



Technical Package Cover Page

This file contains the following documents:

1. Summary of application (in plain language)
 - English
 - Alternative Language (Spanish)
 2. First notice (NORI-Notice of Receipt of Application and Intent to Obtain a Permit)
 - English
 - Alternative Language (Spanish)
 3. Second notice (NAPD-Notice of Preliminary Decision)
 - English
 - Alternative Language (Spanish)
 4. Application materials
 5. Draft permit
 6. Technical summary or fact sheet
-



Portada de Paquete Técnico

Este archivo contiene los siguientes documentos:

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



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

PLAIN LANGUAGE SUMMARY FOR TPDES OR TLAP PERMIT APPLICATIONS

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

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

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

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

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

The following summary is provided for this pending water quality permit application being reviewed by the Texas Commission on Environmental Quality as required by 30 TAC Chapter 39. The information provided in this summary may change during the technical review of the application and is not a federal enforceable representation of the permit application.

Harris County MUD No. 541 (2. Enter Customer Number here (i.e., CN6#####)) proposes to operate Harris County MUD No. 541 Wastewater Treatment Plant (5. Enter Regulated Entity Number here (i.e., RN1#####)), a treatment system that utilizes the extended aeration mode of the activated sludge process. The facility will be located at 0.14 miles northwest of the intersection of Longenbach Rd and Peek Rd., in Houston, Harris County, Texas 77493. Harris County MUD No. 541 Wastewater Treatment Facility.

Discharges from the facility are expected to contain five-day carbonaceous biochemical oxygen demand (CBOD5), total suspended solids (TSS), ammonia nitrogen (NH3-N), and Escherichia coli.. Domestic wastewater will be treated by an activated sludge process.

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

AGUAS RESIDUALES DOMÉSTICAS

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 son representaciones federales exigibles de la solicitud de permiso.

1. Harris County MUD No. 541. (2. Introduzca el número de cliente aquí (CN606316891). 3 Harris County MUD No. 541. 4. Introduzca el nombre de la instalación aquí. 5. Introduzca el número de entidad regulada aquí (RN112067483). Un sistema de tratamiento que utiliza el modo de aireación extendida del proceso de lodos activados. La instalación estará ubicada en a 0.14 millas al noroeste de la intersección deongenbach Rd y Peek Rd,. La instalación 8. Elija del menú desplegable. en Houston. en 10. Introduzca el nombre de la ciudad aquí. , de 11. I Condado de Harris, Texas 77493 12. Harris County MUD No. 541- Instalacion de tratiento de aguas residuales

Se espera que las descargas de la instalación contengan demanda bioquímica de oxígeno carbonoso de cinco días (CBOD5), sólidos suspendidos totales (SST), nitrógeno ammoniacal (NH3-N) y Escherichia coli. Aguas residuales domesticas. estará tratado por un proceso de lodos activados.

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY



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

PROPOSED PERMIT NO. WQ0016654001

APPLICATION. Harris County Municipal Utility District No. 541, 3200 Southwest Freeway, Suite 2600, Houston, Texas 77027, has applied to the Texas Commission on Environmental Quality (TCEQ) for proposed Texas Pollutant Discharge Elimination System (TPDES) Permit No. WQ0016654001 (EPA I.D. No. TX0146862) to authorize the discharge of treated wastewater at a volume not to exceed a daily average flow of 565,000 gallons per day. The domestic wastewater treatment facility will be located approximately 1 mile northwest of the intersection of Longenbaugh Road and Grand Parkway, near the city of Houston, in Harris County, Texas 77493. The discharge route will be from the plant site to a detention pond; thence to a series of detention ponds; thence to Bear Creek; thence to South Mayde Creek; thence to Buffalo Bayou. TCEQ received this application on October 21, 2024. The permit application will be available for viewing and copying at Katy Branch Library, 5414 Franz Road, Katy, in Harris County, Texas prior to the date this notice is published in the newspaper. The application, including any updates, and associated notices are available electronically at the following webpage: <https://www.tceq.texas.gov/permitting/wastewater/pending-permits/tpdes-applications>. This link to an electronic map of the site or facility's general location is provided as a public courtesy and not part of the application or notice. For the exact location, refer to the application.
<https://gisweb.tceq.texas.gov/LocationMapper/?marker=-95.774194,29.891556&level=18>

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

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

PUBLIC COMMENT / PUBLIC MEETING. You may submit public comments or request a public meeting on this application. The purpose of a public meeting is to provide the

opportunity to submit comments or to ask questions about the application. TCEQ will hold a public meeting if the Executive Director determines that there is a significant degree of public interest in the application or if requested by a local legislator. A public meeting is not a contested case hearing.

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

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

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

The Commission may only grant a request for a contested case hearing on issues the requestor submitted in their timely comments that were not subsequently withdrawn. **If a hearing is granted, the subject of a hearing will be limited to disputed issues of fact or mixed questions of fact and law relating to relevant and material water quality concerns submitted during the comment period.**

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

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

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

Further information may also be obtained from Harris County Municipal Utility District No. 541 at the address stated above or by calling Ms. Margaret Gillentine, P.E., Senior Project Manager, at 713-953-5100.

Issuance Date: November 21, 2024

Comisión de Calidad Ambiental del Estado de Texas



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

PERMISO PROPUESTO NO. WQ0016654001

SOLICITUD. Harris County Municipal Utility District No. 541, 3200 Southwest Freeway, Suite 2600, Houston, Texas 77027, solicitado a la Comisión de Calidad Ambiental del Estado de Texas (TCEQ) para renovar el Permiso No. WQ0016654001 (EPA I.D. No. TX0146862) del Sistema de Eliminación de Descargas de Contaminantes de Texas (TPDES) para autorizar la descarga de aguas residuales tratadas en un volumen que no sobrepasa un flujo promedio diario de 565,000 galones por día. La planta está ubicada aproximadamente 1 milla al noroeste de la intersección de Longenbaugh Road y Grand Parkway en la ciudad de Houston, en el Condado de Harris, Texas 77493. La ruta de descarga es del sitio de la planta a hacia el sur hasta el estanque de detención, luego a través de una serie de estanques de detención hasta el sistema de alcantarillado pluvial, de allí a Bear Creek, de allí a South Mayde Creek, de allí a Buffalo Bayou. La TCEQ recibió esta solicitud el 21 de Octubre de 2024 La solicitud para el permiso estará disponible para leerla y copiarla en Katy Branch Library, 5414 Franz Road, Katy, en el Condado de Harris, Texas antes de la fecha de publicación de este aviso en el periódico. La solicitud (cualquier actualización y aviso inclusive) está disponible electrónicamente en la siguiente página web:

<https://www.tceq.texas.gov/permitting/wastewater/pending-permits/tpdes-applications>.

Este enlace a un mapa electrónico de la ubicación general del sitio o de la instalación es 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=-95.774194,29.891556&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. Además, puede pedir que la TCEQ ponga su nombre en una o más de las listas de 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 agregue su nombre en una de las listas designe cual lista(s) y envía por correo su pedido a la Oficina del Secretario Principal de la TCEQ.

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

También se puede obtener información adicional del Harris County Municipal Utility District No. 541 a la dirección indicada arriba o llamando a Ms. Margaret Gillentine, P.E., gerente senior de proyectos, al 713-953-5100.

Fecha de emisión 21 de noviembre de 2024

Texas Commission on Environmental Quality



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

NEW

PERMIT NO. WQ0016654001

APPLICATION AND PRELIMINARY DECISION. Harris County Municipal Utility District No. 541, 3200 Southwest Freeway, Suite 2600, Houston, Texas 77027, has applied to the Texas Commission on Environmental Quality (TCEQ) for new Texas Pollutant Discharge Elimination System (TPDES) Permit No. WQ0016654001, to authorize the discharge of treated domestic wastewater at a daily average flow not to exceed 565,000 gallons per day. TCEQ received this application on October 21, 2024.

The facility will be located approximately 1 mile northwest of the intersection of Longenbaugh Road and Grand Parkway, in Harris County, Texas 77493. The treated effluent will be discharged through two detention ponds, thence to an underground sewer system along Highway 99 (Grand Parkway), thence to Bear Creek, thence to South Mayde Creek, thence to Buffalo Bayou Above Tidal in Segment No. 1014 of the San Jacinto River Basin. The unclassified receiving water uses are minimal aquatic life use for the detention ponds and intermediate aquatic life use for Bear Creek. The designated uses for Segment No. 1014 are primary contact recreation and limited aquatic life use. In accordance with 30 Texas Administrative Code §307.5 and TCEQ's *Procedures to Implement the Texas Surface Water Quality Standards* (June 2010), an antidegradation review of the receiving waters was performed. A Tier 1 antidegradation review has preliminarily determined that existing water quality uses will not be impaired by this permit action. Numerical and narrative criteria to protect existing uses will be maintained. A Tier 2 review has preliminarily determined that no significant degradation of water quality is expected in Bear Creek, which has been identified as having intermediate aquatic life use. Existing uses will be maintained and protected. The preliminary determination can be reexamined and may be modified if new information is received. This link to an electronic map of the site or facility's general location is provided as a public courtesy and is not part of the application or notice. For the exact location, refer to the application.

<https://gisweb.tceq.texas.gov/LocationMapper/?marker=-95.774194,29.891556&level=18>

The TCEQ Executive Director has completed the technical review of the application and prepared a draft permit. The draft permit, if approved, would establish the conditions under which the facility must operate. The Executive Director has made a preliminary decision that this permit, if issued, meets all statutory and regulatory requirements. The permit application, Executive Director's preliminary decision, and draft permit are available for viewing and copying at Katy Branch Library, 5414 Franz Road, Katy, in Harris County, Texas. The application, including any updates, and associated notices are available electronically at the following webpage: <https://www.tceq.texas.gov/permitting/wastewater/pending-permits/tpdes-applications>.

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

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

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

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

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

The Commission may only grant a request for a contested case hearing on issues the requestor submitted in their timely comments that were not subsequently withdrawn. **If a hearing is granted, the subject of a hearing will be limited to disputed issues of fact or mixed questions of fact and law relating to relevant and material water quality concerns submitted during the comment period.**

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

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

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

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

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

Further information may also be obtained from Harris County Municipal Utility District No. 541 at the address stated above or by calling Ms. Margaret Gillentine, P.E., Senior Project Manager, at 713-953-5100.

Issuance Date: October 1, 2025

Comisión De Calidad Ambiental Del Estado De Texas



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

NUEVO

PERMISO NO. WQ 0016654001

SOLICITUD Y DECISIÓN PRELIMINAR. Harris County Municipal Utility District No. 541, 3200 Southwest Freeway, Suite 2600, Houston, Texas 77027 ha solicitado a la Comisión de Calidad Ambiental del Estado de Texas (TCEQ) por un nuevo para autorizar la descarga de aguas residuales domesticas tratadas a un flujo promedio diario que no exceda los 565,000 galones por día. La TCEQ recibió esta solicitud el 21 de octubre de 2024.

La planta está ubicada en aproximadamente a 1 milla al noroeste de la intersección de Longenbaugh Road y Grand Parkway, en el Condado de Harris, Texas 77493. 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=-95.774194,29.891556&level=18>

El efluente tratado es descargado al través de dos estanques de detención, de allí a un sistema de alcantarillado subterráneo a lo largo de la autopista 99 (Grand Parkway), de allí a Bear Creek, de allí a South Mayde Creek, de allí a Buffalo Bayou Above Tidal en el Segmento No. 1014 de la Cuenca del Río Sanjacinto. Los usos no clasificados de las aguas receptoras son limitados usos de la vida acuática para estanques de detención y intermediate usos de la vida acuática para Bear Creek. Los usos designados para el Segmento No. 1014 son recreación de contacto primario y limitados uso de vida acuática.

Option 1: De acuerdo con la 30 TAC §307.5 y los procedimientos de implementación de la TCEQ (Enero 2010) para las Normas de Calidad de Aguas Superficiales en Texas, fue

realizada una revisión de la antidegradación de las aguas recibidas. Una revisión de antidegradación del Nivel 1 ha determinado preliminarmente que los usos de la calidad del agua existente no serán perjudicados por la acción de este permiso. Se mantendrá un criterio narrativo y numérico para proteger los usos existentes. Una revisión del Nivel 2 ha determinado preliminarmente que no se espera ninguna degradación significativa en Bear Creek, el cual se ha identificado que tiene intermedios usos en la vida acuática. Los usos existentes serán mantenidos y protegidos. La determinación preliminar puede ser reexaminada y puede ser modificada, si se recibe alguna información nueva.

El Director Ejecutivo de la TCEQ ha completado la revisión técnica de la solicitud y ha preparado un borrador del permiso. El borrador del permiso, si es aprobado, establecería las condiciones bajo las cuales la instalación debe operar. El Director Ejecutivo ha tomado una decisión preliminar que si este permiso es emitido, cumple con todos los requisitos normativos y legales. La solicitud del permiso, la decisión preliminar del Director Ejecutivo y el borrador del permiso están disponibles para leer y copiar en Katy Branch Library, 5414 Franz Road, Katy, en el condado de Harris. La solicitud (cualquier actualización y aviso inclusive) está disponible electrónicamente en la siguiente página web: <https://www.tceq.texas.gov/permitting/wastewater/pending-permits/tpdes-applications>.

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

COMENTARIO PUBLICO / REUNION PUBLICA. Usted puede presentar comentarios públicos o pedir una reunión pública sobre esta solicitud.

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

OPORTUNIDAD DE UNA AUDIENCIA ADMINISTRATIVA DE LO

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

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

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

La Comisión sólo puede conceder una solicitud de una audiencia de caso impugnado sobre los temas que el solicitante haya presentado en sus comentarios oportunos que no fueron retirados posteriormente. Si se concede una audiencia, el tema de la audiencia estará limitado a cuestiones de hecho en disputa o cuestiones mixtas de hecho y de derecho relacionadas a intereses pertinentes y materiales de calidad del agua que se hayan presentado durante el período de comentarios.

ACCIÓN DEL DIRECTOR EJECUTIVO. El Director Ejecutivo puede emitir la aprobación final de la solicitud a menos que se presente una solicitud de audiencia de

caso impugnado oportunamente o una solicitud de reconsideración. Si se presenta una solicitud de audiencia oportuna o una solicitud de reconsideración, el Director Ejecutivo no emitirá la aprobación final del permiso y enviará la solicitud y la solicitud a los Comisionados de TCEQ para su consideración en una reunión programada de la Comisión.

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

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

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

También se puede obtener información adicional del Harris County Municipal Utility District No. 541 a la dirección indicada arriba o llamando a Margaret Gillentine al 713-953-5100.

Fecha de emission: el 1 de octubre de 2025.

WASTEWATER TREATMENT PLANT

PERMIT APPLICATION

FOR

**HARRIS COUNTY MUNICIPAL UTILITY
DISTRICT NO. 541 WWTP**

HARRIS COUNTY, TEXAS

LJA Job No. 1628-1652
September 2024

Prepared By:
LJA Engineering, Inc.
3600 W Sam Houston Parkway S, Suite 600
Houston, TX 77042
(713) 953-5200
FRN F-1386



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

DOMESTIC WASTEWATER PERMIT APPLICATION CHECKLIST

Complete and submit this checklist with the application.

APPLICANT NAME: Harris County MUD No. 541

PERMIT NUMBER (If new, leave blank): WQ00 [Click to enter text.](#)

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

	Y	N		Y	N
Administrative Report 1.0	☒	☐	Original USGS Map	☒	☐
Administrative Report 1.1	☒	☐	Affected Landowners Map	☒	☐
SPIF	☒	☐	Landowner Disk or Labels	☒	☐
Core Data Form	☒	☐	Buffer Zone Map	☒	☐
Public Involvement Plan Form	☒	☐	Flow Diagram	☒	☐
Technical Report 1.0	☒	☐	Site Drawing	☒	☐
Technical Report 1.1	☒	☐	Original Photographs	☒	☐
Worksheet 2.0	☒	☐	Design Calculations	☒	☐
Worksheet 2.1	☐	☒	Solids Management Plan	☒	☐
Worksheet 3.0	☐	☒	Water Balance	☒	☐
Worksheet 3.1	☐	☒			
Worksheet 3.2	☐	☒			
Worksheet 3.3	☐	☒			
Worksheet 4.0	☐	☒			
Worksheet 5.0	☐	☒			
Worksheet 6.0	☒	☐			
Worksheet 7.0	☐	☒			

For TCEQ Use Only

Segment Number _____ County _____
Expiration Date _____ Region _____
Permit Number _____



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

**DOMESTIC WASTEWATER PERMIT APPLICATION
ADMINISTRATIVE REPORT 1.0**

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

Section 1. Application Fees (Instructions Page 26)

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

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

Minor Amendment (for any flow) \$150.00 ☐

Payment Information:

Mailed Check/Money Order Number:
Check/Money Order Amount:
Name Printed on Check:
EPAY Voucher Number: 772948 & 772949
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-Owned Domestic Wastewater
☐ Privately-Owned Domestic Wastewater
☐ Conventional Wastewater Treatment

b. Check the box next to the appropriate facility status.

- ☐ Active ☒ Inactive

c. Check the box next to the appropriate permit type.

- ☒ TPDES Permit
☐ TLAP
☐ TPDES Permit with TLAP component
☐ Subsurface Area Drip Dispersal System (SADDS)

d. Check the box next to the appropriate application type

- ☒ New
☐ Major Amendment with Renewal
☐ Major Amendment without Renewal
☐ Renewal without changes
☐ Minor Amendment with Renewal
☐ Minor Amendment without Renewal
☐ Minor Modification of permit

e. For amendments or modifications, describe the proposed changes: [Click to enter text.](#)

f. For existing permits:

Permit Number: WQ00 [Click to enter text.](#)

EPA I.D. (TPDES only): TX [Click to enter text.](#)

Expiration Date: [Click to enter text.](#)

Section 3. Facility Owner (Applicant) and Co-Applcant 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?

Harris County MUD No. 541

(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 <http://www15.tceq.texas.gov/crpub/>

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: Mr.

Last Name, First Name: Steadman, Richard

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?

[Click to enter text.](#)

(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: <http://www15.tceq.texas.gov/crpub/>

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. 1

Section 4. Application Contact Information (Instructions Page 27)

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

- A. Prefix: Ms. Last Name, First Name: Gillentine, Margaret
Title: Senior Project Manager Credential: P.E.
Organization Name: LJA Engineering, Inc.
Mailing Address: 3600 W Sam Houston Pkwy S, Unit 600 City, State, Zip Code: Houston, TX, 77042
Phone No.: 713.953.5100 E-mail Address: mgillentine@lja.com
Check one or both: ☒ Administrative Contact ☒ Technical Contact
- B. Prefix: Mr. Last Name, First Name: Canfield, Ryan
Title: Graduate Engineer Credential: E.I.T.
Organization Name: LJA Engineering, Inc.
Mailing Address: 3600 W Sam Houston Pkwy S, Unit 600 City, State, Zip Code: Houston, TX, 77042
Phone No.: 713.335.1334 E-mail Address: rcanfield@lja.com
Check one or both: ☒ Administrative Contact ☐ Technical Contact

Section 5. Permit Contact Information (Instructions Page 27)

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

- A. Prefix: Ms. Last Name, First Name: Gillentine, Margaret
Title: Senior Project Manager Credential: P.E.
Organization Name: LJA Engineering, Inc.

Mailing Address: 3600 W Sam Houston Pkwy S, Unit 600 City, State, Zip Code: Houston, TX, 77042

Phone No.: 713.953.5100

E-mail Address: mgillentine@lja.com

B. Prefix: Mr.

Last Name, First Name: Haan, Gregg

Title: Division Manager

Credential: P.E.

Organization Name: LJA Engineering, Inc.

Mailing Address: 3600 W Sam Houston Pkwy S, Unit 600 City, State, Zip Code: Houston, TX, 77042

Phone No.: 713.953.5061

E-mail Address: ghaan@lja.com

Section 6. Billing Contact Information (Instructions Page 27)

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

Prefix: Mr.

Last Name, First Name: Burton, Carter

Title: Click to enter text.

Credential: CPA

Organization Name: Municipal Accounts & Consulting

Mailing Address: 1281 Brittmoore Rd

City, State, Zip Code: Houston, TX, 77043

Phone No.: Click to enter text.

E-mail Address: carter@municipalaccounts.com

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

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

Prefix: Mr.

Last Name, First Name: Chapline, Charlie

Title: Operator

Credential: Click to enter text.

Organization Name: Municipal District Services, LLC

Mailing Address: 406 W Grand Pkwy S #260

City, State, Zip Code: Katy, TX, 77494

Phone No.: Click to enter text.

E-mail Address: Click to enter text.

Section 8. Public Notice Information (Instructions Page 27)

A. Individual Publishing the Notices

Prefix: Mr.

Last Name, First Name: Canfield, Ryan

Title: Graduate Engineer

Credential: E.I.T.

Organization Name: LJA Engineering, Inc.

Mailing Address: 3600 W Sam Houston Pkwy S, Unit 600
77042

City, State, Zip Code: Houston, TX,

Phone No.: 713.335.1334

E-mail Address: rcafield@lja.com

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

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

☒ E-mail Address

☐ Fax

☒ Regular Mail

C. Contact permit to be listed in the Notices

Prefix: Ms.

Last Name, First Name: Gillentine, Margaret

Title: Senior Project Manager

Credential: P.E.

Organization Name: LJA Engineering, Inc.

Mailing Address: 3600 W Sam Houston Pkwy S, Unit 600 City, State, Zip Code: Houston, TX, 77042

Phone No.: 713.953.5100

E-mail Address: mgillentine@lja.com

D. Public Viewing Information

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

Public building name: Katy Branch Library

Location within the building: Reference Desk

Physical Address of Building: 5414 Franz Road

City: Katy

County: Harris

Contact (Last Name, First Name): Boggs, Elizabeth

Phone No.: 281.391.3509 Ext.: Click to enter text.

E. Bilingual Notice Requirements

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

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

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

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

☒ Yes

☐ No

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

2. Are the students who attend either the elementary school or the middle school enrolled in a bilingual education program at that school?

☒ Yes ☐ No

3. Do the students at these schools attend a bilingual education program at another location?

☐ Yes ☒ No

4. Would the school be required to provide a bilingual education program but the school has waived out of this requirement under 19 TAC §89.1205(g)?

☐ Yes ☒ No

5. If the answer is **yes** to **question 1, 2, 3, or 4**, public notices in an alternative language are required. Which language is required by the bilingual program? Spanish

F. Plain Language Summary Template

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

Attachment: 2

G. Public Involvement Plan Form

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

Attachment: 3

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

A. If the site is currently regulated by TCEQ, provide the Regulated Entity Number (RN) issued to this site. RN Click to enter text.

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

B. Name of project or site (the name known by the community where located):

Harris County MUD No. 541 Wastewater Treatment Plant

C. Owner of treatment facility: Harris County MUD No. 541

Ownership of Facility: ☒ Public ☐ Private ☐ Both ☐ Federal

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

Prefix: Click to enter text.

Last Name, First Name: Wisteria Interests, LLC

Title: Click to enter text.

Credential: Click to enter text.

Organization Name: Wisteria Interests, LLC

Mailing Address: 15500 Voss Road, Suite 450 City, State, Zip Code: Sugar Land, TX, 77498

Phone No.: Click to enter text.

E-mail Address: Click to enter text.

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

Attachment: 4

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 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.](#)

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

Attachment: [Click to enter text.](#)

F. Owner sewage sludge disposal site (if authorization is requested for sludge disposal on property owned or controlled by 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 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.](#)

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

Attachment: [Click to enter text.](#)

Section 10. TPDES Discharge Information (Instructions Page 31)

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

☐ Yes ☐ No

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

The site is located approximately 1 mile northwest of the intersection of Longenbaugh Rd and the Grand Pkwy.

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

☐ Yes ☐ No

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

South to detention pond then through a series of detention ponds to storm sewer system, thence to Bear Creek, thence to South Mayde Creek, thence to Buffalo Bayou above Tidal in Segment No. 1014

City nearest the outfall(s): City of Houston

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

C. Is or will the treated wastewater discharge to a city, county, or state highway right-of-way, or a flood control district drainage ditch?

☐ Yes ☒ No

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

☐ Authorization granted ☐ Authorization pending

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

Attachment: [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: [Click to enter text.](#)

Section 11. TLAP Disposal Information (Instructions Page 32)

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

☐ Yes ☐ No

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

[Click to enter text.](#)

- 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 **TLAPs**, describe the routing of effluent from the treatment facility to the disposal site:

[Click to enter text.](#)

- E. For **TLAPs**, please identify the nearest watercourse to the disposal site to which rainfall runoff might flow if not contained: [Click to enter text.](#)

Section 12. Miscellaneous Information (Instructions Page 32)

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

☐ Yes ☒ No

- B. If the existing permit contains an onsite sludge disposal authorization, is the location of the sewage sludge disposal site in the existing permit accurate?

☐ Yes ☐ No ☒ Not Applicable

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

[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 yes, 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 yes, please provide the following information:

Enforcement order number: [Click to enter text.](#)

Amount past due: [Click to enter text.](#)

Section 13. Attachments (Instructions Page 33)

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

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

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

- Applicant's property boundary
- Treatment facility boundary
- Labeled point of discharge for each discharge point (TPDES only)
- Highlighted discharge route for each discharge point (TPDES only)
- Onsite sewage sludge disposal site (if applicable)
- Effluent disposal site boundaries (TLAP only)
- New and future construction (if applicable)
- 1 mile radius information
- 3 miles downstream information (TPDES only)
- All ponds.

☐ Attachment 1 for Individuals as co-applicants

☒ Other Attachments. Please specify: Attachment 1 – Core Data Form (TCEQ 10400)

Section 14. Signature Page (Instructions Page 34)

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

Permit Number:

Applicant: Harris County MUD No. 541

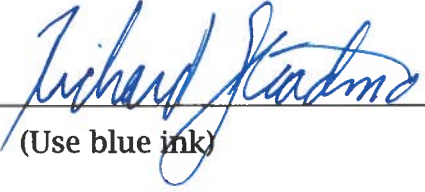
Certification:

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

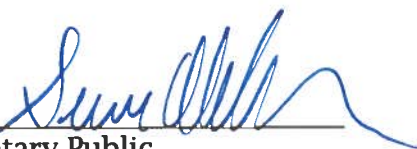
I further certify that I am authorized under 30 Texas Administrative Code § 305.44 to sign and submit this document, and can provide documentation in proof of such authorization upon request.

Signatory name (typed or printed): Richard Steadman

Signatory title: President

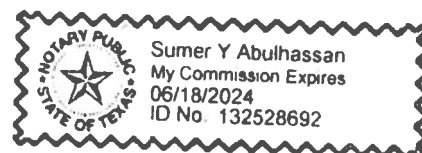
Signature:  Date: 5-31-24
(Use blue ink)

Subscribed and Sworn to before me by the said Richard Steadman
on this 31 day of May, 2024.
My commission expires on the 18 day of June, 2024.


Notary Public

[SEAL]

Harris
County, Texas



DOMESTIC WASTEWATER PERMIT APPLICATION ADMINISTRATIVE REPORT 1.0

The following information is required for new and amendment applications.

Section 1. Affected Landowner Information (Instructions Page 36)

- A. Indicate by a check mark that the landowners map or drawing, with scale, includes the following information, as applicable:
- ☒ The applicant's property boundaries
 - ☒ The facility site boundaries within the applicant's property boundaries
 - ☐ The distance the buffer zone falls into adjacent properties and the property boundaries of the landowners located within the buffer zone
 - ☒ The property boundaries of all landowners surrounding the applicant's property (Note: if the application is a major amendment for a lignite mine, the map must include the property boundaries of all landowners adjacent to the new facility (ponds).)
 - ☒ The point(s) of discharge and highlighted discharge route(s) clearly shown for one mile downstream
 - ☒ The property boundaries of the landowners located on both sides of the discharge route for one full stream mile downstream of the point of discharge
 - ☐ The property boundaries of the landowners along the watercourse for a one-half mile radius from the point of discharge if the point of discharge is into a lake, bay, estuary, or affected by tides
 - ☐ The boundaries of the effluent disposal site (for example, irrigation area or subsurface drainfield site) and all evaporation/holding ponds within the applicant's property
 - ☐ The property boundaries of all landowners surrounding the effluent disposal site
 - ☐ The boundaries of the sludge land application site (for land application of sewage sludge for beneficial use) and the property boundaries of landowners surrounding the applicant's property boundaries where the sewage sludge land application site is located
 - ☐ The property boundaries of landowners within one-half mile in all directions from the applicant's property boundaries where the sewage sludge disposal site (for example, sludge surface disposal site or sludge monofill) is located
- B. ☒ Indicate by a check mark that a separate list with the landowners' names and mailing addresses cross-referenced to the landowner's map has been provided.
- C. Indicate by a check mark in which format the landowners list is submitted:
- ☐ USB Drive
 - ☒ Four sets of labels
- D. Provide the source of the landowners' names and mailing addresses: Harris County Appraisal District
- E. As required by *Texas Water Code § 5.115*, is any permanent school fund land affected by this application?
- ☐ Yes
 - ☒ No

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

Click to enter text.

Section 2. Original Photographs (Instructions Page 38)

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

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

Section 3. Buffer Zone Map (Instructions Page 38)

A. Buffer zone map. Provide a buffer zone map on 8.5 x 11-inch paper with all of the following information. The applicant's property line and the buffer zone line may be distinguished by using dashes or symbols and appropriate labels.

- The applicant's property boundary;
- The required buffer zone; and
- Each treatment unit; and
- The distance from each treatment unit to the property boundaries.

B. Buffer zone compliance method. Indicate how the buffer zone requirements will be met. Check all that apply.

- ☒ Ownership
- ☐ Restrictive easement
- ☐ Nuisance odor control
- ☐ Variance

C. Unsuitable site characteristics. Does the facility comply with the requirements regarding unsuitable site characteristic found in 30 TAC § 309.13(a) through (d)?

- ☒ 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: 9

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: [Click to enter text.](#)
2. Check or Money Order Amount: [Click to enter text.](#)
3. Date of Check or Money Order: [Click to enter text.](#)
4. Name on Check or Money Order: [Click to enter text.](#)
5. APPLICATION INFORMATION

Name of Project or Site: [Click to enter text.](#)

Physical Address of Project or Site: [Click to enter text.](#)

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.

Staple Check or Money Order in This Space

ATTACHMENT 1

INDIVIDUAL INFORMATION

Section 1. Individual Information (Instructions Page 41)

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

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

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

Driver's License or State Identification Number: [Click to enter text.](#)

Date of Birth: [Click to enter text.](#)

Mailing Address: [Click to enter text.](#)

City, State, and Zip Code: [Click to enter text.](#)

Phone Number: [Click to enter text.](#) Fax Number: [Click to enter text.](#)

E-mail Address: [Click to enter text.](#)

CN: [Click to enter text.](#)

For Commission Use Only:

Customer Number:

Regulated Entity Number:

Permit Number:

DOMESTIC WASTEWATER PERMIT APPLICATION CHECKLIST OF COMMON DEFICIENCIES

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

Core Data Form (TCEQ Form No. 10400) ☒ Yes
(Required for all application types. Must be completed in its entirety and signed.
Note: Form may be signed by applicant representative.)

Correct and Current Industrial Wastewater Permit Application Forms ☒ Yes
(TCEQ Form Nos. 10053 and 10054. Version dated 6/25/2018 or later.)

Water Quality Permit Payment Submittal Form (Page 19) ☒ Yes
(Original payment sent to TCEQ Revenue Section. See instructions for mailing address.)

7.5 Minute USGS Quadrangle Topographic Map Attached ☒ Yes
(Full-size map if seeking "New" permit.
8 ½ x 11 acceptable for Renewals and Amendments)

Current/Non-Expired, Executed Lease Agreement or Easement ☐ N/A ☒ Yes

Landowners Map ☐ N/A ☒ Yes
(See instructions for landowner requirements)

Things to Know:

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

Landowners Cross Reference List ☐ N/A ☒ Yes
(See instructions for landowner requirements)

Landowners Labels or USB Drive attached ☐ N/A ☒ Yes
(See instructions for landowner requirements)

Original signature per 30 TAC § 305.44 - Blue Ink Preferred ☒ Yes
(If signature page is not signed by an elected official or principle executive officer, a copy of signature authority/delegation letter must be attached)

Plain Language Summary ☒ Yes



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

DOMESTIC WASTEWATER PERMIT APPLICATION TECHNICAL REPORT 1.0

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

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

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

A. Existing/Interim I Phase

Design Flow (MGD): 0.14125

2-Hr Peak Flow (MGD): 0.565

Estimated construction start date: June 2025

Estimated waste disposal start date: 2026

B. Interim II Phase

Design Flow (MGD): 0.2825

2-Hr Peak Flow (MGD): 1.130

Estimated construction start date: 2027

Estimated waste disposal start date: 2028

C. Final Phase

Design Flow (MGD): 0.565

2-Hr Peak Flow (MGD): 2.260

Estimated construction start date: 2029

Estimated waste disposal start date: 2030

D. Current Operating Phase

Provide the startup date of the facility: Not in operation

Section 2. Treatment Process (Instructions Page 43)

A. Current Operating Phase

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

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

Attachment 10

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)
Attachment 11		

C. Process Flow Diagram

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

Attachment: 12

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

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

- Latitude: 29.891556
- Longitude: -95.774194

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

- Latitude: N/A
- Longitude: N/A

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

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

Attachment: 13

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

The WWTP will provide service to the Harris County Municipal Utility District No. 541.

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

Collection System Information

Collection System Name	Owner Name	Owner Type	Population Served
Harris County MUD No. 541	Harris County MUD No. 541	Publicly Owned	7,910
		Choose an item.	
		Choose an item.	
		Choose an item.	

Section 4. Unbuilt Phases (Instructions Page 45)

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

☐ Yes ☒ No

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

☐ Yes ☐ No

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

Click to enter text.

Section 5. Closure Plans (Instructions Page 45)

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

☐ Yes ☒ No

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

☐ Yes ☐ No

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

[Click to enter text.](#)

Section 6. Permit Specific Requirements (Instructions Page 45)

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

A. Summary transmittal

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

☐ Yes ☒ No

If **yes**, provide the date(s) of approval for each phase: [Click to enter text.](#)

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

[Click to enter text.](#)

B. Buffer zones

Have the buffer zone requirements been met?

☒ Yes ☐ No

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

Buffer zone is met by ownership.

C. Other actions required by the current permit

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

☐ Yes ☒ No

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

Click to enter text.

D. Grit and grease treatment

1. Acceptance of grit and grease waste

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

☐ Yes ☒ No

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

2. Grit and grease processing

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

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. Stormwater management

1. Applicability

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

☐ Yes ☒ No

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

☐ Yes ☒ No

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

2. MSGP coverage

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

☐ Yes ☐ No

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

TXR05 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

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

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.

6. Request for coverage in individual permit

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

☐ Yes ☐ No

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

intend to divert stormwater to the treatment plant headworks and indirectly discharge it to water in the state.

[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. Discharges to the Lake Houston Watershed

Does the facility discharge in the Lake Houston watershed?

☐ Yes ☒ No

If yes, attach a Sewage Sludge Solids Management Plan. See Example 5 in the instructions.

[Click to enter text.](#)

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

1. Acceptance of sludge from other WWTPs

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

☐ Yes ☒ No

If yes, attach sewage sludge solids management plan. See Example 5 of 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 BOD₅ concentration of the sludge, and the design BOD₅ 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 BOD₅ concentration of the septic waste, and the design BOD₅ 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 50)

Is the facility in operation?

☐ Yes ☒ No

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

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

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

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

Pollutant	Average Conc.	Max Conc.	No. of Samples	Sample Type	Sample Date/Time
CBOD ₅ , 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					
<i>E.coli</i> (CFU/100ml) freshwater					
Enterococci (CFU/100ml) saltwater					
Total Dissolved Solids, mg/l					
Electrical Conductivity, μ mohs/cm, †					
Oil & Grease, mg/l					
Alkalinity (CaCO ₃)*, mg/l					

*TPDES permits only

†TLAP permits only

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

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

Section 8. Facility Operator (Instructions Page 50)

Facility Operator Name: Charlie ChaplineFacility Operator's License Classification and Level: Click to enter text.Facility Operator's License Number: Click to enter text.

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

A. WWTP's Biosolids Management Facility Type

Check all that apply. See instructions for guidance

- ☐ Design flow $\geq$ 1 MGD
- ☐ Serves $\geq$ 10,000 people
- ☐ Class I Sludge Management Facility (per 40 CFR § 503.9)
- ☒ Biosolids generator
- ☐ Biosolids end user – land application (onsite)
- ☐ Biosolids end user – surface disposal (onsite)
- ☐ Biosolids end user – incinerator (onsite)

B. WWTP's Biosolids Treatment Process

Check all that apply. See instructions for guidance.

- ☒ Aerobic Digestion
- ☐ Air Drying (or sludge drying beds)
- ☐ Lower Temperature Composting
- ☐ Lime Stabilization
- ☐ Higher Temperature Composting
- ☐ Heat Drying
- ☐ Thermophilic Aerobic Digestion
- ☐ Beta Ray Irradiation
- ☐ Gamma Ray Irradiation
- ☐ Pasteurization
- ☐ Preliminary Operation (e.g. grinding, de-gritting, blending)
- ☐ Thickening (e.g. gravity thickening, centrifugation, filter press, vacuum filter)
- ☐ Sludge Lagoon
- ☐ Temporary Storage (< 2 years)
- ☐ Long Term Storage (≥ 2 years)
- ☐ Methane or Biogas Recovery
- ☐ Other Treatment Process: [Click to enter text.](#)

C. Biosolids Management

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

all biosolids management practices listed in the instructions. Rather indicate the management practice the facility plans to use.

Biosolids Management

Management Practice	Handler or Preparer Type	Bulk or Bag Container	Amount (dry metric tons)	Pathogen Reduction Options	Vector Attraction Reduction Option
Other	Off-site Third-Party Handler or Preparer	Bulk		Class B: PSRP Aerobic Digestion	Choose an item.
Choose an item.	Choose an item.	Choose an item.		Choose an item.	Choose an item.
Choose an item.	Choose an item.	Choose an item.		Choose an item.	Choose an item.

If “Other” is selected for Management Practice, please explain (e.g. monofill or transport to another WWTP): Transported to another permitted wastewater treatment plant or permitted sludge processing facility.

D. Disposal site

Disposal site name: TBD

TCEQ permit or registration number: Click to enter text.

County where disposal site is located: Click to enter text.

E. Transportation method

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

Name of the hauler: TBD

Hauler registration number: Click to enter text.

Sludge is transported as a:

Liquid ☐ semi-liquid ☐ semi-solid ☐ solid ☐

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

A. Beneficial use authorization

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

☐ Yes ☒ No

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

☐ Yes ☐ No

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

☐ Yes ☐ No

B. Sludge processing authorization

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

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

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

☐ Yes ☐ No

Section 11. Sewage Sludge Lagoons (Instructions Page 53)

Does this facility include sewage sludge lagoons?

☐ Yes ☒ No

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

A. Location information

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

- Original General Highway (County) Map:
Attachment: [Click to enter text.](#)
- USDA Natural Resources Conservation Service Soil Map:
Attachment: [Click to enter text.](#)
- Federal Emergency Management Map:
Attachment: [Click to enter text.](#)
- Site map:
Attachment: [Click to enter text.](#)

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

- ☐ Overlap a designated 100-year frequency flood plain
- ☐ Soils with flooding classification
- ☐ Overlap an unstable area
- ☐ Wetlands

- ☐ Located less than 60 meters from a fault
- ☐ None of the above

Attachment: [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: [Click to enter text.](#)

Potassium, mg/kg: [Click to enter text.](#)

pH, standard units: [Click to enter text.](#)

Ammonia Nitrogen mg/kg: [Click to enter text.](#)

Arsenic: [Click to enter text.](#)

Cadmium: [Click to enter text.](#)

Chromium: [Click to enter text.](#)

Copper: [Click to enter text.](#)

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: [Click to enter text.](#)

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 1×10^{-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.](#)
- Description of the method of controlling infiltration of groundwater and surface water from entering the site
Attachment: [Click to enter text.](#)
- Procedures to prevent the occurrence of nuisance conditions
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 55)

A. Additional authorizations

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

☐ Yes ☒ No

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

Click to enter text.

B. Permittee enforcement status

Is the permittee currently under enforcement for this facility?

☐ Yes ☒ No

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

☐ Yes ☒ No

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

Click to enter text.

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

A. RCRA hazardous wastes

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

☐ Yes ☒ No

B. Remediation activity wastewater

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

☐ Yes ☒ No

C. Details about wastes received

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

Attachment: [Click to enter text.](#)

Section 14. Laboratory Accreditation (Instructions Page 56)

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

- The laboratory is an in-house laboratory and is:
 - periodically inspected by the TCEQ; or
 - located in another state and is accredited or inspected by that state; or
 - 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: Click to enter text.

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 57)

A. Justification of permit need

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

The proposed WWTP is needed for a new residential development. The ultimate phase of the plant will serve a total of approximately 2,500 residential lots as part of the development.

B. Regionalization of facilities

For additional guidance, please review [TCEQ's Regionalization Policy for Wastewater Treatment](#)¹.

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

☐ Yes ☒ No

¹ <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: [14](#)

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: [15](#)

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 59)

Is this facility in operation?

☐ Yes ☒ No

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

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

A. Current organic loading

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

Average Influent Organic Strength or BOD₅ Concentration in mg/l: [Click to enter text.](#)

Average Influent Loading (lbs/day = total average flow X average BOD₅ conc. X 8.34): [Click to enter text.](#)

Provide the source of the average organic strength or BOD₅ 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	0.14125 (Phase 1) 0.2825 (Phase 2) 0.565 (Ultimate)	325
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	0.14125 (Phase 1) / 0.2825 (Phase 2) / 0.565 (Ultimate)	
AVERAGE BOD ₅ from all sources		325

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

A. Existing/Interim I Phase Design Effluent Quality

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

Total Suspended Solids, mg/l: 15

Ammonia Nitrogen, mg/l: 2

Total Phosphorus, mg/l: N/A

Dissolved Oxygen, mg/l: 6

Other: Click to enter text.

B. Interim II Phase Design Effluent Quality

Biochemical Oxygen Demand (5-day), mg/l: 7

Total Suspended Solids, mg/l: 15

Ammonia Nitrogen, mg/l: 2

Total Phosphorus, mg/l: N/A

Dissolved Oxygen, mg/l: 4

Other: [Click to enter text.](#)

C. Final Phase Design Effluent Quality

Biochemical Oxygen Demand (5-day), mg/l: 7

Total Suspended Solids, mg/l: 15

Ammonia Nitrogen, mg/l: 2

Total Phosphorus, mg/l: N/A

Dissolved Oxygen, mg/l: 6

Other: [Click to enter text.](#)

D. Disinfection Method

Identify the proposed method of disinfection.

☒ Chlorine: 1-4 mg/l after 20 minutes detention time at peak flow

Dechlorination process: [Click to enter text.](#)

☐ Ultraviolet Light: [Click to enter text.](#) seconds contact time at peak flow

☐ Other: [Click to enter text.](#)

Section 4. Design Calculations (Instructions Page 59)

Attach design calculations and plant features for each proposed phase. Example 4 of the instructions includes sample design calculations and plant features.

Attachment: 16

Section 5. Facility Site (Instructions Page 60)

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.

The ground level will be raised so that facilities will be built above the 100-year frequency flood level.

Provide the source(s) used to determine 100-year frequency flood plain.

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: [Click to enter text.](#)

If **no**, provide the approximate date you anticipate submitting your application to the Corps: [Click to enter text.](#)

B. Wind rose

Attach a wind rose: [Attachment 18](#)

Section 6. Permit Authorization for Sewage Sludge Disposal (Instructions Page 60)

A. Beneficial use authorization

Are you requesting to include authorization to land apply sewage sludge for beneficial use on property located adjacent to the wastewater treatment facility under the wastewater permit?

☐ Yes ☒ No

If **yes**, attach the completed **Application for Permit for Beneficial Land Use of Sewage Sludge (TCEQ Form No. 10451)**: [Click to enter text.](#)

B. Sludge processing authorization

Identify the sludge processing, storage or disposal options that will be conducted at the wastewater treatment facility:

- ☐ Sludge Composting
- ☐ Marketing and Distribution of sludge
- ☐ Sludge Surface Disposal or Sludge Monofill

If **any of the above**, sludge options are selected, attach the completed **Domestic Wastewater Permit Application: Sewage Sludge Technical Report (TCEQ Form No. 10056)**: [Click to enter text.](#)

Section 7. Sewage Sludge Solids Management Plan (Instructions Page 61)

Attach a solids management plan to the application.

Attachment: [19](#)

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

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

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

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

DOMESTIC WASTEWATER PERMIT APPLICATION

WORKSHEET 2.0: RECEIVING WATERS

The following information is required for all TPDES permit applications.

Section 1. Domestic Drinking Water Supply (Instructions Page 64)

Is there a surface water intake for domestic drinking water supply located within 5 miles downstream from the point or proposed point of discharge?

☐ Yes ☒ No

If **no**, proceed to Section 2. If **yes**, 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 64)

Does the facility discharge into tidally affected waters?

☐ Yes ☒ No

If **no**, proceed to Section 3. If **yes**, complete the remainder of this section. If no, proceed to Section 3.

A. Receiving water outfall

Width of the receiving water at the outfall, in feet: [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 64)

Is the discharge directly into (or within 300 feet of) a classified segment?

☐ Yes ☒ No

If **yes**, this Worksheet is complete.

If **no**, complete Sections 4 and 5 of this Worksheet.

Section 4. Description of Immediate Receiving Waters (Instructions Page 65)

Name of the immediate receiving waters: Detention Pond

A. Receiving water type

Identify the appropriate description of the receiving waters.

- ☐ Stream
- ☐ Freshwater Swamp or Marsh
- ☐ Lake or Pond

Surface area, in acres: Click to enter text.

Average depth of the entire water body, in feet: Click to enter text.

Average depth of water body within a 500-foot radius of discharge point, in feet:
Click to enter text.

- ☒ Man-made Channel or Ditch
- ☐ Open Bay
- ☐ Tidal Stream, Bayou, or Marsh
- ☐ Other, specify: Click to enter text.

B. Flow characteristics

If a stream, man-made channel or ditch was checked above, provide the following. For existing discharges, check one of the following that best characterizes the area *upstream* of the discharge. For new discharges, characterize the area *downstream* of the discharge (check one).

- ☒ Intermittent - dry for at least one week during most years
- ☐ Intermittent with Perennial Pools - enduring pools with sufficient habitat to maintain significant aquatic life uses
- ☐ Perennial - normally flowing

Check the method used to characterize the area upstream (or downstream for new dischargers).

- ☐ USGS flow records
- ☐ Historical observation by adjacent landowners
- ☐ Personal observation
- ☒ Other, specify: Proposed Design

C. Downstream perennial confluences

List the names of all perennial streams that join the receiving water within three miles downstream of the discharge point.

N/A

D. Downstream characteristics

Do the receiving water characteristics change within three miles downstream of the discharge (e.g., natural or man-made dams, ponds, reservoirs, etc.)?

☒ Yes ☐ No

If yes, discuss how.

From plant site to a detention pond, flowing east through additional detention ponds, to storm sewer system, thence to Bear Creek.

E. Normal dry weather characteristics

Provide general observations of the water body during normal dry weather conditions.

The detention pond system has not been constructed.

Date and time of observation: [Click to enter text.](#)

Was the water body influenced by stormwater runoff during observations?

☐ Yes ☐ No

Section 5. General Characteristics of the Waterbody (Instructions Page 66)

A. Upstream influences

Is the immediate receiving water upstream of the discharge or proposed discharge site influenced by any of the following? Check all that apply.

☐ Oil field activities

☐ Urban runoff

☐ Upstream discharges

☐ Agricultural runoff

☐ Septic tanks

☐ Other(s), specify: [Click to enter text.](#)

B. Waterbody uses

Observed or evidences of the following uses. Check all that apply.

- | | |
|--|--|
| ☐ Livestock watering | ☐ Contact recreation |
| ☐ Irrigation withdrawal | ☐ Non-contact recreation |
| ☐ Fishing | ☐ Navigation |
| ☐ Domestic water supply | ☐ Industrial water supply |
| ☐ Park activities | ☐ Other(s), specify: Click to enter text. |

C. Waterbody aesthetics

Check one of the following that best describes the aesthetics of the receiving water and the surrounding area.

- ☐ Wilderness: outstanding natural beauty; usually wooded or unpastured area; water clarity exceptional
- ☐ Natural Area: trees and/or native vegetation; some development evident (from fields, pastures, dwellings); water clarity discolored
- ☐ Common Setting: not offensive; developed but uncluttered; water may be colored or turbid
- ☐ Offensive: stream does not enhance aesthetics; cluttered; highly developed; dumping areas; water discolored

DOMESTIC WASTEWATER PERMIT APPLICATION

WORKSHEET 6.0: INDUSTRIAL WASTE CONTRIBUTION

The following is required for all publicly owned treatment works.

Section 1. All POTWs (Instructions Page 89)

A. Industrial users (IUs)

Provide the number of each of the following types of industrial users (IUs) that discharge to your POTW and the daily flows from each user. See the Instructions for definitions of Categorical IUs, Significant IUs - non-categorical, and Other IUs.

If there are no users, enter 0 (zero).

Categorical IUs:

Number of IUs: 0

Average Daily Flows, in MGD: 0

Significant IUs - non-categorical:

Number of IUs: 0

Average Daily Flows, in MGD: 0

Other IUs:

Number of IUs: 0

Average Daily Flows, in MGD: 0

B. Treatment plant interference

In the past three years, has your POTW experienced treatment plant interference (see instructions)?

☐ Yes ☒ No

If yes, identify the dates, duration, description of interference, and probable cause(s) and possible source(s) of each interference event. Include the names of the IUs that may have caused the interference.

Click to enter text.

C. Treatment plant pass through

In the past three years, has your POTW experienced pass through (see instructions)?

☐ Yes ☒ No

If **yes**, identify the dates, duration, a description of the pollutants passing through the treatment plant, and probable cause(s) and possible source(s) of each pass through event. Include the names of the IUs that may have caused pass through.

Click to enter text.

D. Pretreatment program

Does your POTW have an approved pretreatment program?

☐ Yes ☒ No

If **yes**, complete Section 2 only of this Worksheet.

Is your POTW required to develop an approved pretreatment program?

☐ Yes ☐ No

If **yes**, complete Section 2.c. and 2.d. only, and skip Section 3.

If **no to either question above**, skip Section 2 and complete Section 3 for each significant industrial user and categorical industrial user.

Section 2. POTWs with Approved Programs or Those Required to Develop a Program (Instructions Page 90)

A. Substantial modifications

Have there been any **substantial modifications** to the approved pretreatment program that have not been submitted to the TCEQ for approval according to *40 CFR §403.18*?

☐ Yes ☐ No

If **yes**, identify the modifications that have not been submitted to TCEQ, including the purpose of the modification.

Click to enter text.

B. Non-substantial modifications

Have there been any **non-substantial modifications** to the approved pretreatment program that have not been submitted to TCEQ for review and acceptance?

☐ Yes ☐ No

If yes, identify all non-substantial modifications that have not been submitted to TCEQ, including the purpose of the modification.

Click to enter text.

C. Effluent parameters above the MAL

In Table 6.0(1), list all parameters measured above the MAL in the POTW's effluent monitoring during the last three years. Submit an attachment if necessary.

Table 6.0(1) – Parameters Above the MAL

Pollutant	Concentration	MAL	Units	Date

D. Industrial user interruptions

Has any SIU, CIU, or other IU caused or contributed to any problems (excluding interferences or pass throughs) at your POTW in the past three years?

☐ Yes ☐ No

If **yes**, identify the industry, describe each episode, including dates, duration, description of the problems, and probable pollutants.

Click to enter text.

Section 3. Significant Industrial User (SIU) Information and Categorical Industrial User (CIU) (Instructions Page 90)

A. General information

Company Name: N/A

SIC Code: Click to enter text.

Contact name: Click to enter text.

Address: Click to enter text.

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

Telephone number: Click to enter text.

Email address: Click to enter text.

B. Process information

Describe the industrial processes or other activities that affect or contribute to the SIU(s) or CIU(s) discharge (i.e., process and non-process wastewater).

N/A

C. Product and service information

Provide a description of the principal product(s) or services performed.

N/A

D. Flow rate information

See the Instructions for definitions of “process” and “non-process wastewater.”

Process Wastewater:

Discharge, in gallons/day: N/A

Discharge Type: ☐ Continuous ☐ Batch ☐ Intermittent

Non-Process Wastewater:

Discharge, in gallons/day: Click to enter text.

Discharge Type: ☐ Continuous ☐ Batch ☐ Intermittent

E. Pretreatment standards

Is the SIU or CIU subject to technically based local limits as defined in the instructions?

☐ Yes ☐ No

Is the SIU or CIU subject to categorical pretreatment standards found in *40 CFR Parts 405-471*?

☐ Yes ☐ No

If subject to categorical pretreatment standards, indicate the applicable category and subcategory for each categorical process.

Category: Subcategories: [Click to enter text.](#)

[Click or tap here to enter text.](#) [Click to enter text.](#)

Category: [Click to enter text.](#)

Subcategories: [Click to enter text.](#)

Category: [Click to enter text.](#)

Subcategories: [Click to enter text.](#)

Category: [Click to enter text.](#)

Subcategories: [Click to enter text.](#)

Category: [Click to enter text.](#)

Subcategories: [Click to enter text.](#)

F. Industrial user interruptions

Has the SIU or CIU caused or contributed to any problems (e.g., interferences, pass through, odors, corrosion, blockages) at your POTW in the past three years?

☐ Yes ☐ No

If yes, identify the SIU, describe each episode, including dates, duration, description of problems, and probable pollutants.

[Click to enter text.](#)

Attachment 1: Core Data Form



TCEQ Core Data Form

For detailed instructions on completing this form, please read the Core Data Form Instructions or call 512-239-5175.

SECTION I: General Information

1. Reason for Submission (If other is checked please describe in space provided.)		
☒ New Permit, Registration or Authorization (Core Data Form should be submitted with the program application.)		
☐ Renewal (Core Data Form should be submitted with the renewal form)		☐ Other
2. Customer Reference Number (if issued)	Follow this link to search for CN or RN numbers in Central Registry**	3. Regulated Entity Reference Number (if issued)
CN		RN

SECTION II: Customer Information

4. General Customer Information		5. Effective Date for Customer Information Updates (mm/dd/yyyy)			
☒ New Customer ☐ Update to Customer Information ☐ Change in Regulated Entity Ownership					
☐ Change in Legal Name (Verifiable with the Texas Secretary of State or Texas Comptroller of Public Accounts)					
<i>The Customer Name submitted here may be updated automatically based on what is current and active with the Texas Secretary of State (SOS) or Texas Comptroller of Public Accounts (CPA).</i>					
6. Customer Legal Name (If an individual, print last name first: eg: Doe, John)				<i>If new Customer, enter previous Customer below:</i>	
Harris County Municipal Utility District No. 541					
7. TX SOS/CPA Filing Number		8. TX State Tax ID (11 digits)		9. Federal Tax ID (9 digits)	10. DUNS Number (if applicable)
		32017578173			
11. Type of Customer:		☒ Corporation		☐ Individual	Partnership: ☐ General ☐ Limited
Government: ☐ City ☐ County ☐ Federal ☐ Local ☐ State ☐ Other		☐ Sole Proprietorship		☐ Other:	
12. Number of Employees				13. Independently Owned and Operated?	
☒ 0-20 ☐ 21-100 ☐ 101-250 ☐ 251-500 ☐ 501 and higher				☐ Yes ☐ No	
14. Customer Role (Proposed or Actual) – as it relates to the Regulated Entity listed on this form. Please check one of the following					
☒ Owner ☐ Operator ☐ Owner & Operator ☐ Other:					
☐ Occupational Licensee ☐ Responsible Party ☐ VCP/BSA Applicant					
15. Mailing Address:	3200 Southwest Freeway				
	Suite 2600				
	City	Houston	State	TX	ZIP 77027 ZIP + 4
16. Country Mailing Information (if outside USA)				17. E-Mail Address (if applicable)	
18. Telephone Number		19. Extension or Code		20. Fax Number (if applicable)	

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SECTION III: Regulated Entity Information

21. General Regulated Entity Information
(If "New Regulated Entity" is selected, a new permit application is also required.)

☒ New Regulated Entity
☐ Update to Regulated Entity Name
☐ Update to Regulated Entity Information

The Regulated Entity Name submitted may be updated, in order to meet TCEQ Core Data Standards (removal of organizational endings such as Inc, LP, or LLC).

22. Regulated Entity Name
(Enter name of the site where the regulated action is taking place.)

Harris County Municipal Utility District No. 541 Wastewater Treatment Plant

23. Street Address of the Regulated Entity:

(No PO Boxes)

City

State

ZIP

ZIP + 4

24. County

Harris

If no Street Address is provided, fields 25-28 are required.

25. Description to Physical Location:

The site is located approximately 1 miles northwest of the intersection of Longenbaugh Rd and Grand Parkway.

26. Nearest City

State

Nearest ZIP Code

Houston

TX

77493

Latitude/Longitude are required and may be added/updated to meet TCEQ Core Data Standards. (Geocoding of the Physical Address may be used to supply coordinates where none have been provided or to gain accuracy).

27. Latitude (N) In Decimal:

29.891556

28. Longitude (W) In Decimal:

95.774194

Degrees

Minutes

Seconds

Degrees

Minutes

Seconds

29

53

29.6016

95

46

27.0978

29. Primary SIC Code

30. Secondary SIC Code

31. Primary NAICS Code

32. Secondary NAICS Code

(4 digits)

(4 digits)

(5 or 6 digits)

(5 or 6 digits)

4952

22132

33. What is the Primary Business of this entity?
(Do not repeat the SIC or NAICS description.)

Wastewater Treatment Plant

34. Mailing Address:

3200 Southwest Freeway

Suite 2600

City

Houston

State

TX

ZIP

77027

ZIP + 4

35. E-Mail Address:

36. Telephone Number

37. Extension or Code

38. Fax Number
(if applicable)

(713) 860-6482

() -

39. TCEQ Programs and ID Numbers Check all Programs and write in the permits/registration numbers that will be affected by the updates submitted on this form. See the Core Data Form instructions for additional guidance.

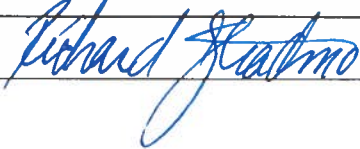
☐ Dam Safety	☐ Districts	☐ Edwards Aquifer	☐ Emissions Inventory Air	☐ Industrial Hazardous Waste
☐ Municipal Solid Waste	☐ New Source Review Air	☐ OSSF	☐ Petroleum Storage Tank	☐ PWS
☐ Sludge	☐ Storm Water	☐ Title V Air	☐ Tires	☐ Used Oil
☐ Voluntary Cleanup	☒ Wastewater	☐ Wastewater Agriculture	☐ Water Rights	☐ Other:

SECTION IV: Preparer Information

40. Name:	Ryan Canfield			41. Title:	EIT
42. Telephone Number	43. Ext./Code	44. Fax Number	45. E-Mail Address		
(713) 335-1334		() -	rcanfield@lja.com		

SECTION V: Authorized Signature

46. By my signature below, I certify, to the best of my knowledge, that the information provided in this form is true and complete, and that I have signature authority to submit this form on behalf of the entity specified in Section II, Field 6 and/or as required for the updates to the ID numbers identified in field 39.

Company:	Harris County MUD No. 541	Job Title:	President
Name (In Print):	Richard Steadman	Phone:	281-414-8287
Signature:		Date:	5-31-24

Attachment 2: Plain Language Summary



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

PLAIN LANGUAGE SUMMARY FOR TPDES OR TLAP PERMIT APPLICATIONS

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

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

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

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

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

The following summary is provided for this pending water quality permit application being reviewed by the Texas Commission on Environmental Quality as required by 30 TAC Chapter 39. The information provided in this summary may change during the technical review of the application and is not a federal enforceable representation of the permit application.

Harris County MUD No. 541 (2. Enter Customer Number here (i.e., CN6#####)) proposes to operate Harris County MUD No. 541 Wastewater Treatment Plant (5. Enter Regulated Entity Number here (i.e., RN1#####)), a treatment system that utilizes the extended aeration mode of the activated sludge process. The facility will be located at 0.14 miles northwest of the intersection of Longenbach Rd and Peek Rd., in Houston, Harris County, Texas 77493. Harris County MUD No. 541 Wastewater Treatment Facility.

Discharges from the facility are expected to contain five-day carbonaceous biochemical oxygen demand (CBOD5), total suspended solids (TSS), ammonia nitrogen (NH3-N), and Escherichia coli.. Domestic wastewater will be treated by an activated sludge process.

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

AGUAS RESIDUALES DOMÉSTICAS /AGUAS PLUVIALES

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

Harris County MUD No. 541 (2. Introduzca el número de cliente aquí (es decir, CN6#####).) propone operar la planta de tratamiento de aguas residuales Harris County MUD No. 541 5. Introduzca el número de entidad regulada aquí (es decir, RN1#####), un sistema de tratamiento que utiliza el modo de aireación extendida del proceso de lodos activados. La instalación estará ubicada en a 0.14 millas al noroeste de la intersección de Longenbach Rd y Peek Rd, en Houston, Condado de Harris, Texas 77493. Harris County MUD No. 541 - Instalación de tratamiento de aguas residuales.

Se espera que las descargas de la instalación contengan demanda bioquímica de oxígeno carbonoso de cinco días (CBOD5), sólidos suspendidos totales (SST), nitrógeno amoniacal (NH3-N) y Escherichia coli.. Aguas residuales domesticas. estará tratado por un proceso de lodos activados.

Attachment 3: PIPF



Texas Commission on Environmental Quality

Public Involvement Plan Form for Permit and Registration Applications

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

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

Section 1. Preliminary Screening

- ☒ New Permit or Registration Application
☐ New Activity - modification, registration, amendment, facility, etc. (see instructions)

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

Section 2. Secondary Screening

- ☒ Requires public notice,
☒ Considered to have significant public interest, **and**
☒ Located within any of the following geographical locations:

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

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

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

Section 3. Application Information

Type of Application (check all that apply):

Air ☐ Initial ☐ Federal ☐ Amendment ☐ Standard Permit ☐ Title V
Waste ☐ Municipal Solid Waste ☐ Industrial and Hazardous Waste ☐ Scrap Tire
☐ Radioactive Material Licensing ☐ Underground Injection Control

Water Quality

- ☒ Texas Pollutant Discharge Elimination System (TPDES)
☐ Texas Land Application Permit (TLAP)
☐ State Only Concentrated Animal Feeding Operation (CAFO)
☐ Water Treatment Plant Residuals Disposal Permit
☐ Class B Biosolids Land Application Permit
☐ Domestic Septage Land Application Registration

Water Rights New Permit

- ☐ New Appropriation of Water
☐ New or existing reservoir

Amendment to an Existing Water Right

- ☐ Add a New Appropriation of Water
☐ Add a New or Existing Reservoir
☐ Major Amendment that could affect other water rights or the environment

Section 4. Plain Language Summary

Provide a brief description of planned activities.

Construction of a wastewater treatment plant for future residential development.

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.

Houston

(City)

Harris

(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

33%

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

\$35,103

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

Black/African-American: 18.7%, American Indian: 0.2%, Asian: 7.3%, Pacific Islander: 0.1%, Some other race: 0.5%, two or more races: 2.6%, Hispanic: 43.0%

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

26.2%

(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

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

☒ Yes ☐ No

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

☐ Yes ☒ No

If Yes, please describe.

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

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

☒ Yes ☐ No

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

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

- ☒ Publish in alternative language newspaper
- ☐ Posted on Commissioner's Integrated Database Website
- ☒ Mailed by TCEQ's Office of the Chief Clerk
- ☐ Other (specify)

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

☒ Yes ☐ No

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

☒ Yes ☐ No

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

- ☐ TCEQ Regional Office ☐ TCEQ Central Office
- ☒ Public Place (specify) Katy Branch Library

Section 7. Voluntary Submittal

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

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

☐ Yes ☐ No

What types of notice will be provided?

- ☐ Publish in alternative language newspaper
- ☐ Posted on Commissioner's Integrated Database Website
- ☐ Mailed by TCEQ's Office of the Chief Clerk
- ☐ Other (specify)

Attachment 4: Deed Recorded Easement

**SPECIAL WARRANTY DEED
(Wastewater Treatment Plant Site - 3.130 Acres)**

NOTICE OF CONFIDENTIALITY RIGHTS: IF YOU ARE A NATURAL PERSON, YOU MAY REMOVE OR STRIKE ANY OR ALL OF THE FOLLOWING INFORMATION FROM ANY INSTRUMENT THAT TRANSFERS AN INTEREST IN REAL PROPERTY BEFORE IT IS FILED FOR RECORD IN THE PUBLIC RECORDS: YOUR SOCIAL SECURITY NUMBER OR YOUR DRIVER'S LICENSE NUMBER

THE STATE OF TEXAS §
 § **KNOW ALL BY THESE PRESENTS:**
COUNTY OF HARRIS §

THAT **WISTERIA INTERESTS, LLC**, a Texas limited liability company ("Grantor"), for and in consideration of the sum of Ten and No/100 Dollars (\$10.00) and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, has GRANTED, BARGAINED, SOLD and CONVEYED, and by these presents does GRANT, BARGAIN, SELL and CONVEY unto **HARRIS COUNTY MUNICIPAL UTILITY DISTRICT NO. 541**, a political subdivision of the State of Texas, its successors and assigns ("Grantee"), all of that certain tract of real property situated in Harris County, Texas, containing 3.130 acres, as more particularly described in **Exhibit A** and shown on **Exhibit B**, both attached hereto and incorporated herein for all purposes, together with all rights, titles, and interests appurtenant thereto and any and all improvements situated thereon (collectively, the "Property").

This Special Warranty Deed and the conveyance hereinabove set forth are executed by Grantor and accepted by Grantee subject to the terms, conditions and provisions hereof and further subject to all easements, conditions, restrictions, covenants, mineral or royalty interests, mineral reservations, surface waivers, utility conveyances, liens, encumbrances, regulations or orders of municipal and/or other governmental authorities, if any, or other matters of record in Harris County, Texas, to the extent the same are validly existing and applicable to the Property (collectively, the "Permitted Encumbrances").

TO HAVE AND TO HOLD the Property, together with all and singular the rights and appurtenances thereunto in anywise belonging, unto Grantee, its successors and assigns, forever, and Grantor does hereby bind itself, its successors and assigns, to WARRANT AND FOREVER DEFEND, all and singular the title to the Property unto Grantee, its successors and assigns, against every person whomsoever lawfully claiming or to claim the same or any part thereof by, through, or under Grantor, but not otherwise, subject only to the Permitted Encumbrances.

Grantee's address is c/o Allen Boone Humphries Robinson LLP, 3200 Southwest Freeway, Suite 2600, Houston, Texas 77027.

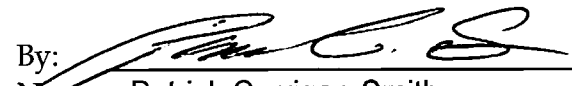
[Signature pages follow this page.]

RP-2024-334573

EXECUTED this 6th day of September, 2024.

GRANTOR:

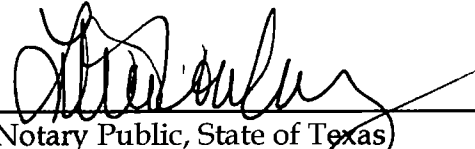
WISTERIA INTERESTS, LLC,
a Texas limited liability company

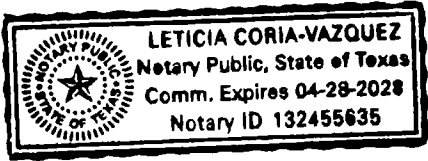
By: 
Name: Patrick Carrigan-Smith
Title: Vice President, Land Development & Acquisition

THE STATE OF TEXAS §
 §
COUNTY OF HARRIS §

This instrument was acknowledged before me on the 6th day of September, 2024, by Patrick Carrigan-Smith, Vice President, Land Development & Acquisition, of WISTERIA INTERESTS, LLC, a Texas limited liability company, on behalf of said limited liability company.

(NOTARY SEAL)


Notary Public, State of Texas



RP-2024-334573

EXECUTED by Grantee on the date set forth in the acknowledgment below, but AGREED to, ACCEPTED, and EFFECTIVE as of the date executed by Grantor.

GRANTEE:

HARRIS COUNTY MUNICIPAL UTILITY
DISTRICT NO. 541

By: [Signature]
Name: RICHARD STEADMAN
Title: PRESIDENT

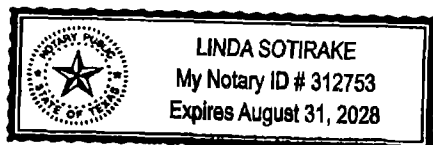
ATTEST:

By: [Signature]
Name: ROBERT STINNI
Title: SECRETARY

THE STATE OF TEXAS §
 §
COUNTY OF Harris §

This instrument was acknowledged before me on the 14th day of August, 2024, by Richard Steadman, President, and Robert Stinni, Secretary, of the Board of Directors of HARRIS COUNTY MUNICIPAL UTILITY DISTRICT NO. 541, a political subdivision of the State of Texas, on behalf of said political subdivision.

(NOTARY SEAL)



[Signature]
Notary Public, State of Texas

Attachments:

Exhibit A - Description of the Property

Exhibit B - Sketch of the Property

After recording, please return to:

Allen Boone Humphries Robinson LLP

3200 Southwest Freeway, Suite 2600

Houston, Texas 77027

Attention: Real Estate Department

RP-2024-334573

Exhibit A - Description of the Property

March 22, 2024
S001-1628-1652

DESCRIPTION OF 3.130 ACRE WASTEWATER TREATMENT PLANT

Being 3.130 acres (136,348 square feet) of land located in the H. & T.C. R.R. Co. Survey, Sec 50, Block 2, Abstract-1592, Harris County, Texas, being a portion of that certain called 634.995 acre tract described in the deed to Wisteria Interests, LLC. by an instrument of record in File Number RP-2022-476897 in the Official Public Records of Real Property of Harris County, Texas (H.C.O.P.R.R.P.), said 3.130 acre tract being more particularly described by metes and bounds as follows (all bearings referenced to the Texas Coordinate System, South Central Zone, NAD83, NA2011 (Epoch 2010.00);

COMMENCING for reference at a 5/8-inch iron rod found for the southeast corner of said 634.995 acre tract, said point lying on the north right-of-way line of Logenbaugh Road (60' wide-as-occupied), from which a 5/8-inch iron rod found for the northwest corner of that certain called 132.732 acre tract described in the deed to Lee Land Investments, LLC. by an instrument of record under File Number RP-2019-473793, H.C.O.P.R.R.P., same being the southwest corner of Lot V of J.W. Metzler's Subdivision, a subdivision of record under Volume 500, Page 236 in the Deed Records of Harris County, Texas (H.C.D.R.), said Lot V being a portion of that certain called 69.022 acre tract described in the deed to Lee Land Investments, LLC. by an instrument of record under File Number RP-2019-473793, H.C.O.P.R.R.P., bears North 02° 04' 51" West, 2,643.20 feet;

Thence, North 82° 53' 28" West, departing said north right-of-way line, 2,714.54 feet to the southeast corner and POINT OF BEGINNING of the herein described tract;

Thence, South 87° 47' 56" West, 356.12 feet to a point for corner, said point lying on the east line of a 180-foot wide easement conveyed to Houston Lighting and Power Company by an instrument of record under Volume 4954, Page 238, H.C.D.R.;

Thence, North 14° 10' 51" West, along the east line of said 180-foot wide easement, 354.73 feet to a point for corner;

Thence, North 87° 47' 56" East, departing said 180-foot wide easement, 429.75 feet to a point for corner;

3.130 Acres

March 22, 2024
S001-1628-1652

Thence, South 02° 12' 04" East, 347.00 feet to the POINT OF BEGINNING and containing 3.130 acres of land.

Corner monuments were not set at the client's request.

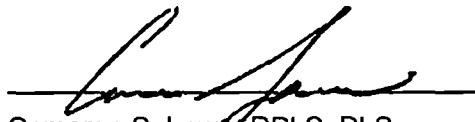
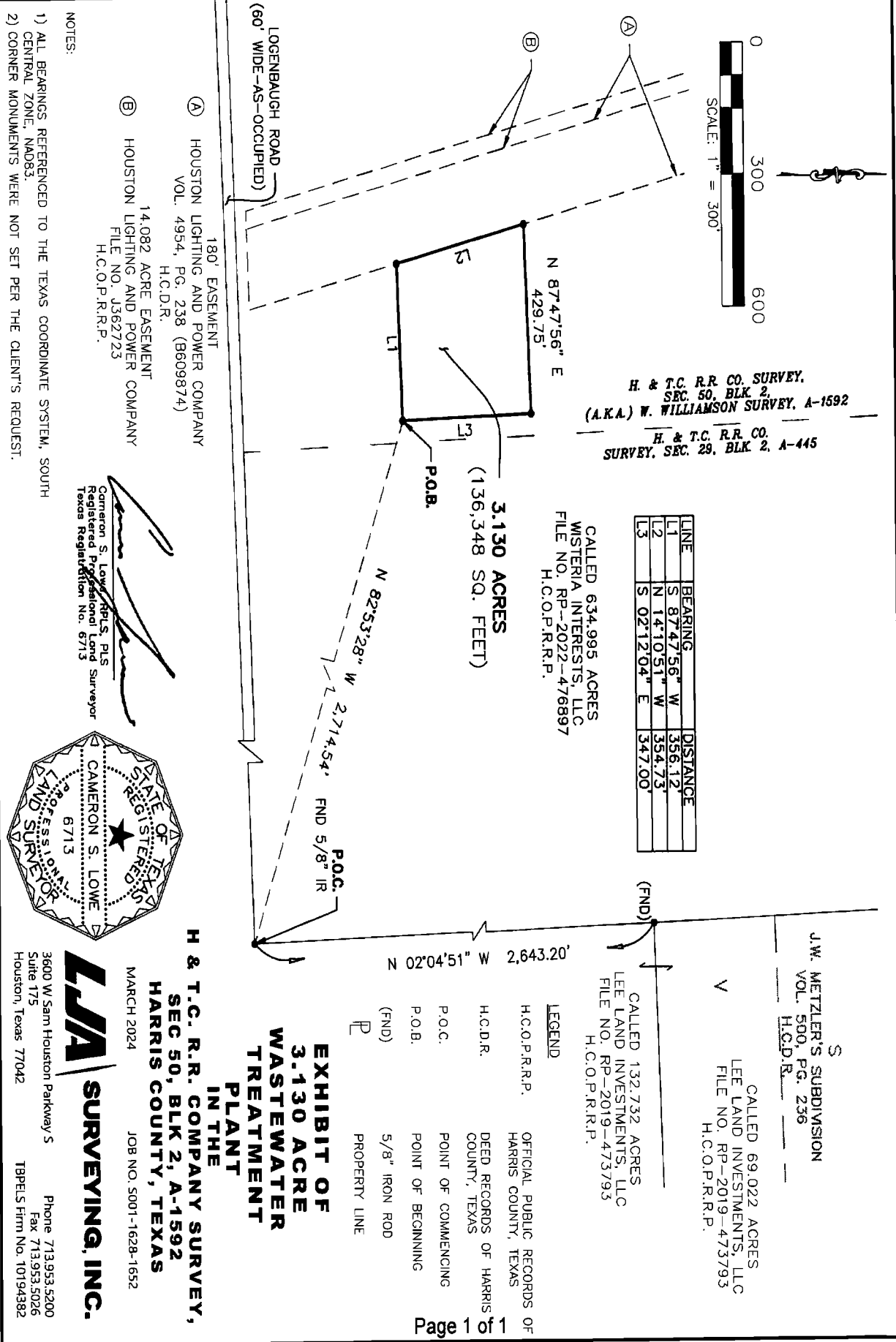

Cameron S. Lowe, RPLS, PLS
Texas Registration No. 6713
LJA Surveying, Inc.



Exhibit B - Sketch of the Property

S:\Sectors\Survey\Projects\JAS001\1628\1652\06 CAD\Working Files\Basis Files\Wisteria WWTP Exhibit.dwg 3/22/2024



RP-2024-334573
Pages 9
09/11/2024 01:53 PM
e-Filed & e-Recorded in the
Official Public Records of
HARRIS COUNTY
TENESHIA HUDSPETH
COUNTY CLERK
Fees \$53.00

RECORDERS MEMORANDUM

This instrument was received and recorded electronically
and any blackouts, additions or changes were present
at the time the instrument was filed and recorded.

Any provision herein which restricts the sale, rental, or
use of the described real property because of color or
race is invalid and unenforceable under federal law.
THE STATE OF TEXAS
COUNTY OF HARRIS

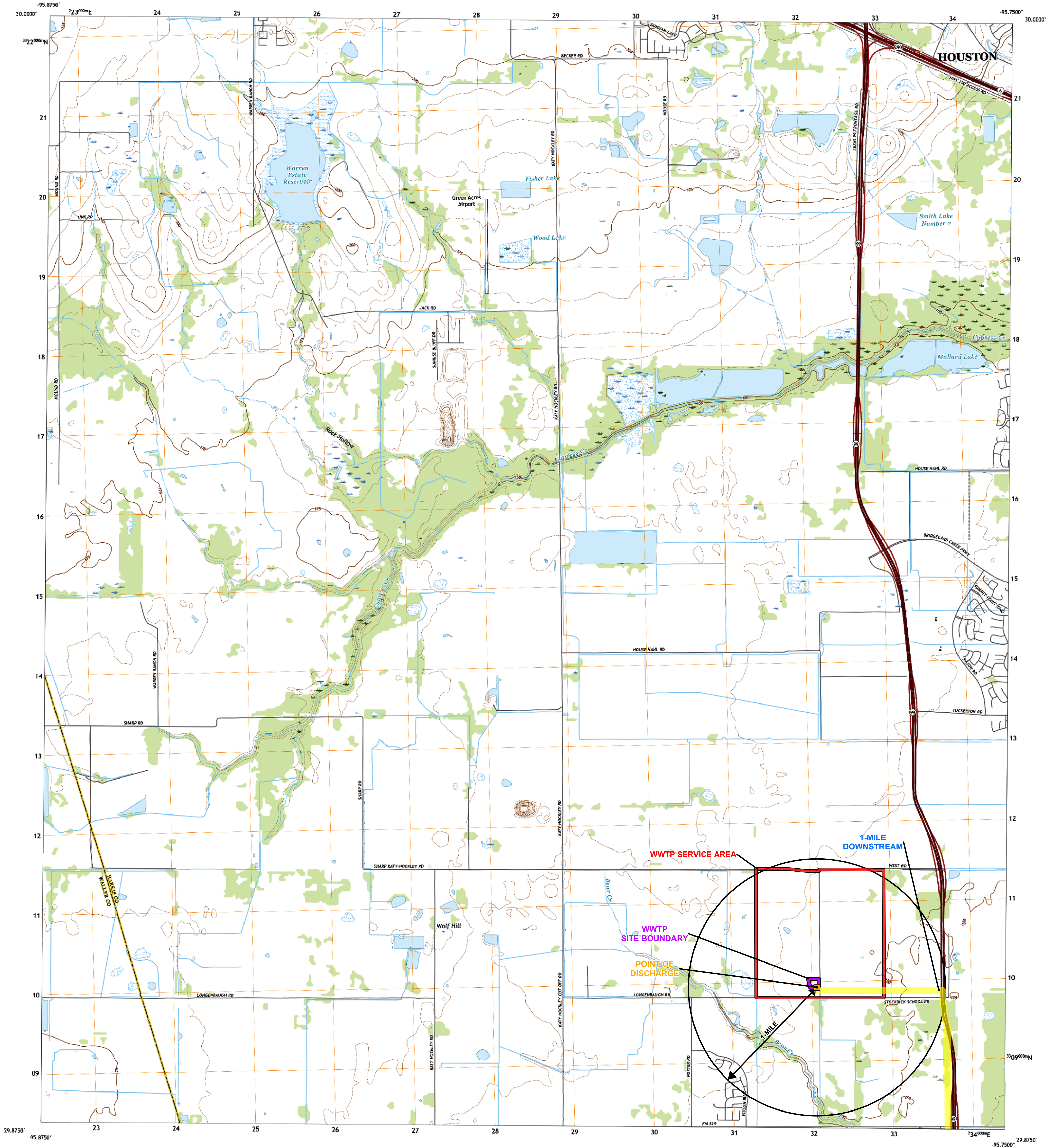
I hereby certify that this instrument was FILED in
File Number Sequence on the date and at the time stamped
hereon by me; and was duly RECORDED in the Official
Public Records of Real Property of Harris County, Texas.



Teneshia Hudspeth
COUNTY CLERK
HARRIS COUNTY, TEXAS

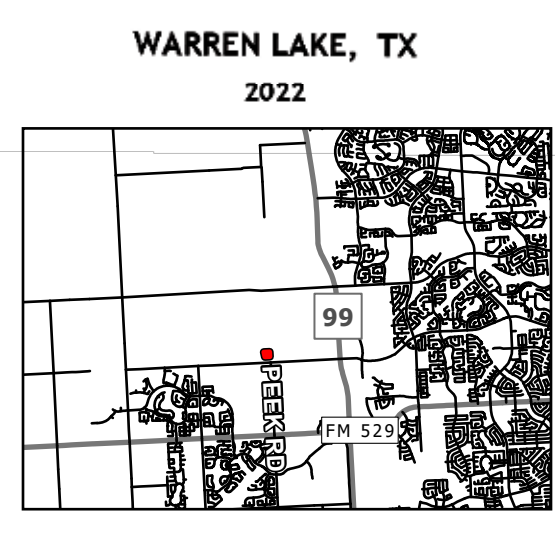
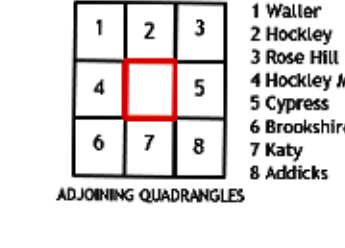
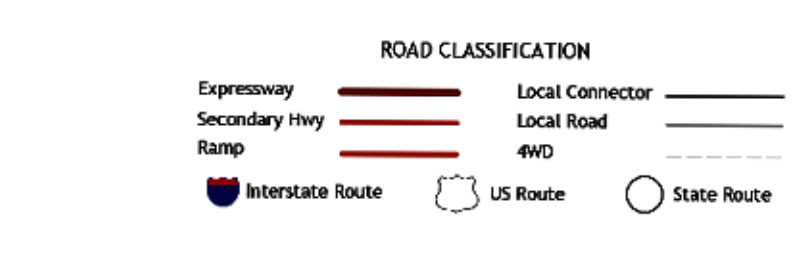
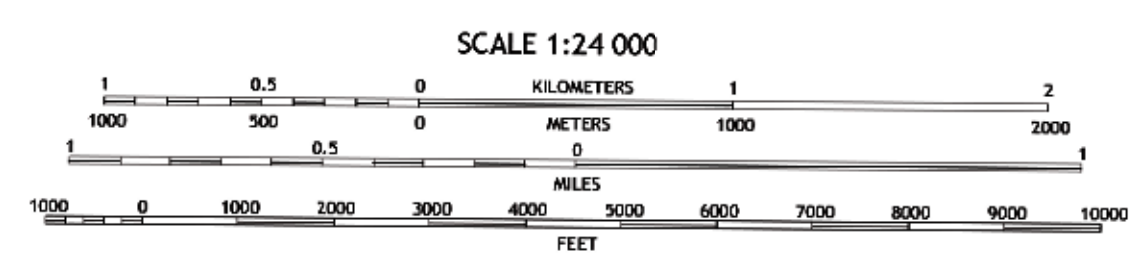
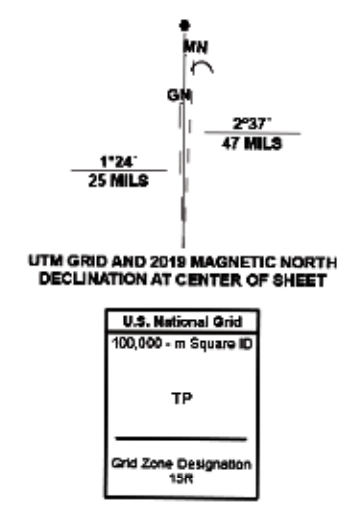
RP-2024-334573

Attachment 5: USGS Maps



Produced by the United States Geological Survey
North American Datum of 1983 (NAD83)
World Geodetic System of 1984 (WGS84). Projection and
1,000-meter grid/Universal Transverse Mercator, Zone 15R
This map is not a legal document. Boundaries may be
generalized for this map scale. Private lands within government
reservations may not be shown. Obtain permission before
entering private lands.

Imagery.....NAP, September 2016 - November 2016
Roads.....U.S. Census Bureau, 2015 - 2019
Names.....U.S. Census Bureau, 1979 - 2021
Hydrography.....National Hydrography Dataset, 2002 - 2018
Contours.....National Elevation Dataset, 2010
Boundaries.....Multiple sources; see metadata file 2019 - 2021
Wetlands.....FWS National Wetlands Inventory Not Available

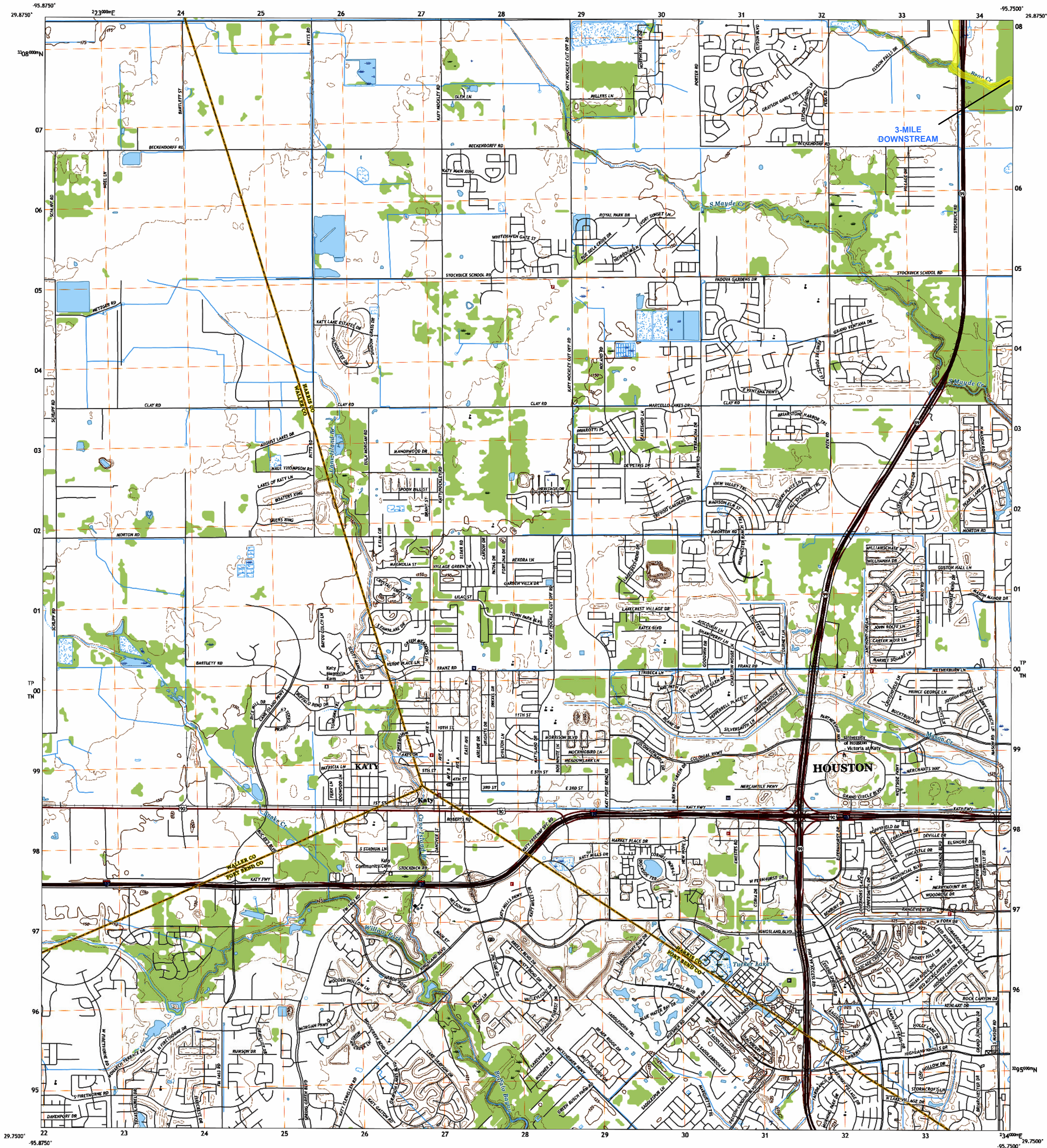


WISTERIA WWTP DISCHARGE PERMIT (3-MILE)
USGS TOPOGRAPHIC MAP

LJA ENGINEERING

3600 W Sam Houston Parkway S, Suite 400
Houston, Texas 77042
Phone: 713.953.5200 TBP: F-1386
LJA.com

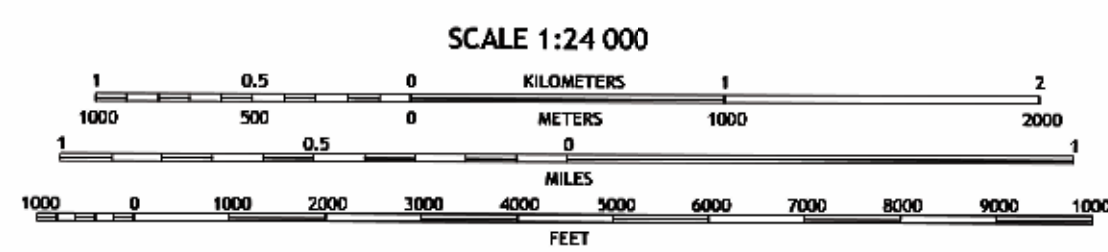
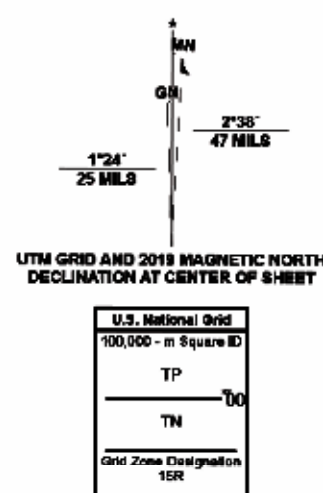
DECEMBER 2023



Produced by the United States Geological Survey

North American Datum of 1983 (NAD83)
World Geodetic System of 1984 (WGS84). Projection and
1000-meter grid/Universal Transverse Mercator, Zone 15R
This map is not a legal document. Boundaries may be
generalized for this map scale. Private lands within government
reservations may not be shown. Obtain permission before
entering private lands.

Imagery.....NAIP, September 2016 - November 2016
Roads.....U.S. Census Bureau, 2013 - 2019
Names.....GNS, 1979 - 2022
Hydrography.....National Hydrography Dataset, 2002 - 2018
Contours.....National Elevation Dataset, 2010
Boundaries.....Multiple sources; see metadata file 2019 - 2021
Wetlands.....FWS National Wetlands Inventory Not Available

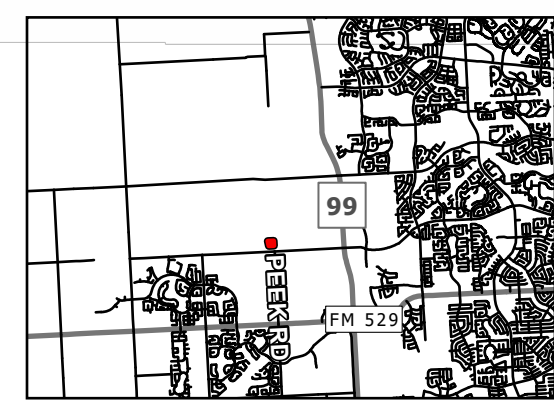


1	2	3
4	5	6
7	8	9

ADJOINING QUADRANGLES

ROAD CLASSIFICATION	
Expressway	Local Connector
Secondary Hwy	Local Road
Ramp	4WD
Interstate Route	US Route
	State Route

KATY, TX
2022



**WISTERIA WWTP DISCHARGE PERMIT (3-MILE)
USGS TOPOGRAPHIC MAP**

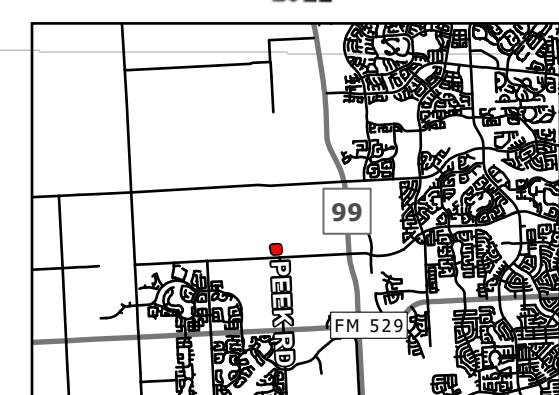
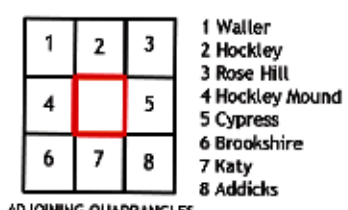
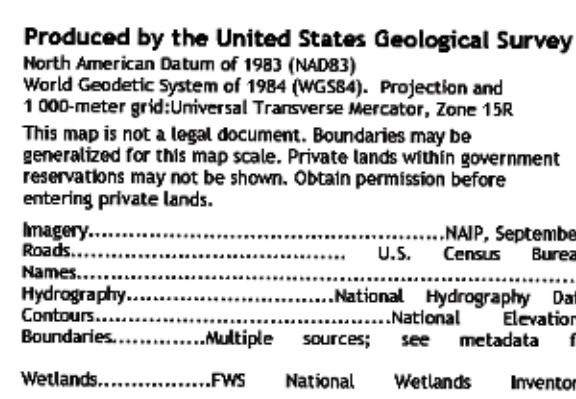


3600 W Sam Houston Parkway S, Suite 400
Houston, Texas 77042
Phone 713.953.5200 TBP F-1386
LJA.com

OCTOBER 2023

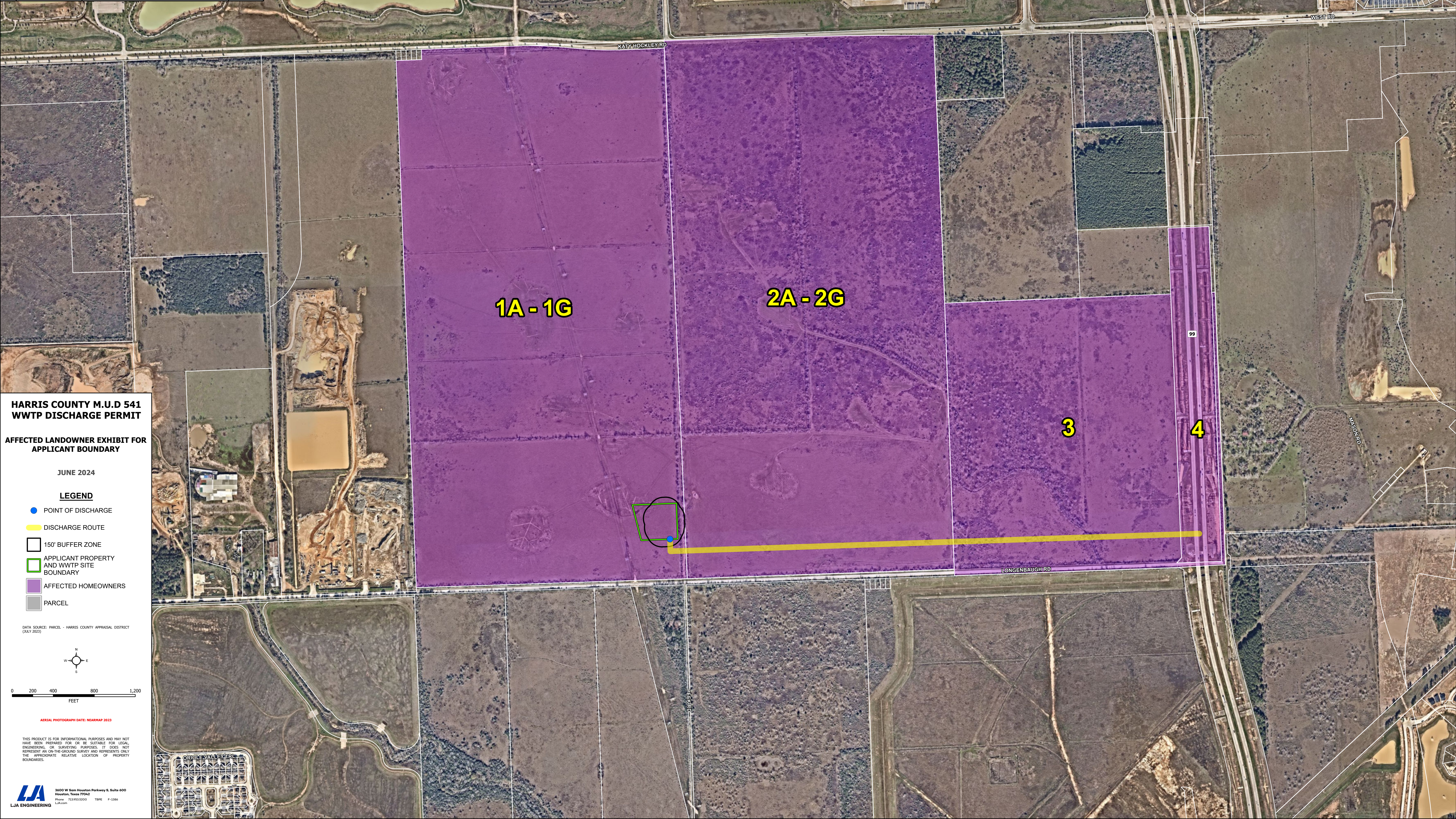


NSN 7 6 4 3 0 1 6 9 6 7 8 1
NSN REF NO. USGS X24-X23081



Attachment 6: Affected Land Owners Map & Land Owners List

KEY	ACCOUNT NUMBER	OWNER NAME	ACREAGE
1A	0481290000017	WISTERIA INTERESTS LLC	24
1B	0481290000016	WISTERIA INTERESTS LLC	45
1C	0481290000015	WISTERIA INTERESTS LLC	24
1D	0481290000014	WISTERIA INTERESTS LLC	48
1E	0481290000013	WISTERIA INTERESTS LLC	24
1F	0481290000012	WISTERIA INTERESTS LLC	24
1G	0481290000001	WISTERIA INTERESTS LLC	130.784
2A	0431110000071	WISTERIA INTERESTS LLC	23.879
2B	0431110000070	WISTERIA INTERESTS LLC	44.802
2C	0431110000069	WISTERIA INTERESTS LLC	23.879
2D	0431110000068	WISTERIA INTERESTS LLC	47.695
2E	0431110000067	WISTERIA INTERESTS LLC	23.879
2F	0431110000066	WISTERIA INTERESTS LLC	23.879
2G	0431110000035	WISTERIA INTERESTS LLC	129.953
3	0431110000040	LEE LAND INVESTMENTS LLC	136.373
4	0431110000075	STATE OF TEXAS	29.857



**HARRIS COUNTY M.U.D 541
WWTP DISCHARGE PERMIT**

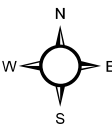
**AFFECTED LANDOWNER EXHIBIT FOR
APPLICANT BOUNDARY**

JUNE 2024

LEGEND

- POINT OF DISCHARGE
- DISCHARGE ROUTE
- 150' BUFFER ZONE
- APPLICANT PROPERTY AND WWTP SITE BOUNDARY
- AFFECTED HOMEOWNERS
- PARCEL

DATA SOURCE: PARCEL - HARRIS COUNTY APPRAISAL DISTRICT (JULY 2023)



0 200 400 800 1,200
FEET

AERIAL PHOTOGRAPH DATE: NEARMAP 2023

THIS PRODUCT IS FOR INFORMATIONAL PURPOSES AND MAY NOT HAVE BEEN PREPARED FOR OR BE SUITABLE FOR LEGAL, ENGINEERING, OR SURVEYING PURPOSES. IT DOES NOT REPRESENT AN ON-THE-GROUND SURVEY AND REPRESENTS ONLY THE APPROXIMATE RELATIVE LOCATION OF PROPERTY BOUNDARIES.

WISTERIA INTERESTS, LLC
13141 NORTHWEST FWY
HOUSTON, TX 77040

LEE LAND INVESTMENTS, LLC
P.O. BOX 19562
HOUSTON, TX 77224

STATE OF TEXAS
5805 W LAMAR BLVD

Attachment 7: Original Photographs





1



2



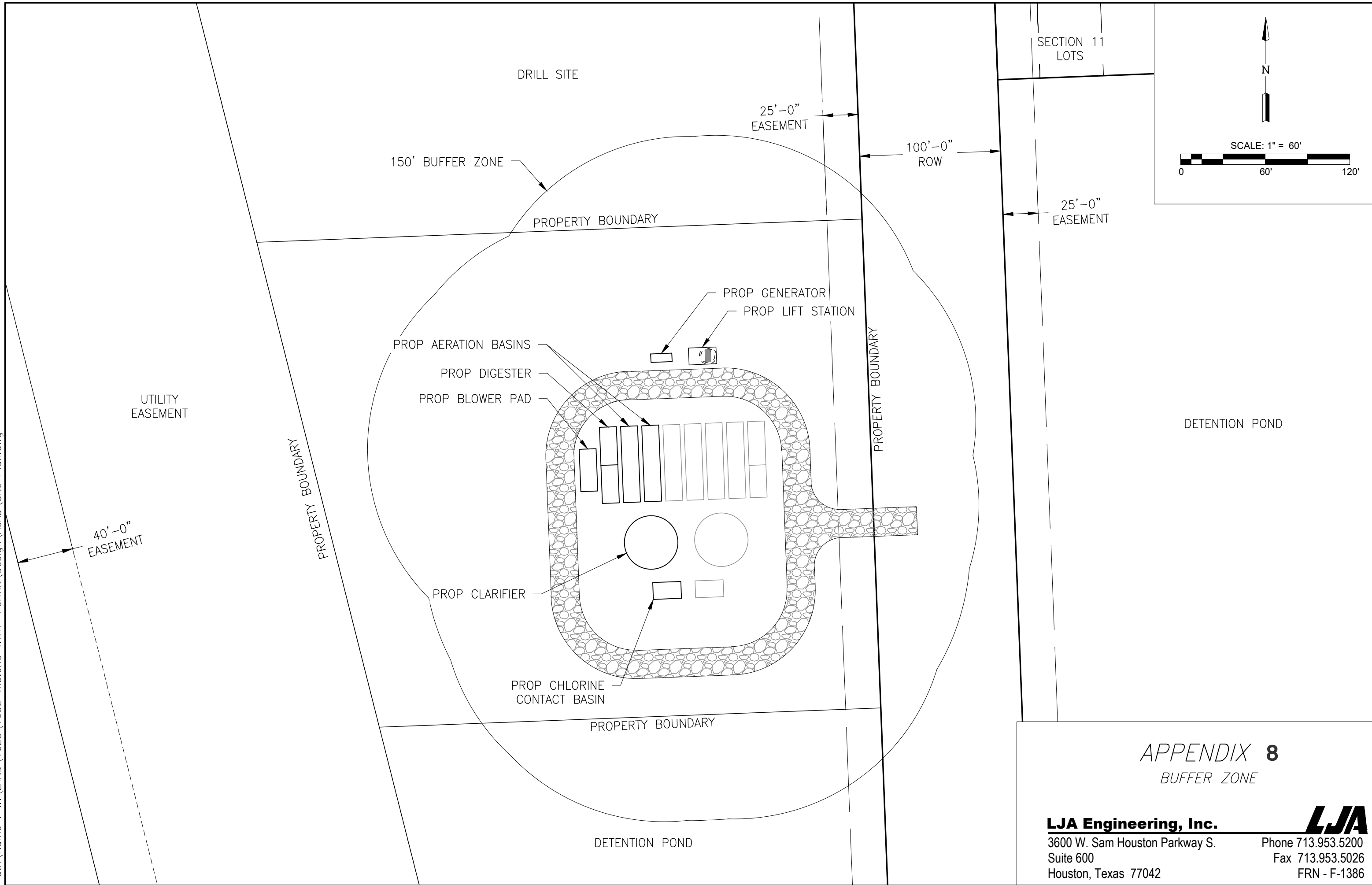
3



4

Attachment 8: Buffer Zone

Date\Time : Thu, 21 Dec 2023 - 11:44am User Name : rcanfield
Path\Name : W:\LAND\1628\1652 Wisteria WWTP Permit\Design\ACAD\Site Plan.dwg



APPENDIX 8

BUFFER ZONE

LJA Engineering, Inc.

3600 W. Sam Houston Parkway S.
Suite 600
Houston, Texas 77042



Phone 713.953.5200
Fax 713.953.5026
FRN - F-1386

Attachment 9: SPIF

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

SUPPLEMENTAL PERMIT INFORMATION FORM (SPIF)

FOR AGENCIES REVIEWING DOMESTIC OR INDUSTRIAL TPDES WASTEWATER PERMIT APPLICATIONS

TCEQ USE ONLY:

Application type: ____Renewal ____Major Amendment ____Minor Amendment ____New

County: _____ Segment Number: _____

Admin Complete Date: _____

Agency Receiving SPIF:

____ Texas Historical Commission

____ U.S. Fish and Wildlife

____ Texas Parks and Wildlife Department

____ U.S. Army Corps of Engineers

This form applies to TPDES permit applications only. (Instructions, Page 53)

Complete this form as a separate document. TCEQ will mail a copy to each agency as required by our agreement with EPA. If any of the items are not completely addressed or further information is needed, we will contact you to provide the information before issuing the permit. Address each item completely.

Do not refer to your response to any item in the permit application form. Provide each attachment for this form separately from the Administrative Report of the application. The application will not be declared administratively complete without this SPIF form being completed in its entirety including all attachments. Questions or comments concerning this form may be directed to the Water Quality Division's Application Review and Processing Team by email at WQ-ARPTeam@tceq.texas.gov or by phone at (512) 239-4671.

The following applies to all applications:

1. Permittee: Harris County MUD No. 541

Permit No. WQ00 _____

EPA ID No. TX _____

Address of the project (or a location description that includes street/highway, city/vicinity, and county):

The project site is located 1 mile west of the intersection of Longenbach Rd. and the Grand Parkway.

Provide the name, address, phone and fax number of an individual that can be contacted to answer specific questions about the property.

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

First and Last Name: Margaret Gillentine

Credential (P.E, P.G., Ph.D., etc.): P.E.

Title: Senior Project Manager

Mailing Address: 3600 W Sam Houston Pkwy S, Unit 600

City, State, Zip Code: Houston, TX, 77042

Phone No.: 713.953.5100 Ext.:

Fax No.:

E-mail Address: mgillentine@lja.com

2. List the county in which the facility is located: Harris County
3. If the property is publicly owned and the owner is different than the permittee/applicant, please list the owner of the property.

N/A

4. Provide a description of the effluent discharge route. The discharge route must follow the flow of effluent from the point of discharge to the nearest major watercourse (from the point of discharge to a classified segment as defined in 30 TAC Chapter 307). If known, please identify the classified segment number.

The effluent discharge route is south to the detention pond through a series of detention ponds to storm sewer system, thence to Bear Creek, thence to South Mayde Creek, thence to Buffalo Bayou above Tidal in Segment No. 1014.

5. Please provide a separate 7.5-minute USGS quadrangle map with the project boundaries plotted and a general location map showing the project area. Please highlight the discharge route from the point of discharge for a distance of one mile downstream. (This map is required in addition to the map in the administrative report).

Provide original photographs of any structures 50 years or older on the property.

Does your project involve any of the following? Check all that apply.

- ☒ Proposed access roads, utility lines, construction easements
- ☐ Visual effects that could damage or detract from a historic property's integrity
- ☐ Vibration effects during construction or as a result of project design
- ☒ Additional phases of development that are planned for the future
- ☐ Sealing caves, fractures, sinkholes, other karst features

☐ Disturbance of vegetation or wetlands

1. List proposed construction impact (surface acres to be impacted, depth of excavation, sealing of caves, or other karst features):

The WWTP site is approximately 3.1 acres and will require some excavation for plant piping and electrical conduit.

2. Describe existing disturbances, vegetation, and land use:

Evidence of previous agricultural use.

THE FOLLOWING ITEMS APPLY ONLY TO APPLICATIONS FOR NEW TPDES PERMITS AND MAJOR AMENDMENTS TO TPDES PERMITS

3. List construction dates of all buildings and structures on the property:

N/A

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

N/A

Attachment 10: Treatment Process

APPENDIX 8

DESCRIPTION OF TREATMENT PROCESS

(In reference to Domestic Technical Report 1.0, Page 1, Item 2A)

Proposed Phase 1 – 0.14125 MGD

The treatment system utilizes the extended aeration mode of the activated sludge process. The plant will initially be capable of treating an average daily flow of 0.14125 MGD and a 2-hour peak flow of 0.565 MGD and consists of steel tankage. Plant influent will be pumped from the on-site lift station to the headworks which has a manually cleaned bar screen. From there, wastewater flows to two aeration basins with a total volume of 15,163 cubic feet. From the aeration basins the wastewater flows to a single 38-foot diameter clarifier with a total volume of 11,559 cubic feet. Clarified wastewater flows from the clarifier into a single chlorine contact basin, with a total volume of 2,280 cubic feet, to the outfall. The sludge in the clarifier sump is recycled back to the aeration basins as RAS or wasted into one aerobic digester basins as WAS with a total volume of 8,554 cubic feet. The digested sludge is collected and disposed by a certified sludge hauler. Supernatant from the aerobic digesters is returned to the aeration basins.

Proposed Phase 2 – 0.2825 MGD

The treatment plant will continue to operate in the complete mix mode of the activated sludge process. The proposed expansion for the final phase will provide an additional 0.14125 MGD of treatment capacity by constructing an additional steel tankage for additional aeration basin to the existing steel tankage. The expansion will allow the wastewater treatment plant to treat an average daily flow of 0.2825 MGD and a 2-hr peak flow of 1.13 MGD. Plant influent will be pumped from the on-site lift station to the headworks which has a manually cleaned bar screen. From there, wastewater flows to three aeration basins with a total volume of 22,745 cubic feet. From the aeration basins the wastewater flows to a single 38-foot diameter clarifier. The clarified wastewater flows from the clarifier into a single chlorine contact basin, with a total volume of 2,280 cubic feet, to the outfall. The sludge in the clarifier sump is recycled back to the aeration basins as RAS or wasted into one aerobic digester basins as WAS with a total volume of 8,554 cubic feet. The digested sludge is collected and disposed by a certified sludge hauler. Supernatant from the aerobic digesters is returned to the aeration basins.

Proposed Final Phase 3 – 0.565 MGD

The treatment plant will continue to operate in the complete mix mode of the activated sludge process. The proposed expansion for the final phase will provide an additional 0.2825 MGD of treatment capacity by constructing an additional steel tankage for three additional aeration basins and two additional digester basins, one additional clarifier, and one additional chlorine contact basin to the existing steel tankage. The expansion will allow the wastewater treatment plant to treat an average daily flow of 0.565 MGD and a 2-hr peak flow of 2.26 MGD. Plant influent will be pumped from the on-site lift station to the headworks which has a manually cleaned bar screen. From there, wastewater flows to six aeration basins with a total volume of 45,490 cubic feet. From the aeration basins the wastewater flows split to the two 38-foot diameter clarifiers with a total volume of 27,400 cubic feet. Clarified wastewater

flows from the clarifier into two chlorine contact basins with a total volume of 4,560 cubic feet, to the outfall. The sludge in the clarifier sump is recycled back to the aeration basins as RAS or wasted into the aerobic digester basins as WAS with a total volume of 17,107 cubic feet. The digested sludge is collected and disposed by a certified sludge hauler. Supernatant from the aerobic digesters is returned to the aeration basins.

Attachment 11: Treatment Units

APPENDIX C – Table 1.0 (1) – Treatment Units

MAJOR COMPONENTS OF TREATMENT SYSTEM

(In reference to Domestic Technical Report 1.0, Page 2, Item 2B)

Major components and size for each project phase are as follows:

**Proposed Phase I
(0.14125 MGD)**

<u>Type of Unit</u>	<u>Number of Units</u>	<u>Size (l' x w' x d')</u>
Aeration Basin	2	54' x 12' x 11.7' swd
Aerobic Digester	2	27' x 12' x 13.2'
Clarification	1	38' dia x 10.19' swd
Chlorine Disinfection	1	20' x 12' x 10.5'

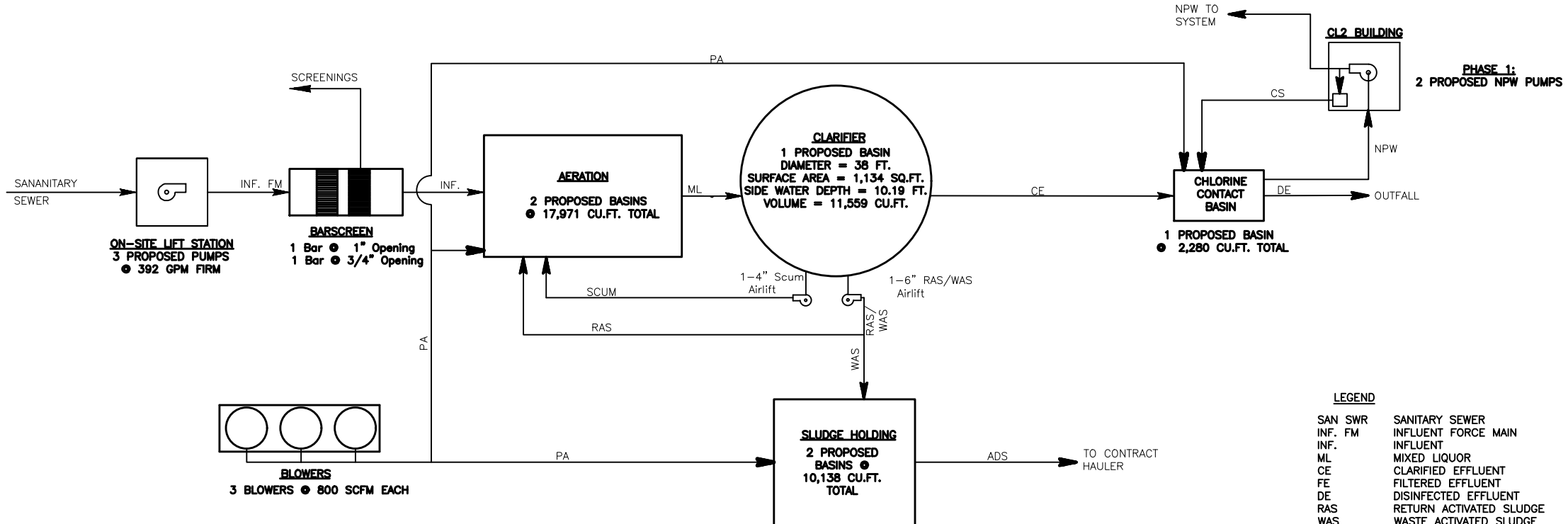
**Proposed Phase II
(0.2825 MGD)**

<u>Type of Unit</u>	<u>Number of Units</u>	<u>Size (l' x w' x d')</u>
Aeration Basin	3	54' x 12' x 11.7' swd
Aerobic Digester	2	27' x 12' x 13.2'
Clarification	1	38' dia x 10.20' swd
Chlorine Disinfection	1	20' x 12' x 10.5'

**Proposed Final Phase
(0.565 MGD)**

<u>Type of Unit</u>	<u>Number of Units</u>	<u>Size (l' x w' x d')</u>
Aeration Basin	6	54' x 12' x 11.7' swd
Aerobic Digester	4	27' x 12' x 13.2'
Clarification	2	38' dia x 12.10' swd
Chlorine Disinfection	2	20' x 12' x 10.5'

Attachment 12: Process Flow Diagrams



PHASE	AVG. DAILY FLOW	PEAK FLOW
PHASE 1	0.14125 MGD	0.565 MGD
PHASE 2	0.2825 MGD	1.13 MGD
ULT. PHASE 3	0.565 MGD	2.26 MGD

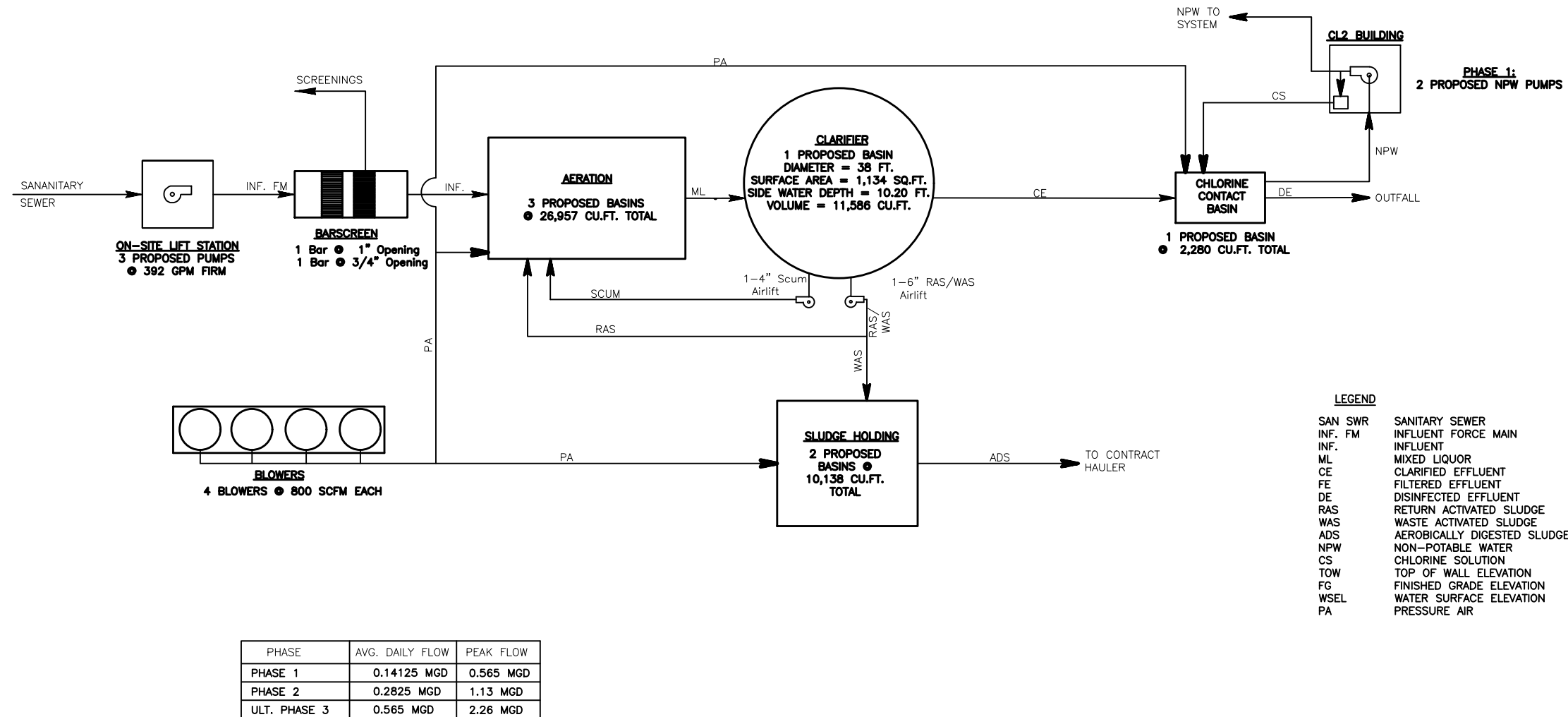
APPENDIX NO. 12
PROCESS FLOW DIAGRAM – PHASE 1

LJA Engineering, Inc.

3600 W. Sam Houston Parkway S.
Suite 600
Houston, Texas 77042

Phone 713.953.5200
Fax 713.953.5026
FRN - F-1386





APPENDIX NO. 12
PROCESS FLOW DIAGRAM – PHASE 2

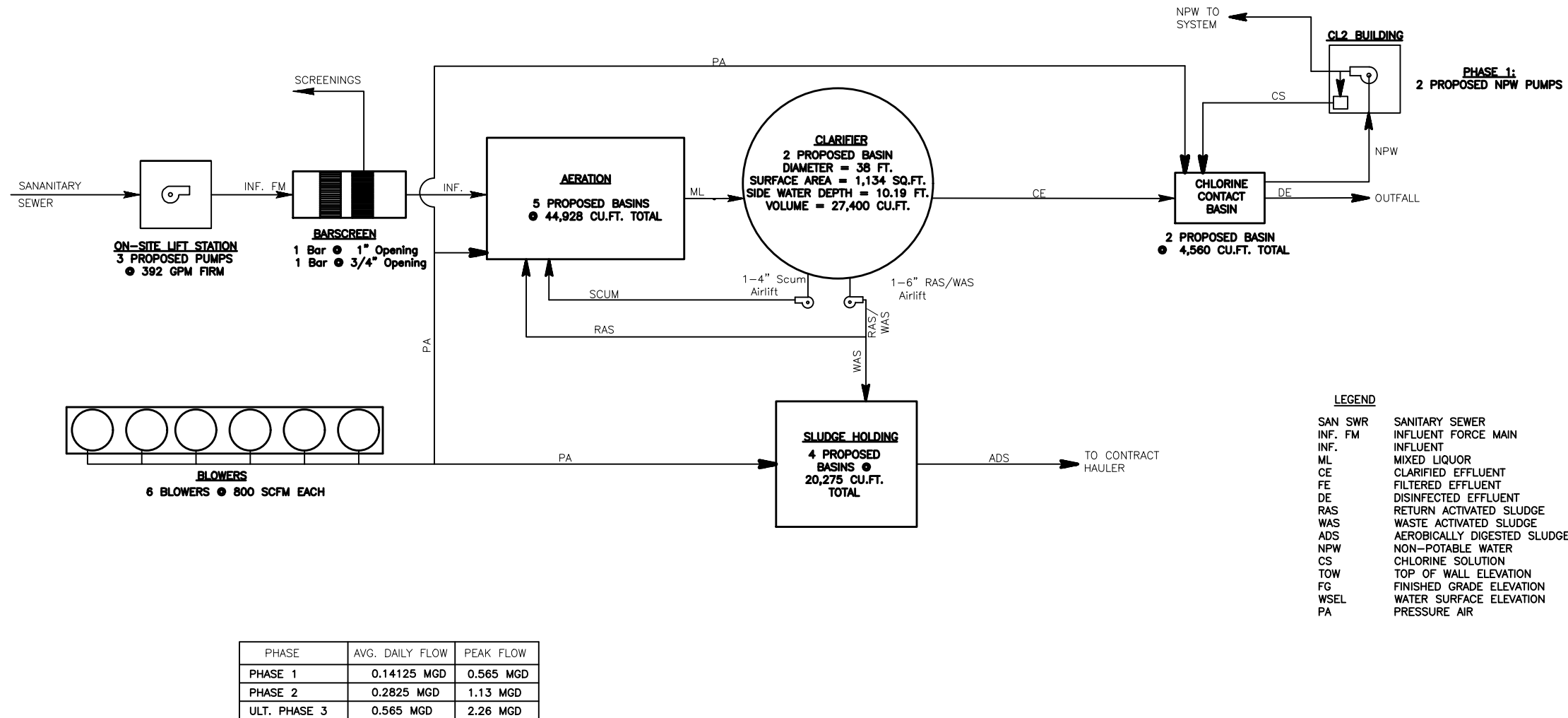
LJA Engineering, Inc.

3600 W. Sam Houston Parkway S.
Suite 600
Houston, Texas 77042

Phone 713.953.5200
Fax 713.953.5026
FRN - F-1386



Date\Time : Tue, 05 Dec 2023 - 8:46am User Name : rconfield
Path\Name : W:\LAND\1628\1652 Wisteria WWTP Permit\Design\ACAD\PROCESS FLOW DIAGRAM.dwg



APPENDIX NO. 12
PROCESS FLOW DIAGRAM – ULTIMATE

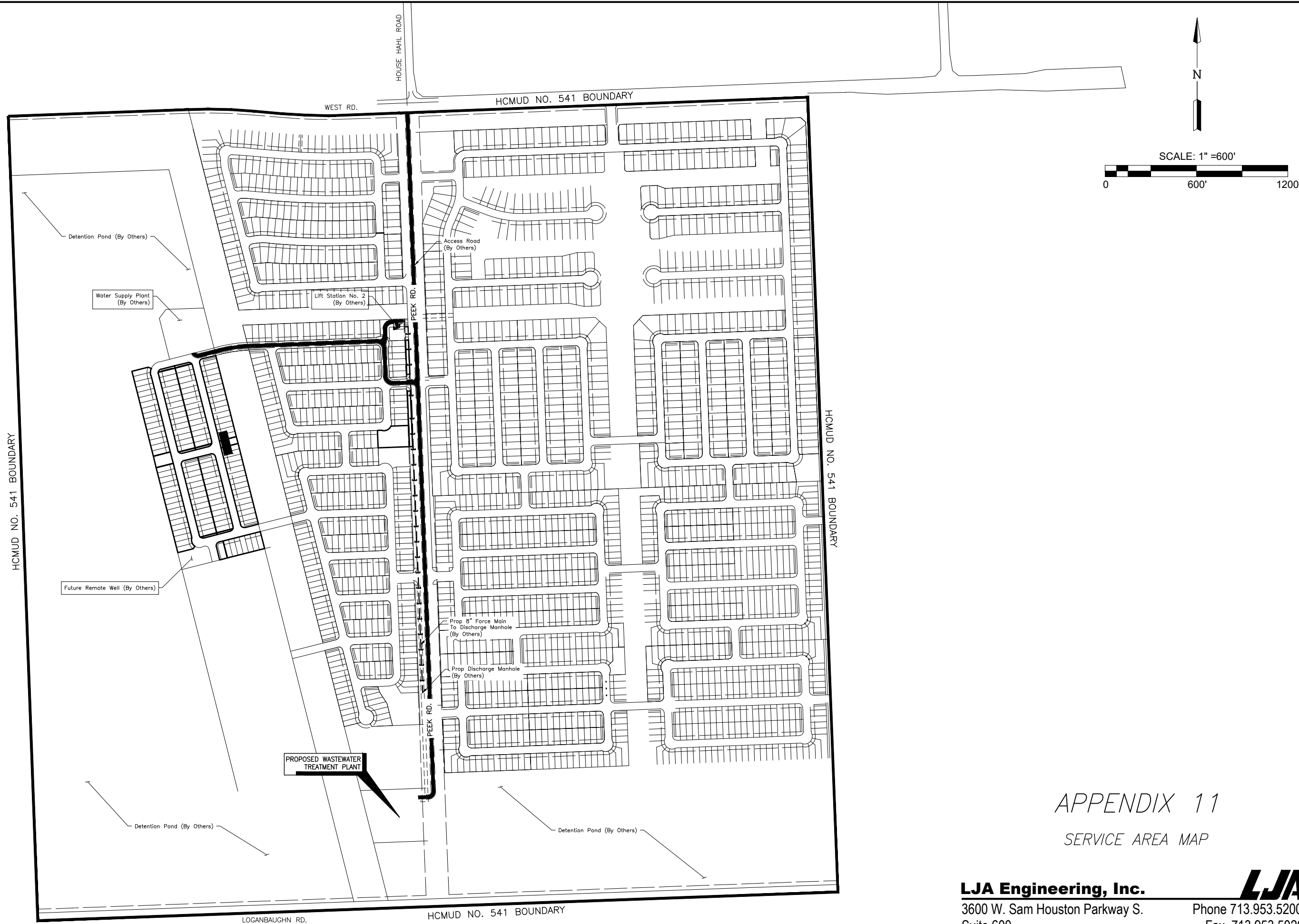
LJA Engineering, Inc.

3600 W. Sam Houston Parkway S.
Suite 600
Houston, Texas 77042

Phone 713.953.5200
Fax 713.953.5026
FRN - F-1386



Attachment 13: Service Area Map



APPENDIX 11
SERVICE AREA MAP

LJA Engineering, Inc.

3600 W. Sam Houston Parkway S.
Suite 600
Houston, Texas 77042

Phone 713.953.5200
Fax 713.953.5026
FRN - F-1386



Attachment 14: Nearby WWTP

WISTERIA DEVELOPMENT
DISCHARGE PERMIT

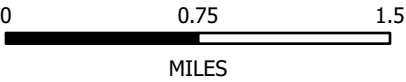
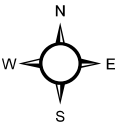
NEARBY DOMESTIC PERMITTED WWTFs
(WITHIN 3-MILE RADIUS)

OCTOBER 2023

LEGEND

- WASTEWATER OUTFALLS
- POINT OF DISCHARGE
- SITE BOUNDARY
- APPLICANT PROPERTY BOUNDARY
- 3-MILE RADIUS
- COUNTY LINE

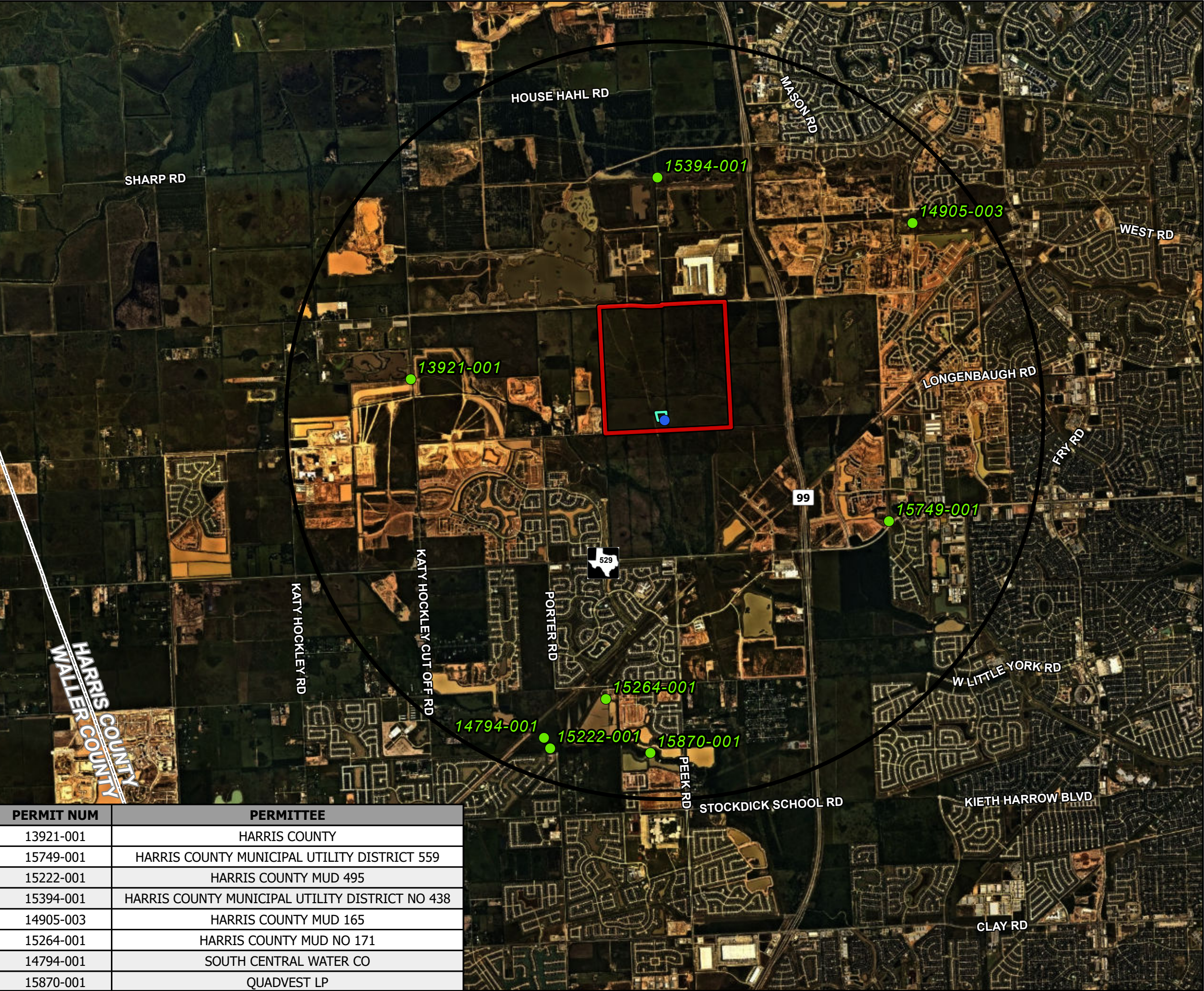
DATA SOURCE: TCEQ OUTFALLS - UPDATED OCTOBER 2023,
COUNTY LINE - H-GAC



AERIAL PHOTOGRAPH DATE: NEARMAP 2023

THIS PRODUCT IS FOR INFORMATIONAL PURPOSES AND MAY NOT
HAVE BEEN PREPARED FOR OR BE SUITABLE FOR LEGAL,
ENGINEERING, OR SURVEYING PURPOSES. IT DOES NOT REPRESENT
AN ON-THE-GROUND SURVEY AND REPRESENTS ONLY THE
APPROXIMATE RELATIVE LOCATION OF PROPERTY BOUNDARIES.

3600 W Sam Houston Parkway S, Suite 600
Houston, Texas 77042
Phone 713.953.5200 TBPE F-1386
LJA.com



PERMIT NUM	PERMITTEE
13921-001	HARRIS COUNTY
15749-001	HARRIS COUNTY MUNICIPAL UTILITY DISTRICT 559
15222-001	HARRIS COUNTY MUD 495
15394-001	HARRIS COUNTY MUNICIPAL UTILITY DISTRICT NO 438
14905-003	HARRIS COUNTY MUD 165
15264-001	HARRIS COUNTY MUD NO 171
14794-001	SOUTH CENTRAL WATER CO
15870-001	QUADVEST LP

Attachment 15: Capacity Request Letters



October 18, 2023

VIA CERTIFIED MAIL

Harris County
10555 Northwest Freeway, Suite 210
Houston, Texas 77092

Re: Wastewater Service Request for Harris County MUD No. 541 WWTP
LJA Job No. 1628-1652

To Whom It May Concern:

We are currently preparing an application for a discharge permit for the Harris County MUD No. 541 Wastewater Treatment Plant, in Harris County. The proposed development will require 0.565 MGD of wastewater service capacity. TCEQ regulations require us to contact all entities with a permitted wastewater treatment plant within three (3) miles of our plant, and to identify any available capacity at those facilities. Your referred wastewater treatment plant is within a three (3) mile radius from our facility. Please let us know if you have the extra capacity in your facility to accommodate the required flow or are willing to expand your facility to accommodate this flow.

Please respond in writing or indicating below on this letter if the Harris County Leadership Academy Wastewater Treatment Facility with TPDES Permit No. WQ0013921001 has available capacity. After you have made the required indication, please email Ryan Canfield at rcanfield@lja.com or mail the response back. We would appreciate a response within ten (10) days. Thank you in advance for your prompt attention regarding this matter.

Sincerely,

Ryan Canfield
Graduate Engineer

RC/pn

- ☐ Yes, our wastewater treatment facility has sufficient capacity to serve the proposed development. Contact Phone Number: _____
- ☐ No, our wastewater treatment facility does not have sufficient capacity to serve the proposed development.

Name: _____ Title: _____

Signature: _____ Date: _____



October 18, 2023

VIA CERTIFIED MAIL

Harris County MUD No. 559
c/o Allen Boone Humphries Robinson LLP
3200 Southwest Freeway, Suite 2600
Houston, Texas 77027

Re: Wastewater Service Request for Harris County MUD No. 541 WWTP
LJA Job No. 1628-1652

To Whom It May Concern:

We are currently preparing an application for a discharge permit for the Harris County MUD No. 541 Wastewater Treatment Plant, in Harris County. The proposed development will require 0.565 MGD of wastewater service capacity. TCEQ regulations require us to contact all entities with a permitted wastewater treatment plant within three (3) miles of our plant, and to identify any available capacity at those facilities. Your referred wastewater treatment plant is within a three (3) mile radius from our facility. Please let us know if you have the extra capacity in your facility to accommodate the required flow or are willing to expand your facility to accommodate this flow.

Please respond in writing or indicating below on this letter if the Harris County MUD No. 559 Wastewater Treatment Facility with TPDES Permit No. WQ0015749001 has available capacity. After you have made the required indication, please email Ryan Canfield at rcanfield@lja.com or mail the response back. We would appreciate a response within ten (10) days. Thank you in advance for your prompt attention regarding this matter.

Sincerely,

Ryan Canfield
Graduate Engineer

RC/pn

- ☐ Yes, our wastewater treatment facility has sufficient capacity to serve the proposed development. Contact Phone Number: _____
- ☐ No, our wastewater treatment facility does not have sufficient capacity to serve the proposed development.

Name: _____ Title: _____

Signature: _____ Date: _____



October 18, 2023

VIA CERTIFIED MAIL

Harris County MUD No. 559
c/o Allen Boone Humphries Robinson LLP
3200 Southwest Freeway, Suite 2600
Houston, Texas 77027

Re: Wastewater Service Request for Harris County MUD No. 541 WWTP
LJA Job No. 1628-1652

To Whom It May Concern:

We are currently preparing an application for a discharge permit for the Harris County MUD No. 541 Wastewater Treatment Plant, in Harris County. The proposed development will require 0.565 MGD of wastewater service capacity. TCEQ regulations require us to contact all entities with a permitted wastewater treatment plant within three (3) miles of our plant, and to identify any available capacity at those facilities. Your referred wastewater treatment plant is within a three (3) mile radius from our facility. Please let us know if you have the extra capacity in your facility to accommodate the required flow or are willing to expand your facility to accommodate this flow.

Please respond in writing or indicating below on this letter if the Harris County MUD No. 559 Wastewater Treatment Facility with TPDES Permit No. WQ0015749001 has available capacity. After you have made the required indication, please email Ryan Canfield at rcanfield@lja.com or mail the response back. We would appreciate a response within ten (10) days. Thank you in advance for your prompt attention regarding this matter.

Sincerely,

Ryan Canfield
Graduate Engineer

RC/pn

- ☐ Yes, our wastewater treatment facility has sufficient capacity to serve the proposed development. Contact Phone Number: _____
- ☒ No, our wastewater treatment facility does not have sufficient capacity to serve the proposed development.

Name: Ryan Lesikar, P.E. Title: District Engineer

Signature: Date: 10/30/2023



October 18, 2023

VIA CERTIFIED MAIL

Harris County MUD No. 495
c/o ABHR
3200 Southwest Freeway, Suite 2600
Houston, Texas 77027

Re: Wastewater Service Request for Harris County MUD No. 541 WWTP
LJA Job No. 1628-1652

To Whom It May Concern:

We are currently preparing an application for a discharge permit for the Harris County MUD No. 541 Wastewater Treatment Plant, in Harris County. The proposed development will require 0.565 MGD of wastewater service capacity. TCEQ regulations require us to contact all entities with a permitted wastewater treatment plant within three (3) miles of our plant, and to identify any available capacity at those facilities. Your referred wastewater treatment plant is within a three (3) mile radius from our facility. Please let us know if you have the extra capacity in your facility to accommodate the required flow or are willing to expand your facility to accommodate this flow.

Please respond in writing or indicating below on this letter if the Harris County MUD No. 495 Wastewater Treatment Facility with TPDES Permit No. WQ0015222001 has available capacity. After you have made the required indication, please email Ryan Canfield at rcanfield@lja.com or mail the response back. We would appreciate a response within ten (10) days. Thank you in advance for your prompt attention regarding this matter.

Sincerely,

Ryan Canfield
Graduate Engineer

RC/pn

- ☐ Yes, our wastewater treatment facility has sufficient capacity to serve the proposed development. Contact Phone Number: _____
- ☐ No, our wastewater treatment facility does not have sufficient capacity to serve the proposed development.

Name: _____ Title: _____

Signature: _____ Date: _____



October 18, 2023

VIA CERTIFIED MAIL

Harris County MUD No. 495
c/o ABHR
3200 Southwest Freeway, Suite 2600
Houston, Texas 77027



Re: Wastewater Service Request for Harris County MUD No. 541 WWTP
LJA Job No. 1628-1652

To Whom It May Concern:

We are currently preparing an application for a discharge permit for the Harris County MUD No. 541 Wastewater Treatment Plant, in Harris County. The proposed development will require 0.565 MGD of wastewater service capacity. TCEQ regulations require us to contact all entities with a permitted wastewater treatment plant within three (3) miles of our plant, and to identify any available capacity at those facilities. Your referred wastewater treatment plant is within a three (3) mile radius from our facility. Please let us know if you have the extra capacity in your facility to accommodate the required flow or are willing to expand your facility to accommodate this flow.

Please respond in writing or indicating below on this letter if the Harris County MUD No. 495 Wastewater Treatment Facility with TPDES Permit No. WQ0015222001 has available capacity. After you have made the required indication, please email Ryan Canfield at rcanfield@lja.com or mail the response back. We would appreciate a response within ten (10) days. Thank you in advance for your prompt attention regarding this matter.

Sincerely,

Ryan Canfield
Graduate Engineer

RC/pn

- ☐ Yes, our wastewater treatment facility has sufficient capacity to serve the proposed development. Contact Phone Number: _____
- ☒ No, our wastewater treatment facility does not have sufficient capacity to serve the proposed development.

Name: Chance Vinklarek Title: Project Manager

Signature: Date: 10/27/23



3600 W Sam Houston Pkwy S
Suite 600
Houston, Texas 77042

CERTIFIED MAIL®



9589 0710 5270 0480 1247 98

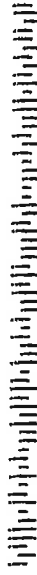


062S0014541257
\$8.530
US POSTAGE
FIRST-CLASS
77042 OCT 20 2023



HARRIS COUNTY MUD NO. 495
c/o Allen Boone Humphries Robinson LLP
3200 SOUTHWEST FWY STE 2600
HOUSTON TX 77027-7537

77027-753750





October 18, 2023

VIA CERTIFIED MAIL

Harris County MUD No. 438
c/o Allen Boone Humphries Robinson LLP
3200 Southwest Freeway, Suite 2600
Houston, Texas 77027

Re: Wastewater Service Request for Harris County MUD No. 541 WWTP
LJA Job No. 1628-1652

To Whom It May Concern:

We are currently preparing an application for a discharge permit for the Harris County MUD No. 541 Wastewater Treatment Plant, in Harris County. The proposed development will require 0.565 MGD of wastewater service capacity. TCEQ regulations require us to contact all entities with a permitted wastewater treatment plant within three (3) miles of our plant, and to identify any available capacity at those facilities. Your referred wastewater treatment plant is within a three (3) mile radius from our facility. Please let us know if you have the extra capacity in your facility to accommodate the required flow or are willing to expand your facility to accommodate this flow.

Please respond in writing or indicating below on this letter if the Harris County MUD No. 438 Wastewater Treatment Facility with TPDES Permit No. WQ0015394001 has available capacity. After you have made the required indication, please email Ryan Canfield at rcanfield@lja.com or mail the response back. We would appreciate a response within ten (10) days. Thank you in advance for your prompt attention regarding this matter.

Sincerely,

Ryan Canfield
Graduate Engineer

RC/pn

- ☐ Yes, our wastewater treatment facility has sufficient capacity to serve the proposed development. Contact Phone Number: _____
- ☐ No, our wastewater treatment facility does not have sufficient capacity to serve the proposed development.

Name: _____ Title: _____

Signature: _____ Date: _____



October 18, 2023

VIA CERTIFIED MAIL

Harris County MUD No. 438
c/o Allen Boone Humphries Robinson LLP
3200 Southwest Freeway, Suite 2600
Houston, Texas 77027

Re: Wastewater Service Request for Harris County MUD No. 541 WWTP
LJA Job No. 1628-1652

To Whom It May Concern:

We are currently preparing an application for a discharge permit for the Harris County MUD No. 541 Wastewater Treatment Plant, in Harris County. The proposed development will require 0.565 MGD of wastewater service capacity. TCEQ regulations require us to contact all entities with a permitted wastewater treatment plant within three (3) miles of our plant, and to identify any available capacity at those facilities. Your referred wastewater treatment plant is within a three (3) mile radius from our facility. Please let us know if you have the extra capacity in your facility to accommodate the required flow or are willing to expand your facility to accommodate this flow.

Please respond in writing or indicating below on this letter if the Harris County MUD No. 438 Wastewater Treatment Facility with TPDES Permit No. WQ0015394001 has available capacity. After you have made the required indication, please email Ryan Canfield at rcanfield@lja.com or mail the response back. We would appreciate a response within ten (10) days. Thank you in advance for your prompt attention regarding this matter.

Sincerely,

Ryan Canfield
Graduate Engineer

RC/pn

- ☐ Yes, our wastewater treatment facility has sufficient capacity to serve the proposed development. Contact Phone Number: _____
- ☒ No, our wastewater treatment facility does not have sufficient capacity to serve the proposed development.

Name: Ethan Demary Title: District Engineer, HCMUD 438
Signature: Ethan Demary Date: 11/2/2023



October 18, 2023

VIA CERTIFIED MAIL

Harris County MUD No. 165
3200 Southwest Freeway, Suite 2600
Houston, Texas 77027

Re: Wastewater Service Request for Harris County MUD No. 541 WWTP
LJA Job No. 1628-1652

To Whom It May Concern:

We are currently preparing an application for a discharge permit for the Harris County MUD No. 541 Wastewater Treatment Plant, in Harris County. The proposed development will require 0.565 MGD of wastewater service capacity. TCEQ regulations require us to contact all entities with a permitted wastewater treatment plant within three (3) miles of our plant, and to identify any available capacity at those facilities. Your referred wastewater treatment plant is within a three (3) mile radius from our facility. Please let us know if you have the extra capacity in your facility to accommodate the required flow or are willing to expand your facility to accommodate this flow.

Please respond in writing or indicating below on this letter if the Harris County MUD No. 165 Wastewater Treatment Facility with TPDES Permit No. WQ0014905003 has available capacity. After you have made the required indication, please email Ryan Canfield at rcanfield@lja.com or mail the response back. We would appreciate a response within ten (10) days. Thank you in advance for your prompt attention regarding this matter.

Sincerely,

Ryan Canfield
Graduate Engineer

RC/pn

- ☐ Yes, our wastewater treatment facility has sufficient capacity to serve the proposed development. Contact Phone Number: _____
- ☐ No, our wastewater treatment facility does not have sufficient capacity to serve the proposed development.

Name: _____ Title: _____

Signature: _____ Date: _____

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

Harris County MUD No. 165
c/o Allen Boone Humphries Robinson LLP
3200 Southwest Freeway, Suite 2600
Houston, Texas 77027



9590 9402 7556 2098 2050 09

2. Article Number (Transfer from service label)

9589 0710 5270 0480 1247 67

COMPLETE THIS SECTION ON DELIVERY

A. Signature

X

RECEIVED

- ☐
- Agent
-
- ☐
- Addressee

B. Received by (Printed Name)

ABHR

C. Date of Delivery

16/26

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☐ No

3. Service Type

- ☐
- Adult Signature
-
- ☐
- Adult Signature Restricted Delivery
-
- ☐
- Certified Mail®
-
- ☐
- Certified Mail Restricted Delivery
-
- ☐
- Collect on Delivery
-
- ☐
- Collect on Delivery Restricted Delivery

- ☐
- Priority Mail Express®
-
- ☐
- Registered Mail™
-
- ☐
- Registered Mail Restricted Delivery
-
- ☐
- Signature Confirmation™
-
- ☐
- Signature Confirmation Restricted Delivery

Restricted Delivery

USPS TRACKING #

NORTH HOUSTON TX 773

26 OCT 2023 PM 1 L

First-Class Mail
Postage & Fees Paid
USPS
Permit No. G-10

9590 9402 7556 2098 2050 09

United States
Postal Service

• Sender: Please print your name, address, and ZIP+4® in this box •

LJA Engineering
3600 W. Sam Houston Pkwy. S. Ste. #600
Houston, Texas 77042

Ryan Canfield
Job #: 1628-1652

10/20/23



October 18, 2023

VIA CERTIFIED MAIL

Harris County MUD No. 171
c/o Allen Boone Humphries Robinson LLP
3200 Southwest Freeway, Suite 2600
Houston, Texas 77027

Re: Wastewater Service Request for Harris County MUD No. 541 WWTP
LJA Job No. 1628-1652

To Whom It May Concern:

We are currently preparing an application for a discharge permit for the Harris County MUD No. 541 Wastewater Treatment Plant, in Harris County. The proposed development will require 0.565 MGD of wastewater service capacity. TCEQ regulations require us to contact all entities with a permitted wastewater treatment plant within three (3) miles of our plant, and to identify any available capacity at those facilities. Your referred wastewater treatment plant is within a three (3) mile radius from our facility. Please let us know if you have the extra capacity in your facility to accommodate the required flow or are willing to expand your facility to accommodate this flow.

Please respond in writing or indicating below on this letter if the Harris County MUD No. 171 Wastewater Treatment Facility with TPDES Permit No. WQ0015264001 has available capacity. After you have made the required indication, please email Ryan Canfield at rcanfield@lja.com or mail the response back. We would appreciate a response within ten (10) days. Thank you in advance for your prompt attention regarding this matter.

Sincerely,

Ryan Canfield
Graduate Engineer

RC/pn

- ☐ Yes, our wastewater treatment facility has sufficient capacity to serve the proposed development. Contact Phone Number: _____
- ☐ No, our wastewater treatment facility does not have sufficient capacity to serve the proposed development.

Name: _____ Title: _____

Signature: _____ Date: _____



October 18, 2023

VIA CERTIFIED MAIL

Harris County MUD No. 171
c/o Allen Boone Humphries Robinson LLP
3200 Southwest Freeway, Suite 2600
Houston, Texas 77027

Re: Wastewater Service Request for Harris County MUD No. 541 WWTP
LJA Job No. 1628-1652

To Whom It May Concern:

We are currently preparing an application for a discharge permit for the Harris County MUD No. 541 Wastewater Treatment Plant, in Harris County. The proposed development will require 0.565 MGD of wastewater service capacity. TCEQ regulations require us to contact all entities with a permitted wastewater treatment plant within three (3) miles of our plant, and to identify any available capacity at those facilities. Your referred wastewater treatment plant is within a three (3) mile radius from our facility. Please let us know if you have the extra capacity in your facility to accommodate the required flow or are willing to expand your facility to accommodate this flow.

Please respond in writing or indicating below on this letter if the Harris County MUD No. 171 Wastewater Treatment Facility with TPDES Permit No. WQ0015264001 has available capacity. After you have made the required indication, please email Ryan Canfield at rcanfield@lja.com or mail the response back. We would appreciate a response within ten (10) days. Thank you in advance for your prompt attention regarding this matter.

Sincerely,

Ryan Canfield
Graduate Engineer

RC/pn

- ☐ Yes, our wastewater treatment facility has sufficient capacity to serve the proposed development. Contact Phone Number: _____
- ☒ No, our wastewater treatment facility does not have sufficient capacity to serve the proposed development.

Name: Melinda Salazar Title: District Engineer

Signature: Melinda S. Salazar Date: 10/30/23



October 18 2023

VIA CERTIFIED MAIL

South Central Water Company
P.O. Box 570177
Houston, Texas 77257

Re: Wastewater Service Request for Harris County MUD No. 541 WWTP
LJA Job No. 1628-1652

To Whom It May Concern:

We are currently preparing an application for a discharge permit for the Harris County MUD No. 541 Wastewater Treatment Plant, in Harris County. The proposed development will require 0.565 MGD of wastewater service capacity. TCEQ regulations require us to contact all entities with a permitted wastewater treatment plant within three (3) miles of our plant, and to identify any available capacity at those facilities. Your referred wastewater treatment plant is within a three (3) mile radius from our facility. Please let us know if you have the extra capacity in your facility to accommodate the required flow or are willing to expand your facility to accommodate this flow.

Please respond in writing or indicating below on this letter if the Katy-Hockley Cut-off Wastewater Treatment Facility with TPDES Permit No. WQ0014794001 has available capacity. After you have made the required indication, please email Ryan Canfield at rcanfield@lja.com or mail the response back. We would appreciate a response within ten (10) days. Thank you in advance for your prompt attention regarding this matter.

Sincerely,

Ryan Canfield
Graduate Engineer

RC/pn

- ☐ Yes, our wastewater treatment facility has sufficient capacity to serve the proposed development. Contact Phone Number: _____
- ☐ No, our wastewater treatment facility does not have sufficient capacity to serve the proposed development.

Name: _____ Title: _____

Signature: _____ Date: _____



October 18, 2023

VIA CERTIFIED MAIL

Quadvest, L.P.
26926 FM 2978
Magnolia, Texas 77354

Re: Wastewater Service Request for Harris County MUD No. 541 WWTP
LJA Job No. 1628-1652

To Whom It May Concern:

We are currently preparing an application for a discharge permit for the Harris County MUD No. 541 Wastewater Treatment Plant, in Harris County. The proposed development will require 0.565 MGD of wastewater service capacity. TCEQ regulations require us to contact all entities with a permitted wastewater treatment plant within three (3) miles of our plant, and to identify any available capacity at those facilities. Your referred wastewater treatment plant is within a three (3) mile radius from our facility. Please let us know if you have the extra capacity in your facility to accommodate the required flow or are willing to expand your facility to accommodate this flow.

Please respond in writing or indicating below on this letter if the Quadvest Wastewater Treatment Facility with TPDES Permit No. WQ0015870001 has available capacity. After you have made the required indication, please email Ryan Canfield at rcanfield@lja.com or mail the response back. We would appreciate a response within ten (10) days. Thank you in advance for your prompt attention regarding this matter.

Sincerely,

Ryan Canfield
Graduate Engineer

RC/pn

- ☐ Yes, our wastewater treatment facility has sufficient capacity to serve the proposed development. Contact Phone Number: _____
- ☐ No, our wastewater treatment facility does not have sufficient capacity to serve the proposed development.

Name: _____ Title: _____

Signature: _____ Date: _____



October 18, 2023

VIA CERTIFIED MAIL

Quadvest, L.P.
26926 FM 2978
Magnolia, Texas 77354

Re: Wastewater Service Request for Harris County MUD No. 541 WWTP
LJA Job No. 1628-1652

To Whom It May Concern:

We are currently preparing an application for a discharge permit for the Harris County MUD No. 541 Wastewater Treatment Plant, in Harris County. The proposed development will require 0.565 MGD of wastewater service capacity. TCEQ regulations require us to contact all entities with a permitted wastewater treatment plant within three (3) miles of our plant, and to identify any available capacity at those facilities. Your referred wastewater treatment plant is within a three (3) mile radius from our facility. Please let us know if you have the extra capacity in your facility to accommodate the required flow or are willing to expand your facility to accommodate this flow.

Please respond in writing or indicating below on this letter if the Quadvest Wastewater Treatment Facility with TPDES Permit No. WQ0015870001 has available capacity. After you have made the required indication, please email Ryan Canfield at rcanfield@lja.com or mail the response back. We would appreciate a response within ten (10) days. Thank you in advance for your prompt attention regarding this matter.

Sincerely,

Ryan Canfield
Graduate Engineer

RC/pn

- ☐ Yes, our wastewater treatment facility has sufficient capacity to serve the proposed development. Contact Phone Number: _____
- ☒ No, our wastewater treatment facility does not have sufficient capacity to serve the proposed development.

Name: MARK L. URBACH Title: VP- CONST. & ENG.
Signature: [Handwritten Signature] Date: 10/26/23

Attachment 16: WWTP Design Calculations

Project Name: Harris County MUD No. 541

Wisteria Wastewater Treatment Plant

Process Design Calculations

Project #: 1628-1652

Phase 1	Phase 2	Ult Phase
---------	---------	-----------

WWTP Influent Flow

Average Daily Flow	gpd	141,250	282,500	565,000
Peaking Factor		4	4	4
Peak Flow	gpd	565,000	1,130,000	2,260,000
Equivalent Single Family Connections	ESFC	565	1,130	2,260
Water Usage per Connection	gal/ESFC	250	250	250

WWTP Organic Parameters

BOD ₅	300 mg/L			
NH ₃	64 mg/L			
BOD Loading	lbs/d	353	707	1,414

Aeration Basin Design

Process Description	Temperatures Exceed 15C			
Organic Loading Rate	35	lbs BOD5/day/1,000ft ³		
Minimum Free Board	1.5	ft		
Minimum Aeration Volume	ft ³	10,097	20,195	40,389
Number of Tanks		2	3	5
Length	ft	60	60	60
Width	ft	12	12	12
Height of Basin	ft	13.2	13.2	13.2
Calculated Side Water Depth at Peak Flow		11.70	11.70	11.70
Proposed Free Board at Peak Flow	ft	1.50	1.50	1.50
Proposed Volume	ft ³	16,848	25,272	42,120

Secondary Clarifier Design

Process Description	Activated Sludge - Secondary, Enhanced Secondary, or Secondary With			
Maximum Surface Loading @ 2-hr Peak Flow	1,200	gpd/ft ²		
Minimum Detention Time	1.8	hrs		
Minimum SWD	10	ft		
Minimum Free Board	1	ft		
Maximum Weir Loading		20,000	20,000	20,000
Maximum Vertical Velocity in Stilling Well	0.15	ft/s		
Minimum Surface Area Required	ft ²	471	942	1883
Number of Clarifiers		1	1	2
Diameter	ft	38	38	38
Proposed Weir Loading	gpd/lf	4,996	9,991	9,991
Height of Clarifier	ft	14.00	14.00	14.00
Calculated Side Water Depth	ft	10.19	10.2	12.1
Proposed Free Board at Peak Flow	ft	1.50	1.50	1.50
Proposed Surface Area	ft ²	1,134	1,134	2,268
Proposed Volume	ft ³	11,559	11,586	27,400
Proposed Detention Time	hrs	3.67	1.84	2.18
Stilling Well Diameter	ft	8.0	8.0	8.0
Proposed Stilling Well Velocity	ft/s	0.02	0.03	0.03

Chlorine Contact Basin

Minimum Contact Time	20	min
----------------------	----	-----

Minimum Free Board		1	ft	
Number of Basins		1	1	2
Width of Tank	ft	12	12	12
Height of Tank	ft	10.5	10.5	10.5
Proposed Length of Tank	ft	20	20	20
Proposed Side Water Depth at Peak Flow	ft	9.50	9.50	9.50
Free Board at Peak Flow	ft	1.00	1.00	1.00
Proposed Volume	ft ³	2,280	2,280	4,560
Proposed Detention Time	min	43.47	21.73	21.73

Aerobic Digester Design

Volatile Solids Wasted (From Solids Balance)	lbs/d	259	517	1034
TCEQ Loading Rate	lbs/d/1,000ft ³	200		

$$V = \frac{P_{x,tss}}{\text{Loading Rate}}$$

Minimum Required Volume	ft ³	1,293	2,585	5,171
Number of Digesters		2	2	4
Width	ft	12	12	12
Depth	ft	13.2	13.2	13.2
Length	ft	30	30	30
Proposed Volume	ft ³	9,504	9,504	19,008

Chlorine Dosage Requirements

Type of Effluent	Activated Sludge			
Chlorine Concentration	8 mg/L			
Storage of Chlorine Tanks	Temperature-Controlled Enclosure			
Low Ambient Temperature	65 °F			
Required Chlorine Dosage	lbs/d	38	75	151
Withdrawal Rate per 150-lb Chlorine Cylinder	65 lbs/d			
Withdrawal Rate per 1-ton Chlorine Cylinder	520 lbs/d			
Number of 150-lb Chlorine Cylinders per Bank		2	2	4
Number of 1-ton Chlorine Cylinders per Bank		0	0	0
Proposed Maximum Chlorine Withdrawal Rate		130	130	260

Air Requirements

Aeration Basins

Type of Diffuser	Coarse Bubble Diffuser			
Transfer Efficiency Factor	0.65			
Depth of Diffuser		10.25	10.32	10.97
Submergence Correction Factor		1.49	1.47	1.29
Clean Water Transfer Efficiency	8.40%			
Wastewater Transfer Efficiency	5.46%			
Aeration Oxygen Requirement	2.12 lb O ₂ /lb BOD ₅			
Aeration Airflowrate	scfm	822	1,623	2,843
Mixing Oxygen Requirement	20 scfm/1,000 ft ³			
Mixing Airflowrate	scfm	337	505	-
Required Airflowrate	scfm	822	1,623	2,843

Aerobic Digester

Type of Diffuser	Coarse Bubble Diffuser			
Required Mixing Air Rate	20 scfm/1,000 ft ³			
Required Airflowrate	scfm	190.08	190.08	380.16

Chlorine Contact Basin

Effluent DO Concentration	4 mg/L			
Initial DO Concentration*	0 mg/L			
Diffuser Capacity	150%			
Required Oxygen at Peak Flow	lb O ₂ /d	18.86	37.72	75.43
Required Airflowrate	scfm	13.90	27.81	55.62
Airflowrate Required by Diffusers		20.86	41.71	83.43
Minimum Airdrops (10 scfm)		3	5	9

* Minimum DO Concentration in the Aeration Basin is 2 mg/L however, to be conservative an estimated DO of 0 mg/L has been assumed entering the CCB

Airlifts

Amount Required	110 scfm
-----------------	----------

Total Air Requirement

Total Plant Required Air	scfm	1,136	1,951	3,389
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Blower Sizing

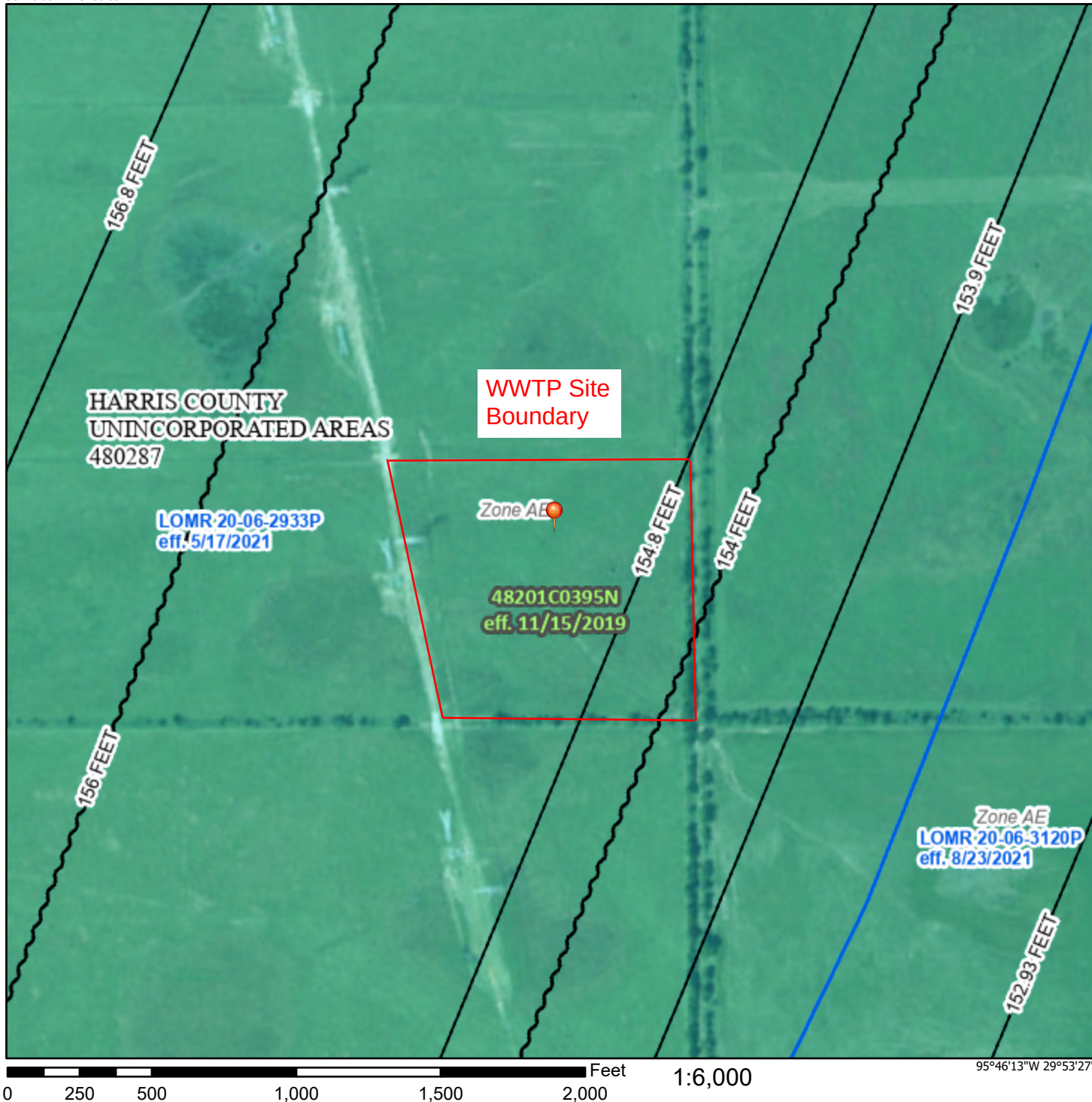
Blower Capacity	700 scfm			
Blower Required		2	3	5
Proposed Blowers		3	4	6

Attachment 17: FEMA Map

National Flood Hazard Layer FIRMette



95°46'50"W 29°53'59"N



Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS		Without Base Flood Elevation (BFE) Zone A, V, A99
		With BFE or Depth Zone AE, AO, AH, VE, AR
		Regulatory Floodway
OTHER AREAS OF FLOOD HAZARD		0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile Zone X
		Future Conditions 1% Annual Chance Flood Hazard Zone X
		Area with Reduced Flood Risk due to Levee. See Notes. Zone X
		Area with Flood Risk due to Levee Zone D
OTHER AREAS		NO SCREEN Area of Minimal Flood Hazard Zone X
		Effective LOMRs
GENERAL STRUCTURES		Area of Undetermined Flood Hazard Zone D
		Channel, Culvert, or Storm Sewer
OTHER FEATURES		Levee, Dike, or Floodwall
		Cross Sections with 1% Annual Chance Water Surface Elevation
MAP PANELS		Coastal Transect
		Base Flood Elevation Line (BFE)
OTHER FEATURES		Limit of Study
		Jurisdiction Boundary
OTHER FEATURES		Coastal Transect Baseline
		Profile Baseline
OTHER FEATURES		Hydrographic Feature
		Digital Data Available
MAP PANELS		No Digital Data Available
		Unmapped



The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on **10/18/2023 at 1:33 PM** and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

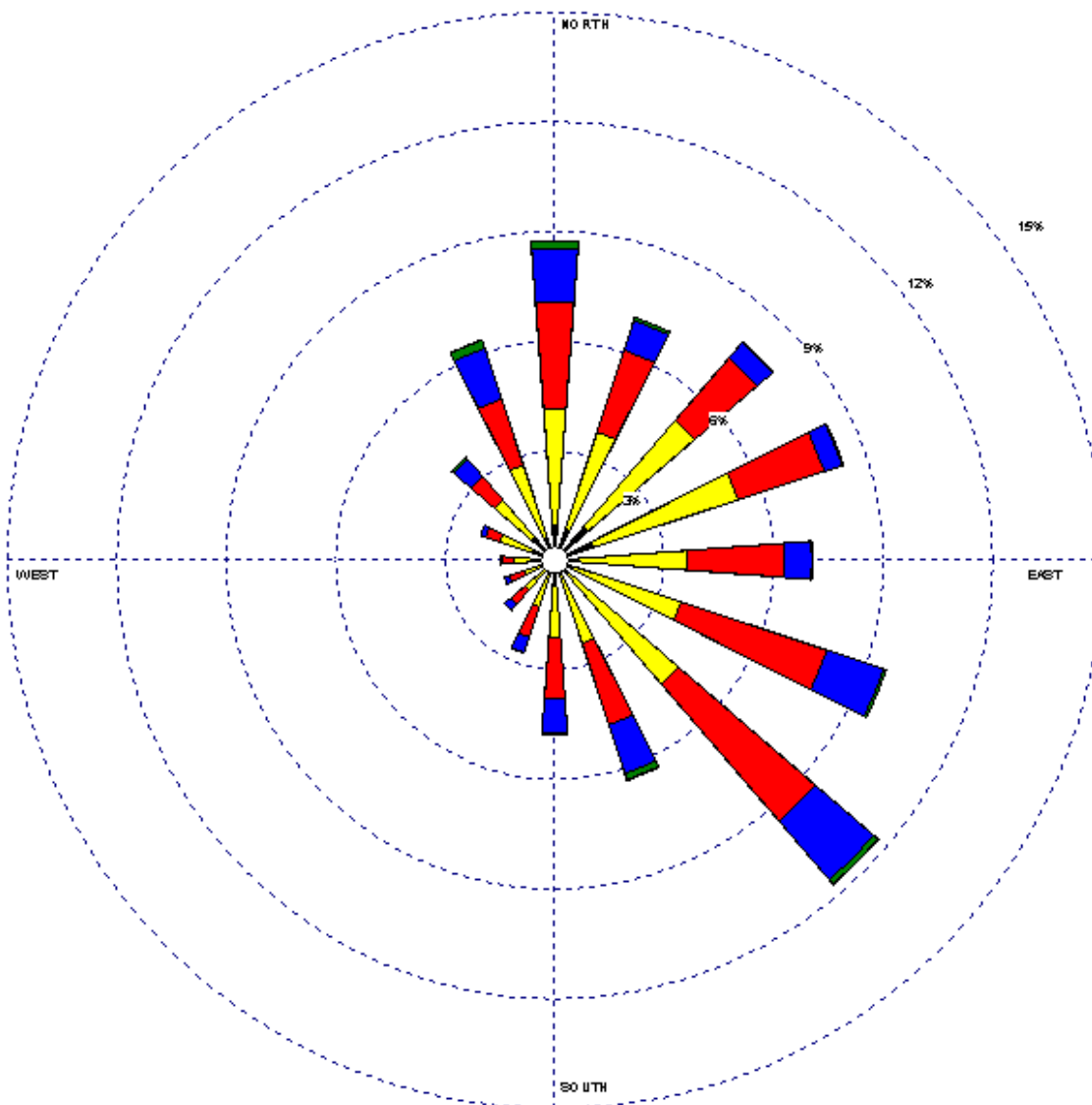
This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

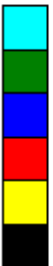
Basemap Imagery Source: USGS National Map 2023

Attachment 18: Wind Rose

WIND ROSE PLOT

Station #12960 - HOUSTON/INTERCONTINENTAL ARPT, TX



Wind Speed (m/s) 	MODELER Sara West	DATE 8/29/2002	COMPANY NAME USDA-ARS
	DISPLAY Wind Speed	UNIT m/s	COMMENTS
	AVG. WIND SPEED 3.71 m/s	CALM WINDS 8.83%	
	ORIENTATION Direction (blowing from)	PLOT YEAR-DATE-TIME 1961 Oct 1 - Oct 31 Midnight - 11 PM	

 WRPLOT 3.0 by Caldoc Environmental Software - www.caldoc-environmental.com

Attachment 19: Sludge Management Plan

ATTACHMENT - 19

Sludge Management Plan

Phase 1 - 0.14125 MGD

Influent Design Flow	0.14125	MGD
Influent BOD ₅ Concentration	325	mg/L
Aerobic Digester Volume	71,084	Gal
Aeration Basin MLSS	2000	mg/L

SOLIDS GENERATED	100% Flow	75% Flow	50% Flow	25% Flow
Pounds (lbs) Influent BOD ₅	383	287	191	96
Pounds (lbs) of digested dry sludge produced*	134	101	67	34
Pounds (lbs) of wet sludge produced	6700	5025	3350	1675
Gallons (Gal) of wet sludge produced	803	603	402	201

*Assuming 0.35 pounds of digested dry sludge produced per pound of influent BOD₅ at average temperature and 2.0% solids concentration in the digester

Sludge will be wasted from the RAS flow stream to the aerobic digester.

Sludge solids will be stabilized in the digester

Supernatant will be decanted from the digester and returned to the plant headworks for treatment.

REMOVAL SCHEDULE (DAYS)	100% Flow	75% Flow	50% Flow	25% Flow
Days between sludge removal	11	14	21	43

Liquid digested sludge will be removed from the digester for disposal on a regular basis as required.

The calculated mean cell residence time (MCRT) for the digester storage volume of 71084 gal will be approximately 88 days at 100% capacity and annual average digested sludge produced of 134 ppd.

ATTACHMENT - 19

Sludge Management Plan

Phase 2 - 0.2825 MGD

Influent Design Flow	0.2825	MGD
Influent BOD ₅ Concentration	325	mg/L
Aerobic Digester Volume	71,084	Gal
Aeration Basin MLSS	2000	mg/L

SOLIDS GENERATED	100% Flow	75% Flow	50% Flow	25% Flow
Pounds (lbs) Influent BOD ₅	766	574	383	191
Pounds (lbs) of digested dry sludge produced*	268	201	134	67
Pounds (lbs) of wet sludge produced	13400	10050	6700	3350
Gallons (Gal) of wet sludge produced	1607	1205	803	402

*Assuming 0.35 pounds of digested dry sludge produced per pound of influent BOD₅ at average temperature and 2.0% solids concentration in the digester

Sludge will be wasted from the RAS flow stream to the aerobic digester.

Sludge solids will be stabilized in the digester

Supernatant will be decanted from the digester and returned to the plant headworks for treatment.

REMOVAL SCHEDULE (DAYS)	100% Flow	75% Flow	50% Flow	25% Flow
Days between sludge removal	5	7	11	21

Liquid digested sludge will be removed from the digester for disposal on a regular basis as required.

The calculated mean cell residence time (MCRT) for the digester storage volume of 71084 gal will be approximately 44 days at 100% capacity and annual average digested sludge produced of 268 ppd.

ATTACHMENT - 19
Sludge Management Plan
Ultimate - 0.565 MGD

Influent Design Flow	0.565 MGD
Influent BOD ₅ Concentration	325 mg/L
Aerobic Digester Volume	142,169 Gal
Aeration Basin MLSS	2000 mg/L

SOLIDS GENERATED	100% Flow	75% Flow	50% Flow	25% Flow
Pounds (lbs) Influent BOD ₅	1531	1149	766	383
Pounds (lbs) of digested dry sludge produced*	536	402	268	134
Pounds (lbs) of wet sludge produced	26800	20100	13400	6700
Gallons (Gal) of wet sludge produced	3213	2410	1607	803

*Assuming 0.35 pounds of digested dry sludge produced per pound of influent BOD₅ at average temperature and 2.0% solids concentration in the digester

Sludge will be wasted from the RAS flow stream to the aerobic digester.

Sludge solids will be stabilized in the digester

Supernatant will be decanted from the digester and returned to the plant headworks for treatment.

REMOVAL SCHEDULE (DAYS)	100% Flow	75% Flow	50% Flow	25% Flow
Days between sludge removal	5	7	11	21

Liquid digested sludge will be removed from the digester for disposal on a regular basis as required.

The calculated mean cell residence time (MCRT) for the digester storage volume of 142169 gal will be approximately 44 days at 100% capacity and annual average digested sludge produced of 536 ppd.

Attachment 20: TCEQ ePay

Your transaction is complete. Thank you for using TCEQ ePay.

Note: It may take up to 3 working days for this electronic payment to be processed and be reflected in the TCEQ ePay system. Print this receipt and the vouchers for your records. An email receipt has also been sent.

Transaction Information

Trace Number: 582EA000626920

Date: 09/26/2024 11:08 AM

Payment Method: CC - Authorization 0000026809

ePay Actor: RYAN CANFIELD

Actor Email: rcanfield@lja.com

IP: 209.133.67.114

TCEQ Amount: \$1,650.00

Texas.gov Price: \$1,687.38*

* This service is provided by Texas.gov, the official website of Texas. The price of this service includes funds that support the ongoing operations and enhancements of Texas.gov, which is provided by a third party in partnership with the State.

Payment Contact Information

Name: MARGARET GILLENLINE

Company: LJA ENGINEERING INC

Address: 3600 W SAM HOUSTON PKWY S, HOUSTON, TX 77042

Phone: 713-953-5100

Cart Items

Click on the voucher number to see the voucher details.

Voucher	Fee Description	AR Number	Amount
722948	WW PERMIT - FACILITY WITH FLOW >= .50 & < 1.0 MGD - NEW AND MAJOR AMENDMENTS		\$1,600.00
722949	30 TAC 305.53B WQ NOTIFICATION FEE		\$50.00
TCEQ Amount:			\$1,650.00

ePay AgainExit ePay

Note: It may take up to 3 working days for this electronic payment to be processed and be reflected in the TCEQ ePay system. Print this receipt for your records.

TCEQ ePay Voucher Receipt

Transaction Information

Voucher Number:	722948
Trace Number:	582EA000626920
Date:	09/26/2024 11:08 AM
Payment Method:	CC - Authorization 0000026809
Voucher Amount:	\$1,600.00
Fee Type:	WW PERMIT - FACILITY WITH FLOW >= .50 & < 1.0 MGD - NEW AND MAJOR AMENDMENTS
ePay Actor:	RYAN CANFIELD

Payment Contact Information

Name:	MARGARET GILLENLINE
Company:	LJA ENGINEERING INC
Address:	3600 W SAM HOUSTON PKWY S, HOUSTON, TX 77042
Phone:	713-953-5100

Site Information

Site Name:	HARRIS COUNTY MUD NO 541 WWTP
Site Location:	APPROXIMATELY 1 MILE NORTHWEST OF INTERSECTION OF LONGENBAUGH RD AND GRAND PKWY

Customer Information

Customer Name:	HARRIS COUNTY MUD NO 541
Customer Address:	3200 SOUTHWEST FREEWAY, HOUSTON, TX 77027

TCEQ ePay Voucher Receipt

Transaction Information

Voucher Number: 722949
Trace Number: 582EA000626920
Date: 09/26/2024 11:08 AM
Payment Method: CC - Authorization 0000026809
Voucher Amount: \$50.00
Fee Type: 30 TAC 305.53B WQ NOTIFICATION FEE
ePay Actor: RYAN CANFIELD

Payment Contact Information

Name: MARGARET GILLENLINE
Company: LJA ENGINEERING INC
Address: 3600 W SAM HOUSTON PKWY S, HOUSTON, TX 77042
Phone: 713-953-5100



TCEQ Core Data Form

For detailed instructions on completing this form, please read the Core Data Form Instructions or call 512-239-5175.

SECTION I: General Information

1. Reason for Submission (If other is checked please describe in space provided.)		
☒ New Permit, Registration or Authorization (Core Data Form should be submitted with the program application.)		
☐ Renewal (Core Data Form should be submitted with the renewal form)		☐ Other
2. Customer Reference Number (if issued)	Follow this link to search for CN or RN numbers in Central Registry**	3. Regulated Entity Reference Number (if issued)
CN		RN

SECTION II: Customer Information

4. General Customer Information		5. Effective Date for Customer Information Updates (mm/dd/yyyy)			
☒ New Customer ☐ Update to Customer Information ☐ Change in Regulated Entity Ownership					
☐ Change in Legal Name (Verifiable with the Texas Secretary of State or Texas Comptroller of Public Accounts)					
<i>The Customer Name submitted here may be updated automatically based on what is current and active with the Texas Secretary of State (SOS) or Texas Comptroller of Public Accounts (CPA).</i>					
6. Customer Legal Name (If an individual, print last name first: eg: Doe, John)				<i>If new Customer, enter previous Customer below:</i>	
Harris County Municipal Utility District No. 541					
7. TX SOS/CPA Filing Number		8. TX State Tax ID (11 digits)		9. Federal Tax ID (9 digits)	10. DUNS Number (if applicable)
11. Type of Customer:		☒ Corporation		☐ Individual	Partnership: ☐ General ☐ Limited
Government: ☐ City ☐ County ☐ Federal ☐ Local ☐ State ☐ Other		☐ Sole Proprietorship		☐ Other:	
12. Number of Employees				13. Independently Owned and Operated?	
☒ 0-20 ☐ 21-100 ☐ 101-250 ☐ 251-500 ☐ 501 and higher				☐ Yes ☐ No	
14. Customer Role (Proposed or Actual) – as it relates to the Regulated Entity listed on this form. Please check one of the following					
☒ Owner ☐ Operator ☐ Owner & Operator ☐ Other:					
☐ Occupational Licensee ☐ Responsible Party ☐ VCP/BSA Applicant					
15. Mailing Address:	3200 Southwest Freeway				
	Suite 2600				
	City	Houston	State	TX	ZIP 77027 ZIP + 4
16. Country Mailing Information (if outside USA)				17. E-Mail Address (if applicable)	
				kcarner@abhr.com	
18. Telephone Number		19. Extension or Code		20. Fax Number (if applicable)	

SECTION III: Regulated Entity Information

21. General Regulated Entity Information (If "New Regulated Entity" is selected, a new permit application is also required.)									
☒ New Regulated Entity ☐ Update to Regulated Entity Name ☐ Update to Regulated Entity Information									
<i>The Regulated Entity Name submitted may be updated, in order to meet TCEQ Core Data Standards (removal of organizational endings such as Inc, LP, or LLC).</i>									
22. Regulated Entity Name (Enter name of the site where the regulated action is taking place.)									
Harris County Municipal Utility District No. 541 Wastewater Treatment Plant									
23. Street Address of the Regulated Entity: (No PO Boxes)									
		City		State		ZIP		ZIP + 4	
24. County		Harris							

If no Street Address is provided, fields 25-28 are required.

25. Description to Physical Location:		The site is located approximately 1 miles northwest of the intersection of Longenbaugh Rd and Grand Parkway.									
26. Nearest City					State		Nearest ZIP Code				
Houston					TX		77493				
<i>Latitude/Longitude are required and may be added/updated to meet TCEQ Core Data Standards. (Geocoding of the Physical Address may be used to supply coordinates where none have been provided or to gain accuracy).</i>											
27. Latitude (N) In Decimal:			29.891556			28. Longitude (W) In Decimal:			95.774194		
Degrees		Minutes		Seconds		Degrees		Minutes		Seconds	
29		53		29.6016		95		46		27.0978	
29. Primary SIC Code (4 digits)			30. Secondary SIC Code (4 digits)			31. Primary NAICS Code (5 or 6 digits)			32. Secondary NAICS Code (5 or 6 digits)		
4952						22132					
33. What is the Primary Business of this entity? (Do not repeat the SIC or NAICS description.)											
Wastewater Treatment Plant											
34. Mailing Address:		3200 Southwest Freeway									
		Suite 2600									
		City	Houston	State	TX	ZIP	77027	ZIP + 4			
35. E-Mail Address:											
36. Telephone Number				37. Extension or Code			38. Fax Number (if applicable)				
(713) 860-6482							() -				

39. TCEQ Programs and ID Numbers Check all Programs and write in the permits/registration numbers that will be affected by the updates submitted on this form. See the Core Data Form instructions for additional guidance.

☐ Dam Safety	☐ Districts	☐ Edwards Aquifer	☐ Emissions Inventory Air	☐ Industrial Hazardous Waste
☐ Municipal Solid Waste	☐ New Source Review Air	☐ OSSF	☐ Petroleum Storage Tank	☐ PWS
☐ Sludge	☐ Storm Water	☐ Title V Air	☐ Tires	☐ Used Oil
☐ Voluntary Cleanup	☒ Wastewater	☐ Wastewater Agriculture	☐ Water Rights	☐ Other:

SECTION IV: Preparer Information

40. Name:	Ryan Canfield			41. Title:	EIT
42. Telephone Number	43. Ext./Code	44. Fax Number	45. E-Mail Address		
(713) 335-1334		() -	rcanfield@lja.com		

SECTION V: Authorized Signature

46. By my signature below, I certify, to the best of my knowledge, that the information provided in this form is true and complete, and that I have signature authority to submit this form on behalf of the entity specified in Section II, Field 6 and/or as required for the updates to the ID numbers identified in field 39.

Company:	Harris County MUD No. 541		Job Title:		
Name (In Print):				Phone:	() -
Signature:				Date:	

November 13, 2024

Ms. Francesca Findlay
Application Review and Processing Team (MC148)
Water Quality Division
Texas Commission of Environmental Quality
12100 Park 35 Circle
Austin, TX 78753

RE: Application Renew, Permit No.: WQ0016654001 (EPA I.D. No. TX0146862)
Applicant Name: Harris County Municipal Utility District No. 541
(CN606316891)
Site Name: Harris County MUD No. 541 WWTP
(RN112067483)
Type of Application: New

Dear Ms. Findlay,

This letter is in response to your review comments dated October 30, 2024 (attached). We have addressed all comments and provide the below summary for your reference.

- 1) Comment: "Core Data Form, Section II, item 8: Please verify the TX State Tax Identification Number: 32017578173."

Response: The TX State Tax ID Number was removed.

- 2) Comment: "Core Data Form, Section II, item 17: Please provide an email address."

Response: The email address has been provided.

- 3) Comment: "Core Data Form, Section II, item 18: Please provide a phone number."

Response: The phone number has been provided.

- 4) Comment: "Landowners List: Please provide the city, State, and Zip Code for the State of Texas."

Response: The city, state, and zip code for the State of Texas have been provided.

- 5) Comment: "The following is a portion of the NORI which contains information relevant to your application. Please read it carefully and indicate if it contains any errors or omissions. The complete notice will be sent to you once the application is declared administratively complete."

Response: Please change the number of Margaret Gillentine in the second paragraph to be 713-953-5100.

- 6) Comment: "Administrative Report 1.0, Section 8, Item E, No. 5 indicates that public notices in Spanish are required. After confirming the portion of the Nori contained in the letter does not contain and errors or omissions, please use the attached template to translate the NORI into Spanish. Only the first and last paragraphs are unique to this application and require translation. Please provide the translated Spanish NORI in a Microsoft Word Document."

Response: The information for the Spanish NORI have been added with the correct number included for Comment 5. Translated version is attached.

The Core Data Form (10054) and Landowners List have been attached with the updated information for your convenience. Should you have any questions or need any additional information concerning this permit renewal, please call me at 713.335.1334.

Sincerely,



Ryan Canfield
Graduate Engineer

RC/pn

Francesca Findlay

From: Ryan Canfield <rcanfield@lja.com>
Sent: Wednesday, November 13, 2024 4:01 PM
To: Francesca Findlay
Cc: Margaret Gillentine
Subject: RE: Application to Renew Permit No. WQ0016654001 - Notice of Deficiency Letter
Attachments: Admin NOD Response Letter.pdf; 10400-Core Data Form.pdf; Municipal Discharge Renewal Spanish NORI(1).docx; Land Owner Labels List.pdf

Follow Up Flag: Follow up
Flag Status: Flagged

Good afternoon,

The comments made in the Administrative NOD have been addressed, the response is attached. The revised Core Data Form (10400) and Landowners Labels list are attached above. As noted by the NOD, the Spanish translated NORI is also attached above.

Please let me know if you have any questions.

Thank you,

RYAN CANFIELD, EIT | Graduate Engineer

Land - Water/Wastewater

O: 713.953.5200 | D: 713.335.1334

3600 W Sam Houston Pkwy S, Suite 600, Houston, TX 77042

EMPLOYEE-OWNED. CLIENT FOCUSED.

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From: Francesca Findlay <Francesca.Findlay@tceq.texas.gov>

Sent: Wednesday, October 30, 2024 1:24 PM

To: Margaret Gillentine <mgillentine@lja.com>

Cc: Ryan Canfield <rcanfield@lja.com>

Subject: FW: Application to Renew Permit No. WQ0016654001 - Notice of Deficiency Letter

[EXTERNAL EMAIL]

Dear Ms. Gillentine:

The attached Notice of Deficiency letter sent on October 30, 2024, requests additional information needed to declare the application administratively complete. Please send the complete response to my attention by November 13, 2024 – 14 days date from letter.

Thank you,

Francesca Findlay
License & Permit Specialist
ARP Team | Water Quality Division
512-239-2441
Texas Commission on Environmental Quality



Please consider whether it is necessary to print this e-mail

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

[EXTERNAL EMAIL] Exercise caution. Do not open attachments or click links from unknown senders or unexpected email



TCEQ Core Data Form

For detailed instructions on completing this form, please read the Core Data Form Instructions or call 512-239-5175.

SECTION I: General Information

1. Reason for Submission (If other is checked please describe in space provided.)		
☒ New Permit, Registration or Authorization (Core Data Form should be submitted with the program application.)		
☐ Renewal (Core Data Form should be submitted with the renewal form)		☐ Other
2. Customer Reference Number (if issued)	Follow this link to search for CN or RN numbers in Central Registry**	3. Regulated Entity Reference Number (if issued)
CN		RN

SECTION II: Customer Information

4. General Customer Information		5. Effective Date for Customer Information Updates (mm/dd/yyyy)			
☒ New Customer ☐ Update to Customer Information ☐ Change in Regulated Entity Ownership					
☐ Change in Legal Name (Verifiable with the Texas Secretary of State or Texas Comptroller of Public Accounts)					
<i>The Customer Name submitted here may be updated automatically based on what is current and active with the Texas Secretary of State (SOS) or Texas Comptroller of Public Accounts (CPA).</i>					
6. Customer Legal Name (If an individual, print last name first: eg: Doe, John)				<i>If new Customer, enter previous Customer below:</i>	
Harris County Municipal Utility District No. 541					
7. TX SOS/CPA Filing Number		8. TX State Tax ID (11 digits)		9. Federal Tax ID (9 digits)	10. DUNS Number (if applicable)
11. Type of Customer:		☒ Corporation		☐ Individual	Partnership: ☐ General ☐ Limited
Government: ☐ City ☐ County ☐ Federal ☐ Local ☐ State ☐ Other		☐ Sole Proprietorship		☐ Other:	
12. Number of Employees				13. Independently Owned and Operated?	
☒ 0-20 ☐ 21-100 ☐ 101-250 ☐ 251-500 ☐ 501 and higher				☐ Yes ☐ No	
14. Customer Role (Proposed or Actual) – as it relates to the Regulated Entity listed on this form. Please check one of the following					
☒ Owner ☐ Operator ☐ Owner & Operator ☐ Other:					
☐ Occupational Licensee ☐ Responsible Party ☐ VCP/BSA Applicant					
15. Mailing Address:	3200 Southwest Freeway				
	Suite 2600				
	City	Houston	State	TX	ZIP 77027 ZIP + 4
16. Country Mailing Information (if outside USA)				17. E-Mail Address (if applicable)	
				kcarner@abhr.com	
18. Telephone Number		19. Extension or Code		20. Fax Number (if applicable)	

SECTION III: Regulated Entity Information

21. General Regulated Entity Information <i>(If "New Regulated Entity" is selected, a new permit application is also required.)</i>							
☒ New Regulated Entity ☐ Update to Regulated Entity Name ☐ Update to Regulated Entity Information							
<i>The Regulated Entity Name submitted may be updated, in order to meet TCEQ Core Data Standards (removal of organizational endings such as Inc, LP, or LLC).</i>							
22. Regulated Entity Name <i>(Enter name of the site where the regulated action is taking place.)</i>							
Harris County Municipal Utility District No. 541 Wastewater Treatment Plant							
23. Street Address of the Regulated Entity: <i>(No PO Boxes)</i>							
	City		State		ZIP		ZIP + 4
24. County	Harris						

If no Street Address is provided, fields 25-28 are required.

25. Description to Physical Location:	The site is located approximately 1 miles northwest of the intersection of Longenbaugh Rd and Grand Parkway.						
26. Nearest City					State	Nearest ZIP Code	
Houston					TX	77493	
<i>Latitude/Longitude are required and may be added/updated to meet TCEQ Core Data Standards. (Geocoding of the Physical Address may be used to supply coordinates where none have been provided or to gain accuracy).</i>							
27. Latitude (N) In Decimal:		29.891556			28. Longitude (W) In Decimal:		95.774194
Degrees	Minutes	Seconds	Degrees	Minutes	Seconds		
29	53	29.6016	95	46	27.0978		
29. Primary SIC Code (4 digits)		30. Secondary SIC Code (4 digits)		31. Primary NAICS Code (5 or 6 digits)		32. Secondary NAICS Code (5 or 6 digits)	
4952				22132			
33. What is the Primary Business of this entity? <i>(Do not repeat the SIC or NAICS description.)</i>							
Wastewater Treatment Plant							
34. Mailing Address:	3200 Southwest Freeway						
	Suite 2600						
	City	Houston	State	TX	ZIP	77027	ZIP + 4
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36. Telephone Number			37. Extension or Code			38. Fax Number <i>(if applicable)</i>	
(713) 860-6482						() -	

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☐ Dam Safety	☐ Districts	☐ Edwards Aquifer	☐ Emissions Inventory Air	☐ Industrial Hazardous Waste
☐ Municipal Solid Waste	☐ New Source Review Air	☐ OSSF	☐ Petroleum Storage Tank	☐ PWS
☐ Sludge	☐ Storm Water	☐ Title V Air	☐ Tires	☐ Used Oil
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SECTION IV: Preparer Information

40. Name:	Ryan Canfield			41. Title:	EIT
42. Telephone Number	43. Ext./Code	44. Fax Number	45. E-Mail Address		
(713) 335-1334		() -	rcanfield@lja.com		

SECTION V: Authorized Signature

46. By my signature below, I certify, to the best of my knowledge, that the information provided in this form is true and complete, and that I have signature authority to submit this form on behalf of the entity specified in Section II, Field 6 and/or as required for the updates to the ID numbers identified in field 39.

Company:	Harris County MUD No. 541		Job Title:		
Name (In Print):				Phone:	() -
Signature:				Date:	

November 13, 2024

Ms. Francesca Findlay
Application Review and Processing Team (MC148)
Water Quality Division
Texas Commission of Environmental Quality
12100 Park 35 Circle
Austin, TX 78753

RE: Application Renew, Permit No.: WQ0016654001 (EPA I.D. No. TX0146862)
Applicant Name: Harris County Municipal Utility District No. 541
(CN606316891)
Site Name: Harris County MUD No. 541 WWTP
(RN112067483)
Type of Application: New

Dear Ms. Findlay,

This letter is in response to your review comments dated October 30, 2024 (attached). We have addressed all comments and provide the below summary for your reference.

- 1) Comment: "Core Data Form, Section II, item 8: Please verify the TX State Tax Identification Number: 32017578173."

Response: The TX State Tax ID Number was removed.

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Response: The city, state, and zip code for the State of Texas have been provided.

- 5) Comment: "The following is a portion of the NORI which contains information relevant to your application. Please read it carefully and indicate if it contains any errors or omissions. The complete notice will be sent to you once the application is declared administratively complete."

Response: Please change the number of Margaret Gillentine in the second paragraph to be 713-953-5100.

- 6) Comment: "Administrative Report 1.0, Section 8, Item E, No. 5 indicates that public notices in Spanish are required. After confirming the portion of the Nori contained in the letter does not contain and errors or omissions, please use the attached template to translate the NORI into Spanish. Only the first and last paragraphs are unique to this application and require translation. Please provide the translated Spanish NORI in a Microsoft Word Document."

Response: The information for the Spanish NORI have been added with the correct number included for Comment 5. Translated version is attached.

The Core Data Form (10054) and Landowners List have been attached with the updated information for your convenience. Should you have any questions or need any additional information concerning this permit renewal, please call me at 713.335.1334.

Sincerely,



Ryan Canfield
Graduate Engineer

RC/pn

WISTERIA INTERESTS, LLC
13141 NORTHWEST FWY
HOUSON, TX 77040

LEE LAND INVESTMENTS, LLC
P.O. BOX 19562
HOUSTON, TX 77224

STATE OF TEXAS
5805 W LAMAR BLVD
AUSTIN, TX 78752

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 RENOVACION

PERMISO NO. WQ00_____

SOLICITUD. Harris County Municipal Utility District No. 541 solicitado a la Comisión de Calidad Ambiental del Estado de Texas (TCEQ) para renovar el Permiso No. WQ0016654001 (EPA I.D. No. TX0146862) del Sistema de Eliminación de Descargas de Contaminantes de Texas (TPDES) para autorizar la descarga de aguas residuales tratadas en un volumen que no sobrepasa un flujo promedio diario de 565,000 galones por día. La planta está ubicada aproximadamente 1 milla al noroeste de la intersección de Longenbaugh Road y Grand Parkway en la ciudad de Houston, en el Condado de Harris, Texas 77493. La ruta de descarga es del sitio de la planta a hacia el sur hasta el estanque de detención, luego a través de una serie de estanques de detención hasta el sistema de alcantarillado pluvial, de allí a Bear Creek, de allí a South Mayde Creek, de allí a Buffalo Bayou sobre Tidal en el segmento numero 1014. La TCEQ recibió esta solicitud el 24 de Octubre de 2024 La solicitud para el permiso estará disponible para leerla y copiarla en Katy Branch Library, 5414 Franz Road, Katy, en el Condado de Harris, Texas antes de la fecha de publicación de este aviso en el periódico. La solicitud (cualquier actualización y aviso inclusive) está disponible electrónicamente en la siguiente página web: <https://www.tceq.texas.gov/permitting/wastewater/pending-permits/tpdes-applications>.

Este enlace a un mapa electrónico de la ubicación general del sitio o de la instalación es 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=-95.774194,29.891556&level=18>

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

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

COMENTARIO PUBLICO / REUNION PUBLICA. Usted puede presentar comentarios públicos

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

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

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

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

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. Además, puede pedir que la TCEQ ponga su nombre en una o más de las listas correos siguientes (1) la lista de correo permanente para recibir los avisos del 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 agregue su nombre en una de las listas designe cual lista(s) y envía por correo su pedido a la Oficina del Secretario Principal de la TCEQ.

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

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

También se puede obtener información adicional del Harris County Municipal Utility District No. 541 a la dirección indicada arriba o llamando a Ms. Margaret Gillentine, P.E., gerente senior de proyectos, al 713-953-5100.

Fecha de emisión:

Francesca Findlay

From: Ryan Canfield <rcanfield@lja.com>
Sent: Wednesday, November 13, 2024 4:01 PM
To: Francesca Findlay
Cc: Margaret Gillentine
Subject: RE: Application to Renew Permit No. WQ0016654001 - Notice of Deficiency Letter
Attachments: Admin NOD Response Letter.pdf; 10400-Core Data Form.pdf; Municipal Discharge Renewal Spanish NORI(1).docx; Land Owner Labels List.pdf

Follow Up Flag: Follow up
Flag Status: Flagged

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Please let me know if you have any questions.

Thank you,

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Land - Water/Wastewater

O: 713.953.5200 | D: 713.335.1334

3600 W Sam Houston Pkwy S, Suite 600, Houston, TX 77042

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Thank you,

Francesca Findlay
License & Permit Specialist
ARP Team | Water Quality Division
512-239-2441
Texas Commission on Environmental Quality



Please consider whether it is necessary to print this e-mail

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

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Texas Commission on Environmental Quality



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[EXTERNAL EMAIL] Exercise caution. Do not open attachments or click links from unknown senders or unexpected email

Francesca Findlay

From: Ryan Canfield <rcanfield@lja.com>
Sent: Thursday, November 21, 2024 9:14 AM
To: Francesca Findlay
Subject: RE: WQ0016654001 Harris County Municipal Utility District No. 541
Attachments: WISTERIA_OWNERSHIP_.pdf

Sorry about that. Here you go.

Thank you,

RYAN CANFIELD, EIT | Graduate Engineer

Land - Water/Wastewater

O: 713.953.5200 | D: 713.335.1334

3600 W Sam Houston Pkwy S, Suite 600, Houston, TX 77042

EMPLOYEE-OWNED. CLIENT FOCUSED.

www.lja.com



Top Workplaces USA | 2023

From: Francesca Findlay <Francesca.Findlay@tceq.texas.gov>

Sent: Wednesday, November 20, 2024 4:00 PM

To: Ryan Canfield <rcanfield@lja.com>

Subject: RE: WQ0016654001 Harris County Municipal Utility District No. 541

[EXTERNAL EMAIL]

Good afternoon,

Please take out the extra columns and resend it. We only need columns for the map number, owner name, and mailing addresses only.

Thank you,

Francesca Findlay

License & Permit Specialist

ARP Team | Water Quality Division

512-239-2441

Texas Commission on Environmental Quality



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

From: Ryan Canfield <rcanfield@lja.com>
Sent: Wednesday, November 20, 2024 1:59 PM
To: Francesca Findlay <Francesca.Findlay@tceq.texas.gov>
Cc: Margaret Gillentine <mgillentine@lja.com>
Subject: RE: WQ0016654001 Harris County Municipal Utility District No. 541

Good afternoon,

Please see attached updated land owner labels list and the ownership sheet. Please let me know if these suffice.

Thank you,

RYAN CANFIELD, EIT | Graduate Engineer
Land - Water/Wastewater
O: 713.953.5200 | D: 713.335.1334
3600 W Sam Houston Pkwy S, Suite 600, Houston, TX 77042
EMPLOYEE-OWNED. CLIENT FOCUSED.

www.lja.com



From: Francesca Findlay <Francesca.Findlay@tceq.texas.gov>
Sent: Tuesday, November 19, 2024 11:29 AM
To: Margaret Gillentine <mgillentine@lja.com>
Cc: Ryan Canfield <rcanfield@lja.com>
Subject: WQ0016654001 Harris County Municipal Utility District No. 541

[EXTERNAL EMAIL]

Good morning,

I am in the process of admin. completing your application and I have noticed that the landowner list is incomplete. Please provide another list:

All landowners identified on the map must be clearly cross-referenced to a list of the landowner names and complete mailing addresses. The cross reference must be in consecutive numeric order (1, 2, 3). The complete list of affected landowners must be provided on a **separate sheet of 8.5x11" paper**.

Thank you,

Francesca Findlay

License & Permit Specialist
ARP Team | Water Quality Division
512-239-2441
Texas Commission on Environmental Quality



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

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TPDES PERMIT NO. WQ0016654001
[For TCEQ office use only - EPA I.D.
No. TX0146862]

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

PERMIT TO DISCHARGE WASTES
under provisions of
Section 402 of the Clean Water Act
and Chapter 26 of the Texas Water Code

Harris County Municipal Utility District No. 541

whose mailing address is

3200 Southwest Freeway, Suite 2600
Houston, Texas 77027

is authorized to treat and discharge wastes from the Harris County MUD No. 541 Wastewater Treatment Facility, SIC Code 4952

located approximately 1 mile northwest of the intersection of Longenbaugh Road and Grand Parkway, in Harris County, Texas 77493

through two detention ponds, thence to an underground sewer system along Highway 99, thence to Bear Creek, thence to South Mayde Creek, thence to Buffalo Bayou Above Tidal in Segment No. 1014 of the San Jacinto River Basin

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

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

ISSUED DATE:

For the Commission

INTERIM I EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTSOutfall Number 001

- During the period beginning upon the date of issuance and lasting through the completion of expansion to the 0.2825 million gallons per day (MGD) facility, the permittee is authorized to discharge subject to the following effluent limitations:

The daily average flow of effluent shall not exceed 0.14125 MGD, nor shall the average discharge during any two-hour period (2-hour peak) exceed 392 gallons per minute.

<u>Effluent Characteristic</u>	<u>Discharge Limitations</u>				<u>Min. Self-Monitoring Requirements</u>	
	Daily Avg mg/l (lbs/day)	7-day Avg mg/l	Daily Max mg/l	Single Grab mg/l	Report Daily Avg. & Max. Single Grab Measurement Frequency	Sample Type
Flow, MGD	Report	N/A	Report	N/A	Continuous	Totalizing Meter
Carbonaceous Biochemical Oxygen Demand (5-day)	10 (12)	15	25	35	One/week	Grab
Total Suspended Solids	15 (18)	25	40	60	One/week	Grab
Ammonia Nitrogen	2 (2.4)	5	10	15	One/week	Grab
<i>E. coli</i> , colony-forming units or most probable number per 100 ml	63	N/A	N/A	399	One/month	Grab

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

INTERIM II EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTSOutfall Number 001

- During the period beginning upon the completion of expansion to the 0.2825 million gallons per day (MGD) facility and lasting through the completion of expansion to the 0.565 MGD facility, the permittee is authorized to discharge subject to the following effluent limitations:

The daily average flow of effluent shall not exceed 0.2825 MGD, nor shall the average discharge during any two-hour period (2-hour peak) exceed 785 gallons per minute.

<u>Effluent Characteristic</u>	<u>Discharge Limitations</u>				<u>Min. Self-Monitoring Requirements</u>	
	Daily Avg mg/l (lbs/day)	7-day Avg mg/l	Daily Max mg/l	Single Grab mg/l	Report Daily Avg. & Max. Single Grab Measurement Frequency	Sample Type
Flow, MGD	Report	N/A	Report	N/A	Continuous	Totalizing Meter
Carbonaceous Biochemical Oxygen Demand (5-day)	7 (16)	12	22	32	One/week	Grab
Total Suspended Solids	12 (28)	20	40	60	One/week	Grab
Ammonia Nitrogen	2 (4.7)	5	10	15	One/week	Grab
<i>E. coli</i> , colony-forming units or most probable number per 100 ml	63	N/A	N/A	399	One/month	Grab

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

FINAL EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTSOutfall Number 001

1. During the period beginning upon the completion of expansion to the 0.565 million gallons per day (MGD) facility and lasting through the date of expiration, the permittee is authorized to discharge subject to the following effluent limitations:

The daily average flow of effluent shall not exceed 0.565 MGD, nor shall the average discharge during any two-hour period (2-hour peak) exceed 1,569 gallons per minute.

<u>Effluent Characteristic</u>	<u>Discharge Limitations</u>				<u>Min. Self-Monitoring Requirements</u>	
	Daily Avg mg/l (lbs/day)	7-day Avg mg/l	Daily Max mg/l	Single Grab mg/l	Report Daily Avg. & Daily Max. Measurement Frequency	Sample Type
Flow, MGD	Report	N/A	Report	N/A	Continuous	Totalizing Meter
Carbonaceous Biochemical Oxygen Demand (5-day)	7 (33)	12	22	32	One/week	Composite
Total Suspended Solids	12 (57)	20	40	60	One/week	Composite
Ammonia Nitrogen	2 (9.4)	5	10	15	One/week	Composite
<i>E. coli</i> , colony-forming units or most probable number per 100 ml	63	N/A	399	N/A	Two/month	Grab

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

DEFINITIONS AND STANDARD PERMIT CONDITIONS

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

1. Flow Measurements

- a. Annual average flow - the arithmetic average of all daily flow determinations taken within the preceding 12 consecutive calendar months. The annual average flow determination shall consist of daily flow volume determinations made by a totalizing meter, charted on a chart recorder and limited to major domestic wastewater discharge facilities with one million gallons per day or greater permitted flow.
- b. Daily average flow - the arithmetic average of all determinations of the daily flow within a period of one calendar month. The daily average flow determination shall consist of determinations made on at least four separate days. If instantaneous measurements are used to determine the daily flow, the determination shall be the arithmetic average of all instantaneous measurements taken during that month. Daily average flow determination for intermittent discharges shall consist of a minimum of three flow determinations on days of discharge.
- c. Daily maximum flow - the highest total flow for any 24-hour period in a calendar month.
- d. Instantaneous flow - the measured flow during the minimum time required to interpret the flow measuring device.
- e. 2-hour peak flow (domestic wastewater treatment plants) - the maximum flow sustained for a two-hour period during the period of daily discharge. The average of multiple measurements of instantaneous maximum flow within a two-hour period may be used to calculate the 2-hour peak flow.
- f. Maximum 2-hour peak flow (domestic wastewater treatment plants) - the highest 2-hour peak flow for any 24-hour period in a calendar month.

2. Concentration Measurements

- a. Daily average concentration - the arithmetic average of all effluent samples, composite or grab as required by this permit, within a period of one calendar month, consisting of at least four separate representative measurements.
 - i. For domestic wastewater treatment plants - When four samples are not available in a calendar month, the arithmetic average (weighted by flow) of all values in the previous four consecutive month period consisting of at least four measurements shall be utilized as the daily average concentration.

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

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

- e. Bacteria concentration (*E. coli* or Enterococci) - Colony Forming Units (CFU) or Most Probable Number (MPN) of bacteria per 100 milliliters effluent. The daily average bacteria concentration is a geometric mean of the values for the effluent samples collected in a calendar month. The geometric mean shall be determined by calculating the n th root of the product of all measurements made in a calendar month, where n equals the number of measurements made; or, computed as the antilogarithm of the arithmetic mean of the logarithms of all measurements made in a calendar month. For any measurement of bacteria equaling zero, a substituted value of one shall be made for input into either computation method. If specified, the 7-day average for bacteria is the geometric mean of the values for all effluent samples collected during a calendar week.
 - f. Daily average loading (lbs/day) - the arithmetic average of all daily discharge loading calculations during a period of one calendar month. These calculations must be made for each day of the month that a parameter is analyzed. The daily discharge, in terms of mass (lbs/day), is calculated as (Flow, MGD x Concentration, mg/l x 8.34).
 - g. Daily maximum loading (lbs/day) - the highest daily discharge, in terms of mass (lbs/day), within a period of one calendar month.
3. Sample Type
- a. Composite sample - For domestic wastewater, a composite sample is a sample made up of a minimum of three effluent portions collected in a continuous 24-hour period or during the period of daily discharge if less than 24 hours, and combined in volumes proportional to flow, and collected at the intervals required by 30 TAC § 319.9 (a). For industrial wastewater, a composite sample is a sample made up of a minimum of three effluent portions collected in a continuous 24-hour period or during the period of daily discharge if less than 24 hours, and combined in volumes proportional to flow, and collected at the intervals required by 30 TAC § 319.9 (b).

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

MONITORING AND REPORTING REQUIREMENTS

1. Self-Reporting

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

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

2. Test Procedures

- a. Unless otherwise specified in this permit, test procedures for the analysis of pollutants shall comply with procedures specified in 30 TAC §§ 319.11 - 319.12. Measurements, tests, and calculations shall be accurately accomplished in a representative manner.
- b. All laboratory tests submitted to demonstrate compliance with this permit must meet the requirements of 30 TAC § 25, Environmental Testing Laboratory Accreditation and Certification.

3. Records of Results

- a. Monitoring samples and measurements shall be taken at times and in a manner so as to

be representative of the monitored activity.

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

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

4. Additional Monitoring by Permittee

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

5. Calibration of Instruments

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

6. Compliance Schedule Reports

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of the permit shall be submitted no later

than 14 days following each schedule date to the Regional Office and the Enforcement Division (MC 224).

7. Noncompliance Notification

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

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

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

10. Signatories to Reports

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

11. All POTWs must provide adequate notice to the Executive Director of the following:

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

PERMIT CONDITIONS**1. General**

- a. When the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in an application or in any report to the Executive Director, it shall promptly submit such facts or information.
- b. This permit is granted on the basis of the information supplied and representations made by the permittee during action on an application, and relying upon the accuracy and completeness of that information and those representations. After notice and opportunity for a hearing, this permit may be modified, suspended, or revoked, in whole or in part, in accordance with 30 TAC Chapter 305, Subchapter D, during its term for good cause including, but not limited to, the following:
 - i. Violation of any terms or conditions of this permit;
 - ii. Obtaining this permit by misrepresentation or failure to disclose fully all relevant facts; or
 - iii. A change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge.
- c. The permittee shall furnish to the Executive Director, upon request and within a reasonable time, any information to determine whether cause exists for amending, revoking, suspending or terminating the permit. The permittee shall also furnish to the Executive Director, upon request, copies of records required to be kept by the permit.

2. Compliance

- a. Acceptance of the permit by the person to whom it is issued constitutes acknowledgment and agreement that such person will comply with all the terms and conditions embodied in the permit, and the rules and other orders of the Commission.
- b. The permittee has a duty to comply with all conditions of the permit. Failure to comply with any permit condition constitutes a violation of the permit and the Texas Water Code or the Texas Health and Safety Code, and is grounds for enforcement action, for permit amendment, revocation, or suspension, or for denial of a permit renewal application or an application for a permit for another facility.
- c. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit.
- d. The permittee shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal or other permit violation that has a reasonable likelihood of adversely affecting human health or the environment.
- e. Authorization from the Commission is required before beginning any change in the permitted facility or activity that may result in noncompliance with any permit requirements.
- f. A permit may be amended, suspended and reissued, or revoked for cause in accordance

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

- g. There shall be no unauthorized discharge of wastewater or any other waste. For the purpose of this permit, an unauthorized discharge is considered to be any discharge of wastewater into or adjacent to water in the state at any location not permitted as an outfall or otherwise defined in the Other Requirements section of this permit.
- h. In accordance with 30 TAC § 305.535(a), the permittee may allow any bypass to occur from a TPDES permitted facility which does not cause permitted effluent limitations to be exceeded or an unauthorized discharge to occur, but only if the bypass is also for essential maintenance to assure efficient operation.
- i. The permittee is subject to administrative, civil, and criminal penalties, as applicable, under TWC §§ 7.051 - 7.075 (relating to Administrative Penalties), 7.101 - 7.111 (relating to Civil Penalties), and 7.141 - 7.202 (relating to Criminal Offenses and Penalties) for violations including, but not limited to, negligently or knowingly violating the federal CWA §§ 301, 302, 306, 307, 308, 318, or 405, or any condition or limitation implementing any sections in a permit issued under the CWA § 402, or any requirement imposed in a pretreatment program approved under the CWA §§ 402 (a)(3) or 402 (b)(8).

3. Inspections and Entry

- a. Inspection and entry shall be allowed as prescribed in the TWC Chapters 26, 27, and 28, and THSC § 361.
- b. The members of the Commission and employees and agents of the Commission are entitled to enter any public or private property at any reasonable time for the purpose of inspecting and investigating conditions relating to the quality of water in the state or the compliance with any rule, regulation, permit or other order of the Commission. Members, employees, or agents of the Commission and Commission contractors are entitled to enter public or private property at any reasonable time to investigate or monitor or, if the responsible party is not responsive or there is an immediate danger to public health or the environment, to remove or remediate a condition related to the quality of water in the state. Members, employees, Commission contractors, or agents acting under this authority who enter private property shall observe the establishment's rules and regulations concerning safety, internal security, and fire protection, and if the property has management in residence, shall notify management or the person then in charge of his presence and shall exhibit proper credentials. If any member, employee, Commission contractor, or agent is refused the right to enter in or on public or private property under this authority, the Executive Director may invoke the remedies authorized in TWC § 7.002. The statement above, that Commission entry shall occur in accordance with an establishment's rules and regulations concerning safety, internal security, and fire protection, is not grounds for denial or restriction of entry to any part of the facility, but merely describes the Commission's duty to observe appropriate rules and regulations during an inspection.

4. Permit Amendment and/or Renewal

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

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

5. Permit Transfer

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

6. Relationship to Hazardous Waste Activities

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

7. Relationship to Water Rights

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

8. Property Rights

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

9. Permit Enforceability

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

10. Relationship to Permit Application

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

11. Notice of Bankruptcy

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

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

OPERATIONAL REQUIREMENTS

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

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

7. Documentation

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

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

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

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

secured.

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

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

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

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

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SLUDGE PROVISIONS

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

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

A. General Requirements

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

B. Testing Requirements

1. Sewage sludge or biosolids shall be tested once during the term of this permit in accordance with the method specified in both 40 CFR Part 261, Appendix II and 40 CFR Part 268, Appendix I [Toxicity Characteristic Leaching Procedure (TCLP)] or other method that receives the prior approval of the TCEQ for the contaminants listed in 40 CFR Part 261.24, Table 1. Sewage sludge or biosolids failing this test shall be managed according to RCRA standards for generators of hazardous waste, and the waste's disposition must be in accordance with all applicable requirements for hazardous waste processing, storage, or disposal. Following failure of any TCLP test, the management or disposal of sewage sludge or biosolids at a facility other than an authorized hazardous waste processing, storage, or disposal facility shall be prohibited until such time as the permittee can demonstrate the sewage sludge or biosolids no longer exhibits the hazardous waste toxicity characteristics (as demonstrated by the results of the TCLP tests). A written report shall be provided to both the TCEQ Registration and Reporting Section (MC 129) of the Permitting and Registration Support Division and the Regional Director (MC Region 12) within seven (7) days after failing the TCLP Test.

The report shall contain test results, certification that unauthorized waste management has stopped, and a summary of alternative disposal plans that comply with RCRA standards for the management of hazardous waste. The report shall be addressed to: Director, Permitting and Registration Support Division (MC 129), Texas Commission on Environmental Quality, P.O. Box 13087, Austin, Texas 78711-3087. In addition, the permittee shall prepare an annual report on the results of all sludge toxicity testing. The permittee must submit this annual report by September 30th of each year, using the online electronic reporting system available through TCEQ's website. If the permittee requests and obtains an electronic reporting waiver, the annual report can be submitted in hard copy to the TCEQ Regional Office (MC Region 12) and the Enforcement Division (MC 224).

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

TABLE 1

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

* Dry weight basis

3. Pathogen Control

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

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

Alternative 1 - The temperature of the sewage sludge that is used or disposed shall be maintained at or above a specific value for a period of time. See 30 TAC § 312.82(a)(2)(A) for specific information;

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

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

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

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

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

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

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

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

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

criteria.

Alternative 1

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

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

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

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

- i. Prior to use or disposal, all the sewage sludge must have been generated from a

single location, except as provided in paragraph v. below;

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

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

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

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

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

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

Alternative 8 - The percent solids of sewage sludge that contains unstabilized solids generated in a primary wastewater treatment process shall be equal to or greater than 90% based on the moisture content and total solids prior to mixing with other materials at the time the sludge is used. Unstabilized solids are defined as organic materials in sewage sludge that have not been treated in either an aerobic or anaerobic treatment process.

Alternative 9 -

- i. Biosolids shall be injected below the surface of the land.
- ii. No significant amount of the biosolids shall be present on the land surface within one hour after the biosolids are injected.
- iii. When sewage sludge that is injected below the surface of the land is Class A or Class AB with respect to pathogens, the biosolids shall be injected below the land surface within eight hours after being discharged from the pathogen treatment process.

Alternative 10 -

- i. Biosolids applied to the land surface or placed on a surface disposal site shall be incorporated into the soil within six hours after application to or placement on the land.
- ii. When biosolids that is incorporated into the soil is Class A or Class AB with respect to pathogens, the biosolids shall be applied to or placed on the land within eight hours after being discharged from the pathogen treatment process.

C. Monitoring Requirements

Toxicity Characteristic Leaching Procedure (TCLP) Test	- once during the term of this permit
PCBs	- once during the term of this permit

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

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

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

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

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

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

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

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

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

A. Pollutant Limits

Table 2

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

Table 3

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

*Dry weight basis

B. Pathogen Control

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

C. Management Practices

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

D. Notification Requirements

1. If bulk biosolids are applied to land in a State other than Texas, written notice shall be provided prior to the initial land application to the permitting authority for the State in which the bulk biosolids are proposed to be applied. The notice shall include:
 - a. The location, by street address, and specific latitude and longitude, of each land application site.
 - b. The approximate time period bulk biosolids will be applied to the site.
 - c. The name, address, telephone number, and National Pollutant Discharge Elimination System permit number (if appropriate) for the person who will apply the bulk biosolids.

E. Record Keeping Requirements

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

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

“I certify, under penalty of law, that the applicable pathogen requirements in 30 TAC § 312.82(a) or (b) and the vector attraction reduction requirements in 30 TAC § 312.83(b) have been met for each site on which bulk biosolids are applied. This determination has been made under my direction and supervision in accordance with the system designed to ensure that qualified personnel properly gather and evaluate the information used to determine that the management practices have been met. I am aware that there are significant penalties for false certification including fine and imprisonment.”
6. The recommended agronomic loading rate from the references listed in Section II.C.3. above, as well as the actual agronomic loading rate shall be retained. The person who applies bulk biosolids shall develop the following information and shall retain the information at the facility site and/or shall be readily available for review by a TCEQ representative indefinitely. If the permittee supplies the sludge to another person who land applies the sludge, the permittee shall notify the land applier of the requirements for record keeping found in 30 TAC § 312.47 for persons who land apply:
 - a. A certification statement that all applicable requirements (specifically listed) have been met, and that the permittee understands that there are significant penalties for false certification including fine and imprisonment. See 30 TAC § 312.47(a)(4)(A)(ii) or 30 TAC § 312.47(a)(5)(A)(ii), as applicable, and to the permittee’s specific sludge treatment activities.
 - b. The location, by street address, and specific latitude and longitude, of each site on which biosolids is applied.
 - c. The number of acres in each site on which bulk biosolids are applied.
 - d. The date and time biosolids are applied to each site.
 - e. The cumulative amount of each pollutant in pounds/acre listed in Table 2 applied to each site.
 - f. The total amount of biosolids applied to each site in dry tons.

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

F. Reporting Requirements

The permittee must submit this annual report by September 30th of each year, using the online electronic reporting system available through TCEQ's website. If the permittee requests and obtains an electronic reporting waiver, the annual report can be submitted in hard copy to the TCEQ Regional Office (MC Region 12) and the Enforcement Division ((MC 224).

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

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

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

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

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

Following failure of any TCLP test, the management or disposal of sewage sludge or biosolids at a facility other than an authorized hazardous waste processing, storage, or disposal facility shall be prohibited until such time as the permittee can demonstrate the sewage sludge or biosolids no longer exhibits the hazardous waste toxicity characteristics (as demonstrated by the results of the TCLP tests). A written report shall be provided to both the TCEQ Registration and Reporting Section (MC 129) of the Permitting and Registration Support Division and the Regional Director (MC Region 12) of the appropriate TCEQ field office within 7 days after failing the TCLP Test.

The report shall contain test results, certification that unauthorized waste management has stopped, and a summary of alternative disposal plans that comply with RCRA standards for the management of hazardous waste. The report shall be addressed to: Director, Permitting and Registration Support Division (MC 129), Texas Commission on Environmental Quality, P. O. Box 13087, Austin, Texas 78711-3087. In addition, the permittee shall prepare an annual report on the results of all sludge toxicity testing. This annual report shall be submitted to the TCEQ Regional Office (MC Region 12) and the Enforcement Division (MC 224) of the by September 30th of each year.

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

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

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

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

F. Reporting Requirements

The permittee shall submit the following information in an annual report to the TCEQ by September 30th of each year. The permittee must submit this annual report using the online electronic reporting system available through TCEQ's website. If the permittee requests and obtains an electronic reporting waiver, the annual report can be submitted in hard copy to the TCEQ Regional Office (MC Region 12) and the Enforcement Division (MC 224).

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

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

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

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

A. General Requirements

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

B. Record Keeping Requirements

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

C. Reporting Requirements

The permittee shall submit the following information in an annual report to the TCEQ by September 30th of each year. The permittee must submit this annual report using the online electronic reporting system available through TCEQ's website. If the permittee requests and obtains an electronic reporting waiver, the annual report can be submitted in hard copy to the TCEQ Regional Office (MC Region 12) and the Enforcement Division (MC 224).

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

TCEQ Revision 06/2020

OTHER REQUIREMENTS

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

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

2. The facility is not located in the Coastal Management Program boundary.
3. Prior to construction of the Interim I phase, the permittee shall submit sufficient evidence of legal restrictions prohibiting residential structures within the part of the buffer zone not owned by the permittee according to 30 TAC § 309.13(e)(3). The evidence of legal restrictions shall be submitted to the Executive Director in care of the TCEQ Wastewater Permitting Section (MC 148). The permittee shall comply with the requirements of 30 TAC § 309.13(a) through (d). See Attachment A.
4. The permittee shall provide facilities for the protection of its wastewater treatment facility from a 100-year flood.
5. In accordance with 30 TAC § 319.9, a permittee that has at least twelve months of uninterrupted compliance with its bacteria limit may notify the commission in writing of its compliance and request a less frequent measurement schedule. To request a less frequent schedule, the permittee shall submit a written request to the TCEQ Wastewater Permitting Section (MC 148) for each phase that includes a different monitoring frequency. The request must contain all of the reported bacteria values (Daily Avg. and Daily Max/Single Grab) for the twelve consecutive months immediately prior to the request. If the Executive Director finds that a less frequent measurement schedule is protective of human health and the environment, the permittee may be given a less frequent measurement schedule. For this permit, one/month may be reduced to one/quarter in the Interim I and II phases and two/month may be reduced to one/month in the Final phase. **A violation of any bacteria limit by a facility that has been granted a less frequent measurement schedule will require the permittee to return to the standard frequency schedule and submit written notice to the TCEQ Wastewater Permitting Section (MC 148).** The permittee may not apply for another reduction in measurement frequency for at least 24 months from the date of the last violation. The Executive Director may establish a more frequent measurement schedule if necessary to protect human health or the environment.
6. Prior to construction of the treatment facility, the permittee shall submit to the TCEQ Wastewater Permitting Section (MC 148) a summary transmittal letter in accordance with the requirements in 30 TAC § 217.6(d). If requested by the Wastewater Permitting Section, the permittee shall submit plans and specifications and a final engineering design report

which comply with 30 TAC Chapter 217, Design Criteria for Domestic Wastewater Systems. The permittee shall clearly show how the treatment system will meet the permitted effluent limitations required on Page 2, 2a, and 2b of this permit. A copy of the summary transmittal letter shall be available at the plant site for inspection by authorized representatives of the TCEQ.

7. Reporting requirements according to 30 TAC §§ 319.1-319.11 and any additional effluent reporting requirements contained in this permit are suspended from the effective date of the permit until plant startup or discharge from the facility described by this permit, whichever occurs first. The permittee shall provide written notice to the TCEQ Regional Office (MC Region 12) and the Applications Review and Processing Team (MC 148) of the Water Quality Division, as well as the Harris County Pollution Control Services Department, in writing at least forty-five days prior to plant startup or anticipated discharge, whichever occurs first, and prior to completion of each additional phase on Notification of Completion Form 20007.

CONTRIBUTING INDUSTRIES AND PRETREATMENT REQUIREMENTS

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

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

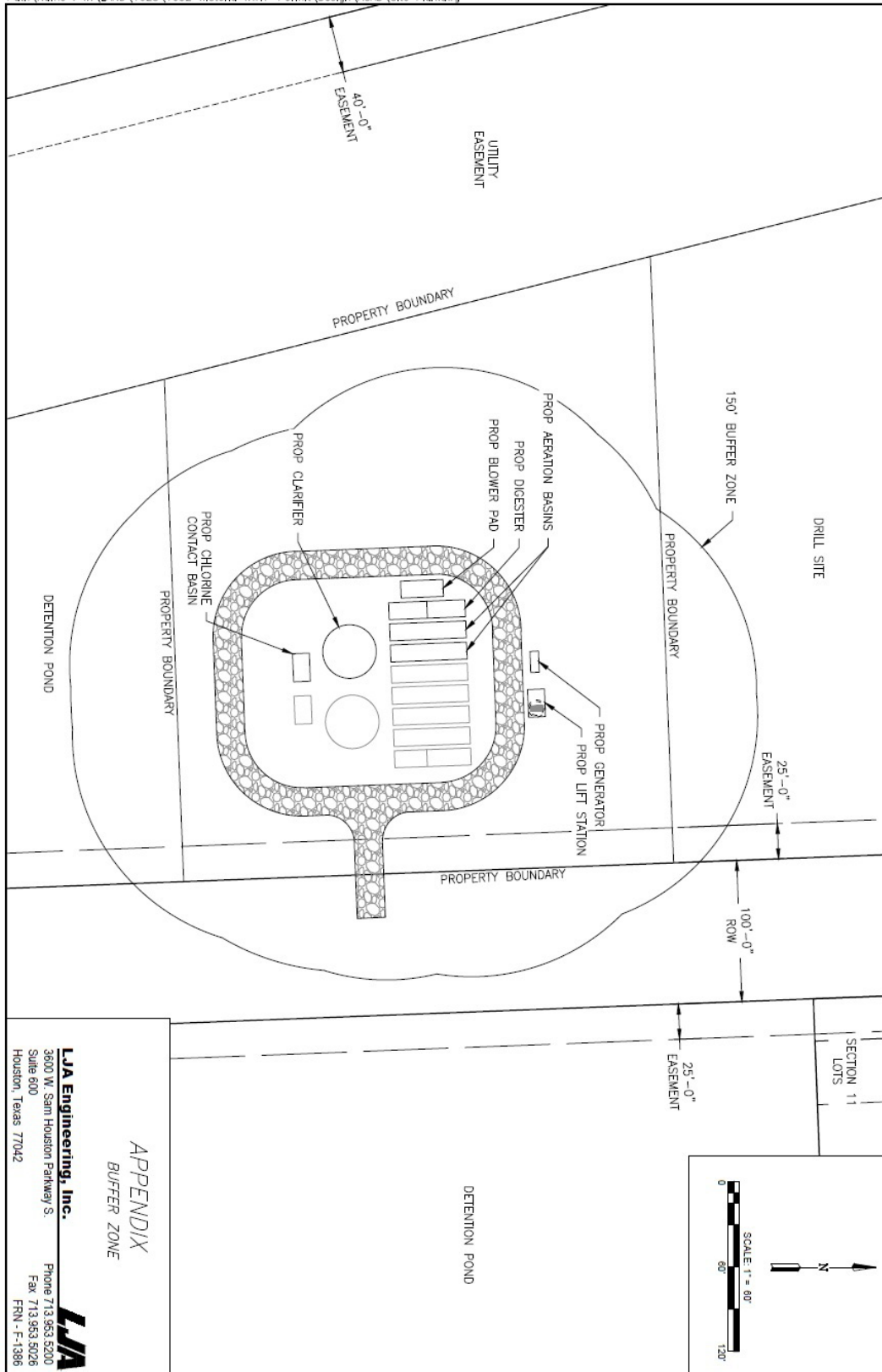
Revised July 2007

Attachment A - Buffer Zone Map

TPDES Permit No. WQ0016654001

Harris County Municipal Utility District No. 541

Date\Time : Thu, 21 Dec 2023 - 11:44am User Name : roanfield
 Path\Name : W:\LAND\1628\1652 Wisteria WWTP Permit\Design\ACAD\Site Plan.dwg



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

DESCRIPTION OF APPLICATION

Applicant: Harris County Municipal Utility District No. 541;
Texas Pollutant Discharge Elimination System (TPDES) Permit No.
WQ0016654001, EPA I.D. No. TX0146862

Regulated Activity: Domestic Wastewater Permit

Type of Application: New Permit

Request: New Permit

Authority: Federal Clean Water Act (CWA) § 402; Texas Water Code § 26.027; 30
Texas Administrative Code (TAC) Chapters 30, 305, 307, 309, 312, and
319; Commission policies; and United States Environmental Protection
Agency (EPA) guidelines.

EXECUTIVE DIRECTOR RECOMMENDATION

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

REASON FOR PROJECT PROPOSED

The applicant has applied to the Texas Commission on Environmental Quality (TCEQ) for a new permit to authorize the discharge of treated domestic wastewater at a daily average flow not to exceed 0.14125 million gallons per day (MGD) in the Interim I phase, a daily average flow not to exceed 0.2825 MGD in the Interim II phase, and a daily average flow not to exceed 0.565 MGD in the Final phase. The proposed wastewater treatment facility will serve a new residential development in Harris County.

PROJECT DESCRIPTION AND LOCATION

The Harris County MUD No. 541 Wastewater Treatment Facility will be an activated sludge process plant operated in the extended aeration mode in the Interim I phase and in the complete mix mode in the Interim II and Final phases. Treatment units for the Interim I phase will include an on-site lift station, a bar screen, two aeration basins, two aerobic digesters, a final clarifier, and a chlorine contact chamber. Treatment units for the Interim II phase will include an on-site lift station, a bar screen, three aeration basins, two aerobic digesters, a final clarifier, and a chlorine contact chamber. Treatment units for the Final phase will include an on-site lift station, a bar screen, six aeration basins, four aerobic digesters, two final clarifiers, and two chlorine contact chambers. The facility has not been constructed.

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

The plant site will be located approximately 1 mile northwest of the intersection of Longenbaugh Road and Grand Parkway, in Harris County, Texas 77493.

Outfall Location:

Outfall Number	Latitude	Longitude
001	29.891556 N	95.774194 W

The treated effluent will be discharged through two detention ponds, thence to an underground sewer system along Highway 99 (Grand Parkway), thence to Bear Creek, thence to South Mayde Creek, thence to Buffalo Bayou Above Tidal in Segment No. 1014 of the San Jacinto River Basin. The unclassified receiving water use is minimal aquatic life use for the detention ponds and intermediate aquatic life use for Bear Creek. The designated uses for Segment No. 1014 are primary contact recreation and limited aquatic life use. The effluent limitations in the draft permit will maintain and protect the existing instream uses. In accordance with 30 Texas Administrative Code § 307.5 and TCEQ's *Procedures to Implement the Texas Surface Water Quality Standards* (June 2010), an antidegradation review of the receiving waters was performed. A Tier 1 antidegradation review has preliminarily determined that existing water quality uses will not be impaired by this permit action. Numerical and narrative criteria to protect existing uses will be maintained. A Tier 2 review has preliminarily determined that no significant degradation of water quality is expected in Bear Creek, which has been identified as having intermediate aquatic life use. Existing uses will be maintained and protected. The preliminary determination can be reexamined and may be modified if new information is received.

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

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

The effluent limits recommended above have been reviewed for consistency with the State of Texas Water Quality Management Plan (WQMP). The proposed limits are not contained in the approved WQMP. However, these limits will be included in the next WQMP update.

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

Segment No. 1014 is not currently listed on the state's inventory of impaired and threatened waters (the 2022 CWA § 303(d) list).

The TMDL project *Fourteen Total Maximum Daily Loads for Nickel in the Houston Ship Channel System* (TMDL Project No.1) has been withdrawn and is no longer applicable.

TMDL Project No. 22: *Eighteen Total Maximum Daily Loads for Bacteria in Buffalo and Whiteoak Bayous and Tributaries Segments 1013, 1013A, 1013C, 1014, 1014A, 1014B, 1014E, 1014H, 1014K, 1014L, 1014M, 1014N, 1014O, 1017, 1017A, 1017B, 1017D, and 1017E* has been approved for this segment. On April 8, 2009, the Texas Commission on Environmental Quality (TCEQ) adopted Eighteen Total Maximum Daily Loads for Bacteria in Buffalo and Whiteoak Bayous and Tributaries. The U.S. Environmental Protection Agency (USEPA) approved the TMDL on June 11, 2009. The total maximum daily load (TMDL) addresses elevated levels of bacteria in multiple segments and assessment units of these bayous and their tributaries. The waste load allocation (WLA) for wastewater treatment facilities was established as the permitted flow for each facility multiplied by one-half the geometric mean criterion for bacteria. Future growth from existing or new permitted sources is not limited by these TMDLs as long as the sources do not exceed the limits of one-half the bacteria geometric mean criterion for *E. coli*. To ensure that effluent limitations for this discharge are consistent with the WLAs provided in the TMDL, a concentration based effluent limitation for *Escherichia coli* (*E. coli*) of 63 colony-forming units (CFU) or most probable number (MPN) per 100 ml has been included in the draft permit.

SUMMARY OF EFFLUENT DATA

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

DRAFT PERMIT CONDITIONS

The draft permit authorizes a discharge of treated domestic wastewater at an Interim I volume not to exceed a daily average flow of 0.14125 MGD, an Interim II volume not to exceed a daily average flow of 0.2825 MGD, and a Final volume not to exceed a daily average flow of 0.565 MGD.

The effluent limitations in the Interim I phase of the draft permit, based on a 30-day average, are 10 mg/l five-day carbonaceous biochemical oxygen demand (CBOD₅), 15 mg/l total suspended solids (TSS), 2 mg/l ammonia-nitrogen (NH₃-N), 63 CFU or MPN of *E. coli* per 100 ml, and 6.0 mg/l minimum dissolved oxygen (DO). The effluent shall contain a total chlorine residual of at least 1.0 mg/l and shall not exceed a total chlorine residual of 4.0 mg/l after a detention time of at least 20 minutes based on peak flow.

The effluent limitations in the Interim II phase of the draft permit, based on a 30-day average, are 7 mg/l CBOD₅, 12 mg/l TSS, 2 mg/l NH₃-N, 63 CFU or MPN of *E. coli* per 100 ml, and 4.0 mg/l minimum DO. The effluent shall contain a total chlorine residual of at least 1.0 mg/l and shall not exceed a total chlorine residual of 4.0 mg/l after a detention time of at least 20 minutes based on peak flow.

The effluent limitations in the Final phase of the draft permit, based on a 30-day average, are 7 mg/l CBOD₅, 12 mg/l TSS, 2 mg/l NH₃-N, 63 CFU or MPN of *E. coli* per 100 ml and 6.0 mg/l minimum DO. The effluent shall contain a total chlorine residual of at least 1.0 mg/l after a detention time of at least 20 minutes (based on peak flow). The permittee shall dechlorinate the chlorinated effluent to less than 0.1 mg/l total chlorine residual.

The draft permit includes a requirement for the permittee to obtain legal restrictions prohibiting residential structures within the part of the buffer zone not owned by the permittee according to 30 TAC § 309.13(e)(3).

The Harris County MUD No. 541 WWTP does not appear to receive significant industrial wastewater contributions. Based on the information provided by the permittee in the most recent TPDES permit

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

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

SUMMARY OF CHANGES FROM APPLICATION

The applicant requested an effluent limit of 15 mg/l TSS for the Interim II phase. However, the effluent limit in the draft permit is 12 mg/l TSS for the Interim II phase.

BASIS FOR DRAFT PERMIT

The following items were considered in developing the draft permit:

1. Application received on October 21, 2024, and additional information received on November 13, 2024, and July 31, 2025.
2. The effluent limitations and conditions in the draft permit comply with EPA-approved portions of the 2018 Texas Surface Water Quality Standards (TSWQS), 30 TAC §§ 307.1 - 307.10, effective March 1, 2018; 2014 TSWQS, effective March 6, 2014; 2010 TSWQS, effective July 22, 2010; and 2000 TSWQS, effective July 26, 2000.
4. The effluent limitations in the draft permit meet the requirements for secondary treatment and the requirements for disinfection according to 30 TAC Chapter 309, Subchapter A: Effluent Limitations.
5. Interoffice Memoranda from the Water Quality Assessment Section of the TCEQ Water Quality Division. Interoffice Memorandum from the Pretreatment Team of the TCEQ Water Quality Division.
6. Consistency with the Coastal Management Plan: The facility is not located in the Coastal Management Program boundary.
7. *Procedures to Implement the Texas Surface Water Quality Standards* (IP), Texas Commission on Environmental Quality, June 2010, as approved by EPA, and the IP, January 2003, for portions of the 2010 IP not approved by EPA.
8. Texas 2022 Clean Water Act Section 303(d) List, Texas Commission on Environmental Quality, June 1, 2022; approved by the U.S. Environmental Protection Agency on July 7, 2022.
9. Texas Natural Resource Conservation Commission, Guidance Document for Establishing Monitoring Frequencies for Domestic and Industrial Wastewater Discharge Permits, Document No.

98-001.000-OWR-WQ, May 1998.

10. *Eighteen Total Maximum Daily Loads for Bacteria in Buffalo and Whiteoak Bayous and Tributaries Segments 1013, 1013A, 1013C, 1014, 1014A, 1014B, 1014E, 1014H, 1014K, 1014L, 1014M, 1014N, 1014O, 1017, 1017A, 1017B, 1017D, and 1017E (TMDL Project No. 22)*

PROCEDURES FOR FINAL DECISION

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

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

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

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

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

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

Harris County Municipal Utility District No. 541

TPDES Permit No. WQ0016654001

Statement of Basis/Technical Summary and Executive Director's Preliminary Decision

For additional information about this application, contact Kimberly Kendall, P.E. at (512) 239-4540.

Kimberly Kendall

Kimberly Kendall, P.E.
Municipal Permits Team
Wastewater Permitting Section (MC 148)

July 25, 2025

Date