

### 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



### 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

# TCEQ

### TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

## 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 30 TAC Section 39.426, you must provide a translated copy of the completed plain language summary in the appropriate alternative language as part of your application package. 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.

HC McKinney 3, LLC and McKinney Ridge, LLC (CN606268720)(CN606271815) proposes to operate Goodman Ranch Wastewater Treatment Plant (RN111982252), a cyclically aerated, flow-through activated sludge process. The facility will be located at 2,318 feet northeast from the intersection of County Road 165 and Farm to Market road 1461, in McKinney, Collin County, Texas 75071. This application is for a new application to discharge at a daily average flow of 1,100,000 gallons per day of treated domestic water.

Discharges from the facility are expected to contain five-day carbonaceous biochemical oxygen demand (CBOD5), total suspended solids (TSS), ammonia nitrogen (NH3-N), total phosphorus (TP), dissolved oxygen (D), and Escherichia coli. All discharged pollutants fall within acceptable limits. Domestic wastewater will be treated by activated sludge process and treatment units including bar screens, aeration basins, clarifiers, chlorine contact basins and blowers, and aerobic digestors. Dewater sludge will be transported and disposed of, while effluent discharge will occur at Outfall 1.

## 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.

HC McKinney 3, LLC and McKinney Ridge, LLC (CN606268720)(CN606271815) propone operar Goodman Ranch Wastewater Treatment Plant (RN111982252, un proceso de lodos activados de flujo continuo y aireado cíclicamente. La instalación está ubicada en La instalación estará ubicada a 2,318 pies al noreste de la intersección de County Road 165 y Farm to Market Road 1461, en McKinney, Condado de Collin, Texas 75071. Esta solicitud es para una nueva aplicación para descargar a un flujo promedio diario de 1,100,000 galones por día de agua doméstica tratada.

Se espera que las descargas de la instalación contengan demanda bioquímica carbonosa de oxígeno de cinco días (CBOD5), sólidos suspendidos totales (SST), nitrógeno amoniacal (NH3-N), fósforo total (TP), oxígeno disuelto (D) y Escherichia coli. Todos los contaminantes vertidos se encuentran dentro de límites aceptables.. Aguas residuales domestics. estará tratado por Unidades de proceso y tratamiento de lodos activados que incluyen cribas de barras, cuencas de aireación, clarificadores, cuencas de contacto con cloro y sopladores, y digestores aeróbicos. Los DESHIDRATADOS serán transportados y eliminados, mientras que la descarga de efluentes ocurrirá en el emisario 1.

### **TEXAS COMMISSION ON ENVIRONMENTAL QUALITY**



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

### PROPOSED PERMIT NO. WQ0016550001

APPLICATION. HC McKinney 3, LLC and McKinney Ridge, LLC, 8200 Douglas Avenue, Suite 300, Dallas, Texas 75225, have applied to the Texas Commission on Environmental Quality (TCEQ) for proposed Texas Pollutant Discharge Elimination System (TPDES) Permit No. WQ0016550001 (EPA I.D. No. TX0146111) to authorize the discharge of treated wastewater at a volume not to exceed an annual average flow of 1,100,000 gallons per day. The domestic wastewater treatment facility will be located approximately 2,300 feet northeast of the intersection of County Road 165 and Farm-to-Market Road 1461, near the city of McKinney, in Collin County, Texas 75071. The discharge route will be from the plant site to an unnamed tributary, thence to SCS Reservoir 16, thence to an unnamed tributary, thence to Honey Creek, thence to East Fork Trinity River, thence to Lake Lavon. TCEQ received this application on May 28, 2024. The permit application will be available for viewing and copying at McKinney City Hall, 222 North Tennessee Street, McKinney, in Collin 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=-96.690277,33.263333&level=18

ALTERNATIVE LANGUAGE NOTICE. Alternative language notice in Spanish is available at: <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>. El aviso de idioma alternativo en español está disponible en <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>.

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

Further information may also be obtained from HC McKinney 3, LLC and McKinney Ridge, LLC at the address stated above or by calling Mr. Matt Atkins, P.E., TNP, Inc., at 972-833-6872.

Issuance Date: July 1, 2024

### Comisión de Calidad Ambiental del Estado de Texas



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

### PERMISO PROPUESTO NO. WQ0016550001

**SOLICITUD.** HC McKinney 3, LLC y McKinney Ridge, LLC, 8200 Douglas Avenue, Suite 300, Dallas, Texas 75225, han solicitado a la Comisión de Calidad Ambiental del Estado de Texas (TCEQ) para el propuesto Permiso No. WQ0016550001 (EPA I.D. No. TX0146111) 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 anual de 1,100,000 galones por día. La planta estará ubicada aproximadamente 2,300 pies al noreste de la intersección de County Road 165 y Farm-to-Market Road 1461 en el Condado de Collin, Texas 75071. La ruta de descarga estará del sitio de la planta a un afluente sin nombre, de allí al embalse 16 de SCS, de allí a un afluente sin nombre, de allí a Honey Creek, de allí al río Trinity East Fork y de allí al lago Lavon. La TCEQ recibió esta solicitud el 28 de mayo de 2024. La solicitud para el permiso estará disponible para leerla y copiarla en McKinney City Hall, 222 North Tennessee Street, McKinney, en el Condado de Collin, Texas antes de la fecha de publicación de este aviso en el periódico. 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

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=-96.690277,33.263333&level=18

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

**COMENTARIO PUBLICO / REUNION PUBLICA. Usted puede presentar comentarios públicos o pedir una reunión pública sobre esta solicitud.** El propósito de una reunión pública es dar la oportunidad de presentar comentarios o hacer preguntas acerca de la solicitud. La TCEQ

realiza una reunión pública si el Director Ejecutivo determina que hay un grado de interés público suficiente en la solicitud o si un legislador local lo pide. Una reunión pública no es una audiencia administrativa de lo contencioso.

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

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

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

**LISTA DE CORREO.** Si somete comentarios públicos, un pedido para una audiencia administrativa de lo contencioso o una reconsideración de la decisión del Director Ejecutivo, la Oficina del Secretario Principal enviará por correo los avisos públicos en relación con la solicitud. Ademas, puede pedir que la TCEQ ponga su nombre en una or mas de las listas correos siguientes (1) la lista de correo permanente para recibir los avisos de el solicitante

indicado por nombre y número del permiso específico y/o (2) la lista de correo de todas las solicitudes en un condado 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.

**INFORMACIÓN DISPONIBLE EN LÍNEA.** Para detalles sobre el estado de la solicitud, favor de visitar la Base de Datos Integrada de los Comisionados en <a href="www.tceq.texas.gov/goto/cid">www.tceq.texas.gov/goto/cid</a>. Para buscar en la base de datos, utilizar el número de permiso para esta solicitud que aparece en la parte superior de este aviso.

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

También se puede obtener información adicional del HC McKinney 3, LLC y McKinney Ridge, LLC a la dirección indicada arriba o llamando a Sr. Matt Atkins, TNP, Inc., al 972-833-6872.

Fecha de emisión el 1 de julio 1 de 2024

### **Texas Commission on Environmental Quality**



#### **COMBINED**

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

#### **AND**

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

### **NEW**

### **PERMIT NO. WQ0016550001**

**APPLICATION AND PRELIMINARY DECISION.** HC McKinney 3, LLC and McKinney Ridge, LLC, 8200 Douglas Avenue, Suite 300, Dallas, Texas 75225, has applied to the Texas Commission on Environmental Quality (TCEQ) for new Texas Pollutant Discharge Elimination System (TPDES) Permit No. WQ0016550001, to authorize the discharge of treated domestic wastewater at a daily average flow not to exceed **750,000** gallons per day. TCEQ received this application on May 28, 2024.

### This combined notice is being issued to change the final flow from what was stated in the NORI.

The facility will be located approximately 2,300 feet northeast of the intersection of County Road 165 and Farm-to-Market Road 1461, in Collin County, Texas 75071. The treated effluent will be discharged to an unnamed tributary, thence to Soil Conservation Service Site 16 Reservoir, thence to an unnamed tributary, thence to Honey Creek, thence to East Fork Trinity River above Lake Lavon, thence to Lake Lavon in Segment No. 0821 of the Trinity River Basin. The unclassified receiving water uses are limited aquatic life use for the unnamed tributary, high aquatic life use for Soil Conservation Service Site 16 Reservoir, and intermediate aquatic life use for Honey Creek, The designated uses for Segment No. 0821 are primary contact recreation, public water supply, and high aquatic life use. In accordance with 30 Texas Administrative Code §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. A Tier 2 review has preliminarily determined that no significant degradation of water quality is expected in Soil Conservation Service Site 16 Reservoir, which has been identified as having high aquatic life use, and Honey Creek which has been identified as having intermediate aquatic life use. 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. <a href="https://gisweb.tceq.texas.gov/LocationMapper/?marker=-96.69027,33.263333&level=18">https://gisweb.tceq.texas.gov/LocationMapper/?marker=-96.69027,33.263333&level=18</a>

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 McKinney City Hall, 222 North Tennessee Street, McKinney, in Collin County, Texas. The application, including any updates, and associated notices are available electronically at the following webpage: <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>.

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

It is available at <a href="https://www.tceq.texas.gov/permitting/wastewater/plain-language-summaries-and-public-notices">https://www.tceq.texas.gov/permitting/wastewater/plain-language-summaries-and-public-notices</a>.

**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="https://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 <a href="https://www.tceq.texas.gov/goto/cid">www.tceq.texas.gov/goto/cid</a>. 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 <a href="www.tceq.texas.gov/goto/comment">www.tceq.texas.gov/goto/comment</a>, 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 <a href="www.tceq.texas.gov/goto/pep">www.tceq.texas.gov/goto/pep</a>. Si desea información en Español, puede llamar al 1-800-687-4040.

Further information may also be obtained from HC McKinney 3, LLC and McKinney Ridge, LLC at the address stated above or by calling Mr. Matt Atkins, P.E., TNP, Inc, at 972-833-6872.

Issuance Date: September 30, 2025

### Comisión De Calidad Ambiental Del Estado De Texas



### **COMBINACION**

### AVISO DE RECEPCIÓN DE LA SOLICITUD Y INTENCIÓN DE OBTENER UN PERMISO DE CALIDAD DEL AGUA (NORI)

 $\mathbf{Y}$ 

### AVISO DE SOLICITUD Y DECISIÓN PRELIMINAR PARA PERMISO TPDES DE AGUAS RESIDUALES MUNICIPALES

#### **NUEVO**

### PERMISO NO. WQ0016550001

**SOLICITUD Y DECISIÓN PRELIMINAR.** HC McKinney 3, LLC y McKinney Ridge, LLC, 8200 Douglas Avenue, Suite 300, Dallas, Texas 75225, ha solicitado a la Comision De Calidad Ambiental del Estado De Texas (TCEQ) un nuevo Permiso del Sistema de Eliminación de Descargas de Contaminantes de Texas (TPDES) No. WQ0016550001, para autorizar la descarga de aguas residuales domésticas tratadas con un flujo promedio diario que no exceda los 750,000 galones por día. La TCEQ recibió esta solicitud el 28 de mayo de 2024.

### Este aviso combinado se emite para cambiar el flujo final respecto al que se indicó en el NORI.

La facilidad estará ubicada aproximadamente a 2,300 pies al noreste de la intersección del County Road 165 y Farm-to-Market Road 1461, en el condado de Collin, Texas 75071. El efluente tratado será descargado a un afluente sin nombre, luego al embalse del Sitio 16 del Servicio de Conservación de Suelos, después a otro afluente sin nombre, y de ahí al arroyo Honey Creek, posteriormente al ramal East Fork Trinity River arriba del Lake Lavon, y finalmente al Lake Lavon en el Segmento No. 0821 de la Trinity River Basin. Los usos del agua receptora no clasificada son: uso acuático limitado para el afluente sin nombre, uso acuático alto para el embalse del Sitio 16 del Servicio de Conservación de Suelos, y uso acuático intermedio para el arroyo Honey Creek. Los usos designados para el Segmento No. 0821 son recreación de contacto primario, suministro público de agua y uso acuático alto. De acuerdo con el Título 30 del Código Administrativo de Texas §307.5 y los Procedimientos de la TCEQ para Implementar los Estándares de Calidad del Agua Superficial de Texas (Junio de 2010), se realizó una revisión de antidegradación de las aguas receptoras. Una revisión de antidegradación de Nivel 1 ha determinado preliminarmente que los usos actuales de calidad del agua no se verán afectados por esta acción del permiso. Se mantendrán los criterios numéricos y narrativos para proteger los usos existentes. Una revisión de Nivel 2 ha determinado preliminarmente que no se espera una degradación significativa de la calidad del agua en el embalse del Sitio 16 del Servicio de Conservación de Suelos, identificado como de

uso acuático alto, ni en el arroyo Honey Creek, identificado como de uso acuático intermedio. Los usos existentes se mantendrán y protegerán. La determinación preliminar puede ser reevaluada y modificada si se recibe nueva información. Este enlace a un mapa electrónico del sitio o de la ubicación general de la instalación se proporciona como una cortesía pública y no forma parte de la solicitud ni del aviso. Para conocer la ubicación exacta, consulte la solicitud.

https://gisweb.tceq.texas.gov/LocationMapper/?marker=- 96.69027,33.263333&level=18

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 McKinney City Hall, 222 North Tennessee Street, McKinney, in Collin 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>.

**ALTERNATIVE LANGUAGE NOTICE.** Alternative language notice in Spanish is available at <a href="https://www.tceq.texas.gov/permitting/wastewater/plain-language-summaries-and-public-notices">https://www.tceq.texas.gov/permitting/wastewater/plain-language-summaries-and-public-notices</a>. El aviso de idioma alternativo en español está disponible en <a href="https://www.tceq.texas.gov/permitting/wastewater/plain-language-summaries-and-public-notices">https://www.tceq.texas.gov/permitting/wastewater/plain-language-summaries-and-public-notices</a>.

**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 PARA UNA AUDIENCIA DE CASO IMPUGNADO. Después de la fecha límite para los comentarios públicos, el director ejecutivo considerará los comentarios y preparará una respuesta a todos los comentarios públicos relevantes y materiales, o significativos. La respuesta a los comentarios, junto con la decisión del director ejecutivo sobre la solicitud, se enviará por correo a todos los que enviaron comentarios públicos o que solicitaron estar en una 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 disputado 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.

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.

**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 petición a los Comisionados de la 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 para que esta solicitud reciba avisos públicos futuros enviadas 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. Para 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 la Office of the Chief Clerk, MC 105, TCEQ, P.O. Box 13087, Austin, TX 78711-3087 o electrónicamente a <a href="https://www14.tceq.texas.gov/epic/eComment/">https://www14.tceq.texas.gov/epic/eComment/</a> dentro de los 30 días a partir de la fecha de publicación de este aviso en el periódico.

**INFORMACIÓN DISPONIBLE EN LÍNEA.** Para obtener detalles sobre el estado de la solicitud, visite la Base de Datos Integrada de los Comisionados en <a href="www.tceq.texas.gov/goto/cid">www.tceq.texas.gov/goto/cid</a>. Busque en la base de datos utilizando el número de permiso para esta solicitud, que se proporciona en la parte superior de este aviso.

**CONTACTOS E INFORMACIÓN DE LA AGENCIA.** Los comentarios y solicitudes públicas deben enviarse electrónicamente a <a href="https://www14.tceq.texas.gov/epic/eComment/">https://www14.tceq.texas.gov/epic/eComment/</a>, o por escrito a la Comision De Calidad Ambiental Del Estado De Texas, Office of the Chief Clerk, MC-105, P.O. Box 13087, Austin, Texas 78711-3087. Cualquier información personal que envíe a al 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 la TCEQ, sin cargo, al 1-800-687-4040 o visite su sitio web en www.tceq.texas.gov/goto/pep. Si desea información en español, puede llamar al 1-800-687-4040.

También se puede obtener información adicional del HC McKinney 3, LLC y McKinney Ridge, LLC a la dirección indicada arriba o llamando a Mr. Matt Atkins, P.E., TNP, Inc, at 972-833-6872.

Fecha de emisión: el 30 de septiembre de 2025



May 1, 2024

Texas Commission on Environmental Quality Applications Review and Processing Team (MF 148) Building F, Room 2101 12100 Park 35 Circle Austin, Texas 78753

### RE: Discharge Permit for the Goodman Ranch Wastewater Treatment Plant

Dear Water Quality Team:

This letter serves to transmit the application for the Goodman Ranch Wastewater Treatment Plant. The permit application follows this letter within the following attachments:

Attachment A. Administrative Report 1.0

Attachment B. Administrative Report 1.1

Attachment C. SPIF

Attachment D. TCEQ Core Data Form

Attachment E. Domestic Technical Report 1.0

Attachment F. Domestic Technical Report 1.1

Attachment G. Domestic Technical Worksheet 2.0

Attachment H. Domestic Technical Worksheet 2.1

Attachment I. Original USGS Map

Attachment J. Affected Landowners Map

Attachment K. Landowner Labels

Attachment L. Buffer Zone Map

Attachment M. Process Flow Diagram

Attachment N. Site Drawing

Attachment O. Original Photographs and Plot Plan

Attachment P. Design Calculations and Plant Features

Attachment Q. Solids Management Plan

Attachment R. Windrose

Attachment S. Copy of EPAY Voucher

Attachment T. Plain Language Summery

Attachment U. Public Involvement Plan Form

If you have any questions regarding this project, please contact me at 972-833-6872 office, 214-641-2717 cell or by email: <a href="mailto:matkins@tnpinc.com">matkins@tnpinc.com</a>.

Sincerely, TNP, Inc. Texas Firm No. F-230

Matt Atkins , P.E. (Texas License No. 93968)

# Attachment A Administrative Report 1.0

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### TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

## DOMESTIC WASTEWATER PERMIT APPLICATION CHECKLIST

Complete and submit this checklist with the application.

APPLICANT NAME: Click to enter text.

PERMIT NUMBER (If new, leave blank): WQ00 Click to enter text.  Indicate if each of the following items is included in your application.							
	Y	N	,	Y	N		
Administrative Report 1.0	$\boxtimes$		Original USGS Map				
Administrative Report 1.1	$\boxtimes$		Affected Landowners Map	$\boxtimes$			
SPIF	$\boxtimes$		Landowner Disk or Labels	$\boxtimes$			
Core Data Form	$\boxtimes$		Buffer Zone Map	$\boxtimes$			
Public Involvement Plan Form	$\boxtimes$		Flow Diagram	$\boxtimes$			
Technical Report 1.0	$\boxtimes$		Site Drawing	$\boxtimes$			
Technical Report 1.1	$\boxtimes$		Original Photographs	$\boxtimes$			
Worksheet 2.0	$\boxtimes$		Design Calculations	$\boxtimes$			
Worksheet 2.1	$\boxtimes$		Solids Management Plan	$\boxtimes$			
Worksheet 3.0		$\boxtimes$	Water Balance		$\boxtimes$		
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		$\boxtimes$					
For TCEQ Use Only							
Segment NumberCounty Expiration DateRegion Permit Number							

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### 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 □

rayinciii iiiioriiiauoi	<b>Payment</b>	<b>Inform</b>	ation
-------------------------	----------------	---------------	-------

Mailed Check/Money Order Number: Click to enter text.

Check/Money Order Amount: Click to enter text.

Name Printed on Check: Click to enter text.

EPAY Voucher Number: 706231

Copy of Payment Voucher enclosed? Yes 

✓

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

a.	Che	heck the box next to the appropriate authorization type						
		Publicly-Owned Domestic Wastewater						
		Privately-Owned Domestic Wastewater						
	$\boxtimes$	Conventional Wastewater Treatment						
b.	Che	ck the box next to the appropriate facility status.						
		Active   Inactive						

c.	Che	eck the box next to the appropriate permit typ	e.			
	$\boxtimes$	TPDES Permit				
		TLAP				
		TPDES Permit with TLAP component				
		Subsurface Area Drip Dispersal System (SAD	DS)			
d.	Che	eck the box next to the appropriate application	ı typ	e		
	$\boxtimes$	New				
		Major Amendment <i>with</i> Renewal		Minor Amendment with Renewal		
		Major Amendment <i>without</i> Renewal		Minor Amendment without Renewal		
		Renewal without changes		Minor Modification of permit		
e.	For	amendments or modifications, describe the p	ropo	osed changes: <u>N/A</u>		
f.	For	existing permits:				
	Permit Number: WQ00 <u>N/A</u>					
	EPA	A I.D. (TPDES only): TX <u>N/A</u>				
	Exp	oiration Date: <u>N/A</u>				
Se	ectio	on 3. Facility Owner (Applicant) a	nd	Co-Applicant Information		
		(Instructions Page 26)				
A.	The	e owner of the facility must apply for the per	mit.			
	Wha	at is the Legal Name of the entity (applicant) a	pply	ing for this permit?		
	<u>HC</u>	McKinney 3, LLC				
		e legal name must be spelled exactly as filed w legal documents forming the entity.)	ith tì	he Texas Secretary of State, County, or in		
		he applicant is currently a customer with the T a may search for your CN on the TCEQ website				
		CN: <u>N/A</u>				
	Wha	at is the name and title of the person signing t	he a	pplication? The person must be an		

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

Prefix: Ms. Last Name, First Name: Blankenship, Sue

Title: <u>Authorizing Agent</u> Credential: Click to enter text.

**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?

### McKinney Ridge, LLC

(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: <a href="http://www15.tceq.texas.gov/crpub/">http://www15.tceq.texas.gov/crpub/</a>

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: Ms. Last Name, First Name: Blankenship, Sue

Title: <u>Authorizing Agent</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. Attachment D – TCEQ Core Data Form

### 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: Ms. Last Name, First Name: Blankenship, Sue

Title: Authorizing Agent Credential: Click to enter text.

Organization Name: HC McKinney 3, LLC

Mailing Address: 8200 Douglas Ave, Suite 300 City, State, Zip Code: Dallas, TX 75225

Phone No.: <u>972-860-3145</u> E-mail Address: <u>sblankenship@huffinescommunities.com</u>

Check one or both:

B. Prefix: Mr. Last Name, First Name: Atkins, Matt

Title: <u>Professional Engineer</u> Credential: <u>P.E.</u>

Organization Name: TNP, Inc

Mailing Address: 825 Watters Creek Blvd. Suite M300 City, State, Zip Code: Allen, TX 75013

Phone No.: 9728336872 E-mail Address: matkins@tnpinc.com

Check one or both: 

Administrative Contact

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: Ms. Last Name, First Name: Blankenship, Sue

Title: <u>Authorizing Agent</u> Credential: Click to enter text.

Organization Name: HC McKinney 3, LLC

Mailing Address: 8200 Douglas Ave, Suite 300 City, State, Zip Code: Dallas, TX 75225

Phone No.: <u>972-860-3144</u> E-mail Address: <u>sblankenship@huffinescommunities.com</u>

**B.** Prefix: Mr. Last Name, First Name: Jeff Winker

Title: Manager Credential: Click to enter text.

Organization Name: <u>HC McKinney 3, LLC</u>

Mailing Address: 8200 Douglas Ave, Suite 300 City, State, Zip Code: Dallas, TX 75225

Phone No.: <u>972-860-3144</u> E-mail Address: <u>jwinker@huffinescommunities.com</u>

### 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: Ms. Last Name, First Name: Blankenship, Sue

Title: <u>Authorizing Agent</u> Credential: Click to enter text.

Organization Name: HC McKinney 3, LLC

Mailing Address: <u>8200 Douglas Ave, Suite 300</u> City, State, Zip Code: <u>Dallas, TX 75225</u>

Phone No.: <u>972-860-3145</u> E-mail Address: <u>sblankenship@huffinescommunities.com</u>

### 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: Ms. Last Name, First Name: Blankenship, Sue

Title: <u>Authorizing Agent</u> Credential: Click to enter text.

Organization Name: HC McKinney 3, LLC

Mailing Address: 8200 Douglas Ave, Suite 300 City, State, Zip Code: Dallas, TX 75225

Phone No.: 972-860-3145 E-mail Address: sblankenship@huffinescommunities.com

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

### A. Individual Publishing the Notices

Prefix: Mr. Last Name, First Name: Atkins, Matt

Title: <u>Professional Engineer</u> Credential: <u>P.E.</u>

Organization Name: TNP, Inc

Mailing Address: 825 Watters Creek Blvd. Suite M300 City, State, Zip Code: Allen, TX 75013

Phone No.: <u>972-833-6872</u> E-mail Address: <u>matkins@tnpinc.com</u>

В.	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
	□ Fax
	⊠ Regular Mail
C.	Contact permit to be listed in the Notices
	Prefix: Mr. Last Name, First Name: Atkins, Matt
	Title: <u>Professional Engineer</u> Credential: <u>P.E.</u>
	Organization Name: <u>TNP, Inc</u>
	Mailing Address: <u>825 Watters Creek Blvd. Suite M300</u> City, State, Zip Code: <u>Allen, TX 75013</u>
	Phone No.: <u>972-833-6872</u> E-mail Address: <u>matkins@tnpinc.com</u>
D.	Public Viewing Information
	If the facility or outfall is located in more than one county, a public viewing place for each county must be provided.
	Public building name: City of McKinney City Hall
	Location within the building: Click to enter text.
	Physical Address of Building: <u>222 N Tennessee St</u>
	City: <u>McKinney</u> County: <u>Collin</u>
	Contact (Last Name, First Name): <u>Satariano, Anthony</u>
	Phone No.: <u>940-232-0958</u> Ext.: Click to enter text.
E.	Bilingual Notice Requirements
	This information <b>is required</b> for <b>new, major amendment, minor amendment or minor modification, and renewal</b> 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 <b>no.</b> publication of an alternative language notice is not required: <b>skip to</b> Section 9

2. Are the students who attend either the elementary school or the middle school enrolled in

a bilingual education program at that school?

No

below.

 $\boxtimes$ 

Yes

3.	Do the locatio		these	e schools attend a bilingual education program at another
		Yes	$\boxtimes$	No
4.				uired to provide a bilingual education program but the school ha rement under 19 TAC §89.1205(g)?
		Yes	$\boxtimes$	No
5.		-	_	<b>question 1, 2, 3, or 4</b> , public notices in an alternative language are ge is required by the bilingual program? <u>Spanish</u>
Pla	ain Lang	guage Summ	ary 7	Геmplate
Co	mplete	the Plain Laı	nguag	ge Summary (TCEQ Form 20972) and include as an attachment.
At	tachme	<b>nt:</b> <u>Attachme</u>	<u>nt: T</u>	
Pu	blic Inv	olvement P	lan F	orm
	-			ement Plan Form (TCEQ Form 20960) for each application for a
ne	w perm	it or major	amen	ndment to a permit and include as an attachment.
At	tachme	<b>nt:</b> <u>Attachme</u>	<u>nt: U</u>	
ct:	ion 9.	Dogulat	od I	Entity and Permitted Site Information (Instructions
CU	ion 9.	Page 29		Entity and Fermitted Site information (instructions
	the site is site. <b>R</b>	is currently		ated by TCEQ, provide the Regulated Entity Number (RN) issued t
				Registry at <a href="http://www15.tceq.texas.gov/crpub/">http://www15.tceq.texas.gov/crpub/</a> to determine if ed by TCEQ.
Na	me of p	roject or sit	e (the	e name known by the community where located):
Go	odman I	Ranch Wastev	vater '	<u>Treatment Plant</u>
Ov	vner of	treatment fa	cility	: HC McKinney 3, LLC
Ov	vnership	of Facility:		Public ⊠ Private □ Both □ Federal
Ov	vner of l	land where t	reatn	nent facility is or will be:
Pre	efix: <u>Ms.</u>	<u>.</u>		Last Name, First Name: <u>Blankenship, Sue</u>
Tit	le: <u>Auth</u>	<u>orizing Agent</u>	- <u>-</u>	Credential: Click to enter text.
Or	ganizati	ion Name: <u>H</u>	C Mcl	Kinney 3, LLC
Ma	ailing Ac	ldress: <u>8200</u>	Doug	glas Ave. Suite 300 City, State, Zip Code: <u>Dallas, TX 75225</u>
Ph	one No.	: 972-860-314	45	E-mail Address: <a href="mailto:sblankenship@huffinescommunities.com">sblankenship@huffinescommunities.com</a>
				same person as the facility owner or co-applicant, attach a lease d easement. See instructions.
	Attach	ment: <u>N/A</u>		

F.

G.

B.

C.

D.

	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 agreement or deed recorded ease	person as the facility owner or co-applicant, attach a lease ement. See instructions.
	Attachment: <u>N/A</u>	
F.	Owner sewage sludge disposal si property owned or controlled by	ite (if authorization is requested for sludge disposal on 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 agreement or deed recorded ease	person as the facility owner or co-applicant, attach a lease ement. See instructions.
	Attachment: N/A	
Se	ection 10. TPDES Dischar	ge Information (Instructions Page 31)
		ge Information (Instructions Page 31) lity location in the existing permit accurate?
	Is the wastewater treatment facil	
	Is the wastewater treatment facility in the wastewater facility in	lity location in the existing permit accurate?  on, please give an accurate description: is approximately 2,318 feet northeast from the intersection of
	Is the wastewater treatment facil	lity location in the existing permit accurate?  on, please give an accurate description: is approximately 2,318 feet northeast from the intersection of
A.	Is the wastewater treatment facility  Yes No  If no, or a new permit application The wastewater treatment facility is County Road 165 and Farm to Mar	lity location in the existing permit accurate?  on, please give an accurate description: is approximately 2,318 feet northeast from the intersection of
A.	Is the wastewater treatment facility  Yes No  If no, or a new permit application The wastewater treatment facility is County Road 165 and Farm to Mar	lity location in the existing permit accurate?  on, please give an accurate description: is approximately 2,318 feet northeast from the intersection of eket Road 1461 in Collin County.
A.	Is the wastewater treatment facility  ☐ Yes ☐ No  If no, or a new permit application The wastewater treatment facility is County Road 165 and Farm to Mar  Are the point(s) of discharge and ☐ Yes ☐ No	lity location in the existing permit accurate?  on, please give an accurate description: is approximately 2,318 feet northeast from the intersection of eket Road 1461 in Collin County.
A.	Is the wastewater treatment facility in the wastewater treatment facility in the wastewater treatment facility in County Road 165 and Farm to Mark Are the point(s) of discharge and □ Yes ☑ No  If no, or a new or amendment proport of discharge and the discharge in the control of the county Road in the discharge in the control of the county Road in the discharge and the discharge in the county Road in the discharge in the county Road in the county	lity location in the existing permit accurate?  on, please give an accurate description: is approximately 2,318 feet northeast from the intersection of ket Road 1461 in Collin County.  If the discharge route(s) in the existing permit correct?
A.	Is the wastewater treatment facility in the wastewater treatment facility in the wastewater treatment facility in County Road 165 and Farm to Mark Are the point(s) of discharge and □ Yes □ No  If no, or a new or amendment proportion of discharge and the discharge and the discharge 307:	lity location in the existing permit accurate?  on, please give an accurate description: is approximately 2,318 feet northeast from the intersection of elect Road 1461 in Collin County.  If the discharge route(s) in the existing permit correct?  oermit application, provide an accurate description of the arge route to the nearest classified segment as defined in 30
A.	Is the wastewater treatment facility in the wastewater treatment facility in the wastewater treatment facility in County Road 165 and Farm to Mark Are the point(s) of discharge and □ Yes □ No  If no, or a new or amendment proportion of discharge and the discharge and the discharge 307:	lity location in the existing permit accurate?  on, please give an accurate description: is approximately 2,318 feet northeast from the intersection of elect Road 1461 in Collin County.  If the discharge route(s) in the existing permit correct?  oermit application, provide an accurate description of the arge route to the nearest classified segment as defined in 30 lately 2,717 feet northeast of the intersection of County Road 168
A.	Is the wastewater treatment facility in the county Road 165 and Farm to Mark Are the point(s) of discharge and Farm to Mark In the point (s) of discharge and the discharge in the discharge in the point of discharge is approximated and County Road 165 in Collin County Road 1	lity location in the existing permit accurate?  on, please give an accurate description: is approximately 2,318 feet northeast from the intersection of elect Road 1461 in Collin County.  If the discharge route(s) in the existing permit correct?  permit application, provide an accurate description of the arge route to the nearest classified segment as defined in 30  nately 2,717 feet northeast of the intersection of County Road 168 nty.
A.	Is the wastewater treatment facility in the was	lity location in the existing permit accurate?  on, please give an accurate description: is approximately 2,318 feet northeast from the intersection of elect Road 1461 in Collin County.  If the discharge route(s) in the existing permit correct?  permit application, provide an accurate description of the arge route to the nearest classified segment as defined in 30  lately 2,717 feet northeast of the intersection of County Road 168 linty.  CMcKinney
A.	Is the wastewater treatment facility in the county Road 165 and Farm to Mark Are the point(s) of discharge and Farm to Mark In the point (s) of discharge and the discharge in the discharge in the point of discharge is approximated and County Road 165 in Collin County Road 1	lity location in the existing permit accurate?  on, please give an accurate description: is approximately 2,318 feet northeast from the intersection of elect Road 1461 in Collin County.  If the discharge route(s) in the existing permit correct?  permit application, provide an accurate description of the arge route to the nearest classified segment as defined in 30  lately 2,717 feet northeast of the intersection of County Road 168 linty.  CMcKinney
А.	Is the wastewater treatment facility in the county Road 165 and Farm to Mark Are the point(s) of discharge and Farm to Mark Are the point(s) of discharge and Farm to Mark Are the point(s) of discharge and the discharge in the discharge and the discharge and County Road 165 in Collin County Road 165 in Collin County Road 165 in Collin County in which the outfalls(s) is	lity location in the existing permit accurate?  on, please give an accurate description: is approximately 2,318 feet northeast from the intersection of elect Road 1461 in Collin County.  If the discharge route(s) in the existing permit correct?  output  ermit application, provide an accurate description of the arge route to the nearest classified segment as defined in 30  lately 2,717 feet northeast of the intersection of County Road 168 linty.  EMcKinney Sayare located: Collin County discharge to a city, county, or state highway right-of-way, or
А.	Is the wastewater treatment facility in the county Road 165 and Farm to Mark Are the point(s) of discharge and Farm to Mark Are the point(s) of discharge and Farm to Mark Are the point(s) of discharge and the discharge in the discharge and the discharge and the discharge is approximated County Road 165 in Collin County Road 165 in Collin County in which the outfalls(s) is Is or will the treated wastewater	lity location in the existing permit accurate?  on, please give an accurate description: is approximately 2,318 feet northeast from the intersection of elect Road 1461 in Collin County.  If the discharge route(s) in the existing permit correct?  output  ermit application, provide an accurate description of the arge route to the nearest classified segment as defined in 30  lately 2,717 feet northeast of the intersection of County Road 168 linty.  EMcKinney Sayare located: Collin County discharge to a city, county, or state highway right-of-way, or

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

	If <b>yes</b> , indicate by a check mark if:
	$\square$ Authorization granted $\square$ Authorization pending
	For <b>new and amendment</b> applications, provide copies of letters that show proof of contact and the approval letter upon receipt.
	Attachment: N/A
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: $\underline{N/A}$
0	
Se	ection 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 <b>no, or a new or amendment permit application</b> , provide an accurate description of the disposal site location:
	N/A
B.	City nearest the disposal site: $N/A$
C.	County in which the disposal site is located: $N/A$
D.	For <b>TLAPs</b> , describe the routing of effluent from the treatment facility to the disposal site:
	N/A
E.	For <b>TLAPs</b> , please identify the nearest watercourse to the disposal site to which rainfall
	runoff might flow if not contained: $N/A$
Se	ection 12. Miscellaneous Information (Instructions Page 32)
	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

	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: $\underline{\rm N/A}$
D.	Do you owe any fees to the TCEQ?
	□ Yes ⊠ No
	If <b>yes</b> , 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 <b>yes</b> , please provide the following information:
	Enforcement order number: <u>N/A</u>
	Amount past due: <u>N/A</u>
56	ection 13. Attachments (Instructions Page 33)
Inc	dicate 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.
	,
Ξ	located or the effluent disposal site are not owned by the applicant or co-applicant.
Ξ	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)
	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.

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

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

Permit Number: N/A

Applicant: HC McKinney 3, LLC

Certification:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering 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):	Sue	Blankenshi	p
----------------	--------	--------------	-----	------------	---

Signatory title: Authorizing Agent

Signature:	Min	(1B/	on asm)	Date:	5.61.24	
	(Use blue					

Subscribed and Sworn to before	me by the said	d <u>Authorized</u>	Agent
on this 22 d	day of	May	, 20 <u>_<b>24</b></u>
My commission expires on the_		y of <u>sugust</u>	, 20_ <b>26</b>

Shelle Julie Named Notary Public



[SEAL]

County, Texas

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

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

Permit Number: N/A

Applicant: McKinney Ridge, LLC

Certification:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering 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):	Sue	Blankenship	)
----------------	--------	----	-----------	-----	-------------	---

S. C. el. E. La

Signatory title: Authorizing Agent

Signature: //// // ////////////////////////////	10010	Date:	2016	_
(Use blue ink)				
Subscribed and Sworn to before	me by the said_	△ UTLORIES	ED BARNT	
on this 22 m		AY	, 20 <u><b>24</b></u> .	
My commission expires on the_	day	of <u>August</u>	, 20 <u></u> .	

<u>School</u> Julie Naved Notary Public REBECCA JULIE NORROD Notary ID #133906193 My Commission Expires August 12, 2026

[SEAL]

57171

County, Texas

# Attachment B Administrative Report 1.1

## 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)

<b>A.</b> Indicate by a check mark that the landowners map or drawing, with scale, includes th following information, as applicable:					
	$\boxtimes$	The applicant's property boundaries			
	$\boxtimes$	The facility site boundaries within the applicant's property boundaries			
	$\boxtimes$	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).)			
	$\boxtimes$	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 radius from the point of discharge if the point of discharge is into a lake, bor 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			
В.	⊠ addı	Indicate by a check mark that a separate list with the landowners' names and mailing resses cross-referenced to the landowner's map has been provided.			
C.	Indi	cate by a check mark in which format the landowners list is submitted:			
		☐ USB Drive ☐ Four sets of labels			
D.	Prov <u>Dist</u>	ride the source of the landowners' names and mailing addresses: <u>Collin County Appraisal</u> <u>rict</u>			
E.		equired by $Texas\ Water\ Code\ \S\ 5.115$ , is any permanent school fund land affected by application?			
		□ Yes ⊠ No			

	If <b>y</b> e land	es, provide the location and foreseeable impacts and effects this application has on the l(s):
	N/A	
Se	ctio	on 2. Original Photographs (Instructions Page 38)
		original ground level photographs. Indicate with checkmarks that the following ation is provided.
	$\boxtimes$	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
	$\boxtimes$	A plot plan or map showing the location and direction of each photograph
Se	ctio	on 3. Buffer Zone Map (Instructions Page 38)
	Buff info	Fer zone map. Provide a buffer zone map on $8.5 \times 11$ -inch paper with all of the following rmation. The applicant's property line and the buffer zone line may be distinguished by g dashes or symbols and appropriate labels.
	•	The required buffer zone; and Each treatment unit; and
В.		er zone compliance method. Indicate how the buffer zone requirements will be met.
		☑ Ownership
		Restrictive easement
		Nuisance odor control
		□ Variance
C.		uitable site characteristics. Does the facility comply with the requirements regarding uitable site characteristic found in 30 TAC § 309.13(a) through (d)?
	Ī	□ Yes ⊠ No

## 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: Attachment: C

### **ATTACHMENT 1**

### INDIVIDUAL INFORMATION

### Section 1. Individual Information (Instructions Page 41)

Complete this attachment if the facility applicant or co-applicant is an individual. Make additional copies of this attachment if both are individuals.

Prefix (Mr., Ms., Miss): Click to enter text.

Full legal name (Last Name, First Name, Middle Initial): Click to enter text.

Driver's License or State Identification Number: Click to enter text.

Date of Birth: Click to enter text.

Mailing Address: Click to enter text.

City, State, and Zip Code: Click to enter text.

Phone Number: Click to enter text. Fax Number: Click to enter text.

E-mail Address: Click to enter text.

CN: Click to enter text.

### For Commission Use Only:

**Customer Number:** 

**Regulated Entity Number:** 

Permit Number:

## 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.

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 Note: Form may be signed by applicant representative.)		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 fo	r mai	iling ad	⊠ Idress	Yes
7.5 Minute USGS Quadrangle Topographic Map Attached (Full-size map if seeking "New" permit. 8 ½ x 11 acceptable for Renewals and Amendments)				Yes
Current/Non-Expired, Executed Lease Agreement or Easement	$\boxtimes$	N/A		Yes
Landowners Map (See instructions for landowner requirements)		N/A	$\boxtimes$	Yes
<ul> <li>Things to Know:</li> <li>All the items shown on the map must be labeled.</li> <li>The applicant's complete property boundaries must be do boundaries of contiguous property owned by the applicant.</li> <li>The applicant cannot be its own adjacent landowner. You landowners immediately adjacent to their property, regard from the actual facility.</li> <li>If the applicant's property is adjacent to a road, creek, or on the opposite side must be identified. Although the property applicant's property boundary, they are considered potent if the adjacent road is a divided highway as identified on map, the applicant does not have to identify the landown the highway.</li> </ul>	nt. mus dless strea perti itially the U	t idention of how m, the es are a affectors	ify the value of the second se	e they are owners djacent to idowners. aphic
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		Yes
Original signature per 30 TAC § 305.44 – Blue Ink Preferred (If signature page is not signed by an elected official or principle exe	cutive	e office	×,	Yes

*a copy of signature authority/delegation letter must be attached)* 

Plain Language Summary

Yes

## Attachment C SPIF

# 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 AmendmentMinor 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 b 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

	answer	specific questions about the property.
	Prefix (	(Mr., Ms., Miss): <u>Ms.</u>
	First aı	nd Last Name: <u>Sue Blankenship</u>
	Creder	ntial (P.E, P.G., Ph.D., etc.): Week here to enter text
	Title: A	authorizing Agent
	Mailing	g Address: <u>8200 Douglas Ave, Suite 300</u>
	City, St	tate, Zip Code: <u>Dallas, TX 75225</u>
	Phone	No.: <u>972-860-3145</u> Ext.: Fax No.:
	E-mail	Address: sblankenship@huffinescommunities.com
2.	List the	e county in which the facility is located: <u>Collin</u>
3.	please	property is publicly owned and the owner is different than the permittee/applicant, list the owner of the property.
	N/A	
4.		e a description of the effluent discharge route. The discharge route must follow the flow
		ent from the point of discharge to the nearest major watercourse (from the point of rge to a classified segment as defined in 30 TAC Chapter 307). If known, please identify
		ssified segment number.
	Honey	Creek Tributary 14 feeds into a SCS 8h Reservoir (Unnamed).
5.	Please	provide a separate 7.5-minute USGS quadrangle map with the project boundaries
	plotted	l and a general location map showing the project area. Please highlight the discharge
		rom the point of discharge for a distance of one mile downstream. (This map is ed in addition to the map in the administrative report).
	Provide	e original photographs of any structures 50 years or older on the property.
	Does y	our 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
	$\boxtimes$	Additional phases of development that are planned for the future
		Sealing caves, fractures, sinkholes, other karst features

Provide the name, address, phone and fax number of an individual that can be contacted to

		Disturbance of vegetation or wetlands
1.	of caves	posed construction impact (surface acres to be impacted, depth of excavation, sealing s, or other karst features):
		nstruction impact ultimately affects 7.3 acre of mostly surface disturbance with an aimate maximum depth of excavation of 30 feet.
2.		e existing disturbances, vegetation, and land use:
	None.	
		WING ITEMS APPLY ONLY TO APPLICATIONS FOR NEW TPDES PERMITS AND MAJOR NTS TO TPDES PERMITS
3.		struction dates of all buildings and structures on the property:
	None e	xisting.
4.	Provide	a brief history of the property, and name of the architect/builder, if known.
	Not kn	

# Attachment D TCEQ Core Data Form



## **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	r Submissi	on (If other is checked	please describe	in space pr	rovided.)						
New Perr	nit, Registra	ation or Authorization	(Core Data Form	should be	submitted	with the prog	gram application.)				
Renewal	(Core Data	Form should be submi	tted with the rer	newal form)	)		Other				
2. Customer	Reference	Number (if issued)	_	Follow this I		CII	3. Regulated Entity Reference Number (if issued)				
CN					Registry**	RN					
ECTIO	N II:	Customer	Inform	ation	<u>1</u>						
4. General Cu	ustomer Ir	nformation	5. Effective I	Date for Cu	ustomer I	nformation	Updates (mm/dd,	/уууу)			
New Custon	mer		pdate to Custon	ner Informa	ation	☐ Cha	nge in Regulated En	tity Own	ership		
Change in L	egal Name	(Verifiable with the Tex	kas Secretary of	State or Tex	xas Comptr	oller of Publi	c Accounts)		•		
The Custome	r Name su	ıbmitted here may l	be updated au	ıtomat <del>i</del> cal	lly based	on what is o	current and active	e with th	ne Texas Sec	retary of State	
(SOS) or Texa	s Comptro	oller of Public Accou	ints (CPA).								
6. Customer	Legal Nam	ne (If an individual, pri	nt last name firs	t: eg: Doe, J	John)		If new Customer,	enter pre	evious Custon	ner below:	
HC McKinney 3	3, LLC										
7. TX SOS/CP	A Filing N	umber	8. TX State T	<b>ax ID</b> (11 d	digits)		9. Federal Tax	ID	10. DUNS	Number (if	
804317168			32081967237				(9 digits)		applicable)		
00.017.100			02002307207								
							873734254				
11. Type of C	ustomer:		tion			☐ Indivi	dual	Partne	ership: 🔲 Ge	neral 🗌 Limited	
Government: [	City 🔲 (	County 🔲 Federal 🔲	Local State	Other		☐ Sole F	Proprietorship	Ot	her:		
12. Number	of Employ	ees					13. Independe	ntly Ow	ned and Op	erated?	
☑ 0-20 □	21-100	101-250 251-	500 🔲 501 a	and higher			Yes	☐ No			
14. Customer	<b>r Role</b> (Pro	posed or Actual) – as i	t relates to the F	Regulated E	ntity listed	on this form.	Please check one o	f the follo	wing		
⊠Owner □		Operator	_	ner & Opera			☐ Other	•			
Occupation	al Licensee	Responsible Pa	rty ∐ V	CP/BSA App	plicant		_				
15. Mailing	8200 Doi	uglas Ave. Suite 300									
Address:											
Address.	City	Dallas		State	TX	ZIP	75225		ZIP + 4	0015	
16. Country I	Mailing In	formation (if outside	USA)		1	L7. E-Mail A	ddress (if applicab	le)			
					S	blankenship(	@huffinescommuni	ties.com			
18. Telephon	e Number	•	19	9. Extensio	on or Cod	e	20. Fax N	Number	(if applicable	)	

TCEQ-10400 (11/22) Page 1 of 3

( 972 ) 860-3145		( ) -
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### **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 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 Name (Enter name of the site where the regulated action is taking place.)											
Goodman Ranch Wastewater Treatment Plant											
23. Street Address of the Regulated Entity:											
(No PO Boxes)	City		State		ZIP			ZIP + 4			
24. County											
		If no Stre	et Address is provide	ed, fields 25	5-28 are req	uired.					
25. Description to		rater treatment fa d 1461 in Collin C	acility is approximately 2 County.	2,318 feet no	rtheast from	the inters	ection of Cou	nty Road 16	55 and Farm to		
Physical Location:	The discharg	ge point is approx	ximately 2,717 feet nort	heast of the	intersection	of County	Road 168 and	d County Ro	ad 165 in Collin		
26. Nearest City State Nearest ZIP Code											
McKinney TX 75071											
McKinney  Latitude/Longitude are re used to supply coordinate	-	-					coding of th				
Latitude/Longitude are re	es where no	-		ccuracy).		ds. (Geo			Address may be		
Latitude/Longitude are reused to supply coordinate  27. Latitude (N) In Decima	al: Minutes	33.263268	provided or to gain ac	ccuracy).	ata Standar Ingitude (W	ds. (Geo	mal: Inutes	e Physical	Address may be  11  Seconds		
Latitude/Longitude are reused to supply coordinate  27. Latitude (N) In Decimal Degrees	es where no al: Minutes	33.263268	Seconds 47.7648	ccuracy). 28. Lo	ata Standar	ds. (Geo	mal: /linutes	-96.6902	Address may be  11  Seconds  24.7596		
Latitude/Longitude are reused to supply coordinate  27. Latitude (N) In Decima	Minutes  30.	33.263268	Seconds 47.7648  Code	28. Lo Degree	engitude (W	ds. (Geo	mal: /linutes	-96.6902	Address may be  11  Seconds  24.7596		
Latitude/Longitude are reused to supply coordinate  27. Latitude (N) In Decima  Degrees  33  29. Primary SIC Code	Minutes  30.	33.263268  15  Secondary SIC	Seconds 47.7648  Code	28. Lo Degree 31. Primary	engitude (W	ds. (Geo	mal: //inutes 41 32. Secon	-96.6902	Address may be  11  Seconds  24.7596		
Latitude/Longitude are reused to supply coordinate  27. Latitude (N) In Decima  Degrees  33  29. Primary SIC Code  (4 digits)	Minutes  30. (4 d	33.263268  15  Secondary SIC  ligits)	Seconds 47.7648  Code	28. Lo Degree 31. Primary (5 or 6 digits	engitude (Wess 96 y NAICS Coc	ds. (Geo	mal: //inutes 41 32. Secon	-96.6902	Address may be  11  Seconds  24.7596		
Latitude/Longitude are reused to supply coordinate  27. Latitude (N) In Decima  Degrees  33  29. Primary SIC Code  (4 digits)	Minutes  30. (4 d	33.263268  15  Secondary SIC  ligits)	Seconds 47.7648  Code	28. Lo Degree 31. Primary (5 or 6 digits	engitude (Wess 96 y NAICS Coc	ds. (Geo	mal: //inutes 41 32. Secon	-96.6902	Address may be  11  Seconds  24.7596		
Latitude/Longitude are reused to supply coordinate  27. Latitude (N) In Decima  Degrees  33  29. Primary SIC Code  (4 digits)  4952  33. What is the Primary B  Municipal Water Treatment	Minutes  30. (4 d	33.263268  15  Secondary SIC ligits)	Seconds 47.7648  Code	28. Lo Degree 31. Primary (5 or 6 digits	engitude (Wess 96 y NAICS Coc	ds. (Geo	mal: //inutes 41 32. Secon	-96.6902	Address may be  11  Seconds  24.7596		
Latitude/Longitude are reused to supply coordinate  27. Latitude (N) In Decima  Degrees  33  29. Primary SIC Code  (4 digits)  4952  33. What is the Primary B	Minutes  30. (4 d	33.263268  15  Secondary SIC ligits)	Seconds 47.7648  Code	28. Lo Degree 31. Primary (5 or 6 digits	engitude (Wess 96 y NAICS Coc	ds. (Geo	mal: //inutes 41 32. Secon	-96.6902	Address may be  11  Seconds  24.7596		
Latitude/Longitude are reused to supply coordinate  27. Latitude (N) In Decima  Degrees  33  29. Primary SIC Code  (4 digits)  4952  33. What is the Primary B  Municipal Water Treatment  34. Mailing	Minutes  30. (4 d	33.263268  15  Secondary SIC ligits)	Seconds 47.7648  Code	28. Lo Degree 31. Primary (5 or 6 digits	engitude (Wess 96 y NAICS Coc	ds. (Geo	mal: //inutes 41 32. Secon	-96.6902	Address may be  11  Seconds  24.7596		
Latitude/Longitude are reused to supply coordinate  27. Latitude (N) In Decima  Degrees  33  29. Primary SIC Code  (4 digits)  4952  33. What is the Primary B  Municipal Water Treatment  34. Mailing	Minutes  30. (4 d  800 Dougl  Suite 300  City	33.263268  15  Secondary SIC ligits)  this entity? (D	Seconds 47.7648  Code	28. Lo  Degree  31. Primary (5 or 6 digits 221320  NAICS descrip	grata Standar  Ingitude (W  96  97  98  99  99  90  90  90  90  90  90  90	l In Deci	mal: //inutes 41 32. Secon	-96.6902	Address may be  11  Seconds  24.7596  CS Code		
Latitude/Longitude are reused to supply coordinate  27. Latitude (N) In Decima  Degrees  33  29. Primary SIC Code  (4 digits)  4952  33. What is the Primary B  Municipal Water Treatment  34. Mailing  Address:	Minutes  30. (4 d  800 Dougl  Suite 300  City	33.263268  15  Secondary SIC ligits)  this entity? (D	Seconds 47.7648  Code  State	28. Lo  Degree  31. Primary (5 or 6 digits 221320  NAICS descrip	grata Standar  Ingitude (W  PS  96  V NAICS Coc  S)  Dition.)	rds. (Geod	mal: //inutes 41 32. Secon	e Physical  -96.6902  Indary NAIG  its)	Address may be  11  Seconds  24.7596  CS Code		

TCEQ-10400 (11/22) Page 2 of 3

☐ Dam Safety		Districts	Edwards Aquifer		Emissions Invento	ory Air	☐ Industrial Hazardous Waste
☐ Municipal Soli	Waste	New Source riew Air	OSSF		Petroleum Storag	e Tank	☐ PWS
Sludge		Storm Water	☐ Title V Air		] Tires		Used Oil
☐ Voluntary Clea	nup 🗵	Wastewater	☐ Wastewater Agric	ulture	] Water Rights		Other:
40. Name: M	latt Atkins		ormation	41. Title:	Professional Eng	jineer	
<b>42. Telephone Nu</b> ( 972 ) 833-6872	imber 43. E	ext./Code	44. Fax Number	45. E-Mail			
	pelow, I certify, to the	e best of my kno					e, and that I have signature authority ntified in field 39.
				Lab Tales	Authorized Age	ent	varanishovino del composito de
Company:	HC McKinney 3,	LLC		Job Title:	Authorized Ag		
Company: Name (In Print):	HC McKinney 3, Sue Blankenship			Job little:		one:	( 972 ) 860- <b>3145</b>

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.



## **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	Submissi	<b>on</b> (If other is checked	l please describe	ın space pro	ovided.)					
New Pern	nit, Registra	ation or Authorization	(Core Data Form	should be s	submitted w	ith the prog	gram application.)			
Renewal	Renewal (Core Data Form should be submitted with the renewal form)									
2. Customer Reference Number (if issued)  Follow this link to search for CN or RN numbers in					egulated Entity Reference Number (if issued)					
CN Central Registry** RN										
SECTIO	N II:	Customer	Inform	ation	<u>1</u>					
4. General Cu	4. General Customer Information 5. Effective Date for Customer Information Updates (mm/dd/yyyy)									
New Custor	☑ New Customer       ☐ Update to Customer Information       ☐ Change in Regulated Entity Ownership									
Change in Le	egal Name (	(Verifiable with the Tex						,	•	
(SOS) or Texa	s Comptro	oller of Public Accou	ints (CPA).			n what is o				
6. Customer	Legai Nam	ne (If an individual, pri	nt last name firsi	t: eg: Doe, J	ionn)		<u>If new Customer,</u>	enter pro	evious Custom	<u>ner below:</u>
McKinney Ridg	e, LLC									
7. TX SOS/CP	A Filing N	umber	8. TX State Ta	<b>ax ID</b> (11 di	igits)		9. Federal Tax	D		Number (if
0805539492			32094997825				(9 digits)		applicable)	
							770558360			
11. Type of C	ustomer:		tion			☐ Indivi	dual	Partne	ership: 🗌 Ger	neral 🗌 Limited
Government: [	City 🔲 (	County 🔲 Federal 🔲	Local State [	Other		Sole F	Proprietorship	Ot	her:	
12. Number o	of Employ	ees					13. Independe	ntly Ow	ned and Op	erated?
<b>□</b> 0-20 □ 2	21-100	101-250 251-	500 🔲 501 a	nd higher			Yes	☐ No		
14. Customer	Role (Pro	posed or Actual) – as i	t relates to the R	egulated Er	ntity listed o	n this form.	Please check one o	f the follo	owing	
⊠Owner ☐Occupationa	al Licensee	Operator Responsible Pa	_	ner & Opera CP/BSA App			Other			
	8200 Dou	uglas Ave. Suite 300								
15. Mailing										
Address:	City	Dallas		State	ТХ	ZIP	75225		ZIP + 4	0015
16. Country N	_	formation (if outside	USA)				ddress (if applicab	le)		
	G		,							
						ankensnip(	@huffinescommunit			
10 Tolophon	a Niumbar		10	Evtoncia	on or Codo		20 Fay N	lumbar	lif applicable	1

TCEQ-10400 (11/22) Page 1 of 3

( 972 ) 860-3145		( ) -
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### **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 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 Name (Enter name of the site where the regulated action is taking place.)											
Goodman Ranch Wastewater Treatment Plant											
23. Street Address of the Regulated Entity:											
(No PO Boxes)	City		State		ZIP			ZIP + 4			
24. County											
		If no Stre	et Address is provide	ed, fields 25	5-28 are req	uired.					
25. Description to		rater treatment fa d 1461 in Collin C	acility is approximately 2 County.	2,318 feet no	rtheast from	the inters	ection of Cou	nty Road 16	55 and Farm to		
Physical Location:	The discharg	ge point is approx	ximately 2,717 feet nort	heast of the	intersection	of County	Road 168 and	d County Ro	ad 165 in Collin		
26. Nearest City State Nearest ZIP Code											
McKinney TX 75071											
McKinney  Latitude/Longitude are re used to supply coordinate	-	-					coding of th				
Latitude/Longitude are re	es where no	-		ccuracy).		ds. (Geo			Address may be		
Latitude/Longitude are reused to supply coordinate  27. Latitude (N) In Decima	al: Minutes	33.263268	provided or to gain ac	ccuracy).	ata Standar Ingitude (W	ds. (Geo	mal: Inutes	e Physical	Address may be  11  Seconds		
Latitude/Longitude are reused to supply coordinate  27. Latitude (N) In Decimal Degrees	es where no al: Minutes	33.263268	Seconds 47.7648	ccuracy). 28. Lo	ata Standar	ds. (Geo	mal: /linutes	-96.6902	Address may be  11  Seconds  24.7596		
Latitude/Longitude are reused to supply coordinate  27. Latitude (N) In Decima	Minutes  30.	33.263268	Seconds 47.7648  Code	28. Lo Degree	engitude (W	ds. (Geo	mal: /linutes	-96.6902	Address may be  11  Seconds  24.7596		
Latitude/Longitude are reused to supply coordinate  27. Latitude (N) In Decima  Degrees  33  29. Primary SIC Code	Minutes  30.	33.263268  15  Secondary SIC	Seconds 47.7648  Code	28. Lo Degree 31. Primary	engitude (W	ds. (Geo	mal: //inutes 41 32. Secon	-96.6902	Address may be  11  Seconds  24.7596		
Latitude/Longitude are reused to supply coordinate  27. Latitude (N) In Decima  Degrees  33  29. Primary SIC Code  (4 digits)	Minutes  30. (4 d	33.263268  15  Secondary SIC  ligits)	Seconds 47.7648  Code	28. Lo Degree 31. Primary (5 or 6 digits	engitude (Wess 96 y NAICS Coc	ds. (Geo	mal: //inutes 41 32. Secon	-96.6902	Address may be  11  Seconds  24.7596		
Latitude/Longitude are reused to supply coordinate  27. Latitude (N) In Decima  Degrees  33  29. Primary SIC Code  (4 digits)	Minutes  30. (4 d	33.263268  15  Secondary SIC  ligits)	Seconds 47.7648  Code	28. Lo Degree 31. Primary (5 or 6 digits	engitude (Wess 96 y NAICS Coc	ds. (Geo	mal: //inutes 41 32. Secon	-96.6902	Address may be  11  Seconds  24.7596		
Latitude/Longitude are reused to supply coordinate  27. Latitude (N) In Decima  Degrees  33  29. Primary SIC Code  (4 digits)  4952  33. What is the Primary B  Municipal Water Treatment	Minutes  30. (4 d	33.263268  15  Secondary SIC ligits)	Seconds 47.7648  Code	28. Lo Degree 31. Primary (5 or 6 digits	engitude (Wess 96 y NAICS Coc	ds. (Geo	mal: //inutes 41 32. Secon	-96.6902	Address may be  11  Seconds  24.7596		
Latitude/Longitude are reused to supply coordinate  27. Latitude (N) In Decima  Degrees  33  29. Primary SIC Code  (4 digits)  4952  33. What is the Primary B	Minutes  30. (4 d	33.263268  15  Secondary SIC ligits)	Seconds 47.7648  Code	28. Lo Degree 31. Primary (5 or 6 digits	engitude (Wess 96 y NAICS Coc	ds. (Geo	mal: //inutes 41 32. Secon	-96.6902	Address may be  11  Seconds  24.7596		
Latitude/Longitude are reused to supply coordinate  27. Latitude (N) In Decima  Degrees  33  29. Primary SIC Code  (4 digits)  4952  33. What is the Primary B  Municipal Water Treatment  34. Mailing	Minutes  30. (4 d	33.263268  15  Secondary SIC ligits)	Seconds 47.7648  Code	28. Lo Degree 31. Primary (5 or 6 digits	engitude (Wess 96 y NAICS Coc	ds. (Geo	mal: //inutes 41 32. Secon	-96.6902	Address may be  11  Seconds  24.7596		
Latitude/Longitude are reused to supply coordinate  27. Latitude (N) In Decima  Degrees  33  29. Primary SIC Code  (4 digits)  4952  33. What is the Primary B  Municipal Water Treatment  34. Mailing	Minutes  30. (4 d  800 Dougl  Suite 300  City	33.263268  15  Secondary SIC ligits)  this entity? (D	Seconds 47.7648  Code	28. Lo  Degree  31. Primary (5 or 6 digits 221320  NAICS descrip	grata Standar  Ingitude (W  96  97  98  99  99  90  90  90  90  90  90  90	l In Deci	mal: //inutes 41 32. Secon	-96.6902	Address may be  11  Seconds  24.7596  CS Code		
Latitude/Longitude are reused to supply coordinate  27. Latitude (N) In Decima  Degrees  33  29. Primary SIC Code  (4 digits)  4952  33. What is the Primary B  Municipal Water Treatment  34. Mailing  Address:	Minutes  30. (4 d  800 Dougl  Suite 300  City	33.263268  15  Secondary SIC ligits)  this entity? (D	Seconds 47.7648  Code  State	28. Lo  Degree  31. Primary (5 or 6 digits 221320  NAICS descrip	grata Standar  Ingitude (W  PS  96  V NAICS Coc  S)  Dition.)	rds. (Geod	mal: //inutes 41 32. Secon	e Physical  -96.6902  Indary NAIG  its)	Address may be  11  Seconds  24.7596  CS Code		

TCEQ-10400 (11/22) Page 2 of 3

☐ Dam Safety		Districts	☐ Edwards Aquifer		Emissions Inventory Air	☐ Industrial Hazardous Wast
☐ Municipal Solid Waste		New Source Review Air	OSSF		Petroleum Storage Tank	PWS
Sludge		Storm Water	☐ Title V Air		] Tires	Used Oil
☐ Voluntary Clean	nup		☐ Wastewater Agriculture		Water Rights	Other:
		43. Ext./Code	44. Fax Number	45. E-Mai	Address	real of the part of the
X SWEETERS	mber		( ) -	matkins@t	npinc.com	
972 ) 833-6872 <b>ECTION</b> By my signature b	V: Au	Ithorized S	ignature wledge, that the inform	ation provided in		e, and that I have signature authoritentified in field 39.
972 ) 833-6872  ECTION  By my signature b submit this form or	V: Au	Ithorized S	ignature wledge, that the inform	ation provided in	this form is true and complete	e, and that I have signature authoritentified in field 39.
. By my signature b	V: Au	ithorized S  fy, to the best of my kno ne entity specified in Sec ey Ridge, LLC	ignature wledge, that the inform	ation provided in required for the	this form is true and complete updates to the ID numbers ide	e, and that I have signature authorit entified in field 39.

# Attachment E Domestic Technical Report 1.0

# THE TONMENTAL OUR THE

### 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>0.3</u> 2-Hr Peak Flow (MGD): <u>1.2</u>

Estimated construction start date: <u>12/2025</u> Estimated waste disposal start date: <u>06/2026</u>

#### **B.** Interim II Phase

Design Flow (MGD): <u>o.6</u> 2-Hr Peak Flow (MGD): <u>2.4</u>

Estimated construction start date: <u>N/A</u>
Estimated waste disposal start date: N/A

### C. Final Phase

Design Flow (MGD): <u>1.1</u> 2-Hr Peak Flow (MGD): <u>4.4</u>

Estimated construction start date: <u>N/A</u>
Estimated waste disposal start date: <u>N/A</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**.

Interim 1: Raw water will enter the headworks screen, split flow into 3 aeration basins, 2 clarifiers, 1 aerobic digester, chlorine contact basin, and then outfall. Solids will be pumped out of the aerobic digester and then trucked to a landfill. Interim 2: Raw water will enter the headworks screen, split flow into 5 aeration basins, 3 clarifiers, 2 aerobic digester, chlorine contact basin, and then outfall. Solids will be pumped out of both aerobic digesters and then trucked to a landfill. Final Phase: Raw water will enter the headworks screen, split flow into 8 aeration basins, 4 clarifiers, 3 aerobic digester, chlorine contact basin, and then outfall. Solids will be pumped out of all aerobic digesters and then trucked to a landfill.

#### **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)
Aeration Basin (Interim 1)	3	70' x 14' x 12'
Aeration Basin (Interim 2)	2	70' x 14' x 12'
Aeration basin (Final Phase)	3	70' x 14' x 12'
Clarifier (Interim 1)	2	45' ø x 12'
Clarifier (Interim 2)	1	45' ø x 12'
Clarifier (Final Phase)	1	45' ø x 12'
Aerobic Digester (Interim 1)	2	40' ø x 16'
Aerobic Digester (Interim 2)	1	40' ø x 16'
Aerobic Digester (Final Phase)	1	40' ø x 16'
Chlorine Contact Basin (Interim 1)	1	30' x 6' x 12'
Chlorine Contact Basin (Final Phase)	1	30' x 6' x 12'

### C. Process Flow Diagram

Provide flow diagrams for the existing facilities and **each** proposed phase of construction.

Attachment: Attachment M – Process Flow Diagram

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

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

• Latitude: 33d16'43.0932"

• Longitude: <u>-96d41'18.7044"</u>

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

• Latitude: N/A

• Longitude: N/A

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: Attachment N - Site Drawing

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

Goodman Ranch Wastewater Treatment Facility will serve 592.8 acres of single family, multi-
family, and commercial residents.

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
		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
<b>If yes</b> , does the existing permit contain a phase that has not been constructed <b>within five years</b> 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/	'A
Se	ction 5. Closure Plans (Instructions Page 45)
	ve any treatment units been taken out of service permanently, or will any units be taken of service in the next five years?
	□ Yes ⊠ No
If y	res, was a closure plan submitted to the TCEQ?
	□ Yes □ No
If y	res, provide a brief description of the closure and the date of plan approval.
N/	
Se	eatment units been taken out of service permanently, or will any units be taken been in the next five years?  No a closure plan submitted to the TCEQ?  No ide a brief description of the closure and the date of plan approval.  Permit Specific Requirements (Instructions Page 45) Ints with an existing permit, check the Other Requirements or Special of the permit.  The permit specifications been approved for the existing facilities and each proposed to the service of the permit in the next five years?  No
	applicants with an existing permit, check the Other Requirements or Special visions 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: Click to enter text.

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/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.
	Ownership
C.	Other actions required by the current permit
	Does the <i>Other Requirements</i> or <i>Special Provisions</i> 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
	<b>If yes</b> , provide information below on the status of any actions taken to meet the conditions of an <i>Other Requirement</i> or <i>Special Provision</i> .
	N/A
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?

2. Grit and grease processing

No

□ Yes ⊠

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

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

		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?
		□ Yes ⊠ No
		<b>If No</b> , 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.
		N/A
	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.	Sto	ormwater 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?

works and how it is separated or processed. Provide a flow diagram showing how grit

	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
	<b>If yes</b> , 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:
	N/A
4.	Existing coverage in individual permit
	Is your stormwater discharge currently permitted through this individual TPDES or TLAP permit?
	□ Yes ⊠ No
	<b>If yes</b> , 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 <b>.</b>	Zero stormwater discharge
	Do you intend to have no discharge of stormwater via use of evaporation or other means?
	□ Yes ⊠ No

No

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

### 6. Request for coverage in individual permit

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

discharges, (recommended), or obtaining coverage 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.

N/A			

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?

	If yes, attach sewage sludge solids management plan. See Example 5 of 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 $BOD_5$ concentration of the sludge, and the design $BOD_5$ 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
	<b>If yes to any of the above</b> , 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 BOD₅ concentration of the septic waste, and the
	design $BOD_5$ 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.
<i>3.</i>	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
	<b>If yes</b> , 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

changed since	e the fast permit act	11011.	
N/A			
<u> </u>			

other physical characteristic of the waste. Also note if this information has or has not

## 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					
Total Suspended Solids, mg/l					
Ammonia Nitrogen, mg/l					
Nitrate Nitrogen, mg/l					
Total Kjeldahl Nitrogen, mg/l					
Sulfate, mg/l					
Chloride, mg/l					
Total Phosphorus, mg/l					
pH, standard units					
Dissolved Oxygen*, mg/l					
Chlorine Residual, mg/l					
E.coli (CFU/100ml) freshwater					
Entercocci (CFU/100ml) saltwater					
Total Dissolved Solids, mg/l					
Electrical Conductivity, µmohs/cm, †					

Oil & Grease, mg/l			
Alkalinity (CaCO <sub>3</sub> )*, mg/l			

<sup>\*</sup>TPDES permits only †TLAP permits only

Table 1.0(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					
Total Dissolved Solids, mg/l					
pH, standard units					
Fluoride, mg/l					
Aluminum, mg/l					
Alkalinity (CaCO <sub>3</sub> ), mg/l					

### **Section 8.** Facility Operator (Instructions Page 50)

Facility Operator Name: TBD

Facility Operator's License Classification and Level: TBD

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

Che	ck all that apply. See instructions for guidance
$\boxtimes$	Design flow>= 1 MGD
	Serves >= 10,000 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)

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

Check all that apply. See instructions for guidance.

Biosolids end user - incinerator (onsite)

	11 /
$\boxtimes$	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: Click to enter text.

### 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
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.
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>Click to enter text.</u>

### D. Disposal site

Disposal site name: <u>Click to enter text.</u>

TCEQ permit or registration number: <u>Click to enter text.</u>
County where disposal site is located: <u>Click to enter text.</u>

### E. Transportation method

Method of transportation (truck, train, pipe, other): <u>Truck</u>

Name of the hauler: Click to enter text.

	Hauler registration number: Click to enter text.								
	Sludge	is tran	sport	ed as a:					
	Liqu	uid 🗆	se	emi-liquid 🗆	semi-solid	$\leq$	sol	id □	
Se	ction			it Authoriza ructions Page		wag	e Slu	dge D	Disposal
A.	Benefic	cial us	e auth	orization					
	Does the benefic			ermit include au	thorization fo	r lan	d appli	ication	of sewage sludge for
		Yes	⊠ N	lo					
	<b>If yes</b> , benefic			esting to contin	ue this author	izati	on to la	and app	oly sewage sludge for
		Yes	□ N	0					
		Form :							Use of Sewage Sludge instructions for
		Yes	□ N	0					
B.	Sludge	proce	ssing	authorization					
				ermit include au options?	thorization fo	r any	of the	follow	ring sludge processing,
	Sluc	dge Co	mpost	ting			Yes	$\boxtimes$	No
	Mar	keting	and I	Distribution of sl	udge		Yes	$\boxtimes$	No
	Sluc	dge Su	rface I	Disposal or Slud	ge Monofill		Yes	$\boxtimes$	No
	Ten	nporar	y stor	age in sludge lag	goons		Yes	$\boxtimes$	No
	author	ization	ı, is th		mestic Wastev	vatei	Perm	it Appl	sting to continue this ication: Sewage Sludge application?
		Yes	□ N	0					
Se	ction	11. \$	Sewa	ge Sludge La	goons (Ins	truc	ctions	S Page	2 53)
				de sewage sludg					
	□ Ye	s 🗵	No						
If y	es, con	nplete	the rei	mainder of this s	section. If no, <sub>]</sub>	proce	eed to S	Section	12.
Α.	Locatio	on info	rmati	on					

### A.

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: N/A

• USDA Natural Resources Conservation Service Soil Map:

Attachment: N/A

• Federal Emergency Management Map:

Attachment: N/A

• 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

oxdim None of the above

Attachment: N/A

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:

N/A

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

Total Nitrogen (=nitrate nitrogen + TKN), mg/kg: N/A

Phosphorus, mg/kg: <u>N/A</u>

Potassium, mg/kg: <u>N/A</u>

pH, standard units: N/A

Ammonia Nitrogen mg/kg: N/A

Arsenic: <u>N/A</u>

Cadmium: N/A

Chromium: <u>N/A</u>

Copper: <u>N/A</u>

Lead: N/A

Mercury: <u>N/A</u>
Molybdenum: <u>N/A</u>
Nickel: <u>N/A</u>
Selenium: <u>N/A</u>
Zinc: <u>N/A</u>
Total PCBs: <u>N/A</u>
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: $N/A$
Total dry tons stored in the lagoons(s) over the life of the unit: $N/A$
Liner information
Does the active/proposed sludge lagoon(s) have a liner with a maximum hydraulic conductivity of $1x10^{-7}$ cm/sec?
□ Yes ⊠ No
If yes, describe the liner below. Please note that a liner is required.
N/A
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: N/A

C.

D.

• Copy of the closure plan

Attachment: N/A

• Copy of deed recordation for the site

Attachment: N/A

• Size of the sludge lagoon(s) in surface acres and capacity in cubic feet and gallons

Attachment: N/A

	<ul> <li>Description of the method of controlling infiltration of groundwater and surface water from entering the site</li> </ul>
	Attachment: <u>N/A</u>
	<ul> <li>Procedures to prevent the occurrence of nuisance conditions</li> </ul>
	Attachment: <u>N/A</u>
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: N/A
Se	ection 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	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
	<b>If yes</b> 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:
  - o periodically inspected by the TCEQ; or
  - o 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
  - o 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:

Date: \_\_\_\_\_

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

Title: Click to enter tex	<u>.</u>
Signature:	

Printed Name: Click to enter text.

# Attachment F Domestic Technical Report 1.1

### 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.

A new wastewater treatment plant is needed to serve approximately 5,800 Residential units in a master-planned community consisting of single-, duplex- and multi-family units north and west of the city of McKinney, TX. Industry standard proposed flow from 30 TAC\$\$ 217.31(a)(3) were used to determine that a 1.1 MGD treatment plan would be needed assuming 2.5 people per residential unit and 75 gallons/person/day. The plan is planned for three phases: 0.3 MGD, 0.6 MGD, and 1.1 MGD.

### B. Regionalization of facilities

For additional guidance, please review <u>TCEQ's Regionalization Policy for Wastewater</u> Treatment<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	s not applicable.	Proceed to 1	Item 2 Utility	CCN
areas.					

Is any	portio	n of	the p	roposed	l service area located in an incorporated city
	Yes	$\boxtimes$	No		Not Applicable

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

If yes, attach correspondence from the city.

Attachment: N/A

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> https://www.tceq.texas.gov/permitting/wastewater/tceq-regionalization-for-wastewater

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: N/A 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 If ves, 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: N/A 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: N/A 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: 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 ves, provide organic loading information in Item A, Current Organic Loading Average Influent Organic Strength or BOD<sub>5</sub> Concentration in mg/l: N/A

### A. Current organic loading

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

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

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

N	I/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.

Table 1.1(1) - Design Organic Loading

Source	Total Average Flow (MGD)	Influent BOD5 Concentration (mg/l)
Municipality		
Subdivision	1.1 MGD	300
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	1.1 MGD	
AVERAGE BOD₅ from all sources		300

# 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: 15

Ammonia Nitrogen, mg/l: 3

Total Phosphorus, mg/l: N/A Dissolved Oxygen, mg/l: 4

Other: N/A

В.	merim ii Phase Design Efficient Quanty
	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: 4
	Other: <u>N/A</u>
C.	Final Phase Design Effluent Quality
	Biochemical Oxygen Demand (5-day), mg/l: 10
	Total Suspended Solids, mg/l: <u>15</u>
	Ammonia Nitrogen, mg/l: 3
	Total Phosphorus, mg/l: <u>N/A</u>
	Dissolved Oxygen, mg/l: 4
	Other: <u>N/A</u>
D.	Disinfection Method
	Identify the proposed method of disinfection.
	$\boxtimes$ Chlorine: <u>1</u> mg/l after <u>20</u> minutes detention time at peak flow
	Dechlorination process: Click to enter text.
	☐ Ultraviolet Light: Click to enter text. seconds contact time at peak flow
	Other: Click to enter text.
	other. <u>chek to effer text.</u>
Se	ection 4. Design Calculations (Instructions Page 59)
	tach design calculations and plant features for each proposed phase. Example 4 of the structions includes sample design calculations and plant features.
	Attachment: <u>Attachment P – Design Calculations</u>
Se	ection 5. Facility Site (Instructions Page 60)
	,
Α.	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

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   No   No   No   No   No   No   N		Provide the source(s) used to determine 100-year frequency flood plant.
Yes   No   If yes, has the applicant applied for a US Corps of Engineers 404 Dredge and Fill Permit?   Yes   No   No   No   No   No   No   Yes, provide the permit number: Click to enter text.   Yes   No   No   No   No   Yes, provide the approximate date you anticipate submitting your application to the Corps: Click to enter text.   No   No   No   No   No   No   No   N		FEMA Floodplain Maps
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: Click to enter text.  If no, provide the approximate date you anticipate submitting your application to the Corps: Click to enter text.  B. Wind rose Attach a wind rose: Attachment R – Wind Rose  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): 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): N/A		For a new or expansion of a facility, will a wetland or part of a wetland be filled?
Yes   No   If yes, provide the permit number: Click to enter text.   If no, provide the approximate date you anticipate submitting your application to the Corps: Click to enter text.    B. Wind rose   Attach a wind rose: Attachment R − Wind Rose    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): 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): N/A		□ Yes ⊠ No
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Attach a wind rose: Attachment R – Wind Rose  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?  Permit Permit Permit for Beneficial Land Use of Sewage Sludge (TCEQ Form No. 10451): 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): N/A		If no, provide the approximate date you anticipate submitting your application to the
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If yes, attach the completed Application for Permit for Beneficial Land Use of Sewage Sludge (TCEQ Form No. 10451): 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): N/A		on property located adjacent to the wastewater treatment facility under the wastewater
Sludge (TCEQ Form No. 10451): 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): N/A		□ Yes ⊠ No
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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): N/A	B.	Sludge processing authorization
☐ 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): N/A		, 0 1
□ 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): N/A		□ Sludge Composting
If any of the above, sludge options are selected, attach the completed <b>Domestic</b> Wastewater Permit Application: Sewage Sludge Technical Report (TCEQ Form No. 10056): $N/A$		☐ Marketing and Distribution of sludge
Wastewater Permit Application: Sewage Sludge Technical Report (TCEQ Form No. 10056): $\underline{\rm N/A}$		☐ Sludge Surface Disposal or Sludge Monofill
Section 7. Sewage Sludge Solids Management Plan (Instructions Page		Wastewater Permit Application: Sewage Sludge Technical Report (TCEQ Form No.
	Se	ection 7. Sewage Sludge Solids Management Plan (Instructions Page

## **61**)

Attach a solids management plan to the application.

Attachment: <u>Attachment Q – Solids Management Plan</u>

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.

# Attachment G Domestic Technical Worksheet 2.0

# 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 <b>no</b> , proceed it Section 2. <b>If yes</b> , provide the following:
Owner of the drinking water supply: $N/A$
Distance and direction to the intake: $N/A$
Attach a USGS map that identifies the location of the intake.
Attachment: N/A
Section 2. Discharge into Tidally Affected Waters (Instructions Page 64)
Does the facility discharge into tidally affected waters?
□ Yes ⊠ No
If <b>no</b> , proceed to Section 3. <b>If yes</b> , 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: $\underline{N/A}$
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).
Click to enter text.

# 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: Click to enter text. A. Receiving water type Identify the appropriate description of the receiving waters. $\boxtimes$ Stream Freshwater Swamp or Marsh Lake or Pond Surface area, in acres: Click to enter text. Average depth of the entire water body, in feet: Click to enter text. Average depth of water body within a 500-foot radius of discharge point, in feet: Click to enter text. Man-made Channel or Ditch Open Bay Tidal Stream, Bayou, or Marsh Other, specify: Click to enter text. **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). USGS flow records Historical observation by adjacent landowners $\boxtimes$ Personal observation Other, specify: Click to enter text.

		e names of all perennial streams t tream of the discharge point.	that joir	the receiving water within three miles
	Honey	Creek Tributary 14		
D.	Downs	stream characteristics		
	discha	rge (e.g., natural or man-made da	_	ithin three miles downstream of the ds, reservoirs, etc.)?
		Yes □ No		
	If yes,	discuss how.		
	Honey	Creek Tributary feeds into SCS 8H I	Reservoi	r (Unnamed)
E.	Provide	I dry weather characteristics e general observations of the wateream bed was dry with small pools of		during normal dry weather conditions. t water
	Date a	nd time of observation: <u>05/02/202</u>	24 5:00 l	<u>PM</u>
	Was th	e water body influenced by storm	ıwater r	unoff during observations?
		Yes 🗵 No		
Se	ection	5. General Characterist Page 66)	ics of	the Waterbody (Instructions
A.	Upstre	am influences		
		mmediate receiving water upstreated by any of the following? Chec		ne discharge or proposed discharge site at apply.
		Oil field activities		Urban runoff
		Upstream discharges		Agricultural runoff
		Septic tanks		Other(s), specify: Click to enter text.

C. Downstream perennial confluences

#### **B.** Waterbody uses Observed or evidences of the following uses. Check all that apply. Livestock watering Contact recreation Irrigation withdrawal Non-contact recreation Fishing **Navigation** Industrial water supply Domestic water supply Park activities Other(s), specify: Click to enter text. 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

Offensive: stream does not enhance aesthetics; cluttered; highly developed;

or turbid

dumping areas; water discolored

# Attachment H Domestic Technical Worksheet 2.1

# DOMESTIC WASTEWATER PERMIT APPLICATION WORKSHEET 2.1: STREAM PHYSICAL CHARACTERISTICS

Required for new applications, major facilities, and applications adding an outfall.

Worksheet 2.1 is not required for discharges to intermittent streams or discharges directly to (or within 300 feet of) a classified segment.

Section 1. General Information (Instructions Page 66)
Date of study: <u>05/02/2024</u> Time of study: <u>5:00 PM</u>
Stream name: <u>Honey Creek Tributary 14</u>
Location: Collin County
Type of stream upstream of existing discharge or downstream of proposed discharge (check one).
$\square$ Perennial $\boxtimes$ Intermittent with perennial pools
Section 2. Data Collection (Instructions Page 66)
Number of stream bends that are well defined: 4
Number of stream bends that are moderately defined: 2
Number of stream bends that are poorly defined: $\underline{1}$
Number of riffles: Click to enter text.
Evidence of flow fluctuations (check one):
□ Minor ⊠ moderate □ severe
Indicate the observed stream uses and if there is evidence of flow fluctuations or channel obstruction/modification.
Debris from heavy storm events can be seen on banks and surrounding stream areas.

#### Stream transects

In the table below, provide the following information for each transect downstream of the existing or proposed discharges. Use a separate row for each transect.

Table 2.1(1) - Stream Transect Records

Stream type at transect	Transect location	Water surface	Stream depths (ft)		
Select riffle, run, glide, or pool. See Instructions, Definitions section.		width (ft)	at 4 to 10 points along each transect from the channel bed to the water surface. Separate the measurements with commas.		
Pool	Outfall	1'	1/12,1/12,1/12,1/12		
Pool	Transect 2	4'	0,0,0,0		
Pool	Transect 3	4'-5'	3/12,2/12,2/12		
Pool	Transect 4	6'	2/12,3/12,1/12,4/12		
Choose an item.					
Choose an item.					
Choose an item.					
Choose an item.					
Choose an item.					
Choose an item.					

# Section 3. Summarize Measurements (Instructions Page 66)

Streambed slope of entire reach, from USGS map in feet/feet: 0.0013

Approximate drainage area above the most downstream transect (from USGS map or county highway map, in square miles): <u>1.41</u>

Length of stream evaluated, in feet: 1520

Number of lateral transects made: <u>4</u>
Average stream width, in feet: <u>11.4</u>
Average stream depth, in feet: .26

Average stream velocity, in feet/second: <u>0.5</u>

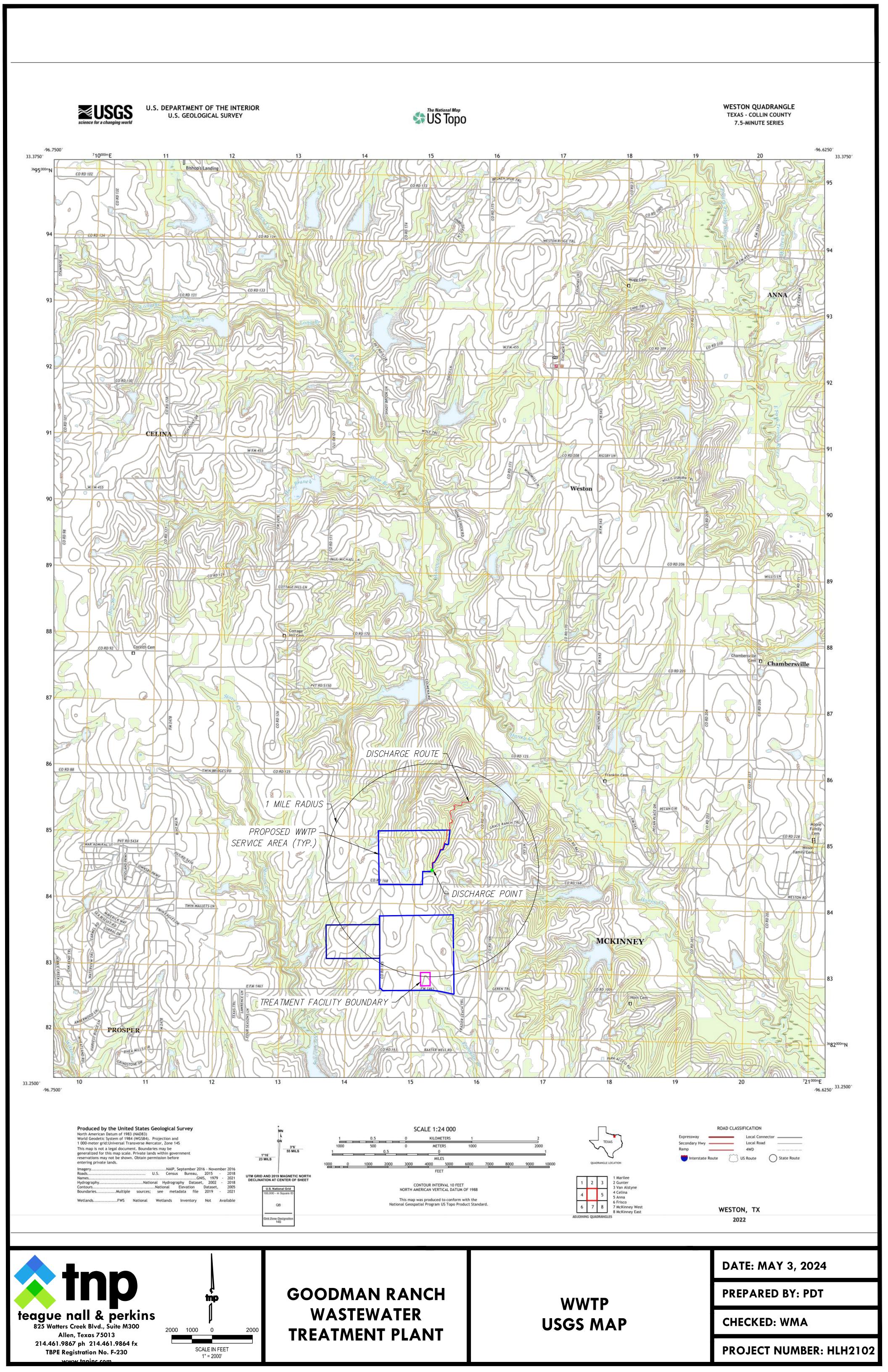
Instantaneous stream flow, in cubic feet/second: o

Indicate flow measurement method (type of meter, floating chip timed over a fixed distance, etc.): <u>Stagnant Water</u>

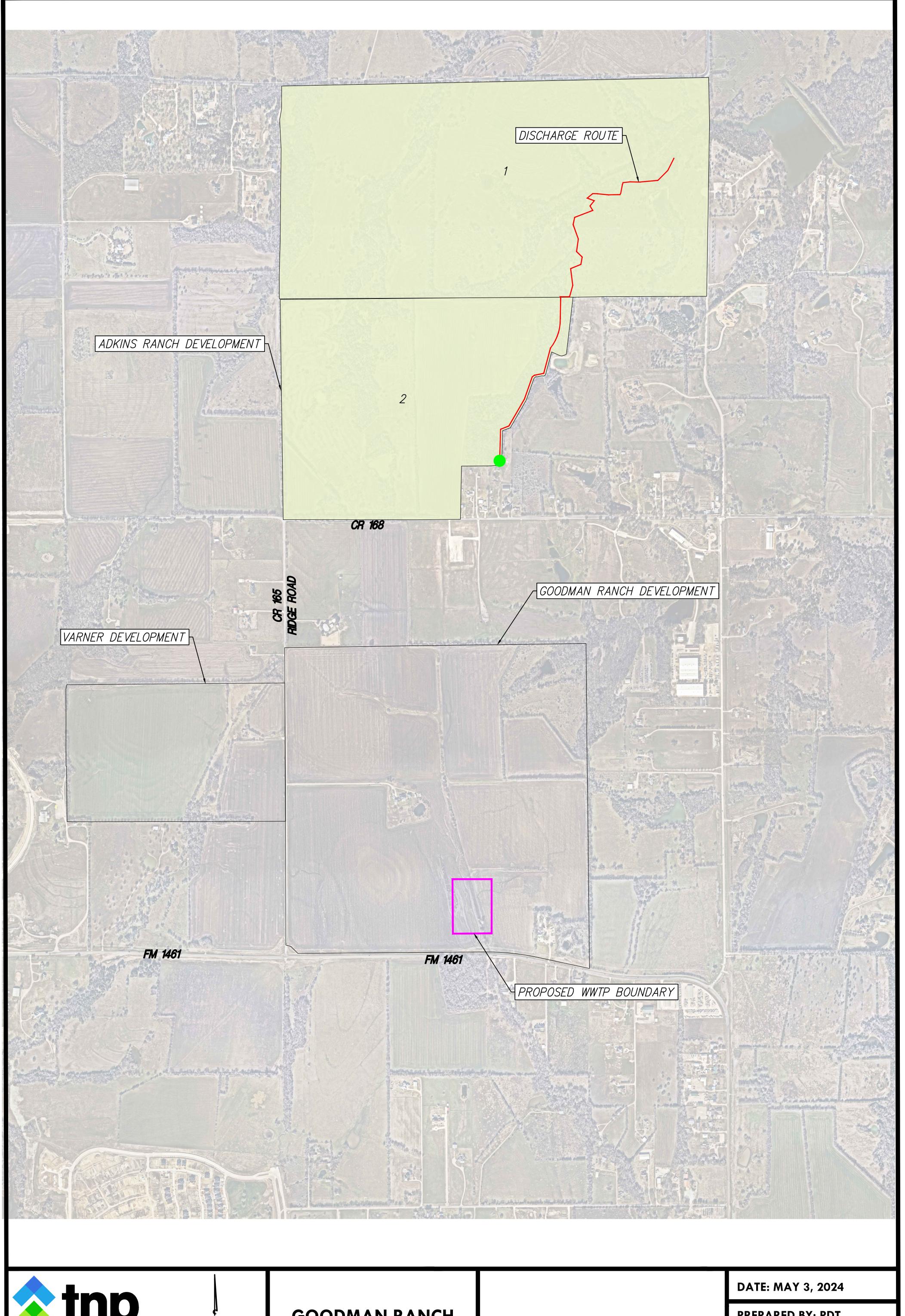
Size of pools (large, small, moderate, none): Moderate

Maximum pool depth, in feet: 2 ft

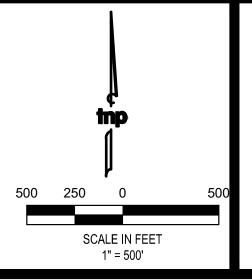
Attachment I
Original USGS Map
(Full Size)



# Attachment J Affected Landowners Map







**GOODMAN RANCH** WASTEWATER **TREATMENT PLANT** 

**AFFECTED LANDOWNERS MAP** 

PREPARED BY: PDT

**CHECKED: WMA** 

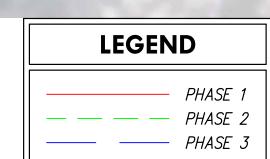
PROJECT NUMBER: HLH2102

Attachment K
Landowner Labels

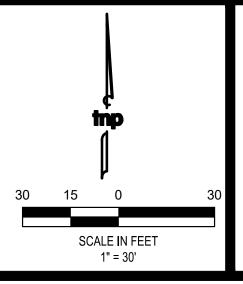
1. BFJ LAND LLC 12900 Preston Rd Ste 1117 Dallas, TX 75230-1383

2. BACK NINE PARTNERS LP 2525 Central Expy N Allen, TX 75013-6000 Attachment L
Buffer Zone Map









GOODMAN RANCH WASTEWATER TREATMENT PLANT

**BUFFER ZONE** 

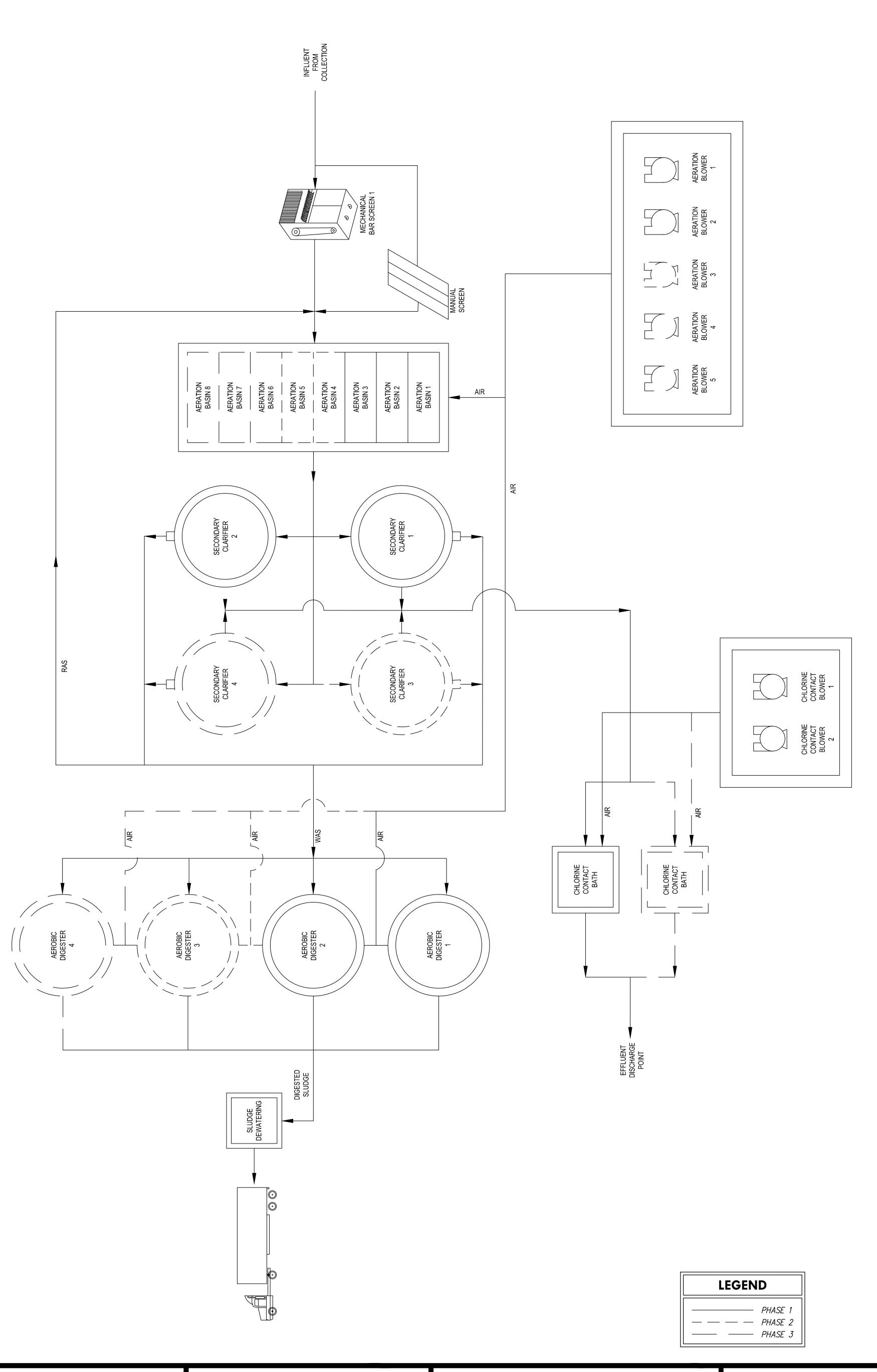
**DATE: MAY 3, 2024** 

PREPARED BY: PDT

CHECKED: WMA

PROJECT NUMBER: HLH2102

# Attachment M Process Flow Diagram





GOODMAN RANCH WASTEWATER TREATMENT PLANT

PROCESS FLOW DIAGRAM

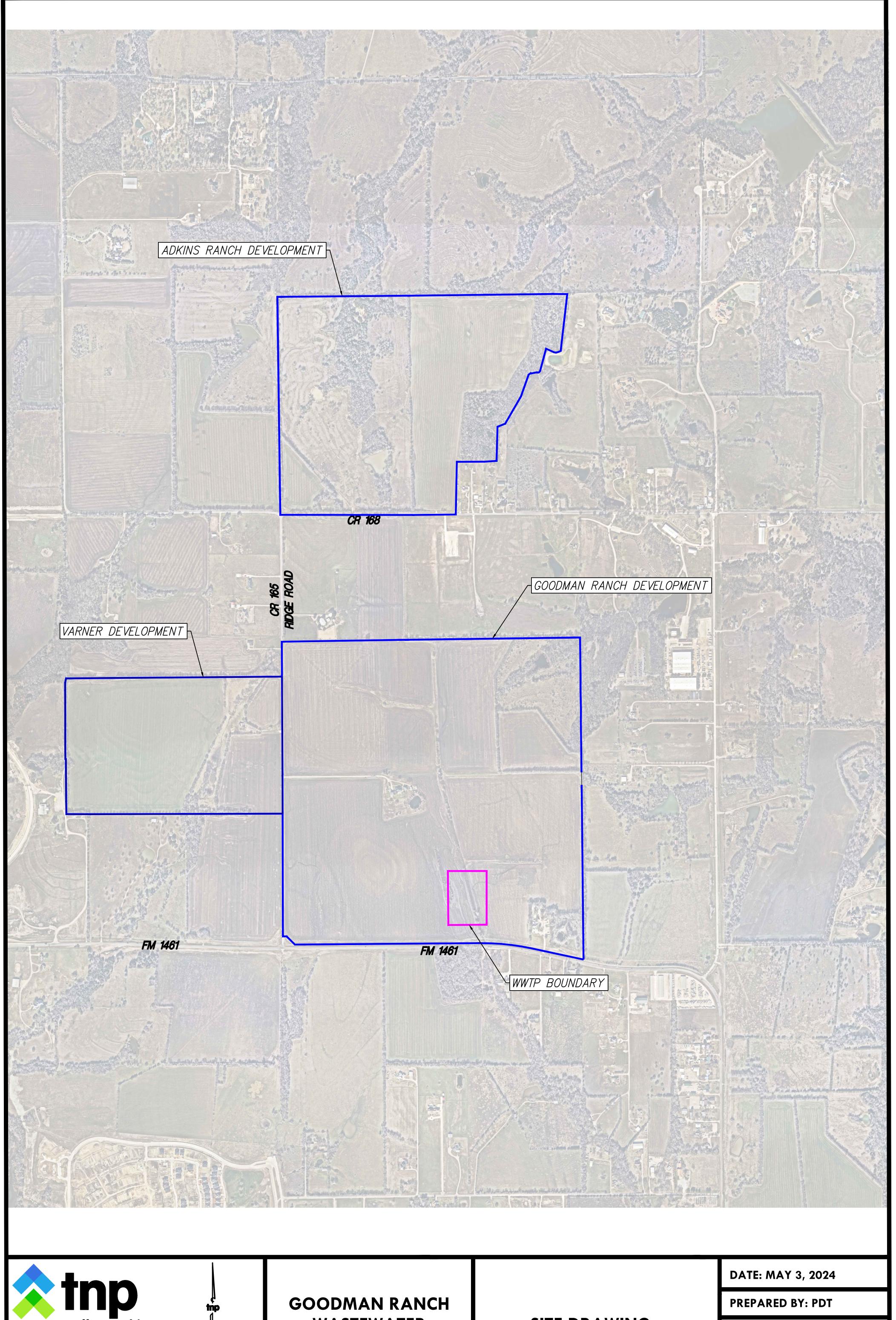
**DATE: MAY 3, 2024** 

PREPARED BY: PDT

CHECKED: WMA

PROJECT NUMBER: HLH2102

Attachment N
Site Drawing





**WASTEWATER TREATMENT PLANT** 

SITE DRAWING

**CHECKED: WMA** 

PROJECT NUMBER: HLH2102

Attachment O
Original Photographs



## Goodman Ranch Site Photos Photo 1: Outfall

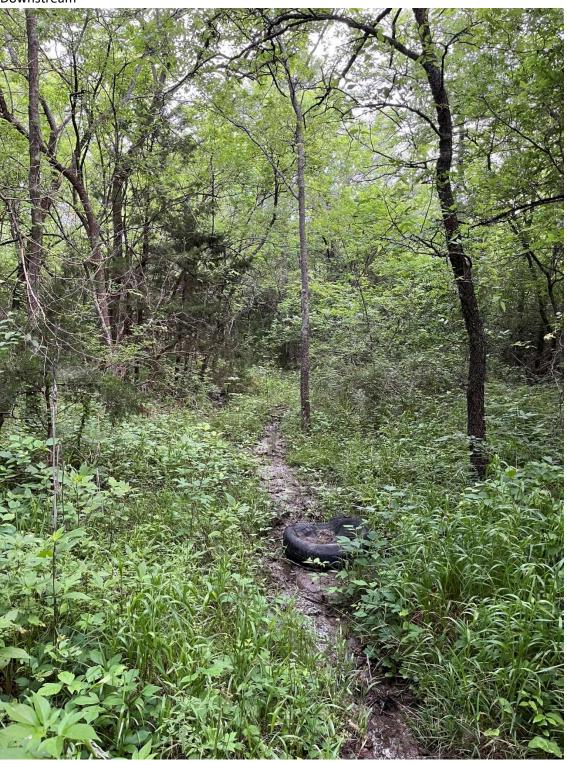
Upstream





## Goodman Ranch Site Photos Photo 1: Outfall

## Downstream





## Goodman Ranch Site Photos Photo 2: Transect 2

Upstream





## Goodman Ranch Site Photos Photo 2: Transect 2

Downstream





## Goodman Ranch Site Photos Photo 3: Transect 3

Upstream





## Goodman Ranch Site Photos Photo 3: Transect 3





## Goodman Ranch Site Photos Photo 4: Transect 4

Upstream





## Goodman Ranch Site Photos Photo 4: Transect 4

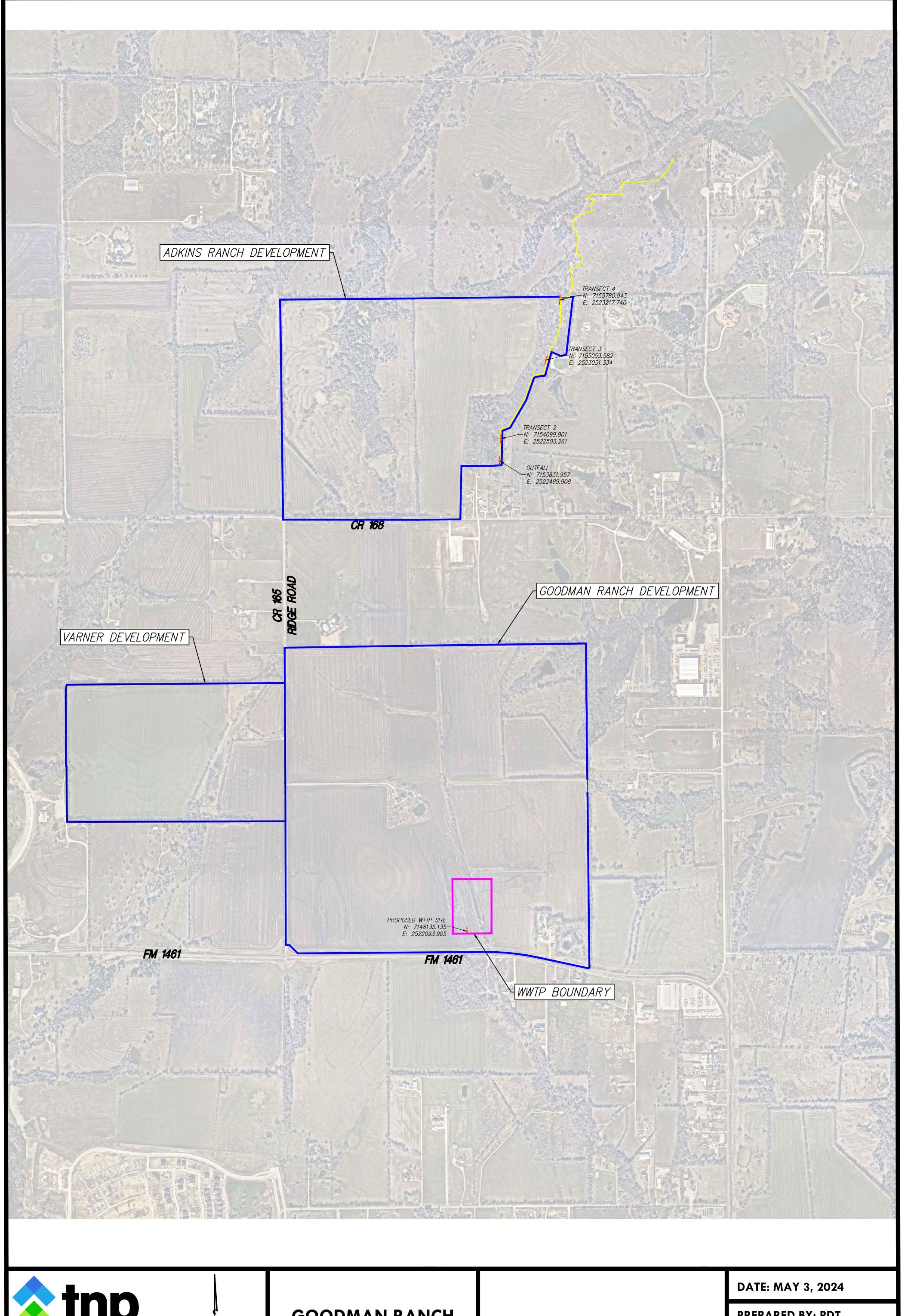
#### Downstream



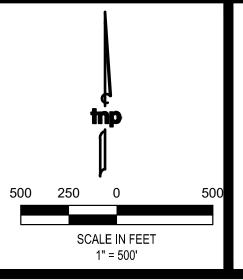


## Goodman Ranch Site Photos Photo 5: WWTP Site









**GOODMAN RANCH WASTEWATER TREATMENT PLANT** 

**STREAM MODEL EXHIBIT** 

PREPARED BY: PDT

**CHECKED: WMA** 

PROJECT NUMBER: HLH2102

Attachment P

Design Calculations

#### PHASE 1 DESIGN CALCULATIONS

#### RAS

\*Design to maintain MLSS concentration in aeration basin between 4,000 mg/L and 10,000 mg/L  $\,$ 

\*Calculate RAS rate by using a mass balance of the aeration  $\, tank \,$ 

MITHER DESIGN Flow Rate to Aeration Tank (Q <sub>1</sub> )	"Calculate RAS rate by using a mass balance of the aera		HAUT	FORMULA / REFERENCE	
Influent   Peak Flow Rate to Aeration Tank (Q Fpw)	Influent Design Flow Pate to Agration Tank (O.)			FORMULA / REFERENCE	
Return Activated Studge Suspended Solids (XA)   12,000 mg/L   Return Studge Studge Suspended Solids (KA)   12,000 mg/L   Return Studge Flow at Design Flow (RAS)   0.6 mGD   Q*x/(X <sub>x</sub> -X); M&E 5th Ed. Eq. 8-42   Return Studge Flow at Peak Flow (RAS)   0.6 mGD   Q*x/(X <sub>x</sub> -X); M&E 5th Ed. Eq. 8-42   Return Studge Flow at Peak Flow (RAS)   0.6 mGD   Q*x/(X <sub>x</sub> -X); M&E 5th Ed. Eq. 8-42   Return Studge Flow at Peak Flow (RAS)   0.6 mGD   Q*x/(X <sub>x</sub> -X); M&E 5th Ed. Eq. 8-42   Return Studge Flow at Peak Flow (RAS)   0.6 mGD   Q*x/(X <sub>x</sub> -X); M&E 5th Ed. Eq. 8-42   Return Studge Flow at Peak Flow (RAS)   0.6 mGD   Q*x/(X <sub>x</sub> -X); M&E 5th Ed. Eq. 8-42   Return Studge Flow at Peak Flow (RAS)   0.6 mGD   Q*x/(X <sub>x</sub> -X); M&E 5th Ed. Eq. 8-42   Return Studge Flow at Peak Flow (RAS)   0.6 mGD   Q*x/(X <sub>x</sub> -X); M&E 5th Ed. Eq. 8-42   Return Studge Flow at Peak Flow (RAS)   0.6 mGD   Q*x/(X <sub>x</sub> -X); M&E 5th Ed. Eq. 8-42   Return Studge Flow at Peak Flow (RAS)   0.6 mGD   Q*x/(X <sub>x</sub> -X); M&E 5th Ed. Eq. 8-42   Return Studge Flow at Peak Flow (RAS)   0.6 mGD   Q*x/(X <sub>x</sub> -X); M&E 5th Ed. Eq. 8-42   Return Studge Flow at Peak Flow (RAS)   0.6 mGD   Q*x/(X <sub>x</sub> -X); M&E 5th Ed. Eq. 8-42   Return Studge Flow at Peak Flow (RAS)   0.6 mGD   Q*x/(X <sub>x</sub> -X); M&E 5th Ed. Eq. 8-42   Return Studge Flow at Peak Flow (RAS)   0.6 mGD   Q*x/(X <sub>x</sub> -X); M&E 5th Ed. Eq. 8-42   Return Studge Flow (RAS)   0.6 mGD   Q*x/(X <sub>x</sub> -X); M&E 5th Ed. Eq. 8-42   Return Studge Flow (RAS)   0.6 mGD   Q*x/(X <sub>x</sub> -X); M&E 5th Ed. Eq. 8-42   Return Studge Flow (RAS)   0.6 mGD   Q*x/(X <sub>x</sub> -X); M&E 5th Ed. Eq. 8-42   Return Studge Flow (RAS)   0.6 mGD   Q*x/(X <sub>x</sub> -X); M&E 5th Ed. Eq. 8-42   Return Studge Flow (RAS)   0.6 mGD   Q*x/(X <sub>x</sub> -X); M&E 5th Ed. Eq. 8-42   Return Studge Flow (RAS)   0.6 mGD   Q*x/(X <sub>x</sub> -X); M&E 5th Ed. Eq. 8-42   Return Studge Flow (RAS)   0.6 mGD   Q*x/(X <sub>x</sub> -X); M&E 5th Ed. Eq. 8-42   Return Studge Flow (RAS)   0.6 mGD   Q*x/(X <sub>x</sub> -X); M&E 5th Ed. Eq. 8-42   Return Studge Flow (RAS)   0.6 mGD   Q*x/(X <sub>x</sub> -X); M&E 5th Ed. Eq. 8-42   Return Studge Flow (RAS)   0.6 mGD	-				
Return Studge Flow at Design Flow (RAS)					
Return Sludge Flow at Design Flow (RAS)   0.15   MGD   Q*V(V <sub>K</sub> -X); M&E 5th Ed. Eq. 8-42			=		
Return Sludge Flow at Peak Flow (RAS)   0.6   MGD   Q <sub>PEN</sub> *W(K <sub>Y</sub> X); M&E 5th Ed. Eq. 8-42			=		
Design Flow for Aeration Basins   0.45					
Design Flow for Aeration Basins         0.45         MGD open Studge Retention Time (θA)         0.45 (days)         QC + RAS (TCEQ £217.157(d)(2)(b) max is 25 days           Organic Loading Rate         35         tbBOD_/d1/1000th² TCEQ £217.154(b)(2) Fig 30 Conventional Activated           Required Minimum Volume         21,466         ft³         TCEQ £217.154(b)(2) Fig 30 Conventional Activated           Number of Aeration Basins to Add         3         ea         Aeration Basin Length         70         ft           Aeration Basin Width         14         ft         Typically between 10° and 30°           Total Provided Aeration Basin's Volume         35,280         ft³         Typically between 10° and 30°           Total Provided Aeration Basin's Side Water Depth         12         ft         Total ABVolume with Largest AB dut of Service (VR)         23,520         ft³           Aeration Basin in Service with Largest AB dut of Service (VR)         23,520         ft²         Tceq £217.155 (a)(3)           Calculated Oxygen Requirem         1.6         lbs 0,2/lb BODs options (bBODs options)         TCEQ £217.155 (a)(3)         TCEQ £217.155 (a)(3)           Calculated Air Flowrate         821         scf 2,1         sCD, ye BODs options (bBODs options)         TCEQ £217.155 (b)(2)(P)(P)           Clean water transfer efficiency         45%         Coarse bubble = .85 Fine bubbl	Return Sludge Flow at Peak Flow (RAS)	0.6	MGD	Q <sub>PEAK</sub> *X/(X <sub>R</sub> -X); M&E 5th Ed. Eq. 8-42	
Design Sludge Retention Time (8A)         10         days blabOr(Jat, 1000n)³ TCEQ \$217.157(d)(2)(b) maxis 25 days           Organic Loading Rate         35         tbBOD/d1,000n³ TCEQ \$217.154(b)(2) Fig 30 Conventional Activated           Required Minimum Volume         21,466         ft ³           Number of Aeration Basins to Add         a ft 1           Aeration Basin Width         14         ft 1           Aeration Basin Width         14         ft 1           Total Provided Aeration Basin Volume         35,280         ft³           Total Provided Aeration Basin Volume         35,280         ft³           Largest Aeration Basin Side Water Depth         12         ft           Largest Aeration Basin Side Water Depth         12         ft           Largest Aeration Basin Side Water Depth         12         ft           Calculated Oxygen Required         1.63         lbs O₂/lb BODs, 10 BODs, 1	AERATION BASINS (AB)				
Design Sludge Retention Time (θA)         10         days (bBOD/d1,000nt) a TCEQ \$217.157(d)(2)(f)) max is 25 days           Organic Loading Rate         35         tbBOD/d1,000nt) a TCEQ \$217.154(b)(2) Fig 30 Conventional Activated           Required Minimum Volume         21,466         it 3           Number of Aeration Basins to Add         3         tt 3           Aeration Basin Width         14         ft           Aeration Basin Width         14         ft           Total Provided Aeration Basin Volume         35,280         tt³         Total Provided Aeration Basin Volume           Total Provided Aeration Basin Side Water Depth         12         ft         Trotal Provided Aeration Basin Side Water Depth         12         ft           Largest Aeration Basin Side Water Depth         12         ft         T         T           Calculated Oxygen Required         1.63         lbs 0,7 lb BODs of the B	Design Flow for Aeration Basins	0.45	MGD	Q <sub>0</sub> + RAS	
Required Minimum Volume	Design Sludge Retention Time (θA)	10	days		
Required Minimum Volume	Organic Loading Rate	35	lbBOD <sub>E</sub> /d/1,000ft <sup>3</sup>	TCEQ \$217.154(b)(2) Fig 30 Conventional Activated	
Number of Aeration Basins to Add         3         ea           Aeration Basin Length         70         ft           Aeration Basin Width         14         ft           Side Water Depth of Aeration Basin Wolume         35,280         tt³           Aeration Basin in Service with Largest Length         70         ft           Aeration Basin in Service with Largest Length         70         ft           Largest Aeration Basin's Side Water Depth         12         ft           Total AB Volume with Largest AB out of Service (VR)         23,520         ft³           Calculated Oxygen Required         1.63         lbs O₂ / lb BOD₂         TCEQ \$217.155 (a)(3) Eq.72           Cypgen Requirement (O₂R)         2.2         lbs O₂ / lb BOD₂         TCEQ \$217.155 (a)(3)           Calculated Air Flowrate         821         scfm         (O₂R*BOD₂) /(WOTE*0.23*0.075*1440) TCEQ 217.155 (b)(2)(C)Eq.F.4           Clean water transfer efficiency         18%         TCEQ 217.155 (b)(2)(A)(iii)           Clean water transfer efficiency adjust based on dilffuser         45%         Coarse bubble = .65 Fine bubble = .45 TCEQ 217.155 (b)(2)(B)(i)           Vasa           Vasa           Vasa           Vasa           Vasa <td colsp<="" td=""><td></td><td></td><td>-</td><td> , , ,</td></td>	<td></td> <td></td> <td>-</td> <td> , , ,</td>			-	, , ,
Acration Basin Length	noquirea i illimidin votanie	21,400			
Actation Basin Wildth         14         ft         Typically between 10' and 30'           Total Provided Acration Basin Solume         35,280         ft³         Typically between 10' and 30'           Acration Basin in Service with Largest Length         70         ft           Largest Aeration Basin's Side Water Depth         12         ft           Total AB Yolume with Largest AB out of Service (VR)         23,520         ft³           Calculated Oxygen Required         1.63         lbs O₂/lb BOD₂ (1.2 * BOD₂ +4.3 * NH₃ -N)/BOD₃ TCEQ 217.155 (a)(3) EQ F.2           Oxygen Requirement (O₂R)         2.2         lbs O₂/lb BOD₂ (7.2 * BOD₂ +4.3 * NH₃ -N)/BOD₃ TCEQ 217.155 (a)(3) EQ F.2           Calculated Air Flowrate         821         scfm         (O₂R*BOD₂ +4.3 * NH₃ -N)/BOD₃ TCEQ 217.155 (a)(3) EQ F.2           Clean water transfer efficiency         18%         TCEQ 217.155 (a)(3)           Clean water transfer efficiency adjust based on diffuser a f45%         Coarse bubble = .65 Fine bubble = .45 TCEQ 217.155 (b)(2)(B)(i)           Clean water transfer efficiency adjust based on diffuser a f45%         Coarse bubble = .65 Fine bubble = .45 TCEQ 217.155 (b)(2)(B)(i)           VBAS           *Design based on volume of aeration tank           Provided Aeration Basin Yolume (NR)         0.264         Mga           Vass Estudge Flowarte from AB, Average Flow         0.0264	Number of Aeration Basins to Add	3	ea		
Side Water Depth of Aeration Basin   12	Aeration Basin Length	70	ft		
Total Provided Aeration Basin Volume   35,280   ft³	Aeration Basin Width	14	ft		
Acration Basin in Service with Largest Length Largest Aeration Basin's Side Water Depth         12         ft           Total AB Volume with Largest AB out of Service (VR)         23,520         tf³           Calculated Oxygen Required         1.63         lbs O₂ / lb BOD₂ (Dec Seq 217.155 (a)(3)         TCEQ 217.155 (a)(3)         TCEQ 217.155 (a)(3)         ECQ 217.155 (a)(3)         ECQ 217.155 (a)(3)         ECQ 217.155 (a)(3)         ECQ 217.155 (b)(2) (A)(iii)         Calculated Air Flowrate         821         scfm         (O₂R*BOD₂ )*(NOTE*0.23*0.075*1440) TCEQ 217.155 (b)(2) (EQ F.4)         Clean water transfer efficiency         18%         TCEQ 217.155 (b)(2) (A)(iii)         Coarse bubble = .45 TCEQ 217.155 (b)(2) (B)(i)         Coarse bubble = .45 TCEQ 217.155 (b)(2) (B)(i)         TCEQ 217.155 (b)(2) (B)(i)         TCEQ 217.155 (b)(2) (B)(i)         TCEQ 217.155 (b)(2) (D)         Wasse Sludge Flowarde from AB, Average Flow         0.264         Mgal         Mgal         Mgal         Wasse Sludge Flowrate from AB, Average Flow         0.0264         MgD         V <sub>R</sub> /θ <sub>A</sub> ; Metcalf &Eddy (M&E) 5th Edition Equation 8-32         Daily Sludge Production Rate         226,691         bb/d         WaS*SG; waste activated sludge rate*specific gravity of sludge solids           AEROBIC DIGESTER         80%         Wasses Sludge Flowarde from AB, Average Flow         20,000         mg/L         TCEQ 8217.249(t)(4)(B); for an average of 20 ° C           Minimum Solidis Retention Time (SRT	Side Water Depth of Aeration Basin	12	ft	Typically between 10' and 30'	
Acration Basin in Service with Largest Length Largest Aeration Basin's Side Water Depth         12         ft           Total AB Volume with Largest AB out of Service (VR)         23,520         tf³           Calculated Oxygen Required         1.63         lbs O₂ / lb BOD₂ (Dec Seq 217.155 (a)(3)         TCEQ 217.155 (a)(3)         TCEQ 217.155 (a)(3)         ECQ 217.155 (a)(3)         ECQ 217.155 (a)(3)         ECQ 217.155 (a)(3)         ECQ 217.155 (b)(2) (A)(iii)         Calculated Air Flowrate         821         scfm         (O₂R*BOD₂ )*(NOTE*0.23*0.075*1440) TCEQ 217.155 (b)(2) (EQ F.4)         Clean water transfer efficiency         18%         TCEQ 217.155 (b)(2) (A)(iii)         Coarse bubble = .45 TCEQ 217.155 (b)(2) (B)(i)         Coarse bubble = .45 TCEQ 217.155 (b)(2) (B)(i)         TCEQ 217.155 (b)(2) (B)(i)         TCEQ 217.155 (b)(2) (B)(i)         TCEQ 217.155 (b)(2) (D)         Wasse Sludge Flowarde from AB, Average Flow         0.264         Mgal         Mgal         Mgal         Wasse Sludge Flowrate from AB, Average Flow         0.0264         MgD         V <sub>R</sub> /θ <sub>A</sub> ; Metcalf &Eddy (M&E) 5th Edition Equation 8-32         Daily Sludge Production Rate         226,691         bb/d         WaS*SG; waste activated sludge rate*specific gravity of sludge solids           AEROBIC DIGESTER         80%         Wasses Sludge Flowarde from AB, Average Flow         20,000         mg/L         TCEQ 8217.249(t)(4)(B); for an average of 20 ° C           Minimum Solidis Retention Time (SRT	Total Provided Aeration Basin Volume	35,280	ft <sup>3</sup>		
Largest Aeration Basin's Side Water Depth 12 ft Total AB Volume with Largest AB out of Service (VR) 23,520 ft 3		70			
Total AB Volume with Largest AB out of Service (VR)		12			
Oxygen Requirement ( $0_2R$ )2.2lbs $0_2$ / lb BODs TCEQ \$217.155 (a)(3)Calculated Air Flowrate821scfm $(O_2R*BOD_5)$ /(WOTE*0.23*0.075*1440) TCEQ 217.155(b)(2)C)Eq F.4Clean water transfer efficiency18%TCEQ 217.155(b)(2)(A)(iii)Clean water transfer efficiency adjust based on diffuser Correction Factor45%Coarse bubble = .65 Fine bubble = .45 TCEQ 217.155(b)(2)(B)(i)WAS**Design based on volume of aeration tankProvided Aeration Basin Volume (VR)0.264MgalWaste Sludge Flowrate from AB, Average Flow Daily Sludge Production Rate0.0264MGD $V_R / \theta_A$ ; Metcalf &Eddy (M&E) 5th Edition Equation 8-32Daily Sludge Production Rate226,691lb/dWAS*SG; waste activated sludge rate*specific gravity of sludge solidsAEROBIC DIGESTERWo of Volatile Solids Destroyed in Digestion (%VSD)40%% Volatile Solids Destroyed in Digestion (%VSD)40%Minimum Solids Retention Time (SRT)40daysFigure: 30 TCEQ \$217.249(t)(4)(B); for an average of 20 ° CSolids Loading0.3lb VSS/tt³-dDigester Percent Solids2%Mass of Influent Solids751ppdBODs * Q DESMass of Digested Solids510ppdMass of Influent Solids * Mass of Digested Solids) / 2Average Solids in Digester Based on SRT25,220lbAverage Solids * SRT		23,520	ft <sup>3</sup>		
Oxygen Requirement ( $0_2R$ )2.2lbs $0_2$ / lb BODs TCEQ \$217.155 (a)(3)Calculated Air Flowrate821scfm $(O_2R*BOD_5)$ /(WOTE*0.23*0.075*1440) TCEQ 217.155(b)(2)C)Eq F.4Clean water transfer efficiency18%TCEQ 217.155(b)(2)(A)(iii)Clean water transfer efficiency adjust based on diffuser Correction Factor45%Coarse bubble = .65 Fine bubble = .45 TCEQ 217.155(b)(2)(B)(i)WAS**Design based on volume of aeration tankProvided Aeration Basin Volume (VR)0.264MgalWaste Sludge Flowrate from AB, Average Flow Daily Sludge Production Rate0.0264MGD $V_R / \theta_A$ ; Metcalf &Eddy (M&E) 5th Edition Equation 8-32Daily Sludge Production Rate226,691lb/dWAS*SG; waste activated sludge rate*specific gravity of sludge solidsAEROBIC DIGESTERWo of Volatile Solids Destroyed in Digestion (%VSD)40%% Volatile Solids Destroyed in Digestion (%VSD)40%Minimum Solids Retention Time (SRT)40daysFigure: 30 TCEQ \$217.249(t)(4)(B); for an average of 20 ° CSolids Loading0.3lb VSS/tt³-dDigester Percent Solids2%Mass of Influent Solids751ppdBODs * Q DESMass of Digested Solids510ppdMass of Influent Solids * Mass of Digested Solids) / 2Average Solids in Digester Based on SRT25,220lbAverage Solids * SRT					
Calculated Air Flowrate 821 scfm $(O_2R*BOD_5)/(WOTE*0.23*0.075*1440)$ TCEQ 217.155(b)(2)C)Eq F.4 Clean water transfer efficiency $(O_2R*BOD_5)/(WOTE*0.23*0.075*1440)$ TCEQ 217.155(b)(2)C)Eq F.4 Clean water transfer efficiency adjust based on diffuser 45% Coarse bubble = .65 Fine bubble = .45 TCEQ 217.155(b)(2)(B)(i) TCEQ 217.155(b)(2)(B)(i) TCEQ 217.155(b)(2)(D)  WAS  *Design based on volume of aeration tank  Provided Aeration Basin Volume (VR) 0.264 Mgal  Waste Sludge Flowrate from AB, Average Flow 0.0264 MGD $V_R/\theta_A$ ; Metcalf &Eddy (M&E) 5th Edition Equation 8-32  Daily Sludge Production Rate 226,691 lb/d WAS*SG; waste activated sludge rate*specific gravity of sludge solids  AEROBIC DIGESTER  % of Volatile Solids (%VS) 80% Volatile Solids (%VS) 40%  MLSS Concentration 20,000 mg/L TCEQ \$217.249(t)(4)(A)  Minimum Solids Retention Time (SRT) 40 days Figure: 30 TCEQ \$217.249(t)(4)(B); for an average of 20 °C  Solids Loading 0.3 lb VSS/ft³-d Digester Percent Solids Mass of Influent Solids 5 10 ppd Mass of Influent Solids * [1-(%VS*%VSD)]  Average Solids in Digester Based on SRT 25,220 lb Average Solids * SRT	Calculated Oxygen Required	1.63			
Clean water transfer efficiency Clean water transfer efficiency adjust based on diffuser Correction Factor  ### Coarse bubble = .45 TCEQ 217.155(b)(2)(B)(ii) Coarse bubble = .45 TCEQ 217.155(b)(2)(B)(i) TCEQ 217.155(b)(2)(D)  ### Coarse bubble = .45 TCEQ 217.155(b)(2)(B)(i) TCEQ 217.155(b)(2)(D)  ### Coarse bubble = .45 TCEQ 217.155(b)(2)(B)(i) TCEQ 217.155(b)(2)(D)  ### Coarse bubble = .45 TCEQ 217.155(b)(2)(B)(i) TCEQ 217.155(b)(2)(D)  ### Coarse bubble = .45 TCEQ 217.155(b)(2)(B)(i) TCEQ 217.155(b)(2)(D)  ### Coarse bubble = .45 TCEQ 217.155(b)(2)(B)(i) TCEQ 217.155(b)(2)(D)  ### Coarse bubble = .45 TCEQ 217.155(b)(2)(B)(i) TCEQ 217.155(b)(2)(B)  ### Coarse bubble = .45 TCEQ 217.155(b)(2)(B)(i) TCEQ 217.155(b)(2)(B) ### Coarse bubble = .45 TCEQ 217.155(b)(2)(B)(i) TCEQ 217.155(b)(2)(B) ### Coarse bubble = .45 TCEQ 217.155(b)(2)(B)(i) TCEQ 217.155(b)(2)(B) ### Coarse bubble = .45 TCEQ 217.155(b)(2)(B)(i) TCEQ 217.155(b)(2)(B) ### Coarse bubble = .45 TCEQ 217.155(b)(2)(B)(i) TCEQ 217.155(b)(2)(B) ### Coarse bubble = .45 TCEQ 217.155(b)(2)(B)(i) ### Coarse bubble = .45 TCEQ 217.15(b)(2)(B)(i) ### Coarse bubble = .45 TCEQ 217.15(b)(a)(B)(i) ### Coarse bub	Oxygen Requirement (O <sub>2</sub> R)	2.2	lbs $O_2$ / lb $BOD_5$	TCEQ \$217.155 (a)(3)	
Clean water transfer efficiency adjust based on diffuser Correction Factor 1 TCEQ 217.155(b)(2)(B)(i) TCEQ 217.155(b)(2)(D)  WAS  *Design based on volume of aeration tank  Provided Aeration Basin Volume (VR) 0.264 Mgal  Waste Sludge Flowrate from AB, Average Flow 0.00264 MGD V <sub>R</sub> / $\theta_A$ ; Metcalf &Eddy (M&E) 5th Edition Equation 8-32  Daily Sludge Production Rate 226,691 lb/d WAS*SG; waste activated sludge rate*specific gravity of sludge solids  AEROBIC DIGESTER  % of Volatile Solids (%VS) 80% Wolatile Solids (%VS) 80% Figure: 30 TCEQ \$217.249(t)(4)(A)  Minimum Solids Retention Time (SRT) 40 days Figure: 30 TCEQ \$217.249(t)(4)(B); for an average of 20 ° C  Solids Loading 0.3 lb VSS/ft³-d  Digester Percent Solids 751 ppd BOD <sub>5</sub> * Q DES  Mass of Influent Solids * [1-(%VS*%VSD)]  Average Solids in Digester Based on SRT 25,220 lb Average Solids * SRT	Calculated Air Flowrate	821	scfm	$(O_2R*BOD_5)/(WOTE*0.23*0.075*1440)$ TCEQ 217.155(b)(2)C)Eq F.4	
WAS *Design based on volume of aeration tank Provided Aeration Basin Volume (VR)  Waste Sludge Flowrate from AB, Average Flow Daily Sludge Production Rate  *Design based on volume (VR)  *O.264  *Mgal  Waste Sludge Flowrate from AB, Average Flow Daily Sludge Production Rate  *O.2669  *Ib/d  *WAS*SG; waste activated sludge rate*specific gravity of sludge solids  *AEROBIC DIGESTER  *Of Volatile Solids (%VS)  *Volatile Solids Destroyed in Digestion (%VSD)  *MLSS Concentration  *Do.000  *Mg/L  *Minimum Solids Retention Time (SRT)  *Olids Loading  *Digester Percent Solids  *Mass of Influent Solids  *Total Solids in Digester  *Gold Mass of Digested Solids * 11-(%VS*%VSD)]  *Average Solids in Digester Based on SRT  *Average Solids * SRT	Clean water transfer efficiency	18%		TCEQ 217.155(b)(2)(A)(iii)	
WAS *Design based on volume of aeration tank Provided Aeration Basin Volume (VR)  Waste Sludge Flowrate from AB, Average Flow  Daily Sludge Production Rate  *Design based on volume of aeration tank Provided Aeration Basin Volume (VR)  *Design based on volume (VR)  *Design based on volume of aeration tank  *Provided Aeration Basin Volume (VR)  *Design based on volume of aeration tank  *Provided Aeration Basin Volume (VR)  *Design based on volume of aeration tank  *Provided Aeration Basin Volume (VR)  *Design based on volume of aeration tank  *Provided Aeration Basin Volume (VR)  *Design based on volume of aeration tank  *Provided Aeration Basin Volume (VR)  *Bell V R / Ø A ; Metcalf & Eddy (M&E) 5th Edition Equation 8-32  *WAS*SG; waste activated sludge rate*specific gravity of sludge solids  *Bell V R / Ø A ; Metcalf & Eddy (M&E) 5th Edition Equation 8-32  *WAS*SG; waste activated sludge rate*specific gravity of sludge solids  *Bell V R / Ø A ; Metcalf & Eddy (M&E) 5th Edition Equation 8-32  *WAS*SG; waste activated sludge rate*specific gravity of sludge solids  *Bell V R / Ø A ; Metcalf & Eddy (M&E) 5th Edition Equation 8-32  *WAS*SG; waste activated sludge rate*specific gravity of sludge solids  *Bell V R / Ø A ; Metcalf & Eddy (M&E) 5th Edition Equation 8-32  *WAS*SG; waste activated sludge rate*specific gravity of sludge solids  *WAS*SG; waste activated sludge rate*specific gravity of sludge solids  *WAS*SG; waste activated sludge rate*specific gravity of sludge solids  *WAS*SG; waste activated sludge rate*specific gravity of sludge solids  *WAS*SG; waste activated sludge rate*specific gravity of sludge solids  *WAS*SG; waste activated sludge rate*specific gravity of sludge solids  *WAS*SG; waste activated sludge rate*specific gravity of sludge solids  *WAS*SG; waste activated sludge rate*specific gravity of sludge solids  *WAS*SG; waste activated sludge rate*specific gravity of sludge solids  *WAS*SG; waste activated sludge rate*specific gravity of sludge solids  *WAS*SG; waste activated sludge rate*specif					
*Design based on volume of aeration tank Provided Aeration Basin Volume (VR) 0.264 Mgal Waste Sludge Flowrate from AB, Average Flow 0.0264 MGD $V_R/\theta_A$ ; Metcalf &Eddy (M&E) 5th Edition Equation 8-32 Daily Sludge Production Rate 226,691 lb/d WAS*SG; waste activated sludge rate*specific gravity of sludge solids    **AEROBIC DIGESTER** ** of Volatile Solids (%VS) 80% Volatile Solids Destroyed in Digestion (%VSD) 40% MLSS Concentration 20,000 mg/L TCEQ \$217.249(t)(4)(A) Figure: 30 TCEQ \$217.249(t)(4)(B); for an average of 20 ° C    **Solids Loading** **Digester Percent Solids** **Mass of Influent Solids** **Mass of Digested Solids** **Mass of Digested Solids** **Jessel Solids in Digester* **Digester* **Jessel Solids in Digester* **Je	Correction Factor	1		TCEQ 217.155(b)(2)(D)	
Provided Aeration Basin Volume (VR)  Waste Sludge Flowrate from AB, Average Flow  0.0264 MGD V <sub>R</sub> /θ <sub>A</sub> ; Metcalf &Eddy (M&E) 5th Edition Equation 8-32  Daily Sludge Production Rate  226,691 lb/d WAS*SG; waste activated sludge rate*specific gravity of sludge solids  AEROBIC DIGESTER  60 f Volatile Solids (%VS)  80%  Volatile Solids Destroyed in Digestion (%VSD)  MLSS Concentration  20,000 mg/L  Minimum Solids Retention Time (SRT)  40 days  Figure: 30 TCEQ \$217.249(t)(4)(B); for an average of 20 ° C  Solids Loading  Digester Percent Solids  2%  Mass of Influent Solids  751 ppd  BOD <sub>5</sub> * Q DES  Mass of Digested Solids  510 ppd  Mass of Influent Solids * [1-(%VS*%VSD)]  Average Solids in Digester  631 ppd (Mass of Influent Solids + Mass of Digested Solids) / 2  Total Solids in Digester Based on SRT  25,220 lb Average Solids * SRT	WAS				
Waste Sludge Flowrate from AB, Average Flow 0.0264 MGD $V_R/\theta_A$ ; Metcalf &Eddy (M&E) 5th Edition Equation 8-32 Daily Sludge Production Rate 226,691 lb/d WAS*SG; waste activated sludge rate*specific gravity of sludge solids    AEROBIC DIGESTER	*Design based on volume of aeration tank				
Daily Studge Production Rate       226,691       lb/d       WAS*SG; waste activated studge rate*specific gravity of studge solids         AEROBIC DIGESTER         % of Volatile Solids (%VS)       80%       Yes production Solids (%VS)         % Volatile Solids Destroyed in Digestion (%VSD)       40%       TCEQ \$217.249(t)(4)(A)         MLSS Concentration       20,000       mg/L       TCEQ \$217.249(t)(4)(A)         Minimum Solids Retention Time (SRT)       40       days       Figure: 30 TCEQ \$217.249(t)(4)(B); for an average of 20 °C         Solids Loading       0.3       lb VSS/ft³-d         Digester Percent Solids       2%       BOD <sub>5</sub> * Q DES         Mass of Influent Solids       751       ppd       BOD <sub>5</sub> * Q DES         Mass of Digested Solids       510       ppd       Mass of Influent Solids * [1-(%VS*%VSD)]         Average Solids in Digester       631       ppd       (Mass of Influent Solids + Mass of Digested Solids) / 2         Total Solids in Digester Based on SRT       25,220       lb       Average Solids * SRT	Provided Aeration Basin Volume (VR)	0.264	Mgal		
AEROBIC DIGESTER  % of Volatile Solids (%VS)  80%  % Volatile Solids Destroyed in Digestion (%VSD)  MLSS Concentration  20,000  Mg/L  TCEQ \$217.249(t)(4)(A)  Minimum Solids Retention Time (SRT)  40  days  Figure: 30 TCEQ \$217.249(t)(4)(B); for an average of 20 ° C  Solids Loading  0.3  lb VSS/ft³-d  Digester Percent Solids  2%  Mass of Influent Solids  751  ppd  BOD <sub>5</sub> * Q DES  Mass of Digested Solids  Average Solids in Digester  631  ppd  (Mass of Influent Solids + Mass of Digested Solids) / 2  Total Solids in Digester Based on SRT  25,220  lb  Average Solids * SRT	Waste Sludge Flowrate from AB, Average Flow	0.0264	MGD	V $_{\rm R}$ / $\theta$ $_{\rm A}$ ; Metcalf &Eddy (M&E) 5th Edition Equation 8-32	
% of Volatile Solids (%VS)  80%  Volatile Solids Destroyed in Digestion (%VSD)  40%  MLSS Concentration  20,000  mg/L  TCEQ \$217.249(t)(4)(A)  Minimum Solids Retention Time (SRT)  40  days  Figure: 30 TCEQ \$217.249(t)(4)(B); for an average of 20 ° C  Solids Loading  Digester Percent Solids  2%  Mass of Influent Solids  751  ppd  BOD <sub>5</sub> * Q DES  Mass of Digested Solids  Average Solids in Digester  631  ppd  (Mass of Influent Solids + Mass of Digested Solids) / 2  Total Solids in Digester Based on SRT  25,220  lb  Average Solids * SRT	Daily Sludge Production Rate	226,691	lb/d	WAS*SG; waste activated sludge rate*specific gravity of sludge solids	
% of Volatile Solids (%VS)  80%  Volatile Solids Destroyed in Digestion (%VSD)  40%  MLSS Concentration  20,000  mg/L  TCEQ \$217.249(t)(4)(A)  Minimum Solids Retention Time (SRT)  40  days  Figure: 30 TCEQ \$217.249(t)(4)(B); for an average of 20 ° C  Solids Loading  Digester Percent Solids  2%  Mass of Influent Solids  751  ppd  BOD <sub>5</sub> * Q DES  Mass of Digested Solids  Average Solids in Digester  631  ppd  (Mass of Influent Solids + Mass of Digested Solids) / 2  Total Solids in Digester Based on SRT  25,220  lb  Average Solids * SRT	AFROBIC DIGESTER				
% Volatile Solids Destroyed in Digestion (%VSD)40%MLSS Concentration20,000mg/LTCEQ \$217.249(t)(4)(A)Minimum Solids Retention Time (SRT)40daysFigure: 30 TCEQ \$217.249(t)(4)(B); for an average of 20 ° CSolids Loading0.3lb VSS/ftt³-dDigester Percent Solids2%Mass of Influent Solids751ppdBOD <sub>5</sub> * Q DESMass of Digested Solids510ppdMass of Influent Solids * [1-(%VS*%VSD)]Average Solids in Digester631ppd(Mass of Influent Solids + Mass of Digested Solids) / 2Total Solids in Digester Based on SRT25,220lbAverage Solids * SRT		80%			
MLSS Concentration20,000mg/LTCEQ \$217.249(t)(4)(A)Minimum Solids Retention Time (SRT)40daysFigure: 30 TCEQ \$217.249(t)(4)(B); for an average of 20 ° CSolids Loading0.3lb VSS/ft³-dDigester Percent Solids2%Mass of Influent Solids751ppdBOD₅ * Q DESMass of Digested Solids510ppdMass of Influent Solids * [1-(%VS*%VSD)]Average Solids in Digester631ppd(Mass of Influent Solids + Mass of Digested Solids) / 2Total Solids in Digester Based on SRT25,220lbAverage Solids * SRT					
Minimum Solids Retention Time (SRT)  40 days Figure: 30 TCEQ \$217.249(t)(4)(B); for an average of 20 ° C  Solids Loading  0.3 lb VSS/ft³-d  Digester Percent Solids  2%  Mass of Influent Solids  751 ppd BOD <sub>5</sub> * Q DES  Mass of Digested Solids  510 ppd Mass of Influent Solids * [1-(%VS*%VSD)]  Average Solids in Digester  631 ppd (Mass of Influent Solids + Mass of Digested Solids) / 2  Total Solids in Digester Based on SRT  25,220 lb Average Solids * SRT			mg/L	TCEQ §217.249(t)(4)(A)	
Solids Loading 0.3 lb VSS/ft³-d  Digester Percent Solids 2%  Mass of Influent Solids 751 ppd BOD <sub>5</sub> * Q DES  Mass of Digested Solids 510 ppd Mass of Influent Solids * [1-(%VS*%VSD)]  Average Solids in Digester 631 ppd (Mass of Influent Solids + Mass of Digested Solids) / 2  Total Solids in Digester Based on SRT 25,220 lb Average Solids * SRT			=		
Digester Percent Solids 2%  Mass of Influent Solids 751 ppd BOD <sub>5</sub> * Q <sub>DES</sub> Mass of Digested Solids 510 ppd Mass of Influent Solids * [1-(%VS*%VSD)]  Average Solids in Digester 631 ppd (Mass of Influent Solids + Mass of Digested Solids) / 2  Total Solids in Digester Based on SRT 25,220 lb Average Solids * SRT			•		
Mass of Influent Solids 751 ppd BOD <sub>5</sub> * Q <sub>DES</sub> Mass of Digested Solids 510 ppd Mass of Influent Solids * [1-(%VS*%VSD)]  Average Solids in Digester 631 ppd (Mass of Influent Solids + Mass of Digested Solids) / 2  Total Solids in Digester Based on SRT 25,220 lb Average Solids * SRT	<u> </u>				
Mass of Digested Solids510ppdMass of Influent Solids * [1-(%VS*%VSD)]Average Solids in Digester631ppd(Mass of Influent Solids + Mass of Digested Solids) / 2Total Solids in Digester Based on SRT25,220lbAverage Solids * SRT	_		bag	BODs * O pre	
Average Solids in Digester 631 ppd (Mass of Influent Solids + Mass of Digested Solids) / 2 Total Solids in Digester Based on SRT 25,220 lb Average Solids * SRT					
Total Solids in Digester Based on SRT 25,220 lb Average Solids * SRT	_		* * .		
				,	
	Minimum Required Digester Volume	20,214	ft3	Total Solids / MLSS Concentration	

#### PHASE 1 DESIGN CALCULATIONS (Continued)

Number of Digester Basins to Add	2	ea	
Digester Basins Diameter	40	ft	
Side Water Depth	16	ft	
Digester Basin Volume to Add	40,212	ft <sup>3</sup>	
Digester Basin Volume to Add	300,789	gal	
Total Digester Basin Volume	40,212	ft <sup>3</sup>	
% Volatile Solids Destroyed in Digestion (%VSD)	40%		M&E 5th Edition Table 13-44 (38%-50%)
Total Mass Reduced	240	lb VSS red/day	
Oxidation of VSS	2.3	kg O <sub>2</sub> /kg VSS	M&E 5th Edition Table 13-44
Oxygen Required	249	kg O <sub>2</sub> /day	
Density of Air	1.204	kg/m³ @ 20° C	
Volume of Air Required per Day	890	m³ air/day	
Oxygen Transfer Efficiency	10%		
Air Flow Rate	6.2	m³/min	
Air Loading	5.5	ft <sup>3</sup> /min*1000ft <sup>3</sup>	

SOLIDS GENERATED	100% flow	75% Flow	50% Flow	25% Flow
Pounds Influent BOD <sub>5</sub> (lb/d)	751	563	375	188
Pounds of Digested Dry Sludge Produced (lb/d)	510	383	255	128
Pounds of Wet Sludge Produced (lb/d)	25,520	19,140	12,760	6,380
Gallons of Wet Sludge Produced (gpd)	3,060	2,295	1,530	765

CLARIFIERVALUEUNITFORMULA / REFERENCEMaximum Overflow Rate @ Peak Flow1,200gal/day/ft²TCEQ \$217.154(c)(1)Minimum Detention Time @ Peak Flow1.8hoursTCEQ \$217.154(c)(1)Maximum Weir Loading20,000gal/day/ftTCEQ Ch. 217.152 (d)(4)Minimum Required Surface Area (Overflow)1,000ft²TCEQ 217.164 (E) Eq F.8Minimum required Surface Area (Detention Time)1,003ft²TCEQ 217.164 (E) Eq F.1Minimum Required Weir Length60ftNumber of Clarifiers to Add2eaClarifier Diameter45ftSide Water Depth of Clarifier12ftTotal Wier Length283ftTotal Clarifier Surface Area3,181ft²Total Clarifier Volume38,170ft³Clarifier in Service with Largest Diameter45ftSide Water Depth of Largest Clarifier12ft
Minimum Detention Time @ Peak Flow  1.8 hours  TCEQ \$217.154(c)(1)  Maximum Weir Loading  20,000 gal/day/ft  TCEQ Ch. 217.152 (d)(4)  Minimum Required Surface Area (Overflow)  1,000 ft²  TCEQ 217.164 (E) Eq F.8  Minimum required Surface Area (Detention Time)  Minimum Required Weir Length  60 ft  Number of Clarifiers to Add  2 ea  Clarifier Diameter  45 ft  Side Water Depth of Clarifier  12 ft  Total Wier Length  283 ft  Total Clarifier Surface Area  3,181 ft²  Total Clarifier Volume  38,170 ft³  Clarifier in Service with Largest Diameter  45 ft
Maximum Weir Loading20,000gal/day/ftTCEQ Ch. 217.152 (d)(4)Minimum Required Surface Area (Overflow)1,000ft²TCEQ 217.164 (E) Eq F.8Minimum required Surface Area (Detention Time)1,003ft²TCEQ 217.164 (E) Eq F.1Minimum Required Weir Length60ftNumber of Clarifiers to Add2eaClarifier Diameter45ftSide Water Depth of Clarifier12ftTotal Wier Length283ftTotal Clarifier Surface Area3,181ft²Total Clarifier Volume38,170ft³
Minimum Required Surface Area (Overflow)  1,000  1,000  1,000  1,000  1,000  1,003  1,
Minimum required Surface Area (Detention Time)  Minimum Required Weir Length  1,003  ft²  TCEQ 217.164 (E) Eq F.1  Number of Clarifiers to Add  2  ea  Clarifier Diameter  45  ft  Side Water Depth of Clarifier  12  ft  Total Wier Length  283  ft  Total Clarifier Surface Area  3,181  ft²  Clarifier in Service with Largest Diameter  45  ft
Minimum Required Weir Length  60 ft  Number of Clarifiers to Add 2 ea  Clarifier Diameter 45 ft  Side Water Depth of Clarifier 12 ft  Total Wier Length 283 ft  Total Clarifier Surface Area 3,181 ft²  Total Clarifier Volume 38,170 ft³  Clarifier in Service with Largest Diameter 45 ft
Number of Clarifiers to Add 2 ea Clarifier Diameter 45 ft Side Water Depth of Clarifier 12 ft Total Wier Length 283 ft Total Clarifier Surface Area 3,181 ft² Total Clarifier Volume 38,170 ft³  Clarifier in Service with Largest Diameter 45 ft
Clarifier Diameter 45 ft Side Water Depth of Clarifier 12 ft Total Wier Length 283 ft Total Clarifier Surface Area 3,181 ft² Total Clarifier Volume 38,170 ft³  Clarifier in Service with Largest Diameter 45 ft
Side Water Depth of Clarifier  12 ft  Total Wier Length  283 ft  Total Clarifier Surface Area  3,181 ft <sup>2</sup> Total Clarifier Volume  38,170 ft <sup>3</sup> Clarifier in Service with Largest Diameter  45 ft
Total Wier Length 283 ft  Total Clarifier Surface Area 3,181 ft²  Total Clarifier Volume 38,170 ft³  Clarifier in Service with Largest Diameter 45 ft
Total Clarifier Surface Area 3,181 ft <sup>2</sup> Total Clarifier Volume 38,170 ft <sup>3</sup> Clarifier in Service with Largest Diameter 45 ft
Total Clarifier Volume 38,170 ft <sup>3</sup> Clarifier in Service with Largest Diameter 45 ft
Clarifier in Service with Largest Diameter 45 ft
Side Water Denth of Largest Clarifier 12 ft
Olde Water Depth of Edigest Oldfiller 12 It
Total Surface Area with Largest Clarifier out of Service 1,590 ft <sup>2</sup>
Total Weir Length with Largest Clarifier out of Service 141 ft
Total Volume with Largest Clarifier out of Service 19,085 ft <sup>3</sup>
CHLORINE CONTACT BASIN
Minimum Detention Time at Peak Flow 20 min TCEQ 217.281(b)(1)
Number of Parallel Channels 2 ea
Width 6 ft
Depth 12 ft
Length 30 ft
Volume 4,320 ft <sup>3</sup>
Detention time 38.8 min

#### **PHASE 2 DESIGN CALCULATIONS**

#### RAS

\*Design to maintain MLSS concentration in aeration basin between 4,000 mg/L and 10,000 mg/L  $\,$ 

\*Calculate RAS rate by using a mass balance of the aeration tank

Successive rate by using a mass butained of the defe	VALUE	UNIT	FORMULA / REFERENCE
Influent Design Flow Rate to Aeration Tank (Q o)	0.6	MGD	
Influent Peak Flow Rate to Aeration Tank (Q PEAK)	2.4	MGD	
Mixed Liquor Suspended Solids (X)	4,000	mg/L	
Return Activated Sludge Suspended Solids (X <sub>R</sub> )	12,000	mg/L	
Return Sludge Flow at Design Flow (RAS)	0.3	MGD	Q*X/(X <sub>R</sub> -X); M&E 5th Ed. Eq. 8-42
Return Sludge Flow at Peak Flow (RAS)	1.2	MGD	$Q_{PEAK}$ *X/( $X_R$ -X); M&E 5th Ed. Eq. 8-42
AERATION BASINS (AB)			
Design Flow for Aeration Basins	0.9	MGD	Q <sub>0</sub> + RAS
Design Sludge Retention Time (θA)	10	days	TCEQ \$217.157(d)(2)(b) max is 25 days
Organic Loading Rate	35	•	TCEQ §217.154(b)(2) Fig 30 Conventional Activated
Required Minimum Volume	42,891	ft <sup>3</sup>	
Number of Aeration Basins to Add	2	ea	
Aeration Basin Length	70	ft	
Aeration Basin Width	14	ft	
Side Water Depth of Aeration Basin	12	ft	Typically between 10' and 30'
Total Provided Aeration Basin Volume	58,800	ft <sup>3</sup>	
Aeration Basin in Service with Largest Length	70	ft	
Largest Aeration Basin's Side Water Depth	12	ft	
Total AB Volume with Largest AB out of Service (VR)	47,040	ft <sup>3</sup>	
Calculated Oxygen Required	1.63	lbs O <sub>2</sub> / lb BOD <sub>5</sub>	(1.2 * BOD <sub>5</sub> + 4.3 * NH <sub>3</sub> -N) / BOD <sub>5</sub> TCEQ 217.155 (a)(3) Eq F.2
Oxygen Requirement (O <sub>2</sub> R)	2.2		TCEQ §217.155 (a)(3)
Calculated Air Flowrate	727	scfm	(O <sub>2</sub> R*BOD <sub>5</sub> )/(WOTE*0.23*0.075*1440) TCEQ 217.155(b)(2)C)Eq F.4
Clean water transfer efficiency	18%		TCEQ 217.155(b)(2)(A)(iii)
Clean water transfer efficiency adjust based on diffuser	65%		Coarse bubble = .65 Fine bubble = .45 TCEQ 217.155(b)(2)(B)(i)
Correction Factor	0.64		TCEQ 217.155(b)(2)(D)
W40			
WAS *Design based on volume of aeration tank			
Provided Aeration Basin Volume (VR)	0.440	Mgal	
Waste Sludge Flowrate from AB, Average Flow	0.0439824	MGD	V <sub>R</sub> / θ <sub>A</sub> ; Metcalf &Eddy (M&E) 5th Edition Equation 8-32
Daily Sludge Production Rate	377,818	lb/d	WAS*SG; waste activated sludge rate*specific gravity of sludge solids
, .			
AEROBIC DIGESTER			
% of Volatile Solids (%VS)	80%		
% Volatile Solids Destroyed in Digestion (%VSD)	40%		TOFO 2047 040(4)/4)/A)
MLSS Concentration	20,000	mg/L	TCEQ \$217.249(t)(4)(A)
Minimum Solids Retention Time (SRT)	40	days	Figure: 30 TCEQ §217.249(t)(4)(B); for an average of 20 ° C
Solids Loading	0.3	lb VSS/ft <sup>3</sup> -d	
Digester Percent Solids  Mass of Influent Solids	2% 1.501	nnd	ROD *O
Mass of Influent Solids	1,501	ppd	BOD <sub>5</sub> * Q <sub>DES</sub> Mass of Influent Solids * [1-(%VS*%VSD)]
Mass of Digested Solids  Average Solids in Digester	1,021 1,261	ppd ppd	(Mass of Influent Solids + Mass of Digested Solids) / 2
Total Solids in Digester Based on SRT	50,440	lb	Average Solids * SRT
Minimum Required Digester Volume	40,428	ft3	Total Solids / MLSS Concentration
- 4 O	- /		

#### PHASE 2 DESIGN CALCULATIONS (Continued)

Number of Digester Basins to Add	1	ea	
Digester Basins Diameter	40	ft	
Side Water Depth	16	ft	
Digester Basin Volume to Add	20,106	ft <sup>3</sup>	
Digester Basin Volume to Add	150,394	gal	
Total Digester Basin Volume	60,319	ft <sup>3</sup>	
% Volatile Solids Destroyed in Digestion (%VSD)	40%		M&E 5th Edition Table 13-44 (38%-50%)
Total Mass Reduced	480	lb VSS red/day	
Oxidation of VSS	2.3	kg O <sub>2</sub> /kg VSS	M&E 5th Edition Table 13-44
Oxygen Required	497	kg O <sub>2</sub> /day	
Density of Air	1.204	kg/m³ @ 20° C	
Volume of Air Required per Day	1780	m³ air/day	
Oxygen Transfer Efficiency	10%		
Air Flow Rate	12.4	m³/min	
Air Loading	21.8	ft <sup>3</sup> /min*1000ft <sup>3</sup>	

SOLIDS GENERATED	100% flow	75% Flow	50% Flow	25% Flow
Pounds Influent BOD <sub>5</sub> (lb/d)	1,501	1,126	751	375
Pounds of Digested Dry Sludge Produced (lb/d)	1,021	766	510	255
Pounds of Wet Sludge Produced (lb/d)	51,041	38,281	25,520	12,760
Gallons of Wet Sludge Produced (gpd)	6,120	4,590	3,060	1,530

VALUE	UNIT	FORMULA / REFERENCE
1,200	gal/day/ft <sup>2</sup>	TCEQ §217.154(c)(1)
1.8	hours	TCEQ §217.154(c)(1)
20,000	gal/day/ft	TCEQ Ch. 217.152 (d)(4)
2,000	ft <sup>2</sup>	TCEQ 217.164 (E) Eq F.8
2,005	ft <sup>2</sup>	TCEQ 217.164 (E) Eq F.10
120	ft	
1	ea	
45	ft	
12	ft	
424	ft	
4,771	ft <sup>2</sup>	
57,256	ft <sup>3</sup>	
45	ft	
12	ft	
3,181	ft <sup>2</sup>	
283	ft	
38,170	ft <sup>3</sup>	
20	min	TCEQ 217.281(b)(1)
0	ea	
6	ft	
12	ft	
30	ft	
4,320	ft <sup>3</sup>	
19.388	min	
	1,200 1.8 20,000 2,000 2,005 120  1 45 12 424 4,771 57,256  45 12 3,181 283 38,170  20 0 6 12 30 4,320	1,200     gal/day/ft²       1.8     hours       20,000     gal/day/ft       2,000     ft²       2,005     ft²       120     ft       1     ea       45     ft       12     ft       424     ft       4,771     ft²       57,256     ft³       45     ft       12     ft       3,181     ft²       283     ft       38,170     ft³       20     min       0     ea       6     ft       12     ft       30     ft       4,320     ft³

#### PHASE 3 DESIGN CALCULATIONS

#### RAS

<sup>\*</sup>Calculate RAS rate by using a mass balance of the aeration tank

Influent Design Flow Rate to Aeration Tank (Q c)	*Calculate RAS rate by using a mass balance of the aera	VALUE	UNIT	FORMULA / REFERENCE
Influent Peak Flow Rate to Aeration Tank (Q Power)         4.4         MGD           Mixed Liquor Suspended Solids (X)         12,000         mg/L           Return Schused Sudge Suspended Solids (X)         12,000         mg/L           Return Sudge Flow at Design Flow (RAS)         5.5         MGD         Q*X/(X*,X); M&E Sth Ed. Eq. 8-42           Return Sudge Flow at Design Flow (RAS)         2.2         MGD         Q*X/(X*,X); M&E Sth Ed. Eq. 8-42           ARATION BASINS (AB)         165         MGD         Q*Pack**V[X*,X; M&E Sth Ed. Eq. 8-42           Design Sludge Retention Time (RA)         10         days         TCEQ \$221,157(d)(2)(b) maxis 25 days           Origanic Loading Rate         35         bBOD/Q*d1/0000*** TCEQ \$221,155(d)(2)(b) maxis 25 days           Required Minimum Volume         78,634         ft*3           Required Minimum Volume         76         ft           Aeration Basin In Sale Made         3         ea           Aeration Basin Width         14         rt           Slow Water Depth of Aeration Basin Volume         94,080         ft*3           Aeration Basin Side Water Depth         12         rt           Total Provided Aeration Basin Volume         94,080         ft*3           Aeration Basin Side Water Depth         12         rt <tr< th=""><th>Influent Design Flow Pate to Aeration Tank (O.)</th><th></th><th></th><th>FORMULA / REFERENCE</th></tr<>	Influent Design Flow Pate to Aeration Tank (O.)			FORMULA / REFERENCE
Mixed Luyor Suspended Solids (X), Return Sludge Flow at Design Flow (RAS)         4.00         mg/L           Return Sludge Flow at Design Flow (RAS)         0.55         MGD         Q*X/(X_n)X); M&E 5th Ed. Eq. 8-42           Return Sludge Flow at Design Flow (RAS)         0.55         MGD         Q*x/(X_n)X); M&E 5th Ed. Eq. 8-42           AFRATION BASINS (AB)         Use of the control of Acration Basins         1.65         MGD         Q*x RAS           Design Sludge Retention Time (RA)         1.0         days         TCEQ \$217.157(d)/2(b) max is 25 days           Organic Loading Rate         35         MBOD_Q*d/Loading*         TCEQ \$217.154(b)/2) Fig 30 Conventional Activated           Required Minimum Volume         78,834         ft*         TCEQ \$217.154(b)/2) Fig 30 Conventional Activated           Number of Acration Basin to Add         3         cac         recurrent Basin Solation Activated           Aeration Basin Width         14         ft         Typically between 10° and 30°           Total Provided Aeration Basin Solviume         90         ft*         Typically between 10° and 30°           Calculated Depth of Aeration Basin Solviume         82,320         ft*         Typically between 10° and 30°           Calculated Oxygen Required         13         ls 0.50 / lb 80°, lb 10°, lb 10°	-			
Return Activated Studge Stugeneded Solids (X <sub>1</sub> )         1,2,00         mg/L         return Studge Flow at Design Flow (RAS)         0.55         MGD         Q*X/(X <sub>m</sub> ,X); M&E sht ed. Eq. 8.42           Return Studge Flow at Peak Flow (RAS)         0.22         MGD         Q*X/(X <sub>m</sub> ,X); M&E sht ed. Eq. 8.42           AERATION BASINS (AB)         TCEQ 8217.157(ld)(2)(b) max is 25 days           Design Flow for Aeration Basins         1.65         MGD         Q <sub>x</sub> + RAS           Design Studge Retention Time (RA)         35         lbb00/yd1/,00017         TCEQ 8217.157(ld)(2)(b) max is 25 days           Organic Loading Rate         35         lbb00/yd1/,00017         TCEQ 8217.154(b)(2) Fig 30 Conventional Activated           Required Minimum Volume         78.634         tt³         TCEQ 8217.154(b)(2) Fig 30 Conventional Activated           Number of Aeration Basins to Add         3         e.a.         a.a.           Aeration Basin Simb Moth         14         ft         ft           Side Water Depth of Aeration Basin Volume         94.08         ft <sup>3</sup> return Studge Required           1014 Provided Aeration Basin Side Water Depth         70         ft         return Studge Required         1.63         lbs. Q <sub>x</sub> / lb BOD <sub>x</sub> (1.2* BOD <sub>x</sub> + 4.3* NH <sub>x</sub> -Nl) PBOD <sub>x</sub> TCEQ 217.155(a)(3) Eq. F.2         Calculated Oxygen Required         1.63         lbs. Q <sub>x</sub> -1b BOD <sub>x</sub> <				
Return Sludge Flow at Design Flow (RAS)   2.2   MGD   Q*V(X_*-X); M&E 5th Ed. Eq. 8-42   Return Sludge Flow at Peak Flow (RAS)   2.2   MGD   Q*PW**, V(X_*-X); M&E 5th Ed. Eq. 8-42   Return Sludge Flow at Peak Flow (RAS)   2.2   MGD   Q*PW**, V(X_*-X); M&E 5th Ed. Eq. 8-42   Return Sludge Flow at Peak Flow (RAS)   2.2   MGD   Q*PW**, V(X_*-X); M&E 5th Ed. Eq. 8-42   Return Sludge Retention Time (8A)   10   days   TCEQ 8217.157(t)(2)(b) max is 25 days   CEQ 8217.157(t)(2)(b) max is 25 days   CEQ 8217.157(t)(2)(b) max is 25 days   CEQ 8217.154(b)(2) Fig 30 Conventional Activated   CEQ 8217.155(b)(2) Fig 30 Conve			=	
Return Sludge Flow at Peak Flow (RAS)         2.2         MGD         Q <sub>PCM</sub> *X/K <sub>R</sub> *X; M&E Sth Ed. Eq. 8-42           AERATION BASINS (AB)         Use an Flow for Aeration Basins         1.65         MGD         Q <sub>2</sub> + RAS           Design Flow for Aeration Basins         1.65         MGD         Q <sub>2</sub> + RAS           Organic Loading Rate         35         UBBOD <sub>2</sub> /d1,000n*1         TCEQ \$217.157(d)(2)(b) max is 25 days           Required Minimum Volume         78,634         th 3         TCEQ \$217.154(b)(2) Fig 30 Conventional Activated           Number of Aeration Basin to Add         3         ea         Aeration Basin Moth         14         1           Stew Water Depth of Aeration Basin Width         14         1         Ttypically between 10° and 30°           Total Provided Aeration Basin Volume         94,080         1t³ 3         Typically between 10° and 30°           Aeration Basin Side Water Depth         12         ft         Typically between 10° and 30°           Calculated Owgen Required         1.63         Ibs 0 <sub>2</sub> / Ibs 0 <sub>3</sub> 1.22* BODs + 4.3* NH 3*N) / BODs † CEQ 217.155 (a)(3) Eq. F.2           Calculated Air Divarie         2.2         1bs 0 y / Ibs Obs         TCEQ 217.155 (a)(3)         TCEQ 217.155 (b)(2)(A)           Calculated Air Divarie         6.5%         1.6         0.7         CEQ 227.155 (b)(2)(A)				0.49//// /// /// /// /// /// /// /// /// /
Design Flow for Aeration Basins   1.65				
Design Flow for Aeration Basins         1.65         MGD Aga's (Design Studge Retention Time (A)         1.00         Aga's (Design Studge Retention Time (A)         1.00         Aga's (Design Studge Retention Time (A)         1.00         CEQ \$217.157(b)(2)(b) max is 25 days         1.00<	Return Sludge Flow at Peak Flow (RAS)	2.2	MGD	$Q_{PEAK} \times X/(X_R - X)$ ; M&E 5th Ed. Eq. 8-42
Design Sludge Retention Time (8A)         10         days         TCEQ \$217.157(d)(2)(b) max is 25 days           Organic Loading Rate         35         tbBOD₂/d1,0001³ TCEQ \$217.154(b)(2) Fig 30 Conventional Activated           Required Minimum Volume         78,634         it 3³         TCEQ \$217.154(b)(2) Fig 30 Conventional Activated           Number of Aeration Basins to Add         3         ea         Acration Basin Width         14         ft           Aeration Basin Width         14         ft         Typically between 10° and 30°           Total Provided Aeration Basin Solume         94,060         1.3         Typically between 10° and 30°           Total Provided Aeration Basin Side Water Depth         12         ft         Total AB Volume with Largest AB out of Service (VR)         82,320         TCEQ \$217.155(a)(3)         TCEQ \$217.155 (a)(3) FCEQ \$217.155 (	AERATION BASINS (AB)			
Organic Loading Rate         35         UBBODy/d/1,000ft <sup>23</sup> TCEQ \$217.154(b)(2) Fig 30 Conventional Activated           Required Minimum Volume         78,634         ft <sup>3</sup> Number of Aeration Basins to Add         3         ea           Aeration Basin Length         70         ft           Aeration Basin Width         14         ft           Side Water Depth of Aeration Basin Volume         94,080         ft <sup>3</sup> Aeration Basin Solice with Largest Length         70         ft Total Provided Aeration Basin Solie Water Depth           Total Provided Aeration Basin Solie Water Depth         70         ft Total Aeration Basin Solie Water Depth           Total AB Volume with Largest AB out of Service (VR)         82,320         ft Total Aeration Basin Solie Water Depth           Oxygen Required         1,33         lbs O <sub>2</sub> /lb BOO <sub>3</sub> (1,2 * BOO <sub>3</sub> + 4.3 * NH <sub>3</sub> · N)/ BOO <sub>3</sub> TCEQ 217.155 (a)(3) Eq. 2.           Calculated Oxygen Required         1,33         scfm         (0,9 * BOO <sub>3</sub> / WONTE*O_23* 0.075* 1440) TCEQ 217.155 (b)(2)(C)C)Eq. 4.           Calculated Air Flowrate         1,333         scfm         (0,9 * BOO <sub>3</sub> / WONTE*O_23* 0.075* 1440) TCEQ 217.155 (b)(2)(E)(E)C)           Clean water transfer efficiency         0,84         TCEQ 217.155 (b)(2)(A)(iii)           Clean water transfer efficiency         0,84         Wass Sud	Design Flow for Aeration Basins	1.65	MGD	Q <sub>O</sub> + RAS
Required Minimum Volume         78,634         ft 3           Number of Aeration Basins to Add         3         ea           Aeration Basin Length         70         ft           Aeration Basin Width         14         ft           Side Water Depth of Aeration Basin         12         ft         Typically between 10' and 30'           Total Provided Aeration Basin Volume         94,080         ft³         Tht           Aeration Basin in Service with Largest Length         70         ft           Largest Aeration Basin's Side Water Depth         12         ft           Calculated Oxygen Required         1.63         lbs 0,7 lb BoD <sub>a</sub> TCEQ \$217.155 (a)\$ TCEQ \$217.155 (a)\$ (3)\$ Eq. F.2           Oxygen Requirement (O,B)         2.2         lbs 0,7 lb BoD <sub>a</sub> TCEQ \$217.155 (b)\$ (2) (A) (iii)         TCEQ \$217.155 (b)\$ (2) (A) (iii)           Clean water transfer efficiency         18%         TCEQ \$217.155 (b)\$ (2) (A) (iii)         TC	Design Sludge Retention Time (θA)	10	days	TCEQ §217.157(d)(2)(b) max is 25 days
Required Minimum Volume         78,634         ft 3           Number of Aeration Basins to Add         3         ea           Aeration Basin Length         70         ft           Aeration Basin Width         14         ft           Side Water Depth of Aeration Basin         12         ft         Typically between 10' and 30'           Total Provided Aeration Basin Volume         94,080         ft³         Tht           Aeration Basin in Service with Largest Length         70         ft           Largest Aeration Basin's Side Water Depth         12         ft           Calculated Oxygen Required         1.63         lbs 0,7 lb BoD <sub>a</sub> TCEQ \$217.155 (a)\$ TCEQ \$217.155 (a)\$ (3)\$ Eq. F.2           Oxygen Requirement (O,B)         2.2         lbs 0,7 lb BoD <sub>a</sub> TCEQ \$217.155 (b)\$ (2) (A) (iii)         TCEQ \$217.155 (b)\$ (2) (A) (iii)           Clean water transfer efficiency         18%         TCEQ \$217.155 (b)\$ (2) (A) (iii)         TC	Organic Loading Rate	35	lbBOD <sub>5</sub> /d/1,000ft <sup>3</sup>	TCEQ §217.154(b)(2) Fig 30 Conventional Activated
Aeration Basin Length         70         ft           Aeration Basin Width         14         ft           Side Water Depth of Aeration Basin         12         ft         Typically between 10' and 30'           Total Provided Aeration Basin Notume         94,080         ft ³         Typically between 10' and 30'           Aeration Basin in Service with Largest Length         70         ft ³           Largest Aeration Basin's Side Water Depth         12         ft ³           Calculated Divigen Required         1.63         Usb Q <sub>2</sub> (Ib BOD <sub>2</sub> to BOD <sub>2</sub> to CEQ 217.155 (a)(3)         CEQ 217.155 (a)(3) PCQ 217.155 (a)(4)(4)(4) PCQ 217.155 (a)(4) PCQ 217.155 (a)(4) PCQ 217.155 (a)(4) PCQ 217.155 (a)(	Required Minimum Volume	78,634	-	
Aeration Basin Length         70         ft           Aeration Basin Width         14         ft           Side Water Depth of Aeration Basin         12         ft         Typically between 10' and 30'           Total Provided Aeration Basin Notume         94,080         ft 3         Typically between 10' and 30'           Aeration Basin in Service with Largest Length         70         ft         Typically between 10' and 30'           Largest Aeration Basin's Side Water Depth         12         ft         Typically between 10' and 30'           Calculated Daygen Required         1.63         Usb S2/1b BOD5, 12         TCEQ 217.155 (a)(3)         TCEQ 217.155 (a)(3) PCEQ 217.155 (a)(3) EP.2         Color Both Provided Prov				
Aeration Basin Width         14         ft         Typically between 10' and 30'           Total Provided Aeration Basin Volume         94,080         ft³         Typically between 10' and 30'           Aeration Basin in Service with Largest Length         70         ft         Typically between 10' and 30'           Largest Aeration Basin's Side Water Depth         12         ft         Typically between 10' and 30'           Calculated Oxygen Requirement (O <sub>2</sub> R)         82,320         ft³         Typically BoD <sub>0</sub> (12.2 * BOD <sub>0</sub> *4.3 * NH <sub>3</sub> - N) / BOD <sub>3</sub> * TCEQ 217.155 (a)(3) Eq. 2.2 * Usb O <sub>2</sub> / Usb BoD <sub>0</sub> (12.2 * BOD <sub>0</sub> * 4.3 * NH <sub>3</sub> - N) / BOD <sub>3</sub> * TCEQ 217.155 (a)(3) Eq. 2.2 * Usb O <sub>2</sub> / Usb BoD <sub>3</sub> (12.2 * BOD <sub>6</sub> * 4.3 * NH <sub>3</sub> - N) / BOD <sub>3</sub> * TCEQ 217.155 (a)(3) Eq. 2.2 * Usb O <sub>2</sub> / Usb BoD <sub>3</sub> (12.2 * BOD <sub>6</sub> * 4.3 * NH <sub>3</sub> - N) / BOD <sub>3</sub> * TCEQ 217.155 (a)(3) Eq. 2.2 * Usb O <sub>2</sub> / Usb BoD <sub>3</sub> (12.2 * BOD <sub>6</sub> * 4.3 * NH <sub>3</sub> - N) / BOD <sub>3</sub> * TCEQ 217.155 (a)(3) Eq. 2.2 * Usb O <sub>2</sub> / Usb BoD <sub>3</sub> (12.2 * BOD <sub>6</sub> * 4.3 * NH <sub>3</sub> - N) / BOD <sub>3</sub> * TCEQ 217.155 (a)(3) Eq. 2.2 * Usb O <sub>2</sub> / Usb BoD <sub>3</sub> (12.2 * BOD <sub>6</sub> * 4.3 * NH <sub>3</sub> - N) / BOD <sub>3</sub> * TCEQ 217.155 (a)(3) Eq. 2.2 * Usb O <sub>2</sub> / Usb BoD <sub>3</sub> * (12.2 * BOD <sub>6</sub> * 4.3 * NH <sub>3</sub> - N) / BOD <sub>3</sub> * TCEQ 217.155 (a)(3) (a)(3) (a) Eq. 2.2 * Usb O <sub>2</sub> / Usb BoD <sub>3</sub> * (20.2 * BOD <sub>6</sub> * 4.3 * NH <sub>3</sub> - N) / BOD <sub>3</sub> * TCEQ 217.155 (b)(2)(2)(2) (C) (C) Eq. 4.2 * Usb O <sub>2</sub> / Usb BoD <sub>3</sub> * (20.2 * Usb O <sub>2</sub> / Usb O <sub>2</sub> / Usb BoD <sub>3</sub> * (20.2 * Usb O <sub>2</sub> / Usb O <sub>2</sub> / Usb O <sub>2</sub> / Usb O <sub>3</sub> * Usb O <sub>2</sub> / Usb O <sub>3</sub> *				
Side Water Depth of Aeration Basin         12         ft         Typically between 10' and 30'           Total Provided Aeration Basin Volume         94,080         ft³           Aeration Basin in Service with Largest Length         70         ft           Largest Aeration Basin's Side Water Depth         12         ft           Total AB Volume with Largest AB out of Service (VR)         82,320         ft³           Calculated Oxygen Required         1.63         lbs O <sub>2</sub> /lb BOD <sub>5</sub> (1.2 * BOD <sub>5</sub> * 4.3 * NH <sub>3</sub> • N) / BOD <sub>5</sub> TCEQ 217.155 (a)(3) Eq F.2           Oxygen Requirement (O <sub>2</sub> R)         2.2         lbs O <sub>2</sub> / lb BOD <sub>5</sub> 10.2 * BOD <sub>5</sub> * 4.3 * NH <sub>3</sub> • N) / BOD <sub>5</sub> TCEQ 217.155 (a)(3) Eq F.2           Clean water transfer efficiency         1.83         scfm         (O <sub>2</sub> R* BOD <sub>5</sub> / (WOTE*-0.23*-0.075*1440) TCEQ 217.155 (b)(2)(C)Eq F.4           Clean water transfer efficiency         1.8%         TCEQ 217.155 (b)(2)(A)(iii)           Clean water transfer efficiency adjust based on diffuser         65%         TCEQ 217.155 (b)(2)(D)           WAS           Vasing based on volume of aeration tank           Provided Aeration Basin Volume (VR)         0.740         Mgal           Waste Sludge Flowrate from AB, Average Flow         0.0703718         MGD         V <sub>R</sub> / θ <sub>A</sub> ; Metcalf &Eddy (M&E) Sth Edition Equation 8-32           Daily Slu	<u> </u>			
Total Provided Aeration Basin Volume				
Aeration Basin in Service with Largest Length         70         ft           Largest Aeration Basin's Side Water Depth         12         ft           Total AB Volume with Largest AB out of Service (VR)         82,320         ft³           Calculated Oxygen Required         1.63         lbs O₂ / lb BOD₂ (12 BOD₂ TEQ \$217.155 (a)(3)         TCEQ \$217.155 (a)(3)         TCEQ \$217.155 (a)(3)         ECQ \$217.155 (b)(2)(A)(iii)         CCC Coarse bubble = .45 TCEQ \$217.155 (b)(2)(B)(i)         ECQ \$217.155 (b)(2)(D)         ECQ \$217.15	Side Water Depth of Aeration Basin	12	ft	Typically between 10' and 30'
Largest Aeration Basin's Side Water Depth         12         ft           Total AB Volume with Largest AB out of Service (VR)         82,320         ft³           Calculated Oxygen Required         1.63         lbs O₂/lb BOD₅ (1.2 * BOD₅ + 4.3 * NH ₃·N) / BOD₅ TCEQ 217.155 (a)(3) Eq F.2           Oxygen Requirement (O₂R)         2.2         lbs O₂/lb BOD₅ (O₂R*BOD₅) / WOTE*0.23*0.075*1440) TCEQ 217.155(b)(2)C)Eq F.4           Clean water transfer efficiency         18%         TCEQ 217.155(b)(2)(A)(iii)           Clean water transfer efficiency adjust based on diffluser Correction Factor         65%         Coarse bubble = .65 Fine bubble = .45 TCEQ 217.155(b)(2)(B)(i)           Correction Factor         0.64         TCEQ 217.155(b)(2)(A)(iii)           WAS           **Vestion Basin Volume of aeration tank           Provided Aeration Basin Volume (VR)         0.740         Mgal           Waste Sludge Flowrate from AB, Average Flow         0.0703718         MGD         V <sub>R</sub> / θ <sub>A</sub> ; Metcalf &Eddy (M&E) 5th Edition Equation 8-32           Daily Sludge Production Rate         604,508         lb/d         WAS*SG; waste activated sludge rate*specific gravity of sludge solids           AEROBIC DIGESTER           % of Volatile Solids (%VS)         80%         Wolatile Solids Retention Time (SRT)         40         days         Figure: 30 TCEQ §217.249(t)(4)(B); for an average of 20 ° C <td>Total Provided Aeration Basin Volume</td> <td>94,080</td> <td>ft<sup>3</sup></td> <td></td>	Total Provided Aeration Basin Volume	94,080	ft <sup>3</sup>	
Total AB Volume with Largest AB out of Service (VR) 82,320 ft $^3$ Calculated Oxygen Required 1.63 lbs $O_2$ / lb $BOD_5$ (1.2 * $BOD_5$ +4.3 * NH $_3$ *N) / $BOD_5$ TCEQ 217.155 (a)(3) Eq F.2 Oxygen Requirement ( $O_2R$ ) 2.2 lbs $O_2$ / lb $BOD_5$ TCEQ 8217.155 (a)(3) (O.5R*BOD $_5$ ) TCEQ 8217.155 (a)(3) (O.5R*BOD $_5$ ) TCEQ 8217.155 (b)(2) (A)(iii) (O.5R*BOD $_5$ ) (O.5R*BOD $_5$ ) (WOTE*O.23*0.075*1440) TCEQ 217.155 (b)(2) C)Eq F.4 Clean water transfer efficiency adjust based on diffuser of 56% (O.64) TCEQ 217.155 (b)(2) (A)(iii) (Coarse bubble = .65 Fine bubble = .45 TCEQ 217.155 (b)(2) (B)(i) (O.64) (	Aeration Basin in Service with Largest Length	70	ft	
Calculated Oxygen Required  1.63    lbs O <sub>2</sub> / lb BOD <sub>5</sub>   CL2 * BOD <sub>5</sub> * 4.3 * NH 3 - N) / BOD <sub>5</sub> TCEQ 217.155 (a) (3) Eq F.2  Oxygen Requirement (O <sub>2</sub> R)  2.2    lbs O <sub>2</sub> / lb BOD <sub>5</sub>   TCEQ 8217.155 (a) (3)  Calculated Air Flowrate  1.333    scfm (O <sub>2</sub> R*BOD <sub>5</sub> ) / (WOTE*0.23*0.075*1440) TCEQ 217.155 (b) (2) C)Eq F.4  Clean water transfer efficiency adjust based on diffuser  Clean water transfer efficiency adjust based on diffuser  Correction Factor  WAS  *Design based on volume of aeration tank  Provided Aeration Basin Volume (VR)  Waste Sludge Flowrate from AB, Average Flow  0.0703718    MGD   V <sub>R</sub> / θ <sub>A</sub> ; Metcalf &Eddy (M&E) 5th Edition Equation 8-32  Daily Sludge Production Rate  80    V <sub>R</sub> / θ <sub>A</sub> ; Metcalf &Eddy (M&E) 5th Edition Equation 8-32  AEROBIC DIGESTER  % of Volatile Solids (%VS)  80    Wostalie Solids (%VS)  80    Wostalie Solids (%VS)  MILSS Concentration  MILSS Concentration  Minimum Solids Retention Time (SRT)  40    days   Figure: 30 TCEQ 8217.249(t)(4)(B); for an average of 20 ° C  Solids Loading  0.3    lb VSS/ft³-d    Solids Loading  0.3    lb VSS/ft³-d    Solids Fercent Solids  2    Ppd    Mass of Influent Solids * [1-(%VS*%VSD)]    Average Solids in Digester Based on SRT  10    Superior Stream	Largest Aeration Basin's Side Water Depth	12	ft	
Oxygen Requirement ( $O_2R$ )2.2lbs $O_2$ / lb BOD5 TCEQ \$217.155 (a)(3)Calculated Air Flowrate1,333scfm $(O_2R*BOD5)$ /(WOTE*0.23*0.075*1440) TCEQ 217.155 (b)(2)C)Eq F.4Clean water transfer efficiency18%TCEQ 217.155(b)(2)(A)(iii)Clean water transfer efficiency adjust based on diffuser Correction Factor65%Coarse bubble = .65 Fine bubble = .45 TCEQ 217.155(b)(2)(B)(i)Correction Factor0.64TCEQ 217.155(b)(2)(D)WAS*Design based on volume of aeration tankProvided Aeration Basin Volume (VR)0.740MgalWaste Sludge Flowrate from AB, Average Flow0.0703718MGD $V_R / \theta_A$ ; Metcalf &Eddy (M&E) 5th Edition Equation 8-32Daily Sludge Production Rate604,508lb/dWAS*SG; waste activated sludge rate*specific gravity of sludge solidsAEROBIC DIGESTER80%Wolatile Solids Destroyed in Digestion (%VSD)40%MLSS Concentration20,000mg/LTCEQ \$217.249(t)(4)(A)Minimum Solids Retention Time (SRT)40daysFigure: 30 TCEQ \$217.249(t)(4)(B); for an average of 20 ° CSolids Loading0.3lb VSS/ft³-dDigester Percent Solids2%EggMass of Influent Solids2,752ppdBOD5 * $Q_{DES}$ Mass of Digested Solids1,871ppdMass of Influent Solids * Mass of Digested Solids) / 2Total Solids in Digester Based on SRT92,474lbAverage Solids * SRT	Total AB Volume with Largest AB out of Service (VR)	82,320	ft <sup>3</sup>	
Oxygen Requirement ( $O_2R$ )2.2lbs $O_2$ / lb BOD5 TCEQ \$217.155 (a)(3)Calculated Air Flowrate1,333scfm $(O_2R*BOD5)$ /(WOTE*0.23*0.075*1440) TCEQ 217.155 (b)(2)C)Eq F.4Clean water transfer efficiency18%TCEQ 217.155(b)(2)(A)(iii)Clean water transfer efficiency adjust based on diffuser Correction Factor65%Coarse bubble = .65 Fine bubble = .45 TCEQ 217.155(b)(2)(B)(i)Correction Factor0.64TCEQ 217.155(b)(2)(D)WAS*Design based on volume of aeration tankProvided Aeration Basin Volume (VR)0.740MgalWaste Sludge Flowrate from AB, Average Flow0.0703718MGD $V_R / \theta_A$ ; Metcalf &Eddy (M&E) 5th Edition Equation 8-32Daily Sludge Production Rate604,508lb/dWAS*SG; waste activated sludge rate*specific gravity of sludge solidsAEROBIC DIGESTER80%Wolatile Solids Destroyed in Digestion (%VSD)40%MLSS Concentration20,000mg/LTCEQ \$217.249(t)(4)(A)Minimum Solids Retention Time (SRT)40daysFigure: 30 TCEQ \$217.249(t)(4)(B); for an average of 20 ° CSolids Loading0.3lb VSS/ft³-dDigester Percent Solids2%EggMass of Influent Solids2,752ppdBOD5 * $Q_{DES}$ Mass of Digested Solids1,871ppdMass of Influent Solids * Mass of Digested Solids) / 2Total Solids in Digester Based on SRT92,474lbAverage Solids * SRT	Coloulated Owigan Required	1.62	lba O / lb BOD	(1.2 * POD + 4.2 * NIL NI\ / POD TOFO 217 155 (c)/2\ Fo F 2
Calculated Air Flowrate 1,333 scfm $(O_2R*BOD_5)/(WOTE*0.23*0.075*1440)$ TCEQ 217.155(b)(2)C)Eq F.4 Clean water transfer efficiency 18% TCEQ 217.155(b)(2)(A)(iii) (Coarse bubble = .45 TCEQ 217.155(b)(2)(B)(i) (Coarse bubble = .45 TCEQ 217.155(b)(2)(B)				
Clean water transfer efficiency 18% $TCEQ 217.155(b)(2)(A)(iii)$ Clean water transfer efficiency adjust based on diffuser 65% $Coarse \ bubble = .65 \ Fine \ bubble = .45 \ TCEQ 217.155(b)(2)(B)(i)$ Correction Factor $0.64$ $TCEQ 217.155(b)(2)(D)$ WAS  *Design based on volume of aeration tank  Provided Aeration Basin Volume (VR) $0.740$ Mgal  Waste Sludge Flowrate from AB, Average Flow $0.0703718$ MGD $V_R/\theta_A$ ; Metcalf &Eddy (M&E) 5th Edition Equation 8-32  Daily Sludge Production Rate $604,508$ lb/d WAS*SG; waste activated sludge rate*specific gravity of sludge solids  AEROBIC DIGESTER  % of Volatile Solids (%VS) $80\%$ % Volatile Solids Destroyed in Digestion (%VSD) $40\%$ MLSS Concentration $20,000$ mg/L $TCEQ \$217.249(t)(4)(A)$ Minimum Solids Retention Time (SRT) $40$ days Figure: $30 \ TCEQ \$217.249(t)(4)(B)$ ; for an average of $20 \ ^{\circ}C$ Solids Loading $0.3$ lb VSS/ft $^3$ -d Digester Percent Solids $2\%$ Mass of Influent Solids $2\%$ Mass of Influent Solids $1.871$ ppd Mass of Influent Solids * [1-{\( \psi \)VS*\%VSD)}] Average Solids in Digester Based on SRT $92,474$ lb Average Solids * SRT				
Clean water transfer efficiency adjust based on diffuser Correction Factor $0.64$ Coarse bubble = .45 TCEQ 217.155(b)(2)(B)(i) TCEQ 217.155(b)(2)(D) $0.64$ TCEQ			scim	2 0 1
Correction Factor 0.64 TCEQ 217.155(b)(2)(D)  WAS  *Design based on volume of aeration tank  Provided Aeration Basin Volume (VR) 0.740 Mgal  Waste Sludge Flowrate from AB, Average Flow 0.0703718 MGD V <sub>R</sub> / θ <sub>A</sub> ; Metcalf &Eddy (M&E) 5th Edition Equation 8-32  Daily Sludge Production Rate 604,508 lb/d WAS*SG; waste activated sludge rate*specific gravity of sludge solids  AEROBIC DIGESTER  % of Volatile Solids (%VS) 80% % Volatile Solids Destroyed in Digestion (%VSD) 40%  MLSS Concentration 20,000 mg/L TCEQ \$217.249(t)(4)(A)  Minimum Solids Retention Time (SRT) 40 days Figure: 30 TCEQ \$217.249(t)(4)(B); for an average of 20 ° C  Solids Loading 0.3 lb VSS/ft³-d  Digester Percent Solids  Mass of Influent Solids \$2,752 ppd BOD <sub>S</sub> * Q DES  Mass of Digested Solids in Digester \$2,312 ppd (Mass of Influent Solids * [1-(%VS*%VSD)]  Average Solids in Digester Based on SRT 92,474 lb Average Solids * SRT	•			
WAS  *Design based on volume of aeration tank  Provided Aeration Basin Volume (VR)  0.740  Mgal  Waste Sludge Flowrate from AB, Average Flow  0.0703718  MGD  V <sub>R</sub> /θ <sub>A</sub> ; Metcalf &Eddy (M&E) 5th Edition Equation 8-32  Daily Sludge Production Rate  604,508  b/d  WAS*SG; waste activated sludge rate*specific gravity of sludge solids  AEROBIC DIGESTER  % of Volatile Solids (%VS)  80%  % Volatile Solids Destroyed in Digestion (%VSD)  MLSS Concentration  20,000  mg/L  TCEQ \$217.249(t)(4)(A)  Minimum Solids Retention Time (SRT)  40  days  Figure: 30 TCEQ \$217.249(t)(4)(B); for an average of 20 ° C  Solids Loading  Digester Percent Solids  2%  Mass of Influent Solids * [1-(%VS*%VSD)]  Average Solids in Digester Based on SRT  92,474  lb  Average Solids * SRT				
*Design based on volume of aeration tank Provided Aeration Basin Volume (VR) 0.740 Mgal Waste Sludge Flowrate from AB, Average Flow 0.0703718 MGD $V_R/\theta_A$ ; Metcalf &Eddy (M&E) 5th Edition Equation 8-32 Daily Sludge Production Rate 604,508 lb/d WAS*SG; waste activated sludge rate*specific gravity of sludge solids AEROBIC DIGESTER		0.0 .		
Provided Aeration Basin Volume (VR)  0.740 Mgal  Waste Sludge Flowrate from AB, Average Flow  0.0703718 MGD V <sub>R</sub> /θ <sub>A</sub> ; Metcalf &Eddy (M&E) 5th Edition Equation 8-32  Daily Sludge Production Rate  604,508 lb/d WAS*SG; waste activated sludge rate*specific gravity of sludge solids  AEROBIC DIGESTER  % of Volatile Solids (%VS)  80%  % Volatile Solids Destroyed in Digestion (%VSD)  MLSS Concentration  20,000 mg/L  TCEQ \$217.249(t)(4)(A)  Minimum Solids Retention Time (SRT)  40 days Figure: 30 TCEQ \$217.249(t)(4)(B); for an average of 20 ° C  Solids Loading  0.3 lb VSS/ft³-d  Digester Percent Solids  2%  Mass of Influent Solids  2,752 ppd BOD <sub>5</sub> * Q DES  Mass of Digested Solids  1,871 ppd Mass of Influent Solids * [1-(%VS*%VSD)]  Average Solids in Digester  2,312 ppd (Mass of Influent Solids + Mass of Digested Solids) / 2  Total Solids in Digester Based on SRT  92,474 lb Average Solids * SRT				
Waste Sludge Flowrate from AB, Average Flow D.0703718 MGD V $_{\rm R}$ / $\theta_{\rm A}$ ; Metcalf &Eddy (M&E) 5th Edition Equation 8-32 Billy Sludge Production Rate 604,508 lb/d WAS*SG; waste activated sludge rate*specific gravity of sludge solids WAS*SG; waste activated sludge rate*specific gravity of sludge solids	<u> </u>			
Daily Sludge Production Rate  604,508 lb/d WAS*SG; waste activated sludge rate*specific gravity of sludge solids  AEROBIC DIGESTER  % of Volatile Solids (%VS)  % Volatile Solids Destroyed in Digestion (%VSD)  MLSS Concentration  20,000 mg/L  Minimum Solids Retention Time (SRT)  40 days  Figure: 30 TCEQ \$217.249(t)(4)(A)  Solids Loading  Digester Percent Solids  2%  Mass of Influent Solids  2,752 ppd BOD <sub>5</sub> * Q DES  Mass of Digested Solids  1,871 ppd Mass of Influent Solids * [1-(%VS*%VSD)]  Average Solids in Digester  2,312 ppd (Mass of Influent Solids + Mass of Digested Solids) / 2  Total Solids in Digester Based on SRT  92,474 lb Average Solids * SRT				
AEROBIC DIGESTER  % of Volatile Solids (%VS)  % Volatile Solids Destroyed in Digestion (%VSD)  MLSS Concentration  Minimum Solids Retention Time (SRT)  40  40  40  40  50  50  50  50  50  60  60  60  60  6				
% of Volatile Solids (%VS)  80%  Volatile Solids Destroyed in Digestion (%VSD)  40%  MLSS Concentration  20,000  Mg/L  TCEQ \$217.249(t)(4)(A)  Minimum Solids Retention Time (SRT)  40  days  Figure: 30 TCEQ \$217.249(t)(4)(B); for an average of 20 ° C  Solids Loading  0.3  lb VSS/ft³-d  Digester Percent Solids  2%  Mass of Influent Solids  2,752  ppd  BOD <sub>5</sub> * Q DES  Mass of Digested Solids  1,871  ppd  Mass of Influent Solids * [1-(%VS*%VSD)]  Average Solids in Digester  Total Solids in Digester Based on SRT  92,474  lb  Average Solids * SRT	Daily Sludge Production Rate	604,508	lb/d	WAS*SG; waste activated sludge rate*specific gravity of sludge solids
% Volatile Solids Destroyed in Digestion (%VSD)40%MLSS Concentration20,000mg/LTCEQ \$217.249(t)(4)(A)Minimum Solids Retention Time (SRT)40daysFigure: 30 TCEQ \$217.249(t)(4)(B); for an average of 20 ° CSolids Loading0.3lb VSS/ftt³-dDigester Percent Solids2%Mass of Influent Solids2,752ppdBOD <sub>5</sub> * Q DESMass of Digested Solids1,871ppdMass of Influent Solids * [1-(%VS*%VSD)]Average Solids in Digester2,312ppd(Mass of Influent Solids + Mass of Digested Solids) / 2Total Solids in Digester Based on SRT92,474lbAverage Solids * SRT	AEROBIC DIGESTER			
MLSS Concentration20,000mg/LTCEQ \$217.249(t)(4)(A)Minimum Solids Retention Time (SRT)40daysFigure: $30 \text{ TCEQ } \$217.249(t)(4)(B)$ ; for an average of $20 ^{\circ}$ CSolids Loading0.3lb VSS/ft³-dDigester Percent Solids2%Mass of Influent Solids2,752ppdBOD $_5 ^{\circ}$ Q DESMass of Digested Solids1,871ppdMass of Influent Solids $^{\circ}$ [1-(%VS*%VSD)]Average Solids in Digester2,312ppd(Mass of Influent Solids + Mass of Digested Solids) / 2Total Solids in Digester Based on SRT92,474lbAverage Solids $^{\circ}$ SRT	% of Volatile Solids (%VS)	80%		
Minimum Solids Retention Time (SRT)  40 days Figure: 30 TCEQ §217.249(t)(4)(B); for an average of 20 ° C  Solids Loading  0.3 lb VSS/ft³-d  Digester Percent Solids  2%  Mass of Influent Solids  2,752 ppd BOD <sub>5</sub> * Q DES  Mass of Digested Solids  1,871 ppd Mass of Influent Solids * [1-(%VS*%VSD)]  Average Solids in Digester  2,312 ppd (Mass of Influent Solids + Mass of Digested Solids) / 2  Total Solids in Digester Based on SRT  92,474 lb Average Solids * SRT	% Volatile Solids Destroyed in Digestion (%VSD)	40%		
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	MLSS Concentration	20,000	mg/L	TCEQ §217.249(t)(4)(A)
Digester Percent Solids $2\%$ Mass of Influent Solids $2,752$ ppd $BOD_5 *Q_{DES}$ Mass of Digested Solids $1,871$ ppd Mass of Influent Solids $*[1-(\%VS*\%VSD)]$ Average Solids in Digester $2,312$ ppd (Mass of Influent Solids + Mass of Digested Solids) / 2 Total Solids in Digester Based on SRT $92,474$ lb Average Solids *SRT	Minimum Solids Retention Time (SRT)	40	days	Figure: 30 TCEQ §217.249(t)(4)(B); for an average of 20 ° C
Mass of Influent Solids $2,752$ ppd $BOD_5 * Q_{DES}$ Mass of Digested Solids $1,871$ ppdMass of Influent Solids * $[1-(\%VS*\%VSD)]$ Average Solids in Digester $2,312$ ppd(Mass of Influent Solids + Mass of Digested Solids) / 2Total Solids in Digester Based on SRT $92,474$ lbAverage Solids * SRT	Solids Loading	0.3	lb VSS/ft³-d	
Mass of Digested Solids1,871ppdMass of Influent Solids * [1-(%VS*%VSD)]Average Solids in Digester2,312ppd(Mass of Influent Solids + Mass of Digested Solids) / 2Total Solids in Digester Based on SRT92,474lbAverage Solids * SRT	Digester Percent Solids	2%		
Average Solids in Digester 2,312 ppd (Mass of Influent Solids + Mass of Digested Solids) / 2 Total Solids in Digester Based on SRT 92,474 lb Average Solids * SRT	Mass of Influent Solids	2,752	ppd	BOD <sub>5</sub> * Q <sub>DES</sub>
Average Solids in Digester 2,312 ppd (Mass of Influent Solids + Mass of Digested Solids) / 2 Total Solids in Digester Based on SRT 92,474 lb Average Solids * SRT	Mass of Digested Solids	1,871	ppd	Mass of Influent Solids * [1-(%VS*%VSD)]
	Average Solids in Digester			
	Total Solids in Digester Based on SRT	92,474	lb	Average Solids * SRT
Minimum Required Digester Volume 74,118 ft3 Total Solids / MLSS Concentration	Minimum Required Digester Volume	74,118	ft3	Total Solids / MLSS Concentration

<sup>\*</sup>Design to maintain MLSS concentration in aeration basin between 4,000 mg/L and 10,000 mg/L  $\,$ 

#### PHASE 3 DESIGN CALCULATIONS (Continued)

Number of Digester Basins to Add	1	ea	
Digester Basins Diameter	40	ft	
Side Water Depth	16	ft	
Digester Basin Volume to Add	20,106	ft <sup>3</sup>	
Digester Basin Volume to Add	150,394	gal	
Total Digester Basin Volume	80,425	ft <sup>3</sup>	
% Volatile Solids Destroyed in Digestion (%VSD)	40%		M&E 5th Edition Table 13-44 (38%-50%)
Total Mass Reduced	881	lb VSS red/day	,
Oxidation of VSS	2.3	kg O <sub>2</sub> /kg VSS	M&E 5th Edition Table 13-44
Oxygen Required	912	kg O <sub>2</sub> /day	
Density of Air	1.204	kg/m³ @ 20° C	
Volume of Air Required per Day	3263	m³ air/day	
Oxygen Transfer Efficiency	10%		
Air Flow Rate	22.7	m³/min	
Air Loading	40	ft <sup>3</sup> /min*1000ft <sup>3</sup>	

SOLIDS GENERATED	100% flow	75% Flow	50% Flow	25% Flow
Pounds Influent BOD <sub>5</sub> (lb/d)	2,752	2,064	1,376	688
Pounds of Digested Dry Sludge Produced (lb/d)	1,871	1,404	936	468
Pounds of Wet Sludge Produced (lb/d)	93,575	70,181	46,787	23,394
Gallons of Wet Sludge Produced (gpd)	11,220	8,415	5,610	2,805

CLARIFIER	VALUE	UNIT	FORMULA / REFERENCE
Maximum Overflow Rate @ Peak Flow	1,200	gal/day/ft <sup>2</sup>	TCEQ §217.154(c)(1)
Minimum Detention Time @ Peak Flow	1.8	hours	TCEQ §217.154(c)(1)
Maximum Weir Loading	30,000	gal/day/ft	TCEQ Ch. 217.152 (d)(4)
Minimum Required Surface Area (Overflow)	3,667	ft <sup>2</sup>	TCEQ 217.164 (E) Eq F.8
Minimum required Surface Area (Detention Time)	3,676	ft <sup>2</sup>	TCEQ 217.164 (E) Eq F.10
Minimum Required Weir Length	147	ft	
Number of Clarifiers to Add	1	ea	
Clarifier Diameter	45	ft	
Side Water Depth of Clarifier	12	ft	
Total Wier Length	565	ft	
Total Clarifier Surface Area	6,362	ft <sup>2</sup>	
Total Clarifier Volume	76,341	ft <sup>3</sup>	
Clarifier in Service with Largest Diameter	45	ft	
Side Water Depth of Largest Clarifier	12	ft	
Total Surface Area with Largest Clarifier out of Service	4,771	ft <sup>2</sup>	
Total Weir Length with Largest Clarifier out of Service	424	ft	
Total Volume with Largest Clarifier out of Service	57,256	ft <sup>3</sup>	
CHLORINE CONTACT BASIN			
Minimum Detention Time at Peak Flow	20	min	TCEQ 217.281(b)(1)
Number of Parallel Channels	2	ea	
Width	6	ft	
Depth	12	ft	
Length	30	ft	
Volume	8,640	ft <sup>3</sup>	
Detention time	21.1507	min	

Attachment Q
Solids Management Plan

# Goodman Ranch Wastewater Treatment Plant Solids Management Plan

Design Calculations of the Domestic Technical Report 1.1 identifies an influent BOD strength of 300 mg/l. The Phase 1 design flow capacity of this treatment facility is 0.3 MGD. This corresponds with the removal of 751 lbs. BOD/day (300 mg/l x 8.34 lbs./gallons x 0.3 MGD). The volatile solids in the sludge is estimated to have no reduction, therefore 100% solids would be remaining.

	Biosolids Pro	duction	
Percent Permitted	lbs. BOD/Day	lbs. of Wet	Wasted Gal./
Flow	Removed	Sludge/Day	Day
		(@ 2.0%)	
100%	751	25,520	3,060
75%	563	19,140	2,295
50%	375	12,760	1,530
25%	188	6,380	765

Assuming influent BOD at average temperatures and 2.0% solids concentration in the Aerobic Digester and at 100% of design flow, sludge would be wasted at 3,060 gallons per day. The total capacity of the proposed aerobic digester basins is 300,789 gallons (2 aerobic digestors at 40'ø x 16'). The digested sludge will be transported by a registered hauler and disposed of at a registered landfill.

Design Calculations of the Domestic Technical Report 1.1 identifies an influent BOD strength of 300 mg/l. The Phase 2 design flow capacity of this treatment facility is 0.6 MGD. This corresponds with the removal of 1,501 lbs. BOD/day (300 mg/l x 8.34 lbs./gallons x 0.6 MGD). The volatile solids in the sludge is estimated to have no reduction, therefore 100% solids would be remaining.

	Biosolids Pro	duction	
Percent Permitted	lbs. BOD/Day	lbs. of Wet	Wasted Gal./
Flow	Removed	Sludge/Day	Day
		(@ 2.0%)	
100%	1,501	51,041	6,120
75%	1,126	38,281	4,590
50%	751	25,520	3,060
25%	375	12,760	1,530

Assuming influent BOD at average temperatures and 2.0% solids concentration in the Aerobic Digester and at 100% of design flow, sludge would be wasted at 6,120 gallons per day. The total

capacity of the proposed aerobic digester basins is 451,183 gallons (3 aerobic digestors at 40'ø x 16'). The digested sludge will be transported by a registered hauler and disposed of at a registered landfill.

Design Calculations of the Domestic Technical Report 1.1 identifies an influent BOD strength of 300 mg/l. The Phase 3 design flow capacity of this treatment facility is 1.1 MGD. This corresponds with the removal of 1,501 lbs. BOD/day (300 mg/l x 8.34 lbs./gallons x 1.1 MGD). The volatile solids in the sludge is estimated to have no reduction, therefore 100% solids would be remaining.

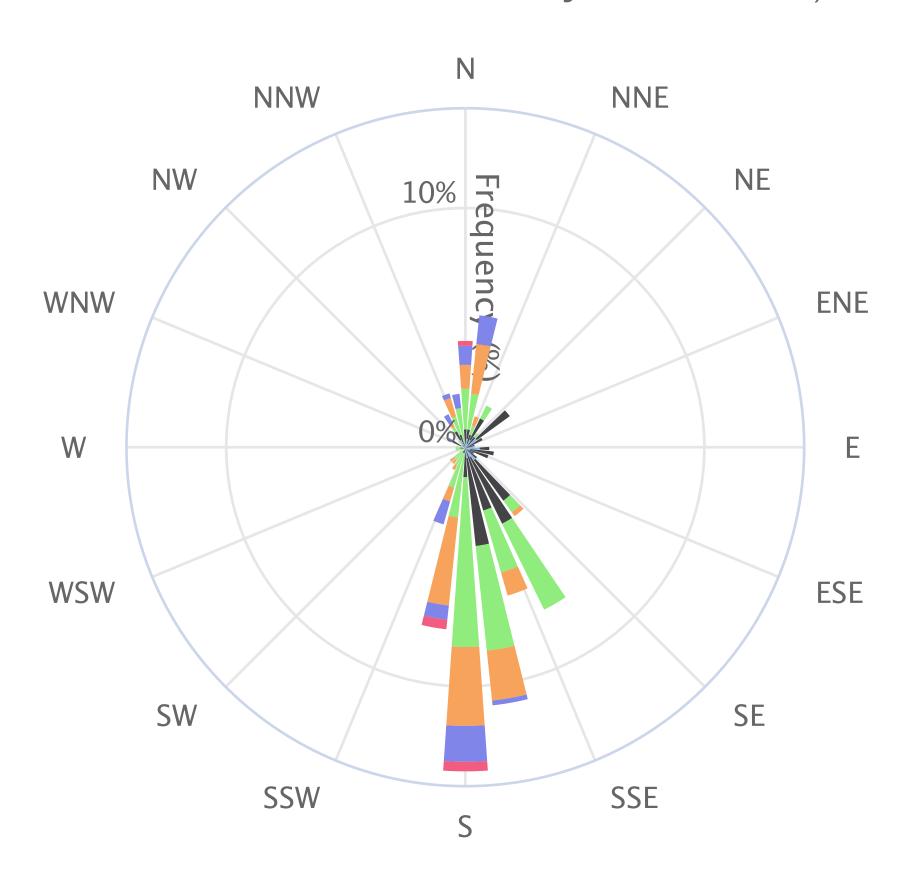
	Biosolids Pro	duction	
Percent Permitted	lbs. BOD/Day	lbs. of Wet	Wasted Gal./
Flow	Removed	Sludge/Day	Day
		(@ 2.0%)	-
100%	2,752	93,575	11,220
75%	2,064	70,181	8,415
50%	1,376	46,787	5,610
25%	688	23,394	2,805

Assuming influent BOD at average temperatures and 2.0% solids concentration in the Aerobic Digester and at 100% of design flow, sludge would be wasted at 11,220 gallons per day. The total capacity of the proposed aerobic digester basins is 601,577 gallons (4 aerobic digestors at 40'ø x 16'). The digested sludge will be transported by a registered hauler and disposed of at a registered landfill.

### Attachment R Windrose

# MCKINNEY MUNI AP (TX) Wind Rose

Dec. 1, 2021 – Dec. 22, 2021 Sub-Interval: Jan. 1 – Dec. 31, 0 – 23



## Wind Speed (mph)

- 1.3 4
- **4** 8
- 8 13
- 13 19
- **19 25**
- **25 32**
- 32 39
- 9 39 47
- **47** -

# Attachment S Copy of EPAY Voucher

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: 706232

**Trace Number:** 582EA000611068

Date: 05/21/2024 09:08 AM

Payment Method: CC - Authorization 000084845G

Voucher Amount: \$50.00

Fee Type: 30 TAC 305.53B WQ NOTIFICATION FEE

ePay Actor: MATT ATKINS
Actor Email: matkins@tnpinc.com

**IP:** 71.41.238.194

#### Payment Contact Information

Name: MATT ATKINS

Company: TEAGUE NALL & PERKINS

Address: 5237 N RIVERSIDE DRIVE, FORT WORTH, TX 76137

**Phone:** 972-833-6872



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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: 706231

**Trace Number:** 582EA000611068

Date: 05/21/2024 09:08 AM

Payment Method: CC - Authorization 000084845G

Voucher Amount: \$2,000.00

Fee Type: WW PERMIT - FACILITY WITH FLOW >= 1.0 MGD - NEW AND MAJOR AMENDMENTS

ePay Actor: MATT ATKINS
Actor Email: matkins@tnpinc.com

**IP:** 71.41.238.194

#### Payment Contact Information

Name: MATT ATKINS

Company: TEAGUE NALL & PERKINS

Address: 5237 N RIVERSIDE DRIVE, FORT WORTH, TX 76137

**Phone:** 972-833-6872

#### Site Information

Site Name: GOODMAN RANCH WASTEWATER TREATMENT PLANT

Site Location: APPROXIMATELY 2 318 FEET NORTHEAST FROM THE INTERSECTION OF CR 165 AND FM 1461

#### Customer Information

Customer Name: HC GOODMAN 3 LLC

Customer Address: 8200 DOUGLAS AVE SUITE 300, DALLAS, TX 75225 0015



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# Attachment T Plain Language Summary

# TCEQ

#### TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

# 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 Title 30, Texas Administrative Code (30 TAC), Chapter 39, Subchapter H. 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 30 TAC Section 39.426, you must provide a translated copy of the completed plain language summary in the appropriate alternative language as part of your application package. 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.

HC McKinney 3, LLC (2. Enter Customer Number here (i.e., CN6#######)) proposes to operate Goodman Ranch Wastewater Treatment Plant (5. Enter Regulated Entity Number here (i.e., RN1######)), a cyclically aerated, flow-through activated sludge process. The facility will be located at 2,318 feet northeast from the intersection of County Road 165 and Farm to Market road 1461, in McKinney, Collin County, Texas 75071. This application is for a new application to discharge at a daily average flow of 1,100,000 gallons per day of treated domestic water. This permit will not authorize a discharge of pollutants into water in the state.

Discharges from the facility are expected to contain five-day carbonaceous biochemical oxygen demand (CBOD5), total suspended solids (TSS), ammonia nitrogen (NH3-N), total phosphorus (TP), dissolved oxygen (D), and Escherichia coli. All discharged pollutants fall within acceptable limits. Domestic wastewater will be treated by activated sludge process and treatment units including bar screens, aeration basins, clarifiers, chlorine contact basins and

### 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.

HC McKinney 3, LLC (2. Introduzca el número de cliente aquí (es decir, CN6#######).) propone operar Goodman Ranch Wastewater Treatment Plant 5. Introduzca el número de entidad regulada aquí (es decir, RN1######), un proceso de lodos activados de flujo continuo y aireado cíclicamente. La instalación está ubicada en La instalación estará ubicada a 2,318 pies al noreste de la intersección de County Road 165 y Farm to Market Road 1461, en McKinney, Condado de Collin, Texas 75071. Esta solicitud es para una nueva aplicación para descargar a un flujo promedio diario de 1,100,000 galones por día de agua doméstica tratada.. Este permiso no autorizará una descarga de contaminantes en el agua en el estado.

Se espera que las descargas de la instalación contengan demanda bioquímica carbonosa de oxígeno de cinco días (CBOD5), sólidos suspendidos totales (SST), nitrógeno amoniacal (NH3-N), fósforo total (TP), oxígeno disuelto (D) y Escherichia coli. Todos los contaminantes vertidos se encuentran dentro de límites aceptables.. Aguas residuales domestics. estará tratado por Unidades de proceso y tratamiento de lodos activados que incluyen cribas de barras, cuencas de aireación, clarificadores, cuencas de contacto con cloro y sopladores, y digestores aeróbicos. Los DESHIDRATADOS serán transportados y eliminados, mientras que la descarga de efluentes ocurrirá en el emisario 1.

# Attachment U Public Involvement Plan Form



#### 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 <b>brief</b> explanation.

TCEQ-20960 (02-09-2023) Page 1 of 4

Section 3. Application Information
Type of Application (check all that apply):
Air Initial Federal Amendment Standard Permit Title V
Waste Municipal Solid Waste Industrial and Hazardous Waste Scrap Tire Radioactive Material Licensing Underground Injection Control
Water Quality
Texas Pollutant Discharge Elimination System (TPDES)
Texas Land Application Permit (TLAP)
State Only Concentrated Animal Feeding Operation (CAFO)
Water Treatment Plant Residuals Disposal Permit
Class B Biosolids Land Application Permit
Domestic Septage Land Application Registration
Water Rights New Permit
New Appropriation of Water
New or existing reservoir
Amendment to an Existing Water Right
Add a New Appropriation of Water
Add a New or Existing Reservoir
Major Amendment that could affect other water rights or the environment
Section 4. Plain Language Summary
Provide a brief description of planned activities.
Project located outside listed geographical locations and is not considered to be significant public
interest due to limited affected downstream properties

TCEQ-20960 (02-09-2023) Page 2 of 4

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.
(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
(., / F - F - F
(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
(e) Languages commonly spoken in area by percentage
(e) Languages commonly spoken in area by percentage
(f) Community and/or Stakeholder Groups
(g) Historic public interest or involvement

TCEQ-20960 (02-09-2023)

Section 6. Planned Public Outreach Activities
(a) Is this application subject to the public participation requirements of Title 30 Texas Administrative Code (30 TAC) Chapter 39?  Yes No
(b) If yes, do you intend at this time to provide public outreach other than what is required by rule?  Yes No  If Yes, please describe.
If you answered "yes" that this application is subject to 30 TAC Chapter 39, answering the remaining questions in Section 6 is not required.
(c) Will you provide notice of this application in alternative languages?  Yes No
Please refer to Section 5. If more than 5% of the population potentially affected by your application is Limited English Proficient, then you are required to provide notice in the alternative language.
If yes, how will you provide notice in alternative languages?
Publish in alternative language newspaper
Posted on Commissioner's Integrated Database Website
Mailed by TCEQ's Office of the Chief Clerk
Other (specify)
(d) Is there an opportunity for some type of public meeting, including after notice?
Yes No
(e) If a public meeting is held, will a translator be provided if requested?
Yes No
(f) <u>Har</u> d copies of the application <u>will</u> be available at the following (check all that apply):
TCEQ Regional Office TCEQ Central Office
Public Place (specify)
Section 7. Voluntary Submittal
For applicants voluntarily providing this Public Involvement Plan, who are not subject to formal public participation requirements.
Will you provide notice of this application, including notice in alternative languages?  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)

TCEQ-20960 (02-09-2023) Page 4 of 4

#### **Leah Whallon**

**From:** Peter Townsend <ptownsend@tnpinc.com>

**Sent:** Friday, June 28, 2024 8:45 AM

To: Leah Whallon Cc: Matt Atkins

Subject:Revisions to Application for Proposed Permit No.: WQ0016550001Attachments:Affected Land Owners.pdf; AFFECTED LANDOWNERS AVERY 5160.docx

Follow Up Flag: Follow up Flag Status: Flagged

#### Good morning Leah,

Here is the updated Adjacent Landowners Exhibit along with the mailing list in a Word Document. I also uploaded the documents to the portal. Let me know if you have any questions or concerns.

Thanks, Peter

#### **Peter Townsend**

Civil Engineer

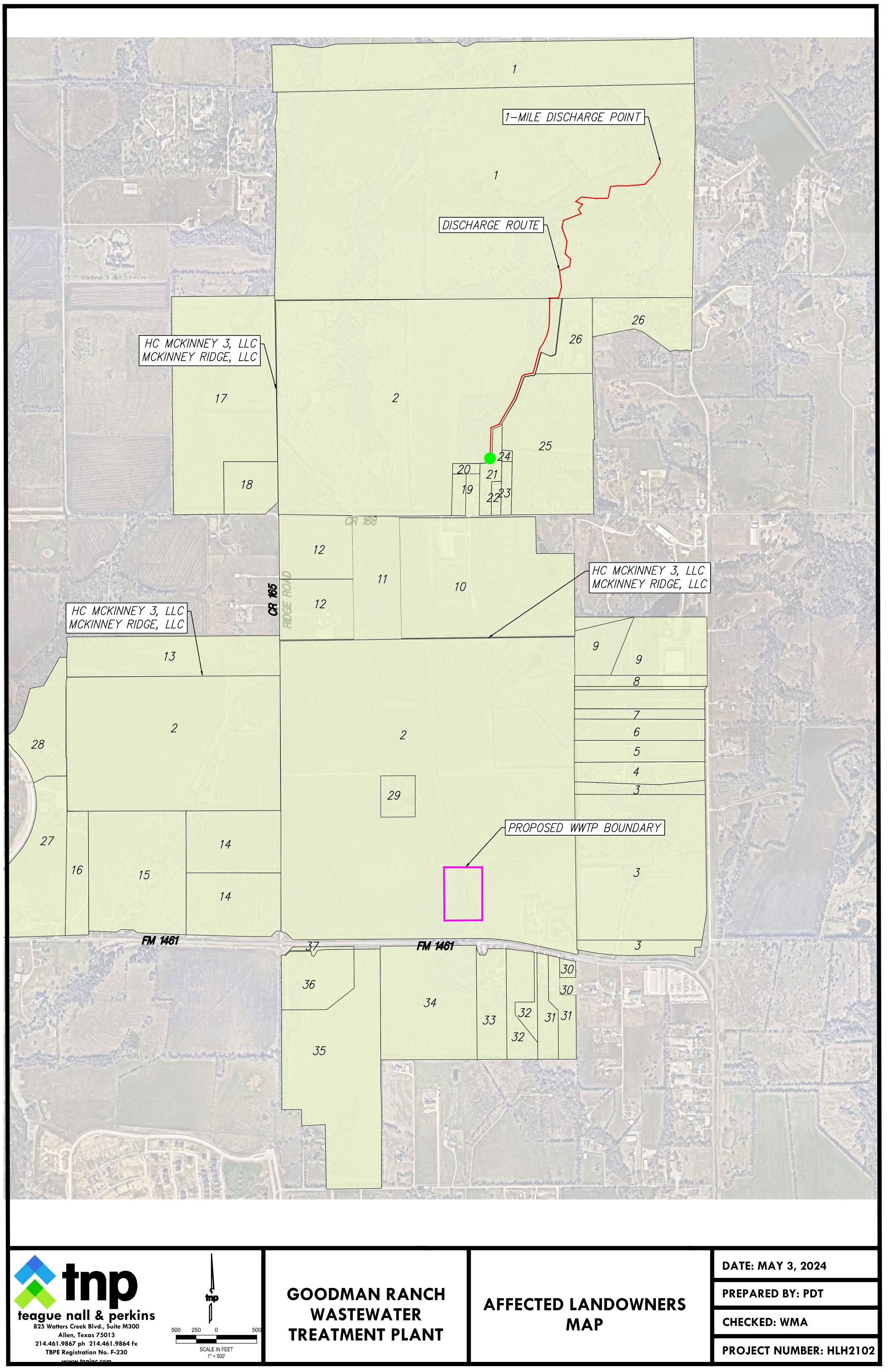


214.396.9563 direct | 972.965.8039 mobile | 214.461.9867 front desk
 825 Watters Creek Boulevard, Suite M300 | Allen, TX 75013

ptownsend@tnpinc.com www.tnpinc.com



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1. BFJ LAND LLC 12900 PRESTON RD STE 117 DALLAS TX 75230-1383	2. HC MCKINNEY 3 LLC & MCKINNEY RIDGE LLC 8200 DOUGLAS AVE STE 300 DALLAS TX 75225-0015	3. KIM KEVIN & HYUNJIN LIVING TRUST THE C/O KEVIN KIM 1762 PRESCOTT PL DALLAS TX 75234-1247
4. GILES MICHAEL N & CHARLOTTE Y 3213 GILLESPIE RD MCKINNEY TX 75072-3978	5. HARDZOG STACEY LYNNE 6621 COUNTY ROAD 166 MCKINNEY TX 75071-7309	6. WHITAKER RUSSELL C & GLENDA 6707 COUNTY ROAD 166 MCKINNEY TX 75071-7311
7. WILSON ARLEN & LYNDA 6785 COUNTY ROAD 166 MCKINNEY TX 75071-7311	8. COLLIN COUNTY COLLIN CO COURTHOUSE BLDG MCKINNEY TX 75069	9. BOARD OF GOV. YOUTH PARK COLLIN CO COURTHOUSE BLDG MCKINNEY TX 75069
10. COLLIN COUNTY 2300 BLOOMDALE RD MCKINNEY TX 75071-8517	11. CR168 MCKINNEY ESTATES LLC 4153 LEIGHTON LN FRISCO TX 75034-6298	12. RAO SUDHIR S & YAMINI MADDALA 1605 BYRN DR ALLEN TX 75013-5377
13. KASARLA LLC & SPANDAN INC 7111 ARCHES AVE IRVING TX 75063-3555	14. CROSS CREEK JOINT VENTURE ATTN: PETER W BALDWIN 8150 N CENTRAL EXPY STE 725 DALLAS TX 75206-1889	15. RK FRONTIER INVESTMENTS LLC C/O SAI REVANTH KOLLI 14374 EASTWICK CT FRISCO TX 75035-0388
16. FRANKLIN FAMILY PARTNERSHIP 8150 N CENTRAL EXPY STE 725 DALLAS TX 75206-1889	17. VAKUNA LLC 2304 HOMESTEAD LN PLANO TX 75025-5526	18. NORTHRIDGE COMMERCIAL LLC 1821 HOUGHTON DR MCKINNEY TX 75072-5929
19. P & L FAMILY TRUST 4404 COUNTY ROAD 168 MCKINNEY TX 75071-7334	20. CHEESEHEAD PROPERTIES - SERIES D LLC 4404 COUNTY ROAD 168 MCKINNEY TX 75071-7334	21. JANOW PROPERTIES LLC PO BOX 1 PRINCETON TX 75407-001
22. HUYNH BILLY 1805 PORT ISABEL DR ALLEN TX 75013-5332	23. RICKY GREER & BARBARA DURHAM 621 LOST CREEK DR PROSPER TX 75078-7235	24. BROOKS BOBBY DALE 4525 COUNTY ROAD 277 MELISSA TX 75454-1711
25. CR 168 INVESTMENTS LLC C/O MICHAEL POLLARD 42089 CROOKED STICK DR WHITNEY TX 76692-2001	26. PARTEE SARA JANE SPEARS BENEFICIARY TRUST & STANLEY EUGENE PARTEE ASSET TRUST 8425 COUNTY ROAD 167 MCKINNEY TX 75071-7305	27. FRANKLIN INVESTMENT CO ROCK CREEK RANCH EVENT CENTER 8150 N CENTRAL EXPY STE 725 DALLAS TX 75206-1889
28. HT FM 1461 TH OWNER LP 2800 POST OAK BLVD STE 4800 HOUSTON TX 77056-6123	29. OGANYAN V & C REVOCABLE TRUST 6404 COUNTY ROAD 165 MCKINNEY TX 75071-8213	30. ANISETTY SREENIVASA MURALI & PRATHIMA SAVARALA 4051 PLANTATION LN FRISCO TX 75035-8591

31. SURTI HARESH M & M PLUMBING 11252 BURKHART RD

MARIETTA OK 73448-2347

34. BATES SHERYL LYNN & BATES MARITAL EXEMPT TRUST

4660 COUNTY ROAD 1006

MCKINNEY TX 75071-6614

37. MCKINNEY FOUR CORNERS LP BERLIN INTERESTS

1201 N RIVERFRONT BLVD STE 100

DALLAS TX 75207-4016

32. LOCKWOOD CHARLES MICHAEL & MISTY SUNSHINE LOCKWOOD

4097 FM 1461

MCKINNEY TX 75071-8265

35. HRC WCD PARTNERS LP

PO BOX 708

ADDISON TX 75001-0708

33. JASANI SNEHAL & MADHANI PRAFUL & HARSHA MADHANI ROVER RESORT

711 MASON DR

ALLEN TX 75013-3076

36. C GREEN PARK LLC C/O CHUCK

**GREEN** 

12520 SCHROEDER RD STE 101

DALLAS TX 75243-1871

#### **Leah Whallon**

Sent: Wednesday, June 19, 2024 1:35 PM

To: Leah Whallon Cc: Matt Atkins

**Subject:** Response for Application for Proposed Permit No.: WQ0016550001

Attachments: Municipal Discharge New Spanish NORI.docx; 2024 06 19 TCEQ Responses.pdf

Follow Up Flag: Follow up Flag Status: Flagged

#### Good afternoon,

I have attached the necessary revisions and the NORI word doc to this email. Let me know if you have any questions or concerns.

Thanks, Peter Townsend

#### **Peter Townsend**

Civil Engineer



214.396.9563 direct | 972.965.8039 mobile | 214.461.9867 front desk
 825 Watters Creek Boulevard, Suite M300 | Allen, TX 75013

ptownsend@tnpinc.com www.tnpinc.com



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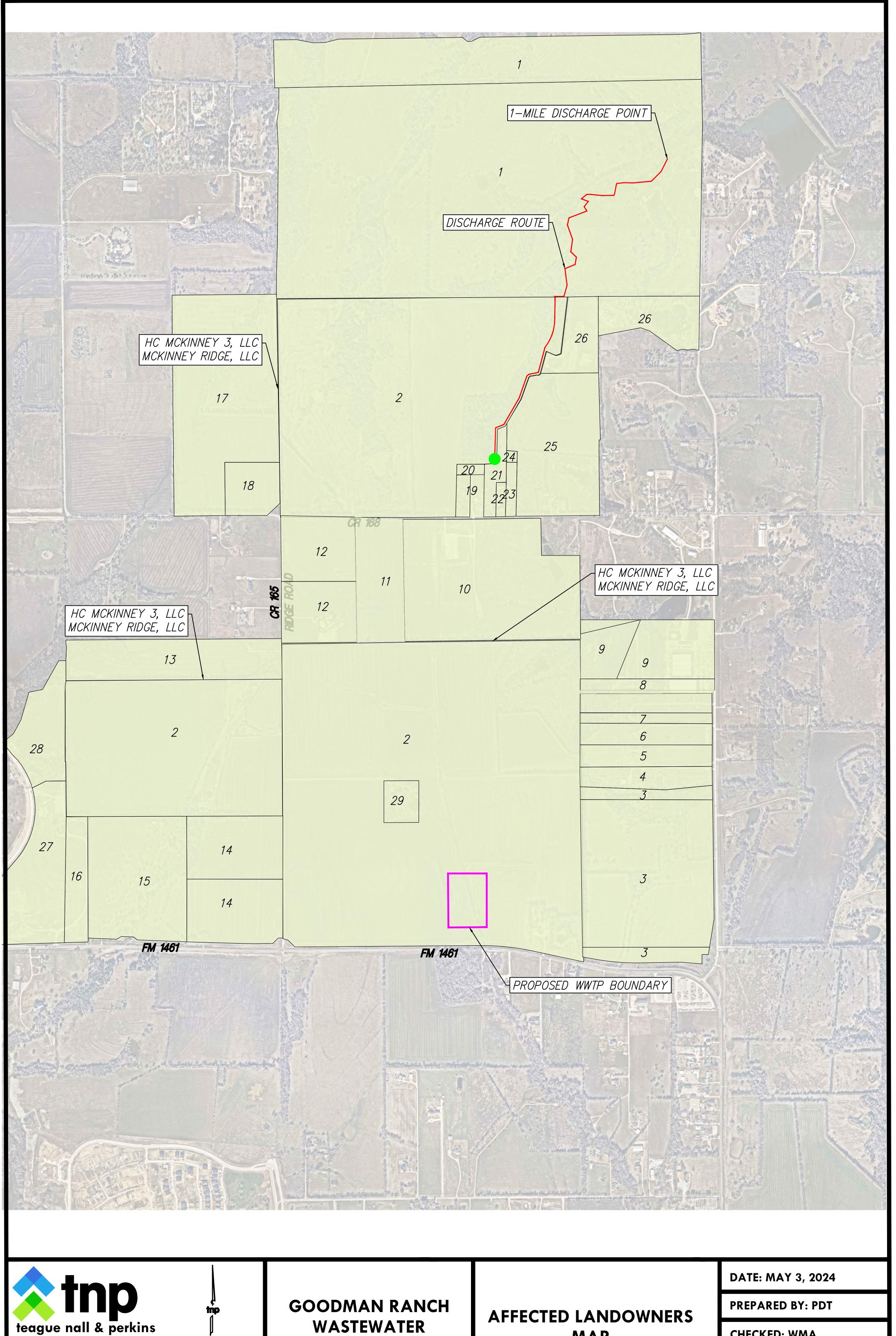
	Title: <u>N/A</u>	Credential: <u>N/A</u>
	Organization Name: <u>N/A</u>	
	Mailing Address: <u>N/A</u>	City, State, Zip Code: <u>N/A</u>
	Phone No.: <u>N/A</u>	E-mail Address: <u>N/A</u>
	If the landowner is not the sa agreement or deed recorded	ame person as the facility owner or co-applicant, attach a lease easement. See instructions.
	Attachment: <u>N/A</u>	
F.	Owner sewage sludge dispose property owned or controlled	al site (if authorization is requested for sludge disposal on l 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 sa agreement or deed recorded	ame person as the facility owner or co-applicant, attach a lease easement. See instructions.
	Attachment: N/A	
Se	ection 10. TPDES Disch	arge Information (Instructions Page 31)
A.	Is the wastewater treatment f	facility location in the existing permit accurate?
	□ Yes ⊠ No	
		cation, please give an accurate description:
		ity is approximately 2,318 feet northeast from the intersection of Market Road 1461 in Collin County.
	County Road 105 and Parm to	warket Road 1401 iii Collin County.
B.	Are the point(s) of discharge	and the discharge route(s) in the existing permit correct?
	□ Yes ⊠ No	
	•	nt permit application, provide an accurate description of the
	point of discharge and the di TAC Chapter 307:	scharge route to the nearest classified segment as defined in 30
	The point of discharge is approand County Road 165 in Collin	eximately 2,717 feet northeast of the intersection of County Road 168 County. The discharged water will travel along the creek to SCS parged into Honey Creek Tributary 14 which flows south into East
	TOTA TIMILY KIVEL.	
	City nearest the outfall(s): <u>Cit</u>	y of McKinney
	County in which the outfalls(	s) is/are located: <u>Collin County</u>
C.	Is or will the treated wastewa a flood control district draina	iter discharge to a city, county, or state highway right-of-way, or age ditch?

Last Name, First Name: N/A

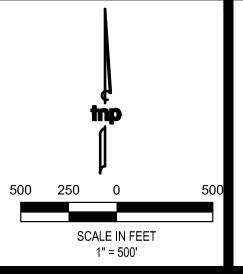
**E.** Owner of effluent disposal site:

Prefix: N/A

	□ Yes ⊠ No
	If <b>yes</b> , indicate by a check mark if:
	$\square$ Authorization granted $\square$ Authorization pending
	For <b>new and amendment</b> 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: $\underline{N/A}$
Se	ection 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 <b>no, or a new or amendment permit application</b> , provide an accurate description of the disposal site location:
	N/A
В.	City nearest the disposal site: <u>N/A</u>
	County in which the disposal site is located: N/A
D.	For <b>TLAPs</b> , describe the routing of effluent from the treatment facility to the disposal site:
	N/A
E.	For <b>TLAPs</b> , please identify the nearest watercourse to the disposal site to which rainfall runoff might flow if not contained: $N/A$
Se	ection 12. Miscellaneous Information (Instructions Page 32)
A.	Is the facility located on or does the treated effluent cross American Indian Land?
	□ Yes ⊠ No
В.	If the existing permit contains an onsite sludge disposal authorization, is the location of the sewage sludge disposal site in the existing permit accurate?
	$\square$ Yes $\square$ No $\boxtimes$ 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







**TREATMENT PLANT** 

**MAP** 

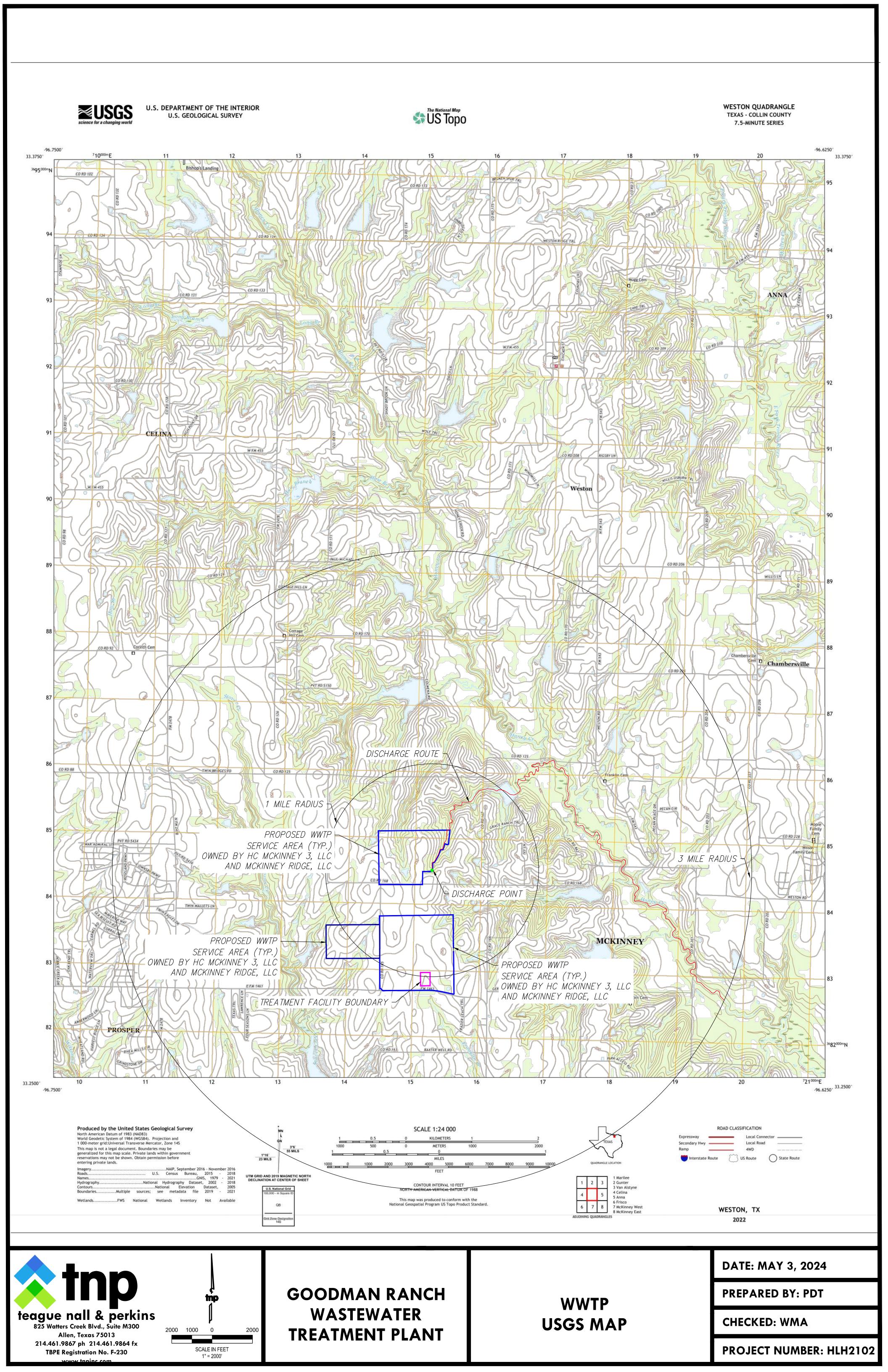
**CHECKED: WMA** 

PROJECT NUMBER: HLH2102

- 1. BFJ LAND LLC 12900 PRESTON RD STE 1117 DALLAS TX 75230-1383
- 2. HC MCKINNEY 3 LLC & MCKINNEY RIDGE LLC 8200 DOUGLAS AVE STE 300 DALLAS TX 75225-0015
- 3. KIM KEVIN & HYUNJIN LIVING TRUST THE C/O KEVIN KIM 1762 PRESCOTT PL DALLAS TX 75234-1247
- 4. GILES MICHAEL N & CHARLOTTE Y 3213 GILLESPIE RD MCKINNEY TX 75072-3978
- 5. HARDZOG STACEY LYNNE 6621 COUNTY ROAD 166 MCKINNEY TX 75071-7309
- 6. WHITAKER RUSSELL C & GLENDA 6707 COUNTY ROAD 166 MCKINNEY TX 75071-7311
- 7. WILSON ARLEN & LYNDA 6785 COUNTY ROAD 166 MCKINNEY TX 75071-7311
- 8. COLLIN COUNTY
  COLLIN CO COURTHOUSE
  BLDG
  MCKINNEY TX 75069
- 9. BOARD OF GOV. YOUTH PARK YOUTH PARK
- 10. COLLIN COUNTY 2300 BLOOMDALE RD MCKINNEY TX 75071-8517
- 11. CR168 MCKINNEY ESTATES LLC 4153 LEIGHTON LN

- FRISCO TX 75034-6298
- 12. RAO SUDHIR S & YAMINI MADDALA 1605 BYRN DR ALLEN TX 75013-5377
- 13. KASARLA LLC & SPANDAN INC 7111 ARCHES AVE IRVING TX 75063-3555
- 14. CROSS CREEK JOINT VENTURE ATTN: PETER W BALDWIN 8150 N CENTRAL EXPY STE 725 DALLAS TX 75206-1889
- 15. RK FRONTIER INVESTMENTS LLC C/O SAI REVANTH KOLLI 14374 EASTWICK CT FRISCO TX 75035-0388
- 16. FRANKLIN FAMILY PARTNERSHIP 8150 N CENTRAL EXPY STE 725 DALLAS TX 75206-1889
- 17. VAKUNA LLC 2304 HOMESTEAD LN PLANO TX 75025-5526
- 18. NORTHRIDGE COMMERCIAL LLC 1821 HOUGHTON DR MCKINNEY TX 75072-5929
- 19. P & L FAMILY TRUST 4404 COUNTY ROAD 168 MCKINNEY TX 75071-7334
- 20. CHEESEHEAD PROPERTIES - SERIES D LLC 4404 COUNTY ROAD 168 MCKINNEY TX 75071-7334
- 21. JANOW PROPERTIES LLC PO BOX 1 PRINCETON TX 75407-001

- 22. HUYNH BILLY 1805 PORT ISABEL DR ALLEN TX 75013-5332
- 23. RICKY GREER & BARBARA DURHAM 621 LOST CREEK DR PROSPER TX 75078-7235
- 24. BROOKS BOBBY DALE 4525 COUNTY ROAD 277 MELISSA TX 75454-1711
- 25. CR 168 INVESTMENTS LLC C/O MICHAEL POLLARD 42089 CROOKED STICK DR WHITNEY TX 76692-2001
- 26. PARTEE SARA JANE SPEARS BENEFICIARY TRUST & STANLEY EUGENE PARTEE ASSET TRUST 8425 COUNTY ROAD 167 MCKINNEY TX 75071-7305
- 27. FRANKLIN INVESTMENT CO ROCK CREEK RANCH EVENT CENTER 8150 N CENTRAL EXPY STE 725 DALLAS TX 75206-1889
- 28. HT FM 1461 TH OWNER LP 2800 POST OAK BLVD STE 4800 HOUSTON TX 77056-6123
- 29. OGANYAN V & C REVOCABLE TRUST 6404 COUNTY ROAD 165 MCKINNEY TX 75071-8213



# TCEQ

#### TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

## 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 Title 30, Texas Administrative Code (30 TAC), Chapter 39, Subchapter H. 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 30 TAC Section 39.426, you must provide a translated copy of the completed plain language summary in the appropriate alternative language as part of your application package. 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.

HC McKinney 3, LLC and McKinney Ridge, LLC (CN606268720)(CN606271815) proposes to operate Goodman Ranch Wastewater Treatment Plant (RN111982252), a cyclically aerated, flow-through activated sludge process. The facility will be located at 2,318 feet northeast from the intersection of County Road 165 and Farm to Market road 1461, in McKinney, Collin County, Texas 75071. This application is for a new application to discharge at a daily average flow of 1,100,000 gallons per day of treated domestic water.

Discharges from the facility are expected to contain five-day carbonaceous biochemical oxygen demand (CBOD5), total suspended solids (TSS), ammonia nitrogen (NH3-N), total phosphorus (TP), dissolved oxygen (D), and Escherichia coli. All discharged pollutants fall within acceptable limits. Domestic wastewater will be treated by activated sludge process and treatment units including bar screens, aeration basins, clarifiers, chlorine contact basins and blowers, and aerobic digestors. Dewater sludge will be transported and disposed of, while effluent discharge will occur at Outfall 1.

### 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.

HC McKinney 3, LLC and McKinney Ridge, LLC (CN606268720)(CN606271815) propone operar Goodman Ranch Wastewater Treatment Plant (RN111982252, un proceso de lodos activados de flujo continuo y aireado cíclicamente. La instalación está ubicada en La instalación estará ubicada a 2,318 pies al noreste de la intersección de County Road 165 y Farm to Market Road 1461, en McKinney, Condado de Collin, Texas 75071. Esta solicitud es para una nueva aplicación para descargar a un flujo promedio diario de 1,100,000 galones por día de agua doméstica tratada.

Se espera que las descargas de la instalación contengan demanda bioquímica carbonosa de oxígeno de cinco días (CBOD5), sólidos suspendidos totales (SST), nitrógeno amoniacal (NH3-N), fósforo total (TP), oxígeno disuelto (D) y Escherichia coli. Todos los contaminantes vertidos se encuentran dentro de límites aceptables.. Aguas residuales domestics. estará tratado por Unidades de proceso y tratamiento de lodos activados que incluyen cribas de barras, cuencas de aireación, clarificadores, cuencas de contacto con cloro y sopladores, y digestores aeróbicos. Los DESHIDRATADOS serán transportados y eliminados, mientras que la descarga de efluentes ocurrirá en el emisario 1.

#### Comisión de Calidad Ambiental del Estado de Texas



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

PERMISO PROPUESTO	NO. W	/ <b>Ooo</b>
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**SOLICITUD.** HC McKinney 3, LLC y McKinney Ridge, LLC, 8200 Douglas Avenue, Suite 300, Dallas, Texas 75225, ha solicitado a la Comisión de Calidad Ambiental del Estado de Texas (TCEQ) para el propuesto Permiso No. WQ0016550001 (EPA I.D. No. TX014611) 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 1,100,000 galones por día. La planta está ubicada a 2,318 pies al noreste de la intersección de County Road 165 y Farm to Market Road 1461 en el Condado de Collin, Texas. La ruta de descarga es del sitio de la planta a el agua descargada viajará a lo largo del arroyo hasta el embalse 13 de SCS antes de descargarse en el afluente 14 de Honey Creek, que fluye hacia el sur en el río East Fork Trinity. La TCEQ recibió esta solicitud el 28 de mayo de 2024. La solicitud para el permiso estará disponible para leerla y copiarla en McKinney City Hall, 222 North Tennessee Street, McKinney, en el Condado de Collin, Texasantes de la fecha de publicación de este aviso en el periódico. 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=-96.690277,33.263333&level=18

[Include the following non-italicized sentence if the facility is located in the Coastal Management Program boundary. The Coastal Management Program boundary is the area along the Texas Coast of the Gulf of México as depicted on the map in 31 TAC §503.1 and includes part or all of the following counties: Cameron, Willacy, Kenedy, Kleberg, Nueces, San Patricio, Aransas, Refugio, Calhoun, Victoria, Jackson, Matagorda, Brazoria, Galveston, Harris, Chambers, Jefferson y Orange.] El Director Ejecutivo de la TCEQ ha revisado esta medida para ver si está de acuerdo con los objetivos y las regulaciones del Programa de Administración Costero de Texas (CMP) de acuerdo con las regulaciones del Consejo Coordinador de la Costa (CCC) y ha determinado que la acción es conforme con las metas y regulaciones pertinentes del CMP.

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

límite para someter comentarios públicos.

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

#### OPORTUNIDAD DE UNA AUDIENCIA ADMINISTRATIVA DE LO CONTENCIOSO.

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

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

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

LISTA DE CORREO. Si somete comentarios públicos, un pedido para una audiencia

administrativa de lo contencioso o una reconsideración de la decisión del Director Ejecutivo, la Oficina del Secretario Principal enviará por correo los avisos públicos en relación con la solicitud. Ademas, puede pedir que la TCEQ ponga su nombre en una or mas de las listas correos siguientes (1) la lista de correo permanente para recibir los avisos de el solicitante indicado por nombre y número del permiso específico y/o (2) la lista de correo de todas las solicitudes en un condado 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 A LA AGENCIA. Todos los comentarios públicos y solicitudes deben ser presentadas electrónicamente vía <a href="http://www14.tceq.texas.gov/epic/eComment/">http://www14.tceq.texas.gov/epic/eComment/</a> o por escrito dirigidos a la Comisión de Texas de Calidad Ambiental, Oficial de la Secretaría (Office of Chief Clerk), MC-105, P.O. Box 13087, Austin, Texas 78711-3087. Tenga en cuenta que cualquier información personal que usted proporcione, incluyendo su nombre, número de teléfono, dirección de correo electrónico y dirección física pasarán a formar parte del registro público de la Agencia. Para obtener más información acerca de esta solicitud de permiso o el proceso de permisos, llame al programa de educación pública de la TCEQ, gratis, al 1-800-687-4040. Si desea información en Español, puede llamar al 1-800-687-4040.

También se puede obtener información adicional del HC McKinney 3, LLC y McKinney Ridge, LLC a la dirección indicada arriba o llamando a Sr. Matt Atkins al 972-833-6872.

Fecha de emisión	[Date notice issued	7
i cena ae emision	Date Hottee 133aca	



TPDES PERMIT NO. WQ0016550001 [For TCEQ office use only - EPA I.D. No. TX0146111]

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

#### PERMIT TO DISCHARGE WASTES

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

HC McKinney 3, LLC and McKinney Ridge, LLC

whose mailing address is

8200 Douglas Avenue, Suite 300 Dallas, Texas 75225

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

located approximately 2,300 feet northeast of the intersection of County Road 165 and Farm-to-Market Road 1461, in Collin County, Texas 75071

to an unnamed tributary, thence to Soil Conservation Service Site 16 Reservoir, thence to an unnamed tributary, thence to Honey Creek, thence to East Fork Trinity River above Lake Lavon, thence to Lake Lavon in Segment No. 0821 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

Outfall Number 001

- 1. During the period beginning upon the date of issuance and lasting through the completion of expansion to the 0.60 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 0.30 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-Monit	oring Requirements	
	Daily Avg mg/l (lbs/day)	7-day Avg mg/l	Daily Max mg/l	Single Grab mg/l	Report Daily Avg Measurement Frequency	g. & Max. Single Grab Sample Type
Flow, MGD	Report	N/A	Report	N/A	Continuous	<b>Totalizing Meter</b>
Carbonaceous Biochemical Oxygen Demand (5-day)	7 (18)	12	22	32	One/week	Grab
Total Suspended Solids	12 (30)	20	40	60	One/week	Grab
Ammonia Nitrogen	2 (5.0)	5	10	15	One/week	Grab
Total Phosphorus	0.5 (1.3)	1	2	3	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 at each chlorine contact chamber. 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

Outfall Number 001

1. During the period beginning upon the completion of expansion to the o.60 million gallons per day (MGD) facility and lasting through the completion of expansion to the o.75 MGD facility, the permittee is authorized to discharge subject to the following effluent limitations:

The daily average flow of effluent shall not exceed 0.60 MGD, nor shall the average discharge during any two-hour period (2-hour peak) exceed 1,667 gallons per minute.

Effluent Characteristic	Discharge Limitations			Min. Self-Monit	oring Requirements	
	Daily Avg mg/l (lbs/day)	7-day Avg mg/l	Daily Max mg/l	Single Grab mg/l	Report Daily . Measurement Frequency	Avg. & Daily Max. Sample Type
Flow, MGD	Report	N/A	Report	N/A	Continuous	<b>Totalizing Meter</b>
Carbonaceous Biochemical Oxygen Demand (5-day)	5 (25)	10	20	30	One/week	Composite
Total Suspended Solids	5 (25)	10	20	30	One/week	Composite
Ammonia Nitrogen	1.3 (6.5)	3	6	10	One/week	Composite
Total Phosphorus	0.5 (2.5)	1	2	3	One/week	Composite
<i>E. coli</i> , colony-forming units or most probable number per 100 ml	126	N/A	399	N/A	Two/month	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 twice 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 6.0 mg/l and shall be monitored once per week by grab sample.

#### FINAL EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

Outfall Number 001

- 1. During the period beginning upon the completion of expansion to the 0.75 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 daily average flow of effluent shall not exceed 0.75 MGD, nor shall the average discharge during any two-hour period (2-hour peak) exceed 2,083 gallons per minute.

Effluent Characteristic	Discharge Limitations				Min. Self-Mon	itoring 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	<b>Totalizing Meter</b>
Carbonaceous Biochemical Oxygen Demand (5-day)	5 (31)	10	20	30	One/week	Composite
<b>Total Suspended Solids</b>	5 (31)	10	20	30	One/week	Composite
Ammonia Nitrogen	1 (6.3)	3	6	10	One/week	Composite
Total Phosphorus	0.5 (3.1)	1	2	3	One/week	Composite
<i>E. coli</i> , colony-forming units or most probable number per 100 ml	126	N/A	399	N/A	Two/month	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 twice 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 6.0 mg/l and shall be monitored once per week by grab sample.

#### **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 24-hour 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 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 use or biosolids 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 TCEO 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.
- 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 Domestic Permits Team, Domestic Wastewater 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 Domestic Permits Team, Domestic Wastewater 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.
- 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.

TCEQ Revision 06/2020

#### **SLUDGE PROVISIONS**

The permittee is authorized to dispose of sludge or biosolids 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 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 must submit this annual report by September 30<sup>th</sup> of each year, 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.

TABLE 1

<u>Pollutant</u>	<b>Ceiling Concentration</b>		
	(Milligrams per kilogram)*		
Arsenic	<i>7</i> 5		
Cadmium	85		
Chromium	3000		
Copper	4300		
Lead	840		
Mercury	57		
Molybdenum	<i>7</i> 5		
Nickel	420		
PCBs	49		
Selenium	100		
Zinc	7500		

<sup>\*</sup> 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:

Alternative 1 - 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)(3)(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

Alternative 3 - 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  $\S$  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  $\S$  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.

- Alternative 1 The mass of volatile solids in the sewage sludge shall be reduced by a minimum of 38%.
- Alternative 2 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.
- Alternative 3 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.
- Alternative 4 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.
- Alternative 5 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.
- Alternative 6 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.
- Alternative 7 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.

#### Alternative 8 -

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.

#### Alternative 9 -

- 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.

#### Alternative 10-

- 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 is 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 (TCLP) Test
PCBs
- once during the term of this permit
- once during the term of this permit

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 (\*)

metric tons per 365-day period Monitoring Frequency

o 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 FOR APPLICATION TO THE LAND MEETING CLASS A, CLASS AB or B BIOSOLIDS 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:

#### A. Pollutant Limits

#### Table 2

	Cumulative Pollutant Loading Rate
<u>Pollutant</u>	(pounds per acre)*
Arsenic	36
Cadmium	35
Chromium	2677
Copper	1339
Lead	268
Mercury	15
Molybdenum	Report Only
Nickel	375
Selenium	89
Zinc	2500

#### Table 3

	Monthly Average		
	Concentration		
<u>Pollutant</u>	(milligrams per kilogram)*		
Arsenic	41		
Cadmium	39		
Chromium	1200		
Copper	1500		
Lead	300		
Mercury	17		
Molybdenum	Report Only		
Nickel	420		
Selenium	36		
Zinc	2800		

\*Dry weight basis

#### **B.** Pathogen Control

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.

#### **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 biosolids enters a wetland or other waters in the State.
- 2. Bulk biosolids not meeting Class A biosolids 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.

#### 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), or 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 is 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 must submit this annual report by September 30<sup>th</sup> of each year, 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).

- 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 or biosolids meets the requirements in 30 TAC § 330 concerning the quality of the sludge disposed in a municipal solid waste landfill.
- B. If the permittee generates sewage sludge or biosolids 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. Sewage sludge or biosolids shall be tested once during the term of this permit 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) of the by September 30<sup>th</sup> of each year.

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

#### 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. 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 or biosolids 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 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.

TCEQ Revision 06/2020

#### 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 facility must be operated by a chief operator or an operator holding a Class C license or higher. 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. The permittee shall comply with the requirements of 30 TAC § 309.13(a) through (d). In addition, by ownership of the required buffer zone area, the permittee shall comply with the requirements of 30 TAC § 309.13(e).
- 4. 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 TCEQ Domestic Wastewater 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 phase and two/month may be reduced to one/month in the Interim II and Final phases. 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 Domestic Wastewater 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.
- 5. Prior to construction of the Interim I (0.30 MGD), Interim II (0.60 MGD), and Final phase (0.75 MGD) treatment facilities, the permittee shall submit to the TCEQ Domestic Wastewater Section (MC 148) a summary transmittal letter in accordance with the requirements in 30 TAC § 217.6(d). If requested by the Domestic Wastewater Section, the permittee shall submit plans and 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 permitted 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.
- 6. 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.

### STATEMENT OF BASIS/TECHNICAL SUMMARY AND EXECUTIVE DIRECTOR'S PRELIMINARY DECISION

#### **DESCRIPTION OF APPLICATION**

Applicant: HC McKinney 3, LLC and McKinney Ridge, LLC;

Texas Pollutant Discharge Elimination System (TPDES) Permit No.

WQ0016550001, EPA I.D. No. TX0146111

Regulated Activity: Domestic Wastewater Permit

Type of Application: New Permit

Request: New Permit

Authority: Federal Clean Water Act (CWA) § 402; Texas Water Code § 26.027; 30

Texas Administrative Code (TAC) Chapters 30, 305, 307, 309, 312, and 319; Commission policies; and United States Environmental Protection

Agency (EPA) guidelines.

#### **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**.

#### REASON FOR PROJECT PROPOSED

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 a daily average flow not to exceed 0.30 million gallons per day (MGD) in the Interim I phase, a daily average flow not to exceed 0.60 MGD in the Interim II phase and a daily average flow not to exceed 0.75 MGD in the Final phase. The proposed wastewater treatment facility will serve 592.8 acres of single family, multi-family and commercial residents.

#### PROJECT DESCRIPTION AND LOCATION

The Goodman Ranch Wastewater Treatment Facility is an activated sludge process plant operated in the conventional aeration mode. Treatment units in the Interim I phase will include three aeration basins, two final clarifiers, two aerobic digestors, and two chlorine contact chambers. Treatment units in the Interim II phase will include five aearation basins, three final clarifiers, three aerobic digestors, three chlorine contact basins, and one dechlorination basin. Treatment units in the Final phase will include six aeration basins, three final clarifiers, three aerobic digestors, three chlorine contact basins, and one dechlorination basin. The facility has not been constructed.

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

The plant site will be located approximately 2,300 feet northeast of the intersection of County Road 165 and Farm-to-Market Road 1461, in Collin County, Texas 75071.

#### Outfall Location:

Outfall Number	Latitude	Longitude
001	33.278637 N	96.688529 W

The treated effluent will be discharged to an unnamed tributary, thence to Soil Conservation Service Site 16 Reservoir, thence to an unnamed tributary, thence to Honey Creek, thence to East Fork Trinity River above Lake Lavon, thence to Lake Lavon in Segment No. 0821 of the Trinity River Basin. The unclassified receiving water uses are limited aquatic life use for the unnamed tributary, high aquatic life use for Soil Conservation Service Site 16 Reservoir, and intermediate aquatic life use for Honey Creek. The designated uses for Segment No. 0821 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 Texas Administrative Code §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. A Tier 2 review has preliminarily determined that no significant degradation of water quality is expected in Soil Conservation Service Site 16 Reservoir, which has been identified as having high aquatic life use, and Honey Creek which has been identified as having intermediate aquatic life use. Existing uses will be maintained and protected. The preliminary determination can be reexamined and may be modified if new information is received.

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 Texas Surface Water Quality Standards (TSWQS) and the State of Texas Water Quality Management Plan (WQMP).

In a case such as this, end-of-pipe compliance with pH limits between 6.0 and 9.0 standard units reasonably assures instream compliance with the TSWQS for pH when the discharge authorized is from a minor facility. This technology-based approach reasonably assures instream compliance with TSWQS criteria due to the relatively smaller discharge volumes authorized by these permits. This conservative assumption is based on TCEQ sampling conducted throughout the state which indicates that instream buffering quickly restores pH levels to ambient conditions. Similarly, this approach has been historically applied within EPA issued NPDES general permits where technology-based pH limits were established to be protective of water quality criteria.

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

The discharge from this permit action is not expected to have an effect on any federal endangered or threatened aquatic or aquatic dependent species or proposed species or their critical habitat. This determination is based on the United States Fish and Wildlife Service's (USFWS) biological opinion on the State of Texas authorization of the Texas Pollutant Discharge Elimination System (TPDES; 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. 0821 is not currently listed on the state's inventory of impaired and threatened waters (the 2022 CWA § 303(d) list). However, the East Fork Trinity River above Lake Lavon (0821D) is currently listed on the 2022 303(d) list. The East Fork Trinity River above Lake Lavon listing is specifically for elevated bacteria levels in water (recreation use) throughout the entire water body (AU 0821D\_01).

This facility is designed to provide adequate disinfection and, when operated properly, should not add to the bacterial impairment of the segment. In addition, in order to ensure that the proposed discharge meets the stream bacterial standard, an effluent limitation of 126 colony-forming units (CFU) or most probable number (MPN) of Escherichia coli per 100 ml has been added to the draft permit.

#### SUMMARY OF EFFLUENT DATA

Self-reporting data is not available since the facility has not been constructed.

#### **DRAFT PERMIT CONDITIONS**

The draft permit authorizes a discharge of treated domestic wastewater at an Interim I volume not to exceed a daily average flow of 0.30 MGD, at an Interim II volume not to exceed a daily average flow of 0.60 MGD, and a Final volume not to exceed a daily average flow of 0.75 MGD.

The effluent limitations in the Interim I phase of the draft permit, based on a 30-day average, are 7 mg/l five-day carbonaceous biochemical oxygen demand (CBOD $_5$ ), 12 mg/l total suspended solids (TSS), 2.0 mg/l ammonia-nitrogen (NH $_3$ -N), 0.50 mg/l total phosphorus (TP), 126 colony forming units (CFU) or most probable number (MPN) of *E. coli* per 100 ml, and 4.0 mg/l minimum dissolved oxygen (DO). 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.

The effluent limitations in the Interim II phase of the draft permit, based on a 30-day average, are 5 mg/l CBOD $_5$ , 5 mg/l TSS, 1.3 mg/l NH $_3$ -N, 0.50 mg/l TP, 126 colony forming units (CFU) or most probable number (MPN) of *E. coli* per 100 ml and 6.0 mg/l minimum dissolved oxygen (DO). 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). The permittee shall dechlorinate the chlorinated effluent to less than 0.1 mg/l total chlorine residual.

The effluent limitations in the Final phase of the draft permit, based on a 30-day average, are 5 mg/l  $CBOD_5$ , 5 mg/l TSS, 1.0 mg/l  $NH_3$ -N, 0.50 mg/l TP, 126 colony forming units (CFU) or most probable number (MPN) of *E. coli* per 100 ml and 6.0 mg/l minimum dissolved oxygen (DO). 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). The permittee shall dechlorinate the chlorinated effluent to less than 0.1 mg/l total chlorine residual.

The permittee shall comply with the requirements of 30 TAC § 309.13(a) through (d). In addition, by ownership of the required buffer zone area, the permittee shall comply with the requirements of 30 TAC § 309.13(e).

The draft permit includes Sludge Provisions according to the requirements of 30 TAC Chapter 312, Sludge Use, Disposal, and Transportation. The draft permit also authorizes the disposal of sludge at a TCEQ-authorized land application site, co-disposal landfill, wastewater treatment facility, or facility that further processes sludge.

#### SUMMARY OF CHANGES FROM APPLICATION

The applicant requested effluent limitations, based on a 30-day average, of 10 mg/l BOD<sub>5</sub>, 15 mg/l TSS, 3 mg/l NH<sub>3</sub>-N, 126 *E. coli* per 100 ml and 4.0 mg/l minimum DO. However, effluent limitations in the Interim I phase of the draft permit, based on a 30-day average, are 7 mg/l CBOD<sub>5</sub>, 12 mg/l TSS, 2 mg/l NH<sub>3</sub>-N, 0.50 mg/l TP, 126 CFU or MPN of *E. coli* per 100 ml and 4.0 mg/l minimum DO. The effluent limitations in the Interim II phase of the draft permit, based on a 30-day average, are 5 mg/l CBOD<sub>5</sub>, 5 mg/l TSS, 1.3 mg/l NH<sub>3</sub>-N, 0.5 mg/l TP, 126 CFU or MPN of *E. coli* per 100 ml and 6.0 mg/l minimum DO. The effluent limitations in the Final phase of the draft permit, based on a 30-day average, are 5 mg/l CBOD<sub>5</sub>, 5 mg/l TSS, 1.0 mg/l NH<sub>3</sub>-N, 0.5 mg/l TP, 126 CFU or MPN of *E. coli* per 100 ml and 6.0 mg/l minimum DO.

#### BASIS FOR DRAFT PERMIT

The following items were considered in developing the draft permit:

- 1. Application received on May 28, 2024, and additional information received on August 6, 2025, September 2, 2025 and September 16, 2025.
- 2. 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.
- 3. 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.
- 4. Interoffice Memoranda from the Water Quality Assessment Section of the TCEQ Water Quality Division.
- 5. Consistency with the Coastal Management Plan: The facility is not located in the Coastal Management Program boundary.
- 6. *Procedures to Implement the Texas Surface Water Quality Standards* (IP), Texas Commission on Environmental Quality, June 2010, as approved by EPA, and the IP, January 2003, for portions of the 2010 IP not approved by EPA.
- 7. 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.
- 8. 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.

#### 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 Garrison Layne at (512) 239-0849.

Garrison Layne	Date
Domestic Permits Team	
Domestic Wastewater Section (MC 148)	