Administrative Package Cover Page

This file contains the following documents:

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

Portada de Paquete Administrativo

Este archivo contiene los siguientes documentos:

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

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.

North Texas Municipal Water District (CN601365448) operates Sabine Creek Wastewater Treatment Plant (RN103888020), a domestic wastewater treatment plant. The facility is located at 1513 Crenshaw Road, in Royse City, Rockwall County, Texas 75189. The application is for a major amendment to request an expansion of the permitted flow from 7 MGD to 20 MGD.

Discharges from the facility are expected to contain Carbonaceous Biochemical Oxygen Demand (CBOD), Total Suspendid Solids (TSS, Ammonia Nitrogen, and E. coli. Additional potential pollutants are included in the Domestic Technical Report 1.0, Section 7 Pollutant Analysis of Treated Effluent and Domestic Worksheet 4.0 in the permit application. Domestic wastewater is treated by fine screens, grit chambers, primary clarifiers, aeration basins, secondary clarifiers, tertiary disc filters, U.V. disinfection. Sludge from the clarifiers is processed with sludge holding tanks and screw presses. The dewatered sludge is disposed at the NTMWD 121 Regional Disposal Facility.

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.

North Texas Municipal Water District (CN601365448) opera Sabine Creek Wastewater Treatment Plant (RN103888020), una planta de tratamiento de aguas residuals domesticas. La instalación está ubicada en 1513 Crenshaw Road, en Royse City, Condado de Rockwall, Texas 75189. La solicitud es para una enmienda importante para solicitor una expansión del flujo permitido de 7 MGD a 20 MGD.

Se espera que las descargas de la instalación contengan demanda bioquímica de oxígeno carbonosa de cinco dias (CBOD5), total de solidos en suspensión (TSS), nitrógeno amoniacal, bacterias coliformes (E. coli). Los contaminantes potenciales adicionales se incluyen en el Informe técnico domestico 1.0, Sección 7. Análisis de Contaminantes de Efluentes Tratados y Hoja de Trabajo Domestico 4.0 en el paquete de solicitud de permiso. Aguas residuals domésticas está tratado por cribas finas, cámaras de arena, clarificadores primarios, cubetas de aireación, clarificadores secundarios, filtros de disco terciarios, desinfección UV. Los lodos de los clarificadores se procesan con tanques de retención de lodos y prensas de tornillo. Los lodos deshidratados se eliminan en la instalación regional de eliminación NTMWD 121.

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

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

PERMIT NO. WQ0014469001

APPLICATION. North Texas Municipal Water District, P.O. Box 2408, Wylie, Texas 75098, has applied to the Texas Commission on Environmental Quality (TCEQ) to amend Texas Pollutant Discharge Elimination System (TPDES) Permit No. WQ0014469001 (EPA I.D. No. TX0126110) to authorize an increase in the discharge of treated wastewater to a volume not to exceed an annual average flow of 20,000,000 gallons per day. The domestic wastewater treatment facility is located at 1513 Crenshaw Drive, Royse City, in Rockwall County, Texas 75189. The discharge route is from the plant site to Parker Creek; thence to South Fork Sabine River; thence to Lake Tawakoni. TCEQ received this application on March 6, 2025. The permit application will be available for viewing and copying at C.F. Goodwin Public Library, Front Desk, 309 North Arch Street, Royse City, in Rockwall County, Texas prior to the date this notice is published in the newspaper. The application, including any updates, and associated notices are available electronically at the following webpage: https://www.tceq.texas.gov/permitting/wastewater/pending-permits/tpdes-applications. This link to an electronic map of the site or facility's general location is provided as a public courtesy and not part of the application or notice. For the exact location, refer to the application. https://gisweb.tceq.texas.gov/LocationMapper/?marker=-96.32,32.923333&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 North Texas Municipal Water District at the address stated above or by calling Mr. Jerry Allen, Permitting Manager, at 469-626-4634.

Issuance Date: May 1, 2025

Comisión de Calidad Ambiental del Estado de Texas

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

PERMISO NO. WQ0014469001

SOLICITUD. North Texas Municipal Water District, P.O. Box 2408, Wylie, Texas 75098, ha solicitado a la Comisión de Calidad Ambiental del Estado de Texas (TCEQ) para modificar el Permiso No. WQ0014469001 (EPA I.D. No. TX 0126110) 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 20,000,000 galones por día. La planta está ubicada en 1513 Crenshaw Drive, Royse City, en el Condado de Rockwall, Texas 75189. La ruta de descarga es del sitio de la planta al Parker Creek; de allí a South Fork Sabine River; de allí al lago Tawakoni. La TCEQ recibió esta solicitud el 6 de marzo de 2025. La solicitud para el permiso está disponible para leerla y copiarla en la Biblioteca Pública de C.F. Goodwin, 309 North Arch Street, Royse City, Texas. La solicitud (cualquier actualización y aviso inclusivo) está disponible electrónicamente en la siguiente página web: https://www.tceq.texas.gov/permitting/wastewater/pending-permits/tpdes-applications. Este enlace a un mapa electrónico de la ubicación general del sitio o de la instalación es proporcionado como una cortesía y no es parte de la solicitud o del aviso. Para la ubicación exacta, consulte la solicitud. https://gisweb.tceq.texas.gov/LocationMapper/?marker=-96.32,32.923333&level=18

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

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

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

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

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

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

intereses pertinentes y materiales de calidad del agua que se hayan presentado durante el período de comentarios.

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

CONTACTOS E INFORMACIÓN DE LA TCEQ. Todos los comentarios escritos del público y los para pedidos una reunión deben ser presentados a la Oficina del Secretario Principal, MC 105, TCEQ, P.O. Box 13087, Austin, TX 78711-3087 o por el internet at www.tceq.texas.gov/about/comments.html. Tenga en cuenta que cualquier información personal que usted proporcione, incluyendo su nombre, número de teléfono, dirección de correo electrónico y dirección física pasarán a formar parte del registro público de la Agencia. Si necesita más información en Español sobre esta solicitud para un permiso o el proceso del permiso, por favor llame a El Programa de Educación Pública de la TCEQ, sin cobro, al 1-800-687-4040. La información general sobre la TCEQ puede ser encontrada en nuestro sitio de la red: www.tceq.texas.gov.

También se puede obtener información adicional del North Texas Municipal Water District a la dirección indicada arriba o llamando a Mr. Jerry Allen, Permitting Manager, al 469-626-4634.

Fecha de emisión 1 de mayo de 2025

NORTH TEXAS MUNICIPAL WATER DISTRICT

Regional. Reliable. Everyday.

March 12, 2025

Abesha Michael
Wastewater Permitting Section (MC-148)
Water Quality Division
Texas Commission on Environmental Quality
P.O. Box 13087
Austin, Texas 78711-3087

VIA ELECTRONIC MAIL
Abesha.Michael@tceq.texas.gov

Re: Response to TCEQ Notice of Deficiency
Applicant Name: North Texas Municipal Water District (CN601365448)
Permit Number: WQ0014469001 (EPA I.D. No. TX0126110)
Site Name: Sabine Creek WWTP (RN103888020)
Type of Application: Major Amendment with Renewal

Dear Ms. Michael:

This letter is submitted regarding the above-referenced TPDES Domestic Wastewater Permit Application ("Application") associated with the North Texas Municipal Water District's ("NTMWD's") Sabine Creek Wastewater Treatment Plant ("Sabine Creek WWTP") in response to items noted in the March 10, 2025 Notice of Deficiency letter addressed to Jerry Allen. NTMWD offers the following comments for your consideration:

Request 1 (Section 1, item B, the cross-referenced affected landowners mailing list on page 12 of the administrative report: Thank you for the cross-reference, separate mailing list page, However, the mailing list shows 9 affected landowners names and mailing addresses while the landowners map delineated 7 affected landowners only. Please submit a revised mailing list or map. Please email a revised mailing labels accordingly, in Microsoft word format.)

Response:
The Landowners Map (Domestic Attachment 5) and the Landowners Cross-Reference List (Domestic Attachment 6), both depict 9 parcels. Parcels on the map are labeled 1-9 and the cross-reference list lists the 9 parcels and corresponding landowners. There are only 7 mailing labels because parcels 4, 5, and 6 are owned by the same landowner. In reference to the landowner mailing labels, the *Instruction for Completing the Domestic Wastewater Permit Application (TCEQ-10053-ins)* state: "Please eliminate duplicate names and addresses." Therefore, duplicate mailing labels were eliminated.

501 E. Brown Street, P.O. Box 2408, Wylie, Texas 75098-2408 | Phone: 972-442-5405 | Fax: 972-295-6440 |
www.ntmwd.com

Request 2 (Review the portion of the NORI provided and indicate if it contains any errors or omissions.)

Response:
NTMWD has reviewed the portion of the NORI provided. The portion of the NORI stating the discharge route states: "The discharge route is from the plant site to Parker Creek; thence to South Fork Sabine River; thence to Lake Tawakoni (pending RWA confirmation)."
Please edit the statement as follows: "The discharge route is from the plant site to Parker Creek; thence to South Fork Sabine River; thence to Lake Tawakoni in Segment 0507 of the Sabine River Basin."

Request 3 (Please provide the translated Spanish NORI in a Microsoft Word document.)

A translated Spanish NORI, in Microsoft Word document format, has been attached to the NTMWD response email with this letter.

Should you have any questions or need additional information please contact me at jallen@ntmwd.com or 469-626-4634.

Sincerely,

Jerry Allen
Permitting Manager

JA/sb

Enclosures
cc: Hunter Stephens, NTMWD
Joel Nickerson, NTMWD
R.J. Muraski, NTMWD
Lauren Kalisek, Lloyd Gosselink Rochelle & Townsend, P.C.
Lora Naismith, Lloyd Gosselink Rochelle & Townsend, P.C.

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
MODIFICACION

PERMISO NO. WQ0014469001

SOLICITUD. North Texas Municipal Water District, P.O. Box 2408, Wylie, TX 75098 ha solicitado a la Comisión de Calidad Ambiental del Estado de Texas (TCEQ) para modificar el Permiso No. WQ0014469001 (EPA I.D. No. TX 0126110) 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 20,000,000 galones por día. La planta está ubicada en 1513 Crenshaw Drive, Royse City, en el Condado de Rockwall, Texas. La ruta de descarga es del sitio de la planta al Parker Creek; de allí a South Fork Sabine River; de allí al lago Tawakoni en el Segmento No. 0507 de la Cuenca del Río Sabine. La TCEQ recibió esta solicitud el 6 de marzo de 2025. La solicitud para el permiso está disponible para leerla y copiarla en la Biblioteca Pública de C.F. Goodwin, 309 North Arch Street, Royse City, Texas. La solicitud (cualquier actualización y aviso inclusivo) está disponible electrónicamente en la siguiente página web: https://www.tceq.texas.gov/permitting/wastewater/pending-permits/tpdes-applications. Este enlace a un mapa electrónico de la ubicación general del sitio o de la instalación es proporcionado como una cortesía y no es parte de la solicitud o del aviso. Para la ubicación exacta, consulte la solicitud. https://gisweb.tceq.texas.gov/LocationMapper/?marker=-96.32,32.923333&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.**

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

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

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

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

de hecho en disputa o cuestiones mixtas de hecho y de derecho relacionadas a intereses pertinentes y materiales de calidad del agua que se hayan presentado durante el período de comentarios.

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

CONTACTOS E INFORMACIÓN DE LA TCEQ. Todos los comentarios escritos del público y los para pedidos una reunión deben ser presentados a la Oficina del Secretario Principal, MC 105, TCEQ, P.O. Box 13087, Austin, TX 78711-3087 o por el internet at www.tceq.texas.gov/about/comments.html. Tenga en cuenta que cualquier información personal que usted proporcione, incluyendo su nombre, número de teléfono, dirección de correo electrónico y dirección física pasarán a formar parte del registro público de la Agencia. Si necesita más información en Español sobre esta solicitud para un permiso o el proceso del permiso, por favor llame a El Programa de Educación Pública de la TCEQ, sin cobro, al 1-800-687-4040. La información general sobre la TCEQ puede ser encontrada en nuestro sitio de la red: www.tceq.texas.gov.

También se puede obtener información adicional del North Texas Municipal Water District a la dirección indicada arriba o llamando a Mr. Jerry Allen, Permitting Manager, al 469-626-4634.

Fecha de emisión _____ *[Date notice issued]*

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

March 6, 2025

Re: Confirmation of Submission of the Major Amendment with Renewal for Public Domestic Wastewater Authorization.

Dear Applicant:

This is an acknowledgement that you have successfully completed Major Amendment with Renewal for the Public Domestic Wastewater authorization.

ER Account Number: ER080008
Application Reference Number: 718630
Authorization Number: WQ0014469001
Site Name: Sabine Creek WWTP
Regulated Entity: RN103888020 - Sabine Creek Wastewater Treatment Plant
Customer(s): CN601365448 - North Texas Municipal Water District

Please be aware that TCEQ staff may contact your designated contact for any additional information.

If you have any questions, you may contact the Applications Review and Processing Team by email at WQ-ARPTeam@tceq.texas.gov or by telephone at (512) 239-4671.

Sincerely,
Applications Review and Processing Team
Water Quality Division

Texas Commission on Environmental Quality

Update Domestic or Industrial Individual Permit

WQ0014469001

Site Information (Regulated Entity)

What is the name of the site to be authorized?	SABINE CREEK WWTP
Does the site have a physical address?	Yes
Physical Address	
Number and Street	1513 CRENSHAW DR
City	ROYSE CITY
State	TX
ZIP	75189
County	ROCKWALL
Latitude (N) (##.######)	32.923333
Longitude (W) (-###.######)	-96.32
Primary SIC Code	4952
Secondary SIC Code	
Primary NAICS Code	221320
Secondary NAICS Code	
Regulated Entity Site Information	
What is the Regulated Entity's Number (RN)?	RN103888020
What is the name of the Regulated Entity (RE)?	SABINE CREEK WASTEWATER TREATMENT PLANT
Does the RE site have a physical address?	Yes
Physical Address	
Number and Street	1513 CRENSHAW DR
City	ROYSE CITY
State	TX
ZIP	75189
County	ROCKWALL
Latitude (N) (##.######)	32.923265
Longitude (W) (-###.######)	-96.320077
Facility NAICS Code	
What is the primary business of this entity?	DOMESTIC WASTEWATER TREATMENT

North T-Customer (Applicant) Information (Owner)

How is this applicant associated with this site?	Owner

What is the applicant's Customer Number (CN)?	CN601365448
Type of Customer	Local Government
Full legal name of the applicant:	
Legal Name	North Texas Municipal Water District
Texas SOS Filing Number	
Federal Tax ID	756004258
State Franchise Tax ID	
State Sales Tax ID	
Local Tax ID	
DUNS Number	77608933
Number of Employees	501+
Independently Owned and Operated?	Yes
I certify that the full legal name of the entity applying for this permit has been provided and is legally authorized to do business in Texas.	Yes
Responsible Authority Contact	
Organization Name	North Texas Municipal Water District
Prefix	
First	JENNAFER
Middle	P
Last	COVINGTON
Suffix	
Credentials	PE
Title	EXECUTIVE DIRECTOR/GENERAL MANAGER
Responsible Authority Mailing Address	
Enter new address or copy one from list:	
Address Type	Domestic
Mailing Address (include Suite or Bldg. here, if applicable)	PO BOX 2408
Routing (such as Mail Code, Dept., or Attn:)	
City	WYLIE
State	TX
ZIP	75098
Phone (###-###-####)	9724425405
Extension	
Alternate Phone (###-###-####)	
Fax (###-###-####)	
E-mail	JCOVINGTON@NTMWD.COM

Billing Contact

Responsible contact for receiving billing statements:

Select the permittee that is responsible for payment of the annual fee.	CN601365448, North Texas Municipal Water District
Organization Name	NORTH TEXAS MUNICIPAL WATER DISTRICT
Prefix	
First	HUNTER
Middle	
Last	STEPHENS
Suffix	
Credentials	
Title	DIRECTOR OF WASTEWATER
Enter new address or copy one from list:	

Mailing Address

Address Type	Domestic
Mailing Address (include Suite or Bldg. here, if applicable)	PO BOX 2408
Routing (such as Mail Code, Dept., or Attn:)	
City	WYLIE
State	TX
ZIP	75098
Phone (###-###-####)	4696264921
Extension	
Alternate Phone (###-###-####)	
Fax (###-###-####)	
E-mail	HSTEPHENS@NTMWD.COM

Application Contact

Person TCEQ should contact for questions about this application:

Same as another contact?	
Organization Name	NORTH TEXAS MUNICIPAL WATER DISTRICT
Prefix	MR
First	JERRY
Middle	
Last	ALLEN
Suffix	
Credentials	
Title	PERMITTING MANAGER
Enter new address or copy one from list:	

Mailing Address

Address Type	Domestic
Mailing Address (include Suite or Bldg. here, if applicable)	PO BOX 2408
Routing (such as Mail Code, Dept., or Attn:)	
City	WYLIE
State	TX
ZIP	75098
Phone (###-###-####)	4696264634
Extension	
Alternate Phone (###-###-####)	
Fax (###-###-####)	
E-mail	JALLEN@NTMWD.COM

Technical Contact

Person TCEQ should contact for questions about this application:

Same as another contact?	Application Contact
Organization Name	NORTH TEXAS MUNICIPAL WATER DISTRICT
Prefix	MR
First	JERRY
Middle	
Last	ALLEN
Suffix	
Credentials	
Title	PERMITTING MANAGER
Enter new address or copy one from list:	

Mailing Address

Address Type	Domestic
Mailing Address (include Suite or Bldg. here, if applicable)	PO BOX 2408
Routing (such as Mail Code, Dept., or Attn:)	
City	WYLIE
State	TX
ZIP	75098
Phone (###-###-####)	4696264634
Extension	
Alternate Phone (###-###-####)	
Fax (###-###-####)	
E-mail	JALLEN@NTMWD.COM

DMR Contact

Person responsible for submitting Discharge Monitoring Report Forms:	
Same as another contact?	Billing Contact
Organization Name	NORTH TEXAS MUNICIPAL WATER DISTRICT
Prefix	
First	HUNTER
Middle	
Last	STEPHENS
Suffix	
Credentials	
Title	DIRECTOR OF WASTEWATER
Enter new address or copy one from list:	
Mailing Address:	
Address Type	Domestic
Mailing Address (include Suite or Bldg. here, if applicable)	PO BOX 2408
Routing (such as Mail Code, Dept., or Attn:)	
City	WYLIE
State	TX
ZIP	75098
Phone (###-###-####)	4696264921
Extension	
Alternate Phone (###-###-####)	
Fax (###-###-####)	
E-mail	HSTEPHENS@NTMWD.COM

Section 1# Permit Contact

Permit Contact#: 1

Person TCEQ should contact throughout the permit term.

1) Same as another contact?	Technical Contact
2) Organization Name	NORTH TEXAS MUNICIPAL WATER DISTRICT
3) Prefix	MR
4) First	JERRY
5) Middle	
6) Last	ALLEN
7) Suffix	
8) Credentials	
9) Title	PERMITTING MANAGER

Mailing Address

10) Enter new address or copy one from list	
11) Address Type	Domestic
11.1) Mailing Address (include Suite or Bldg. here, if applicable)	PO BOX 2408
11.2) Routing (such as Mail Code, Dept., or Attn:)	
11.3) City	WYLIE
11.4) State	TX
11.5) ZIP	75098
12) Phone (###-###-####)	4696264634
13) Extension	
14) Alternate Phone (###-###-####)	
15) Fax (###-###-####)	
16) E-mail	JALLEN@NTMWD.COM

Section 2# Permit Contact

Permit Contact#: 2

Person TCEQ should contact throughout the permit term.

1) Same as another contact?	
2) Organization Name	NORTH TEXAS MUNICIPAL WATER DISTRICT
3) Prefix	
4) First	SARAH
5) Middle	
6) Last	BURNS
7) Suffix	
8) Credentials	
9) Title	PERMITTING SUPERVISOR

Mailing Address

10) Enter new address or copy one from list	
11) Address Type	Domestic
11.1) Mailing Address (include Suite or Bldg. here, if applicable)	PO BOX 2408
11.2) Routing (such as Mail Code, Dept., or Attn:)	
11.3) City	WYLIE
11.4) State	TX
11.5) ZIP	75098
12) Phone (###-###-####)	4696264632
13) Extension	
14) Alternate Phone (###-###-####)	
15) Fax (###-###-####)	
16) E-mail	SBURNS@NTMWD.COM

Owner Information

Owner of Treatment Facility	
1) Prefix	
2) First and Last Name	
3) Organization Name	NORTH TEXAS MUNICIPAL WATER DISTRICT
4) Mailing Address	P.O. BOX 2408
5) City	WYLIE
6) State	TX
7) Zip Code	75098
8) Phone (###-###-####)	9724425405
9) Extension	
10) Email	JCOVINGTON@NTMWD.COM
11) What is ownership of the treatment facility?	Public
Owner of Land (where treatment facility is or will be)	
12) Prefix	
13) First and Last Name	
14) Organization Name	NORTH TEXAS MUNICIPAL WATER DISTRICT
15) Mailing Address	P.O. BOX 2408
16) City	WYLIE
17) State	TX
18) Zip Code	75098
19) Phone (###-###-####)	9724425405
20) Extension	
21) Email	JCOVINGTON@NTMWD.COM
22) Is the landowner the same person as the facility owner or co-applicant?	Yes

General Information Renewal-Amendment

1) Current authorization expiration date:	06/22/2026
2) Current Facility operational status:	Active
3) Is the facility located on or does the treated effluent cross American Indian Land?	No
4) What is the application type that you are seeking?	Major Amendment with Renewal

4.1) Describe the proposed changes:	Amend the currently permitted flow from 7 MGD to 20 MGD. The requested phasing includes Existing/ Interim I 7 MGD, Interim II 11 MGD, Final Phase 20 MGD
5) Current Authorization type:	Public Domestic Wastewater
5.1) What is the proposed total flow in MGD discharged at the facility?	20
5.2) Select the applicable fee	>= 1.0 MGD - Major Amendment - $2,050
6) What is the classification for your authorization?	TPDES
6.1) What is the EPA Identification Number?	TX0126110
6.2) Is the wastewater treatment facility location in the existing permit accurate?	Yes
6.3) Are the point(s) of discharge and the discharge route(s) in the existing permit correct?	Yes
6.4) City nearest the outfall(s):	Royse City
6.5) County where the outfalls are located:	ROCKWALL
6.6) Is or will the treated wastewater discharge to a city, county, or state highway right-of-way, or a flood control district drainage ditch?	No
6.7) Is the daily average discharge at your facility of 5 MGD or more?	Yes
6.7.1) Provide the names of all counties located within 100 statute miles downstream of the point(s) of discharge:	HUNT|ROCKWALL|VAN ZANDT| WOOD|SMITH
7) Did any person formerly employed by the TCEQ represent your company and get paid for service regarding this application?	No

Public Notice Information

Individual Publishing the Notices

1) Prefix	
2) First and Last Name	JERRY ALLEN
3) Credential	
4) Title	PERMITTING MANAGER
5) Organization Name	
6) Mailing Address	PO BOX 2408
7) Address Line 2	
8) City	WYLIE
9) State	TX
10) Zip Code	75098
11) Phone (###-###-####)	4696264634
12) Extension	
13) Fax (###-###-####)	
14) Email	JALLEN@NTMWD.COM

Contact person to be listed in the Notices	
15) Prefix	MR
16) First and Last Name	JERRY ALLEN
17) Credential	
18) Title	PERMITTING MANAGER
19) Organization Name	
20) Phone (###-###-####)	4696264634
21) Fax (###-###-####)	
22) Email	JALLEN@NTMWD.COM
Bilingual Notice Requirements	
23) 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
23.1) Are the students who attend either the elementary school or the middle school enrolled in a bilingual education program at that school?	Yes
23.2) Do the students at these schools attend a bilingual education program at another location?	No
23.3) 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)?	No
23.4) Which language is required by the bilingual program?	SPANISH

Section 1# Public Viewing Information

County#: 1

1) County	ROCKWALL
2) Public building name	C.F. GOODWIN PUBLIC LIBRARY
3) Location within the building	FRONT DESK
4) Physical Address of Building	309 NORTH ARCH STREET
5) City	ROYSE CITY
6) Contact Name	HERLDINE RADLEY
7) Phone (###-###-####)	9726352772
8) Extension	
9) Is the location open to the public?	Yes

Plain Language

1) Plain Language	
[File Properties]	
File Name	LANG_AR-1 Plain Language Summary.pdf
Hash	7BA0AA039CA7C407CF8E034AE65D00B9E6C304B4D979FECDF115A9342728FF9B
MIME-Type	application/pdf

Supplemental Permit Information Form

1) Supplemental Permit Information Form (SPIF)

[File Properties]

File Name	SPIF_AR-2 SPIF.pdf
Hash	8B476CD8541312355FB755BC9899C2D2E1F5BC8F527A352A8E545DBF23A986E4
MIME-Type	application/pdf

Domestic Attachments

1) Attach an 8.5"x11", reproduced portion of the most current and original USGS Topographic Quadrangle Map(s) that meets the 1:24,000 scale.

[File Properties]

File Name	MAP_Domestic Attachment 1 - USGS Topographic Map.pdf
Hash	D2C4661FBC06A7B62B64A395590E0BC1731B7543F8F86AA254E82ECBBAE067EB
MIME-Type	application/pdf

2) Public Involvement Plan attachment (TCEQ Form 20960)

[File Properties]

File Name	PIP_Domestic Attachment 2 - PIP Form.pdf
Hash	A2F2B8CCC84C86E43DD927B3827EF3CE610FC91411975F34E5BAED235053549B
MIME-Type	application/pdf

3) Administrative Report 1.1

[File Properties]

File Name	ARPT_Domestic Attachment 3 - Administrative Report 1.1.pdf
Hash	2761FE64521C64B2F39545BF302B8EFFEBE0BC6F459A947A60C0DBA9A0F08854
MIME-Type	application/pdf

4) I confirm that all required sections of Technical Report 1.0 are complete and will be included in the Technical Attachment.	Yes
4.1) I confirm that Technical Report 1.1 is complete and included in the Technical Attachment.	Yes
4.2) I confirm that Worksheet 2.0 (Receiving Waters) is complete and included in the Technical Attachment.	Yes
4.3) Are you planning to include Worksheet 2.1 (Stream Physical Characteristics) in the Technical Attachment?	Yes
4.4) Are you planning to include Worksheet 4.0 (Pollutant Analyses Requirements) in the Technical Attachment?	Yes

4.5) Are you planning to include Worksheet 5.0 (Toxicity Testing Requirements) in the Technical Attachment?	Yes
4.6) I confirm that Worksheet 6.0 (Industrial Waste Contribution) is complete and included in the Technical Attachment.	Yes
4.7) Are you planning to include Worksheet 7.0 (Class V Injection Well Inventory/Authorization Form) in the Technical Attachment?	No

4.8) Technical Attachment

[File Properties]

File Name	TECH_Domestic Attachment 4 - Technical Reports.pdf
Hash	E2902289E04BE9BD84C023AF96366141C0E3F0CF6E6E9CF5521D374E159D8A05
MIME-Type	application/pdf

5) Affected Landowners Map

[File Properties]

File Name	LANDMP_Domestic Attachment 5- Landowners Map.pdf
Hash	E406E04C25B7D3F42B391BB36D0711AD7DEE2F0A9B08DA36FC07E5AA0E087E2D
MIME-Type	application/pdf

6) Landowners Cross Reference List

[File Properties]

File Name	LANDCRL_Domestic Attachment 6 - Landowner Cross Reference List.pdf
Hash	1BA16A56C030120F23973E889EA48024E0A3D0D55FE9DA33FDD3851BA70562F8
MIME-Type	application/pdf

7) Landowner Avery Template

[File Properties]

File Name	LANDAT_Sabine Creek WWTP Landowner Labels.docx
Hash	F6919FAE9200FEDBF2154B4A0D9131F08991593368B4957D90354FD59B4222FF
MIME-Type	application/vnd.openxmlformats-officedocument.wordprocessingml.document

8) Buffer Zone Map

[File Properties]

File Name	BUFF_ZM_Domestic Attachment 8 - Buffer Zone Map.pdf
Hash	F1727EB1AD864BE1DB6D7864F34EF3229A51262DA929A2DA0AE15CD3B0D21D7B
MIME-Type	application/pdf

9) Flow Diagram

[File Properties]

File Name FLDIA_Domestic Attachment 9 - Flow Diagram.pdf

Hash CA0E40250788C151000EEE12CE01398A647C80B7F0637406259DEE7255A97B3A

MIME-Type application/pdf

10) Site Drawing

[File Properties]

File Name SITEDR_Domestic Attachment 10 - Site Drawing.pdf

Hash 7F49AB029D73CE0ED22769E9F3B78AFEC117FFAB5C9BFAB5CEFC5687E41E8222

MIME-Type application/pdf

11) Original Photographs

[File Properties]

File Name ORIGPH_Domestic Attachment 11 - Original Photographs.pdf

Hash 99E4C5FFC8E708B41979BB7F2AAEDFBE9AA4FB931782265EAFC508C2B7F3B41F

MIME-Type application/pdf

12) Design Calculations

[File Properties]

File Name DES_CAL_Domestic Attachment 12 - Design Calculations.pdf

Hash 3A61461C6CD1E4ABCFF469F4C3734A0852C003E61E8A3E18706472415EBB3181

MIME-Type application/pdf

13) Solids Management Plan

[File Properties]

File Name SMP_Domestic Attachment 13 - Solids Management Plan.pdf

Hash 3422A3AC8243B53CFA490E6647A70D94D3512DD362C6E25FDB83492319059069

MIME-Type application/pdf

14) Water Balance

[File Properties]

File Name WB_Domestic Attachment 14 - Water Balance.pdf

Hash A50E9AEBDE6E9567F32A9C27573BFBD9A4D77899E2A6969802EE05D32F8ABAD6

MIME-Type application/pdf

15) Other Attachments

[File Properties]

File Name	OTHER_Domestic Attachment 15 - Other Attachments.pdf
Hash	EF57CFAE530073E1B717ABDFCA04718C32C4BC96C5891C9CE9D76494678B0A55
MIME-Type	application/pdf

Certification

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

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.

1. I am Jennafer Covington, the owner of the STEERS account ER108121.
2. I have the authority to sign this data on behalf of the applicant named above.
3. I have personally examined the foregoing and am familiar with its content and the content of any attachments, and based upon my personal knowledge and/or inquiry of any individual responsible for information contained herein, that this information is true, accurate, and complete.
4. I further certify that I have not violated any term in my TCEQ STEERS participation agreement and that I have no reason to believe that the confidentiality or use of my password has been compromised at any time.
5. I understand that use of my password constitutes an electronic signature legally equivalent to my written signature.
6. I also understand that the attestations of fact contained herein pertain to the implementation, oversight and enforcement of a state and/or federal environmental program and must be true and complete to the best of my knowledge.
7. I am aware that criminal penalties may be imposed for statements or omissions that I know or have reason to believe are untrue or misleading.
8. I am knowingly and intentionally signing Update Domestic or Industrial Individual Permit WQ0014469001.
9. My signature indicates that I am in agreement with the information on this form, and authorize its submittal to the TCEQ.

OWNER Signature: Jennafer Covington OWNER

Customer Number:	CN601365448
Legal Name:	North Texas Municipal Water District
Account Number:	ER108121
Signature IP Address:	174.244.35.5
Signature Date:	2025-03-05
Signature Hash:	B27378DF90A45F1EE5D3A76C993DFA2A477E4EAF0E92A4826303FA58ED8725E5
Form Hash Code at time of Signature:	7F37BD67C7E3A788BBBD4B3EDF67F171E724EF648C8511CA76750D5127E1A87B

Fee Payment

Transaction by:	The application fee payment transaction was made by JOEL NICKERSON
Paid by:	The application fee was paid by JOEL

	NICKERSON
Fee Amount:	$2000.00
Paid Date:	The application fee was paid on 2024-12-20
Transaction/Voucher number:	The transaction number is 582EA000640336 and the voucher number is 737435

Submission

Reference Number:	The application reference number is 718630
Submitted by:	The application was submitted by ER080008/ Sarah Burns
Submitted Timestamp:	The application was submitted on 2025-03-06 at 09:21:37 CST
Submitted From:	The application was submitted from IP address 209.116.250.114
Confirmation Number:	The confirmation number is 637295
Steers Version:	The STEERS version is 6.88
Permit Number:	The permit number is WQ0014469001

Additional Information

Application Creator: This account was created by Sarah Burns

DOMESTIC ATTACHMENT 3
ADMINISTRATIVE REPORT 1.1

DOMESTIC WASTEWATER PERMIT APPLICATION ADMINISTRATIVE REPORT 1.0

The following information is required for new and amendment applications.

Section 1. Affected Landowner Information (Instructions Page 36)

A. Indicate by a check mark that the landowners map or drawing, with scale, includes the following information, as applicable: See Domestic Attachment 5

- ☒ 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. See Domestic Attachment 6

C. Indicate by a check mark in which format the landowners list is submitted:

☐ USB Drive ☒ Four sets of labels See Domestic Attachment 7

D. Provide the source of the landowners' names and mailing addresses: Rockwall County CAD

E. As required by *Texas Water Code § 5.115*, is any permanent school fund land affected by this application?

☐ Yes ☒ No

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

N/A

Section 2. Original Photographs (Instructions Page 38)

Provide original ground level photographs. Indicate with checkmarks that the following information is provided. See Domestic Attachment 11

- ☒ 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. See Domestic Attachment 8

- 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

ATTACHMENT AR-1
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.

North Texas Municipal Water District (CN601365448) operates Sabine Creek Wastewater Treatment Plant (RN103888020), a domestic wastewater treatment plant. The facility is located at 1513 Crenshaw Road, in Royse City, Rockwall County, Texas 75189. The application is for a major amendment to request an expansion of the permitted flow from 7 MGD to 20 MGD.

Discharges from the facility are expected to contain Carbonaceous Biochemical Oxygen Demand (CBOD), Total Suspendid Solids (TSS, Ammonia Nitrogen, and E. coli. Additional potential pollutants are included in the Domestic Technical Report 1.0, Section 7 Pollutant Analysis of Treated Effluent and Domestic Worksheet 4.0 in the permit application. Domestic wastewater is treated by fine screens, grit chambers, primary clarifiers, aeration basins, secondary clarifiers, tertiary disc filters, U.V. disinfection. Sludge from the clarifiers is processed with sludge holding tanks and screw presses. The dewatered sludge is disposed at the NTMWD 121 Regional Disposal Facility.

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.

North Texas Municipal Water District (CN601365448) opera Sabine Creek Wastewater Treatment Plant (RN103888020), una planta de tratamiento de aguas residuals domesticas. La instalación está ubicada en 1513 Crenshaw Road, en Royse City, Condado de Rockwall, Texas 75189. La solicitud es para una enmienda importante para solicitor una expansión del flujo permitido de 7 MGD a 20 MGD.

Se espera que las descargas de la instalación contengan demanda bioquímica de oxígeno carbonosa de cinco dias (CBOD5), total de solidos en suspensión (TSS), nitrógeno amoniacal, bacterias coliformes (E. coli). Los contaminantes potenciales adicionales se incluyen en el Informe técnico domestico 1.0, Sección 7. Análisis de Contaminantes de Efluentes Tratados y Hoja de Trabajo Domestico 4.0 en el paquete de solicitud de permiso. Aguas residuals domésticas está tratado por cribas finas, cámaras de arena, clarificadores primarios, cubetas de aireación, clarificadores secundarios, filtros de disco terciarios, desinfección UV. Los lodos de los clarificadores se procesan con tanques de retención de lodos y prensas de tornillo. Los lodos deshidratados se eliminan en la instalación regional de eliminación NTMWD 121.

DOMESTIC ATTACHMENT 2
PUBLIC INVOLVEMENT PLAN FORM

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.

Sabine Creek Wastewater Treatment Plant is not considered to have significant public interest.

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.

Section 5. Community and Demographic Information

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

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

(City)

(County)

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

☐ City ☐ County ☐ Census Tract

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

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

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

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

(e) Languages commonly spoken in area by percentage

(f) Community and/or Stakeholder Groups

(g) Historic public interest or involvement

Section 6. Planned Public Outreach Activities

(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)

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)

DOMESTIC ATTACHMENT 1
USGS TOPOGRAPHIC MAP

Sabine Creek WWTP USGS Topographic Map

N

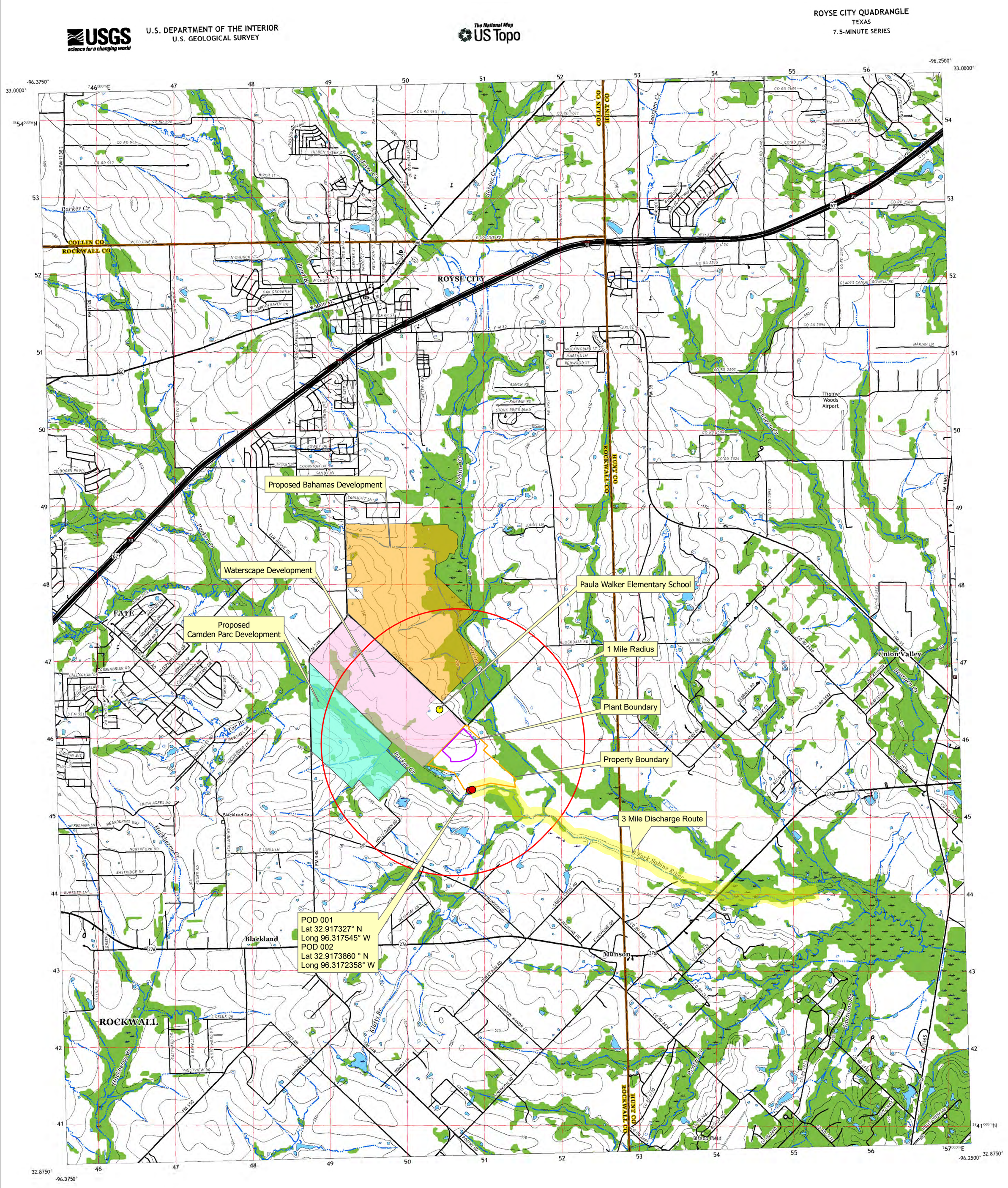
Legend

- Point of Discharge (POD)
- Discharge Route 3 Mile
- 1 Mile Radius
- Plant Boundary
- Property Boundary

Note: There are no springs, monitoring wells or sewage treatment facilities located within one mile of the Sabine Creek WWTP. There are no effluent disposal sites, sludge disposal, or storage/evaporation/holding ponds associated with this WWTP.

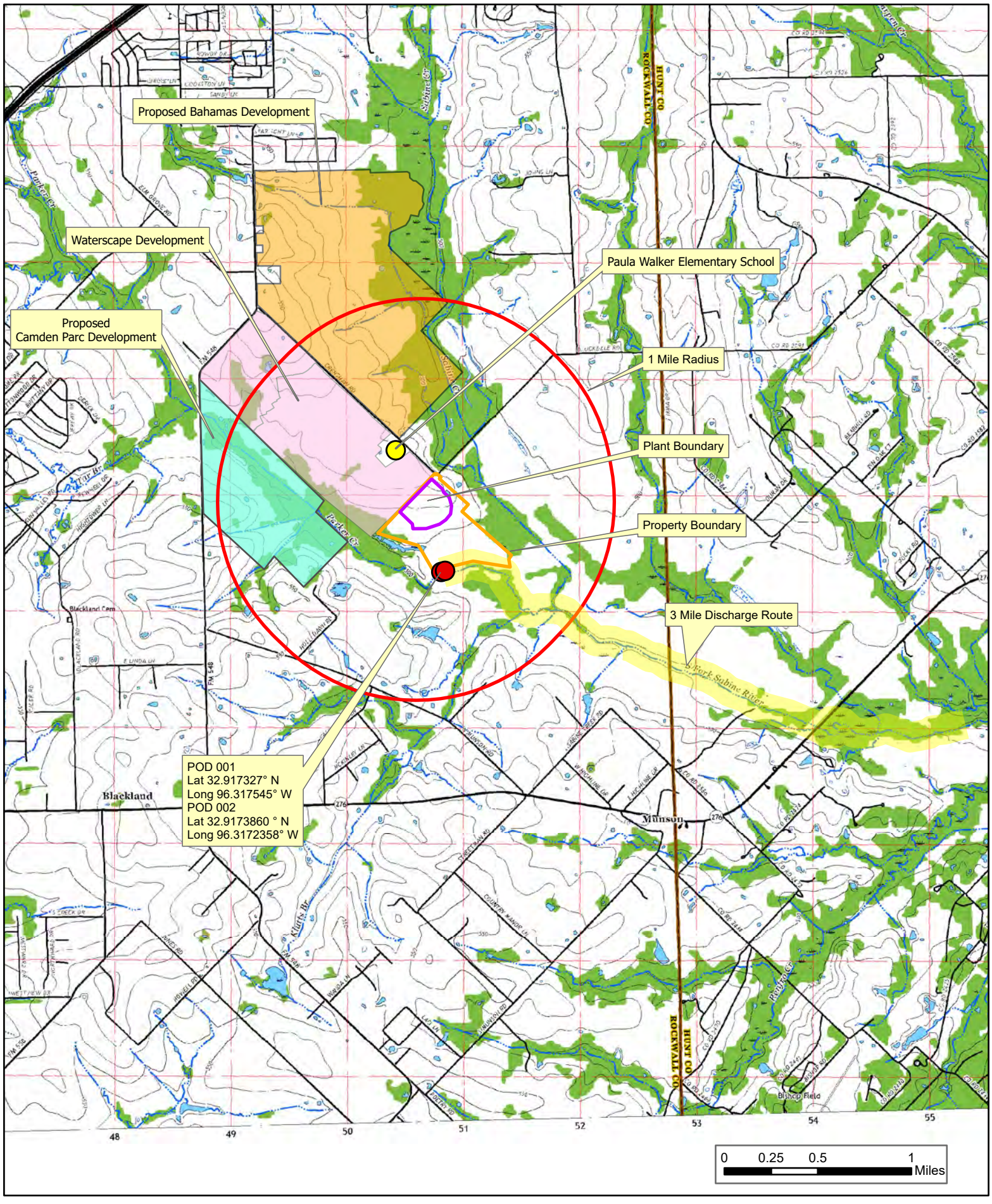
0 0.5 1 Miles

1:24,000



Sabine Creek WWTP USGS Topographic Map

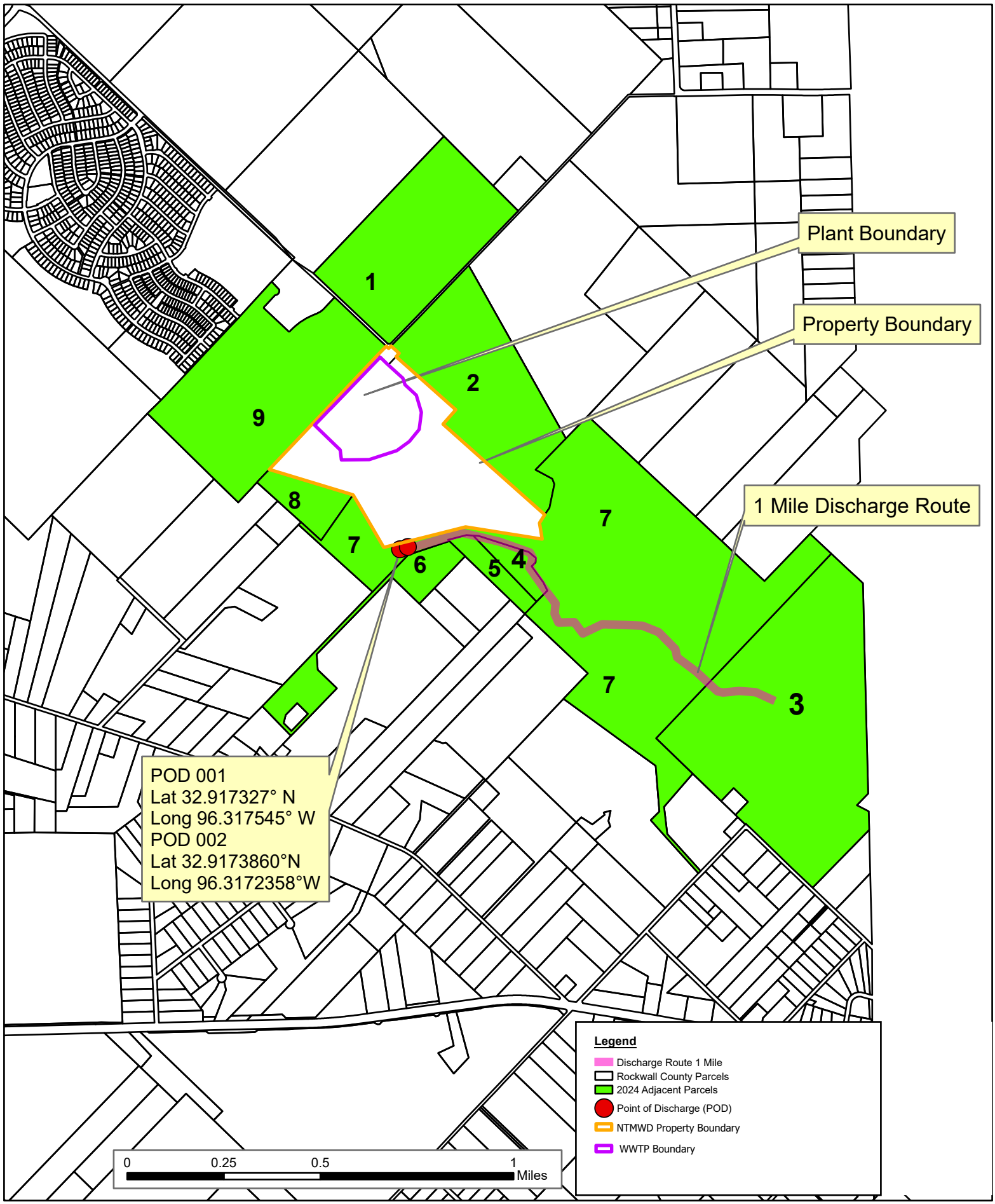
Note: There are no springs, monitoring wells or sewage treatment facilities located within one mile of the Sabine Creek WWTP. There are no effluent disposal sites, sludge disposal, or storage/evaporation/holding ponds associated with this WWTP.



ATTACHMENT 5
LANDOWNERS MAP

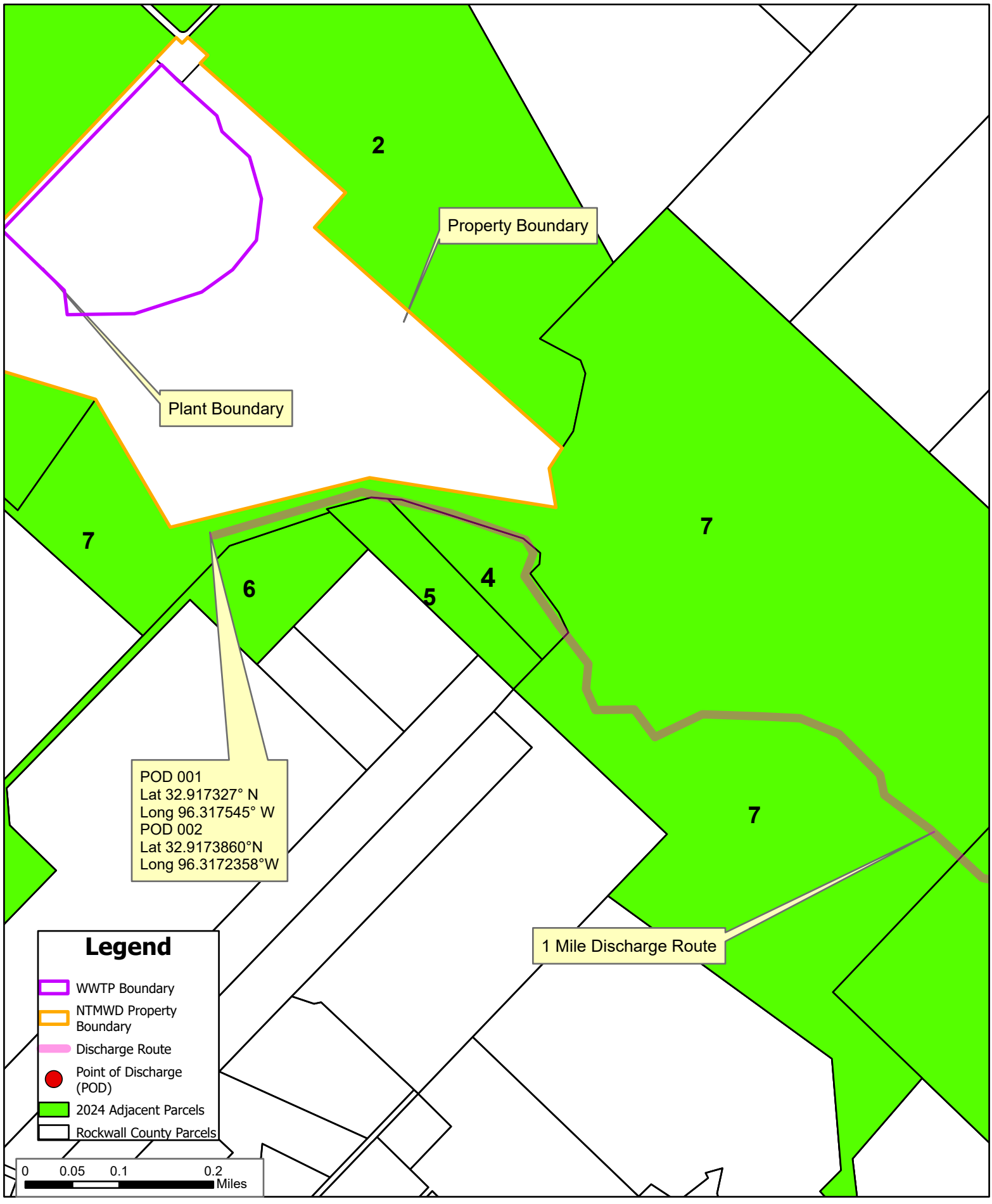
Sabine Creek WWTP Adjacent Landowners Map

This map was created using Rockwall CAD
parcel data that was last updated on May 9, 2024.



Sabine Creek WWTP Adjacent Landowners Map (Zoom)

This map was created using Rockwall CAD
parcel data that was last updated on May 9, 2024.



ATTACHMENT 6
LANDOWNER CROSS REFERENCE LIST

SABINE CREEK WWTP Cross-referenced Landowners List						
MapID	Property ID	OWNER NAME	MAILING ADDRESS	CITY	STATE	ZIP
1	10421	CRENSHAW JOHN WESLEY	PO BOX 905	FORNEY	TX	75126
2	11172	BOYD DAVID D & LORENA G BOYD	2613 SPRING RAIN DR	MESQUITE	TX	75181
3	112925	MCKOWN MIKE & KAY	780 SABINE CREEK RD	ROYSE CITY	TX	75189
4	32774	HARVEY JASON AND NICOLE AND GARY HARVEY AND KENETA HARVEY AND CLAY AINLEY AND LETHA	1076 N MUNSON RD	ROYSE CITY	TX	75189
5	32775	HARVEY JASON AND NICOLE AND GARY HARVEY AND KENETA HARVEY AND CLAY AINLEY AND LETHA	1076 N MUNSON RD	ROYSE CITY	TX	75189
6	11842	HARVEY JASON AND NICOLE AND GARY HARVEY AND KENETA HARVEY AND CLAY AINLEY AND LETHA	1076 N MUNSON RD	ROYSE CITY	TX	75189
7	11573	HIDDEN LAKE @ SABINE CREEK LLC	1237 WALES DRIVE	ROCKWALL	TX	75032
8	50007	CARSON ROBERT C & EDITH L	700 HOLLI DAWN	ROYSE CITY	TX	75189
9	11701	WATERSCAPE 4 LLC	8200 DOUGLAS AVE S TE 300	DALLAS	TX	75225
This list was created on May 10, 2024 using Rockwall CAD parcel data that was last updated on May 9, 2024.						

APPLICANT: NORTH TEXAS MUNICIPAL WATER DISTRICT [SABINE CREEK WWTP] PERMIT: WQ0014469001

HIDDEN LAKE @ SABINE CREEK
1237 WALES DR
ROCKWALL TX 75032

DAVID & LORENA BOYD
2613 SPRING RAIN DR
MESQUITE TX 75181

WATERSCAPE 4 LLC
8200 DOUGLAS AVE
SUITE 300
DALLAS TX 75225

MIKE & KAY MCKOWN
780 SABINE CREEK RD
ROYSE CITY TX 75189

JASON & NICOLE HARVEY
GARY & KENETA HARVEY
CLAY & LETHLA AINLEY
1076 N MUNSON RD
ROYSE CITY TX 75189

ROBERT & EDITH CARSON
700 HOLLI DAWN RD
ROYSE CITY TX 75189

JOHN WESLEY CRENSHAW
PO BOX 905
FORNEY TX 75126

ATTACHMENT 11
ORIGINAL PHOTOGRAPHS

Photo #1

Photo #2

*7 MGD construction in progress

Photo #3

*7 MGD construction in progress

Photo #4

*7 MGD construction in progress

Photo #5

*7 MGD construction in progress

Photo #6

*7 MGD construction in progress

Photo #7

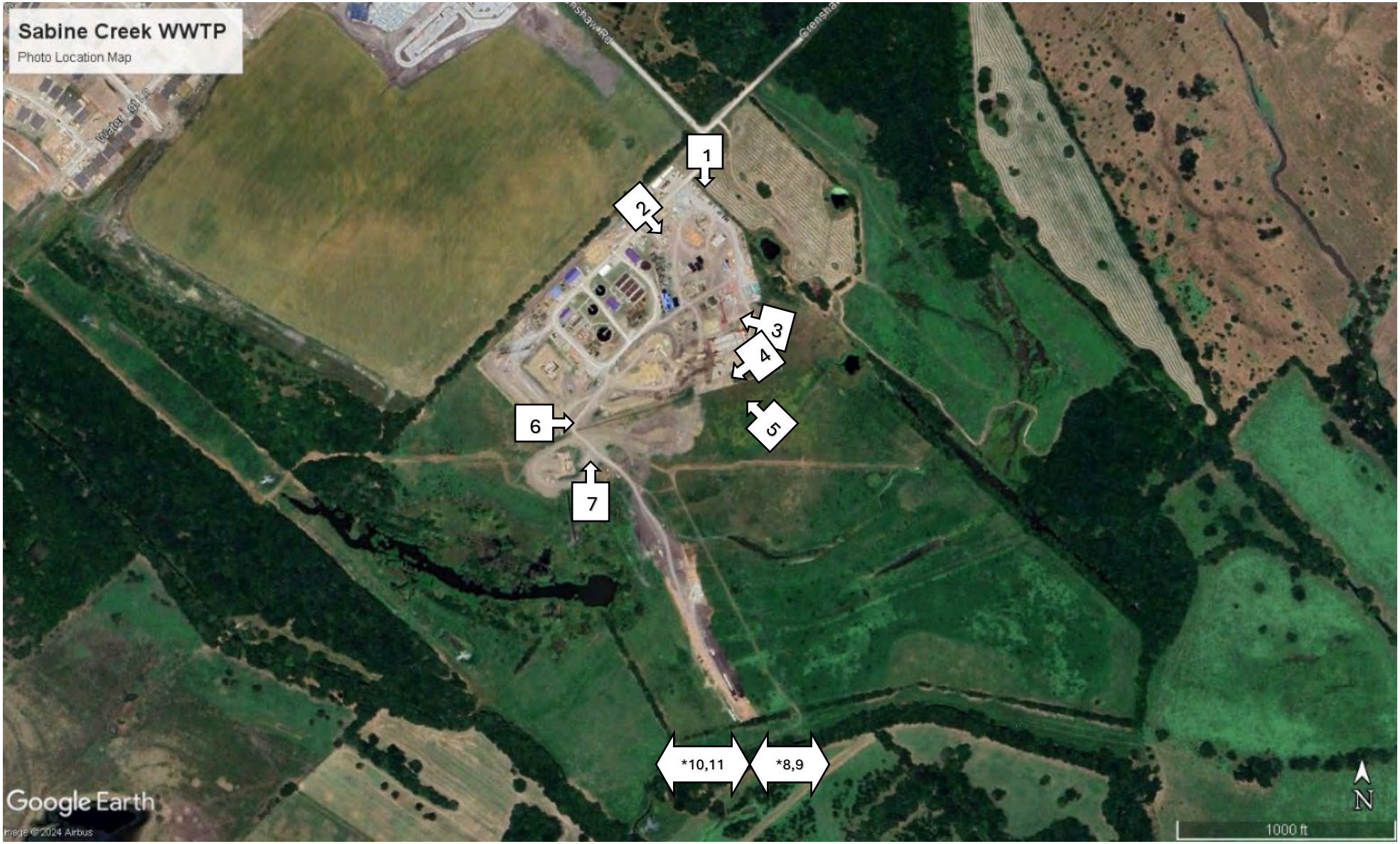
*7 MGD construction in progress

Photo #8: New Outfall (Upstream)

Photo #9: New Outfall (Downstream)

Photo # 10: Existing Outfall (Upstream)

Photo #11: Existing Outfall (Downstream)



*GPS Locations: Photos 8-9: 32.9173860, -96.3172358; Photos 10-11: 32.917290, -96.317632

ATTACHMENT AR-2

SUPPLEMENTAL PERMIT INFORMATION FORM

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: See Attachment AR-2

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: North Texas Municipal Water District

   Permit No. WQ00 14469001 EPA ID No. TX 0126110

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

   1513 Crenshaw Road, Royse City, Rockwall County, TX 75189

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): Mr.

First and Last Name: Jerry Allen

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

Title: Permitting Manager

Mailing Address: P.O. Box

City, State, Zip Code: Wylie, Texas 75098

Phone No.: 469-626-4634 Ext.: N/A Fax No.: N/A

E-mail Address: jallen@ntmwd.com

2. List the county in which the facility is located: Rockwall
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.

Sabine WWTP discharges into Parker Creek. Approximately 0.8 miles downstream from the outfall, Parker Creek converges with Sabine Creek at the South Fork Sabine River (Segment No. 0507G); thence to Lake Tawakoni (Segment No. 0507).

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). See Attachment 1

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):

About 30 acres will be impacted during construction and the depth of excavation will be about 25 feet in depth. There are no caves or karst features on the property.

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

The property is a wastewater treatment plant and is actively under construction to expand the WWTP to the permitted 7 MGD. The areas not impacted by construction have grass covering unpaved areas within fenced boundaries. Unpaved roads exist at the site providing access to buildings and facilities. The portion of the property without facilities or active construction is comprised of grass covering and the remaining area with trees, shrubs and ponds.

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:

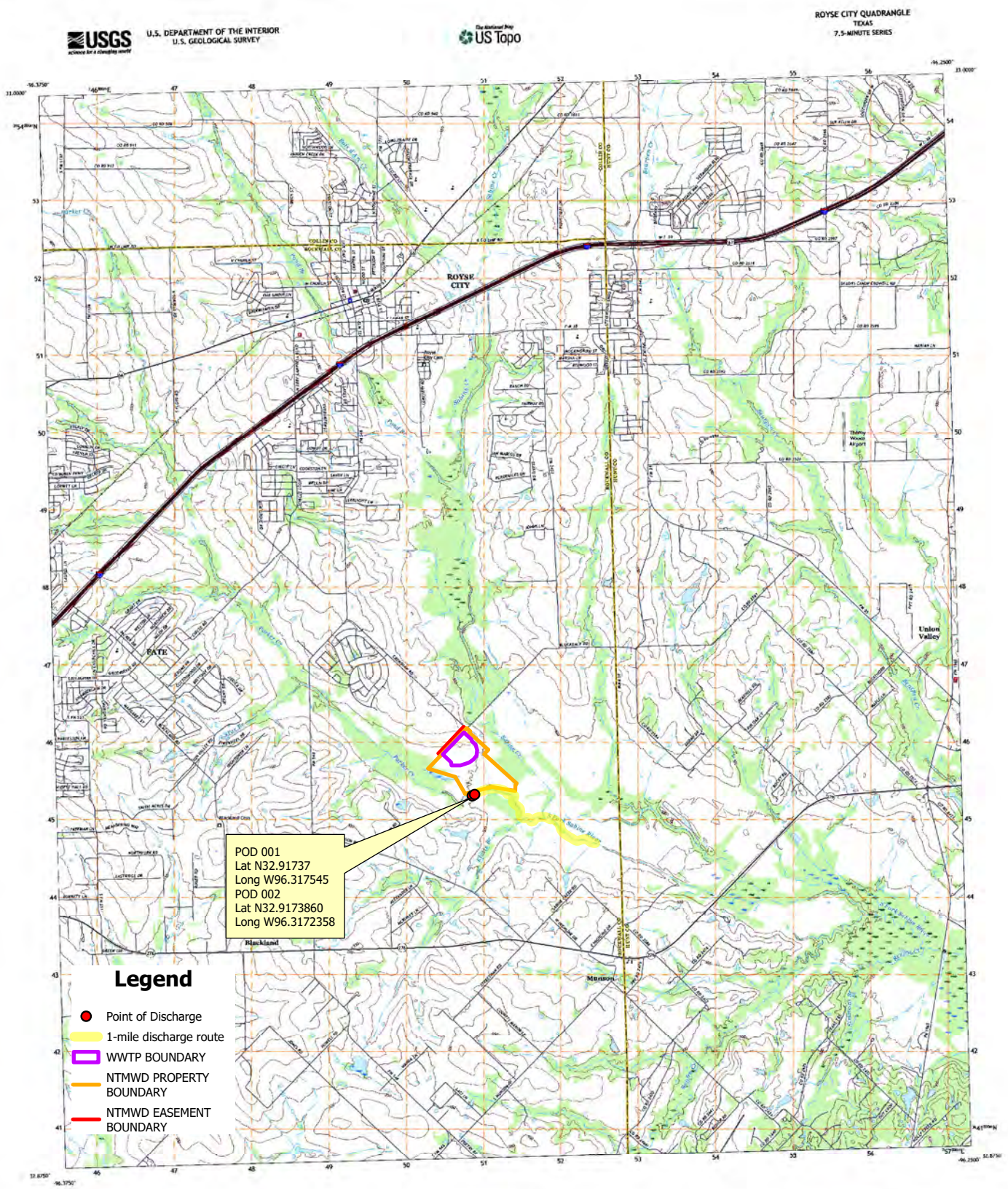
The plant was originally constructed in 2006 with 1.5 MGD annual average daily flow (AADF) capacity, and subsequently expanded to 3 MGD AADF with a 9.0 MGD peak two-hour flow (P2HF) in 2019. The plant is currently under construction to expand to the permitted 7 MGD. Before the construction of the WWTP, the property contained no structures and was used as crop and pastureland.

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

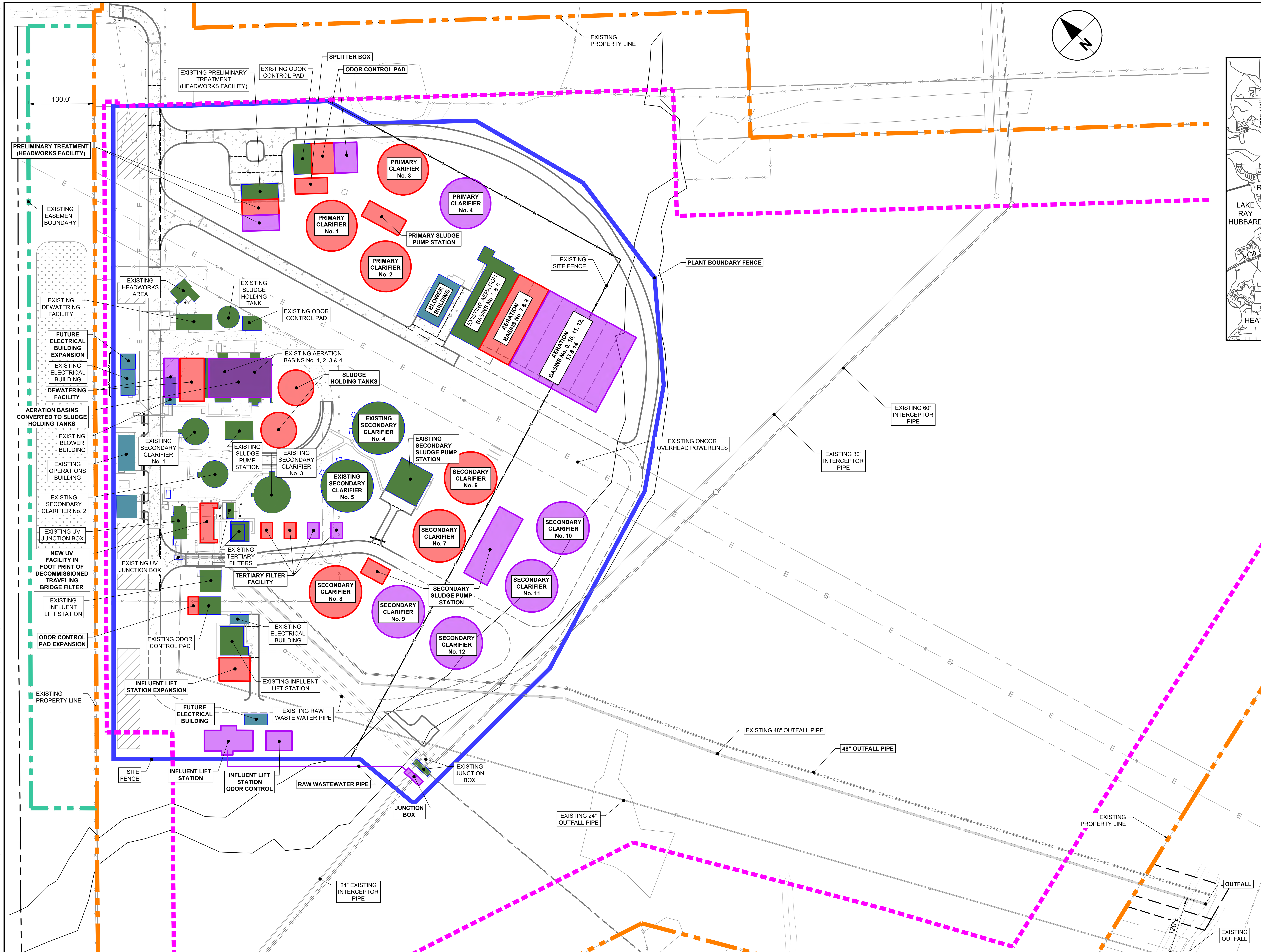
Sabine Creek WWTP was originally constructed in 2006 as a 1.5 MGD activated sludge treatment facility. The most recent expansion was placed into service in 2019, which brought the permitted annual average daily treatment capacity to 3.0 MGD. Prior to the construction of the Sabine Creek WWTP, the property was crop and pastureland.

SPIF ATTACHMENT 1
USGS TOPOGRAPHIC MAP

Sabine Creek Wastewater Treatment Plant
USGS Topographic Map

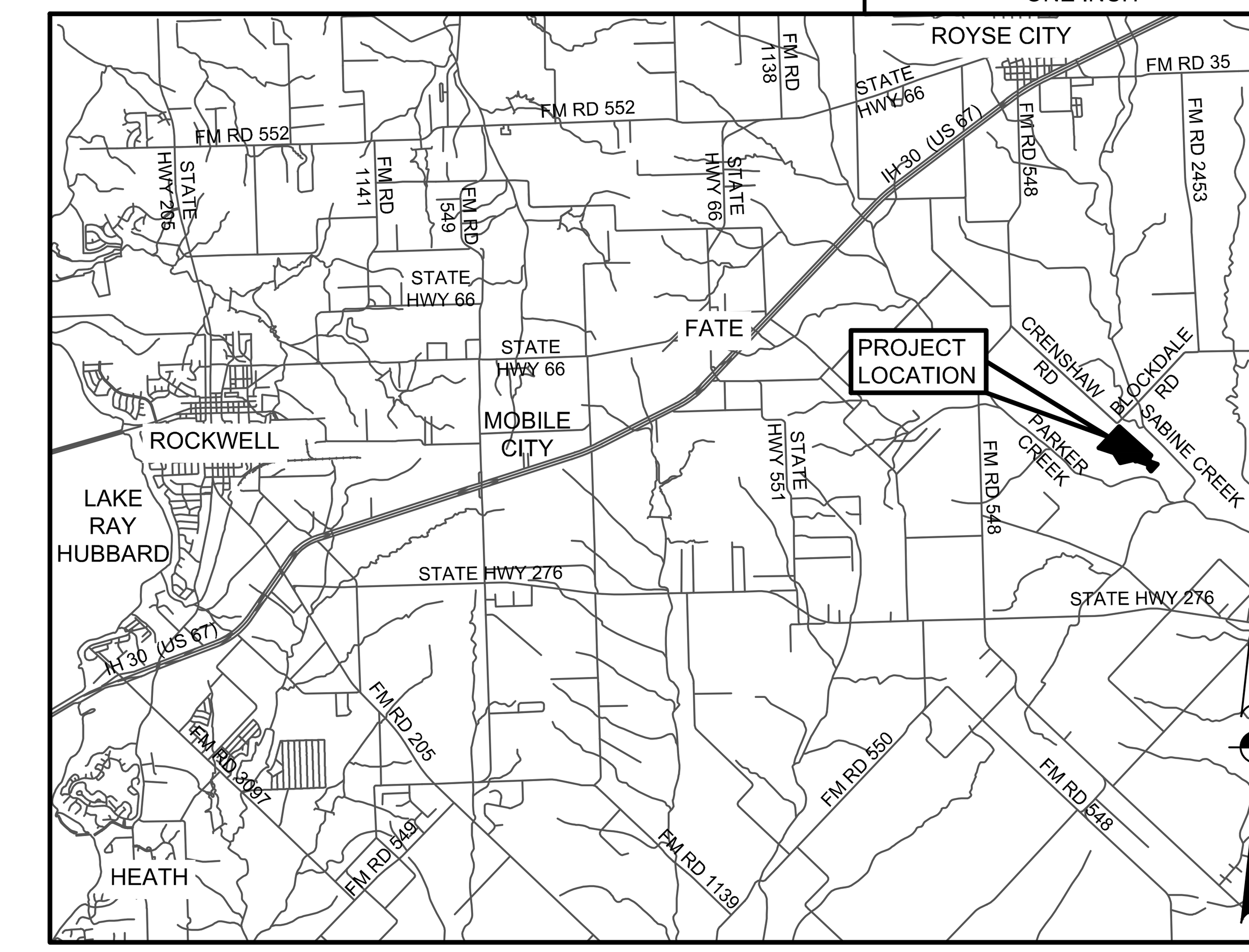


ATTACHMENT 8
BUFFER ZONE MAP


EXISTING PROPERTY LINE
SPLITTER BOX
ODOR CONTROL PAD
EXISTING ODOR CONTROL PAD
EXISTING PRELIMINARY TREATMENT (HEADWORKS FACILITY)
130.0'
PRELIMINARY TREATMENT (HEADWORKS FACILITY)
EXISTING EASEMENT BOUNDARY
PRIMARY CLARIFIER No. 3
PRIMARY CLARIFIER No. 4
PRIMARY CLARIFIER No. 1
PRIMARY CLARIFIER No. 2
PRIMARY SLUDGE PUMP STATION
EXISTING SITE FENCE
PLANT BOUNDARY FENCE
BLOWER BUILDING
EXISTING AERATION BASINS No. 5 & 6
AERATION BASINS No. 7 & 8
AERATION BASINS No. 9, 10, 11, 12, 13 & 14
EXISTING HEADWORKS AREA
EXISTING SLUDGE HOLDING TANK
EXISTING ODOR CONTROL PAD
EXISTING DEWATERING FACILITY
FUTURE ELECTRICAL BUILDING EXPANSION
EXISTING ELECTRICAL BUILDING
DEWATERING FACILITY
AERATION BASINS CONVERTED TO SLUDGE HOLDING TANKS
EXISTING AERATION BASINS No. 1, 2, 3 & 4
SLUDGE HOLDING TANKS
EXISTING 60" INTERCEPTOR PIPE
EXISTING BLOWER BUILDING
EXISTING SECONDARY CLARIFIER No. 1
EXISTING SLUDGE PUMP STATION
EXISTING SECONDARY CLARIFIER No. 3
EXISTING SECONDARY CLARIFIER No. 4
EXISTING SECONDARY SLUDGE PUMP STATION
EXISTING ONCOR OVERHEAD POWERLINES
EXISTING 30" INTERCEPTOR PIPE
EXISTING OPERATIONS BUILDING
EXISTING SECONDARY CLARIFIER No. 5
SECONDARY CLARIFIER No. 6
EXISTING SECONDARY CLARIFIER No. 2
SECONDARY CLARIFIER No. 7
SECONDARY CLARIFIER No. 10
EXISTING UV JUNCTION BOX
NEW UV FACILITY IN FOOT PRINT OF DECOMMISSIONED TRAVELING BRIDGE FILTER
EXISTING UV JUNCTION BOX
EXISTING TERTIARY FILTERS
TERTIARY FILTER FACILITY
SECONDARY CLARIFIER No. 8
SECONDARY CLARIFIER No. 9
SECONDARY SLUDGE PUMP STATION
SECONDARY CLARIFIER No. 11
EXISTING INFLUENT LIFT STATION
ODOR CONTROL PAD EXPANSION
EXISTING ODOR CONTROL PAD
EXISTING ELECTRICAL BUILDING
SECONDARY CLARIFIER No. 12
INFLUENT LIFT STATION EXPANSION
EXISTING INFLUENT LIFT STATION
EXISTING PROPERTY LINE
FUTURE ELECTRICAL BUILDING
EXISTING RAW WASTE WATER PIPE
EXISTING 48" OUTFALL PIPE
48" OUTFALL PIPE
SITE FENCE
INFLUENT LIFT STATION
INFLUENT LIFT STATION ODOR CONTROL
RAW WASTEWATER PIPE
EXISTING JUNCTION BOX
JUNCTION BOX
EXISTING 24" OUTFALL PIPE
EXISTING PROPERTY LINE
24" EXISTING INTERCEPTOR PIPE
OUTFALL
EXISTING OUTFALL
120'

BAR IS ONE INCH IN LENGTH ON ORIGINAL DRAWING. CHECK SCALE AND ADJUST ACCORDINGLY.

ONE INCH



LOCATION MAP

NTS

LEGEND

- EXISTING AEROBIC TREATMENT UNITS
- NON-TREATMENT UNITS
- FUTURE AEROBIC TREATMENT UNITS IN THE NEXT EXPANSION TO 11 MGD
- FUTURE AEROBIC TREATMENT UNITS IN THE FINAL BUILDOUT EXPANSION TO 20 MGD
- 150' BUFFER
- PLANT BOUNDARY
- PROPERTY BOUNDARY
- EASEMENT BOUNDARY

NOTE:
INTERNAL PLANT PIPING NOT SHOWN FOR CLARITY

150' BUFFER LINE REPRESENTS A 150' BUFFER ZONE FROM THE PROPERTY BOUNDARY, EXCEPT ON THE NORTHWEST SIDE OF THE SITE WHERE IT REPRESENTS A 150' BUFFER ZONE FROM THE EASEMENT BOUNDARY.

0 100' 200'

1" = 100'

04/27/2022

NO.	DATE	REVISION	APPROV.

DESIGNED BY T.GAERTNER
DRAWN BY J.PEDERSEN
CHECKED BY S.HERNANDEZ
REVIEWED BY T.GAERTNER

AECOM

AECOM TECHNICAL SERVICES, INC.
13355 NOEL ROAD, SUITE 400
DALLAS, TEXAS 75240
WWW.AECOM.COM
TBPE REG. NO. F-3580

NORTH TEXAS MUNICIPAL WATER DISTRICT
SABINE CREEK WWTP EXPANSION TO 7 MGD

NORTH TEXAS MUNICIPAL WATER DISTRICT

BUFFER ZONE MAP

SHEET NO. OF ---
DWG NO. 00-SK-01
PROJ REF 60645127

ANSI D - 22x34

Plot Time: 7/17/2024 4:00 PM PEDERSEN, JON
File: C:\Users\pedersenj\DC\ACCDocs\AECOM\CI-AMER (USA) 60645127-Sabine Creek WWTP\Project Files\900 Design Collaboration\20 Detailed Design\CSHT\work\60645127-ACM-00-C100-Permitting Ver 2.dwg

DOMESTIC ATTACHMENT 4
TECHNICAL REPORT 1.0 and 1.1

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): 7.0

2-Hr Peak Flow (MGD): 21.0

Estimated construction start date: 11/2022

Estimated waste disposal start date:8/2025

B. Interim II Phase

Design Flow (MGD):11.0

2-Hr Peak Flow (MGD): 44.0

Estimated construction start date:2032

Estimated waste disposal start date: 2035

C. Final Phase

Design Flow (MGD): 20.0

2-Hr Peak Flow (MGD): 80.0

Estimated construction start date: 2047

Estimated waste disposal start date: 2050

D. Current Operating Phase

Provide the startup date of the facility: 08/01/2006

Section 2. Treatment Process (Instructions Page 43)

A. Current Operating Phase

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

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

See Attachment TR-1

B. Treatment Units

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

Table 1.0(1) – Treatment Units

Treatment Unit Type	Number of Units	Dimensions (L x W x D)
See Attachment TR-2		

C. Process Flow Diagram

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

Attachment: Domestic Attachment 9

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

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

- Latitude: OF 001: 32.917290; OF 002: 32.9173860
- Longitude: OF 001: -96.317632; OF 002: -96.3172358

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: See Domestic Attachment 10

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

City of Fate and City of Royse City

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
Sabine Creek Interceptor	NTMWD	Publicly Owned	23,355
Parker Creek Interceptor and Parallel Interceptor	NTMWD	Publicly Owned	20,079
City of Fate Sewer System	City of Fate	Publicly Owned	20,079
Royse City Sewer System	City of Royse City	Publicly Owned	23,355

Section 4. Unbuilt Phases (Instructions Page 45)

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

☐ Yes ☒ No

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

☐ Yes ☐ No

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

N/A

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.

N/A

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: Interim Phase I (3 MGD): 11/07/2016; Interim Phase II (5 MGD): 03/03/2022; Final Phase (7 MGD): 03/03/2022

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**.

See Attachment TR-3

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.

See Attachment TR-4

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*.

See Attachment TR-5

D. Grit and grease treatment

1. *Acceptance of grit and grease waste*

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

☐ Yes ☒ No

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

2. *Grit and grease processing*

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

N/A

3. *Grit disposal*

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

☐ 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.

N/A

4. *Grease and decanted liquid disposal*

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

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

N/A

E. 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 U132 or TXRNE N/A

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

☐ Yes ☐ No

3. *Conditional exclusion*

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

☐ Yes ☒ No

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

N/A

4. Existing coverage in individual permit

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

☐ Yes ☒ No

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

N/A

5. Zero stormwater discharge

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

☐ Yes ☒ No

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

N/A

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

6. Request for coverage in individual permit

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

☐ Yes ☒ No

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

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

N/A

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

F. Discharges to the Lake Houston Watershed

Does the facility discharge in the Lake Houston watershed?

☐ Yes ☒ No

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

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

1. Acceptance of sludge from other WWTPs

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

☐ Yes ☒ No

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

In addition, provide the date the plant started or is anticipated to start accepting sludge, an estimate of monthly sludge acceptance (gallons or millions of gallons), an estimate of the BOD_5 concentration of the sludge, and the design BOD_5 concentration of the influent from the collection system. Also note if this information has or has not changed since the last permit action.

N/A

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

2. Acceptance of septic waste

Is the facility accepting or will it accept septic waste?

☐ Yes ☒ No

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

☐ Yes ☐ No

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

☐ Yes ☐ No

If yes to any of the above, provide the date the plant started or is anticipated to start accepting septic waste, an estimate of monthly septic waste acceptance (gallons or millions of gallons), an estimate of the BOD_5 concentration of the septic waste, and the design BOD_5 concentration of the influent from the collection system. Also note if this information has or has not changed since the last permit action.

N/A

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

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

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

☐ Yes ☒ No

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

N/A

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

Is the facility in operation? See Attachment TR-6

☒ 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). **W*ater 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	N/A	<2.2	1	Composite	06/11/2024 08:55 06/12/2024 08:55
Total Suspended Solids, mg/l	N/A	1.1	1	Composite	06/11/2024 08:55 06/12/2024 08:55
Ammonia Nitrogen, mg/l	N/A	1.5	1	Composite	06/11/2024 08:55 06/12/2024 08:55
Nitrate Nitrogen, mg/l	N/A	13.2	1	Composite	06/11/2024 08:55 06/12/2024 08:55
Total Kjeldahl Nitrogen, mg/l	N/A	3.18	1	Composite	06/11/2024 08:55 06/12/2024 08:55
Sulfate, mg/l	N/A	177	1	Composite	06/11/2024 08:55 06/12/2024 08:55
Chloride, mg/l	N/A	97.4	1	Composite	06/11/2024 08:55 06/12/2024 08:55
Total Phosphorus, mg/l	N/A	1.24	1	Composite	06/11/2024 08:55 06/12/2024 08:55
pH, standard units	N/A	7.17	1	Grab	06/12/2024 08:55
Dissolved Oxygen*, mg/l	N/A	7.85	1	Grab	06/12/2024 08:55
Chlorine Residual, mg/l	N/A	0.07	1	Grab	06/12/2024 08:55
E.coli (CFU/100ml) freshwater	N/A	<1	1	Grab	06/12/2024 08:55
Entercocci (CFU/100ml) saltwater	N/A	N/A	N/A	N/A	N/A
Total Dissolved Solids, mg/l	N/A	658	1	Composite	06/11/2024 08:55 06/12/2024 08:55
Electrical Conductivity, µmohs/cm, †	N/A	898	1	Grab	06/11/2024 08:55 06/12/2024 08:55
Oil & Grease, mg/l	N/A	1.5	1	Grab	06/12/2024 08:55
Alkalinity ($CaCO_3$)*, mg/l	N/A	140	1	Composite	06/11/2024 08:55 06/12/2024 08:55

*TPDES permits only
†TLAP permits only

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

Pollutant	Average Conc.	Max Conc.	No. of Samples	Sample Type	Sample Date/Time
Total Suspended Solids, mg/l	N/A	N/A	N/A	N/A	N/A
Total Dissolved Solids, mg/l	N/A	N/A	N/A	N/A	N/A
pH, standard units	N/A	N/A	N/A	N/A	N/A
Fluoride, mg/l	N/A	N/A	N/A	N/A	N/A
Aluminum, mg/l	N/A	N/A	N/A	N/A	N/A
Alkalinity ($CaCO_3$), mg/l	N/A	N/A	N/A	N/A	N/A

Section 8. Facility Operator (Instructions Page 50)

Facility Operator Name: Jason Fisher

Facility Operator's License Classification and Level: Wastewater Treatment Operator Class A

Facility Operator's License Number: WW054014

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>= 1 MGD
- ☒ Serves >= 10,000 people
- ☒ Class I Sludge Management Facility (per 40 CFR § 503.9)
- ☐ Biosolids generator
- ☐ Biosolids end user – land application (onsite)
- ☐ Biosolids end user – surface disposal (onsite)
- ☐ 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: N/A

C. Biosolids Management

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

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

Biosolids Management

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

If "Other" is selected for Management Practice, please explain (e.g. monofill or transport to another WWTP): Transport to disposal site

D. Disposal site

Disposal site name: NTMWD 121 Regional Disposal Facility

TCEQ permit or registration number: MSW 2294

County where disposal site is located: Collin

E. Transportation method

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

Name of the hauler: North Texas Municipal Water District

Hauler registration number: 22488

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: N/A
- USDA Natural Resources Conservation Service Soil Map:

  Attachment: N/A
- Federal Emergency Management Map:

  Attachment: N/A
- Site map:

  Attachment: N/A

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

☐ Overlap a designated 100-year frequency flood plain

☐ Soils with flooding classification

☐ Overlap an unstable area

☐ Wetlands

☐ Located less than 60 meters from a fault

☐ None of the above

Attachment: N/A

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

N/A

B. Temporary storage information

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

Nitrate Nitrogen, mg/kg: N/A

Total Kjeldahl Nitrogen, mg/kg: N/A

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

Phosphorus, mg/kg: N/A

Potassium, mg/kg: N/A

pH, standard units: N/A

Ammonia Nitrogen mg/kg: N/A

Arsenic: N/A

Cadmium: N/A

Chromium: N/A

Copper: N/A

Lead: N/A

Mercury: N/A

Molybdenum: N/A

Nickel: N/A

Selenium: N/A

Zinc: N/A

Total PCBs: N/A

Provide the following information:

Volume and frequency of sludge to the lagoon(s): N/A

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

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

C. Liner information

Does the active/proposed sludge lagoon(s) have a liner with a maximum hydraulic conductivity of $1x10^{-7}$ cm/sec?

☐ Yes ☐ No

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

N/A

D. Site development plan

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

N/A

Attach the following documents to the application.

- Plan view and cross-section of the sludge lagoon(s)

  Attachment: N/A
- Copy of the closure plan

  Attachment: N/A
- Copy of deed recordation for the site

  Attachment: N/A
- Size of the sludge lagoon(s) in surface acres and capacity in cubic feet and gallons

  Attachment: N/A
- Description of the method of controlling infiltration of groundwater and surface water from entering the site

  Attachment: N/A
- Procedures to prevent the occurrence of nuisance conditions

  Attachment: N/A

E. Groundwater monitoring

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

☐ Yes ☒ No

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

Attachment: N/A

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:

TCEQ Authorization R-14469-001 authorizes NTMWD to produce Type II Reclaimed Water and Royse City is the Provider of Reclaimed Water to authorized Users within Royse City Incorporated and ETJ Boundaries.

B. Permittee enforcement status

Is the permittee currently under enforcement for this facility?

☐ Yes ☒ No

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

☐ Yes ☒ No

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

N/A

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

A. RCRA hazardous wastes

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

☐ Yes ☒ No

B. Remediation activity wastewater

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

☐ Yes ☒ No

C. Details about wastes received

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

Attachment: N/A

Section 14. Laboratory Accreditation (Instructions Page 56)

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

- The laboratory is an in-house laboratory and is:
  - periodically inspected by the TCEQ; or
  - located in another state and is accredited or inspected by that state; or
  - 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: Jennafer P. Covington

Title: Executive Director/General Manager

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.

See Attachment TR-7

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: Royse City and Fate

If yes, attach correspondence from the city.

Attachment: See Attachment TR-8

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: See Attachment TR-8

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: See Attachment TR-8

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: See Attachment TR-8

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: See Attachment TR-8

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: See Attachment TR-8

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): 7 MGD

Average Influent Organic Strength or BOD_5 Concentration in mg/l: 188

Average Influent Loading (lbs/day = total average flow X average BOD_5 conc. X 8.34): 1,568

Provide the source of the average organic strength or BOD_5 concentration.

The Cities of Royse City and Fate, which include residential, commercial, and a few very small industrial customers.

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	N/A	N/A
Subdivision	N/A	N/A
Trailer park – transient	N/A	N/A
Mobile home park	N/A	N/A
School with cafeteria and showers	N/A	N/A
School with cafeteria, no showers	N/A	N/A
Recreational park, overnight use	N/A	N/A
Recreational park, day use	N/A	N/A
Office building or factory	N/A	N/A
Motel	N/A	N/A
Restaurant	N/A	N/A
Hospital	N/A	N/A
Nursing home	N/A	N/A
Other	N/A	N/A
TOTAL FLOW from all sources	N/A	N/A
AVERAGE BOD_5 from all sources	N/A	N/A

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: No Limit

Dissolved Oxygen, mg/l: 6

Other: N/A

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: No Limit

Dissolved Oxygen, mg/l: 5

Other: N/A

C. Final Phase Design Effluent Quality

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

Total Suspended Solids, mg/l: 15

Ammonia Nitrogen, mg/l: 2

Total Phosphorus, mg/l: No Limit

Dissolved Oxygen, mg/l: 4

Other: N/A

D. Disinfection Method

Identify the proposed method of disinfection.

☐ Chlorine: N/A mg/l after N/A minutes detention time at peak flow

Dechlorination process: N/A

☒ Ultraviolet Light: 5.4 seconds contact time at peak flow

☐ Other: N/A

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: See Domestic Attachment 12

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.

N/A

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

FEMA Panels 48397C0065L and 48397C0070L

For a new or expansion of a facility, will a wetland or part of a wetland be filled?

☐ Yes ☒ No

If yes, has the applicant applied for a US Corps of Engineers 404 Dredge and Fill Permit?

☐ Yes ☐ No

If yes, provide the permit number: N/A

If no, provide the approximate date you anticipate submitting your application to the Corps: N/A

B. Wind rose

Attach a wind rose: See Attachment TR-9

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

A. Beneficial use authorization

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

☐ Yes ☒ No

If yes, attach the completed **Application for Permit for Beneficial Land Use of Sewage Sludge (TCEQ Form No. 10451)**: N/A

B. Sludge processing authorization

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

☐ Sludge Composting

☐ Marketing and Distribution of sludge

☐ Sludge Surface Disposal or Sludge Monofill

If any of the above, sludge options are selected, attach the completed **Domestic Wastewater Permit Application: Sewage Sludge Technical Report (TCEQ Form No. 10056)**: N/A

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

Attach a solids management plan to the application.

Attachment: See Domestic Attachment 13

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

- Treatment units and processes dimensions and capacities

- Solids generated at 100, 75, 50, and 25 percent of design flow
- Mixed liquor suspended solids operating range at design and projected actual flow
- Quantity of solids to be removed and a schedule for solids removal
- Identification and ownership of the ultimate sludge disposal site
- For facultative lagoons, design life calculations, monitoring well locations and depths, and the ultimate disposal method for the sludge from the facultative lagoon

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

ATTACHMENT TR-1
TREATMENT PROCESS DESCRIPTION

Sabine Creek Wastewater Treatment Plant
Treatment Process Description

The North Texas Municipal Water District (NTMWD) Sabine Creek Wastewater Treatment Plant (WWTP) is an advanced tertiary plant currently operating in the Existing/Interim I Phase of 7.0 MGD. NTMWD is applying for an Interim II Phase of 11.0 MGD, and a Final Phase of 20 MGD. The wastewater processes consists of *(3/5/7) fine screens, *(2/4/6) bypass manual screens, *(2/3/5) grit chambers, *(0/3/4) primary clarifiers, *(6/8/10) aeration basins, *(5/8/12) secondary clarifiers, *(1/0/0) traveling bridge filter (dual media), *(3/6/10) tertiary disc filters and the effluent is disinfected with a *(2/5/8) UV channels prior to the point of discharge to Parker Creek. Four of the existing aeration basins operate in the complete mix mode and the new aeration basins will operate in the plug flow mode. The sludge from the secondary clarifier is pumped to a *(1/3/7) aerobic sludge holding tanks for storage until it is pumped to *(2/4/6) screw presses for dewatering. The dewatered sludge is collected in a container and hauled to the NTMWD 121 Disposal Facility for disposal.

*(Total units in [Existing] Interim I Phase/ Interim II Phase/Final Phase Proposed Expansion)

ATTACHMENT TR-2
TREATMENT UNITS

Sabine Creek WWTP Treatment Unit Table

Existing/Interim I Capacity 7.0 MGD AADF, 21.0 MGD P2HF
Interim II Capacity 11 MGD AADF, 44 MGD P2HF
Final Capacity 20 MGD AADF, 80 MGD P2HF

Treatment Unit Type	Total Number of Units in Final Phase	Total No. of Units per Phase	Capacity/Dimensions
		Existing/Interim I	Existing Capacity/Dimension
		Interim II 11 MGD	Additional Capacity/Dimension
		Final 20 MGD	Additional Capacity/Dimension
Fine Screens	7	3	(1) 10 MGD + (1) 6 MGD + (1) 16 MGD
		2	16 MGD each
		2	16 MGD each
Bypass Manual Screen	6	2	(1) 10 MGD + (1) 16 MGD
		2	16 MGD each
		2	16 MGD each
Grit Chambers	5	2	(1) 16 MGD P2HF capacity; Diameter: 14 ft (1) 20 MGD P2HF capacity; Diameter: 16 ft
		1	20 MGD P2HF capacity each; Diameter: 16 ft
		2	20 MGD P2HF capacity each; Diameter: 16 ft
Primary Clarifiers	4	0	N/A
		3	20.0 MGD P2HF capacity each; 100 ft diameter, 18 ft SWD
		1	20.0 MGD P2HF capacity; 100 ft diameter, 18 ft SWD
Aeration Basins	10	6	(4) 0.75 MGD AADF capacity each Dimensions: 75 ftx30 ftx16 ft SWD each (2) 2.0 MGD AADF capacity each Dimensions: 150 ftx30 ftx20 ft SWD each
		2	(2) 2.0 MGD AADF capacity each Dimensions: 150 ftx30 ftx20 ft SWD
		6 new, *(minus the 4 converted)*	(6) 2.0 MGD AADF capacity each Dimensions: 150 ftx30 ftx20 ft SWD *(The (4) 0.75 MGD basins of the Interim I Phase will be converted to Aerobic Sludge Holding Tanks)*
Secondary Clarifiers	12	5	(2) 2.25 MGD P2HF capacity; 50 ft diameter, 12 ft SWD (1) 4.5 MGD P2HF capacity; 70 ft diameter, 12 ft SWD (2) 9.4 MGD P2HF capacity; 100 ft diameter, 18 ft SWD
		3	9.4 MGD P2HF capacity; 100 ft diameter, 18 ft SWD

		4	9.4 MGD P2HF capacity; 100 ft diameter, 18 ft SWD
Traveling Bridge Filter	0	1	5.0 MGD P2HF capacity Filter Bed Area: 875 ft^2, Loading Rate P2HF:3.97 GPM/ft^2
		0	To be removed
		0	N/A
Tertiary Disc Filters	10	3	(1) 8.0 MGD P2HF capacity Filter Bed Area: 861 ft2, Loading Rate P2HF: 6.5 GPM/ft2; (2) 8.2 MGD P2HF capacity each Filter Bed Area: 896 ft2, Loading Rate P2HF: 6.36 GPM/ft2
		3	8.2 MGD P2HF each Filter Bed Area: 896 ft2, Loading Rate P2HF: 6.36 GPM/ft2
		4	8.2 MGD P2HF each Filter Bed Area: 896 ft2, Loading Rate P2HF: 6.36 GPM/ft2
U.V. System	8 channels	2 channels	21.2 MGD P2HF capacity No. of modules per channel: 5
		3 channels	31.8 MGD P2HF capacity added No. of modules per channel: 5
		3 channels	31.8 MGD P2HF capacity added No. of modules per channel: 5
Aerobic Sludge Holding Tanks	7	1	Volume: 150,000 Gallons Diameter: 42 ft
		2	Volume: 575,000 Gallons each Diameter: 70 ft each
		4	Volume: 269,000 Gallons each Dimensions: 75 ftx30 ftx16 ft SWD each (converted 0.75 MGD aeration basins)
Screw Press	6	2	Solids Loading Capacity: 1000 lb/hr dry capacity each Flow: 200 GPM each at 1% sludge concentration
		2	Solids Loading Capacity: 1000 lb/hr dry capacity each Flow: 200 GPM each at 1% sludge concentration
		2	Solids Loading Capacity: 1000 lb/hr dry capacity each Flow: 200 GPM each at 1% sludge concentration

ATTACHMENT TR-3
APPROVAL LETTER

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

March 3, 2022

Bruce D. Cole, P.E.
AECOM TECHNICAL SERVICES GROUP, INC.
13355 Noel Road, Ste. 400
Dallas, TX 75240

Re: North Texas Municipal Water District
Sabine Creek WWTP Expansion to 7 MGD
Permit No. WQ0014469-001
WWPR Log No. 0322/011
CN601365448, RN103888020
Rockwall County

Dear Mr. Cole:

We have received the project summary transmittal letter dated 2/22/2022.

The rules which regulate the design, installation and testing of domestic wastewater projects are found in 30 TAC, Chapter 217, of the Texas Commission on Environmental Quality (TCEQ) rules titled Design Criteria for Wastewater Systems.

Section 217.6(d), relating to case-by-case reviews, states in part that upon submittal of a summary transmittal letter, the executive director may approve of the project without reviewing a complete set of plans and specifications.

Under the authority of §217.6(e) a technical review of complete plans and specifications is not required. **However, the project proposed in the summary transmittal letter is approved for construction. Please note, that this conditional approval does not relieve the applicant of any responsibilities to obtain all other necessary permits or authorizations, such as wastewater treatment permit or other authorization as required by Chapter 26 of the Texas Water Code.** Below are provisions of the Chapter 217 regulations, which must be met as a condition of approval. These items are provided as a reminder. If you have already met these requirements, please disregard this additional notice.

- You must keep certain materials on file for the life of the project and provide them to TCEQ upon request. These materials include an engineering report, test results, a summary transmittal letter, and the final version of the project plans and specifications. These materials shall be prepared and sealed by a Professional Engineer licensed in the State of Texas and must show substantial compliance with Chapter 217. All plans and specifications must conform to any waste discharge requirements authorized in a permit by the TCEQ. Certain specific items which shall be addressed in the engineering report are discussed in §217.6(d). Additionally, the engineering report must include all constants, graphs,

equations, and calculations needed to show substantial compliance with Chapter 217. The items which shall be included in the summary transmittal letter are addressed in §217.6(d)(1)-(9).

- Any deviations from Chapter 217 shall be disclosed in the summary transmittal letter and the technical justifications for those deviations shall be provided in the engineering report. Any deviations from Chapter 217 shall be based on the best professional judgement of the licensed professional engineer sealing the materials and the engineer's judgement that the design would not result in a threat to public health or the environment.

- Any variance from a Chapter 217 requirement disclosed in your summary transmittal letter is approved. If in the future, additional variances from the Chapter 217 requirements are desired for the project, each variance must be requested in writing by the design engineer. Then, the TCEQ will consider granting a written approval to the variance from the rules for the specific project and the specific circumstances.

- Within 60 days of the completion of construction, an appointed engineer shall notify both the Wastewater Permits Section of the TCEQ and the appropriate Region Office of the date of completion. The engineer shall also provide written certification that all construction, materials, and equipment were substantially in accordance with the approved project, the rules of the TCEQ, and any change orders filed with the TCEQ. All notifications, certifications, and change orders must include the signed and dated seal of a Professional Engineer licensed in the State of Texas.

This approval does not mean that future projects will be approved without a complete plans and specifications review. The TCEQ will provide a notification of intent to review whenever a project is to undergo a complete plans and specifications review. Please be reminded of 30 TAC §217.7(a) of the rules which states, "Approval given by the executive director or other authorized review authority does not relieve an owner of any liability or responsibility with respect to designing, constructing, or operating a collection system or treatment facility in accordance with applicable commission rules and the associated wastewater permit".

If you have any questions or if we can be of any further assistance, please call me at (512) 239-4552.

Sincerely,

Louis C. Herrin, III, P.E.
Wastewater Permits Section (MC 148)
Water Quality Division
Texas Commission on Environmental Quality

LCHIII/tc

cc: TCEQ, Region 4 Office

ATTACHMENT TR-4
BUFFER ZONE REQUIREMENTS

Buffer Zone Requirements

The majority of the buffer zone surrounding the WWTP is met by ownership, with an exception to the buffer zone along the northwest property boundary, which extends into property owned by Waterscape 4, LCC.

Attached is an easement executed August 19, 2024, between NTMWD and Waterscape 4, LLC. Waterscape 4, LLC or its successors shall not construct any house, residential building, or other type of habitable structure on the easement which satisfies the buffer zone requirements for the northwest boundary.

EASEMENT FOR THE NORTH TEXAS MUNICIPAL WATER DISTRICT SABINE CREEK WASTEWATER TREATMENT PLANT BUFFER ZONE

STATE OF TEXAS §
§
COUNTY OF ROCKWALL §

KNOW ALL MEN BY THESE PRESENTS:

THAT, subject to the exceptions, reservations, and limitations herein, and in lieu of condemnation of same, the undersigned WATERSCAPE 4, LLC, ("Grantor"), for and in consideration of the sum of **TEN AND NO/100 DOLLARS** ($10.00) and other good a valuable consideration paid by the NORTH TEXAS MUNICIPAL WATER DISTRICT ("Grantee"), has granted, sold and conveyed, and by these presents does grant, sell, and convey unto the Grantee an easement on those certain premises owned by the Grantor for the purpose of establishing and maintaining a buffer zone relating to the Grantee's wastewater facility, said easement being, on and across the following described lands situated in Rockwall County, Texas, to wit:

Being a tract of land one hundred and thirty (130') feet in width situated in Nancy McCasland Survey Survey, Abstract No. 149, Rockwall County, Texas, being more particularly described as follows (the "Easement Area"):

SEE ATTACHED EXHIBIT "A" FOR DESCRIPTION

Subject to the exceptions, reservations, and limitations herein, and in lieu of condemnation of same, Grantor covenants to the Grantee that the Grantor or its successors shall not construct or cause to be constructed any house, residential building, or other type of habitable structure, on the property described in Exhibit A attached. The Grantor further represents that no residences now exist on the area described in Exhibit A. The area described in Exhibit A shall be utilized by Grantee solely to provide a buffer zone for the Grantee's wastewater facility adjoining the described tract.

Notwithstanding anything to the contrary herein, Grantee shall have the right, but not the obligation, to construct an earthen berm and plant trees and landscaping within the Easement Area to screen the wastewater treatment facilities, provided, however, if Grantor has previously constructed improvements in the Easement Area, Grantee shall coordinate Grantee's work with Grantor to minimize impacts to Grantor's improvements. Grantor shall have the right, but not the obligation, to construct an earthen berm and landscaping, at Grantor's sole cost, within the Easement Area to screen the wastewater treatment plant or for such other purposes as Grantor may determine. Grantor may also construct hike and bike trails within the Easement Area.

Grantee shall have no obligation to maintain the portion of the berm, any landscaping, hike and bike trails, or any other similar amenities constructed by Grantor within the Easement Area, said obligation to repair and maintain that portion of the berm, landscaping and any facilities constructed by Grantor being the sole responsibility of Grantor. Grantor shall have no obligation to maintain the portion of the berm, any landscaping or any other similar amenities constructed by Grantee within the Easement Area, said obligation to repair and maintain that portion of the berm, landscaping and any facilities constructed by Grantee being the sole responsibility of Grantee. Grantor and its successors and assigns shall indemnify

Grantee from any and all causes of action, claims, and damages for injuries to person or property related to or arising out of any use or activity on or within the Easement Area by persons or entities using the Easement Area at Grantor's direction or with Grantor's permission, provided, however, Grantor shall not be required to indemnify Grantee for any causes of action, claims, and damages arising from or related to the use of the Easement Area by Grantee, any of Grantee's employees, contractors, agents, or representatives, or any person or entity using the Easement Area at Grantor's direction or with Grantor's permission. Grantor shall have the right to assign its rights and obligations under this Easement to the homeowner's association ("HOA") for the Waterscape development and, upon such assignment and the HOA's written acceptance of Grantor's obligation under this Easement, Grantor's indemnity and other obligations under this Easement shall automatically terminate.

Grantor further reserves the right to put or place or authorize others to put or place underground utility lines, drainage pipes and swales provided such facilities do not materially interfere with the construction or viability of the berm. Said utility lines, drainage pipes and swales may only be placed within the Easement Area upon express written approval by Grantee of Grantor's engineering plans and specifications, which approval will not be unreasonably withheld, conditioned, or delayed.

THE CONVEYANCE OF THE RIGHTS TO USE THE EASEMENT AREA IS MADE ON AN "AS-IS, WHERE IS" BASIS, AND THE CONSIDERATION WAS BARGAINED ON THE BASIS OF AN "AS IS, WHERE IS" TRANSACTION IN LIEU OF GRANTEE'S CONDEMNATION OF THE PROPERTY.

GRANTOR HEREBY SPECIFICALLY DISCLAIMS ANY WARRANTY, GUARANTY, OR REPRESENTATION, ORAL OR WRITTEN, PAST, PRESENT, OR FUTURE, OF, AS TO, OR CONCERNING (1) THE NATURE AND CONDITION OF THE EASEMENT AREA, (2) THE SUITABILITY OF THE EASEMENT AREA FOR ANY AND ALL ACTIVITIES AND USES WHICH GRANTEE MAY ELECT TO CONDUCT THEREON, (3) THE COMPLIANCE OF THE EASEMENT AREA OR THE OPERATION THEREOF WITH ANY LAWS, RULES, ORDINANCES, OR REGULATIONS OF ANY GOVERNMENT OR OTHER BODY, AND (4) WARRANTIES (EXPRESS OR IMPLIED) OF CONDITION OR REGARDING THE PROPERTY'S FITNESS FOR A PARTICULAR PURPOSE, MERCHANTABILITY, TENANTABILITY, HABITABILITY OR SUITABILITY FOR ANY INTENDED USE.

This conveyance is made by Grantor and accepted by Grantee subject to the following:

1. Visible and apparent easements and encumbrances not appearing of record.

2. Easements, restrictions, reservations, covenants, conditions, encumbrances, oil, gas, water and all other leases, and mineral severances (other than liens and conveyances) presently of record in the Official Public Records of Rockwall County, Texas, that affect the property, but only to the extent that said items are still valid and in force and effect as of the Effective Date.

Grantor reserves all of the subsurface water, oil, gas, and sulfur in and under the Easement Area but waives all rights of ingress and egress to the surface thereof for the purpose of exploring, developing, mining or drilling for same; however, nothing in this reservation shall affect the title and rights of the Grantee, its successors and assigns, to take and use all other minerals and materials thereon, therein, and thereunder.

TO HAVE AND TO HOLD, subject to the exceptions, reservations, and limitations herein, and in lieu of condemnation, unto the said Grantee, its successors and assigns, the above-described easement, and Grantor does hereby bind itself and its successors and assigns to warrant and forever defend all and singular the said easement to Grantee and 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.

WATERSCAPE 4, LLC

By: _____

Its: authorized Signatory

ACKNOWLEDGMENT

STATE OF TEXAS §
§
COUNTY OF ROCKWALL §

This instrument was acknowledged before me on August 19, 2024, by Colin Huffines, as authorized Signatory of WATERSCAPE 4, LLC, on behalf of said entity.

AMY MARTINEZ
Notary Public, State of Texas
Comm. Expires 02-09-2026
Notary ID 133580114

_____
Notary Public, State of Texas

ACCEPTANCE BY GRANTEE:

NORTH TEXAS MUNICIPAL WATER DISTRICT

By: _____

Its: ASSISTANT DEPUTY ENGINEERING

ACKNOWLEDGMENT

STATE OF TEXAS §
§
COUNTY OF ROCKWALL §

This instrument was acknowledged before me on AUGUST 19, 2024, by MARIC SIMON, as AD ENGINEERING of NORTH TEXAS MUNICIPAL WATER DISTRICT, on behalf of said entity.

AMY MARTINEZ
Notary Public, State of Texas
Comm. Expires 02-09-2026
Notary ID 133580114

_____
Notary Public, State of Texas

NTMWD SABINE CREEK WASTEWATER TREATMENT PLANT
WATERSCAPE 4, LLC PARCEL ACQUISITION
PROJECT NUMBER 308-0576-20
NANCY McCASLAND SURVEY, A-149
ROCKWALL COUNTY, TEXAS

BEING a 4.611 acre (200,842 square foot) tract of land situated in the Nancy McCasland Survey, Abstract Number 149, in Rockwall County, Texas, and being a portion of the remainder of a called 121.833 acre tract of land situated said McCasland Survey, conveyed to Waterscape 4, LLC by the Special Warranty Deed with Vendor's Lien recorded in Instrument Number 20200000013264, Official Public Records, Rockwall County, Texas and being more particularly described as follows:

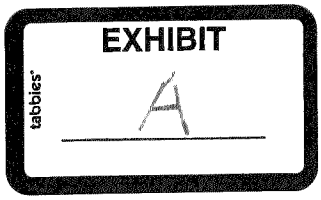
COMMENCING at a 5/8-inch iron rod with a yellow cap stamped 'CSM-INC' found for the East corner of a called 0.970 acre tract of land situated in said McCasland Survey and the Daniel Henley Survey, Abstract Number 118, conveyed to the North Texas Municipal Water District (henceforth referred to as NTMWD) by the General Warranty Deed recorded in Volume 3582, Page 175, Deed Records, Rockwall County, Texas and an interior ell corner of a called 82.02 acre tract of land situated in said McCasland Survey and said Henley Survey conveyed to David D. Boyd and wife, Lorena G. Boyd, et al, by the Warranty Deed with Vendor's Lien recorded in Volume 2564, Page 67, said Deed Records, from which a 5/8-inch iron rod found in the Northeasterly line of a called 110.460 acre tract of land situated in said McCasland Survey conveyed to said NTMWD by the Warranty Deed recorded in Volume 3061, Page 268, said Deed Records, for the South corner of said NTMWD 0.970 acre tract and the South most West corner of said Boyd tract, bears South 44 degrees, 30 minutes, 00 seconds West, a distance of 212.61 feet;

THENCE: North 45 degrees, 30 minutes, 00 seconds West, with the Northeasterly line of said NTMWD 0.970 acre tract and the North most Southwesterly line of said Boyd tract, a distance of 182.66 feet to the North corner of said NTMWD 0.970 acre tract and the North most West corner of said Boyd tract, being within the margins of Crenshaw Road (a public road by use and occupation, no dedication found);

THENCE: South 44 degrees, 39 minutes, 53 seconds West, within the margins of said Crenshaw Road and with the East most Northwesterly line of said NTMWD 0.970 acre tract, a distance of 28.97 feet;

THENCE: North 46 degrees, 25 minutes, 08 second West, continuing within the margins of said Crenshaw Road and the South most Northeasterly line of said NTMWD 0.970 acre tract, a distance of 15.71 feet to the Southeast corner of a called 1.178 acre tract of land situated in the Richard Brown Survey, Abstract Number 51, conveyed to Rockwall County, Texas for the Crenshaw Road right-of-way, by the Donation Deed for Right-of-Way recorded in Volume 750, Page 187, said Deed Records, and the Northeast corner of a called 1.178 acre tract of land situated in said McCasland Survey conveyed to said Rockwall County for said Crenshaw Road right-of-way by the Donation Deed for Right-of-Way (henceforth referred to as Rockwall County Tract II) recorded in Volume 750, Page 185, said Deed Records;

THENCE: South 43 degrees, 56 minutes, 55 seconds West, with the Northwesterly line of said NTMWD 0.970 acre tract and the Southeasterly line of said Rockwall County Tract II, a distance of 30.00 feet to a 5/8-inch iron rod with a red plastic cap stamped 'CRIADO' set in the Northwesterly line of said NTMWD 0.970 acre tract, for the Northeast corner of said Waterscape 4 Remainder Tract and the Southeast corner of said Rockwall County Tract II and being the **POINT OF BEGINNING** of the tract herein described;



NTMWD SABINE CREEK WASTEWATER TREATMENT PLANT
WATERSCAPE 4, LLC PARCEL ACQUISITION
PROJECT NUMBER 308-0576-20
NANCY McCASLAND SURVEY, A-149
ROCKWALL COUNTY, TEXAS

THENCE: South 43 degrees, 56 minutes, 55 seconds West, with the Southeasterly line of said Waterscape 4 Remainder Tract and the Northwesterly line of said NTMWD 0.970 acre tract, at 160.30 feet pass the West corner of said NTMWD 0.970 acre tract and the North corner of said NTMWD 110.460 acre tract, in all a total distance of 1,545.51 feet to a 5/8-inch iron rod with a red plastic cap stamped 'CRIADO' set;

THENCE: North 46 degrees, 30 minutes, 30 seconds West, departing the Northwesterly line of said NTMWD 110.460 acre tract, over and across said Waterscape 4 Remainder tract, a distance of 130.00 feet to a 5/8-inch iron rod with a red plastic cap stamped 'CRIADO' set;

THENCE: North 43 degrees, 56 minutes, 55 seconds East, continuing over and across said Waterscape 4 Remainder Tract, a distance of 1,544.47 feet to a 5/8-iron rod with a red plastic cap stamped 'CRIADO' set in the Northeasterly line of said Waterscape 4 Remainder Tract and the Southwesterly line of said Rockwall County Tract II;

THENCE: South 46 degrees, 30 minutes, 30 seconds East, with the Northeasterly line of said Waterscape 4 Remainder Tract and the Southwesterly line of said Rockwall County Tract II, a distance of 130.00 feet to the **POINT OF BEGINNING** and containing 4.611 acres (200,842 square feet) of land.

Note: All bearings are based on the Texas State Plane Coordinate System, North Central Zone (4202), North American Datum of 1983 (NAD '83). All distances cited are surface values and may be converted to grid by dividing by a combined scale factor of 1.000146135. Units are US Survey Feet.

Note: Map of Survey of even date attached herewith.

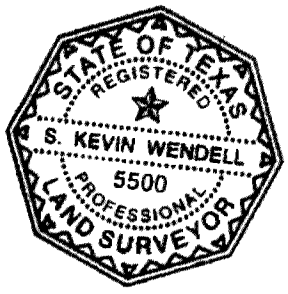
Note: Surveyed on the ground December 2023.

Note: Criado Project No. R14836.00

I, S. Kevin Wendell, a Registered Professional Land Surveyor in the State of Texas, hereby certify that this Real Property Description and Map of Survey, attached herewith, represents an actual survey made on the ground under my supervision.

01/02/24
Date

S. Kevin Wendell, RPLS #5500
Registered Professional Land Surveyor
State of Texas



Criado and Associates, Inc
TBPLS Firm Registration No. 10163300
4100 Spring Valley Road, Suite 1001
Dallas, Texas 75244
(469) 547-6057
kwendell@criadoassociates.com

N

W E

S

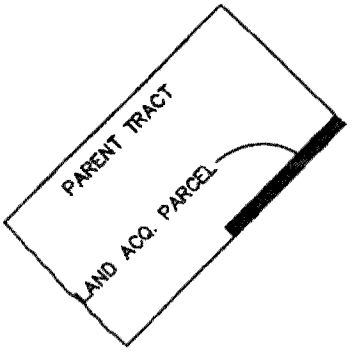
N.T.S

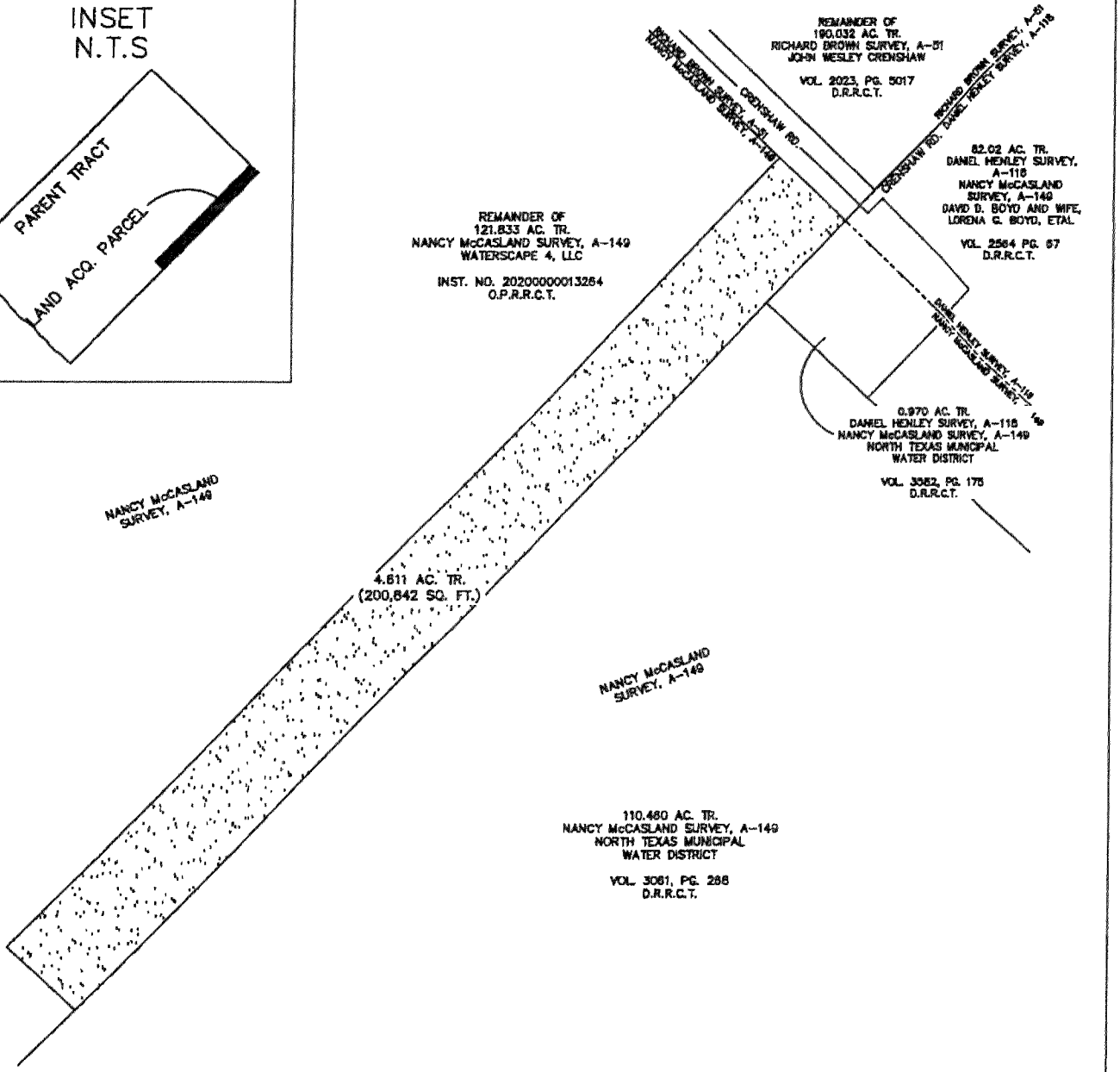
NTMWD
SABINE CREEK WASTEWATER
TREATMENT PLANT

4.611 AC. TR.
OUT OF
THE WATERSCAPE 4, LLC
121.833 AC. TR.
PROJECT NUMBER 308-0576-20

NANCY McCASLAND SURVEY, A-149
ROCKWALL COUNTY, TEXAS

INSET
N.T.S





CRIADO

Civil Engineering | Land Surveying | Subsurface Utility Engineering, LLC

4.611 AC. TR.
OUT OF
THE WATERSCAPE 4, LLC
121.833 AC. TR.
NANCY McCASLAND
SURVEY, A-149
ROCKWALL COUNTY, TEXAS

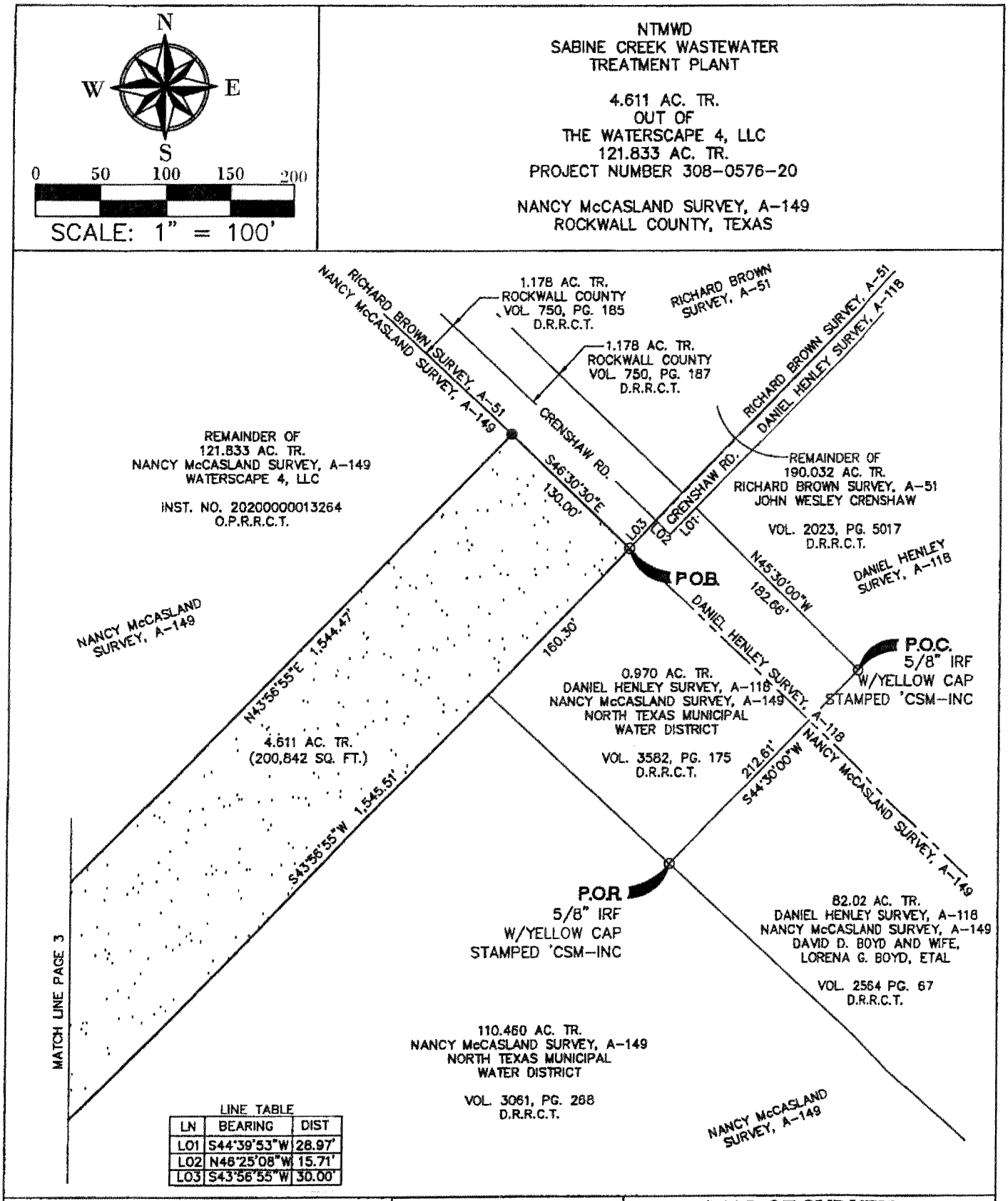
MAP OF SURVEY

DRAWN BY: KW CHECKED: AA

LOCATION: ROCKWALL COUNTY, TX

PROJECT # R14836.00

DATE: 12/28/2023 PAGE 1 OF 4



LINE TABLE

LN	BEARING	DIST
L01	S44°39'53"W	28.97'
L02	N46°25'08"W	15.71'
L03	S43°56'55"W	30.00'

CRIADO

4.611 AC. TR.
OUT OF
THE WATERSCAPE 4, LLC
121.833 AC. TR.
NANCY McCASLAND
SURVEY, A-149
ROCKWALL COUNTY, TEXAS

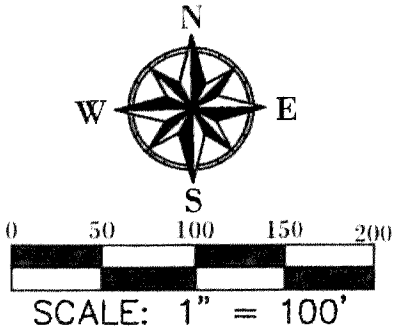
MAP OF SURVEY

DRAWN BY: KW CHECKED: AA

LOCATION: ROCKWALL COUNTY, TX

PROJECT # R14836.00

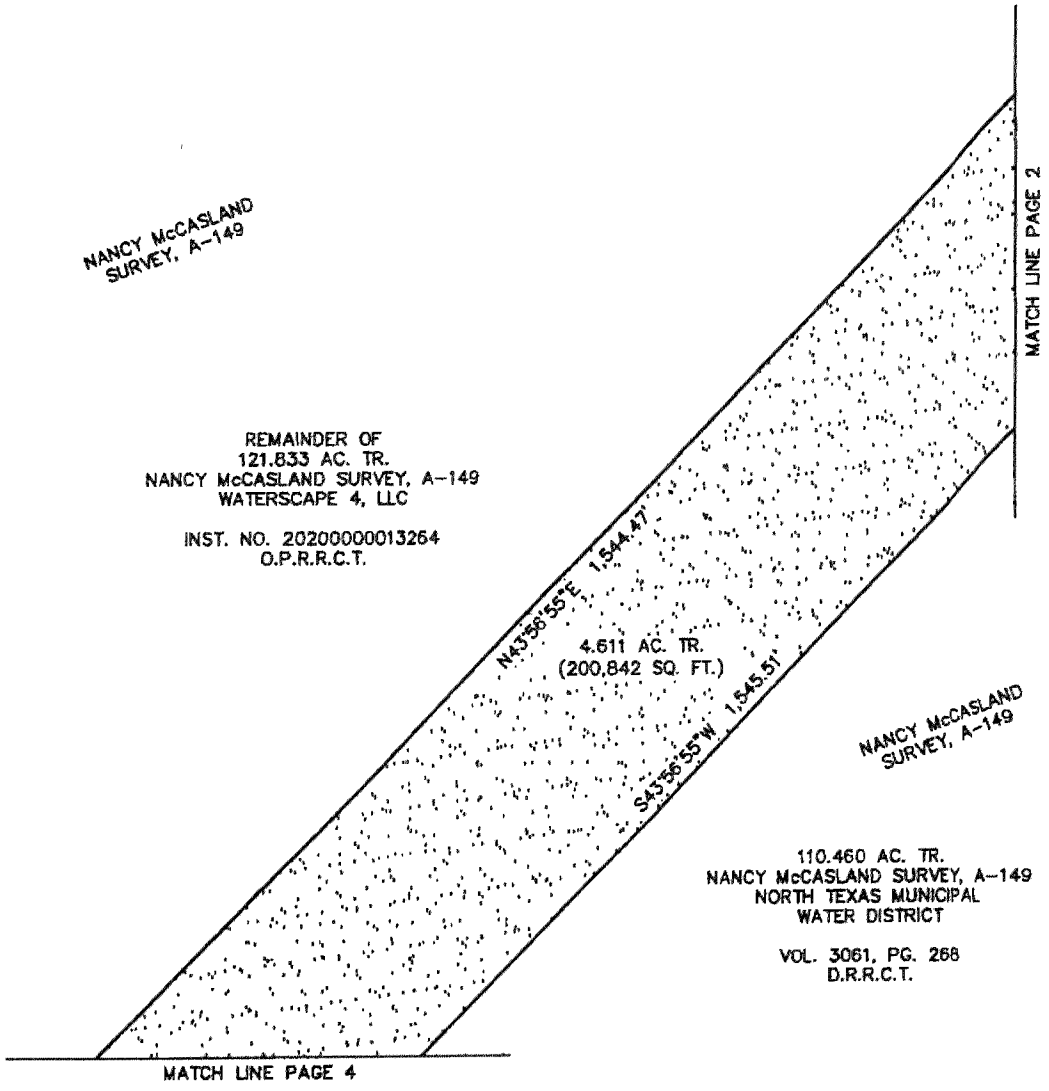
DATE: 12/28/2023 PAGE 2 OF 4



NTMWD
SABINE CREEK WASTEWATER
TREATMENT PLANT

4.611 AC. TR.
OUT OF
THE WATERSCAPE 4, LLC
121.833 AC. TR.
PROJECT NUMBER 308-0576-20

NANCY McCASLAND SURVEY, A-149
ROCKWALL COUNTY, TEXAS



CRIADO
Civil Engineering | Land Surveying | Industrial Water Engineering | GIS

4.611 AC. TR.
OUT OF
THE WATERSCAPE 4, LLC
121.833 AC. TR.
NANCY McCASLAND
SURVEY, A-149
ROCKWALL COUNTY, TEXAS

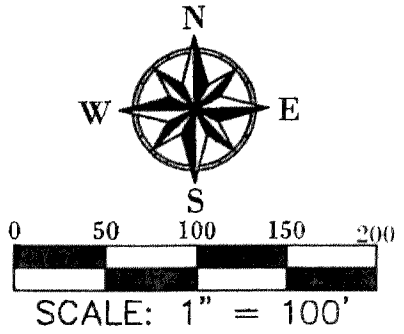
MAP OF SURVEY

DRAWN BY: KW CHECKED: AA

LOCATION: ROCKWALL COUNTY, TX

PROJECT # R14836.00

DATE: 12/28/2023 PAGE 3 OF 4



NTMWD
SABINE CREEK WASTEWATER
TREATMENT PLANT

4.611 AC. TR.
OUT OF
THE WATERSCAPE 4, LLC
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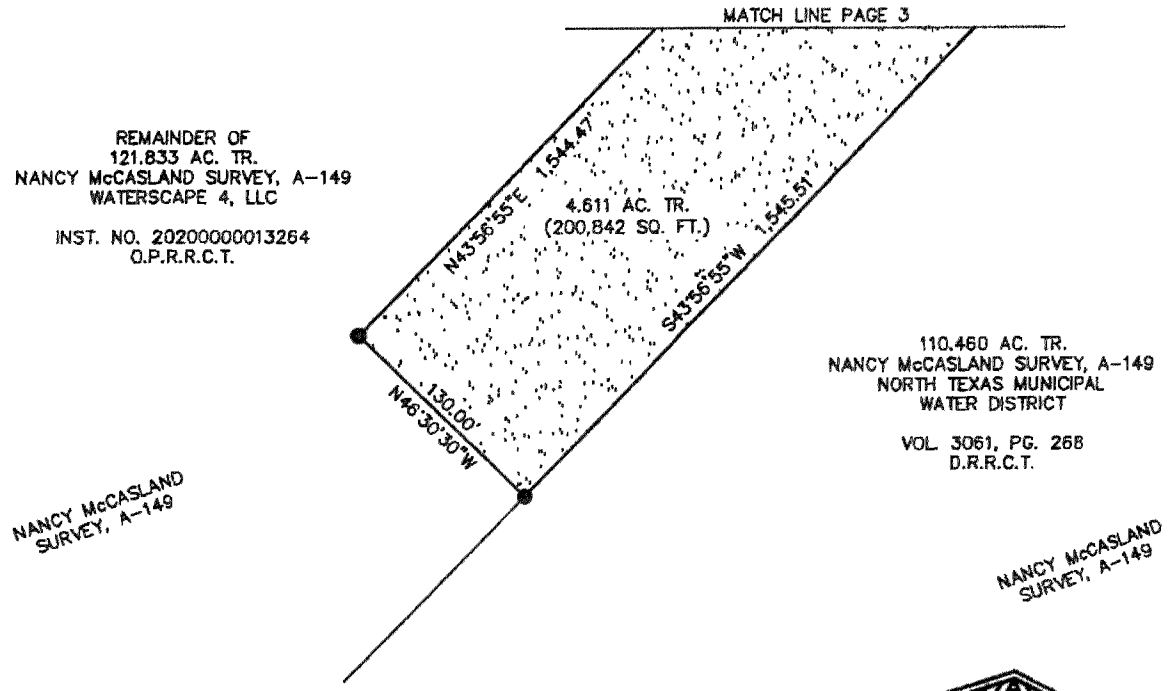
PROJECT NUMBER 308-0576-20

NANCY McCASLAND SURVEY, A-149
ROCKWALL COUNTY, TEXAS



LEGEND	
○	MONUMENT FOUND (AS NOTED)
●	5/8" IRON ROD SET WITH BLUE CAP STAMPED 'CRIADO EASEMENT'
O.P.R.R.C.T.	OFFICIAL PUBLIC RECORDS OF ROCKWALL COUNTY, TEXAS
D.R.R.C.T.	DEED RECORDS OF ROCKWALL COUNTY, TEXAS
INST. NO.	INSTRUMENT NUMBER
VOL./PG.	VOLUME/PAGE
P.O.C.	POINT OF COMMENCING
P.O.B.	POINT OF BEGINNING
P.O.R.	POINT OF REFERENCE
ROW	RIGHT-OF-WAY
LN	LINE NUMBER
DIST	DISTANCE
IRF	IRON ROD FOUND

NOTES:
1. ALL BEARINGS ARE BASED ON THE TEXAS STATE PLANE COORDINATE SYSTEM, NORTH CENTRAL ZONE (4202), NORTH AMERICAN DATUM OF 1983 (NAD '83). ALL DISTANCES SHOWN ARE SURFACE VALUES AND MAY BE CONVERTED TO GRID BY DIVIDING BY A COMBINED SCALE FACTOR OF 1.00013. UNITS ARE US SURVEY FEET.

2. THIS SURVEY WAS PERFORMED WITHOUT THE BENEFIT OF A TITLE REPORT. THE SURVEYOR DID NOT RESEARCH THE SUBJECT PROPERTY TITLE INFORMATION AND/OR ENCROACHMENTS. THERE MAY BE EASEMENT AND OR RESTRICTIVE COVENANTS OF RECORD AFFECTING THIS PROPERTY WHICH ARE NOT SHOWN HEREON.

3. THIS MAP OF SURVEY IS ACCOMPANIED BY A SEPARATE PROPERTY DESCRIPTION OF EVEN DATE.

4. A 5/8-INCH IRON ROD WITH A BLUE PLASTIC CAP STAMPED 'CRIADO EASEMENT' SET AT ALL PARCEL CORNERS.

5. CRENSHAW ROAD IS A GENERALLY RECOGNIZED PUBLIC ROAD BY USE AND OCCUPATION, EXCEPT AS SHOWN, NO DEDICATION FOUND.

THIS IS TO CERTIFY THAT THIS MAP OF SURVEY WAS PREPARED FROM AN ACCURATE SURVEY CONDUCTED ON THE GROUND UNDER MY DIRECT SUPERVISION NOVEMBER 2023.

KEVIN WENDELL
REGISTERED PROFESSIONAL LAND SURVEYOR TEXAS
REGISTRATION NO. 5500

DATE: 01/02/24

CRIADO

4.611 AC. TR.
OUT OF
THE WATERSCAPE 4, LLC
121.833 AC. TR.
NANCY McCASLAND
SURVEY, A-149
ROCKWALL COUNTY, TEXAS

MAP OF SURVEY

DRAWN BY: KW CHECKED: AA

LOCATION: ROCKWALL COUNTY, TX

PROJECT # R14836.00

DATE: 12/28/2023 PAGE 4 OF 4

ATTACHMENT TR-5
OTHER REQUIREMENTS

Other Requirements
Sabine Creek Wastewater Treatment Plant

The “Other Requirements” item 7 of the current TPDES Permit No. WQ0014469001, issued March 30, 2023, requires a summary transmittal letter prior to the construction of the Interim II and Final phase treatment facilities. The summary transmittal letter was submitted on 2/24/2022 and TCEQ approval letter was dated 3/3/2022.

Other Requirement 8 requires the permittee to notify the TCEQ in writing at least 45 days prior to the completion of the Interim II and Final phase facilities, on Notification of Completion Form 20007. The facility is currently operating Interim I of the current permit. The facility is currently under construction for the expansion. The Notification of Completion Form will be submitted at least 45 days prior to completion of the facilities.

Other Requirement 9 included monitoring and reporting requirements for TDS, chloride, and sulfate at Outfall 001, that will expire upon the expiration date of the permit. The reported monthly average values are to be evaluated at the next permit action, and the reporting requirements may be reinstated, or an effluent limit added. Since the permit was issued last year and does not expire until March 30, 2028, there has not been enough samples collected to accurately determine representative monthly averages. TDS, chloride, and sulfate samples will continue to be collected and data will be submitted with the next renewal application.

ATTACHMENT TR-6

POLLUTANT ANALYSIS OF TREATED EFFLUENT

Sabine Creek WWTP	Project: **Permit Renewal**	
1513 Crenshaw Rd	Project Number: SBX	**Reported:**
Royse City, TEXAS 75189	Project Manager: Kristen Suprobo	2024-07-30 15:41

ANALYTICAL REPORT FOR SAMPLES

Laboratory ID :	2421003-01
Sample Name :	Effluent TC
Sample Alias :	
Sample Type :	96 Pt. Time Composite
Sampled Begin :	2024-06-11 08:50
Sampled Ended :	2024-06-12 08:55
Matrix :	Aqueous; (Water)
Outfall :	Effluent
Sampler A :	Eric Demand
Sampler B :	Yilma Zerihun
Job Info :	

Laboratory ID :	2421003-02
Sample Name :	Effluent Equipment Blank
Sample Alias :	
Sample Type :	Grab
Sampled Begin :	2024-06-10 13:30
Sampled Ended :	2024-06-10 13:30
Matrix :	Aqueous; (Water)
Outfall :	Equipment Blank
Sampler A :	Eric Demand
Sampler B :	Yilma Zerihun
Job Info :	

Laboratory ID :	2421003-03
Sample Name :	Effluent G
Sample Alias :	
Sample Type :	Grab
Sampled Begin :	2024-06-12 08:55
Sampled Ended :	2024-06-12 08:55
Matrix :	Aqueous; (Water)
Outfall :	Effluent
Sampler A :	Eric Demand
Sampler B :	Yilma Zerihun
Job Info :	

Laboratory ID :	2421003-04
Sample Name :	Trip Blank
Sample Alias :	
Sample Type :	Grab
Sampled Begin :	2024-06-10 13:16
Sampled Ended :	2024-06-10 13:16
Matrix :	Aqueous; (Water)
Outfall :	Trip Blank
Sampler A :	Eric Demand
Sampler B :	Yilma Zerihun
Job Info :	

North Texas Municipal Water District

Kelly Harden, Laboratory Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document.

North Texas Municipal Water District Laboratory
201 E Brown St.
Wylie, TX 75098

Sabine Creek WWTP	Project: **Permit Renewal**	
1513 Crenshaw Rd	Project Number: SBX	**Reported:**
Royse City, TEXAS 75189	Project Manager: Kristen Suprobo	2024-07-30 15:41

ANALYTICAL REPORT FOR SAMPLES

Effluent TC (2421003-01 - Outfall: Effluent)

Total Metals by EPA 200.8
North Texas Municipal Water District

Analyte	Analyst	Result	SRL	MDL	MRL	Units	Prep Ratio	Batch	Prepared	Analyzed	Method	Notes
Silver	lmg	ND	0.500	0.250	0.500	ug/L	1	2417014	2024-06-19	2024-06-20	EPA 200.8	
Aluminum	lmg	**35.4**	2.50	1.25	2.50	ug/L	1	"	2024-06-19	2024-06-20	"	
Arsenic	lmg	**1.65**	0.500	0.250	0.500	ug/L	1	"	2024-06-19	2024-06-20	"	
Barium	lmg	**44.4**	1.00	0.500	1.00	ug/L	1	"	2024-06-19	2024-06-20	"	
Beryllium	lmg	ND	0.500	0.250	0.500	ug/L	1	2417306	2024-06-27	2024-07-02	"	
Cadmium	lmg	ND	1.00	0.500	1.00	ug/L	1	2417014	2024-06-19	2024-06-20	"	
Chromium	lmg	ND	2.50	1.25	2.50	ug/L	1	"	2024-06-19	2024-06-20	"	
Copper	lmg	**1.96**	1.00	0.500	1.00	ug/L	1	"	2024-06-19	2024-06-20	"	
Nickel	lmg	**5.91**	1.00	0.500	1.00	ug/L	1	"	2024-06-19	2024-06-20	"	
Lead	lmg	ND	0.500	0.250	0.500	ug/L	1	"	2024-06-19	2024-06-20	"	
Antimony	lmg	ND	2.50	1.25	2.50	ug/L	1	"	2024-06-19	2024-06-20	"	
Selenium	lmg	**1.85**	1.00	0.500	1.00	ug/L	1	"	2024-06-19	2024-06-20	"	
Thallium	lmg	ND	0.500	0.250	0.500	ug/L	1	"	2024-06-19	2024-06-20	"	
Zinc	lmg	**17.6**	2.50	1.25	2.50	ug/L	1	"	2024-06-19	2024-06-20	"	

Total Mercury by EPA 245.7
North Texas Municipal Water District

Analyte	Analyst	Result	SRL	MDL	MRL	Units	Prep Ratio	Batch	Prepared	Analyzed	Method	Notes
Mercury	nv	ND	0.00500	0.00180	0.00500	ug/L	1	2416934	2024-06-18	2024-06-18	EPA 245.7	

Conventional Chemistry Parameters by EPA Methods
North Texas Municipal Water District

Analyte	Analyst	Result	SRL	MDL	MRL	Units	Prep Ratio	Batch	Prepared	Analyzed	Method	Notes
Ammonia as N	ran	**1.50**	0.0500	0.0500	0.100	mg/L	1	2416428	2024-06-12	2024-06-13	EPA 350.1	
Total Phosphate as P	hfs	**1.24**	0.100	0.0100	0.0200	mg/L	10	2416409	2024-06-12	2024-06-12	EPA 365.1	
Total Kjeldal Nitrogen	lac	**3.18**	0.100	0.100	0.200	mg/L	1	2416606	2024-06-14	2024-06-14	EPA 351.2	

Conventional Chemistry Parameters by Standard Methods
North Texas Municipal Water District

Analyte	Analyst	Result	SRL	MDL	MRL	Units	Prep Ratio	Batch	Prepared	Analyzed	Method	Notes
Total Alkalinity	yjs	**140**	20.0	10.0	20.0	mg/L	1	2416438	2024-06-13	2024-06-13	SM 2320B	
Carbonaceous Biochemical Oxygen Demand	sgr	ND	2.2	0.1	2.0	mg/L	1.11	2416405	240612 1142	240617 0915	SM 5210B	
Total Dissolved Solids	pp	**658**	5.00	5.00	10.0	mg/L	1	2416424	2024-06-12	2024-06-18	SM 2540C	
Total Suspended Solids	krg	**1.10**	0.50	0.50	0.50	mg/L	1	2416323	2024-06-12	2024-06-12	SM 2540D	

Anions by EPA 300 Series
North Texas Municipal Water District

Analyte	Analyst	Result	SRL	MDL	MRL	Units	Prep Ratio	Batch	Prepared	Analyzed	Method	Notes

Sabine Creek WWTP	Project: **Permit Renewal**	
1513 Crenshaw Rd	Project Number: SBX	**Reported:**
Royse City, TEXAS 75189	Project Manager: Kristen Suprobo	2024-07-30 15:41

ANALYTICAL REPORT FOR SAMPLES

Effluent TC (2421003-01 - Outfall: Effluent)

Anions by EPA 300 Series
North Texas Municipal Water District

Analyte	Analyst	Result	SRL	MDL	MRL	Units	Prep Ratio	Batch	Prepared	Analyzed	Method	Notes
Chloride	mgc	**97.4**	10.0	0.500	1.00	mg/L	10	2417039	2024-06-19	2024-06-19	EPA 300.0	
Fluoride	mgc	**0.638**	0.020	0.010	0.020	mg/L	1	2416514	2024-06-13	2024-06-13	"	
Nitrate as N	tns	**13.2**	0.100	0.010	0.020	mg/L	5	2416410	240612 0949	240612 1824	"	
Sulfate	mgc	**177**	10.0	0.500	1.00	mg/L	10	2417039	2024-06-19	2024-06-19	"	

Carbamate and Urea Pesticides (HPLC)
Eurofins Dallas

Analyte	Analyst	Result	SRL	MDL	MRL	Units	Prep Ratio	Batch	Prepared	Analyzed	Method	Notes
Diuron	yg	**0.0546**	0.00514	0.0514	0.0900	ug/L	1	166400	2024-06-17	2024-06-20	632	SUB
Carbaryl	yg	ND	0.185	1.85	5.00	ug/L	1	"	2024-06-17	2024-06-20	"	SUB

Herbicides (GC)
Eurofins Dallas

Analyte	Analyst	Result	SRL	MDL	MRL	Units	Prep Ratio	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2,4-Dichlorophenylacetic acid		*62 %*	*45-150*				1	*166702*	*2024-06-18*	*2024-06-21*	*615*	*SUB*
Silvex (2,4,5-TP)	wp	ND	0.0422	0.0000422	0.000200	ug/L	1	"	2024-06-18	2024-06-21	"	SUB
2,4-D	wp	ND	0.0539	0.0000539	0.000200	ug/L	1	"	2024-06-18	2024-06-21	"	SUB
Dalapon	wp	ND	0.0476	0.0000476	0.000200	ug/L	1	"	2024-06-18	2024-06-21	"	SUB
Hexachlorophene	wp	ND	0.808	0.000808	0.00500	ug/L	1	"	2024-06-18	2024-06-21	"	*1,SUB
Dinoseb	wp	ND	0.0343	0.0000343	0.000200	ug/L	1	"	2024-06-18	2024-06-21	"	SUB
Dicamba	wp	ND	0.0423	0.0000423	0.000200	ug/L	1	"	2024-06-18	2024-06-21	"	SUB
Pentachlorophenol	wp	ND	0.0443	0.0000443	0.000200	ug/L	1	"	2024-06-18	2024-06-21	"	SUB

Organochlorine Pesticides in Water
Eurofins Dallas

Analyte	Analyst	Result	SRL	MDL	MRL	Units	Prep Ratio	Batch	Prepared	Analyzed	Method	Notes
Surrogate: DCB Decachlorobiphenyl (Surr)		*122 %*	*15-136*				1	*166167*	*2024-06-15*	*2024-06-18*	*EPA 608.3*	*SUB*
Surrogate: Tetrachloro-m-xylene		*103 %*	*18-126*				1	*"*	*2024-06-15*	*2024-06-18*	*"*	*SUB*
Endosulfan I	a1s	ND	0.00107	0.00107	0.0100	ug/L	1	"	2024-06-15	2024-06-18	"	SUB
Dieldrin	a1s	ND	0.000953	0.000953	0.0100	ug/L	1	"	2024-06-15	2024-06-18	"	SUB
delta-BHC	a1s	ND	0.00245	0.00245	0.250	ug/L	1	"	2024-06-15	2024-06-18	"	SUB
beta-BHC	a1s	ND	0.00389	0.00389	0.0180	ug/L	1	"	2024-06-15	2024-06-18	"	SUB
Endrin	a1s	ND	0.00156	0.00156	0.0100	ug/L	1	"	2024-06-15	2024-06-18	"	SUB
Endrin aldehyde	a1s	ND	0.00118	0.00118	0.0100	ug/L	1	"	2024-06-15	2024-06-18	"	SUB
gamma-BHC (Lindane)	a1s	ND	0.00299	0.00299	0.0100	ug/L	1	"	2024-06-15	2024-06-18	"	SUB
Endosulfan II	a1s	ND	0.00122	0.00122	0.0100	ug/L	1	"	2024-06-15	2024-06-18	"	SUB
4,4'-DDE	a1s	ND	0.00109	0.00109	0.0100	ug/L	1	"	2024-06-15	2024-06-18	"	SUB
alpha-BHC	a1s	ND	0.00142	0.00142	0.00900	ug/L	1	"	2024-06-15	2024-06-18	"	SUB
4,4'-DDT	a1s	ND	0.00379	0.00379	0.0200	ug/L	1	"	2024-06-15	2024-06-18	"	SUB
Heptachlor	a1s	ND	0.00446	0.00446	0.00900	ug/L	1	"	2024-06-15	2024-06-18	"	SUB

Sabine Creek WWTP	Project: **Permit Renewal**	
1513 Crenshaw Rd	Project Number: SBX	**Reported:**
Royse City, TEXAS 75189	Project Manager: Kristen Suprobo	2024-07-30 15:41

ANALYTICAL REPORT FOR SAMPLES

Effluent TC (2421003-01 - Outfall: Effluent)

Organochlorine Pesticides in Water
Eurofins Dallas

Analyte	Analyst	Result	SRL	MDL	MRL	Units	Prep Ratio	Batch	Prepared	Analyzed	Method	Notes
Heptachlor epoxide	a1s	ND	0.00134	0.00134	0.0100	ug/L	1	166167	2024-06-15	2024-06-18	EPA 608.3	SUB
Endosulfan sulfate	a1s	ND	0.00112	0.00112	0.0100	ug/L	1	"	2024-06-15	2024-06-18	"	SUB
Chlordane	a1s	ND	0.103	0.103	0.0400	ug/L	1	"	2024-06-15	2024-06-18	"	SUB
Toxaphene	a1s	ND	0.0769	0.0769	0.100	ug/L	1	"	2024-06-15	2024-06-18	"	SUB
Aldrin	a1s	ND	0.00113	0.00113	0.0100	ug/L	1	"	2024-06-15	2024-06-18	"	SUB
4,4'-DDD	a1s	ND	0.000814	0.000814	0.0100	ug/L	1	"	2024-06-15	2024-06-18	"	SUB
Dicofol	a1s	ND	0.05	0.0000500	0.000100	ug/L	1	"	2024-06-15	2024-06-18	"	SUB
Mirex	a1s	ND	0.02	0.0000200	0.000020(	ug/L	1	"	2024-06-15	2024-06-18	"	SUB
Methoxychlor	a1s	ND	0.0039	0.0000039	0.000020(	ug/L	1	"	2024-06-15	2024-06-18	"	*+,SUB

Polychlorinated Biphenyls (PCBs) (GC)
Eurofins Dallas

Analyte	Analyst	Result	SRL	MDL	MRL	Units	Prep Ratio	Batch	Prepared	Analyzed	Method	Notes
Surrogate: DCB Decachlorobiphenyl (Surr)		*115 %*		*15-136*			1	"	*2024-06-15*	*2024-06-17*	"	*p,SUB*
Surrogate: Tetrachloro-m-xylene		*68 %*		*18-126*			1	"	*2024-06-15*	*2024-06-17*	"	*SUB*
PCB-1242	wp	ND	0.0125	0.0125	0.100	ug/L	1	"	2024-06-15	2024-06-17	"	SUB
PCB-1260	wp	ND	0.0078	0.00780	0.100	ug/L	1	"	2024-06-15	2024-06-17	"	SUB
PCB-1248	wp	ND	0.0125	0.0125	0.100	ug/L	1	"	2024-06-15	2024-06-17	"	SUB
PCB-1016	wp	ND	0.0125	0.0125	0.100	ug/L	1	"	2024-06-15	2024-06-17	"	*+,SUB
PCB-1221	wp	ND	0.0125	0.0125	0.100	ug/L	1	"	2024-06-15	2024-06-17	"	SUB
PCB-1232	wp	ND	0.0125	0.0125	0.100	ug/L	1	"	2024-06-15	2024-06-17	"	SUB
PCB-1254	wp	ND	0.0078	0.00780	0.100	ug/L	1	"	2024-06-15	2024-06-17	"	SUB
Polychlorinated biphenyls, Total	wp	ND	0.1	0.100	0.100	ug/L	1	"	2024-06-15	2024-06-17	"	SUB

Semivolatile Organic Compounds (GC/MS)
Eurofins Dallas

Analyte	Analyst	Result	SRL	MDL	MRL	Units	Prep Ratio	Batch	Prepared	Analyzed	Method	Notes
Surrogate: p-Terphenyl-d14 (Surr)		*91 %*		*20-141*			1	*165885*	*2024-06-14*	*2024-06-14*	*EPA 625.1*	*SUB*
Surrogate: Nitrobenzene-d5 (Surr)		*62 %*		*15-314*			1	"	*2024-06-14*	*2024-06-14*	"	*SUB*
Surrogate: 2-Fluorobiphenyl (Surr)		*65 %*		*29-112*			1	"	*2024-06-14*	*2024-06-14*	"	*SUB*
Surrogate: 2,4,6-Tribromophenol (Surr)		*85 %*		*31-132*			1	"	*2024-06-14*	*2024-06-14*	"	*SUB*
Surrogate: Phenol-d5 (Surr)		*15 %*		*8-424*			1	"	*2024-06-14*	*2024-06-14*	"	*SUB*
Surrogate: 2-Fluorophenol (Surr)		*24 %*		*28-114*			1	"	*2024-06-14*	*2024-06-14*	"	*S1-,SUB*
4-Chlorophenyl phenyl ether	t1s	ND	1.28	1.28	10.0	ug/L	1	"	2024-06-14	2024-06-14	"	SUB
Bis(2-chloroethoxy)methane	t1s	ND	1.76	1.76	10.0	ug/L	1	"	2024-06-14	2024-06-14	"	SUB
2-Chloronaphthalene	t1s	ND	0.462	0.462	5.00	ug/L	1	"	2024-06-14	2024-06-14	"	SUB
2-Nitrophenol	t1s	ND	1.67	1.67	10.0	ug/L	1	"	2024-06-14	2024-06-14	"	SUB
2,4-Dichlorophenol	t1s	ND	0.314	0.314	5.00	ug/L	1	"	2024-06-14	2024-06-14	"	SUB
N-Nitrosodi-n-propylamine	t1s	ND	2.88	2.88	10.0	ug/L	1	"	2024-06-14	2024-06-14	"	SUB

ANALYTICAL REPORT FOR SAMPLES

Effluent TC (2421003-01 - Outfall: Effluent)

Semivolatile Organic Compounds (GC/MS)

Eurofins Dallas

Analyte	Analyst	Result	SRL	MDL	MRL	Units	Prep Ratio	Batch	Prepared	Analyzed	Method	Notes
Diethyl phthalate	t1s	ND	1.59	1.59	5.00	ug/L	1	165885	2024-06-14	2024-06-14	EPA 625.1	SUB
Dibenz(a,h)anthracene	t1s	ND	0.246	0.246	5.00	ug/L	1	"	2024-06-14	2024-06-14	"	SUB
Dimethyl phthalate	t1s	ND	0.299	0.299	2.50	ug/L	1	"	2024-06-14	2024-06-14	"	SUB
Hexachlorobutadiene	t1s	ND	0.238	0.238	1.00	ug/L	1	"	2024-06-14	2024-06-14	"	SUB
2-Chlorophenol	t1s	ND	0.649	0.649	5.00	ug/L	1	"	2024-06-14	2024-06-14	"	SUB
Acenaphthene	t1s	ND	1.39	1.39	5.70	ug/L	1	"	2024-06-14	2024-06-14	"	SUB
Hexachlorocyclopentadiene	t1s	ND	4.58	4.58	10.0	ug/L	1	"	2024-06-14	2024-06-14	"	SUB
2,4-Dinitrophenol	t1s	ND	1.61	1.61	10.0	ug/L	1	"	2024-06-14	2024-06-14	"	SUB
3,3'-Dichlorobenzidine	t1s	ND	0.341	0.341	5.00	ug/L	1	"	2024-06-14	2024-06-14	"	SUB
4,6-Dinitro-2-methylphenol	t1s	ND	1.44	1.44	10.0	ug/L	1	"	2024-06-14	2024-06-14	"	SUB
4-Nitrophenol	t1s	ND	4.91	4.91	7.20	ug/L	1	"	2024-06-14	2024-06-14	"	SUB
2,4,6-Trichlorophenol	t1s	ND	1.42	1.42	5.00	ug/L	1	"	2024-06-14	2024-06-14	"	SUB
4-Nonylphenol	t1s	ND	10	10.0	10.0	ug/L	1	"	2024-06-14	2024-06-14	"	SUB
2,6-Dinitrotoluene	t1s	ND	1.61	1.61	5.00	ug/L	1	"	2024-06-14	2024-06-14	"	SUB
Acenaphthylene	t1s	ND	1.41	1.41	10.0	ug/L	1	"	2024-06-14	2024-06-14	"	SUB
Anthracene	t1s	ND	1.5	1.50	5.70	ug/L	1	"	2024-06-14	2024-06-14	"	SUB
Benzo[g,h,i]perylene	t1s	ND	2.68	2.68	10.0	ug/L	1	"	2024-06-14	2024-06-14	"	SUB
Benzo[k]fluoranthene	t1s	ND	0.375	0.375	5.00	ug/L	1	"	2024-06-14	2024-06-14	"	SUB
4-Chloro-3-methylphenol	t1s	ND	1.57	1.57	5.00	ug/L	1	"	2024-06-14	2024-06-14	"	SUB
2,4-Dimethylphenol	t1s	ND	0.649	0.649	5.00	ug/L	1	"	2024-06-14	2024-06-14	"	SUB
2,4,5-Trichlorophenol	t1s	ND	2	2.00	10.0	ug/L	1	"	2024-06-14	2024-06-14	"	*+,SUB
Total Cresols	t1s	ND	2.62	2.62	10.0	ug/L	1	"	2024-06-14	2024-06-14	"	SUB
1,2-Diphenylhydrazine	t1s	ND	1.49	1.49	10.0	ug/L	1	"	2024-06-14	2024-06-14	"	SUB
Di-n-butyl phthalate	t1s	ND	0.252	0.252	5.00	ug/L	1	"	2024-06-14	2024-06-14	"	SUB
Hexachlorobenzene	t1s	ND	0.307	0.307	5.00	ug/L	1	"	2024-06-14	2024-06-14	"	SUB
Fluorene	t1s	ND	1.63	1.63	5.00	ug/L	1	"	2024-06-14	2024-06-14	"	SUB
Nitrobenzene	t1s	ND	1.66	1.66	5.00	ug/L	1	"	2024-06-14	2024-06-14	"	SUB
N-Nitrosodiethylamine	t1s	ND	1.75	1.75	10.0	ug/L	1	"	2024-06-14	2024-06-14	"	SUB
Fluoranthene	t1s	ND	1.59	1.59	5.00	ug/L	1	"	2024-06-14	2024-06-14	"	SUB
Pyridine	t1s	ND	2.64	2.64	10.0	ug/L	1	"	2024-06-14	2024-06-14	"	*1,SUB
Azobenzene	t1s	ND	1.5	1.50	10.0	ug/L	1	"	2024-06-14	2024-06-14	"	SUB
Benzo[a]pyrene	t1s	ND	0.364	0.364	5.00	ug/L	1	"	2024-06-14	2024-06-14	"	SUB
Benzo[a]anthracene	t1s	ND	0.173	0.173	5.00	ug/L	1	"	2024-06-14	2024-06-14	"	SUB
N-Nitrosodimethylamine	t1s	ND	2.02	2.02	10.0	ug/L	1	"	2024-06-14	2024-06-14	"	SUB
Benzidine	t1s	ND	4.8	4.80	20.0	ug/L	1	"	2024-06-14	2024-06-14	"	*-, *1,SUB
Chrysene	t1s	ND	0.222	0.222	5.00	ug/L	1	"	2024-06-14	2024-06-14	"	SUB
Hexachloroethane	t1s	ND	0.526	0.526	4.80	ug/L	1	"	2024-06-14	2024-06-14	"	SUB
N-Nitrosodi-n-butylamine	t1s	ND	1.49	1.49	10.0	ug/L	1	"	2024-06-14	2024-06-14	"	SUB
Butyl benzyl phthalate	t1s	ND	0.337	0.337	5.00	ug/L	1	"	2024-06-14	2024-06-14	"	SUB
Di-n-octyl phthalate	t1s	ND	0.373	0.373	5.00	ug/L	1	"	2024-06-14	2024-06-14	"	SUB

ANALYTICAL REPORT FOR SAMPLES

Effluent TC (2421003-01 - Outfall: Effluent)

Semivolatile Organic Compounds (GC/MS)
Eurofins Dallas

Analyte	Analyst	Result	SRL	MDL	MRL	Units	Prep Ratio	Batch	Prepared	Analyzed	Method	Notes
2,4-Dinitrotoluene	t1s	ND	1.31	1.31	10.0	ug/L	1	165885	2024-06-14	2024-06-14	EPA 625.1	SUB
N-Nitrosodiphenylamine	t1s	ND	1.81	1.81	10.0	ug/L	1	"	2024-06-14	2024-06-14	"	SUB
Pentachlorobenzene	t1s	ND	1.07	1.07	10.0	ug/L	1	"	2024-06-14	2024-06-14	"	SUB
Phenanthrene	t1s	ND	1.42	1.42	10.0	ug/L	1	"	2024-06-14	2024-06-14	"	SUB
Phenol	t1s	ND	0.423	0.423	4.50	ug/L	1	"	2024-06-14	2024-06-14	"	SUB
Pyrene	t1s	ND	0.178	0.178	5.00	ug/L	1	"	2024-06-14	2024-06-14	"	SUB
2,2'-oxybis[1-chloropropane]	t1s	ND	1.79	1.79	10.0	ug/L	1	"	2024-06-14	2024-06-14	"	SUB
1,2,4,5-Tetrachlorobenzene	t1s	ND	1.32	1.32	10.0	ug/L	1	"	2024-06-14	2024-06-14	"	SUB
Bis(2-chloroethyl)ether	t1s	ND	2.16	2.16	10.0	ug/L	1	"	2024-06-14	2024-06-14	"	SUB
4-Bromophenyl phenyl ether	t1s	ND	0.256	0.256	5.00	ug/L	1	"	2024-06-14	2024-06-14	"	SUB
Indeno[1,2,3-cd]pyrene	t1s	ND	2.29	2.29	5.00	ug/L	1	"	2024-06-14	2024-06-14	"	SUB
Naphthalene	t1s	ND	0.542	0.542	2.50	ug/L	1	"	2024-06-14	2024-06-14	"	SUB
Bis(2-ethylhexyl) phthalate	t1s	ND	0.277	0.277	5.00	ug/L	1	"	2024-06-14	2024-06-14	"	SUB
Benzo[b]fluoranthene	t1s	ND	2.04	2.04	10.0	ug/L	1	"	2024-06-14	2024-06-14	"	SUB
Isophorone	t1s	ND	1.64	1.64	5.00	ug/L	1	"	2024-06-14	2024-06-14	"	SUB
2-Methylphenol	t1s	ND	1.62	0.00162	0.0100	ug/L	1	"	2024-06-14	2024-06-14	"	SUB
Pentachlorophenol	t1s	ND	0.234	0.000234	0.0100	ug/L	1	"	2024-06-14	2024-06-14	"	SUB
1,2,4-Trichlorobenzene	t1s	ND	1.61	0.00161	0.00500	ug/L	1	"	2024-06-14	2024-06-14	"	SUB
3 & 4 Methylphenol	t1s	ND	2.62	0.00262	0.0100	ug/L	1	"	2024-06-14	2024-06-14	"	SUB

Semivolatile Organic Compounds (GC/MS) TICs
Eurofins Dallas

Analyte	Analyst	Result	SRL	MDL	MRL	Units	Prep Ratio	Batch	Prepared	Analyzed	Method	Notes
2,3,7,8-TCDD TIC 01	t1s	ND	10			ug/L	1	"	2024-06-14	2024-06-14	625.1 TICs	SUB

Pesticides by 614
SPL

Analyte	Analyst	Result	SRL	MDL	MRL	Units	Prep Ratio	Batch	Prepared	Analyzed	Method	Notes
Diazinon	kap	ND	0.0491			ug/L	0	1124933	2024-06-16	2024-06-20	EPA 614	SUB
Malathion	kap	**0.284**	0.0491			ug/L	0	"	2024-06-16	2024-06-20	"	SUB
Parathion, ethyl	kap	ND	0.0491			ug/L	0	"	2024-06-16	2024-06-20	"	SUB
Chlorpyrifos	kap	ND	0.0491			ug/L	0	"	2024-06-16	2024-06-20	"	SUB
Parathion, methyl	kap	ND	0.0491			ug/L	0	"	2024-06-16	2024-06-20	"	SUB
Demeton	kap	ND	0.0491			ug/L	0	"	2024-06-16	2024-06-20	"	SUB
Guthion	kap	ND	0.0491			ug/L	0	"	2024-06-16	2024-06-20	"	SUB

Effluent Equipment Blank (2421003-02 - Outfall: Equipment Blank)

Sabine Creek WWTP	Project: **Permit Renewal**	
1513 Crenshaw Rd	Project Number: SBX	**Reported:**
Royse City, TEXAS 75189	Project Manager: Kristen Suprobo	2024-07-30 15:41

ANALYTICAL REPORT FOR SAMPLES

Effluent Equipment Blank (2421003-02 - Outfall: Equipment Blank)

Total Mercury by EPA 245.7
North Texas Municipal Water District

Analyte	Analyst	Result	SRL	MDL	MRL	Units	Prep Ratio	Batch	Prepared	Analyzed	Method	Notes
Mercury	nv	ND	0.00500	0.00180	0.00500	ug/L	1	2416934	2024-06-18	2024-06-18	EPA 245.7	

Effluent G (2421003-03 - Outfall: Effluent)

Conventional Chemistry Parameters by Field Personnel
North Texas Municipal Water District

Analyte	Analyst	Result	SRL	MDL	MRL	Units	Prep Ratio	Batch	Prepared	Analyzed	Method	Notes
Residual Chlorine	ed/yz	**0.0700**	0.0400		0.0400	mg/L	1	2416419	240612 0855	240612 0855	4500-Cl-G	AccFD
Conductance at 25°C	ed/yz	**898.0**	2.000		2.000	uS/cm	1	"	2024-06-12	2024-06-12	SM 2510B	AccFD
Dissolved Oxygen	ed/yz	**7.85**				mg/L	1	"	240612 0855	240612 0855	SM 4500-O-G	AccFD
pH	ed/yz	**7.17**				pH/SU	1	"	240612 0855	240612 0855	SM 4500-H-B	AccFD
Temperature	ed/yz	**24.7**				°C	1	"	240612 0855	240612 0855	SM 2550B	AccFD

Coliform by Quantitray
North Texas Municipal Water District

Analyte	Analyst	Result	SRL	MDL	MRL	Units	Prep Ratio	Batch	Prepared	Analyzed	Method	Notes
Escherichia Coliform	srb	ND	1.0	1.0	1.0	MPN/100mL	1	2416417	240612 1127	240613 1127	MPN E-Coli	

Chromium, Hexavalent
Eurofins Dallas

Analyte	Analyst	Result	SRL	MDL	MRL	Units	Prep Ratio	Batch	Prepared	Analyzed	Method	Notes
Cr (VI)	knw	**8.41**	2.8	2.80	10.0	ug/L	1	20665	2024-06-12	2024-06-12	7196A	Ja,SUB

Chromium, Trivalent
Eurofins Dallas

Analyte	Analyst	Result	SRL	MDL	MRL	Units	Prep Ratio	Batch	Prepared	Analyzed	Method	Notes
Cr (III)	jdm	ND	2			ug/L	1	167182	2024-06-24	2024-06-24	SM 3500 CR B	SUB

Cyanide, Amenable
Eurofins Dallas

Analyte	Analyst	Result	SRL	MDL	MRL	Units	Prep Ratio	Batch	Prepared	Analyzed	Method	Notes
Cyanide, Amenable	mc	ND	2.33			ug/L	1	166127	2024-06-18	2024-06-18	SM 4500 CN G	SUB

Cyanide, Non-amenable
Eurofins Dallas

Analyte	Analyst	Result	SRL	MDL	MRL	Units	Prep Ratio	Batch	Prepared	Analyzed	Method	Notes
Cyanide, Non-amenable	ld	**4.71**	2.33	2.33	5.00	ug/L	1	166088	2024-06-14	2024-06-14	4500 CN G NonAm	Ja,SUB

Sabine Creek WWTP	Project: **Permit Renewal**	
1513 Crenshaw Rd	Project Number: SBX	**Reported:**
Royse City, TEXAS 75189	Project Manager: Kristen Suprobo	2024-07-30 15:41

ANALYTICAL REPORT FOR SAMPLES

Effluent G (2421003-03 - Outfall: Effluent)

Cyanide, Total
Eurofins Dallas

Analyte	Analyst	Result	SRL	MDL	MRL	Units	Prep Ratio	Batch	Prepared	Analyzed	Method	Notes
Cyanide, Total	ld	**3.19**	2	2.00	5.00	ug/L	1	165820	2024-06-13	2024-06-13	335.4	Ja,SUB

HEM and SGT-HEM
Eurofins Dallas

Analyte	Analyst	Result	SRL	MDL	MRL	Units	Prep Ratio	Batch	Prepared	Analyzed	Method	Notes
Oil & Grease (Hexane Extr)	knw	**1550**		1.14	5.00	ug/L	1	20759	2024-06-18	2024-06-18	1664B	Ja,SUB

Metals (ICP/MS) Total Recoverable
Eurofins Dallas

Analyte	Analyst	Result	SRL	MDL	MRL	Units	Prep Ratio	Batch	Prepared	Analyzed	Method	Notes
Cr	dp	**0.401**	0.325	0.000325	0.00300	ug/L	1	166273	2024-06-17	2024-06-17	200.8	Ja,SUB

Phenolics, Total Recoverable
Eurofins Dallas

Analyte	Analyst	Result	SRL	MDL	MRL	Units	Prep Ratio	Batch	Prepared	Analyzed	Method	Notes
Phenols, Total	sc	ND	5.8	5.80	10.0	ug/L	1	167198	2024-06-19	2024-06-19	420.4	SUB

Volatile Organic Compounds (GC/MS)
Eurofins Dallas

Analyte	Analyst	Result	SRL	MDL	MRL	Units	Prep Ratio	Batch	Prepared	Analyzed	Method	Notes
Surrogate: Dibromofluoromethane (Surr)		*99 %*	*61-132*				1	*20655*	*2024-06-12*	*2024-06-12*	*EPA 624.1*	*SUB*
Surrogate: 4-Bromofluorobenzene (Surr)		*105 %*	*76-119*				1	*"*	*2024-06-12*	*2024-06-12*	*"*	*SUB*
Surrogate: Toluene-d8 (Surr)		*100 %*	*74-130*				1	*"*	*2024-06-12*	*2024-06-12*	*"*	*SUB*
Surrogate: 1,2-Dichloroethane-d4 (Surr)		*101 %*	*76-118*				1	*"*	*2024-06-12*	*2024-06-12*	*"*	*SUB*
Toluene	mc	**4.34**	1.61	0.00161	0.00500	ug/L	1	"	2024-06-12	2024-06-12	"	Ja,SUB
1,2,4-Trichlorobenzene	mc	ND	0.593	0.000593	0.00200	ug/L	1	"	2024-06-12	2024-06-12	"	SUB
Chloromethane	mc	ND	0.941	0.000941	0.00500	ug/L	1	"	2024-06-12	2024-06-12	"	SUB
cis-1,3-Dichloropropene	mc	ND	0.885	0.000885	0.00500	ug/L	1	"	2024-06-12	2024-06-12	"	SUB
1,2-Dichloroethane	mc	ND	1.53	0.00153	0.00500	ug/L	1	"	2024-06-12	2024-06-12	"	SUB
Xylenes, Total	mc	ND	1.13	0.00113	0.00500	ug/L	1	"	2024-06-12	2024-06-12	"	SUB
1,2-Dichloropropane	mc	ND	1.55	0.00155	0.00500	ug/L	1	"	2024-06-12	2024-06-12	"	SUB
Methylene Chloride	mc	ND	0.829	0.000829	0.00500	ug/L	1	"	2024-06-12	2024-06-12	"	SUB
MTBE	mc	ND	2.68	0.00268	0.0100	ug/L	1	"	2024-06-12	2024-06-12	"	SUB
Naphthalene	mc	ND	0.927	0.000927	0.00500	ug/L	1	"	2024-06-12	2024-06-12	"	SUB
o-Xylene	mc	ND	0.488	0.000488	0.00200	ug/L	1	"	2024-06-12	2024-06-12	"	SUB
Tetrachloroethene	mc	ND	0.9	0.000900	0.00500	ug/L	1	"	2024-06-12	2024-06-12	"	SUB
1,2-Dibromoethane	mc	ND	0.631	0.000631	0.00200	ug/L	1	"	2024-06-12	2024-06-12	"	SUB
1,2-Dichlorobenzene	mc	ND	0.603	0.000603	0.00200	ug/L	1	"	2024-06-12	2024-06-12	"	SUB
Acrolein	mc	ND	23.1	0.0231	0.0500	ug/L	1	"	2024-06-12	2024-06-12	"	SUB
Acrylonitrile	mc	ND	7.8	0.00780	0.0500	ug/L	1	"	2024-06-12	2024-06-12	"	SUB

Sabine Creek WWTP	Project: **Permit Renewal**	
1513 Crenshaw Rd	Project Number: SBX	**Reported:**
Royse City, TEXAS 75189	Project Manager: Kristen Suprobo	2024-07-30 15:41

ANALYTICAL REPORT FOR SAMPLES

Effluent G (2421003-03 - Outfall: Effluent)

Volatile Organic Compounds (GC/MS)

Eurofins Dallas

Analyte	Analyst	Result	SRL	MDL	MRL	Units	Prep Ratio	Batch	Prepared	Analyzed	Method	Notes
Bromomethane	mc	ND	1.88	0.00188	0.00500	ug/L	1	20655	2024-06-12	2024-06-12	EPA 624.1	SUB
Bromoform	mc	ND	1.33	0.00133	0.00500	ug/L	1	"	2024-06-12	2024-06-12	"	SUB
Carbon tetrachloride	mc	ND	1.26	0.00126	0.00200	ug/L	1	"	2024-06-12	2024-06-12	"	SUB
Bromodichloromethane	mc	ND	0.696	0.000696	0.00200	ug/L	1	"	2024-06-12	2024-06-12	"	SUB
Ethylbenzene	mc	ND	0.878	0.000878	0.00500	ug/L	1	"	2024-06-12	2024-06-12	"	SUB
Chlorobenzene	mc	ND	0.945	0.000945	0.00500	ug/L	1	"	2024-06-12	2024-06-12	"	SUB
1,1,2-Trichloroethane	mc	ND	0.747	0.000747	0.00200	ug/L	1	"	2024-06-12	2024-06-12	"	SUB
Acetone	mc	ND	21.3	0.0213	0.0500	ug/L	1	"	2024-06-12	2024-06-12	"	SUB
2-Chloroethyl vinyl ether	mc	ND	1.2	0.00120	0.00500	ug/L	1	"	2024-06-12	2024-06-12	"	SUB
1,4-Dichlorobenzene	mc	ND	0.637	0.000637	0.00200	ug/L	1	"	2024-06-12	2024-06-12	"	SUB
1,3-Dichlorobenzene	mc	ND	1.08	0.00108	0.00500	ug/L	1	"	2024-06-12	2024-06-12	"	SUB
Chloroethane	mc	ND	1.45	0.00145	0.00500	ug/L	1	"	2024-06-12	2024-06-12	"	SUB
Chloroform	mc	ND	1.21	0.00121	0.00500	ug/L	1	"	2024-06-12	2024-06-12	"	SUB
Benzene	mc	ND	0.496	0.000496	0.00200	ug/L	1	"	2024-06-12	2024-06-12	"	SUB
Dibromochloromethane	mc	ND	1.75	0.00175	0.00500	ug/L	1	"	2024-06-12	2024-06-12	"	SUB
Vinyl acetate	mc	ND	1.69	0.00169	0.00500	ug/L	1	"	2024-06-12	2024-06-12	"	SUB
Trichlorofluoromethane	mc	ND	1.24	0.00124	0.00500	ug/L	1	"	2024-06-12	2024-06-12	"	SUB
Trichloroethene	mc	ND	1.69	0.00169	0.00500	ug/L	1	"	2024-06-12	2024-06-12	"	SUB
trans-1,3-Dichloropropene	mc	ND	1.95	0.00195	0.00500	ug/L	1	"	2024-06-12	2024-06-12	"	SUB
m,p-Xylenes	mc	ND	1.13	0.00113	0.00500	ug/L	1	"	2024-06-12	2024-06-12	"	SUB
2-Butanone	mc	ND	4.53	0.00453	0.0200	ug/L	1	"	2024-06-12	2024-06-12	"	SUB
trans-1,2-Dichloroethene	mc	ND	0.903	0.000903	0.00500	ug/L	1	"	2024-06-12	2024-06-12	"	SUB
Vinyl chloride	mc	ND	0.592	0.000592	0.00200	ug/L	1	"	2024-06-12	2024-06-12	"	SUB
1,3-Dichloropropene, Total	mc	ND	1.95	0.00195	0.00500	ug/L	1	"	2024-06-12	2024-06-12	"	SUB
cis-1,2-Dichloroethene	mc	ND	0.796	0.000796	0.00500	ug/L	1	"	2024-06-12	2024-06-12	"	SUB
1,1,1-Trichloroethane	mc	ND	1.45	0.00145	0.00500	ug/L	1	"	2024-06-12	2024-06-12	"	SUB
1,1,2,2-Tetrachloroethane	mc	ND	1.71	0.00171	0.00500	ug/L	1	"	2024-06-12	2024-06-12	"	SUB
1,1-Dichloroethane	mc	ND	1.03	0.00103	0.00500	ug/L	1	"	2024-06-12	2024-06-12	"	SUB
1,1-Dichloroethene	mc	ND	0.575	0.000575	0.00200	ug/L	1	"	2024-06-12	2024-06-12	"	SUB
Trihalomethanes, Total	mc	ND	1.75	1.75	5.00	ug/L	1	"	2024-06-12	2024-06-12	"	SUB

Sabine Creek WWTP	Project: **Permit Renewal**	
1513 Crenshaw Rd	Project Number: SBX	**Reported:**
Royse City, TEXAS 75189	Project Manager: Kristen Suprobo	2024-07-30 15:41

ANALYTICAL REPORT FOR SAMPLES

Trip Blank (2421003-04 - Outfall: Trip Blank)

Total Mercury by EPA 245.7

North Texas Municipal Water District

Analyte	Analyst	Result	SRL	MDL	MRL	Units	Prep Ratio	Batch	Prepared	Analyzed	Method	Notes
Mercury	nv	ND	0.00500	0.00180	0.00500	ug/L	1	2416934	2024-06-18	2024-06-18	EPA 245.7	

Sabine Creek WWTP	Project: **Permit Renewal**	
1513 Crenshaw Rd	Project Number: SBX	**Reported:**
Royse City, TEXAS 75189	Project Manager: Kristen Suprobo	2024-07-30 15:41

ANALYTICAL REPORT FOR SAMPLES

Total Metals by EPA 200.8 - Quality Control

North Texas Municipal Water District

Analyte	Result	AQL	Units	Spike Level	MDL	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2417014 - [200.8 Digestion] Digested down to 10mL at 95ºC											
Blank (2417014-BLK1)					Prepared: 2024-06-19 Analyzed: 2024-06-20						
Aluminum	ND	2.50	ug/L		1.25						
Arsenic	ND	0.500	"		0.250						
Barium	ND	1.00	"		0.500						
Cadmium	ND	1.00	"		0.500						
Copper	ND	1.00	"		0.500						
Lead	ND	0.500	"		0.250						
Nickel	ND	1.00	"		0.500						
Selenium	ND	1.00	"		0.500						
Silver	ND	0.500	"		0.250						
Zinc	ND	2.50	"		1.25						
Antimony	ND	2.50	"		1.25						
Thallium	ND	0.500	"		0.250						
Chromium	ND	2.50	"		1.25						
LCS (2417014-BS1)					Prepared: 2024-06-19 Analyzed: 2024-06-20						
Aluminum	47.4	2.50	ug/L	50.0	1.25		94.8	85-115			
Arsenic	48.9	0.500	"	50.0	0.250		97.9	85-115			
Barium	48.9	1.00	"	50.0	0.500		97.8	85-115			
Cadmium	49.9	1.00	"	50.0	0.500		99.7	85-115			
Copper	51.0	1.00	"	50.0	0.500		102	85-115			
Lead	46.4	0.500	"	50.0	0.250		92.8	85-115			
Nickel	49.4	1.00	"	50.0	0.500		98.8	85-115			
Selenium	49.2	1.00	"	50.0	0.500		98.3	85-115			
Silver	50.7	0.500	"	50.0	0.250		101	85-115			
Zinc	49.9	2.50	"	50.0	1.25		99.8	85-115			
Antimony	43.5	2.50	"	50.0	1.25		86.9	85-115			
Thallium	50.3	0.500	"	50.0	0.250		101	85-115			
Chromium	47.2	2.50	"	50.0	1.25		94.5	85-115			
LCS Dup (2417014-BSD1)					Prepared: 2024-06-19 Analyzed: 2024-06-20						
Aluminum	46.2	2.50	ug/L	50.0	1.25		92.3	85-115	2.65	20	
Arsenic	48.4	0.500	"	50.0	0.250		96.8	85-115	1.05	20	
Barium	48.5	1.00	"	50.0	0.500		97.0	85-115	0.811	20	
Cadmium	49.5	1.00	"	50.0	0.500		99.0	85-115	0.750	20	
Copper	49.9	1.00	"	50.0	0.500		99.7	85-115	2.22	20	
Lead	45.8	0.500	"	50.0	0.250		91.7	85-115	1.19	20	
Nickel	48.4	1.00	"	50.0	0.500		96.8	85-115	2.01	20	
Selenium	49.0	1.00	"	50.0	0.500		98.0	85-115	0.364	20	
Silver	50.6	0.500	"	50.0	0.250		101	85-115	0.256	20	
Zinc	49.6	2.50	"	50.0	1.25		99.1	85-115	0.613	20	
Antimony	45.3	2.50	"	50.0	1.25		90.6	85-115	4.08	20	
Thallium	50.3	0.500	"	50.0	0.250		101	85-115	0.0540	20	

Sabine Creek WWTP	Project: **Permit Renewal**	
1513 Crenshaw Rd	Project Number: SBX	**Reported:**
Royse City, TEXAS 75189	Project Manager: Kristen Suprobo	2024-07-30 15:41

ANALYTICAL REPORT FOR SAMPLES

Total Metals by EPA 200.8 - Quality Control

North Texas Municipal Water District

Analyte	Result	AQL	Units	Spike Level	MDL	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2417014 - [200.8 Digestion] Digested down to 10mL at 95ºC											
LCS Dup (2417014-BSD1)					Prepared: 2024-06-19 Analyzed: 2024-06-20						
Chromium	46.6	2.50	ug/L	50.0	1.25		93.2	85-115	1.30	20	
Matrix Spike (2417014-MS1)		**Source: 2425019-02**			Prepared: 2024-06-19 Analyzed: 2024-06-20						
Aluminum	87.8	2.50	ug/L	50.0	1.25	36.7	102	70-130			
Arsenic	55.9	0.500	"	50.0	0.250	4.99	102	70-130			
Barium	97.7	1.00	"	50.0	0.500	49.8	95.7	70-130			
Cadmium	50.2	1.00	"	50.0	0.500	ND	100	70-130			
Copper	48.4	1.00	"	50.0	0.500	1.15	94.5	70-130			
Lead	43.9	0.500	"	50.0	0.250	0.256	87.3	70-130			
Nickel	50.9	1.00	"	50.0	0.500	3.55	94.7	70-130			
Selenium	53.1	1.00	"	50.0	0.500	0.746	105	70-130			
Silver	39.1	0.500	"	50.0	0.250	ND	78.3	70-130			
Zinc	52.8	2.50	"	50.0	1.25	3.33	98.9	70-130			
Antimony	44.8	2.50	"	50.0	1.25	1.66	86.2	70-130			
Thallium	48.8	0.500	"	50.0	0.250	ND	97.5	70-130			
Chromium	46.7	2.50	"	50.0	1.25	ND	93.4	70-130			
Matrix Spike (2417014-MS2)		**Source: 2425019-08**			Prepared: 2024-06-19 Analyzed: 2024-06-20						
Aluminum	53.7	2.50	ug/L	50.0	1.25	3.29	101	70-130			
Arsenic	52.4	0.500	"	50.0	0.250	0.530	104	70-130			
Barium	89.7	1.00	"	50.0	0.500	44.1	91.0	70-130			
Cadmium	50.6	1.00	"	50.0	0.500	ND	101	70-130			
Copper	49.0	1.00	"	50.0	0.500	1.10	95.7	70-130			
Lead	44.6	0.500	"	50.0	0.250	ND	89.1	70-130			
Nickel	54.3	1.00	"	50.0	0.500	6.06	96.5	70-130			
Selenium	55.3	1.00	"	50.0	0.500	0.562	109	70-130			
Silver	49.5	0.500	"	50.0	0.250	ND	99.0	70-130			
Zinc	51.1	2.50	"	50.0	1.25	ND	102	70-130			
Antimony	50.6	2.50	"	50.0	1.25	ND	101	70-130			CCBJ
Thallium	50.1	0.500	"	50.0	0.250	ND	100	70-130			
Chromium	48.7	2.50	"	50.0	1.25	ND	97.5	70-130			
Matrix Spike Dup (2417014-MSD1)		**Source: 2425019-02**			Prepared: 2024-06-19 Analyzed: 2024-06-20						
Aluminum	98.8	2.50	ug/L	50.0	1.25	36.7	124	70-130	11.8	20	
Arsenic	57.5	0.500	"	50.0	0.250	4.99	105	70-130	2.75	20	
Barium	101	1.00	"	50.0	0.500	49.8	103	70-130	3.81	20	
Cadmium	51.4	1.00	"	50.0	0.500	ND	103	70-130	2.43	20	
Copper	50.3	1.00	"	50.0	0.500	1.15	98.4	70-130	3.89	20	
Lead	45.3	0.500	"	50.0	0.250	0.256	90.2	70-130	3.26	20	
Nickel	52.5	1.00	"	50.0	0.500	3.55	98.0	70-130	3.15	20	
Selenium	54.2	1.00	"	50.0	0.500	0.746	107	70-130	2.09	20	
Silver	43.1	0.500	"	50.0	0.250	ND	86.2	70-130	9.61	20	

ANALYTICAL REPORT FOR SAMPLES

Total Metals by EPA 200.8 - Quality Control

North Texas Municipal Water District

Analyte	Result	AQL	Units	Spike Level	MDL	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2417014 - [200.8 Digestion] Digested down to 10mL at 95ºC											
Matrix Spike Dup (2417014-MSD1)		**Source: 2425019-02**			Prepared: 2024-06-19 Analyzed: 2024-06-20						
Zinc	54.9	2.50	ug/L	50.0	1.25	3.33	103	70-130	4.02	20	
Antimony	45.9	2.50	"	50.0	1.25	1.66	88.5	70-130	2.51	20	
Thallium	50.3	0.500	"	50.0	0.250	ND	101	70-130	3.17	20	
Chromium	48.5	2.50	"	50.0	1.25	ND	96.9	70-130	3.71	20	
Matrix Spike Dup (2417014-MSD2)		**Source: 2425019-08**			Prepared: 2024-06-19 Analyzed: 2024-06-20						
Aluminum	54.6	2.50	ug/L	50.0	1.25	3.29	103	70-130	1.64	20	
Arsenic	53.5	0.500	"	50.0	0.250	0.530	106	70-130	2.04	20	
Barium	93.1	1.00	"	50.0	0.500	44.1	98.0	70-130	3.81	20	
Cadmium	52.2	1.00	"	50.0	0.500	ND	104	70-130	3.21	20	
Copper	50.2	1.00	"	50.0	0.500	1.10	98.2	70-130	2.50	20	
Lead	46.2	0.500	"	50.0	0.250	ND	92.4	70-130	3.63	20	
Nickel	55.4	1.00	"	50.0	0.500	6.06	98.8	70-130	2.09	20	
Selenium	56.5	1.00	"	50.0	0.500	0.562	112	70-130	2.04	20	
Silver	45.6	0.500	"	50.0	0.250	ND	91.3	70-130	8.14	20	
Zinc	52.2	2.50	"	50.0	1.25	ND	104	70-130	2.21	20	
Antimony	51.4	2.50	"	50.0	1.25	ND	103	70-130	1.62	20	CCBJ
Thallium	51.7	0.500	"	50.0	0.250	ND	103	70-130	3.12	20	
Chromium	49.6	2.50	"	50.0	1.25	ND	99.2	70-130	1.74	20	
Batch 2417306 - [200.8 Digestion] Digested down to 10mL at 95ºC											
Blank (2417306-BLK1)					Prepared: 2024-06-27 Analyzed: 2024-07-02						
Beryllium	ND	0.500	ug/L		0.250						
LCS (2417306-BS1)					Prepared: 2024-06-27 Analyzed: 2024-07-02						
Beryllium	49.5	0.500	ug/L	50.0	0.250		99.0	85-115			
LCS Dup (2417306-BSD1)					Prepared: 2024-06-27 Analyzed: 2024-07-02						
Beryllium	49.3	0.500	ug/L	50.0	0.250		98.6	85-115	0.423	20	
Matrix Spike (2417306-MS1)		**Source: 2425087-01**			Prepared: 2024-06-27 Analyzed: 2024-07-02						
Beryllium	53.8	0.500	ug/L	50.0	0.250	ND	108	70-130			
Matrix Spike (2417306-MS2)		**Source: 2426086-01**			Prepared: 2024-06-27 Analyzed: 2024-07-02						
Beryllium	52.6	0.500	ug/L	50.0	0.250	ND	105	70-130			
Matrix Spike Dup (2417306-MSD1)		**Source: 2425087-01**			Prepared: 2024-06-27 Analyzed: 2024-07-02						
Beryllium	54.3	0.500	ug/L	50.0	0.250	ND	109	70-130	0.785	20	
Matrix Spike Dup (2417306-MSD2)		**Source: 2426086-01**			Prepared: 2024-06-27 Analyzed: 2024-07-02						
Beryllium	53.6	0.500	ug/L	50.0	0.250	ND	107	70-130	1.92	20	

Total Mercury by EPA 245.7 - Quality Control

North Texas Municipal Water District

ANALYTICAL REPORT FOR SAMPLES

Analyte	Result	AQL	Units	Spike Level	MDL	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2416934 - [245.7 Digestion] 245.7 Digestion											
Blank (2416934-BLK1)					Prepared & Analyzed: 2024-06-18						
Mercury	ND	0.00500	ug/L		0.00180						
MRL Check (2416934-MRL1)					Prepared & Analyzed: 2024-06-18						
Mercury	0.00526	0.00500	ug/L	0.00500	0.00180		105	50-150			
Matrix Spike (2416934-MS1)		**Source: 2421003-04**			Prepared & Analyzed: 2024-06-18						
Mercury	0.0106	0.00500	ug/L	0.0100	0.00180	ND	106	63-111			
Matrix Spike (2416934-MS2)		**Source: 2424009-07**			Prepared & Analyzed: 2024-06-18						
Mercury	0.0106	0.00500	ug/L	0.0100	0.00180	ND	106	63-111			
Matrix Spike Dup (2416934-MSD1)		**Source: 2421003-04**			Prepared & Analyzed: 2024-06-18						
Mercury	0.0109	0.00500	ug/L	0.0100	0.00180	ND	109	63-111	2.23	18	
Matrix Spike Dup (2416934-MSD2)		**Source: 2424009-07**			Prepared & Analyzed: 2024-06-18						
Mercury	0.0107	0.00500	ug/L	0.0100	0.00180	ND	107	63-111	1.05	18	

Conventional Chemistry Parameters by EPA Methods - Quality Control

North Texas Municipal Water District

Analyte	Result	AQL	Units	Spike Level	MDL	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2416409 - [365.1 PO4 Digestion] 365.3 PO4 Digestion											
Blank (2416409-BLK1)					Prepared & Analyzed: 2024-06-12						
Total Phosphate as P	ND	0.0200	mg/L		0.0100						
LCS (2416409-BS1)					Prepared & Analyzed: 2024-06-12						
Total Phosphate as P	0.0980	0.0200	mg/L	0.100	0.0100		98.0	90-110			
LCS Dup (2416409-BSD1)					Prepared & Analyzed: 2024-06-12						
Total Phosphate as P	0.0970	0.0200	mg/L	0.100	0.0100		97.0	90-110	1.03	10	
Matrix Spike (2416409-MS1)		**Source: 2424134-02**			Prepared & Analyzed: 2024-06-12						
Total Phosphate as P	1.64	0.200	mg/L	1.00	0.100	0.710	93.0	90-110			
Matrix Spike (2416409-MS2)		**Source: 2424136-01**			Prepared & Analyzed: 2024-06-12						
Total Phosphate as P	7.22	0.500	mg/L	2.50	0.250	4.60	105	90-110			
Matrix Spike Dup (2416409-MSD1)		**Source: 2424134-02**			Prepared & Analyzed: 2024-06-12						
Total Phosphate as P	1.69	0.200	mg/L	1.00	0.100	0.710	98.0	90-110	3.00	10	
Matrix Spike Dup (2416409-MSD2)		**Source: 2424136-01**			Prepared & Analyzed: 2024-06-12						
Total Phosphate as P	7.25	0.500	mg/L	2.50	0.250	4.60	106	90-110	0.345	10	
Reference (2416409-SRM1)					Prepared & Analyzed: 2024-06-12						
Total Phosphate as P	2.05	0.500	mg/L	2.00	0.250		102	81-117			
Batch 2416428 - [350.1 NH3 w/o Distillation] 350.1 NH3 without Distillation											
Blank (2416428-BLK1)					Prepared: 2024-06-12 Analyzed: 2024-06-13						

ANALYTICAL REPORT FOR SAMPLES

Conventional Chemistry Parameters by EPA Methods - Quality Control

North Texas Municipal Water District

Analyte	Result	AQL	Units	Spike Level	MDL	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2416428 - [350.1 NH3 w/o Distillation] 350.1 NH3 without Distillation											
Blank (2416428-BLK1)					Prepared: 2024-06-12 Analyzed: 2024-06-13						
Ammonia as N	ND	0.100	mg/L		0.0500						
LCS (2416428-BS1)					Prepared: 2024-06-12 Analyzed: 2024-06-13						
Ammonia as N	2.01	0.100	mg/L	2.00	0.0500		101	90-110			
LCS Dup (2416428-BSD1)					Prepared: 2024-06-12 Analyzed: 2024-06-13						
Ammonia as N	2.01	0.100	mg/L	2.00	0.0500		100	90-110	0.199	10	
Matrix Spike (2416428-MS1)		**Source: 2424135-01**			Prepared: 2024-06-12 Analyzed: 2024-06-13						
Ammonia as N	64.4	2.00	mg/L	40.0	1.00	24.8	99.1	90-110			
Matrix Spike (2416428-MS2)		**Source: 2424139-01**			Prepared: 2024-06-12 Analyzed: 2024-06-13						
Ammonia as N	66.9	2.00	mg/L	40.0	1.00	26.5	101	90-110			
Matrix Spike Dup (2416428-MSD1)		**Source: 2424135-01**			Prepared: 2024-06-12 Analyzed: 2024-06-13						
Ammonia as N	65.0	2.00	mg/L	40.0	1.00	24.8	101	90-110	0.896	10	
Matrix Spike Dup (2416428-MSD2)		**Source: 2424139-01**			Prepared: 2024-06-12 Analyzed: 2024-06-13						
Ammonia as N	65.1	2.00	mg/L	40.0	1.00	26.5	96.6	90-110	2.73	10	
Batch 2416606 - [351.2 TKN Digestion] 351.2 TKN Digestion											
Blank (2416606-BLK1)					Prepared & Analyzed: 2024-06-14						
Total Kjeldal Nitrogen	ND	0.200	mg/L		0.100						
LCS (2416606-BS1)					Prepared & Analyzed: 2024-06-14						
Total Kjeldal Nitrogen	1.99	0.200	mg/L	2.00	0.100		99.6	90-110			
LCS Dup (2416606-BSD1)					Prepared & Analyzed: 2024-06-14						
Total Kjeldal Nitrogen	1.96	0.200	mg/L	2.00	0.100		98.0	90-110	1.62	10	
LOQ Check Standard (2416606-MRL1)					Prepared & Analyzed: 2024-06-14						
Total Kjeldal Nitrogen	0.179	0.200	mg/L	0.200	0.100		89.5	70-130			J
Matrix Spike (2416606-MS1)		**Source: 2424010-01**			Prepared & Analyzed: 2024-06-14						
Total Kjeldal Nitrogen	2.61	0.200	mg/L	2.00	0.100	0.649	98.0	90-110			
Matrix Spike (2416606-MS2)		**Source: 2424012-02**			Prepared & Analyzed: 2024-06-14						
Total Kjeldal Nitrogen	2.66	0.200	mg/L	2.00	0.100	0.614	102	90-110			
Matrix Spike Dup (2416606-MSD1)		**Source: 2424010-01**			Prepared & Analyzed: 2024-06-14						
Total Kjeldal Nitrogen	2.66	0.200	mg/L	2.00	0.100	0.649	100	90-110	1.79	10	
Matrix Spike Dup (2416606-MSD2)		**Source: 2424012-02**			Prepared & Analyzed: 2024-06-14						
Total Kjeldal Nitrogen	2.69	0.200	mg/L	2.00	0.100	0.614	104	90-110	1.16	10	
Reference (2416606-SRM1)					Prepared & Analyzed: 2024-06-14						
Total Kjeldal Nitrogen	1.04	0.200	mg/L	1.04	0.100		100	74-121			

ANALYTICAL REPORT FOR SAMPLES

Conventional Chemistry Parameters by Standard Methods - Quality Control

North Texas Municipal Water District

Analyte	Result	AQL	Units	Spike Level	MDL	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2416323 - [Solids Preparation]											
Blank (2416323-BLK1)					Prepared & Analyzed: 2024-06-12						
Total Suspended Solids	ND	0.50	mg/L		0.50						
Blank (2416323-BLK2)					Prepared & Analyzed: 2024-06-12						
Total Suspended Solids	ND	0.50	mg/L		0.50						
Blank (2416323-BLK3)					Prepared & Analyzed: 2024-06-12						
Total Suspended Solids	ND	0.50	mg/L		0.50						
Blank (2416323-BLK4)					Prepared & Analyzed: 2024-06-12						
Total Suspended Solids	ND	0.50	mg/L		0.50						
Blank (2416323-BLK5)					Prepared & Analyzed: 2024-06-12						
Total Suspended Solids	ND	0.50	mg/L		0.50						
LCS (2416323-BS1)					Prepared & Analyzed: 2024-06-12						
Total Suspended Solids	41.0	5.00	mg/L	40.0	5.00		102	80-120			
Duplicate (2416323-DUP1)		**Source: 2424071-03**			Prepared & Analyzed: 2024-06-12						
Total Suspended Solids	10600	100	mg/L		100	10600			0.377	10	
Duplicate (2416323-DUP2)		**Source: 2424071-05**			Prepared & Analyzed: 2024-06-12						
Total Suspended Solids	11200	100	mg/L		100	11200			0.179	10	
Duplicate (2416323-DUP3)		**Source: 2424101-06**			Prepared & Analyzed: 2024-06-12						
Total Suspended Solids	3020	100	mg/L		100	2980			1.33	10	
Duplicate (2416323-DUP4)		**Source: 2424134-09**			Prepared & Analyzed: 2024-06-12						
Total Suspended Solids	14300	100	mg/L		100	14800			3.57	10	
Duplicate (2416323-DUP5)		**Source: 2424171-04**			Prepared & Analyzed: 2024-06-12						
Total Suspended Solids	4080	100	mg/L		100	4040			0.985	10	
Batch 2416405 - [GenChem Demand]											
Blank (2416405-BLK1)					Prepared: 2024-06-12 Analyzed: 2024-06-17						
Carbonaceous Biochemical Oxygen Demand	ND	2.0	mg/L		0.1						
LCS (2416405-BS1)					Prepared: 2024-06-12 Analyzed: 2024-06-17						
Carbonaceous Biochemical Oxygen Demand	196	100	mg/L	198	5.0		99.0	84-115			
Duplicate (2416405-DUP1)		**Source: 2424136-02**			Prepared: 2024-06-12 Analyzed: 2024-06-17						
Carbonaceous Biochemical Oxygen Demand	0.58	2.2	mg/L		0.1	0.65			12.6	15	
Batch 2416424 - [Solids Preparation]											
Blank (2416424-BLK1)					Prepared: 2024-06-12 Analyzed: 2024-06-18						
Total Dissolved Solids	ND	10.0	mg/L		5.00						

Sabine Creek WWTP	Project: **Permit Renewal**	
1513 Crenshaw Rd	Project Number: SBX	**Reported:**
Royse City, TEXAS 75189	Project Manager: Kristen Suprobo	2024-07-30 15:41

ANALYTICAL REPORT FOR SAMPLES

Conventional Chemistry Parameters by Standard Methods - Quality Control

North Texas Municipal Water District

Analyte	Result	AQL	Units	Spike Level	MDL	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2416424 - [Solids Preparation]											
Blank (2416424-BLK2)					Prepared: 2024-06-12 Analyzed: 2024-06-18						
Total Dissolved Solids	ND	10.0	mg/L		5.00						
Blank (2416424-BLK3)					Prepared: 2024-06-12 Analyzed: 2024-06-18						
Total Dissolved Solids	ND	10.0	mg/L		5.00						
Blank (2416424-BLK4)					Prepared: 2024-06-12 Analyzed: 2024-06-18						
Total Dissolved Solids	ND	10.0	mg/L		5.00						
Blank (2416424-BLK5)					Prepared: 2024-06-12 Analyzed: 2024-06-18						
Total Dissolved Solids	ND	10.0	mg/L		5.00						
LCS (2416424-BS1)					Prepared: 2024-06-12 Analyzed: 2024-06-18						
Total Dissolved Solids	237	10.0	mg/L	240	5.00		98.8	80-120			
Duplicate (2416424-DUP1)		**Source: 2421003-01**			Prepared: 2024-06-12 Analyzed: 2024-06-18						
Total Dissolved Solids	679	10.0	mg/L		5.00	658			3.14	10	
Duplicate (2416424-DUP2)		**Source: 2424021-02**			Prepared: 2024-06-12 Analyzed: 2024-06-18						
Total Dissolved Solids	237	10.0	mg/L		5.00	237			0.00	10	
Duplicate (2416424-DUP3)		**Source: 2424071-02**			Prepared: 2024-06-12 Analyzed: 2024-06-18						
Total Dissolved Solids	665	10.0	mg/L		5.00	665			0.00	10	
Duplicate (2416424-DUP4)		**Source: 2424101-02**			Prepared: 2024-06-12 Analyzed: 2024-06-18						
Total Dissolved Solids	547	10.0	mg/L		5.00	556			1.63	10	
Duplicate (2416424-DUP5)		**Source: 2424177-02**			Prepared: 2024-06-12 Analyzed: 2024-06-18						
Total Dissolved Solids	318	10.0	mg/L		5.00	334			4.91	10	
LOQ Check Standard (2416424-MRL1)					Prepared: 2024-06-12 Analyzed: 2024-06-18						
Total Dissolved Solids	7.00	10.0	mg/L	9.60	5.00		72.9	70-130			
Batch 2416438 - [Water Quality Preparation] Water Quality Preparation											
Blank (2416438-BLK1)					Prepared & Analyzed: 2024-06-13						
Total Alkalinity	ND	20.0	mg/L		10.0						
LCS (2416438-BS1)					Prepared & Analyzed: 2024-06-13						
Total Alkalinity	50.3	20.0	mg/L	50.0	10.0		101	90-110			
LCS Dup (2416438-BSD1)					Prepared & Analyzed: 2024-06-13						
Total Alkalinity	50.4	20.0	mg/L	50.0	10.0		101	90-110	0.318	10	
Duplicate (2416438-DUP1)		**Source: 2421003-01**			Prepared & Analyzed: 2024-06-13						
Total Alkalinity	140	20.0	mg/L		10.0	140			0.222	10	
Duplicate (2416438-DUP2)		**Source: 2424139-02**			Prepared & Analyzed: 2024-06-13						
Total Alkalinity	124	20.0	mg/L		10.0	123			0.584	10	

Sabine Creek WWTP	Project: **Permit Renewal**	
1513 Crenshaw Rd	Project Number: SBX	**Reported:**
Royse City, TEXAS 75189	Project Manager: Kristen Suprobo	2024-07-30 15:41

ANALYTICAL REPORT FOR SAMPLES

Coliform by Quantitray - Quality Control

North Texas Municipal Water District

Analyte	Result	AQL	Units	Spike Level	MDL	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2416417 - [IDEXX Colilert Quantitray] IDEXX Colilert Quantitray											
Blank (2416417-BLK1)					Prepared: 2024-06-12 Analyzed: 2024-06-13						
Escherichia Coliform	ND	1.0	MPN/100mL		1.0						
Duplicate (2416417-DUP1)			**Source: 2421003-03**		Prepared: 2024-06-12 Analyzed: 2024-06-13						
Escherichia Coliform	ND	1.0	MPN/100mL		1.0	ND				200	

Anions by EPA 300 Series - Quality Control

North Texas Municipal Water District

Analyte	Result	AQL	Units	Spike Level	MDL	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2416410 - [300.0 Anions] 300.0 Anions											
Blank (2416410-BLK1)					Prepared & Analyzed: 2024-06-12						
Nitrate as N	ND	0.020	mg/L		0.010						
LCS (2416410-BS1)					Prepared & Analyzed: 2024-06-12						
Nitrate as N	1.00	0.020	mg/L	1.00	0.010		100	90-110			
LCS Dup (2416410-BSD1)					Prepared & Analyzed: 2024-06-12						
Nitrate as N	1.00	0.020	mg/L	1.00	0.010		100	90-110	0.00	10	
Matrix Spike (2416410-MS1)			**Source: 2424074-01**		Prepared & Analyzed: 2024-06-12						
Nitrate as N	0.989	0.020	mg/L	1.00	0.010	0.015	97.4	80-120			
Matrix Spike (2416410-MS2)			**Source: 2424085-02**		Prepared & Analyzed: 2024-06-12						
Nitrate as N	1.42	0.020	mg/L	1.00	0.010	0.347	107	80-120			
Matrix Spike Dup (2416410-MSD1)			**Source: 2424074-01**		Prepared & Analyzed: 2024-06-12						
Nitrate as N	0.996	0.020	mg/L	1.00	0.010	0.015	98.1	80-120	0.705	10	
Matrix Spike Dup (2416410-MSD2)			**Source: 2424085-02**		Prepared & Analyzed: 2024-06-12						
Nitrate as N	1.41	0.020	mg/L	1.00	0.010	0.347	106	80-120	0.353	10	
Batch 2416514 - [300.0 Anions] 300.0 Anions											
Blank (2416514-BLK1)					Prepared & Analyzed: 2024-06-13						
Fluoride	ND	0.020	mg/L		0.010						
LCS (2416514-BS1)					Prepared & Analyzed: 2024-06-13						
Fluoride	1.06	0.020	mg/L	1.00	0.010		106	90-110			
LCS Dup (2416514-BSD1)					Prepared & Analyzed: 2024-06-13						
Fluoride	1.07	0.020	mg/L	1.00	0.010		107	90-110	0.845	10	
Matrix Spike (2416514-MS1)			**Source: 2424211-06**		Prepared & Analyzed: 2024-06-13						
Fluoride	1.44	0.020	mg/L	1.00	0.010	0.322	112	80-120			

ANALYTICAL REPORT FOR SAMPLES

Anions by EPA 300 Series - Quality Control

North Texas Municipal Water District

Analyte	Result	AQL	Units	Spike Level	MDL	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2416514 - [300.0 Anions] 300.0 Anions											
Matrix Spike (2416514-MS2)		**Source: 2424142-06**			Prepared & Analyzed: 2024-06-13						
Fluoride	1.38	0.020	mg/L	1.00	0.010	0.263	111	80-120			
Matrix Spike Dup (2416514-MSD1)		**Source: 2424211-06**			Prepared & Analyzed: 2024-06-13						
Fluoride	1.44	0.020	mg/L	1.00	0.010	0.322	112	80-120	0.0693	10	
Matrix Spike Dup (2416514-MSD2)		**Source: 2424142-06**			Prepared & Analyzed: 2024-06-13						
Fluoride	1.37	0.020	mg/L	1.00	0.010	0.263	111	80-120	0.291	10	
Batch 2417039 - [300.0 Anions] 300.0 Anions											
Blank (2417039-BLK1)					Prepared & Analyzed: 2024-06-19						
Sulfate	ND	1.00	mg/L		0.500						
Chloride	ND	1.00	"		0.500						
LCS (2417039-BS1)					Prepared & Analyzed: 2024-06-19						
Chloride	29.3	1.00	mg/L	30.0	0.500		97.6	90-110			
Sulfate	29.6	1.00	"	30.0	0.500		98.6	90-110			
LCS Dup (2417039-BSD1)					Prepared & Analyzed: 2024-06-19						
Sulfate	29.6	1.00	mg/L	30.0	0.500		98.8	90-110	0.220	10	
Chloride	29.3	1.00	"	30.0	0.500		97.8	90-110	0.256	10	
LOQ Check Standard (2417039-MRL1)					Prepared & Analyzed: 2024-06-19						
Sulfate	4.72	1.00	mg/L	5.00	0.500		94.4	70-130			
Chloride	4.81	1.00	"	5.00	0.500		96.3	70-130			
Matrix Spike (2417039-MS1)		**Source: 2421003-01**			Prepared & Analyzed: 2024-06-19						
Sulfate	487	10.0	mg/L	300	5.00	177	103	80-120			
Chloride	396	10.0	"	300	5.00	97.4	99.5	80-120			
Matrix Spike (2417039-MS2)		**Source: 2424134-02**			Prepared & Analyzed: 2024-06-19						
Sulfate	436	10.0	mg/L	300	5.00	126	103	80-120			
Chloride	385	10.0	"	300	5.00	86.7	99.5	80-120			
Matrix Spike Dup (2417039-MSD1)		**Source: 2421003-01**			Prepared & Analyzed: 2024-06-19						
Chloride	398	10.0	mg/L	300	5.00	97.4	100	80-120	0.532	10	
Sulfate	491	10.0	"	300	5.00	177	105	80-120	0.925	10	
Matrix Spike Dup (2417039-MSD2)		**Source: 2424134-02**			Prepared & Analyzed: 2024-06-19						
Sulfate	441	10.0	mg/L	300	5.00	126	105	80-120	1.08	10	
Chloride	389	10.0	"	300	5.00	86.7	101	80-120	1.07	10	

Sabine Creek WWTP	Project: **Permit Renewal**	
1513 Crenshaw Rd	Project Number: SBX	**Reported:**
Royse City, TEXAS 75189	Project Manager: Kristen Suprobo	2024-07-30 15:41

ANALYTICAL REPORT FOR SAMPLES

General Notes and Definitions

DET	Analyte DETECTED
dry	Sample results reported on a dry weight basis
MDL	Method Detection Limit
MRL	Method Reporting Limit
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
RPD	Relative Percent Difference
SRL	Sample Reporting Limit
Note:	"Conductance at 25°C" is also known as Specific Conductance

Report Notes and Definitions

*-	LCS and/or LCSD is outside acceptance limits, low biased.
*+	LCS and/or LCSD is outside acceptance limits, high biased.
*1	LCS/LCSD RPD exceeds control limits.
AccFD	Field Data, not performed by laboratory, presented per client request.
CCBJ	CCB is >1/2 IMRL and <IMRL
CCVA	CCV acceptable at this range.
J	Estimated value. The analyte was positively identified but the quantitation is estimation. This estimated report value is between the MDL and MRL (PQL).
Ja	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
p	The %RPD between the primary and confirmation column/detector is >40%. The lower value has been reported.
S1-	Surrogate recovery exceeds control limits, low biased.
S1+	Surrogate recovery exceeds control limits, high biased.
SUB	QA/QC for subcontracted analysis appears on hardcopy of subcontract laboratory report.

08280824 143030

Sabine Creek WWTP
1513 Crenshaw Rd.
Royse City, TX 75189
Contact: KRISTEN SUPROBO

NTMWD Chain of Custody Record

Work Order Numb ### 2421003

Page 1 of 2

Project: Permit Renewal

Reviewed By: Y.C.

Effluent Residual Chlorine ____ mg/L

INFLUENT COLLECTION TEAM | EFFLUENT COLLECTION TEAM

Comp. Sx. Beg/End Date/Time: 6.11.24 0855AM/6.12.24 855AM

Sample Collector Name(s): Eric Demond Yihua Zenghua

Version 1.0 Updated: 4/20/2022

Date	Time	Type	Sx. Num	Sample Name	Alk;CBOD;Cl;SO4;TSS;TDS;	NH3;TPO4;TKN;	E.coli;	F;NO3 by EPA 300.0	TM Sb;Al;As;Ba;Be;Cr;Cd;Cu; Pb;Ni;Se;Ag;Tl;Zn	LL Hg	Cr;Cr(VI);Cr(III)	CN;CN-A*	Phenols by 420.1	VOCs by EPA 624.1*	Oil and Grease	BNA by EPA 625.1*	Pest/PCB by EPA 608.3*	Pest by EPA 632*	Herb by EPA 615*	Dioxins by 625.1*	Dioxins by 613/1613*	Pest by 1657*	4 L HDPE Unpres	500 mL HDPE H2SO4	500 mL Glass	250 mL HDPE HNO3	100mL Bacti	500 mL HDPE Unpres	1 L HDPE NaOH	250 mL Amber H2SO4	40 mL VOA	1 L Clear H2SO4	1 L Amber Glass	A
See Comp	see above	96-p,24 hr	01	Effluent TC	X	X		X	X	X						X	X	X	X	X	X	X	1	1	(1)	1		1					(14)	
6.12.24	0115pm	Grab	02	Effluent Equipment Blank						X															(1)									
6.12.24	855AM	Grab	03	Effluent G			X				X	X*	X	X	X												2	(1)	(1)	(1)	(3)	(1)		
6.12.24	0116p	Grab	04	Trip Blank						X															(1)									

See Subcontract COC

Field Data

Sx. Nu	Sample Name	Chlorine Residual	Conductivity uS/cm	DO mg/L	pH SU	Temperature °C
3	Effluent G	0.07	898	7.85	7.17	24.7

Temperature IR# 23

Cooler Info

C #	TempC Obs.	TempC Cor.	Ctr ID	On Ice Y/N
1	11.3	11.0	IC	Y
2	3.3	3.0	IF	Y
3	20.0	19.7	3A	Y
4	6.6	6.3	3A	Y
5				
6				

Preservation

Chk./Adj. By PC

pH Strips:N Y 30123

Items Adjusted

to pH < 2

Reagent:N____

ID pH$_i$ | ID pH$_i$

to pH > 10

Reagent:N____

ID pH$_i$ | ID pH$_i$

Relinquished by:	Date	Time	Received by:	Relinquished by:	Date	Time	Received by:	Relinquished by:	Date	Time	Received by:
	6.12.24	9:55									

Relinquished by:	Date	Time	Received for Laboratory by:	Date	Time	Remarks: IN-HOUSE PARAMETERS
				NTMWD		*CN and CN-A on Effluent only #2416419

Legend:FC=Flow Composite, Obs.=Observed, Cor.=Corrected

C:36-293R:3E:07/05/16

Sabine Creek WWTP
1513 Crenshaw Rd.
Royse City, TX 75189
Contact: KRISTEN SUPROBO

NTMWD Chain of Custody Record

Work Order Number: 2421003
Project: Permit Renewal
Reviewed By: P.C.

Effluent Residual Chlorine _____ mg/L

	INFLUENT COLLECTION TEAM	EFFLUENT COLLECTION TEAM
Comp. Sx. Beg/End Date/Time		6.11.24 0850Am / 6.12.24 855Am
Sample Collector Name(s):		Eric Dennard Yilma Berihun

Version 1.0 | Updated: 4/20/2022

Date	Time	Type	Sx. Num	Sample Name						Cr;Cr(VI);Cr(III)	CN;CN-A	Phenols by 420.1	VOCs by EPA 624.1	Oil and Grease	BNA by EPA 625.1	Pest/PCB by EPA 608.3	Pest by EPA 632	Herb by EPA 615	Dioxins by 625.1	Dioxins by 613/1613	Pest by 1657	500 mL HDPE Unpres	1 L HDPE NaOH	250 mL Amber H2SO4	40 mL VOA	1 L Clear H2SO4	1 L Amber Glass	500mL Glass
See comp	See above	96-p, 24 hr	01	Effluent TC										X	X	X	X	X	X	X							14	
6.12.24	855Am	Grab	03	Effluent G						X	X*	X	X	X							1	1	1	3	1			

Temperature IR#

Cooler Info

#	TempC Obs.	Ctr ID	On Ice Y / N
1			
3			
4			
5			
6			

Preservation
Chk./Adj. By
pH Strips:N_____
Items Adjusted
to pH < 2
Reagent:N_____

ID	pH	ID	pH

to pH > 10
Reagent:N_____

ID	pH	ID	pH

Relinquished by:	Date	Time	Received by:	Relinquished by:	Date	Time	Received by:	Relinquished by:	Date	Time	Received by:
Eric	6.12.24										

Relinquished by:	Date	Time	Received for Laboratory by:	Date	Time	Remarks: SUBCONTRACT ANALYSES
				EUROFINS ANALYTICAL		

Legend:FC=Flow Composite, Obs.=Observed, Cor.=Corrected

C:36-293R:3E:07/05/16

Eurofins Eaton Analytical South Bend
110 S. Hill Street
Southbend, IN 46617
Phone: 574-233-4777 Fax: 574-233-8207

Chain of Custody Record

eurofins | Environment Testing America

08280824 152905

Client Information	Sampler: Eric Demand	Lab PM: Sylvia Garza	Carrier Tracking No(s):	COC No:
Client Contact: Kelly Harden	Phone: 469-626-4610	E-Mail:	State of Origin:	Page: Page 1 of 1
Company: North Texas Municipal Water District	PWSID:			Job #:
Address: 201 East Brown	Due Date Requested:			
City: Wylie				
State, Zip: Texas 75098	Compliance Project: Δ Yes Δ No			
Phone: 469-626-4610	PO #:			
Email: kharden@ntmwd.com	WO #:			
Project Name: SBX Permit Renewal	Project #:			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	BNA by EPA 625.1	Pest/PCB by EPA 608.3	Herb by EPA 615	Dioxins by 613/1613	Pest by EPA 1657	Pest by EPA 632	Dioxins by 625.1	Cr, Cr (III), Cr (VI)	Cn, Cn-A	Phenols by 420.1	VOC by EPA 624.1	Oil and Grease		Total Number of containers	Special Instructions/Note:
			Preservation Code:																		
2421003- 01 Effluent TC	6/11-12/24	8:50-8:55	C	W	N		I	I	I	I	I	I	I							14	
2421003- 03 Effluent G	6/12/24	8:55	G	W	N									I	B	S	I	S		7	

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company NTMWD	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 01/16/2019

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Kelly Harden
North Texas Municipal Water District
PO BOX 2408
Wylie, Texas 75098

Generated 7/25/2024 12:18:57 PM

JOB DESCRIPTION

SBX Permit Renewal
2421003

JOB NUMBER

870-27737-1

Eurofins Dallas
9701 Harry Hines Blvd
Dallas TX 75220

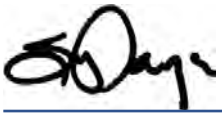
Eurofins Dallas

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

Authorization



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Authorized for release by
Sylvia Garza, Project Manager
Sylvia.Garza@et.eurofinsus.com
(832)544-2004

Table of Contents

Definitions/Glossary

Client: North Texas Municipal Water District
Project/Site: SBX Permit Renewal

Job ID: 870-27737-1
SDG: 2421003

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

GC/MS Semi VOA

Qualifier	Qualifier Description
*-	LCS and/or LCSD is outside acceptance limits, low biased.
*+	LCS and/or LCSD is outside acceptance limits, high biased.
*1	LCS/LCSD RPD exceeds control limits.
	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
S1-	Surrogate recovery exceeds control limits, low biased.
U	Indicates the analyte was analyzed for but not detected.

GC/MS Semi VOA TICs

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

GC Semi VOA

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
*1	LCS/LCSD RPD exceeds control limits.
	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
p	The %RPD between the primary and confirmation column/detector is >40%. The lower value has been reported.
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

HPLC/IC

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

Metals

Qualifier	Qualifier Description
	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

General Chemistry

Qualifier	Qualifier Description
	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job Narrative
870-27737-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt
The samples were received on 6/12/2024 4:15 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were -0.1°C and 1.3°C.

Subcontract Work
Method General Subcontract Method: This method was subcontracted to Ana-Lab Corporation. The subcontract laboratory certification is different from that of the facility issuing the final report. The subcontract report is appended in its entirety.

GC/MS VOA
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

GC/MS Semi VOA
Method 625.1: Six surrogates are used for this analysis. The laboratory's SOP allows one acid and one base of these surrogates to be outside acceptance criteria without performing re-extraction/re-analysis. The following sample contained an allowable number of surrogate compounds outside limits: 2421003-01 (Effluent TC) (870-27737-1). These results have been reported and qualified.

Method 625.1: The laboratory control sample (LCS) for preparation batch 860-165885 and analytical batch 860-165945 recovered outside control limits for the following analytes: 2,4,5-Trichlorophenol. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method 625.1: The laboratory control sample and/or the laboratory control sample duplicate (LCS/LCSD) for preparation batch 860-165885 and analytical batch 860-165945 recovered outside control limits for the following analyte(s): . Benzidine. Benzidine has been identified as a poor performing analyte when analyzed using this method; therefore, re-extraction/re-analysis was not performed. Batch precision also exceeded control limits for these analyte(s). These results have been reported and qualified.

Method 625.1: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 860-165885 and analytical batch 860-165945 recovered outside control limits for the following analytes: Pyridine.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

GC Semi VOA
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

PCBs
Method 608.3_PCB: The surrogate recovery for the laboratory control sample duplicate (LCSD) associated with preparation batch 860-166167 and analytical batch 860-166350 was outside the upper control limits.

(LCSD 860-166167/5-A)

Method 608.3_PCB: The laboratory control sample duplicate (LCSD) for preparation batch 860-166167 and analytical batch 860-166350 recovered outside control limits for the following analytes: PCB-1016. These analytes were biased high in the LCSD and were not detected in the associated samples; therefore, the data have been reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Job ID: 870-27737-1 (Continued)

Pesticides
Method 608.3_Pest: The surrogate recovery for the laboratory control sample duplicate (LCSD) associated with preparation batch 860-166167 and analytical batch 860-166572 was outside the upper control limits.
(LCSD 860-166167/3-A)

Method 608.3_Pest: The laboratory control sample duplicate (LCSD) for preparation batch 860-166167 and analytical batch 860-166572 recovered outside control limits for the following analytes: Methoxychlor. These analytes were biased high in the LCSD and were not detected in the associated samples; therefore, the data have been reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

HPLC/IC
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Metals
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

General Chemistry
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Detection Summary

Client: North Texas Municipal Water District
Project/Site: SBX Permit Renewal

Job ID: 870-27737-1
SDG: 2421003

Client Sample ID: 2421003-01 (Effluent TC) — Lab Sample ID: 870-27737-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	Method	Prep Type
Diuron	0.0546		0.00900	0.00514	ug/L	1	632	Total/NA

Client Sample ID: 2421003-03 (Effluent G) — Lab Sample ID: 870-27737-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	Method	Prep Type
Toluene	0.00434		0.00500	0.00161	mg/L	1	624.1	Total/NA
Cr	0.000401		0.00300	0.000325	mg/L	1	200.8	Total Recoverable
HEM	1.55		5.55	1.27	mg/L	1	1664B	Total/NA
Cyanide, Total	3.19		5.00	2.00	ug/L	1	335.4	Total/NA
Cyanide, Non-amenable	4.71		5.00	2.33	ug/L	1	4500 CN G NonAm	Total/NA
Cr (VI)	8.41		10.0	2.80	ug/L	1	7196A	Total/NA

This Detection Summary does not include radiochemical test results.

Client: North Texas Municipal Water District
Project/Site: SBX Permit Renewal

Job ID: 870-27737-1
SDG: 2421003

Client Sample ID: 2421003-01 (Effluent TC)
Date Collected: 06/12/24 08:55
Date Received: 06/12/24 16:15

Lab Sample ID: 870-27737-1
Matrix: Water

Method: EPA 625.1 - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4,5-Tetrachlorobenzene	<1.32	U	10.0	1.32	ug/L		06/14/24 05:30	06/14/24 19:07	1
Acenaphthene	<1.39	U	5.70	1.39	ug/L		06/14/24 05:30	06/14/24 19:07	1
Acenaphthylene	<1.41	U	10.0	1.41	ug/L		06/14/24 05:30	06/14/24 19:07	1
Anthracene	<1.50	U	5.70	1.50	ug/L		06/14/24 05:30	06/14/24 19:07	1
Benzidine	<4.80	U *- *1	20.0	4.80	ug/L		06/14/24 05:30	06/14/24 19:07	1
Benzo[a]anthracene	<0.173	U	5.00	0.173	ug/L		06/14/24 05:30	06/14/24 19:07	1
Benzo[a]pyrene	<0.364	U	5.00	0.364	ug/L		06/14/24 05:30	06/14/24 19:07	1
Benzo[b]fluoranthene	<2.04	U	10.0	2.04	ug/L		06/14/24 05:30	06/14/24 19:07	1
Benzo[g,h,i]perylene	<2.68	U	10.0	2.68	ug/L		06/14/24 05:30	06/14/24 19:07	1
Benzo[k]fluoranthene	<0.375	U	5.00	0.375	ug/L		06/14/24 05:30	06/14/24 19:07	1
Butyl benzyl phthalate	<0.337	U	5.00	0.337	ug/L		06/14/24 05:30	06/14/24 19:07	1
Bis(2-chloroethyl)ether	<2.16	U	10.0	2.16	ug/L		06/14/24 05:30	06/14/24 19:07	1
2,4,5-Trichlorophenol	<2.00	U *+	10.0	2.00	ug/L		06/14/24 05:30	06/14/24 19:07	1
Bis(2-chloroethoxy)methane	<1.76	U	10.0	1.76	ug/L		06/14/24 05:30	06/14/24 19:07	1
Bis(2-ethylhexyl) phthalate	<0.277	U	5.00	0.277	ug/L		06/14/24 05:30	06/14/24 19:07	1
4-Chlorophenyl phenyl ether	<1.28	U	10.0	1.28	ug/L		06/14/24 05:30	06/14/24 19:07	1
4-Bromophenyl phenyl ether	<0.256	U	5.00	0.256	ug/L		06/14/24 05:30	06/14/24 19:07	1
2-Chloronaphthalene	<0.462	U	5.00	0.462	ug/L		06/14/24 05:30	06/14/24 19:07	1
Chrysene	<0.222	U	5.00	0.222	ug/L		06/14/24 05:30	06/14/24 19:07	1
Dibenz(a,h)anthracene	<0.246	U	5.00	0.246	ug/L		06/14/24 05:30	06/14/24 19:07	1
Diethyl phthalate	<1.59	U	5.00	1.59	ug/L		06/14/24 05:30	06/14/24 19:07	1
Dimethyl phthalate	<0.299	U	2.50	0.299	ug/L		06/14/24 05:30	06/14/24 19:07	1
Di-n-butyl phthalate	<0.252	U	5.00	0.252	ug/L		06/14/24 05:30	06/14/24 19:07	1
2-Methylphenol	<0.00162	U	0.0100	0.00162	mg/L		06/14/24 05:30	06/14/24 19:07	1
3 & 4 Methylphenol	<0.00262	U	0.0100	0.00262	mg/L		06/14/24 05:30	06/14/24 19:07	1
3,3'-Dichlorobenzidine	<0.341	U	5.00	0.341	ug/L		06/14/24 05:30	06/14/24 19:07	1
2,4-Dinitrotoluene	<1.31	U	10.0	1.31	ug/L		06/14/24 05:30	06/14/24 19:07	1
2,6-Dinitrotoluene	<1.61	U	5.00	1.61	ug/L		06/14/24 05:30	06/14/24 19:07	1
Azobenzene	<1.50	U	10.0	1.50	ug/L		06/14/24 05:30	06/14/24 19:07	1
Fluoranthene	<1.59	U	5.00	1.59	ug/L		06/14/24 05:30	06/14/24 19:07	1
Fluorene	<1.63	U	5.00	1.63	ug/L		06/14/24 05:30	06/14/24 19:07	1
Hexachlorobenzene	<0.307	U	5.00	0.307	ug/L		06/14/24 05:30	06/14/24 19:07	1
Hexachlorobutadiene	<0.238	U	1.00	0.238	ug/L		06/14/24 05:30	06/14/24 19:07	1
Hexachlorocyclopentadiene	<4.58	U	10.0	4.58	ug/L		06/14/24 05:30	06/14/24 19:07	1
Hexachloroethane	<0.526	U	4.80	0.526	ug/L		06/14/24 05:30	06/14/24 19:07	1
Indeno[1,2,3-cd]pyrene	<2.29	U	5.00	2.29	ug/L		06/14/24 05:30	06/14/24 19:07	1
Isophorone	<1.64	U	5.00	1.64	ug/L		06/14/24 05:30	06/14/24 19:07	1
Naphthalene	<0.542	U	2.50	0.542	ug/L		06/14/24 05:30	06/14/24 19:07	1
Nitrobenzene	<1.66	U	5.00	1.66	ug/L		06/14/24 05:30	06/14/24 19:07	1
N-Nitrosodimethylamine	<2.02	U	10.0	2.02	ug/L		06/14/24 05:30	06/14/24 19:07	1
Phenanthrene	<1.42	U	10.0	1.42	ug/L		06/14/24 05:30	06/14/24 19:07	1
Pyrene	<0.178	U	5.00	0.178	ug/L		06/14/24 05:30	06/14/24 19:07	1
1,2,4-Trichlorobenzene	<0.00161	U	0.00500	0.00161	mg/L		06/14/24 05:30	06/14/24 19:07	1
2-Chlorophenol	<0.649	U	5.00	0.649	ug/L		06/14/24 05:30	06/14/24 19:07	1
4-Chloro-3-methylphenol	<1.57	U	5.00	1.57	ug/L		06/14/24 05:30	06/14/24 19:07	1
2,4-Dichlorophenol	<0.314	U	5.00	0.314	ug/L		06/14/24 05:30	06/14/24 19:07	1
2,4-Dimethylphenol	<0.649	U	5.00	0.649	ug/L		06/14/24 05:30	06/14/24 19:07	1
2,4-Dinitrophenol	<1.61	U	10.0	1.61	ug/L		06/14/24 05:30	06/14/24 19:07	1
2-Nitrophenol	<1.67	U	10.0	1.67	ug/L		06/14/24 05:30	06/14/24 19:07	1

Client Sample ID: 2421003-01 (Effluent TC)

Date Collected: 06/12/24 08:55
Date Received: 06/12/24 16:15

Lab Sample ID: 870-27737-1

Matrix: Water

Method: EPA 625.1 - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Nitrophenol	<4.91	U	7.20	4.91	ug/L		06/14/24 05:30	06/14/24 19:07	1
Pentachlorophenol	<0.000234	U	0.0100	0.000234	mg/L		06/14/24 05:30	06/14/24 19:07	1
Phenol	<0.423	U	4.50	0.423	ug/L		06/14/24 05:30	06/14/24 19:07	1
2,4,6-Trichlorophenol	<1.42	U	5.00	1.42	ug/L		06/14/24 05:30	06/14/24 19:07	1
Di-n-octyl phthalate	<0.373	U	5.00	0.373	ug/L		06/14/24 05:30	06/14/24 19:07	1
N-Nitrosodi-n-propylamine	<2.88	U	10.0	2.88	ug/L		06/14/24 05:30	06/14/24 19:07	1
N-Nitrosodiphenylamine	<1.81	U	10.0	1.81	ug/L		06/14/24 05:30	06/14/24 19:07	1
2,2'-oxybis[1-chloropropane]	<1.79	U	10.0	1.79	ug/L		06/14/24 05:30	06/14/24 19:07	1
4,6-Dinitro-2-methylphenol	<1.44	U	10.0	1.44	ug/L		06/14/24 05:30	06/14/24 19:07	1
1,2-Diphenylhydrazine	<1.49	U	10.0	1.49	ug/L		06/14/24 05:30	06/14/24 19:07	1
N-Nitrosodi-n-butylamine	<1.49	U	10.0	1.49	ug/L		06/14/24 05:30	06/14/24 19:07	1
N-Nitrosodiethylamine	<1.75	U	10.0	1.75	ug/L		06/14/24 05:30	06/14/24 19:07	1
4-Nonylphenol	<10.0	U	10.0	10.0	ug/L		06/14/24 05:30	06/14/24 19:07	1
Pentachlorobenzene	<1.07	U	10.0	1.07	ug/L		06/14/24 05:30	06/14/24 19:07	1
Pyridine	<2.64	U *1	10.0	2.64	ug/L		06/14/24 05:30	06/14/24 19:07	1
Total Cresols	<2.62	U	10.0	2.62	ug/L		06/14/24 05:30	06/14/24 19:07	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
2,3,7,8-TCDD TIC	*<10.0*	*U*	*ug/L*			*1746-01-6*	*06/14/24 05:30*	*06/14/24 19:07*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*85*		*31 - 132*	*06/14/24 05:30*	*06/14/24 19:07*	*1*
2-Fluorobiphenyl (Surr)	*65*		*29 - 112*	*06/14/24 05:30*	*06/14/24 19:07*	*1*
2-Fluorophenol (Surr)	*24*	*S1-*	*28 - 114*	*06/14/24 05:30*	*06/14/24 19:07*	*1*
Nitrobenzene-d5 (Surr)	*62*		*15 - 314*	*06/14/24 05:30*	*06/14/24 19:07*	*1*
p-Terphenyl-d14 (Surr)	*91*		*20 - 141*	*06/14/24 05:30*	*06/14/24 19:07*	*1*
Phenol-d5 (Surr)	*15*		*8 - 424*	*06/14/24 05:30*	*06/14/24 19:07*	*1*

Method: EPA 608.3 - Organochlorine Pesticides in Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	<0.00113	U	0.0100	0.00113	ug/L		06/15/24 07:58	06/18/24 13:58	1
alpha-BHC	<0.00142	U	0.00900	0.00142	ug/L		06/15/24 07:58	06/18/24 13:58	1
beta-BHC	<0.00389	U	0.0180	0.00389	ug/L		06/15/24 07:58	06/18/24 13:58	1
delta-BHC	<0.00245	U	0.250	0.00245	ug/L		06/15/24 07:58	06/18/24 13:58	1
gamma-BHC (Lindane)	<0.00299	U	0.0100	0.00299	ug/L		06/15/24 07:58	06/18/24 13:58	1
4,4'-DDD	<0.000814	U	0.0100	0.000814	ug/L		06/15/24 07:58	06/18/24 13:58	1
4,4'-DDE	<0.00109	U	0.0100	0.00109	ug/L		06/15/24 07:58	06/18/24 13:58	1
4,4'-DDT	<0.00379	U	0.0200	0.00379	ug/L		06/15/24 07:58	06/18/24 13:58	1
Dieldrin	<0.000953	U	0.0100	0.000953	ug/L		06/15/24 07:58	06/18/24 13:58	1
Endosulfan I	<0.00107	U	0.0100	0.00107	ug/L		06/15/24 07:58	06/18/24 13:58	1
Endosulfan II	<0.00122	U	0.0100	0.00122	ug/L		06/15/24 07:58	06/18/24 13:58	1
Endosulfan sulfate	<0.00112	U	0.0100	0.00112	ug/L		06/15/24 07:58	06/18/24 13:58	1
Endrin	<0.00156	U	0.0100	0.00156	ug/L		06/15/24 07:58	06/18/24 13:58	1
Endrin aldehyde	<0.00118	U	0.0100	0.00118	ug/L		06/15/24 07:58	06/18/24 13:58	1
Dicofol	<0.0000500	U	0.000100	0.0000500	mg/L		06/15/24 07:58	06/18/24 13:58	1
Heptachlor	<0.00446	U	0.00900	0.00446	ug/L		06/15/24 07:58	06/18/24 13:58	1
Heptachlor epoxide	<0.00134	U	0.0100	0.00134	ug/L		06/15/24 07:58	06/18/24 13:58	1
Toxaphene	<0.0769	U	0.100	0.0769	ug/L		06/15/24 07:58	06/18/24 13:58	1
Chlordane	<0.103	U	0.0400	0.103	ug/L		06/15/24 07:58	06/18/24 13:58	1

Client Sample ID: 2421003-01 (Effluent TC)

Lab Sample ID: 870-27737-1
Matrix: Water
Date Collected: 06/12/24 08:55
Date Received: 06/12/24 16:15

Method: EPA 608.3 - Organochlorine Pesticides in Water (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methoxychlor	<0.00000390	U *+	0.0000200	0.0000039 0	mg/L		06/15/24 07:58	06/18/24 13:58	1
Mirex	<0.0000200	U	0.0000200	0.0000200	mg/L		06/15/24 07:58	06/18/24 13:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*122*		*15 - 136*	*06/15/24 07:58*	*06/18/24 13:58*	*1*
Tetrachloro-m-xylene	*103*		*18 - 126*	*06/15/24 07:58*	*06/18/24 13:58*	*1*

Method: EPA 608.3 - Polychlorinated Biphenyls (PCBs) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.0125	U *+	0.100	0.0125	ug/L		06/15/24 07:58	06/17/24 13:50	1
PCB-1242	<0.0125	U	0.100	0.0125	ug/L		06/15/24 07:58	06/17/24 13:50	1
PCB-1254	<0.00780	U	0.100	0.00780	ug/L		06/15/24 07:58	06/17/24 13:50	1
PCB-1221	<0.0125	U	0.100	0.0125	ug/L		06/15/24 07:58	06/17/24 13:50	1
PCB-1232	<0.0125	U	0.100	0.0125	ug/L		06/15/24 07:58	06/17/24 13:50	1
PCB-1248	<0.0125	U	0.100	0.0125	ug/L		06/15/24 07:58	06/17/24 13:50	1
PCB-1260	<0.00780	U	0.100	0.00780	ug/L		06/15/24 07:58	06/17/24 13:50	1
Polychlorinated biphenyls, Total	<0.100	U	0.100	0.100	ug/L		06/15/24 07:58	06/17/24 13:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*68*		*18 - 126*	*06/15/24 07:58*	*06/17/24 13:50*	*1*
DCB Decachlorobiphenyl (Surr)	*115*	*p*	*15 - 136*	*06/15/24 07:58*	*06/17/24 13:50*	*1*

Method: EPA-01 615 - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-D	<0.0000539	U	0.000200	0.0000539	mg/L		06/18/24 13:50	06/21/24 00:25	1
Hexachlorophene	<0.000808	U *1	0.00500	0.000808	mg/L		06/18/24 13:50	06/21/24 00:25	1
Silvex (2,4,5-TP)	<0.0000422	U	0.000200	0.0000422	mg/L		06/18/24 13:50	06/21/24 00:25	1
Dalapon	<0.0000476	U	0.000200	0.0000476	mg/L		06/18/24 13:50	06/21/24 00:25	1
Dicamba	<0.0000423	U	0.000200	0.0000423	mg/L		06/18/24 13:50	06/21/24 00:25	1
Dinoseb	<0.0000343	U	0.000200	0.0000343	mg/L		06/18/24 13:50	06/21/24 00:25	1
Pentachlorophenol	<0.0000443	U	0.000200	0.0000443	mg/L		06/18/24 13:50	06/21/24 00:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4-Dichlorophenylacetic acid	*62*		*45 - 150*	*06/18/24 13:50*	*06/21/24 00:25*	*1*

Method: EPA-01 632 - Carbamate and Urea Pesticides (HPLC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbaryl	<0.185	U	0.500	0.185	ug/L		06/17/24 14:00	06/20/24 05:17	1
Diuron	**0.0546**		0.00900	0.00514	ug/L		06/17/24 14:00	06/20/24 05:17	1

Client Sample ID: 2421003-03 (Effluent G)

Lab Sample ID: 870-27737-2
Matrix: Water
Date Collected: 06/12/24 08:55
Date Received: 06/12/24 16:15

Method: EPA 624.1 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.00145	U	0.00500	0.00145	mg/L			06/12/24 19:53	1
1,1,2,2-Tetrachloroethane	<0.00171	U	0.00500	0.00171	mg/L			06/12/24 19:53	1
1,1,2-Trichloroethane	<0.000747	U	0.00200	0.000747	mg/L			06/12/24 19:53	1
1,1-Dichloroethane	<0.00103	U	0.00500	0.00103	mg/L			06/12/24 19:53	1
1,1-Dichloroethene	<0.000575	U	0.00200	0.000575	mg/L			06/12/24 19:53	1

Client: North Texas Municipal Water District
Project/Site: SBX Permit Renewal

Job ID: 870-27737-1
SDG: 2421003

Client Sample ID: 2421003-03 (Effluent G)
Date Collected: 06/12/24 08:55
Date Received: 06/12/24 16:15

Lab Sample ID: 870-27737-2
Matrix: Water

Method: EPA 624.1 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.000593	U	0.00200	0.000593	mg/L			06/12/24 19:53	1
1,2-Dibromoethane	<0.000631	U	0.00200	0.000631	mg/L			06/12/24 19:53	1
1,2-Dichlorobenzene	<0.000603	U	0.00200	0.000603	mg/L			06/12/24 19:53	1
1,2-Dichloroethane	<0.00153	U	0.00500	0.00153	mg/L			06/12/24 19:53	1
1,2-Dichloropropane	<0.00155	U	0.00500	0.00155	mg/L			06/12/24 19:53	1
1,3-Dichlorobenzene	<0.00108	U	0.00500	0.00108	mg/L			06/12/24 19:53	1
1,4-Dichlorobenzene	<0.000637	U	0.00200	0.000637	mg/L			06/12/24 19:53	1
2-Butanone	<0.00453	U	0.0200	0.00453	mg/L			06/12/24 19:53	1
2-Chloroethyl vinyl ether	<0.00120	U	0.00500	0.00120	mg/L			06/12/24 19:53	1
Acetone	<0.0213	U	0.0500	0.0213	mg/L			06/12/24 19:53	1
Acrolein	<0.0231	U	0.0500	0.0231	mg/L			06/12/24 19:53	1
Acrylonitrile	<0.00780	U	0.0500	0.00780	mg/L			06/12/24 19:53	1
Benzene	<0.000496	U	0.00200	0.000496	mg/L			06/12/24 19:53	1
Bromodichloromethane	<0.000696	U	0.00200	0.000696	mg/L			06/12/24 19:53	1
Bromoform	<0.00133	U	0.00500	0.00133	mg/L			06/12/24 19:53	1
Bromomethane	<0.00188	U	0.00500	0.00188	mg/L			06/12/24 19:53	1
Carbon tetrachloride	<0.00126	U	0.00200	0.00126	mg/L			06/12/24 19:53	1
Chlorobenzene	<0.000945	U	0.00500	0.000945	mg/L			06/12/24 19:53	1
Chloroethane	<0.00145	U	0.00500	0.00145	mg/L			06/12/24 19:53	1
Chloroform	<0.00121	U	0.00500	0.00121	mg/L			06/12/24 19:53	1
Chloromethane	<0.000941	U	0.00500	0.000941	mg/L			06/12/24 19:53	1
Dibromochloromethane	<0.00175	U	0.00500	0.00175	mg/L			06/12/24 19:53	1
Ethylbenzene	<0.000878	U	0.00500	0.000878	mg/L			06/12/24 19:53	1
MTBE	<0.00268	U	0.0100	0.00268	mg/L			06/12/24 19:53	1
Methylene Chloride	<0.000829	U	0.00500	0.000829	mg/L			06/12/24 19:53	1
Naphthalene	<0.000927	U	0.00500	0.000927	mg/L			06/12/24 19:53	1
Tetrachloroethene	<0.000900	U	0.00500	0.000900	mg/L			06/12/24 19:53	1
Toluene	**0.00434**	**J**	0.00500	0.00161	mg/L			06/12/24 19:53	1
Xylenes, Total	<0.00113	U	0.00500	0.00113	mg/L			06/12/24 19:53	1
Trichloroethene	<0.00169	U	0.00500	0.00169	mg/L			06/12/24 19:53	1
Trichlorofluoromethane	<0.00124	U	0.00500	0.00124	mg/L			06/12/24 19:53	1
Vinyl chloride	<0.000592	U	0.00200	0.000592	mg/L			06/12/24 19:53	1
cis-1,2-Dichloroethene	<0.000796	U	0.00500	0.000796	mg/L			06/12/24 19:53	1
cis-1,3-Dichloropropene	<0.000885	U	0.00500	0.000885	mg/L			06/12/24 19:53	1
m,p-Xylenes	<0.00113	U	0.00500	0.00113	mg/L			06/12/24 19:53	1
o-Xylene	<0.000488	U	0.00200	0.000488	mg/L			06/12/24 19:53	1
trans-1,2-Dichloroethene	<0.000903	U	0.00500	0.000903	mg/L			06/12/24 19:53	1
trans-1,3-Dichloropropene	<0.00195	U	0.00500	0.00195	mg/L			06/12/24 19:53	1
Trihalomethanes, Total	<1.75	U	5.00	1.75	ug/L			06/12/24 19:53	1
Vinyl acetate	<0.00169	U	0.00500	0.00169	mg/L			06/12/24 19:53	1
1,3-Dichloropropene, Total	<0.00195	U	0.00500	0.00195	mg/L			06/12/24 19:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*76 - 118*		*06/12/24 19:53*	*1*
4-Bromofluorobenzene (Surr)	*105*		*76 - 119*		*06/12/24 19:53*	*1*
Dibromofluoromethane (Surr)	*99*		*61 - 132*		*06/12/24 19:53*	*1*
Toluene-d8 (Surr)	*100*		*74 - 130*		*06/12/24 19:53*	*1*

Client Sample ID: 2421003-03 (Effluent G)

Date Collected: 06/12/24 08:55
Date Received: 06/12/24 16:15

Lab Sample ID: 870-27737-2

Matrix: Water

Method: EPA 200.8 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr	**0.000401**	**J**	0.00300	0.000325	mg/L		06/17/24 08:00	06/17/24 13:39	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM (1664B)	**1.55**	**J**	5.55	1.27	mg/L			06/18/24 10:05	1
Cyanide, Total (EPA 335.4)	**3.19**	**J**	5.00	2.00	ug/L		06/13/24 16:57	06/13/24 19:25	1
Phenols, Total (EPA 420.4)	<5.80	U	10.0	5.80	ug/L			06/19/24 21:12	1
Cyanide, Non-amenable (SM 4500 CN G NonAm)	**4.71**	**J**	5.00	2.33	ug/L		06/14/24 17:07	06/14/24 20:45	1
Cr (VI) (SW846 7196A)	**8.41**	**J**	10.0	2.80	ug/L			06/12/24 18:12	1
Cr (III) (SM 3500 CR B)	<2.00	U	3.00	2.00	ug/L			06/24/24 22:15	1
Cr (III) (SM 3500 CR B)	<2.00	U	3.00	2.00	ug/L			06/24/24 22:15	1
Cyanide, Amenable (SM 4500 CN G)	<2.33	U	5.00	2.33	ug/L			06/18/24 18:21	1

Surrogate Summary

Client: North Texas Municipal Water District
Project/Site: SBX Permit Renewal

Job ID: 870-27737-1
SDG: 2421003

Method: 624.1 - Volatile Organic Compounds (GC/MS)

Matrix: Water — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(76-118)	(76-119)	(61-132)	(74-130)
870-27737-2	2421003-03 (Effluent G)	101	105	99	100
LCS 870-20655/3	Lab Control Sample	100	100	101	101
LCSD 870-20655/4	Lab Control Sample Dup	106	100	104	100
MB 870-20655/5	Method Blank	104	99	96	100

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)

Method: 625.1 - Semivolatile Organic Compounds (GC/MS)

Matrix: Water — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)					
		TBP	FBP	2FP	NBZ	TPHd14	PHL
Lab Sample ID	Client Sample ID	(31-132)	(29-112)	(28-114)	(15-314)	(20-141)	(8-424)
870-27737-1	2421003-01 (Effluent TC)	85	65	24 S1-	62	91	15
LCS 860-165885/2-A	Lab Control Sample	105	97	47	88	111	29
LCSD 860-165885/3-A	Lab Control Sample Dup	103	91	44	83	109	26
MB 860-165885/1-A	Method Blank	97	92	38	95	117	24

Surrogate Legend

TBP = 2,4,6-Tribromophenol (Surr)
FBP = 2-Fluorobiphenyl (Surr)
2FP = 2-Fluorophenol (Surr)
NBZ = Nitrobenzene-d5 (Surr)
TPHd14 = p-Terphenyl-d14 (Surr)
PHL = Phenol-d5 (Surr)

Method: 608.3 - Organochlorine Pesticides in Water

Matrix: Water — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
		DCB1	TCX1
Lab Sample ID	Client Sample ID	(15-136)	(18-126)
870-27737-1	2421003-01 (Effluent TC)	122	103
LCS 860-166167/2-A	Lab Control Sample	133	118
LCSD 860-166167/3-A	Lab Control Sample Dup	138 S1+	127 S1+
MB 860-166167/1-A	Method Blank	136	124

Surrogate Legend

DCB = DCB Decachlorobiphenyl (Surr)
TCX = Tetrachloro-m-xylene

Method: 608.3 - Polychlorinated Biphenyls (PCBs) (GC)

Matrix: Water — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
		TCX1	DCB1
Lab Sample ID	Client Sample ID	(18-126)	(15-136)
870-27737-1	2421003-01 (Effluent TC)	68	115 p

Surrogate Summary

Client: North Texas Municipal Water District
Project/Site: SBX Permit Renewal

Job ID: 870-27737-1
SDG: 2421003

Method: 608.3 - Polychlorinated Biphenyls (PCBs) (GC) (Continued)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	TCX1 (18-126)	DCB1 (15-136)
LCS 860-166167/4-A	Lab Control Sample	103	131
LCSD 860-166167/5-A	Lab Control Sample Dup	110	140 S1+
MB 860-166167/1-A	Method Blank	98	132

Surrogate Legend

TCX = Tetrachloro-m-xylene
DCB = DCB Decachlorobiphenyl (Surr)

Method: 615 - Herbicides (GC)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)
Lab Sample ID	Client Sample ID	DCPAA2 (45-150)
870-27737-1	2421003-01 (Effluent TC)	62
LCS 860-166702/2-A	Lab Control Sample	109
LCS 860-166702/4-A	Lab Control Sample	74
LCSD 860-166702/3-A	Lab Control Sample Dup	107
LCSD 860-166702/5-A	Lab Control Sample Dup	88
MB 860-166702/1-A	Method Blank	134

Surrogate Legend

DCPAA = 2,4-Dichlorophenylacetic acid

Method: 624.1 - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 870-20655/5
Matrix: Water
Analysis Batch: 20655

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.00145	U	0.00500	0.00145	mg/L			06/12/24 16:32	1
1,1,2,2-Tetrachloroethane	<0.00171	U	0.00500	0.00171	mg/L			06/12/24 16:32	1
1,1,2-Trichloroethane	<0.000747	U	0.00200	0.000747	mg/L			06/12/24 16:32	1
1,1-Dichloroethane	<0.00103	U	0.00500	0.00103	mg/L			06/12/24 16:32	1
1,1-Dichloroethene	<0.000575	U	0.00200	0.000575	mg/L			06/12/24 16:32	1
1,2,4-Trichlorobenzene	<0.000593	U	0.00200	0.000593	mg/L			06/12/24 16:32	1
1,2-Dibromoethane	<0.000631	U	0.00200	0.000631	mg/L			06/12/24 16:32	1
1,2-Dichlorobenzene	<0.000603	U	0.00200	0.000603	mg/L			06/12/24 16:32	1
1,2-Dichloroethane	<0.00153	U	0.00500	0.00153	mg/L			06/12/24 16:32	1
1,2-Dichloropropane	<0.00155	U	0.00500	0.00155	mg/L			06/12/24 16:32	1
1,3-Dichlorobenzene	<0.00108	U	0.00500	0.00108	mg/L			06/12/24 16:32	1
1,4-Dichlorobenzene	<0.000637	U	0.00200	0.000637	mg/L			06/12/24 16:32	1
2-Butanone	<0.00453	U	0.0200	0.00453	mg/L			06/12/24 16:32	1
2-Chloroethyl vinyl ether	<0.00120	U	0.00500	0.00120	mg/L			06/12/24 16:32	1
Acetone	<0.0213	U	0.0500	0.0213	mg/L			06/12/24 16:32	1
Acrolein	<0.0231	U	0.0500	0.0231	mg/L			06/12/24 16:32	1
Acrylonitrile	<0.00780	U	0.0500	0.00780	mg/L			06/12/24 16:32	1
Benzene	<0.000496	U	0.00200	0.000496	mg/L			06/12/24 16:32	1
Bromodichloromethane	<0.000696	U	0.00200	0.000696	mg/L			06/12/24 16:32	1
Bromoform	<0.00133	U	0.00500	0.00133	mg/L			06/12/24 16:32	1
Bromomethane	<0.00188	U	0.00500	0.00188	mg/L			06/12/24 16:32	1
Carbon tetrachloride	<0.00126	U	0.00200	0.00126	mg/L			06/12/24 16:32	1
Chlorobenzene	<0.000945	U	0.00500	0.000945	mg/L			06/12/24 16:32	1
Chloroethane	<0.00145	U	0.00500	0.00145	mg/L			06/12/24 16:32	1
Chloroform	<0.00121	U	0.00500	0.00121	mg/L			06/12/24 16:32	1
Chloromethane	<0.000941	U	0.00500	0.000941	mg/L			06/12/24 16:32	1
Dibromochloromethane	<0.00175	U	0.00500	0.00175	mg/L			06/12/24 16:32	1
Ethylbenzene	<0.000878	U	0.00500	0.000878	mg/L			06/12/24 16:32	1
MTBE	<0.00268	U	0.0100	0.00268	mg/L			06/12/24 16:32	1
Methylene Chloride	<0.000829	U	0.00500	0.000829	mg/L			06/12/24 16:32	1
Naphthalene	<0.000927	U	0.00500	0.000927	mg/L			06/12/24 16:32	1
Tetrachloroethene	<0.000900	U	0.00500	0.000900	mg/L			06/12/24 16:32	1
Toluene	<0.00161	U	0.00500	0.00161	mg/L			06/12/24 16:32	1
Xylenes, Total	<0.00113	U	0.00500	0.00113	mg/L			06/12/24 16:32	1
Trichloroethene	<0.00169	U	0.00500	0.00169	mg/L			06/12/24 16:32	1
Trichlorofluoromethane	<0.00124	U	0.00500	0.00124	mg/L			06/12/24 16:32	1
Vinyl chloride	<0.000592	U	0.00200	0.000592	mg/L			06/12/24 16:32	1
cis-1,2-Dichloroethene	<0.000796	U	0.00500	0.000796	mg/L			06/12/24 16:32	1
cis-1,3-Dichloropropene	<0.000885	U	0.00500	0.000885	mg/L			06/12/24 16:32	1
m,p-Xylenes	<0.00113	U	0.00500	0.00113	mg/L			06/12/24 16:32	1
o-Xylene	<0.000488	U	0.00200	0.000488	mg/L			06/12/24 16:32	1
trans-1,2-Dichloroethene	<0.000903	U	0.00500	0.000903	mg/L			06/12/24 16:32	1
trans-1,3-Dichloropropene	<0.00195	U	0.00500	0.00195	mg/L			06/12/24 16:32	1
Trihalomethanes, Total	<1.75	U	5.00	1.75	ug/L			06/12/24 16:32	1
Vinyl acetate	<0.00169	U	0.00500	0.00169	mg/L			06/12/24 16:32	1
1,3-Dichloropropene, Total	<0.00195	U	0.00500	0.00195	mg/L			06/12/24 16:32	1

Method: 624.1 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 870-20655/5
Matrix: Water
Analysis Batch: 20655

Client Sample ID: Method Blank
Prep Type: Total/NA

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*104*		*76 - 118*		*06/12/24 16:32*	
4-Bromofluorobenzene (Surr)	*99*		*76 - 119*		*06/12/24 16:32*	
Dibromofluoromethane (Surr)	*96*		*61 - 132*		*06/12/24 16:32*	
Toluene-d8 (Surr)	*100*		*74 - 130*		*06/12/24 16:32*	

Lab Sample ID: LCS 870-20655/3
Matrix: Water
Analysis Batch: 20655

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1-Trichloroethane	0.0503	0.04782		mg/L		95	70 - 130
1,1,2,2-Tetrachloroethane	0.0504	0.05061		mg/L		100	70 - 130
1,1,2-Trichloroethane	0.0503	0.04783		mg/L		95	75 - 130
1,1-Dichloroethane	0.0505	0.04820		mg/L		95	71 - 130
1,1-Dichloroethene	0.0504	0.04717		mg/L		94	70 - 130
1,2,4-Trichlorobenzene	0.0504	0.04671		mg/L		93	70 - 130
1,2-Dibromoethane	0.0504	0.04491		mg/L		89	70 - 130
1,2-Dichlorobenzene	0.0503	0.04658		mg/L		93	70 - 130
1,2-Dichloroethane	0.0505	0.04584		mg/L		91	72 - 130
1,2-Dichloropropane	0.0504	0.04767		mg/L		95	70 - 130
1,3-Dichlorobenzene	0.0504	0.04652		mg/L		92	75 - 130
1,4-Dichlorobenzene	0.0504	0.04645		mg/L		92	70 - 130
2-Butanone	0.504	0.5098		mg/L		101	70 - 130
2-Chloroethyl vinyl ether	0.0501	0.04803		mg/L		96	70 - 130
Acetone	0.503	0.5698		mg/L		113	70 - 130
Acrolein	0.494	0.4065		mg/L		82	70 - 130
Acrylonitrile	0.504	0.4806		mg/L		95	70 - 130
Benzene	0.0503	0.04667		mg/L		93	70 - 130
Bromodichloromethane	0.0505	0.04874		mg/L		97	70 - 130
Bromoform	0.0504	0.04987		mg/L		99	70 - 130
Bromomethane	0.0501	0.04791		mg/L		96	70 - 130
Carbon tetrachloride	0.0505	0.05053		mg/L		100	70 - 125
Chlorobenzene	0.0504	0.04540		mg/L		90	70 - 130
Chloroethane	0.0500	0.05729		mg/L		115	70 - 130
Chloroform	0.0505	0.04485		mg/L		89	70 - 121
Chloromethane	0.0500	0.05445		mg/L		109	70 - 130
Dibromochloromethane	0.0503	0.04934		mg/L		98	70 - 130
Ethylbenzene	0.0504	0.04623		mg/L		92	75 - 130
MTBE	0.0503	0.05043		mg/L		100	70 - 130
Methylene Chloride	0.0504	0.04400		mg/L		87	70 - 130
Naphthalene	0.0502	0.04908		mg/L		98	70 - 130
Tetrachloroethene	0.0503	0.04535		mg/L		90	70 - 130
Toluene	0.0505	0.04487		mg/L		89	75 - 130
Trichloroethene	0.0503	0.04698		mg/L		93	75 - 130
Trichlorofluoromethane	0.0500	0.05956		mg/L		119	70 - 130
Vinyl chloride	0.0500	0.05712		mg/L		114	70 - 130
cis-1,2-Dichloroethene	0.0503	0.04868		mg/L		97	70 - 130
cis-1,3-Dichloropropene	0.0505	0.04837		mg/L		96	70 - 130

Method: 624.1 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 870-20655/3
Matrix: Water
Analysis Batch: 20655

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
m,p-Xylenes			0.0503	0.04542		mg/L		90	70 - 130		
o-Xylene			0.0504	0.04669		mg/L		93	70 - 130		
trans-1,2-Dichloroethene			0.0505	0.04798		mg/L		95	70 - 130		
trans-1,3-Dichloropropene			0.0504	0.04843		mg/L		96	70 - 130		
Vinyl acetate			0.101	0.09560		mg/L		95	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*100*		*76 - 118*
4-Bromofluorobenzene (Surr)	*100*		*76 - 119*
Dibromofluoromethane (Surr)	*101*		*61 - 132*
Toluene-d8 (Surr)	*101*		*74 - 130*

Lab Sample ID: LCSD 870-20655/4
Matrix: Water
Analysis Batch: 20655

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1,1-Trichloroethane			0.0503	0.04877		mg/L		97	70 - 130	2	21
1,1,2,2-Tetrachloroethane			0.0504	0.04910		mg/L		97	70 - 130	3	25
1,1,2-Trichloroethane			0.0503	0.04747		mg/L		94	75 - 130	1	25
1,1-Dichloroethane			0.0505	0.04752		mg/L		94	71 - 130	1	24
1,1-Dichloroethene			0.0504	0.04667		mg/L		93	70 - 130	1	25
1,2,4-Trichlorobenzene			0.0504	0.04571		mg/L		91	70 - 130	2	25
1,2-Dibromoethane			0.0504	0.04397		mg/L		87	70 - 130	2	25
1,2-Dichlorobenzene			0.0503	0.04543		mg/L		90	70 - 130	2	25
1,2-Dichloroethane			0.0505	0.04553		mg/L		90	72 - 130	1	25
1,2-Dichloropropane			0.0504	0.04755		mg/L		94	70 - 130	0	25
1,3-Dichlorobenzene			0.0504	0.04502		mg/L		89	75 - 130	3	24
1,4-Dichlorobenzene			0.0504	0.04472		mg/L		89	70 - 130	4	25
2-Butanone			0.504	0.5251		mg/L		104	70 - 130	3	25
2-Chloroethyl vinyl ether			0.0501	0.04859		mg/L		97	70 - 130	1	25
Acetone			0.503	0.5898		mg/L		117	70 - 130	3	25
Acrolein			0.494	0.4218		mg/L		85	70 - 130	4	25
Acrylonitrile			0.504	0.5001		mg/L		99	70 - 130	4	25
Benzene			0.0503	0.04630		mg/L		92	70 - 130	1	25
Bromodichloromethane			0.0505	0.04876		mg/L		97	70 - 130	0	25
Bromoform			0.0504	0.04885		mg/L		97	70 - 130	2	25
Bromomethane			0.0501	0.04951		mg/L		99	70 - 130	3	25
Carbon tetrachloride			0.0505	0.05049		mg/L		100	70 - 125	0	25
Chlorobenzene			0.0504	0.04481		mg/L		89	70 - 130	1	25
Chloroethane			0.0500	0.05725		mg/L		115	70 - 130	0	25
Chloroform			0.0505	0.04724		mg/L		94	70 - 121	5	25
Chloromethane			0.0500	0.05247		mg/L		105	70 - 130	4	25
Dibromochloromethane			0.0503	0.04820		mg/L		96	70 - 130	2	25
Ethylbenzene			0.0504	0.04560		mg/L		90	75 - 130	1	25
MTBE			0.0503	0.05150		mg/L		102	70 - 130	2	25
Methylene Chloride			0.0504	0.04579		mg/L		91	70 - 130	4	25
Naphthalene			0.0502	0.04821		mg/L		96	70 - 130	2	25

Method: 624.1 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 870-20655/4
Matrix: Water
Analysis Batch: 20655

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Tetrachloroethene			0.0503	0.04438		mg/L		88	70 - 130	2	23
Toluene			0.0505	0.04407		mg/L		87	75 - 130	2	22
Trichloroethene			0.0503	0.04652		mg/L		93	75 - 130	1	25
Trichlorofluoromethane			0.0500	0.05921		mg/L		118	70 - 130	1	25
Vinyl chloride			0.0500	0.05643		mg/L		113	70 - 130	1	25
cis-1,2-Dichloroethene			0.0503	0.04955		mg/L		98	70 - 130	2	25
cis-1,3-Dichloropropene			0.0505	0.04851		mg/L		96	70 - 130	0	25
m,p-Xylenes			0.0503	0.04532		mg/L		90	70 - 130	0	25
o-Xylene			0.0504	0.04607		mg/L		91	70 - 130	1	25
trans-1,2-Dichloroethene			0.0505	0.04914		mg/L		97	70 - 130	2	25
trans-1,3-Dichloropropene			0.0504	0.04802		mg/L		95	70 - 130	1	25
Vinyl acetate			0.101	0.09354		mg/L		93	70 - 130	2	25

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*106*		*76 - 118*
4-Bromofluorobenzene (Surr)	*100*		*76 - 119*
Dibromofluoromethane (Surr)	*104*		*61 - 132*
Toluene-d8 (Surr)	*100*		*74 - 130*

Method: 625.1 - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 860-165885/1-A
Matrix: Water
Analysis Batch: 165945

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 165885

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4,5-Tetrachlorobenzene	<1.32	U	10.0	1.32	ug/L		06/14/24 05:30	06/14/24 14:51	1
Acenaphthene	<1.39	U	5.70	1.39	ug/L		06/14/24 05:30	06/14/24 14:51	1
Acenaphthylene	<1.41	U	10.0	1.41	ug/L		06/14/24 05:30	06/14/24 14:51	1
Anthracene	<1.50	U	5.70	1.50	ug/L		06/14/24 05:30	06/14/24 14:51	1
Benzidine	<4.80	U	20.0	4.80	ug/L		06/14/24 05:30	06/14/24 14:51	1
Benzo[a]anthracene	<0.173	U	5.00	0.173	ug/L		06/14/24 05:30	06/14/24 14:51	1
Benzo[a]pyrene	<0.364	U	5.00	0.364	ug/L		06/14/24 05:30	06/14/24 14:51	1
Benzo[b]fluoranthene	<2.04	U	10.0	2.04	ug/L		06/14/24 05:30	06/14/24 14:51	1
Benzo[g,h,i]perylene	<2.68	U	10.0	2.68	ug/L		06/14/24 05:30	06/14/24 14:51	1
Benzo[k]fluoranthene	<0.375	U	5.00	0.375	ug/L		06/14/24 05:30	06/14/24 14:51	1
Butyl benzyl phthalate	<0.337	U	5.00	0.337	ug/L		06/14/24 05:30	06/14/24 14:51	1
Bis(2-chloroethyl)ether	<2.16	U	10.0	2.16	ug/L		06/14/24 05:30	06/14/24 14:51	1
2,4,5-Trichlorophenol	<2.00	U	10.0	2.00	ug/L		06/14/24 05:30	06/14/24 14:51	1
Bis(2-chloroethoxy)methane	<1.76	U	10.0	1.76	ug/L		06/14/24 05:30	06/14/24 14:51	1
Bis(2-ethylhexyl) phthalate	<0.277	U	5.00	0.277	ug/L		06/14/24 05:30	06/14/24 14:51	1
4-Chlorophenyl phenyl ether	<1.28	U	10.0	1.28	ug/L		06/14/24 05:30	06/14/24 14:51	1
4-Bromophenyl phenyl ether	<0.256	U	5.00	0.256	ug/L		06/14/24 05:30	06/14/24 14:51	1
2-Chloronaphthalene	<0.462	U	5.00	0.462	ug/L		06/14/24 05:30	06/14/24 14:51	1
Chrysene	<0.222	U	5.00	0.222	ug/L		06/14/24 05:30	06/14/24 14:51	1
Dibenz(a,h)anthracene	<0.246	U	5.00	0.246	ug/L		06/14/24 05:30	06/14/24 14:51	1
Diethyl phthalate	<1.59	U	5.00	1.59	ug/L		06/14/24 05:30	06/14/24 14:51	1
Dimethyl phthalate	<0.299	U	2.50	0.299	ug/L		06/14/24 05:30	06/14/24 14:51	1
Di-n-butyl phthalate	<0.252	U	5.00	0.252	ug/L		06/14/24 05:30	06/14/24 14:51	1

Method: 625.1 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 860-165885/1-A
Matrix: Water
Analysis Batch: 165945

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 165885

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylphenol	<0.00162	U	0.0100	0.00162	mg/L		06/14/24 05:30	06/14/24 14:51	1
3 & 4 Methylphenol	<0.00262	U	0.0100	0.00262	mg/L		06/14/24 05:30	06/14/24 14:51	1
3,3'-Dichlorobenzidine	<0.341	U	5.00	0.341	ug/L		06/14/24 05:30	06/14/24 14:51	1
2,4-Dinitrotoluene	<1.31	U	10.0	1.31	ug/L		06/14/24 05:30	06/14/24 14:51	1
2,6-Dinitrotoluene	<1.61	U	5.00	1.61	ug/L		06/14/24 05:30	06/14/24 14:51	1
Azobenzene	<1.50	U	10.0	1.50	ug/L		06/14/24 05:30	06/14/24 14:51	1
Fluoranthene	<1.59	U	5.00	1.59	ug/L		06/14/24 05:30	06/14/24 14:51	1
Fluorene	<1.63	U	5.00	1.63	ug/L		06/14/24 05:30	06/14/24 14:51	1
Hexachlorobenzene	<0.307	U	5.00	0.307	ug/L		06/14/24 05:30	06/14/24 14:51	1
Hexachlorobutadiene	<0.238	U	1.00	0.238	ug/L		06/14/24 05:30	06/14/24 14:51	1
Hexachlorocyclopentadiene	<4.58	U	10.0	4.58	ug/L		06/14/24 05:30	06/14/24 14:51	1
Hexachloroethane	<0.526	U	4.80	0.526	ug/L		06/14/24 05:30	06/14/24 14:51	1
Indeno[1,2,3-cd]pyrene	<2.29	U	5.00	2.29	ug/L		06/14/24 05:30	06/14/24 14:51	1
Isophorone	<1.64	U	5.00	1.64	ug/L		06/14/24 05:30	06/14/24 14:51	1
Naphthalene	<0.542	U	2.50	0.542	ug/L		06/14/24 05:30	06/14/24 14:51	1
Nitrobenzene	<1.66	U	5.00	1.66	ug/L		06/14/24 05:30	06/14/24 14:51	1
N-Nitrosodimethylamine	<2.02	U	10.0	2.02	ug/L		06/14/24 05:30	06/14/24 14:51	1
Phenanthrene	<1.42	U	10.0	1.42	ug/L		06/14/24 05:30	06/14/24 14:51	1
Pyrene	<0.178	U	5.00	0.178	ug/L		06/14/24 05:30	06/14/24 14:51	1
1,2,4-Trichlorobenzene	<0.00161	U	0.00500	0.00161	mg/L		06/14/24 05:30	06/14/24 14:51	1
2-Chlorophenol	<0.649	U	5.00	0.649	ug/L		06/14/24 05:30	06/14/24 14:51	1
4-Chloro-3-methylphenol	<1.57	U	5.00	1.57	ug/L		06/14/24 05:30	06/14/24 14:51	1
2,4-Dichlorophenol	<0.314	U	5.00	0.314	ug/L		06/14/24 05:30	06/14/24 14:51	1
2,4-Dimethylphenol	<0.649	U	5.00	0.649	ug/L		06/14/24 05:30	06/14/24 14:51	1
2,4-Dinitrophenol	<1.61	U	10.0	1.61	ug/L		06/14/24 05:30	06/14/24 14:51	1
2-Nitrophenol	<1.67	U	10.0	1.67	ug/L		06/14/24 05:30	06/14/24 14:51	1
4-Nitrophenol	<4.91	U	7.20	4.91	ug/L		06/14/24 05:30	06/14/24 14:51	1
Pentachlorophenol	<0.000234	U	0.0100	0.000234	mg/L		06/14/24 05:30	06/14/24 14:51	1
Phenol	<0.423	U	4.50	0.423	ug/L		06/14/24 05:30	06/14/24 14:51	1
2,4,6-Trichlorophenol	<1.42	U	5.00	1.42	ug/L		06/14/24 05:30	06/14/24 14:51	1
Di-n-octyl phthalate	<0.373	U	5.00	0.373	ug/L		06/14/24 05:30	06/14/24 14:51	1
N-Nitrosodi-n-propylamine	<2.88	U	10.0	2.88	ug/L		06/14/24 05:30	06/14/24 14:51	1
N-Nitrosodiphenylamine	<1.81	U	10.0	1.81	ug/L		06/14/24 05:30	06/14/24 14:51	1
2,2'-oxybis[1-chloropropane]	<1.79	U	10.0	1.79	ug/L		06/14/24 05:30	06/14/24 14:51	1
4,6-Dinitro-2-methylphenol	<1.44	U	10.0	1.44	ug/L		06/14/24 05:30	06/14/24 14:51	1
1,2-Diphenylhydrazine	<1.49	U	10.0	1.49	ug/L		06/14/24 05:30	06/14/24 14:51	1
N-Nitrosodi-n-butylamine	<1.49	U	10.0	1.49	ug/L		06/14/24 05:30	06/14/24 14:51	1
N-Nitrosodiethylamine	<1.75	U	10.0	1.75	ug/L		06/14/24 05:30	06/14/24 14:51	1
4-Nonylphenol	<10.0	U	10.0	10.0	ug/L		06/14/24 05:30	06/14/24 14:51	1
Pentachlorobenzene	<1.07	U	10.0	1.07	ug/L		06/14/24 05:30	06/14/24 14:51	1
Pyridine	<2.64	U	10.0	2.64	ug/L		06/14/24 05:30	06/14/24 14:51	1
Total Cresols	<2.62	U	10.0	2.62	ug/L		06/14/24 05:30	06/14/24 14:51	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*97*		*31 - 132*	*06/14/24 05:30*	*06/14/24 14:51*	
2-Fluorobiphenyl (Surr)	*92*		*29 - 112*	*06/14/24 05:30*	*06/14/24 14:51*	
2-Fluorophenol (Surr)	*38*		*28 - 114*	*06/14/24 05:30*	*06/14/24 14:51*	
Nitrobenzene-d5 (Surr)	*95*		*15 - 314*	*06/14/24 05:30*	*06/14/24 14:51*	

Method: 625.1 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 860-165885/1-A
Matrix: Water
Analysis Batch: 165945

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 165885

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
p-Terphenyl-d14 (Surr)	117		20 - 141	06/14/24 05:30	06/14/24 14:51	
Phenol-d5 (Surr)	24		8 - 424	06/14/24 05:30	06/14/24 14:51	

Lab Sample ID: LCS 860-165885/2-A
Matrix: Water
Analysis Batch: 165945

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 165885

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,2,4,5-Tetrachlorobenzene	40.0	40.03		ug/L		100	41 - 125
Acenaphthene	40.0	39.77		ug/L		99	60 - 132
Acenaphthylene	40.0	39.56		ug/L		99	54 - 126
Anthracene	40.0	44.02		ug/L		110	43 - 120
Benzidine	40.0	8.349	J *-	ug/L		21	25 - 125
Benzo[a]anthracene	40.0	43.51		ug/L		109	42 - 133
Benzo[a]pyrene	40.0	42.93		ug/L		107	32 - 148
Benzo[b]fluoranthene	40.0	46.25		ug/L		116	42 - 140
Benzo[g,h,i]perylene	40.0	45.50		ug/L		114	13 - 195
Benzo[k]fluoranthene	40.0	42.45		ug/L		106	25 - 146
Butyl benzyl phthalate	40.0	44.46		ug/L		111	12 - 140
Bis(2-chloroethyl)ether	40.0	34.36		ug/L		86	43 - 126
2,4,5-Trichlorophenol	40.0	46.46	*+	ug/L		116	35 - 111
Bis(2-chloroethoxy)methane	40.0	37.15		ug/L		93	49 - 165
Bis(2-ethylhexyl) phthalate	40.0	44.12		ug/L		110	29 - 137
4-Chlorophenyl phenyl ether	40.0	43.34		ug/L		108	38 - 145
4-Bromophenyl phenyl ether	40.0	44.15		ug/L		110	65 - 120
2-Chloronaphthalene	40.0	39.40		ug/L		99	65 - 120
Chrysene	40.0	44.90		ug/L		112	44 - 140
Dibenz(a,h)anthracene	40.0	43.03		ug/L		108	16 - 200
Diethyl phthalate	40.0	44.70		ug/L		112	17 - 120
Dimethyl phthalate	40.0	41.61		ug/L		104	25 - 120
Di-n-butyl phthalate	40.0	40.76		ug/L		102	8 - 120
2-Methylphenol	0.0400	0.02362		mg/L		59	14 - 176
3 & 4 Methylphenol	0.0400	0.02217		mg/L		55	14 - 176
3,3'-Dichlorobenzidine	40.0	45.76		ug/L		114	18 - 213
2,4-Dinitrotoluene	40.0	46.11		ug/L		115	48 - 127
2,6-Dinitrotoluene	40.0	42.94		ug/L		107	68 - 137
Azobenzene	40.0	37.12		ug/L		93	28 - 136
Fluoranthene	40.0	43.80		ug/L		109	43 - 121
Fluorene	40.0	42.66		ug/L		107	70 - 120
Hexachlorobenzene	40.0	42.58		ug/L		106	8 - 142
Hexachlorobutadiene	40.0	36.06		ug/L		90	38 - 120
Hexachlorocyclopentadiene	40.0	38.74		ug/L		97	41 - 125
Hexachloroethane	40.0	29.50		ug/L		74	55 - 120
Indeno[1,2,3-cd]pyrene	40.0	45.03		ug/L		113	13 - 151
Isophorone	40.0	35.46		ug/L		89	47 - 180
Naphthalene	40.0	35.66		ug/L		89	36 - 120
Nitrobenzene	40.0	36.52		ug/L		91	54 - 158
N-Nitrosodimethylamine	40.0	16.99		ug/L		42	20 - 125

Method: 625.1 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 860-165885/2-A
Matrix: Water
Analysis Batch: 165945

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 165885

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Phenanthrene	40.0	42.12		ug/L		105	65 - 120
Pyrene	40.0	45.63		ug/L		114	70 - 120
1,2,4-Trichlorobenzene	0.0400	0.04067		mg/L		102	57 - 130
2-Chlorophenol	40.0	31.25		ug/L		78	36 - 120
4-Chloro-3-methylphenol	40.0	36.24		ug/L		91	41 - 128
2,4-Dichlorophenol	40.0	40.40		ug/L		101	53 - 122
2,4-Dimethylphenol	40.0	29.84		ug/L		75	42 - 120
2,4-Dinitrophenol	40.0	49.10		ug/L		123	12 - 173
2-Nitrophenol	40.0	38.00		ug/L		95	45 - 167
4-Nitrophenol	40.0	17.93		ug/L		45	13 - 129
Pentachlorophenol	0.0400	0.04122		mg/L		103	38 - 152
Phenol	40.0	13.68		ug/L		34	17 - 120
2,4,6-Trichlorophenol	40.0	43.96		ug/L		110	52 - 129
Di-n-octyl phthalate	40.0	40.02		ug/L		100	19 - 132
N-Nitrosodi-n-propylamine	40.0	33.07		ug/L		83	14 - 198
N-Nitrosodiphenylamine	40.0	43.31		ug/L		108	2 - 196
2,2'-oxybis[1-chloropropane]	40.0	34.70		ug/L		87	63 - 139
4,6-Dinitro-2-methylphenol	40.0	44.04		ug/L		110	53 - 130
1,2-Diphenylhydrazine	40.0	37.12		ug/L		93	28 - 136
N-Nitrosodi-n-butylamine	40.0	35.29		ug/L		88	33 - 141
N-Nitrosodiethylamine	40.0	36.58		ug/L		91	30 - 160
Pentachlorobenzene	40.0	41.28		ug/L		103	25 - 131
Pyridine	80.0	8.309		ug/L		10	5 - 94

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*105*		*31 - 132*
2-Fluorobiphenyl (Surr)	*97*		*29 - 112*
2-Fluorophenol (Surr)	*47*		*28 - 114*
Nitrobenzene-d5 (Surr)	*88*		*15 - 314*
p-Terphenyl-d14 (Surr)	*111*		*20 - 141*
Phenol-d5 (Surr)	*29*		*8 - 424*

Lab Sample ID: LCSD 860-165885/3-A
Matrix: Water
Analysis Batch: 165945

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 165885

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,2,4,5-Tetrachlorobenzene	40.0	38.74		ug/L		97	41 - 125	3	30
Acenaphthene	40.0	37.94		ug/L		95	60 - 132	5	29
Acenaphthylene	40.0	37.70		ug/L		94	54 - 126	5	30
Anthracene	40.0	41.87		ug/L		105	43 - 120	5	30
Benzidine	40.0	17.04	J *1	ug/L		43	25 - 125	68	30
Benzo[a]anthracene	40.0	42.17		ug/L		105	42 - 133	3	30
Benzo[a]pyrene	40.0	41.28		ug/L		103	32 - 148	4	30
Benzo[b]fluoranthene	40.0	44.36		ug/L		111	42 - 140	4	30
Benzo[g,h,i]perylene	40.0	44.35		ug/L		111	13 - 195	3	30
Benzo[k]fluoranthene	40.0	40.80		ug/L		102	25 - 146	4	30
Butyl benzyl phthalate	40.0	42.60		ug/L		106	12 - 140	4	30

Method: 625.1 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 860-165885/3-A
Matrix: Water
Analysis Batch: 165945

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 165885

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Bis(2-chloroethyl)ether			40.0	32.99		ug/L		82	43 - 126	4	30
2,4,5-Trichlorophenol			40.0	44.29		ug/L		111	35 - 111	5	30
Bis(2-chloroethoxy)methane			40.0	36.48		ug/L		91	49 - 165	2	30
Bis(2-ethylhexyl) phthalate			40.0	42.93		ug/L		107	29 - 137	3	30
4-Chlorophenyl phenyl ether			40.0	41.46		ug/L		104	38 - 145	4	30
4-Bromophenyl phenyl ether			40.0	43.16		ug/L		108	65 - 120	2	26
2-Chloronaphthalene			40.0	37.43		ug/L		94	65 - 120	5	15
Chrysene			40.0	43.67		ug/L		109	44 - 140	3	30
Dibenz(a,h)anthracene			40.0	41.73		ug/L		104	16 - 200	3	30
Diethyl phthalate			40.0	41.80		ug/L		105	17 - 120	7	30
Dimethyl phthalate			40.0	38.99		ug/L		97	25 - 120	7	30
Di-n-butyl phthalate			40.0	38.82		ug/L		97	8 - 120	5	28
2-Methylphenol			0.0400	0.02263		mg/L		57	14 - 176	4	30
3 & 4 Methylphenol			0.0400	0.02090		mg/L		52	14 - 176	6	30
3,3'-Dichlorobenzidine			40.0	44.29		ug/L		111	18 - 213	3	30
2,4-Dinitrotoluene			40.0	42.87		ug/L		107	48 - 127	7	25
2,6-Dinitrotoluene			40.0	40.35		ug/L		101	68 - 137	6	29
Azobenzene			40.0	36.42		ug/L		91	28 - 136	2	30
Fluoranthene			40.0	42.27		ug/L		106	43 - 121	4	30
Fluorene			40.0	40.15		ug/L		100	70 - 120	6	23
Hexachlorobenzene			40.0	41.46		ug/L		104	8 - 142	3	30
Hexachlorobutadiene			40.0	34.07		ug/L		85	38 - 120	6	30
Hexachlorocyclopentadiene			40.0	38.45		ug/L		96	41 - 125	1	30
Hexachloroethane			40.0	26.76		ug/L		67	55 - 120	10	30
Indeno[1,2,3-cd]pyrene			40.0	43.48		ug/L		109	13 - 151	4	30
Isophorone			40.0	35.10		ug/L		88	47 - 180	1	30
Naphthalene			40.0	33.90		ug/L		85	36 - 120	5	30
Nitrobenzene			40.0	35.43		ug/L		89	54 - 158	3	30
N-Nitrosodimethylamine			40.0	16.08		ug/L		40	20 - 125	6	30
Phenanthrene			40.0	40.67		ug/L		102	65 - 120	4	30
Pyrene			40.0	44.40		ug/L		111	70 - 120	3	30
1,2,4-Trichlorobenzene			0.0400	0.03872		mg/L		97	57 - 130	5	30
2-Chlorophenol			40.0	30.01		ug/L		75	36 - 120	4	30
4-Chloro-3-methylphenol			40.0	34.84		ug/L		87	41 - 128	4	30
2,4-Dichlorophenol			40.0	39.61		ug/L		99	53 - 122	2	30
2,4-Dimethylphenol			40.0	29.09		ug/L		73	42 - 120	3	30
2,4-Dinitrophenol			40.0	47.20		ug/L		118	12 - 173	4	30
2-Nitrophenol			40.0	38.28		ug/L		96	45 - 167	1	30
4-Nitrophenol			40.0	15.81		ug/L		40	13 - 129	13	30
Pentachlorophenol			0.0400	0.04197		mg/L		105	38 - 152	2	30
Phenol			40.0	12.60		ug/L		31	17 - 120	8	30
2,4,6-Trichlorophenol			40.0	42.43		ug/L		106	52 - 129	4	30
Di-n-octyl phthalate			40.0	38.87		ug/L		97	19 - 132	3	30
N-Nitrosodi-n-propylamine			40.0	31.80		ug/L		80	14 - 198	4	30
N-Nitrosodiphenylamine			40.0	41.95		ug/L		105	2 - 196	3	30
2,2'-oxybis[1-chloropropane]			40.0	33.60		ug/L		84	63 - 139	3	30
4,6-Dinitro-2-methylphenol			40.0	43.12		ug/L		108	53 - 130	2	30
1,2-Diphenylhydrazine			40.0	36.42		ug/L		91	28 - 136	2	30
N-Nitrosodi-n-butylamine			40.0	34.10		ug/L		85	33 - 141	3	30

Method: 625.1 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 860-165885/3-A
Matrix: Water
Analysis Batch: 165945

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 165885

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
N-Nitrosodiethylamine			40.0	35.39		ug/L		88	30 - 160	3	30
Pentachlorobenzene			40.0	38.96		ug/L		97	25 - 131	6	30
Pyridine			80.0	13.74	*1	ug/L		17	5 - 94	49	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*103*		*31 - 132*
2-Fluorobiphenyl (Surr)	*91*		*29 - 112*
2-Fluorophenol (Surr)	*44*		*28 - 114*
Nitrobenzene-d5 (Surr)	*83*		*15 - 314*
p-Terphenyl-d14 (Surr)	*109*		*20 - 141*
Phenol-d5 (Surr)	*26*		*8 - 424*

Method: 608.3 - Organochlorine Pesticides in Water

Lab Sample ID: MB 860-166167/1-A
Matrix: Water
Analysis Batch: 166572

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 166167

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	<0.00113	U	0.0100	0.00113	ug/L		06/15/24 07:58	06/18/24 10:57	1
alpha-BHC	<0.00142	U	0.00900	0.00142	ug/L		06/15/24 07:58	06/18/24 10:57	1
beta-BHC	<0.00389	U	0.0180	0.00389	ug/L		06/15/24 07:58	06/18/24 10:57	1
delta-BHC	<0.00245	U	0.250	0.00245	ug/L		06/15/24 07:58	06/18/24 10:57	1
gamma-BHC (Lindane)	<0.00299	U	0.0100	0.00299	ug/L		06/15/24 07:58	06/18/24 10:57	1
4,4'-DDD	<0.000814	U	0.0100	0.000814	ug/L		06/15/24 07:58	06/18/24 10:57	1
4,4'-DDE	<0.00109	U	0.0100	0.00109	ug/L		06/15/24 07:58	06/18/24 10:57	1
4,4'-DDT	<0.00379	U	0.0200	0.00379	ug/L		06/15/24 07:58	06/18/24 10:57	1
Dieldrin	<0.000953	U	0.0100	0.000953	ug/L		06/15/24 07:58	06/18/24 10:57	1
Endosulfan I	<0.00107	U	0.0100	0.00107	ug/L		06/15/24 07:58	06/18/24 10:57	1
Endosulfan II	<0.00122	U	0.0100	0.00122	ug/L		06/15/24 07:58	06/18/24 10:57	1
Endosulfan sulfate	<0.00112	U	0.0100	0.00112	ug/L		06/15/24 07:58	06/18/24 10:57	1
Endrin	<0.00156	U	0.0100	0.00156	ug/L		06/15/24 07:58	06/18/24 10:57	1
Endrin aldehyde	<0.00118	U	0.0100	0.00118	ug/L		06/15/24 07:58	06/18/24 10:57	1
Dicofol	<0.0000500	U	0.000100	0.0000500	mg/L		06/15/24 07:58	06/18/24 10:57	1
Heptachlor	<0.00446	U	0.00900	0.00446	ug/L		06/15/24 07:58	06/18/24 10:57	1
Heptachlor epoxide	<0.00134	U	0.0100	0.00134	ug/L		06/15/24 07:58	06/18/24 10:57	1
Toxaphene	<0.0769	U	0.100	0.0769	ug/L		06/15/24 07:58	06/18/24 10:57	1
Chlordane	<0.103	U	0.0400	0.103	ug/L		06/15/24 07:58	06/18/24 10:57	1
Methoxychlor	<0.00000390	U	0.0000200	0.0000039 0	mg/L		06/15/24 07:58	06/18/24 10:57	1
Mirex	<0.0000200	U	0.0000200	0.0000200	mg/L		06/15/24 07:58	06/18/24 10:57	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*136*		*15 - 136*	*06/15/24 07:58*	*06/18/24 10:57*	
Tetrachloro-m-xylene	*124*		*18 - 126*	*06/15/24 07:58*	*06/18/24 10:57*	

Method: 608.3 - Organochlorine Pesticides in Water (Continued)

Lab Sample ID: LCS 860-166167/2-A
Matrix: Water
Analysis Batch: 166572

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 166167

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Aldrin			0.100	0.1075		ug/L		108	42 - 140		
alpha-BHC			0.100	0.1039		ug/L		104	37 - 140		
beta-BHC			0.100	0.1279		ug/L		128	17 - 147		
delta-BHC			0.100	0.03479		ug/L		35	19 - 140		
gamma-BHC (Lindane)			0.100	0.1163		ug/L		116	34 - 140		
4,4'-DDD			0.100	0.1287		ug/L		129	31 - 141		
4,4'-DDE			0.100	0.1232		ug/L		123	30 - 145		
4,4'-DDT			0.100	0.1299		ug/L		130	25 - 160		
Dieldrin			0.100	0.1201		ug/L		120	36 - 146		
Endosulfan I			0.100	0.1291		ug/L		129	45 - 153		
Endosulfan II			0.100	0.1307		ug/L		131	22 - 171		
Endosulfan sulfate			0.100	0.09982		ug/L		100	26 - 144		
Endrin			0.100	0.1298		ug/L		130	30 - 147		
Endrin aldehyde			0.100	0.1137		ug/L		114	60 - 130		
Heptachlor			0.100	0.1240		ug/L		124	34 - 140		
Heptachlor epoxide			0.100	0.1244		ug/L		124	37 - 142		
Methoxychlor			0.000100	0.0001299		mg/L		130	50 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCB Decachlorobiphenyl (Surr)	*133*		*15 - 136*
Tetrachloro-m-xylene	*118*		*18 - 126*

Lab Sample ID: LCSD 860-166167/3-A
Matrix: Water
Analysis Batch: 166572

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 166167

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Aldrin			0.100	0.1205		ug/L		120	42 - 140	11	30
alpha-BHC			0.100	0.1151		ug/L		115	37 - 140	10	30
beta-BHC			0.100	0.1416		ug/L		142	17 - 147	10	30
delta-BHC			0.100	0.03849		ug/L		38	19 - 140	10	30
gamma-BHC (Lindane)			0.100	0.1289		ug/L		129	34 - 140	10	30
4,4'-DDD			0.100	0.1372		ug/L		137	31 - 141	6	30
4,4'-DDE			0.100	0.1325		ug/L		132	30 - 145	7	30
4,4'-DDT			0.100	0.1389		ug/L		139	25 - 160	7	30
Dieldrin			0.100	0.1297		ug/L		130	36 - 146	8	30
Endosulfan I			0.100	0.1405		ug/L		141	45 - 153	8	30
Endosulfan II			0.100	0.1396		ug/L		140	22 - 171	7	30
Endosulfan sulfate			0.100	0.1075		ug/L		107	26 - 144	7	30
Endrin			0.100	0.1416		ug/L		142	30 - 147	9	30
Endrin aldehyde			0.100	0.1164		ug/L		116	60 - 130	2	30
Heptachlor			0.100	0.1379		ug/L		138	34 - 140	11	30
Heptachlor epoxide			0.100	0.1357		ug/L		136	37 - 142	9	30
Methoxychlor			0.000100	0.0001404	*+	mg/L		140	50 - 130	8	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
DCB Decachlorobiphenyl (Surr)	*138*	*S1+*	*15 - 136*
Tetrachloro-m-xylene	*127*	*S1+*	*18 - 126*

Method: 608.3 - Polychlorinated Biphenyls (PCBs) (GC)

Lab Sample ID: MB 860-166167/1-A
Matrix: Water
Analysis Batch: 166350

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 166167

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.0125	U	0.100	0.0125	ug/L		06/15/24 07:58	06/17/24 12:24	1
PCB-1242	<0.0125	U	0.100	0.0125	ug/L		06/15/24 07:58	06/17/24 12:24	1
PCB-1254	<0.00780	U	0.100	0.00780	ug/L		06/15/24 07:58	06/17/24 12:24	1
PCB-1221	<0.0125	U	0.100	0.0125	ug/L		06/15/24 07:58	06/17/24 12:24	1
PCB-1232	<0.0125	U	0.100	0.0125	ug/L		06/15/24 07:58	06/17/24 12:24	1
PCB-1248	<0.0125	U	0.100	0.0125	ug/L		06/15/24 07:58	06/17/24 12:24	1
PCB-1260	<0.00780	U	0.100	0.00780	ug/L		06/15/24 07:58	06/17/24 12:24	1
Polychlorinated biphenyls, Total	<0.100	U	0.100	0.100	ug/L		06/15/24 07:58	06/17/24 12:24	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*98*		*18 - 126*	*06/15/24 07:58*	*06/17/24 12:24*	
DCB Decachlorobiphenyl (Surr)	*132*		*15 - 136*	*06/15/24 07:58*	*06/17/24 12:24*	

Lab Sample ID: LCS 860-166167/4-A
Matrix: Water
Analysis Batch: 166350

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 166167

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
PCB-1016			1.00	0.9694		ug/L		97	61 - 103		
PCB-1260			1.00	1.117		ug/L		112	37 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Tetrachloro-m-xylene	*103*		*18 - 126*
DCB Decachlorobiphenyl (Surr)	*131*		*15 - 136*

Lab Sample ID: LCSD 860-166167/5-A
Matrix: Water
Analysis Batch: 166350

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 166167

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
PCB-1016			1.00	1.062	*+	ug/L		106	61 - 103	9	24
PCB-1260			1.00	1.247		ug/L		125	37 - 130	11	28

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Tetrachloro-m-xylene	*110*		*18 - 126*
DCB Decachlorobiphenyl (Surr)	*140*	*S1+*	*15 - 136*

Method: 615 - Herbicides (GC)

Lab Sample ID: MB 860-166702/1-A
Matrix: Water
Analysis Batch: 167119

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 166702

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-D	<0.0000539	U	0.000200	0.0000539	mg/L		06/18/24 13:50	06/20/24 13:24	1
Hexachlorophene	<0.000808	U	0.00500	0.000808	mg/L		06/18/24 13:50	06/20/24 13:24	1
Silvex (2,4,5-TP)	<0.0000422	U	0.000200	0.0000422	mg/L		06/18/24 13:50	06/20/24 13:24	1
Dalapon	<0.0000476	U	0.000200	0.0000476	mg/L		06/18/24 13:50	06/20/24 13:24	1

Method: 615 - Herbicides (GC) (Continued)

Lab Sample ID: MB 860-166702/1-A
Matrix: Water
Analysis Batch: 167119

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 166702

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dicamba	<0.0000423	U	0.000200	0.0000423	mg/L		06/18/24 13:50	06/20/24 13:24	1
Dinoseb	<0.0000343	U	0.000200	0.0000343	mg/L		06/18/24 13:50	06/20/24 13:24	1
Pentachlorophenol	<0.0000443	U	0.000200	0.0000443	mg/L		06/18/24 13:50	06/20/24 13:24	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4-Dichlorophenylacetic acid	*134*		*45 - 150*	*06/18/24 13:50*	*06/20/24 13:24*	

Lab Sample ID: LCS 860-166702/2-A
Matrix: Water
Analysis Batch: 167119

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 166702

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
2,4-D			0.00200	0.002123		mg/L		106	55 - 145		
Silvex (2,4,5-TP)			0.00200	0.002100		mg/L		105	55 - 140		
Dalapon			0.00200	0.001921		mg/L		96	50 - 150		
Dicamba			0.00200	0.002094		mg/L		105	55 - 135		
Dinoseb			0.00200	0.001276		mg/L		64	20 - 100		
Pentachlorophenol			0.00200	0.002268		mg/L		113	50 - 135		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4-Dichlorophenylacetic acid	*109*		*45 - 150*

Lab Sample ID: LCS 860-166702/4-A
Matrix: Water
Analysis Batch: 167348

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 166702

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Hexachlorophene			0.00800	0.008052		mg/L		101	60 - 135		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4-Dichlorophenylacetic acid	*74*		*45 - 150*

Lab Sample ID: LCSD 860-166702/3-A
Matrix: Water
Analysis Batch: 167119

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 166702

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
2,4-D			0.00200	0.002029		mg/L		101	55 - 145	5	25
Silvex (2,4,5-TP)			0.00200	0.002069		mg/L		103	55 - 140	1	25
Dalapon			0.00200	0.001838		mg/L		92	50 - 150	4	25
Dicamba			0.00200	0.002036		mg/L		102	55 - 135	3	25
Dinoseb			0.00200	0.001358		mg/L		68	20 - 100	6	25
Pentachlorophenol			0.00200	0.002205		mg/L		110	50 - 135	3	25

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2,4-Dichlorophenylacetic acid	*107*		*45 - 150*

Method: 615 - Herbicides (GC) (Continued)

Lab Sample ID: LCSD 860-166702/5-A
Matrix: Water
Analysis Batch: 167348

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 166702

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Hexachlorophene			0.00800	0.008875		mg/L		111	60 - 135	10	25

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2,4-Dichlorophenylacetic acid	*88*		*45 - 150*

Method: 632 - Carbamate and Urea Pesticides (HPLC)

Lab Sample ID: MB 860-166400/1-A
Matrix: Water
Analysis Batch: 167049

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 166400

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbaryl	<1.85	U	5.00	1.85	ug/L		06/17/24 14:00	06/19/24 18:20	1
Diuron	<0.0514	U	0.0900	0.0514	ug/L		06/17/24 14:00	06/19/24 18:20	1

Lab Sample ID: LCS 860-166400/2-A
Matrix: Water
Analysis Batch: 167049

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 166400

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Carbaryl			100	103.6		ug/L		104	70 - 130		
Diuron			2.00	1.923		ug/L		96	70 - 130		

Lab Sample ID: LCSD 860-166400/3-A
Matrix: Water
Analysis Batch: 167049

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 166400

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Carbaryl			100	104.2		ug/L		104	70 - 130	1	20
Diuron			2.00	1.932		ug/L		97	70 - 130	0	20

Method: 200.8 - Metals (ICP/MS)

Lab Sample ID: MB 860-166273/1-A
Matrix: Water
Analysis Batch: 166402

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 166273

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr	<0.000325	U	0.00300	0.000325	mg/L		06/17/24 08:00	06/17/24 12:26	1

Lab Sample ID: LCS 860-166273/2-A
Matrix: Water
Analysis Batch: 166402

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 166273

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Cr			0.100	0.1042		mg/L		104	85 - 115		

Method: 200.8 - Metals (ICP/MS) (Continued)

Lab Sample ID: LCSD 860-166273/3-A
Matrix: Water
Analysis Batch: 166402

Client Sample ID: Lab Control Sample Dup
Prep Type: Total Recoverable
Prep Batch: 166273

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Cr			0.100	0.1039		mg/L		104	85 - 115	0	20

Lab Sample ID: LLCS 860-166273/4-A
Matrix: Water
Analysis Batch: 166402

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 166273

Analyte			Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits		
Cr			0.00400	0.003121		mg/L		78	50 - 150		

Method: 1664B - HEM and SGT-HEM

Lab Sample ID: MB 870-20759/1
Matrix: Water
Analysis Batch: 20759

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM	<1.14	U	5.00	1.14	mg/L			06/18/24 10:05	1

Lab Sample ID: LCS 870-20759/2
Matrix: Water
Analysis Batch: 20759

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
HEM			40.0	31.60		mg/L		79	78 - 114		

Lab Sample ID: LCSD 870-20759/3
Matrix: Water
Analysis Batch: 20759

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
HEM			40.0	31.10		mg/L		78	78 - 114	2	11

Method: 335.4 - Cyanide, Total

Lab Sample ID: MB 860-165820/12-A
Matrix: Water
Analysis Batch: 165928

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 165820

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<2.00	U	5.00	2.00	ug/L		06/13/24 16:57	06/13/24 19:28	1

Lab Sample ID: MB 860-165820/4-A
Matrix: Water
Analysis Batch: 165928

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 165820

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<2.00	U	5.00	2.00	ug/L		06/13/24 16:57	06/13/24 19:16	1

Method: 335.4 - Cyanide, Total (Continued)

Lab Sample ID: LCS 860-165820/13-A
Matrix: Water
Analysis Batch: 165928

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 165820

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Cyanide, Total	100	97.65		ug/L		98	90 - 110

Lab Sample ID: LCS 860-165820/5-A
Matrix: Water
Analysis Batch: 165928

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 165820

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Cyanide, Total	100	98.22		ug/L		98	90 - 110

Lab Sample ID: LCSD 860-165820/14-A
Matrix: Water
Analysis Batch: 165928

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 165820

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Cyanide, Total	100	94.36		ug/L		94	90 - 110	3	20

Lab Sample ID: LLCS 860-165820/6-A
Matrix: Water
Analysis Batch: 165928

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 165820

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits
Cyanide, Total	5.00	5.234		ug/L		105	50 - 150

Method: 420.4 - Phenolics, Total Recoverable

Lab Sample ID: MB 860-167198/55
Matrix: Water
Analysis Batch: 167198

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenols, Total	<5.80	U	10.0	5.80	ug/L			06/19/24 20:53	1

Lab Sample ID: LCS 860-167198/56
Matrix: Water
Analysis Batch: 167198

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Phenols, Total	100	96.80		ug/L		97	90 - 110

Lab Sample ID: LCSD 860-167198/57
Matrix: Water
Analysis Batch: 167198

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Phenols, Total	100	105.1		ug/L		105	90 - 110	8	20

Method: 4500 CN G NonAm - Cyanide, Non-amenable

Lab Sample ID: MB 860-166088/4-A
Matrix: Water
Analysis Batch: 166388

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 166088

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Non-amenable	<2.33	U	5.00	2.33	ug/L		06/14/24 17:07	06/14/24 20:28	1

Lab Sample ID: LCS 860-166088/5-A
Matrix: Water
Analysis Batch: 166388

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 166088

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Cyanide, Non-amenable	100	100.1		ug/L		100	90 - 110

Lab Sample ID: LCSD 860-166088/6-A
Matrix: Water
Analysis Batch: 166388

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 166088

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Cyanide, Non-amenable	100	97.00		ug/L		97	90 - 110	3	20

Method: 7196A - Chromium, Hexavalent

Lab Sample ID: MB 870-20665/9
Matrix: Water
Analysis Batch: 20665

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	<2.80	U	10.0	2.80	ug/L			06/12/24 18:12	1

Lab Sample ID: LCS 870-20665/10
Matrix: Water
Analysis Batch: 20665

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Cr (VI)	499	506.7		ug/L		102	85 - 115

Lab Sample ID: LCSD 870-20665/11
Matrix: Water
Analysis Batch: 20665

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Cr (VI)	499	504.0		ug/L		101	85 - 115	1	20

Lab Sample ID: 870-27737-2 MS
Matrix: Water
Analysis Batch: 20665

Client Sample ID: 2421003-03 (Effluent G)
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Cr (VI)	8.41		499	490.5		ug/L		97	85 - 115

Method: 7196A - Chromium, Hexavalent (Continued)

Lab Sample ID: 870-27737-2 MSD
Matrix: Water
Analysis Batch: 20665

Client Sample ID: 2421003-03 (Effluent G)
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Cr (VI)	8.41		499	502.6		ug/L		99	85 - 115	2	20

GC/MS VOA

Analysis Batch: 20655

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
870-27737-2	2421003-03 (Effluent G)	Total/NA	Water	624.1	
MB 870-20655/5	Method Blank	Total/NA	Water	624.1	
LCS 870-20655/3	Lab Control Sample	Total/NA	Water	624.1	
LCSD 870-20655/4	Lab Control Sample Dup	Total/NA	Water	624.1	

GC/MS Semi VOA

Prep Batch: 165885

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
870-27737-1	2421003-01 (Effluent TC)	Total/NA	Water	625	
MB 860-165885/1-A	Method Blank	Total/NA	Water	625	
LCS 860-165885/2-A	Lab Control Sample	Total/NA	Water	625	
LCSD 860-165885/3-A	Lab Control Sample Dup	Total/NA	Water	625	

Analysis Batch: 165945

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
870-27737-1	2421003-01 (Effluent TC)	Total/NA	Water	625.1	165885
MB 860-165885/1-A	Method Blank	Total/NA	Water	625.1	165885
LCS 860-165885/2-A	Lab Control Sample	Total/NA	Water	625.1	165885
LCSD 860-165885/3-A	Lab Control Sample Dup	Total/NA	Water	625.1	165885

GC Semi VOA

Prep Batch: 166167

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
870-27737-1	2421003-01 (Effluent TC)	Total/NA	Water	608	
MB 860-166167/1-A	Method Blank	Total/NA	Water	608	
LCS 860-166167/2-A	Lab Control Sample	Total/NA	Water	608	
LCS 860-166167/4-A	Lab Control Sample	Total/NA	Water	608	
LCSD 860-166167/3-A	Lab Control Sample Dup	Total/NA	Water	608	
LCSD 860-166167/5-A	Lab Control Sample Dup	Total/NA	Water	608	

Analysis Batch: 166350

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
870-27737-1	2421003-01 (Effluent TC)	Total/NA	Water	608.3	166167
MB 860-166167/1-A	Method Blank	Total/NA	Water	608.3	166167
LCS 860-166167/4-A	Lab Control Sample	Total/NA	Water	608.3	166167
LCSD 860-166167/5-A	Lab Control Sample Dup	Total/NA	Water	608.3	166167

Analysis Batch: 166572

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
870-27737-1	2421003-01 (Effluent TC)	Total/NA	Water	608.3	166167
MB 860-166167/1-A	Method Blank	Total/NA	Water	608.3	166167
LCS 860-166167/2-A	Lab Control Sample	Total/NA	Water	608.3	166167
LCSD 860-166167/3-A	Lab Control Sample Dup	Total/NA	Water	608.3	166167

Prep Batch: 166702

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
870-27737-1	2421003-01 (Effluent TC)	Total/NA	Water	3511	
MB 860-166702/1-A	Method Blank	Total/NA	Water	3511	
LCS 860-166702/2-A	Lab Control Sample	Total/NA	Water	3511	
LCS 860-166702/4-A	Lab Control Sample	Total/NA	Water	3511	

GC Semi VOA (Continued)

Prep Batch: 166702 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 860-166702/3-A	Lab Control Sample Dup	Total/NA	Water	3511	
LCSD 860-166702/5-A	Lab Control Sample Dup	Total/NA	Water	3511	

Analysis Batch: 167119

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
870-27737-1	2421003-01 (Effluent TC)	Total/NA	Water	615	166702
MB 860-166702/1-A	Method Blank	Total/NA	Water	615	166702
LCS 860-166702/2-A	Lab Control Sample	Total/NA	Water	615	166702
LCSD 860-166702/3-A	Lab Control Sample Dup	Total/NA	Water	615	166702

Analysis Batch: 167348

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 860-166702/4-A	Lab Control Sample	Total/NA	Water	615	166702
LCSD 860-166702/5-A	Lab Control Sample Dup	Total/NA	Water	615	166702

HPLC/IC

Prep Batch: 166400

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
870-27737-1	2421003-01 (Effluent TC)	Total/NA	Water	CWA_Prep	
MB 860-166400/1-A	Method Blank	Total/NA	Water	CWA_Prep	
LCS 860-166400/2-A	Lab Control Sample	Total/NA	Water	CWA_Prep	
LCSD 860-166400/3-A	Lab Control Sample Dup	Total/NA	Water	CWA_Prep	

Analysis Batch: 167049

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
870-27737-1	2421003-01 (Effluent TC)	Total/NA	Water	632	166400
MB 860-166400/1-A	Method Blank	Total/NA	Water	632	166400
LCS 860-166400/2-A	Lab Control Sample	Total/NA	Water	632	166400
LCSD 860-166400/3-A	Lab Control Sample Dup	Total/NA	Water	632	166400

Metals

Prep Batch: 166273

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
870-27737-2	2421003-03 (Effluent G)	Total Recoverable	Water	200.8	
MB 860-166273/1-A	Method Blank	Total Recoverable	Water	200.8	
LCS 860-166273/2-A	Lab Control Sample	Total Recoverable	Water	200.8	
LCSD 860-166273/3-A	Lab Control Sample Dup	Total Recoverable	Water	200.8	
LLCS 860-166273/4-A	Lab Control Sample	Total Recoverable	Water	200.8	

Analysis Batch: 166402

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
870-27737-2	2421003-03 (Effluent G)	Total Recoverable	Water	200.8	166273
MB 860-166273/1-A	Method Blank	Total Recoverable	Water	200.8	166273
LCS 860-166273/2-A	Lab Control Sample	Total Recoverable	Water	200.8	166273
LCSD 860-166273/3-A	Lab Control Sample Dup	Total Recoverable	Water	200.8	166273
LLCS 860-166273/4-A	Lab Control Sample	Total Recoverable	Water	200.8	166273

General Chemistry

Analysis Batch: 20665

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
870-27737-2	2421003-03 (Effluent G)	Total/NA	Water	7196A	
MB 870-20665/9	Method Blank	Total/NA	Water	7196A	
LCS 870-20665/10	Lab Control Sample	Total/NA	Water	7196A	
LCSD 870-20665/11	Lab Control Sample Dup	Total/NA	Water	7196A	
870-27737-2 MS	2421003-03 (Effluent G)	Total/NA	Water	7196A	
870-27737-2 MSD	2421003-03 (Effluent G)	Total/NA	Water	7196A	

Analysis Batch: 20759

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
870-27737-2	2421003-03 (Effluent G)	Total/NA	Water	1664B	
MB 870-20759/1	Method Blank	Total/NA	Water	1664B	
LCS 870-20759/2	Lab Control Sample	Total/NA	Water	1664B	
LCSD 870-20759/3	Lab Control Sample Dup	Total/NA	Water	1664B	

Prep Batch: 165820

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
870-27737-2	2421003-03 (Effluent G)	Total/NA	Water	Distill/CN	
MB 860-165820/12-A	Method Blank	Total/NA	Water	Distill/CN	
MB 860-165820/4-A	Method Blank	Total/NA	Water	Distill/CN	
LCS 860-165820/13-A	Lab Control Sample	Total/NA	Water	Distill/CN	
LCS 860-165820/5-A	Lab Control Sample	Total/NA	Water	Distill/CN	
LCSD 860-165820/14-A	Lab Control Sample Dup	Total/NA	Water	Distill/CN	
LLCS 860-165820/6-A	Lab Control Sample	Total/NA	Water	Distill/CN	

Analysis Batch: 165928

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
870-27737-2	2421003-03 (Effluent G)	Total/NA	Water	335.4	165820
MB 860-165820/12-A	Method Blank	Total/NA	Water	335.4	165820
MB 860-165820/4-A	Method Blank	Total/NA	Water	335.4	165820
LCS 860-165820/13-A	Lab Control Sample	Total/NA	Water	335.4	165820
LCS 860-165820/5-A	Lab Control Sample	Total/NA	Water	335.4	165820
LCSD 860-165820/14-A	Lab Control Sample Dup	Total/NA	Water	335.4	165820
LLCS 860-165820/6-A	Lab Control Sample	Total/NA	Water	335.4	165820

Prep Batch: 166088

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
870-27737-2	2421003-03 (Effluent G)	Total/NA	Water	Distill/CN	
MB 860-166088/4-A	Method Blank	Total/NA	Water	Distill/CN	
LCS 860-166088/5-A	Lab Control Sample	Total/NA	Water	Distill/CN	
LCSD 860-166088/6-A	Lab Control Sample Dup	Total/NA	Water	Distill/CN	

Analysis Batch: 166127

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
870-27737-2	2421003-03 (Effluent G)	Total/NA	Water	SM 4500 CN G	

Analysis Batch: 166388

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
870-27737-2	2421003-03 (Effluent G)	Total/NA	Water	4500 CN G NonAm	166088
MB 860-166088/4-A	Method Blank	Total/NA	Water	4500 CN G NonAm	166088

General Chemistry (Continued)

Analysis Batch: 166388 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 860-166088/5-A	Lab Control Sample	Total/NA	Water	4500 CN G NonAm	166088
LCSD 860-166088/6-A	Lab Control Sample Dup	Total/NA	Water	4500 CN G NonAm	166088

Analysis Batch: 167182

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
870-27737-2	2421003-03 (Effluent G)	Total/NA	Water	SM 3500 CR B	
870-27737-2	2421003-03 (Effluent G)	Total/NA	Water	SM 3500 CR B	

Analysis Batch: 167198

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
870-27737-2	2421003-03 (Effluent G)	Total/NA	Water	420.4	
MB 860-167198/55	Method Blank	Total/NA	Water	420.4	
LCS 860-167198/56	Lab Control Sample	Total/NA	Water	420.4	
LCSD 860-167198/57	Lab Control Sample Dup	Total/NA	Water	420.4	

Lab Chronicle

Client: North Texas Municipal Water District
Project/Site: SBX Permit Renewal

Job ID: 870-27737-1
SDG: 2421003

Client Sample ID: 2421003-01 (Effluent TC)

Date Collected: 06/12/24 08:55
Date Received: 06/12/24 16:15

Lab Sample ID: 870-27737-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	625			1000 mL	1.00 mL	165885	06/14/24 05:30	DR	EET HOU
Total/NA	Analysis	625.1		1	1 mL	1 mL	165945	06/14/24 19:07	T1S	EET HOU
Total/NA	Prep	608			1000 mL	1 mL	166167	06/15/24 07:58	BH	EET HOU
Total/NA	Analysis	608.3		1			166350	06/17/24 13:50	WP	EET HOU
Total/NA	Prep	608			1000 mL	1 mL	166167	06/15/24 07:58	BH	EET HOU
Total/NA	Analysis	608.3		1			166572	06/18/24 13:58	A1S	EET HOU
Total/NA	Prep	3511			50 mL	4 mL	166702	06/18/24 13:50	BH	EET HOU
Total/NA	Analysis	615		1			167119	06/21/24 00:25	WP	EET HOU
Total/NA	Prep	CWA_Prep			1000 mL	1 mL	166400	06/17/24 14:00	DR	EET HOU
Total/NA	Analysis	632		1			167049	06/20/24 05:17	YG	EET HOU

Client Sample ID: 2421003-03 (Effluent G)

Date Collected: 06/12/24 08:55
Date Received: 06/12/24 16:15

Lab Sample ID: 870-27737-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624.1		1	5 mL	5 mL	20655	06/12/24 19:53	MC	EET DAL
Total Recoverable	Prep	200.8			50 mL	50 mL	166273	06/17/24 08:00	MD	EET HOU
Total Recoverable	Analysis	200.8		1			166402	06/17/24 13:39	DP	EET HOU
Total/NA	Analysis	1664B		1	901 mL	1000 mL	20759	06/18/24 10:05	KNW	EET DAL
Total/NA	Prep	Distill/CN			6 mL	6 mL	165820	06/13/24 16:57	MLEI	EET HOU
Total/NA	Analysis	335.4		1			165928	06/13/24 19:25	LD	EET HOU
Total/NA	Analysis	420.4		1	10 mL	10 mL	167198	06/19/24 21:12	SC	EET HOU
Total/NA	Prep	Distill/CN			6 mL	6 mL	166088	06/14/24 17:07	LD	EET HOU
Total/NA	Analysis	4500 CN G NonAm		1			166388	06/14/24 20:45	LD	EET HOU
Total/NA	Analysis	7196A		1	10 mL	10 mL	20665	06/12/24 18:12	KNW	EET DAL
Total/NA	Analysis	SM 3500 CR B		1			167182	06/24/24 22:15	JDM	EET HOU
Total/NA	Analysis	SM 3500 CR B		1			167182	06/24/24 22:15	JDM	EET HOU
Total/NA	Analysis	SM 4500 CN G		1			166127	06/18/24 18:21	MC	EET HOU

Laboratory References:

Ana-Lab Co = Ana-Lab Corporation, 2600 Dudley Rd, Kilgore, TX 75662

EET DAL = Eurofins Dallas, 9701 Harry Hines Blvd, Dallas, TX 75220, TEL (214)902-0300

EET HOU = Eurofins Houston, 4145 Greenbriar Dr, Stafford, TX 77477, TEL (281)240-4200

Accreditation/Certification Summary

Client: North Texas Municipal Water District
Project/Site: SBX Permit Renewal

Job ID: 870-27737-1
SDG: 2421003

Laboratory: Eurofins Dallas

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704295-23-34	06-30-24

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
624.1		Water	1,2,4-Trichlorobenzene
624.1		Water	1,3-Dichloropropene, Total
624.1		Water	Vinyl acetate

Laboratory: Eurofins Houston

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704215	06-30-24

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
420.4		Water	Phenols, Total
4500 CN G NonAm	Distill/CN	Water	Cyanide, Non-amenable
608.3	608	Water	Dicofol
608.3	608	Water	Mirex
608.3	608	Water	Polychlorinated biphenyls, Total
615	3511	Water	Hexachlorophene
615	3511	Water	Pentachlorophenol
625.1	625	Water	3 & 4 Methylphenol
625.1	625	Water	4-Nonylphenol
625.1	625	Water	Azobenzene
625.1	625	Water	Total Cresols
632	CWA_Prep	Water	Diuron
SM 3500 CR B		Water	Cr (III)

Method Summary

Client: North Texas Municipal Water District
Project/Site: SBX Permit Renewal

Job ID: 870-27737-1
SDG: 2421003

Method	Method Description	Protocol	Laboratory
624.1	Volatile Organic Compounds (GC/MS)	EPA	EET DAL
625.1	Semivolatile Organic Compounds (GC/MS)	EPA	EET HOU
608.3	Organochlorine Pesticides in Water	EPA	EET HOU
608.3	Polychlorinated Biphenyls (PCBs) (GC)	EPA	EET HOU
615	Herbicides (GC)	EPA-01	EET HOU
632	Carbamate and Urea Pesticides (HPLC)	EPA-01	EET HOU
200.8	Metals (ICP/MS)	EPA	EET HOU
1664B	HEM and SGT-HEM	1664B	EET DAL
335.4	Cyanide, Total	EPA	EET HOU
420.4	Phenolics, Total Recoverable	EPA	EET HOU
4500 CN G NonAm	Cyanide, Non-amenable	SM	EET HOU
7196A	Chromium, Hexavalent	SW846	EET DAL
SM 3500 CR B	Chromium, Trivalent	SM	EET HOU
SM 4500 CN G	Cyanide, Amenable	SM	EET HOU
614	EPA 614 - Organophosphorus Pesticides	EPA	Ana-Lab Co
200.8	Preparation, Total Recoverable Metals	EPA	EET HOU
3511	Microextraction of Organic Compounds	SW846	EET HOU
608	Liquid-Liquid Extraction (Separatory Funnel)	EPA	EET HOU
625	Liquid-Liquid Extraction	EPA	EET HOU
CWA_Prep	Liquid-Liquid Extraction (Separatory Funnel)	EPA	EET HOU
Distill/CN	Distillation, Cyanide	None	EET HOU

Protocol References:

1664B = EPA-821-98-002
EPA = US Environmental Protection Agency
EPA-01 = "Methods For The Determination Of Nonconventional Pesticides In Municipal And Industrial Wastewater", EPA/821/R/92/002, April 1992.
None = None
SM = "Standard Methods For The Examination Of Water And Wastewater"
SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

Ana-Lab Co = Ana-Lab Corporation, 2600 Dudley Rd, Kilgore, TX 75662
EET DAL = Eurofins Dallas, 9701 Harry Hines Blvd, Dallas, TX 75220, TEL (214)902-0300
EET HOU = Eurofins Houston, 4145 Greenbriar Dr, Stafford, TX 77477, TEL (281)240-4200

Sample Summary

Client: North Texas Municipal Water District
Project/Site: SBX Permit Renewal

Job ID: 870-27737-1
Sr G:8c4c WMp

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
870-27737-1	2421003-01 (Effluent TC)	Water	06/12/24 08:55	06/12/24 16:15
870-27737-2	2421003-03 (Effluent G)	Water	06/12/24 08:55	06/12/24 16:15

2600 Dudley Rd. Kilgore, Texas 75662
24 Waterway Avenue, Suite 375 The Woodlands, TX 77380
*Office: 903-984-0551 * Fax: 903-984-5914*

Project
1106902

XNKS-N

Eurofins Xenco
John Builes
9701 Harry Hines Blvd
Dallas, TX 75220

Printed 06/21/2024
17:02

TABLE OF CONTENTS

This report consists of this Table of Contents and the following pages:

2600 Dudley Rd. Kilgore, Texas 75662
24 Waterway Avenue, Suite 375 The Woodlands, TX 77380
*Office: 903-984-0551 * Fax: 903-984-5914*

SAMPLE CROSS REFERENCE

Project
1106902

Printed 6/21/2024 Page 1 of 1
ww

Eurofins Xenco
John Builes
9701 Harry Hines Blvd
Dallas, TX 75220

Sample	Sample ID	Taken	Time	Received
2307581	*2421003-01 EFF*	06/12/2024	08:55:00	06/13/2024

Bottle 01 Client Supplied Amber Glass
Bottle 02 Client Supplied Amber Glass
Bottle 03 Prepared Bottle: OPXL/OPXS 2 mL Autosampler Vial (Batch 1124222) Volume: 1.00000 mL <== Derived from 02 (1019 ml)

Method	Bottle	PrepSet	Preparation	QcGroup	Analytical
EPA 614	03	1124222	06/16/2024	1124933	06/20/2024

Email: Kilgore.ProjectManagement@spllabs.com

2600 Dudley Rd. Kilgore, Texas 75662
24 Waterway Avenue, Suite 375 The Woodlands, TX 77380
Office: 903-984-0551 * Fax: 903-984-5914

SPL The Science of Sure

XNKS-N

Project 1106902

Eurofins Xenco
John Builes
9701 Harry Hines Blvd
Dallas, TX 75220

Printed: 06/21/2024

RESULTS

Sample Results

2307581 **2421003-01 EFF** 870-27737-1 Received: 06/13/2024

Non-Potable Water Collected by: Client Eurofins Xenco PO: US1312966443
Taken: 06/12/2024 08:55:00

EPA 614 Prepared: 1124222 06/16/2024 16:30:00 Analyzed 1124933 06/20/2024 00:40:00 KAP

	Parameter	Results	Units	RL	Flags	CAS	Bottle
NELAC	Azinphos-methyl (Guthion)	<0.0491	ug/L	0.0491		86-50-0	03
z	Chlorpyrifos	<0.0491	ug/L	0.0491		2921-88-2	03
NELAC	Demeton	<0.0491	ug/L	0.0491		8065-48-3	03
NELAC	Diazinon	<0.0491	ug/L	0.0491		333-41-5	03
NELAC	Malathion	0.284	ug/L	0.0491		121-75-5	03
NELAC	Parathion, ethyl	<0.0491	ug/L	0.0491		56-38-2	03
NELAC	Parathion, methyl	<0.0491	ug/L	0.0491		298-00-0	03

Sample Preparation

2307581 **2421003-01 EFF** 870-27737-1 Received: 06/13/2024

US1312966443

06/12/2024

Prepared: 12/31/1899 11:13:37 Calculated 11:13:37 CAL

z	Environmental Fee (per Project)	Verified						

EPA 608.3 Prepared: 1124222 06/16/2024 16:30:00 Analyzed 1124222 06/16/2024 16:30:00 MCC

	Solvent Extraction	1/1019	ml					02

EPA 614 Prepared: 1124222 06/16/2024 16:30:00 Analyzed 1124933 06/20/2024 00:40:00 KAP

2600 Dudley Rd. Kilgore, Texas 75662
24 Waterway Avenue, Suite 375 The Woodlands, TX 77380
Office: 903-984-0551 * Fax: 903-984-5914

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Eurofins Xenco
John Builes
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Dallas, TX 75220

Printed: 06/21/2024

2307581 2421003-01 EFF 870-27737-1 Received: 06/13/2024

US1312966443

06/12/2024

EPA 614 Prepared: 1124222 06/16/2024 16:30:00 Analyzed 1124933 06/20/2024 00:40:00 KAP

z Permit Renewal Phos. Pesticides Entered 03

Qualifiers:

We report results on an As Received (or Wet) basis unless marked Dry Weight.

Unless otherwise noted, testing was performed at SPL, Inc.- Kilgore laboratory which holds International, Federal, and state accreditations. Please see our Websites for details.

(N)ELAC - Covered in our NELAC scope of accreditation
z -- Not covered by our NELAC scope of accreditation

These analytical results relate to the sample tested. This report may NOT be reproduced EXCEPT in FULL without written approval of SPL Kilgore. Unless otherwise specified, these test results meet the requirements of NELAC.
RL is the Reporting Limit (sample specific quantitation limit) and is at or above the Method Detection Limit (MDL). CAS is Chemical Abstract Service number. RL is our Reporting Limit, or Minimum Quantitation Level. The RL takes into account the Instrument Detection Limit (IDL), Method Detection Limit (MDL), and Practical Quantitation Limit (PQL), and any dilutions and/or concentrations performed during sample preparation (EQL). Our analytical result must be above this RL before we report a value in the 'Results' column of our report (without a 'J' flag). Otherwise, we report ND (Not Detected above RL), because the result is "<" (less than) the number in the RL column. MAL is Minimum Analytical Level and is typically from regulatory agencies. Unless we report a result in the result column, or interferences prevent it, we work to have our RL at or below the MAL.

Bill Peery

Bill Peery, MS, VP Technical Services

QUALITY CONTROL

XNKS-N

Eurofins Xenco
John Builes
9701 Harry Hines Blvd
Dallas, TX 75220

Project
1106902

Printed 06/21/2024

Analytical Set 1124933 EPA 614

Blank

Parameter	PrepSet	Reading	MDL	MQL	Units	File
Azinphos-methyl (Guthion)	1124222	ND	41.4	50.0	ug/L	126470703
Chlorpyrifos	1124222	ND	22.6	50.0	ug/L	126470703
Demeton	1124222	ND	31.9	50.0	ug/L	126470703
Diazinon	1124222	ND	19.7	50.0	ug/L	126470703
Malathion	1124222	ND	24.8	50.0	ug/L	126470703
Parathion, ethyl	1124222	ND	23.9	50.0	ug/L	126470703
Parathion, methyl	1124222	ND	27.4	50.0	ug/L	126470703

CCV

Parameter	Reading	Known	Units	Recover%	Limits%	File
Azinphos-methyl (Guthion)	1060	1000	ug/L	106	37.5 - 164	126470701
Azinphos-methyl (Guthion)	1040	1000	ug/L	104	37.5 - 164	126470702
Azinphos-methyl (Guthion)	980	1000	ug/L	98.0	37.5 - 164	126470710
Chlorpyrifos	1040	1000	ug/L	104	45.4 - 176	126470701
Chlorpyrifos	1120	1000	ug/L	112	45.4 - 176	126470702
Chlorpyrifos	1220	1000	ug/L	122	45.4 - 176	126470710
Demeton	1020	1000	ug/L	102	58.6 - 150	126470701
Demeton	1130	1000	ug/L	113	58.6 - 150	126470702
Demeton	1160	1000	ug/L	116	58.6 - 150	126470710
Diazinon	1030	1000	ug/L	103	65.4 - 138	126470701
Diazinon	1130	1000	ug/L	113	65.4 - 138	126470702
Diazinon	1310	1000	ug/L	131	65.4 - 138	126470710
Malathion	1040	1000	ug/L	104	49.5 - 160	126470701
Malathion	1170	1000	ug/L	117	49.5 - 160	126470702
Malathion	1120	1000	ug/L	112	49.5 - 160	126470710
Parathion, ethyl	1030	1000	ug/L	103	56.0 - 142	126470701
Parathion, ethyl	1080	1000	ug/L	108	56.0 - 142	126470702
Parathion, ethyl	956	1000	ug/L	95.6	56.0 - 142	126470710
Parathion, methyl	1050	1000	ug/L	105	12.6 - 194	126470701
Parathion, methyl	1140	1000	ug/L	114	12.6 - 194	126470702
Parathion, methyl	1070	1000	ug/L	107	12.6 - 194	126470710

LCS Dup

Parameter	PrepSet	LCS	LCSD	Known	Limits%	LCS%	LCSD%	Units	RPD	Limit%
Azinphos-methyl (Guthion)	1124222	609	627	1000	0.100 - 155	60.9	62.7	ug/L	2.91	30.0
Chlorpyrifos	1124222	705	666	1000	3.37 - 129	70.5	66.6	ug/L	5.69	30.0
Demeton	1124222	571	554	1000	0.100 - 109	57.1	55.4	ug/L	3.02	30.0
Diazinon	1124222	544	523	1000	0.100 - 125	54.4	52.3	ug/L	3.94	30.0
Malathion	1124222	667	634	1000	0.100 - 130	66.7	63.4	ug/L	5.07	30.0
Parathion, ethyl	1124222	733	688	1000	0.100 - 122	73.3	68.8	ug/L	6.33	30.0
Parathion, methyl	1124222	367	336	1000	0.100 - 131	36.7	33.6	ug/L	8.82	30.0

Surrogate

Parameter	Sample	Type	Reading	Known	Units	Recover%	Limits%	File

Email: Kilgore.ProjectManagement@spllabs.com

QUALITY CONTROL

XNKS-N

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John Builes
9701 Harry Hines Blvd
Dallas, TX 75220

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1106902

Printed 06/21/2024

Surrogate

Parameter	Sample	Type	Reading	Known	Units	Recover%	Limits%	File
Tributylphosphate		CCV	1030	2000	ug/L	51.5	0.100 - 106	126470701
Tributylphosphate		CCV	1110	2000	ug/L	55.5	0.100 - 106	126470702
Tributylphosphate		CCV	1180	2000	ug/L	59.0	0.100 - 106	126470710
Triphenylphosphate		CCV	1030	2000	ug/L	51.5	0.100 - 172	126470701
Triphenylphosphate		CCV	1190	2000	ug/L	59.5	0.100 - 172	126470702
Triphenylphosphate		CCV	1270	2000	ug/L	63.5	0.100 - 172	126470710
Tributylphosphate	1124222	Blank	537	2000	ug/L	26.8	0.100 - 106	126470703
Tributylphosphate	1124222	LCS	723	2000	ug/L	36.2	0.100 - 106	126470704
Tributylphosphate	1124222	LCS Dup	693	2000	ug/L	34.6	0.100 - 106	126470705
Triphenylphosphate	1124222	Blank	547	2000	ug/L	27.4	0.100 - 172	126470703
Triphenylphosphate	1124222	LCS	708	2000	ug/L	35.4	0.100 - 172	126470704
Triphenylphosphate	1124222	LCS Dup	690	2000	ug/L	34.5	0.100 - 172	126470705
Tributylphosphate	2307581	Unknown	643	2000	ug/L	32.2	0.100 - 106	126470709
Triphenylphosphate	2307581	Unknown	431	2000	ug/L	21.6	0.100 - 172	126470709

* Out RPD is Relative Percent Difference: abs(r1-r2) / mean(r1,r2) * 100% Recover% is Recovery Percent: result / known * 100%

Blank - Method Blank (reagent water or other blank matrices that contains all reagents except standard(s) and is processed simultaneously with and under the same conditions as samples; carried through preparation and analytical procedures exactly like a sample; monitors); CCV - Continuing Calibration Verification (same standard used to prepare the curve; typically a mid-range concentration; verifies the continued validity of the calibration curve); LCS Dup - Laboratory Control Sample Duplicate (replicate LCS; analyzed when there is insufficient sample for duplicate or MSD; quantifies accuracy and precision.); Surrogate - Surrogate (mimics the analyte of interest but is unlikely to be found in environmental samples; added to analytical samples for QC purposes. **ANSI/ASQC E4 1994 Ref #4 TRADE QA Resources Guide.)

Eurofins Dallas
9701 Harry Hines Blvd
Dallas, TX 75220
Phone: 214-902-0300

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Garza, Sylvia	Carrier Tracking No(s):	COC No: 870-6401.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Sylvia.Garza@et.eurofinsus.com	State of Origin: Texas	Page: Page 1 of 1
Company: Ana-Lab Corporation		Accreditations Required (See note): NELAP - Texas		Job #: 870-27737-1
Address: 2600 Dudley Rd.	Due Date Requested: 8/21/2024	Analysis Requested		Preservation Codes:
City: Kilgore	TAT Requested (days):			
State, Zip: TX, 75662	PO #:			
Phone:	WO #:			Other:
Email:	Project #: 87000965			
Project Name: SBX Permit Renewal	SSOW#:			
Site:				Special Instructions/Note:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix	SUB (Element Subcontract Method) EPA 614	
2421003-01 (Effluent TC) (870-27737-1)	6/12/24	08.55 Central		Water	X	See Attached Instructions 2600561

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing South Central, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing South Central, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing South Central, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing South Central, LLC.

Possible Hazard Identification: Unconfirmed		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month): ☐ Return To Client ☐ Disposal By Lab ☐ Archive For ____ Months	
Deliverable Requested: I, II, III, IV, Other (specify)	Primary Deliverable Rank: 2	Special Instructions/QC Requirements:	
Empty Kit Relinquished by:	Date:	Time:	Method of Shipment: FEDEX
Relinquished by:	Date/Time: 06/12/24 1700	Company	Received by: JUN 12 2024
Relinquished by: FEDEX	Date/Time: 6/13/24 1015	Company	Received by: Antwon
Relinquished by:	Date/Time:	Company	Received by:
Custody Seals Intact: ∆ Yes ∆ No	Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks

Ver: 04/02/2024

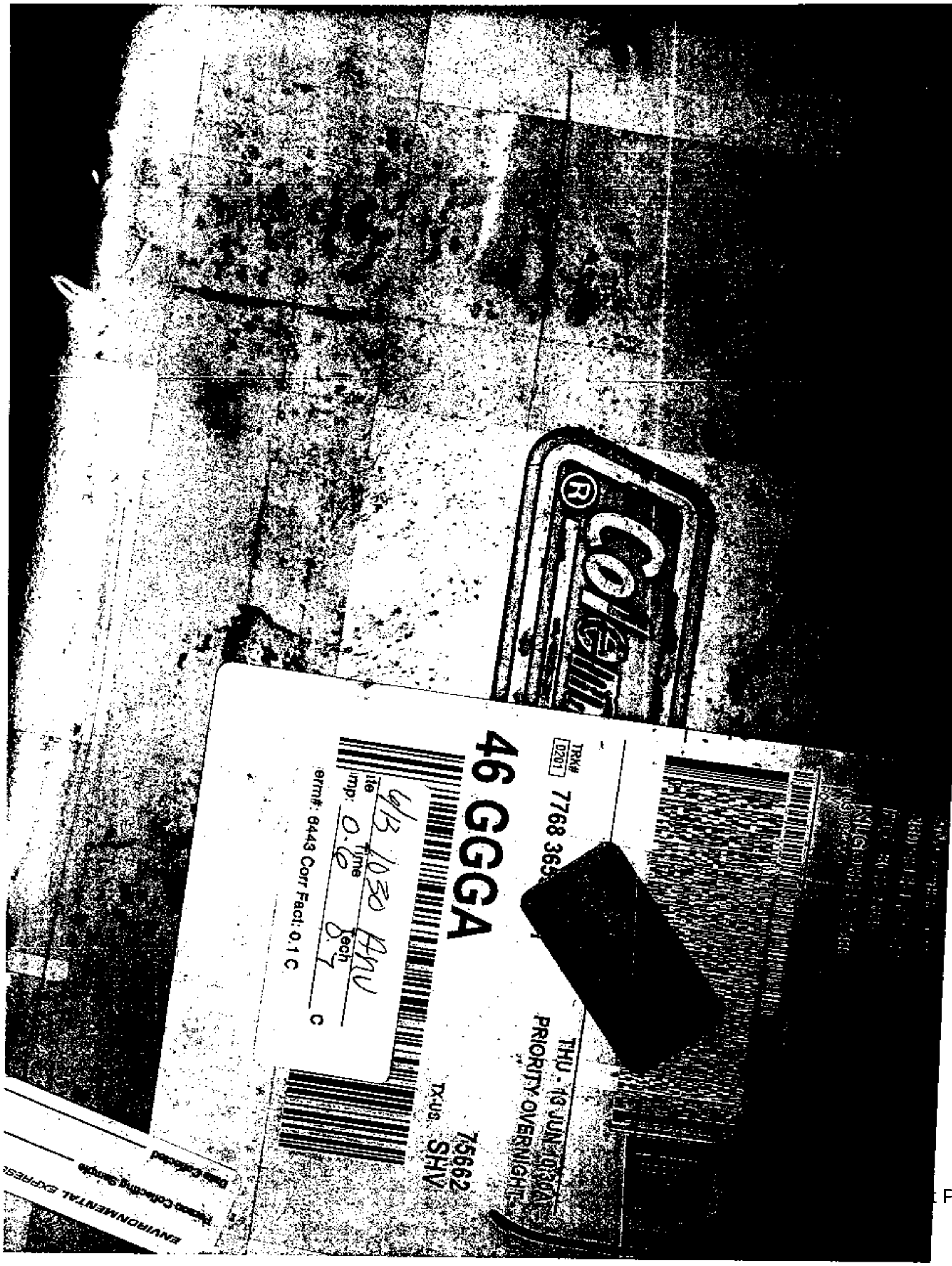
ICOC No:
870-6401

Containers

Count	Container Type	Preservative
2	Amber Glass 1 liter - unpreserved	None

Subcontract Method Instructions

Sample IDs	Method	Method Description	Method Comments
1	SUBCONTRACT	SUB (General Subcontract Method)/ EPA 614	EPA 614/ Need Texas Wastewater MAL's.


46 GGGA
PRIORITY OVERNIGHT
75662
TX-US SHV

Eurofins Eaton Analytical South Bend
110 S. Hill Street
Southbend, IN 46617
Phone: 574-233-4777 Fax: 574-233-8207

Chain of Custody Record

eurofins Environment Testing America

7/25/2024

Client Information	Sampler:	Lab PM: Sylvia Garza	Carrier Tracking No(s):	COC No:
Client Contact: Kelly Harden	Phone: 469-626-4610	E-Mail:	State of Origin:	Page: Page 1 of 1
Company: North Texas Municipal Water District	PWSID:			Job #:
Address: 201 East Brown	Due Date Requested:			
City: Wylie				
State, Zip: Texas 75098	Compliance Project: Δ Yes Δ No			
Phone: 469-626-4610	PO #:			
Email: kharden@ntmwd.com	WO #:			
Project Name: SBX Permit Renewal	Project #:			
Site:	SSOW#:			

Analysis Requested

870-27737 Chain of Custody

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	BNA by EPA 625.1	Pest/PCB by EPA 608.3	Herb by EPA 615	Dioxins by 613/1613	Pest by EPA 1657	Pest by EPA 632	Dioxins by 625.1	Cr, Cr (III), Cr (VI)	Cn, Cn-A	Phenols by 420.1	VOC by EPA 624.1	Oil and Grease	Total Number of containers	Special Instructions/Note:
			Preservation Code:																	
2421003- 01 Effluent TC	6/11/24-6/12/24	850-855	C	W	N		I	I	I	I	I	I	I						14	
2421003- 03 Effluent G	6/12/24	0855	G	W	N									I	B	S	I	S	7	

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1		6/12/24 1443	NTMWD		6/12/24 1443	
2		6-12-24 1615		Leon Hardaway	6-12-24 1615	
3						

Custody Seals Intact: Δ Yes Δ No
Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks: 1.4/1.3 0.0/-0.1 0.2/0.1 THM001 -0.1

Ver: 01/16/2019

Login Sample Receipt Checklist

Client: North Texas Municipal Water District

Job Number: 870-27737-1
SDG Number: 2421003

Login Number: 27737
List Number: 1
Creator: Dabinett, Ian

List Source: Eurofins Dallas

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	

Login Sample Receipt Checklist

Client: North Texas Municipal Water District

Job Number: 870-27737-1
SDG Number: 2421003

Login Number: 27737
List Number: 2
Creator: Baker, Jeremiah

List Source: Eurofins Houston
List Creation: 06/13/24 09:40 AM

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	

ATTACHMENT TR-7
JUSTIFICATION OF NEED

Justification of Permit Need:

The North Texas Municipal Water District (NTMWD) owns and operates Sabine Creek Wastewater Treatment Plant (WWTP) which currently serves the City of Fate and Royse City. The plant was originally constructed in 2006 with 1.5 MGD annual average daily flow (AADF) capacity, and subsequently expanded to 3 M D AADF in 2019, and then construction to expand to 7 M D AADF began in 2024. The Sabine Creek WWTP is currently permitted for Final Phase of 7.0 MGD and based on the flow pro ections of the cities of Fate and Royse City, the Sabine Creek WWTP will require expansion beyond its permitted capacity of 7.0 MGD.

The cities of Fate and Royse City are experiencing rapid population growth. Royse City and the City of Fate are expected to reach build-out populations by the years 2050 and 2035, respectively. The population pro ections for the City of Fate and Royse City, based on data provided by each city, are listed below in Table 1 and Table 2. Connected Population includes the population connected to the wastewater systems, excluding the population utilizing on-site septic facilities.

Table 1: Royse City Population Pro ections

Year	Royse City Total Population	Royse City-Connected Population
2020	16,781	14,161
2025	28,972	26,352
2030	37,575	34,995
2035	60,620	58,000
2040	83,664	81,044
2050	129,753	127,133

Table 2: City of Fate Population Pro ections

Year	City of Fate Total Population	City of Fate-Connected Population
2020	16,105	12,605
2025	25,937	22,437
2030	41,772	38,272
2035	52,542	52,542
2040	52,542	52,542
2050	52,542	52,542

Wastewater flow pro ections using the population pro ections indicated above were developed through the year 2050 for the City of Fate and Royse City and are reproduced in Table 3.

Table 3: Flow pro ections (M D) for the City of Fate and Royse City

City	**2024**	**2025**	**2030**	**2035**	**2040**	**2050**
City of Fate	1.65	1.91	3.25	4.47	4.47	4.47
Royse City	1.40	1.71	3.15	5.22	7.29	11.44
Total	3.05	3.62	6.40	9.69	11.76	15.91

The Texas Pollution Discharge Elimination System (TPDES) permits require compliance with 30 TAC

§305.126 (75/90 rule). This rule requires that permit holders initiate engineering and financial planning for expansion of facilities when flow measurements reach 75% of the permitted average flow for three consecutive months and when flow measurements reach 90% of the permitted average flow for three consecutive months the permit holder obtain authorization from the TCE to commence construction of improvements and expansion. Based on the wastewater flow pro ections indicated in Table 3, a timeline is developed in Table 4 indicating the plant's current, permitted and proposed expansion capacity and the year when the flows will reach 0 of the plant's capacity. Based on the timeline in Table 4, the Sabine Creek WWTP will require expansion beyond its current and permitted capacity of 7.0 M D AADF.

Table 4: Plant Capacity vs ear of pro ected flow at 0 Capacity

Expansion MGD	**Year at Which Flow Reaches 75% Capacity**	**Year at Which Flow Reaches 90% Capacity**
7 (Existing Plant Capacity)	2028	2030
11 (Current Proposed Plant Expansion Capacity)	2033	2036
20 (Current Proposed Plant Expansion Capacity)	2047	N/A

Soon, NTMWD will need to obtain a permit beyond 7.0 M D to meet the permit horizon to accomplish planning, approval, funding, design, and construction by 2028-2030.

The current permit contains the following phases:

Interim I Phase	3.0 MGD
Interim II Phase	5.0 MGD
Final Phase	7.0 MGD

The WWTP is currently operating in the 3.0 M D Phase and NTMWD is constructing the 5.0 and 7.0 M D expansion simultaneously because of the urgent need for the 7.0 M D Phase. The construction of the 7.0 M D Phase is expected to be completed and operational by November 2025. According to population pro ections, planning for the 11 M D Phase should occur in 2028 and the request for authorization to commence construction in 2030. Therefore, the attached application request to amend the permit to:

Interim I Phase	7.0 MGD
Interim II Phase	11.0 MGD
Final Phase	20.0 MGD

By the time the amended permit for 20.0 M D is issued, the construction for 7.0 M D is expected to be completed and the WWTP is expected to be operating on the 7.0 M D Phase.

ATTACHMENT TR-8

MUNICIPALLY INCORPORATED AREAS, UTILITY CCNs, and NEARBY WWTPs or COLLECTION SYSTEMS

Sabine Creek Wastewater Treatment Plant Municipally Incorporated and Utility CCN Areas

The North Texas Municipal Water District (NTMWD) is a conservation and reclamation district and political subdivision of the State of Texas, authorized to acquire, treat, and distribute potable water, and to collect, treat and dispose of wastes, both liquid and solid, in order to reduce pollution, conserve and develop the natural resources of Texas. The NTMWD acts as a regional wholesaler of water, wastewater treatment, and solid waste services to its Member Cities and Customers.

As a result, the NTMWD provides wastewater treatment services to over 1.4 million people located in 24 communities throughout the Dallas metropolitan area. Collin County, which contains some of the fastest-growing communities in the nation, is located in NTMWD's northern service area. To provide regional wastewater service, NTMWD's Sabine Creek Wastewater Treatment Plant (WWTP) accepts wastewater flow from Royse City (Member City of NTMWD) and Fate (Customer City of NTMWD), who provide retail wastewater service within their boundaries, resulting in NTMWD currently providing wholesale wastewater service to more than 26,000 people. This provision of regional wastewater service is accomplished through a regional wastewater service contract between the Cities of Royse City and Fate. Therefore, NTMWD's current and proposed service area for the Sabine Creek WWTP are the municipally incorporated areas, ETJ, and CCNs held by these cities.

NTMWD currently owns and operates the Sabine Creek WWTP that treats wastewater received from these cities.

Domestic Technical Report 1.1, Section 1.B(1-2) requires:

1. Documentation of consent from the Cities to provide service
2. A cost analysis of expenditures that includes the cost of connecting to the cities versus the cost of the proposed facility.

However, such documentation and analysis is not necessary in this instance because the Cities of Royse City and Fate are Member and Customer Cities of NTMWD, and are part of the Sabine Creek Wastewater Collection and Treatment System pursuant to regional wastewater service contract.

Sabine Creek Wastewater Treatment Plant
Nearby WWTPs or Collection Systems

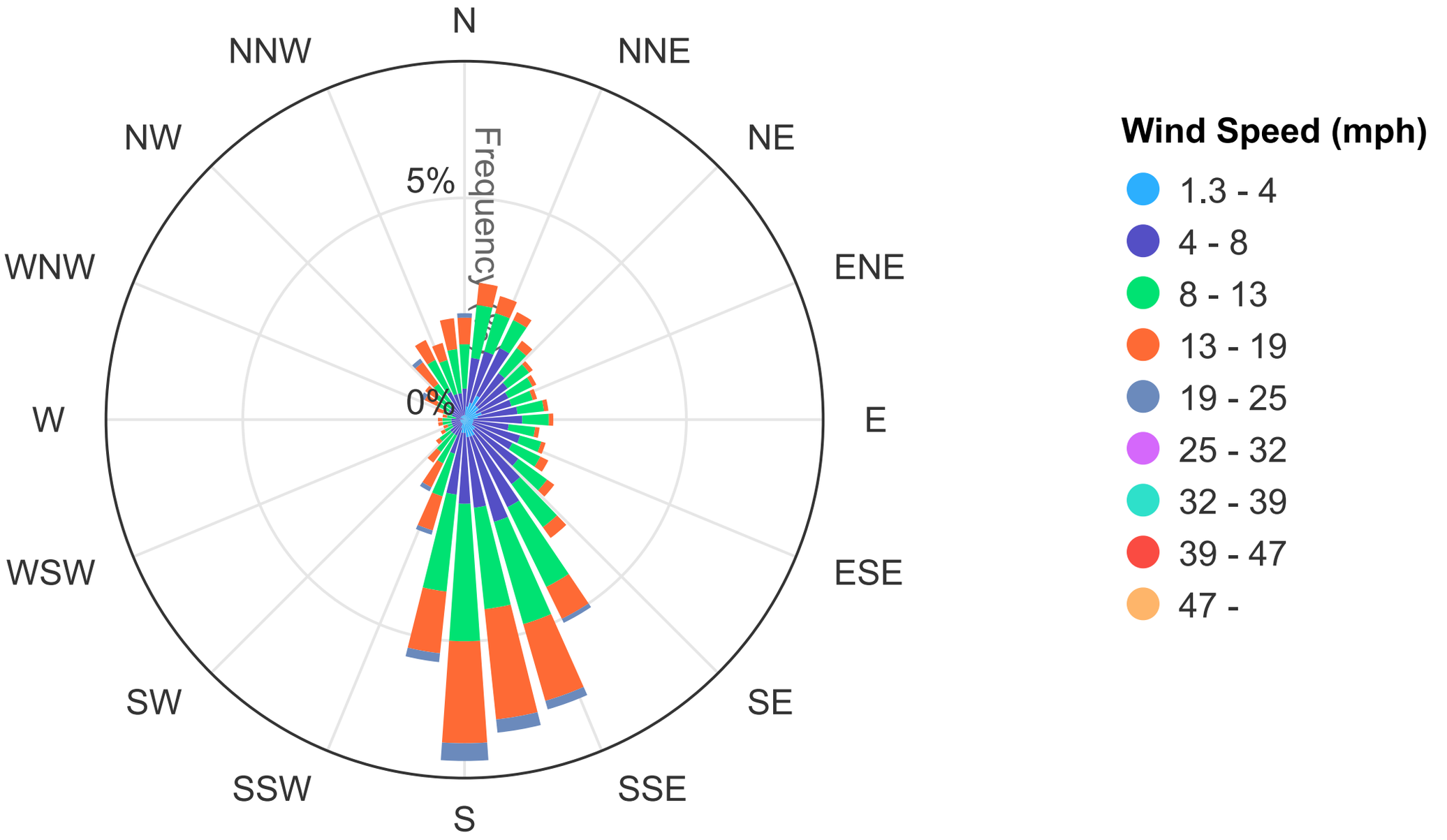
There are no permitted WWTPs within a 3-mile radius of the Sabine Creek WWTP. The Cities of Royse City (CN600656524) and Fate (CN600754485) wastewater collection systems are within a three-mile radius of the Sabine Creek WWTP.

Providing correspondence to/from these cities is not applicable to evaluate the potential for regionalization of domestic wastewater treatment facilities because the Cities of Royse City and Fate are Member and Customer Cities of NTMWD and are part of the Sabine Creek Wastewater Collection and Treatment System pursuant to regional wastewater service contract. The wastewater collection system of these cities are a component of the Sabine Creek Wastewater Collection and Treatment System.

ATTACHMENT TR-9
WIND ROSE

TERRELL MUNICIPAL AP (TX) Wind Rose

August 29, 2019 - August 29, 2024
Sub-Interval: January 1 - December 31, 0 - 24



Click and drag to zoom

ATTACHMENT TR-10
WORKSHEET 2.0
RECEIVING WATERS

DOMESTIC WASTEWATER PERMIT APPLICATION WORKSHEET 2.0: RECEIVING WATERS

The following information is required for all TPDES permit applications.

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

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

☐ Yes ☒ No

If **no**, proceed it Section 2. **If yes**, provide the following:

Owner of the drinking water supply: N/A

Distance and direction to the intake: N/A

Attach a USGS map that identifies the location of the intake.

Attachment: N/A

Section 2. Discharge into Tidally Affected Waters (Instructions Page 64)

Does the facility discharge into tidally affected waters?

☐ Yes ☒ No

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

A. Receiving water outfall

Width of the receiving water at the outfall, in feet: N/A

B. Oyster waters

Are there oyster waters in the vicinity of the discharge?

☐ Yes ☐ No

If yes, provide the distance and direction from outfall(s).

N/A

C. Sea grasses

Are there any sea grasses within the vicinity of the point of discharge?

☐ Yes ☐ No

If yes, provide the distance and direction from the outfall(s).

N/A

Section 3. Classified Segments (Instructions Page 64)

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

☐ Yes ☒ No

If yes, this Worksheet is complete.

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

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

Name of the immediate receiving waters: Parker Creek

A. Receiving water type

Identify the appropriate description of the receiving waters.

☒ Stream

☐ Freshwater Swamp or Marsh

☐ Lake or Pond

Surface area, in acres: N/A

Average depth of the entire water body, in feet: N/A

Average depth of water body within a 500-foot radius of discharge point, in feet: N/A

☐ Man-made Channel or Ditch

☐ Open Bay

☐ Tidal Stream, Bayou, or Marsh

☐ Other, specify: N/A

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: N/A

C. Downstream perennial confluences

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

South Fork Sabine River

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.

Approximately 0.8 miles downstream from the Sabine Creek WWTP outfall, Parker Creek and Sabine Creek converge to form South Fork Sabine River

E. Normal dry weather characteristics

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

The banks are nearly vertical with very little slope at the WWTP outfall. The banks are covered in an abundance of vegetation including, trees, shrubs, and grasses. Approximately 250 meters upstream from the outfall, the stream bed becomes dry with 2 pools observed.

Date and time of observation: 9/5/2023 @ 9:24 AM

Was the water body influenced by stormwater runoff during observations?

☐ Yes ☒ No

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

A. Upstream influences

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

☐ Oil field activities
☐ Upstream discharges
☐ Septic tanks
☒ Urban runoff
☒ Agricultural runoff
☐ Other(s), specify: N/A

B. Waterbody uses

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

- ☒ Livestock watering
- ☐ Irrigation withdrawal
- ☐ Fishing
- ☐ Domestic water supply
- ☐ Park activities
- ☐ Contact recreation
- ☐ Non-contact recreation
- ☐ Navigation
- ☐ Industrial water supply
- ☐ Other(s), specify: N/A

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

ATTACHMENT TR-11
WORKSHEET 2.1
STREAM PHYSICAL CHARACTERISTICS

DOMESTIC WASTEWATER PERMIT APPLICATION WORKSHEET 2.1: STREAM PHYSICAL CHARACTERISTICS

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

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

Section 1. General Information (Instructions Page 66)

Date of study: 2/27/2020 Time of study: 09:00 AM

Stream name: Parker Creek

Location: Sabine Creek WWTP, located at 1513 Crenshaw Road, which is at the southernmost corner of Crenshaw Road, 1 ¼ miles southeast of the intersection of Crenshaw Road and Farm-to-Market 548, near the confluence of Parker Creek and Sabine Creek in Rockwall County.

Type of stream upstream of existing discharge or downstream of proposed discharge (check one).

☐ Perennial ☒ Intermittent with perennial pools

Section 2. Data Collection (Instructions Page 66)

Number of stream bends that are well defined: 1

Number of stream bends that are moderately defined: 1

Number of stream bends that are poorly defined: 6

Number of riffles: 0

Evidence of flow fluctuations (check one):

☐ Minor ☒ moderate ☐ severe

Indicate the observed stream uses and if there is evidence of flow fluctuations or channel obstruction/modification.

There was evidence of moderate flow fluctuations during rain events based on suspended plant and trash debris. Creek banks were steep. Creek bed consisted of gravel and sand from T0-T3 and soft clay between T4-T5. Several tires and leaf litter were observed along the creek bottom. Channel obstruction overserved between T2 -T3 and T4-T5 consisting of tree branches and trash. Minnows and turtles were observed throughout the creek. Cattle grazing observed on properties surrounding creek.

Stream transects

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

Table 2.1(1) - Stream Transect Records

Stream type at transect Select riffle, run, glide, or pool. See Instructions, Definitions section.	**Transect location**	**Water surface width (ft)**	**Stream depths (ft)** at 4 to 10 points along each transect from the channel bed to the water surface. Separate the measurements with commas.
Glide	32.917327, -96.317545	7	0.75, 0.75, 0.8, 0.9, 0.9
Glide	32.917622, -96.316111	16	2.2, 2.3, 2.1, 2.1, 1.7
Glide	32.917884, -96.314609	16	1.2, 1.5, 1.25, 1.4, 1.3
Run	32.917493, -96.313357	15	2.4, 2.8, 3.0, 2.4, 2.5
Run	32.917153, -96.311922	18	3.4, 3.0, 2.2, 1.5, 1.2
Run	32.916275, -96.311743	21	1.9, 2.2, 2.0, 1.5, 1.5

Section 3. Summarize Measurements (Instructions Page 66)

Streambed slope of entire reach, from USGS map in feet/feet: 0.0008

Approximate drainage area above the most downstream transect (from USGS map or county highway map, in square miles): 13

Length of stream evaluated, in feet: 2640

Number of lateral transects made: 6

Average stream width, in feet: 15.5

Average stream depth, in feet: 1.82

Average stream velocity, in feet/second: 0.131

Instantaneous stream flow, in cubic feet/second: 4.662

Indicate flow measurement method (type of meter, floating chip timed over a fixed distance, etc.): FlowTracker2 (Doppler)

Size of pools (large, small, moderate, none): N/A

Maximum pool depth, in feet: N/A

ATTACHMENT TR-12

WORKSHEET 4.0

POLLUTANT ANALYSES REQUIREMENTS

DOMESTIC WASTEWATER PERMIT APPLICATION WORKSHEET 4.0: POLLUTANT ANALYSIS REQUIREMENTS

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

This worksheet is not required minor amendments without renewal.

Section 1. Toxic Pollutants (Instructions Page 78)

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

Grab ☒ Composite ☒

Date and time sample(s) collected: 06/12/2024 08:55 (Grab); 06/11/2024 08:55 to 06/12/2024 08:55 (Composite)

Table 4.0(1) – Toxics Analysis

Pollutant	AVG Effluent Conc. (µg/l)	MAX Effluent Conc. (µg/l)	Number of Samples	MAL (µg/l)
Acrylonitrile	N/A	<50	1	50
Aldrin	N/A	<0.01	1	0.01
Aluminum	N/A	35.4	1	2.5
Anthracene	N/A	<10	1	10
Antimony	N/A	<5	1	5
Arsenic	N/A	1.65	1	0.5
Barium	N/A	44.4	1	3
Benzene	N/A	<10	1	10
Benzidine	N/A	<50	1	50
Benzo(a)anthracene	N/A	<5	1	5
Benzo(a)pyrene	N/A	<5	1	5
Bis(2-chloroethyl)ether	N/A	<10	1	10
Bis(2-ethylhexyl)phthalate	N/A	<10	1	10
Bromodichloromethane	N/A	<10	1	10
Bromoform	N/A	<10	1	10
Cadmium	N/A	<1	1	1
Carbon Tetrachloride	N/A	<2	1	2
Carbaryl	N/A	<5	1	5
Chlordane*	N/A	<0.2	1	0.2
Chlorobenzene	N/A	<10	1	10
Chlorodibromomethane	N/A	<10	1	10

Pollutant	AVG Effluent Conc. (µg/l)	MAX Effluent Conc. (µg/l)	Number of Samples	MAL (µg/l)
Chloroform	N/A	<10	1	10
Chlorpyrifos	N/A	<0.05	1	0.05
Chromium (Total)	N/A	<3	1	3
Chromium (Tri) **(*1)**	N/A	<2	1	N/A
Chromium (Hex)	N/A	8.41	1	3
Copper	N/A	<2	1	2
Chrysene	N/A	<5	1	5
p-Chloro-m-Cresol	N/A	<10	1	10
4,6-Dinitro-o-Cresol	N/A	<50	1	50
p-Cresol	N/A	<10	1	10
Cyanide **(*2)**	N/A	<10	1	10
4,4'- DDD	N/A	<0.1	1	0.1
4,4'- DDE	N/A	<0.1	1	0.1
4,4'- DDT	N/A	<0.02	1	0.02
2,4-D	N/A	<0.7	1	0.7
Demeton (O and S)	N/A	<0.2	1	0.20
Diazinon	N/A	<0.1	1	0.5/0.1
1,2-Dibromoethane	N/A	<10	1	10
m-Dichlorobenzene	N/A	<10	1	10
o-Dichlorobenzene	N/A	<10	1	10
p-Dichlorobenzene	N/A	<10	1	10
3,3'-Dichlorobenzidine	N/A	<5	1	5
1,2-Dichloroethane	N/A	<10	1	10
1,1-Dichloroethylene	N/A	<10	1	10
Dichloromethane	N/A	<20	1	20
1,2-Dichloropropane	N/A	<10	1	10
1,3-Dichloropropene	N/A	<10	1	10
Dicofol	N/A	<1	1	1
Dieldrin	N/A	<0.02	1	0.02
2,4-Dimethylphenol	N/A	<10	1	10
Di-n-Butyl Phthalate	N/A	<10	1	10
Diuron	N/A	<0.09	1	0.09
Endosulfan I (alpha)	N/A	<0.01	1	0.01

Pollutant	AVG Effluent Conc. (µg/l)	MAX Effluent Conc. (µg/l)	Number of Samples	MAL (µg/l)
Endosulfan II (beta)	N/A	<0.02	1	0.02
Endosulfan Sulfate	N/A	<0.1	1	0.1
Endrin	N/A	<0.02	1	0.02
Ethylbenzene	N/A	<10	1	10
Fluoride	N/A	638	1	500
Guthion	N/A	<0.1	1	0.1
Heptachlor	N/A	<0.01	1	0.01
Heptachlor Epoxide	N/A	<0.01	1	0.01
Hexachlorobenzene	N/A	<5	1	5
Hexachlorobutadiene	N/A	<10	1	10
Hexachlorocyclohexane (alpha)	N/A	<0.05	1	0.05
Hexachlorocyclohexane (beta)	N/A	<0.05	1	0.05
gamma-Hexachlorocyclohexane (Lindane)	N/A	<0.05	1	0.05
Hexachlorocyclopentadiene	N/A	<10	1	10
Hexachloroethane	N/A	<20	1	20
Hexachlorophene	N/A	<10	1	10
Lead	N/A	<0.5	1	0.5
Malathion	N/A	0.284	1	0.1
Mercury	N/A	<0.005	1	0.005
Methoxychlor	N/A	<2	1	2
Methyl Ethyl Ketone	N/A	<50	1	50
Mirex	N/A	<0.02	1	0.02
Nickel	N/A	5.91	1	2
Nitrate-Nitrogen	N/A	13200	1	100
Nitrobenzene	N/A	<10	1	10
N-Nitrosodiethylamine	N/A	<20	1	20
N-Nitroso-di-n-Butylamine	N/A	<20	1	20
Nonylphenol	N/A	<333	1	333
Parathion (ethyl)	N/A	<0.1	1	0.1
Pentachlorobenzene	N/A	<20	1	20
Pentachlorophenol	N/A	<5	1	5
Phenanthrene	N/A	<10	1	10

Pollutant	AVG Effluent Conc. (µg/l)	MAX Effluent Conc. (µg/l)	Number of Samples	MAL (µg/l)
Polychlorinated Biphenyls (PCB's) **(*3)**	N/A	<0.2	1	0.2
Pyridine	N/A	<20	1	20
Selenium	N/A	<5	1	5
Silver	N/A	<0.5	1	0.5
1,2,4,5-Tetrachlorobenzene	N/A	<20	1	20
1,1,2,2-Tetrachloroethane	N/A	<10	1	10
Tetrachloroethylene	N/A	<10	1	10
Thallium	N/A	<0.5	1	0.5
Toluene	N/A	<10	1	10
Toxaphene	N/A	<0.3	1	0.3
2,4,5-TP (Silvex)	N/A	<0.3	1	0.3
Tributyltin (see instructions for explanation)	N/A	N/A	N/A	0.01
1,1,1-Trichloroethane	N/A	<10	1	10
1,1,2-Trichloroethane	N/A	<10	1	10
Trichloroethylene	N/A	<10	1	10
2,4,5-Trichlorophenol	N/A	<50	1	50
TTHM (Total Trihalomethanes)	N/A	<10	1	10
Vinyl Chloride	N/A	<10	1	10
Zinc	N/A	17.6	1	5

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

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

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

Section 2. Priority Pollutants

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

Grab ☒ Composite ☒

Date and time sample(s) collected: 06/12/2024 08:55 (Grab); 06/11/2024 08:55 to 06/12/2024 08:55 (Composite)

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

Pollutant	AVG Effluent Conc. (µg/l)	MAX Effluent Conc. (µg/l)	Number of Samples	MAL (µg/l)
Antimony	N/A	<5	1	5
Arsenic	N/A	1.65	1	0.5
Beryllium	N/A	<0.5	1	0.5
Cadmium	N/A	<1	1	1
Chromium (Total)	N/A	<3	1	3
Chromium (Hex)	N/A	8.41	1	3
Chromium (Tri) **(*1)**	N/A	<2	1	N/A
Copper	N/A	<2	1	2
Lead	N/A	<0.5	1	0.5
Mercury	N/A	<0.005	1	0.005
Nickel	N/A	5.91	1	2
Selenium	N/A	<5	1	5
Silver	N/A	<0.5	1	0.5
Thallium	N/A	<0.5	1	0.5
Zinc	N/A	17.6	1	5
Cyanide **(*2)**	N/A	<10	1	10
Phenols, Total	N/A	<10	1	10

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

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

Table 4.0(2)B – Volatile Compounds

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

Table 4.0(2)C – Acid Compounds

Pollutant	AVG Effluent Conc. (µg/l)	MAX Effluent Conc. (µg/l)	Number of Samples	MAL (µg/l)
2-Chlorophenol	N/A	<10	1	10
2,4-Dichlorophenol	N/A	<10	1	10
2,4-Dimethylphenol	N/A	<10	1	10
4,6-Dinitro-o-Cresol	N/A	<50	1	50
2,4-Dinitrophenol	N/A	<50	1	50
2-Nitrophenol	N/A	<20	1	20
4-Nitrophenol	N/A	<50	1	50
P-Chloro-m-Cresol	N/A	<10	1	10
Pentalchlorophenol	N/A	<5	1	5
Phenol	N/A	<10	1	10
2,4,6-Trichlorophenol	N/A	<10	1	10

Table 4.0(2)D – Base/Neutral Compounds

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

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

Table 4.0(2)E - Pesticides

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

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

Section 3. Dioxin/Furan Compounds

A. Indicate which of the following compounds from may be present in the influent from a contributing industrial user or significant industrial user. Check all that apply.

☐ 2,4,5-trichlorophenoxy acetic acid

Common Name 2,4,5-T, CASRN 93-76-5

☐ 2-(2,4,5-trichlorophenoxy) propanoic acid

Common Name Silvex or 2,4,5-TP, CASRN 93-72-1

☐ 2-(2,4,5-trichlorophenoxy) ethyl 2,2-dichloropropionate

Common Name Erbon, CASRN 136-25-4

☐ 0,0-dimethyl 0-(2,4,5-trichlorophenyl) phosphorothioate

Common Name Ronnel, CASRN 299-84-3

☐ 2,4,5-trichlorophenol

Common Name TCP, CASRN 95-95-4

☐ hexachlorophene

Common Name HCP, CASRN 70-30-4

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

N/A

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

☐ Yes ☒ No

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

N/A

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

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

Grab ☐ Composite ☐

Date and time sample(s) collected: N/A

Table 4.0(2)F – Dioxin/Furan Compounds

Compound	Toxic Equivalency Factors	Wastewater Concentration (ppq)	Wastewater Equivalents (ppq)	Sludge Concentration (ppt)	Sludge Equivalents (ppt)	MAL (ppq)
2,3,7,8 TCDD	1	N/A	N/A	N/A	N/A	10
1,2,3,7,8 PeCDD	0.5	N/A	N/A	N/A	N/A	50
2,3,7,8 HxCDDs	0.1	N/A	N/A	N/A	N/A	50
1,2,3,4,6,7,8 HpCDD	0.01	N/A	N/A	N/A	N/A	50
2,3,7,8 TCDF	0.1	N/A	N/A	N/A	N/A	10
1,2,3,7,8 PeCDF	0.05	N/A	N/A	N/A	N/A	50
2,3,4,7,8 PeCDF	0.5	N/A	N/A	N/A	N/A	50
2,3,7,8 HxCDFs	0.1	N/A	N/A	N/A	N/A	50
2,3,4,7,8 HpCDFs	0.01	N/A	N/A	N/A	N/A	50
OCDD	0.0003	N/A	N/A	N/A	N/A	100
OCDF	0.0003	N/A	N/A	N/A	N/A	100
PCB 77	0.0001	N/A	N/A	N/A	N/A	0.5
PCB 81	0.0003	N/A	N/A	N/A	N/A	0.5
PCB 126	0.1	N/A	N/A	N/A	N/A	0.5
PCB 169	0.03	N/A	N/A	N/A	N/A	0.5
Total		N/A	N/A	N/A	N/A	

ATTACHMENT TR-13
WORKSHEET 5.0
TOXICITY TESTING REQUIREMENTS

DOMESTIC WASTEWATER PERMIT APPLICATION WORKSHEET 5.0: TOXICITY TESTING REQUIREMENTS

The following **is required** for facilities with a current operating design flow of**1.0 MGD or greater**, with an EPA-approved **pretreatment** program (or those required to have one under 40 CFR Part 403), or are required to perform Whole Effluent Toxicity testing. See instructions for further details.

This worksheet is not required minor amendments without renewal.

Section 1. Required Tests (Instructions Page 88)

Indicate the number of 7-day chronic or 48-hour acute Whole Effluent Toxicity (WET) tests performed in the four and one-half years prior to submission of the application.

7-day Chronic: 36

48-hour Acute: 16

Section 2. Toxicity Reduction Evaluations (TREs)

Has this facility completed a TRE in the past four and a half years? Or is the facility currently performing a TRE?

☐ Yes ☒ No

If yes, describe the progress to date, if applicable, in identifying and confirming the toxicant.

N/A

Section 3. Summary of WET Tests

If the required biomonitoring test information has not been previously submitted via both the Discharge Monitoring Reports (DMRs) and the Table 1 (as found in the permit), provide a summary of the testing results for all valid and invalid tests performed over the past four and one-half years. Make additional copies of this table as needed.

Table 5.0(1) Summary of WET Tests

Test Date	Test Species	NOEC Survival	NOEC Sub-lethal
DMRs submitted via NetDMR. Table 1s submitted to TCEQ email WET@tceq.texas.gov			

ATTACHMENT TR-14
WORKSHEET 6.0
INDUSTRIAL WASTE CONTRIBUTION

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: 2

Average Daily Flows, in MGD: 0.032

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.

N/A

C. Treatment plant pass through

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

☐ Yes ☒ No

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

N/A

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.

N/A

B. Non-substantial modifications

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

☐ Yes ☒ No

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

N/A

C. Effluent parameters above the MAL

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

Table 6.0(1) – Parameters Above the MAL

Pollutant	Concentration	MAL	Units	Date
N/A				

D. Industrial user interruptions

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

☐ Yes ☒ No

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

N/A

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

A. General information

Company Name:See Attachments "Industrial User No. 1" and Industrial User No.2"

SIC Code: N/A

Contact name: N/A

Address: N/A

City, State, and Zip Code: N/A

Telephone number: N/A

Email address: N/A

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: N/A

Discharge Type: ☐ Continuous ☐ Batch ☐ Intermittent

E. Pretreatment standards

Is the SIU or CIU subject to technically based local limits as defined in the *i*nstructions?

☐ 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: N/A

Subcategories: N/A

Category: N/A

Subcategories: N/A

Category: N/A

Subcategories: N/A

Category: N/A

Subcategories: N/A

Category: N/A

Subcategories: N/A

F. Industrial user interruptions

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

☐ Yes ☐ No

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

N/A

Industrial User No. 1

Bell's Plating

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

A. General information

Company Name: Bell's Plating

SIC Code: 3471

Contact name: Michael Bray

Address: 1115 Industrial Drive

City, State, and Zip Code: Royse City, TX 75189

Telephone number: 972-635-9505

Email address: bellsplating@coolaccess.net

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).

The IU performs powder coating and electroplating (nickel plating). The IU does very little if any electroplating currently.

C. Product and service information

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

Miscellaneous steel/aluminum parts

D. Flow rate information

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

Process Wastewater:

Discharge, in gallons/day: IU does not discharge process wastewater

Discharge Type: ☐ Continuous ☐ Batch ☐ Intermittent

Non-Process Wastewater:

Discharge, in gallons/day: 3,000 gpd – Discharges sanitary only

Discharge Type: ☒ Continuous ☐ Batch ☐ Intermittent

E. Pretreatment standards

Is the SIU or CIU subject to technically based local limits as defined in the *i*nstructions?

☒ 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: 40 CFR 433.17

Subcategories: N/A

Category: N/A

Subcategories: N/A

Category: N/A

Subcategories: N/A

Category: N/A

Subcategories: N/A

Category: N/A

Subcategories: N/A

F. Industrial user interruptions

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

☐ Yes ☒ No

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

N/A

Industrial User No. 2
Brown's Die Casting

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

A. General information

Company Name: Brown's Die Casting

SIC Code: 3544

Contact name: Mark Brown

Address: 1209 Industrial Drive

City, State, and Zip Code: Royse City, TX 75189

Telephone number: 972-636-9575

Email address: mbbdc@bdcinc.com

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).

The IU performs casting of raw aluminum. Non-contact cooling water is used in a closed loop system that is not tied to the sewer. Primary water consumption is from additional make-up water added to account for loss due to evaporation. This water is not discharged.

C. Product and service information

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

Miscellaneous aluminum cast parts

D. Flow rate information

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

Process Wastewater:

Discharge, in gallons/day: IU does not discharge process wastewater

Discharge Type: ☐ Continuous ☐ Batch ☐ Intermittent

Non-Process Wastewater:

Discharge, in gallons/day: 25,500 gpd – Discharges sanitary only

Discharge Type: ☒ Continuous ☐ Batch ☐ Intermittent

E. Pretreatment standards

Is the SIU or CIU subject to technically based local limits as defined in the *i*nstructions?

☒ 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: 40 CFR 464.16

Subcategories: N/A

Category: N/A

Subcategories: N/A

Category: N/A

Subcategories: N/A

Category: N/A

Subcategories: N/A

Category: N/A

Subcategories: N/A

*The IU performs CIU activities but does not discharge process wastewater. IUs that do not discharge process wastewater are listed as an SIU.

F. Industrial user interruptions

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

☐ Yes ☒ No

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

N/A

ATTACHMENT 12
DESIGN CALCULATIONS

Influent Flow and Loading

Influent Flow

NTMWD provided historical operating data for the plant for January 2017 to December 2023. The hourly effluent flow was converted to daily average flow for further evaluation. Daily average effluent flow, linear regression, and 30-day moving average flow are shown in Figure 1. Table 1 shows the pertinent annual flow parameters from the historical data provided.

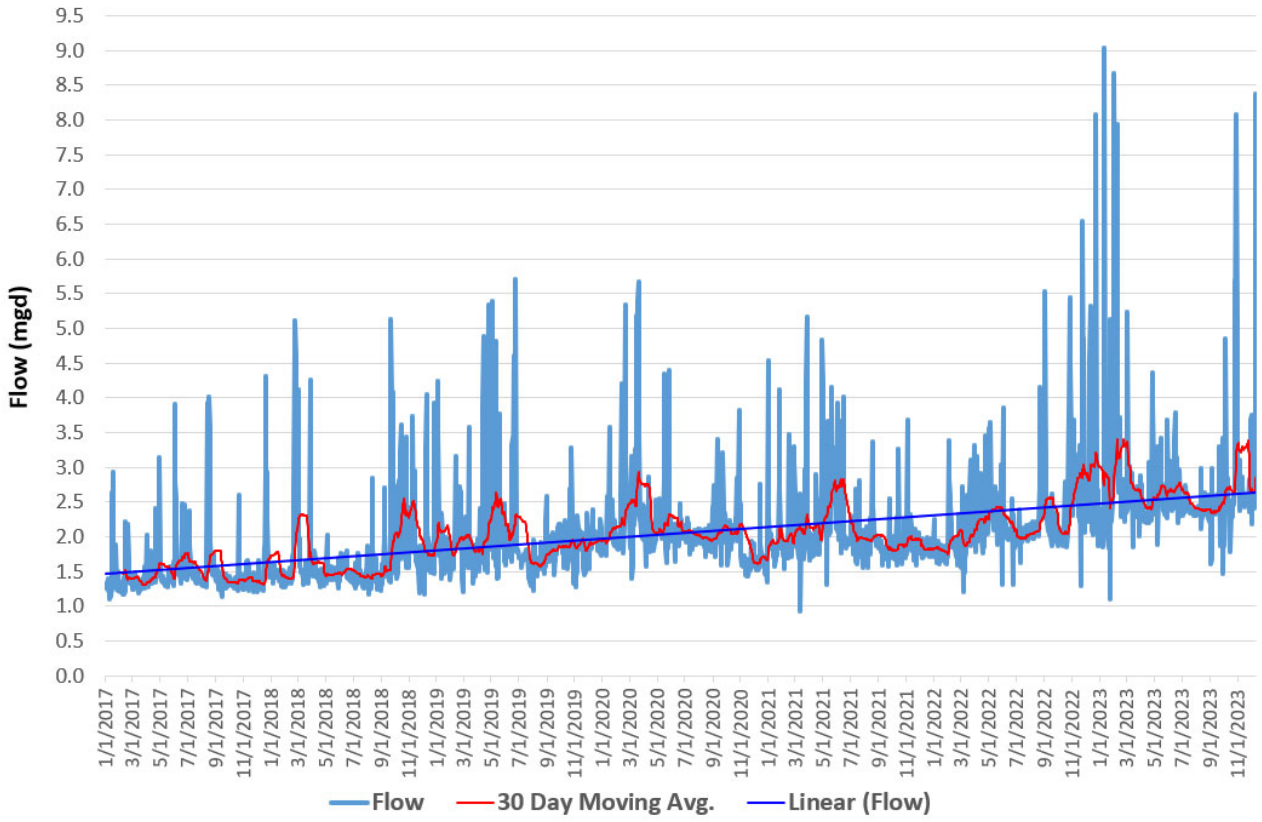


Figure 1: Daily effluent flow 2017 – 2023*

*A small set of data points were ignored due to flow values being off by orders of magnitude from other flow values.

Table 1: Summary of Influent Flow Parameters

Parameter	2017	2018	2019	2020	2021	2022	2023
Estimated Connected Population	17,446	20,324	23,223	26,766	30,812	34,858	38,904
Annual Average Daily Flow (MGD)	1.5	1.73	1.96	2.12	2.07	2.31	2.71
Maximum 30-day Flow (MGD)	1.8	2.54	2.64	2.92	2.83	3.21	3.41
Maximum Day Flow (MGD)	4.32	5.13	5.7	5.67	5.17	8.08	9.03
Peak 2-hour Flow (MGD)	5.4	5.73	6.7	6.5	N/A*	N/A*	N/A*
Peak 2-hour Factor	3.6	3.3	3.4	3.1	N/A*	N/A*	N/A*
Per Capita Flow (gal/cap/d)	86	85	84	79	67	66	70

*Flow data for the years 2021, 2022, and 2023 are only daily averages, so Peak 2-hour Flow and Peak 2-hour Factor could not be calculated.

Plant Influent BOD, TSS and Ammonia Load:

NTMWD provided historical data from January 2017 to December 2023 for plant influent characteristics including influent BOD, TSS and ammonia. Figure 2 shows the revised influent BOD and TSS concentration and Figure 3 shows the influent ammonia concentrations for year 2017 through 2023.

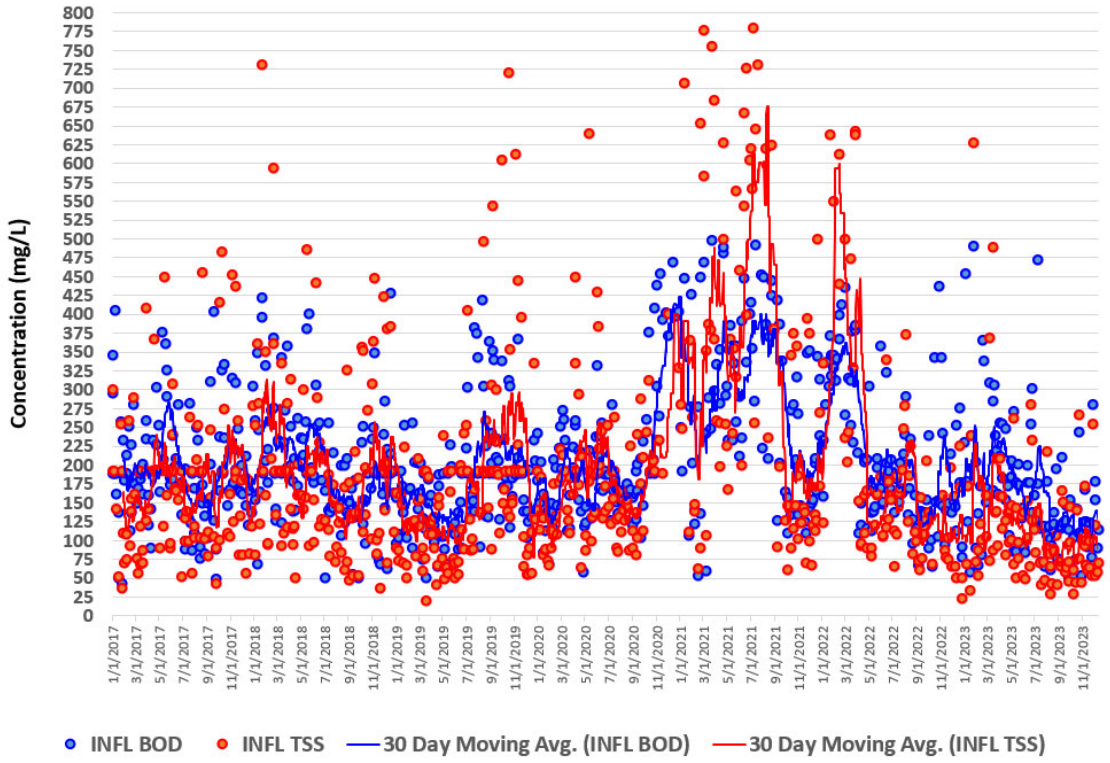


Figure 2: Plant influent BOD and TSS concentration 2017 – 2023

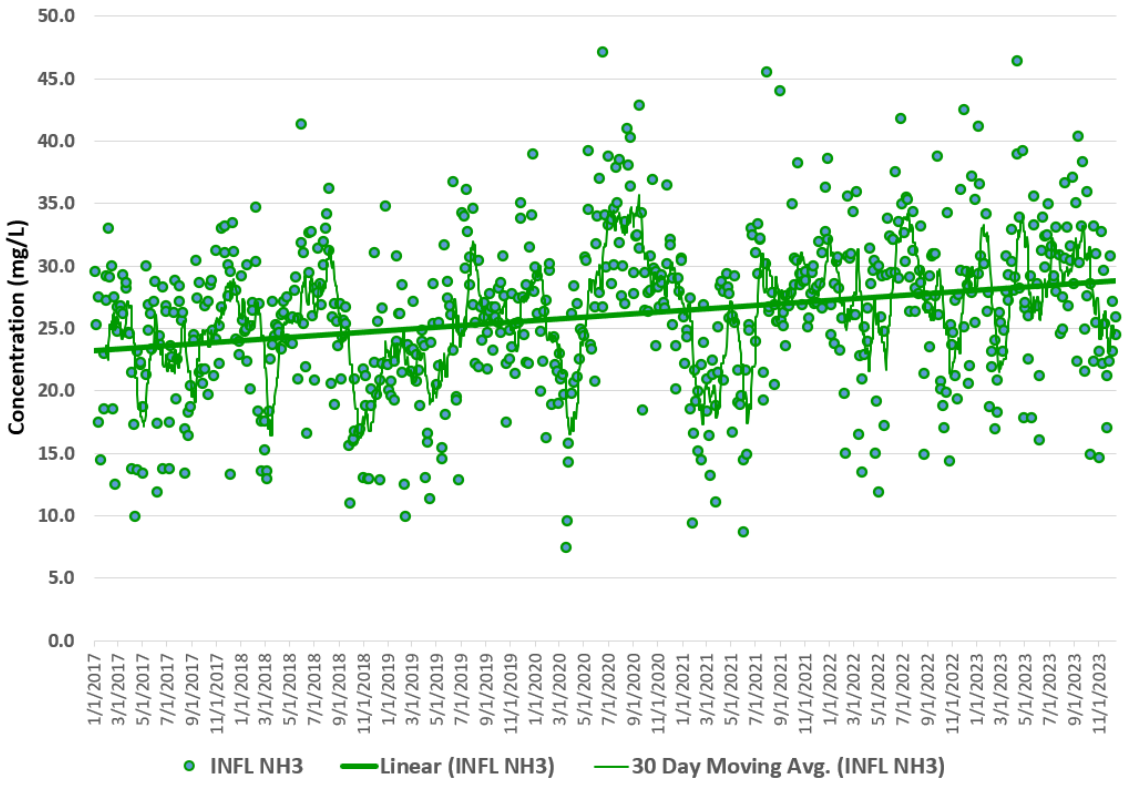


Figure 3: Influent ammonia concentration 2017 – 2023

Based on this historical data, the annual averages for influent BOD, TSS, and ammonia concentrations, mass loads and per capita contributions for 2017 – 2023 are summarized in Table 2. The long-term average concentrations of BOD, TSS and ammonia are summarized in Table 3. The maximum 30-day moving average will be used as the basis for the 30-day Maximum Month load design criteria.

Table 2: Influent Load Parameters

Year	Flow (MGD)	BOD			TSS			NH3-N		
		mg/L	lb/d	lb/c/d	mg/L	lb/d	lb/c/d	mg/L	lb/d	lb/c/d
2017	1.5	196	2452	0.14	173	2164	0.12	23.9	299	0.017
2018	1.73	199	2871	0.14	194	2799	0.14	24.1	348	0.017
2019	1.96	179	2926	0.13	168	2746	0.12	24.9	407	0.018
2020	2.12	182	3218	0.12	175	3094	0.12	28.1	497	0.019
2021	2.07	279*	4817	0.16	331*	5714	0.19	25.6	442	0.017
2022	2.31	209	4026	0.12	190	3660	0.11	27.4	527	0.020
2023	2.71	165	3729	0.10	119	2690	0.07	28.3	639	0.024

*Values for BOD and TSS were significantly higher from November 2020 through March 2022, likely due to the COVID-19 pandemic. The Sabine Creek service area is located approximately 30 miles outside of Dallas, so it is likely that many of the population would typically commute into Dallas during the workday. Since the pandemic caused most people to work from home, this may have caused the significant increase in BOD and TSS loading during this period.

Table 3: Average Day and Maximum 30-day Concentration 2017 – 2023*

Parameter	Average Day Design Concentration	Average 30-day Maximum Concentration
BOD (mg/L)	189	263
TSS (mg/L)	170	278
NH3-N (mg/L)	26.0	34.3

*BOD and TSS data from November 1, 2020 through March 31, 2022 is excluded from these calculations due to increased loading, likely from the COVID-19 pandemic.

Current Effluent Permit Limits and Plant's Performance

NTMWD provided the historical effluent quality data for January 2017 through December 2023. Based on the data provided, the effluent CBOD, TSS and NH3-N are well within the permitted effluent limits. Table 4 shows the current daily average effluent limits per the TPDES permit and Table 5 shows the plant's annual average effluent quality for 2017-2023.

Table 4: Current Permitted Effluent Limits

Parameter	Daily Average Effluent Limit
CBOD (mg/L)	10
TSS (mg/L)	15
NH3-N (mg/L)	2

Table 5: Annual Average Effluent Quality 2017-2023

Parameter	2017	2018	2019	2020	2021	2022	2023
CBOD (mg/L)	2	2	2	2	2	2	2
TSS (mg/L)	2	2	2	1	1	2	1
NH3-N (mg/L)	0.28	0.57	0.32	0.5	1.0	0.73	1.02

Proposed Expansion Design Features

The plant is currently permitted for 7 MGD AADF with 21.0 MGD P2HF. As indicated in the previous section, the proposed expansions are for 11 MGD AADF with 44 MGD P2HF, and then 20 MGD AADF with 80 MGD P2HF, both with a peaking factor of 4. Hence the proposed expansions will include new facilities such that the existing and new facilities combined will handle 11 MGD AADF and 44 MGD peak flow, and then 20 MGD AADF and 80 MGD peak flow. The current plant expansion will be completed in 2025 and will expand the plant from 3 MGD AADF with 9 MGD P2HF (3 MGD) to 7 MGD AADF with 21.0 MGD P2HF (7 MGD).

The 7 MGD expansion facilities will operate as a separate treatment train in parallel with the 3 MGD facilities, except that several process interconnections are being made between the two treatment trains to create operational flexibility. Treatment Train A includes the aeration basins and secondary clarifiers from the original 3 MGD plant and has an AADF capacity of 3 MGD. Treatment Train B includes the aeration basins and secondary clarifiers being added in the 7 MGD expansion and has an AADF capacity of 4 MGD.

The new facilities to be installed in the next two expansion phases will add capacity to Train B (the previously installed facilities from the 7 MGD expansion), still operating in parallel with Train A (the original 3 MGD treatment train). Primary clarifiers will serve both treatment trains. Solids from both treatment trains will be combined for dewatering and handling. The facilities being added in the 7 MGD expansion are considered existing in this narrative.

The long-term average concentrations of influent BOD, TSS and ammonia are summarized in Table 8 and will be used as the design criteria for the proposed expansion. The proposed expansion will meet the current TPDES permitted effluent limits summarized in Table 4.

Treatment Facilities and Equipment

The following facilities are sized based on the regulations listed in 30 TAC Chapter 217.

Influent Lift Station

A new dry pit influent lift station (No. 2) was installed in the (7 MGD) plant expansion with 5 total pumps, 4 duty pumps and 1 standby pump, with a firm lift station capacity of 14 MGD. Out of the 5 pumps, 2 pumps are jockey pumps (2 MGD each) and 3 pumps are large pumps (5 MGD each) with 1 large pump as a standby pump. This was in addition to the existing (3 MGD) lift station (No. 1), which contains 5 pumps and has a firm capacity of 9 MGD.

For the first expansion phase to 44 MGD P2HF, the 2 jockey pumps in influent lift station No. 2 are proposed to be replaced with large pumps, and an additional 4 large pumps are proposed to be added for a total of 9 large pumps (8 duty and 1 standby). These large pumps will operate at 4.5 MGD each, for a firm capacity of 36 MGD. The combined firm capacity of the two lift stations will be 45 MGD. The new pumps will have variable frequency drives like the existing, located in a separate electrical building immediately adjacent to the lift station. A new 24-inch force main will be added to the headworks facility and interconnections will be made between the existing force mains and the new force main to allow flexibility of operation.

For the second expansion phase to 80 MGD P2HF, a third lift station (No. 3) is proposed to be added with 9 large pumps (8 duty and 1 standby). The pumps in the new lift station will operate at 4.5 MGD each for a firm capacity of 36 MGD. The combined firm capacity of the three lift stations will be 81 MGD. The new pumps will also have variable frequency drives in a new separate electrical building dedicated to the third lift station. A new 36-inch force main will be added to the headworks facility and interconnections will be made between the existing force mains and the new force main to allow flexibility of operation.

Headworks:

The existing headworks have three ¼-inch-opening fine step screens with a total 32 MGD installed capacity and 2 bypass manual screens. For the first expansion, it is proposed to add two ¼-inch- opening 16 MGD fine step screens in this project with bypass manual screens, and a washer compactor. The installed capacity of 64 MGD will exceed the 44 MGD required for this expansion.

For the second expansion, it is proposed to add an additional two ¼-inch-opening 16 MGD fine step screens with bypass manual screens and washer compactors. This will bring the total installed capacity to 96 MGD, which meets the requirements of the second expansion.

The existing headworks have a 16 MGD and a 20 MGD forced-vortex grit chambers with grit pumps, cyclone separators, and grit classifiers. For the first expansion, it is proposed to add one 20 MGD grit chamber with a grit pump, cyclone separator, and grit classifier. For the second expansion, it is proposed to add an additional two 20 MGD forced-vortex grit tanks with grit pumps, cyclone separators, and grit classifiers.

Primary Clarifiers

Three 100-ft primary clarifiers are proposed to be added in the first expansion. The existing plant does not have any primary clarifiers. Flows from both headworks facilities will be combined and sent to the primary clarifiers. The new 100-ft primary clarifiers will be designed for up to 5.0 MGD each at design flow and up to 20.0 MGD each at peak flows. This capacity will total to more than the 11 MGD design flow and 44 MGD peak flow required for this expansion.

One additional 100-ft primary clarifier is proposed to be added in the second expansion with the same design criteria. The combined four primary clarifiers will have a design flow rate capacity of

20.0 MGD and a peak flow capacity of 80.0 MGD. The primary clarifier design criteria are included in Table 6.

Table 6: Proposed Expansion Primary Clarifier Design Criteria

Parameter	**Design Criteria**		**TCEQ Design Standard**
	11 MGD Expansion	**20 MGD Expansion**	
Total number of clarifiers	3 new, 3 total	1 new, 4 total	
Diameter, feet	100	100	
Side Water Depth, feet	18	18	>10 30 TAC 217.129(d)(3)
Design Average, MGD (each)	3.7	5.0	
Peak Flows, MGD (each)	14.7	20.0	
Surface Loading Rate at Design flow, gpd/ft2	467	637	<1,000
Surface Loading rate at P2HF, gpd/ft2	1,867	2,546	<1,800 *2,000-3,000 per Metcalf and Eddy
Effluent Weir Loading Rate at P2HF, gpd/ft	46,685	63,662	<30,000
Detention time at P2HF, hrs	1.7	1.3	>0.9

For the 11 MGD and 20 MGD expansions, the respective proposed P2HF surface loading rates are 1,867 gpd/ft2 and 2,546 gpd/ft2, and the proposed effluent weir loading rates are 46,685 gpd/ft and 63,662 gpd/ft, as shown in Table 6. These are in exceedance of the TCEQ requirements. The surface overflow rates are based on Metcalf & Eddy, which allow for 2,000-3,000 gpd/ft^2 at peak flows. The effluent weir loading rates being in exceedance of the TCEQ requirements does not impact the effectiveness of the treatment process since there are additional downstream treatment units for nutrient and solids removal.

Primary Sludge Pumps

A new primary sludge pump station will be installed with the 11 MGD expansion. The pump station will initially serve primary clarifiers 1, 2, and 3 and will house five primary sludge pumps (three duty and two standby units). For the 20 MGD expansion, an additional pump will be added to the primary sludge pump station to serve primary clarifier 4, for a total of six pumps (four duty and two standby units). The new primary sludge pumps have been designed to meet the effluent requirements at the design capacity of 11 MGD AADF and 20 MGD AADF for the respective expansions, pumping sludge for 8 hours per day, 7 days per week. The design parameters associated with the new sludge pumps are listed in Table 7.

Table 7: Proposed Primary Sludge Pump Design Criteria

Parameter	Design Criteria		TCEQ Design Standard
	11 MGD Expansion	**20 MGD Expansion**	
No. of primary sludge pumps	5 new, 5 total (3 duty, 2 standby)	1 new, 6 total (4 duty, 2 standby)	
Capacity	72.0 gpm each at 50' TDH	98.1 gpm each at 50' TDH	
Type	Vertical centrifugal, VFD Operated	Vertical centrifugal, VFD Operated	

Aeration Basins

Treatment Train A includes the original four 0.75 MGD capacity aeration basins, with a total AADF capacity of 3.0 MGD. Treatment Train B includes the two 2.0 MGD capacity aeration basins added in the 7 MGD expansion, with a total AADF capacity of 4.0 MGD.

Two new aeration basins will be added to Train B in the 11 MGD expansion with a capacity of 2 MGD each (for a total of 4 aeration basins and an AADF capacity of 8.0 MGD in Train B). In the 20 MGD expansion, an additional 6 new aeration basins will be added to Train B with a capacity of 2 MGD each (for a total of 10 aeration basins and an AADF capacity of 20.0 MGD in Train B). The original four 0.75 MGD capacity aeration basins from Train A will be decommissioned and converted to sludge storage tanks as part of the 20 MGD expansion. The existing and proposed aeration basins combined will provide 11 MGD treatment capacity (for the 11 MGD expansion) and 20 MGD treatment capacity (for the 20 MGD expansion). The mode of operation for the aeration basins will be plug flow. The aeration basin design criteria are included in Table 8 and aeration blower design criteria are included in Table 9.

Table 8: Train B Proposed Expansion Aeration Basin Design Criteria

Parameter	Design Criteria		TCEQ Design Standard
	11 MGD Expansion	**20 MGD Expansion**	
Design AADF (MGD)	8.0	20.0	
Solids Retention Time (SRT), days	6.4-10	6.4-10	>6.38 @ 15 degrees C [Table F.8 Figure: 30 TAC 17.164(c)(3)]
Influent BOD, mg/L	189	189	
Influent BOD Loading, lb/day	9,347	26,796	
Organic Loading Rate (BOD5 lbs/day/1,000cf)	35	35	<35 @ 15 degrees C [Table F.1 Figure: 30 TAC 217.154(b)(2)]
Influent TSS, mg/L	170	170	

Mixed-Liquor Suspended Solids, mg/L	3,000 – 4,000	3,000 – 4,000	2,000-5,000 [30 TAC 217.156(a)(7)]
Total Number of Aeration Basins	2 new, 4 total Basins, 3 Zones each	6 new, 10 total Basins, 3 Zones each	
Side Water Depth, feet	20	20	
Total Aeration Basin Size, Each	150 feet x 30 feet x 20 feet 673,200 gallons	150 feet x 30 feet x 20 feet 673,200 gallons	

Table 9: Train B Aeration Blower Design Criteria

Parameter	**Design Criteria**		**TCEQ Design Standard**
	11 MGD Expansion	**20 MGD Expansion**	
No. of Blowers	1 new, 3 total (2 duty, 1 standby)	3 new, 6 total (5 duty, 1 standby)	
Blower Type	Single Stage Centrifugal Integrally Geared Blowers	Single Stage Centrifugal Integrally Geared Blowers	
O2R, lb O2/lb BOD applied	2.2	2.2	2.2 Minimum Per Table F.3 Figure: 30 TAC 217.155(a)(3)]
Air flow/BOD5 load (Standard cubic feet/day/pound)	3,317	3,317	>3200 [Table F.4 Figure: 30 TAC 217.155(b)(1)]
Air Capacity	5,000 SCFM per blower	5,000 SCFM per blower	
Pressure	11.2 psi (w/ 20 feet SWD)	11.2 psi (w/ 20 feet SWD)	
Diffuser Type	9” Membrane Disc	9” Membrane Disc	
Diffuser Submergence Depth	19 ft	19 ft	12 ft
SOTE	26% Clean water 12% Adjusted	26% Clean water 12% Adjusted	26% Maximum 30 TAC 217.155(b)(2)(A)(iii) 30 TAC 217.155(b)(2)(B)(i)
AOR lb O2/hour Zone 3 (Aerated Zone)	240 – Grid 1 160 – Grid 2 120 – Grid 3	240 – Grid 1 160 – Grid 2 120 – Grid 3	Maintain min D.O of 2.0 mg/l 30 TAC 217.154(b)(1)

Secondary Clarifiers

Train A includes the original two 50-ft diameter and one 70-ft diameter secondary clarifiers that receive an AADF loading of 3.0 MGD. Train B includes the two 100-ft secondary clarifiers added in

the 7 MGD expansion that receive an AADF loading of 4.0 MGD. Train A and Train B combine to have a total capacity of 7 MGD design flow and 27.8 MGD peak flow.

Three new 100-ft diameter secondary clarifiers will be added in the 11 MGD expansion. The new 100-foot-diameter clarifiers will be added to Train B and will be designed for 2 MGD design flow each. Each clarifier can handle up to 9.4 MGD peak 2-hour flow (based on TCEQ criteria of surface loading rate for clarifiers during peak flow). Hence, the existing and proposed clarifiers combined will provide 13 MGD design flow capacity and will be able to handle more than 44 MGD peak 2-hour flow for the 11 MGD expansion.

An additional four 100-ft diameter secondary clarifiers will be added to the Train B in the 20 MGD expansion. The new 100-foot-diameter clarifiers will be identical to those added in the 11 MGD expansion. The existing and proposed clarifiers combined will provide 21 MGD design flow capacity and will be able to handle more than 80 MGD peak 2-hour flow for the 20 MGD expansion.

The secondary clarifier design criteria are included in Table 10.

Table 10: Train B Proposed Expansion Secondary Clarifier Design Criteria

Parameter	**Design Criteria**		**TCEQ Design Standard**
	11 MGD Expansion	**20 MGD Expansion**	
Number of clarifiers	3 new, 5 total (4 duty, 1 standby)	4 new, 9 total (8 duty, 1 standby)	
Diameter, feet	100	100	
Side Water Depth, feet	18	18	>10 30 TAC 217.152(g)(2)(A)
Design Average, MGD (each)	2.0	2.1	
Peak Flows, MGD (each)	8.8	8.9	
Surface Loading Rate at Design flow, gpd/ft2	255	271	
Surface Loading rate at P2HF, gpd/ft2	1,114	1,130	<1200
Effluent Weir Loading Rate at P2HF, gpd/ft	27,852	28,250	<30,000
Detention time at P2HF, hrs	2.90	2.86	>1.8

Secondary Sludge Pumps:

There are currently two secondary sludge pump stations. One secondary sludge pump station (No.1) serves the 50-ft and 70-ft secondary clarifiers (No. 1, No. 2, and No. 3) in Train A and will remain in service. A new secondary sludge pump station (No. 2) was constructed in the 7 MGD

expansion to serve the two new 100-ft secondary clarifiers also constructed in that expansion (No. 4 and 5) in Train B. This sludge pump station will also serve two of the new secondary clarifiers constructed in the 11 MGD expansion (No. 6 and 7). This secondary sludge pump station will be expanded to house an additional 3 RAS pumps and 2 WAS pump, for a total of 6 RAS pumps (4 duty and 2 standby units) and 4 WAS pumps (2 duty and 2 standby units). In the 11 MGD expansion, a third secondary sludge pump station (No. 3) will be constructed to serve the new Secondary Clarifier No. 8, also in Train B. This pump station will initially house 2 RAS pump (1 duty and 1 standby unit) and 2 WAS pump (1 duty and 1 standby unit). The new Train B RAS and WAS pumps combined with the existing Train B pumps have been designed to meet the effluent requirements at the design capacity of 8 MGD AADF (total capacity of the plant 11 MGD including 3 MGD Train A).

In the 20 MGD expansion, 1 additional RAS pump will be added to the third secondary sludge pump station to serve the new Secondary Clarifier No. 9, for a total of 3 RAS pumps (2 duty and 1 standby unit) and 2 WAS pumps (1 duty and 1 standby unit). Another new secondary sludge pump station will be constructed with the 20 MGD expansion to serve the new Clarifiers No. 10, 11, and 12 constructed in this expansion. This secondary sludge pump station will house 5 RAS pumps (3 duty and 2 standby units) and 3 WAS pumps (2 duty and 1 standby unit). The new Train B RAS and WAS pumps combined with the existing Train B pumps have been designed to meet the effluent requirements at the design capacity of 17 MGD AADF (total capacity of the plant 20 MGD).

The design parameters associated with the new sludge pumps are listed in Table 11.

Table 11: Proposed RAS and WAS Pump Design Criteria

Parameter	**Design Criteria**		**TCEQ Design Standard**
	11 MGD Expansion	**20 MGD Expansion**	
New RAS Pumps			
No. of RAS pumps	5 new, 8 total (5 duty, 3 standby)	6 new, 14 total (9 duty, 5 standby)	
Maximum Clarifier Underflow Rate, gpd/sqft	306	306	200-400
Capacity	1,667 gpm at 17’ TDH	1,667 gpm at 17’ TDH	
Type	Vertical centrifugal, VFD Operated	Vertical centrifugal, VFD Operated	
New WAS Pumps			
No. of WAS pumps	4 new, 6 total (3 duty, 3 standby)	3 new, 9 total (5 duty, 4 standby)	
Capacity	250 gpm at 50’ TDH	250 gpm at 50’ TDH	
Type	Double disc diaphragm, VFD Operated	Double disc diaphragm, VFD Operated	

Disc Filter

New disc filter units will be constructed as an expansion to the existing effluent filtration facilities. The existing filtration facilities include a traveling bridge filter with a peak capacity of 5 MGD, one disc filter with a peak capacity of 8 MGD, and two disc filters, each with a peak capacity of 8.2 MGD. For the 11 MGD expansion, the traveling bridge filter will be decommissioned and three new disc filters will be sized for 8.2 MGD capacity each and will function in the same manner as the existing disc filters. The combined firm capacity of the existing and new tertiary filtration facilities will be 49 MGD. For the 20 MGD expansion, an additional four disc filters with 8.2 MGD capacity each will be installed, for a total combined capacity of 81.8 MGD. The design basis criteria for new disc filters are provided in Table 12.

Table 12: Proposed Expansion Disc Filter Design Criteria

Parameter	**Design Criteria**		**TCEQ Design Standard**
	11 MGD Expansion	**20 MGD Expansion**	
Media Type	Cloth Disc Media	Cloth Disc Media	
No. of units	3 new, 6 total	4 new, 10 total	No redundancy required for polishing
Number of discs per unit	7	7	
Area per unit	896 ft2	896 ft2	
Peak flow (MGD)	8.2 MGD	8.2 MGD	
Peak Filtration Rate	6.36 gpm/ft2	6.36 gpm/ft2	<6.5 gpm/ft2

Ultraviolet Disinfection

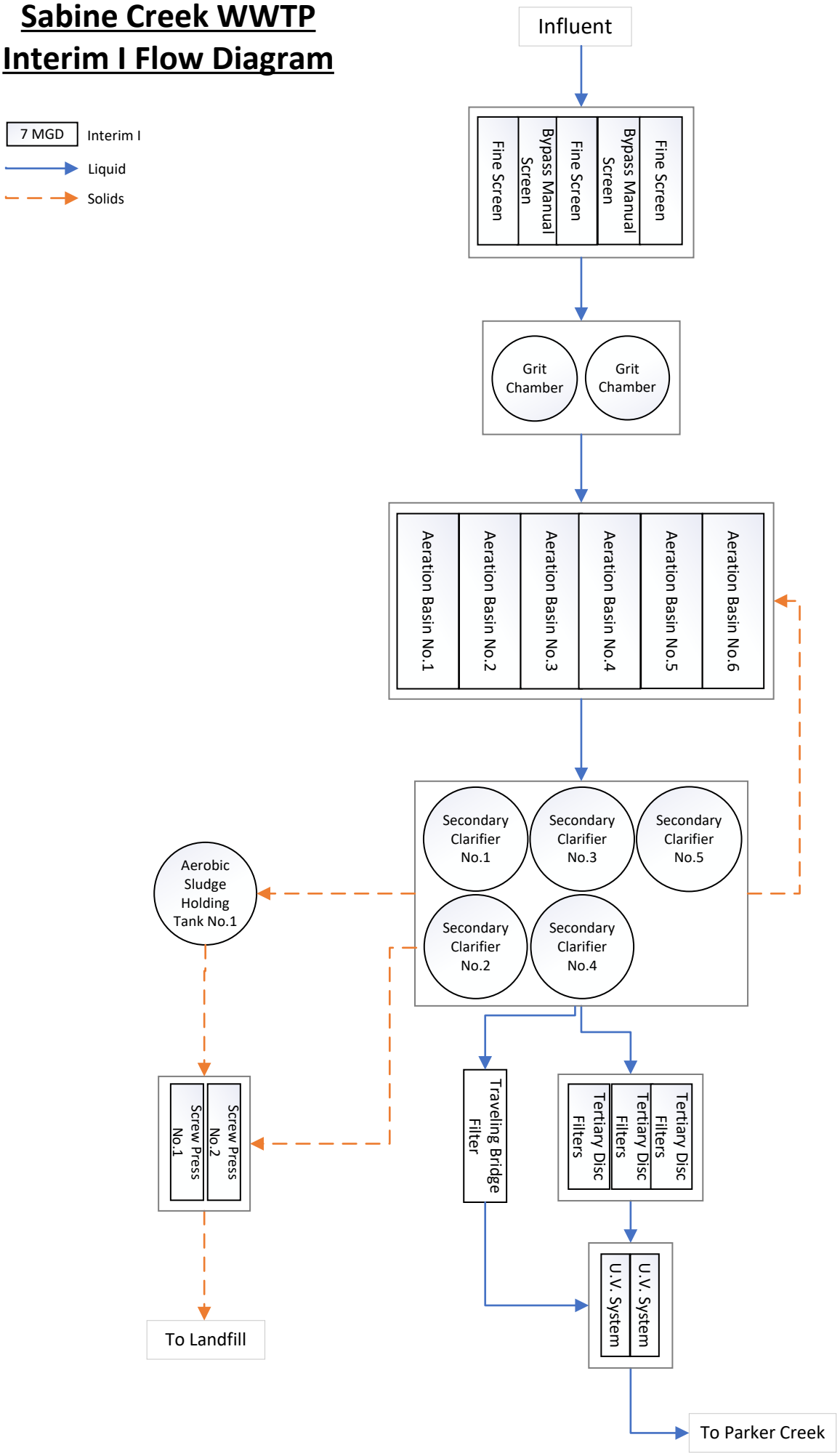
The plant's current disinfection system consists of two UV channels, each with five UV lamp modules. In the proposed 11 MGD expansion, three additional channels will be installed with 5 UV lamp modules each, resulting in a total of 5 channels and a total of 25 modules with a total capacity of 53.0 MGD. In the proposed 20 MGD expansion, three additional channels will be installed with 5 UV lamp modules each, resulting in a total of 8 channels and a total of 40 modules with a total capacity of 84.8 MGD. The plant's current TPDES permit limits related to disinfection are a daily average of 126 MPN/100 ml and a daily maximum of 399 MPN/100 ml. The proposed expansion designs will meet the current TPDES permit limits, and the design criteria is listed in Table 13.

Table 13: UV Disinfection Design Criteria

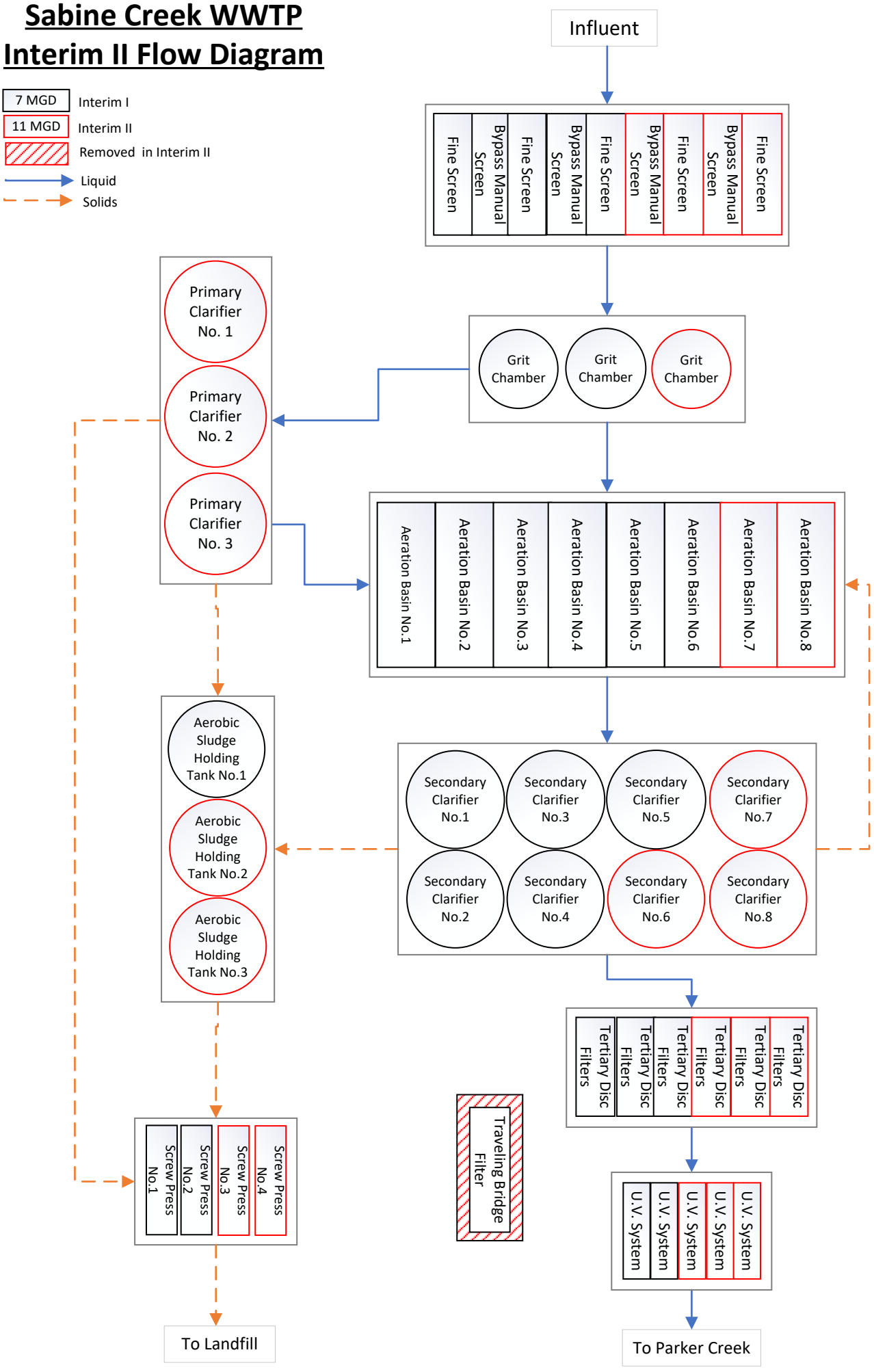
Parameter	**Design Criteria**		**TCEQ Design Standard**
	11 MGD Expansion	**20 MGD Expansion**	
Design Flow (AADF/P2HF)	11 MGD/ 44 MGD	20 MGD/ 80 MGD	
Disinfection Limits	126 MPN/ 100 ml	126 MPN/ 100 ml	Current Permit limits
UV Transmittance	65%	65%	
Number of Channels	3 new, 5 total	3 new, 8 total	
Number of Lamp Modules per Channel	5	5	
Total Number of Lamp Modules	25	40	

ATTACHMENT 9
PROCESS FLOW DIAGRAM

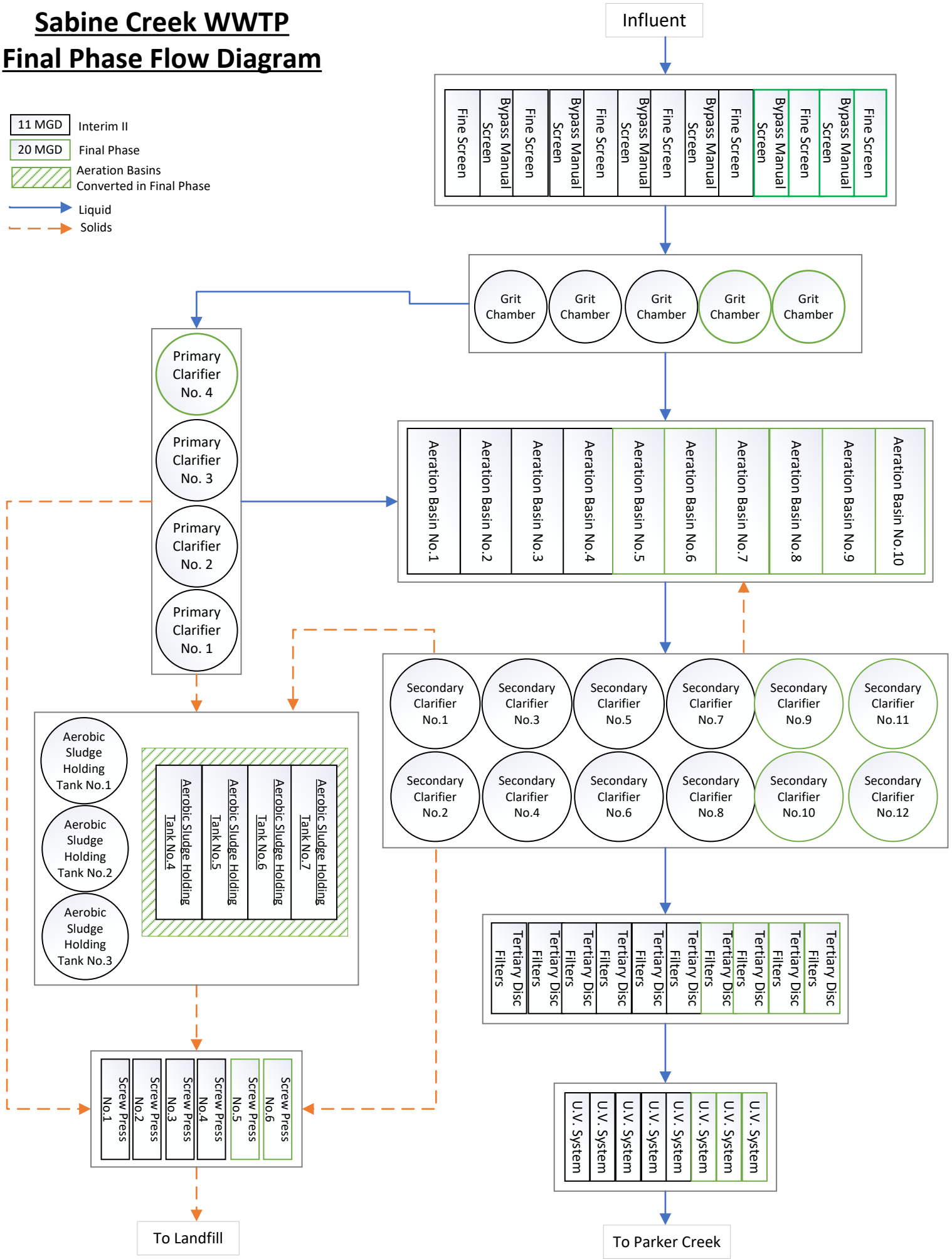
Sabine Creek WWTP
Interim I Flow Diagram



Sabine Creek WWTP
Interim II Flow Diagram



Sabine Creek WWTP
Final Phase Flow Diagram



ATTACHMENT 15
OTHER ATTACHMENTS

ATTACHMENT 1
EPAY VOUCHER RECEIPT

TCEQ ePay Voucher Receipt

Transaction Information

Voucher Number:	737436
Trace Number:	582EA000640336
Date:	12/20/2024 09:25 AM
Payment Method:	CC - Authorization 0000004379
Voucher Amount:	$50.00
Fee Type:	30 TAC 305.53B WQ NOTIFICATION FEE
ePay Actor:	GARY WARD

Payment Contact Information

Name:	JOEL NICKERSON
Company:	NTMWD
Address:	501 BROWN, WYLIE, TX 75098
Phone:	972-442-5405

TCEQ ePay Voucher Receipt

Transaction Information

Voucher Number:	737435
Trace Number:	582EA000640336
Date:	12/20/2024 09:25 AM
Payment Method:	CC - Authorization 0000004379
Voucher Amount:	$2,000.00
Fee Type:	WW PERMIT - FACILITY WITH FLOW >= 1.0 MGD - NEW AND MAJOR AMENDMENTS
ePay Actor:	GARY WARD

Payment Contact Information

Name:	JOEL NICKERSON
Company:	NTMWD
Address:	501 BROWN, WYLIE, TX 75098
Phone:	972-442-5405

Site Information

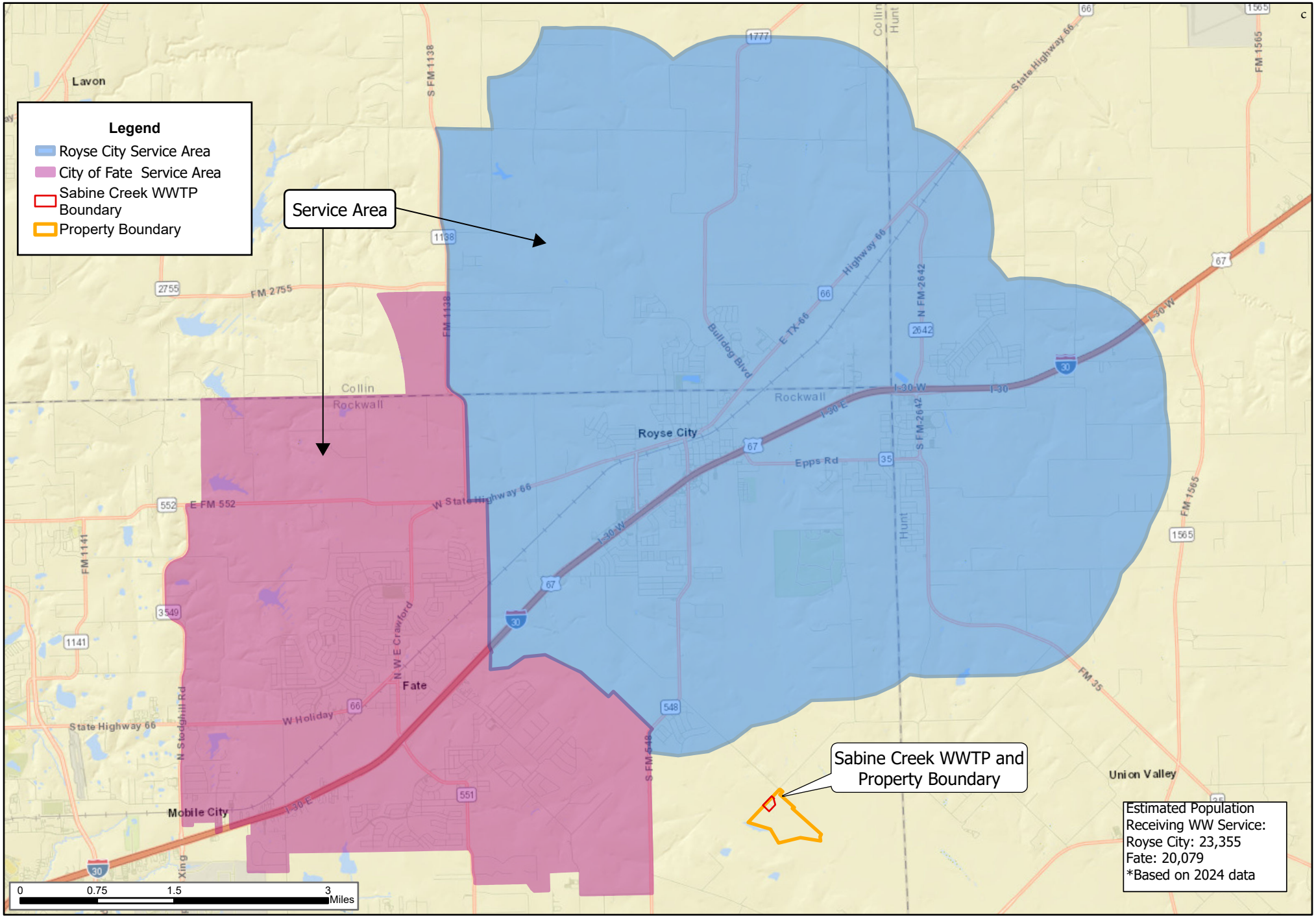
Site Name:	SABINE CREEK WWTP
Site Location:	ROYSE CITY TX

Customer Information

Customer Name:	NTMWD
Customer Address:	501 BROWN, WYLIE, TX 75098

ATTACHMENT 10
SITE DRAWING

Sabine Creek WWTP Site Drawing



ATTACHMENT 13
SOLIDS MANAGEMENT PLAN

Sewage Sludge Solids Management Plan

Sludge Production

The estimated solids production for the proposed expansions to 11.0 MGD AADF and 20.0 MGD AADF are listed in Table 1. Primary sludge (PS) will typically range from 1% to 5% in solids concentration and waste activated sludge (WAS) will typically range from 0.4% to 0.9% in solids concentration. It was conservatively assumed that PS would be ~1% and WAS would be ~0.45% in setting up BioWin models and calculating sludge production.

Table 1: Estimated Solids Production

Parameter	**Proposed Expansion Design Criteria**	
	11 MGD Expansion	**20 MGD Expansion**
Design AADF, MGD	11.0	20.0
PS percent solids %	1.1%	1.0%
WAS percent solids %	0.4%	0.5%
Combined PS & WAS percent solids %	0.6%	0.7%
Combined PS & WAS total dry solids, ppd	17760	33160
Total dry solids production at design, ppd	17760	33160
Total dry solids production at 75% of design, ppd	13320	24870
Total dry solids production at 50% of design, ppd	8880	16580
Total dry solids production at 25% of design, ppd	4440	8290

Dewatering and Sludge Storage

The operating range for mixed liquor suspended solids design criteria is 3,000 – 4,000 mg/L. Solids from both existing and proposed expansion facilities will be handled together. The existing plant currently performs sludge dewatering using two screw presses operating 8 hours, 5 days a week. When the dewatering unit is not operational, sludge is pumped to a 150,000-gallon aerobic sludge holding tank.

The proposed expansion to 11 MGD will include an additional two screw presses for dewatering sludge from both existing and proposed expansion facilities, operating 8 hours, 5 days a week. This expansion will also include two 70-foot diameter sludge holding tanks with a capacity of 575,000 gallons each for a total of 1,300,000 gallons of sludge storage.

The proposed expansion to 20 MGD will include an additional two screw presses, operating 8 hours, 5 days a week. This expansion will also decommission the four 0.75 MGD capacity aeration basins and convert them to aerobic sludge holding tanks. This will provide four additional aerobic sludge holding tanks with a capacity of 269,000 gallons each for a total of 2,376,000 gallons of sludge storage. The converted aerobic sludge holding tanks will operate as aerobic digesters using coarse bubble aeration. As long as sufficient aeration is provided, there will be no more odor than the activated sludge basins, so no covers are required. The design data for the sewage sludge solids treatment units are summarized in Table 2.

Table 2. Sewage Sludge Solids Treatment Units

Treatment Unit	Total Units	Phase	Number of Units	Dimensions/Capacity
Sludge Holding Tank	7	7 MGD	1	Volume: 150,000 Gallons / Diameter: 42 ft
		11 MGD	2	Volume: 575,000 Gallons each / Diameter: 70 ft each
		20 MGD	4	Volume: 269,000 Gallons each / Dimensions: 75 ftx30 ftx16 ft SWD each (converted 0.75 MGD aeration basins)
Screw Press	6	7 MGD	2	Solids Loading Capacity: 1000 lb/hr dry capacity each/ Flow: 200 GPM each at 1% sludge concentration
		11 MGD	2	Solids Loading Capacity: 1000 lb/hr dry capacity each/ Flow: 200 GPM each at 1% sludge concentration
		20 MGD	2	Solids Loading Capacity: 1000 lb/hr dry capacity each/ Flow: 200 GPM each at 1% sludge concentration

The location of the current screw presses does not allow for the additional screw presses to be housed in the same building, so the additional screw presses added in the 11 MGD and 20 MGD expansions will be located in a separate building. TCEQ requires redundancy in dewatering units above 4.0 MGD AADF. Redundancy is provided with multiple presses and the ability to operate longer hours if necessary. The proposed screw press design criteria are listed in Table 3.

Table 3: Dewatering Design Criteria

Parameter	Design Criteria		TCEQ Design Standard
	11 MGD Expansion	20 MGD Expansion	
Dewatering Unit Capacity	1000 lbs./hr. dry capacity	1000 lbs./hr. dry capacity	

Total Units	2 new, 4 total	2 new, 6 total	Redundancy required above 4.0 MGD AADF
Max capacity of the sludge feed pump:	200 gpm each at 1% sludge concentration	200 gpm each at 1% sludge concentration	

The estimated solids generated at design flows of 11.0 MGD and 20.0 MGD and at 75%, 50% and 25% of design flow were established in Table 1 and are also presented in Table 4 and Table 5. The tables include the combined PS and WAS solids and dewatered sludge solids generated at the various flows for the proposed expansions. Also included in the tables are the number of truckloads of solids expected to be generated per week.

Table 4: Sewage Sludge Solids Generated – 11 MGD Expansion

% Design Flow	**25%**	**50%**	**75%**	**100%**
AADF, MGD	2.75	5.5	8.25	11.0
Combined PS & WAS				
Flowrate (gpd)	87,500	175,000	262,500	350,000
%TS	0.6%	0.6%	0.6%	0.6%
Dry Solids (lbs/day)	4,440	8,880	13,320	17,760
Dewatered Solids				
%TS	16.8%	16.8%	16.8%	16.8%
Total Dry Solids (lbs/day)	4,220	8,440	12,660	16,880
Total Wet Solids (lbs/day)	25,110	50,220	75,330	100,430
Approx Truckloads/Week	6	12	17	23

Table 5: Sewage Sludge Solids Generated – 20 MGD Expansion

% Design Flow	**25%**	**50%**	**75%**	**100%**
AADF, MGD	5.0	10.0	15.0	20.0
Combined PS & WAS				
Flowrate (gpd)	147,500	295,000	442,500	590,000
%TS	0.7%	0.7%	0.7%	0.7%
Dry Solids (lbs/day)	8,290	16,580	24,870	33,160
Dewatered Solids				
%TS	16.4%	16.4%	16.4%	16.4%
Total Dry Solids (lbs/day)	7,880	15,750	23,630	31,500
Total Wet Solids (lbs/day)	48,020	96,037	144,060	192,080
Approx Truckloads/Week	11	22	33	43

Solids are processed and handled regularly, as required to maintain the WWTP. Dewatered solids are collected and hauled by NTMWD trucks (Hauler Registration No. 22488) for disposal at the NTMWD 121 Regional Disposal Facility (MSW Permit No. 2294), where the sludge is weighted and disposed. The hauling manifests and weight tickets are electronically scanned and imported into a computer database for data storage and report generation. The hauling manifests and weight tickets are on record at the NTMWD 121 Regional Disposal Facility and Sabine Creek WWTP.

ATTACHMENT 14
WATER BALANCE

DOMESTIC ATTACHMENT 14 – WATER BALANCE

Water Balance applies to Worksheet 3.0 Land Application of Effluent, Worksheet 3.1 Surface Land Disposal of Effluent, Worksheet 3.2 Subsurface Land Disposal of Effluent

Sabine Creek WWTP does not land apply, surface land dispose, or subsurface land dispose of effluent. Therefore, water balance is not required.