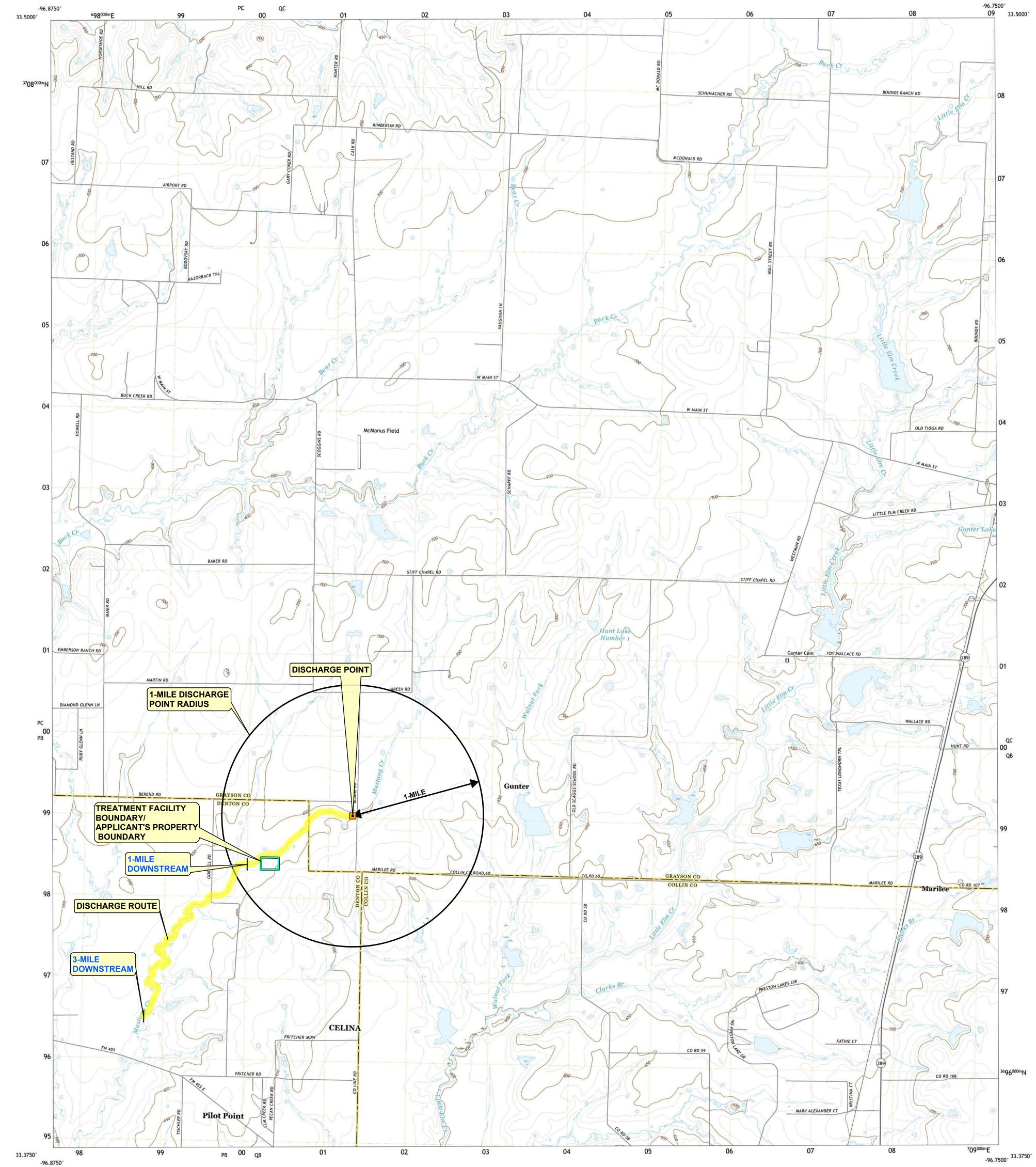
Mailed by TCEQ's Office of the Chief Clerk

Other (specify)



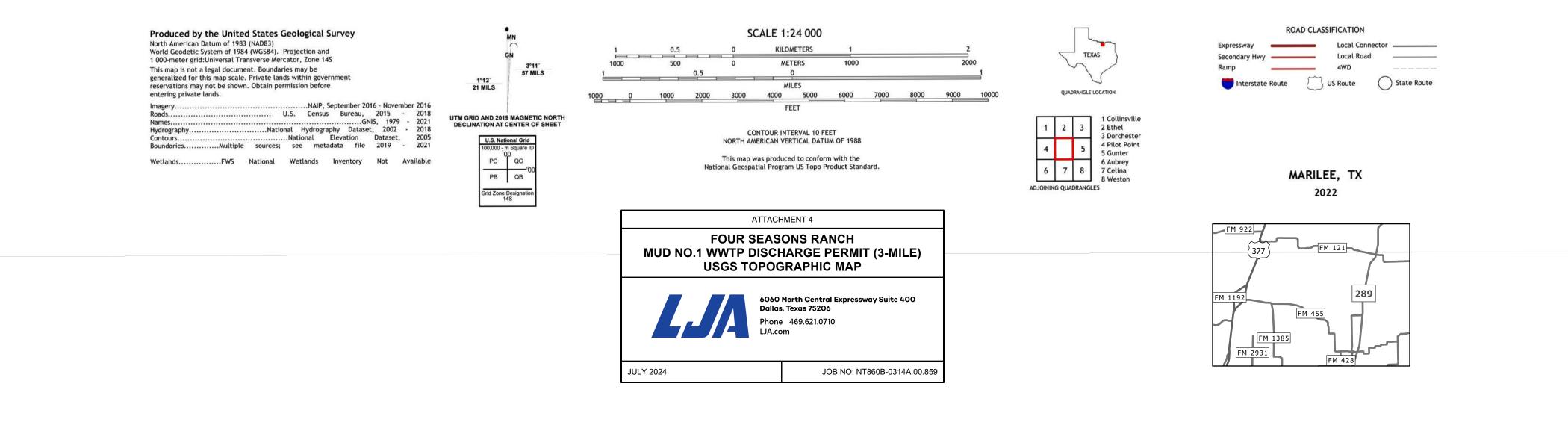


MARILEE QUADRANGLE TEXAS 7.5-MINUTE SERIES





NSN. 7643016397183 NGA REF NO.USGSX24K27699

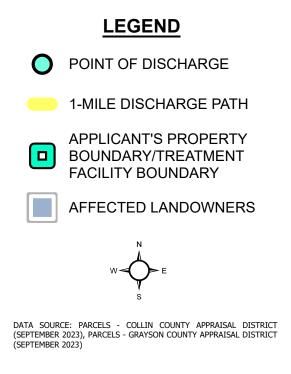


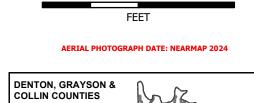


# FOUR SEASONS RANCH MUD NO.1 WWTP DISCHARGE PERMIT

ATTACHMENT 5 AFFECTED LANDOWNER EXHIBIT

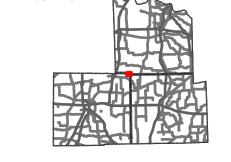
AUGUST 2024





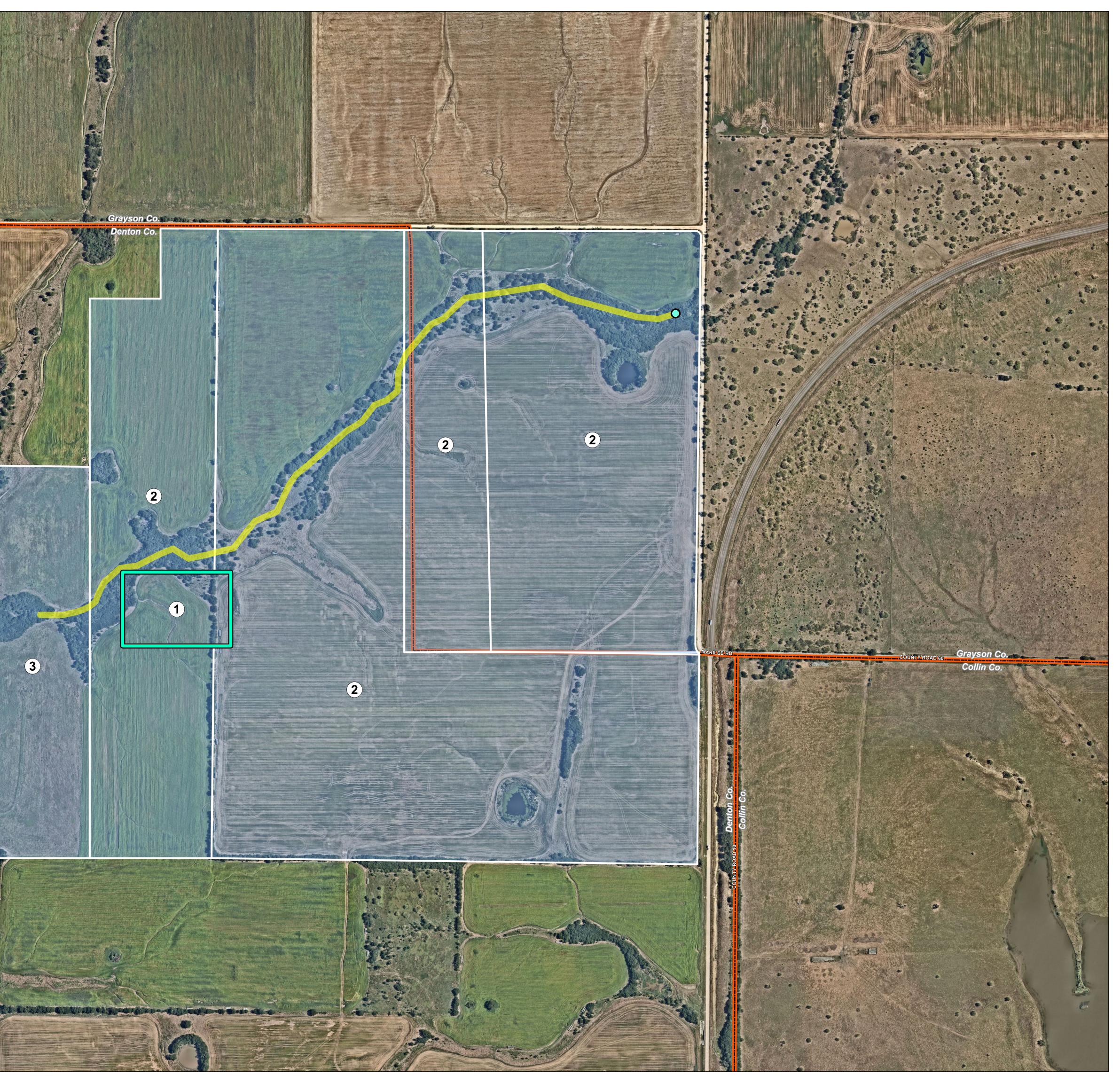
300

150



THIS PRODUCT IS FOR INFORMATIONAL PURPOSES AND MAY NOT HAVE BEEN PREPARED FOR OR BE SUITABLE FOR LEGAL, ENGINEERING, OR SURVEYING PURPOSES. IT DOES NOT REPRESENT AN ON-THE-GROUND SURVEY AND REPRESENTS ONLY THE APPROXIMATE RELATIVE LOCATION OF PROPERTY BOUNDARIES.

600



- FOUR SEASONS RANCH MUD NO. 1 16000 DALLAS PKWY STE 350 DALLAS, TX 75206
- FOUR SEASONS RANCH LTD 16950 DALLAS PKWY STE 120 DALLAS, TX 75248
- 3. GORRELL 42 LLC 8105 RASOR BLVD STE 298 PLANO, TX 75024

## TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

## SUPPLEMENTAL PERMIT INFORMATION FORM (SPIF)

#### FOR AGENCIES REVIEWING DOMESTIC OR INDUSTRIAL TPDES WASTEWATER PERMIT APPLICATIONS

TCEQ USE ONLY:				
Application type:         Renewal         Major Amendment         Minor Amendment         New				
County:	Segment Number:			
Admin Complete Date:				
Agency Receiving SPIF:				
Texas Historical Commission	U.S. Fish and Wildlife			
Texas Parks and Wildlife Department	U.S. Army Corps of Engineers			

#### This form applies to TPDES permit applications only. (Instructions, Page 53)

Complete this form as a separate document. TCEQ will mail a copy to each agency as required by our agreement with EPA. If any of the items are not completely addressed or further information is needed, we will contact you to provide the information before issuing the permit. Address each item completely.

**Do not refer to your response to any item in the permit application form**. Provide each attachment for this form separately from the Administrative Report of the application. The application will not be declared administratively complete without this SPIF form being completed in its entirety including all attachments. Questions or comments concerning this form may be directed to the Water Quality Division's Application Review and Processing Team by email at <u>WQ-ARPTeam@tceq.texas.gov</u> or by phone at (512) 239-4671.

The following applies to all applications:

1. Permittee: Four Seasons Ranch MUD 1

Permit No. WQ00 <u>N/A</u>

EPA ID No. TX <u>N/A</u>

Address of the project (or a location description that includes street/highway, city/vicinity, and county):

Located 0.6 miles northeast of the intersection of County Line Rd and Gorrell Rd in Denton County

Provide the name, address, phone and fax number of an individual that can be contacted to answer specific questions about the property.

Prefix (Mr., Ms., Miss): <u>Ms.</u> First and Last Name: <u>Laura Preston</u> Credential (P.E, P.G., Ph.D., etc.): <u>P.E.</u> Title: <u>Assistant Project Manager</u> Mailing Address: <u>6060 N Central Expy, Ste 400</u> City, State, Zip Code: <u>Dallas, Texas 75206</u> Phone No.: <u>214-442-6579 Ext.: N/A</u> Fax No.: <u>N/A</u> E-mail Address: <u>lpreston@lja.com</u>

- 2. List the county in which the facility is located: <u>Denton</u>
- If the property is publicly owned and the owner is different than the permittee/applicant, please list the owner of the property.
   N/A

4. Provide a description of the effluent discharge route. The discharge route must follow the flow of effluent from the point of discharge to the nearest major watercourse (from the point of discharge to a classified segment as defined in 30 TAC Chapter 307). If known, please identify the classified segment number.

To unnamed tributary, thence to Little Elm Creek, thence to Lake Lewisville in segment 0823 of the Trinity River Basin.

5. Please provide a separate 7.5-minute USGS quadrangle map with the project boundaries plotted and a general location map showing the project area. Please highlight the discharge route from the point of discharge for a distance of one mile downstream. (This map is required in addition to the map in the administrative report).

Provide original photographs of any structures 50 years or older on the property.

Does your project involve any of the following? Check all that apply.

- Proposed access roads, utility lines, 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 caves, fractures, sinkholes, other karst features
- Disturbance of vegetation or wetlands

N/A

1. List proposed construction impact (surface acres to be impacted, depth of excavation, sealing of caves, or other karst features):

2.	Describe existing disturbances, vegetation, and land use:	
	<u>Undeveloped Land</u>	

## THE FOLLOWING ITEMS APPLY ONLY TO APPLICATIONS FOR NEW TPDES PERMITS AND MAJOR AMENDMENTS TO TPDES PERMITS

- List construction dates of all buildings and structures on the property: <u>No existing buildings or structures are located on the property where the wastewater</u> <u>treatment plant is proposed.</u>
- 4. Provide a brief history of the property, and name of the architect/builder, if known. <u>The property where the wastewater treatment plant is proposed has never been developed</u> <u>and has generally been used for agricultural purposes.</u>

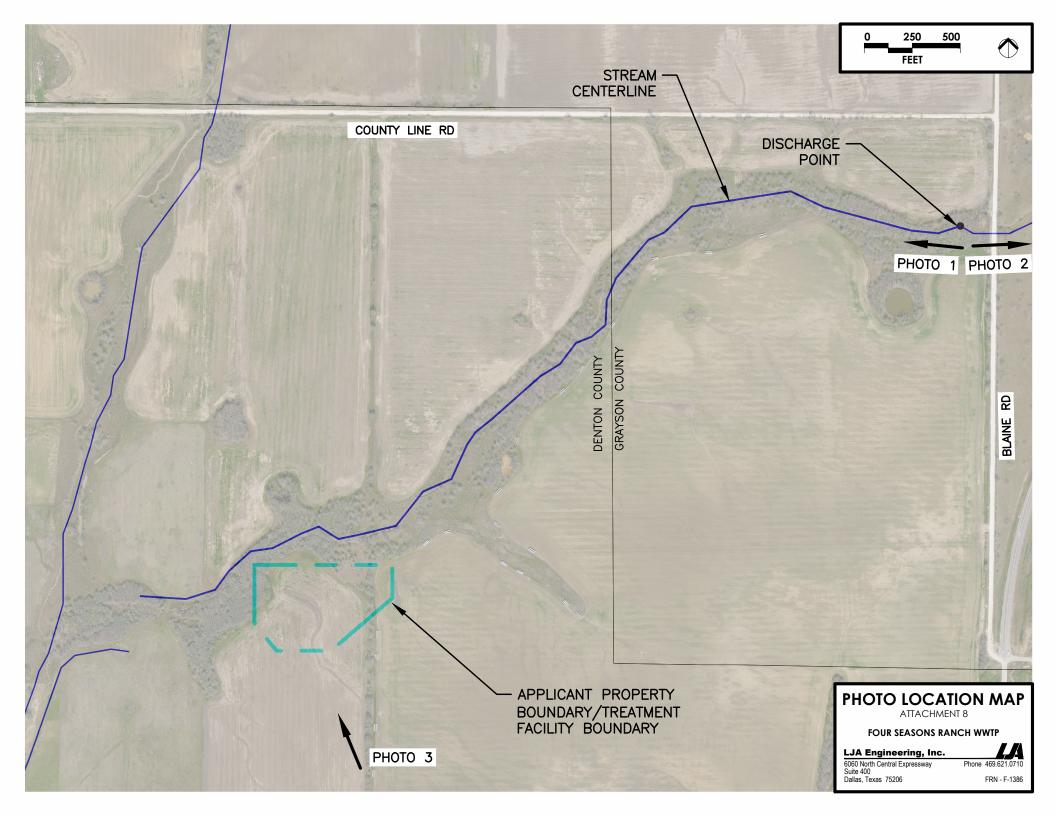




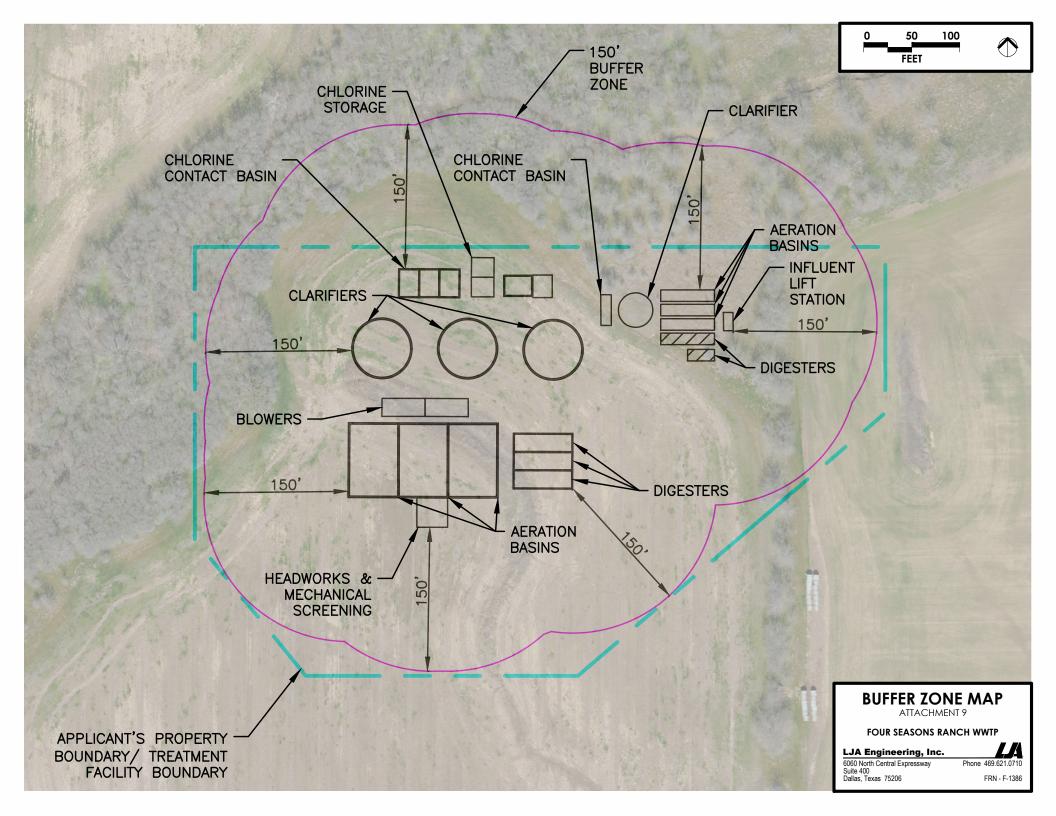
Photo 1: Discharge location and downstream of the discharge location



Photo 2: Upstream of the discharge location



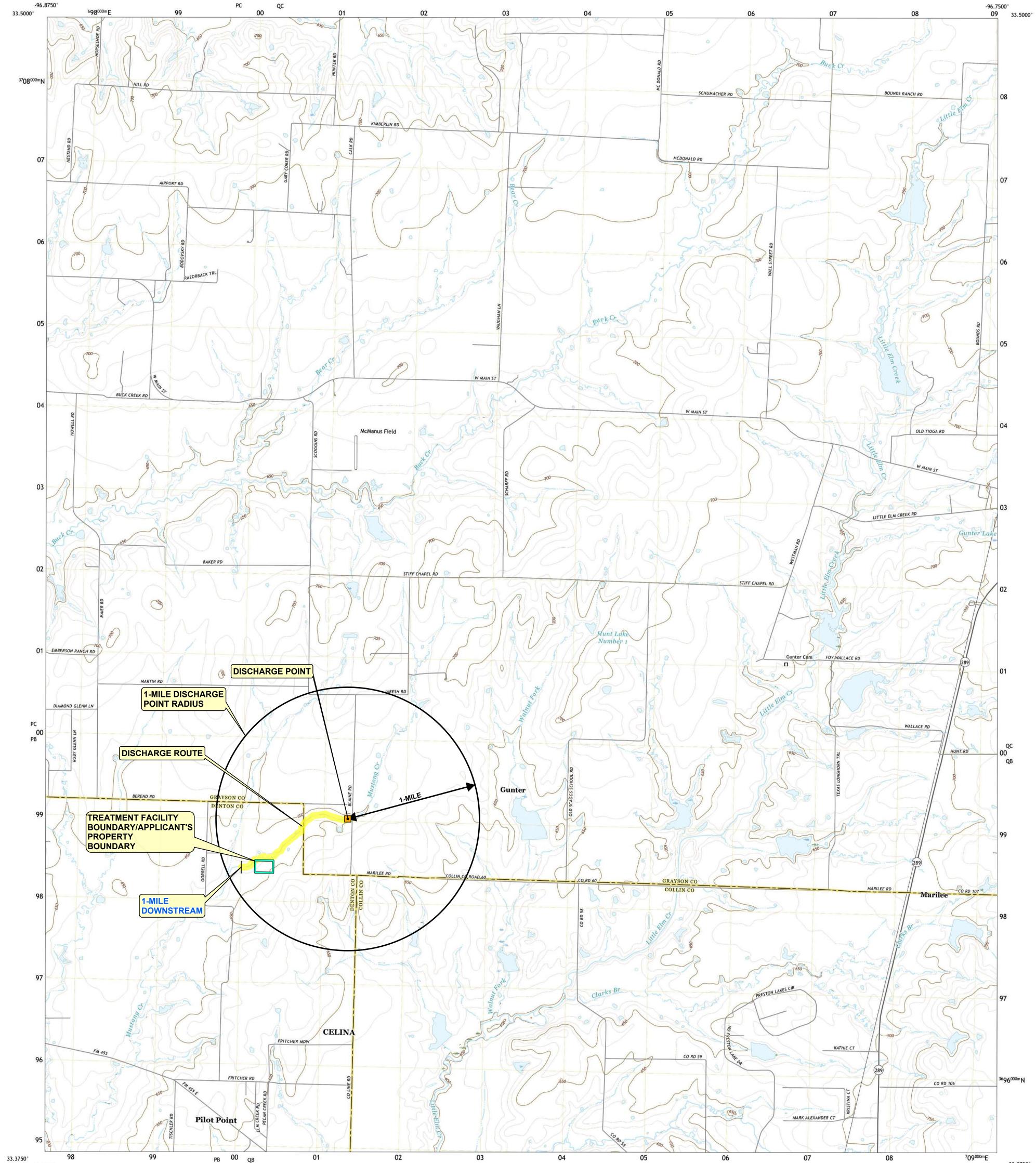
Photo 3: WWTP Site



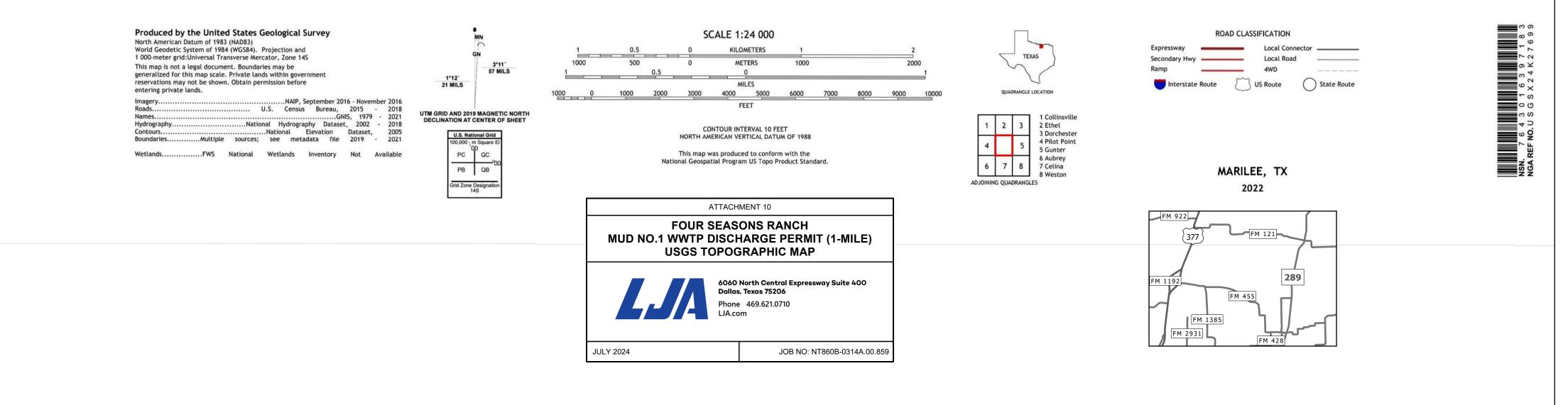




MARILEE QUADRANGLE TEXAS 7.5-MINUTE SERIES



-96.8750°



#### ATTACHMENT 11 DESCRIPTION OF THE TREATMENT PROCESS

(In reference to Domestic Technical Report 1.0, Section 2, Item A)

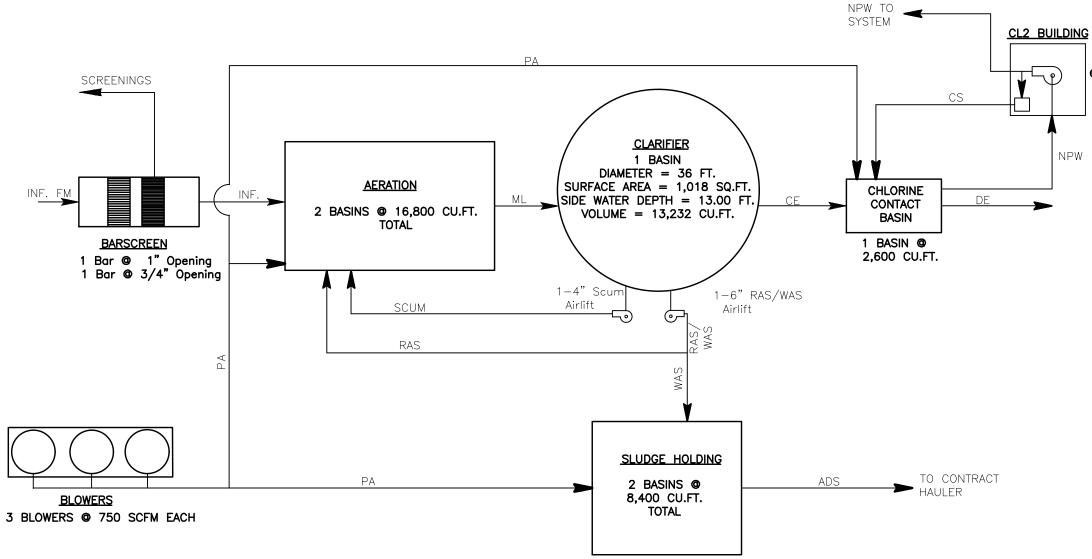
The treatment system includes a package plant employing the activated sludge process operating in the complete mix mode. The plant will be developed in three phases and will include three treatment trains when complete. Phase 1, Phase 2, and the final phase 3 will have a capacity of 0.15 MGD, 0.30 MGD, and 2.0 MGD respectively. In the Final Phase, the plant will have a common header between the aeration basins and clarifiers to allow for flexibility in plant repairs and operations. All phases will have common outfall.

The first 2 phases of treatment trains will consist of steel "box car" units used for aeration and digestion. Two aeration basins, two sludge digestion basins, one 36' diameter clarifier and one chlorine contact basin will be fabricated for Phase 1. Phase 2 will include one additional aeration basin, one additional sludge digestion basin, and will use the same chlorine contact basin and secondary clarifier. The final phase 3 will consist of permanent concrete basins. It will have three 75' by 60' aeration basins, three 60' diameter clarifiers, three 20' by 14' chlorine contact basins, and three 24' by 18' aerobic digesters.

Influent to this facility will be pumped from an on-site lift station to a bar screen. In the Final Phase 3, the bar screen will include a flow splitter thus splitting the influent to each bank of aeration basins. The mixed liquor from the aeration basins will flow to the clarifier. The clarified effluent from the clarifier will then flow to the chlorine contact basin and the disinfected plant effluent will outfall via a 36" pipe. Sludge will be returned to the aeration basins then wasted to the digester basins via air lifts. Sludge from the digesters will be truck hauled for disposal at a registered disposal site.

Attachment No. 12				
Treatment Units	# of Units	Dimensions (L*W*D) (ft.)		
Aeration Basin	2	56*12*14		
Clarifier	1	36*Dia*14	INTERIM PHASE 1 0.15 MGD	
Cl2 Contact Basin	1	20*10*14	NTE HA 15	
Aerobic Digester	2	28*12*14	⊆	
Aeration Basin	2	56*12*14	5 2	
Aeration Basin	1	56*12*14	INTERIM PHASE 0.30 MGD	
Clarifier	1	36*Dia*14	PHA MGD	
Cl2 Contact Basin	1	20*10*14	ERIM 0.30	
Aerobic Digester	2	28*12*14	D. O.	
Aerobic Digester	1	28*12*14	Ż	
Aeration Basin	3	75*50*16	5 m Q	
Clarifier	3	60*Dia*16	INTERIM PHASE 3 2.00 MGD	
Cl2 Contact Basin	3	28*20*14	NTE HA 00 I	
Aerobic Digester	3	60*24*18	Г Р	

Bolded New processes Shaded Existing processes

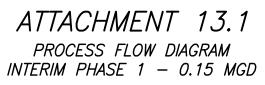


PHASE	AVG. DAILY FLOW	PEAK FLOW
PHASE 1	0.15 MGD	0.60 MGD

1 NPW PUMP © 65 GPM AND 60 PSI 1 CL2 EQUIPMENT © 150 LB

#### LEGEND

SAN SWR INF. FM INF. MI	SANITARY SEWER INFLUENT FORCE MAIN INFLUENT MIXED LIQUOR
CF	CLARIFIED FEELUENT
FF	FILTERED FEFLUENT
DE	DISINFECTED FEFLUENT
RAS	RETURN ACTIVATED SLUDGE
WAS	WASTE ACTIVATED SLUDGE
ADS	AEROBICALLY DIGESTED SLUDGE
NPW	NON-POTABLE WATER
CS	CHLORINE SOLUTION
TOW	TOP OF WALL ELEVATION
FG	FINISHED GRADE ELEVATION
WSEL	WATER SURFACE ELEVATION
PA	PRESSURE AIR

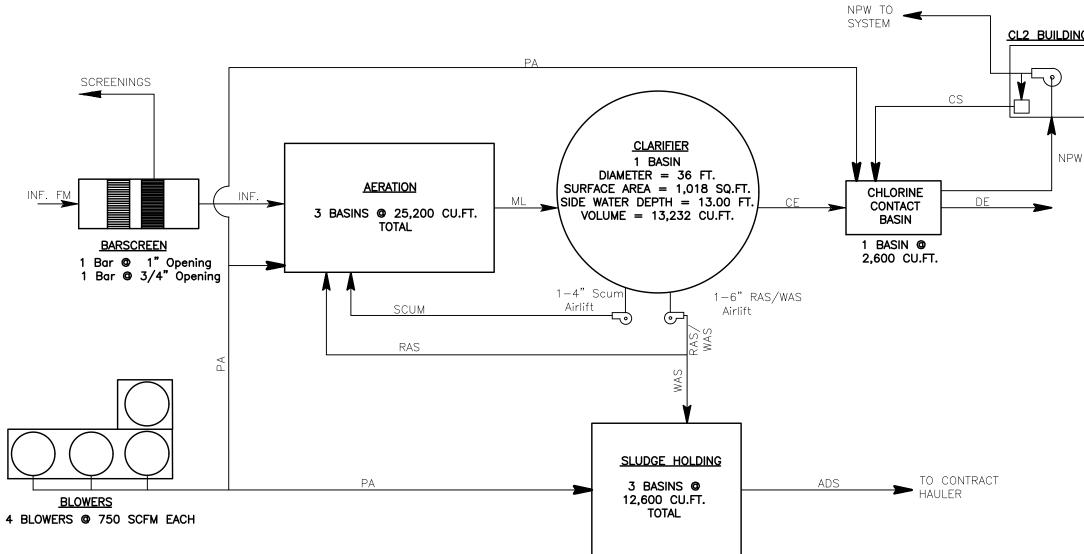


LJA Engineering, Inc.

3600 W Sam Houston Parkway S. Suite 600 Houston, Texas 77042

Phone 713.953.5200 Fax 713.953.5026 FRN - F-1386



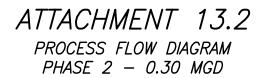


PHASE	AVG. DAILY FLOW	PEAK FLOW
PHASE 1	0.15 MGD	0.60 MGD
PHASE 2	0.30 MGD	1.20 MGD

N	2	
	Ø	1 NPW PUMP 65 GPM AND 60 PS 2 CL2 EQUIPMENT © 150 LB

#### LEGEND

SAN SWR INF. FM INF. CE FE DE RAS WAS ADS NPW CS TOW FG WSFI	SANITARY SEWER INFLUENT FORCE MAIN INFLUENT MIXED LIQUOR CLARIFIED EFFLUENT FILTERED EFFLUENT DISINFECTED EFFLUENT RETURN ACTIVATED SLUDGE WASTE ACTIVATED SLUDGE AEROBICALLY DIGESTED SLUDGE NON-POTABLE WATER CHLORINE SOLUTION TOP OF WALL ELEVATION FINISHED GRADE ELEVATION WATER SURFACE FLEVATION

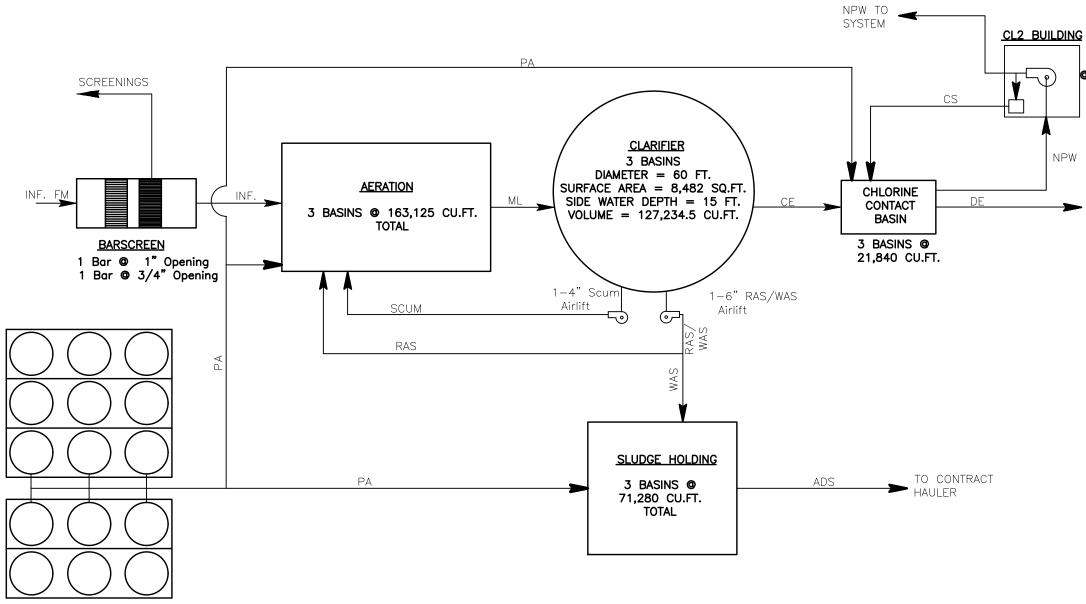


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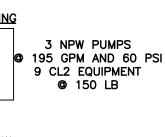


Phone 713.953.5200 Fax 713.953.5026 FRN - F-1386



BLOWERS 304 BLOWERS @ 750 SCFM EACH

PHASE	AVG. DAILY FLOW	PEAK FLOW
PHASE I	0.15 MGD	0.60 MGD
PHASE 2	0.30 MGD	1.20 MGD
PHASE 3	2.00 MGD	8.00 MGD



#### LEGEND

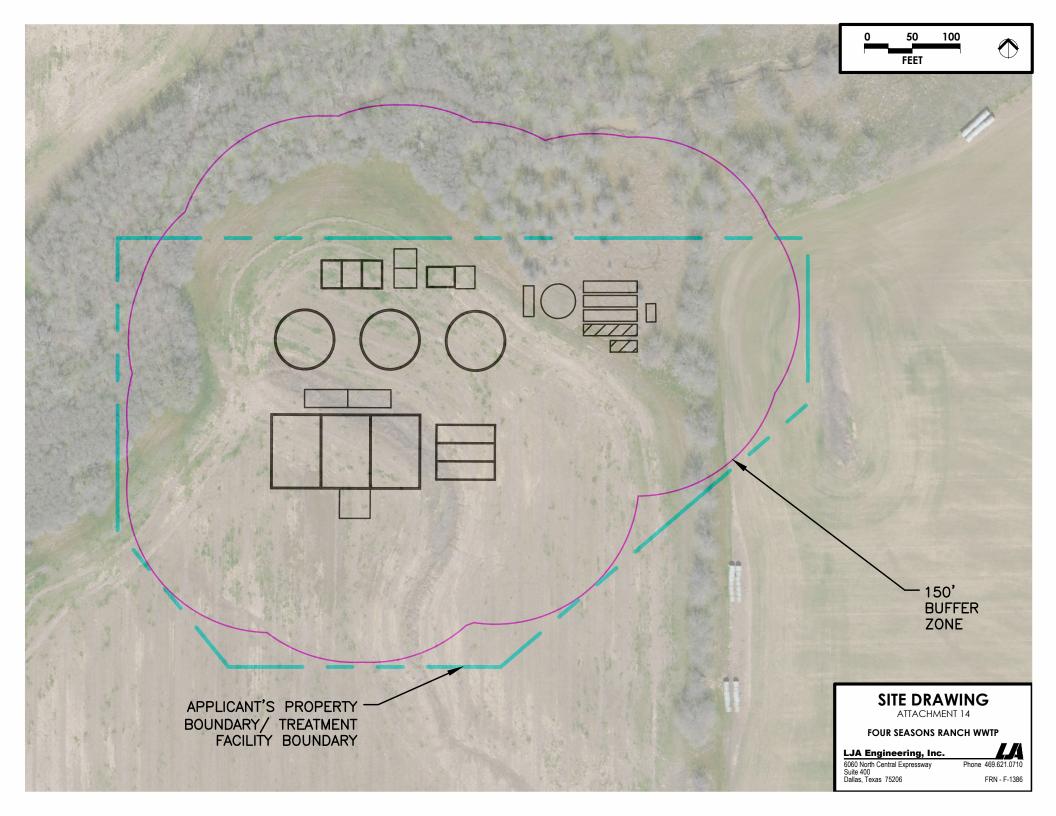
SAN SWR INF. FM INF.	SANITARY SEWER INFLUENT FORCE MAIN INFLUENT
ML	MIXED LIQUOR
CE	CLARIFIED EFFLUENT
FE	FILTERED EFFLUENT
DE	DISINFECTED EFFLUENT
RAS	RETURN ACTIVATED SLUDGE
WAS	WASTE ACTIVATED SLUDGE
ADS	AEROBICALLY DIGESTED SLUDGE
NPW	NON-POTABLE WATER
CS	CHLORINE SOLUTION
TOW	TOP OF WALL ELEVATION
FG	FINISHED GRADE ELEVATION
WSEL	WATER SURFACE ELEVATION
PA	PRESSURE AIR



#### LJA Engineering, Inc.

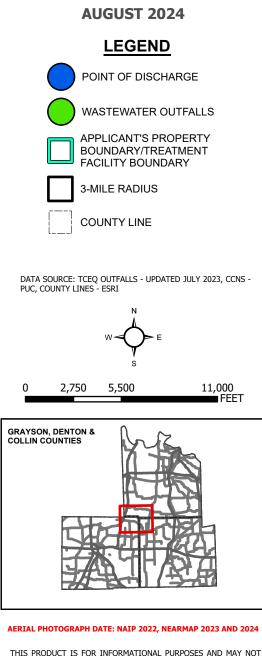
3600 W Sam Houston Parkway S. Suite 600 Houston, Texas 77042 052 5200

Phone 713.953.5200 Fax 713.953.5026 FRN - F-1386



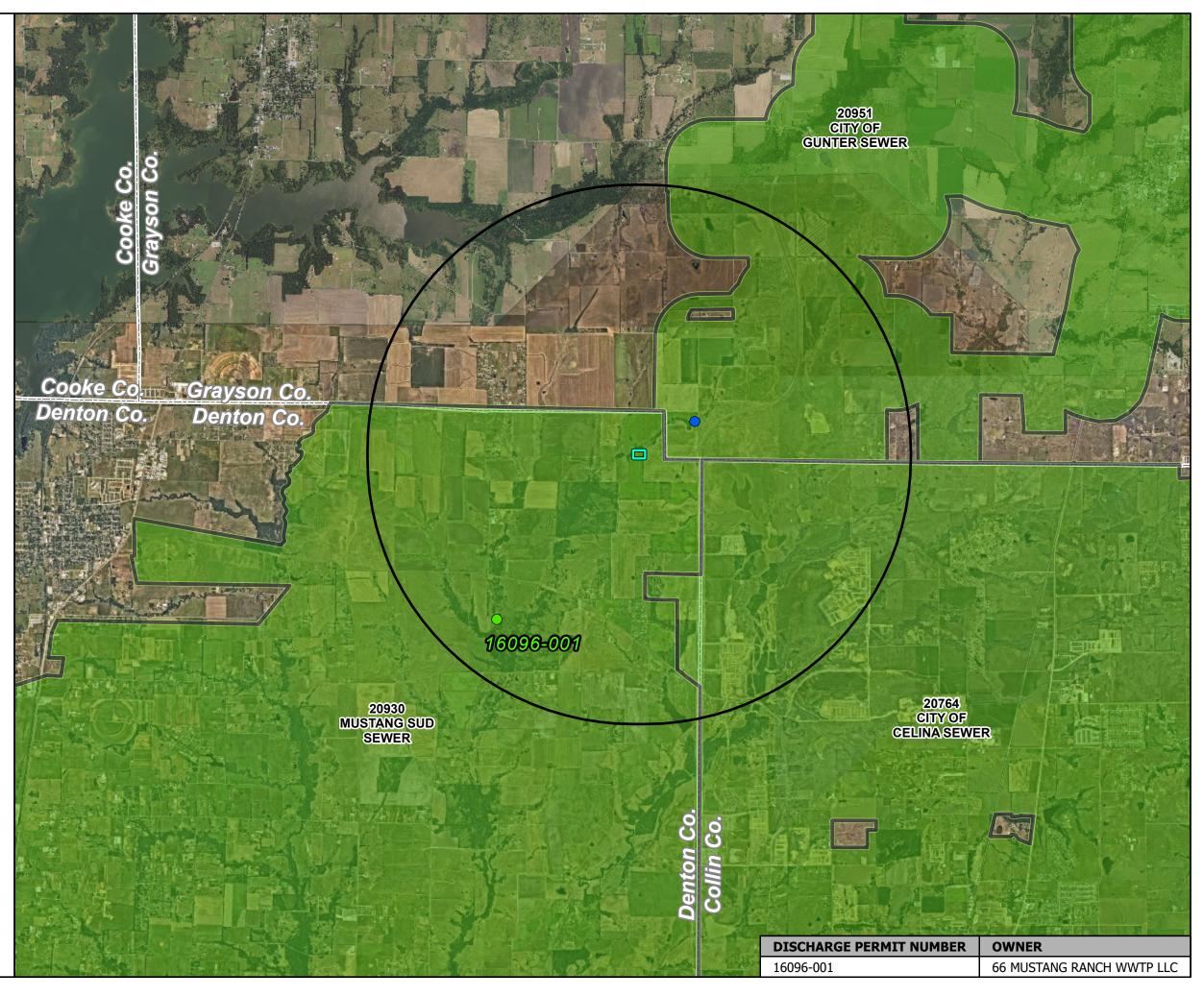
## FOUR SEASONS RANCH MUD NO.1 WWTP DISCHARGE PERMIT

ATTACHMENT 15 NEARBY DOMESTIC PERMITTED WWTFS NEARBY SEWER-CCN (WITHIN 3-MILE RADIUS)



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August 10, 2024

#### **VIA CERTIFIED MAIL**

Mustang SUD 7985 FM 2931 Aubrey, Texas 76227

Re: Wastewater Service Request for Four Seasons Ranch WWTP LJA Job No. NT860B-0314

To Whom It May Concern:

We are currently preparing an application for a discharge permit for the Four Seasons Ranch Wastewater Treatment Plant in Denton County. The proposed development will require 2.0 MGD of ultimate wastewater service capacity. TCEQ regulations require us to contact all entities with a permitted wastewater treatment plant or collection system within three (3) miles of our plant and identify any available capacity at those facilities. Your system is within a three (3) mile radius of our facility. Please let us know if you have the extra capacity in your facility to accommodate the required flow or are willing to expand your facility to accommodate this flow.

Please respond by indicating below on this letter if Mustang SUD has available capacity. After you have made the required indication, please email (lpreston@lja.com) or mail the response back. We would appreciate a response within thirty (30) days. Thank you in advance for your prompt attention regarding this matter.

Sincerely,

Laurá Preston, PE Assistant Project Manager

- Yes, our wastewater treatment facility has sufficient capacity to serve the proposed development. Contact Phone Number:
- No, our wastewater treatment facility does not have sufficient capacity to serve the proposed development.

Name:	Title:
Signature:	Date:

## **Project Name:**

## **Four Seasons Ranch**

Wastewater Treatment Plant

**Process Design Calculations** 

Project #: 0314

		Phase I	Phase II	Phase III
WWTP Influent Flow				
Average Daily Flow	gpd	150,000	300,000	2,000,000
Peaking Factor		4	4 4	4
Peak Flow	gpd	600,000	1,200,000	8,000,000
Equivalent Single Family Connections	ESFC	428	857	5,714
Water Usage per Connection	gal/ESFC	350	350	350
WWTP Organic Parameters				
BOD <sub>5</sub>	325 mg/L			

BOD <sup>2</sup>	325 mg/L			
NH <sub>3</sub>	70 mg/L			
BOD Loading	lbs/d	407	813	5,421

## **Aeration Basin Design**

Process Description	Temperatures Ex	ceed 15C			
Organic Loading Rate	35 Ibs BOD5/day/1,000ft3				
Minimum Free Board	1.5	ft			
Minimum Aeration Volume		ft <sup>3</sup>	11,616	23,233	154,886
Number of Tanks			2	3	3
Length		ft	56	56	75
Width		ft	12	12	50
Height of Basin		ft	14.0	14.0	16.0
Calculated Side Water Depth at Peak Flow		ft	12.50	12.50	14.50
Proposed Free Board at Peak Flow		ft	1.50	1.50	1.50
Proposed Volume		ft <sup>3</sup>	16,800	25,200	163,125

## **Secondary Clarifier Design**

Process Desription	Activated Sludge - Secondary, Enl	hanced Secondary,	or Secondary With	
Maximum Surface Loading @ 2-hr Peak Flow	1,200 gpd/ft <sup>2</sup>			
Minimum Detention Time	1.8 hrs			
Minimum Side Water Depth	10 ft			
Minimum Free Board	1 ft			
Maximum Weir Loading	gpd/lf	20,000	20,000	30,000
Maximum Vertical Velocity in Stilling Well	0.15 ft/s			
Minimum Surface Area Required	ft <sup>2</sup>	500	1,000	6,667
			· · · · · · · · · · · · · · · · · · ·	
Number of Clarifiers		1	1	3
Diameter	ft	36	36	60
Proposed Weir Loading	gpd/lf	5,617	11,234	14,635
Height of Clarifier	ft	14.0	14.0	16.0
Calculated Side Water Depth at Peak Flow	ft	13.00	13.00	15.00
Proposed Free Board at Peak Flow	ft	1.00	1.00	1.00
Proposed Surface Area	ft <sup>2</sup>	1,018	1,018	8,482
Proposed Volume	ft <sup>3</sup>	13,232	13,232	127,235
Proposed Detention Time at Peak Flow	hrs	3.96	1.98	2.86
Stilling Well Diameter	ft	6.0	6.0	8.0
Proposed Stilling Well Velocity	ft/s	0.03	0.07	0.08

## **Chlorine Contact Basin**

Minimum Contact Time	20 min			
Minimum Free Board	1 ft			
Number of Desire		1	1	2
Number of Basins	10.0	1		3
Width of Tank	10 ft	10	10	20
Height of Tank	14 ft	14	14	14
Calculated Side Water Depth at Peak Flow	ft	13.00	13.00	13.00
Calculated Free Board at Peak Flow	ft	1.00	1.00	1.00
Proposed Length of Tank	32 ft	20	20	28
Proposed Volume	ft <sup>3</sup>	2,600	2,600	21,840
Proposed Detention Time	min	46.68	23.34	29.41
Aerobic Digester Design				
Volatile Soilds Wasted (From Solids Balance)	lbs/d	266	531	4000
TCEQ Loading Rate	200 lbs/d/1,000ft <sup>3</sup>			
$V = \frac{P_{x,tss}}{Loading Rate}$				
0	ft <sup>3</sup>	4 220	2.656	20.000
Minimum Required Volume (per TCEQ Regulations)	ft	1,328	2,656	20,000
Minimum Required Volume (3.5 days)		4,648	9,297	70,000
Number of Digesters		2	3	3
Width	ft	12	12	24
Height	ft	14	14	18
Freeboard	ft	1.5	1.5	1.5

#### Length (Assumes digesters are half as long as Aeration Basins) Proposed Volume

Depth

## **Chlorine Dosage Requirements**

0 1				
Type of Effluent	Activated Sludge			
Chlorine Concentration	8 mg/L			
Storage of Chlorine Tanks	Temperature-Controlled Enclosure			
Low Ambient Temperature	65 °F			
Required Chlorine Dosage	lbs/d	40	80	534
Withdrawal Rate per 150-lb Chlorine Cylinder	65 lbs/d			
Withdrawal Rate per 1-ton Chlorine Cylinder	520 lbs/d			
Number of 150-lb Chlorine Cylinders per Bank		1	2	9
Number of 1-ton Chlorine Cylinders per Bank		0	0	0
Proposed Maximum Chlorine Withdrawal Rate		65	130	585

ft

ft

ft<sup>3</sup>

12.50

28.00

8,400

16.50

60.00

71,280

12.50

28.00

12,600

## Air Requirements

Aeration Basins				
Type of Diffuser	Coarse Bubble Diffuser			
Transfer Efficency Factor	0.65			
Depth of Diffuser		11.00	11.50	13.50
Submergence Correction Factor		1.28	1.14	0.96
Clean Water Transfer Efficiency	8.40%			
Wastewater Transfer Efficiency	5.46%			
Aeration Oxygen Requirement	2.13 lb O <sub>2</sub> /lb BOD <sub>5</sub>			
Aeration Airflowrate	scfm	816	1,453	8,116
Mixing Oxygen Requirement	20 scfm/1,000 ft3			
Mixing Airflowrate	scfm	336	504	225,000
Required Airflowrate	scfm	816	1,453	225,000
Aerobic Digester				
Type of Diffuser	Coarse Bubble Diffuser			
Required Mixing Air Rate	20 scfm/1,000 ft3			
Required Airflowrate	scfm	168	252	1425.6
Chlorine Contact Basin				
Effluent DO Concentration	4 mg/L			
Initial DO Concentration*	0 mg/L			
Diffuser Capacity	150%			
Required Oxygen at Peak Flow	lb O <sub>2</sub> /d	20.03	40.05	267.02
Required Airflowrate	scfm	14.77	29.53	196.88
Airflowrate Required by Diffusers	Schin	22.15	44.30	295.32
Minimum Airdrops (10 scfm)		3	44.30	30
* Minimum DO Concentration in the Aeration Basin is 2 mg/L however, to b	e conservative an estimated DO of 0 mg/L has bee			50
		en ussumed entering the enforme		
Airlifts				
Amount Required	120 scfm			
Total Air Requirement				
-	scfm	1 110	1 955	226 742
Total Plant Required Air	scim	1,119	1,855	226,742
Blower Sizing				
Blower Capacity	750 scfm			
Blower Required		2	3	303
Blowers Proposed		3	4	304
•				

				_	Capacity Cal			_				
					1				2			
Year 1	8/1/2024	9/1/2024	10/1/2024	11/1/2024	12/1/2024	1/1/2025	2/1/2025	3/1/2025	4/1/2025	5/1/2025	6/1/2025	7/1/2025
Res. Connections	0	95	190	285	380	475	570	665	760	855	950	1045
Flow at 350 GPD per conn.	0	33,250	66,500	99,750	133,000	166,250	199,500	232,750	266,000	299,250	332,500	365,750
				-				-				
Year 2	8/1/2025	9/1/2025	10/1/2025	11/1/2025	12/1/2025	1/1/2026	2/1/2026	3/1/2026	4/1/2026	5/1/2026	6/1/2026	7/1/2026
Res. Connections	1140	1235	1330	1425	1520	1615	1710	1805	1900	1995	2090	2185
Flow at 350 GPD per conn.	399,000	432,250	465,500	498,750	532,000	565,250	598,500	631,750	665,000	698,250	731,500	764,750
Year 3	8/1/2026	9/1/2026	10/1/2026	11/1/2026	12/1/2026	1/1/2027	2/1/2027	3/1/2027	4/1/2027	5/1/2027	6/1/2027	7/1/2027
Res. Connections	2280	2375	2470	2565	2660	2755	2850	2945	3040	3135	3230	3325
Flow at 350 GPD per conn.	798,000	831,250	864,500	897,750	931,000	964,250	997,500	1,030,750	1,064,000	1,097,250	1,130,500	1,163,750
Year 4	8/1/2027	9/1/2027	10/1/2027	11/1/2027	12/1/2027	1/1/2028	2/1/2028	3/1/2028	4/1/2028	5/1/2028	6/1/2028	7/1/2028
Res. Connections	3420	3515	3610	3705	3800	3895	3990	4085	4180	4275	4370	4465
Flow at 350 GPD per conn.	1,197,000	1,230,250	1,263,500	1,296,750	1,330,000	1,363,250	1,396,500	1,429,750	1,463,000	1,496,250	1,529,500	1,562,750
											ſ	3
Year 5	8/1/2028	9/1/2028	10/1/2028	11/1/2028	12/1/2028	1/1/2029	2/1/2029	3/1/2029	4/1/2029	5/1/2029	6/1/2029	7/1/2029
Res. Connections	4560	4655	4750	4845	4940	5035	5130	5225	5320	5415	5510	5605
Flow at 350 GPD per conn.	1,596,000	1,629,250	1,662,500	1,695,750	1,729,000	1,762,250	1,795,500	1,828,750	1,862,000	1,895,250	1,928,500	1,961,750

#### Attachment 17

1.)	90% of phase 1 flow, Proposed Phase 2 construction begins
2.)	90% of phase 2 flow, proposed Phase 3 construction begins
1.) 2.) 3. )	Full development is reached, development stops

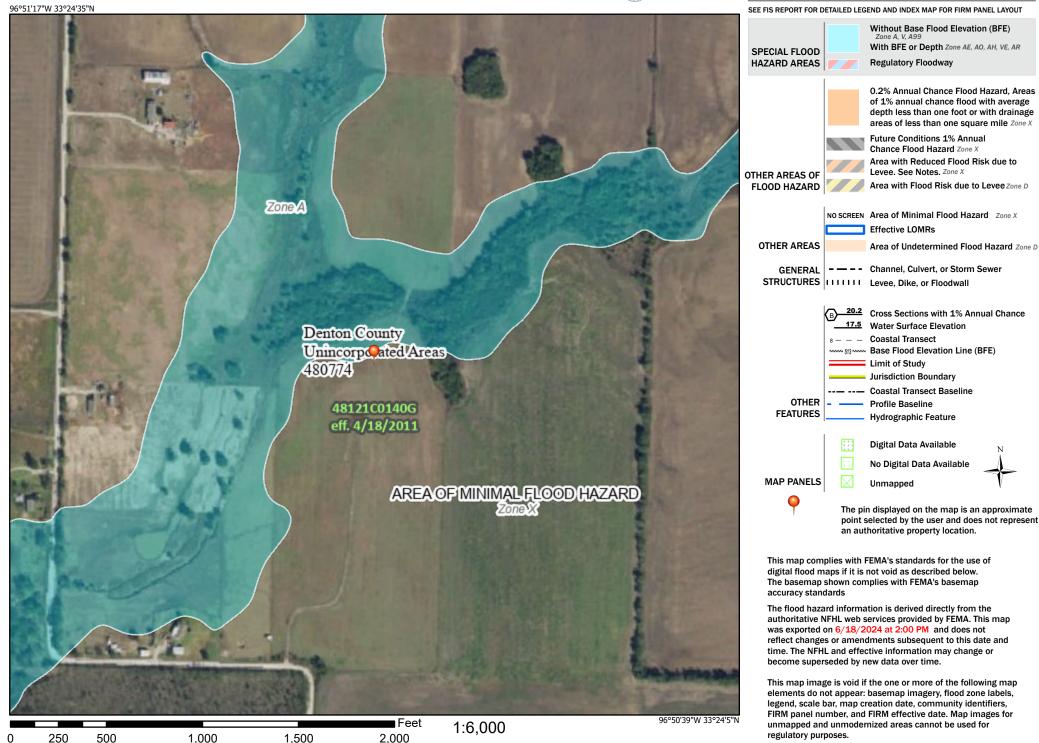
95	ESFC per month	
350	gallons per escf	
8/1/2024	Date	

	Flow	75%	90%
Phase 1:	150000	112500	135000
Phase 2:	300000	225000	270000
Phase 3:	2000000	1500000	1800000

## National Flood Hazard Layer FIRMette

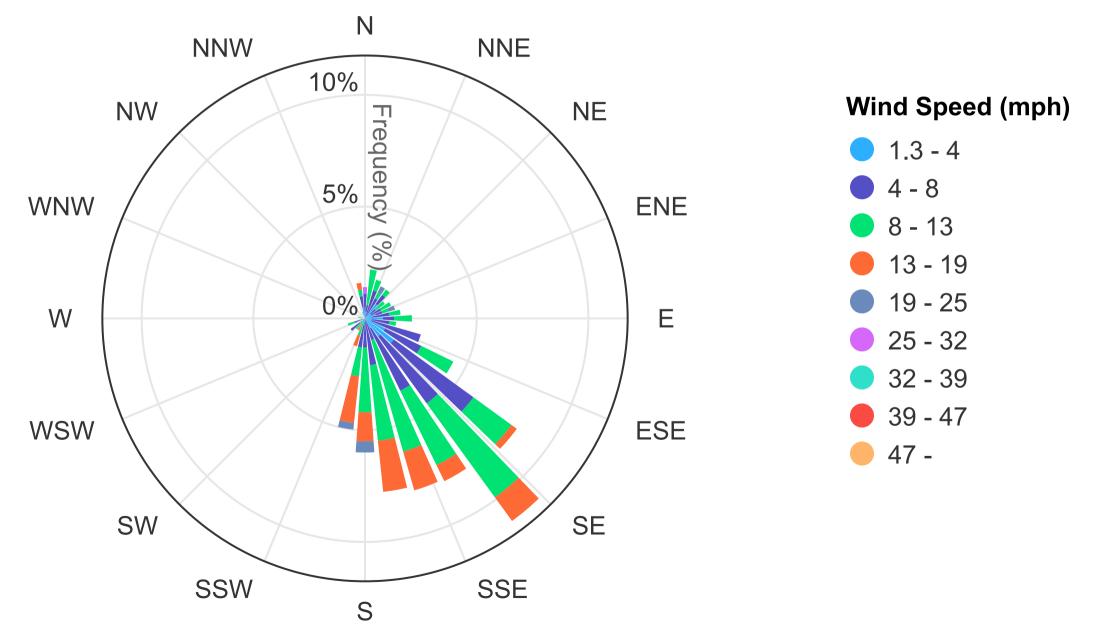


#### Legend



# MCKINNEY MUNI AP (TX) Wind Rose

June 1, 2024 - June 17, 2024 Sub-Interval: Jan. 1 - Dec. 31, 0 - 23



Click and drag to zoom

ATTACHMENT - 20			
Sludge Management Plan			
Phase 1 - 0.15 MGD			
Influent Design Flow	0.15	MGD	
Influent BOD <sub>5</sub> Concentration	325	mg/L	
Aerobic Digester Volume	62,836	Gal	
Aeration Basin MLSS	2000	mg/L	

SOLIDS GENERATED	100% Flow	75% Flow	50% Flow	25% Flow
Pounds (lbs) Influent BOD5	407	305	203	102
Pounds (lbs) of digested dry sludge produced*	142	107	71	36
Pounds (lbs) of wet sludge produced	7115	5336	3558	1779
Gallons (Gal) of wet sludge produced	853	640	427	213

\*Assuming 0.35 pounds of digested dry sludge produced per pound of influent BOD5 at average temperature and 2.0% solids concentration in the digester

Sludge will be wasted from the RAS flow stream to the aerobic digester.

Sludge solids will be stabilized in the digester

Supernatant will be decanted from the digester and returned to the plant headworks for treatment.

REMOVAL SCHEDULE (DAYS)	100% Flow	75% Flow	50% Flow	25% Flow
Days between sludge removal	9	12	18	35

Liquid digested sludge will be removed from the digester for disposal on a regular basis as required. The calculated mean cell residence time (MCRT) for the digester storage volume of 62836.368 gal will be approximately 73 days at 100% capacity and annual average digested sludge produced of 142 ppd.

	ATTACHMENT - 20			
Sludge Management Plan				
Phase 2 - 0.30 MGD				
Influent Design Flow	0.3 MGD			
Influent BOD <sub>5</sub> Concentration	325 mg/L			
Aerobic Digester Volume	94,255 Gal			
Aeration Basin MLSS	2000 mg/L			

SOLIDS GENERATED	100% Flow	75% Flow	50% Flow	25% Flow
Pounds (lbs) Influent BOD5	813	610	407	203
Pounds (lbs) of digested dry sludge produced*	285	213	142	71
Pounds (lbs) of wet sludge produced	14230	10673	7115	3558
Gallons (Gal) of wet sludge produced	1706	1280	853	427

\*Assuming 0.35 pounds of digested dry sludge produced per pound of influent BOD5 at average temperature and 2.0% solids concentration in the digester

Sludge will be wasted from the RAS flow stream to the aerobic digester.

Sludge solids will be stabilized in the digester

Supernatant will be decanted from the digester and returned to the plant headworks for treatment.

REMOVAL SCHEDULE (DAYS)	100% Flow	75% Flow	50% Flow	25% Flow
Days between sludge removal	7	9	13	27

Liquid digested sludge will be removed from the digester for disposal on a regular basis as required. The calculated mean cell residence time (MCRT) for the digester storage volume of 94254.552 gal will be approximately 55 days at 100% capacity and annual average digested sludge produced of 285 ppd.

	ATTACHMENT - 20							
	Sludge Management Plan							
Phase 3 - 2.00 MGD								
Influent Design Flow	2000000 MGD							
Influent BOD <sub>5</sub> Concentration	325 mg/L							
Aerobic Digester Volume	533,211 Gal							
Aeration Basin MLSS	2000 mg/L							

SOLIDS GENERATED	100% Flow	75% Flow	50% Flow	25% Flow
Pounds (lbs) Influent BOD5	5421000000	4065750000	2710500000	1355250000
Pounds (lbs) of digested dry sludge produced*	1897350000	1423012500	948675000	474337500
Pounds (lbs) of wet sludge produced	94867500000	71150625000	47433750000	23716875000
Gallons (Gal) of wet sludge produced	11375000000	8531250000	5687500000	2843750000

\*Assuming 0.35 pounds of digested dry sludge produced per pound of influent BOD5 at average temperature and 2.0% solids concentration in the digester

Sludge will be wasted from the RAS flow stream to the aerobic digester.

Sludge solids will be stabilized in the digester

Supernatant will be decanted from the digester and returned to the plant headworks for treatment.

REMOVAL SCHEDULE (DAYS)	100% Flow	75% Flow	50% Flow	25% Flow
Days between sludge removal	0	0	0	0

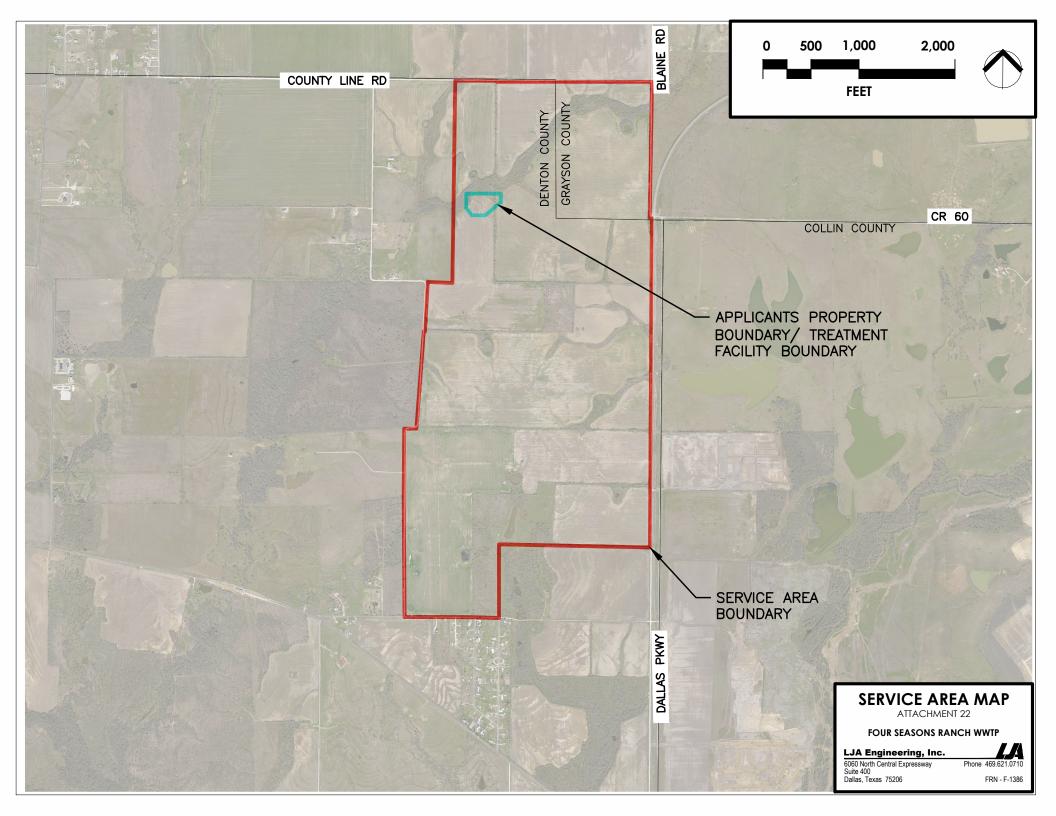
Liquid digested sludge will be removed from the digester for disposal on a regular basis as required. The calculated mean cell residence time (MCRT) for the digester storage volume of 533211.4656 gal will be approximately 0 days at 100% capacity and annual average digested sludge produced of 1897350000 ppd.

## ATTACHMENT – 21

#### Justification for Proposed Facility

The proposed facility will allow Four Seasons Ranch MUD 1 to treat the wastewater from its proposed development service area.

There is no existing sanitary sewer collection infrastructure in the proposed area of development or in the near vicinity of the service area.



#### **Erwin Madrid**

From:	Sally Easley <seasley@lja.com></seasley@lja.com>
Sent:	Wednesday, October 16, 2024 8:05 AM
То:	Erwin Madrid
Cc:	Laura Preston; Dallas Wendling; 0314 - SNR Celina Tract
Subject:	NOD Response for Permit No. WQ0016620001
Attachments:	WQ0016620001 Municipal Discharge New Spanish NORI.docx; WQ0016620001 Four
	Seasons WWTP Response Letter.pdf

Mr. Madrid,

Please find both the response letter with NORI corrections in red and updated new Spanish NORI as a word document attached for submittal.

Thank you,

Sally Easley Graduate Engineer

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#### **Erwin Madrid**

From:	Sally Easley <seasley@lja.com></seasley@lja.com>
Sent:	Tuesday, October 15, 2024 11:10 AM
То:	Erwin Madrid
Subject:	RE: Individual Wastewater Permit Application - Electronic copy request
Attachments:	1 - Core Data Form.pdf

Erwin,

I appreciate your patience.

I am re-sending the updated core data form, attachment 1 that includes the signature page attached to this email. I forgot to update that earlier.

Thank you,

Sally Easley Graduate Engineer

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From: Erwin Madrid < Erwin.Madrid@tceq.texas.gov>
Sent: Thursday, October 10, 2024 3:16 PM
To: Sally Easley <seasley@lja.com>
Cc: Laura Preston < lpreston@lja.com>; Dallas Wendling <dwendling@lja.com>; Abesha Michael
<Abesha.Michael@tceq.texas.gov>
Subject: RE: Individual Wastewater Permit Application - Electronic copy request

#### [EXTERNAL EMAIL]

Hi Sally,

Thank you for clarifying. Yes please, if you would send me an updated CDF form with the updated description and the updated description on section 10.A of the administrative report.

Regards,

Erwin Madrid Team Lead ARP Team | Water Quality Division 512-239-2191 Texas Commission on Environmental Quality



Please consider whether it is necessary to print this e-mail.

From: Sally Easley <<u>seasley@lja.com</u>>
Sent: Wednesday, October 9, 2024 3:32 PM
To: Erwin Madrid <<u>Erwin.Madrid@tceq.texas.gov</u>>
Cc: Laura Preston <<u>lpreston@lja.com</u>>; Dallas Wendling@lja.com>; Abesha Michael
<<u>Abesha.Michael@tceq.texas.gov</u>>
Subject: RE: Individual Wastewater Permit Application - Electronic copy request

Hi Edwin,

Thank you for your help reviewing this permit.

County Line Road and Berend Road are the same road with two different names running from Blaine Road eastward to Highway 377 where it ends in Pilot Point, Texas.

Please let me know if I need to amend the pages and attachment including the location description and forward to you.

Thank you,

Sally Easley Graduate Engineer

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<Abesha.Michael@tceq.texas.gov>
Subject: RE: Individual Wastewater Permit Application - Electronic copy request

[EXTERNAL EMAIL]

Hi Sally,

Disregard the item about the hard copy of the application, I was able to locate it here in the office. If you would please just confirm the proposed facility location description.

Regards,

Erwin Madrid Team Lead ARP Team | Water Quality Division 512-239-2191 Texas Commission on Environmental Quality



From: Erwin Madrid
Sent: Wednesday, October 9, 2024 2:56 PM
To: Sally Easley <<u>seasley@lja.com</u>>
Cc: Laura Preston <<u>lpreston@lja.com</u>>; Dallas Wendling <<u>dwendling@lja.com</u>>; Abesha Michael
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Hi Sally,

I am working on reviewing the permit application for Four Seasons Ranch WWTP; however, I am waiting to hear back from our standards team to complete my review. In the meantime, can you please address the following items below:

Can you please confirm that a hard copy of the permit application was mailed to our office? If not, can you please mail in the original hard copy (paper).

Additionally, the facility location description on the application indicates that the proposed facility will be located 0.6 miles southeast of the intersection of County Line Rd and Gorrell Rd. However, upon review, it doesn't appear that County Line Rd and Gorrell Rd intersects. It appears that Gorrell Rd intersects with Berend Rd. Can you please confirm the facility location description?

Regards,

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Please consider whether it is necessary to print this e-mail.

From: Sally Easley <<u>seasley@lja.com</u>> Sent: Friday, October 4, 2024 1:36 PM To: WQ-ARPTeam <<u>WQ-ARPTeam@tceq.texas.gov</u>> Subject: RE: Individual Wastewater Permit Application - Electronic copy request

Thank you very much. I appreciate the update.

Sally Easley Graduate Engineer

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To: Sally Easley <<u>seasley@lja.com</u>>
Cc: 0314 - SNR Celina Tract <<u>NTX0314@lja.com</u>>; Laura Preston <<u>lpreston@lja.com</u>>; Dallas Wendling
<<u>dwendling@lja.com</u>>
Subject: RE: Individual Wastewater Permit Application - Electronic copy request

#### [EXTERNAL EMAIL]

Hi Sally,

I can confirm that we have received the application copy you sent; Abesha has not completed the administrative review, she is currently out of the office. However, we will attempt to get you a response as soon as possible.

Thank you in advance for your understanding!

Regards,

Erwin Madrid Team Lead ARP Team | Water Quality Division 512-239-2191 Texas Commission on Environmental Quality



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From: Sally Easley <<u>seasley@lja.com</u>>
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Cc:	Laura Preston; Dallas Wendling; Abesha Michael
Subject:	RE: Individual Wastewater Permit Application - Electronic copy request
Attachments:	7 - SPIF.pdf; 1 - Core Data Form.pdf; 10053 10A P8.pdf

Erwin,

Please find attached the updated page 8, section 10A of form 10053, attachment 1, form 10040 Core Data Form, and attachment 7, SPIF all with updated location description to reflect the change from County Line RD to Berend RD.

Thank you,

Sally Easley Graduate Engineer

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Team Lead ARP Team | Water Quality Division 512-239-2191 Texas Commission on Environmental Quality



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[EXTERNAL EMAIL] Exercise caution. Do not open attachments or click links from unknown senders or unexpected email



October 16, 2024

Via Email to: Erwin.Madrid@tceq.texas.gov

Re: Response Letter for Case No.: WQ0016620001 Applicant Name: Four Seasons Ranch Municipal Utility District 1 Site Name: Four Seasons Ranch WWTP LJA Job No. NT860B-0314A

Dear Mr. Madrid:

In response to the TCEQ comments dated October 14, 2024, we have addressed your comments as follows.

1. The following is a portion of the NORI which contains information relevant to your application. Please read it carefully and indicate if it contains any errors or omissions. The complete notice will be sent to you once the application is declared administratively complete.

APPLICATION. Four Season Ranch Municipal Utility District 1 of Denton County, 16000 Dallas Parkway, Suite 350, Dallas, Texas 75248, has applied to the Texas Commission on Environmental Quality (TCEQ) for proposed Texas Pollutant Discharge Elimination System (TPDES) Permit No. WQ0016620001 (EPA I.D. No. TX0146587) to authorize the discharge of treated wastewater at a volume not to exceed a daily average flow of 2,000,000 gallons per day. The domestic wastewater treatment facility will be located approximately 0.6 miles southeast of the intersection of Berend Road and Gorrell Road, near the city of Gunter, in Denton County, Texas 76258. The discharge route will be from the plant site to Mustang Creek; thence to Little Elm Creek; thence to Lake Lewisville. TCEQ received this application on September 12, 2024. The permit application will be available for viewing and copying at Pilot Point Community Library, 324 South Washington Street, Pilot Point, in Denton 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/tpdes-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=-96.846747,33.406575&level=18

Further information may also be obtained from Four Season Ranch Municipal Utility District 1 of Denton County at the address stated above or by calling Ms. Laura Preston, P.E., Assistant Project Manager, at 214-442-6579.

Erwin Madrid October 16, 2024 Permit No. WQ0016620001 Page 2 of 2

## Response: The version of the NORI included below is a copy of the above with changes noted in red.

APPLICATION. Four Seasons Ranch Municipal Utility District 1 of Denton County, 16000 Dallas Parkway, Suite 350, Dallas, Texas 75248, has applied to the Texas Commission on Environmental Quality (TCEQ) for proposed Texas Pollutant Discharge Elimination System (TPDES) Permit No. WQ0016620001 (EPA I.D. No. TX0146587) to authorize the discharge of treated wastewater at a volume not to exceed a daily average flow of 2,000,000 gallons per day. The domestic wastewater treatment facility will be located approximately 0.6 miles southeast of the intersection of Berend Road and Gorrell Road, near the city of Gunter, in Denton County, Texas 76258. The discharge route will be from the plant site to Mustang Creek; thence to Little Elm Creek; thence to Lake Lewisville. TCEQ received this application on September 12, 2024. The permit application will be available for viewing and copying at Pilot Point Community Library, 324 South Washington Street, Pilot Point, in Denton 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:

<u>https://www.tceq.texas.gov/permitting/wastewater/pending-permits/tpdes-applications</u>. 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. <u>https://gisweb.tceq.texas.gov/LocationMapper/?marker=-96.846747,33.406575&level=18</u>

Further information may also be obtained from Four Seasons Ranch Municipal Utility District 1 of Denton County at the address stated above or by calling Ms. Laura Preston, P.E., Assistant Project Manager, at 214-442-6579.

2. The application indicates that public notices in Spanish are required. After confirming the portion of the NORI above does not contain any errors or omissions, please use the attached template to translate the NORI into Spanish. Only the first and last paragraphs are unique to this application and require translation. Please provide the translated Spanish NORI in a Microsoft Word document.

Response: The completed Spanish NORI in Microsoft Word is included as an attachment to the email to which this response letter is attached.

If you have any questions or require additional information, please contact me at 214-442-6579. We trust this additional information will allow further review and processing for approval.

Sincerely,

Laurá Preston, PE Assistant Project Manager

LP/se

Enclosures: Spanish NORI (Word document) Organization Name: Four Seasons Ranch MUD 1

Mailing Address: 16000 Dallas Pkwy, Ste 350 City, State, Zip Code: Dallas, Tx 75248

Phone No.: <u>972-788-1600</u> E-mail Address: <u>jbethke@coatsrose.com</u>

If the landowner is not the same person as the facility owner or co-applicant, attach a lease agreement or deed recorded easement. See instructions.

#### Attachment: $\underline{N/A}$

**E.** Owner of effluent disposal site:

Prefix: <u>N/A</u>	Last Name, First Name: <u>N/A</u>
Title: <u>N/A</u>	Credential: <u>N/A</u>
Organization Name: <u>N/A</u>	
Mailing Address: <u>N/A</u>	City, State, Zip Code: <u>N/A</u>
Phone No.: <u>N/A</u>	E-mail Address: <u>N/A</u>

If the landowner is not the same person as the facility owner or co-applicant, attach a lease agreement or deed recorded easement. See instructions.

#### Attachment: $\underline{N/A}$

**F.** Owner sewage sludge disposal site (if authorization is requested for sludge disposal on property owned or controlled by the applicant)::

Prefix: <u>N/A</u>	Last Name, First Name: <u>N/A</u>
Title: <u>N/A</u>	Credential: <u>N/A</u>
Organization Name: <u>N/A</u>	
Mailing Address: <u>N/A</u>	City, State, Zip Code: <u>N/A</u>
Phone No.: <u>N/A</u>	E-mail Address: <u>N/A</u>

If the landowner is not the same person as the facility owner or co-applicant, attach a lease agreement or deed recorded easement. See instructions.

Attachment: <u>N/A</u>

### Section 10. TPDES Discharge Information (Instructions Page 31)

A. Is the wastewater treatment facility location in the existing permit accurate?

🗆 Yes 🖾 No

If **no**, **or a new permit application**, please give an accurate description:

Approximately 0.6 miles southeast of the intersection of Berend Rd and Gorrell Rd in Denton County

**B.** Are the point(s) of discharge and the discharge route(s) in the existing permit correct?

🗆 Yes 🖾 No

If **no**, **or a new or amendment permit application**, provide an accurate description of the point of discharge and the discharge route to the nearest classified segment as defined in 30 TAC Chapter 307:



## **TCEQ Core Data Form**

For detailed instructions on completing this form, please read the Core Data Form Instructions or call 512-239-5175.

### **SECTION I: General Information**

<b>1. Reason for Submission</b> (If other is checked please describe in space provided.)								
New Permit, Registration or Authorization (Core Data H	Form should be submitted with	the program application.)						
Renewal (Core Data Form should be submitted with the	e renewal form)	Other						
2. Customer Reference Number (if issued)	Follow this link to search	3. Regulated Entity Reference Number (if issued)						
	for CN or RN numbers in							
CN 603401316	central negistry	RN N/A						
	J							

## **SECTION II: Customer Information**

4. General Cu	ustomer Information 5. Effective Date for Customer Information Updates (mm/dd/yyyy) 7/1/2024								7/1/2024				
New Customer         Update to Customer Information         Change in Regulated Entity Ownership													
Change in Le	Change in Legal Name (Verifiable with the Texas Secretary of State or Texas Comptroller of Public Accounts)												
			-	•	utomatical	ly base	ed on	what is c	urrent	and active	with th	ne Texas Secr	etary of State
(SOS) or Texa	s Comptro	oller of I	Public Accou	nts (CPA).									
6. Customer I	egal Nam	<b>ne</b> (If an i	individual, prii	nt last name fi	rst: eg: Doe, J	lohn)			<u>lf nev</u>	v Customer, o	enter pre	evious Custom	er below:
Four Seasons R	anch MUD	1											
7. TX SOS/CP	A Filing N	umber		8. TX State	<b>Tax ID</b> (11 d	igits)			9. Fe	deral Tax II	D	10. DUNS	Number (if
N/A				N/A					(9 dig	its)		applicable)	
									N/A	N/A		N/A	
11. Type of C	ustomer:		Corporat	ion				🗌 Individ	lual		Partne	ership: 🗌 Gen	eral 🗌 Limited
Government:	City 🗌 🤇	County [	Federal	Local 🗌 State	e 🛛 Other			Sole Pr	roprieto	orship	🗌 Otl	her:	
12. Number o	of Employ	ees							13. lı	ndepender	tly Ow	ned and Ope	erated?
⊠ 0-20 □ 2	21-100 [	101-25	50 🗌 251-	500 🗌 501	and higher				∏ Y€	es [	🗙 No		
14. Customer	<b>Role</b> (Pro	posed or	Actual) – <i>as i</i> i	t relates to the	Regulated E	ntity list	ted on	this form.	Please o	check one of	the follo	owing	
Owner		<u> </u>	erator		vner & Opera					Other:			
	al Licensee	Re	esponsible Par	rty 🗌	VCP/BSA App	olicant							
	16000 Da	allas Pkw	y Ste 350										
15. Mailing													
Address:	City	Dallas			State	тх		ZIP	7524	0		ZIP + 4	6637
	City	Dallas			State		-	ZIP	75240	0		ZIP <del>+</del> 4	0037
<b>16. Country Mailing Information</b> (if outside USA)						17. E-Mail Address (if applicable)							
							jbethke@coatsrose.com						
18. Telephone Number     19. Extension or Code     20. Fax Number (if applicable)													

## **SECTION III: Regulated Entity Information**

21. General Regulated Entity Information (If 'New Regulated Entity" is selected, a new permit application is also required.)								
New Regulated Entity	🛛 New Regulated Entity 🛛 Update to Regulated Entity Name 📄 Update to Regulated Entity Information							
The Regulated Entity Name submitted may be updated, in order to meet TCEQ Core Data Standards (removal of organizational endings such as Inc, LP, or LLC).								
22. Regulated Entity Nam	<b>1e</b> (Enter name	of the site where the	regulated action	is taking pla	ce.)			
Four Seasons Ranch WWTP								
23. Street Address of								
the Regulated Entity:								
<u>(No PO Boxes)</u>	City		State		ZIP		ZIP + 4	
24. County	Denton County							

#### If no Street Address is provided, fields 25-28 are required.

25. Description to         Physical Location:										
26. Nearest City						State		Nearest ZIP Code		
Gunter						ТХ			76258	
Latitude/Longitude are required and may be added/updated to meet TCEQ Core Data Standards. (Geocoding of the Physical Address may be used to supply coordinates where none have been provided or to gain accuracy).								Address may be		
27. Latitude (N) In Decim	al:	33.406575		28. Lo	ongitude (W	itude (W) In Decimal:		96.846747		
Degrees	Minutes		Seconds	Degre	es	Minutes		Seconds		
33		24	23.67		96		50		48.29	
				<b>31. Primar</b> (5 or 6 digit	Primary NAICS Code     32. Secondary NAICS Code       r 6 digits)     (5 or 6 digits)					
4952				221320						
33. What is the Primary Business of this entity? (Do not repeat the SIC or NAICS description.)										
Municipal Domestic Wastew	ater Treatmer	nt								
	Four Sease	ons Ranch MUD 1								
34. Mailing Address:	16000 Dallas Pkwy Ste 350									
Address.	City	Dallas	State	тх	ZIP	75248		ZIP + 4	6637	
35. E-Mail Address:	jbet	hke@coatsrose.c	om							
36. Telephone Number			37. Extension or (	Code	38. Fa	ax Number	(if applicabl	le)		
( 972 ) 788-1600					( )	) -				

**39. TCEQ Programs and ID Numbers** Check all Programs and write in the permits/registration numbers that will be affected by the updates submitted on this form. See the Core Data Form instructions for additional guidance.

Dam Safety	Districts	Edwards Aquifer	Emissions Inventory Air	Industrial Hazardous Waste
		<i>i</i> .		
Municipal Solid Waste	Review Air	OSSF	Petroleum Storage Tank	D PWS
Sludge	Storm Water	Title V Air		Used Oil
Voluntary Cleanup	Wastewater	Wastewater Agriculture	Water Rights	Other:

### **SECTION IV: Preparer Information**

40. Name:	Laura Preston			41. Title:	Assistant Project Manager
42. Telephone	Number	43. Ext./Code	44. Fax Number	45. E-Mail /	Address
( 214 ) 442-6579			( ) -	lpreston@lja	com

## **SECTION V: Authorized Signature**

46. By my signature below, I certify, to the best of my knowledge, that the information provided in this form is true and complete, and that I have signature authority to submit this form on behalf of the entity specified in Section II, Field 6 and/or as required for the updates to the ID numbers identified in field 39.

Company:	Four Seasons Ranch MUD 1	Job Title:	Board Pre	sident	
Name (In Print):	Michael Teeling			Phone:	( 972 ) 755- <b>1000</b>
Signature:	michaed tel	in		Date:	08/15/2024
		5			

## TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

## SUPPLEMENTAL PERMIT INFORMATION FORM (SPIF)

#### FOR AGENCIES REVIEWING DOMESTIC OR INDUSTRIAL TPDES WASTEWATER PERMIT APPLICATIONS

TCEQ USE ONLY:	
Application type:RenewalMajor Am	endmentNinor AmendmentNew
County:	Segment Number:
Admin Complete Date:	
Agency Receiving SPIF:	
Texas Historical Commission	U.S. Fish and Wildlife
Texas Parks and Wildlife Department	U.S. Army Corps of Engineers

#### This form applies to TPDES permit applications only. (Instructions, Page 53)

Complete this form as a separate document. TCEQ will mail a copy to each agency as required by our agreement with EPA. If any of the items are not completely addressed or further information is needed, we will contact you to provide the information before issuing the permit. Address each item completely.

**Do not refer to your response to any item in the permit application form**. Provide each attachment for this form separately from the Administrative Report of the application. The application will not be declared administratively complete without this SPIF form being completed in its entirety including all attachments. Questions or comments concerning this form may be directed to the Water Quality Division's Application Review and Processing Team by email at <u>WQ-ARPTeam@tceq.texas.gov</u> or by phone at (512) 239-4671.

The following applies to all applications:

1. Permittee: Four Seasons Ranch MUD 1

Permit No. WQ00 <u>N/A</u>

EPA ID No. TX N/A

Address of the project (or a location description that includes street/highway, city/vicinity, and county):

Located 0.6 miles southeast of the intersection of Berend Rd and Gorrell Rd in Denton County Provide the name, address, phone and fax number of an individual that can be contacted to answer specific questions about the property.

Prefix (Mr., Ms., Miss): <u>Ms.</u> First and Last Name: <u>Laura Preston</u> Credential (P.E, P.G., Ph.D., etc.): <u>P.E.</u> Title: <u>Assistant Project Manager</u> Mailing Address: <u>6060 N Central Expy, Ste 400</u> City, State, Zip Code: <u>Dallas, Texas 75206</u> Phone No.: <u>214-442-6579 Ext.: N/A</u> Fax No.: <u>N/A</u> E-mail Address: <u>lpreston@lja.com</u>

- 2. List the county in which the facility is located: <u>Denton</u>
- If the property is publicly owned and the owner is different than the permittee/applicant, please list the owner of the property.
   N/A

4. Provide a description of the effluent discharge route. The discharge route must follow the flow of effluent from the point of discharge to the nearest major watercourse (from the point of discharge to a classified segment as defined in 30 TAC Chapter 307). If known, please identify the classified segment number.

To unnamed tributary, thence to Little Elm Creek, thence to Lake Lewisville in segment 0823 of the Trinity River Basin.

5. Please provide a separate 7.5-minute USGS quadrangle map with the project boundaries plotted and a general location map showing the project area. Please highlight the discharge route from the point of discharge for a distance of one mile downstream. (This map is required in addition to the map in the administrative report).

Provide original photographs of any structures 50 years or older on the property.

Does your project involve any of the following? Check all that apply.

- Proposed access roads, utility lines, 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 caves, fractures, sinkholes, other karst features
- Disturbance of vegetation or wetlands

N/A

1. List proposed construction impact (surface acres to be impacted, depth of excavation, sealing of caves, or other karst features):

2.	Describe existing disturbances, vegetation, and land use:	
	Undeveloped Land	

## THE FOLLOWING ITEMS APPLY ONLY TO APPLICATIONS FOR NEW TPDES PERMITS AND MAJOR AMENDMENTS TO TPDES PERMITS

- List construction dates of all buildings and structures on the property: <u>No existing buildings or structures are located on the property where the wastewater</u> <u>treatment plant is proposed.</u>
- 4. Provide a brief history of the property, and name of the architect/builder, if known. <u>The property where the wastewater treatment plant is proposed has never been developed</u> <u>and has generally been used for agricultural purposes.</u>