

## This file contains the following documents:

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



# Este archivo contiene los siguientes documentos:

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

# 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 <u>30 TAC Section 39.426</u>, 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 Enter 'INDUSTRIAL' or 'DOMESTIC' here 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.

Utilities Investment Company, Inc. (CN600633093) proposes to operate Bluestem Wastewater Treatment Plant (RN111471371), an activated sludge process with nitrification operated in the complete mix mode. The facility is located at 35617 Wilson Road, in Brookshire, Waller County, Texas 77423. This application for a major amendment application to discharge a daily average flow of 650,000 gallons per day of treated domestic wastewater.

Discharges from the facility are expected to contain five-day carbonaceous biochemical oxygen demand (CBOD<sub>5</sub>), total suspended solids (TSS), ammonia nitrogen (NH<sub>3</sub>-N), and *Escherichia coli*. Additional potential pollutants are included in the Domestic Technical Report 1.0, Section 7. Pollutant Analysis of Treated Effluent in the permit application package. Domestic wastewater is treated by an activated sludge process plant and the treatment units will include a screening facility, equalization basins/anoxic zones, aeration basins, final clarifiers, sludge digesters, chlorine contact chambers and a dichlorination basin.

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

#### AGUAS RESIDUALES Introduzca 'INDUSTRIALES' o 'DOMÉSTICAS' aquí /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.

Utilities Investment Company, Inc. (CN600633093) propone operar la Planta de Tratamiento de Aguas Residuales de Bluestem (RN 111471371), un proceso de lodos activados con nitrificación operado en el modo de mezcla completa. La instalación está ubicada en 35617 Camino Wilson, en Brookshire, Condado de Waller, Texas 77423. Esta solicitud es para una enmienda importante aplicación para descargar a un flujo promedio diario de 650,000 galones por día de aguas residuales domésticas tratadas.

Se espera que las descargas de la instalación contengan demanda bioquímica de oxígeno carbonoso de cinco días (CBOD₅), solidos totalmente suspendidos (TSS), nitrógeno amoniacal (NHҫ-N), y Escherichia coli. Los contaminantes potenciales adicionales se incluyen en el Informe Técnico Domésticas 1.0, Seccion 7 Análisis de Contaminantes de Efluente Tratado en el paquete de solicitud de permisos.. Las aguas residuales domésticas. está tratado por una planta de proceso de lodos activados y las unidades de tratamiento incluirán una pantalla de barras, cuenca de ecualización/zona anóxica, balsas de aireación, clarificadores finales, digestores de lodos, cámaras de contacto y una cuenca de decloración.

# **TEXAS COMMISSION ON ENVIRONMENTAL QUALITY**



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

#### PERMIT NO. WQ0016136001

**APPLICATION.** Utilities Investment Company, Inc., P.O. Box 279, New Waverly, Texas 77358, has applied to the Texas Commission on Environmental Quality (TCEQ) to amend Texas Pollutant Discharge Elimination System (TPDES) Permit No. WQ0016136001 (EPA I.D. No. TX0142654) to authorize an increase in the discharge of treated wastewater to a volume not to exceed a daily average flow of 650,000 gallons per day. The domestic wastewater treatment facility is located at 35617 Wilson Road, near the city of Brookshire, in Waller County, Texas 77423. The discharge route is from the plant site to an unnamed tributary; thence to Bessies Creek; thence to Brazos River Below Navasota River. TCEQ received this application on May 22, 2025. The permit application will be available for viewing and copying at Brookshire-Pattison Public Library, Reference Desk, 3815 6th Street, Brookshire, 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=-95.977222,29.879444&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.

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 Utilities Investment Company, Inc. at the address stated above or by calling Ms. Shelley Young, P.E., WaterEngineers, Inc., at 281-373-0500.

Issuance Date: June 30, 2025

## 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. WQ0016136001

**SOLICITUD.** Utilities Investment Company, Inc. P.O. Box 279, New Waverly, Texas 77358, ha solicitado a la Comisión de Calidad Ambiental del Estado de Texas (TCEQ) para enmendar Permiso No. WQ0016136001 (EPA I.D. No. TX0142654) del Sistema de Eliminación de Descargas de Contaminantes de Texas (TPDES) para autorizarla un aumento en el descarga de aguas residuales tratadas hasta un volumen que no exceda un caudal medio diario de 650,000 galones por dia. La planta está ubicada a 35617 Camino de Wilson, cerca la ciudad de Brookshire, en el Condado de Waller, Texas 77423. La ruta de descarga es del sitio de la planta a tributario sin nombre; deah ahí a Bessies Creek; de ahí a Rio Brazos abajo Rio Navasota. La TCEQ recibió esta solicitud el 22 de mayo de 2025. La solicitud para el permiso está disponible para leerla y copiarla en Biblioteca Publica de Brookshire-Pattison, escritorio de referencia,3815 Calle 6th, Brookshire, en Condado de Waller, Texas antes de la fecha de publicación de este aviso en el periódico. La solicitud, incluidas las actualizaciones y los avisos asociados, stan disponibles electrónicamente en la siguiente pagina web:

https://www.tceq.texas.gov/permitting/wastewater/pending-permits/tpdes-applications. Este enlace a un mapa electrónico de la ubicación general del sitio o de la instalación es proporcionado como una cortesía y no es parte de la solicitud o del aviso. Para la ubicación exacta, consulte la solicitud.

https://gisweb.tceq.texas.gov/LocationMapper/?marker=95.977222,29.879444&level=18

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

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

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

OPORTUNIDAD DE UNA AUDIENCIA ADMINISTRATIVA DE LO CONTENCIOSO.

Después del plazo para presentar comentarios públicos, el Director Ejecutivo considerará todos los comentarios apropiados y preparará una respuesta a todo los comentarios públicos esenciales, pertinentes, o significativos. A menos que la solicitud haya sido referida directamente a una audiencia administrativa de lo contencioso, la respuesta a los comentarios y la decisión del Director Ejecutivo sobre la solicitud serán enviados por correo a todos los que presentaron un comentario público y a las personas que están en la lista para recibir avisos sobre esta solicitud. Si se reciben comentarios, el aviso también proveerá instrucciones para pedir una reconsideración de la decisión del Director Ejecutivo y para pedir una 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 Utilities Investment Company, Inc. a la dirección indicada arriba o llamando a Ms. Shelley Young, P.E., WaterEngineers, Inc., al 281-373-0500.

Fecha de emisión 30 de junio de 2025

#### **Abesha Michael**

**From:** Shelley Young <syoung@waterengineers.com>

Sent: Wednesday, June 4, 2025 11:00 AM

To: Abesha Michael

**Subject:** RE: Application to Amend Permit No. WQ0016136001 - Notice of Deficiency Letter

Attachments: Labels.docx; Municipal Discharge Major Amendment Spanish NORI.docx

Hello Abesha,

Please find attached the "Labels" file.

The portion of the NORI looks fine.

Please find attached the Spanish version of the NORI.

A copy of the application has been filed electronically.

Please let me know if you need anything additional.

Regards,

Shelley B. Young, P.E. WaterEngineers, Inc. 17230 Huffmeister Rd. Cypress, TX ~ 77429

tel: 281-373-0500 fax: 281-373-1113 www.waterengineers.com

The contents of this e-mail and any attachment(s) are confidential, and the property of WaterEngineers, Inc.

From: Abesha Michael <Abesha.Michael@tceq.texas.gov>

**Sent:** Wednesday, May 28, 2025 2:29 PM

To: Shelley Young <syoung@waterengineers.com>

Subject: Application to Amend Permit No. WQ0016136001 - Notice of Deficiency Letter

Dear Ms. Young,

The attached Notice of Deficiency letter sent on May 28, 2025, requests additional information needed to declare the application administratively complete. Please send the complete response to my attention by June 11, 2025.

Thank you,

## 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. V	WOoo
-------------------------	------

**SOLICITUD.** Utilities Investment Company, Inc. P.O. Box 279, New Waverly, Tejas 77358, ha solicitado a la Comisión de Calidad Ambiental del Estado de Texas (TCEQ) para enmendar Permiso No. WQ0016136001 (EPA I.D. No. TX0142654) del Sistema de Eliminación de Descargas de Contaminantes de Texas (TPDES) para autorizarla un aumento en el descarga de aguas residuales tratadas hasta un volumen que no exceda un caudal medio diario de 650000 galones por dia. La planta está ubicada a 35617 Camino de Wilson, cerca la ciudad de Brookshire, en el Condado de Waller, Tejas 77423. La ruta de descarga es del sitio de la planta a tributario sin nombre; deah ahí a Bessies Creek; de ahí a Rio Brazos abajo Rio Navasota. La TCEQ recibió esta solicitud el 22 de mayo de 2025. La solicitud para el permiso está disponible para leerla y copiarla en Biblioteca Publica de Brookshire-Pattison, escritorio de referencia,3815 Calle 6th, Brookshire, en Condado de Waller, Tejas antes de la fecha de publicación de este aviso en el periódico. La solicitud, incluidas las actualizaciones y los avisos asociados, stan disponibles electrónicamente en la siguiente pagina web:

https://www.tceq.texas.gov/permitting/wastewater/pending-permits/tpdes-applications. Este enlace a un mapa electrónico de la ubicación general del sitio o de la instalación es proporcionado como una cortesía y no es parte de la solicitud o del aviso. Para la ubicación exacta, consulte la solicitud.

https://gisweb.tceq.texas.gov/LocationMapper/?marker=-95.977222,29.879444&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 v porqué el miembro sería afectado: v 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 Utilities Investment Company, Inc. a la dirección indicada arriba o llamando a Ms. Shelley Young, P.E., WaterEngineers, Inc., al 281-373-0500.

Fecha de emisión	П	)a	te	n	ot	ice	is	SH	eá	17

DWIGHT RAULSTON 6418 AUDEN STREET HOUSTON TX 77005 HOU-BLUESTEM 17 LLC 13141 NORTHWEST FREEWAY HOUSTON TX 77040

LEGEND CLASSIC HOMES LTD 13141 NORTHWEST FREEWAY HOUSTON TX 77040

LAKIN & JULIET OJEKUNLE 3025 WAXWING DRIVE BROOKSHIRE TX 77423 ANGELA & ROBERET CARLSON 3017 WAXWING DRIVE BROOKSHIRE TX 77423

DANIELA BOLIVAR & MARTEL CORDERO 3009 WAXWING DRIVE BROOKSHIRE TX 77423

JESSICA ROSTOCIL & DALE DOCKERY 3048 CHESTNUT LANE BROOKSHIRE TX 77423 EDUARDO & ALEXANDRA ARANA 3052 CHESTNUT LANE BROOKSHIRE TX 77423 BRENT & JULIE WATTS 28926 DEWBERRY ARBOR CT KATY TX 77494

BLUESTEM DEVELOPMENT COMPANY 1401 WOODLANDS PARKWAY THE WOODLANDS TX 77380 HARVEY & LYNETTE LAAS 9870 FM 359 BROOKSHIRE TX 77423 JAKE & CATRIONA CULLUM 7200 ADAMS FLAT ROAD BROOKSHIRE TX 77423

KATHY MILLS & EDWINA GARRETT 3485 EULA MORGAN ROAD KATY TX 77493 S & H PROPERTY HOLDINGS LLC 3119 WELLSPRING LAKE DRIVE FULSHEAR TX 77441 MARGARITO & MARIANA PALACIOS 4772 HUBBARD BROOKSHIRE TX 77423

KENNETH & DARLA HOLDER 6553 ADAMS FLAT ROAD BROOKSHIRE TX 77423

DI LAND HOLDINGS LLC 4011 ROLAND ROAD KTY TX 77493



# WATER & WASTEWATER TREATMENT CONSULTANTS 17230 HUFFMEISTER ROAD, SUITE A~CYPRESS, TEXAS 77429-1643 TEL: 281-373-0500 FAX: 281-373-1113

Overnight by UPS

May 21, 2025

Executive Director Water Quality Applications Team (MC 148) Texas Commission on Environmental Quality 12100 Park 35 Circle Austin, Texas 78753

Re: Utilities Investment Company, Inc.

Application for a Major Amendment with Renewal to

TPDES Permit No. WQ0016136001 Bluestem Wastewater Treatment Plant

Dear Sir/Ms:

Enclosed please find the original and one copy of the Application for a Major Amendment with Renewal to Texas Pollution Discharge Elimination System Permit No. WQ0016136001 for the Bluestem Wastewater Treatment Plant in Waller County.

Please contact Shelley Young, P.E. at 281-373-0500 or at <u>syoung@waterengineers.com</u> if there are any questions related to the material presented in the application.

Sincerely,

WATERENGINEERS, INC.

Shelley Joung, P.E.

Encl: As noted

RECEIVED

MAY 2 2 2025

Water Quality Applications Team

# APPLICATION FOR A MAJOR AMENDMENT TO TEXAS POLLUTION DISCHARGE ELIMINATION SYSTEM PERMIT NO. WQ0016136001

#### **FOR**

# BLUESTEM WASTEWATER TREATMENT PLANT

UTILITIES INVESTMENT COMPANY, INC. P. O. BOX 279 NEW WAVERLY, TEXAS 77358-0279

PREPARED BY:

# WATERENGINEERS, INC.

WATER & WASTEWATER TREATMENT CONSULTANTS 17230 HUFFMEISTER ROAD, SUITE A, CYPRESS, TEXAS 77429 Tel: 281-373-0500 FAX: 281-373-1113

MAY 2025

# APPLICATION FOR A MAJOR AMENDMENT TO TEXAS POLLUTION DISCHARGE ELIMINATION SYSTEM PERMIT NO. WQ0016136001

#### **FOR**

## **BLUESTEM**

## WASTEWATER TREATMENT PLANT

## TABLE OF CONTENTS

	Reference	Reference
Description	Page Numbers(s)	Question
TCEO Demostic Westernator Barreit Auglication		
TCEQ Domestic Wastewater Permit Application Domestic Administrative Report 1.0	1-11	
Z GAMESTA TAMAMADIAN TO TROPORT THE		
TCEQ Domestic Wastewater Permit Application		
Domestic Administrative Report 1.1	12-13	
TCEQ Domestic Wastewater Permit Application	Technical Report	
Domestic Technical Report 1.0	1-18	
TCEQ Domestic Wastewater Permit Application Domestic Technical Report 1.1	Technical Report	
Domestic Technical Report 1.1	Technical Report	
Domestic Worksheet 2.0 – Receiving Waters	25-28	
Augustus and ADMINI 01	A.1	
Attachment ADMIN.01 USGS Topographic Map	Administrative Report 1.0 Page 10	13
COGO Topograpine Map	Tage 10	13
Attachment ADMIN.02	Administrative Report 1.0	
Proof of Application Fee	Page 10	13
Attachment ADMIN.03	Administrative Report 1.0	
Core Data Form	Page 4	3C
Attachment ADMIN.04	Administrative Report 1.0	
Plain Language Summary	Page 7	<b>8</b> F
Attachment ADMIN.05	Administrative Report 1.0	
Public Involvement Plan	Page 7	8G
A TOTAL DATE OF THE STATE OF TH		
Attachment ADMIN.06	Administrative Report 1.1	1 A 8-D
Affected Landowners Map & Table	Page 12	1 A&B

Administrative Report 1.1	
Page 13	2
Administrative Report 1.1	
Page 13	3A
Administrative Report	
Page 14	
Technical Report	
	2B
Page 22	4
Page 2	2C
T 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
7	
	3
Page 23	7
Technical Penort	
-	5B
1 age 23	36
Technical Report	
Page 20	1B3
	Page 13  Administrative Report 1.1 Page 13  Administrative Report Page 14  Technical Report Page 2 Page 22  Technical Report 1.0 Page 2 Page 2  Technical Report Page 2 Page 23  Technical Report Page 2 Page 23  Technical Report Page 2 Page 23

# SECOMMISSION OF THE PROPERTY O

# TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

# DOMESTIC WASTEWATER PERMIT APPLICATION CHECKLIST

Complete and submit this checklist with the application.

APPLICANT NAME: <u>Utilities Investment Company, Inc.</u>
PERMIT NUMBER (If new, leave blank): WQ00<u>16136001</u>

Indicate if each of the following items is included in your application.

	Y	N		Y	N
Administrative Report 1.0	$\boxtimes$		Original USGS Map	$\boxtimes$	
Administrative Report 1.1	$\boxtimes$		Affected Landowners Map	$\boxtimes$	
SPIF	$\boxtimes$		Landowner Disk or Labels	$\boxtimes$	
Core Data Form	$\boxtimes$	(5) (5)	Buffer Zone Map	$\boxtimes$	
Summary of Application (PLS)	$\boxtimes$		Flow Diagram	$\boxtimes$	
Public Involvement Plan Form	$\boxtimes$		Site Drawing	$\boxtimes$	
Technical Report 1.0	$\boxtimes$		Original Photographs	$\boxtimes$	
Technical Report 1.1	$\boxtimes$		Design Calculations	$\boxtimes$	
Worksheet 2.0	$\boxtimes$		Solids Management Plan	$\boxtimes$	
Worksheet 2.1		$\boxtimes$	Water Balance		$\boxtimes$
Worksheet 3.0		$\boxtimes$			
Worksheet 3.1		$\boxtimes$			
Worksheet 3.2		$\boxtimes$			
Worksheet 3.3	7	$\boxtimes$			
Worksheet 4.0		$\boxtimes$			
Worksheet 5.0		$\boxtimes$			
Worksheet 6.0		$\boxtimes$			
Worksheet 7.0					
For TCEQ Use Only					
Segment Number Expiration Date Permit Number			County Region		— —

# 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).

		dilly 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 <b>□</b>	\$2,015.00				
Minor Amendment (for any flow) \$150.00 □						
Payment Information:						

#### Payment Information:

Mailed Check/Money Order Number: 1580

Check/Money Order Amount: \$1,650.00

Name Printed on Check: WaterEngineers, Inc.

**EPAY** Voucher Number: Click to enter text.

Copy of Payment Voucher enclosed? Yes

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

a.	Check the box next to the appropriate authorization type.					
		Publicly Owne	d Domestic Wastewater			
	$\boxtimes$	Privately-Owne	d Domestic Wastewater			
		Conventional V	Vater Treatment			
b.	Che	ck the box next	to the appropriate facility status.			
		Active ⊠	Inactive			

c.	c. Check the box next to the appropriate permit type.							
	$\boxtimes$	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				
		New						
	$\boxtimes$	Major Amendment with Renewal		Minor Amendment with Renewal				
		Major Amendment without Renewal		Minor Amendment without Renewal				
		Renewal without changes		Minor Modification of permit				
e.		amendments or modifications, describe the parease the final phase flow to 0.650 mgd and change						
f.	For existing permits:							
	Permit Number: WQ00 <u>16136001</u>							
	EPA	I.D. (TPDES only): TX <u>0142654</u>						
	Exp	iration Date: <u>10/20/2027</u>						
			_					

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

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

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

**Utilities Investment Company, Inc.** 

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

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

CN: 600633093

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: Mr. Last Name, First Name: Marsh, Shannon

Title: President 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?

N/A

(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: Click to enter text.

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: Click to enter text.

Last Name, First Name: Click to enter text.

Title: Click to enter text.

Credential: Click to enter text.

Provide a brief description of the need for a co-permittee: Click to enter text.

#### 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. <u>ADMIN.03</u>

# **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: Young, Shelley

Title: Engineer Credential: P.E.

Organization Name: WaterEngineers, Inc.

Mailing Address: 17230 Huffmeister Road, Suite A City, State, Zip Code: Cypress, TX 77429

Phone No.: <u>281-373-0500</u> E-mail Address: <u>syoung@waterengineers.com</u>

B. Prefix: Click to enter text. Last Name, First Name: Click to enter text.

Title: Click to enter text. Credential: Click to enter text.

Organization Name: Click to enter text.

Mailing Address: Click to enter text. City, State, Zip Code: Click to enter text.

Phone No.: Click to enter text. E-mail Address: Click to enter text.

Check one or both:  $\square$  Administrative Contact  $\square$  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: Mr. Last Name, First Name: Marsh, Shannon

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

Organization Name: <u>Utilities Investment Company, Inc.</u>

Mailing Address: P.O. Box 279 City, State, Zip Code: New Waverly, TX 77358

Phone No.: 936-344-8014 E-mail Address: marshwaterman@aol.com

**B.** Prefix: Ms. Last Name, First Name: Marsh, Tracy

Title: Treasurer Credential: Click to enter text.

Organization Name: <u>Utilities Investment Company, Inc.</u>

Mailing Address: P.O. Box 279 City, State, Zip Code: New Waverly, TX 77358

Phone No.: 936-344-8014 E-mail Address: marshwaterman@aol.com

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

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

Prefix: Mr. Last Name, First Name: Marsh, Shannon

Title: President Credential: Click to enter text.

Organization Name: Utilities Investment Company, Inc.

Mailing Address: P.O. Box 279 City, State, Zip Code: New Waverly, TX 77358

Phone No.: <u>936-344-8014</u> E-mail Address: <u>marshwaterman@aol.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: Mr. Last Name, First Name: Marsh, Shannon

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

Organization Name: Utilities Investment Company, Inc.

Mailing Address: P.O. Box 279 City, State, Zip Code: New Waverly, TX 77358

Phone No.: 936-344-8014 E-mail Address: marshwaterman@aol.com

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

#### A. Individual Publishing the Notices

Prefix: Mr. Last Name, First Name: Young, Shelley

Title: Engineer Credential: P.E.

Organization Name: WaterEngineers, Inc.

Mailing Address: 17230 Huffmeister Road, Suite A City, State, Zip Code: Cypress, TX 77429

Phone No.: <u>281-373-0500</u> E-mail Address: <u>syoung@waterengineers.com</u>

	Pa	ackage
	In	ndicate by a check mark the preferred method for receiving the first notice and instructions:
	$\boxtimes$	E-mail Address
		l Fax
		Regular Mail
C.	C	ontact permit to be listed in the Notices
	Pr	refix: <u>Ms.</u> Last Name, First Name: <u>Young, Shelley</u>
	Ti	itle: <u>Engineer</u> Credential: <u>P.E.</u>
	O	rganization Name: <u>WaterEngineers, Inc.</u>
	M	ailing Address: <u>17230 Huffmeister Road, Suite A</u> City, State, Zip Code: <u>Cypress, TX 77429</u>
	Ph	none No.: <u>281-373-0500</u> E-mail Address: <u>syoung@waterengineers.com</u>
D.	Pu	ublic Viewing Information
	•	the facility or outfall is located in more than one county, a public viewing place for each ounty must be provided.
	Pu	ıblic building name: <u>Brookshire-Pattison Public Library</u>
	Lo	ocation within the building: <u>Reference Desk</u>
	Ph	nysical Address of Building: <u>3815 6th Street</u>
	Ci	ty: <u>Brookshire</u> County: <u>Waller</u>
	Co	ontact (Last Name, First Name): <u>Librarian</u>
	Ph	none No.: <u>281-375-5550</u> Ext.: Click to enter text.
E.	Bil	lingual Notice Requirements
		nis information <b>is required</b> for <b>new, major amendment, minor amendment or minor odification, and renewal</b> applications.
	be	is section of the application is only used to determine if alternative language notices will needed. Complete instructions on publishing the alternative language notices will be in ur public notice package.
	ob	ease call the bilingual/ESL coordinator at the nearest elementary and middle schools and tain the following information to determine whether an alternative language notices are quired.
	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 below.
	2.	Are the students who attend either the elementary school or the middle school enrolled in a bilingual education program at that school?
		⊠ Yes □ No

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

	3.	Do the locatio		these	schools atten	d a bilingua	l educ	ation pro	gram a	at another
			Yes	$\boxtimes$	No					
	4.				uired to provi ement under				ogram	but the school has
			Yes	$\boxtimes$	No					
	5.				u <b>estion 1, 2,</b> 3 e is required b					ntive language are
F.	Su	mmary	of Applicati	on in	Plain Langua	ge Template	2			
					f Application guage summar					Q Form 20972), ment.
	Att	tachme	nt: <u>ADMIN.o</u>	4						
G.	Pu	blic Inv	olvement Pl	an Fo	rm					
					ment Plan For <b>dment to a pe</b>					plication for a it.
	Att	achmei	nt: <u>ADMIN.o</u>	5						
Se	cti	on 9.			ntity and F	Permitted	Site	Inform	atior	(Instructions
			Page 29							
Α.			s currently r <b>N</b> <u>111471371</u>	egula	ted by TCEQ,	provide the l	Regula	ited Entit	ty Num	ber (RN) issued to
			TCEQ's Cent currently reg			://www15.to	eq.tex	as.gov/c	rpub/	to determine if
В.	Nar	ne of pi	roject or site	(the	name known l	y the comm	unity	where lo	cated):	
	<u>Blu</u>	estem W	WTP							
C.	Ow	ner of t	reatment fac	ility: ]	<u>Utilities Invest</u>	nent Compan	y, Inc.			
	Ow	nership	of Facility:		Public 🛛	Private		Both		Federal
D.	Ow	ner of la	and where tr	eatme	ent facility is o	or will be:				
	Pre	fix: Clic	k to enter te	xt.	Last Nan	ne, First Nam	ie: Clic	k to ente	er text.	
	Titl	e: Click	to enter text	-	Credenti	al: Click to e	nter te	ext.		
	Org	anizatio	on Name: <u>Uti</u>	<u>lities l</u>	Investment Con	npany, Inc.				
	Mai	ling Ad	dress: <u>P.O. B</u>	ox 279	<u>[</u>	City, State,	Zip Co	ode: <u>New</u>	Waver	y, TX 77358
	Pho	ne No.:	936-344-801	4	E-mail A	ddress: <u>mar</u> s	shwate	rman@ac	ol.com	
					ame person as easement. See			or co-ap	plican	, attach a lease
		Attachn	nent: Click to	ente	r tovt					

B.

C.

D.

E.	Owner of effluent disposal site:	
	Prefix: Click to enter text.	Last Name, First Name: Click to enter text.
	Title: Click to enter text.	Credential: Click to enter text.
	Organization Name: Click to ente	er text.
	Mailing Address: Click to enter t	ext. City, State, Zip Code: Click to enter text.
	Phone No.: Click to enter text.	E-mail Address: Click to enter text.
	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: Click to enter te	xt.
F.	Owner sewage sludge disposal si property owned or controlled by	te (if authorization is requested for sludge disposal on the applicant)::
	Prefix: Click to enter text.	Last Name, First Name: Click to enter text.
	Title: Click to enter text.	Credential: Click to enter text.
	Organization Name: Click to ente	er text.
	Mailing Address: Click to enter to	ext. City, State, Zip Code: Click to enter text.
	Phone No.: Click to enter text.	E-mail Address: Click to enter text.
	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: Click to enter te	xt.
Se	ction 10. TPDES Discharg	ge Information (Instructions Page 31)
	200 470	ge Information (Instructions Page 31) ity location in the existing permit accurate?
	200 470	Y
	Is the wastewater treatment facil.   Yes  No  If no, or a new permit application	Y
A.	Is the wastewater treatment facility  Yes  No  If no, or a new permit application  However, the plant site has now been waller County, Texas 77423	ity location in the existing permit accurate?  n, please give an accurate description:
A.	Is the wastewater treatment facility  Yes  No  If no, or a new permit application  However, the plant site has now been waller County, Texas 77423	n, please give an accurate description: en given a street address: 35617 Wilson Road, Brookshire,
A. B.	Is the wastewater treatment facility  Yes □ No  If no, or a new permit application  However, the plant site has now been waller County, Texas 77423  Are the point(s) of discharge and □ Yes □ No  If no, or a new or amendment perpoint of discharge and the discharge TAC Chapter 307:	n, please give an accurate description: en given a street address: 35617 Wilson Road, Brookshire,
A. B.	Is the wastewater treatment facility  Yes □ No  If no, or a new permit application  However, the plant site has now been waller County, Texas 77423  Are the point(s) of discharge and □ Yes □ No  If no, or a new or amendment perpoint of discharge and the discharge	n, please give an accurate description: en given a street address: 35617 Wilson Road, Brookshire, the discharge route(s) in the existing permit correct?  ermit application, provide an accurate description of the
A. B.	Is the wastewater treatment facility  Yes □ No  If no, or a new permit application  However, the plant site has now been waller County, Texas 77423  Are the point(s) of discharge and □ Yes □ No  If no, or a new or amendment perpoint of discharge and the discharge TAC Chapter 307:	n, please give an accurate description: en given a street address: 35617 Wilson Road, Brookshire, the discharge route(s) in the existing permit correct?  ermit application, provide an accurate description of the
А.	Is the wastewater treatment facility  Yes □ No  If no, or a new permit application  However, the plant site has now been waller County, Texas 77423  Are the point(s) of discharge and □ Yes □ No  If no, or a new or amendment perpoint of discharge and the discharge TAC Chapter 307:	n, please give an accurate description: en given a street address: 35617 Wilson Road, Brookshire, the discharge route(s) in the existing permit correct?  ermit application, provide an accurate description of the rge route to the nearest classified segment as defined in 30
А.	Is the wastewater treatment facility.  Yes □ No  If no, or a new permit application. However, the plant site has now been waller County, Texas 77423  Are the point(s) of discharge and □ Yes □ No  If no, or a new or amendment perpoint of discharge and the discharge and the discharge and the county. Click to enter text.	n, please give an accurate description: en given a street address: 35617 Wilson Road, Brookshire, the discharge route(s) in the existing permit correct? ermit application, provide an accurate description of the rge route to the nearest classified segment as defined in 30
A. B. C.	Is the wastewater treatment facility.  Yes	ity location in the existing permit accurate?  In, please give an accurate description: En given a street address: 35617 Wilson Road, Brookshire,  the discharge route(s) in the existing permit correct?  Ermit application, provide an accurate description of the rge route to the nearest classified segment as defined in 30   Initialized in the existing permit correct?  Are located: Waller lischarge to a city, county, or state highway right-of-way, or

	If <b>yes</b> , indicate by a check mark if:
	☐ Authorization granted ☐ 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: Click to enter text.
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: $N/A$
Se	ection 11. TLAP Disposal Information (Instructions Page 32)
Α.	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-Not a TLAP
B.	City nearest the disposal site: Click to enter text.
C.	County in which the disposal site is located: Click to enter text.
D.	For <b>TLAPs</b> , describe the routing of effluent from the treatment facility to the disposal site:
	Click to enter text.
E.	For <b>TLAPs</b> , please identify the nearest watercourse to the disposal site to which rainfall runoff might flow if not contained: Click to enter text.
Se	ction 12. Miscellaneous Information (Instructions Page 32)
A.	Is the facility located on or does the treated effluent cross American Indian Land?
	□ Yes ⊠ No
	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.
	Click to enter text.

C.	Did any person formerly employed by the TCEQ represent your company and get paid for service regarding this application?		
	□ Yes ⊠ No		
	If yes, list each person formerly employed by the TCEQ who represented your company and was paid for service regarding the application: Click to enter text.		
D.	Do you owe any fees to the TCEQ?		
	□ Yes ⊠ No		
	If <b>yes</b> , provide the following information:		
	Account number: Click to enter text.		
	Amount past due: Click to enter text.		
E.	Do you owe any penalties to the TCEQ?		
	□ Yes ⊠ No		
	If <b>yes</b> , please provide the following information:		
	Enforcement order number: Click to enter text.		
	Amount past due: Click to enter text.		
Se	ction 13. Attachments (Instructions Page 33)		
Ind	licate 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.		
$\boxtimes$	Original full-size USGS Topographic Map with the following information:		
	<ul> <li>Applicant's property boundary</li> <li>Treatment facility boundary</li> <li>Labeled point of discharge for each discharge point (TPDES only)</li> <li>Highlighted discharge route for each discharge point (TPDES only)</li> <li>Onsite sewage sludge disposal site (if applicable)</li> <li>Effluent disposal site boundaries (TLAP only)</li> <li>New and future construction (if applicable)</li> <li>1 mile radius information</li> <li>3 miles downstream information (TPDES only)</li> <li>All ponds.</li> </ul>		

Attachment 1 for Individuals as co-applicants

Other Attachments. Please specify: ADMIN.02-Proof of Payment, ADMIN.03-Core Data Form, ADMIN.04-Summary of Application in Plain Language Template, ADMIN.05-Public Involvement Plan Form, ADMIN.06- Downstream & Adjacent Landowner Map and List, ADMIN.07-Site and Stream Photographs, ADMIN.08 Buffer Zone Map, ADMIN.09 SPIF Form and Maps

# Section 14. Signature Page (Instructions Page 34)

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

Permit Number: WQ0016136001

Applicant: Utilities Investment Company, Inc.

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 o	r printed): <u>Shannon Marsh</u>
Signatory title: President	

Signature:	S		Da	te:	5/2/25
	(Use blue ink)				
Subscribed a	and Sworn to before	me by the	said_Shar	nno	n Marsh
on this	2	day of	May		, 20 <u>25</u> .
My commiss	ion expires on the_	28	_day of Octobe		, 20 <u><i>8</i>5</u> .

Marsn Kaykelley
Notary Public

Montgomery
County, Texas

[SEAL]

SHARON KAY KELLEY
Notary Public, State of Texas
Comm. Expires 10-28-2025
Notary ID 125478883

# DOMESTIC WASTEWATER PERMIT APPLICATION **ADMINISTRATIVE REPORT 1.0**

The following information is required for new and amendment applications.

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

A.	. Indicate by a check mark that the landowners map or drawing, with scale, includes the following information, as applicable:			
	$\boxtimes$	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		
	$\boxtimes$	The property boundaries of all landowners surrounding the applicant's property (Note: if the application is a major amendment for a lignite mine, the map must include the property boundaries of all landowners adjacent to the new facility (ponds).)		
		The point(s) of discharge and highlighted discharge route(s) clearly shown for one mile downstream		
		The property boundaries of the landowners located on both sides of the discharge route for one full stream mile downstream of the point of discharge		
		The property boundaries of the landowners along the watercourse for a one-half mile radius from the point of discharge if the point of discharge is into a lake, bay, estuary, or affected by tides		
		The boundaries of the effluent disposal site (for example, irrigation area or subsurface drainfield site) and all evaporation/holding ponds within the applicant's property		
		The property boundaries of all landowners surrounding the effluent disposal site		
		The boundaries of the sludge land application site (for land application of sewage sludge for beneficial use) and the property boundaries of landowners surrounding the applicant's property boundaries where the sewage sludge land application site is located		
		The property boundaries of landowners within one-half mile in all directions from the applicant's property boundaries where the sewage sludge disposal site (for example, sludge surface disposal site or sludge monofill) is located		
В.		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.		Indicate by a check mark that the landowners list has also been provided as mailing is in electronic format (Avery 5160).		
D.	Prov. <u>Distr</u>	ide the source of the landowners' names and mailing addresses: Waller County Appraisal		
		equired by <i>Texas Water Code § 5.115</i> , is any permanent school fund land affected by application?		
	[2] [2]	l Yes ⊠ No		

B.

C.

D.

E.

		yes nd(s	s, provide the location and foreseeable impacts and effects this application has on the
			to enter text.
	L		
S	ect	ion	2. Original Photographs (Instructions Page 38)
			original ground level photographs. Indicate with checkmarks that the following ion is provided.
	$\boxtimes$	Δ	at least one original photograph of the new or expanded treatment unit location
		a e	It 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 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.
		A	t least one photograph of the existing/proposed effluent disposal site
	$\boxtimes$	A	plot plan or map showing the location and direction of each photograph
C/	octi	on	3. Buffer Zone Map (Instructions Page 38)
	Bu inf	ffer orn	zone map. Provide a buffer zone map on $8.5 \times 11$ -inch paper with all of the following nation. The applicant's property line and the buffer zone line may be distinguished by dashes or symbols and appropriate labels.
		•	The applicant's property boundary; The required buffer zone; and Each treatment unit; and The distance from each treatment unit to the property boundaries.
В.			zone compliance method. Indicate how the buffer zone requirements will be met. all that apply.
		$\boxtimes$	Ownership
		$\boxtimes$	Restrictive easement
			Nuisance odor control
			Variance
C.			able site characteristics. Does the facility comply with the requirements regarding able site characteristic found in 30 TAC § 309.13(a) through (d)?
		$\boxtimes$	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: ADMIN.09

# THE TOP THE TO

# 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 42)

#### A. Existing/Interim I Phase

Design Flow (MGD): <u>0.325</u> 2-Hr Peak Flow (MGD): <u>1.300</u>

Estimated construction start date: <u>Q4 2026</u>
Estimated waste disposal start date: <u>Q4 2027</u>

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

Design Flow (MGD): Click to enter text.

2-Hr Peak Flow (MGD): Click to enter text.

Estimated construction start date: Click to enter text.

Estimated waste disposal start date: Click to enter text.

#### C. Final Phase

Design Flow (MGD): <u>0.650</u>

2-Hr Peak Flow (MGD): 2.6

Estimated construction start date: Q2 2031

Estimated waste disposal start date: Q2 2032

## D. Current Operating Phase

Provide the startup date of the facility: N/A-new

# Section 2. Treatment Process (Instructions Page 42)

## 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.

Flow will enter the conventional activated sludge with nitrification process through a screening system into the equalization/anoxic zone; thence to the aeration basin, thence to the clarifier, thence to the chlorine contact chamber for disinfection and discharge. Sludge from the bottom of the clarifier will either be returned to the equalization/anoxic zone or wasted to the digester. The final phase will add a structure identical to the first phase with flow being split 50%-50% at a flow splitter box. Chlorinated flow will be combined and dechlorinated in the Final Phase before final discharge.

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

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

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

Treatment Unit Type	Number of Units	Dimensions (L x W x D)
See TECH.01		

#### C. Process Flow Diagram

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

Attachment: TECH.02

# Section 3. Site Information and Drawing (Instructions Page 43)

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

• Latitude: 30.237817

• Longitude: <u>-95.036747</u>

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

• Latitude: Click to enter text.

• Longitude: Click to enter text.

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: TECH.03

Provide the name and a des	cription of the area	served by the treatment	facility.
Sections from the Santa Fe	residential subdivi	sion.	
Collection System Informatic each <b>uniquely owned</b> collection satellite collection systems. <b>examples.</b>	ction system, existin	ng and new, served by th	is facility, including
Collection System Informatio			
Collection System Name	Owner Name	Owner Type	Population Serve
Santa Fe	Liberty County Utilities, LLC	Privately Owned	10,157
		Choose an item.	
		Choose an item.	
		Choose an item.	
If yes, does the existing perioders of being authorized by  Wes INO  If yes, provide a detailed distribute to provide sufficient recommending denial of the	y the TCEQ?  cussion regarding t  t justification may	he continued need for tl result in the Executive	ne unbuilt phase.
Click to enter text.			
Section 5. Closure P	lans (Instructio	ons Page 44)	
lave any treatment units bee	en taken out of serv		any units be taken
ut of service in the next five	: years:		
□ Yes ⊠ No			

11	yes, was a closure plan submitted to the TCEQ!
	□ Yes □ No
If	yes, provide a brief description of the closure and the date of plan approval.
Se	ection 6. Permit Specific Requirements (Instructions Page 44)
Pro	r applicants with an existing permit, check the Other Requirements or Special ovisions of the permit.  Summary transmittal
2 1.	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 <i>requirement or provision</i> pertaining to the submission of a summary transmittal letter. <b>Provide a copy of</b> an approval letter from the TCEQ, if applicable.
	Summary Transmittal letter will be submitted prior to construction
В.	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.
	Click to enter text.

C.	Oth	ner actions required by the current permit
	curk	es the <i>Other Requirements</i> or <i>Special Provisions</i> section in the existing permit require omission of any other information or other required actions? Examples include tification of Completion, progress reports, soil monitoring data, etc.
		□ Yes ⊠ No
	If y	ves, provide information below on the status of any actions taken to meet the additions of an Other Requirement or Special Provision.
	Cl	ick to enter text.
D.	Gri	it and grease treatment
	1.	Acceptance of grit and grease waste
		Does the facility have a grit and/or grease processing facility onsite that treats and decants or accepts transported loads of grit and grease waste that are discharged directly to the wastewater treatment plant prior to any treatment?
		□ Yes ⊠ No
		If No, stop here and continue with Subsection E. Stormwater Management.
	2.	Grit and grease processing
		Describe below how the grit and grease waste is treated at the facility. In your description, include how and where the grit and grease is introduced to the treatment works and how it is separated or processed. Provide a flow diagram showing how grit and grease is processed at the facility.
		Click to enter text.
	3.	Grit disposal
		Does the facility have a Municipal Solid Waste (MSW) registration or permit for grit disposal?
		□ Yes □ No
		If No, contact the TCEQ Municipal Solid Waste team at 512-239-2335. Note: A registration or permit is required for grit disposal. Grit shall not be combined with treatment plant sludge. See the instruction booklet for additional information on grit disposal requirements and restrictions.

		Describe the method of grit disposal.							
		Click to enter text.							
	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.							
		Click to enter text.							
E.	Ste	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?							
		□ Yes ⊠ No							
		If no to both of the above, then skip to Subsection F, Other Wastes Received.							
	2.	MSGP coverage							
		Is the stormwater runoff from the WWTP and dedicated lands for sewage disposal currently permitted under the TPDES Multi-Sector General Permit (MSGP), TXR050000?							
		□ Yes □ No							
		<b>If yes</b> , please provide MSGP Authorization Number and skip to Subsection F, Other Wastes Received:							
		TXR05 Click to enter text. or TXRNE Click to enter text.							
		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:
	Click to enter text.
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.
	Click to enter text.
5.	Zero stormwater discharge
	Do you intend to have no discharge of stormwater via use of evaporation or other means?
	□ Yes □ No
	If yes, explain below then skip to Subsection F. Other Wastes Received.
	Click to enter text.
	Note: If there is a potential to discharge any stormwater to surface water in the state as the result of any storm event, then permit coverage is required under the MSGP or an individual discharge permit. This requirement applies to all areas of facilities with treatment plants or systems that treat, store, recycle, or reclaim domestic sewage, wastewater or sewage sludge (including dedicated lands for sewage sludge disposal located within the onsite property boundaries) that meet the applicability criteria of above. You have the option of obtaining coverage under the MSGP for direct discharges, (recommended), or obtaining coverage under this individual permit.
<b>5.</b>	Request for coverage in individual permit
	Are you requesting coverage of stormwater discharges associated with your treatment plant under this individual permit?
	□ Yes □ No
	If yes, provide a description of stormwater runoff management practices at the site for which you are requesting authorization in this individual wastewater permit and describe whether you intend to comingle this discharge with your treated effluent or discharge it via a separate dedicated stormwater outfall. Please also indicate if you

		intend to divert stormwater to the treatment plant headworks and indirectly discharge it to water in the state.							
		Click to enter text.							
		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.	Di	scharges to the Lake Houston Watershed							
	Do	oes the facility discharge in the Lake Houston watershed?							
		⊠ Yes □ No							
		yes, attach a Sewage Sludge Solids Management Plan. See Example 5 in the instructions. e Attachment TECH.04							
G.	Ot	her wastes received including sludge from other WWTPs and septic waste							
	1.	1. Acceptance of sludge from other WWTPs							
		Does or will the facility accept sludge from other treatment plants at the facility site?							
		□ Yes ⊠ No							
		If yes, attach sewage sludge solids management plan. See Example 5 of instructions.							
		In addition, provide the date the plant started or is anticipated to start accepting sludge, an estimate of monthly sludge acceptance (gallons or millions of gallons), an							
		estimate of the BOD <sub>5</sub> concentration of the sludge, and the design BOD <sub>5</sub> concentration of the influent from the collection system. Also note if this information has or has not changed since the last permit action.							
		Click to enter text.							
		Note: Permits that accept sludge from other wastewater treatment plants may be required to have influent flow and organic loading monitoring.							
	2.	Acceptance of septic waste							
		Is the facility accepting or will it accept septic waste?							
		□ Yes ⊠ No							
		If yes, does the facility have a Type V processing unit?							
		□ Yes □ No							
		If yes, does the unit have a Municipal Solid Waste permit?							
		□ Yes □ No							

If yes to any of the above, provide the date the plant started or is anticipated to start accepting septic waste, an estimate of monthly septic waste acceptance (gallons or millions of gallons), an estimate of the $BOD_5$ concentration of the septic waste, and the
design BOD <sub>5</sub> concentration of the influent from the collection system. Also note if this information has or has not changed since the last permit action.
Click to enter text.
Note: Permits that accept sludge from other wastewater treatment plants may be required to have influent flow and organic loading monitoring.
3. Acceptance of other wastes (not including septic, grease, grit, or RCRA, CERCLA or as discharged by IUs listed in Worksheet 6)
Is or will the facility accept wastes that are not domestic in nature excluding the categories listed above?
□ Yes ⊠ No
If yes, provide the date that the plant started accepting the waste, an estimate how much waste is accepted on a monthly basis (gallons or millions of gallons), a description of the entities generating the waste, and any distinguishing chemical or other physical characteristic of the waste. Also note if this information has or has not changed since the last permit action.
Click to enter text.
Section 7. Pollutant Analysis of Treated Effluent (Instructions Page 49)
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. <i>Wastewater treatment facilities</i> complete Table 1.0(2). <i>Water treatment facilities</i> 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 cample 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

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 49)

Facility Operator Name: Shannon Marsh

Facility Operator's License Classification and Level: B

Facility Operator's License Number: WWooo4433

<sup>†</sup>TLAP permits only

### Section 9. Sludge and Biosolids Management and Disposal (Instructions Page 50)

A.	WW	TP's Sewage Sludge or Biosolids Management Facility Type							
	Che	eck all that apply. See instructions for guidance							
		Design flow>= 1 MGD							
	$\boxtimes$	Serves >= 10,000 people							
		Class I Sludge Management Facility (per 40 CFR § 503.9)							
	$\boxtimes$	Biosolids generator							
		☐ Biosolids end user – land application (onsite)							
	□ Biosolids end user – surface disposal (onsite)								
		Biosolids end user - incinerator (onsite)							
B.	ww	TP's Sewage Sludge or Biosolids Treatment Process							
	Che	ck all that apply. See instructions for guidance.							
	$\boxtimes$	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. Sewage Sludge or Biosolids Management

Provide information on the *intended* sewage sludge or biosolids management practice. Do not enter every management practice that you want authorized in the permit, as the

permit will authorize all sewage sludge or 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
Other	Off-site Third-Party Handler or Preparer	Not Applicable		N/A: Transported to another facility for further processing	N/A: Trasporrted to another facility for further processing
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>Transport to another WWTP</u>

#### D. Disposal site

Disposal site name: <u>Mount Houston Road MUD WWTP</u>
TCEQ permit or registration number: <u>WQoo11154001</u>

County where disposal site is located: Harris

### E. Transportation method

Method of transportation (truck, train, pipe, other): Truck

Name of the hauler: Magna-Flow Environmental

Hauler registration number: 21484

Sludge is transported as a:

Elquid 2 Schii fiquid 2 Schii Solid 2 Solid 1	Liquid ⊠	semi-liquid 🗆	semi-solid □	solid 🗆
---	----------	---------------	--------------	---------

### Section 10. Permit Authorization for Sewage Sludge Disposal (Instructions Page 52)

#### A. Beneficial use authorization

Does tl	he exi	isting	permit	include	authoriza	tion for	· land	application	of bioso	lids for
benefic	cial us	se?								
(2)	Ves	N	No							

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

Yes	No
162	INO

		Form No.	npleted <b>Application for Perm</b> 10451) attached to this per				
		Yes □	No				
B.	Sludg	e processi	ng authorization				
			g permit include authorizationsal options?	on for an	y of the	e follov	ving sludge processing,
	Slu	ıdge Comp	osting	(S)	Yes	$\boxtimes$	No
	Ma	rketing an	d Distribution of Biosolids		Yes	$\boxtimes$	No
	Slu	ıdge Surfac	e Disposal or Sludge Monofi	11 🗖	Yes	$\boxtimes$	No
	Te	mporary st	orage in sludge lagoons		Yes	$\boxtimes$	No
	author	rization, is	he above sludge options and the completed <b>Domestic Wa</b> <b>t (TCEQ Form No. 10056)</b> at	stewate	r Perm	it Appl	lication: Sewage Sludge
		Yes □	No				
Se	ction	11. Sev	vage Sludge Lagoons (	Instru	ctions	s Page	e 53)
			lude sewage sludge lagoons			8	
	□ Ye	5000					
If y		nplete the	remainder of this section. If	no, proc	eed to s	Section	12.
Α.	Locati	on informa	ation				
		_	aps are required to be submi chment Number.	tted as p	art of t	he app	lication. For each map,
	•	Original G	eneral Highway (County) Maj	o:			
		Attachme	nt: Click to enter text.				
	•	USDA Natı	ıral Resources Conservation	Service :	Soil Ma	p:	
		Attachmei	nt: Click to enter text.				
	•	Federal En	nergency Management Map:				
		Attachmei	nt: <u>Click to enter text.</u>				
		Site map:	SANCE CAPITY A TRANSPORT MATERIAL TOP TO ACCUPATE TO ACCUPATE A SANCE AND A SA				
			nt: Click to enter text.			75	-1 1 11 1
	Discus apply.	s in a desc	ription if any of the followin	g exist w	ithin th	ne lago	on area. Check all that
		Overlap a	designated 100-year freque	ncy flood	l plain		
		Soils with	flooding classification				
		Overlap a	n unstable area				
		Wetlands					

100	Located less than 60 meters from a fault		
	None of the above		
Atta	achment: Click to enter text.		
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:			
Click	to enter text.		

#### 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: Click to enter text.

Total Kjeldahl Nitrogen, mg/kg: Click to enter text.

Total Nitrogen (=nitrate nitrogen + TKN), mg/kg: Click to enter text.

Phosphorus, mg/kg: <u>Click to enter text</u>. Potassium, mg/kg: <u>Click to enter text</u>.

pH, standard units: Click to enter text.

Ammonia Nitrogen mg/kg: Click to enter text.

Arsenic: <u>Click to enter text.</u> Cadmium: <u>Click to enter text.</u>

Chromium: Click to enter text.

Copper: <u>Click to enter text.</u> Lead: Click to enter text.

Mercury: Click to enter text.

Molybdenum: Click to enter text.

Nickel: Click to enter text.

Selenium: Click to enter text.

Zinc: Click to enter text.

Total PCBs: <u>Click to enter text.</u>

Provide the following information:

Volume and frequency of sludge to the lagoon(s): Click to enter text.

Total dry tons stored in the lagoons(s) per 365-day period: Click to enter text.

Total dry tons stored in the lagoons(s) over the life of the unit: Click to enter text.

#### C. 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.					
	Click to enter text.					
D	. Site development plan					
	Provide a detailed description of the methods used to deposit sludge in the lagoon(s):					
	Click to enter text.					
	Attach the following documents to the application.					
	Plan view and cross-section of the sludge lagoon(s)					
	Attachment: Click to enter text.					
	Copy of the closure plan					
	Attachment: Click to enter text.					
	Copy of deed recordation for the site					
	Attachment: Click to enter text.					
	• Size of the sludge lagoon(s) in surface acres and capacity in cubic feet and gallons					
	Attachment: Click to enter text.					
	<ul> <li>Description of the method of controlling infiltration of groundwater and surface water from entering the site</li> </ul>					
	<b>Attachment</b> : Click to enter text.					
	<ul> <li>Procedures to prevent the occurrence of nuisance conditions</li> </ul>					
	Attachment: Click to enter text.					
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: Click to enter text.

### Section 12. Authorizations/Compliance/Enforcement (Instructions Page 54)

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:
C	lick to enter text.
В.	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:
Cl	lick to enter text.
Sec	ction 13. RCRA/CERCLA Wastes (Instructions Page 55)
	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: Click to enter text.

### Section 14. Laboratory Accreditation (Instructions Page 55)

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

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

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

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

#### CERTIFICATION:

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

Printed Name: N/A - not in operation

Title: Click to enter text.

Signature:	
Date:	

### DOMESTIC WASTEWATER PERMIT APPLICATION TECHNICAL REPORT 1.1

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

### Section 1. Justification for Permit (Instructions Page 56)

#### 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.

Utilities Investment Company, Inc. has been asked by the developer of the Bluestem
Subdivision to provide water and wastewater service to the development. Growth in
the subdivision and growth in the surrounding area necessitates additional capacity
to serve the wastewater needs.

#### 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 not applicable. Proceed to Item $2$ Utility CCN areas.							
Is any portion of the proposed service area located in an incorporated city?							
□ Yes □ No □ Not Applicable							
If yes, within the city limits of: Click to enter text.							
If yes, attach correspondence from the city.							
Attachment: Click to enter text.							

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: Click to enter text.

### 2. Utility CCN areas

Is any	port	tion of	the pro	posed	service a	rea located	l inside	another	utility's	CCN	area?
		Yes	$\boxtimes$	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: Click to enter text.

#### 3. Nearby WWTPs or collection systems

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

⊠ Yes □ No

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

Attachment: TECH.07

**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: TECH.07

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: Click to enter text.

### Section 2. Proposed Organic Loading (Instructions Page 58)

Is	this	facility	in '	opera	tion?
		/			

□ Yes ⊠ No

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

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

### A. Current organic loading

Facility Design Flow (flow being requested in application): Click to enter text.

Average Influent Organic Strength or BOD<sub>5</sub> Concentration in mg/l: Click to enter text.

Average Influent Loading (lbs/day = total average flow X average BOD<sub>5</sub> conc. X 8.34): <u>Click</u> to enter text.

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

Click to enter text.			

### 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	0.325 / 0.650	300 / 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	0.325 / 0.650	
AVERAGE BOD₅ from all sources		300 / 300

### Section 3. Proposed Effluent Quality and Disinfection (Instructions Page 58)

### 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: E. Coli: 126 mpn/100 ml

Biochemical Oxygen Demand (5-day), mg/l: <u>Click to enter text.</u>
Total Suspended Solids, mg/l: Click to enter text.
Ammonia Nitrogen, mg/l: Click to enter text.
Total Phosphorus, mg/l: Click to enter text.
Dissolved Oxygen, mg/l: Click to enter text.
Other: Click to enter text.
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: E. Coli: 126 mpn/100 ml
D. Disinfection Method
Identify the proposed method of disinfection.
☐ Chlorine: 1-4 mg/l after minimum 20 minutes detention time at peak flow
Dechlorination process: sulfur dioxide
☐ Ultraviolet Light: <u>Click to enter text</u> . seconds contact time at peak flow
□ Other: Click to enter text.
Section 4. Design Calculations (Instructions Page 58)
Attach design calculations and plant features for each proposed phase. Example 4 of the instructions includes sample design calculations and plant features.
Attachment: TECH.01
Attachment. <u>TECH.01</u>
Section 5. Facility Site (Instructions Page 59)
A. 100-year floodplain
Will the proposed facilities be located above 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.
rever. If applicable, provide the size and types of protective structures.
Provide the source(s) used to determine 100-year frequency flood plain.

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

FEMA Flood Map 48473C0275E
For a new or expansion of a facility, will a wetland or part of a wetland be filled?
□ Yes ⊠ No
If yes, has the applicant applied for a US Corps of Engineers 404 Dredge and Fill Permit?
□ Yes □ No
If yes, provide the permit number: <u>Click to enter text.</u>
<b>If no,</b> provide the approximate date you anticipate submitting your application to the Corps: <u>Click to enter text.</u>
Wind rose
Attach a wind rose: <u>TECH.03</u>
ection 6. Permit Authorization for Sewage Sludge Disposal
(Instructions Page 59)
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 <b>Application for Permit for Beneficial Land Use of Sewage Sludge (TCEQ Form No. 10451)</b> : <u>Click to enter text.</u>
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 <b>Domestic</b> Wastewater Permit Application: Sewage Sludge Technical Report (TCEQ Form No. 10056): Click to enter text.

### Section 7. Sewage Sludge Solids Management Plan (Instructions Page 60)

Attach a solids management plan to the application.

Attachment: TECH.04

B.

B.

The sewage sludge solids management plan must contain the following information:

- Treatment units and processes dimensions and capacities
- Solids generated at 100, 75, 50, and 25 percent of design flow
- · Mixed liquor suspended solids operating range at design and projected actual flow

- Quantity of solids to be removed and a schedule for solids removal
- Identification and ownership of the ultimate sludge disposal site
- For facultative lagoons, design life calculations, monitoring well locations and depths, and the ultimate disposal method for the sludge from the facultative lagoon

An example of a sewage sludge solids management plan has been included as Example 5 of the instructions.

### DOMESTIC WASTEWATER PERMIT APPLICATION WORKSHEET 2.0: RECEIVING WATERS

The following information is required for all TPDES permit applications.

Section 1.	Domestic Drinking	<b>Water Supply</b>	(Instructions	<b>Page 63)</b>

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: Click to enter text.
Distance and direction to the intake: Click to enter text.
Attach a USGS map that identifies the location of the intake.
Attachment: Click to enter text.
Section 2. Discharge into Tidally Affected Waters (Instructions Page 63)
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: Click to enter text.
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).
Click to enter text.
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 63) Is the discharge directly into (or within 300 feet of) a classified segment? 2 Yes $\boxtimes$ 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 63) Name of the immediate receiving waters: Unnamed tributary of Bessies Creek 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 136 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 X Personal observation Other, specify: Click to enter text.

C.	Downstream perennial confluences						
			f all perennial strea he discharge point.	ms that j	join the receiving water within three miles		
	Bessi	es Creek					
D.	Down	stream cha	aracteristics				
					ge within three miles downstream of the ponds, reservoirs, etc.)?		
		Yes 🛛	No				
	If yes,	, discuss h	ow.				
	Click	to enter te	xt.				
E.	Provid Stream	e general on is slightly turninge pools and	urbid, surrounded by nat	water bod	ody during normal dry weather conditions.  ses, trees and foliage. The stream has some areas ter coverage. See Photos in Attachment		
	Date a	nd time of	observation: <u>3/3/20</u>	22 @ 154	545		
	Was th □	e water bo Yes ⊠	dy influenced by sto No	ormwater	er runoff during observations?		
Se	ction		eral Characteri e 65)	istics o	of the Waterbody (Instructions		
A.	Upstre	am influer	nces				
			receiving water ups of the following? C		of the discharge or proposed discharge site l that apply.		
		Oil field a	ctivities		☑ Urban runoff		
		Upstream	discharges		☑ Agricultural runoff		
		Septic tan	ks		Other(s), specify: <u>Click to enter text.</u>		

В.	Waterl	body uses								
	Observed or evidences of the following uses. Check all that apply.									
		☐ Livestock watering ☐ Contact recreation								
		Irrigation withdrawal		Non-contact recreation						
		Fishing	0.853 36	Navigation						
		Domestic water supply		Industrial water supply						
		Park activities	$\boxtimes$	Other(s), specify: <u>unknown</u>						
C.	Waterb	oody aesthetics								
		one of the following that best descri rounding area.	bes t	the aesthetics of the receiving water and						
	☐ 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									
	Offensive: stream does not enhance aesthetics; cluttered; highly developed;									

# ATTACHMENT ADMIN.01 USGS Topographic Map

(Reference Administrative Report 1.0, Page 10, Question 13)

### **ATTACHMENT ADMIN.02**

### **Proof of Payment**

(Reference Administrative Report 1.0, Page 10, Question 13)

### WATER QUALITY PERMIT

### PAYMENT SUBMITTAL FORM

Use this form to submit the Application Fee, if the mailing the payment.

- Complete items 1 through 5 below.
- Staple the check or money order in the space provided at the bottom of this document.
- Do Not mail this form with the application form.
- Do not mail this form to the same address as the application.
- Do not submit a copy of the application with this form as it could cause duplicate permit entries.

#### Mail this form and the check or money order to:

BY REGULAR U.S. MAIL

Texas Commission on Environmental Quality Financial Administration Division Cashier's Office, MC-214 P.O. Box 13088 Austin, Texas 78711-3088 BY OVERNIGHT/EXPRESS MAIL

Texas Commission on Environmental Quality Financial Administration Division Cashier's Office, MC-214 12100 Park 35 Circle Austin, Texas 78753

Fee Code: WQP Waste Permit No: Click to enter text.

- 1. Check or Money Order Number: <u>1580</u>
- 2. Check or Money Order Amount: \$1,650.00
- 3. Date of Check or Money Order: 5/21/2025
- 4. Name on Check or Money Order: WaterEngineers, Inc.
- 5. APPLICATION INFORMATION

Name of Project or Site: Bluestem WWTP

Physical Address of Project or Site: 35617 Wilson Road, Brookshire, TX 77423

If the check is for more than one application, attach a list which includes the name of each Project or Site (RE) and Physical Address, exactly as provided on the application.

### **ATTACHMENT ADMIN.03**

### **Core Data Form**

(Reference Administrative Report 1.0, Page 4, Section 3C)



### **TCEQ Core Data Form**

TCEQ Use Only	

		ructions regard	•	n of this	form, pleas	e read	the Co	e Data	Form Instructions	or call 512	2-239-5175.
1. Reason f	or Submiss	ion (If other is	checked ple	ase des	cribe in spa	ce provi	ided.)				
☐ New Pe	ermit, Registr	ration or Author	ization (Core	Data Fo	rm should l	e subm	nitted w	ith the	program applicati	on.)	
Renew	Renewal (Core Data Form should be submitted with the renewal form)										
Tollow this link to scal on								ed Entity Referer	nce Numbe	er (if issued)	
CN 600633093   for CN or RN numbers in Central Registry**   RN 11147								471371			
SECTION	II: Cus	tomer Info	ormation	<u>l</u> g							
4. General (	Customer In	formation	5. Effectiv	e Date f	or Custom	er Infor	matior	Upda	tes (mm/dd/yyyy)		
☐ New Cus	stomer	-		Update	to Custome	er Inforn	nation		☐ Change ir	Regulated	Entity Ownership
☐Change i	n Legal Nam	e (Verifiable wi	th the Texas	Secretar	y of State o	r Texas	Comp	troller o	of Public Accounts	<b>)</b>	_
The Custo	omer Nam	e submitted	here may	be up	dated aut	omati	cally	based	l on what is cu	ırrent an	d active with the
Texas Sec	cretary of	State (SOS)	or Texas	Compt	roller of l	Public	Acco	unts	(CPA).		
6. Custome	r Legal Nam	<b>e</b> (If an individua	l, print last nar	ne first: e	g: Doe, John	)	<u> If</u>	new Cu	ıstomer, enter prev	ious Custor	mer below:
Utilities I	nvestmen	t Company,	Inc.								
7. TX SOS/0	PA Filing N	umber	8. TX State	Tax ID	(11 digits)		9.	Feder	al Tax ID (9 digits)	10. DUN	NS Number (if applicable)
01422305	500		3011905	2162							
11. Type of	Customer:		on		☐ Indivi	dual		Pa	rtnership: 🔲 Gene	ral 🔲 Limited	I
Government	City 🔲 Co	ounty 🗌 Federal 🗆	State 🔲 Othe	er	☐ Sole	Propriet	orship		Other:		
	12. Number of Employees       13. Independently Owned and Operated?         ☑ 0-20 ☐ 21-100 ☐ 101-250 ☐ 251-500 ☐ 501 and higher       ☑ Yes ☐ No						ated?				
14. Custome	er Role (Prop	osed or Actual) -	as it relates to	the Reg	ulated Entity	listed on	this for	m. Plea	se check one of the	following:	
⊠Owner ☐Occupation	nal Licensee	☐ Operate ☐ Respo	or nsible Party			& Opera		plicant	Other:		
	P.O. Box	x 279									
15. Mailing											
Address:	City 1	New Waver	lv	St	ate TX		ZIP	7735	58	ZIP + 4	0279
16. Country		rmation (if outside	•			17. E	-Mail A		S (if applicable)		
18. Telephor	marshwaterman@aol.com  18. Telephone Number  19. Extension or Code  20. Fax Number (if applicable)								ble)		
( 936 ) 344-8014							•				
( )50 /51	1-0011								( )30   344	7030	
		ulated En									
	_									•	a permit application)
	lated Entity		Regulated	_					Entity Information		
_		Name subn lings such a	•			order	to m	eet TC	CEQ Agency D	ata Stan	dards (removal
22. Regulated	Entity Nam	e (Enter name o	f the site wher	e the regi	ulated action	is taking	place.)				

TCEQ-10400 (04/15) Page 1 of 2

Bluestem Wastewater Treatment Plant

	05/15 W" D. 1												
23. Street Address of	35617 Wilson Road												
the Regulated Entity: (No PO Boxes)								T					
(NOTO BOXOS)	City	Brooksh	nire	State	T	X Z	ZIP	774	123	ZIP	+ 4		
24. County	Walle	Waller											
		Enter Physical	Location	on Descriptio	n if n	o street a	ddres	s is <u>p</u> rov	ided.				
25. Description to Physical Location:													
26. Nearest City								State			Nea	rest ZIP Code	
Brookshire								TX			774	123	
27. Latitude (N) In Decir	nal:	29.88018	39			28. Lon	gitude	(W) Ir	Decimal:	95.98	308		
Degrees	Minutes		Seco	nds		Degrees			Minutes			Seconds	
29		52		48.68			95			58		50.88	
29. Primary SIC Code (4 di	gits) 3	0. Secondary S	SIC Cod	ie (4 digits)		Primary I	NAICS	Code			y NAI	CS Code	
4952						6 digits) 1320			(5 01 6	i digits)			
33. What is the Primary B	usinoss o	of this antitu?	(Do not	repeat the SIC or			1						
providing wastewate			•	-			•	and no	tentially	other	leve	lonment	
providing wastewate	JOINTO	es to the Bro	203101	II TOSIGOIIII	<i>a</i> 1 110	P.O. Bo		una pe	tentiany	other	4010	Юринен	
34. Mailing						1.0.00	X 213						
Address:				1									
	City	New Wav	erly	State	1	TX	ZIP   77358   ZIP + 4				279		
35. E-Mail Address:						rshwater	man@						
36. Telepho		er	_	37. Extension	n or								
( 936 ) 34				<del>-</del>					•	) 344-98			
39. TCEQ Programs and ID Norm. See the Core Data Form ins				rite in the permi	ts/regi	istration nu	mbers	that will be	affected by	the updat	es sub	mitted on this	
☐ Dam Safety	District			Edwards Aquife		☐ Emissions Inventory Air ☐ Industrial Hazardous Wa						zardous Waste	
	_		1	,									
☐ Municipal Solid Waste	☐ New So	ource Review Air	100	OSSF		☐ Petroleum Storage Tank ☐ PV				☐ PWS	PWS		
Sludge	☐ Storm \	Water		Title V Air		ПП	ires			Used (	Dil	<del></del>	
☐ Voluntary Cleanup	Waste	Water		Wastewater Agri	griculture		[	Other:					
	WQ0016136001												
SECTION IV: Prep	arer In	formation											
40. Name: Shelley Yo													
42. Telephone Number 43. Ext./Code 44. Fax Number 45. E-Mail Address													
(281) 373-0500		Ī		373-1113		T			gineers.	com			
SECTION V: Author	rized					1 - 7 - 34	B		J				
			nowlad	ae that the i-	orm:	tion near	ded :-	thic for-	ic true and	Loomplat	اممر و	that I have	
<b>46.</b> By my signature below, I of signature authority to submit the identified in field 39.													

Job Title:

Project Engineer

Phone:

Date:

Company:

Signature:

Name(In Print):

WaterEngineers, Inc.

Shelley Young, P.E.

(281) 373-0500

### **ATTACHMENT ADMIN.04**

### **Plain Language Summary**

(Reference Administrative Report 1.0, Page 7, Section 8F)

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

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

If you are subject to the alternative language notice requirements in <u>30 TAC Section 39.426</u>, 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 Enter 'INDUSTRIAL' or 'DOMESTIC' here 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.

Utilities Investment Company, Inc. (CN600633093) proposes to operate Bluestem Wastewater Treatment Plant (RN111471371), an activated sludge process with nitrification operated in the complete mix mode. The facility is located at 35617 Wilson Road, in Brookshire, Waller County, Texas 77423. This application for a major amendment application to discharge a daily average flow of 650,000 gallons per day of treated domestic wastewater.

Discharges from the facility are expected to contain five-day carbonaceous biochemical oxygen demand (CBOD<sub>5</sub>), total suspended solids (TSS), ammonia nitrogen (NH<sub>3</sub>-N), and *Escherichia coli*. Additional potential pollutants are included in the Domestic Technical Report 1.0, Section 7. Pollutant Analysis of Treated Effluent in the permit application package. Domestic wastewater is treated by an activated sludge process plant and the treatment units will include a screening facility, equalization basins/anoxic zones, aeration basins, final clarifiers, sludge digesters, chlorine contact chambers and a dichlorination basin.

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

#### AGUAS RESIDUALES Introduzca 'INDUSTRIALES' o 'DOMÉSTICAS' aquí /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.

Utilities Investment Company, Inc. (CN600633093) propone operar la Planta de Tratamiento de Aguas Residuales de Bluestem (RN 111471371), un proceso de lodos activados con nitrificación operado en el modo de mezcla completa. La instalación está ubicada en 35617 Camino Wilson, en Brookshire, Condado de Waller, Texas 77423. Esta solicitud es para una enmienda importante aplicación para descargar a un flujo promedio diario de 650,000 galones por día de aguas residuales domésticas tratadas.

Se espera que las descargas de la instalación contengan demanda bioquímica de oxígeno carbonoso de cinco días (CBOD₅), solidos totalmente suspendidos (TSS), nitrógeno amoniacal (NHҫ-N), y Escherichia coli. Los contaminantes potenciales adicionales se incluyen en el Informe Técnico Domésticas 1.0, Seccion 7 Análisis de Contaminantes de Efluente Tratado en el paquete de solicitud de permisos.. Las aguas residuales domésticas. está tratado por una planta de proceso de lodos activados y las unidades de tratamiento incluirán una pantalla de barras, cuenca de ecualización/zona anóxica, balsas de aireación, clarificadores finales, digestores de lodos, cámaras de contacto y una cuenca de decloración.

### **ATTACHMENT ADMIN.05**

### **Public Involvement Plan**

(Reference Administrative Report 1.0, Page 7, Section 8G)

WQ0016136001 Utilties Investment Company, Inc. Bluestem WWTP



Section 1. Preliminary Screening

Texas Commission on Environmental Quality

### Public Involvement Plan Form for Permit and Registration Applications

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

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

<ul> <li>□ New Permit or Registration Application</li> <li>□ New Activity - modification, registration</li> </ul>	, amendment, facility, etc. (see instructions)					
If neither of the above boxes are check	ed, a Public Involvement Plan is not necessary. naining sections not required.					
Section 2. Secondary Screening						
<ul> <li>☒ Requires public notice,</li> <li>☐ Considered to have significant public into</li> <li>☒ Located within any of the following geographics</li> <li>Austin</li> <li>San Antonio</li> </ul>						
<ul><li>Dallas</li><li>West Texas</li></ul>						
• Fort Worth • Texas Panhan	ndle					
• Houston • Along the Tex	xas/Mexico Border					
<ul> <li>Other geographical locations should</li> </ul>	be decided on a case-by-case basis					
	a Public Involvement Plan is not necessary. Stop r Section 2.					
☑ Public Involvement Plan not applicable to The area affected by this permit action is no best of my knowledge, not been part of any	ot environmentally highly sensitive and, to the					
Section 3. Application Information						
Type of Application (check all that apply):						
Air □ Initial □ Federal □ Amendmen	t □ Standard Permit □ Title V					
Waste □ Municipal Solid Waste □ Industrial and Hazardous Waste □ Radioactive Materials Licensing □ Underground Injection Controls						

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.
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)

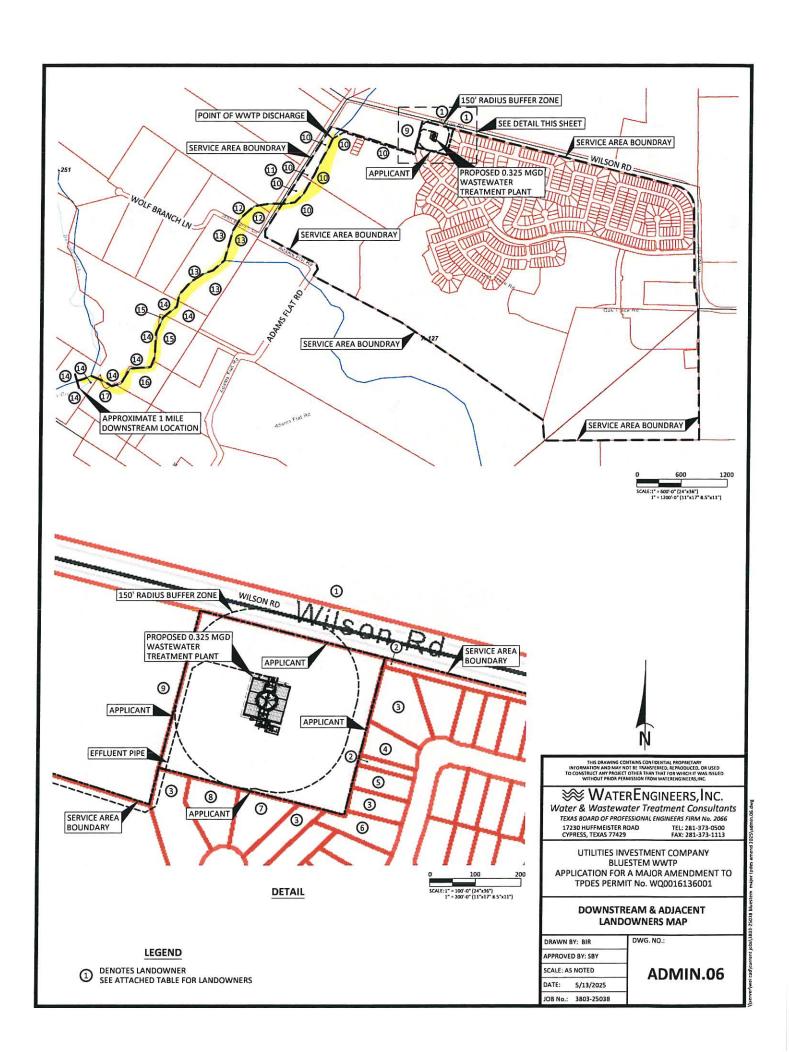
(Census Tract)
Please indicate which of these three is the level used for gathering the following information.  □ City □ County □ Census Tract
(a) Percent of people over 25 years of age who at least graduated from high school
(b) Per capita income for population near the specified location
(c) Percent 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
(f) Community and/or Stakeholder Groups
(g) Historic public interest or involvement
Section 6. Planned Public Outreach Activities
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?
(a) Is this application subject to the public participation requirements of Title 30 Texas
(a) Is this application subject to the public participation requirements of Title 30 Texas Administrative Code (30 TAC) Chapter 39?
(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
(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?
(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
(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,
(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.
(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.
(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
(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.

TCEQ-20960 (10-10-2022)

☐ Mailed by TCEQ's Office of the Chief Clerk
□ Other (specify)
(d) Is there an opportunity for some type of public meeting, including after notice?
□ Yes □ No
(e) If a public meeting is held, will a translator be provided if requested?
□ Yes □ No
(f) Hard copies of the application will be available at the following (check all that apply):
☐ TCEQ Regional Office
☐ TCEQ Central Office
□ Public Place (specify)
Section 7. Voluntary Submittal  For applicants voluntarily providing this Public Involvement Plan, who are not subject to formal public participation requirements.  Will you provide notice of this application, including notice in alternative languages?  ☐ Yes ☐ No  What types of notice will be provided?
□ Publish in alternative language newspaper
☐ Posted on Commissioner's Integrated Database Website
$\square$ Mailed by TCEQ's Office of the Chief Clerk
□ Other (specify)

## ATTACHMENT ADMIN.06 Affected Landowners Map and Table

(Reference Administrative Report 1.1, Page 12, Section 1A&B)



## TABLE "ADMIN.06"

## UTILITIES INVESTMENT COMPANY, INC. Bluestem **Wastewater Treatment Plant**

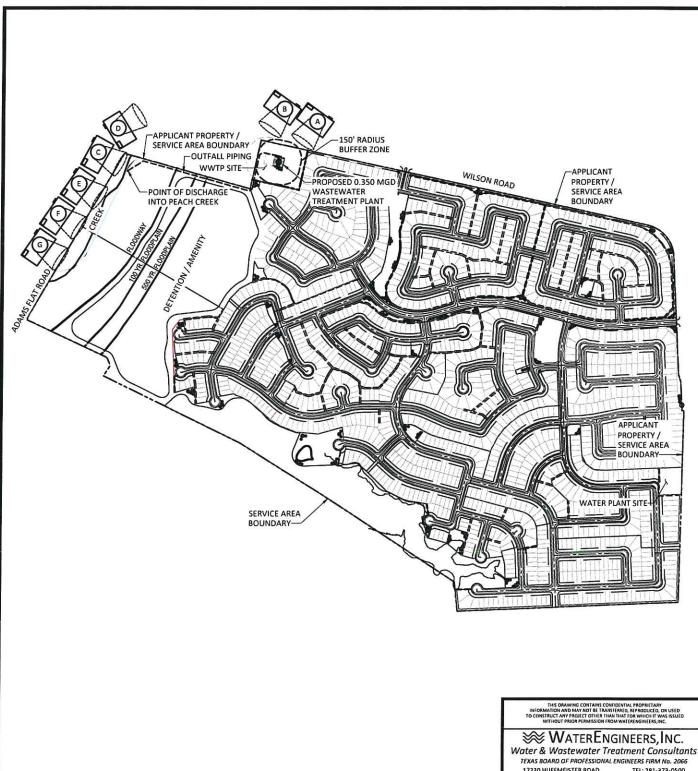
## Adjacent & Downstream Land Ownership Table Source: Waller County Appraisal District

Tract No.	Title Owner & Address
(See Attachment "ADMIN.06" Map)	Title Owner & Address
(See Headinione Historia, 100 Map)	DWIGHT RAULSTON
1	6418 AUDEN STREET
	HOUTON TX 77005
A A MORE THE STATE OF THE STATE	HOU-BLUESTEM 17 LLC
2	13141 NORTHWEST FREEWAY
2	HOUTON TX 77040
	LEGEND CLASSIC HOMES LTD
3	13141 NORTHWEST FREEWAY
	HOUTON TX 77040
	LAKIN & JULIET OJEKUNLE
4	3025 WAXWING DRIVE
·	BROOKSHIRE TX 77423
	ANGELA & ROBERT CARLSON
5	3017 WAXWING DRIVE
	BROOKSHIRE TX 77423
	DANIELA BOLIVAR & MARTEL
6	CORDERO
	3009 WAXWING DRIVE
	BROOKSHIRE TX 77423
	JESSICA ROSTOCIL & DALE DOCKERY
7	3048 CHESTNUT LANE
	BROOKSHIRE TX 77423
	EDUARDO & ALEXANDRA ARANA
8	3052 CHESTNUT LANE
	BROOKSHIRE TX 77423
	BRENT & JULIE WATTS
9	28926 DEWBERRY ARBOR CT
\$40	KATY TX 77494
	BLLUESTEM DEVELOPMENT
10	COMPANY LLC
	1401 WOODLANDS PARKWAY
	THE WOODLANDS TX 77380
	HARVEY & LYNETTE LAAS
11	9870 FM 359
walking).	BROOKSHIRE TX 77423

	JAKE & CATRIONA CULLUM
12	7200 ADAMS FLAT ROAD
	BROOKSHIRE TX 77423
	KATHY MILLS & EDWINA GARRETT
13	3485 EULA MORGAN ROAD
	KATY TX 77493
	S & H PROPERTY HOLDINGS LLC
14	3119 WELLSPRING LAKE DRIVE
	FULSHEAR TX 77441
	MARGARITO & ARIANA PALACIOS
15	4772 HUBBARD
	BROOKSHIRE TX 77423
	KENNETH & DARLA HOLDER
16	6553 ADAMS FLAT ROAD
	BROOKSHIRE TX 77423
	DI LAND HOLDINGS LLC
17	4011 ROLAND ROAD
	KATY TX 77493

## ATTACHMENT ADMIN.07 Photographs

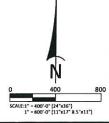
(Reference Administrative Report 1.1, Page 13, Section 2)



### LEGEND

DENOTES LOCATION FROM WHICH PHOTOGRAPHS WERE TAKEN SEE ATTACHMENT ADMIN.05-2 FOR SITE PHOTOGRAPHS

PROPOSED SERVICE AREA BOUNDARY & APPLICANT PROPERTY BOUNDARY



TEXAS BOARD OF PROFESSIONAL ENGINEERS FIRM No. 2066
17230 HUFFMEISTER ROAD TEL: 281-373-0500
CYPRESS, TEXAS 77429 FAX: 281-373-1113

UTILITIES INVESTMENT COMPANY **BLUESTEM WWTP** APPLICATION FOR A MAJOR AMENDMENT TO TPDES PERMIT No. WQ0016136001

## SITE PICTURE LOCATION MAP

DWG. NO.: DRAWN BY: BIR APPROVED BY: SBY SCALE: AS NOTED DATE: 5/13/2025

JOB No.: 3803-25038

**ADMIN.07-1** 

#### WASTEWATER TREATMENT PLANT SITE





AREA TO THE WEST OF EXISTING WASTEWATER TREATMENT PLANT WHERE FINAL PHASE PLANT TO BE BUILT





\*\* SEE ADMIN.05-1 FOR LOCATION IN WHICH PHOTOGRAPHS WERE TAKEN

THIS DRAWING CONTAINS CONTIDENTIAL PROPRIETARY
INFORMATION AND MAY NOT BE TRANSFERRED, REPRODUCED, OR USED
TO CONSTRUCT ANY PROJECT OTHER THAN THAT FOR WHICH IT WAS ISSUE!
WITHOUT PRIOR PERMISSION FROM WATERENGINEERS, INC.

## ₩ WATER ENGINEERS, INC.

Water & Wastewater Treatment Consultants
TEXAS BOARD OF PROFESSIONAL ENGINEERS FIRM No. 2066
17330 HUFFMEISTER ROAD TEL: 381-373-0500
CYPRESS, TEXAS 77429 FAX: 281-373-1113

UTILITIES INVESTMENT COMPANY
BLUESTEM WWTP
APPLICATION FOR A MAJOR AMENDMENT TO
TPDES PERMIT No. WQ0016136001

#### SITE PHOTOGRAPHS

DRAWN BY: BIR
APPROVED BY: SBY

JOB No.: 3803-25038

DWG. NO.:

SCALE: AS NOTED

DATE: 5/13/2025

AD

**ADMIN.07-2** 

## POINT OF DISCHARGE INTO UNNAMED TRIBUTARY TO BESSIES CREEK





## **UPSTREAM FROM POINT OF DISCHARGE**





THIS DRAWING CONTAINS CONFIDENTIAL PROPRIETARY
INFORMATION AND MAY NOT BE TRANSFERRED, REPRODUCED, OR USED
O CONSTRUCT ANY PROJECT OTHER THAN THAT FOR WHICH IT WAS ISSUE!
WITHOUT PRIOR PERMISSION FROM WATERIGINEERS, INC.

## ₩ WATER ENGINEERS, INC.

Water & Wastewater Treatment Consultants TEXAS BOARD OF PROFESSIONAL ENGINEERS FIRM No. 2066 17230 HUFFMEISTER ROAD TEL: 281-373-0500 CYPRESS, TEXAS 77429 FAX: 281-373-1113

UTILITIES INVESTMENT COMPANY
BLUESTEM WWTP
APPLICATION FOR A MAIOR AMENDMENT TO
TPDES PERMIT No. WQ0016136001

## SITE PHOTOGRAPHS

DWG. NO.:

DRAWN BY: BIR
APPROVED BY: SBY
SCALE: AS NOTED
DATE: 5/13/2025

JOB No.: 3803-25038

**ADMIN.07-3** 

\*\* SEE ADMIN.05-1 FOR LOCATION IN WHICH PHOTOGRAPHS WERE TAKEN

Steament jobs/3303-25038 bluestern major rodes amend 2025) admin 02-3 dwa

#### DOWNSTREAM FROM POINT OF DISCHARGE





## 592' DOWNSTREAM FROM POINT OF DISCHARGE





## ₩ WATERENGINEERS, INC.

Water & Wastewater Treatment Consultants
TEXAS BOARD OF PROFESSIONAL ENGINEERS FIRM No. 2066 TEL: 281-373-0500 FAX: 281-373-1113

UTILITIES INVESTMENT COMPANY BLUESTEM WWTP
APPLICATION FOR A MAJOR AMENDMENT TO
TPDES PERMIT No. WQ0016136001

## SITE PHOTOGRAPHS

DRAWN BY: BIR APPROVED BY: SBY

JOB No.: 3803-25038

DATE:

SCALE: AS NOTED **ADMIN.07-4** 5/13/2025

DWG. NO.:

\*\* SEE ADMIN.05-1 FOR LOCATION IN WHICH PHOTOGRAPHS WERE TAKEN

#### 787' DOWNSTREAM FROM POINT OF DISCHARGE





## ₩ WaterEngineers,Inc.

Water & Wastewater Treatment Consultants TEXAS BOARD OF PROFESSIONAL ENGINEERS FIRM No. 2066
17330 HUFFMEISTER ROAD TEL: 281-373-0500
CYPRESS, TEXAS 77429 FAX: 281-373-1113

UTILITIES INVESTMENT COMPANY BLUESTEM WWTP APPLICATION FOR A MAJOR AMENDMENT TO TPDES PERMIT No. WQ0016136001

#### SITE PHOTOGRAPHS

DRAWN BY: BIR APPROVED BY: SBY

SCALE: AS NOTED 5/13/2025

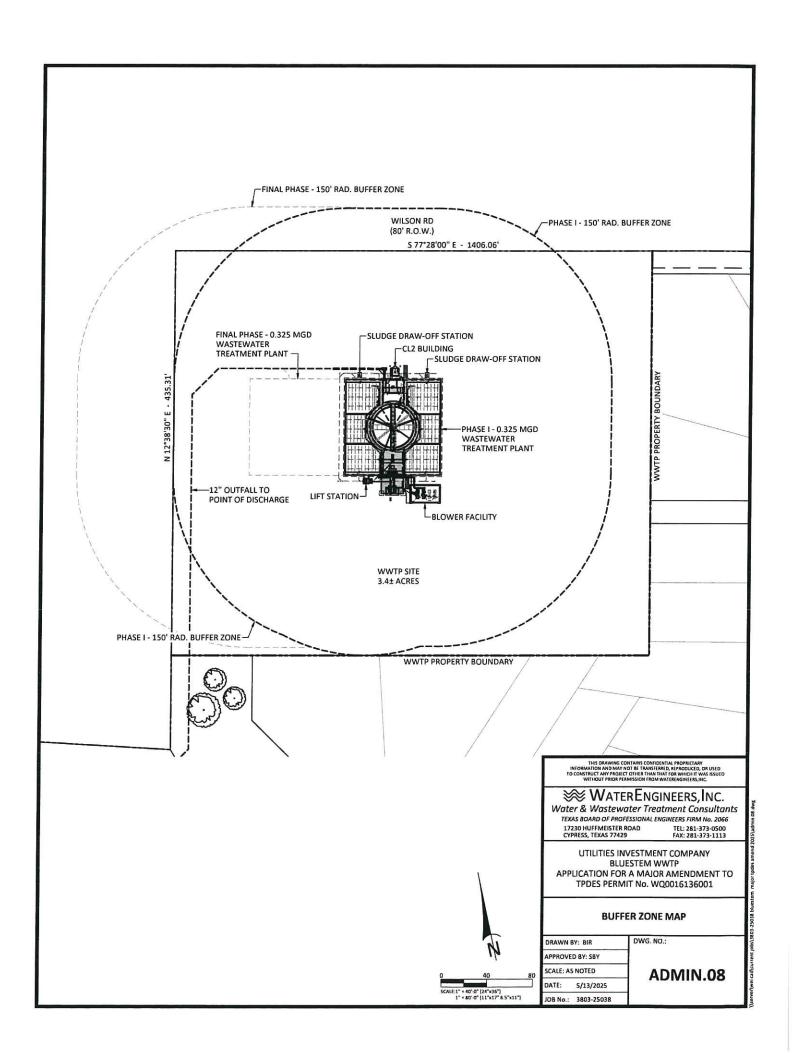
3803-25038

DWG. NO.:

## **ATTACHMENT ADMIN.08**

## **Buffer Zone Map**

(Reference Administrative Report 1.1, Page 13, Section 3A)



# ATTACHMENT ADMIN.09 Supplemental Permit Information Form and USGS Map

(Reference Administrative Report Page 14)

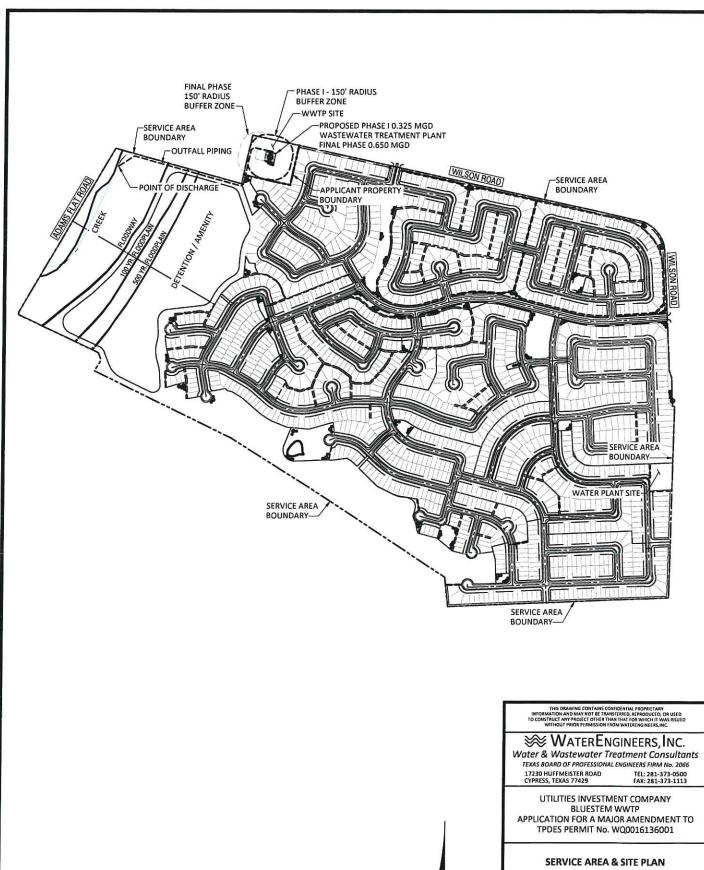
## TEXAS COMMISSION ON ENVIRONMENTAL QUALITY SUPPLEMENTAL PERMIT INFORMATION FORM (SPIF)

## FOR AGENCIES REVIEWING DOMESTIC OR INDUSTRIAL TPDES WASTEWATER PERMIT APPLICATIONS

TCEQ USE ONLY:  Application type:RenewalMajor Ame	endment Minor Amendment New
County:	
Admin Complete Date:	1
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. TCE our agreement with EPA. If any of the items are n is needed, we will contact you to provide the info each item completely.	ot completely addressed or further information
Do not refer to your response to any item in the attachment for this form separately from the Adrapplication will not be declared administratively completed in its entirety including all attachment may be directed to the Water Quality Division's A email at <a href="MO-ARPTeam@tceq.texas.gov">MO-ARPTeam@tceq.texas.gov</a> or by phore	ninistrative Report of the application. The complete without this SPIF form being s. Questions or comments concerning this form pplication Review and Processing Team by
The following applies to all applications:	
1. Permittee: <u>Utilities Investment Company, Inc.</u>	
Permit No. WQ00 <u>16136001</u>	EPA ID No. TX <u>0142654</u>
Address of the project (or a location description and county):	
35617 Wilson Road, Brookshire, Waller Count	y, TX 77423

		de the name, address, phone and fax number of an individual that can be contacted to er specific questions about the property.
	Prefix	(Mr., Ms., Miss): <u>Ms.</u>
	First a	and Last Name: Shelley Young
	Crede	ntial (P.E, P.G., Ph.D., etc.): <u>P.E.</u>
	Title:	<u>Engineer</u>
	Mailin	g Address: <u>17230 Huffmeister Road, Suite A</u>
	City, S	State, Zip Code: <u>Cypress, TX 77429</u>
	Phone	No.: <u>281-373-0500</u> Ext.: Click here to enter text, Fax No.: <u>281-373-1113</u>
	E-mail	Address: syoung@waterengineers.com
2.	List th	e county in which the facility is located: Waller
3.		property is publicly owned and the owner is different than the permittee/applicant, list the owner of the property.
	N/A	
4	Provid	le a description of the effluent discharge route. The discharge route must follow the flow
4•		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.
		the plant site to an unnamed tributary; thence to Bessies Creek; thence to Brazos Below Navasota River in Segment No. 1202 of the Brazos River Basin.
	L	
5.		provide a separate 7.5-minute USGS quadrangle map with the project boundaries land a general location map showing the project area. Please highlight the discharge
	route f	from the point of discharge for a distance of one mile downstream. (This map is
	require	ed in addition to the map in the administrative report).
	Provid	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.
	$\boxtimes$	Proposed access roads, utility lines, construction easements
		Visual effects that could damage or detract from a historic property's integrity
		Vibration effects during construction or as a result of project design
		Additional phases of development that are planned for the future
		Sealing caves, fractures, sinkholes, other karst features
TOE	0.00071	(08/a1/a0aa)

	Disturbance of vegetation or wettands
1.	List proposed construction impact (surface acres to be impacted, depth of excavation, sealing of caves, or other karst features):
	The plant site will encompass approximately 2.0 acre. Excavation is not expected to be more than 10-12'.
2.	Describe existing disturbances, vegetation, and land use:
	Land is currently used as a wastewater treatment plant site.
	E FOLLOWING ITEMS APPLY ONLY TO APPLICATIONS FOR NEW TPDES PERMITS AND MAJOR IENDMENTS TO TPDES PERMITS
3.	List construction dates of all buildings and structures on the property:
	The Phase I plant is currently under construction.
4.	Provide a brief history of the property, and name of the architect/builder, if known.
	Before the wastewater treatment plant was under construction, the property was vacant and used agriculturally.



PROPOSED SERVICE AREA BOUNDARY & APPLICANT PROPERTY BOUNDARY

**LEGEND** 

400 CALE:1" = 400'-0" (24"x36") DWG. NO.:

DRAWN BY: BIR
APPROVED BY: SBY
SCALE: AS NOTED

DATE: 5/13/2025 JOB No.: 3803-25038 **ADMIN.09-4** 

# ATTACHMENT TECH.01 Design & Loading Criteria Table And Design Features for Reliability

(Reference Technical Report Page 2, Question 2b And Page 22, Question 4)

## TECH.01-1 DESIGN & LOADING CRITERIA BLUESTEM WWTP PHASE I - 325,000 GPD CAPACITY (4Q) FINAL PHASE - 650,000 GPD CAPACITY (4Q)

FINAL PHASE - 650,000 GPD CAPACITY (4Q)									
Parameter	WWTP # 1 Value	WWTP # 2 Value	Composite Value						
INFLUENT CONDITIONS % of Flow to Each Plant	50.0%	50.0%							
Average Daily Flow, mgd	0.325	0.325	0.650						
Ratio Average/Peak Flow	4.00 1.300	4.00	4.00						
Peak 2-Hour Flow, mgd BOD, mg/l	300	1.300	2.600 300						
BOD, lb/day	813	813	1626						
TREATMENT UNITS Tank Wall Height, ft	12	12	12						
Tank Freeboard, ft	1.5	1.5	1.5						
Side Water Depth, ft	10.5	10.5	10.5						
ACTIVATED SLUDGE PLANT Anoxic/Selector Zone									
Design Detention, hrs	2	2	2						
Required Volume, cu ft	3,621	3,621	7242						
Required Volume, Gallons Anoxic Basin Depth, ft	27,083 10.5	27,083 10.5	54167						
Required Anoxic Basin Surface Area, sq ft	345	345	690						
Actual Anoxic Basin Surface Area, sq ft	372	372	744						
Actual Anoxic Basin Volume, cu ft Detention, hours	3,906 2.16	3,906 2.16	7,812 2.16						
Air Supply, scfm/1000 cu ft	20	20	2.10						
Air Supply, scfm	78	78	156						
Aeration Basin Oxic Zones Aeration Basin Loading, lb BOD/1000 cu ft	30	20	30						
Aeration Basin Volume, cu ft	27,105	30 27,105	54,210						
Aeration Basin Depth, ft	10.25	10.25	10.25						
Req'd Aeration Basin Surface Area, sq ft Actual Aeration Basin Surface Area, sq ft	2,644	2,644	5,289						
Actual Aeration Basin Surface Area, sq ft Actual Aeration Basin Volume, cu ft	2,662 27,286	27,286	5,324 54,571						
Total Aerated Volume (Anoxic + Aerobic), cu ft	31,192	31,192	62,383						
Aeration Basin Loading, # BOD/1000 cf Detention, hours	26.1 17.23	26.1							
O2 Reg'd @ 2.2, # O2/lb BOD	1,789	17.23 1,789							
Correction Factor for Fine Bubble	0.45	0.45							
Air Diffuser Submergence, ft	9.50	9.50							
Air Diffuser Efficiency, %/ ft sub Air Diffuser eff., %	0.017 16,2%	0.017 16. <b>2</b> %							
Required Aeration Basin Air Flow Rate, scfm	913	913							
Mixed Liquor Temperrature, deg C	30	30							
Air Supply Temperature Correction Factor Corrected Air Supply Rate, scfm	1.268 1,157	1.268 1,157	2,314						
No. of Tube Diffuser Membranes (36.4" long)	86	86	172						
Active membrane surface area/diffuser, sq ft	2.54	2.54							
Diffuser air flow, scfm/SF of membrane Air Supply, scfm/1000 cf	5.30 33	5.30 34							
R.S. Airlift Air, scfm	52	52	105						
Skimmer Airlift Air, scfm	5	5	10						
Clarifier Selected Internal Diameter, ft	40	40							
Side Water Depth, ft	10.35	10.35							
Total Area sq ft	1,257	1,257	2,513						
Total Volume, cu ft Avg. SOR, gpd/sq ft	13,006 259	13,006 259	26,012 259						
Peak SOR, gpd/sq ft	1,035	1,035	1,035						
Avg. Detention, hr	7.18	7.18	7.18						
Peak Detention, hr Max Qr @ 400 mgd/sf, mgd	1.80 0.503	1.80 0.503	1.80 1.005						
Max Qp + Qr, mgd	1.803	1.803	3.605						
CHLORINATION	0.000								
Min. Detention, min. Side Water Depth, ft	24 8.83	24 8.83							
Minimum Volume, cu ft	2,897	2,897	5,793						
Min. Surface Area, sq ft	328	328	656						
Actual Surface Area, sq ft	320 2,826	320 2.826	640 5.651						
Actual Volume, cu ft Detention @ Qp, minutes	23.4	23.4	23.4						
Air Supply @ 10 scfm/1000 cf	28	28	57						
DECHLORINATION	N/A	0.5							
Min. Detention, min. Side Water Depth, ft	N/A N/A	0.5 8.83							
Minimum Volume, cu ft	N/A	181	181						
Min. Surface Area, sq ft Actual Surface Area, sq ft	N/A N/A	21 20	21 20						
Actual Sulface Area, sq ft Actual Volume, cu ft	N/A	177	177						
Detention @ Qp, minutes	N/A	0.5							
Air Supply @ 10 scfm/1000 cf AEROBIC DIGESTION	N/A	2	2						
Reg'd Loading, cu ft/# BOD	22.5	22.5	22.5						
Required Volume, cu ft	18,296	18,296	36,592						
Basin Depth, ft	10.5	10.5	2.405						
Min. Surface Area, sq ft Actual Surface Area, sq ft	1,742 1,744	1,742 1,744	3,485 3,488						
Total Actual Volume, cu ft	18,312	18,312	36,624						
Loading, cu ft/# BOD	22.5	22.5	22.5						
Air Supply Rate, scfm/1000 cu ft Total Air Supply, cfm	25 458	25 458	25 916						
No. diffuser membranes (2/diffuser)	80	80	160						
Airflow/diffuser membrane, scfm	5.72	5.72							
AIR BLOWERS Anoxic Basin, scfm	78	78	156						
Oxic Basins, scim	1,157	1,157	2,314						
RAS Airlift, scfm	52	52	105						
Scum Airlift, scfm Chlorine Contact Basin, scfm	5 28	5 28	10 57						
Dechlorination Basin, scfm	N/A	2	2						
Aerobic Digester Basin, scfm	458	458	916						
Total Air Supply Required, scfm No. of Blowers	1,779 2	1,780 2	3,559						
Capacity, scfm	1,500	1,500	3,000						
Firm Capacity, scfm	1,500	1,500	3,000						
Blower Op Pressure, psi	5.36	5.36	5.36						

### **DESIGN FEATURES FOR RELIABILITY**

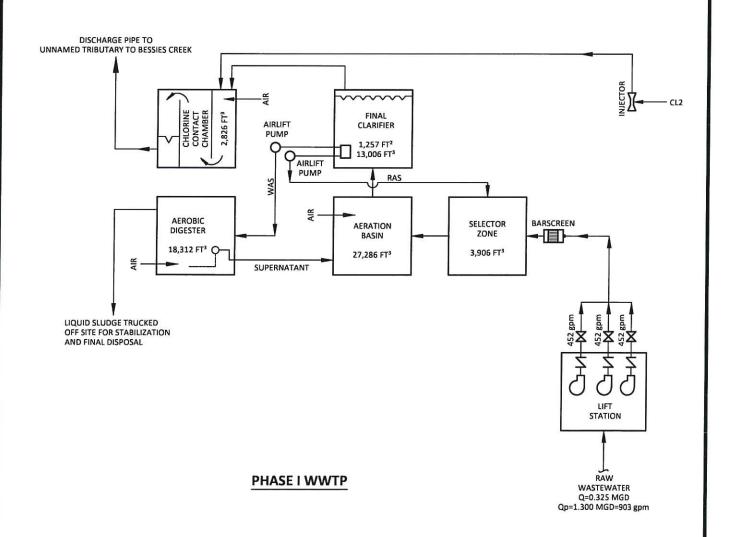
The Bluestem WWTP facilities are/will be designed to provide a high degree of mechanical reliability consistent with TCEQ Design Criteria. The following describe design features that are/will be incorporated at the facilities to prevent bypassing or overflows of untreated wastewater:

- A. The plant has an equalization basin at the beginning so that high flows will be evened out over longer time periods. Any infiltration/inflow that is noted will be located and addressed as soon as possible.
- B. The electrical service that serves the Bluestem WWTP is reliable with most outages lasting less than 2-4 hours. However, Utilities Investment Company, Inc. has purchased a generator to operate necessary plant components during extended outages.
- C. All mechanical units, such as influent pumps, blowers and chemical feed pumps are installed with spare units in the event a piece of equipment is out of service for repairs.
- D. Plant units are maintained per TCEQ standards and repaired as quickly as possible should failure occur.
- E. The facilities include an auto-dialer that calls the operator in case of power outages, blower malfunctions, lift station malfunctions or high-water alarm situations.

## **ATTACHMENT TECH.02**

## **Process Flow Diagram**

(Reference Technical Report Page 2, Question 2c)



THIS DRAWING CONTAINS CONFIDENTIAL PROPRIETARY
INFORMATION AND MAY NOT BE TRANSFERRED, REPRODUCED, OR USED
TO CONSTRUCT ANY PROJECT OTHER THAN THAT FOR WHICH IT WAS ISSUED
WITHOUT PRIOR PERMISSION FROM WATERENGINEERS, INC.

## ₩ WATER ENGINEERS, INC.

Water & Wastewater Treatment Consultants TEXAS BOARD OF PROFESSIONAL ENGINEERS FIRM No. 2066 17230 HUFFMEISTER ROAD TEL: 281-373-0500 CYPRESS, TEXAS 77429 FAX: 281-373-1113

UTILITIES INVESTMENT COMPANY
BLUESTEM WWTP
APPLICATION FOR A MAJOR AMENDMENT TO
TPDES PERMIT No. WQ0016136001

#### FLOW SCHEMATIC

DRAWN BY: BIR DWG. NO.:
APPROVED BY: SBY

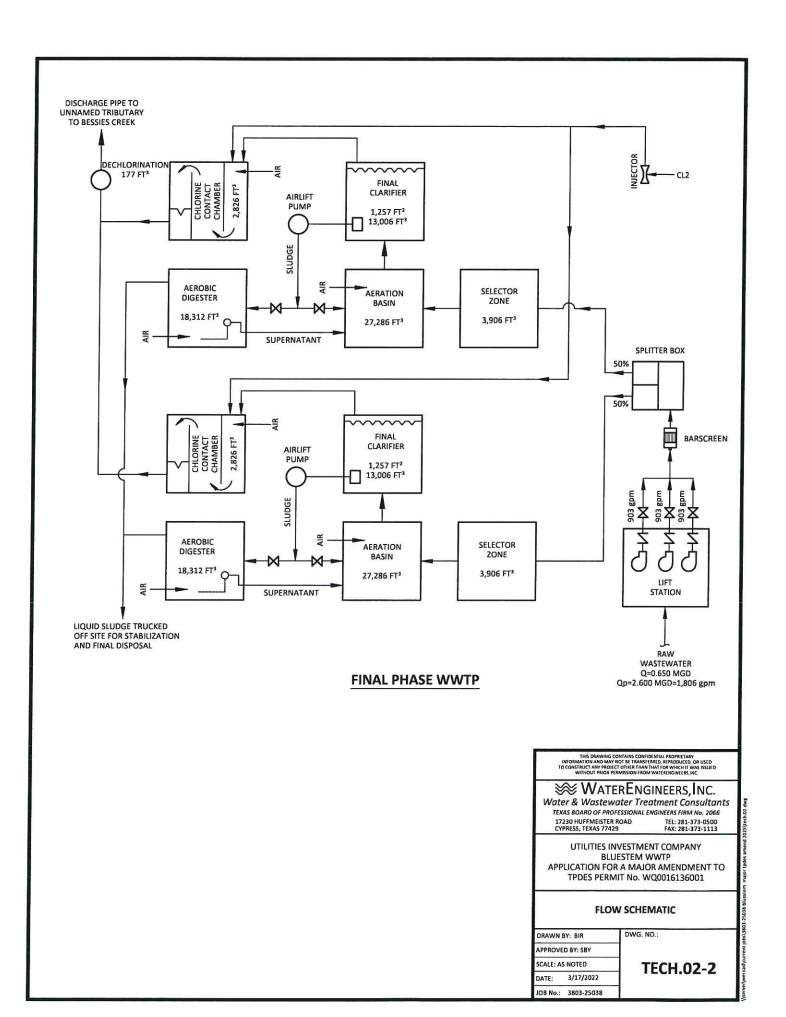
SCALE: AS NOTED

DATE: 3/17/2022

JOB No.: 3803-25038

TECH.02-1

03-25038 bluestem major tpdes amend 2025\tech.02.dwg



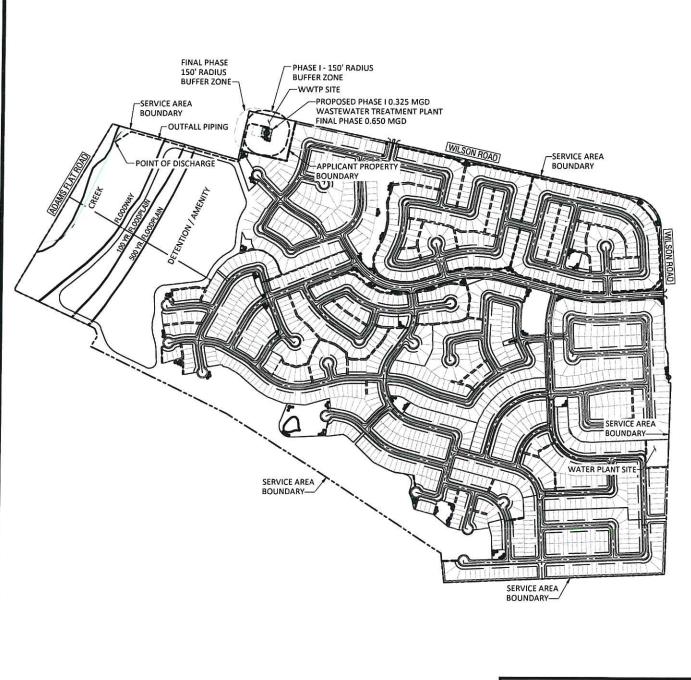
## **ATTACHMENT TECH.03**

## **Site Drawing**

(Reference Technical Report Page 2, Question 3)

(Including Wind Rose)

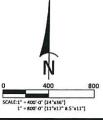
(Reference Technical Report Page 23, Question 7)



WIND ROSE

LEGEND

PROPOSED SERVICE AREA BOUNDARY & APPLICANT PROPERTY BOUNDARY DEPICTING % OF TIME WIND BLOWS IN INDICATED DIRECTION. BASED ON DATA AT HOUSTON INTERCONTINENTAL AIRPORT.



THIS DRAWING CONTAINS CONFIDENTIAL PROPRIETARY
INFORMATION AND MAY NOT BE TRANSFERBED, REPRODUCED, OR USED
TO CONSTRUCT ANY PROJECT OTHER THAN THAT FOR WHICH IT WAS ISSUED
WITHOUT PRIOR PERMISSION FROM WATERENGINEERS, INC.

## ₩ WATER ENGINEERS, INC.

Water & Wastewater Treatment Consultants
TEXAS BOARD OF PROFESSIONAL ENGINEERS FIRM No. 2066

17230 HUFFMEISTER ROAD CYPRESS, TEXAS 77429 TEL: 281-373-0500 FAX: 281-373-1113

UTILITIES INVESTMENT COMPANY
BLUESTEM WWTP
PPI ICATION FOR A MAIOR AMENDMENT TO

APPLICATION FOR A MAJOR AMENDMENT TO TPDES PERMIT No. WQ0016136001

#### **SERVICE AREA & SITE PLAN**

DRAWN E	BY: BIR	DWG. NO.:
APPROVE	D BY: SBY	
SCALE: AS	NOTED	Т
DATE:	5/13/2025	1 ''
IOR No :	3903-35039	

TECH.03

## ATTACHMENT TECH.04 Solids Management Plan

(Reference Technical Report Page 23, Question 5B)

## ATTACHMENT TECH.04 SLUDGE MANAGEMENT PLAN

### 1. Type of Wastewater Treatment Process Used

The Bluestem WWTP (WWTP) will use the activated sludge with nitrification process. Solids analyses have been made based upon a spreadsheet calculation set up using sludge kinetic calculations developed by Dr. Ross McKinney and published in *Notes on Activated Sludge*, 1971, by Brian L. Goodman. Tables TECH.04-01 and TECH.04-02 show the process design and sludge generation calculations for the design flows of 325,000 gpd and 650,000 gpd.

## 2. Dimensions and Capacities

The Phase I treatment facility will have dual digesters with a total volume of 18,312 cu. ft., a surface area of 1,744 sq. ft. and a 10.5 ft. side water depth. The Phase I digesters will provide a total design flow loading of 22.5 cu. ft./1b BOD. The Final Phase treatment facility will add identical units as in Phase I for a total volume of 36,624 cu. ft., surface area of 3,488 sq. ft. and a 10.5 ft. side water depth. The Final Phase digesters will provide a total design flow loading of 22.5 cu. ft./lb BOD.

#### 3. Sludge Generation Calculations

Sludge generation calculations showing the amount of solids generated at 100%, 75%, 50% and 25% of design flows are included in Attachments TECH.04-01 and TECH.04-02. These are the solids that must be wasted from the activated sludge process and that must be stabilized in the aerobic digester. The results are summarized in the following table:

Phase	Solids @ 100% Qavg, lb/day	Solids @ 75% Qavg, lb/day	Solids @ 50% Qavg, lb/day	Solids @ 25% Qavg, lb/day
Phase I	611	459	306	153
Final Phase	1,223	918	612	306

#### 4. Operating Range of Mixed Liquor Suspended Solids

The calculations that predict the mixed liquor suspended solids in the activated sludge process are located in the following table:

	Predicted Solids @100% Flow		Predicted Solids @75% Flow		Predicted Solids @50% Flow		Predicted Solids @25% Flow	
	sludge age, days	MLSS mg/l	sludge age, days	MLSS mg/l	sludge age, days	MLS S mg/l	sludge age, days	MLSS mg/l
Phase I	10	3,710	13.25	3,688	20	3,713	40	3,715
Phase II	10	3,710	13.25	3,688	20	3,713	40	3,715

#### 5. Solids Removal Procedures

The removal of waste activated sludge from the activated sludge process is achieved by wasting sludge from the bottom of the clarifier into the aerobic digester using the waste sludge airlift pump. In order to thicken solids prior to putting them into the digester, the air lift is turned off for approximately one hour prior to wasting. Periodically (two to three times a week) the air supply to the aerobic digester is shut off, allowing solids to settle to the bottom of the digester. Then the supernatant liquor is decanted with an adjustable decant airlift pump and returned to the aeration basin. After a sufficient period of digestion and/or the digester is full, sludge is removed from the digester by a vacuum truck by hooking the truck hose to the piping connection and opening the shut off valve.

#### 6. Quantity of Solids to Be Removed and Solids Removal Schedule

The quantity of solids to be removed at the various plant loadings are presented in the following table. These quantities shown in the tabulation are *monthly* quantities based upon an influent BOD of 300 mg/l and TSS of 240 mg/l. If the strength of the influent wastewater varies significantly, solids removal quantities will be different.

	@ 100 % Flow		@ 50 % Flow Capacity		@ 25 % Flow Capacity			
Phase	% Solids	Gal/ Month	% Solids	Gal/ Month	% Solids	Gal/ Month	% Solids	Gal/ Month
Phase I	2.0	89,226	2.0	66,949	2.0	44,646	2.0	22,332
Phase II	2.0	178,453	2.0	133,898	2.0	89,293	2.0	44,663

### 7. Identification of Disposal Site

The disposal of sludge from the WWTP is contracted to sludge management and disposal contractor, Magna-Flow Environmental., who transports liquid sludge from the digester to other wastewater treatment facilities for further processing. Solids documentation is assured by measuring the volume of each sludge withdrawal and measuring the sludge solids concentrations. All required data is included in the annual sludge report to the TCEQ.

## ATTACHMENT TECH.04-01

## PROCESS DESIGN AND SLUDGE GENERATION CALCULATIONS PHASE I - 325,000 GPD CAPACITY (4Q) BLUESTEM WWTP

INFLUENT CONDITIONS	
Infl. BOD, mg/l         300         Clarifier Diameter, ft         40           Infl. TSS, mg/l         240         Clarifier Side Wall Depth, ft         10.35           Infl. VSS, mg/l         192         Clarifier Surface Area, sq ft         1,257           BOD Loading, lb/day         813         Clarifier Volume, cu ft         13,006           BOD Load, #/1000 cu ft         29.8         Temperature, deg C         20           Actual Plant Loading, %         100%         75%         50%         25%           Actual Flow Rate, mgd         0.325         0.2438         0.1625         0.0813           BOD Loading, #/Day         813         610         407         203           Ret. Sludge Rate, gpd/sq ft         250         250         250           Ret. Sludge Flow, mgd         0.31         0.31         0.31         0.31	a
Infl. TSS, mg/l         240         Clarifier Side Wall Depth, ft         10.33           Infl. VSS, mg/l         192         Clarifier Surface Area, sq ft         1,257           BOD Loading, lb/day         813         Clarifier Volume, cu ft         13,006           BOD Load, #/1000 cu ft         29.8         Temperature, deg C         20           Actual Plant Loading, %         100%         75%         50%         25%           Actual Flow Rate, mgd         0.325         0.2438         0.1625         0.0813           BOD Loading, #/Day         813         610         407         203           Ret. Sludge Rate, gpd/sq ft         250         250         250           Ret. Sludge Flow, mgd         0.31         0.31         0.31         0.31	
Infl. VSS, mg/l         192         Clarifier Surface Area, sq ft         1,25           BOD Loading, lb/day         813         Clarifier Volume, cu ft         13,006           BOD Load, #/1000 cu ft         29.8         Temperature, deg C         20           Actual Plant Loading, %         100%         75%         50%         25%           Actual Flow Rate, mgd         0.325         0.2438         0.1625         0.0813           BOD Loading, #/Day         813         610         407         203           Ret. Sludge Rate, gpd/sq ft         250         250         250         250           Ret. Sludge Flow, mgd         0.31         0.31         0.31         0.31         0.31	
BOD Loading, Ib/day       813       Clarifier Volume, cu ft       13,006         BOD Load, #/1000 cu ft       29.8       Temperature, deg C       20         Actual Plant Loading, %       100%       75%       50%       25%         Actual Flow Rate, mgd       0.325       0.2438       0.1625       0.0813         BOD Loading, #/Day       813       610       407       203         Ret. Sludge Rate, gpd/sq ft       250       250       250       250         Ret. Sludge Flow, mgd       0.31       0.31       0.31       0.31	
BOD Load, #/1000 cu ft       29.8       Temperature, deg C       20         Actual Plant Loading, %       100%       75%       50%       25%         Actual Flow Rate, mgd       0.325       0.2438       0.1625       0.0813         BOD Loading, #/Day       813       610       407       203         Ret. Sludge Rate, gpd/sq ft       250       250       250       250         Ret. Sludge Flow, mgd       0.31       0.31       0.31       0.31	
Actual Plant Loading, %       100%       75%       50%       25%         Actual Flow Rate, mgd       0.325       0.2438       0.1625       0.0813         BOD Loading, #/Day       813       610       407       203         Ret. Sludge Rate, gpd/sq ft       250       250       250       250         Ret. Sludge Flow, mgd       0.31       0.31       0.31       0.31	
Actual Flow Rate, mgd       0.325       0.2438       0.1625       0.0813         BOD Loading, #/Day       813       610       407       203         Ret. Sludge Rate, gpd/sq ft       250       250       250       250         Ret. Sludge Flow, mgd       0.31       0.31       0.31       0.31	
BOD Loading, #/Day       813       610       407       203         Ret. Sludge Rate, gpd/sq ft       250       250       250       250         Ret. Sludge Flow, mgd       0.31       0.31       0.31       0.31	
Ret. Sludge Rate, gpd/sq ft       250       250       250         Ret. Sludge Flow, mgd       0.31       0.31       0.31	3
Ret. Sludge Flow, mgd 0.31 0.31 0.31 0.31	3
t = Aeration Time, days 0.63 0.84 1.26 2.51	1
and the same of th	ĺ
ts = Sludge Age, Days 10 13.25 20 40	
Km = BOD Removal Metabolic Factor 360 360 360 360	
Ks = Synthesis Factor 250 250 250 250	
Ke = Endogenous Metabolism Factor 0.240 0.181 0.120 0.060	
F = Effl Soluble BOD 1.321 0.992 0.662 0.331	
Ma = Active Mass 971 966 974 975	
Me = Endogenous Mass 560 557 561 561	
Mi = Inert Organic Mass 1,070 1,063 1,070 1,070	
Mii = Inert Inorganic Mass 1,109 1,102 1,109 1,109	
Mt = Total Mass, mg/l 3,710 3,688 3,713 3,715	
Total Mass in Aeration Basin, lb 6,314 6,278 6,321 6,324	
Lb BOD/Lb MLSS/Day 0.129 0.097 0.064 0.032	
EffI TSS, mg/l 7.4 7.4 7.4 7.4	
Effl BOD, mg/l 2.6 2.2 1.9 1.6	ĺ
Sludge Accumulation, lb/day 631 474 316 158	
TSS Lost In Effluent, lb/day 20 15 10 5	
Waste Sludge, lb/day 611 459 306 153	
Return Sludge Conc, mg/l 7,547 6,550 5,634 4,676	
Waste Sludge Conc, mg/l 7,547 6,550 5,634 4,676	
Waste Sludge Flow, gpd 9,712 8,399 6,512 3,925	
AEROBIC DIGESTER	
Volume, cu ft 18,312	
Design Loading, cu ft/lb BOD 22.5 30.0 45.0 90.1	
Incoming Sludge Conc, mg/l 7,547 6,550 5,634 4,676	
Thick Sludge Conc, mg/l 20,000 20,000 20,000 20,000	
Detention, Days 37.4 50 75 149	
Infl Total Solids, Ib/day 611 459 306 153	
Infl Active Mass, Ib/day 160 120 80 40	
Effl Active Mass, lb/Day 16 12 8 4	
Active Mass Red., lb/day 115 87 58 29	
Digester Effl Solids, lb/day 496 372 248 124 Sludge Disposed lb/mg 1526 1527 1528 1528	
Sludge Disposed, lb/mg 1,526 1,527 1,528 1,528 1,528 Sludge Disposed tops/mg 0.76 0.76 0.76	
Sludge Disposed, tons/mg 0.76 0.76 0.76 0.76 Sludge Hayled, gal/day, 2.074 2.232 1.488 7.44	
Sludge Hauled, gal/day       2,974       2,232       1,488       744         Sludge Hauled, gal/month       89,226       66,949       44,646       22,332	
Sludge Hauled, gal/month 89,226 66,949 44,646 22,332	

## ATTACHMENT TECH.04-02

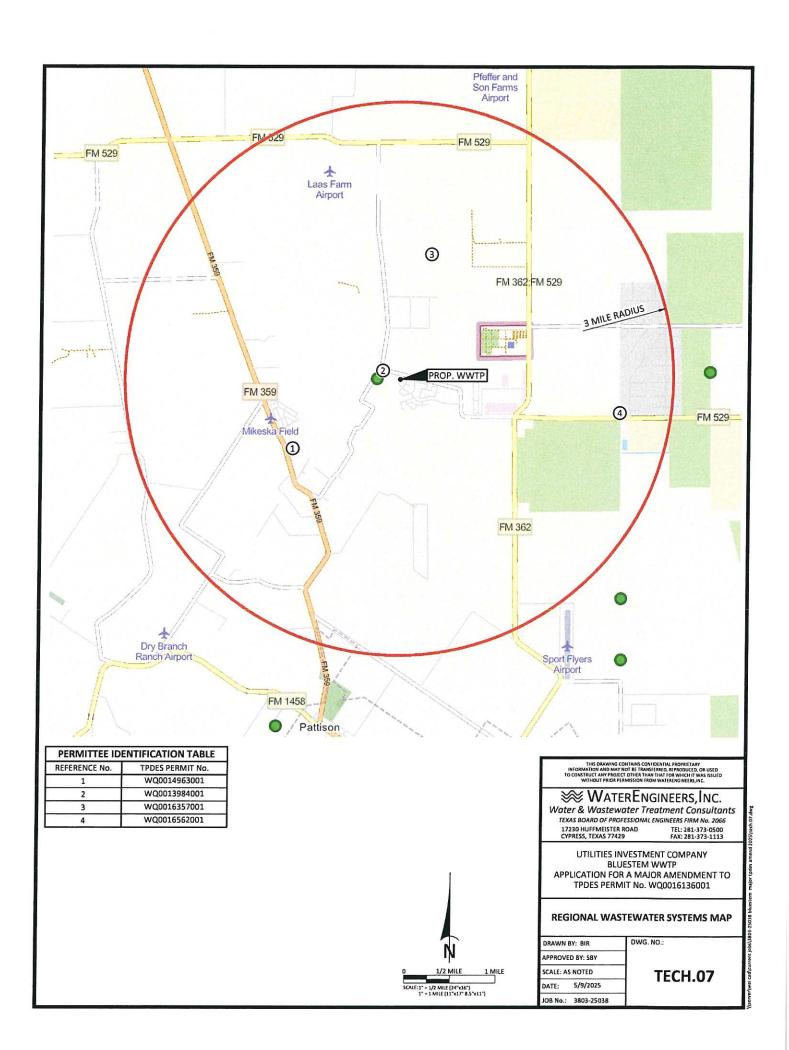
## PROCESS DESIGN AND SLUDGE GENERATION CALCULATIONS FINAL PHASE - 650,000 GPD CAPACITY (4Q) BLUESTEM WWTP

INELLIENT CONDITIONS			
INFLUENT CONDITIONS Design Flow Rate, mgd 0.650		Acrotion Vol. ou ft	E4 571
Infl. BOD, mg/l 300		Aeration Vol, cu ft	54,571
		Clarifier Diameter, ft, each	40 10.35
Infl. TSS, mg/l 240		Clarifier Side Wall Depth, ft	10.35
Infl. VSS, mg/l 192		Clarifier Surface Area, sq ft	2,513
BOD Loading, lb/day 1,626		Clarifier Volume, cu ft	26,012
BOD Load, #/1000 cu ft 29.8	ű.	Temperature, deg C	20
Actual Plant Loading, %	1	0.75 0.5	0.25
Actual Flow Rate, mgd	0.65	0.4875 0.325	0.1625
BOD Loading, #/Day	1626	1220 813	407
Ret. Sludge Rate, gpd/sq ft	250	250 250	250
Ret. Sludge Flow, mgd	0.63	0.63 0.63	0.63
t = Aeration Time, days	0.63	0.84 1.26	2.51
ts = Sludge Age, Days	10	13.25 20	40
Km = BOD Removal Metabolic Factor	360	360 360	360
Ks = Synthesis Factor	250	250 250	250
Ke = Endogenous Metabolism Factor	0.240	0.181 0.120	0.060
F = Effl Soluble BOD	1.321	0.992 0.662	0.331
Ma = Active Mass	971	966 974	975
Me = Endogenous Mass	560	557 561	561
Mi = Inert Organic Mass	1,070	1,063 1,070	1,070
Mii = Inert Inorganic Mass	1,109	1,102 1,109	1,109
Mt = Total Mass, mg/l	3,710	3,688 3,713	3,715
Total Mass in Aeration Basin, Ib	12,629	12,556 12,641	12,648
Lb BOD/Lb MLSS/Day	0.129	0.097 0.064	0.032
Effl TSS, mg/l	7.4	7.4 7.4	7.4
EffI BOD, mg/I	2.6	2.2 1.9	1.6
Sludge Accumulation, lb/day	1263	948 632	316
TSS Lost In Effluent, lb/day	40	30 20	10
Waste Sludge, Ib/day	1223	918 612	306
Return Sludge Conc, mg/l	7,547	6,550 5,634	4,676
Waste Sludge Conc, mg/l	7,547	6,550 5,634	4,676
Waste Sludge Conc, riigh	19,424	16,798 13,023	7,850
Waste Studye i 10W, gpu	13,727	10,730 10,020	7,000
AEROBIC DIGESTER	20.004		
Volume, cu ft	36,624	22 45	20
Design Loading, cu ft/lb BOD	23	30 45	90
Incoming Sludge Conc, mg/l	7,547	6,550 5,634	4,676
Thick Sludge Conc, mg/l	20,000	20,000 20,000	20,000
Detention, Days	37	50 75	149
Infl Total Solids, lb/day	1,223	918 612	306
Infl Active Mass, Ib/day	320	240 160	80
Effl Active Mass, lb/Day	32	24 16	8
Active Mass Red., lb/day	230	173 115	58
Digester Effl Solids, lb/day	992	744 496	248
Sludge Disposed, lb/mg	1,526	1,527 1,528	1,528
Sludge Disposed, tons/mg	0.76	0.76 0.76	0.76
Sludge Hauled, gal/day	5,948	4,463 2,976	1,489
Sludge Hauled, gal/month	178,453	133,898 89,293	44,663
			1

# ATTACHMENT TECH.07 Map and List of Facilities within 3 Miles and

**Service Request Letters** 

(Reference Technical Report Page 20, Section 1B3)





## WATER & WASTEWATER TREATMENT CONSULTANTS 17230 HUFFMEISTER ROAD, SUITE A~CYPRESS, TEXAS 77429-1643 TEL: 281-373-0500 FAX: 281-373-1113

April 24, 2025

Quadvest LP 26926 FM 2978 Magnolia, TX 88354 emailed to: murback@quadvest.com

Re:

TCEQ Waste Discharge Permit No. WQ0016357001

Dear Permittee:

We are writing to you on behalf of Utilities Investment Company, Inc. regarding an amendment to a wastewater treatment plant project that serves the Bluestem Subdivision, a single-family development, in Waller County, located at 35617 Wilson Road, as shown on the attached map. The proposed wastewater system will serve approximately 2,600 equivalent single-family connections. Utilities Investment Company, Inc. is in the process of applying for an amendment to TCEQ TPDES Permit No. WQ0016136001 to discharge 650,000 gpd.

We are required to contact all existing TCEQ Wastewater Discharge Permittees and/or CCN holders with collection systems within a 3-mile radius of the project to inquire if an existing permit holder is willing to provide the wastewater treatment capacity needed. According to TCEQ records, you are a permittee having an existing wastewater treatment plant or CCN service area located within three miles of the project and have a TCEQ Waste Discharge Permit. If we find a wastewater treatment plant permit holder within three miles that has the required capacity available or will expand their facility to make it available, we will conduct a feasibility study to determine if it is cost effective to obtain service from them.

We will appreciate receiving a response from you indicating if 650,000 gpd of wastewater treatment capacity in your facility is available, and if so, under what terms. A handwritten reply on a copy of this letter will be adequate. You may email your response to me at <a href="mailto:syoung@waterengineers.com">syoung@waterengineers.com</a> or fax to (281) 373-1113. Please feel free to call me at 281-373-0500 if you have any questions. Thank you for your assistance.

Sincerely,

WATERENGINEERS, INC.

Shelley Young

Shelley Young, P.E.

cc: Utilities Investment Company, Inc.

5 9	REPLY
Date of Reply: 4/30/25	Printed Name: MARK L. URBACK
Name of Permittee: QUADVEST	Printed Name: MARK L. URBACK
Capacity Available (Yes / 10)?	Title: GVi>
Terms (if available)	Address:
	Telephone:
	Email:



## WATER & WASTEWATER TREATMENT CONSULTANTS 17230 HUFFMEISTER ROAD, SUITE A~CYPRESS, TEXAS 77429-1643 TEL: 281-373-0500 FAX: 281-373-1113

April 24, 2025

Utilities Investment Co., Inc. P.O. Box 279 New Waverly, Texas 77358-0279

emailed to: marshwaterman@aol.com

Re:

TCEQ Waste Discharge Permit No. WQ0013984001

Dear Permittee:

We are writing to you on behalf of Utilities Investment Company, Inc. regarding an amendment to a wastewater treatment plant project that serves the Bluestem Subdivision, a single-family development, in Waller County, located at 35617 Wilson Road, as shown on the attached map. The proposed wastewater system will serve approximately 2,600 equivalent single-family connections. Utilities Investment Company, Inc. is in the process of applying for an amendment to TCEQ TPDES Permit No. WQ0016136001 to discharge 650,000 gpd.

We are required to contact all existing TCEQ Wastewater Discharge Permittees and/or CCN holders with collection systems within a 3-mile radius of the project to inquire if an existing permit holder is willing to provide the wastewater treatment capacity needed. According to TCEQ records, you are a permittee having an existing wastewater treatment plant or CCN service area located within three miles of the project and have a TCEQ Waste Discharge Permit. If we find a wastewater treatment plant permit holder within three miles that has the required capacity available or will expand their facility to make it available, we will conduct a feasibility study to determine if it is cost effective to obtain service from them.

We will appreciate receiving a response from you indicating if 650,000 gpd of wastewater treatment capacity in your facility is available, and if so, under what terms. A handwritten reply on a copy of this letter will be adequate. You may email your response to me at <a href="mailto:syoung@waterengineers.com">syoung@waterengineers.com</a> or fax to (281) 373-1113. Please feel free to call me at 281-373-0500 if you have any questions. Thank you for your assistance.

Sincerely,

WATERENGINEERS, INC.

Shelley Young

Shelley Young, P.E.

cc: Utilities Investment Company, Inc.

	REPLY
Date of Reply:	Signature:
Name of Permittee:	
Capacity Available (Yes / No)?	
Terms (if available)	
	Telephone: 281~590~4356
	Email:



## WATER & WASTEWATER TREATMENT CONSULTANTS 17230 HUFFMEISTER ROAD, SUITE A~CYPRESS, TEXAS 77429-1643

TEL: 281-373-0500 FAX: 281-373-1113

April 23, 2025

Beacon Estates WSC 513 W. Navigation Street Brookshire, TX 77423 Certified Mail Receipt # 7021 2720 0002 5119 7163

Re:

TCEQ Waste Discharge Permit No. WQ0014963001

Dear Permittee:

We are writing to you on behalf of Utilities Investment Company, Inc. regarding an amendment to a wastewater treatment plant project that serves the Bluestem Subdivision, a single-family development, in Waller County, located at 35617 Wilson Road, as shown on the attached map. The proposed wastewater system will serve approximately 2,600 equivalent single-family connections. Utilities Investment Company, Inc. is in the process of applying for an amendment to TCEQ TPDES Permit No. WQ0016136001 to discharge 650,000 gpd.

We are required to contact all existing TCEQ Wastewater Discharge Permittees and/or CCN holders with collection systems within a 3-mile radius of the project to inquire if an existing permit holder is willing to provide the wastewater treatment capacity needed. According to TCEQ records, you are a permittee having an existing wastewater treatment plant or CCN service area located within three miles of the project and have a TCEQ Waste Discharge Permit. If we find a wastewater treatment plant permit holder within three miles that has the required capacity available or will expand their facility to make it available, we will conduct a feasibility study to determine if it is cost effective to obtain service from them.

We will appreciate receiving a response from you indicating if 650,000 gpd of wastewater treatment capacity in your facility is available, and if so, under what terms. A handwritten reply on a copy of this letter will be adequate. You may email your response to me at <a href="mailto:syoung@waterengineers.com">syoung@waterengineers.com</a> or fax to (281) 373-1113. Please feel free to call me at 281-373-0500 if you have any questions. Thank you for your assistance.

Sincerely, WATERENGINEERS, INC.

## Shelley Young

Shelley Young, P.E.

cc: Utilities Investment Company, Inc.

	1			
REPLY				
Date of Reply:	Signature:			
Name of Permittee:	Printed Name:			
Capacity Available (Yes / No)?	Title:			
Terms (if available)	Address:			
	Telephone:			
	Email:			

1



## WATER & WASTEWATER TREATMENT CONSULTANTS

17230 HUFFMEISTER ROAD, SUITE A~CYPRESS, TEXAS 77429-1643 Tel: 281-373-0500 Fax: 281-373-1113

April 24, 2025

Century Communities, Inc. 333 Cypress Run, Suite 200 Houston, TX 77094 Certified Mail Receipt # 7021 2720 0002 5119 7170

Re: TCEQ Waste Discharge Permit No. WQ0016562001

Dear Permittee:

We are writing to you on behalf of Utilities Investment Company, Inc. regarding an amendment to a wastewater treatment plant project that serves the Bluestem Subdivision, a single-family development, in Waller County, located at 35617 Wilson Road, as shown on the attached map. The proposed wastewater system will serve approximately 2,600 equivalent single-family connections. Utilities Investment Company, Inc. is in the process of applying for an amendment to TCEQ TPDES Permit No. WQ0016136001 to discharge 650,000 gpd.

We are required to contact all existing TCEQ Wastewater Discharge Permittees and/or CCN holders with collection systems within a 3-mile radius of the project to inquire if an existing permit holder is willing to provide the wastewater treatment capacity needed. According to TCEQ records, you are a permittee having an existing wastewater treatment plant or CCN service area located within three miles of the project and have a TCEQ Waste Discharge Permit. If we find a wastewater treatment plant permit holder within three miles that has the required capacity available or will expand their facility to make it available, we will conduct a feasibility study to determine if it is cost effective to obtain service from them.

We will appreciate receiving a response from you indicating if 650,000 gpd of wastewater treatment capacity in your facility is available, and if so, under what terms. A handwritten reply on a copy of this letter will be adequate. You may email your response to me at <a href="mailto:syoung@waterengineers.com">syoung@waterengineers.com</a> or fax to (281) 373-1113. Please feel free to call me at 281-373-0500 if you have any questions. Thank you for your assistance.

Sincerely, WATERENGINEERS, INC.

## Shelley Young

Shelley Young, P.E.

cc: Utilities Investment Company, Inc.

REPLY				
Date of Reply:	Signature:			
Name of Permittee:	Printed Name:			
Capacity Available (Yes / No)?	Title:			
Terms (if available)	Address:			
W0 12	Telephone:			
	Email:			

