# Technical Package Cover Page

**This file contains the following documents:**

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

---

# Portada de Paquete Técnico

**Este archivo contiene los siguientes documentos:**

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

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

# PLAIN LANGUAGE SUMMARY FOR TPDES OR TLAP PERMIT APPLICATIONS

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

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

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

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

**ENGLISH TEMPLATE FOR TPDES or TLAP NEW/RENEWAL/AMENDMENT APPLICATIONS**
**Enter 'INDUSTRIAL' or 'DOMESTIC' here WASTEWATER/STORMWATER**
*The following summary is provided for this pending water quality permit application being reviewed by the Texas Commission on Environmental Quality as required by 30 TAC Chapter 39. The information provided in this summary may change during the technical review of the application and is not a federal enforceable representation of the permit application.*

City of Lockhart & Guadalupe-Blanco River Authority (CN600245195, CN601180565) operate Lockhart Wastewater Treatment Facility No. 2 (RN101325926), a Wastewater Treatment Facility. The facility is located at 167 Creekview, in Lockhart, Caldwell County, Texas 78644. Renewal to discharge 1.5 million gallons per day of treated domestic wastewater.

Discharges from the facility are expected to contain Carbonaceous Biochemical Oxygen Demand (CBOD), Total Suspended Solids, Ammonia Nitrogen, and *E. coli*. Wastewater is treated by bar screen, aeration basins, clarification, and disinfection.

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

**AGUAS RESIDUALES** Introduzca 'INDUSTRIALES' o 'DOMÉSTICAS' aquí **/AGUAS PLUVIALES**

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

La Ciudad de Lockhart y La Autoridad del Rion Guadalupe-Blanco (CN600245195, CN601180565) opera Planta de tratamiento de aguas residuals de Lockhart No. 2 RN101325926, un Planta de tratamiento de aguas resideuales. La instalación está ubicada en Calle Creekview 167, en Lockhart, Condado de Caldwell , Texas 78644. Renovación para descargar 1,5 millones de galones por día de aguas residuales domésticas tratadas.

Se espera que las descargas de la instalación contengan Demanda bioquímica de oxígeno carbonoso (CBOD), sólidos suspendidos totales, nitrógeno amoniacal y E. coli.. Aguas residuales. está tratado por rejillas de rejilla, tanques de aireación, clarificación y desinfección..

# TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

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

**PERMIT NO. WQ0010210002**

**APPLICATION.** City of Lockhart and Guadalupe-Blanco River Authority, P.O. Box 239, Lockhart, Texas 78644, has applied to the Texas Commission on Environmental Quality (TCEQ) to renew Texas Pollutant Discharge Elimination System (TPDES) Permit No. WQ0010210002 (EPA I.D. No. TX0113565) to authorize the discharge of treated wastewater at a volume not to exceed an annual average flow of 1,500,000 gallons per day. The domestic wastewater treatment facility is located at 167 Creekview, near the city of Lockhart, in Caldwell County, Texas 78644. The discharge route is from the plant site directly to Plum Creek. TCEQ received this application on January 14, 2025. The permit application will be available for viewing and copying at Dr. Eugene Clark Library, 217 South Main Street, Lockhart, in Caldwell 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=-97.624166,29.873333&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.**

**TCEQ may act on an application to renew a permit for discharge of wastewater without providing an opportunity for a contested case hearing if certain criteria are met.**

**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 City of Lockhart and Guadalupe-Blanco River Authority at the address stated above or by calling Mrs. Amy Uniacke, P.E., Treatment Design Director, at 830-379-5822.

Issuance Date: January 23, 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**
**RENOVACION**

**PERMISO NO. WQ0010210002**

**SOLICITUD.** Ciudad de Lockhart y Autoridad del Rio Guadalupe-Blanco, P.O. Box 239, Lockhart, Texas 78644 ha solicitado a la Comisión de Calidad Ambiental del Estado de Texas (TCEQ) para renovar el Permiso No. WQ0010210002 (EPA I.D. No. TX0113565) del Sistema de Eliminación de Descargas de Contaminantes de Texas (TPDES) para autorizar la descarga de aguas residuales tratadas en un volumen que no sobrepasa un flujo promedio diario de 1,500,000 galones por día. El servicio doméstico La planta de tratamiento de aguas residuales está ubicada en 167 Creekview, en la ciudad de Lockhart, en Caldwell Condado, Texas 78644. La ruta de descarga es desde el sitio de la planta hasta Plum Creek. TCEQ recibió esta solicitud el 14 de enero de 2025. La solicitud para el permiso estará disponible para su visualización y copiando en la Bibioteca Dr. Eugene Clark, 217 South Main Street, Lockhart, en el condado de Caldwell, Texas antes de la fecha en que este aviso se publique en periódico. La solicitud,que incluye Cualquier actualización y avisos asociados están disponibles electrónicamente en la siguiente pagina web: https://www.tceq.texas.gov/permitting/wastewater/pending-permits/tpdes-applications. Este enlace a un mapa electrónico de la ubicación general del sitio o de la instalación es proporcionado como una cortesía y no es parte de la solicitud o del aviso. Para la ubicación exacta, consulte la solicitud. https://gisweb.tceq.texas.gov/LocationMapper/?marker=-97.624166,29.873333&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. Si ciertos criterios se cumplen, la TCEQ puede actuar sobre una solicitud para renovar un permiso sin proveer una oportunidad de una audiencia administrativa de lo contencioso.**

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

También se puede obtener información adicional del City of Lockhart and Guadalupe-Blanco River Authority a la dirección indicada arriba o llamando a Mrs. Amy Uniacke, P.E. Treatment Director, al 830-379-5822.

Fecha de emission: 23 de enero de 2025

# Texas Commission on Environmental Quality

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

**RENEWAL**

**PERMIT NO. WQ0010210002**

**APPLICATION AND PRELIMINARY DECISION.** City of Lockhart and Guadalupe-Blanco River Authority, P.O. Box 239, Lockhart, Texas 78644, has applied to the Texas Commission on Environmental Quality (TCEQ) for a renewal of Texas Pollutant Discharge Elimination System (TPDES) Permit No. WQ0010210002, which authorizes the discharge of treated domestic wastewater at an annual average flow not to exceed 1,500,000 gallons per day. TCEQ received this application on January 14, 2025.

The facility is located at 167 Creekview, in Caldwell County, Texas 78644. The treated effluent is discharged directly to Plum Creek in Segment No. 1810 of the Guadalupe River Basin. The designated uses for Segment No. 1810 are primary contact recreation, aquifer protection, and high aquatic life use. This link to an electronic map of the site or facility's general location is provided as a public courtesy and is not part of the application or notice. For the exact location, refer to the application.
https://gisweb.tceq.texas.gov/LocationMapper/?marker=-97.624166,29.873333&level=18

The TCEQ Executive Director has completed the technical review of the application and prepared a draft permit. The draft permit, if approved, would establish the conditions under which the facility must operate. The Executive Director has made a preliminary decision that this permit, if issued, meets all statutory and regulatory requirements. The permit application, Executive Director's preliminary decision, and draft permit are available for viewing and copying at Dr. Eugene Clark Library, 217 South Main Street, Lockhart, in Caldwell County, Texas. The application is available for viewing and copying at the following webpage:
https://www.tceq.texas.gov/permitting/wastewater/pending-permits/tpdes-applications.

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

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

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

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

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

The Commission may only grant a request for a contested case hearing on issues the requestor submitted in their timely comments that were not subsequently withdrawn. **If a hearing is granted, the subject of a hearing will be limited to disputed issues of fact or mixed questions of fact and law relating to relevant and material water quality concerns submitted during the comment period. TCEQ may act on an application to renew a permit for discharge of wastewater without providing an opportunity for a contested case hearing if certain criteria are met.**

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

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

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

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

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

Further information may also be obtained from City of Lockhart and Guadalupe-Blanco River Authority at the address stated above or by calling Mrs. Amy Uniacke, P.E., Treatment Design Director, at 830-379-5822.

Issuance Date: December 8, 2025

# Comisión de Calidad Ambiental de Texas

**NOTIFICACIÓN DE LA DEMANDA Y DECISIÓN PRELIMINAR**
**PARA EL PERMISO TPDES PARA AGUAS RESIDUALES MUNICIPALES**

**RENOVACIÓN**

**PERMISO Nº WQ0010210002**

**SOLICITUD Y DECISIÓN PRELIMINAR.** La Autoridad del Río Guadalupe-Blanco y la Ciudad de Lockhart, P.O. Box 239, Lockhart, Texas 78644, ha solicitado a la Comisión de Calidad Ambiental de Texas (TCEQ) una renovación del Permiso No. WQ0010210002, que autoriza la descarga de aguas residuales domésticas tratadas a un flujo promedio anual que no exceda los 1,500,000 galones por día. La TCEQ recibió esta solicitud el 14 de enero de 2025.

La instalación está ubicada en 167 Creekview, en el condado de Caldwell, Texas 78644. El efluente tratado se descarga directamente a Plum Creek en el Segmento No. 1810 de la Cuenca del Río Guadalupe. Los usos designados para el Segmento No. 1810 son la recreación de contacto primario, la protección de acuíferos y el alto uso de la vida acuática. Este enlace a un mapa electrónico de la ubicación general del sitio o instalación se proporciona como cortesía pública y no forma parte de la solicitud o aviso. Para conocer la ubicación exacta, consulte la aplicación.
https://gisweb.tceq.texas.gov/LocationMapper/?marker=-97.624166,29.873333&level=18

El Director Ejecutivo de la TCEQ ha completado la revisión técnica de la solicitud y ha preparado un borrador del permiso. El borrador del permiso, si se aprueba, establecería las condiciones bajo las cuales debe operar la instalación. El Director Ejecutivo ha tomado una decisión preliminar de que este permiso, si se emite, cumple con todos los requisitos legales y reglamentarios. La solicitud de permiso, la decisión preliminar del Director Ejecutivo y el borrador del permiso están disponibles para ver y copiar en la Biblioteca Dr. Eugene Clark, 217 South Main Street, Lockhart, en el condado de Caldwell, Texas. La aplicación está disponible para su visualización y copia en la siguiente página web:
https://www.tceq.texas.gov/permitting/wastewater/pending-permits/tpdes-applications.

**AVISO DE LENGUAJE ALTERNATIVO.** El aviso de idioma alternativo en español está disponible en https://www.tceq.texas.gov/permitting/wastewater/plain-language-summariesand-public-notices. El aviso de idioma alternativo en español está disponible en https://www.tceq.texas.gov/permitting/wastewater/plain-language-summaries-and-publicnotices.

**COMENTARIO PÚBLICO / REUNIÓN PÚBLICA. Puede enviar comentarios públicos o solicitar una reunión pública sobre esta solicitud.** El propósito de una reunión pública es brindar la oportunidad de enviar comentarios o hacer preguntas sobre la solicitud. La TCEQ celebra una reunión pública si el Director Ejecutivo determina que existe un grado significativo de interés público en la solicitud o si lo solicita un legislador local. Una reunión pública no es una audiencia de caso impugnado.

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

**PARA SOLICITAR UNA AUDIENCIA DE CASO IMPUGNADO, DEBE INCLUIR LOS SIGUIENTES ELEMENTOS EN SU SOLICITUD: su nombre, dirección, número de teléfono; nombre del solicitante y número de permiso propuesto; la ubicación y distancia de su propiedad/actividades en relación con la instalación propuesta; una descripción específica de cómo se vería afectado negativamente por la instalación de una manera que no es común para el público en general; una lista de todas las cuestiones de hecho en disputa que envíe durante el período de comentarios; y la declaración "[Yo/somos] una audiencia de caso impugnado". Si la solicitud de audiencia de caso impugnado se presenta en nombre de un grupo o asociación, la solicitud debe designar al representante del grupo para recibir correspondencia futura; identificar por nombre y dirección física a un miembro individual del grupo que se vería afectado negativamente por la instalación o actividad propuesta; proporcionar la información discutida anteriormente sobre la ubicación del miembro afectado y la distancia de la instalación o actividad; explicar cómo y por qué el miembro se vería afectado; y explicar cómo los intereses que el grupo busca proteger son relevantes para el propósito del grupo.**

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

La Comisión solo puede acceder a una solicitud de audiencia de un caso impugnado sobre cuestiones que el solicitante presentó en sus observaciones oportunas y que no fueron retiradas posteriormente. **Si se concede una audiencia, el tema de una audiencia se limitará a cuestiones de hecho en disputa o cuestiones mixtas de hecho y derecho relacionadas con preocupaciones relevantes y materiales sobre la calidad del agua presentadas durante el período de comentarios. La TCEQ puede actuar sobre una solicitud para renovar un permiso de descarga de aguas residuales sin brindar la oportunidad de una audiencia de caso impugnado si se cumplen ciertos criterios.**

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

**LISTA DE CORREO.** Si envía comentarios públicos, una solicitud para una audiencia de caso impugnado o una reconsideración de la decisión del Director Ejecutivo, se lo agregará a la lista de correo de esta solicitud específica para recibir futuros avisos públicos enviados por correo por la Oficina del Secretario Principal. Además, puede solicitar ser incluido en: (1) la lista de correo permanente para un solicitante específico nombre y número de permiso; y/o (2) la lista de correo de un condado específico. Si desea ser incluido en la lista de correo permanente y / o del condado, especifique claramente qué lista (s) y envíe su solicitud a la Oficina del Secretario Principal de la TCEQ a la dirección a continuación.
**Todos los comentarios públicos por escrito y las solicitudes de reuniones públicas deben enviarse a la Oficina del Secretario Principal, MC 105, Comisión de Calidad Ambiental de Texas, PO Box 13087, Austin, TX 78711-3087 o electrónicamente a** www.tceq.texas.gov/goto/comment **dentro de los 30 días a partir de la fecha de publicación de este aviso en el periódico.**

**INFORMACIÓN DISPONIBLE EN LÍNEA.** Para obtener detalles sobre el estado de la solicitud, visite la Base de datos integrada de los comisionados en www.tceq.texas.gov/goto/cid. Busque en la base de datos utilizando el número de permiso para esta solicitud, que se proporciona en la parte superior de este aviso.

**CONTACTOS E INFORMACIÓN DE LA AGENCIA.** Los comentarios públicos y las solicitudes deben enviarse electrónicamente a www.tceq.texas.gov/goto/comment o por escrito a la Comisión de Calidad Ambiental de Texas, Oficina del Secretario Principal, MC 105, PO Box 13087, Austin, Texas 78711-3087. Cualquier información personal que envíe a la TCEQ pasará a formar parte del registro de la agencia; Esto incluye direcciones de correo electrónico. Para obtener más información sobre esta solicitud de permiso o el proceso de permisos, llame al Programa de Educación Pública de la TCEQ, sin cargo, al 1-800-687-4040 o visite su sitio web en www.tceq.texas.gov/goto/pep. Si desea información en Español, puede llamar al 1-800-6874040.

También se puede obtener más información de la Ciudad de Lockhart y la Autoridad del Río Guadalupe-Blanco en la dirección indicada anteriormente o llamando a la Sra. Amy Uniacke, P.E., Directora de Diseño de Tratamiento, al 830-379-5822.

Fecha de emisión: 8 de diciembre de 2025

GBRA
Guadalupe-Blanco River Authority

Your Trusted
Water Resource

2225 E. Common Street
New Braunfels, TX 78130
830-379-5822

GBRA.ORG

January 14, 2025

Texas Commission on Environmental Quality
Water Quality Division
Applications Review and Processing Team (MC148)
P.O. Box 13087
Austin, Texas 78711-3087

Re: Permit Renewal: City of Lockhart & Guadalupe-Blanco River Authority
WQ0010210-002

Enclosed is the application for permit renewal WQ0010210-002.

The permit application fee of $2,015 was sent on December 13, 2024. If you have any questions, please do not hesitate to contact me at 830-379-5822.

Sincerely,

Mary C. Newman
Executive Assistant to the General Manager/CEO

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

# DOMESTIC WASTEWATER PERMIT APPLICATION CHECKLIST

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

APPLICANT NAME: City of Lockhart & Guadalupe-Blanco River Authority

PERMIT NUMBER (If new, leave blank): WQ00 10210-002

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

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

For TCEQ Use Only

Segment Number _____County _____
Expiration Date _____Region_____
Permit Number _____

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

# DOMESTIC WASTEWATER PERMIT APPLICATION ADMINISTRATIVE REPORT 1.0

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

## Section 1. Application Fees (Instructions Page 26)

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

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

Minor Amendment (for any flow) $150.00 ☐

**Payment Information:**

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

Check/Money Order Amount: Click to enter text.

Name Printed on Check: Click to enter text.

EPAY Voucher Number: Click to enter text.

Copy of Payment Voucher enclosed? Yes ☒

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

**a.** Check the box next to the appropriate authorization type.

☒ Publicly-Owned Domestic Wastewater

☐ Privately-Owned Domestic Wastewater

☐ Conventional Wastewater Treatment

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

☒ Active ☐ Inactive

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

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

**d.** Check the box next to the appropriate application type

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

**e.** For amendments or modifications, describe the proposed changes: Click to enter text.

**f. For existing permits**:

Permit Number: WQ00 10210-002

EPA I.D. (TPDES only): TX 00113565

Expiration Date: July 30, 2025

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

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

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

City of Lockhart

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

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

CN: 600245195

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

Prefix: Mr. Last Name, First Name: White, Lew

Title: City Mayor, City of Lockhart Credential: Click to enter text.

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

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

Guadalupe-Blanco River Authority

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

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

CN: 601180565

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

Prefix: Mr. Last Name, First Name: Nichols, Darrell

Title: General Manager/CEO Credential: Click to enter text.

Provide a brief description of the need for a co-permittee: Operator

**C. Core Data Form**

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

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

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

**A.** Prefix: Mr. Last Name, First Name: Montana, Eduardo

Title: Division Manager Credential: Click to enter text.

Organization Name: Guadalupe-Blanco River Authority

Mailing Address: 2225 E. Common Street City, State, Zip Code: New Braunfels, TX 78130

Phone No.: 830-379-5822 E-mail Address: emontana@gbra.org

Check one or both: ☐ Administrative Contact ☒ Technical Contact

**B.** Prefix: Mr. Last Name, First Name: Harris, David

Title: Executive Manager of Operations Credential: Click to enter text.

Organization Name: Guadalupe-Blanco River Authority

Mailing Address: 2225 E. Common Street City, State, Zip Code: New Braunfels, TX 78130

Phone No.: 830-379-5822 E-mail Address: dharris@gbra.org

Check one or both: ☒ Administrative Contact ☐ Technical Contact

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

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

**A.** Prefix: Mr. Last Name, First Name: Montana, Eduardo

Title: Division Manager Credential: Click to enter text.

Organization Name: Guadalupe-Blanco River Authority

Mailing Address: 2225 E. Common Street City, State, Zip Code: New Braunfels, TX 78130

Phone No.: 830-379-5822 E-mail Address: emontana@gbra.org

**B.** Prefix: Mr. Last Name, First Name: Harris, David

Title: Executive Manager of Operations Credential: Click to enter text.

Organization Name: Guadalupe-Blanco River Authority

Mailing Address: 2225 E. Common Street City, State, Zip Code: New Braunfels, TX 78130

Phone No.: 830-379-5822 E-mail Address: dharris@gbra.org

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

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

Prefix: Mr. Last Name, First Name: Harris, David

Title: Executive Manager of Operations Credential: Click to enter text.

Organization Name: Guadalupe-Blanco River Authority

Mailing Address: 2225 E. Common Street City, State, Zip Code: New Braunfels, TX 78130

Phone No.: 830-379-5822 E-mail Address: dharris@gbra.org

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

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

Prefix: Mrs. Last Name, First Name: Ramirez, Tricia

Title: Executive Assistant Credential: Click to enter text.

Organization Name: Guadalupe-Blanco River Authority

Mailing Address: 2225 E. Common Street City, State, Zip Code: New Braunfels, TX 78130

Phone No.: 830-379-5822 E-mail Address: tramirez@gbra.org

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

**A. Individual Publishing the Notices**

Prefix: Mrs. Last Name, First Name: Juarez, Yolanda

Title: Executive Assistance, Engineering Department Credential: Click to enter text.

Organization Name: Guadalupe-Blanco River Authority

Mailing Address: 2225 E. Common Street City, State, Zip Code: New Braunfels, TX 78130

Phone No.: 830-379-5822 E-mail Address: yjuarez@gbra.org

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

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

☒ E-mail Address

☐ Fax

☐ Regular Mail

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

Prefix: Mrs. Last Name, First Name: Uniacke, Amy

Title: Treatment Design Director Credential: P.E.

Organization Name: Guadalupe-Blanco River Authority

Mailing Address: 2225 E. Common Street City, State, Zip Code: New Braunfels, TX 78130

Phone No.: 830-379-5822 E-mail Address: auniacke@gbra.org

**D. Public Viewing Information**

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

Public building name: Dr. Eugene Clark Library

Location within the building: Circulation Desk

Physical Address of Building: 217 S. Main Street

City: Lockhart County: Caldwell

Contact (Last Name, First Name): Stephanie Castanon

Phone No.: 512-398-3223 Ext.: 2880

**E. Bilingual Notice Requirements**

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

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

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

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

   ☒ Yes ☐ No

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

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

   ☒ Yes ☐ No

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

   ☐ Yes ☒ No

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

   ☐ Yes ☒ No

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

**F. Plain Language Summary Template**

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

**Attachment:** Attachment 2

**G. Public Involvement Plan Form**

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

**Attachment:** N/A

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

**A.** If the site is currently regulated by TCEQ, provide the Regulated Entity Number (RN) issued to this site. **RN** 101325926

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

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

Lockhart Wastewater Treatment Plant No. 2

**C.** Owner of treatment facility: City of Lockhart

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

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

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

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

Organization Name: City of Lockhart

Mailing Address: P.O. Box 239 City, State, Zip Code: Lockhart, TX 78644

Phone No.: 512-398-3461 E-mail Address: lwhite@lockhart-tx.org

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

**Attachment:** N/A

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

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

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

Organization Name: City of Lockhart

Mailing Address: P.O. Box 239 City, State, Zip Code: Lockhart, TX 78644

Phone No.: 512-398-3461 E-mail Address: lwhite@lockhart-tx.org

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

**Attachment:** N/A

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

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

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

Organization Name: Click to enter text.

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

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

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

**Attachment:** N/A

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

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

☒ Yes ☐ No

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

Click to enter text.

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

☒ Yes ☐ No

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

Click to enter text.

City nearest the outfall(s): Lockhart

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

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

☐ Yes ☒ No

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

☐ Authorization granted ☐ Authorization pending

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

**Attachment:** N/A

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

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

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

☐ Yes ☐ No

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

Click to enter text.

**B.** City nearest the disposal site: Click to enter text.

**C.** County in which the disposal site is located: Click to enter text.

**D.** For **TLAPs**, describe the routing of effluent from the treatment facility to the disposal site:

Click to enter text.

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

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

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

☐ Yes ☒ No

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

☐ Yes ☐ No ☒ Not Applicable

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

Click to enter text.

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

☐ Yes ☒ No

If yes, list each person formerly employed by the TCEQ who represented your company and was paid for service regarding the application: Click to enter text.

**D.** Do you owe any fees to the TCEQ?

☐ Yes ☒ No

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

Account number: Click to enter text.

Amount past due: Click to enter text.

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

☐ Yes ☒ No

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

Enforcement order number: Click to enter text.

Amount past due: Click to enter text.

## Section 13. Attachments (Instructions Page 33)

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

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

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

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

☐ Attachment 1 for Individuals as co-applicants

☐ Other Attachments. Please specify: Click to enter text.

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

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

Permit Number: WQ0010210-002

Applicant: City of Lockhart

Certification:

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

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

Signatory name (typed or printed): Lew White

Signatory title: City Mayor, City of Lockhart

Signature: Lew White Date: OCTOBER 3, 2024

(Use blue ink)

Subscribed and Sworn to before me by the said LEW WHITE

on this 3rd day of OCTOBER, 2024.

My commission expires on the 26th day of APRIL, 2024.

Julie Mladenka Bowermon

Notary Public

JULIE MLADENKA BOWERMON
Notary ID #126078055
My Commission Expires
April 26, 2027

*[SEAL]*

CALDWELL

County, Texas

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

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

Permit Number: WQ0010210-002

Applicant: Guadalupe-Blanco River Authority

Certification:

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

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

Signatory name (typed or printed): Darrell Nichols

Signatory title: General Manager/CEO

Signature: Darrell Nichols Date: January 8, 2025

(Use blue ink)

Subscribed and Sworn to before me by the said Darrell Nichols, General Manager/CEO

on this 8th day of January, 2025.

My commission expires on the 19th day of May, 2025.

Mary C Newman

Notary Public

MARY C. NEWMAN
My Notary ID # 5132625
Expires May 19, 2025

*[SEAL]*

Comal County

County, Texas

# DOMESTIC WASTEWATER PERMIT APPLICATION ADMINISTRATIVE REPORT 1.0

The following information is required for new and amendment applications.

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

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

- ☐ The applicant's property boundaries
- ☐ The facility site boundaries within the applicant's property boundaries
- ☐ The distance the buffer zone falls into adjacent properties and the property boundaries of the landowners located within the buffer zone
- ☐ The property boundaries of all landowners surrounding the applicant's property (Note: if the application is a major amendment for a lignite mine, the map must include the property boundaries of all landowners adjacent to the new facility (ponds).)
- ☐ The point(s) of discharge and highlighted discharge route(s) clearly shown for one mile downstream
- ☐ The property boundaries of the landowners located on both sides of the discharge route for one full stream mile downstream of the point of discharge
- ☐ The property boundaries of the landowners along the watercourse for a one-half mile radius from the point of discharge if the point of discharge is into a lake, bay, estuary, or affected by tides
- ☐ The boundaries of the effluent disposal site (for example, irrigation area or subsurface drainfield site) and all evaporation/holding ponds within the applicant's property
- ☐ The property boundaries of all landowners surrounding the effluent disposal site
- ☐ The boundaries of the sludge land application site (for land application of sewage sludge for beneficial use) and the property boundaries of landowners surrounding the applicant's property boundaries where the sewage sludge land application site is located
- ☐ The property boundaries of landowners within one-half mile in all directions from the applicant's property boundaries where the sewage sludge disposal site (for example, sludge surface disposal site or sludge monofill) is located

**B.** ☐ Indicate by a check mark that a separate list with the landowners' names and mailing addresses cross-referenced to the landowner's map has been provided.

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

☐ USB Drive ☐ Four sets of labels

**D.** Provide the source of the landowners' names and mailing addresses: Click to enter text.

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

☐ Yes ☐ No

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

Click to enter text.

## Section 2. Original Photographs (Instructions Page 38)

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

☐ At least one original photograph of the new or expanded treatment unit location

☐ At least two photographs of the existing/proposed point of discharge and as much area downstream (photo 1) and upstream (photo 2) as can be captured. If the discharge is to an open water body (e.g., lake, bay), the point of discharge should be in the right or left edge of each photograph showing the open water and with as much area on each respective side of the discharge as can be captured.

☐ At least one photograph of the existing/proposed effluent disposal site

☐ A plot plan or map showing the location and direction of each photograph

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

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

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

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

☐ Ownership

☐ Restrictive easement

☐ Nuisance odor control

☐ Variance

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

☐ Yes ☐ No

# DOMESTIC WASTEWATER PERMIT APPLICATION

# SUPPLEMENTAL PERMIT INFORMATION FORM (SPIF)

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

**Attachment:** Attachment 3

# WATER QUALITY PERMIT

# PAYMENT SUBMITTAL FORM

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

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

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

*BY REGULAR U.S. MAIL*

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

*BY OVERNIGHT/EXPRESS MAIL*

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

**Fee Code: WQP** **Waste Permit No:** WQ0010210-002

1. Check or Money Order Number: Click to enter text.
2. Check or Money Order Amount: Click to enter text.
3. Date of Check or Money Order: Click to enter text.
4. Name on Check or Money Order: Click to enter text.
5. APPLICATION INFORMATION

   Name of Project or Site: Lockhart Wastewater Treatment Facility No. 2

   Physical Address of Project or Site: 167 Creekview, Lockhart, TX 78644

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

**Staple Check or Money Order in This Space**

# ATTACHMENT 1

# INDIVIDUAL INFORMATION

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

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

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

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

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

Date of Birth: Click to enter text.

Mailing Address: Click to enter text.

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

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

E-mail Address: Click to enter text.

CN: Click to enter text.

**For Commission Use Only:**
Customer Number:
Regulated Entity Number:
Permit Number:

# DOMESTIC WASTEWATER PERMIT APPLICATION CHECKLIST OF COMMON DEFICIENCIES

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

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

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

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

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

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

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

**Things to Know:**

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

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

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

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

Plain Language Summary ☒ Yes

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

# DOMESTIC WASTEWATER PERMIT APPLICATION TECHNICAL REPORT 1.0

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

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

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

**A. Existing/Interim I Phase**

Design Flow (MGD): 1.5

2-Hr Peak Flow (MGD): 4.5

Estimated construction start date: Click to enter text.

Estimated waste disposal start date: Click to enter text.

**B. Interim II Phase**

Design Flow (MGD): Click to enter text.

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

Estimated construction start date: Click to enter text.

Estimated waste disposal start date: Click to enter text.

**C. Final Phase**

Design Flow (MGD): 1.5

2-Hr Peak Flow (MGD): 4.5

Estimated construction start date: Click to enter text.

Estimated waste disposal start date: Click to enter text.

**D. Current Operating Phase**

Provide the startup date of the facility: Final, 02/09/1999

## 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**.

The Lockhart Wastewater Treatment Plant No.2 is an activated sludge process plant operated in the extended aeration mode. The treatment units include bar screens, grit chamber, aeration basin, final clarifiers, gravity sludge thickener, belt filter press, and an Ultraviolet light disinfection channel, followed by a post aeration basin. The thickened sludge is sent through the belt press and transported. The final effluent is discharged to Plum Creek.

### 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) |
|---|---|---|
| **Bar Screen Channels** | 2 | 3'W x 6' SWD |
| Grit Removal | 1 | 16' x 16' x 14' SWD |
| Aeration Basin | 1 | 10,777 sq. ft. x 15' SWD |
| Octagonal Clarifiers | 2 | (24.9'b x 30'h)/ 2 x 8 ea x 14' SWD |
| U.V. Channel | 1 | 26.5' x 2.04' x 5.17' SWD |
| Thickener Pre-Mix | 1 | 24' x 6' x 13' SWD |
| Sludge Thickener | 1 | 24' x 24' x 10.25' SWD |
| Sludge Holder | 1 | 688 sq. ft x 13.5' SWD |
| Post Aeration Basin | 1 | 15' x 10' 10' SWD |

### C. Process Flow Diagram

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

**Attachment**: Attachment 5

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

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

- Latitude: 29.870567
- Longitude: -97.619702

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

- Latitude: Click to enter text.
- Longitude: Click to enter text.

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

- The boundaries of the treatment facility;
- The boundaries of the area served by the treatment facility;
- If land disposal of effluent, the boundaries of the disposal site and all storage/holding

ponds; and

- If sludge disposal is authorized in the permit, the boundaries of the land application or disposal site.

**Attachment**: Attachment 6

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

City of Lockhart

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 |
|---|---|---|---|
| City of Lockhart | City of Lockhart | Publicly Owned | 14,985 |
| | | Choose an item. | |
| | | Choose an item. | |
| | | Choose an item. | |

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

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

☐ Yes ☒ No

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

☐ Yes ☐ No

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

Click to enter text.

## Section 5. Closure Plans (Instructions Page 45)

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

☐ Yes ☒ No

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

☐ Yes ☐ No

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

Click to enter text.

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

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

### A. Summary transmittal

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

☒ Yes ☐ No

**If yes**, provide the date(s) of approval for each phase: Spring 1999

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

Click to enter text.

### B. Buffer zones

Have the buffer zone requirements been met?

☒ Yes ☐ No

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

Click to enter text.

## C. Other actions required by the current permit

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

☐ Yes ☒ No

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

Click to enter text.

## D. Grit and grease treatment

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

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

☐ Yes ☒ No

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

### *2. Grit and grease processing*

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

Click to enter text.

### *3. Grit disposal*

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

☐ Yes ☐ No

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

Describe the method of grit disposal.

Click to enter text.

***4. Grease and decanted liquid disposal***

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

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

Click to enter text.

## E. Stormwater management

***1. Applicability***

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

☒ Yes ☐ No

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

☒ Yes ☐ No

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

***2. MSGP coverage***

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

☒ Yes ☐ No

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

TXR05 Q363 or TXRNE Click to enter text.

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

☐ Yes ☐ No

### 3. *Conditional exclusion*

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

☐ Yes ☐ No

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

Click to enter text.

### 4. *Existing coverage in individual permit*

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

☐ Yes ☐ No

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

Click to enter text.

### 5. *Zero stormwater discharge*

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

☐ Yes ☐ No

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

Click to enter text.

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

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

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

☐ Yes ☐ No

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

Click to enter text.

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

## F. Discharges to the Lake Houston Watershed

Does the facility discharge in the Lake Houston watershed?

☐ Yes ☒ No

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

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

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

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

☒ Yes ☐ No

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

In addition, provide the date the plant started or is anticipated to start accepting sludge, an estimate of monthly sludge acceptance (gallons or millions of gallons), an estimate of the $BOD_5$ 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.

Attachment 7

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.

Acceptance Date: 1999, Estimated monthly septic waste: 1,000,000 gallons/month, Estimated BOD concentration of the septic waste: 2,000 mg/L, design BOD concentration of the influent collection system: 2,500 mg/L.

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

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

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

☐ Yes ☒ No

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

Click to enter text.

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

Is the facility in operation?

☒ Yes ☐ No

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

**If yes**, provide effluent analysis data for the listed pollutants. ***Wastewater treatment facilities*** complete Table 1.0(2). 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 | | 1 | 1 | Grab | 8/1/24: 6am |
| Total Suspended Solids, mg/l | | 1.80 | 1 | Grab | 8/1/24: 6am |
| Ammonia Nitrogen, mg/l | | 0.13 | 1 | Grab | 8/1/24: 6am |
| Nitrate Nitrogen, mg/l | | 10.0 | 1 | Grab | 8/1/24: 6am |
| Total Kjeldahl Nitrogen, mg/l | | 0.45 | 1 | Grab | 8/1/24: 6am |
| Sulfate, mg/l | | 80.3 | 1 | Grab | 8/1/24: 6am |
| Chloride, mg/l | | 183 | 1 | Grab | 8/1/24: 6am |
| Total Phosphorus, mg/l | | 3.83 | 1 | Grab | 8/1/24: 6am |
| pH, standard units | | 4.5 | 1 | Grab | 8/1/24: 6am |
| Dissolved Oxygen*, mg/l | | 7.83 | 1 | Grab | 8/1/24: 6am |
| Chlorine Residual, mg/l | | N/A | | | |
| *E.coli* (CFU/100ml) freshwater | | 18 | 1 | Grab | 8/1/24: 6am |
| Entercocci (CFU/100ml) saltwater | | N/A | | | |
| Total Dissolved Solids, mg/l | | 620 | 1 | Grab | 8/1/24: 6am |
| Electrical Conductivity, µmohs/cm, † | | N/A | | | |
| Oil & Grease, mg/l | | 0.860 | 1 | Grab | 8/1/24: 6am |
| Alkalinity ($CaCO_3$)*, mg/l | | 174 | 1 | Grab | 8/1/24: 6am |

*TPDES permits only
†TLAP permits only

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

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

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

Facility Operator Name: Jason Eeds

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

Facility Operator's License Number: WW0030657

## 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: Click to enter text.

### C. Biosolids Management

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

**Biosolids Management**

| Management Practice | Handler or Preparer Type | Bulk or Bag Container | Amount (dry metric tons) | Pathogen Reduction Options | Vector Attraction Reduction Option |
|---|---|---|---|---|---|
| Other | Off-site Third-Party Handler or Preparer | Bulk | 389 | Class B: PSRP Aerobic Digestion | Option 4: SOUR <=1.5 mg 02/hr/g total solids at 20C (<2% solids) |
| Choose an item. | Choose an item. | Choose an item. | | Choose an item. | Choose an item. |
| Choose an item. | Choose an item. | Choose an item. | | Choose an item. | Choose an item. |

If "Other" is selected for Management Practice, please explain (e.g. monofill or transport to another WWTP): Transported for further processing

### D. Disposal site

Disposal site name: JV Dirt and Loam 5RC Compost Facility; Micro Dirt

TCEQ permit or registration number: TCEQ #2310; TCEQ #42016

County where disposal site is located: Caldwell; Travis

### E. Transportation method

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

Name of the hauler: Sheridan Environmental

Hauler registration number: Permit #24220

Sludge is transported as a:

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

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

### A. Beneficial use authorization

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

☐ Yes ☒ No

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

☐ Yes ☐ No

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

☐ Yes ☐ No

### B. Sludge processing authorization

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

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

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

☐ Yes ☐ No

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

Does this facility include sewage sludge lagoons?

☐ Yes ☒ No

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

### A. Location information

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

- Original General Highway (County) Map:

  **Attachment**: Click to enter text.
- USDA Natural Resources Conservation Service Soil Map:

  **Attachment**: Click to enter text.
- Federal Emergency Management Map:

  **Attachment**: Click to enter text.
- Site map:

  **Attachment**: Click to enter text.

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

☐ Overlap a designated 100-year frequency flood plain

☐ Soils with flooding classification

☐ Overlap an unstable area

☐ Wetlands

☐ Located less than 60 meters from a fault

☐ None of the above

**Attachment**: Click to enter text.

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

Click to enter text.

**B. Temporary storage information**

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

Nitrate Nitrogen, mg/kg: Click to enter text.

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

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

Phosphorus, mg/kg: Click to enter text.

Potassium, mg/kg: Click to enter text.

pH, standard units: Click to enter text.

Ammonia Nitrogen mg/kg: Click to enter text.

Arsenic: Click to enter text.

Cadmium: Click to enter text.

Chromium: Click to enter text.

Copper: Click to enter text.

Lead: Click to enter text.

Mercury: Click to enter text.

Molybdenum: Click to enter text.

Nickel: Click to enter text.

Selenium: Click to enter text.

Zinc: Click to enter text.

Total PCBs: Click to enter text.

Provide the following information:

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

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

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

### C. Liner information

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

☐ Yes ☐ No

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

Click to enter text.

### D. Site development plan

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

Click to enter text.

Attach the following documents to the application.

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

  **Attachment**: Click to enter text.
- Copy of the closure plan

  **Attachment**: Click to enter text.
- Copy of deed recordation for the site

  **Attachment**: Click to enter text.
- Size of the sludge lagoon(s) in surface acres and capacity in cubic feet and gallons

  **Attachment**: Click to enter text.
- Description of the method of controlling infiltration of groundwater and surface water from entering the site

  **Attachment**: Click to enter text.
- Procedures to prevent the occurrence of nuisance conditions

  **Attachment**: Click to enter text.

### E. Groundwater monitoring

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

☐ Yes ☐ No

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

**Attachment:** Click to enter text.

## Section 12. Authorizations/Compliance/Enforcement (Instructions Page 55)

### A. Additional authorizations

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

☐ Yes ☒ No

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

Click to enter text.

### B. Permittee enforcement status

Is the permittee currently under enforcement for this facility?

☐ Yes ☒ No

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

☐ Yes ☐ No

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

Click to enter text.

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

### A. RCRA hazardous wastes

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

☐ Yes ☒ No

**B. Remediation activity wastewater**

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

☐ Yes ☒ No

**C. Details about wastes received**

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

**Attachment:** Click to enter text.

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

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

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

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

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

CERTIFICATION:

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

Printed Name: Lew White

Title: City Mayor, City of Lockhart

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.

Click to enter text.

### B. Regionalization of facilities

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

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

#### *1. Municipally incorporated areas*

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

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

☐ Yes ☐ No ☐ Not Applicable

**If yes**, within the city limits of: Click to enter text.

**If yes**, attach correspondence from the city.

**Attachment:** Click to enter text.

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

**Attachment:** Click to enter text.

#### *2. Utility CCN areas*

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

☐ Yes ☐ No

[1] https://www.tceq.texas.gov/permitting/wastewater/tceq-regionalization-for-wastewater

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

**Attachment**: Click to enter text.

***3. Nearby WWTPs or collection systems***

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

☐ Yes ☐ No

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

**Attachment**: Click to enter text.

**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**: Click to enter text.

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

**Attachment:** Click to enter text.

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

Is this facility in operation?

☐ Yes ☐ No

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

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

### A. Current organic loading

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

Average Influent Organic Strength or $BOD_5$ Concentration in mg/l: Click to enter text.

Average Influent Loading (lbs/day = total average flow X average $BOD_5$ conc. X 8.34): Click to enter text.

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

Click to enter text.

### B. Proposed organic loading

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

**Table 1.1(1) – Design Organic Loading**

| Source | Total Average Flow (MGD) | Influent BOD5 Concentration (mg/l) |
|---|---|---|
| Municipality | | |
| Subdivision | | |
| Trailer park – transient | | |
| Mobile home park | | |
| School with cafeteria and showers | | |
| School with cafeteria, no showers | | |
| Recreational park, overnight use | | |
| Recreational park, day use | | |
| Office building or factory | | |
| Motel | | |
| Restaurant | | |
| Hospital | | |
| Nursing home | | |
| Other | | |
| TOTAL FLOW from all sources | | |
| AVERAGE $BOD_5$ from all sources | | |

## 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: Click to enter text.

Total Suspended Solids, mg/l: Click to enter text.

Ammonia Nitrogen, mg/l: Click to enter text.

Total Phosphorus, mg/l: Click to enter text.

Dissolved Oxygen, mg/l: Click to enter text.

Other: Click to enter text.

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

Biochemical Oxygen Demand (5-day), mg/l: Click to enter text.

Total Suspended Solids, mg/l: Click to enter text.

Ammonia Nitrogen, mg/l: Click to enter text.

Total Phosphorus, mg/l: Click to enter text.

Dissolved Oxygen, mg/l: Click to enter text.

Other: Click to enter text.

**C. Final Phase Design Effluent Quality**

Biochemical Oxygen Demand (5-day), mg/l: Click to enter text.

Total Suspended Solids, mg/l: Click to enter text.

Ammonia Nitrogen, mg/l: Click to enter text.

Total Phosphorus, mg/l: Click to enter text.

Dissolved Oxygen, mg/l: Click to enter text.

Other: Click to enter text.

**D. Disinfection Method**

Identify the proposed method of disinfection.

☐ Chlorine: Click to enter text. mg/l after Click to enter text. minutes detention time at peak flow

Dechlorination process: Click to enter text.

☐ Ultraviolet Light: Click to enter text. seconds contact time at peak flow

☐ Other: Click to enter text.

## Section 4. Design Calculations (Instructions Page 59)

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

**Attachment**: Click to enter text.

## 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.

Click to enter text.

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

Click to enter text.

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

☐ Yes ☐ No

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

☐ Yes ☐ No

**If yes**, provide the permit number: Click to enter text.

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

### B. Wind rose

Attach a wind rose: Click to enter text.

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

### A. Beneficial use authorization

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

☐ Yes ☐ No

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

### B. Sludge processing authorization

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

☐ Sludge Composting

☐ Marketing and Distribution of sludge

☐ Sludge Surface Disposal or Sludge Monofill

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

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

Attach a solids management plan to the application.

**Attachment:** Click to enter text.

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

- Treatment units and processes dimensions and capacities

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

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

# DOMESTIC WASTEWATER PERMIT APPLICATION WORKSHEET 2.0: RECEIVING WATERS

The following information is required for all TPDES permit applications.

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

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

☐ Yes ☒ No

If **no**, proceed it Section 2. **If yes**, provide the following:

Owner of the drinking water supply: Click to enter text.

Distance and direction to the intake: Click to enter text.

Attach a USGS map that identifies the location of the intake.

**Attachment**: Click to enter text.

## Section 2. Discharge into Tidally Affected Waters (Instructions Page 64)

Does the facility discharge into tidally affected waters?

☐ Yes ☒ No

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

### A. Receiving water outfall

Width of the receiving water at the outfall, in feet: Click to enter text.

### B. Oyster waters

Are there oyster waters in the vicinity of the discharge?

☐ Yes ☐ No

**If yes**, provide the distance and direction from outfall(s).

Click to enter text.

### C. Sea grasses

Are there any sea grasses within the vicinity of the point of discharge?

☐ Yes ☐ No

**If yes**, provide the distance and direction from the outfall(s).

Click to enter text.

## Section 3. Classified Segments (Instructions Page 64)

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

☒ Yes ☐ No

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

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

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

Name of the immediate receiving waters: Click to enter text.

### A. Receiving water type

Identify the appropriate description of the receiving waters.

☐ Stream

☐ Freshwater Swamp or Marsh

☐ Lake or Pond

Surface area, in acres: Click to enter text.

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

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

☐ Man-made Channel or Ditch

☐ Open Bay

☐ Tidal Stream, Bayou, or Marsh

☐ Other, specify: Click to enter text.

### B. Flow characteristics

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

☐ Intermittent - dry for at least one week during most years

☐ Intermittent with Perennial Pools - enduring pools with sufficient habitat to maintain significant aquatic life uses

☐ Perennial - normally flowing

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

☐ USGS flow records

☐ Historical observation by adjacent landowners

☐ Personal observation

☐ Other, specify: Click to enter text.

### C. Downstream perennial confluences

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

Click to enter text.

### 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.

Click to enter text.

### E. Normal dry weather characteristics

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

Click to enter text.

Date and time of observation: Click to enter text.

Was the water body influenced by stormwater runoff during observations?

☐ Yes ☐ No

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

### A. Upstream influences

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

☐ Oil field activities
☐ Upstream discharges
☐ Septic tanks
☐ Urban runoff
☐ Agricultural runoff
☐ Other(s), specify: Click to enter text.

**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: Click to enter text.

**C. Waterbody aesthetics**

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

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

# DOMESTIC WASTEWATER PERMIT APPLICATION WORKSHEET 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: Click to enter text. Time of study: Click to enter text.

Stream name: Click to enter text.

Location: Click to enter text.

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: Click to enter text.

Number of stream bends that are moderately defined: Click to enter text.

Number of stream bends that are poorly defined: Click to enter text.

Number of riffles: Click to enter text.

Evidence of flow fluctuations (check one):

☐ Minor ☐ moderate ☐ severe

Indicate the observed stream uses and if there is evidence of flow fluctuations or channel obstruction/modification.

Click to enter text.

**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**<br>Select riffle, run, glide, or pool. See Instructions, Definitions section. | **Transect location** | **Water surface width (ft)** | **Stream depths (ft)**<br>at 4 to 10 points along each transect from the channel bed to the water surface. Separate the measurements with commas. |
|---|---|---|---|
| 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. | | | |

## Section 3. Summarize Measurements (Instructions Page 66)

Streambed slope of entire reach, from USGS map in feet/feet: Click to enter text.

Approximate drainage area above the most downstream transect (from USGS map or county highway map, in square miles): Click to enter text.

Length of stream evaluated, in feet: Click to enter text.

Number of lateral transects made: Click to enter text.

Average stream width, in feet: Click to enter text.

Average stream depth, in feet: Click to enter text.

Average stream velocity, in feet/second: Click to enter text.

Instantaneous stream flow, in cubic feet/second: Click to enter text.

Indicate flow measurement method (type of meter, floating chip timed over a fixed distance, etc.): Click to enter text.

Size of pools (large, small, moderate, none): Click to enter text.

Maximum pool depth, in feet: Click to enter text.

# DOMESTIC WASTEWATER PERMIT APPLICATION WORKSHEET 3.0: LAND DISPOSAL OF EFFLUENT

**The following is required for renewal, new, and amendment permit applications.**

## Section 1. Type of Disposal System (Instructions Page 68)

Identify the method of land disposal:

- ☐ Surface application
- ☐ Irrigation
- ☐ Drip irrigation system
- ☐ Evaporation
- ☐ Subsurface application
- ☐ Subsurface soils absorption
- ☐ Subsurface area drip dispersal system
- ☐ Evapotranspiration beds
- ☐ Other (describe in detail): Click to enter text.

NOTE: All applicants without authorization or proposing new/amended subsurface disposal MUST complete and submit Worksheet 7.0.

**For existing authorizations, provide Registration Number:** Click to enter text.

## Section 2. Land Application Site(s) (Instructions Page 68)

In table 3.0(1), provide the requested information for the land application sites. Include the agricultural or cover crop type (wheat, cotton, alfalfa, bermuda grass, native grasses, etc.), land use (golf course, hayland, pastureland, park, row crop, etc.), irrigation area, amount of effluent applied, and whether or not the public has access to the area. Specify the amount of land area and the amount of effluent that will be allotted to each agricultural or cover crop, if more than one crop will be used.

**Table 3.0(1) – Land Application Site Crops**

| Crop Type & Land Use | Irrigation Area (acres) | Effluent Application (GPD) | Public Access? Y/N |
|---|---|---|---|
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

## Section 3. Storage and Evaporation Lagoons/Ponds (Instructions Page 68)

**Table 3.0(2) – Storage and Evaporation Ponds**

| Pond Number | Surface Area (acres) | Storage Volume (acre-feet) | Dimensions | Liner Type |
|---|---|---|---|---|
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

Attach a copy of a liner certification that was prepared, signed, and sealed by a Texas licensed professional engineer for each pond.

**Attachment**: Click to enter text.

## Section 4. Flood and Runoff Protection (Instructions Page 68)

Is the land application site within the 100-year frequency flood level?

☐ Yes ☐ No

**If yes**, describe how the site will be protected from inundation.

Click to enter text.

Provide the source used to determine the 100-year frequency flood level:

Click to enter text.

Provide a description of tailwater controls and rainfall run-on controls used for the land application site.

Click to enter text.

## Section 5. Annual Cropping Plan (Instructions Page 68)

Attach an Annual Cropping Plan which includes a discussion of each of the following items. If not applicable, provide a detailed explanation indicating why. **Attachment**: Click to enter text.

- Soils map with crops
- Cool and warm season plant species
- Crop yield goals
- Crop growing season
- Crop nutrient requirements
- Additional fertilizer requirements
- Minimum/maximum harvest height (for grass crops)
- Supplemental watering requirements
- Crop salt tolerances
- Harvesting method/number of harvests
- Justification for not removing existing vegetation to be irrigated

## Section 6. Well and Map Information (Instructions Page 69)

Attach a USGS map with the following information shown and labeled. If not applicable, provide a detailed explanation indicating why. **Attachment**: Click to enter text.

- The boundaries of the land application site(s)
- Waste disposal or treatment facility site(s)
- On-site buildings
- Buffer zones
- Effluent storage and tailwater control facilities
- All water wells within 1-mile radius of the disposal site or property boundaries
- All springs and seeps onsite and within 500 feet of the property boundaries
- All surface waters in the state onsite and within 500 feet of the property boundaries
- All faults and sinkholes onsite and within 500 feet of the property

List and cross reference all water wells located within a half-mile radius of the disposal site or property boundaries shown on the USGS map in the following table. Attach additional pages as necessary to include all of the wells.

**Table 3.0(3) – Water Well Data**

| Well ID | Well Use | Producing? Y/N | Open, cased, capped, or plugged? | Proposed Best Management Practice |
|---|---|---|---|---|
| | | | Choose an item. | |
| | | | Choose an item. | |
| | | | Choose an item. | |
| | | | Choose an item. | |
| | | | Choose an item. | |

If water quality data or well log information is available please include the information in an attachment listed by Well ID.

**Attachment**: Click to enter text.

## Section 7. Groundwater Quality (Instructions Page 69)

Attach a Groundwater Quality Technical Report which assesses the impact of the wastewater disposal system on groundwater. This report shall include an evaluation of the water wells (including the information in the well table provided in Item 6. above), the wastewater application rate, and pond liners. Indicate by a check mark that this report is provided.

**Attachment**: Click to enter text.

Are groundwater monitoring wells available onsite? ☐ Yes ☐ No

Do you plan to install ground water monitoring wells or lysimeters around the land application site? ☐ Yes ☐ No

**If yes**, provide the proposed location of the monitoring wells or lysimeters on a site map.

**Attachment**: Click to enter text.

## Section 8. Soil Map and Soil Analyses (Instructions Page 70)

### A. Soil map

Attach a USDA Soil Survey map that shows the area to be used for effluent disposal.

**Attachment**: Click to enter text.

### B. Soil analyses

Attach the laboratory results sheets from the soil analyses. **Note**: for renewal applications, the current annual soil analyses required by the permit are acceptable as long as the test date is less than one year prior to the submission of the application.

**Attachment**: Click to enter text.

List all USDA designated soil series on the proposed land application site. Attach additional pages as necessary.

**Table 3.0(4) – Soil Data**

| Soil Series | Depth from Surface | Permeability | Available Water Capacity | Curve Number |
|---|---|---|---|---|
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

## Section 9. Effluent Monitoring Data (Instructions Page 71)

Is the facility in operation?

☐ Yes ☐ No

**If no**, this section is not applicable and the worksheet is complete.

**If yes**, provide the effluent monitoring data for the parameters regulated in the existing permit. If a parameter is not regulated in the existing permit, enter N/A.

**Table 3.0(5) – Effluent Monitoring Data**

| Date | 30 Day Avg Flow MGD | BOD5 mg/l | TSS mg/l | pH | Chlorine Residual mg/l | Acres irrigated |
|---|---|---|---|---|---|---|
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |

Provide a discussion of all persistent excursions above the permitted limits and any corrective actions taken.

Click to enter text.

# DOMESTIC WASTEWATER PERMIT APPLICATION WORKSHEET 3.1: SURFACE LAND DISPOSAL OF EFFLUENT

**The following is required for new and major amendment permit applications. Renewal and minor amendment permit applications may be asked for this worksheet on a case by case basis.**

## Section 1. Surface Disposal (Instructions Page 72)

Complete the item that applies for the method of disposal being used.

**A. Irrigation**

Area under irrigation, in acres: Click to enter text.

Design application frequency:

hours/day Click to enter text. **And** days/week Click to enter text.

Land grade (slope):

average percent (%): Click to enter text.

maximum percent (%): Click to enter text.

Design application rate in acre-feet/acre/year: Click to enter text.

Design total nitrogen loading rate, in lbs N/acre/year: Click to enter text.

Soil conductivity (mmhos/cm): Click to enter text.

Method of application: Click to enter text.

Attach a separate engineering report with the water balance and storage volume calculations, method of application, irrigation efficiency, and nitrogen balance.

**Attachment:** Click to enter text.

**B. Evaporation ponds**

Daily average effluent flow into ponds, in gallons per day: Click to enter text.

Attach a separate engineering report with the water balance and storage volume calculations.

**Attachment:** Click to enter text.

**C. Evapotranspiration beds**

Number of beds: Click to enter text.

Area of bed(s), in acres: Click to enter text.

Depth of bed(s), in feet: Click to enter text.

Void ratio of soil in the beds: Click to enter text.

Storage volume within the beds, in acre-feet: Click to enter text.

Attach a separate engineering report with the water balance and storage volume calculations, and a description of the lining.

**Attachment:** Click to enter text.

**D. Overland flow**

Area used for application, in acres: Click to enter text.

Slopes for application area, percent (%): Click to enter text.

Design application rate, in gpm/foot of slope width: Click to enter text.

Slope length, in feet: Click to enter text.

Design $BOD_5$ loading rate, in lbs $BOD_5$/acre/day: Click to enter text.

Design application frequency:

hours/day: Click to enter text. **And** days/week: Click to enter text.

Attach a separate engineering report with the method of application and design requirements according to *30 TAC Chapter 217*.

**Attachment:** Click to enter text.

## Section 2. Edwards Aquifer (Instructions Page 73)

Is the facility subject to *30 TAC Chapter 213*, Edwards Aquifer Rules?

☐ Yes ☐ No

If **yes**, is the facility located on the Edwards Aquifer Recharge Zone?

☐ Yes ☐ No

**If yes**, attach a geological report addressing potential recharge features.

**Attachment:** Click to enter text.

# DOMESTIC WASTEWATER PERMIT APPLICATION WORKSHEET 3.2: SURFACE LAND DISPOSAL OF EFFLUENT

The following **is required** for **new and major amendment** permit applications. Renewal and minor amendments applicants may be asked for the worksheet on a case by case basis.

NOTE: All applicants proposing new/amended subsurface disposal MUST complete and submit Worksheet 7.0. This worksheet applies to any subsurface disposal system that **does not meet** the definition of a subsurface area drip dispersal system as defined in *30 TAC Chapter 222, Subsurface Area Drip Dispersal System.*

## Section 1. Subsurface Application (Instructions Page 74)

Identify the type of system:

- ☐ Conventional Gravity Drainfield, Beds, or Trenches (new systems must be less than 5,000 GPD)
- ☐ Low Pressure Dosing
- ☐ Other, specify: Click to enter text.

Application area, in acres: Click to enter text.

Area of drainfield, in square feet: Click to enter text.

Application rate, in gal/square foot/day: Click to enter text.

Depth to groundwater, in feet: Click to enter text.

Area of trench, in square feet: Click to enter text.

Dosing duration per area, in hours: Click to enter text.

Number of beds: Click to enter text.

Dosing amount per area, in inches/day: Click to enter text.

Infiltration rate, in inches/hour: Click to enter text.

Storage volume, in gallons: Click to enter text.

Area of bed(s), in square feet: Click to enter text.

Soil Classification: Click to enter text.

Attach a separate engineering report with the information required in *30 TAC § 309.20,* excluding the requirements of *§* 309.20 b(3)(A) and (B) design analysis which may be asked for on a case by case basis. Include a description of the schedule of dosing basin rotation.

**Attachment:** Click to enter text.

## Section 2. Edwards Aquifer (Instructions Page 74)

Is the subsurface system over the Edwards Aquifer Recharge Zone as mapped by TCEQ?

☐ Yes ☐ No

Is the subsurface system over the Edwards Aquifer Transition Zone as mapped by TCEQ?

☐ Yes ☐ No

**If yes to either question**, the subsurface system may be prohibited by *30 TAC §213.8*. Please call the Municipal Permits Team, at 512-239-4671, to schedule a pre-application meeting.

# DOMESTIC WASTEWATER PERMIT APPLICATION WORKSHEET 3.3: SUBSURFACE AREA DRIP DISPERSAL (SADDS) LAND DISPOSAL OF EFFLUENT

The following **is required** for **new and major amendment** subsurface area drip dispersal system permit applications. Renewal and minor amendments applicants may be asked for the worksheet on a case by case basis.

NOTE: All applicants proposing new/amended subsurface disposal MUST complete and submit Worksheet 7.0. This worksheet applies to any subsurface disposal system that **meets** the definition of a subsurface area drip dispersal system as defined in *30 TAC Chapter 222, Subsurface Area Drip Dispersal System.*

## Section 1. Administrative Information (Instructions Page 75)

**A.** Provide the legal name of all corporations or other business entities managed, owned, or otherwise closely related to the owner of the treatment facility:

**B.** Click to enter text. Is the owner of the land where the treatment facility is located the same as the owner of the treatment facility?

☐ Yes ☐ No

If **no**, provide the legal name of all corporations or other business entities managed, owned, or otherwise closely related to the owner of the land where the treatment facility is located.

Click to enter text.

**C.** Owner of the subsurface area drip dispersal system: Click to enter text.

**D.** Is the owner of the subsurface area drip dispersal system the same as the owner of the wastewater treatment facility or the site where the wastewater treatment facility is located?

☐ Yes ☐ No

If **no**, identify the names of all corporations or other business entities managed, owned, or otherwise closely related to the entity identified in Item 1.C.

Click to enter text.

**E.** Owner of the land where the subsurface area drip dispersal system is located: Click to enter text.

**F.** Is the owner of the land where the subsurface area drip dispersal system is located the same as owner of the wastewater treatment facility, the site where the wastewater treatment facility is located, or the owner of the subsurface area drip dispersal system?

☐ Yes ☐ No

If **no**, identify the name of all corporations or other business entities managed, owned, or otherwise closely related to the entity identified in item 1.E.

Click to enter text.

## Section 2. Subsurface Area Drip Dispersal System (Instructions Page 75)

### A. Type of system

☐ Subsurface Drip Irrigation

☐ Surface Drip Irrigation

☐ Other, specify: Click to enter text.

### B. Irrigation operations

Application area, in acres: Click to enter text.

Infiltration Rate, in inches/hour: Click to enter text.

Average slope of the application area, percent (%): Click to enter text.

Maximum slope of the application area, percent (%): Click to enter text.

Storage volume, in gallons: Click to enter text.

Major soil series: Click to enter text.

Depth to groundwater, in feet: Click to enter text.

### C. Application rate

Is the facility located **west** of the boundary shown in *30 TAC § 222.83* **and** also using a vegetative cover of non-native grasses over seeded with cool season grasses during the winter months (October-March)?

☐ Yes ☐ No

**If yes**, then the facility may propose a hydraulic application rate not to exceed 0.1 gal/square foot/day.

Is the facility located **east** of the boundary shown in *30 TAC § 222.83* **or** in any part of the state when the vegetative cover is any crop other than non-native grasses?

☐ Yes ☐ No

If **yes**, the facility must use the formula in *30 TAC §222.83* to calculate the maximum hydraulic application rate.

Do you plan to submit an alternative method to calculate the hydraulic application rate for approval by the executive director?

☐ Yes ☐ No

Hydraulic application rate, in gal/square foot/day: Click to enter text.

Nitrogen application rate, in lbs/gal/day: Click to enter text.

### D. Dosing information

Number of doses per day: Click to enter text.

Dosing duration per area, in hours: Click to enter text.

Rest period between doses, in hours: Click to enter text.

Dosing amount per area, in inches/day: Click to enter text.

Number of zones: Click to enter text.

Does the proposed subsurface drip irrigation system use tree vegetative cover as a crop?

☐ Yes ☐ No

If **yes**, provide a vegetation survey by a certified arborist. Please call the Water Quality Assessment Team at (512) 239-4671 to schedule a pre-application meeting.

**Attachment:** Click to enter text.

## Section 3. Required Plans (Instructions Page 75)

### A. Recharge feature plan

Attach a Recharge Feature Plan with all information required in *30 TAC §222.79*.

**Attachment:** Click to enter text.

### B. Soil evaluation

Attach a Soil Evaluation with all information required in *30 TAC §222.73*.

**Attachment:** Click to enter text.

### C. Site preparation plan

Attach a Site Preparation Plan with all information required in *30 TAC §222.75*.

**Attachment:** Click to enter text.

### D. Soil sampling/testing

Attach soil sampling and testing that includes all information required in *30 TAC §222.157*.

**Attachment:** Click to enter text.

## Section 4. Floodway Designation (Instructions Page 76)

### A. Site location

Is the existing/proposed land application site within a designated floodway?

☐ Yes ☐ No

### B. Flood map

Attach either the FEMA flood map or alternate information used to determine the floodway.

**Attachment:** Click to enter text.

## Section 5. Surface Waters in the State (Instructions Page 76)

### A. Buffer Map

Attach a map showing appropriate buffers on surface waters in the state, water wells, and springs/seeps.

**Attachment:** Click to enter text.

**B. Buffer variance request**

Do you plan to request a buffer variance from water wells or waters in the state?

☐ Yes ☐ No

**If yes**, then attach the additional information required in *30 TAC § 222.81(c).*

**Attachment:** Click to enter text.

## Section 6. Edwards Aquifer (Instructions Page 76)

**A.** Is the SADDS located over the Edwards Aquifer Recharge Zone as mapped by TCEQ?

☐ Yes ☐ No

**B.** Is the SADDS located over the Edwards Aquifer Transition Zone as mapped by TCEQ?

☐ Yes ☐ No

**If yes to either question**, then the SADDS may be prohibited by *30 TAC §213.8*. Please call the Municipal Permits Team at 512-239-4671 to schedule a pre-application meeting.

# 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: 10/7/2024 at 7:30 a.m.

### *Table 4.0(1) – Toxics Analysis*

| Pollutant | AVG Effluent Conc. (µg/l) | MAX Effluent Conc. (µg/l) | Number of Samples | MAL (µg/l) |
|---|---|---|---|---|
| Acrylonitrile | | <0.001 | 1 | 50 |
| Aldrin | | <0.0000096 | 1 | 0.01 |
| Aluminum | | 0.0234 | 1 | 2.5 |
| Anthracene | | <0.00096 | 1 | 10 |
| Antimony | | 0.00116 | 1 | 5 |
| Arsenic | | 0.00138 | 1 | 0.5 |
| Barium | | 0.0333 | 1 | 3 |
| Benzene | | <0.001 | 1 | 10 |
| Benzidine | | <0.0192 | 1 | 50 |
| Benzo(a)anthracene | | <0.00096 | 1 | 5 |
| Benzo(a)pyrene | | <0.00096 | 1 | 5 |
| Bis(2-chloroethyl)ether | | <0.00096 | 1 | 10 |
| Bis(2-ethylhexyl)phthalate | | <0.0072 | 1 | 10 |
| Bromodichloromethane | | <0.001 | 1 | 10 |
| Bromoform | | <0.001 | 1 | 10 |
| Cadmium | | <0.000095 | 1 | 1 |
| Carbon Tetrachloride | | <0.001 | 1 | 2 |
| Carbaryl | | <0.0024 | 1 | 5 |
| Chlordane* | | <0.000192 | 1 | 0.2 |
| Chlorobenzene | | <0.001 | 1 | 10 |

| Pollutant | AVG Effluent Conc. (µg/l) | MAX Effluent Conc. (µg/l) | Number of Samples | MAL (µg/l) |
|---|---|---|---|---|
| Chlorodibromomethane | | <0.001 | 1 | 10 |
| Chloroform | | <0.001 | 1 | 10 |
| Chlorpyrifos | | <0.000048 | 1 | 0.05 |
| Chromium (Total) | | 0.000726 | 1 | 3 |
| Chromium (Tri) **(*1)** | | <0.0100 | 1 | N/A |
| Chromium (Hex) | | <0.010 | 1 | 3 |
| Copper | | 0.00226 | 1 | 2 |
| Chrysene | | <0.00096 | 1 | 5 |
| p-Chloro-m-Cresol | | <0.0023 | 1 | 10 |
| 4,6-Dinitro-o-Cresol | | <0.00499 | 1 | 50 |
| p-Cresol | | <0.00595 | 1 | 10 |
| Cyanide **(*2)** | | <0.00238 | 1 | 10 |
| 4,4'- DDD | | <0.0000096 | 1 | 0.1 |
| 4,4'- DDE | | <0.0000096 | 1 | 0.1 |
| 4,4'- DDT | | <0.0000096 | 1 | 0.02 |
| 2,4-D | | <0.000477 | 1 | 0.7 |
| Demeton (O and S) | | <0.000048 | 1 | 0.20 |
| Diazinon | | <0.000048 | 1 | 0.5/0.1 |
| 1,2-Dibromoethane | | <0.001 | 1 | 10 |
| m-Dichlorobenzene | | <0.001 | 1 | 10 |
| o-Dichlorobenzene | | <0.001 | 1 | 10 |
| p-Dichlorobenzene | | <0.001 | 1 | 10 |
| 3,3'-Dichlorobenzidine | | <0.0048 | 1 | 5 |
| 1,2-Dichloroethane | | <0.001 | 1 | 10 |
| 1,1-Dichloroethylene | | <0.001 | 1 | 10 |
| Dichloromethane | | <0.00102 | 1 | 20 |
| 1,2-Dichloropropane | | <0.001 | 1 | 10 |
| 1,3-Dichloropropene | | <0.001 | 1 | 10 |
| Dicofol | | <0.000048 | 1 | 1 |
| Dieldrin | | <0.0000096 | 1 | 0.02 |
| 2,4-Dimethylphenol | | <0.0023 | 1 | 10 |
| Di-n-Butyl Phthalate | | <0.0072 | 1 | 10 |
| Diuron | | <0.0000432 | 1 | 0.09 |

| Pollutant | AVG Effluent Conc. (µg/l) | MAX Effluent Conc. (µg/l) | Number of Samples | MAL (µg/l) |
|---|---|---|---|---|
| Endosulfan I (alpha) | | <0.0000096 | 1 | 0.01 |
| Endosulfan II (beta) | | <0.0000096 | 1 | 0.02 |
| Endosulfan Sulfate | | <0.0000096 | 1 | 0.1 |
| Endrin | | <0.0000096 | 1 | 0.02 |
| Ethylbenzene | | <0.001 | 1 | 10 |
| Fluoride | | 0.0645 | 1 | 500 |
| Guthion | | <0.000048 | 1 | 0.1 |
| Heptachlor | | <0.0000096 | 1 | 0.01 |
| Heptachlor Epoxide | | <0.0000096 | 1 | 0.01 |
| Hexachlorobenzene | | <0.00096 | 1 | 5 |
| Hexachlorobutadiene | | <0.00096 | 1 | 10 |
| Hexachlorocyclohexane (alpha) | | <0.0000096 | 1 | 0.05 |
| Hexachlorocyclohexane (beta) | | <0.0000096 | 1 | 0.05 |
| gamma-Hexachlorocyclohexane (Lindane) | | <0.0000096 | 1 | 0.05 |
| Hexachlorocyclopentadiene | | <0.00864 | 1 | 10 |
| Hexachloroethane | | <0.00096 | 1 | 20 |
| Hexachlorophene | | <0.00239 | 1 | 10 |
| Lead | | <0.0005 | 1 | 0.5 |
| Malathion | | <0.000048 | 1 | 0.1 |
| Mercury | | <0.00000128 | 1 | 0.005 |
| Methoxychlor | | <0.0000096 | 1 | 2 |
| Methyl Ethyl Ketone | | <0.001 | 1 | 50 |
| Mirex | | <0.0000096 | 1 | 0.02 |
| Nickel | | 0.00218 | 1 | 2 |
| Nitrate-Nitrogen | | 1.59 | 1 | 100 |
| Nitrobenzene | | <0.00096 | 1 | 10 |
| N-Nitrosodiethylamine | | <0.00096 | 1 | 20 |
| N-Nitroso-di-n-Butylamine | | <0.00096 | 1 | 20 |
| Nonylphenol | | <0.0288 | 1 | 333 |
| Parathion (ethyl) | | <0.000048 | 1 | 0.1 |
| Pentachlorobenzene | | <0.00096 | 1 | 20 |
| Pentachlorophenol | | <0.00096 | 1 | 5 |

| Pollutant | AVG Effluent Conc. (µg/l) | MAX Effluent Conc. (µg/l) | Number of Samples | MAL (µg/l) |
|---|---|---|---|---|
| Phenanthrene | | <0.00096 | 1 | 10 |
| Polychlorinated Biphenyls (PCB's) **(*3)** | | <0.001346 | 1 | 0.2 |
| Pyridine | | <0.00518 | 1 | 20 |
| Selenium | | 0.00313 | 1 | 5 |
| Silver | | 0.0000822 | 1 | 0.5 |
| 1,2,4,5-Tetrachlorobenzene | | <0.00096 | 1 | 20 |
| 1,1,2,2-Tetrachloroethane | | <0.001 | 1 | 10 |
| Tetrachloroethylene | | <0.001 | 1 | 10 |
| Thallium | | <0.000966 | 1 | 0.5 |
| Toluene | | <0.001 | 1 | 10 |
| Toxaphene | | <0.000192 | 1 | 0.3 |
| 2,4,5-TP (Silvex) | | <0.000286 | 1 | 0.3 |
| Tributyltin (see instructions for explanation) | | <0.00000671 | 1 | 0.01 |
| 1,1,1-Trichloroethane | | <0.001 | 1 | 10 |
| 1,1,2-Trichloroethane | | <0.001 | 1 | 10 |
| Trichloroethylene | | <0.001 | 1 | 10 |
| 2,4,5-Trichlorophenol | | <0.00096 | 1 | 50 |
| TTHM (Total Trihalomethanes) | | <0.001 | 1 | 10 |
| Vinyl Chloride | | <0.001 | 1 | 10 |
| Zinc | | 0.0356 | 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: 10/07/2024 @ 7:30 a.m.

### *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 | | 0.00116 | 1 | 5 |
| Arsenic | | 0.00138 | 1 | 0.5 |
| Beryllium | | 0.0000629 | 1 | 0.5 |
| Cadmium | | <0.000095 | 1 | 1 |
| Chromium (Total) | | <0.010 | 1 | 3 |
| Chromium (Hex) | | <0.010 | 1 | 3 |
| Chromium (Tri) **(*1)** | | <0.0100 | 1 | N/A |
| Copper | | 0.00226 | 1 | 2 |
| Lead | | <0.0005 | 1 | 0.5 |
| Mercury | | <0.00000128 | 1 | 0.005 |
| Nickel | | 0.00218 | 1 | 2 |
| Selenium | | 0.00313 | 1 | 5 |
| Silver | | 0.0000822 | 1 | 0.5 |
| Thallium | | <0.000966 | 1 | 0.5 |
| Zinc | | 0.0356 | 1 | 5 |
| Cyanide **(*2)** | | <0.00238 | 1 | 10 |
| Phenols, Total | | <0.00144 | 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 | | <0.04 | 1 | 50 |
| Acrylonitrile | | <0.001 | 1 | 50 |
| Benzene | | <0.001 | 1 | 10 |
| Bromoform | | <0.001 | 1 | 10 |
| Carbon Tetrachloride | | <0.001 | 1 | 2 |
| Chlorobenzene | | <0.001 | 1 | 10 |
| Chlorodibromomethane | | <0.001 | 1 | 10 |
| Chloroethane | | <0.00112 | 1 | 50 |
| 2-Chloroethylvinyl Ether | | <0.001 | 1 | 10 |
| Chloroform | | <0.001 | 1 | 10 |
| Dichlorobromomethane [Bromodichloromethane] | | <0.001 | 1 | 10 |
| 1,1-Dichloroethane | | <0.001 | 1 | 10 |
| 1,2-Dichloroethane | | <0.001 | 1 | 10 |
| 1,1-Dichloroethylene | | <0.001 | 1 | 10 |
| 1,2-Dichloropropane | | <0.001 | 1 | 10 |
| 1,3-Dichloropropylene [1,3-Dichloropropene] | | <0.001 | 1 | 10 |
| 1,2-Trans-Dichloroethylene | | <0.001 | 1 | 10 |
| Ethylbenzene | | <0.001 | 1 | 10 |
| Methyl Bromide | | <0.001 | 1 | 50 |
| Methyl Chloride | | <0.001 | 1 | 50 |
| Methylene Chloride | | <0.00102 | 1 | 20 |
| 1,1,2,2-Tetrachloroethane | | <0.001 | 1 | 10 |
| Tetrachloroethylene | | <0.001 | 1 | 10 |
| Toluene | | <0.001 | 1 | 10 |
| 1,1,1-Trichloroethane | | <0.001 | 1 | 10 |
| 1,1,2-Trichloroethane | | <0.001 | 1 | 10 |
| Trichloroethylene | | <0.001 | 1 | 10 |
| Vinyl Chloride | | <0.001 | 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 | | <0.00096 | 1 | 10 |
| 2,4-Dichlorophenol | | <0.00096 | 1 | 10 |
| 2,4-Dimethylphenol | | <0.0023 | 1 | 10 |
| 4,6-Dinitro-o-Cresol | | <0.0049 | 1 | 50 |
| 2,4-Dinitrophenol | | <0.00864 | 1 | 50 |
| 2-Nitrophenol | | <0.00096 | 1 | 20 |
| 4-Nitrophenol | | <0.00096 | 1 | 50 |
| P-Chloro-m-Cresol | | <0.00595 | 1 | 10 |
| Pentalchlorophenol | | <0.0096 | 1 | 5 |
| Phenol | | <0.00144 | 1 | 10 |
| 2,4,6-Trichlorophenol | | <0.00096 | 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 | | <0.00096 | 1 | 10 |
| Acenaphthylene | | <0.00096 | 1 | 10 |
| Anthracene | | <0.00096 | 1 | 10 |
| Benzidine | | <0.0192 | 1 | 50 |
| Benzo(a)Anthracene | | <0.00096 | 1 | 5 |
| Benzo(a)Pyrene | | <0.00096 | 1 | 5 |
| 3,4-Benzofluoranthene | | <0.00096 | 1 | 10 |
| Benzo(ghi)Perylene | | <0.00096 | 1 | 20 |
| Benzo(k)Fluoranthene | | <0.00096 | 1 | 5 |
| Bis(2-Chloroethoxy)Methane | | <0.00096 | 1 | 10 |
| Bis(2-Chloroethyl)Ether | | <0.00096 | 1 | 10 |
| Bis(2-Chloroisopropyl)Ether | | <0.00096 | 1 | 10 |
| Bis(2-Ethylhexyl)Phthalate | | <0.0072 | 1 | 10 |
| 4-Bromophenyl Phenyl Ether | | <0.00096 | 1 | 10 |
| Butyl benzyl Phthalate | | 0.00117 | 1 | 10 |
| 2-Chloronaphthalene | | <0.00096 | 1 | 10 |
| 4-Chlorophenyl phenyl ether | | <0.00096 | 1 | 10 |
| Chrysene | | <0.00096 | 1 | 5 |
| Dibenzo(a,h)Anthracene | | <0.00096 | 1 | 5 |
| 1,2-(o)Dichlorobenzene | | <0.00096 | 1 | 10 |
| 1,3-(m)Dichlorobenzene | | <0.00096 | 1 | 10 |
| 1,4-(p)Dichlorobenzene | | <0.00096 | 1 | 10 |
| 3,3-Dichlorobenzidine | | <0.0048 | 1 | 5 |
| Diethyl Phthalate | | <0.00547 | 1 | 10 |
| Dimethyl Phthalate | | <0.00461 | 1 | 10 |
| Di-n-Butyl Phthalate | | <0.0072 | 1 | 10 |
| 2,4-Dinitrotoluene | | <0.00336 | 1 | 10 |
| 2,6-Dinitrotoluene | | <0.00096 | 1 | 10 |
| Di-n-Octyl Phthalate | | <0.00096 | 1 | 10 |
| 1,2-Diphenylhydrazine (as Azo-benzene) | | <0.00096 | 1 | 20 |
| Fluoranthene | | <0.00096 | 1 | 10 |

| Pollutant | AVG Effluent Conc. (µg/l) | MAX Effluent Conc. (µg/l) | Number of Samples | MAL (µg/l) |
|---|---|---|---|---|
| Fluorene | | <0.00096 | 1 | 10 |
| Hexachlorobenzene | | <0.00096 | 1 | 5 |
| Hexachlorobutadiene | | <0.00096 | 1 | 10 |
| Hexachlorocyclo-pentadiene | | <0.00864 | 1 | 10 |
| Hexachloroethane | | <0.00096 | 1 | 20 |
| Indeno(1,2,3-cd)pyrene | | <0.00096 | 1 | 5 |
| Isophorone | | <0.00096 | 1 | 10 |
| Naphthalene | | <0.00096 | 1 | 10 |
| Nitrobenzene | | <0.00096 | 1 | 10 |
| N-Nitrosodimethylamine | | <0.00672 | 1 | 50 |
| N-Nitrosodi-n-Propylamine | | <0.00096 | 1 | 20 |
| N-Nitrosodiphenylamine | | <0.00096 | 1 | 20 |
| Phenanthrene | | <0.00096 | 1 | 10 |
| Pyrene | | <0.00096 | 1 | 10 |
| 1,2,4-Trichlorobenzene | | <0.00096 | 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 | | <0.0000096 | 1 | 0.01 |
| alpha-BHC (Hexachlorocyclohexane) | | <0.0000096 | 1 | 0.05 |
| beta-BHC (Hexachlorocyclohexane) | | <0.0000096 | 1 | 0.05 |
| gamma-BHC (Hexachlorocyclohexane) | | <0.0000096 | 1 | 0.05 |
| delta-BHC (Hexachlorocyclohexane) | | <0.0000096 | 1 | 0.05 |
| Chlordane | | <0.000192 | 1 | 0.2 |
| 4,4-DDT | | <0.0000096 | 1 | 0.02 |
| 4,4-DDE | | <0.0000096 | 1 | 0.1 |
| 4,4,-DDD | | <0.0000096 | 1 | 0.1 |
| Dieldrin | | <0.0000096 | 1 | 0.02 |
| Endosulfan I (alpha) | | <0.0000096 | 1 | 0.01 |
| Endosulfan II (beta) | | <0.0000096 | 1 | 0.02 |
| Endosulfan Sulfate | | <0.0000096 | 1 | 0.1 |
| Endrin | | <0.0000096 | 1 | 0.02 |
| Endrin Aldehyde | | <0.0000096 | 1 | 0.1 |
| Heptachlor | | <0.0000096 | 1 | 0.01 |
| Heptachlor Epoxide | | <0.0000096 | 1 | 0.01 |
| PCB-1242 | | <0.000192 | 1 | 0.2 |
| PCB-1254 | | <0.000192 | 1 | 0.2 |
| PCB-1221 | | <0.000192 | 1 | 0.2 |
| PCB-1232 | | <0.000192 | 1 | 0.2 |
| PCB-1248 | | <0.000192 | 1 | 0.2 |
| PCB-1260 | | <0.000192 | 1 | 0.2 |
| PCB-1016 | | <0.000194 | 1 | 0.2 |
| Toxaphene | | <0.000192 | 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.

Click to enter text.

**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.

Click to enter text.

**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: Click to enter text.

### *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 | | | | | 10 |
| 1,2,3,7,8 PeCDD | 0.5 | | | | | 50 |
| 2,3,7,8 HxCDDs | 0.1 | | | | | 50 |
| 1,2,3,4,6,7,8 HpCDD | 0.01 | | | | | 50 |
| 2,3,7,8 TCDF | 0.1 | | | | | 10 |
| 1,2,3,7,8 PeCDF | 0.05 | | | | | 50 |
| 2,3,4,7,8 PeCDF | 0.5 | | | | | 50 |
| 2,3,7,8 HxCDFs | 0.1 | | | | | 50 |
| 2,3,4,7,8 HpCDFs | 0.01 | | | | | 50 |
| OCDD | 0.0003 | | | | | 100 |
| OCDF | 0.0003 | | | | | 100 |
| PCB 77 | 0.0001 | | | | | 0.5 |
| PCB 81 | 0.0003 | | | | | 0.5 |
| PCB 126 | 0.1 | | | | | 0.5 |
| PCB 169 | 0.03 | | | | | 0.5 |
| Total | | | | | | |

# 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: 12

48-hour Acute: 9

## 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.

Click to enter text.

## 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 |
|---|---|---|---|
| Information pro | vided to TCEQ through Disc | arge Monitoring | Reports (DMRs) |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

# 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: Click to enter text.

Significant IUs – non-categorical:

Number of IUs: Click to enter text.

Average Daily Flows, in MGD: Click to enter text.

Other IUs:

Number of IUs: Click to enter text.

Average Daily Flows, in MGD: Click to enter text.

### B. Treatment plant interference

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

☐ Yes ☒ No

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

Click to enter text.

### C. Treatment plant pass through

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

☐ Yes ☒ No

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

Click to enter text.

### D. Pretreatment program

Does your POTW have an approved pretreatment program?

☐ Yes ☒ No

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

Is your POTW required to develop an approved pretreatment program?

☐ Yes ☒ No

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

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

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

### A. Substantial modifications

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

☐ Yes ☐ No

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

Click to enter text.

### B. Non-substantial modifications

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

☐ Yes ☐ No

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

Click to enter text.

### C. Effluent parameters above the MAL

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

**Table 6.0(1) – Parameters Above the MAL**

| Pollutant | Concentration | MAL | Units | Date |
|---|---|---|---|---|
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

### D. Industrial user interruptions

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

☐ Yes ☐ No

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

Click to enter text.

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

### A. General information

Company Name: Click to enter text.

SIC Code: Click to enter text.

Contact name: Click to enter text.

Address: Click to enter text.

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

Telephone number: Click to enter text.

Email address: Click to enter text.

### B. Process information

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

Click to enter text.

### C. Product and service information

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

Click to enter text.

### D. Flow rate information

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

Process Wastewater:

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

Discharge Type: ☐ Continuous ☐ Batch ☐ Intermittent

Non-Process Wastewater:

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

Discharge Type: ☐ Continuous ☐ Batch ☐ Intermittent

## E. Pretreatment standards

Is the SIU or CIU subject to technically based local limits as defined in the *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: Subcategories: Click to enter text.

Click or tap here to enter text. Click to enter text.

Category: Click to enter text.

Subcategories: Click to enter text.

Category: Click to enter text.

Subcategories: Click to enter text.

Category: Click to enter text.

Subcategories: Click to enter text.

Category: Click to enter text.

Subcategories: Click to enter text.

## F. Industrial user interruptions

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

☐ Yes ☐ No

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

Click to enter text.

# WORKSHEET 7.0

## TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

## CLASS V INJECTION WELL INVENTORY/AUTHORIZATION FORM

Submit the completed form to:

TCEQ
IUC Permits Team
Radioactive Materials Division
MC-233
PO Box 13087
Austin, Texas 78711-3087
512-239-6466

For TCEQ Use Only
Reg. No._____
Date Received_____
Date Authorized_____

## Section 1. General Information (Instructions Page 92)

**1. TCEQ Program Area**

Program Area (PST, VCP, IHW, etc.): Click to enter text.

Program ID: Click to enter text.

Contact Name: Click to enter text.

Phone Number: Click to enter text.

**2. Agent/Consultant Contact Information**

Contact Name: Click to enter text.

Address: Click to enter text.

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

Phone Number: Click to enter text.

**3. Owner/Operator Contact Information**

☐ Owner ☐ Operator

Owner/Operator Name: Click to enter text.

Contact Name: Click to enter text.

Address: Click to enter text.

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

Phone Number: Click to enter text.

**4. Facility Contact Information**

Facility Name: Click to enter text.

Address: Click to enter text.

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

Location description (if no address is available): Click to enter text.

Facility Contact Person: Click to enter text.

Phone Number: Click to enter text.

5. **Latitude and Longitude, in degrees-minutes-seconds**

Latitude: Click to enter text.

Longitude: Click to enter text.

Method of determination (GPS, TOPO, etc.): Click to enter text.

Attach topographic quadrangle map as attachment A.

6. **Well Information**

Type of Well Construction, select one:

- ☐ Vertical Injection
- ☐ Subsurface Fluid Distribution System
- ☐ Infiltration Gallery
- ☐ Temporary Injection Points
- ☐ Other, Specify: Click to enter text.

Number of Injection Wells: Click to enter text.

7. **Purpose**

Detailed Description regarding purpose of Injection System:

Click to enter text.

Attach a Site Map as Attachment B (Attach the Approved Remediation Plan, if appropriate.)

8. **Water Well Driller/Installer**

Water Well Driller/Installer Name: Click to enter text.

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

Phone Number: Click to enter text.

License Number: Click to enter text.

## Section 2. Proposed Down Hole Design

**Attach a diagram signed and sealed by a licensed engineer as Attachment C.**

**Table 7.0(1) – Down Hole Design Table**

| Name of String | Size | Setting Depth | Sacks Cement/Grout – Slurry Volume – Top of Cement | Hole Size | Weight (lbs/ft) PVC/Steel |
|---|---|---|---|---|---|
| Casing | | | | | |
| Tubing | | | | | |
| Screen | | | | | |

## Section 3. Proposed Trench System, Subsurface Fluid Distribution System, or Infiltration Gallery

**Attach a diagram signed and sealed by a licensed engineer as Attachment D.**

System(s) Dimensions: Click to enter text.

System(s) Construction: Click to enter text.

## Section 4. Site Hydrogeological and Injection Zone Data

**1.** Name of Contaminated Aquifer: Click to enter text.

**2.** Receiving Formation Name of Injection Zone: Click to enter text.

**3.** Well/Trench Total Depth: Click to enter text.

**4.** Surface Elevation: Click to enter text.

**5.** Depth to Ground Water: Click to enter text.

**6.** Injection Zone Depth: Click to enter text.

**7.** Injection Zone vertically isolated geologically? ☐ Yes ☐ No

Impervious Strata between Injection Zone and nearest Underground Source of Drinking Water:

Name: Click to enter text.

Thickness: Click to enter text.

**8.** Provide a list of contaminants and the levels (ppm) in contaminated aquifer

Attach as Attachment E.

**9.** Horizontal and Vertical extent of contamination and injection plume

Attach as Attachment F.

**10.** Formation (Injection Zone) Water Chemistry (Background levels) TDS, etc.

Attach as Attachment G.

**11.** Injection Fluid Chemistry in PPM at point of injection

Attach as Attachment H.

**12.** Lowest Known Depth of Ground Water with < 10,000 PPM TDS: Click to enter text.

**13.** Maximum injection Rate/Volume/Pressure: Click to enter text.

**14.** Water wells within 1/4 mile radius (attach map as Attachment I): Click to enter text.

**15.** Injection wells within 1/4 mile radius (attach map as Attachment J): Click to enter text.

**16.** Monitor wells within 1/4 mile radius (attach drillers logs and map as Attachment K): Click to enter text.

**17.** Sampling frequency: Click to enter text.

**18.** Known hazardous components in injection fluid: Click to enter text.

## Section 5. Site History

1. Type of Facility: Click to enter text.
2. Contamination Dates: Click to enter text.
3. Original Contamination (VOCs, TPH, BTEX, etc.) and Concentrations (attach as Attachment L): Click to enter text.
4. Previous Remediation (attach results of any previous remediation as attachment M): Click to enter text.

**NOTE: Authorization Form should be completed in detail and authorization given by the TCEQ before construction, operation, and/or conversion can begin. Attach additional pages as necessary.**

### *Class V Injection Well Designations*

5A07 Heat Pump/AC return (IW used for groundwater to heat and/or cool buildings)
5A19 Industrial Cooling Water Return Flow (IW used to cool industrial process equipment)
5B22 Salt Water Intrusion Barrier (IW used to inject fluids to prevent the intrusion of salt water into an aquifer)
5D02 Storm Water Drainage (IW designed for the disposal of rain water)
5D04 Industrial Stormwater Drainage Wells (IW designed for the disposal of rain water associated with industrial facilities)
5F01 Agricultural Drainage (IW that receive agricultural runoff)
5R21 Aquifer Recharge (IW used to inject fluids to recharge an aquifer)
5S23 Subsidence Control Wells (IW used to control land subsidence caused by ground water withdrawal)
5W09 Untreated Sewage
5W10 Large Capacity Cesspools (Cesspools that are designed for 5,000 gpd or greater)
5W11 Large Capacity Septic systems (Septic systems designed for 5,000 gpd or greater)
5W12 WTTP disposal
5W20 Industrial Process Waste Disposal Wells
5W31 Septic System (Well Disposal method)
5W32 Septic System Drainfield Disposal
5X13 Mine Backfill (IW used to control subsidence, dispose of mining byproducts, and/or fill sections of a mine)
5X25 Experimental Wells (Pilot Test) (IW used to test new technologies or tracer dye studies)
5X26 Aquifer Remediation (IW used to clean up, treat, or prevent contamination of a USDW)
5X27 Other Wells
5X28 Motor Vehicle Waste Disposal Wells (IW used to dispose of waste from a motor vehicle site - These are currently banned)
5X29 Abandoned Drinking Water Wells (waste disposal)

**List of Exhibits**
**Lockhart Wastewater Treatment Facility No.2**
**TPDES No. WQ0010210-002**

| Attachment No. | Exhibit Name | Where in Permit Application |
|---|---|---|
| 1 | Core Data Form | Domestic Adm. Report 1.0, Section 3.C., pg. 4 of 17 |
| 2 | Plain Language Summary | Domestic Adm. Report 1.0, Section 8.F., pg. 7 of 17 |
| 3 | USGS Topographic Map | Domestic Adm. Report 1.0, Section 13, pg. 10 of 17 |
| 4 | SPIF | SPIF, Item 5, pg. 14 of 17 |
| 5 | Process Flow Diagrams | Domestic Tech. Report 1.0, Section 2, C, pg. 2 of 66 |
| 6 | Site Drawing | Domestic Tech. Report 1.0, Section 3, pg. 3 of 66 |
| 7 | Sewage Sludge Solids | Domestic Tech. Report 1.0, Section 6, pg. 8 of 66 |
| 8 | Laboratory Analysis | Domestic Tech. Report 1.0, Section 7, pg. 10 of 66 |

# Attachment 1

# Core Data Form

TCEQ Use Only

# TCEQ Core Data Form

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

## SECTION I: General Information

**1. Reason for Submission** (*If other is checked please describe in space provided.*)

☐ New Permit, Registration or Authorization (*Core Data Form should be submitted with the program application.*)

☒ Renewal *(Core Data Form should be submitted with the renewal form)* ☐ Other

| 2. Customer Reference Number *(if issued)* | Follow this link to search for CN or RN numbers in Central Registry** | 3. Regulated Entity Reference Number *(if issued)* |
|---|---|---|
| CN 600245195 | | RN 101325926 |

## SECTION II: Customer Information

**4. General Customer Information** | **5. Effective Date for Customer Information Updates** (mm/dd/yyyy)

☐ New Customer ☐ Update to Customer Information ☐ Change in Regulated Entity Ownership
☐ Change in Legal Name (Verifiable with the Texas Secretary of State or Texas Comptroller of Public Accounts)

***The Customer Name submitted here may be updated automatically based on what is current and active with the Texas Secretary of State (SOS) or Texas Comptroller of Public Accounts (CPA).***

**6. Customer Legal Name** *(If an individual, print last name first: eg: Doe, John)* | *If new Customer, enter previous Customer below:*

City of Lockhart

| 7. TX SOS/CPA Filing Number | 8. TX State Tax ID (11 digits) | 9. Federal Tax ID (9 digits) | 10. DUNS Number *(if applicable)* |
|---|---|---|---|
| | 17460016342 | 746001634 | |

**11. Type of Customer:** ☐ Corporation ☐ Individual Partnership: ☐ General ☐ Limited
Government: ☒ City ☐ County ☐ Federal ☐ Local ☐ State ☐ Other ☐ Sole Proprietorship ☐ Other:

**12. Number of Employees**
☐ 0-20 ☐ 21-100 ☒ 101-250 ☐ 251-500 ☐ 501 and higher

**13. Independently Owned and Operated?**
☐ **Yes** ☒ **No**

**14. Customer Role** (Proposed or Actual) – *as it relates to the Regulated Entity listed on this form. Please check one of the following*

☒ Owner ☐ Operator ☐ Owner & Operator
☐ Occupational Licensee ☐ Responsible Party ☐ VCP/BSA Applicant ☐ Other:

**15. Mailing Address:**

P.O. Box 239

| City | State | ZIP | ZIP + 4 |
|---|---|---|---|
| Lockhart | TX | 78644 | |

| 16. Country Mailing Information *(if outside USA)* | 17. E-Mail Address *(if applicable)* |
|---|---|
| | slewis@lockhart-tx.org |

| 18. Telephone Number | 19. Extension or Code | 20. Fax Number *(if applicable)* |
|---|---|---|
| | | |

| | | |
|---|---|---|
| ( 512 ) 398-3461 | | ( ) - |

## SECTION III: Regulated Entity Information

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

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

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

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

Lockhart Wastewater Treatment Facility No. 2

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **23. Street Address of the Regulated Entity:** ***(No PO Boxes)*** | 167 Creekview | | | | | | | |
| | | | | | | | | |
| | **City** | Lockhart | **State** | TX | **ZIP** | 78644 | **ZIP + 4** | |
| **24. County** | Caldwell | | | | | | | |

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

| | | | | | |
|---|---|---|---|---|---|
| **25. Description to Physical Location:** | | | | | |
| **26. Nearest City** | | | **State** | | **Nearest ZIP Code** |
| | | | | | |

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

| | | | | | |
|---|---|---|---|---|---|
| **27. Latitude (N) In Decimal:** | | | **28. Longitude (W) In Decimal:** | | |
| Degrees | Minutes | Seconds | Degrees | Minutes | Seconds |
| | | | | | |

| | | | |
|---|---|---|---|
| **29. Primary SIC Code** (4 digits) | **30. Secondary SIC Code** (4 digits) | **31. Primary NAICS Code** (5 or 6 digits) | **32. Secondary NAICS Code** (5 or 6 digits) |
| 4952 | | 221320 | |

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

Wastewater Treatment Facility

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **34. Mailing Address:** | **P.O. Box 239** | | | | | | | |
| | | | | | | | | |
| | **City** | **Lockhart** | **State** | **TX** | **ZIP** | **78644** | **ZIP + 4** | |
| **35. E-Mail Address:** | **lwhite@lockhart-tx.org** | | | | | | | |

| | | |
|---|---|---|
| **36. Telephone Number** | **37. Extension or Code** | **38. Fax Number** *(if applicable)* |
| **( 512 ) 398-3461** | | ( ) - |

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

| | | | | |
|---|---|---|---|---|
| ☐ Dam Safety | ☐ Districts | ☐ Edwards Aquifer | ☐ Emissions Inventory Air | ☐ Industrial Hazardous Waste |
| | | | | |
| ☐ Municipal Solid Waste | ☐ New Source Review Air | ☐ OSSF | ☐ Petroleum Storage Tank | ☐ PWS |
| | | | | |
| ☐ Sludge | ☐ Storm Water | ☐ Title V Air | ☐ Tires | ☐ Used Oil |
| | | | | |
| ☐ Voluntary Cleanup | ☒ Wastewater | ☐ Wastewater Agriculture | ☐ Water Rights | ☐ Other: |
| | WQ0010210-002 | | | |

## SECTION IV: Preparer Information

| 40. Name: | Lauren Willis | 41. Title: | Director of Gov't Affairs |
|---|---|---|---|

| 42. Telephone Number | 43. Ext./Code | 44. Fax Number | 45. E-Mail Address |
|---|---|---|---|
| ( 830 ) 379-5822 | | (  )  - | lwillis@gbra.org |

## SECTION V: Authorized Signature

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

| Company: | City of Lockhart | Job Title: | City Mayor |
|---|---|---|---|
| Name *(In Print)*: | Lew White | Phone: | ( 512 ) 398- 3461 |
| Signature: | Lew White | Date: | OCTOBER 3, 2024 |

TCEQ Use Only

# TCEQ Core Data Form

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

## SECTION I: General Information

**1. Reason for Submission** (*If other is checked please describe in space provided.*)

☐ New Permit, Registration or Authorization (*Core Data Form should be submitted with the program application.*)

☒ Renewal *(Core Data Form should be submitted with the renewal form)* ☐ Other

| 2. Customer Reference Number *(if issued)* | Follow this link to search for CN or RN numbers in Central Registry** | 3. Regulated Entity Reference Number *(if issued)* |
|---|---|---|
| CN 601180565 | | RN 101325926 |

## SECTION II: Customer Information

**4. General Customer Information** | **5. Effective Date for Customer Information Updates** (mm/dd/yyyy)

☐ New Customer ☐ Update to Customer Information ☐ Change in Regulated Entity Ownership
☐ Change in Legal Name (Verifiable with the Texas Secretary of State or Texas Comptroller of Public Accounts)

***The Customer Name submitted here may be updated automatically based on what is current and active with the Texas Secretary of State (SOS) or Texas Comptroller of Public Accounts (CPA).***

**6. Customer Legal Name** *(If an individual, print last name first: eg: Doe, John)* | *If new Customer, enter previous Customer below:*

Guadalupe-Blanco River Authority

| 7. TX SOS/CPA Filing Number | 8. TX State Tax ID (11 digits) | 9. Federal Tax ID (9 digits) | 10. DUNS Number *(if applicable)* |
|---|---|---|---|
| | 17460017795 | 746001779 | |

**11. Type of Customer:** ☐ Corporation ☐ Individual Partnership: ☐ General ☐ Limited
Government: ☐ City ☐ County ☐ Federal ☐ Local ☐ State ☒ Other ☐ Sole Proprietorship ☐ Other:

**12. Number of Employees**
☐ 0-20 ☐ 21-100 ☒ 101-250 ☐ 251-500 ☐ 501 and higher

**13. Independently Owned and Operated?**
☐ **Yes** ☒ **No**

**14. Customer Role** (Proposed or Actual) – *as it relates to the Regulated Entity listed on this form. Please check one of the following*

☐ Owner ☒ Operator ☐ Owner & Operator
☐ Occupational Licensee ☐ Responsible Party ☐ VCP/BSA Applicant ☐ Other:

**15. Mailing Address:**

2225 E. Common Street

| City | State | ZIP | ZIP + 4 |
|---|---|---|---|
| New Braunfels | TX | 78130 | |

| 16. Country Mailing Information *(if outside USA)* | 17. E-Mail Address *(if applicable)* |
|---|---|
| | dnichols@gbra.org |

| 18. Telephone Number | 19. Extension or Code | 20. Fax Number *(if applicable)* |
|---|---|---|
| | | |

| | | |
|---|---|---|
| ( 830 ) 379-5822 | | ( ) - |

## SECTION III: Regulated Entity Information

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

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

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

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

Lockhart Wastewater Treatment Facility No. 2

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **23. Street Address of the Regulated Entity:** ***(No PO Boxes)*** | 167 Creekview | | | | | | | |
| | | | | | | | | |
| | **City** | Lockhart | **State** | TX | **ZIP** | 78644 | **ZIP + 4** | |
| **24. County** | Caldwell | | | | | | | |

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

| | | | | | |
|---|---|---|---|---|---|
| **25. Description to Physical Location:** | | | | | |
| **26. Nearest City** | | | **State** | | **Nearest ZIP Code** |
| | | | | | |

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

| | | | | | |
|---|---|---|---|---|---|
| **27. Latitude (N) In Decimal:** | | | **28. Longitude (W) In Decimal:** | | |
| Degrees | Minutes | Seconds | Degrees | Minutes | Seconds |
| | | | | | |

| | | | |
|---|---|---|---|
| **29. Primary SIC Code** (4 digits) | **30. Secondary SIC Code** (4 digits) | **31. Primary NAICS Code** (5 or 6 digits) | **32. Secondary NAICS Code** (5 or 6 digits) |
| 4952 | | 221320 | |

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

Wastewater Treatment Facility

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **34. Mailing Address:** | **2225 E. Common Street** | | | | | | | |
| | | | | | | | | |
| | **City** | **New Braunfels** | **State** | **TX** | **ZIP** | **78130** | **ZIP + 4** | |
| **35. E-Mail Address:** | **dnichols@gbra.org** | | | | | | | |

| | | |
|---|---|---|
| **36. Telephone Number** | **37. Extension or Code** | **38. Fax Number** *(if applicable)* |
| **( 830 ) 379-5822** | | ( ) - |

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

| | | | | |
|---|---|---|---|---|
| ☐ Dam Safety | ☐ Districts | ☐ Edwards Aquifer | ☐ Emissions Inventory Air | ☐ Industrial Hazardous Waste |
| | | | | |
| ☐ Municipal Solid Waste | ☐ New Source Review Air | ☐ OSSF | ☐ Petroleum Storage Tank | ☐ PWS |
| | | | | |
| ☐ Sludge | ☐ Storm Water | ☐ Title V Air | ☐ Tires | ☐ Used Oil |
| | | | | |
| ☐ Voluntary Cleanup | ☒ Wastewater | ☐ Wastewater Agriculture | ☐ Water Rights | ☐ Other: |
| | WQ0010210-002 | | | |

## SECTION IV: Preparer Information

| 40. Name: | Lauren Willis | 41. Title: | Director of Gov't Affairs |
|---|---|---|---|
| **42. Telephone Number** | **43. Ext./Code** | **44. Fax Number** | **45. E-Mail Address** |
| ( 830 ) 379-5822 | | (  )  - | lwillis@gbra.org |

## SECTION V: Authorized Signature

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

| Company: | Guadalupe-Blanco River Authority | Job Title: | General Manager/CEO |
|---|---|---|---|
| Name *(In Print)*: | Darrell Nichols | Phone: | ( 830 ) 379- 5822 |
| Signature: | Darrell Nichols | Date: | January 8, 2025 |

# Attachment 2

# Plain Language Summary

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

# PLAIN LANGUAGE SUMMARY FOR TPDES OR TLAP PERMIT APPLICATIONS

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

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

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

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

**ENGLISH TEMPLATE FOR TPDES or TLAP NEW/RENEWAL/AMENDMENT APPLICATIONS**
**Enter 'INDUSTRIAL' or 'DOMESTIC' here WASTEWATER/STORMWATER**
*The following summary is provided for this pending water quality permit application being reviewed by the Texas Commission on Environmental Quality as required by 30 TAC Chapter 39. The information provided in this summary may change during the technical review of the application and is not a federal enforceable representation of the permit application.*

City of Lockhart & Guadalupe-Blanco River Authority (CN600245195, CN601180565) operate Lockhart Wastewater Treatment Facility No. 2 (RN101325926), a Wastewater Treatment Facility. The facility is located at 167 Creekview, in Lockhart, Caldwell County, Texas 78644. Renewal to discharge 1.5 million gallons per day of treated domestic wastewater.

Discharges from the facility are expected to contain Carbonaceous Biochemical Oxygen Demand (CBOD), Total Suspended Solids, Ammonia Nitrogen, and *E. coli*. Wastewater is treated by bar screen, aeration basins, clarification, and disinfection.

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

**AGUAS RESIDUALES** Introduzca 'INDUSTRIALES' o 'DOMÉSTICAS' aquí **/AGUAS PLUVIALES**

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

La Ciudad de Lockhart y La Autoridad del Rion Guadalupe-Blanco (CN600245195, CN601180565) opera Planta de tratamiento de aguas residuals de Lockhart No. 2 RN101325926, un Planta de tratamiento de aguas resideuales. La instalación está ubicada en Calle Creekview 167, en Lockhart, Condado de Caldwell , Texas 78644. Renovación para descargar 1,5 millones de galones por día de aguas residuales domésticas tratadas.

Se espera que las descargas de la instalación contengan Demanda bioquímica de oxígeno carbonoso (CBOD), sólidos suspendidos totales, nitrógeno amoniacal y E. coli.. Aguas residuales. está tratado por rejillas de rejilla, tanques de aireación, clarificación y desinfección..

## INSTRUCTIONS

1. Enter the name of applicant in this section. The applicant name should match the name associated with the customer number.
2. Enter the Customer Number in this section. Each Individual or Organization is issued a unique 11-digit identification number called a CN (e.g. CN123456789).
3. Choose “operates” in this section for existing facility applications or choose “proposes to operate” for new facility applications.
4. Enter the name of the facility in this section. The facility name should match the name associated with the regulated entity number.
5. Enter the Regulated Entity number in this section. Each site location is issued a unique 11-digit identification number called an RN (e.g. RN123456789).
6. Choose the appropriate article (a or an) to complete the sentence.
7. Enter a description of the facility in this section. For example: steam electric generating facility, nitrogenous fertilizer manufacturing facility, etc.
8. Choose “is” for an existing facility or “will be” for a new facility.
9. Enter the location of the facility in this section.
10. Enter the City nearest the facility in this section.
11. Enter the County nearest the facility in this section.
12. Enter the zip code for the facility address in this section.
13. Enter a summary of the application request in this section. For example: renewal to discharge 25,000 gallons per day of treated domestic wastewater, new application to discharge process wastewater and stormwater on an intermittent and flow-variable basis, or major amendment to reduce monitoring frequency for pH, etc. If more than one outfall is included in the application, provide applicable information for each individual outfall.
14. List all pollutants expected in the discharge from this facility in this section. If applicable, refer to the pollutants from any federal numeric effluent limitations that apply to your facility.
15. Enter the discharge types from your facility in this section (e.g., stormwater, process wastewater, once through cooling water, etc.)
16. Choose the appropriate verb tense to complete the sentence.
17. Enter a description of the wastewater treatment used at your facility. Include a description of each process, starting with initial treatment and finishing with the outfall/point of disposal. Use additional lines for individual discharge types if necessary.

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.

## Example

### Individual Industrial Wastewater Application

*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 are not federal enforceable representations of the permit application.*

ABC Corporation (CN600000000) operates the Starr Power Station (RN10000000000), a two-unit gas-fired electric generating facility. Unit 1 has a generating capacity of 393 megawatts (MWs) and Unit 2 has a generating capacity of 528 MWs. The facility is located at 1356 Starr Street, near the City of Austin, Travis County, Texas 78753.

This application is for a renewal to discharge 870,000,000 gallons per day of once through cooling water, auxiliary cooling water, and also authorizes the following waste streams monitored inside the facility (internal outfalls) before it is mixed with the other wastewaters authorized for discharge via main Outfall 001, referred to as "previously monitored effluents" (low-volume wastewater, metal-cleaning waste, and stormwater (from diked oil storage area yards and storm drains)) via Outfall 001. Low-volume waste sources, metal-cleaning waste, and stormwater drains on a continuous and flow-variable basis via internal Outfall 101.

The discharge of once through cooling water via Outfall 001 and low-volume waste and metal-cleaning waste via Outfall 101 from this facility is subject to federal effluent limitation guidelines at 40 CFR Part 423. The pollutants expected from these discharges based on 40 CFR Part 423 are: free available chlorine, total residual chlorine, total suspended solids, oil and grease, total iron, total copper, and pH. Temperature is also expected from these discharges. Additional potential pollutants are included in the Industrial Wastewater Application Technical Report, Worksheet 2.0.

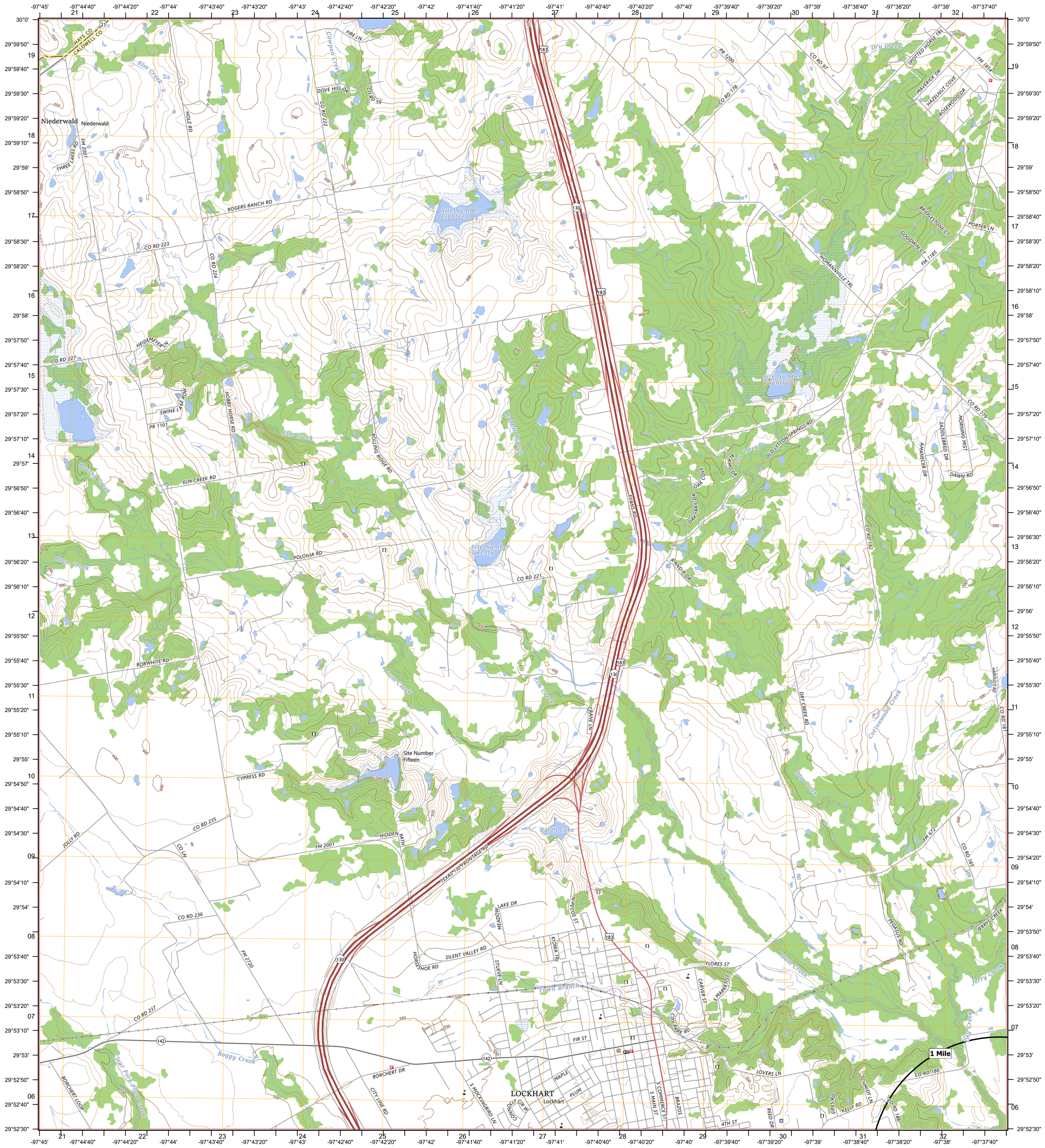
Cooling water and boiler make-up water are supplied by Lake Starr Reservoir. The City of Austin municipal water plant (CN600000000, PWS 00000) supplies the facility's potable water and serves as an alternate source of boiler make-up water. Water from the Lake Starr Reservoir is withdrawn at the intake structure and treated with sodium hypochlorite to prevent biofouling and sodium bromide as a chlorine enhancer to improve efficacy and then passed through condensers and auxiliary equipment on a once-through basis to cool equipment and condense exhaust steam.

Low-volume wastewater from blowdown of boiler Units 1 and 2 and metal-cleaning wastes receive no treatment prior to discharge via Outfall 101. Plant floor and equipment drains and stormwater runoff from diked oil storage areas, yards, and storm drains are routed through an oil and water separator prior to discharge via Outfall 101. Domestic wastewater, blowdown, and backwash water from the service water filter, clarifier, and sand filter are routed to the Starr Creek Domestic Sewage Treatment Plant, TPDES Permit No. WQ0010000001, for treatment and disposal. Metal-cleaning waste from equipment cleaning is generally disposed of off-site.

Attachment 3

USGS Topographic Map
Administrative Report

# LOCKHART NORTH QUADRANGLE
TEXAS
7.5-MINUTE




Coordinate System: NAD 1983 UTM Zone 14N
Projection: Transverse Mercator
Datum: North American 1983

This map is not a legal document. Boundaries may be generalized for this map scale. Private lands within government reservations may not be shown. Obtain permission before entering private lands.

Initial styling of this Map Document was provided by the US Geological Survey. The edited content in this document are neither done by nor endorsed by the USGS.

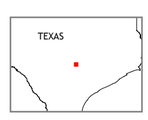
Contours.....National Elevation Dataset, 2022
Landcover.....U.S. Geological Survey, 2019
Roads.....U.S. Census Bureau, 2022

| U.S. National Grid |
|---|
| 100,000-m Square ID |
| PU |
| Grid Zone Designation |
| 14R |

SCALE 1:24,000

1 0.5 0 KILOMETERS 1 2
1000 500 0 METERS 1000 2000
1 0.5 0 1
MILES
1000 500 0 1000 2000 3000 4000 5000 6000 7000 8000 9000 10000
FEET

CONTOUR INTERVAL 10 FEET




QUADRANGLE LOCATION

| | | |
|---|---|---|
| Buda | Creedmoor | Lytton Springs |
| Uhland | Lockhart North | Dale |
| Martindale | Lockhart South | McMahan |

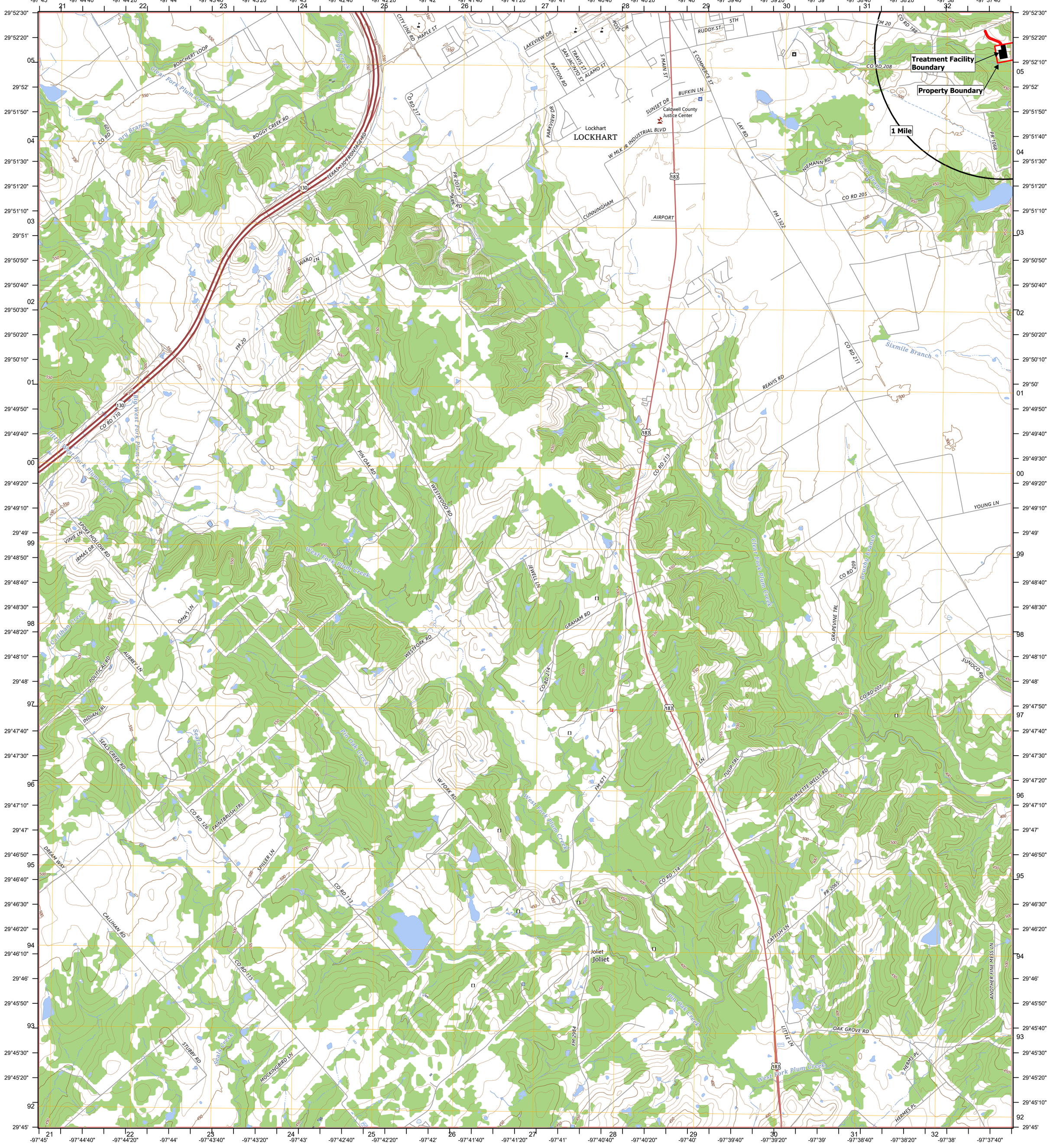
ADJOINING QUADRANGLES

ROAD CLASSIFICATION

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

## LOCKHART WWTF NO. 2 (FM 20)
## 2024

# LOCKHART SOUTH QUADRANGLE
TEXAS
7.5-MINUTE




Coordinate System: NAD 1983 UTM Zone 14N
Projection: Transverse Mercator
Datum: North American 1983

This map is not a legal document. Boundaries may be generalized for this map scale. Private lands within government reservations may not be shown. Obtain permission before entering private lands.

Initial styling of this Map Document was provided by the US Geological Survey. The edited content in this document are neither done by nor endorsed by the USGS.

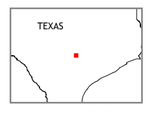
Contours.....National Elevation Dataset, 2022
Landcover.....U.S. Geological Survey, 2019
Roads.....U.S. Census Bureau, 2022

| U.S. National Grid |
|---|
| 100,000-m Square ID |
| PU |
| PT |
| Grid Zone Designation |
| 14R |

SCALE 1:24,000

1 0.5 0 KILOMETERS 1 2
1000 500 0 METERS 1000 2000
1 0.5 0 1
MILES
1000 500 0 1000 2000 3000 4000 5000 6000 7000 8000 9000 10000
FEET

CONTOUR INTERVAL 10 FEET




QUADRANGLE LOCATION

| | | |
|---|---|---|
| Uhland | Lockhart North | Dale |
| Martindale | Lockhart South | McMahan |
| Kingsbury | Luling | Harwood |

ADJOINING QUADRANGLES

ROAD CLASSIFICATION

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

## LOCKHART WWTF NO. 2 (FM 20)
## 2024

# DALE QUADRANGLE
**TEXAS**
**7.5-MINUTE**

Coordinate System: NAD 1983 UTM Zone 14N
Projection: Transverse Mercator
Datum: North American 1983

This map is not a legal document. Boundaries may be generalized for this map scale. Private lands within government reservations may not be shown. Obtain permission before entering private lands.

Initial styling of this Map Document was provided by the US Geological Survey. The edited content in this document are neither done by nor endorsed by the USGS.

Contours.....National Elevation Dataset, 2022
Landcover.....U.S. Geological Survey, 2019
Roads.....U.S. Census Bureau, 2022

| U.S. National Grid |
|---|
| 100,000-m Square ID |
| PU |
| Grid Zone Designation |
| 14R |

SCALE 1:24,000

1 0.5 0 KILOMETERS 1 2
1000 500 0 METERS 1000 2000
1 0.5 0 1
MILES
1000 500 0 1000 2000 3000 4000 5000 6000 7000 8000 9000 10000
FEET

CONTOUR INTERVAL 10 FEET

QUADRANGLE LOCATION

ROAD CLASSIFICATION

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

| | | |
|---|---|---|
| Creedmoor | Lytton Springs | Bastrop SW |
| Lockhart North | Dale | Red Rock |
| Lockhart South | McMahan | Delhi |

ADJOINING QUADRANGLES

**LOCKHART WWTF NO. 2 (FM 20)**
**2024**

**MCMAHAN QUADRANGLE**
**TEXAS**
**7.5-MINUTE**

Property Boundary
Point of Discharge
Path of Discharge
1 Mile
3 Miles Downstream
Lockhart
LOCKHART
Plum Creek
CO RD 208
CLARK RD
FM 713
CO RD 201
Linscome Creek
CO RD 162
PR 2028
PR 2003
CO RD 254
FM 86
Site Number Twentyeight
Pecan Branch
CO RD 204
CATTLEMENS ROW
Dry Creek
STAR RD
PR 2010
CO RD 82
Daniels Creek
OLD COLONY LINE RD
WHIZZERVILLE RD
McMahan
McMahan
Campbell Creek
SAND HILL RD
Tenney Creek
FM 713
Comanche Flats
Comanche Flats
FOX LN
CO RD 205
CO RD 200
SIDES LN
FM 3158
Seawillow Branch
WOOD LN
YOUNG LN
Seawillow
Seawillow
CO RD 199
JOHNSON LN
Daniels Creek
KEATON LN
CO RD 145C
CLEAR CREEK RD
Tenney Creek
CO RD 141
Plum Creek
CO RD 196
Tilmon
Tilmon
BOULDER LN
RED SAND TRL
CO RD 147
Soil Conservation Service Site 31 Reservoir
FM 86
VINE HILL RD
SEAWILLOW RD
Brownsboro
Brownsboro
CLEARFORK RD
SILVER MINE RD
CO RD 146
FM 1322
CLEAR FORK RD
Hines Branch
CHUCKWAGON RD
SMITH FARM RD
PRO RD
CO RD 140
CO RD 128
Clear Fork Plum Creek
Plum Creek
Copperas Creek
CO RD 704
Round Mountain
Round Mountain

Coordinate System: NAD 1983 UTM Zone 14N
Projection: Transverse Mercator
Datum: North American 1983

This map is not a legal document. Boundaries may be generalized for this map scale. Private lands within government reservations may not be shown. Obtain permission before entering private lands.

Initial styling of this Map Document was provided by the US Geological Survey. The edited content in this document are neither done by nor endorsed by the USGS.

Contours.....National Elevation Dataset, 2022
Landcover.....U.S. Geological Survey, 2019
Roads.....U.S. Census Bureau, 2022

U.S. National Grid
100,000-m Square ID
00
PU
PT
Grid Zone Designation
14R

SCALE 1:24,000

1 0.5 0 KILOMETERS 1 2
1000 500 0 METERS 1000 2000
1 0.5 0 1
MILES
1000 500 0 1000 2000 3000 4000 5000 6000 7000 8000 9000 10000
FEET

CONTOUR INTERVAL 10 FEET

TEXAS
QUADRANGLE LOCATION

| | | |
|---|---|---|
| Lockhart North | Dale | Red Rock |
| Lockhart South | McMahan | Delhi |
| Luling | Harwood | Sandy Fork |

ADJOINING QUADRANGLES

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

**LOCKHART WWTF NO. 2 (FM 20)**
**2024**

Attachment 4

SPIF

# TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

# SUPPLEMENTAL PERMIT INFORMATION FORM (SPIF)

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

**TCEQ USE ONLY:**

Application type: ____Renewal ____Major Amendment ____Minor Amendment ____New

County: _____ Segment Number: _____

Admin Complete Date: _____

Agency Receiving SPIF:

_____ Texas Historical Commission _____ U.S. Fish and Wildlife

_____ Texas Parks and Wildlife Department _____ U.S. Army Corps of Engineers

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

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

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

The following applies to all applications:

1. Permittee: City of Lockhart & Guadalupe-Blanco River Authority

   Permit No. WQ00 10210-002 EPA ID No. TX 0113565

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

   167 Creekview, Lockhart, TX 78644 (Caldwell County)

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

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

First and Last Name: Eduardo Montana

Credential (P.E, P.G., Ph.D., etc.): Click here to enter text

Title: Division Manager Hays/Caldwell Counties

Mailing Address: 167 Creekview

City, State, Zip Code: Lockhart, TX 78644

Phone No.: 512-738-3239 Ext.: Click here to enter text Fax No.: Click here to enter text

E-mail Address: emontana@gbra.org

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

City of Lockhart

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

The treated effluent is discharged via pipeline to Plum Creek, Segment 1810 of Guadalupe River Basin

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

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

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

☐ Proposed access roads, utility lines, construction easements

☐ Visual effects that could damage or detract from a historic property's integrity

☐ Vibration effects during construction or as a result of project design

☐ Additional phases of development that are planned for the future

☐ Sealing caves, fractures, sinkholes, other karst features

☐ Disturbance of vegetation or wetlands

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

N/A

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

Grass is mowed around and between existing wastewater treatment structures. Other than routine mowing, there is not ground disturbance associated with this permit.

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

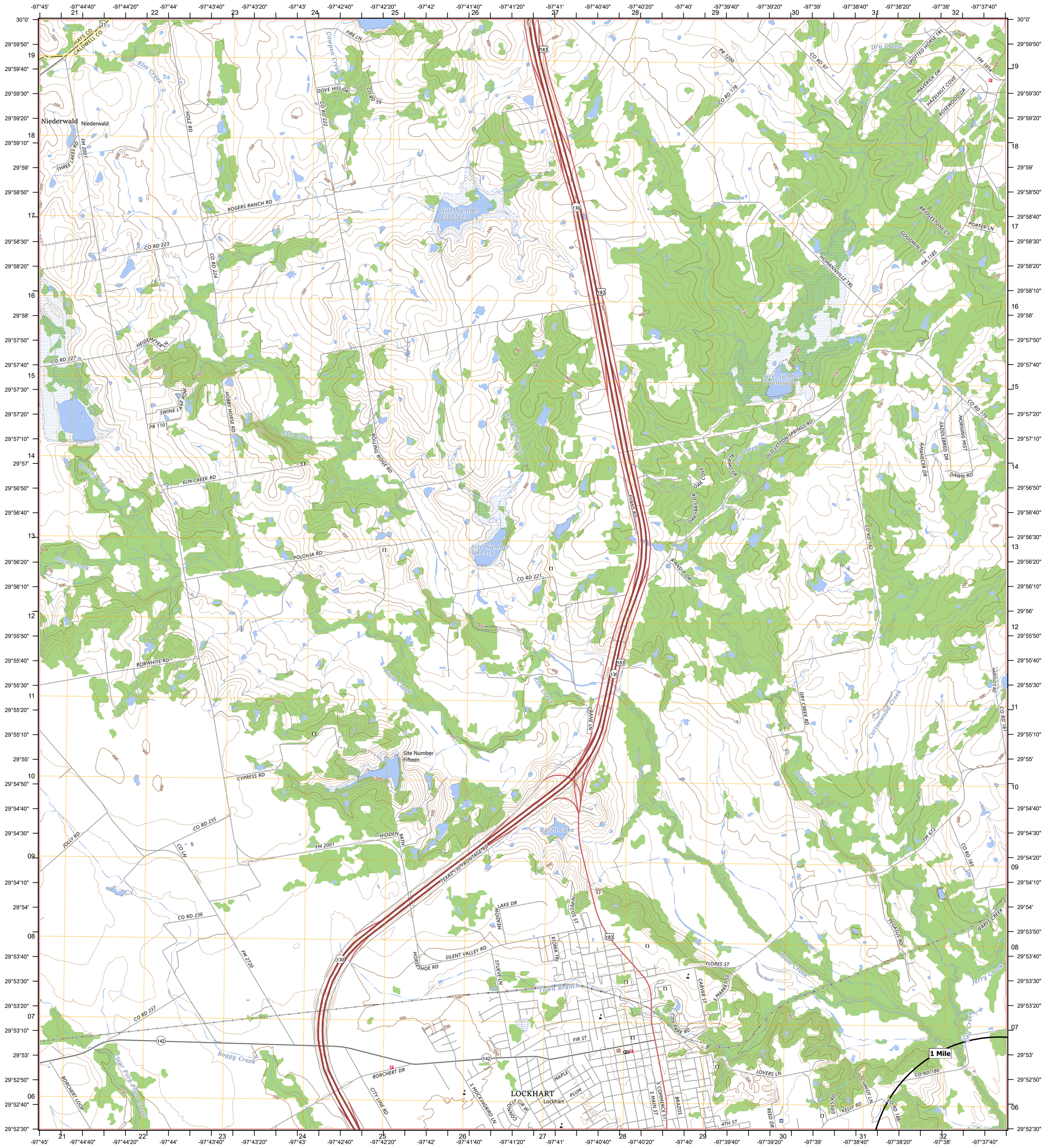
3. List construction dates of all buildings and structures on the property:

Click here to enter text.

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

Click here to enter text.

# LOCKHART NORTH QUADRANGLE
TEXAS
7.5-MINUTE




Coordinate System: NAD 1983 UTM Zone 14N
Projection: Transverse Mercator
Datum: North American 1983

This map is not a legal document. Boundaries may be generalized for this map scale. Private lands within government reservations may not be shown. Obtain permission before entering private lands.

Initial styling of this Map Document was provided by the US Geological Survey. The edited content in this document are neither done by nor endorsed by the USGS.

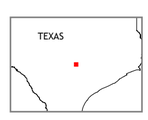
Contours.....National Elevation Dataset, 2022
Landcover.....U.S. Geological Survey, 2019
Roads.....U.S. Census Bureau, 2022

| U.S. National Grid |
|---|
| 100,000-m Square ID |
| PU |
| Grid Zone Designation |
| 14R |

SCALE 1:24,000

1 0.5 0 KILOMETERS 1 2
1000 500 0 METERS 1000 2000
1 0.5 0 1
MILES
1000 500 0 1000 2000 3000 4000 5000 6000 7000 8000 9000 10000
FEET

CONTOUR INTERVAL 10 FEET




QUADRANGLE LOCATION

| | | |
|---|---|---|
| Buda | Creedmoor | Lytton Springs |
| Uhland | Lockhart North | Dale |
| Martindale | Lockhart South | McMahan |

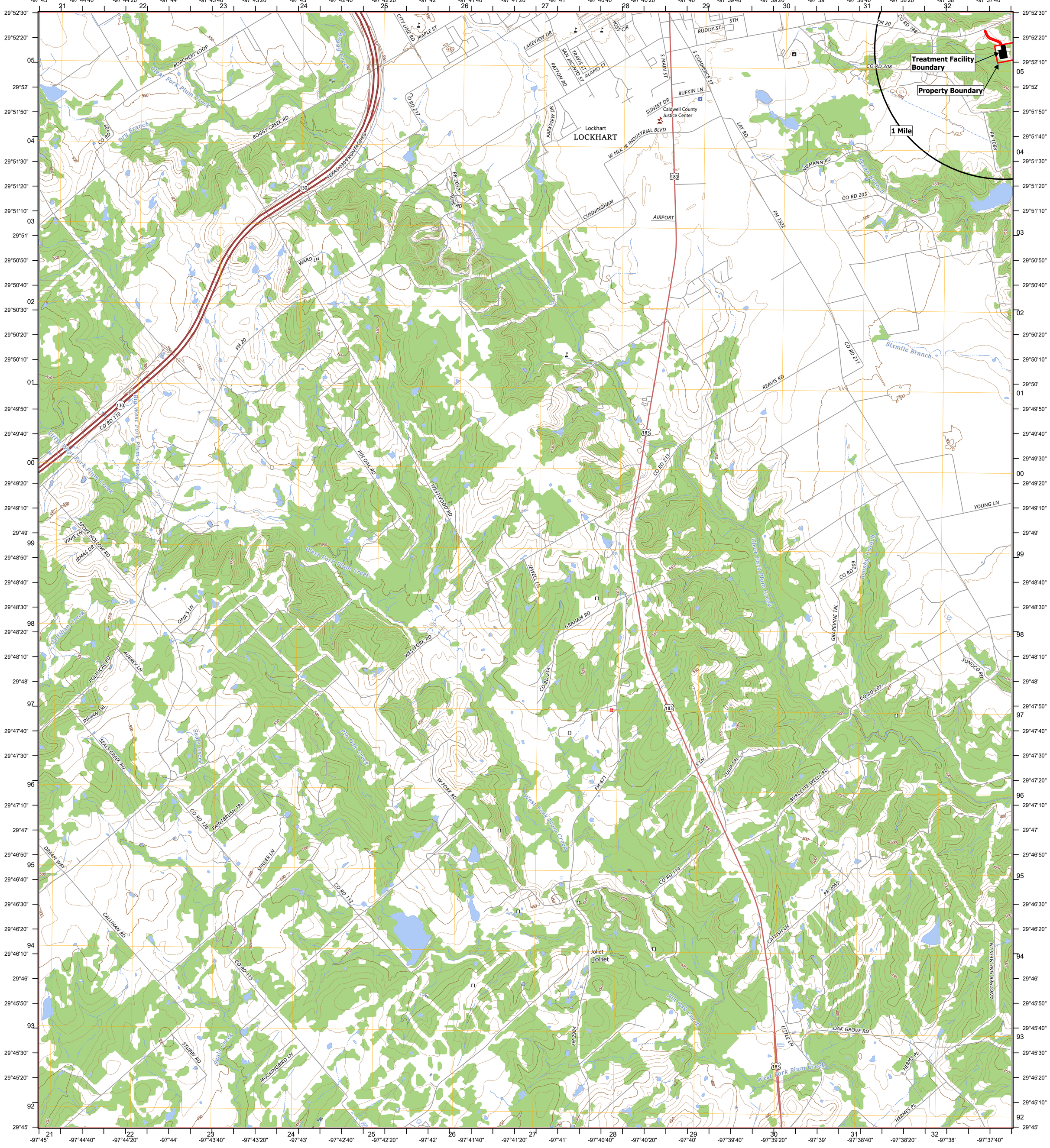
ADJOINING QUADRANGLES

ROAD CLASSIFICATION

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

## LOCKHART WWTF NO. 2 (FM 20)
## 2024

# LOCKHART SOUTH QUADRANGLE
TEXAS
7.5-MINUTE




Coordinate System: NAD 1983 UTM Zone 14N
Projection: Transverse Mercator
Datum: North American 1983

This map is not a legal document. Boundaries may be generalized for this map scale. Private lands within government reservations may not be shown. Obtain permission before entering private lands.

Initial styling of this Map Document was provided by the US Geological Survey. The edited content in this document are neither done by nor endorsed by the USGS.

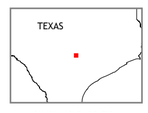
Contours.....National Elevation Dataset, 2022
Landcover.....U.S. Geological Survey, 2019
Roads.....U.S. Census Bureau, 2022

| U.S. National Grid |
|---|
| 100,000-m Square ID |
| PU |
| PT |
| Grid Zone Designation |
| 14R |

SCALE 1:24,000

1 0.5 0 KILOMETERS 1 2
1000 500 0 METERS 1000 2000
1 0.5 0 1
MILES
1000 500 0 1000 2000 3000 4000 5000 6000 7000 8000 9000 10000
FEET

CONTOUR INTERVAL 10 FEET




QUADRANGLE LOCATION

| | | |
|---|---|---|
| Uhland | Lockhart North | Dale |
| Martindale | Lockhart South | McMahan |
| Kingsbury | Luling | Harwood |

ADJOINING QUADRANGLES

ROAD CLASSIFICATION

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

## LOCKHART WWTF NO. 2 (FM 20)
## 2024

# DALE QUADRANGLE
**TEXAS**
**7.5-MINUTE**

Coordinate System: NAD 1983 UTM Zone 14N
Projection: Transverse Mercator
Datum: North American 1983

This map is not a legal document. Boundaries may be generalized for this map scale. Private lands within government reservations may not be shown. Obtain permission before entering private lands.

Initial styling of this Map Document was provided by the US Geological Survey. The edited content in this document are neither done by nor endorsed by the USGS.

Contours.....National Elevation Dataset, 2022
Landcover.....U.S. Geological Survey, 2019
Roads.....U.S. Census Bureau, 2022

| U.S. National Grid |
|---|
| 100,000-m Square ID |
| PU |
| Grid Zone Designation |
| 14R |

SCALE 1:24,000

1 0.5 0 KILOMETERS 1 2
1000 500 0 METERS 1000 2000
1 0.5 0 1
MILES
1000 500 0 1000 2000 3000 4000 5000 6000 7000 8000 9000 10000
FEET

CONTOUR INTERVAL 10 FEET

QUADRANGLE LOCATION

ROAD CLASSIFICATION

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

| | | |
|---|---|---|
| Creedmoor | Lytton Springs | Bastrop SW |
| Lockhart North | Dale | Red Rock |
| Lockhart South | McMahan | Delhi |

ADJOINING QUADRANGLES

**LOCKHART WWTF NO. 2 (FM 20)**
**2024**

**MCMAHAN QUADRANGLE**
**TEXAS**
**7.5-MINUTE**

Property Boundary
Point of Discharge
Path of Discharge
1 Mile
3 Miles Downstream
Lockhart
LOCKHART
Plum Creek
CO RD 208
CLARK RD
FM 713
CO RD 201
Linscome Creek
CO RD 162
PR 2028
PR 2003
CO RD 254
FM 86
Site Number Twentyeight
Pecan Branch
CO RD 204
CATTLEMENS ROW
Dry Creek
STAR RD
PR 2010
CO RD 82
Daniels Creek
OLD COLONY LINE RD
WHIZZERVILLE RD
McMahan
McMahan
Campbell Creek
SAND HILL RD
Tenney Creek
FM 713
Comanche Flats
Comanche Flats
FOX LN
CO RD 205
CO RD 200
SIDES LN
FM 3158
Seawillow Branch
WOOD LN
YOUNG LN
Seawillow
Seawillow
CO RD 199
JOHNSON LN
Daniels Creek
KEATON LN
CO RD 145C
CLEAR CREEK RD
Tenney Creek
CO RD 141
Plum Creek
CO RD 196
Tilmon
Tilmon
BOULDER LN
RED SAND TRL
CO RD 147
Soil Conservation Service Site 31 Reservoir
FM 86
VINE HILL RD
SEAWILLOW RD
Brownsboro
Brownsboro
CLEARFORK RD
SILVER MINE RD
CO RD 146
FM 1322
CLEAR FORK RD
Hines Branch
CHUCKWAGON RD
SMITH FARM RD
PRO RD
CO RD 140
CO RD 128
Clear Fork Plum Creek
Plum Creek
Copperas Creek
CO RD 704
Round Mountain
Round Mountain

Coordinate System: NAD 1983 UTM Zone 14N
Projection: Transverse Mercator
Datum: North American 1983

This map is not a legal document. Boundaries may be generalized for this map scale. Private lands within government reservations may not be shown. Obtain permission before entering private lands.

Initial styling of this Map Document was provided by the US Geological Survey. The edited content in this document are neither done by nor endorsed by the USGS.

Contours.....National Elevation Dataset, 2022
Landcover.....U.S. Geological Survey, 2019
Roads.....U.S. Census Bureau, 2022

U.S. National Grid
100,000-m Square ID
00
PU
PT
Grid Zone Designation
14R

SCALE 1:24,000

1 0.5 0 KILOMETERS 1 2
1000 500 0 METERS 1000 2000
1 0.5 0 1
MILES
1000 500 0 1000 2000 3000 4000 5000 6000 7000 8000 9000 10000
FEET

CONTOUR INTERVAL 10 FEET

TEXAS
QUADRANGLE LOCATION

| | | |
|---|---|---|
| Lockhart North | Dale | Red Rock |
| Lockhart South | McMahan | Delhi |
| Luling | Harwood | Sandy Fork |

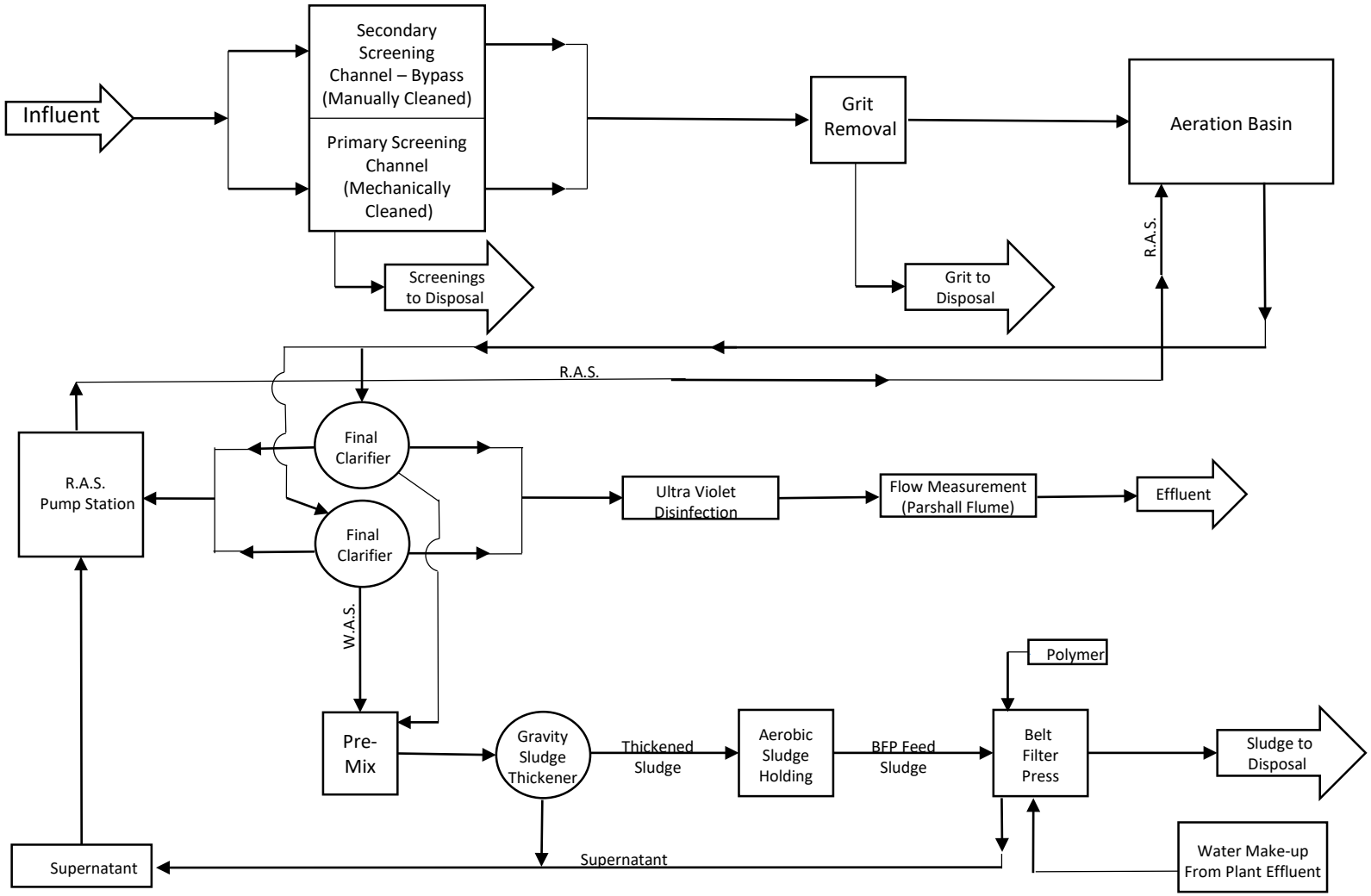
ADJOINING QUADRANGLES

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

**LOCKHART WWTF NO. 2 (FM 20)**
**2024**

# Attachment 5

# Process Flow Diagrams


Influent
Secondary Screening Channel – Bypass (Manually Cleaned)
Primary Screening Channel (Mechanically Cleaned)
Screenings to Disposal
Grit Removal
Grit to Disposal
Aeration Basin
R.A.S.
R.A.S.
R.A.S. Pump Station
Final Clarifier
Final Clarifier
Ultra Violet Disinfection
Flow Measurement (Parshall Flume)
Effluent
W.A.S.
Pre-Mix
Gravity Sludge Thickener
Thickened Sludge
Aerobic Sludge Holding
BFP Feed Sludge
Polymer
Belt Filter Press
Sludge to Disposal
Supernatant
Supernatant
Water Make-up From Plant Effluent

# Attachment 6

# Site Drawings

CONTRACTOR TO PLANT VINES ALONG SOUTHERN AND WESTERN SIDES OF CHAIN LINK FENCE (REF SPECIFICATIONS)

14" CLARIFIER EFFLUENT

FINAL CLARIFIER

EFFLUENT BOX AND FLOW SPLIT

AERATION BASIN

CLEANOUT RISER

16" D.I. CLARIFIER INFLUENT

RAS/DECANT LIFT STATION

150' BUFFER ZONE

RAS FLOW MEASUREMENT STATION

FINAL CLARIFIER

SLUDGE THICKENER

PRE-MIX

4" D.I. DRAIN

12" D.I. RAS

24" D.I. GRIT CHAMBER EFFLUENT

PLANT CONTRACTOR TO HERE

PIPELINE CONTRACTOR TO HERE (NOT IN THIS CONTRACT)

SCREENING AND GRIT REMOVAL

2-12' GATES

ENTRANCE EASEMENT

PROPOSED CATTLE GUARD (REF SHEET 38 FOR DETAILS)

2" PVC PLANT WATER

SLUDGE HOLDING

8" D.I. DRAIN

1-1/2" NON POTABLE WATER

ASPHALT ENTRANCE ROAD

4" D.I. PLANT AIR

6" SUPERNATANT

4" PVC PLANT WATER

PROPOSED MANHOLE

20' D.I. AERATION BASIN

24" D.I.

HOSE STATION

21" PVC COLLECTION LINE (NOT IN THIS CONTRACT)

6" PVC CITY WATER

EFFLUENT STRUCTURE

4" PVC PLANT WAT.

6" PVC PLANT WATER

4" x 6" TRANSITION

8" D.I. DRAIN

BACKFLOW PREVENTER

4" PVC CITY WATER TO WWTP

2" PVC VAULT DRAIN

24" D.I. SCREENING CHANNEL EFFLUENT

6" PVC PLANT WATER

8" D.I. PLANT AIR

6" D.I. SLUDGE

ASPHALT DRIVE

24'

4" PVC PLANT WATER

POTABLE/NON-POTABLE WATER SUPPLY CONNECTION VAULT (REFERENCE SHEET 37)

4" COMBINATION METER

PIPELINE CONTRACTOR TO HERE (NOT IN THIS CONTRACT)

PROPERTY LINE

WATER REUSE SUPPLY PUMP

30" D.I. PLANT DISCHARGE

BELT PRESS

MCC/ EQUIP. ROOM

EMERGENCY GENERATOR

4" D.I. PROCESS AIR

PLANT CONTRACTOR TO HERE

CONCRETE PAD

2" PVC CITY WATER TO LAB

PROPOSED MANHOLE

27" TREATED EFFLUENT DISCHARGE TO PLUM CREEK (REF SHEETS 33 AND 34)

SLUDGE CONTAINER PAD

MAINTENANCE/ STORAGE

CONCRETE DRIVE EXTENTS

6" DRAIN FROM BLDG.

CHAIN LINK FENCE

VEHICULAR GATE (TYP 3) (REF SHEET 38 FOR DETAILS)

ADMINISTRATION/BUILDING AND LABORATORY

AS-BUILT

NOTES

1. 21" PVC COLLECTION LINE, MANHOLE LOCATED UPSTREAM OF THE SCREENING CHANNEL AND COLLECTION SYSTEM TIE-IN NOT PART OF THIS CONTRACT.
2. 6" PVC POTABLE WATER LINE UPSTREAM OF 4" METER, NOT PART OF THIS CONTRACT.
3. ALL OUTLETS FOR PLANT WATER SYSTEM SHALL CONTAIN THE LABEL "UNSAFE WATER". EXPOSED PIPING FOR THE PLANT WATER SHALL BE COLOR COATED AS REQUIRED IN THE SPECIFICATIONS.
4. THE CONTRACTOR SHALL PROVIDE THE CONNECTION TO THE 6" CITY WATER AT THE METER AND THE CONNECTION TO THE SEWER COLLECTION LINE AT THE MANHOLE ADJACENT TO THE SCREENING CHANNEL.

# GBRA / LOCKHART
# WASTEWATER TREATMENT PLANT NO. 2
# SITE PLAN AND YARD PIPING PLAN

HUNTER ASSOCIATES, INC.
ENGINEERS/PLANNERS/SURVEYORS
DALLAS 214-369-9171 AUSTIN 512-454-8716

| | | |
|---|---|---|
| DESIGNED BY: H.C.B. | SCALE: 1" = 20' | |
| DRAWN BY: B.K.J. | APPROVED BY: | |
| JOB NUMBER: A94058-A | DATE: APR. 96 | SHEET 5 OF 50 |

STATE OF TEXAS
HAL CRAIG BELL
86078
LICENSED PROFESSIONAL ENGINEER
4/15/97

LOCKHART\A94058-5

# Attachment 7

# Sewage Sludge Solids

Sewage Sludge Solids Management Plan for City of Lockhart and GBRA Wastewater Treatment Plant No. 2 (TPDES No.WQ0010210-002)

Other wastewater treatment facilities that dispose of municipal sewage sludge at this facility for the reporting period of September 1, 2022 – August 31, 2023:

- City of Lockhart and Guadalupe-Blanco River Authority (TPDES No. WQ 0010210-001) – 4,700,000 gallons transported from the Lockhart Wastewater Treatment Facility No. 1 plant to the Lockhart Wastewater Treatment Facility No. 2 plant via the city's sewer collection system and is passed through the conventional sewage treatment process.

The plant treatment process consists of:

- Headworks with bar screen and grit removal
- Carousel aeration treatment unit
    - Capacity 200,535 cubic feet (1,500,000 gallons)
- Clarifiers (2)
    - Capacity 38,770 cubic feet each (290,000 gallons each)
- Sludge thickener
    - Capacity 58,422 cubic feet (437,000 gallons)
- Sludge holding tank
    - 8,743 cubic feet (65,400 gallons)

Average mixed liquor TSS – 8,500 mg/l
Total solids removed – 1,170,566 lbs/year based on waste activated sludge TSS of 10,500 mg/l and a wasting rate of 35,000 gpd.
Total sludge disposed for reporting year 2022-2023 – 660.06 dry metric tons

Sludge Disposal Site:
JV Dirt and Loam 5RC Compost Facility
TCEQ permit #2310
3600 N 973 FM
Austin, TX 78725
(512) 927-1977

Or

Micro Dirt
TCEQ Permit#42016
1550 Goforth Road
Creedmoor, TX 78610
(512) 327-1977

# Attachment 8

# Laboratory Analysis

Publish Date/Time: 8/29/2024 2:17 PM

GBRA
Guadalupe-Blanco River Authority

# Report of Analysis

**For: 421439 - GBRA-Lockhart WWTP**
933 E Court St
Seguin, TX 78155

Released By: Kylie Gudgell
Title: Lead Technical Manager

I am the laboratory manager, or his/her designee, and I am responsible for the release of this data package. This laboratory data package has been reviewed and is complete and technically compliant with the requirements of the methods used, except where noted. I affirm, to the best of my knowledge that all problems/anomalies observed by this laboratory (and if applicable, any and all laboratories subcontracted through this laboratory) that might affect the quality of the data, have been identified in the report, and that no information or data have been knowingly withheld that would affect the quality of the data.

This Laboratory is NELAP accredited. Scope: Non-potable water, potable water.

*NA = not analyzed*

1 Parameter not available for NELAP accreditation at the GBRA
2 Parameter is approved under TCEQ Drinking Water Program

933 East Court Street
Seguin, TX 78155
(830)379-5822 ext 256

This report cannot be reproduced, except in full, without prior written permission of the GBRA Laboratory. Results shown relate only to the items tested. Samples are assumed to be in acceptable condition unless otherwise noted.

**Work Order:** 240801.23

**Lab Sample ID:** 240801.23-01 **Collection Date/Time:** 8/1/2024 06:00 AM **Sample Matrix:** Waste Water

**Site:** FM 20 Effluent Permit **Receive Date/Time:** 8/1/2024 12:04 PM **Sample Type:** Composite

| | Analyte | Method | Sample Result | DF | RPL | Qualifier | Test Date/Time | Analyst | Read Date/Time | Analyst |
|---|---|---|---|---|---|---|---|---|---|---|
| | Anions - Chloride | EPA 300.0 Rev. 2.1 | 183 mg/L | 2 | 2 | | 8/2/2024 12:14 AM | MHS | | |
| | Anions - Nitrate | EPA 300.0 Rev. 2.1 | 10.0 mg/L | 10 | 0.5 | | 8/1/2024 09:34 PM | MHS | | |
| | Anions - Sulfate | EPA 300.0 Rev. 2.1 | 80.3 mg/L | 2 | 2 | | 8/2/2024 12:14 AM | MHS | | |
| | Ammonia as N | EPA 350.1 Rev. 2 | 0.13 mg/L | 1 | 0.1 | | 8/2/2024 01:00 PM | MW | | |
| | Total Kjeldahl Nitrogen (TKN) | EPA 351.2 Rev. 2 | 0.45 mg/L | 1 | 0.2 | | 8/19/2024 05:25 PM | MW | | |
| | Total Phosphorus | EPA 365.3 | 3.83 mg/L | 10 | 0.2 | | 8/6/2024 11:08 AM | MW | | |
| | Total Alkalinity | SM 2320 B | 174 mg CaCO3/L | 1 | 20 | | 8/2/2024 10:15 AM | MHS | | |
| 1 | pH (T.Alkalinity) | SM 2320 B | 4.5 SU | 1 | 1 | | 8/2/2024 10:15 AM | MHS | | |
| | Total Dissolved Solids | SM 2540 C | 620 mg/L | 1 | 10 | | 8/2/2024 04:11 PM | MLH | | |
| | Total Suspended Solids | SM 2540 D | 1.80 mg/L | 1 | 0.5 | | 8/2/2024 06:10 PM | MLH | | |
| 1 | pH (Lab) | SM 4500 H+B | 8.1 SU | 1 | 1 | Q | 8/1/2024 02:29 PM | CS | | |
| | Carbonaceous Biochemical Oxygen Demand (CBOD) | SM 5210 B | 1 mg/L | 1 | 1 | | 8/1/2024 04:15 PM | CS | 8/6/2024 11:21 AM | CS |

*NA = not analyzed*

[1] Parameter not available for NELAP accreditation at the GBRA

[2] Parameter is approved under TCEQ Drinking Water Program

933 East Court Street
Seguin, TX 78155
(830)379-5822 ext 256

This report cannot be reproduced, except in full, without prior written permission of the GBRA Laboratory. Results shown relate only to the items tested. Samples are assumed to be in acceptable condition unless otherwise noted.

**Work Order:** 240801.23

**Lab Sample ID:** 240801.23-02 **Collection Date/Time:** 8/1/2024 08:00 AM **Sample Matrix:** Waste Water
**Site:** FM 20 Effluent Permit **Receive Date/Time:** 8/1/2024 12:04 PM **Sample Type:** Grab

| | Analyte | Method | Sample Result | | DF | RPL | Qualifier | Test Date/Time | Analyst | Read Date/Time | Analyst |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | Oil and Grease | Subcontract | See Attached Report | mg/L | 1 | | | 8/14/2024 07:45 AM | | | |

Subcontract methods are tested by an external laboratory. See subcontracted report for further details.

**Lab Sample ID:** 240801.23-03 **Collection Date/Time:** 8/1/2024 08:00 AM **Sample Matrix:** Waste Water
**Site:** FM 20 Effluent Permit **Receive Date/Time:** 8/1/2024 12:04 PM **Sample Type:** Grab

| Analyte | Method | Sample Result | | DF | RPL | Qualifier | Test Date/Time | Analyst | Read Date/Time | Analyst |
|---|---|---|---|---|---|---|---|---|---|---|
| E. coli by Quanti-Tray | IDEXX Colilert 18 hr | 18 | MPN/100mL | 1 | 1 | | 8/1/2024 03:22 PM | MLH | 8/2/2024 09:39 AM | MLH |

*NA = not analyzed*

1 Parameter not available for NELAP accreditation at the GBRA
2 Parameter is approved under TCEQ Drinking Water Program

933 East Court Street
Seguin, TX 78155
(830)379-5822 ext 256

This report cannot be reproduced, except in full, without prior written permission of the GBRA Laboratory. Results shown relate only to the items tested. Samples are assumed to be in acceptable condition unless otherwise noted.

**Work Order:** 240801.23

# LABORATORY TERM AND QUALIFIER DEFINITION REPORT

## General Term Definition

| | | | |
|---|---|---|---|
| %REC | Percent Recovery | LOQ | Limit of Quantitation |
| %RPD | Relative Percent Difference | LR | Low Range |
| CCB | Continuing Calibration Verification | MBLK | Method Blank |
| CCV | Continuing Calibration Verification | MDL | Method Detection Limit |
| D.F. | Dilution Factor | MS | Matrix Spike |
| HR | High Range | MSD | Matrix Spike Duplicate |
| ICB | Initial Calibration Blank | ND | Not Detected |
| ICV | Initial Calibration Verification | QC | Quality Control |
| LCS | Laboratory Control Spike | RPL | Reporting Limit |
| LCSD | Laboratory Control Spike Duplicate | | |

## Qualifier Definition

| | |
|---|---|
| Q | Sample held beyond the accepted holding time |

## Order Comments

| | |
|---|---|
| 240801.23 | N/A |

# QC Results

| QCBatch ID | QC ID | Parameter | % Recovery / RPD | Control Limits |
|---|---|---|---|---|
| QC240802.002 | 240731.03-02: Duplicate 1 | Total Suspended Solids | 1.05 | 0 - 15 |
| | 240801.01-03: Duplicate 2 | Total Suspended Solids | 0.3 | 0 - 15 |
| | 240801.08-02: Duplicate 4 | Total Suspended Solids | 0.92 | 0 - 15 |
| | 240801.16-01: Duplicate 3 | Total Suspended Solids | 0.0 | 0 - 15 |
| | 240801.16-02: Duplicate 5 | Total Suspended Solids | 6.45 | 0 - 15 |

*NA = not analyzed*

[1] Parameter not available for NELAP accreditation at the GBRA

[2] Parameter is approved under TCEQ Drinking Water Program

933 East Court Street
Seguin, TX 78155
(830)379-5822 ext 256

This report cannot be reproduced, except in full, without prior written permission of the GBRA Laboratory. Results shown relate only to the items tested. Samples are assumed to be in acceptable condition unless otherwise noted.

| | | | | |
|---|---|---|---|---|
| | LCS 1 | Total Suspended Solids | 96.6 | 75 - 125 |
| | LCS 2 | Total Suspended Solids | 90.4 | 75 - 125 |
| | LCS 3 | Total Suspended Solids | 98.2 | 75 - 125 |
| | LCS 4 | Total Suspended Solids | 119.0 | 75 - 125 |
| | LCS 5 | Total Suspended Solids | 98.6 | 75 - 125 |
| | MBLK 1 | Total Suspended Solids | 0.0 | 0 - 0.5 |
| | MBLK 2 | Total Suspended Solids | 0.0 | 0 - 0.5 |
| | MBLK 3 | Total Suspended Solids | 0.0 | 0 - 0.5 |
| | MBLK 4 | Total Suspended Solids | 0.0 | 0 - 0.5 |
| | MBLK 5 | Total Suspended Solids | 0.0 | 0 - 0.5 |
| QC240802.003 | 240724.01-01: Duplicate 1 | E. coli by Quanti-Tray | 0.12 | |
| | MBLK 1 | E. coli by Quanti-Tray | 0.0 | |
| QC240802.004 | 240801.23-01: Duplicate 1 | Total Dissolved Solids | 1.3 | 0 - 10 |
| | LCS 1 | Total Dissolved Solids | 94.95 | 75 - 125 |
| | MBLK 1 | Total Dissolved Solids | 0.0 | 0 - 10 |
| QC240802.014 | 240724.01-01: MS 1 | Anions - Nitrate | 104.61 | 80 - 120 |
| | 240724.01-01: MSD 1 | Anions - Nitrate | 5.08 | 0 - 20 |
| | LCS 1 | Anions - Nitrate | 97.84 | 90 - 110 |
| | LCSD 1 | Anions - Nitrate | 0.45 | 0 - 20 |
| | LOQ 1 | Anions - Nitrate | 95.0 | 70 - 130 |
| | MBLK 1 | Anions - Nitrate | 0.0 | |
| QC240802.015 | 240724.01-02: MS 2 | Anions - Chloride | 116.81 | 80 - 120 |
| | 240724.01-02: MS 2 | Anions - Sulfate | 111.25 | 80 - 120 |
| | 240724.01-02: MSD 2 | Anions - Chloride | 0.71 | 0 - 20 |
| | 240724.01-02: MSD 2 | Anions - Sulfate | 0.9 | 0 - 20 |
| | 240801.05-01: MS 1 | Anions - Chloride | 116.9 | 80 - 120 |
| | 240801.05-01: MS 1 | Anions - Sulfate | 110.15 | 80 - 120 |
| | 240801.05-01: MSD 1 | Anions - Chloride | 1.15 | 0 - 20 |
| | 240801.05-01: MSD 1 | Anions - Sulfate | 1.14 | 0 - 20 |
| | LCS 1 | Anions - Chloride | 103.8 | 90 - 110 |
| | LCS 1 | Anions - Sulfate | 107.72 | 90 - 110 |
| | LCS 2 | Anions - Chloride | 104.34 | 90 - 110 |
| | LCS 2 | Anions - Sulfate | 108.92 | 90 - 110 |
| | LCSD 1 | Anions - Chloride | 1.93 | 0 - 20 |
| | LCSD 1 | Anions - Sulfate | 1.97 | 0 - 20 |

*NA = not analyzed*

[1] Parameter not available for NELAP accreditation at the GBRA
[2] Parameter is approved under TCEQ Drinking Water Program



This report cannot be reproduced, except in full, without prior written permission of the GBRA Laboratory. Results shown relate only to the items tested. Samples are assumed to be in acceptable condition unless otherwise noted.

| | | | | |
|---|---|---|---|---|
| | LCSD 2 | Anions - Chloride | 1.85 | 0 - 20 |
| | LCSD 2 | Anions - Sulfate | 1.94 | 0 - 20 |
| | LOQ 1 | Anions - Chloride | 105.99 | 70 - 130 |
| | LOQ 1 | Anions - Sulfate | 103.28 | 70 - 130 |
| | LOQ 2 | Anions - Chloride | 106.37 | 70 - 130 |
| | LOQ 2 | Anions - Sulfate | 108.82 | 70 - 130 |
| | MBLK 1 | Anions - Chloride | 0.0 | 0 - 1 |
| | MBLK 1 | Anions - Sulfate | 0.0 | |
| | MBLK 2 | Anions - Chloride | 0.0 | 0 - 1 |
| | MBLK 2 | Anions - Sulfate | 0.0 | |
| QC240803.001 | 240801.05-01: MS 1 | Total Alkalinity | 89.12 | 75 - 125 |
| | 240801.05-01: MSD 1 | Total Alkalinity | 0.63 | 0 - 15.4 |
| | LCS 1 | Total Alkalinity | 96.51 | 80 - 120 |
| | LCSD 1 | Total Alkalinity | 0.33 | 0 - 15.4 |
| | MBLK 1 | pH (T.Alkalinity) | 4.5 | |
| | MBLK 1 | Phenolphthalein Alkalinity | 0.0 | |
| | MBLK 1 | Total Alkalinity | 2.51 | 0 - 20 |
| QC240805.005 | 240801.01-01: Duplicate 1 | pH (Lab) | 1.03 | |
| | 240801.04-01: Duplicate 2 | pH (Lab) | 2.04 | |
| | 240801.08-01: Duplicate 3 | pH (Lab) | 0.52 | |
| | CCV 1 | pH (Lab) | 100.29 | |
| | ICV 1 | pH (Lab) | 100.0 | |
| QC240805.009 | 240801.01-02: Duplicate 1 | Carbonaceous Biochemical Oxygen Demand (CBOD) | 3.56 | 0 - 15.4 |
| | 240801.03-01: Duplicate 2 | Carbonaceous Biochemical Oxygen Demand (CBOD) | 0.0 | 0 - 15.4 |
| | CBOD GGA 1 | Carbonaceous Biochemical Oxygen Demand (CBOD) | 91.41 | 84.6 - 115.4 |
| | Dilution Blank 1 | Carbonaceous Biochemical Oxygen Demand (CBOD) | 0.0 | |
| QC240806.002 | 240722.06-05: MS 1 | Ammonia as N | 105.85 | 90 - 110 |
| | 240722.06-05: MSD 1 | Ammonia as N | 2.4 | 0 - 15 |
| | 240722.16-02: MS 2 | Ammonia as N | 94.82 | 90 - 110 |
| | 240722.16-02: MSD 2 | Ammonia as N | 6.68 | 0 - 15 |
| | 240730.02-01: MS 3 | Ammonia as N | 118.64 | 90 - 110 |
| | 240730.02-01: MSD 3 | Ammonia as N | 10.74 | 0 - 15 |

*NA = not analyzed*

[1] Parameter not available for NELAP accreditation at the GBRA

[2] Parameter is approved under TCEQ Drinking Water Program



This report cannot be reproduced, except in full, without prior written permission of the GBRA Laboratory. Results shown relate only to the items tested. Samples are assumed to be in acceptable condition unless otherwise noted.

| | | | | |
|---|---|---|---|---|
| | 240730.04-01: MS 4 | Ammonia as N | 103.63 | 90 - 110 |
| | 240730.04-01: MSD 4 | Ammonia as N | 7.27 | 0 - 15 |
| | 240731.03-03: MS 5 | Ammonia as N | 105.38 | 90 - 110 |
| | 240731.03-03: MSD 5 | Ammonia as N | 5.54 | 0 - 15 |
| | 240801.08-01: MS 6 | Ammonia as N | 108.81 | 90 - 110 |
| | 240801.08-01: MSD 6 | Ammonia as N | 0.41 | 0 - 15 |
| | 240801.22-01: MS 7 | Ammonia as N | 99.31 | 90 - 110 |
| | 240801.22-01: MSD 7 | Ammonia as N | 0.62 | 0 - 15 |
| | LCS 1 | Ammonia as N | 106.31 | 90 - 110 |
| | LCS 2 | Ammonia as N | 105.09 | 90 - 110 |
| | LCS 3 | Ammonia as N | 103.39 | 90 - 110 |
| | LCS 4 | Ammonia as N | 105.53 | 90 - 110 |
| | LCS 5 | Ammonia as N | 104.76 | 90 - 110 |
| | LCS 6 | Ammonia as N | 105.64 | 90 - 110 |
| | LCS 7 | Ammonia as N | 95.97 | 90 - 110 |
| | LCSD 1 | Ammonia as N | 2.02 | 0 - 15 |
| | LCSD 2 | Ammonia as N | 1.78 | 0 - 15 |
| | LCSD 3 | Ammonia as N | 5.23 | 0 - 15 |
| | LCSD 4 | Ammonia as N | 6.64 | 0 - 15 |
| | LCSD 5 | Ammonia as N | 2.67 | 0 - 15 |
| | LCSD 6 | Ammonia as N | 1.51 | 0 - 15 |
| | LCSD 7 | Ammonia as N | 6.82 | 0 - 15 |
| | LOQ 1 | Ammonia as N | 98.82 | 70 - 130 |
| | LOQ 2 | Ammonia as N | 97.92 | 70 - 130 |
| | LOQ 3 | Ammonia as N | 97.32 | 70 - 130 |
| | MBLK 1 | Ammonia as N | -0.01 | 0 - 0.1 |
| | MBLK 2 | Ammonia as N | 0.0 | 0 - 0.1 |
| | MBLK 3 | Ammonia as N | 0.0 | 0 - 0.1 |
| | MBLK 4 | Ammonia as N | 0.0 | 0 - 0.1 |
| | MBLK 5 | Ammonia as N | 0.0 | 0 - 0.1 |
| | MBLK 6 | Ammonia as N | -0.01 | 0 - 0.1 |
| | MBLK 7 | Ammonia as N | 0.0 | 0 - 0.1 |
| QC240808.006 | 240722.06-03: MS 1 | Total Phosphorus | 101.22 | 80 - 120 |
| | 240722.06-03: MSD 1 | Total Phosphorus | 1.92 | 0 - 15 |
| | 240722.16-08: MS 2 | Total Phosphorus | 114.68 | 80 - 120 |

*NA = not analyzed*

[1] Parameter not available for NELAP accreditation at the GBRA
[2] Parameter is approved under TCEQ Drinking Water Program



This report cannot be reproduced, except in full, without prior written permission of the GBRA Laboratory. Results shown relate only to the items tested. Samples are assumed to be in acceptable condition unless otherwise noted.

| | | | | |
|---|---|---|---|---|
| | 240722.16-08: MSD 2 | Total Phosphorus | 0.4 | 0 - 15 |
| | 240730.02-01: MS 3 | Total Phosphorus | 114.25 | 80 - 120 |
| | 240730.02-01: MSD 3 | Total Phosphorus | 0.08 | 0 - 15 |
| | 240730.04-01: MS 4 | Total Phosphorus | 119.35 | 80 - 120 |
| | 240730.04-01: MSD 4 | Total Phosphorus | 3.11 | 0 - 15 |
| | 240801.08-01: MS 5 | Total Phosphorus | 102.43 | 80 - 120 |
| | 240801.08-01: MSD 5 | Total Phosphorus | 0.32 | 0 - 15 |
| | 240801.22-01: MS 6 | Total Phosphorus | 92.87 | 80 - 120 |
| | 240801.22-01: MSD 6 | Total Phosphorus | 0.34 | 0 - 15 |
| | LCS 1 | Total Phosphorus | 111.44 | 75 - 125 |
| | LCS 2 | Total Phosphorus | 111.91 | 75 - 125 |
| | LCS 3 | Total Phosphorus | 112.24 | 75 - 125 |
| | LCS 4 | Total Phosphorus | 111.81 | 75 - 125 |
| | LCS 5 | Total Phosphorus | 108.0 | 75 - 125 |
| | LCS 6 | Total Phosphorus | 109.18 | 75 - 125 |
| | LCSD 1 | Total Phosphorus | 2.02 | 0 - 15 |
| | LCSD 2 | Total Phosphorus | 2.41 | 0 - 15 |
| | LCSD 3 | Total Phosphorus | 2.97 | 0 - 15 |
| | LCSD 4 | Total Phosphorus | 2.37 | 0 - 15 |
| | LCSD 5 | Total Phosphorus | 0.71 | 0 - 15 |
| | LCSD 6 | Total Phosphorus | 1.22 | 0 - 15 |
| | LOQ 1 | Total Phosphorus | 94.85 | 75 - 125 |
| | LOQ 2 | Total Phosphorus | 100.25 | 75 - 125 |
| | LOQ 3 | Total Phosphorus | 94.45 | 75 - 125 |
| | MBLK 1 | Total Phosphorus | 0.0 | |
| | MBLK 2 | Total Phosphorus | -0.01 | |
| | MBLK 3 | Total Phosphorus | 0.0 | |
| | MBLK 4 | Total Phosphorus | 0.0 | |
| | MBLK 5 | Total Phosphorus | 0.0 | |
| | MBLK 6 | Total Phosphorus | 0.0 | |
| QC240820.001 | 240724.01-03: MS 1 | Total Kjeldahl Nitrogen (TKN) | 106.15 | 90 - 110 |
| | 240724.01-03: MSD 1 | Total Kjeldahl Nitrogen (TKN) | 5.29 | 0 - 15 |
| | 240806.15-01: MS 2 | Total Kjeldahl Nitrogen (TKN) | 108.69 | 90 - 110 |
| | 240806.15-01: MSD 2 | Total Kjeldahl Nitrogen (TKN) | 0.04 | 0 - 15 |
| | LCS 1 | Total Kjeldahl Nitrogen (TKN) | 104.76 | 90 - 110 |

*NA = not analyzed*

[1] Parameter not available for NELAP accreditation at the GBRA

[2] Parameter is approved under TCEQ Drinking Water Program

933 East Court Street
Seguin, TX 78155
(830)379-5822 ext 256

This report cannot be reproduced, except in full, without prior written permission of the GBRA Laboratory. Results shown relate only to the items tested. Samples are assumed to be in acceptable condition unless otherwise noted.

| | | | |
|---|---|---|---|
| LCS 2 | Total Kjeldahl Nitrogen (TKN) | 105.98 | 90 - 110 |
| LCSD 1 | Total Kjeldahl Nitrogen (TKN) | 1.17 | 0 - 15 |
| LCSD 2 | Total Kjeldahl Nitrogen (TKN) | 4.96 | 0 - 15 |
| LOQ 1 | Total Kjeldahl Nitrogen (TKN) | 112.48 | 70 - 130 |
| LOQ 2 | Total Kjeldahl Nitrogen (TKN) | 95.31 | 70 - 130 |
| MBLK 1 | Total Kjeldahl Nitrogen (TKN) | -0.04 | |
| MBLK 2 | Total Kjeldahl Nitrogen (TKN) | -0.04 | |

*NA = not analyzed*

[1] Parameter not available for NELAP accreditation at the GBRA

[2] Parameter is approved under TCEQ Drinking Water Program

933 East Court Street
Seguin, TX 78155
(830)379-5822 ext 256

This report cannot be reproduced, except in full, without prior written permission of the GBRA Laboratory. Results shown relate only to the items tested. Samples are assumed to be in acceptable condition unless otherwise noted.

GBRA Laboratory

GBRA COC Form

Qualtrax ID: 17988

# Chain-Of-Custody Record

| Report To | | Invoice To (if applicable) | |
|---|---|---|---|
| Customer Acct.#: | 421439 | | |
| Name: GBRA-Lockhart WWTP-FM20 Plant | | Name: | |
| Address: 167 Creekview, Lockhart, TX | | Address: | |
| Phone #: 512-398-6391 | | Phone #: | |
| Email: emendez@gbra.org; jeeds@gbra.org | | Email: | |
| Thermometer #: 29 | Observed / Corrected Temp(°C): 5.1 / 5.2 | Chlorine Check Reagent ID: | Chlorine : Absent/ Present |
| Sample Iced (Circle One): Yes / No | CoC Page: 1 of 1 | pH Paper Reagent ID: 111522-02 | |
| No. of Containers: 4 | Containers Intact (Circle One): Yes / No | Residual Chlorine (Total/Free) Results: | |

| Date Collected | Time Collected | Matrix | Sx Vol. P=Plastic G=Glass A=Amber | Sample Name/Description | Preservation ID (PID#)/ TCEQ ID Number | Grab / Comp. | Analysis Requested | 240801.23 GBRA Sample ID | pH | Preservative | Sub Out |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 7/31/24 8/01/24 | 10A - 6A | WW | 1G-P | FM20 Permit | | C | CBOD, TSS, Nitrate, Sulfate, Chloride, TDS, Alk, Cond | -01 | | ~~H2SO4~~ | |
| 7/31/24 8/01/24 | 10A - 6A | WW | 1L-P | | 070324-10 | C | Ammonia, TKN, Total Phos | 1 | <2 | H2SO4 | |
| | | | | | | | | | | | |
| 8/01/24 | 8Am | WW | 1L G | | | G | Oil and Grease | -02 | + | H2SO4 | Y |
| 8/01/24 | 8Am | WW | 100mL-P | | | G | E. coli | -03 | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | WW | | | | G | pH: Temp: | | | | |
| | | WW | | | | G | Dissolved Oxygen: | Chlorine Residual: | | | |
| | | | | | | | | | | | |

Matrices: WW=Wastewater, DW=Drinking Water, SW=Surface Water, S=Sludge/Soil

Samples marked above as "Sub Out" will be subcontracted to a laboratory that meets the regulatory or end-user requirements of these samples

Expedite Samples: 24hr/Holiday (4x Fee) 48hr/Weekend (3x Fee) 3-5 days (2x Fee) Due Date:

| | | | |
|---|---|---|---|
| Sampler Name (Print): Phillip Gallegos | | Sampler Signature: | |
| Relinquished By: Phillip Gallegos | Date/Time: 8/01/24 8:15am | Transferred To: Fridge | Date/Time: 8/01/24 8:15am |
| Relinquished By: Fridge | Date/Time: 8/01-24 1046A | Received By: Mari de Dios | Date/Time: 8-01-24 1046A |
| Relinquished By: Mackenzie deLeon | Date/Time: 8-01-24 1204p | Received By: | Date/Time: 8/1/24 1204 |
| Relinquished By: | Date/Time: | Received By: | Date/Time: |

NOTES / COMMENTS / SHIP TO:
+pH tested at subcontracted lab

Status: Published

Qualtrax ID: 17988

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

SPL
The Science of Sure



Project
1113206

## GBRL-C

GBRA/Seguin
Miliana Hernandez
Regional Laboratory
933 E. Court St
Seguin, TX 78155-5819

Printed 08/15/2024
14:37

# TABLE OF CONTENTS

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


| Report Name | Description | Pages |
|---|---|---|
| 1113206_r02_01_ProjectSamples | SPL Kilgore Project P:1113206 C:GBRL Project Sample Cross Reference t:304 | 1 |
| 1113206_r03_03_ProjectResults | SPL Kilgore Project P:1113206 C:GBRL Project Results t:304 PO: acc dept= LabInvoices@gbra.org | 2 |
| 1113206_r10_05_ProjectQC | SPL Kilgore Project P:1113206 C:GBRL Project Quality Control Groups | 1 |
| 1113206_r99_09_CoC__1_of_1 | SPL Kilgore CoC GBRL 1113206_1_of_1 | 2 |
| | **Total Pages:** | 6 |

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

SPL
The Science of Sure

# SAMPLE CROSS REFERENCE

Project
1113206

Printed 8/15/2024 Page 1 of 1
ww

GBRA/Seguin
Miliana Hernandez
Regional Laboratory
933 E. Court St
Seguin, TX 78155-5819

| Sample | Sample ID | Taken | Time | Received |
|---|---|---|---|---|
| 2322510 | *240801.23-02* | 08/01/2024 | 08:00:00 | 08/06/2024 |

Bottle 01 H2SO4 to pH <2 Glass Qt w/Teflon lined lid

| Method | Bottle | PrepSet | Preparation | QcGroup | Analytical |
|---|---|---|---|---|---|
| EPA 1664B (HEM) | 01 | 1133461 | 08/14/2024 | 1133461 | 08/14/2024 |

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

# GBRL-C



Project
1113206

GBRA/Seguin
Miliana Hernandez
Regional Laboratory
933 E. Court St
Seguin, TX 78155-5819

Printed: 08/15/2024

## RESULTS

### Sample Results

**2322510** **240801.23-02** Received: 08/06/2024

Non-Potable Water Collected by: Client GBRA/Seguin PO: dept= LabInvoices@gbra.org
Taken: 08/01/2024 08:00:00

EPA 1664B (HEM) Prepared: 1133461 08/14/2024 07:45:00 Analyzed 1133461 08/14/2024 07:45:00 DRI

| | Parameter | Results | Units | RL | Flags | CAS | Bottle |
|---|---|---|---|---|---|---|---|
| ELAC | **Oil and Grease (HEM)** | **0.860** | **mg/L** | 4.30 | J | | 01 |

### Sample Preparation

**2322510** **240801.23-02** Received: 08/06/2024

dept= LabInvoices@gbra.org

08/01/2024

Prepared: 08/06/2024 14:52:56 Calculated 08/06/2024 14:52:56 CAL

**Environmental Fee (per Project)** **Verified**

Prepared: 08/15/2024 11:53:00 Analyzed 08/15/2024 11:53:00 WJP

**Level IV Data Review** **Completed**

EPA 1664B (HEM) Prepared: 1133194 08/14/2024 07:45:00 Analyzed 1133194 08/14/2024 07:45:00 DRI

ELAC **O&G HEM Started** **Started**

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

## GBRL-C



Project
1113206

GBRA/Seguin
Miliana Hernandez
Regional Laboratory
933 E. Court St
Seguin, TX 78155-5819

Printed: 08/15/2024

Qualifiers.

J - Analyte detected below quantitation limit

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

SPL The Science of Sure



## GBRL-C

GBRA/Seguin
Miliana Hernandez
Regional Laboratory
933 E. Court St
Seguin, TX 78155-5819

Project
1113206

Printed 08/15/2024

Analytical Set 1133461 — EPA 1664B (HEM)

**Blank**

| Parameter | PrepSet | Reading | MDL | MQL | Units | File |
|---|---|---|---|---|---|---|
| Oil and Grease (HEM) | 1133461 | ND | 0.804 | 4.00 | mg/L | 126658396 |

**ControlBlk**

| Parameter | PrepSet | Reading | MDL | MQL | Units | File |
|---|---|---|---|---|---|---|
| Oil and Grease (HEM) | 1133461 | 0.0003 | | | grams | 126658395 |
| Oil and Grease (HEM) | 1133461 | 0.0003 | | | grams | 126658420 |

**LCS**

| Parameter | PrepSet | Reading | Known | Units | Recover% | Limits | File |
|---|---|---|---|---|---|---|---|
| Oil and Grease (HEM) | 1133461 | 33.0 | 40.0 | mg/L | 82.5 | 78.0 - 114 | 126658397 |

**MS**

| Parameter | Sample | MS | MSD | UNK | Known | Limits | MS% | MSD% | Units | RPD | Limit% |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Oil and Grease (HEM) | 2322502 | 44.8 | 0 | 7.39 | 40.0 | 78.0 - 114 | 93.5 | | mg/L | | 20.0 |

* 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); LCS - Laboratory Control Sample (reagent water or other blank matrices that is spiked with a known quantity of target analyte(s) and carried through preparation and analytical procedures exactly like a sample; typically a mid-range concentration; verifies that bias and precision of the analytical process are within control limits; determines usability of the data.); MS - Matrix Spike (same solution and amount of target analyte added to the LCS is added to a second aliquot of sample; quantifies matrix bias.)

1113206 CoC Print Group 001 of 001

GBRA Laboratory

GBRA
Guadalupe-Blanco River Authority

GBRA COC Form

Qualtrax ID: 17968

# Chain-Of-Custody Record

| Report To | Customer Acct.#: | Invoice To (if applicable) | |
|---|---|---|---|
| Name: GBRA Kylie Gudgell | | Name: | |
| Address: 933 East Court St Seguin | | Address: | |
| Phone #: 830-379-5822 | | Phone #: | |
| Email: labreports@gbra.org | | Email: labsubinvoices@gbra.org | |
| Thermometer #: | Observed / Corrected Temp(°C): / | Chlorine Check Reagent ID: | Chlorine : Absent/ Present |
| Sample Iced (Circle One): Yes / No | CoC Page: of | pH Paper Reagent ID: | |
| No. of Containers: | Containers Intact (Circle One): Yes / No | Residual Chlorine (Total/Free) Results: | |

| Date Collected | Time Collected | Matrix | Sx Vol. P=Plastic G=Glass A=Amber | Sample Name/Description | Preservation ID (PID#)/ TCEQ ID Number | Grab / Comp. | Analysis Requested | GBRA Sample ID | pH | Preservative | Sub Out |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 8/1/2024 | 0800 | WW | 1L-G | 240801.23-02 | | G | Oil and Grease | 23225 / 0 | | H2SO4 | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |

Matrices: WW=Wastewater, DW=Drinking Water, SW=Surface Water, S=Sludge/Soil

Samples marked above as "Sub Out" will be subcontracted to a laboratory that meets the regulatory or end-user requirements of these samples

Expedite Samples: 24hr/Holiday (4x Fee) 48hr/Weekend (3x Fee) 3-5 days (2x Fee) Due Date: _____

| Sampler Name (Print): | | Sampler Signature: | |
|---|---|---|---|
| Relinquished By: GBRA | Date/Time: 8/5/24 | Transferred To: Common Courier | Date/Time: 8/5/24 |
| Relinquished By: Common Courier | Date/Time: 8/6/24 1030 | Received By: | Date/Time: 8/6/24 1030 |
| Relinquished By: | Date/Time: | Received By: | Date/Time: |
| Relinquished By: | Date/Time: | Received By: | Date/Time: |

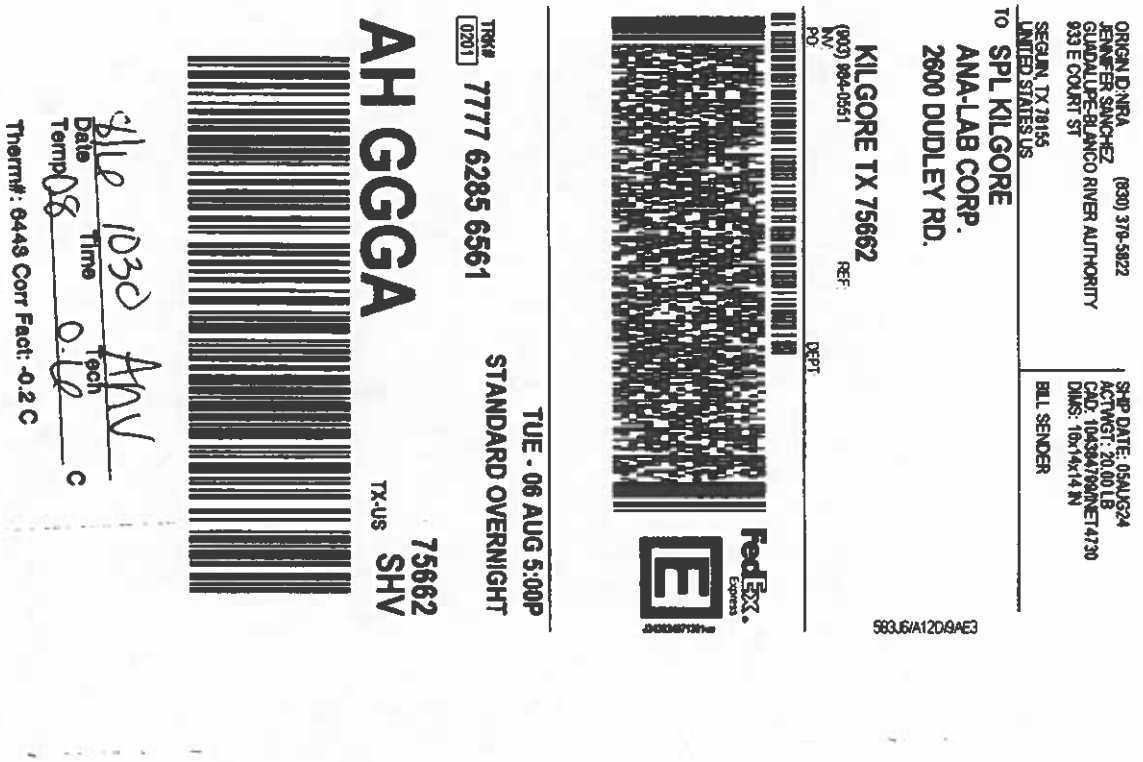
NOTES / COMMENTS / SHIP TO:
*pH tested at subcontracted lab

Status: Published
Issue Date: 12/11/2023 Revision: 3

Page1 of 1

Qualtrax ID: 17968

*1113206 CoC Print Group 001 of 001*




**After printing this label:**
1. Use the 'Print' button on this page to print your label to your laser or inkjet printer.
2. Fold the printed page along the horizontal line.
3. Place label in shipping pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.

**Warning:** Use only the printed original label for shipping. Using a photocopy of this label for shipping purposes is fraudulent and could result in additional billing charges, along with the cancellation of your FedEx account number.
Use of this system constitutes your agreement to the service conditions in the current FedEx Service Guide, available on fedex.com.FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery,misdelivery,or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim.Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental,consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss.Maximum for items of extraordinary value is $1,000, e.g. jewelry, precious metals, negotiable instruments and other items listed in our ServiceGuide. Written claims must be filed within strict time limits, see current FedEx Service Guide.

Publish Date/Time: 11/8/2024 5:29 PM

Guadalupe-Blanco River Authority

# Report of Analysis

**For: 421439 - GBRA-Lockhart WWTP**
933 E Court St
Seguin, TX 78155

Released By: Kylie Gudgell
Title: Lead Technical Manager

I am the laboratory manager, or his/her designee, and I am responsible for the release of this data package. This laboratory data package has been reviewed and is complete and technically compliant with the requirements of the methods used, except where noted. I affirm, to the best of my knowledge that all problems/anomalies observed by this laboratory (and if applicable, any and all laboratories subcontracted through this laboratory) that might affect the quality of the data, have been identified in the report, and that no information or data have been knowingly withheld that would affect the quality of the data.

This Laboratory is NELAP accredited. Scope: Non-potable water, potable water.

*NA = not analyzed*

1 Parameter not available for NELAP accreditation at the GBRA
2 Parameter is approved under TCEQ Drinking Water Program

933 East Court Street
Seguin, TX 78155
(830)379-5822 ext 256

This report cannot be reproduced, except in full, without prior written permission of the GBRA Laboratory. Results shown relate only to the items tested. Samples are assumed to be in acceptable condition unless otherwise noted.

**Work Order:** 241007.01

**Lab Sample ID:** 241007.01-01 **Collection Date/Time:** 10/7/2024 07:30 AM **Sample Matrix:** Waste Water

**Site:** FM 20 Effluent Permit **Receive Date/Time:** 10/7/2024 10:44 AM **Sample Type:** Grab

| Analyte | Method | Sample Result | | DF | RPL | Qualifier | Test Date/Time | Analyst | Read Date/Time | Analyst |
|---|---|---|---|---|---|---|---|---|---|---|
| Anions - Fluoride | EPA 300.0 Rev. 2.1 | 0.473 | mg/L | 1 | 0.05 | | 10/10/2024 08:30 PM | MLH | | |
| Anions - Nitrate | EPA 300.0 Rev. 2.1 | 1.59 | mg/L | 1 | 0.05 | | 10/7/2024 08:16 PM | MLH | | |
| [1] Chromium, Hexavalent | Subcontract | See Attached Report | mg/L | 1 | | | | | | |
| [1] Chromium, Trivalent | Subcontract | See Attached Report | mg/L | 1 | | | | | | |
| [1] Table 4 Testing | Subcontract | See Attached Report | | 1 | | | | | | |

*NA = not analyzed*

[1] Parameter not available for NELAP accreditation at the GBRA

[2] Parameter is approved under TCEQ Drinking Water Program

933 East Court Street
Seguin, TX 78155
(830)379-5822 ext 256

This report cannot be reproduced, except in full, without prior written permission of the GBRA Laboratory. Results shown relate only to the items tested. Samples are assumed to be in acceptable condition unless otherwise noted.

**Work Order:** 241007.01

# LABORATORY TERM AND QUALIFIER DEFINITION REPORT

## General Term Definition

| | | | |
|---|---|---|---|
| %REC | Percent Recovery | LOQ | Limit of Quantitation |
| %RPD | Relative Percent Difference | LR | Low Range |
| CCB | Continuing Calibration Verification | MBLK | Method Blank |
| CCV | Continuing Calibration Verification | MDL | Method Detection Limit |
| D.F. | Dilution Factor | MS | Matrix Spike |
| HR | High Range | MSD | Matrix Spike Duplicate |
| ICB | Initial Calibration Blank | ND | Not Detected |
| ICV | Initial Calibration Verification | QC | Quality Control |
| LCS | Laboratory Control Spike | RPL | Reporting Limit |
| LCSD | Laboratory Control Spike Duplicate | | |

## Qualifier Definition

## Order Comments

| | |
|---|---|
| 241007.01 | N/A |

# QC Results

| QCBatch ID | QC ID | Parameter | % Recovery / RPD | Control Limits |
|---|---|---|---|---|
| QC241030.002 | 241007.01-01: MS 1 | Anions - Nitrate | 96.68 | 80 - 120 |
| | 241007.01-01: MSD 1 | Anions - Nitrate | 0.19 | 0 - 20 |
| | LCS 1 | Anions - Nitrate | 97.46 | 90 - 110 |
| | LCSD 1 | Anions - Nitrate | 0.72 | 0 - 20 |
| | LOQ 1 | Anions - Nitrate | 113.8 | 70 - 130 |

*NA = not analyzed*

[1] Parameter not available for NELAP accreditation at the GBRA
[2] Parameter is approved under TCEQ Drinking Water Program

933 East Court Street
Seguin, TX 78155
(830)379-5822 ext 256

This report cannot be reproduced, except in full, without prior written permission of the GBRA Laboratory. Results shown relate only to the items tested. Samples are assumed to be in acceptable condition unless otherwise noted.

| | | | | |
|---|---|---|---|---|
| | MBLK 1 | Anions - Nitrate | 0.0 | |
| QC241030.003 | 241007.01-01: MS 1 | Anions - Fluoride | 112.97 | 80 - 120 |
| | 241007.01-01: MSD 1 | Anions - Fluoride | 0.58 | 0 - 20 |
| | LCS 1 | Anions - Fluoride | 104.66 | 90 - 110 |
| | LCSD 1 | Anions - Fluoride | 1.96 | 0 - 20 |
| | LOQ 1 | Anions - Fluoride | 116.6 | 70 - 130 |
| | MBLK 1 | Anions - Fluoride | 0.0 | |

*NA = not analyzed*

[1] Parameter not available for NELAP accreditation at the GBRA
[2] Parameter is approved under TCEQ Drinking Water Program

933 East Court Street
Seguin, TX 78155
(830)379-5822 ext 256

This report cannot be reproduced, except in full, without prior written permission of the GBRA Laboratory. Results shown relate only to the items tested. Samples are assumed to be in acceptable condition unless otherwise noted.

**Work Order:** 241007.01

GBRA Laboratory

GBRA COC Form

Qualtrax ID: 17988

# Chain-Of-Custody Record

| Report To | | Customer Acct.#: 421439 | Invoice To (if applicable) | |
|---|---|---|---|---|
| Name: GBRA-Lockhart WWTP-FM20 Plant | | | Name: | |
| Address: 167 Creekview, Lockhart, TX | | | Address: | |
| Phone #: 512-398-6391 | | | Phone #: | |
| Email: emendez@gbra.org; jeeds@gbra.org | | | Email: | |
| Thermometer #: 29 | Observed / Corrected Temp(°C): 10.9 / 7.0 | | Chlorine Check Reagent ID: | Chlorine : Absent/ Present |
| Sample Iced (Circle One): Yes / No | CoC Page: 1 of 1 | | pH Paper Reagent ID: 11522-08 JM 10/7/24 | |
| No. of Containers: 25 | Containers Intact (Circle One): Yes / No | | Residual Chlorine (Total/Free) Results: 3 | |

| Date Collected | Time Collected | Matrix | Sx Vol. P=Plastic G=Glass A=Amber | Sample Name/Description | Preservation ID (PID#)/ TCEQ ID Number | Grab / Comp. | Analysis Requested | GBRA Sample ID (2410708-1 JM 10/7/24) | pH | Preservative | Sub Out |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 10-7-24 | 7:30 AM | WW | 10 - 1 Qt Amb G | FM20 Effluent | | G | Routine 428 | -01 | | | Y |
| 10-7-24 | 7:30 AM | | 2-40mL VOA | | | G | (Nitrate + Fluoride run | | | | |
| 10-7-24 | 7:30 AM | | 2 - 1 Qt G | | | G | in-house) JM 10/29/24 | | <2 | H2SO4 | |
| 10-7-24 | 7:30 AM | | 1 - 250mL Amb G | | | G | | | <2 | H2SO4 | |
| 10-7-24 | 7:30 AM | | 1 - 500mL P | | | G | | | | HNO3 | |
| 10-7-24 | 7:30 AM | | 3 - 40mL VOA | | | G | | | | Na2S2O3 | |
| 10-7-24 | 7:30 AM | | 2 - 500mL G | | | G | | | | HCl | |
| 10-7-24 | 7:30 AM | | 2 - 250mL Amb P | | | G | | | >10 | NaOH | |
| 10-7-24 | 7:30 AM | | 1 - 125mL | | | G | | | <2 | H2SO4 | |
| 10-7-24 | 7:30 AM | | 1 - 125mL | | | G | | | >10 | NaOH | |

Page 3 of 66

Matrices: WW=Wastewater, DW=Drinking Water, SW=Surface Water, S=Sludge/Soil

Samples marked above as "Sub Out" will be subcontracted to a laboratory that meets the regulatory or end-user requirements of these samples

Expedite Samples: 24hr/Holiday (4x Fee) 48hr/Weekend (3x Fee) 3-5 days (2x Fee) Due Date: _____

| Sampler Name (Print): Joe Leal | | Sampler Signature: | |
|---|---|---|---|
| Relinquished By: Joe Leal | Date/Time: 10-7-24 1044 | Transferred To: | Date/Time: 10/7/24 1044 |
| Relinquished By: | Date/Time: | Received By: | Date/Time: |
| Relinquished By: | Date/Time: | Received By: | Date/Time: |
| Relinquished By: | Date/Time: | Received By: | Date/Time: |

NOTES / COMMENTS / SHIP TO:
+pH tested at subcontracted lab

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



Project
1120706

## GBRL-C

GBRA/Seguin
Miliana Hernandez
Regional Laboratory
933 E. Court St
Seguin, TX 78155-5819

Printed 10/23/2024
7:36

# TABLE OF CONTENTS

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


| Report Name | Description | Pages |
|---|---|---|
| 1120706_r02_01_ProjectSamples | SPL Kilgore Project P:1120706 C:GBRL Project Sample Cross Reference t:304 | 6 |
| 1120706_r03_03_ProjectResults | SPL Kilgore Project P:1120706 C:GBRL Project Results t:304 PO: acc dept= LabInvoices@gbra.org | 13 |
| 1120706_r10_05_ProjectQC | SPL Kilgore Project P:1120706 C:GBRL Project Quality Control Groups | 28 |
| 1120706_r99_09_CoC__1_of_1 | SPL Kilgore CoC GBRL 1120706_1_of_1 | 8 |
| | **Total Pages:** | 55 |

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



# SAMPLE CROSS REFERENCE

Project 1120706



GBRA/Seguin
Miliana Hernandez
Regional Laboratory
933 E. Court St
Seguin, TX 78155-5819

| Sample | Sample ID | Taken | Time | Received |
|---|---|---|---|---|
| 2341203 | 241007.01-01 | 10/07/2024 | 07:30:00 | 10/08/2024 |

Bottle 01 Amber 32 Oz
Bottle 02 Amber 32 Oz
Bottle 03 Amber 32 Oz
Bottle 04 Amber 32 Oz
Bottle 05 Amber 32 Oz
Bottle 06 Amber 32 Oz
Bottle 07 Amber 32 Oz
Bottle 08 Amber 32 Oz
Bottle 09 Amber 32 Oz
Bottle 10 H2SO4 to pH <2 Glass Qt w/Teflon lined lid
Bottle 11 16 oz HNO3 Metals Plastic
Bottle 12 Glass Vial 40 mL (Zero Headspace) w/Teflon lined lid
Bottle 13 Glass Vial 40 mL (Zero Headspace) w/Teflon lined lid
Bottle 14 Na2S2O3 (0.008%) Glass 40 mL vial w/Teflon lined lid (zero headspace)
Bottle 15 Na2S2O3 (0.008%) Glass 40 mL vial w/Teflon lined lid (zero headspace)
Bottle 16 Na2S2O3 (0.008%) Glass 40 mL vial w/Teflon lined lid (zero headspace)
Bottle 17 NaOH to pH >12 Polyethylene 250 mL/amber
Bottle 18 NaOH to pH >12 Polyethylene 250 mL/amber
Bottle 19 H2SO4 to pH <2 Amber Glass 250 mL w/Teflon lined lid
Bottle 20 Prepared Bottle: CN TRAACS Autosampler Vial (Batch 1141810) Volume: 10.00000 mL <== Derived from 18 ( 5 ml )
Bottle 21 Prepared Bottle: Phenol TRAACS Autosampler Vial (Batch 1141839) Volume: 6.00000 mL <== Derived from 19 ( 6 ml )
Bottle 22 Prepared Bottle: 2 mL Autosampler Vial (Batch 1141902) Volume: 5.00000 mL <== Derived from 02 ( 1045 ml )
Bottle 23 Prepared Bottle: CN TRAACS Autosampler Vial (Batch 1141921) Volume: 10.00000 mL <== Derived from 18 ( 5 ml )
Bottle 24 Prepared Bottle: ICP Preparation for Metals (Batch 1142094) Volume: 50.00000 mL <== Derived from 11 ( 50 ml )
Bottle 25 Prepared Bottle: 2 mL Autosampler Vial (Batch 1142237) Volume: 1.00000 mL <== Derived from 01 ( 1042 ml )
Bottle 26 Prepared Bottle: 632L\632S 2 mL Autosampler Vial (Batch 1142294) Volume: 1.00000 mL <== Derived from 03 ( 1042 ml )
Bottle 27 Prepared Bottle: GCXL\GCXS 2 mL Autosampler Vial (Batch 1142304) Volume: 1.00000 mL <== Derived from 03 ( 1042 ml )
Bottle 28 Prepared Bottle: OPXL/OPXS 2 mL Autosampler Vial (Batch 1142311) Volume: 1.00000 mL <== Derived from 03 ( 1042 ml )
Bottle 29 Prepared Bottle:PCBL 2 mL Autosampler Vial (Batch 1142312) Volume: 1.00000 mL <== Derived from 03 ( 1042 ml )
Bottle 30 Prepared Bottle: 2 mL Autosampler Vial (Batch 1142564) Volume: 1.00000 mL <== Derived from 07 ( 1043 ml )
Bottle 31 Prepared Bottle: 2 mL Autosampler Vial (Batch 1142711) Volume: 10.00000 mL <== Derived from 09 ( 1049 ml )
Bottle 32 Prepared Bottle: 2 mL Autosampler Vial (Batch 1143012) Volume: 1.00000 mL <== Derived from 05 ( 1040 ml )

| Method | Bottle | PrepSet | Preparation | QcGroup | Analytical |
|---|---|---|---|---|---|
| EPA 608.3 | 27 | 1142304 | 10/10/2024 | 1143253 | 10/15/2024 |
| EPA 608.3 | 29 | 1142312 | 10/10/2024 | 1143830 | 10/15/2024 |
| EPA 615 | 31 | 1142711 | 10/14/2024 | 1143664 | 10/19/2024 |
| EPA 632 | 26 | 1142294 | 10/10/2024 | 1143577 | 10/17/2024 |
| EPA 300.0 2.1 | 01 | 1141878 | 10/09/2024 | 1141878 | 10/09/2024 |

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

1 2 3 4 5

# SAMPLE CROSS REFERENCE

Project
1120706


WW 241007.01-01-TRIP BLANK

GBRA/Seguin
Miliana Hernandez
Regional Laboratory
933 E. Court St
Seguin, TX 78155-5819

| Sample | Sample ID | Taken | Time | Received |
|---|---|---|---|---|
| 2341203 | 241007.01-01 | 10/07/2024 | 07:30:00 | 10/08/2024 |

Bottle 01 Amber 32 Oz
Bottle 02 Amber 32 Oz
Bottle 03 Amber 32 Oz
Bottle 04 Amber 32 Oz
Bottle 05 Amber 32 Oz
Bottle 06 Amber 32 Oz
Bottle 07 Amber 32 Oz
Bottle 08 Amber 32 Oz
Bottle 09 Amber 32 Oz
Bottle 10 H2SO4 to pH <2 Glass Qt w/Teflon lined lid
Bottle 11 16 oz HNO3 Metals Plastic
Bottle 12 Glass Vial 40 mL (Zero Headspace) w/Teflon lined lid
Bottle 13 Glass Vial 40 mL (Zero Headspace) w/Teflon lined lid
Bottle 14 Na2S2O3 (0.008%) Glass 40 mL vial w/Teflon lined lid (zero headspace)
Bottle 15 Na2S2O3 (0.008%) Glass 40 mL vial w/Teflon lined lid (zero headspace)
Bottle 16 Na2S2O3 (0.008%) Glass 40 mL vial w/Teflon lined lid (zero headspace)
Bottle 17 NaOH to pH >12 Polyethylene 250 mL/amber
Bottle 18 NaOH to pH >12 Polyethylene 250 mL/amber
Bottle 19 H2SO4 to pH <2 Amber Glass 250 mL w/Teflon lined lid
Bottle 20 Prepared Bottle: CN TRAACS Autosampler Vial (Batch 1141810) Volume: 10.00000 mL <== Derived from 18 ( 5 ml )
Bottle 21 Prepared Bottle: Phenol TRAACS Autosampler Vial (Batch 1141839) Volume: 6.00000 mL <== Derived from 19 ( 6 ml )
Bottle 22 Prepared Bottle: 2 mL Autosampler Vial (Batch 1141902) Volume: 5.00000 mL <== Derived from 02 ( 1045 ml )
Bottle 23 Prepared Bottle: CN TRAACS Autosampler Vial (Batch 1141921) Volume: 10.00000 mL <== Derived from 18 ( 5 ml )
Bottle 24 Prepared Bottle: ICP Preparation for Metals (Batch 1142094) Volume: 50.00000 mL <== Derived from 11 ( 50 ml )
Bottle 25 Prepared Bottle: 2 mL Autosampler Vial (Batch 1142237) Volume: 1.00000 mL <== Derived from 01 ( 1042 ml )
Bottle 26 Prepared Bottle: 632L\632S 2 mL Autosampler Vial (Batch 1142294) Volume: 1.00000 mL <== Derived from 03 ( 1042 ml )
Bottle 27 Prepared Bottle: GCXL\GCXS 2 mL Autosampler Vial (Batch 1142304) Volume: 1.00000 mL <== Derived from 03 ( 1042 ml )
Bottle 28 Prepared Bottle: OPXL/OPXS 2 mL Autosampler Vial (Batch 1142311) Volume: 1.00000 mL <== Derived from 03 ( 1042 ml )
Bottle 29 Prepared Bottle:PCBL 2 mL Autosampler Vial (Batch 1142312) Volume: 1.00000 mL <== Derived from 03 ( 1042 ml )
Bottle 30 Prepared Bottle: 2 mL Autosampler Vial (Batch 1142564) Volume: 1.00000 mL <== Derived from 07 ( 1043 ml )
Bottle 31 Prepared Bottle: 2 mL Autosampler Vial (Batch 1142711) Volume: 10.00000 mL <== Derived from 09 ( 1049 ml )
Bottle 32 Prepared Bottle: 2 mL Autosampler Vial (Batch 1143012) Volume: 1.00000 mL <== Derived from 05 ( 1040 ml )

| Method | Bottle | PrepSet | Preparation | QcGroup | Analytical |
|---|---|---|---|---|---|
| EPA 604.1 | 22 | 1141902 | 10/08/2024 | 1142441 | 10/11/2024 |
| EPA 617 | 27 | 1142304 | 10/10/2024 | 1143232 | 10/15/2024 |
| EPA 625.1 | 25 | 1142237 | 10/09/2024 | 1143054 | 10/14/2024 |
| EPA 624.1 | 13 | 1142060 | 10/09/2024 | 1142060 | 10/09/2024 |
| EPA 624.1 | 15 | 1142062 | 10/09/2024 | 1142062 | 10/09/2024 |

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

1 2 3 4 5

# SAMPLE CROSS REFERENCE

Project 1120706



GBRA/Seguin
Miliana Hernandez
Regional Laboratory
933 E. Court St
Seguin, TX 78155-5819

| Sample | Sample ID | Taken | Time | Received |
|---|---|---|---|---|
| 2341203 | *241007.01-01* | 10/07/2024 | 07:30:00 | 10/08/2024 |

Bottle 01 Amber 32 Oz
Bottle 02 Amber 32 Oz
Bottle 03 Amber 32 Oz
Bottle 04 Amber 32 Oz
Bottle 05 Amber 32 Oz
Bottle 06 Amber 32 Oz
Bottle 07 Amber 32 Oz
Bottle 08 Amber 32 Oz
Bottle 09 Amber 32 Oz
Bottle 10 H2SO4 to pH <2 Glass Qt w/Teflon lined lid
Bottle 11 16 oz HNO3 Metals Plastic
Bottle 12 Glass Vial 40 mL (Zero Headspace) w/Teflon lined lid
Bottle 13 Glass Vial 40 mL (Zero Headspace) w/Teflon lined lid
Bottle 14 Na2S2O3 (0.008%) Glass 40 mL vial w/Teflon lined lid (zero headspace)
Bottle 15 Na2S2O3 (0.008%) Glass 40 mL vial w/Teflon lined lid (zero headspace)
Bottle 16 Na2S2O3 (0.008%) Glass 40 mL vial w/Teflon lined lid (zero headspace)
Bottle 17 NaOH to pH >12 Polyethylene 250 mL/amber
Bottle 18 NaOH to pH >12 Polyethylene 250 mL/amber
Bottle 19 H2SO4 to pH <2 Amber Glass 250 mL w/Teflon lined lid
Bottle 20 Prepared Bottle: CN TRAACS Autosampler Vial (Batch 1141810) Volume: 10.00000 mL <== Derived from 18 ( 5 ml )
Bottle 21 Prepared Bottle: Phenol TRAACS Autosampler Vial (Batch 1141839) Volume: 6.00000 mL <== Derived from 19 ( 6 ml )
Bottle 22 Prepared Bottle: 2 mL Autosampler Vial (Batch 1141902) Volume: 5.00000 mL <== Derived from 02 ( 1045 ml )
Bottle 23 Prepared Bottle: CN TRAACS Autosampler Vial (Batch 1141921) Volume: 10.00000 mL <== Derived from 18 ( 5 ml )
Bottle 24 Prepared Bottle: ICP Preparation for Metals (Batch 1142094) Volume: 50.00000 mL <== Derived from 11 ( 50 ml )
Bottle 25 Prepared Bottle: 2 mL Autosampler Vial (Batch 1142237) Volume: 1.00000 mL <== Derived from 01 ( 1042 ml )
Bottle 26 Prepared Bottle: 632L\632S 2 mL Autosampler Vial (Batch 1142294) Volume: 1.00000 mL <== Derived from 03 ( 1042 ml )
Bottle 27 Prepared Bottle: GCXL\GCXS 2 mL Autosampler Vial (Batch 1142304) Volume: 1.00000 mL <== Derived from 03 ( 1042 ml )
Bottle 28 Prepared Bottle: OPXL/OPXS 2 mL Autosampler Vial (Batch 1142311) Volume: 1.00000 mL <== Derived from 03 ( 1042 ml )
Bottle 29 Prepared Bottle:PCBL 2 mL Autosampler Vial (Batch 1142312) Volume: 1.00000 mL <== Derived from 03 ( 1042 ml )
Bottle 30 Prepared Bottle: 2 mL Autosampler Vial (Batch 1142564) Volume: 1.00000 mL <== Derived from 07 ( 1043 ml )
Bottle 31 Prepared Bottle: 2 mL Autosampler Vial (Batch 1142711) Volume: 10.00000 mL <== Derived from 09 ( 1049 ml )
Bottle 32 Prepared Bottle: 2 mL Autosampler Vial (Batch 1143012) Volume: 1.00000 mL <== Derived from 05 ( 1040 ml )

| Method | Bottle | PrepSet | Preparation | QcGroup | Analytical |
|---|---|---|---|---|---|
| EPA 614 | 28 | 1142311 | 10/10/2024 | 1143853 | 10/17/2024 |
| ASTM D7065-11 | 32 | 1143012 | 10/15/2024 | 1143252 | 10/16/2024 |
| TX 1001 | 30 | 1142564 | 10/10/2024 | 1143013 | 10/15/2024 |
| EPA 200.8 5.4 | 24 | 1142094 | 10/10/2024 | 1142309 | 10/10/2024 |
| EPA 200.8 5.4 | 24 | 1142094 | 10/10/2024 | 1142657 | 10/11/2024 |

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

1 2 3 4 5

# SAMPLE CROSS REFERENCE

Project 1120706



GBRA/Seguin
Miliana Hernandez
Regional Laboratory
933 E. Court St
Seguin, TX 78155-5819

| Sample | Sample ID | Taken | Time | Received |
|---|---|---|---|---|
| 2341203 | 241007.01-01 | 10/07/2024 | 07:30:00 | 10/08/2024 |

Bottle 01 Amber 32 Oz
Bottle 02 Amber 32 Oz
Bottle 03 Amber 32 Oz
Bottle 04 Amber 32 Oz
Bottle 05 Amber 32 Oz
Bottle 06 Amber 32 Oz
Bottle 07 Amber 32 Oz
Bottle 08 Amber 32 Oz
Bottle 09 Amber 32 Oz
Bottle 10 H2SO4 to pH <2 Glass Qt w/Teflon lined lid
Bottle 11 16 oz HNO3 Metals Plastic
Bottle 12 Glass Vial 40 mL (Zero Headspace) w/Teflon lined lid
Bottle 13 Glass Vial 40 mL (Zero Headspace) w/Teflon lined lid
Bottle 14 Na2S2O3 (0.008%) Glass 40 mL vial w/Teflon lined lid (zero headspace)
Bottle 15 Na2S2O3 (0.008%) Glass 40 mL vial w/Teflon lined lid (zero headspace)
Bottle 16 Na2S2O3 (0.008%) Glass 40 mL vial w/Teflon lined lid (zero headspace)
Bottle 17 NaOH to pH >12 Polyethylene 250 mL/amber
Bottle 18 NaOH to pH >12 Polyethylene 250 mL/amber
Bottle 19 H2SO4 to pH <2 Amber Glass 250 mL w/Teflon lined lid
Bottle 20 Prepared Bottle: CN TRAACS Autosampler Vial (Batch 1141810) Volume: 10.00000 mL <== Derived from 18 ( 5 ml )
Bottle 21 Prepared Bottle: Phenol TRAACS Autosampler Vial (Batch 1141839) Volume: 6.00000 mL <== Derived from 19 ( 6 ml )
Bottle 22 Prepared Bottle: 2 mL Autosampler Vial (Batch 1141902) Volume: 5.00000 mL <== Derived from 02 ( 1045 ml )
Bottle 23 Prepared Bottle: CN TRAACS Autosampler Vial (Batch 1141921) Volume: 10.00000 mL <== Derived from 18 ( 5 ml )
Bottle 24 Prepared Bottle: ICP Preparation for Metals (Batch 1142094) Volume: 50.00000 mL <== Derived from 11 ( 50 ml )
Bottle 25 Prepared Bottle: 2 mL Autosampler Vial (Batch 1142237) Volume: 1.00000 mL <== Derived from 01 ( 1042 ml )
Bottle 26 Prepared Bottle: 632L\632S 2 mL Autosampler Vial (Batch 1142294) Volume: 1.00000 mL <== Derived from 03 ( 1042 ml )
Bottle 27 Prepared Bottle: GCXL\GCXS 2 mL Autosampler Vial (Batch 1142304) Volume: 1.00000 mL <== Derived from 03 ( 1042 ml )
Bottle 28 Prepared Bottle: OPXL/OPXS 2 mL Autosampler Vial (Batch 1142311) Volume: 1.00000 mL <== Derived from 03 ( 1042 ml )
Bottle 29 Prepared Bottle:PCBL 2 mL Autosampler Vial (Batch 1142312) Volume: 1.00000 mL <== Derived from 03 ( 1042 ml )
Bottle 30 Prepared Bottle: 2 mL Autosampler Vial (Batch 1142564) Volume: 1.00000 mL <== Derived from 07 ( 1043 ml )
Bottle 31 Prepared Bottle: 2 mL Autosampler Vial (Batch 1142711) Volume: 10.00000 mL <== Derived from 09 ( 1049 ml )
Bottle 32 Prepared Bottle: 2 mL Autosampler Vial (Batch 1143012) Volume: 1.00000 mL <== Derived from 05 ( 1040 ml )

| Method | Bottle | PrepSet | Preparation | QcGroup | Analytical |
|---|---|---|---|---|---|
| EPA 245.7 2 | | | 10/08/2024 | | 10/08/2024 |
| SM 4500-CN⁻ G-2016 | | | 10/15/2024 | | 10/15/2024 |
| SM 4500-CN⁻ G-2016 | 23 | 1141921 | 10/09/2024 | 1142901 | 10/15/2024 |
| SM 4500-CN⁻ E-2016 | 20 | 1141810 | 10/09/2024 | 1142155 | 10/10/2024 |
| EPA 420.4 1 | 21 | 1141839 | 10/09/2024 | 1142185 | 10/10/2024 |

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

1 2 3 4 5

# SAMPLE CROSS REFERENCE

Project 1120706



GBRA/Seguin
Miliana Hernandez
Regional Laboratory
933 E. Court St
Seguin, TX 78155-5819

| Sample | Sample ID | Taken | Time | Received |
|---|---|---|---|---|
| 2341203 | *241007.01-01* | 10/07/2024 | 07:30:00 | 10/08/2024 |

Bottle 01 Amber 32 Oz
Bottle 02 Amber 32 Oz
Bottle 03 Amber 32 Oz
Bottle 04 Amber 32 Oz
Bottle 05 Amber 32 Oz
Bottle 06 Amber 32 Oz
Bottle 07 Amber 32 Oz
Bottle 08 Amber 32 Oz
Bottle 09 Amber 32 Oz
Bottle 10 H2SO4 to pH <2 Glass Qt w/Teflon lined lid
Bottle 11 16 oz HNO3 Metals Plastic
Bottle 12 Glass Vial 40 mL (Zero Headspace) w/Teflon lined lid
Bottle 13 Glass Vial 40 mL (Zero Headspace) w/Teflon lined lid
Bottle 14 Na2S2O3 (0.008%) Glass 40 mL vial w/Teflon lined lid (zero headspace)
Bottle 15 Na2S2O3 (0.008%) Glass 40 mL vial w/Teflon lined lid (zero headspace)
Bottle 16 Na2S2O3 (0.008%) Glass 40 mL vial w/Teflon lined lid (zero headspace)
Bottle 17 NaOH to pH >12 Polyethylene 250 mL/amber
Bottle 18 NaOH to pH >12 Polyethylene 250 mL/amber
Bottle 19 H2SO4 to pH <2 Amber Glass 250 mL w/Teflon lined lid
Bottle 20 Prepared Bottle: CN TRAACS Autosampler Vial (Batch 1141810) Volume: 10.00000 mL <== Derived from 18 ( 5 ml )
Bottle 21 Prepared Bottle: Phenol TRAACS Autosampler Vial (Batch 1141839) Volume: 6.00000 mL <== Derived from 19 ( 6 ml )
Bottle 22 Prepared Bottle: 2 mL Autosampler Vial (Batch 1141902) Volume: 5.00000 mL <== Derived from 02 ( 1045 ml )
Bottle 23 Prepared Bottle: CN TRAACS Autosampler Vial (Batch 1141921) Volume: 10.00000 mL <== Derived from 18 ( 5 ml )
Bottle 24 Prepared Bottle: ICP Preparation for Metals (Batch 1142094) Volume: 50.00000 mL <== Derived from 11 ( 50 ml )
Bottle 25 Prepared Bottle: 2 mL Autosampler Vial (Batch 1142237) Volume: 1.00000 mL <== Derived from 01 ( 1042 ml )
Bottle 26 Prepared Bottle: 632L\632S 2 mL Autosampler Vial (Batch 1142294) Volume: 1.00000 mL <== Derived from 03 ( 1042 ml )
Bottle 27 Prepared Bottle: GCXL\GCXS 2 mL Autosampler Vial (Batch 1142304) Volume: 1.00000 mL <== Derived from 03 ( 1042 ml )
Bottle 28 Prepared Bottle: OPXL/OPXS 2 mL Autosampler Vial (Batch 1142311) Volume: 1.00000 mL <== Derived from 03 ( 1042 ml )
Bottle 29 Prepared Bottle:PCBL 2 mL Autosampler Vial (Batch 1142312) Volume: 1.00000 mL <== Derived from 03 ( 1042 ml )
Bottle 30 Prepared Bottle: 2 mL Autosampler Vial (Batch 1142564) Volume: 1.00000 mL <== Derived from 07 ( 1043 ml )
Bottle 31 Prepared Bottle: 2 mL Autosampler Vial (Batch 1142711) Volume: 10.00000 mL <== Derived from 09 ( 1049 ml )
Bottle 32 Prepared Bottle: 2 mL Autosampler Vial (Batch 1143012) Volume: 1.00000 mL <== Derived from 05 ( 1040 ml )

| Method | Bottle | PrepSet | Preparation | QcGroup | Analytical |
|---|---|---|---|---|---|
| EPA 622 | 28 | 1142311 | 10/10/2024 | 1143851 | 10/17/2024 |

| Sample | Sample ID | Taken | Time | Received |
|---|---|---|---|---|
| 2341205 | *241007.01-01-TRIP BLANK* | 10/07/2024 | 07:30:00 | 10/08/2024 |

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

1 2 3 4 5

# SAMPLE CROSS REFERENCE

Project
1120706



GBRA/Seguin
Miliana Hernandez
Regional Laboratory
933 E. Court St
Seguin, TX 78155-5819

Bottle 01 Client supplied HCl Clean Metals Bottle
Bottle 02 Prepared Bottle: Mercury Preparation for Metals (Batch 1143417) Volume: 50.00000 mL <== Derived from 01 ( 47 ml )

| Method | Bottle | PrepSet | Preparation | QcGroup | Analytical |
|---|---|---|---|---|---|
| EPA 245.7 2 | 02 | 1143417 | 10/17/2024 | 1143563 | 10/18/2024 |

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



# GBRL-C



Project
1120706

GBRA/Seguin
Miliana Hernandez
Regional Laboratory
933 E. Court St
Seguin, TX 78155-5819

Printed: 10/23/2024

## RESULTS

### Sample Results

**2341203** **241007.01-01** Received: 10/08/2024

Non-Potable Water | Collected by: Client | GBRA/Seguin | PO: dept= LabInvoices@gbra.org
Taken: 10/07/2024 07:30:00

Prepared: 10/08/2024 18:16:20 Calculated 10/08/2024 18:16:20 CAL

| | Parameter | Results | Units | RL | Flags | CAS | Bottle |
|---|---|---|---|---|---|---|---|
| z | Field Sulfide Check for CNs | Verified | mg/L | | | | |

Prepared: 10/23/2024 07:28:00 Analyzed 10/23/2024 07:28:00 WJP

| | Parameter | Results | Units | RL | Flags | CAS | Bottle |
|---|---|---|---|---|---|---|---|
| z | Check Limits | Completed | | | | | |

ASTM D7065-11 Prepared: 1143012 10/15/2024 10:30:00 Analyzed 1143252 10/16/2024 18:42:00 DWL

| | Parameter | Results | Units | RL | Flags | CAS | Bottle |
|---|---|---|---|---|---|---|---|
| z | Nonylphenol | <0.0288 | mg/L | 0.0288 | | 25154-52-3 | 32 |

EPA 200.8 5.4 Prepared: 1142094 10/10/2024 10:00:00 Analyzed 1142309 10/10/2024 16:44:00 JC2

| | Parameter | Results | Units | RL | Flags | CAS | Bottle |
|---|---|---|---|---|---|---|---|
| NELAC | Aluminum, Total | 0.0234 | mg/L | 0.002 | | 7429-90-5 | 24 |
| NELAC | Arsenic, Total | 0.00138 | mg/L | 0.0005 | | 7440-38-2 | 24 |
| NELAC | Barium, Total | 0.0333 | mg/L | 0.002 | | 7440-39-3 | 24 |
| NELAC | Beryllium, Total | 0.0000629 | mg/L | 0.0005 | J | 7440-41-7 | 24 |
| NELAC | Cadmium, Total | <0.000095 | mg/L | 0.000095 | | 7440-43-9 | 24 |
| NELAC | Copper, Total | 0.00226 | mg/L | 0.001 | | 7440-50-8 | 24 |
| NELAC | Nickel, Total | 0.00218 | mg/L | 0.001 | | 7440-02-0 | 24 |
| NELAC | Selenium, Total | 0.00313 | mg/L | 0.002 | | 7782-49-2 | 24 |
| NELAC | Silver, Total | 0.0000822 | mg/L | 0.0002 | J | 7440-22-4 | 24 |
| NELAC | Zinc, Total | 0.0356 | mg/L | 0.005 | | 7440-66-6 | 24 |

EPA 200.8 5.4 Prepared: 1142094 10/10/2024 10:00:00 Analyzed 1142657 10/11/2024 14:57:00 ESG

| | Parameter | Results | Units | RL | Flags | CAS | Bottle |
|---|---|---|---|---|---|---|---|
| NELAC | Antimony, Total | 0.00116 | mg/L | 0.003 | J | 7440-36-0 | 24 |
| NELAC | Chromium, Total | 0.000726 | mg/L | 0.001 | J | 7440-47-3 | 24 |

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



# GBRL-C



Project 1120706

GBRA/Seguin
Miliana Hernandez
Regional Laboratory
933 E. Court St
Seguin, TX 78155-5819

Printed: 10/23/2024

**2341203** **241007.01-01** Received: 10/08/2024

Non-Potable Water | Collected by: Client | GBRA/Seguin | PO: dept= LabInvoices@gbra.org
Taken: 10/07/2024 07:30:00

*EPA 200.8 5.4* — Prepared: 1142094 10/10/2024 10:00:00 — Analyzed 1142657 10/11/2024 14:57:00 — ESG

| | Parameter | Results | Units | RL | Flags | CAS | Bottle |
|---|---|---|---|---|---|---|---|
| NELAC | **Lead, Total** | **<0.0005** | **mg/L** | 0.0005 | | **7439-92-1** | 24 |
| NELAC | **Thallium, Total** | **<0.000966** | **mg/L** | 0.000966 | | **7440-28-0** | 24 |

*EPA 245.7 2* — Prepared: 10/08/2024 12:00:00 — Analyzed 10/08/2024 12:00:00 — RDT

| | Parameter | Results | Units | RL | Flags | CAS | Bottle |
|---|---|---|---|---|---|---|---|
| NELAC | **Mercury, Total (low level)** | **INSUFFICIENT** | | | | **7439-97-6** | |

*EPA 300.0 2.1* — Prepared: 1141878 10/09/2024 01:53:00 — Analyzed 1141878 10/09/2024 01:53:00 — TTC

| | Parameter | Results | Units | RL | Flags | CAS | Bottle |
|---|---|---|---|---|---|---|---|
| NELAC | **Fluoride** | **0.0645** | **mg/L** | 0.500 | J | | 01 |

*EPA 420.4 1* — Prepared: 1141839 10/09/2024 09:15:55 — Analyzed 1142185 10/10/2024 11:18:00 — AMB

| | Parameter | Results | Units | RL | Flags | CAS | Bottle |
|---|---|---|---|---|---|---|---|
| NELAC | **Phenolics, Total Recoverable** | **0.017** | **mg/L** | 0.005 | | | 21 |

*EPA 604.1* — Prepared: 1141902 10/08/2024 09:30:00 — Analyzed 1142441 10/11/2024 02:06:00 — BRU

| | Parameter | Results | Units | RL | Flags | CAS | Bottle |
|---|---|---|---|---|---|---|---|
| z | **Hexachlorophene** | **<0.00239** | **mg/L** | 0.00239 | | **70-30-4** | 22 |

*EPA 608.3* — Prepared: 1142304 10/10/2024 11:00:00 — Analyzed 1143253 10/15/2024 20:48:00 — KAP

| | Parameter | Results | Units | RL | Flags | CAS | Bottle |
|---|---|---|---|---|---|---|---|
| NELAC | **4,4-DDD** | **<0.0000096** | **mg/L** | 0.0000096 | X | **72-54-8** | 27 |
| NELAC | **4,4-DDE** | **<0.0000096** | **mg/L** | 0.0000096 | | **72-55-9** | 27 |
| NELAC | **4,4-DDT** | **<0.0000096** | **mg/L** | 0.0000096 | | **50-29-3** | 27 |
| NELAC | **Aldrin** | **<0.0000096** | **mg/L** | 0.0000096 | | **309-00-2** | 27 |
| NELAC | **Alpha-BHC(hexachlorocyclohexane)** | **<0.0000096** | **mg/L** | 0.0000096 | XM | **319-84-6** | 27 |
| NELAC | **Beta-BHC(hexachlorocyclohexane)** | **<0.0000096** | **mg/L** | 0.0000096 | | **319-85-7** | 27 |
| NELAC | **Chlordane** | **<0.000192** | **mg/L** | 0.000192 | | **57-74-9** | 27 |
| NELAC | **Delta-BHC(hexachlorocyclohexane)** | **<0.0000096** | **mg/L** | 0.0000096 | | **319-86-8** | 27 |
| NELAC | **Dieldrin** | **<0.0000096** | **mg/L** | 0.0000096 | X | **60-57-1** | 27 |

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



## GBRL-C

GBRA/Seguin
Miliana Hernandez
Regional Laboratory
933 E. Court St
Seguin, TX 78155-5819

Project
1120706

Printed: 10/23/2024

**2341203** **241007.01-01** Received: 10/08/2024

Non-Potable Water Collected by: Client GBRA/Seguin PO: dept= LabInvoices@gbra.org
Taken: 10/07/2024 07:30:00

*EPA 608.3* Prepared: 1142304 10/10/2024 11:00:00 Analyzed 1143253 10/15/2024 20:48:00 KAP

| | Parameter | Results | Units | RL | Flags | CAS | Bottle |
|---|---|---|---|---|---|---|---|
| NELAC | Endosulfan I (alpha) | <0.0000096 | mg/L | 0.0000096 | X | 959-98-8 | 27 |
| NELAC | Endosulfan II (beta) | <0.0000096 | mg/L | 0.0000096 | X | 33213-65-9 | 27 |
| NELAC | Endosulfan sulfate | <0.0000096 | mg/L | 0.0000096 | X | 1031-07-8 | 27 |
| NELAC | Endrin | <0.0000096 | mg/L | 0.0000096 | | 72-20-8 | 27 |
| NELAC | Endrin aldehyde | <0.0000096 | mg/L | 0.0000096 | | 7421-93-4 | 27 |
| NELAC | Gamma-BHC(Lindane) | <0.0000096 | mg/L | 0.0000096 | X | 58-89-9 | 27 |
| NELAC | Heptachlor | <0.0000096 | mg/L | 0.0000096 | X | 76-44-8 | 27 |
| NELAC | Heptachlor epoxide | <0.0000096 | mg/L | 0.0000096 | X | 1024-57-3 | 27 |
| NELAC | Toxaphene | <0.000192 | mg/L | 0.000192 | | 8001-35-2 | 27 |

*EPA 608.3* Prepared: 1142312 10/10/2024 11:00:00 Analyzed 1143830 10/15/2024 20:48:00 KAP

| | Parameter | Results | Units | RL | Flags | CAS | Bottle |
|---|---|---|---|---|---|---|---|
| NELAC | PCB-1016 | <0.000194 | mg/L | 0.000194 | XD | 12674-11-2 | 29 |
| NELAC | PCB-1221 | <0.000192 | mg/L | 0.000192 | | 11104-28-2 | 29 |
| NELAC | PCB-1232 | <0.000192 | mg/L | 0.000192 | | 11141-16-5 | 29 |
| NELAC | PCB-1242 | <0.000192 | mg/L | 0.000192 | | 53469-21-9 | 29 |
| NELAC | PCB-1248 | <0.000192 | mg/L | 0.000192 | | 12672-29-6 | 29 |
| NELAC | PCB-1254 | <0.000192 | mg/L | 0.000192 | | 11097-69-1 | 29 |
| NELAC | PCB-1260 | <0.000192 | mg/L | 0.000192 | XD | 11096-82-5 | 29 |
| NELAC | PCB-1262 | <0.000192 | mg/L | 0.000192 | | 37324-23-5 | 29 |
| NELAC | PCB-1268 | <0.000192 | mg/L | 0.000192 | | 11100-14-4 | 29 |

*EPA 614* Prepared: 1142311 10/10/2024 11:00:00 Analyzed 1143853 10/17/2024 22:05:00 KAP

| | Parameter | Results | Units | RL | Flags | CAS | Bottle |
|---|---|---|---|---|---|---|---|
| NELAC | Azinphos-methyl (Guthion) | <0.000048 | mg/L | 0.000048 | | 86-50-0 | 28 |
| NELAC | Demeton | <0.000048 | mg/L | 0.000048 | | 8065-48-3 | 28 |
| NELAC | Diazinon | <0.000048 | mg/L | 0.000048 | | 333-41-5 | 28 |
| NELAC | Malathion | <0.000048 | mg/L | 0.000048 | | 121-75-5 | 28 |
| NELAC | Parathion, ethyl | <0.000048 | mg/L | 0.000048 | | 56-38-2 | 28 |
| NELAC | Parathion, methyl | <0.000048 | mg/L | 0.000048 | | 298-00-0 | 28 |

*EPA 615* Prepared: 1142711 10/14/2024 10:00:00 Analyzed 1143664 10/19/2024 12:36:00 KAP

| Parameter | Results | Units | RL | Flags | CAS | Bottle |
|---|---|---|---|---|---|---|

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



# GBRL-C



Project 1120706

GBRA/Seguin
Miliana Hernandez
Regional Laboratory
933 E. Court St
Seguin, TX 78155-5819

Printed: 10/23/2024

**2341203** **241007.01-01** Received: 10/08/2024

Non-Potable Water Collected by: Client GBRA/Seguin PO: dept=LabInvoices@gbra.org
Taken: 10/07/2024 07:30:00

*EPA 615* Prepared: 1142711 10/14/2024 10:00:00 Analyzed 1143664 10/19/2024 12:36:00 KAP

| | Parameter | Results | Units | RL | Flags | CAS | Bottle |
|---|---|---|---|---|---|---|---|
| NELAC | 2,4 Dichlorophenoxyacetic acid | <0.000477 | mg/L | 0.000477 | | 94-75-7 | 31 |
| NELAC | 2,4,5-TP (Silvex) | <0.000286 | mg/L | 0.000286 | | 93-72-1 | 31 |

*EPA 617* Prepared: 1142304 10/10/2024 11:00:00 Analyzed 1143232 10/15/2024 20:48:00 KAP

| | Parameter | Results | Units | RL | Flags | CAS | Bottle |
|---|---|---|---|---|---|---|---|
| z | Kelthane (Dicofol) | <0.000048 | mg/L | 0.000048 | XD | 115-32-2 | 27 |
| z | Methoxychlor | <0.0000096 | mg/L | 0.0000096 | X | 72-43-5 | 27 |
| z | Mirex | <0.0000096 | mg/L | 0.0000096 | X | 2385-85-5 | 27 |

*EPA 622* Prepared: 1142311 10/10/2024 11:00:00 Analyzed 1143851 10/17/2024 22:05:00 KAP

| | Parameter | Results | Units | RL | Flags | CAS | Bottle |
|---|---|---|---|---|---|---|---|
| NELAC | Chlorpyrifos | <0.000048 | mg/L | 0.000048 | | 2921-88-2 | 28 |

*EPA 624.1* Prepared: 1142060 10/09/2024 12:41:00 Analyzed 1142060 10/09/2024 12:41:00 MR1

| | Parameter | Results | Units | RL | Flags | CAS | Bottle |
|---|---|---|---|---|---|---|---|
| NELAC | Acrolein | <0.004 | mg/L | 0.004 | | 107-02-8 | 13 |
| NELAC | Acrylonitrile | <0.001 | mg/L | 0.001 | | 107-13-1 | 13 |

*EPA 624.1* Prepared: 1142062 10/09/2024 15:17:00 Analyzed 1142062 10/09/2024 15:17:00 MR1

| | Parameter | Results | Units | RL | Flags | CAS | Bottle |
|---|---|---|---|---|---|---|---|
| NELAC | 1,1,1-Trichloroethane | <0.001 | mg/L | 0.001 | | 71-55-6 | 15 |
| NELAC | 1,1,2,2-Tetrachloroethane | <0.001 | mg/L | 0.001 | | 79-34-5 | 15 |
| NELAC | 1,1,2-Trichloroethane | <0.001 | mg/L | 0.001 | | 79-00-5 | 15 |
| NELAC | 1,1-Dichloroethane | <0.001 | mg/L | 0.001 | | 75-34-3 | 15 |
| NELAC | 1,1-Dichloroethylene | <0.001 | mg/L | 0.001 | | 75-35-4 | 15 |
| NELAC | 1,2-Dibromoethane (EDB) | <0.001 | mg/L | 0.001 | | 106-93-4 | 15 |
| NELAC | 1,2-Dichloroethane | <0.001 | mg/L | 0.001 | | 107-06-2 | 15 |
| NELAC | 1,2-Dichloropropane | <0.001 | mg/L | 0.001 | | 78-87-5 | 15 |
| NELAC | 2-Chloroethylvinyl ether | <0.001 | mg/L | 0.001 | | 110-75-8 | 15 |
| NELAC | Benzene | <0.001 | mg/L | 0.001 | | 71-43-2 | 15 |
| NELAC | Bromodichloromethane | <0.001 | mg/L | 0.001 | | 75-27-4 | 15 |
| NELAC | Bromoform | <0.001 | mg/L | 0.001 | | 75-25-2 | 15 |

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



# GBRL-C

GBRA/Seguin
Miliana Hernandez
Regional Laboratory
933 E. Court St
Seguin, TX 78155-5819

Project
1120706

Printed: 10/23/2024

**2341203** **241007.01-01** Received: 10/08/2024

Non-Potable Water | Collected by: Client | GBRA/Seguin | PO: dept= LabInvoices@gbra.org
Taken: 10/07/2024 07:30:00

*EPA 624.1* Prepared: 1142062 10/09/2024 15:17:00 Analyzed 1142062 10/09/2024 15:17:00 MR1

| | Parameter | Results | Units | RL | Flags | CAS | Bottle |
|---|---|---|---|---|---|---|---|
| NELAC | Bromomethane (Methyl Bromi | <0.001 | mg/L | 0.001 | | 74-83-9 | 15 |
| NELAC | Carbon Tetrachloride | <0.001 | mg/L | 0.001 | | 56-23-5 | 15 |
| NELAC | Chlorobenzene | <0.001 | mg/L | 0.001 | | 108-90-7 | 15 |
| NELAC | Chloroethane | <0.00112 | mg/L | 0.00112 | | 75-00-3 | 15 |
| NELAC | Chloroform | <0.001 | mg/L | 0.001 | | 67-66-3 | 15 |
| NELAC | Chloromethane (Methyl Chloride) | <0.001 | mg/L | 0.001 | | 74-87-3 | 15 |
| NELAC | cis-1,3-Dichloropropene | <0.001 | mg/L | 0.001 | | 10061-01-5 | 15 |
| NELAC | Dibromochloromethane | <0.001 | mg/L | 0.001 | | 124-48- 1 | 15 |
| NELAC | Dichloromethane | <0.00102 | mg/L | 0.00102 | | 75-09-2 | 15 |
| NELAC | Ethylbenzene | <0.001 | mg/L | 0.001 | | 100-41-4 | 15 |
| NELAC | m-Dichlorobenzene (1,3-DCB) | <0.001 | mg/L | 0.001 | | 541-73-1 | 15 |
| NELAC | Methyl ethyl ketone (Butanone) | <0.001 | mg/L | 0.001 | | 78-93-3 | 15 |
| NELAC | o-Dichlorobenzene (1,2-DCB) | <0.001 | mg/L | 0.001 | | 95-50-1 | 15 |
| NELAC | p-Dichlorobenzene (1,4-DCB) | <0.001 | mg/L | 0.001 | | 106-46-7 | 15 |
| NELAC | Tetrachloroethylene | <0.001 | mg/L | 0.001 | | 127-18-4 | 15 |
| NELAC | Toluene | <0.001 | mg/L | 0.001 | | 108-88-3 | 15 |
| NELAC | trans-1,2-Dichloroethylene | <0.001 | mg/L | 0.001 | | 156-60-5 | 15 |
| NELAC | trans-1,3-Dichloropropene | <0.001 | mg/L | 0.001 | | 10061-02-6 | 15 |
| NELAC | Trichloroethylene | <0.001 | mg/L | 0.001 | | 79-01-6 | 15 |
| NELAC | Vinyl chloride | <0.001 | mg/L | 0.001 | | 75-01-4 | 15 |

*EPA 624.1* Prepared: 1142062 10/10/2024 13:42:51 Calculated 1142062 10/10/2024 13:42:51 CAL

| | Parameter | Results | Units | RL | Flags | CAS | Bottle |
|---|---|---|---|---|---|---|---|
| NELAC | Trihalomethanes | <0.001 | mg/L | 0.001 | | | 15 |

*EPA 625.1* Prepared: 1142237 10/09/2024 15:00:00 Analyzed 1143054 10/14/2024 19:55:00 PM1

| | Parameter | Results | Units | RL | Flags | CAS | Bottle |
|---|---|---|---|---|---|---|---|
| NELAC | 1,2,4,5-Tetrachlorobenzene | <0.00096 | mg/L | 0.00096 | | 95-94-3 | 25 |
| NELAC | 1,2,4-Trichlorobenzene | <0.00096 | mg/L | 0.00096 | | 120-82-1 | 25 |
| NELAC | 1,2-Dichlorobenzene | <0.00096 | mg/L | 0.00096 | | 95-50-1 | 25 |
| NELAC | 1,2-DPH (as azobenzene) | <0.00096 | mg/L | 0.00096 | | 122-66-7 | 25 |
| NELAC | 1,3-Dichlorobenzene | <0.00096 | mg/L | 0.00096 | | 541-73-1 | 25 |
| NELAC | 1,4-Dichlorobenzene | <0.00096 | mg/L | 0.00096 | | 106-46-7 | 25 |
| NELAC | 2,4,5-Trichlorophenol | <0.00096 | mg/L | 0.00096 | | 95-95-4 | 25 |

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



## GBRL-C



Project 1120706

GBRA/Seguin
Miliana Hernandez
Regional Laboratory
933 E. Court St
Seguin, TX 78155-5819

Printed: 10/23/2024

**2341203** **241007.01-01** Received: 10/08/2024

Non-Potable Water Collected by: Client GBRA/Seguin PO: dept=LabInvoices@gbra.org
Taken: 10/07/2024 07:30:00

EPA 625.1 Prepared: 1142237 10/09/2024 15:00:00 Analyzed 1143054 10/14/2024 19:55:00 PM1

| | Parameter | Results | Units | RL | Flags | CAS | Bottle |
|---|---|---|---|---|---|---|---|
| NELAC | 2,4,6-Trichlorophenol | <0.00096 | mg/L | 0.00096 | | 88-06-2 | 25 |
| NELAC | 2,4-Dichlorophenol | <0.00096 | mg/L | 0.00096 | | 120-83-2 | 25 |
| NELAC | 2,4-Dimethylphenol | <0.0023 | mg/L | 0.0023 | SD | 105-67-9 | 25 |
| NELAC | 2,4-Dinitrophenol | <0.00864 | mg/L | 0.00864 | | 51-28-5 | 25 |
| NELAC | 2,4-Dinitrotoluene | <0.00336 | mg/L | 0.00336 | | 121-14-2 | 25 |
| NELAC | 2,6-Dinitrotoluene | <0.00096 | mg/L | 0.00096 | | 606-20-2 | 25 |
| NELAC | 2-Chloronaphthalene | <0.00096 | mg/L | 0.00096 | | 91-58-7 | 25 |
| NELAC | 2-Chlorophenol | <0.00096 | mg/L | 0.00096 | | 95-57-8 | 25 |
| NELAC | 2-Methylphenol (o-Cresol) | <0.00499 | mg/L | 0.00499 | | 95-48-7 | 25 |
| NELAC | 2-Nitrophenol | <0.00096 | mg/L | 0.00096 | | 88-75-5 | 25 |
| NELAC | 3&4-Methylphenol (m&p-Cresol) | <0.00595 | mg/L | 0.00595 | | MEPH34 | 25 |
| NELAC | 3,3'-Dichlorobenzidine | <0.0048 | mg/L | 0.0048 | | 91-94-1 | 25 |
| NELAC | 4,6-Dinitro-2-methylphenol | <0.00768 | mg/L | 0.00768 | | 534-52-1 | 25 |
| NELAC | 4-Bromophenyl phenyl ether | <0.00096 | mg/L | 0.00096 | | 101-55-3 | 25 |
| NELAC | 4-Chlorophenyl phenyl ethe | <0.00096 | mg/L | 0.00096 | | 7005-72-3 | 25 |
| NELAC | 4-Nitrophenol | <0.00096 | mg/L | 0.00096 | | 100-02-7 | 25 |
| NELAC | Acenaphthene | <0.00096 | mg/L | 0.00096 | | 83-32-9 | 25 |
| NELAC | Acenaphthylene | <0.00096 | mg/L | 0.00096 | | 208-96-8 | 25 |
| z | Aniline | <0.00096 | mg/L | 0.00096 | S | 62-53-3 | 25 |
| NELAC | Anthracene | <0.00096 | mg/L | 0.00096 | | 120-12-7 | 25 |
| NELAC | Benzidine | <0.0192 | mg/L | 0.0192 | | 92-87-5 | 25 |
| NELAC | Benzo(a)anthracene | <0.00096 | mg/L | 0.00096 | | 56-55-3 | 25 |
| NELAC | Benzo(a)pyrene | <0.00096 | mg/L | 0.00096 | | 50-32-8 | 25 |
| NELAC | Benzo(b)fluoranthene | <0.00096 | mg/L | 0.00096 | | 205-99-2 | 25 |
| NELAC | Benzo(ghi)perylene | <0.00096 | mg/L | 0.00096 | | 191-24-2 | 25 |
| NELAC | Benzo(k)fluoranthene | <0.00096 | mg/L | 0.00096 | | 207-08-9 | 25 |
| NELAC | Benzyl Butyl phthalate | 0.00117 | mg/L | 0.0072 | J | 85-68-7 | 25 |
| NELAC | Bis(2-chloroethoxy)methane | <0.00096 | mg/L | 0.00096 | | 111-91-1 | 25 |
| NELAC | Bis(2-chloroethyl)ether | <0.00096 | mg/L | 0.00096 | | 111-44-4 | 25 |
| NELAC | Bis(2-chloroisopropyl)ether | <0.00096 | mg/L | 0.00096 | | 108-60-1 | 25 |
| NELAC | Bis(2-ethylhexyl)phthalate | <0.0072 | mg/L | 0.0072 | | 117-81-7 | 25 |
| NELAC | Chrysene (Benzo(a)phenanthrene) | <0.00096 | mg/L | 0.00096 | | 218-01-9 | 25 |
| NELAC | Dibenz(a,h)anthracene | <0.00096 | mg/L | 0.00096 | | 53-70-3 | 25 |
| NELAC | Diethyl phthalate | <0.00547 | mg/L | 0.00547 | | 84-66-2 | 25 |
| NELAC | Dimethyl phthalate | <0.00461 | mg/L | 0.00461 | | 131-11-3 | 25 |
| NELAC | Di-n-butylphthalate | <0.0072 | mg/L | 0.0072 | | 84-74-2 | 25 |

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



## GBRL-C

GBRA/Seguin
Miliana Hernandez
Regional Laboratory
933 E. Court St
Seguin, TX 78155-5819

Project
1120706

Printed: 10/23/2024

**2341203** **241007.01-01** Received: 10/08/2024

Non-Potable Water Collected by: Client GBRA/Seguin PO: dept= LabInvoices@gbra.org
Taken: 10/07/2024 07:30:00

*EPA 625.1* Prepared: 1142237 10/09/2024 15:00:00 Analyzed 1143054 10/14/2024 19:55:00 PM1

| | Parameter | Results | Units | RL | Flags | CAS | Bottle |
|---|---|---|---|---|---|---|---|
| NELAC | Di-n-octylphthalate | <0.00096 | mg/L | 0.00096 | | 117-84-0 | 25 |
| NELAC | Fluoranthene(Benzo(j,k)fluorene) | <0.00096 | mg/L | 0.00096 | | 206-44-0 | 25 |
| NELAC | Fluorene | <0.00096 | mg/L | 0.00096 | | 86-73-7 | 25 |
| NELAC | Hexachlorobenzene | <0.00096 | mg/L | 0.00096 | | 118-74-1 | 25 |
| NELAC | Hexachlorobutadiene | <0.00096 | mg/L | 0.00096 | | 87-68-3 | 25 |
| NELAC | Hexachlorocyclopentadiene | <0.00864 | mg/L | 0.00864 | D | 77-47-4 | 25 |
| NELAC | Hexachloroethane | <0.00096 | mg/L | 0.00096 | S | 67-72-1 | 25 |
| NELAC | Indeno(1,2,3-cd)pyrene | <0.00096 | mg/L | 0.00096 | | 193-39-5 | 25 |
| NELAC | Isophorone | <0.00096 | mg/L | 0.00096 | | 78-59-1 | 25 |
| NELAC | Naphthalene | <0.00096 | mg/L | 0.00096 | | 91-20-3 | 25 |
| NELAC | Nitrobenzene | <0.00096 | mg/L | 0.00096 | | 98-95-3 | 25 |
| NELAC | n-Nitrosodiethylamine | <0.00096 | mg/L | 0.00096 | | 55-18-5 | 25 |
| NELAC | N-Nitrosodimethylamine | <0.00672 | mg/L | 0.00672 | | 62-75-9 | 25 |
| NELAC | n-Nitroso-di-n-butylamine | <0.00096 | mg/L | 0.00096 | | 924-16-3 | 25 |
| NELAC | N-Nitrosodi-n-propylamine | <0.00096 | mg/L | 0.00096 | | 621-64-7 | 25 |
| NELAC | N-Nitrosodiphenylamine (as DPA | <0.00096 | mg/L | 0.00096 | | 86-30-6 | 25 |
| NELAC | p-Chloro-m-Cresol (4-Chloro-3-me | <0.0023 | mg/L | 0.0023 | | 59-50-7 | 25 |
| NELAC | Pentachlorobenzene | <0.00096 | mg/L | 0.00096 | | 608-93-5 | 25 |
| NELAC | Pentachlorophenol | <0.00096 | mg/L | 0.00096 | | 87-86-5 | 25 |
| NELAC | Phenanthrene | <0.00096 | mg/L | 0.00096 | | 85-01-8 | 25 |
| NELAC | Phenol | <0.00144 | mg/L | 0.00144 | | 108-95-2 | 25 |
| NELAC | Pyrene | <0.00096 | mg/L | 0.00096 | | 129-00-0 | 25 |
| NELAC | Pyridine | <0.00518 | mg/L | 0.00518 | | 110-86-1 | 25 |

*EPA 625.1* Prepared: 1142237 10/09/2024 15:00:00 Calculated 1143054 10/16/2024 15:18:51 CAL

| | Parameter | Results | Units | RL | Flags | CAS | Bottle |
|---|---|---|---|---|---|---|---|
| NELAC | Cresols Total | <0.00595 | mg/L | 0.00595 | | 1319-77-3, etc. | 25 |

*EPA 632* Prepared: 1142294 10/10/2024 11:00:00 Analyzed 1143577 10/17/2024 20:24:00 BRU

| | Parameter | Results | Units | RL | Flags | CAS | Bottle |
|---|---|---|---|---|---|---|---|
| NELAC | Carbaryl (Sevin) | <0.0024 | mg/L | 0.0024 | | 63-25-2 | 26 |
| 2 | Diuron | <0.0000432 | mg/L | 0.0000432 | | 330-54-1 | 26 |

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



## GBRL-C

GBRA/Seguin
Miliana Hernandez
Regional Laboratory
933 E. Court St
Seguin, TX 78155-5819

Project 1120706

Printed: 10/23/2024

**2341203** **241007.01-01** Received: 10/08/2024

Non-Potable Water Collected by: Client GBRA/Seguin PO: dept=LabInvoices@gbra.org
Taken: 10/07/2024 07:30:00

*SM 4500-CN⁻ E-2016* Prepared: 1141810 10/09/2024 07:23:07 Analyzed 1142155 10/10/2024 06:27:00 AMB

| | Parameter | Results | Units | RL | Flags | CAS | Bottle |
|---|---|---|---|---|---|---|---|
| NELAC | **Cyanide, total** | **<0.00238** | **mg/L** | 0.00238 | | | 20 |

*SM 4500-CN⁻ G-2016* Prepared: 10/15/2024 16:01:24 Calculated 10/15/2024 16:01:24 CAL

| | Parameter | Results | Units | RL | Flags | CAS | Bottle |
|---|---|---|---|---|---|---|---|
| NELAC | **Cyanide - Available/Amenable** | **<0.00238** | **mg/L** | 0.00238 | | | |

*SM 4500-CN⁻ G-2016* Prepared: 1141921 10/09/2024 14:24:35 Analyzed 1142901 10/15/2024 13:09:00 AMB

| | Parameter | Results | Units | RL | Flags | CAS | Bottle |
|---|---|---|---|---|---|---|---|
| NELAC | **Cyanide After Chlorination** | **<0.00238** | **mg/L** | 0.00238 | | | 23 |

*TX 1001* Prepared: 1142564 10/10/2024 07:45:00 Analyzed 1143013 10/15/2024 20:14:00 DWL

| | Parameter | Results | Units | RL | Flags | CAS | Bottle |
|---|---|---|---|---|---|---|---|
| z | **Tributyltin hydride** | **<0.00000671** | **mg/L** | 0.00000671 | | **688-73-3** | 30 |

**2341205** **241007.01-01-TRIP BLANK** Received: 10/08/2024

Non-Potable Water Collected by: Client GBRA/Seguin PO: dept=LabInvoices@gbra.org
Taken: 10/07/2024 07:30:00

*EPA 245.7 2* Prepared: 1143417 10/17/2024 14:54:00 Analyzed 1143563 10/18/2024 10:50:00 RD1

| | Parameter | Results | Units | RL | Flags | CAS | Bottle |
|---|---|---|---|---|---|---|---|
| NELAC | **Mercury, Total (low level)** | **<0.00000128** | **mg/L** | 0.00000128 | | **7439-97-6** | 02 |

### Sample Preparation

**2341203** **241007.01-01** Received: 10/08/2024

dept=LabInvoices@gbra.org

10/07/2024

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



## GBRL-C

GBRA/Seguin
Miliana Hernandez
Regional Laboratory
933 E. Court St
Seguin, TX 78155-5819

Project
1120706

Printed: 10/23/2024

**2341203** **241007.01-01**

Received: 10/08/2024

dept= LabInvoices@gbra.org

10/07/2024

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | *Prepared:* | | *10/08/2024* | *17:50:08* | *Calculated* | *10/08/2024* | *17:50:08* | *CAL* |
| z | **Environmental Fee (per Project)** | **Verified** | | | | | | | |
| z | **LL Mercury Test Prep** | **Verified** | | | | | | | |
| | | *Prepared:* | | *10/23/2024* | *07:28:00* | *Analyzed* | *10/23/2024* | *07:28:00* | *WJP* |
| z | **Level IV Data Review** | **Completed** | | | | | | | |
| | *ASTM D7065-11* | *Prepared:* | *1143012* | *10/15/2024* | *10:30:00* | *Analyzed* | *1143252* | *10/16/2024* | *18:42:00* *DWL* |
| z | **Nonyl Phenol Expansion** | **Entered** | | | | | | | 32 |
| | *EPA 200.2 2.8* | *Prepared:* | *1142094* | *10/10/2024* | *10:00:00* | *Analyzed* | *1142094* | *10/10/2024* | *10:00:00* *ESG* |
| z | **Liquid Metals Digestion** | **50/50** | **ml** | | | | | | 11 |
| | *EPA 420.4 1* | *Prepared:* | *1141839* | *10/09/2024* | *09:15:55* | *Analyzed* | *1141839* | *10/09/2024* | *09:15:55* *SRJ* |
| NELAC | **Phenol Distillation** | **6/6** | **ml** | | | | | | 19 |
| | *EPA 604.1* | *Prepared:* | *1141902* | *10/08/2024* | *09:30:00* | *Analyzed* | *1141902* | *10/08/2024* | *09:30:00* *LSM* |
| | **Hexachlorophene Extraction** | **5/1045** | **ml** | | | | | | 02 |
| | *EPA 604.1* | *Prepared:* | *1141902* | *10/08/2024* | *09:30:00* | *Analyzed* | *1142441* | *10/11/2024* | *02:06:00* *BRU* |
| | **Hexachlorophene Expansion** | **Entered** | | | | | | **70-30-4** | 22 |
| | *EPA 608.3* | *Prepared:* | *1142304* | *10/10/2024* | *11:00:00* | *Analyzed* | *1142304* | *10/10/2024* | *11:00:00* *LSM* |

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



## GBRL-C



Project 1120706

GBRA/Seguin
Miliana Hernandez
Regional Laboratory
933 E. Court St
Seguin, TX 78155-5819

Printed: 10/23/2024

**2341203** **241007.01-01**

Received: 10/08/2024

dept=LabInvoices@gbra.org

10/07/2024

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | *EPA 608.3* | *Prepared:* | *1142304* | *10/10/2024* | *11:00:00* | *Analyzed* | *1142304* | *10/10/2024* | *11:00:00* | *LSM* |
| | **Liquid-Liquid Extr. W/Hex Ex** | **1/1042** | | **ml** | | | | | | 03 |
| | *EPA 608.3* | *Prepared:* | *1142304* | *10/10/2024* | *11:00:00* | *Analyzed* | *1143253* | *10/15/2024* | *20:48:00* | *KAP* |
| *NELAC* | **TTO Pesticides** | **Entered** | | | | | | | | 27 |
| | *EPA 608.3* | *Prepared:* | *1142311* | *10/10/2024* | *11:00:00* | *Analyzed* | *1142311* | *10/10/2024* | *11:00:00* | *LSM* |
| | **Solvent Extraction** | **1/1042** | | **ml** | | | | | | 03 |
| | *EPA 608.3* | *Prepared:* | *1142312* | *10/10/2024* | *11:00:00* | *Analyzed* | *1142312* | *10/10/2024* | *11:00:00* | *LSM* |
| | **PCB Liq-Liq Extr. W/Hex Exch.** | **1/1042** | | **ml** | | | | | | 03 |
| | *EPA 608.3* | *Prepared:* | *1142312* | *10/10/2024* | *11:00:00* | *Analyzed* | *1143830* | *10/15/2024* | *20:48:00* | *KAP* |
| *NELAC* | **Polychlorinated Biphenyls** | **Entered** | | | | | | | | 29 |
| | *EPA 614* | *Prepared:* | *1142311* | *10/10/2024* | *11:00:00* | *Analyzed* | *1143853* | *10/17/2024* | *22:05:00* | *KAP* |
| | **Permit Organophos. Pesticides** | **Entered** | | | | | | | | 28 |
| | *EPA 615* | *Prepared:* | *1142711* | *10/14/2024* | *10:00:00* | *Analyzed* | *1142711* | *10/14/2024* | *10:00:00* | *LSM* |
| *NELAC* | **Esterification of Sample** | **10/1049** | | **ml** | | | | | | 09 |
| | *EPA 615* | *Prepared:* | *1142711* | *10/14/2024* | *10:00:00* | *Analyzed* | *1143664* | *10/19/2024* | *12:36:00* | *KAP* |
| *NELAC* | **Herbicides by GC** | **Entered** | | | | | | | | 31 |

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



## GBRL-C

GBRA/Seguin
Miliana Hernandez
Regional Laboratory
933 E. Court St
Seguin, TX 78155-5819

Project
1120706

Printed: 10/23/2024

**2341203** **241007.01-01** Received: 10/08/2024

dept= LabInvoices@gbra.org

10/07/2024

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | *EPA 617* | *Prepared:* | *1142304* | *10/10/2024* | *11:00:00* | *Analyzed* | *1143232* | *10/15/2024* | *20:48:00* | *KAP* |
| z | **For use with !PPR only** | **Entered** | | | | | | | | 27 |
| | *EPA 622* | *Prepared:* | *1142311* | *10/10/2024* | *11:00:00* | *Analyzed* | *1143851* | *10/17/2024* | *22:05:00* | *KAP* |
| NELAC | **For use with EXP !CPP only** | **Entered** | | | | | | | | 28 |
| | *EPA 624.1* | *Prepared:* | *1142060* | *10/09/2024* | *12:41:00* | *Analyzed* | *1142060* | *10/09/2024* | *12:41:00* | *MR1* |
| NELAC | **Acrolein/Acrylonitrile Exp.** | **Entered** | | | | | | | | 13 |
| | *EPA 624.1* | *Prepared:* | *1142062* | *10/09/2024* | *15:17:00* | *Analyzed* | *1142062* | *10/09/2024* | *15:17:00* | *MR1* |
| z | **Table D-1/D-2 Volatile Expansion** | **Entered** | | | | | | | | 15 |
| | *EPA 625.1* | *Prepared:* | *1142237* | *10/09/2024* | *15:00:00* | *Analyzed* | *1142237* | *10/09/2024* | *15:00:00* | *LSM* |
| | **Liquid-Liquid Extraction, BNA** | **1/1042** | **ml** | | | | | | | 01 |
| | *EPA 625.1* | *Prepared:* | *1142237* | *10/09/2024* | *15:00:00* | *Analyzed* | *1143054* | *10/14/2024* | *19:55:00* | *PM1* |
| NELAC | **Table D-1/ D-2 Semivolatiles Exp** | **Entered** | | | | | | | | 25 |
| | *EPA 625.1* | *Prepared:* | *1143012* | *10/15/2024* | *10:30:00* | *Analyzed* | *1143012* | *10/15/2024* | *10:30:00* | *LSM* |
| | **Nonylphenol Liq-Liq Extract** | **1/1040** | **ml** | | | | | | | 05 |
| | *EPA 632* | *Prepared:* | *1142294* | *10/10/2024* | *11:00:00* | *Analyzed* | *1142294* | *10/10/2024* | *11:00:00* | *LSM* |
| | **Liquid-Liquid Extr. W/Hex Ex** | **1/1042** | **ml** | | | | | | | 03 |

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



## GBRL-C

GBRA/Seguin
Miliana Hernandez
Regional Laboratory
933 E. Court St
Seguin, TX 78155-5819

Project
1120706

Printed: 10/23/2024

**2341203** **241007.01-01**

Received: 10/08/2024

dept=LabInvoices@gbra.org

10/07/2024

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | *EPA 632* | | *Prepared:* | *1142294* | *10/10/2024* | *11:00:00* | *Analyzed* | *1143577* | *10/17/2024* | *20:24:00* | *BRU* |
| NELAC | **Carbaryl/Diuron** | **Entered** | | | | | | | | | 26 |
| | *SM 4500-CN⁻ C-2016* | | *Prepared:* | *1141810* | *10/09/2024* | *07:23:07* | *Analyzed* | *1141810* | *10/09/2024* | *07:23:07* | *AMB* |
| NELAC | **Cyanide Distillation** | **10/5** | **ml** | | | | | | | | 18 |
| | *SM 4500-CN⁻ C-2016* | | *Prepared:* | *1141921* | *10/09/2024* | *14:24:35* | *Analyzed* | *1141921* | *10/09/2024* | *14:24:35* | *SRJ* |
| NELAC | **CN Dist After Chlorination** | **10/5** | **ml** | | | | | | | | 18 |
| | *TX 1001* | | *Prepared:* | *1142564* | *10/10/2024* | *07:45:00* | *Analyzed* | *1142564* | *10/10/2024* | *07:45:00* | *MCC* |
| z | **Butyltins Extraction** | **1/1043** | **ml** | | | | | | | | 07 |
| | *TX 1001* | | *Prepared:* | *1142564* | *10/10/2024* | *07:45:00* | *Analyzed* | *1143013* | *10/15/2024* | *20:14:00* | *DWL* |
| z | **Butyltin Expansion** | **Entered** | | | | | | | | | 30 |

**2341205** **241007.01-01-TRIP BLANK**

Received: 10/08/2024

dept=LabInvoices@gbra.org

10/07/2024

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | *EPA 245.7 2* | | *Prepared:* | *1143417* | *10/17/2024* | *14:54:00* | *Analyzed* | *1143417* | *10/17/2024* | *14:54:00* | *RDI* |
| NELAC | **Low Level Mercury Liquid Metals** | **50/47** | **ml** | | | | | | | | 01 |

Report Page 19 of 56

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



Project
1120706

# GBRL-C

**GBRA/Seguin**
**Miliana Hernandez**
**Regional Laboratory**
**933 E. Court St**
**Seguin, TX 78155-5819**

Printed: 10/23/2024

Qualifiers:

J - Analyte detected below quantitation limit
D - Duplicate RPD was higher than expected
M - High reporting level resulting from matrix interference.
X - Standard reads higher than desired.
S - Standard reads lower than desired

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

SPL The Science of Sure



## GBRL-C

GBRA/Seguin
Miliana Hernandez
Regional Laboratory
933 E. Court St
Seguin, TX 78155-5819

Project
1120706

Printed 10/23/2024

Analytical Set 1142155 — SM 4500-CN⁻ E-2016

### Blank

| Parameter | PrepSet | Reading | MDL | MQL | Units | File |
|---|---|---|---|---|---|---|
| Cyanide, total | 1141810 | ND | 0.00238 | 0.005 | mg/L | 126868521 |

### CCV

| Parameter | Reading | Known | Units | Recover% | Limits% | File |
|---|---|---|---|---|---|---|
| Cyanide, total | 0.511 | 0.500 | mg/L | 102 | 90.0 - 110 | 126868519 |
| Cyanide, total | 0.510 | 0.500 | mg/L | 102 | 90.0 - 110 | 126868520 |
| Cyanide, total | 0.508 | 0.500 | mg/L | 102 | 90.0 - 110 | 126868528 |
| Cyanide, total | 0.510 | 0.500 | mg/L | 102 | 90.0 - 110 | 126868539 |
| Cyanide, total | 0.516 | 0.500 | mg/L | 103 | 90.0 - 110 | 126868547 |
| Cyanide, total | 0.520 | 0.500 | mg/L | 104 | 90.0 - 110 | 126868548 |
| Cyanide, total | 0.520 | 0.500 | mg/L | 104 | 90.0 - 110 | 126868549 |
| Cyanide, total | 0.524 | 0.500 | mg/L | 105 | 90.0 - 110 | 126868550 |
| Cyanide, total | 0.498 | 0.500 | mg/L | 99.6 | 90.0 - 110 | 126868551 |

### Duplicate

| Parameter | Sample | Result | Unknown | Unit | RPD | Limit% |
|---|---|---|---|---|---|---|
| Cyanide, total | 2339642 | ND | ND | mg/L | | 20.0 |
| Cyanide, total | 2341105 | ND | ND | mg/L | | 20.0 |

### ICV

| Parameter | Reading | Known | Units | Recover% | Limits% | File |
|---|---|---|---|---|---|---|
| Cyanide, total | 0.197 | 0.200 | mg/L | 98.5 | 90.0 - 110 | 126868518 |

### LCS Dup

| Parameter | PrepSet | LCS | LCSD | Known | Limits% | LCS% | LCSD% | Units | RPD | Limit% |
|---|---|---|---|---|---|---|---|---|---|---|
| Cyanide, total | 1141810 | 0.395 | 0.395 | 0.400 | 90.0 - 110 | 98.8 | 98.8 | mg/L | 0 | 20.0 |

### Mat. Spike

| Parameter | Sample | Spike | Unknown | Known | Units | Recovery % | Limits % | File | |
|---|---|---|---|---|---|---|---|---|---|
| Cyanide, total | 2339642 | 0.395 | ND | 0.400 | mg/L | 98.8 | 90.0 - 110 | 126868526 | |
| Cyanide, total | 2341105 | 0.356 | ND | 0.400 | mg/L | 89.0 | 90.0 - 110 | 126868530 | * |

Analytical Set 1142185 — EPA 420.4 1

### Blank

| Parameter | PrepSet | Reading | MDL | MQL | Units | File |
|---|---|---|---|---|---|---|
| Phenolics, Total Recoverable | 1141839 | ND | 0.003 | 0.005 | mg/L | 126868983 |

### CCV

| Parameter | Reading | Known | Units | Recover% | Limits% | File |
|---|---|---|---|---|---|---|
| Phenolics, Total Recoverable | 0.201 | 0.200 | mg/L | 100 | 90.0 - 110 | 126868982 |
| Phenolics, Total Recoverable | 0.193 | 0.200 | mg/L | 96.5 | 90.0 - 110 | 126868991 |
| Phenolics, Total Recoverable | 0.191 | 0.200 | mg/L | 95.5 | 90.0 - 110 | 126869002 |
| Phenolics, Total Recoverable | 0.199 | 0.200 | mg/L | 99.5 | 90.0 - 110 | 126869013 |
| Phenolics, Total Recoverable | 0.198 | 0.200 | mg/L | 99.0 | 90.0 - 110 | 126869016 |

# QUALITY CONTROL



## GBRL-C

GBRA/Seguin
Miliana Hernandez
Regional Laboratory
933 E. Court St
Seguin, TX 78155-5819

Project
1120706

Printed 10/23/2024

**Duplicate**

| Parameter | Sample | Result | Unknown | Unit | RPD | | Limit% |
|---|---|---|---|---|---|---|---|
| Phenolics, Total Recoverable | 2340451 | 0.022 | 0.027 | mg/L | 20.4 | * | 20.0 |
| Phenolics, Total Recoverable | 2340515 | 0.017 | 0.014 | mg/L | 19.4 | | 20.0 |

**ICV**

| Parameter | Reading | Known | Units | Recover% | Limits% | File |
|---|---|---|---|---|---|---|
| Phenolics, Total Recoverable | 0.203 | 0.200 | mg/L | 102 | 90.0 - 110 | 126868981 |

**LCS Dup**

| Parameter | PrepSet | LCS | LCSD | Known | Limits% | LCS% | LCSD% | Units | RPD | Limit% |
|---|---|---|---|---|---|---|---|---|---|---|
| Phenolics, Total Recoverable | 1141839 | 0.217 | 0.219 | 0.200 | 90.0 - 110 | 108 | 110 | mg/L | 0.917 | 20.0 |

**Mat. Spike**

| Parameter | Sample | Spike | Unknown | Known | Units | Recovery % | Limits % | File |
|---|---|---|---|---|---|---|---|---|
| Phenolics, Total Recoverable | 2340451 | 0.228 | 0.027 | 0.200 | mg/L | 100 | 90.0 - 110 | 126868988 |
| Phenolics, Total Recoverable | 2340515 | 0.205 | 0.014 | 0.200 | mg/L | 95.5 | 90.0 - 110 | 126868992 |

Analytical Set 1142901 — SM 4500-CN⁻ G-2016

**Blank**

| Parameter | PrepSet | Reading | MDL | MQL | Units | File |
|---|---|---|---|---|---|---|
| Cyanide After Chlorination | 1141921 | ND | 0.00119 | 0.0025 | mg/L | 126885276 |

**CCV**

| Parameter | Reading | Known | Units | Recover% | Limits% | File |
|---|---|---|---|---|---|---|
| Cyanide After Chlorination | 0.499 | 0.500 | mg/L | 99.8 | 90.0 - 110 | 126885275 |
| Cyanide After Chlorination | 0.509 | 0.500 | mg/L | 102 | 90.0 - 110 | 126885285 |
| Cyanide After Chlorination | 0.517 | 0.500 | mg/L | 103 | 90.0 - 110 | 126885296 |
| Cyanide After Chlorination | 0.514 | 0.500 | mg/L | 103 | 90.0 - 110 | 126885302 |

**Duplicate**

| Parameter | Sample | Result | Unknown | Unit | RPD | | Limit% |
|---|---|---|---|---|---|---|---|
| Cyanide After Chlorination | 2339642 | ND | ND | mg/L | | | 20.0 |
| Cyanide After Chlorination | 2341105 | ND | 0.0014 | mg/L | 200 | * | 20.0 |

**ICV**

| Parameter | Reading | Known | Units | Recover% | Limits% | File |
|---|---|---|---|---|---|---|
| Cyanide After Chlorination | 0.204 | 0.200 | mg/L | 102 | 90.0 - 110 | 126885274 |

**LCS Dup**

| Parameter | PrepSet | LCS | LCSD | Known | Limits% | LCS% | LCSD% | Units | RPD | Limit% |
|---|---|---|---|---|---|---|---|---|---|---|
| Cyanide After Chlorination | 1141921 | 0.198 | 0.189 | 0.200 | 90.0 - 110 | 99.0 | 94.5 | mg/L | 4.65 | 20.0 |

**Mat. Spike**

| Parameter | Sample | Spike | Unknown | Known | Units | Recovery % | Limits % | File |
|---|---|---|---|---|---|---|---|---|
| Cyanide After Chlorination | 2339642 | 0.383 | ND | 0.400 | mg/L | 95.8 | 90.0 - 110 | 126885281 |
| Cyanide After Chlorination | 2341105 | 0.391 | 0.0014 | 0.400 | mg/L | 97.8 | 90.0 - 110 | 126885284 |

Analytical Set 1141878 — EPA 300.0 2.1

# QUALITY CONTROL



## GBRL-C

GBRA/Seguin
Miliana Hernandez
Regional Laboratory
933 E. Court St
Seguin, TX 78155-5819

Project
1120706

Printed 10/23/2024

### AWRL/LOQ C

| Parameter | Reading | Known | Units | Recover% | Limits% | File |
|---|---|---|---|---|---|---|
| Fluoride | 0.0883 | 0.100 | mg/L | 88.3 | 70.0 - 130 | 126863677 |

### Blank

| Parameter | PrepSet | Reading | MDL | MQL | Units | File |
|---|---|---|---|---|---|---|
| Fluoride | 1141878 | ND | 0.00509 | 0.100 | mg/L | 126863678 |

### CCB

| Parameter | PrepSet | Reading | MDL | MQL | Units | File |
|---|---|---|---|---|---|---|
| Fluoride | 1141878 | 0 | 0.00509 | 0.100 | mg/L | 126863674 |
| Fluoride | 1141878 | 0 | 0.00509 | 0.100 | mg/L | 126863690 |
| Fluoride | 1141878 | 0 | 0.00509 | 0.100 | mg/L | 126863706 |

### CCV

| Parameter | Reading | Known | Units | Recover% | Limits% | File |
|---|---|---|---|---|---|---|
| Fluoride | 10.9 | 10.0 | mg/L | 109 | 90.0 - 110 | 126863673 |
| Fluoride | 10.9 | 10.0 | mg/L | 109 | 90.0 - 110 | 126863689 |
| Fluoride | 11.0 | 10.0 | mg/L | 110 | 90.0 - 110 | 126863705 |

### LCS Dup

| Parameter | PrepSet | LCS | LCSD | Known | Limits% | LCS% | LCSD% | Units | RPD | Limit% |
|---|---|---|---|---|---|---|---|---|---|---|
| Fluoride | 1141878 | 5.65 | 5.70 | 5.00 | 88.0 - 118 | 113 | 114 | mg/L | 0.881 | 20.0 |

### MSD

| Parameter | Sample | MS | MSD | UNK | Known | Limits | MS% | MSD% | Units | RPD | Limit% |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Fluoride | 2340389 | 16.0 | 10.7 | ND | 10.0 | 80.0 - 120 | 160 * | 107 | mg/L | 39.7 * | 20.0 |
| Fluoride | 2340394 | 15.7 | 15.7 | ND | 10.0 | 80.0 - 120 | 157 * | 157 * | mg/L | 0 | 20.0 |

Analytical Set 1142309 — EPA 200.8 5.4

### Blank

| Parameter | PrepSet | Reading | MDL | MQL | Units | File |
|---|---|---|---|---|---|---|
| Aluminum, Total | 1142094 | ND | 0.00199 | 0.002 | mg/L | 126873074 |
| Arsenic, Total | 1142094 | ND | 0.00025 | 0.0005 | mg/L | 126873074 |
| Barium, Total | 1142094 | ND | 0.000348 | 0.002 | mg/L | 126873074 |
| Beryllium, Total | 1142094 | ND | 0.0000605 | 0.0005 | mg/L | 126873074 |
| Cadmium, Total | 1142094 | ND | 0.000095 | 0.0005 | mg/L | 126873074 |
| Copper, Total | 1142094 | ND | 0.0005 | 0.001 | mg/L | 126873074 |
| Nickel, Total | 1142094 | ND | 0.0005 | 0.001 | mg/L | 126873074 |
| Selenium, Total | 1142094 | ND | 0.000728 | 0.002 | mg/L | 126873074 |
| Silver, Total | 1142094 | ND | 0.0000628 | 0.0002 | mg/L | 126873074 |
| Zinc, Total | 1142094 | ND | 0.0025 | 0.005 | mg/L | 126873074 |

### CCV

| Parameter | Reading | Known | Units | Recover% | Limits% | File |
|---|---|---|---|---|---|---|
| Aluminum, Total | 0.0501 | 0.05 | mg/L | 100 | 90.0 - 110 | 126873077 |
| Aluminum, Total | 0.0491 | 0.05 | mg/L | 98.2 | 90.0 - 110 | 126873088 |
| Aluminum, Total | 0.0479 | 0.05 | mg/L | 95.8 | 90.0 - 110 | 126873099 |
| Arsenic, Total | 0.0507 | 0.05 | mg/L | 101 | 90.0 - 110 | 126873077 |

# QUALITY CONTROL



## GBRL-C

GBRA/Seguin
Miliana Hernandez
Regional Laboratory
933 E. Court St
Seguin, TX 78155-5819

Project
1120706

Printed 10/23/2024

CCV

| Parameter | Reading | Known | Units | Recover% | Limits% | File |
|---|---|---|---|---|---|---|
| Arsenic, Total | 0.0493 | 0.05 | mg/L | 98.6 | 90.0 - 110 | 126873088 |
| Arsenic, Total | 0.048 | 0.05 | mg/L | 96.0 | 90.0 - 110 | 126873099 |
| Arsenic, Total | 0.0491 | 0.05 | mg/L | 98.2 | 90.0 - 110 | 126873109 |
| Arsenic, Total | 0.0507 | 0.05 | mg/L | 101 | 90.0 - 110 | 126873120 |
| Arsenic, Total | 0.0533 | 0.05 | mg/L | 107 | 90.0 - 110 | 126873129 |
| Barium, Total | 0.0509 | 0.05 | mg/L | 102 | 90.0 - 110 | 126873077 |
| Barium, Total | 0.0492 | 0.05 | mg/L | 98.4 | 90.0 - 110 | 126873088 |
| Barium, Total | 0.0477 | 0.05 | mg/L | 95.4 | 90.0 - 110 | 126873099 |
| Beryllium, Total | 0.0496 | 0.05 | mg/L | 99.2 | 90.0 - 110 | 126873077 |
| Beryllium, Total | 0.0485 | 0.05 | mg/L | 97.0 | 90.0 - 110 | 126873088 |
| Beryllium, Total | 0.0485 | 0.05 | mg/L | 97.0 | 90.0 - 110 | 126873099 |
| Beryllium, Total | 0.0511 | 0.05 | mg/L | 102 | 90.0 - 110 | 126873109 |
| Beryllium, Total | 0.0487 | 0.05 | mg/L | 97.4 | 90.0 - 110 | 126873120 |
| Beryllium, Total | 0.0504 | 0.05 | mg/L | 101 | 90.0 - 110 | 126873129 |
| Cadmium, Total | 0.0496 | 0.05 | mg/L | 99.2 | 90.0 - 110 | 126873077 |
| Cadmium, Total | 0.0493 | 0.05 | mg/L | 98.6 | 90.0 - 110 | 126873088 |
| Cadmium, Total | 0.0492 | 0.05 | mg/L | 98.4 | 90.0 - 110 | 126873099 |
| Cadmium, Total | 0.0524 | 0.05 | mg/L | 105 | 90.0 - 110 | 126873109 |
| Cadmium, Total | 0.0496 | 0.05 | mg/L | 99.2 | 90.0 - 110 | 126873120 |
| Cadmium, Total | 0.0508 | 0.05 | mg/L | 102 | 90.0 - 110 | 126873129 |
| Copper, Total | 0.0508 | 0.05 | mg/L | 102 | 90.0 - 110 | 126873077 |
| Copper, Total | 0.0498 | 0.05 | mg/L | 99.6 | 90.0 - 110 | 126873088 |
| Copper, Total | 0.0491 | 0.05 | mg/L | 98.2 | 90.0 - 110 | 126873099 |
| Nickel, Total | 0.0494 | 0.05 | mg/L | 98.8 | 90.0 - 110 | 126873077 |
| Nickel, Total | 0.0482 | 0.05 | mg/L | 96.4 | 90.0 - 110 | 126873088 |
| Nickel, Total | 0.0471 | 0.05 | mg/L | 94.2 | 90.0 - 110 | 126873099 |
| Nickel, Total | 0.0512 | 0.05 | mg/L | 102 | 90.0 - 110 | 126873109 |
| Nickel, Total | 0.0486 | 0.05 | mg/L | 97.2 | 90.0 - 110 | 126873120 |
| Nickel, Total | 0.0519 | 0.05 | mg/L | 104 | 90.0 - 110 | 126873129 |
| Selenium, Total | 0.0513 | 0.05 | mg/L | 103 | 90.0 - 110 | 126873077 |
| Selenium, Total | 0.0505 | 0.05 | mg/L | 101 | 90.0 - 110 | 126873088 |
| Selenium, Total | 0.0498 | 0.05 | mg/L | 99.6 | 90.0 - 110 | 126873099 |
| Selenium, Total | 0.0501 | 0.05 | mg/L | 100 | 90.0 - 110 | 126873109 |
| Selenium, Total | 0.0528 | 0.05 | mg/L | 106 | 90.0 - 110 | 126873120 |
| Selenium, Total | 0.0511 | 0.05 | mg/L | 102 | 90.0 - 110 | 126873129 |
| Silver, Total | 0.047 | 0.05 | mg/L | 94.0 | 90.0 - 110 | 126873077 |
| Silver, Total | 0.046 | 0.05 | mg/L | 92.0 | 90.0 - 110 | 126873088 |
| Silver, Total | 0.0456 | 0.05 | mg/L | 91.2 | 90.0 - 110 | 126873099 |
| Silver, Total | 0.0492 | 0.05 | mg/L | 98.4 | 90.0 - 110 | 126873109 |
| Silver, Total | 0.0467 | 0.05 | mg/L | 93.4 | 90.0 - 110 | 126873120 |
| Silver, Total | 0.0474 | 0.05 | mg/L | 94.8 | 90.0 - 110 | 126873129 |
| Zinc, Total | 0.0485 | 0.05 | mg/L | 97.0 | 90.0 - 110 | 126873077 |
| Zinc, Total | 0.0498 | 0.05 | mg/L | 99.6 | 90.0 - 110 | 126873088 |
| Zinc, Total | 0.0467 | 0.05 | mg/L | 93.4 | 90.0 - 110 | 126873099 |
| Zinc, Total | 0.0523 | 0.05 | mg/L | 105 | 90.0 - 110 | 126873109 |

# QUALITY CONTROL

SPL The Science of Sure



## GBRL-C

GBRA/Seguin
Miliana Hernandez
Regional Laboratory
933 E. Court St
Seguin, TX 78155-5819

Project
1120706

Printed 10/23/2024

### CCV

| Parameter | Reading | Known | Units | Recover% | Limits% | File |
|---|---|---|---|---|---|---|
| Zinc, Total | 0.050 | 0.05 | mg/L | 100 | 90.0 - 110 | 126873120 |
| Zinc, Total | 0.052 | 0.05 | mg/L | 104 | 90.0 - 110 | 126873129 |

### ICV

| Parameter | Reading | Known | Units | Recover% | Limits% | File |
|---|---|---|---|---|---|---|
| Aluminum, Total | 0.0504 | 0.05 | mg/L | 101 | 90.0 - 110 | 126873057 |
| Arsenic, Total | 0.0504 | 0.05 | mg/L | 101 | 90.0 - 110 | 126873057 |
| Barium, Total | 0.0509 | 0.05 | mg/L | 102 | 90.0 - 110 | 126873057 |
| Beryllium, Total | 0.051 | 0.05 | mg/L | 102 | 90.0 - 110 | 126873057 |
| Cadmium, Total | 0.0502 | 0.05 | mg/L | 100 | 90.0 - 110 | 126873057 |
| Copper, Total | 0.0511 | 0.05 | mg/L | 102 | 90.0 - 110 | 126873057 |
| Nickel, Total | 0.0505 | 0.05 | mg/L | 101 | 90.0 - 110 | 126873057 |
| Selenium, Total | 0.0508 | 0.05 | mg/L | 102 | 90.0 - 110 | 126873057 |
| Silver, Total | 0.0469 | 0.05 | mg/L | 93.8 | 90.0 - 110 | 126873057 |
| Zinc, Total | 0.0508 | 0.05 | mg/L | 102 | 90.0 - 110 | 126873057 |

### LCS Dup

| Parameter | PrepSet | LCS | LCSD | Known | Limits% | LCS% | LCSD% | Units | RPD | Limit% |
|---|---|---|---|---|---|---|---|---|---|---|
| Aluminum, Total | 1142094 | 0.560 | 0.574 | 0.500 | 85.0 - 115 | 112 | 115 | mg/L | 2.47 | 20.0 |
| Arsenic, Total | 1142094 | 0.488 | 0.495 | 0.500 | 85.0 - 115 | 97.6 | 99.0 | mg/L | 1.42 | 20.0 |
| Barium, Total | 1142094 | 0.493 | 0.495 | 0.500 | 85.0 - 115 | 98.6 | 99.0 | mg/L | 0.405 | 20.0 |
| Beryllium, Total | 1142094 | 0.195 | 0.197 | 0.200 | 85.0 - 115 | 97.5 | 98.5 | mg/L | 1.02 | 20.0 |
| Cadmium, Total | 1142094 | 0.253 | 0.258 | 0.250 | 85.0 - 115 | 101 | 103 | mg/L | 1.96 | 20.0 |
| Copper, Total | 1142094 | 0.505 | 0.509 | 0.500 | 85.0 - 115 | 101 | 102 | mg/L | 0.789 | 20.0 |
| Nickel, Total | 1142094 | 0.501 | 0.504 | 0.500 | 85.0 - 115 | 100 | 101 | mg/L | 0.597 | 20.0 |
| Selenium, Total | 1142094 | 0.499 | 0.507 | 0.500 | 85.0 - 115 | 99.8 | 101 | mg/L | 1.59 | 20.0 |
| Silver, Total | 1142094 | 0.0947 | 0.0958 | 0.100 | 85.0 - 115 | 94.7 | 95.8 | mg/L | 1.15 | 20.0 |
| Zinc, Total | 1142094 | 0.496 | 0.500 | 0.500 | 85.0 - 115 | 99.2 | 100 | mg/L | 0.803 | 20.0 |

### MRL Check

| Parameter | Reading | Known | Units | Recover% | Limits% | File |
|---|---|---|---|---|---|---|
| Copper, Total | 0.001 | 0.001 | mg/L | 100 | 25.0 - 175 | 126873058 |

### MSD

| Parameter | Sample | MS | MSD | UNK | Known | Limits | MS% | MSD% | Units | RPD | Limit% |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Aluminum, Total | 2339936 | 0.572 | 0.574 | 0.006 | 0.500 | 70.0 - 130 | 113 | 114 | mg/L | 0.353 | 20.0 |
| Arsenic, Total | 2339936 | 0.504 | 0.490 | 0.000398 | 0.500 | 70.0 - 130 | 101 | 97.9 | mg/L | 2.82 | 20.0 |
| Barium, Total | 2339936 | 0.545 | 0.541 | 0.036 | 0.500 | 70.0 - 130 | 102 | 101 | mg/L | 0.789 | 20.0 |
| Beryllium, Total | 2339936 | 0.196 | 0.194 | ND | 0.200 | 70.0 - 130 | 98.0 | 97.0 | mg/L | 1.03 | 20.0 |
| Cadmium, Total | 2339936 | 0.253 | 0.249 | ND | 0.250 | 70.0 - 130 | 101 | 99.6 | mg/L | 1.59 | 20.0 |
| Copper, Total | 2339936 | 0.492 | 0.489 | ND | 0.500 | 70.0 - 130 | 98.4 | 97.8 | mg/L | 0.612 | 20.0 |
| Nickel, Total | 2339936 | 0.485 | 0.479 | 0.00101 | 0.500 | 70.0 - 130 | 96.8 | 95.6 | mg/L | 1.25 | 20.0 |
| Selenium, Total | 2339936 | 0.496 | 0.488 | 0.000951 | 0.500 | 70.0 - 130 | 99.0 | 97.4 | mg/L | 1.63 | 20.0 |
| Silver, Total | 2339936 | 0.0945 | 0.0928 | ND | 0.100 | 70.0 - 130 | 94.5 | 92.8 | mg/L | 1.82 | 20.0 |
| Zinc, Total | 2339936 | 0.489 | 0.473 | ND | 0.500 | 70.0 - 130 | 97.8 | 94.6 | mg/L | 3.33 | 20.0 |
| Aluminum, Total | 2341171 | 1.83 | 1.77 | 1.20 | 0.500 | 70.0 - 130 | 126 | 114 | mg/L | 10.0 | 20.0 |

# QUALITY CONTROL

SPL The Science of Sure



## GBRL-C

GBRA/Seguin
Miliana Hernandez
Regional Laboratory
933 E. Court St
Seguin, TX 78155-5819

Project
1120706

Printed 10/23/2024

### MSD

| Parameter | Sample | MS | MSD | UNK | Known | Limits | MS% | MSD% | Units | RPD | Limit% |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic, Total | 2341171 | 0.491 | 0.499 | 0.00299 | 0.500 | 70.0 - 130 | 97.6 | 99.2 | mg/L | 1.63 | 20.0 |
| Barium, Total | 2341171 | 0.596 | 0.601 | 0.102 | 0.500 | 70.0 - 130 | 98.8 | 99.8 | mg/L | 1.01 | 20.0 |
| Beryllium, Total | 2341171 | 0.183 | 0.185 | ND | 0.200 | 70.0 - 130 | 91.5 | 92.5 | mg/L | 1.09 | 20.0 |
| Cadmium, Total | 2341171 | 0.236 | 0.237 | 0.000471 | 0.250 | 70.0 - 130 | 94.2 | 94.6 | mg/L | 0.424 | 20.0 |
| Copper, Total | 2341171 | 0.589 | 0.587 | 0.129 | 0.500 | 70.0 - 130 | 92.0 | 91.6 | mg/L | 0.436 | 20.0 |
| Nickel, Total | 2341171 | 0.502 | 0.499 | 0.0575 | 0.500 | 70.0 - 130 | 88.9 | 88.3 | mg/L | 0.677 | 20.0 |
| Selenium, Total | 2341171 | 0.366 | 0.364 | 0.00474 | 0.500 | 70.0 - 130 | 72.3 | 71.9 | mg/L | 0.555 | 20.0 |
| Silver, Total | 2341171 | 0.0849 | 0.0862 | 0.000215 | 0.100 | 70.0 - 130 | 84.7 | 86.0 | mg/L | 1.52 | 20.0 |
| Zinc, Total | 2341171 | 0.909 | 0.895 | 0.476 | 0.500 | 70.0 - 130 | 86.6 | 83.8 | mg/L | 3.29 | 20.0 |

Analytical Set 1142657 — EPA 200.8 5.4

### Blank

| Parameter | PrepSet | Reading | MDL | MQL | Units | File |
|---|---|---|---|---|---|---|
| Antimony, Total | 1142094 | ND | 0.000847 | 0.003 | mg/L | 126879939 |
| Chromium, Total | 1142094 | ND | 0.000392 | 0.001 | mg/L | 126879939 |
| Lead, Total | 1142094 | ND | 0.000549 | 0.001 | mg/L | 126879939 |
| Lead, Total | 1142657 | ND | 0.000549 | 0.001 | mg/L | 126879990 |
| Lead, Total | 1142657 | ND | 0.000549 | 0.001 | mg/L | 126880020 |
| Lead, Total | 1142657 | ND | 0.000549 | 0.001 | mg/L | 126880050 |
| Lead, Total | 1142657 | ND | 0.000549 | 0.001 | mg/L | 126880079 |
| Thallium, Total | 1142094 | ND | 0.000966 | 0.001 | mg/L | 126879939 |

### CCV

| Parameter | Reading | Known | Units | Recover% | Limits% | File |
|---|---|---|---|---|---|---|
| Antimony, Total | 0.0478 | 0.05 | mg/L | 95.6 | 90.0 - 110 | 126879927 |
| Antimony, Total | 0.0478 | 0.05 | mg/L | 95.6 | 90.0 - 110 | 126879935 |
| Antimony, Total | 0.0476 | 0.05 | mg/L | 95.2 | 90.0 - 110 | 126879944 |
| Antimony, Total | 0.0466 | 0.05 | mg/L | 93.2 | 90.0 - 110 | 126879954 |
| Chromium, Total | 0.0506 | 0.05 | mg/L | 101 | 90.0 - 110 | 126879927 |
| Chromium, Total | 0.0504 | 0.05 | mg/L | 101 | 90.0 - 110 | 126879935 |
| Chromium, Total | 0.0501 | 0.05 | mg/L | 100 | 90.0 - 110 | 126879944 |
| Chromium, Total | 0.0505 | 0.05 | mg/L | 101 | 90.0 - 110 | 126879954 |
| Lead, Total | 0.0515 | 0.05 | mg/L | 103 | 90.0 - 110 | 126879927 |
| Lead, Total | 0.0508 | 0.05 | mg/L | 102 | 90.0 - 110 | 126879935 |
| Lead, Total | 0.0511 | 0.05 | mg/L | 102 | 90.0 - 110 | 126879944 |
| Lead, Total | 0.049 | 0.05 | mg/L | 98.0 | 90.0 - 110 | 126879954 |
| Lead, Total | 0.0482 | 0.05 | mg/L | 96.4 | 90.0 - 110 | 126880007 |
| Lead, Total | 0.0485 | 0.05 | mg/L | 97.0 | 90.0 - 110 | 126880018 |
| Lead, Total | 0.0492 | 0.05 | mg/L | 98.4 | 90.0 - 110 | 126880028 |
| Lead, Total | 0.0489 | 0.05 | mg/L | 97.8 | 90.0 - 110 | 126880039 |
| Lead, Total | 0.0503 | 0.05 | mg/L | 101 | 90.0 - 110 | 126880049 |
| Lead, Total | 0.0484 | 0.05 | mg/L | 96.8 | 90.0 - 110 | 126880059 |
| Lead, Total | 0.0473 | 0.05 | mg/L | 94.6 | 90.0 - 110 | 126880070 |
| Lead, Total | 0.0496 | 0.05 | mg/L | 99.2 | 90.0 - 110 | 126880080 |
| Lead, Total | 0.0486 | 0.05 | mg/L | 97.2 | 90.0 - 110 | 126880091 |

# QUALITY CONTROL

SPL The Science of Sure



## GBRL-C

GBRA/Seguin
Miliana Hernandez
Regional Laboratory
933 E. Court St
Seguin, TX 78155-5819

Project
1120706

Printed 10/23/2024

### CCV

| Parameter | Reading | Known | Units | Recover% | Limits% | File |
|---|---|---|---|---|---|---|
| Lead, Total | 0.0474 | 0.05 | mg/L | 94.8 | 90.0 - 110 | 126880102 |
| Thallium, Total | 0.0504 | 0.05 | mg/L | 101 | 90.0 - 110 | 126879927 |
| Thallium, Total | 0.0491 | 0.05 | mg/L | 98.2 | 90.0 - 110 | 126879935 |
| Thallium, Total | 0.0495 | 0.05 | mg/L | 99.0 | 90.0 - 110 | 126879944 |
| Thallium, Total | 0.0474 | 0.05 | mg/L | 94.8 | 90.0 - 110 | 126879954 |

### Dir. SPKD

| Parameter | Sample | DSPK | DSPKD | UNK | Known | Limits% | DSPK% | DSPKD% | Units | RPD | Limit% |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead, Total | 2341758 | 0.500 | 0.497 | ND | 0.500 | 70.0 - 130 | 100 | 99.4 | mg/L | 0.602 | 30.0 |
| Lead, Total | 2341770 | 0.494 | 0.487 | ND | 0.500 | 70.0 - 130 | 98.8 | 97.4 | mg/L | 1.43 | 30.0 |
| Lead, Total | 2341780 | 0.493 | 0.512 | 0.00764 | 0.500 | 70.0 - 130 | 97.1 | 101 | mg/L | 3.78 | 30.0 |
| Lead, Total | 2341790 | 0.492 | 0.495 | 0.00157 | 0.500 | 70.0 - 130 | 98.1 | 98.7 | mg/L | 0.608 | 30.0 |
| Lead, Total | 2341800 | 0.485 | 0.497 | 0.000662 | 0.500 | 70.0 - 130 | 97.0 | 99.4 | mg/L | 2.44 | 30.0 |
| Lead, Total | 2341811 | 0.490 | 0.500 | ND | 0.500 | 70.0 - 130 | 98.0 | 100 | mg/L | 2.02 | 30.0 |
| Lead, Total | 2341821 | 0.496 | 0.501 | ND | 0.500 | 70.0 - 130 | 99.2 | 100 | mg/L | 1.00 | 30.0 |

### Direct SPK

| Parameter | Sample | DSPK | UNK | Known | Limits% | DSPK% | Units | |
|---|---|---|---|---|---|---|---|---|
| Lead, Total | 2341758 | 0.500 | ND | 0.500 | 70.0 - 130 | 100 | mg/L | 30.0 |
| Lead, Total | 2341770 | 0.494 | ND | 0.500 | 70.0 - 130 | 98.8 | mg/L | 30.0 |
| Lead, Total | 2341780 | 0.493 | 0.00764 | 0.500 | 70.0 - 130 | 97.1 | mg/L | 30.0 |
| Lead, Total | 2341790 | 0.492 | 0.00157 | 0.500 | 70.0 - 130 | 98.1 | mg/L | 30.0 |
| Lead, Total | 2341800 | 0.485 | 0.000662 | 0.500 | 70.0 - 130 | 97.0 | mg/L | 30.0 |
| Lead, Total | 2341811 | 0.490 | ND | 0.500 | 70.0 - 130 | 98.0 | mg/L | 30.0 |
| Lead, Total | 2341821 | 0.496 | ND | 0.500 | 70.0 - 130 | 99.2 | mg/L | 30.0 |

### ICV

| Parameter | Reading | Known | Units | Recover% | Limits% | File |
|---|---|---|---|---|---|---|
| Antimony, Total | 0.0504 | 0.05 | mg/L | 101 | 90.0 - 110 | 126879920 |
| Chromium, Total | 0.0511 | 0.05 | mg/L | 102 | 90.0 - 110 | 126879920 |
| Lead, Total | 0.0511 | 0.05 | mg/L | 102 | 90.0 - 110 | 126879920 |
| Thallium, Total | 0.0495 | 0.05 | mg/L | 99.0 | 90.0 - 110 | 126879920 |

### LCS Dup

| Parameter | PrepSet | LCS | LCSD | Known | Limits% | LCS% | LCSD% | Units | RPD | Limit% |
|---|---|---|---|---|---|---|---|---|---|---|
| Antimony, Total | 1142094 | 0.471 | 0.475 | 0.500 | 85.0 - 115 | 94.2 | 95.0 | mg/L | 0.846 | 20.0 |
| Chromium, Total | 1142094 | 0.468 | 0.483 | 0.500 | 85.0 - 115 | 93.6 | 96.6 | mg/L | 3.15 | 20.0 |
| Lead, Total | 1142094 | 0.461 | 0.463 | 0.500 | 85.0 - 115 | 92.2 | 92.6 | mg/L | 0.433 | 20.0 |
| Lead, Total | 1142657 | 0.466 | 0.460 | 0.500 | 85.0 - 115 | 93.2 | 92.0 | mg/L | 1.30 | 20.0 |
| Lead, Total | 1142657 | 0.466 | 0.481 | 0.500 | 85.0 - 115 | 93.2 | 96.2 | mg/L | 3.17 | 20.0 |
| Lead, Total | 1142657 | 0.466 | 0.464 | 0.500 | 85.0 - 115 | 93.2 | 92.8 | mg/L | 0.430 | 20.0 |
| Lead, Total | 1142657 | 0.466 | 0.484 | 0.500 | 85.0 - 115 | 93.2 | 96.8 | mg/L | 3.79 | 20.0 |
| Thallium, Total | 1142094 | 0.480 | 0.483 | 0.500 | 85.0 - 115 | 96.0 | 96.6 | mg/L | 0.623 | 20.0 |

### MRL Check

| Parameter | Reading | Known | Units | Recover% | Limits% | File |
|---|---|---|---|---|---|---|
| Lead, Total | 0.000959 | 0.001 | mg/L | 95.9 | 25.0 - 175 | 126879921 |

# QUALITY CONTROL



## GBRL-C

GBRA/Seguin
Miliana Hernandez
Regional Laboratory
933 E. Court St
Seguin, TX 78155-5819

Project
1120706

Printed 10/23/2024

MSD

| Parameter | Sample | MS | MSD | UNK | Known | Limits | MS% | MSD% | Units | RPD | Limit% |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Antimony, Total | 2339936 | 0.485 | 0.477 | ND | 0.500 | 70.0 - 130 | 97.0 | 95.4 | mg/L | 1.66 | 20.0 |
| Chromium, Total | 2339936 | 0.478 | 0.481 | 0.000558 | 0.500 | 70.0 - 130 | 95.5 | 96.1 | mg/L | 0.626 | 20.0 |
| Lead, Total | 2339936 | 0.446 | 0.447 | ND | 0.500 | 70.0 - 130 | 89.2 | 89.4 | mg/L | 0.224 | 20.0 |
| Thallium, Total | 2339936 | 0.469 | 0.470 | ND | 0.500 | 70.0 - 130 | 93.8 | 94.0 | mg/L | 0.213 | 20.0 |
| Antimony, Total | 2341171 | 0.467 | 0.478 | 0.00116 | 0.500 | 70.0 - 130 | 93.2 | 95.4 | mg/L | 2.33 | 20.0 |
| Chromium, Total | 2341171 | 0.673 | 0.581 | 0.147 | 0.500 | 70.0 - 130 | 105 | 86.8 | mg/L | 19.2 | 20.0 |
| Lead, Total | 2341171 | 0.418 | 0.422 | 0.00181 | 0.500 | 70.0 - 130 | 83.2 | 84.0 | mg/L | 0.957 | 20.0 |
| Thallium, Total | 2341171 | 0.439 | 0.441 | ND | 0.500 | 70.0 - 130 | 87.8 | 88.2 | mg/L | 0.455 | 20.0 |

Analytical Set 1143563 — EPA 245.7 2

AWRL/LOQ C

| Parameter | Reading | Known | Units | Recover% | Limits% | File |
|---|---|---|---|---|---|---|
| Mercury, Total (low level) | 4.94 | 5 | ng/L | 98.8 | 70.0 - 130 | 126903898 |

Blank

| Parameter | PrepSet | Reading | MDL | MQL | Units | File |
|---|---|---|---|---|---|---|
| Mercury, Total (low level) | 1143417 | ND | 1.20 | 5.00 | ng/L | 126903901 |

CCV

| Parameter | Reading | Known | Units | Recover% | Limits% | File |
|---|---|---|---|---|---|---|
| Mercury, Total (low level) | 24.7 | 25 | ng/L | 98.8 | 87.0 - 113 | 126903899 |
| Mercury, Total (low level) | 24.5 | 25 | ng/L | 98.0 | 87.0 - 113 | 126903911 |
| Mercury, Total (low level) | 24.0 | 25 | ng/L | 96.0 | 87.0 - 113 | 126903923 |
| Mercury, Total (low level) | 23.7 | 25 | ng/L | 94.8 | 87.0 - 113 | 126903932 |

ICL

| Parameter | Reading | Known | Units | Recover% | Limits% | File |
|---|---|---|---|---|---|---|
| Mercury, Total (low level) | 97.5 | 100 | ng/L | 97.5 | 90.0 - 110 | 126903896 |

ICV

| Parameter | Reading | Known | Units | Recover% | Limits% | File |
|---|---|---|---|---|---|---|
| Mercury, Total (low level) | 23.7 | 25 | ng/L | 94.8 | 90.0 - 110 | 126903897 |

LCS Dup

| Parameter | PrepSet | LCS | LCSD | Known | Limits% | LCS% | LCSD% | Units | RPD | Limit% |
|---|---|---|---|---|---|---|---|---|---|---|
| Mercury, Total (low level) | 1143417 | 19.7 | 19.7 | 25.0 | 76.0 - 115 | 78.8 | 78.8 | ng/L | 0 | 50.0 |

MSD

| Parameter | Sample | MS | MSD | UNK | Known | Limits | MS% | MSD% | Units | RPD | Limit% |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Mercury, Total (low level) | 2341139 | 20.0 | 19.6 | 1.29 | 26.6 | 63.0 - 111 | 70.3 | 68.8 | ng/L | 2.16 | 18.0 |
| Mercury, Total (low level) | 2343514 | 18.1 | 19.8 | ND | 26.6 | 63.0 - 111 | 68.0 | 74.4 | ng/L | 8.97 | 18.0 |

Analytical Set 1142060 — EPA 624.1

BFB

| Parameter | Sample | RefMass | Reading | % | Limits% | File |
|---|---|---|---|---|---|---|
| BFB Mass 173 | 1142060 | 174 | 0 | 0.0 | 0 - 2.00 | 126866829 |
| BFB Mass 174 | 1142060 | 95.0 | 7665 | 55.2 | 50.0 - 100 | 126866829 |

Email: Kilgore.ProjectManagement@spllabs.com

# QUALITY CONTROL



## GBRL-C

GBRA/Seguin
Miliana Hernandez
Regional Laboratory
933 E. Court St
Seguin, TX 78155-5819

Project
1120706

Printed 10/23/2024

### BFB

| Parameter | Sample | RetMass | Reading | % | Limits% | File |
|---|---|---|---|---|---|---|
| BFB Mass 175 | 1142060 | 174 | 579 | 7.6 | 5.00 - 9.00 | 126866829 |
| BFB Mass 176 | 1142060 | 174 | 7503 | 97.9 | 95.0 - 101 | 126866829 |
| BFB Mass 177 | 1142060 | 176 | 476 | 6.3 | 5.00 - 9.00 | 126866829 |
| BFB Mass 50 | 1142060 | 95.0 | 2719 | 19.6 | 15.0 - 40.0 | 126866829 |
| BFB Mass 75 | 1142060 | 95.0 | 7572 | 54.6 | 30.0 - 60.0 | 126866829 |
| BFB Mass 95 | 1142060 | 95.0 | 13878 | 100.0 | 100 - 100 | 126866829 |
| BFB Mass 96 | 1142060 | 95.0 | 934 | 6.7 | 5.00 - 9.00 | 126866829 |

### Blank

| Parameter | PrepSet | Reading | MDL | MQL | Units | File |
|---|---|---|---|---|---|---|
| Acrolein | 1142060 | ND | 2.33 | 4.00 | ug/L | 126866833 |
| Acrylonitrile | 1142060 | ND | 0.998 | 1.00 | ug/L | 126866833 |

### IS Areas

| Parameter | Sample | Type | Reading | CCVISM | Low | High | File | PrepSet |
|---|---|---|---|---|---|---|---|---|
| 1,4-DichlorobenzeneD4 (ISTD) | 1142060 | LCS | 78990 | 81560 | 40780 | 122300 | 126866830 | 1142060 |
| 1,4-DichlorobenzeneD4 (ISTD) | 1142060 | LCS Dup | 78330 | 81560 | 40780 | 122300 | 126866831 | 1142060 |
| 1,4-DichlorobenzeneD4 (ISTD) | 1142060 | Blank | 68440 | 81560 | 40780 | 122300 | 126866833 | 1142060 |
| ChlorobenzeneD5 (ISTD) | 1142060 | LCS | 166500 | 167700 | 83830 | 251500 | 126866830 | 1142060 |
| ChlorobenzeneD5 (ISTD) | 1142060 | LCS Dup | 158600 | 167700 | 83830 | 251500 | 126866831 | 1142060 |
| ChlorobenzeneD5 (ISTD) | 1142060 | Blank | 167900 | 167700 | 83830 | 251500 | 126866833 | 1142060 |
| 1,4-DichlorobenzeneD4 (ISTD) | 2340587 | MS | 75330 | 81560 | 40780 | 122300 | 126866838 | 1142060 |
| 1,4-DichlorobenzeneD4 (ISTD) | 2340587 | MSD | 78820 | 81560 | 40780 | 122300 | 126866839 | 1142060 |
| ChlorobenzeneD5 (ISTD) | 2340587 | MS | 154500 | 167700 | 83830 | 251500 | 126866838 | 1142060 |
| ChlorobenzeneD5 (ISTD) | 2340587 | MSD | 165800 | 167700 | 83830 | 251500 | 126866839 | 1142060 |
| 1,4-DichlorobenzeneD4 (ISTD) | 2341203 | Unknown | 67060 | 81560 | 40780 | 122300 | 126866835 | 1142060 |
| ChlorobenzeneD5 (ISTD) | 2341203 | Unknown | 161000 | 167700 | 83830 | 251500 | 126866835 | 1142060 |

### IS RetTime

| Parameter | Sample | Type | Reading | CCVISM | Low | High | File | PrepSet |
|---|---|---|---|---|---|---|---|---|
| 1,4-DichlorobenzeneD4 (ISTD) | 1142060 | LCS | 11.97 | 11.97 | 11.91 | 12.03 | 126866830 | 1142060 |
| 1,4-DichlorobenzeneD4 (ISTD) | 1142060 | LCS Dup | 11.97 | 11.97 | 11.91 | 12.03 | 126866831 | 1142060 |
| 1,4-DichlorobenzeneD4 (ISTD) | 1142060 | Blank | 11.97 | 11.97 | 11.91 | 12.03 | 126866833 | 1142060 |
| ChlorobenzeneD5 (ISTD) | 1142060 | LCS | 9.597 | 9.591 | 9.531 | 9.651 | 126866830 | 1142060 |
| ChlorobenzeneD5 (ISTD) | 1142060 | LCS Dup | 9.597 | 9.591 | 9.531 | 9.651 | 126866831 | 1142060 |
| ChlorobenzeneD5 (ISTD) | 1142060 | Blank | 9.597 | 9.591 | 9.531 | 9.651 | 126866833 | 1142060 |
| 1,4-DichlorobenzeneD4 (ISTD) | 2340587 | MS | 11.97 | 11.97 | 11.91 | 12.03 | 126866838 | 1142060 |
| 1,4-DichlorobenzeneD4 (ISTD) | 2340587 | MSD | 11.96 | 11.97 | 11.91 | 12.03 | 126866839 | 1142060 |
| ChlorobenzeneD5 (ISTD) | 2340587 | MS | 9.591 | 9.591 | 9.531 | 9.651 | 126866838 | 1142060 |
| ChlorobenzeneD5 (ISTD) | 2340587 | MSD | 9.591 | 9.591 | 9.531 | 9.651 | 126866839 | 1142060 |
| 1,4-DichlorobenzeneD4 (ISTD) | 2341203 | Unknown | 11.97 | 11.97 | 11.91 | 12.03 | 126866835 | 1142060 |
| ChlorobenzeneD5 (ISTD) | 2341203 | Unknown | 9.597 | 9.591 | 9.531 | 9.651 | 126866835 | 1142060 |

### LCS Dup

| Parameter | PrepSet | LCS | LCSD | Known | Limits% | LCS% | LCSD% | Units | RPD | Limit% |
|---|---|---|---|---|---|---|---|---|---|---|
| Acrolein | 1142060 | 27.7 | 28.2 | 40.0 | 60.0 - 140 | 69.2 | 70.5 | ug/L | 1.86 | 30.0 |

# QUALITY CONTROL



## GBRL-C

GBRA/Seguin
Miliana Hernandez
Regional Laboratory
933 E. Court St
Seguin, TX 78155-5819

Project
1120706

Printed 10/23/2024

LCS Dup

| Parameter | PrepSet | LCS | LCSD | Known | Limits% | LCS% | LCSD% | Units | RPD | Limit% |
|---|---|---|---|---|---|---|---|---|---|---|
| Acrylonitrile | 1142060 | 43.9 | 47.5 | 40.0 | 60.0 - 140 | 110 | 119 | ug/L | 7.86 | 30.0 |

MSD

| Parameter | Sample | MS | MSD | UNK | Known | Limits | MS% | MSD% | Units | RPD | Limit% |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Acrolein | 2340587 | 33.2 | 28.4 | ND | 200 | 40.0 - 160 | 16.6 * | 14.2 * | ug/L | 15.6 | 60.0 |
| Acrylonitrile | 2340587 | 196 | 194 | ND | 200 | 40.0 - 160 | 98.0 | 97.0 | ug/L | 1.03 | 60.0 |

Surrogate

| Parameter | Sample | Type | Reading | Known | Units | Recover% | Limits% | File |
|---|---|---|---|---|---|---|---|---|
| 1,2-DCA-d4 (SURR) | 1142060 | LCS | 20.1 | 20.0 | ug/L | 100 | 70.0 - 130 | 126866830 |
| 1,2-DCA-d4 (SURR) | 1142060 | LCS Dup | 20.4 | 20.0 | ug/L | 102 | 70.0 - 130 | 126866831 |
| 1,2-DCA-d4 (SURR) | 1142060 | Blank | 20.2 | 20.0 | ug/L | 101 | 70.0 - 130 | 126866833 |
| Bromofluorobenzene (SURR) | 1142060 | LCS | 20.4 | 20.0 | ug/L | 102 | 70.0 - 130 | 126866830 |
| Bromofluorobenzene (SURR) | 1142060 | LCS Dup | 19.9 | 20.0 | ug/L | 99.5 | 70.0 - 130 | 126866831 |
| Bromofluorobenzene (SURR) | 1142060 | Blank | 21.5 | 20.0 | ug/L | 108 | 70.0 - 130 | 126866833 |
| Dibromofluoromethane (SURR) | 1142060 | LCS | 20.4 | 20.0 | ug/L | 102 | 70.0 - 130 | 126866830 |
| Dibromofluoromethane (SURR) | 1142060 | LCS Dup | 20.4 | 20.0 | ug/L | 102 | 70.0 - 130 | 126866831 |
| Dibromofluoromethane (SURR) | 1142060 | Blank | 19.6 | 20.0 | ug/L | 98.0 | 70.0 - 130 | 126866833 |
| TolueneD8 (SURR) | 1142060 | LCS | 20.0 | 20.0 | ug/L | 100 | 70.0 - 130 | 126866830 |
| TolueneD8 (SURR) | 1142060 | LCS Dup | 19.9 | 20.0 | ug/L | 99.5 | 70.0 - 130 | 126866831 |
| TolueneD8 (SURR) | 1142060 | Blank | 19.6 | 20.0 | ug/L | 98.0 | 70.0 - 130 | 126866833 |
| 1,2-DCA-d4 (SURR) | 2340587 | MS | 20.1 | 20.0 | ug/L | 100 | 70.0 - 130 | 126866838 |
| 1,2-DCA-d4 (SURR) | 2340587 | MSD | 19.9 | 20.0 | ug/L | 99.5 | 70.0 - 130 | 126866839 |
| Bromofluorobenzene (SURR) | 2340587 | MS | 19.8 | 20.0 | ug/L | 99.0 | 70.0 - 130 | 126866838 |
| Bromofluorobenzene (SURR) | 2340587 | MSD | 20.4 | 20.0 | ug/L | 102 | 70.0 - 130 | 126866839 |
| Dibromofluoromethane (SURR) | 2340587 | MS | 20.2 | 20.0 | ug/L | 101 | 70.0 - 130 | 126866838 |
| Dibromofluoromethane (SURR) | 2340587 | MSD | 19.9 | 20.0 | ug/L | 99.5 | 70.0 - 130 | 126866839 |
| TolueneD8 (SURR) | 2340587 | MS | 19.8 | 20.0 | ug/L | 99.0 | 70.0 - 130 | 126866838 |
| TolueneD8 (SURR) | 2340587 | MSD | 19.9 | 20.0 | ug/L | 99.5 | 70.0 - 130 | 126866839 |
| 1,2-DCA-d4 (SURR) | 2341203 | Unknown | 20.3 | 20.0 | ug/L | 102 | 70.0 - 130 | 126866835 |
| Bromofluorobenzene (SURR) | 2341203 | Unknown | 21.2 | 20.0 | ug/L | 106 | 70.0 - 130 | 126866835 |
| Dibromofluoromethane (SURR) | 2341203 | Unknown | 20.3 | 20.0 | ug/L | 102 | 70.0 - 130 | 126866835 |
| TolueneD8 (SURR) | 2341203 | Unknown | 19.6 | 20.0 | ug/L | 98.0 | 70.0 - 130 | 126866835 |

Analytical Set 1142062 — EPA 624.1

BFB

| Parameter | Sample | RefMass | Reading | % | Limits% | File |
|---|---|---|---|---|---|---|
| BFB Mass 173 | 1142062 | 174 | 0 | 0.0 | 0 - 2.00 | 126866848 |
| BFB Mass 174 | 1142062 | 95.0 | 7665 | 55.2 | 50.0 - 100 | 126866848 |
| BFB Mass 175 | 1142062 | 174 | 579 | 7.6 | 5.00 - 9.00 | 126866848 |
| BFB Mass 176 | 1142062 | 174 | 7503 | 97.9 | 95.0 - 101 | 126866848 |
| BFB Mass 177 | 1142062 | 176 | 476 | 6.3 | 5.00 - 9.00 | 126866848 |
| BFB Mass 50 | 1142062 | 95.0 | 2719 | 19.6 | 15.0 - 40.0 | 126866848 |
| BFB Mass 75 | 1142062 | 95.0 | 7572 | 54.6 | 30.0 - 60.0 | 126866848 |
| BFB Mass 95 | 1142062 | 95.0 | 13878 | 100.0 | 100 - 100 | 126866848 |

# QUALITY CONTROL



## GBRL-C

GBRA/Seguin
Miliana Hernandez
Regional Laboratory
933 E. Court St
Seguin, TX 78155-5819

Project
1120706

Printed 10/23/2024

### BFB

| Parameter | Sample | RefMass | Reading | % | Limits% | File |
|---|---|---|---|---|---|---|
| BFB Mass 96 | 1142062 | 95.0 | 934 | 6.7 | 5.00 - 9.00 | 126866848 |

### Blank

| Parameter | PrepSet | Reading | MDL | MQL | Units | File |
|---|---|---|---|---|---|---|
| 1,1,1-Trichloroethane | 1142062 | ND | 0.531 | 1.00 | ug/L | 126866852 |
| 1,1,2-Trichloroethane | 1142062 | ND | 0.563 | 1.00 | ug/L | 126866852 |
| 1,1-Dichloroethane | 1142062 | ND | 0.593 | 1.00 | ug/L | 126866852 |
| 1,1-Dichloroethylene | 1142062 | ND | 0.574 | 1.00 | ug/L | 126866852 |
| 1,2-Dibromoethane (EDB) | 1142062 | ND | 0.562 | 1.00 | ug/L | 126866852 |
| 1,2-Dichloroethane | 1142062 | ND | 0.590 | 1.00 | ug/L | 126866852 |
| 1,2-Dichloropropane | 1142062 | ND | 0.615 | 1.00 | ug/L | 126866852 |
| Benzene | 1142062 | ND | 0.453 | 1.00 | ug/L | 126866852 |
| Bromodichloromethane | 1142062 | ND | 0.409 | 1.00 | ug/L | 126866852 |
| Bromoform | 1142062 | ND | 0.500 | 1.00 | ug/L | 126866852 |
| Carbon Tetrachloride | 1142062 | ND | 0.299 | 1.00 | ug/L | 126866852 |
| Chlorobenzene | 1142062 | ND | 0.558 | 1.00 | ug/L | 126866852 |
| Chloroethane | 1142062 | ND | 1.12 | 1.12 | ug/L | 126866852 |
| Chloroform | 1142062 | ND | 0.463 | 1.00 | ug/L | 126866852 |
| Chloromethane (Methyl Chloride) | 1142062 | ND | 0.811 | 1.00 | ug/L | 126866852 |
| cis-1,3-Dichloropropene | 1142062 | ND | 0.660 | 1.00 | ug/L | 126866852 |
| Dibromochloromethane | 1142062 | ND | 0.311 | 1.00 | ug/L | 126866852 |
| Dichloromethane | 1142062 | ND | 1.02 | 1.02 | ug/L | 126866852 |
| Ethylbenzene | 1142062 | ND | 0.498 | 1.00 | ug/L | 126866852 |
| m-Dichlorobenzene (1,3-DCB) | 1142062 | ND | 0.619 | 1.00 | ug/L | 126866852 |
| Methyl ethyl ketone (Butanone) | 1142062 | ND | 0.742 | 1.00 | ug/L | 126866852 |
| o-Dichlorobenzene (1,2-DCB) | 1142062 | ND | 0.532 | 1.00 | ug/L | 126866852 |
| p-Dichlorobenzene (1,4-DCB) | 1142062 | ND | 0.837 | 1.00 | ug/L | 126866852 |
| Tetrachloroethylene | 1142062 | ND | 0.607 | 1.00 | ug/L | 126866852 |
| Toluene | 1142062 | ND | 0.655 | 1.00 | ug/L | 126866852 |
| trans-1,2-Dichloroethylene | 1142062 | ND | 0.701 | 1.00 | ug/L | 126866852 |
| trans-1,3-Dichloropropene | 1142062 | ND | 0.627 | 1.00 | ug/L | 126866852 |
| Trichloroethylene | 1142062 | ND | 0.521 | 1.00 | ug/L | 126866852 |
| Vinyl chloride | 1142062 | ND | 0.702 | 1.00 | ug/L | 126866852 |

### IS Areas

| Parameter | Sample | Type | Reading | CCVISM | Low | High | File | PrepSet |
|---|---|---|---|---|---|---|---|---|
| 1,4-DichlorobenzeneD4 (ISTD) | 1142062 | LCS | 78990 | 81560 | 40780 | 122300 | 126866849 | 1142062 |
| 1,4-DichlorobenzeneD4 (ISTD) | 1142062 | LCS Dup | 78330 | 81560 | 40780 | 122300 | 126866850 | 1142062 |
| 1,4-DichlorobenzeneD4 (ISTD) | 1142062 | Blank | 68440 | 81560 | 40780 | 122300 | 126866852 | 1142062 |
| ChlorobenzeneD5 (ISTD) | 1142062 | LCS | 166500 | 167700 | 83830 | 251500 | 126866849 | 1142062 |
| ChlorobenzeneD5 (ISTD) | 1142062 | LCS Dup | 158600 | 167700 | 83830 | 251500 | 126866850 | 1142062 |
| ChlorobenzeneD5 (ISTD) | 1142062 | Blank | 167900 | 167700 | 83830 | 251500 | 126866852 | 1142062 |
| 1,4-DichlorobenzeneD4 (ISTD) | 2340587 | MS | 75330 | 81560 | 40780 | 122300 | 126866854 | 1142062 |
| 1,4-DichlorobenzeneD4 (ISTD) | 2340587 | MSD | 78820 | 81560 | 40780 | 122300 | 126866855 | 1142062 |
| ChlorobenzeneD5 (ISTD) | 2340587 | MS | 154500 | 167700 | 83830 | 251500 | 126866854 | 1142062 |

# QUALITY CONTROL

SPL The Science of Sure



## GBRL-C

GBRA/Seguin
Miliana Hernandez
Regional Laboratory
933 E. Court St
Seguin, TX 78155-5819

Project
1120706

Printed 10/23/2024

### IS Areas

| Parameter | Sample | Type | Reading | CCVISM | Low | High | File | PrepSet |
|---|---|---|---|---|---|---|---|---|
| ChlorobenzeneD5 (ISTD) | 2340587 | MSD | 165800 | 167700 | 83830 | 251500 | 126866855 | 1142062 |
| 1,4-DichlorobenzeneD4 (ISTD) | 2341203 | Unknown | 63530 | 81560 | 40780 | 122300 | 126866857 | 1142062 |
| ChlorobenzeneD5 (ISTD) | 2341203 | Unknown | 158100 | 167700 | 83830 | 251500 | 126866857 | 1142062 |

### IS RetTime

| Parameter | Sample | Type | Reading | CCVISM | Low | High | File | PrepSet |
|---|---|---|---|---|---|---|---|---|
| 1,4-DichlorobenzeneD4 (ISTD) | 1142062 | LCS | 11.97 | 11.97 | 11.91 | 12.03 | 126866849 | 1142062 |
| 1,4-DichlorobenzeneD4 (ISTD) | 1142062 | LCS Dup | 11.97 | 11.97 | 11.91 | 12.03 | 126866850 | 1142062 |
| 1,4-DichlorobenzeneD4 (ISTD) | 1142062 | Blank | 11.97 | 11.97 | 11.91 | 12.03 | 126866852 | 1142062 |
| ChlorobenzeneD5 (ISTD) | 1142062 | LCS | 9.597 | 9.591 | 9.531 | 9.651 | 126866849 | 1142062 |
| ChlorobenzeneD5 (ISTD) | 1142062 | LCS Dup | 9.597 | 9.591 | 9.531 | 9.651 | 126866850 | 1142062 |
| ChlorobenzeneD5 (ISTD) | 1142062 | Blank | 9.597 | 9.591 | 9.531 | 9.651 | 126866852 | 1142062 |
| 1,4-DichlorobenzeneD4 (ISTD) | 2340587 | MS | 11.97 | 11.97 | 11.91 | 12.03 | 126866854 | 1142062 |
| 1,4-DichlorobenzeneD4 (ISTD) | 2340587 | MSD | 11.96 | 11.97 | 11.91 | 12.03 | 126866855 | 1142062 |
| ChlorobenzeneD5 (ISTD) | 2340587 | MS | 9.591 | 9.591 | 9.531 | 9.651 | 126866854 | 1142062 |
| ChlorobenzeneD5 (ISTD) | 2340587 | MSD | 9.591 | 9.591 | 9.531 | 9.651 | 126866855 | 1142062 |
| 1,4-DichlorobenzeneD4 (ISTD) | 2341203 | Unknown | 11.97 | 11.97 | 11.91 | 12.03 | 126866857 | 1142062 |
| ChlorobenzeneD5 (ISTD) | 2341203 | Unknown | 9.597 | 9.591 | 9.531 | 9.651 | 126866857 | 1142062 |

### LCS Dup

| Parameter | PrepSet | LCS | LCSD | Known | Limits% | LCS% | LCSD% | Units | RPD | Limit% |
|---|---|---|---|---|---|---|---|---|---|---|
| 1,1,1-Trichloroethane | 1142062 | 20.4 | 20.3 | 20.0 | 70.0 - 130 | 102 | 102 | ug/L | 0 | 21.0 |
| 1,1,2,2-Tetrachloroethane | 1142062 | 22.2 | 21.9 | 20.0 | 60.0 - 140 | 111 | 110 | ug/L | 0.905 | 36.0 |
| 1,1,2-Trichloroethane | 1142062 | 20.6 | 21.1 | 20.0 | 70.0 - 130 | 103 | 106 | ug/L | 2.87 | 27.0 |
| 1,1-Dichloroethane | 1142062 | 21.3 | 21.5 | 20.0 | 70.0 - 130 | 106 | 108 | ug/L | 1.87 | 24.0 |
| 1,1-Dichloroethylene | 1142062 | 20.3 | 20.4 | 20.0 | 50.0 - 150 | 102 | 102 | ug/L | 0 | 40.0 |
| 1,2-Dibromoethane (EDB) | 1142062 | 19.8 | 20.2 | 20.0 | 78.4 - 122 | 99.0 | 101 | ug/L | 2.00 | 30.0 |
| 1,2-Dichloroethane | 1142062 | 19.4 | 20.2 | 20.0 | 70.0 - 130 | 97.0 | 101 | ug/L | 4.04 | 29.0 |
| 1,2-Dichloropropane | 1142062 | 20.2 | 21.0 | 20.0 | 35.0 - 165 | 101 | 105 | ug/L | 3.88 | 69.0 |
| Benzene | 1142062 | 20.2 | 20.3 | 20.0 | 65.0 - 135 | 101 | 102 | ug/L | 0.985 | 33.0 |
| Bromodichloromethane | 1142062 | 21.2 | 21.8 | 20.0 | 65.0 - 135 | 106 | 109 | ug/L | 2.79 | 34.0 |
| Bromoform | 1142062 | 20.2 | 21.1 | 20.0 | 70.0 - 130 | 101 | 106 | ug/L | 4.83 | 25.0 |
| Bromomethane (Methyl Bromi | 1142062 | 16.5 | 16.6 | 20.0 | 15.0 - 185 | 82.5 | 83.0 | ug/L | 0.604 | 90.0 |
| Carbon Tetrachloride | 1142062 | 20.8 | 21.2 | 20.0 | 70.0 - 130 | 104 | 106 | ug/L | 1.90 | 26.0 |
| Chlorobenzene | 1142062 | 19.6 | 20.2 | 20.0 | 65.0 - 135 | 98.0 | 101 | ug/L | 3.02 | 29.0 |
| Chloroethane | 1142062 | 14.8 | 15.5 | 20.0 | 40.0 - 160 | 74.0 | 77.5 | ug/L | 4.62 | 47.0 |
| Chloroform | 1142062 | 20.8 | 21.2 | 20.0 | 70.0 - 135 | 104 | 106 | ug/L | 1.90 | 32.0 |
| Chloromethane (Methyl Chloride) | 1142062 | 13.9 | 14.2 | 20.0 | 0.100 - 205 | 69.5 | 71.0 | ug/L | 2.14 | 472 |
| cis-1,3-Dichloropropene | 1142062 | 20.4 | 20.9 | 20.0 | 25.0 - 175 | 102 | 104 | ug/L | 1.94 | 79.0 |
| Dibromochloromethane | 1142062 | 17.8 | 18.6 | 20.0 | 70.0 - 135 | 89.0 | 93.0 | ug/L | 4.40 | 30.0 |
| Dichloromethane | 1142062 | 21.2 | 21.2 | 20.0 | 60.0 - 140 | 106 | 106 | ug/L | 0 | 192 |
| Ethylbenzene | 1142062 | 19.1 | 19.7 | 20.0 | 60.0 - 140 | 95.5 | 98.5 | ug/L | 3.09 | 34.0 |
| m-Dichlorobenzene (1,3-DCB) | 1142062 | 19.6 | 19.6 | 20.0 | 70.0 - 130 | 98.0 | 98.0 | ug/L | 0 | 24.0 |
| Methyl ethyl ketone (Butanone) | 1142062 | 23.8 | 25.0 | 20.0 | 62.3 - 136 | 119 | 125 | ug/L | 4.92 | 30.0 |
| o-Dichlorobenzene (1,2-DCB) | 1142062 | 20.2 | 20.1 | 20.0 | 65.0 - 135 | 101 | 100 | ug/L | 0.995 | 31.0 |

# QUALITY CONTROL

SPL The Science of Sure



## GBRL-C

GBRA/Seguin
Miliana Hernandez
Regional Laboratory
933 E. Court St
Seguin, TX 78155-5819

Project
1120706

Printed 10/23/2024

### LCS Dup

| Parameter | PrepSet | LCS | LCSD | Known | Limits% | LCS% | LCSD% | Units | RPD | Limit% |
|---|---|---|---|---|---|---|---|---|---|---|
| p-Dichlorobenzene (1,4-DCB) | 1142062 | 20.7 | 20.2 | 20.0 | 65.0 - 135 | 104 | 101 | ug/L | 2.93 | 31.0 |
| Tetrachloroethylene | 1142062 | 19.6 | 19.6 | 20.0 | 70.0 - 130 | 98.0 | 98.0 | ug/L | 0 | 23.0 |
| Toluene | 1142062 | 19.1 | 19.5 | 20.0 | 70.0 - 130 | 95.5 | 97.5 | ug/L | 2.07 | 22.0 |
| trans-1,2-Dichloroethylene | 1142062 | 19.6 | 19.5 | 20.0 | 70.0 - 130 | 98.0 | 97.5 | ug/L | 0.512 | 27.0 |
| trans-1,3-Dichloropropene | 1142062 | 19.0 | 19.3 | 20.0 | 50.0 - 150 | 95.0 | 96.5 | ug/L | 1.57 | 52.0 |
| Trichloroethylene | 1142062 | 19.9 | 20.8 | 20.0 | 65.0 - 135 | 99.5 | 104 | ug/L | 4.42 | 29.0 |
| Vinyl chloride | 1142062 | 16.0 | 16.0 | 20.0 | 5.00 - 195 | 80.0 | 80.0 | ug/L | 0 | 100 |

### MSD

| Parameter | Sample | MS | MSD | UNK | Known | Limits | MS% | MSD% | Units | RPD | Limit% |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,1,1-Trichloroethane | 2340587 | 120 | 110 | 11.2 | 100 | 52.0 - 162 | 109 | 98.8 | ug/L | 9.63 | 36.0 |
| 1,1,2,2-Tetrachloroethane | 2340587 | 117 | 115 | 11.2 | 100 | 46.0 - 157 | 106 | 104 | ug/L | 1.91 | 61.0 |
| 1,1,2-Trichloroethane | 2340587 | 114 | 108 | 11.2 | 100 | 52.0 - 150 | 103 | 96.8 | ug/L | 6.01 | 45.0 |
| 1,1-Dichloroethane | 2340587 | 120 | 112 | 11.2 | 100 | 59.0 - 155 | 109 | 101 | ug/L | 7.63 | 40.0 |
| 1,1-Dichloroethylene | 2340587 | 115 | 107 | 11.2 | 100 | 0.100 - 234 | 104 | 95.8 | ug/L | 8.02 | 32.0 |
| 1,2-Dibromoethane (EDB) | 2340587 | 112 | 106 | 11.2 | 100 | 49.3 - 120 | 101 | 94.8 | ug/L | 6.13 | 30.0 |
| 1,2-Dichloroethane | 2340587 | 110 | 105 | 11.2 | 100 | 49.0 - 155 | 98.8 | 93.8 | ug/L | 5.19 | 49.0 |
| 1,2-Dichloropropane | 2340587 | 116 | 106 | 11.2 | 100 | 0.100 - 210 | 105 | 94.8 | ug/L | 10.0 | 55.0 |
| Benzene | 2340587 | 115 | 106 | 11.2 | 100 | 37.0 - 151 | 104 | 94.8 | ug/L | 9.06 | 61.0 |
| Bromodichloromethane | 2340587 | 126 | 118 | 2.65 | 100 | 35.0 - 155 | 123 | 115 | ug/L | 6.70 | 56.0 |
| Bromoform | 2340587 | 123 | 121 | 11.2 | 100 | 45.0 - 169 | 112 | 110 | ug/L | 1.81 | 42.0 |
| Bromomethane (Methyl Bromi | 2340587 | 91.5 | 85.8 | 11.2 | 100 | 0.100 - 242 | 80.3 | 74.6 | ug/L | 7.36 | 61.0 |
| Carbon Tetrachloride | 2340587 | 124 | 114 | 11.2 | 100 | 70.0 - 140 | 113 | 103 | ug/L | 9.28 | 41.0 |
| Chlorobenzene | 2340587 | 113 | 106 | 11.2 | 100 | 37.0 - 160 | 102 | 94.8 | ug/L | 7.12 | 53.0 |
| Chloroethane | 2340587 | 84.2 | 77.7 | 11.2 | 100 | 14.0 - 230 | 73.0 | 66.5 | ug/L | 9.32 | 78.0 |
| Chloroform | 2340587 | 125 | 116 | 5.30 | 100 | 51.0 - 138 | 120 | 111 | ug/L | 7.81 | 54.0 |
| Chloromethane (Methyl Chloride) | 2340587 | 78.0 | 73.9 | 11.2 | 100 | 0.100 - 273 | 66.8 | 62.7 | ug/L | 6.33 | 60.0 |
| cis-1,3-Dichloropropene | 2340587 | 111 | 103 | 11.2 | 100 | 0.100 - 227 | 99.8 | 91.8 | ug/L | 8.35 | 58.0 |
| Dibromochloromethane | 2340587 | 109 | 105 | 8.20 | 100 | 53.0 - 149 | 101 | 96.8 | ug/L | 4.05 | 50.0 |
| Dichloromethane | 2340587 | 117 | 109 | 1.30 | 100 | 0.100 - 221 | 116 | 108 | ug/L | 7.16 | 28.0 |
| Ethylbenzene | 2340587 | 114 | 106 | 11.2 | 100 | 37.0 - 162 | 103 | 94.8 | ug/L | 8.10 | 63.0 |
| m-Dichlorobenzene (1,3-DCB) | 2340587 | 114 | 109 | 11.2 | 100 | 59.0 - 156 | 103 | 97.8 | ug/L | 4.99 | 43.0 |
| Methyl ethyl ketone (Butanone) | 2340587 | 127 | 131 | 11.2 | 100 | 0.100 - 211 | 116 | 120 | ug/L | 3.40 | 30.0 |
| o-Dichlorobenzene (1,2-DCB) | 2340587 | 118 | 114 | 11.2 | 100 | 18.0 - 190 | 107 | 103 | ug/L | 3.82 | 57.0 |
| p-Dichlorobenzene (1,4-DCB) | 2340587 | 117 | 115 | 11.2 | 100 | 18.0 - 190 | 106 | 104 | ug/L | 1.91 | 57.0 |
| Tetrachloroethylene | 2340587 | 108 | 106 | 11.2 | 100 | 64.0 - 148 | 96.8 | 94.8 | ug/L | 2.09 | 39.0 |
| Toluene | 2340587 | 111 | 104 | 11.2 | 100 | 47.0 - 150 | 99.8 | 92.8 | ug/L | 7.27 | 41.0 |
| trans-1,2-Dichloroethylene | 2340587 | 111 | 107 | 11.2 | 100 | 54.0 - 156 | 99.8 | 95.8 | ug/L | 4.09 | 45.0 |
| trans-1,3-Dichloropropene | 2340587 | 105 | 98.8 | 11.2 | 100 | 17.0 - 183 | 93.8 | 87.6 | ug/L | 6.84 | 86.0 |
| Trichloroethylene | 2340587 | 116 | 110 | 11.2 | 100 | 70.0 - 157 | 105 | 98.8 | ug/L | 5.89 | 48.0 |
| Vinyl chloride | 2340587 | 82.6 | 77.3 | 11.2 | 100 | 0.100 - 251 | 71.4 | 66.1 | ug/L | 7.71 | 66.0 |

### Surrogate

| Parameter | Sample | Type | Reading | Known | Units | Recover% | Limits% | File |
|---|---|---|---|---|---|---|---|---|
| 1,2-DCA-d4 (SURR) | 1142062 | LCS | 20.1 | 20.0 | ug/L | 100 | 70.0 - 130 | 126866849 |

# QUALITY CONTROL



## GBRL-C

GBRA/Seguin
Miliana Hernandez
Regional Laboratory
933 E. Court St
Seguin, TX 78155-5819

Project
1120706

Printed 10/23/2024

**Surrogate**

| Parameter | Sample | Type | Reading | Known | Units | Recover% | Limits% | File |
|---|---|---|---|---|---|---|---|---|
| 1,2-DCA-d4 (SURR) | 1142062 | LCS Dup | 20.4 | 20.0 | ug/L | 102 | 70.0 - 130 | 126866850 |
| 1,2-DCA-d4 (SURR) | 1142062 | Blank | 20.2 | 20.0 | ug/L | 101 | 70.0 - 130 | 126866852 |
| Bromofluorobenzene (SURR) | 1142062 | LCS | 20.4 | 20.0 | ug/L | 102 | 70.0 - 130 | 126866849 |
| Bromofluorobenzene (SURR) | 1142062 | LCS Dup | 19.9 | 20.0 | ug/L | 99.5 | 70.0 - 130 | 126866850 |
| Bromofluorobenzene (SURR) | 1142062 | Blank | 21.5 | 20.0 | ug/L | 108 | 70.0 - 130 | 126866852 |
| Dibromofluoromethane (SURR) | 1142062 | LCS | 20.4 | 20.0 | ug/L | 102 | 70.0 - 130 | 126866849 |
| Dibromofluoromethane (SURR) | 1142062 | LCS Dup | 20.4 | 20.0 | ug/L | 102 | 70.0 - 130 | 126866850 |
| Dibromofluoromethane (SURR) | 1142062 | Blank | 19.6 | 20.0 | ug/L | 98.0 | 70.0 - 130 | 126866852 |
| TolueneD8 (SURR) | 1142062 | LCS | 20.0 | 20.0 | ug/L | 100 | 70.0 - 130 | 126866849 |
| TolueneD8 (SURR) | 1142062 | LCS Dup | 19.9 | 20.0 | ug/L | 99.5 | 70.0 - 130 | 126866850 |
| TolueneD8 (SURR) | 1142062 | Blank | 19.6 | 20.0 | ug/L | 98.0 | 70.0 - 130 | 126866852 |
| 1,2-DCA-d4 (SURR) | 2340587 | MS | 20.1 | 20.0 | ug/L | 100 | 70.0 - 130 | 126866854 |
| 1,2-DCA-d4 (SURR) | 2340587 | MSD | 19.9 | 20.0 | ug/L | 99.5 | 70.0 - 130 | 126866855 |
| Bromofluorobenzene (SURR) | 2340587 | MS | 19.8 | 20.0 | ug/L | 99.0 | 70.0 - 130 | 126866854 |
| Bromofluorobenzene (SURR) | 2340587 | MSD | 20.4 | 20.0 | ug/L | 102 | 70.0 - 130 | 126866855 |
| Dibromofluoromethane (SURR) | 2340587 | MS | 20.2 | 20.0 | ug/L | 101 | 70.0 - 130 | 126866854 |
| Dibromofluoromethane (SURR) | 2340587 | MSD | 19.9 | 20.0 | ug/L | 99.5 | 70.0 - 130 | 126866855 |
| TolueneD8 (SURR) | 2340587 | MS | 19.8 | 20.0 | ug/L | 99.0 | 70.0 - 130 | 126866854 |
| TolueneD8 (SURR) | 2340587 | MSD | 19.9 | 20.0 | ug/L | 99.5 | 70.0 - 130 | 126866855 |
| 1,2-DCA-d4 (SURR) | 2341203 | Unknown | 20.4 | 20.0 | ug/L | 102 | 70.0 - 130 | 126866857 |
| Bromofluorobenzene (SURR) | 2341203 | Unknown | 22.0 | 20.0 | ug/L | 110 | 70.0 - 130 | 126866857 |
| Dibromofluoromethane (SURR) | 2341203 | Unknown | 20.4 | 20.0 | ug/L | 102 | 70.0 - 130 | 126866857 |
| TolueneD8 (SURR) | 2341203 | Unknown | 20.0 | 20.0 | ug/L | 100 | 70.0 - 130 | 126866857 |

Analytical Set 1142441 — EPA 604.1

**Blank**

| Parameter | PrepSet | Reading | MDL | MQL | Units | File |
|---|---|---|---|---|---|---|
| Hexachlorophene | 1141902 | ND | 0.890 | 2.50 | ug/L | 126875232 |

**CCV**

| Parameter | Reading | Known | Units | Recover% | Limits% | File |
|---|---|---|---|---|---|---|
| Hexachlorophene | 5420 | 5000 | ug/L | 108 | 70.0 - 130 | 126875231 |
| Hexachlorophene | 5320 | 5000 | ug/L | 106 | 70.0 - 130 | 126875237 |
| Hexachlorophene | 5470 | 5000 | ug/L | 109 | 70.0 - 130 | 126875240 |
| Hexachlorophene | 5450 | 5000 | ug/L | 109 | 70.0 - 130 | 126875243 |

**LCS Dup**

| Parameter | PrepSet | LCS | LCSD | Known | Limits% | LCS% | LCSD% | Units | RPD | Limit% |
|---|---|---|---|---|---|---|---|---|---|---|
| Hexachlorophene | 1141902 | 38.6 | 42.2 | 50.0 | 25.5 - 145 | 77.2 | 84.4 | ug/L | 8.91 | 50.0 |

Analytical Set 1143013 — TX 1001

**Blank**

| Parameter | PrepSet | Reading | MDL | MQL | Units | File |
|---|---|---|---|---|---|---|
| Tributyltin hydride | 1142564 | ND | 0.005 | 0.007 | ug/L | 126888137 |

# QUALITY CONTROL



## GBRL-C

GBRA/Seguin
Miliana Hernandez
Regional Laboratory
933 E. Court St
Seguin, TX 78155-5819

Project
1120706

Printed 10/23/2024

CCV

| Parameter | Reading | Known | Units | Recover% | Limits% | File |
|---|---|---|---|---|---|---|
| Tributyltin hydride | 42900 | 50000 | ug/L | 85.7 | 70.0 - 130 | 126888136 |

LCS Dup

| Parameter | PrepSet | LCS | LCSD | Known | Limits% | LCS% | LCSD% | Units | RPD | Limit% |
|---|---|---|---|---|---|---|---|---|---|---|
| Tributyltin hydride | 1142564 | 395 | 344 | 500 | 0.100 - 211 | 79.0 | 68.8 | ug/L | 13.8 | 30.0 |

Analytical Set 1143054 — EPA 625.1

Blank

| Parameter | PrepSet | Reading | MDL | MQL | Units | File |
|---|---|---|---|---|---|---|
| 1,2,4,5-Tetrachlorobenzene | 1142237 | ND | 0.517 | 1.00 | ug/L | 126888786 |
| 1,2,4-Trichlorobenzene | 1142237 | ND | 0.720 | 1.00 | ug/L | 126888786 |
| 1,2-Dichlorobenzene | 1142237 | ND | 0.598 | 1.00 | ug/L | 126888786 |
| 1,2-DPH (as azobenzene) | 1142237 | ND | 0.695 | 1.00 | ug/L | 126888786 |
| 1,3-Dichlorobenzene | 1142237 | ND | 0.686 | 1.00 | ug/L | 126888786 |
| 1,4-Dichlorobenzene | 1142237 | ND | 0.633 | 1.00 | ug/L | 126888786 |
| 2,4,5-Trichlorophenol | 1142237 | ND | 0.734 | 1.00 | ug/L | 126888786 |
| 2,4,6-Trichlorophenol | 1142237 | ND | 0.704 | 1.00 | ug/L | 126888786 |
| 2,4-Dichlorophenol | 1142237 | ND | 0.567 | 1.00 | ug/L | 126888786 |
| 2,4-Dimethylphenol | 1142237 | ND | 2.32 | 2.40 | ug/L | 126888786 |
| 2,4-Dinitrophenol | 1142237 | ND | 8.07 | 9.00 | ug/L | 126888786 |
| 2,4-Dinitrotoluene | 1142237 | ND | 3.35 | 3.50 | ug/L | 126888786 |
| 2,6-Dinitrotoluene | 1142237 | ND | 0.675 | 1.00 | ug/L | 126888786 |
| 2-Chloronaphthalene | 1142237 | ND | 0.333 | 1.00 | ug/L | 126888786 |
| 2-Chlorophenol | 1142237 | ND | 0.367 | 1.00 | ug/L | 126888786 |
| 2-Methylphenol (o-Cresol) | 1142237 | ND | 5.13 | 5.20 | ug/L | 126888786 |
| 2-Nitrophenol | 1142237 | ND | 0.495 | 1.00 | ug/L | 126888786 |
| 3&4-Methylphenol (m&p-Cresol) | 1142237 | ND | 6.15 | 6.20 | ug/L | 126888786 |
| 3,3'-Dichlorobenzidine | 1142237 | ND | 4.79 | 5.00 | ug/L | 126888786 |
| 4,6-Dinitro-2-methylphenol | 1142237 | ND | 7.88 | 8.00 | ug/L | 126888786 |
| 4-Bromophenyl phenyl ether | 1142237 | ND | 0.311 | 1.00 | ug/L | 126888786 |
| 4-Chlorophenyl phenyl ethe | 1142237 | ND | 0.281 | 1.00 | ug/L | 126888786 |
| 4-Nitrophenol | 1142237 | ND | 0.932 | 1.00 | ug/L | 126888786 |
| Acenaphthene | 1142237 | ND | 0.139 | 1.00 | ug/L | 126888786 |
| Acenaphthylene | 1142237 | ND | 0.202 | 1.00 | ug/L | 126888786 |
| Aniline | 1142237 | ND | 0.367 | 1.00 | ug/L | 126888786 |
| Anthracene | 1142237 | ND | 0.538 | 1.00 | ug/L | 126888786 |
| Benzidine | 1142237 | ND | 19.9 | 20.0 | ug/L | 126888786 |
| Benzo(a)anthracene | 1142237 | ND | 0.627 | 1.00 | ug/L | 126888786 |
| Benzo(a)pyrene | 1142237 | ND | 0.478 | 1.00 | ug/L | 126888786 |
| Benzo(b)fluoranthene | 1142237 | ND | 0.517 | 1.00 | ug/L | 126888786 |
| Benzo(ghi)perylene | 1142237 | ND | 0.750 | 1.00 | ug/L | 126888786 |
| Benzo(k)fluoranthene | 1142237 | ND | 0.763 | 1.00 | ug/L | 126888786 |
| Benzyl Butyl phthalate | 1142237 | 0.760 | 0.696 | 7.50 | ug/L | 126888786 |
| Bis(2-chloroethoxy)methane | 1142237 | ND | 0.312 | 1.00 | ug/L | 126888786 |
| Bis(2-chloroethyl)ether | 1142237 | ND | 0.434 | 1.00 | ug/L | 126888786 |

# QUALITY CONTROL



## GBRL-C

GBRA/Seguin
Miliana Hernandez
Regional Laboratory
933 E. Court St
Seguin, TX 78155-5819

Project
1120706

Printed 10/23/2024

**Blank**

| Parameter | PrepSet | Reading | MDL | MQL | Units | File |
|---|---|---|---|---|---|---|
| Bis(2-chloroisopropyl)ether | 1142237 | ND | 0.448 | 1.00 | ug/L | 126888786 |
| Bis(2-ethylhexyl)phthalate | 1142237 | ND | 1.63 | 7.50 | ug/L | 126888786 |
| Chrysene (Benzo(a)phenanthrene) | 1142237 | ND | 0.575 | 1.00 | ug/L | 126888786 |
| Dibenz(a,h)anthracene | 1142237 | ND | 0.872 | 1.00 | ug/L | 126888786 |
| Diethyl phthalate | 1142237 | ND | 0.721 | 5.70 | ug/L | 126888786 |
| Dimethyl phthalate | 1142237 | ND | 0.497 | 4.80 | ug/L | 126888786 |
| Di-n-butylphthalate | 1142237 | ND | 0.834 | 7.50 | ug/L | 126888786 |
| Di-n-octylphthalate | 1142237 | 0.880 | 0.782 | 1.00 | ug/L | 126888786 |
| Fluoranthene(Benzo(j,k)fluorene) | 1142237 | ND | 0.772 | 1.00 | ug/L | 126888786 |
| Fluorene | 1142237 | ND | 0.512 | 1.00 | ug/L | 126888786 |
| Hexachlorobenzene | 1142237 | ND | 0.187 | 1.00 | ug/L | 126888786 |
| Hexachlorobutadiene | 1142237 | ND | 0.618 | 1.00 | ug/L | 126888786 |
| Hexachlorocyclopentadiene | 1142237 | ND | 8.69 | 9.00 | ug/L | 126888786 |
| Hexachloroethane | 1142237 | ND | 0.789 | 1.00 | ug/L | 126888786 |
| Indeno(1,2,3-cd)pyrene | 1142237 | ND | 0.793 | 1.00 | ug/L | 126888786 |
| Isophorone | 1142237 | ND | 0.468 | 1.00 | ug/L | 126888786 |
| Naphthalene | 1142237 | ND | 0.387 | 1.00 | ug/L | 126888786 |
| Nitrobenzene | 1142237 | ND | 0.390 | 1.00 | ug/L | 126888786 |
| n-Nitrosodiethylamine | 1142237 | ND | 0.282 | 1.00 | ug/L | 126888786 |
| N-Nitrosodimethylamine | 1142237 | ND | 6.64 | 7.00 | ug/L | 126888786 |
| n-Nitroso-di-n-butylamine | 1142237 | ND | 0.403 | 1.00 | ug/L | 126888786 |
| N-Nitrosodi-n-propylamine | 1142237 | ND | 0.777 | 1.00 | ug/L | 126888786 |
| N-Nitrosodiphenylamine (as DPA | 1142237 | ND | 0.427 | 1.00 | ug/L | 126888786 |
| p-Chloro-m-Cresol (4-Chloro-3-me | 1142237 | ND | 2.35 | 2.40 | ug/L | 126888786 |
| Pentachlorobenzene | 1142237 | ND | 0.420 | 1.00 | ug/L | 126888786 |
| Pentachlorophenol | 1142237 | 0.900 | 0.129 | 1.00 | ug/L | 126888786 |
| Phenanthrene | 1142237 | ND | 0.624 | 1.00 | ug/L | 126888786 |
| Phenol | 1142237 | ND | 1.50 | 1.50 | ug/L | 126888786 |
| Pyrene | 1142237 | ND | 0.587 | 1.00 | ug/L | 126888786 |
| Pyridine | 1142237 | ND | 5.33 | 5.40 | ug/L | 126888786 |

**CCV**

| Parameter | Reading | Known | Units | Recover% | Limits% | File |
|---|---|---|---|---|---|---|
| 1,2,4,5-Tetrachlorobenzene | 46400 | 50000 | ug/L | 92.8 | 60.0 - 140 | 126888785 |
| 1,2,4-Trichlorobenzene | 47600 | 50000 | ug/L | 95.2 | 61.0 - 130 | 126888785 |
| 1,2-Dichlorobenzene | 51800 | 50000 | ug/L | 104 | 60.0 - 140 | 126888785 |
| 1,2-DPH (as azobenzene) | 50000 | 50000 | ug/L | 100 | 60.0 - 140 | 126888785 |
| 1,3-Dichlorobenzene | 51100 | 50000 | ug/L | 102 | 60.0 - 140 | 126888785 |
| 1,4-Dichlorobenzene | 50600 | 50000 | ug/L | 101 | 60.0 - 140 | 126888785 |
| 2,4,5-Trichlorophenol | 52500 | 50000 | ug/L | 105 | 69.0 - 130 | 126888785 |
| 2,4,6-Trichlorophenol | 48500 | 50000 | ug/L | 97.0 | 69.0 - 130 | 126888785 |
| 2,4-Dichlorophenol | 50100 | 50000 | ug/L | 100 | 64.0 - 130 | 126888785 |
| 2,4-Dimethylphenol | 47400 | 50000 | ug/L | 94.8 | 58.0 - 130 | 126888785 |
| 2,4-Dinitrophenol | 44700 | 50000 | ug/L | 89.4 | 39.0 - 173 | 126888785 |
| 2,4-Dinitrotoluene | 61600 | 50000 | ug/L | 123 | 53.0 - 130 | 126888785 |

# QUALITY CONTROL



## GBRL-C

GBRA/Seguin
Miliana Hernandez
Regional Laboratory
933 E. Court St
Seguin, TX 78155-5819

Project
1120706

Printed 10/23/2024

CCV

| Parameter | Reading | Known | Units | Recovr% | Limits% | File |
|---|---|---|---|---|---|---|
| 2,6-Dinitrotoluene | 57500 | 50000 | ug/L | 115 | 68.0 - 137 | 126888785 |
| 2-Chloronaphthalene | 45800 | 50000 | ug/L | 91.6 | 70.0 - 130 | 126888785 |
| 2-Chlorophenol | 50700 | 50000 | ug/L | 101 | 55.0 - 130 | 126888785 |
| 2-Methylphenol (o-Cresol) | 48400 | 50000 | ug/L | 96.8 | 60.0 - 140 | 126888785 |
| 2-Nitrophenol | 50600 | 50000 | ug/L | 101 | 61.0 - 163 | 126888785 |
| 3&4-Methylphenol (m&p-Cresol) | 49100 | 50000 | ug/L | 98.2 | 60.0 - 140 | 126888785 |
| 3,3'-Dichlorobenzidine | 74000 | 50000 | ug/L | 148 | 18.0 - 213 | 126888785 |
| 4,6-Dinitro-2-methylphenol | 49800 | 50000 | ug/L | 99.6 | 56.0 - 130 | 126888785 |
| 4-Bromophenyl phenyl ether | 51900 | 50000 | ug/L | 104 | 70.0 - 130 | 126888785 |
| 4-Chlorophenyl phenyl ethe | 51100 | 50000 | ug/L | 102 | 57.0 - 145 | 126888785 |
| 4-Nitrophenol | 46600 | 50000 | ug/L | 93.2 | 35.0 - 135 | 126888785 |
| Acenaphthene | 53700 | 50000 | ug/L | 107 | 70.0 - 130 | 126888785 |
| Acenaphthylene | 52200 | 50000 | ug/L | 104 | 60.0 - 130 | 126888785 |
| Aniline | 45200 | 50000 | ug/L | 90.4 | 60.0 - 140 | 126888785 |
| Anthracene | 54100 | 50000 | ug/L | 108 | 58.0 - 130 | 126888785 |
| Benzidine | 34900 | 50000 | ug/L | 69.8 | 20.0 - 180 | 126888785 |
| Benzo(a)anthracene | 60200 | 50000 | ug/L | 120 | 42.0 - 133 | 126888785 |
| Benzo(a)pyrene | 52000 | 50000 | ug/L | 104 | 32.0 - 148 | 126888785 |
| Benzo(b)fluoranthene | 48400 | 50000 | ug/L | 96.8 | 42.0 - 140 | 126888785 |
| Benzo(ghi)perylene | 49400 | 50000 | ug/L | 98.8 | 13.0 - 195 | 126888785 |
| Benzo(k)fluoranthene | 52800 | 50000 | ug/L | 106 | 25.0 - 146 | 126888785 |
| Benzyl Butyl phthalate | 57600 | 50000 | ug/L | 115 | 43.0 - 140 | 126888785 |
| Bis(2-chloroethoxy)methane | 49900 | 50000 | ug/L | 99.8 | 52.0 - 164 | 126888785 |
| Bis(2-chloroethyl)ether | 48800 | 50000 | ug/L | 97.6 | 52.0 - 130 | 126888785 |
| Bis(2-chloroisopropyl)ether | 52300 | 50000 | ug/L | 105 | 63.0 - 139 | 126888785 |
| Bis(2-ethylhexyl)phthalate | 64700 | 50000 | ug/L | 129 | 43.0 - 137 | 126888785 |
| Chrysene (Benzo(a)phenanthrene) | 65400 | 50000 | ug/L | 131 | 44.0 - 140 | 126888785 |
| Dibenz(a,h)anthracene | 49000 | 50000 | ug/L | 98.0 | 13.0 - 200 | 126888785 |
| Diethyl phthalate | 56600 | 50000 | ug/L | 113 | 47.0 - 130 | 126888785 |
| Dimethyl phthalate | 55500 | 50000 | ug/L | 111 | 50.0 - 130 | 126888785 |
| Di-n-butylphthalate | 55600 | 50000 | ug/L | 111 | 52.0 - 130 | 126888785 |
| Di-n-octylphthalate | 56300 | 50000 | ug/L | 113 | 21.0 - 132 | 126888785 |
| Fluoranthene(Benzo(j,k)fluorene) | 51600 | 50000 | ug/L | 103 | 47.0 - 130 | 126888785 |
| Fluorene | 54800 | 50000 | ug/L | 110 | 70.0 - 130 | 126888785 |
| Hexachlorobenzene | 55700 | 50000 | ug/L | 111 | 38.0 - 142 | 126888785 |
| Hexachlorobutadiene | 46700 | 50000 | ug/L | 93.4 | 68.0 - 130 | 126888785 |
| Hexachlorocyclopentadiene | 32800 | 50000 | ug/L | 65.6 | 60.0 - 140 | 126888785 |
| Hexachloroethane | 50900 | 50000 | ug/L | 102 | 55.0 - 130 | 126888785 |
| Indeno(1,2,3-cd)pyrene | 47700 | 50000 | ug/L | 95.4 | 13.0 - 151 | 126888785 |
| Isophorone | 53900 | 50000 | ug/L | 108 | 52.0 - 180 | 126888785 |
| Naphthalene | 50200 | 50000 | ug/L | 100 | 70.0 - 130 | 126888785 |
| Nitrobenzene | 50300 | 50000 | ug/L | 101 | 54.0 - 158 | 126888785 |
| n-Nitrosodiethylamine | 46700 | 50000 | ug/L | 93.4 | 60.0 - 140 | 126888785 |
| N-Nitrosodimethylamine | 52200 | 50000 | ug/L | 104 | 60.0 - 140 | 126888785 |
| n-Nitroso-di-n-butylamine | 52800 | 50000 | ug/L | 106 | 60.0 - 140 | 126888785 |

# QUALITY CONTROL



## GBRL-C

GBRA/Seguin
Miliana Hernandez
Regional Laboratory
933 E. Court St
Seguin, TX 78155-5819

Project
1120706

Printed 10/23/2024

### CCV

| Parameter | Reading | Known | Units | Recover% | Limits% | File |
|---|---|---|---|---|---|---|
| N-Nitrosodi-n-propylamine | 56800 | 50000 | ug/L | 114 | 59.0 - 170 | 126888785 |
| N-Nitrosodiphenylamine (as DPA | 45700 | 50000 | ug/L | 91.4 | 60.0 - 140 | 126888785 |
| p-Chloro-m-Cresol (4-Chloro-3-me | 53000 | 50000 | ug/L | 106 | 68.0 - 130 | 126888785 |
| Pentachlorobenzene | 50400 | 50000 | ug/L | 101 | 60.0 - 140 | 126888785 |
| Pentachlorophenol | 48200 | 50000 | ug/L | 96.4 | 42.0 - 152 | 126888785 |
| Phenanthrene | 51900 | 50000 | ug/L | 104 | 67.0 - 130 | 126888785 |
| Phenol | 46100 | 50000 | ug/L | 92.2 | 48.0 - 130 | 126888785 |
| Pyrene | 46800 | 50000 | ug/L | 93.6 | 70.0 - 130 | 126888785 |
| Pyridine | 47200 | 50000 | ug/L | 94.4 | 60.0 - 140 | 126888785 |

### DFTPP

| Parameter | | RefMass | Reading | % | Limits% | File |
|---|---|---|---|---|---|---|
| DFTPP Mass 127 | 627107 | 198 | 34941 | 49.8 | 40.0 - 60.0 | 126888784 |
| DFTPP Mass 197 | 627107 | 198 | 0 | 0.0 | 0 - 1.00 | 126888784 |
| DFTPP Mass 198 | 627107 | 198 | 70226 | 100.0 | 100 - 100 | 126888784 |
| DFTPP Mass 199 | 627107 | 198 | 4736 | 6.7 | 5.00 - 9.00 | 126888784 |
| DFTPP Mass 275 | 627107 | 198 | 16239 | 23.1 | 10.0 - 30.0 | 126888784 |
| DFTPP Mass 365 | 627107 | 198 | 2511 | 3.6 | 1.00 - 100 | 126888784 |
| DFTPP Mass 441 | 627107 | 443 | 6877 | 78.8 | 0 - 100 | 126888784 |
| DFTPP Mass 442 | 627107 | 198 | 45688 | 65.1 | 40.0 - 100 | 126888784 |
| DFTPP Mass 443 | 627107 | 442 | 8722 | 19.1 | 17.0 - 23.0 | 126888784 |
| DFTPP Mass 51 | 627107 | 198 | 21736 | 31.0 | 30.0 - 60.0 | 126888784 |
| DFTPP Mass 68 | 627107 | 69.0 | 0 | 0.0 | 0 - 2.00 | 126888784 |
| DFTPP Mass 69 | 627107 | 198 | 24136 | 34.4 | 0 - 100 | 126888784 |
| DFTPP Mass 70 | 627107 | 69.0 | 139 | 0.6 | 0 - 2.00 | 126888784 |

### LCS Dup

| Parameter | PrepSet | LCS | LCSD | Known | Limits% | LCS% | LCSD% | Units | RPD | Limit% |
|---|---|---|---|---|---|---|---|---|---|---|
| 1,2,4,5-Tetrachlorobenzene | 1142237 | 13.3 | 11.8 | 25.0 | 27.5 - 85.5 | 53.2 | 47.2 | ug/L | 12.0 | 50.0 |
| 1,2,4-Trichlorobenzene | 1142237 | 11.4 | 11.0 | 25.0 | 44.0 - 142 | 45.6 | 44.0 | ug/L | 3.57 | 50.0 |
| 1,2-Dichlorobenzene | 1142237 | 11.6 | 11.0 | 25.0 | 23.0 - 81.8 | 46.4 | 44.0 | ug/L | 5.31 | 50.0 |
| 1,2-DPH (as azobenzene) | 1142237 | 22.1 | 18.6 | 25.0 | 12.6 - 110 | 88.4 | 74.4 | ug/L | 17.2 | 50.0 |
| 1,3-Dichlorobenzene | 1142237 | 10.8 | 10.2 | 25.0 | 21.1 - 80.5 | 43.2 | 40.8 | ug/L | 5.71 | 50.0 |
| 1,4-Dichlorobenzene | 1142237 | 11.0 | 10.6 | 25.0 | 21.4 - 76.9 | 44.0 | 42.4 | ug/L | 3.70 | 50.0 |
| 2,4,5-Trichlorophenol | 1142237 | 18.6 | 14.4 | 25.0 | 51.3 - 109 | 74.4 | 57.6 | ug/L | 25.5 | 50.0 |
| 2,4,6-Trichlorophenol | 1142237 | 18.1 | 15.3 | 25.0 | 37.0 - 144 | 72.4 | 61.2 | ug/L | 16.8 | 58.0 |
| 2,4-Dichlorophenol | 1142237 | 18.5 | 16.3 | 25.0 | 39.0 - 135 | 74.0 | 65.2 | ug/L | 12.6 | 50.0 |
| 2,4-Dimethylphenol | 1142237 | 3.52 | 9.52 | 25.0 | 23.0 - 120 | 14.1 * | 38.1 | ug/L | 92.0 * | 68.0 |
| 2,4-Dinitrophenol | 1142237 | 12.7 | 11.0 | 25.0 | 0.100 - 191 | 50.8 | 44.0 | ug/L | 14.3 | 132 |
| 2,4-Dinitrotoluene | 1142237 | 21.4 | 17.4 | 25.0 | 39.0 - 139 | 85.6 | 69.6 | ug/L | 20.6 | 42.0 |
| 2,6-Dinitrotoluene | 1142237 | 20.9 | 17.3 | 25.0 | 50.0 - 158 | 83.6 | 69.2 | ug/L | 18.8 | 48.0 |
| 2-Chloronaphthalene | 1142237 | 16.9 | 15.0 | 25.0 | 60.0 - 120 | 67.6 | 60.0 | ug/L | 11.9 | 24.0 |
| 2-Chlorophenol | 1142237 | 17.3 | 16.1 | 25.0 | 23.0 - 134 | 69.2 | 64.4 | ug/L | 7.19 | 61.0 |
| 2-Methylphenol (o-Cresol) | 1142237 | 14.4 | 14.3 | 25.0 | 38.9 - 76.1 | 57.6 | 57.2 | ug/L | 0.697 | 50.0 |
| 2-Nitrophenol | 1142237 | 18.0 | 16.2 | 25.0 | 29.0 - 182 | 72.0 | 64.8 | ug/L | 10.5 | 55.0 |

# QUALITY CONTROL

SPL The Science of Sure



## GBRL-C

GBRA/Seguin
Miliana Hernandez
Regional Laboratory
933 E. Court St
Seguin, TX 78155-5819

Project
1120706

Printed 10/23/2024

LCS Dup

| Parameter | PrepSet | LCS | LCSD | Known | Limits% | LCS% | LCSD% | Units | RPD | Limit% |
|---|---|---|---|---|---|---|---|---|---|---|
| 3&4-Methylphenol (m&p-Cresol) | 1142237 | 13.2 | 12.9 | 25.0 | 33.0 - 70.4 | 52.8 | 51.6 | ug/L | 2.30 | 50.0 |
| 3,3'-Dichlorobenzidine | 1142237 | 23.2 | 19.4 | 25.0 | 0.100 - 262 | 92.8 | 77.6 | ug/L | 17.8 | 108 |
| 4,6-Dinitro-2-methylphenol | 1142237 | 16.8 | 13.2 | 25.0 | 0.100 - 181 | 67.2 | 52.8 | ug/L | 24.0 | 203 |
| 4-Bromophenyl phenyl ether | 1142237 | 20.0 | 16.9 | 25.0 | 53.0 - 127 | 80.0 | 67.6 | ug/L | 16.8 | 43.0 |
| 4-Chlorophenyl phenyl ethe | 1142237 | 18.6 | 15.9 | 25.0 | 25.0 - 158 | 74.4 | 63.6 | ug/L | 15.7 | 61.0 |
| 4-Nitrophenol | 1142237 | 7.60 | 6.56 | 25.0 | 0.100 - 132 | 30.4 | 26.2 | ug/L | 14.8 | 131 |
| Acenaphthene | 1142237 | 19.5 | 16.6 | 25.0 | 47.0 - 145 | 78.0 | 66.4 | ug/L | 16.1 | 48.0 |
| Acenaphthylene | 1142237 | 19.7 | 17.0 | 25.0 | 33.0 - 145 | 78.8 | 68.0 | ug/L | 14.7 | 74.0 |
| Aniline | 1142237 | 16.9 | 14.4 | 25.0 | 70.0 - 130 | 67.6 * | 57.6 * | ug/L | 16.0 | 50.0 |
| Anthracene | 1142237 | 21.6 | 18.6 | 25.0 | 27.0 - 133 | 86.4 | 74.4 | ug/L | 14.9 | 66.0 |
| Benzidine | 1142237 | 1.46 | 1.68 | 25.0 | 0.100 - 36.9 | 5.84 | 6.72 | ug/L | 14.0 | 90.0 |
| Benzo(a)anthracene | 1142237 | 21.4 | 17.3 | 25.0 | 33.0 - 143 | 85.6 | 69.2 | ug/L | 21.2 | 53.0 |
| Benzo(a)pyrene | 1142237 | 19.6 | 16.5 | 25.0 | 17.0 - 163 | 78.4 | 66.0 | ug/L | 17.2 | 72.0 |
| Benzo(b)fluoranthene | 1142237 | 20.1 | 16.1 | 25.0 | 24.0 - 159 | 80.4 | 64.4 | ug/L | 22.1 | 71.0 |
| Benzo(ghi)perylene | 1142237 | 22.2 | 19.3 | 25.0 | 0.100 - 219 | 88.8 | 77.2 | ug/L | 14.0 | 97.0 |
| Benzo(k)fluoranthene | 1142237 | 17.8 | 14.8 | 25.0 | 11.0 - 162 | 71.2 | 59.2 | ug/L | 18.4 | 63.0 |
| Benzyl Butyl phthalate | 1142237 | 20.7 | 16.7 | 25.0 | 0.100 - 152 | 82.8 | 66.8 | ug/L | 21.4 | 60.0 |
| Bis(2-chloroethoxy)methane | 1142237 | 19.1 | 16.7 | 25.0 | 33.0 - 184 | 76.4 | 66.8 | ug/L | 13.4 | 54.0 |
| Bis(2-chloroethyl)ether | 1142237 | 17.4 | 15.8 | 25.0 | 12.0 - 158 | 69.6 | 63.2 | ug/L | 9.64 | 108 |
| Bis(2-chloroisopropyl)ether | 1142237 | 16.1 | 14.8 | 25.0 | 36.0 - 166 | 64.4 | 59.2 | ug/L | 8.41 | 76.0 |
| Bis(2-ethylhexyl)phthalate | 1142237 | 21.3 | 16.5 | 25.0 | 8.00 - 158 | 85.2 | 66.0 | ug/L | 25.4 | 82.0 |
| Chrysene (Benzo(a)phenanthrene) | 1142237 | 21.7 | 17.8 | 25.0 | 17.0 - 168 | 86.8 | 71.2 | ug/L | 19.7 | 87.0 |
| Dibenz(a,h)anthracene | 1142237 | 22.9 | 18.7 | 25.0 | 0.100 - 227 | 91.6 | 74.8 | ug/L | 20.2 | 126 |
| Diethyl phthalate | 1142237 | 23.1 | 19.5 | 25.0 | 0.100 - 120 | 92.4 | 78.0 | ug/L | 16.9 | 100 |
| Dimethyl phthalate | 1142237 | 21.0 | 17.9 | 25.0 | 0.100 - 120 | 84.0 | 71.6 | ug/L | 15.9 | 183 |
| Di-n-butylphthalate | 1142237 | 23.8 | 20.6 | 25.0 | 1.00 - 120 | 95.2 | 82.4 | ug/L | 14.4 | 47.0 |
| Di-n-octylphthalate | 1142237 | 16.0 | 13.0 | 25.0 | 4.00 - 146 | 64.0 | 52.0 | ug/L | 20.7 | 69.0 |
| Fluoranthene(Benzo(j,k)fluorene) | 1142237 | 19.4 | 17.8 | 25.0 | 26.0 - 137 | 77.6 | 71.2 | ug/L | 8.60 | 66.0 |
| Fluorene | 1142237 | 21.2 | 18.5 | 25.0 | 59.0 - 121 | 84.8 | 74.0 | ug/L | 13.6 | 38.0 |
| Hexachlorobenzene | 1142237 | 20.2 | 17.2 | 25.0 | 0.100 - 152 | 80.8 | 68.8 | ug/L | 16.0 | 55.0 |
| Hexachlorobutadiene | 1142237 | 8.30 | 8.05 | 25.0 | 24.0 - 120 | 33.2 | 32.2 | ug/L | 3.06 | 62.0 |
| Hexachlorocyclopentadiene | 1142237 | 4.69 | 2.75 | 25.0 | 3.97 - 68.7 | 18.8 | 11.0 | ug/L | 52.3 * | 50.0 |
| Hexachloroethane | 1142237 | 9.30 | 8.99 | 25.0 | 40.0 - 120 | 37.2 * | 36.0 * | ug/L | 3.28 | 52.0 |
| Indeno(1,2,3-cd)pyrene | 1142237 | 23.2 | 19.2 | 25.0 | 0.100 - 171 | 92.8 | 76.8 | ug/L | 18.9 | 99.0 |
| Isophorone | 1142237 | 19.1 | 16.5 | 25.0 | 21.0 - 196 | 76.4 | 66.0 | ug/L | 14.6 | 93.0 |
| Naphthalene | 1142237 | 15.4 | 14.3 | 25.0 | 21.0 - 133 | 61.6 | 57.2 | ug/L | 7.41 | 65.0 |
| Nitrobenzene | 1142237 | 18.1 | 16.3 | 25.0 | 35.0 - 180 | 72.4 | 65.2 | ug/L | 10.5 | 62.0 |
| n-Nitrosodiethylamine | 1142237 | 18.2 | 16.9 | 25.0 | 18.0 - 100 | 72.8 | 67.6 | ug/L | 7.41 | 50.0 |
| N-Nitrosodimethylamine | 1142237 | 13.6 | 12.6 | 25.0 | 30.2 - 74.9 | 54.4 | 50.4 | ug/L | 7.63 | 50.0 |
| n-Nitroso-di-n-butylamine | 1142237 | 20.3 | 17.2 | 25.0 | 48.4 - 98.5 | 81.2 | 68.8 | ug/L | 16.5 | 50.0 |
| N-Nitrosodi-n-propylamine | 1142237 | 19.2 | 16.9 | 25.0 | 0.100 - 230 | 76.8 | 67.6 | ug/L | 12.7 | 87.0 |
| N-Nitrosodiphenylamine (as DPA | 1142237 | 21.8 | 18.5 | 25.0 | 49.3 - 94.2 | 87.2 | 74.0 | ug/L | 16.4 | 50.0 |
| p-Chloro-m-Cresol (4-Chloro-3-me | 1142237 | 19.7 | 17.5 | 25.0 | 22.0 - 147 | 78.8 | 70.0 | ug/L | 11.8 | 70.0 |
| Pentachlorobenzene | 1142237 | 17.4 | 14.8 | 25.0 | 39.3 - 93.7 | 69.6 | 59.2 | ug/L | 16.1 | 50.0 |
| Pentachlorophenol | 1142237 | 15.3 | 12.9 | 25.0 | 14.0 - 176 | 61.2 | 51.6 | ug/L | 17.0 | 86.0 |

# QUALITY CONTROL



## GBRL-C

GBRA/Seguin
Miliana Hernandez
Regional Laboratory
933 E. Court St
Seguin, TX 78155-5819

Project
1120706

Printed 10/23/2024

### LCS Dup

| Parameter | PrepSet | LCS | LCSD | Known | Limits% | LCS% | LCSD% | Units | RPD | Limit% |
|---|---|---|---|---|---|---|---|---|---|---|
| Phenanthrene | 1142237 | 21.9 | 18.9 | 25.0 | 54.0 - 120 | 87.6 | 75.6 | ug/L | 14.7 | 39.0 |
| Phenol | 1142237 | 9.11 | 8.27 | 25.0 | 5.00 - 120 | 36.4 | 33.1 | ug/L | 9.50 | 64.0 |
| Pyrene | 1142237 | 21.1 | 17.4 | 25.0 | 52.0 - 120 | 84.4 | 69.6 | ug/L | 19.2 | 49.0 |
| Pyridine | 1142237 | 8.92 | 10.6 | 25.0 | 11.2 - 50.6 | 35.7 | 42.4 | ug/L | 17.2 | 50.0 |

### Surrogate

| Parameter | Sample | Type | Reading | Known | Units | Recover% | Limits% | File |
|---|---|---|---|---|---|---|---|---|
| 2,4,6-Tribromophenol | 627231 | CCV | 48100 | 100000 | ug/L | 48.1 | 10.0 - 150 | 126888785 |
| 2-Fluorophenol-SURR | 627231 | CCV | 49600 | 100000 | ug/L | 49.6 | 10.0 - 150 | 126888785 |
| 4-Terphenyl-d14-SURR | 627231 | CCV | 40200 | 50000 | ug/L | 80.4 | 30.0 - 150 | 126888785 |
| Nitrobenzene-d5-SURR | 627231 | CCV | 48800 | 50000 | ug/L | 97.6 | 30.0 - 150 | 126888785 |
| Phenol-d6-SURR | 627231 | CCV | 50900 | 100000 | ug/L | 50.9 | 10.0 - 150 | 126888785 |
| 2,4,6-Tribromophenol | 1142237 | Blank | 41.2 | 100 | ug/L | 41.2 | 10.0 - 150 | 126888786 |
| 2,4,6-Tribromophenol | 1142237 | LCS | 60.6 | 100 | ug/L | 60.6 | 10.0 - 150 | 126888787 |
| 2,4,6-Tribromophenol | 1142237 | LCS Dup | 50.4 | 100 | ug/L | 50.4 | 10.0 - 150 | 126888788 |
| 2-Fluorophenol-SURR | 1142237 | Blank | 34500 | 100000 | ug/L | 34.5 | 10.0 - 150 | 126888786 |
| 2-Fluorophenol-SURR | 1142237 | LCS | 42300 | 100000 | ug/L | 42.3 | 10.0 - 150 | 126888787 |
| 2-Fluorophenol-SURR | 1142237 | LCS Dup | 40300 | 100000 | ug/L | 40.3 | 10.0 - 150 | 126888788 |
| 4-Terphenyl-d14-SURR | 1142237 | Blank | 27900 | 50000 | ug/L | 55.8 | 30.0 - 150 | 126888786 |
| 4-Terphenyl-d14-SURR | 1142237 | LCS | 34400 | 50000 | ug/L | 68.8 | 30.0 - 150 | 126888787 |
| 4-Terphenyl-d14-SURR | 1142237 | LCS Dup | 29200 | 50000 | ug/L | 58.4 | 30.0 - 150 | 126888788 |
| Nitrobenzene-d5-SURR | 1142237 | Blank | 31100 | 50000 | ug/L | 62.2 | 30.0 - 150 | 126888786 |
| Nitrobenzene-d5-SURR | 1142237 | LCS | 35000 | 50000 | ug/L | 70.0 | 30.0 - 150 | 126888787 |
| Nitrobenzene-d5-SURR | 1142237 | LCS Dup | 31600 | 50000 | ug/L | 63.2 | 30.0 - 150 | 126888788 |
| Phenol-d6-SURR | 1142237 | Blank | 24800 | 100000 | ug/L | 24.8 | 10.0 - 150 | 126888786 |
| Phenol-d6-SURR | 1142237 | LCS | 32100 | 100000 | ug/L | 32.1 | 10.0 - 150 | 126888787 |
| Phenol-d6-SURR | 1142237 | LCS Dup | 29500 | 100000 | ug/L | 29.5 | 10.0 - 150 | 126888788 |
| 2,4,6-Tribromophenol | 2341203 | Unknown | 32.9 | 96.0 | ug/L | 34.3 | 10.0 - 150 | 126888790 |
| 2-Fluorophenol-SURR | 2341203 | Unknown | 29.4 | 96.0 | ug/L | 30.6 | 10.0 - 150 | 126888790 |
| 4-Terphenyl-d14-SURR | 2341203 | Unknown | 28.1 | 48.0 | ug/L | 58.5 | 30.0 - 150 | 126888790 |
| Nitrobenzene-d5-SURR | 2341203 | Unknown | 26.0 | 48.0 | ug/L | 54.2 | 30.0 - 150 | 126888790 |
| Phenol-d6-SURR | 2341203 | Unknown | 22.3 | 96.0 | ug/L | 23.2 | 10.0 - 150 | 126888790 |

Analytical Set 1143232 — EPA 617

### Blank

| Parameter | PrepSet | Reading | MDL | MQL | Units | File |
|---|---|---|---|---|---|---|
| Kelthane (Dicofol) | 1142304 | ND | 3.52 | 5.00 | ug/L | 126895550 |
| Methoxychlor | 1142304 | ND | 0.897 | 1.00 | ug/L | 126895550 |
| Mirex | 1142304 | ND | 0.905 | 1.00 | ug/L | 126895550 |

### CCV

| Parameter | Reading | Known | Units | Recover% | Limits% | | File |
|---|---|---|---|---|---|---|---|
| Kelthane (Dicofol) | 47.9 | 50.0 | ug/L | 95.7 | 70.0 - 130 | | 126895549 |
| Kelthane (Dicofol) | 317 | 100 | ug/L | 317 | 70.0 - 130 | * | 126895556 |
| Methoxychlor | 27.6 | 25.0 | ug/L | 110 | 70.0 - 130 | | 126895549 |

## GBRL-C

GBRA/Seguin
Miliana Hernandez
Regional Laboratory
933 E. Court St
Seguin, TX 78155-5819

Project
1120706

Printed 10/23/2024

### CCV

| Parameter | Reading | Known | Units | Recover% | Limits% | | File |
|---|---|---|---|---|---|---|---|
| Methoxychlor | 84.5 | 50.0 | ug/L | 169 | 70.0 - 130 | * | 126895556 |
| Mirex | 24.9 | 25.0 | ug/L | 99.7 | 70.0 - 130 | | 126895549 |
| Mirex | 69.1 | 50.0 | ug/L | 138 | 70.0 - 130 | * | 126895556 |

### LCS Dup

| Parameter | PrepSet | LCS | LCSD | Known | Limits% | LCS% | LCSD% | Units | RPD | Limit% |
|---|---|---|---|---|---|---|---|---|---|---|
| Kelthane (Dicofol) | 1142304 | 110 | 165 | 100 | 0.100 - 137 | 110 | 165 * | ug/L | 40.0 * | 30.0 |
| Methoxychlor | 1142304 | 92.5 | 89.8 | 100 | 21.5 - 151 | 92.5 | 89.8 | ug/L | 2.96 | 30.0 |
| Mirex | 1142304 | 63.7 | 71.3 | 100 | 11.6 - 140 | 63.7 | 71.3 | ug/L | 11.3 | 30.0 |

### Surrogate

| Parameter | Sample | Type | Reading | Known | Units | Recover% | Limits% | File |
|---|---|---|---|---|---|---|---|---|
| Decachlorobiphenyl | | CCV | 25.3 | 100 | ug/L | 25.3 | 10.0 - 150 | 126895549 |
| Decachlorobiphenyl | | CCV | 68.9 | 100 | ug/L | 68.9 | 10.0 - 150 | 126895556 |
| Tetrachloro-m-Xylene (Surr) | | CCV | 21.0 | 100 | ug/L | 21.0 | 10.0 - 150 | 126895549 |
| Tetrachloro-m-Xylene (Surr) | | CCV | 58.1 | 100 | ug/L | 58.1 | 10.0 - 150 | 126895556 |
| Decachlorobiphenyl | 1142304 | Blank | 51.5 | 100 | ug/L | 51.5 | 10.0 - 150 | 126895550 |
| Decachlorobiphenyl | 1142304 | LCS | 61.3 | 100 | ug/L | 61.3 | 10.0 - 150 | 126895551 |
| Decachlorobiphenyl | 1142304 | LCS Dup | 67.4 | 100 | ug/L | 67.4 | 10.0 - 150 | 126895552 |
| Tetrachloro-m-Xylene (Surr) | 1142304 | Blank | 47.7 | 100 | ug/L | 47.7 | 10.0 - 150 | 126895550 |
| Tetrachloro-m-Xylene (Surr) | 1142304 | LCS | 47.1 | 100 | ug/L | 47.1 | 10.0 - 150 | 126895551 |
| Tetrachloro-m-Xylene (Surr) | 1142304 | LCS Dup | 46.9 | 100 | ug/L | 46.9 | 10.0 - 150 | 126895552 |
| Decachlorobiphenyl | 2341203 | Unknown | 0.0433 | 0.096 | ug/L | 45.1 | 10.0 - 150 | 126895554 |
| Tetrachloro-m-Xylene (Surr) | 2341203 | Unknown | 0.0397 | 0.096 | ug/L | 41.4 | 10.0 - 150 | 126895554 |

Analytical Set 1143252 — ASTM D7065-11

### Blank

| Parameter | PrepSet | Reading | MDL | MQL | Units | File |
|---|---|---|---|---|---|---|
| Nonylphenol | 1143012 | ND | 5.00 | 30.0 | ug/L | 126896485 |

### CCV

| Parameter | Reading | Known | Units | Recover% | Limits% | File |
|---|---|---|---|---|---|---|
| Nonylphenol | 154000 | 150000 | ug/L | 103 | 70.0 - 130 | 126896484 |

### IS Areas

| Parameter | Sample | Type | Reading | CCVISM | Low | High | File | PrepSet |
|---|---|---|---|---|---|---|---|---|
| Acenaphthene-d10-ISTD | 626989 | CCV | 1080000 | 1080000 | 540000 | 1620000 | 126896484 | 626989 |
| Phenanthrene-d10-ISTD | 626989 | CCV | 1470000 | 1470000 | 734900 | 2205000 | 126896484 | 626989 |
| Acenaphthene-d10-ISTD | 1143012 | Blank | 665100 | 1080000 | 540000 | 1620000 | 126896485 | 1143012 |
| Acenaphthene-d10-ISTD | 1143012 | LCS | 655900 | 1080000 | 540000 | 1620000 | 126896486 | 1143012 |
| Acenaphthene-d10-ISTD | 1143012 | LCS Dup | 892100 | 1080000 | 540000 | 1620000 | 126896487 | 1143012 |
| Phenanthrene-d10-ISTD | 1143012 | Blank | 935400 | 1470000 | 734900 | 2205000 | 126896485 | 1143012 |
| Phenanthrene-d10-ISTD | 1143012 | LCS | 867100 | 1470000 | 734900 | 2205000 | 126896486 | 1143012 |
| Phenanthrene-d10-ISTD | 1143012 | LCS Dup | 1202000 | 1470000 | 734900 | 2205000 | 126896487 | 1143012 |
| Acenaphthene-d10-ISTD | 2341203 | Unknown | 611100 | 1080000 | 540000 | 1620000 | 126896490 | 1143012 |
| Phenanthrene-d10-ISTD | 2341203 | Unknown | 832200 | 1470000 | 734900 | 2205000 | 126896490 | 1143012 |

# QUALITY CONTROL

SPL The Science of Sure



## GBRL-C

GBRA/Seguin
Miliana Hernandez
Regional Laboratory
933 E. Court St
Seguin, TX 78155-5819

Project
1120706

Printed 10/23/2024

### IS RetTime

| Parameter | Sample | Type | Reading | CCVISM | Low | High | File | PrepSet |
|---|---|---|---|---|---|---|---|---|
| Acenaphthene-d10-ISTD | 626989 | CCV | 6.254 | 6.254 | 6.194 | 6.314 | 126896484 | 626989 |
| Phenanthrene-d10-ISTD | 626989 | CCV | 7.445 | 7.445 | 7.385 | 7.505 | 126896484 | 626989 |
| Acenaphthene-d10-ISTD | 1143012 | Blank | 6.254 | 6.254 | 6.194 | 6.314 | 126896485 | 1143012 |
| Acenaphthene-d10-ISTD | 1143012 | LCS | 6.254 | 6.254 | 6.194 | 6.314 | 126896486 | 1143012 |
| Acenaphthene-d10-ISTD | 1143012 | LCS Dup | 6.253 | 6.254 | 6.194 | 6.314 | 126896487 | 1143012 |
| Phenanthrene-d10-ISTD | 1143012 | Blank | 7.445 | 7.445 | 7.385 | 7.505 | 126896485 | 1143012 |
| Phenanthrene-d10-ISTD | 1143012 | LCS | 7.445 | 7.445 | 7.385 | 7.505 | 126896486 | 1143012 |
| Phenanthrene-d10-ISTD | 1143012 | LCS Dup | 7.445 | 7.445 | 7.385 | 7.505 | 126896487 | 1143012 |
| Acenaphthene-d10-ISTD | 2341203 | Unknown | 6.254 | 6.254 | 6.194 | 6.314 | 126896490 | 1143012 |
| Phenanthrene-d10-ISTD | 2341203 | Unknown | 7.445 | 7.445 | 7.385 | 7.505 | 126896490 | 1143012 |

### LCS Dup

| Parameter | PrepSet | LCS | LCSD | Known | Limits% | LCS% | LCSD% | Units | RPD | Limit% |
|---|---|---|---|---|---|---|---|---|---|---|
| Nonylphenol | 1143012 | 109 | 147 | 150 | 56.0 - 112 | 72.7 | 98.0 | ug/L | 29.6 | 30.0 |

### Surrogate

| Parameter | Sample | Type | Reading | Known | Units | Recover% | Limits% | File |
|---|---|---|---|---|---|---|---|---|
| 4-Nonylphenol-SURR | 626989 | CCV | 27600 | 25000 | ug/L | 110 | 50.0 - 130 | 126896484 |
| 4-Nonylphenol-SURR | 1143012 | Blank | 19700 | 25000 | ug/L | 78.8 | 50.0 - 130 | 126896485 |
| 4-Nonylphenol-SURR | 1143012 | LCS | 19900 | 25000 | ug/L | 79.6 | 50.0 - 130 | 126896486 |
| 4-Nonylphenol-SURR | 1143012 | LCS Dup | 18400 | 25000 | ug/L | 73.6 | 50.0 - 130 | 126896487 |
| 4-Nonylphenol-SURR | 2341203 | Unknown | 16.6 | 24.0 | ug/L | 69.2 | 50.0 - 130 | 126896490 |

Analytical Set 1143253 — EPA 608.3

### Blank

| Parameter | PrepSet | Reading | MDL | MQL | Units | File |
|---|---|---|---|---|---|---|
| 4,4-DDD | 1142304 | ND | 0.731 | 1.00 | ug/L | 126896493 |
| 4,4-DDE | 1142304 | ND | 0.361 | 1.00 | ug/L | 126896493 |
| 4,4-DDT | 1142304 | ND | 0.862 | 1.00 | ug/L | 126896493 |
| Aldrin | 1142304 | ND | 0.260 | 1.00 | ug/L | 126896493 |
| Alpha-BHC(hexachlorocyclohexane) | 1142304 | ND | 0.280 | 1.00 | ug/L | 126896493 |
| Beta-BHC(hexachlorocyclohexane) | 1142304 | ND | 0.579 | 1.00 | ug/L | 126896493 |
| Delta-BHC(hexachlorocyclohexane) | 1142304 | ND | 0.898 | 1.00 | ug/L | 126896493 |
| Dieldrin | 1142304 | ND | 0.162 | 1.00 | ug/L | 126896493 |
| Endosulfan I (alpha) | 1142304 | ND | 0.679 | 1.00 | ug/L | 126896493 |
| Endosulfan II (beta) | 1142304 | ND | 0.356 | 1.00 | ug/L | 126896493 |
| Endosulfan sulfate | 1142304 | ND | 0.588 | 1.00 | ug/L | 126896493 |
| Endrin | 1142304 | ND | 0.538 | 1.00 | ug/L | 126896493 |
| Endrin aldehyde | 1142304 | ND | 0.699 | 1.00 | ug/L | 126896493 |
| Gamma-BHC(Lindane) | 1142304 | ND | 0.385 | 1.00 | ug/L | 126896493 |
| Heptachlor | 1142304 | ND | 0.207 | 1.00 | ug/L | 126896493 |
| Heptachlor epoxide | 1142304 | ND | 0.660 | 1.00 | ug/L | 126896493 |
| Toxaphene | 1142304 | ND | 0.169 | 0.200 | ug/L | 126896493 |

### CCV

| Parameter | Reading | Known | Units | Recover% | Limits% | File |
|---|---|---|---|---|---|---|

# QUALITY CONTROL



## GBRL-C

GBRA/Seguin
Miliana Hernandez
Regional Laboratory
933 E. Court St
Seguin, TX 78155-5819

Project
1120706

Printed 10/23/2024

CCV

| Parameter | Reading | Known | Units | Recover% | Limits% | | File |
|---|---|---|---|---|---|---|---|
| 4,4-DDD | 26.1 | 25.0 | ug/L | 104 | 75.0 - 125 | | 126896492 |
| 4,4-DDD | 78.3 | 50.0 | ug/L | 157 | 75.0 - 125 | * | 126896499 |
| 4,4-DDE | 31.8 | 25.0 | ug/L | 127 | 75.0 - 125 | * | 126896492 |
| 4,4-DDE | 73.4 | 50.0 | ug/L | 147 | 75.0 - 125 | * | 126896499 |
| 4,4-DDT | 26.0 | 25.0 | ug/L | 104 | 75.0 - 125 | | 126896492 |
| 4,4-DDT | 71.0 | 50.0 | ug/L | 142 | 75.0 - 125 | * | 126896499 |
| Aldrin | 24.6 | 25.0 | ug/L | 98.4 | 75.0 - 125 | | 126896492 |
| Aldrin | 68.8 | 50.0 | ug/L | 138 | 75.0 - 125 | * | 126896499 |
| Alpha-BHC(hexachlorocyclohexane) | 25.1 | 25.0 | ug/L | 100 | 75.0 - 125 | | 126896492 |
| Alpha-BHC(hexachlorocyclohexane) | 73.0 | 50.0 | ug/L | 146 | 75.0 - 125 | * | 126896499 |
| Beta-BHC(hexachlorocyclohexane) | 26.0 | 25.0 | ug/L | 104 | 75.0 - 125 | | 126896492 |
| Beta-BHC(hexachlorocyclohexane) | 74.7 | 50.0 | ug/L | 149 | 75.0 - 125 | * | 126896499 |
| Delta-BHC(hexachlorocyclohexane) | 25.9 | 25.0 | ug/L | 104 | 75.0 - 125 | | 126896492 |
| Delta-BHC(hexachlorocyclohexane) | 77.3 | 50.0 | ug/L | 155 | 75.0 - 125 | * | 126896499 |
| Dieldrin | 25.3 | 25.0 | ug/L | 101 | 75.0 - 125 | | 126896492 |
| Dieldrin | 68.1 | 50.0 | ug/L | 136 | 75.0 - 125 | * | 126896499 |
| Endosulfan I (alpha) | 25.3 | 25.0 | ug/L | 101 | 75.0 - 125 | | 126896492 |
| Endosulfan I (alpha) | 67.3 | 50.0 | ug/L | 135 | 75.0 - 125 | * | 126896499 |
| Endosulfan II (beta) | 25.3 | 25.0 | ug/L | 101 | 75.0 - 125 | | 126896492 |
| Endosulfan II (beta) | 64.6 | 50.0 | ug/L | 129 | 75.0 - 125 | * | 126896499 |
| Endosulfan sulfate | 25.6 | 25.0 | ug/L | 102 | 75.0 - 125 | | 126896492 |
| Endosulfan sulfate | 77.2 | 50.0 | ug/L | 154 | 75.0 - 125 | * | 126896499 |
| Endrin | 25.4 | 25.0 | ug/L | 102 | 75.0 - 125 | | 126896492 |
| Endrin | 71.3 | 50.0 | ug/L | 143 | 75.0 - 125 | * | 126896499 |
| Endrin aldehyde | 25.3 | 25.0 | ug/L | 101 | 75.0 - 125 | | 126896492 |
| Endrin aldehyde | 58.2 | 50.0 | ug/L | 116 | 75.0 - 125 | | 126896499 |
| Gamma-BHC(Lindane) | 24.9 | 25.0 | ug/L | 99.6 | 75.0 - 125 | | 126896492 |
| Gamma-BHC(Lindane) | 81.3 | 50.0 | ug/L | 163 | 75.0 - 125 | * | 126896499 |
| Heptachlor | 24.9 | 25.0 | ug/L | 99.6 | 75.0 - 125 | | 126896492 |
| Heptachlor | 68.0 | 50.0 | ug/L | 136 | 75.0 - 125 | * | 126896499 |
| Heptachlor epoxide | 25.3 | 25.0 | ug/L | 101 | 75.0 - 125 | | 126896492 |
| Heptachlor epoxide | 70.2 | 50.0 | ug/L | 140 | 75.0 - 125 | * | 126896499 |

LCS Dup

| Parameter | PrepSet | LCS | LCSD | Known | Limits% | LCS% | LCSD% | Units | RPD | Limit% |
|---|---|---|---|---|---|---|---|---|---|---|
| 4,4-DDD | 1142304 | 79.9 | 80.4 | 100 | 31.0 - 141 | 79.9 | 80.4 | ug/L | 0.624 | 39.0 |
| 4,4-DDE | 1142304 | 64.0 | 70.1 | 100 | 30.0 - 145 | 64.0 | 70.1 | ug/L | 9.10 | 35.0 |
| 4,4-DDT | 1142304 | 64.1 | 71.0 | 100 | 25.0 - 160 | 64.1 | 71.0 | ug/L | 10.2 | 42.0 |
| Aldrin | 1142304 | 48.8 | 53.9 | 100 | 42.0 - 140 | 48.8 | 53.9 | ug/L | 9.93 | 35.0 |
| Alpha-BHC(hexachlorocyclohexane) | 1142304 | 80.6 | 72.2 | 100 | 37.0 - 140 | 80.6 | 72.2 | ug/L | 11.0 | 36.0 |
| Beta-BHC(hexachlorocyclohexane) | 1142304 | 87.4 | 76.9 | 100 | 17.0 - 147 | 87.4 | 76.9 | ug/L | 12.8 | 44.0 |
| Delta-BHC(hexachlorocyclohexane) | 1142304 | 86.9 | 76.7 | 100 | 19.0 - 140 | 86.9 | 76.7 | ug/L | 12.5 | 52.0 |
| Dieldrin | 1142304 | 71.9 | 69.6 | 100 | 36.0 - 146 | 71.9 | 69.6 | ug/L | 3.25 | 49.0 |
| Endosulfan I (alpha) | 1142304 | 71.7 | 67.6 | 100 | 45.0 - 153 | 71.7 | 67.6 | ug/L | 5.89 | 28.0 |
| Endosulfan II (beta) | 1142304 | 44.2 | 41.2 | 100 | 0.100 - 202 | 44.2 | 41.2 | ug/L | 7.03 | 53.0 |

# QUALITY CONTROL



## GBRL-C

GBRA/Seguin
Miliana Hernandez
Regional Laboratory
933 E. Court St
Seguin, TX 78155-5819

Project
1120706

Printed 10/23/2024

### LCS Dup

| Parameter | PrepSet | LCS | LCSD | Known | Limits% | LCS% | LCSD% | Units | RPD | Limit% |
|---|---|---|---|---|---|---|---|---|---|---|
| Endosulfan sulfate | 1142304 | 78.9 | 72.1 | 100 | 26.0 - 144 | 78.9 | 72.1 | ug/L | 9.01 | 38.0 |
| Endrin | 1142304 | 76.9 | 72.4 | 100 | 30.0 - 147 | 76.9 | 72.4 | ug/L | 6.03 | 48.0 |
| Endrin aldehyde | 1142304 | 61.9 | 56.2 | 100 | 37.6 - 158 | 61.9 | 56.2 | ug/L | 9.65 | 30.0 |
| Gamma-BHC(Lindane) | 1142304 | 85.1 | 71.5 | 100 | 32.0 - 140 | 85.1 | 71.5 | ug/L | 17.4 | 39.0 |
| Heptachlor | 1142304 | 53.1 | 54.4 | 100 | 34.0 - 140 | 53.1 | 54.4 | ug/L | 2.42 | 43.0 |
| Heptachlor epoxide | 1142304 | 75.1 | 70.3 | 100 | 37.0 - 142 | 75.1 | 70.3 | ug/L | 6.60 | 26.0 |

### Surrogate

| Parameter | Sample | Type | Reading | Known | Units | Recover% | Limits% | File |
|---|---|---|---|---|---|---|---|---|
| Decachlorobiphenyl | | CCV | 25.3 | 100 | ug/L | 25.3 | 0.100 - 144 | 126896492 |
| Decachlorobiphenyl | | CCV | 68.9 | 100 | ug/L | 68.9 | 0.100 - 144 | 126896499 |
| Tetrachloro-m-Xylene (Surr) | | CCV | 21.0 | 100 | ug/L | 21.0 | 0.100 - 107 | 126896492 |
| Tetrachloro-m-Xylene (Surr) | | CCV | 58.1 | 100 | ug/L | 58.1 | 0.100 - 107 | 126896499 |
| Decachlorobiphenyl | 1142304 | Blank | 51.5 | 100 | ug/L | 51.5 | 0.100 - 144 | 126896493 |
| Decachlorobiphenyl | 1142304 | LCS | 61.3 | 100 | ug/L | 61.3 | 0.100 - 144 | 126896494 |
| Decachlorobiphenyl | 1142304 | LCS Dup | 67.4 | 100 | ug/L | 67.4 | 0.100 - 144 | 126896495 |
| Tetrachloro-m-Xylene (Surr) | 1142304 | Blank | 47.7 | 100 | ug/L | 47.7 | 0.100 - 107 | 126896493 |
| Tetrachloro-m-Xylene (Surr) | 1142304 | LCS | 47.1 | 100 | ug/L | 47.1 | 0.100 - 107 | 126896494 |
| Tetrachloro-m-Xylene (Surr) | 1142304 | LCS Dup | 46.9 | 100 | ug/L | 46.9 | 0.100 - 107 | 126896495 |
| Decachlorobiphenyl | 2341203 | Unknown | 0.0433 | 0.096 | ug/L | 45.1 | 0.100 - 144 | 126896497 |
| Tetrachloro-m-Xylene (Surr) | 2341203 | Unknown | 0.0397 | 0.096 | ug/L | 41.4 | 0.100 - 107 | 126896497 |

Analytical Set 1143577 — EPA 632

### Blank

| Parameter | PrepSet | Reading | MDL | MQL | Units | File |
|---|---|---|---|---|---|---|
| Carbaryl (Sevin) | 1142294 | ND | 66.1 | 2500 | ug/L | 126904131 |
| Diuron | 1142294 | 459 | 44.4 | 45.0 | ug/L | 126904131 |

### CCV

| Parameter | Reading | Known | Units | Recover% | Limits% | File |
|---|---|---|---|---|---|---|
| Carbaryl (Sevin) | 1070 | 1000 | ug/L | 107 | 70.0 - 130 | 126904130 |
| Carbaryl (Sevin) | 1070 | 1000 | ug/L | 107 | 70.0 - 130 | 126904134 |
| Carbaryl (Sevin) | 1070 | 1000 | ug/L | 107 | 70.0 - 130 | 126904138 |
| Carbaryl (Sevin) | 1040 | 1000 | ug/L | 104 | 70.0 - 130 | 126904142 |
| Carbaryl (Sevin) | 1120 | 1000 | ug/L | 112 | 70.0 - 130 | 126904146 |
| Carbaryl (Sevin) | 1150 | 1000 | ug/L | 115 | 70.0 - 130 | 126904150 |
| Carbaryl (Sevin) | 1180 | 1000 | ug/L | 118 | 70.0 - 130 | 126904154 |
| Diuron | 1020 | 1000 | ug/L | 102 | 70.0 - 130 | 126904130 |
| Diuron | 1020 | 1000 | ug/L | 102 | 70.0 - 130 | 126904134 |
| Diuron | 1050 | 1000 | ug/L | 105 | 70.0 - 130 | 126904138 |
| Diuron | 1050 | 1000 | ug/L | 105 | 70.0 - 130 | 126904142 |
| Diuron | 1060 | 1000 | ug/L | 106 | 70.0 - 130 | 126904146 |
| Diuron | 1130 | 1000 | ug/L | 113 | 70.0 - 130 | 126904150 |
| Diuron | 1150 | 1000 | ug/L | 115 | 70.0 - 130 | 126904154 |

## GBRL-C

GBRA/Seguin
Miliana Hernandez
Regional Laboratory
933 E. Court St
Seguin, TX 78155-5819

Project 1120706

Printed 10/23/2024

**LCS Dup**

| Parameter | PrepSet | LCS | LCSD | Known | Limits% | LCS% | LCSD% | Units | RPD | Limit% |
|---|---|---|---|---|---|---|---|---|---|---|
| Carbaryl (Sevin) | 1142294 | 982 | 1020 | 1000 | 17.1 - 131 | 98.2 | 102 | ug/L | 3.80 | 30.0 |
| Diuron | 1142294 | 375 | 278 | 1000 | 0.100 - 138 | 37.5 | 27.8 | ug/L | 29.7 | 30.0 |

Analytical Set 1143664 — EPA 615

**Blank**

| Parameter | PrepSet | Reading | MDL | MQL | Units | File |
|---|---|---|---|---|---|---|
| 2,4 Dichlorophenoxyacetic acid | 1142711 | 25.2 | 15.9 | 50.0 | ug/L | 126907218 |
| 2,4,5-TP (Silvex) | 1142711 | ND | 8.93 | 30.0 | ug/L | 126907218 |

**CCV**

| Parameter | Reading | Known | Units | Recover% | Limits% | File |
|---|---|---|---|---|---|---|
| 2,4 Dichlorophenoxyacetic acid | 147 | 150 | ug/L | 97.8 | 80.0 - 115 | 126907217 |
| 2,4 Dichlorophenoxyacetic acid | 125 | 150 | ug/L | 83.5 | 80.0 - 115 | 126907224 |
| 2,4,5-TP (Silvex) | 149 | 150 | ug/L | 99.2 | 80.0 - 115 | 126907217 |
| 2,4,5-TP (Silvex) | 134 | 150 | ug/L | 89.6 | 80.0 - 115 | 126907224 |

**LCS Dup**

| Parameter | PrepSet | LCS | LCSD | Known | Limits% | LCS% | LCSD% | Units | RPD | Limit% |
|---|---|---|---|---|---|---|---|---|---|---|
| 2,4 Dichlorophenoxyacetic acid | 1142711 | 70.7 | 72.5 | 100 | 0.100 - 319 | 70.7 | 72.5 | ug/L | 2.51 | 30.0 |
| 2,4,5-TP (Silvex) | 1142711 | 79.7 | 66.9 | 100 | 0.100 - 244 | 79.7 | 66.9 | ug/L | 17.5 | 30.0 |

**Surrogate**

| Parameter | Sample | Type | Reading | Known | Units | Recover% | Limits% | File |
|---|---|---|---|---|---|---|---|---|
| 2,4-Dichlorophenylacetic Acid | | CCV | 169 | 200 | ug/L | 79.5 | 0.100 - 313 | 126907217 |
| 2,4-Dichlorophenylacetic Acid | | CCV | 144 | 200 | ug/L | 72.0 | 0.100 - 313 | 126907224 |
| 2,4-Dichlorophenylacetic Acid | 1142711 | Blank | 131 | 200 | ug/L | 65.5 | 0.100 - 313 | 126907218 |
| 2,4-Dichlorophenylacetic Acid | 1142711 | LCS | 90.5 | 200 | ug/L | 45.2 | 0.100 - 313 | 126907219 |
| 2,4-Dichlorophenylacetic Acid | 1142711 | LCS Dup | 134 | 200 | ug/L | 67.0 | 0.100 - 313 | 126907220 |
| 2,4-Dichlorophenylacetic Acid | 2341203 | Unknown | 1.22 | 1.91 | ug/L | 63.9 | 0.100 - 313 | 126907222 |

Analytical Set 1143830 — EPA 608.3

**Blank**

| Parameter | PrepSet | Reading | MDL | MQL | Units | File |
|---|---|---|---|---|---|---|
| PCB-1016 | 1142312 | ND | 0.202 | 0.202 | ug/L | 126911481 |
| PCB-1221 | 1142312 | ND | 0.143 | 0.200 | ug/L | 126911481 |
| PCB-1232 | 1142312 | ND | 0.143 | 0.200 | ug/L | 126911481 |
| PCB-1242 | 1142312 | ND | 0.192 | 0.200 | ug/L | 126911481 |
| PCB-1248 | 1142312 | ND | 0.143 | 0.200 | ug/L | 126911481 |
| PCB-1254 | 1142312 | ND | 0.143 | 0.200 | ug/L | 126911481 |
| PCB-1260 | 1142312 | ND | 0.161 | 0.200 | ug/L | 126911481 |
| PCB-1262 | 1142312 | ND | 0.198 | 0.200 | ug/L | 126911481 |
| PCB-1268 | 1142312 | ND | 0.143 | 0.200 | ug/L | 126911481 |

**CCV**

| Parameter | Reading | Known | Units | Recover% | Limits% | | File |
|---|---|---|---|---|---|---|---|
| PCB-1016 | 1310 | 1000 | ug/L | 131 | 80.0 - 115 | * | 126911480 |

## GBRL-C

GBRA/Seguin
Miliana Hernandez
Regional Laboratory
933 E. Court St
Seguin, TX 78155-5819

Project 1120706

Printed 10/23/2024

### CCV

| Parameter | Reading | Known | Units | Recover% | Limits% | | File |
|---|---|---|---|---|---|---|---|
| PCB-1016 | 1690 | 1000 | ug/L | 169 | 80.0 - 115 | * | 126911488 |
| PCB-1016 | 1560 | 1000 | ug/L | 156 | 80.0 - 115 | * | 126911491 |
| PCB-1260 | 1190 | 1000 | ug/L | 119 | 80.0 - 115 | * | 126911480 |
| PCB-1260 | 1370 | 1000 | ug/L | 137 | 80.0 - 115 | * | 126911488 |
| PCB-1260 | 1220 | 1000 | ug/L | 122 | 80.0 - 115 | * | 126911491 |

### LCS Dup

| Parameter | PrepSet | LCS | LCSD | Known | Limits% | LCS% | LCSD% | Units | RPD | Limit% |
|---|---|---|---|---|---|---|---|---|---|---|
| PCB-1016 | 1142312 | 972 | 653 | 1000 | 39.8 - 135 | 97.2 | 65.3 | ug/L | 39.3 * | 30.0 |
| PCB-1260 | 1142312 | 863 | 612 | 1000 | 36.1 - 134 | 86.3 | 61.2 | ug/L | 34.0 * | 30.0 |

### Surrogate

| Parameter | Sample | Type | Reading | Known | Units | Recover% | Limits% | File |
|---|---|---|---|---|---|---|---|---|
| Decachlorobiphenyl | 1142312 | Blank | 51.5 | 100 | ug/L | 51.5 | 10.0 - 200 | 126911481 |
| Tetrachloro-m-Xylene (Surr) | 1142312 | Blank | 47.7 | 100 | ug/L | 47.7 | 10.0 - 200 | 126911481 |
| Decachlorobiphenyl | 2341203 | Unknown | 0.0433 | 0.096 | ug/L | 45.1 | 10.0 - 200 | 126911485 |
| Tetrachloro-m-Xylene (Surr) | 2341203 | Unknown | 0.0397 | 0.096 | ug/L | 41.4 | 10.0 - 200 | 126911485 |

Analytical Set 1143851 — EPA 622

### Blank

| Parameter | PrepSet | Reading | MDL | MQL | Units | File |
|---|---|---|---|---|---|---|
| Chlorpyrifos | 1142311 | ND | 0.0904 | 50.0 | ug/L | 126911848 |

### CCV

| Parameter | Reading | Known | Units | Recover% | Limits% | | File |
|---|---|---|---|---|---|---|---|
| Chlorpyrifos | 993 | 1000 | ug/L | 99.3 | 48.0 - 150 | | 126911847 |
| Chlorpyrifos | 1020 | 1000 | ug/L | 102 | 48.0 - 150 | | 126911857 |
| Chlorpyrifos | 1260 | 1000 | ug/L | 126 | 48.0 - 150 | | 126911861 |

### LCS Dup

| Parameter | PrepSet | LCS | LCSD | Known | Limits% | LCS% | LCSD% | Units | RPD | Limit% |
|---|---|---|---|---|---|---|---|---|---|---|
| Chlorpyrifos | 1142311 | 602 | 583 | 1000 | 0.100 - 128 | 60.2 | 58.3 | ug/L | 3.21 | 30.0 |

### Surrogate

| Parameter | Sample | Type | Reading | Known | Units | Recover% | Limits% | File |
|---|---|---|---|---|---|---|---|---|
| Tributylphosphate | | CCV | 1010 | 1000 | ug/L | 101 | 0.100 - 115 | 126911847 |
| Tributylphosphate | | CCV | 948 | 1000 | ug/L | 94.8 | 0.100 - 115 | 126911857 |
| Tributylphosphate | | CCV | 966 | 1000 | ug/L | 96.6 | 0.100 - 115 | 126911861 |
| Triphenylphosphate | | CCV | 1010 | 1000 | ug/L | 101 | 0.100 - 115 | 126911847 |
| Triphenylphosphate | | CCV | 820 | 1000 | ug/L | 82.0 | 0.100 - 115 | 126911857 |
| Triphenylphosphate | | CCV | 1230 | 1000 | ug/L | 123 * | 0.100 - 115 | 126911861 |
| Tributylphosphate | 1142311 | Blank | 617 | 1000 | ug/L | 61.7 | 0.100 - 115 | 126911848 |
| Tributylphosphate | 1142311 | LCS | 524 | 1000 | ug/L | 52.4 | 0.100 - 115 | 126911849 |
| Tributylphosphate | 1142311 | LCS Dup | 535 | 1000 | ug/L | 53.5 | 0.100 - 115 | 126911850 |
| Triphenylphosphate | 1142311 | Blank | 568 | 1000 | ug/L | 56.8 | 0.100 - 115 | 126911848 |
| Triphenylphosphate | 1142311 | LCS | 458 | 1000 | ug/L | 45.8 | 0.100 - 115 | 126911849 |

## GBRL-C

GBRA/Seguin
Miliana Hernandez
Regional Laboratory
933 E. Court St
Seguin, TX 78155-5819

Project 1120706

Printed 10/23/2024

**Surrogate**

| Parameter | Sample | Type | Reading | Known | Units | Recover% | Limits% | File |
|---|---|---|---|---|---|---|---|---|
| Triphenylphosphate | 1142311 | LCS Dup | 432 | 1000 | ug/L | 43.2 | 0.100 - 115 | 126911850 |

Analytical Set 1143853 — EPA 614

**Blank**

| Parameter | PrepSet | Reading | MDL | MQL | Units | File |
|---|---|---|---|---|---|---|
| Azinphos-methyl (Guthion) | 1142311 | ND | 41.4 | 50.0 | ug/L | 126911883 |
| Demeton | 1142311 | ND | 31.9 | 50.0 | ug/L | 126911883 |
| Diazinon | 1142311 | ND | 19.7 | 50.0 | ug/L | 126911883 |
| Malathion | 1142311 | ND | 24.8 | 50.0 | ug/L | 126911883 |
| Parathion, ethyl | 1142311 | ND | 23.9 | 50.0 | ug/L | 126911883 |
| Parathion, methyl | 1142311 | ND | 27.4 | 50.0 | ug/L | 126911883 |

**CCV**

| Parameter | Reading | Known | Units | Recover% | Limits% | File |
|---|---|---|---|---|---|---|
| Azinphos-methyl (Guthion) | 967 | 1000 | ug/L | 96.7 | 37.5 - 164 | 126911882 |
| Azinphos-methyl (Guthion) | 909 | 1000 | ug/L | 90.9 | 37.5 - 164 | 126911892 |
| Azinphos-methyl (Guthion) | 1060 | 1000 | ug/L | 106 | 37.5 - 164 | 126911896 |
| Demeton | 976 | 1000 | ug/L | 97.6 | 58.6 - 150 | 126911882 |
| Demeton | 1010 | 1000 | ug/L | 101 | 58.6 - 150 | 126911892 |
| Demeton | 909 | 1000 | ug/L | 90.9 | 58.6 - 150 | 126911896 |
| Diazinon | 971 | 1000 | ug/L | 97.1 | 65.4 - 138 | 126911882 |
| Diazinon | 1050 | 1000 | ug/L | 105 | 65.4 - 138 | 126911892 |
| Diazinon | 1240 | 1000 | ug/L | 124 | 65.4 - 138 | 126911896 |
| Malathion | 992 | 1000 | ug/L | 99.2 | 49.5 - 160 | 126911882 |
| Malathion | 1030 | 1000 | ug/L | 103 | 49.5 - 160 | 126911892 |
| Malathion | 1090 | 1000 | ug/L | 109 | 49.5 - 160 | 126911896 |
| Parathion, ethyl | 962 | 1000 | ug/L | 96.2 | 56.0 - 142 | 126911882 |
| Parathion, ethyl | 1000 | 1000 | ug/L | 100 | 56.0 - 142 | 126911892 |
| Parathion, ethyl | 839 | 1000 | ug/L | 83.9 | 56.0 - 142 | 126911896 |
| Parathion, methyl | 978 | 1000 | ug/L | 97.8 | 12.6 - 194 | 126911882 |
| Parathion, methyl | 1030 | 1000 | ug/L | 103 | 12.6 - 194 | 126911892 |
| Parathion, methyl | 683 | 1000 | ug/L | 68.3 | 12.6 - 194 | 126911896 |

**LCS Dup**

| Parameter | PrepSet | LCS | LCSD | Known | Limits% | LCS% | LCSD% | Units | RPD | Limit% |
|---|---|---|---|---|---|---|---|---|---|---|
| Azinphos-methyl (Guthion) | 1142311 | 818 | 637 | 1000 | 0.100 - 155 | 81.8 | 63.7 | ug/L | 24.9 | 30.0 |
| Demeton | 1142311 | 429 | 401 | 1000 | 0.100 - 109 | 42.9 | 40.1 | ug/L | 6.75 | 30.0 |
| Diazinon | 1142311 | 556 | 591 | 1000 | 0.100 - 125 | 55.6 | 59.1 | ug/L | 6.10 | 30.0 |
| Malathion | 1142311 | 591 | 575 | 1000 | 0.100 - 130 | 59.1 | 57.5 | ug/L | 2.74 | 30.0 |
| Parathion, ethyl | 1142311 | 619 | 621 | 1000 | 0.100 - 122 | 61.9 | 62.1 | ug/L | 0.323 | 30.0 |
| Parathion, methyl | 1142311 | 633 | 608 | 1000 | 0.100 - 131 | 63.3 | 60.8 | ug/L | 4.03 | 30.0 |

**Surrogate**

| Parameter | Sample | Type | Reading | Known | Units | Recover% | Limits% | File |
|---|---|---|---|---|---|---|---|---|
| Tributylphosphate | | CCV | 1010 | 2000 | ug/L | 50.5 | 0.100 - 106 | 126911882 |
| Tributylphosphate | | CCV | 948 | 2000 | ug/L | 47.4 | 0.100 - 106 | 126911892 |

# QUALITY CONTROL



## GBRL-C

GBRA/Seguin
Miliana Hernandez
Regional Laboratory
933 E. Court St
Seguin, TX 78155-5819

Project
1120706

Printed 10/23/2024

**Surrogate**

| Parameter | Sample | Type | Reading | Known | Units | Recover% | Limits% | File |
|---|---|---|---|---|---|---|---|---|
| Tributylphosphate | | CCV | 966 | 2000 | ug/L | 48.3 | 0.100 - 106 | 126911896 |
| Triphenylphosphate | | CCV | 1010 | 2000 | ug/L | 50.5 | 0.100 - 172 | 126911882 |
| Triphenylphosphate | | CCV | 820 | 2000 | ug/L | 41.0 | 0.100 - 172 | 126911892 |
| Triphenylphosphate | | CCV | 1230 | 2000 | ug/L | 61.5 | 0.100 - 172 | 126911896 |
| Tributylphosphate | 1142311 | Blank | 617 | 2000 | ug/L | 30.8 | 0.100 - 106 | 126911883 |
| Tributylphosphate | 1142311 | LCS | 524 | 2000 | ug/L | 26.2 | 0.100 - 106 | 126911884 |
| Tributylphosphate | 1142311 | LCS Dup | 535 | 2000 | ug/L | 26.8 | 0.100 - 106 | 126911885 |
| Triphenylphosphate | 1142311 | Blank | 568 | 2000 | ug/L | 28.4 | 0.100 - 172 | 126911883 |
| Triphenylphosphate | 1142311 | LCS | 458 | 2000 | ug/L | 22.9 | 0.100 - 172 | 126911884 |
| Triphenylphosphate | 1142311 | LCS Dup | 432 | 2000 | ug/L | 21.6 | 0.100 - 172 | 126911885 |
| Tributylphosphate | 2341203 | Unknown | 0.485 | 1.92 | ug/L | 25.3 | 0.100 - 106 | 126911887 |
| Triphenylphosphate | 2341203 | Unknown | 0.368 | 1.92 | ug/L | 19.2 | 0.100 - 172 | 126911887 |

* 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); CCB - Continuing Calibration Blank; CCV - Continuing Calibration Verification (same standard used to prepare the curve; typically a mid-range concentration; verifies the continued validity of the calibration curve); MSD - Matrix Spike Duplicate (replicate of the matrix spike; same solution and amount of target analyte added to the MS is added to a third aliquot of sample; quantifies matrix bias and precision.); LCS Dup - Laboratory Control Sample Duplicate (replicate LCS, analyzed when there is insufficient sample for duplicate or MSD; quantifies accuracy and precision.); AWRL/LOQ C - Ambient Water Reporting Limit/LOQ Check Std; BFB - Bromofluorobenzene, GC/MS Tuning Compound (mass intensity used as tuning acceptance criteria.); 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.); IS Areas - Internal Standard Area (The area of the internal stadard relative to a check standard. Internal Standard is a known concentration of an analyte(s) that is not a sample component or standard that is added to the sample and standard and is used to measure the relative responses of other analytes in the same sample or standard.); IS RetTime - Internal Standard Retention Time (the time the internal standard comes off the column. Internal Stardard is a known concentration of an analyte(s) that is not a sample component or standard that is added to the sample and standard and is used to measure the relative responses of other analytes in the same sample or standard.); ICV - Initial Calibration Verification; MRL Check - Minimum Reporting Limit Check Std; DFTPP - GC/MS Tuning Compound

1120706 CoC Print Group 001 of 001

GBRA Laboratory

GBRA COC Form

Qualtrax ID: 17988

# Chain-Of-Custody Record

| Report To | | | | | | Invoice To (if applicable) | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Name: GBRA Kylie Gudgell | | | | | | Name: | | | | | |
| Address: 933 East Court St Seguin | | | | | | Address: | | | | | |
| Phone #: 830-379-5822 | | | | | | Phone #: | | | | | |
| Email: labreports@gbra.org | | | | | | Email: labsubinvoices@gbra.org | | | | | |
| Thermometer #: | | Observed / Corrected Temp(°C): / | | | | Chlorine Check Reagent ID: | | | Chlorine : Absent/ Present | | |
| Sample Iced (Circle One): Yes / No | | CoC Page: of | | | | pH Paper Reagent ID: | | | | | |
| No. of Containers: | | Containers Intact (Circle One): Yes / No | | | | Residual Chlorine (Total/Free) Results: | | | | | |
| Date Collected | Time Collected | Matrix | Sz Vol. P=Plastic G=Glass A=Amber | Sample Name/Description | Preservation ID (PID#)/ TCEQ ID Number | Grab / Comp. | Analysis Requested | GBRA Sample ID | pH | Preservative | Sub Out |
| 10/2/2024 | 9:30 AM | WW | 2-250mL Amb P | 241002.18-02 | | C | Free Cyanide | 2341171 | | NaOH | |
| 10/4/2024 | 9:00 AM | WW | 1 - 1L G | 241002.18-02 | | C | Oil and Grease | | | H2SO4 | |
| 10/4/2024 | 9:00 AM | WW | 1- 500mL P | 241002.18-02 | | C | Al, Sb, As, Ba, Be, Cd, Cu, Pb, Hg, Ni, Se, Ag, Zn | ↓ | | HNO3 | |

Matrices: WW=Wastewater, DW=Drinking Water, SW=Surface Water, S=Sludge/Soil

Samples marked above as "Sub Out" will be subcontracted to a laboratory that meets the regulatory or end-user requirements of these samples

Expedite Samples: 24hr/Holiday (4x Fee) 48hr/Weekend (3x Fee) 3-5 days (2x Fee) Due Date:

| Sampler Name (Print): | | Sampler Signature: | |
|---|---|---|---|
| Relinquished By: GBRA Courier | Date/Time: 10/7/24 | Transferred To: Common Courier | Date/Time: 10/7/24 |
| Relinquished By: Common Courier | Date/Time: 10/7/24 1010 | Received By: | Date/Time: 10/8/24 1010 |
| Relinquished By: | Date/Time: | Received By: | Date/Time: |
| Relinquished By: | Date/Time: | Received By: | Date/Time: |

NOTES / COMMENTS / SHIP TO:
+pH tested at subcontracted lab

Status: Published
Issue Date: 12/11/2023 Revision: 3

Page1 of 1

Qualtrax ID: 17988

ORIGIN ID:NIRA (830) 379-5822
JENNIFER SANCHEZ
GUADALUPE-BLANCO RIVER AUTHORITY
933 E COURT ST
SUITE 305
SEGUIN, TX 78155
UNITED STATES US

SHIP DATE: 07OCT24
ACTWGT: 100.00 LB
CAD: 104384799/INET4535
DIMS: 36x19x15 IN

BILL SENDER

TO SPL KILGORE
ANA-LAB CORP.
2600 DUDLEY RD.

KILGORE TX 75662
(903) 984-0551 REF:
INV:
PO: DEPT:

FedEx Express

TUE - 08 OCT 5:00P
STANDARD OVERNIGHT

TRK# 0201 7790 2241 8088

AH GGGA

75662
TX-US SHV

10/8 1007 2T
Date Time Tech
Temp: 2.4 / 2.2 C
Therm#: 6444 Corr Fact: -0.2 C

Report Page 50 of 56

1120706 CoC Print Group 001 of 001

GBRA Laboratory

GBRA COC Form

Qualtrax ID: 17988

# Chain-Of-Custody Record

| Report To | Customer Acct.#: | Invoice To (If applicable) | |
|---|---|---|---|
| Name: GBRA Kylie Gudgell | | Name: | |
| Address: 933 East Court St Seguin | | Address: | |
| Phone #: 830-379-5822 | | Phone #: | |
| Email: labreports@gbra.org | | Email: labsubinvoices@gbra.org | |
| Thermometer #: | Observed / Corrected Temp(°C): / | Chlorine Check Reagent ID: | Chlorine : Absent/ Present |
| Sample Iced (Circle One): Yes / No | CoC Page: of | pH Paper Reagent ID: | |
| No. of Containers: | Containers Intact (Circle One): Yes / No | Residual Chlorine (Total/Free) Results: | |

| Date Collected | Time Collected | Matrix | Sx Vol. P=Plastic G=Glass A=Amber | Sample Name/Description | Preservation ID (PID#)/ TCEQ ID Number | Grab / Comp. | Analysis Requested | GBRA Sample ID | pH | Preservative | Sub Out |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 10/7/24 | 0730 | WW | 9 - 1 Qt Amb G | 241007.01 - 01 | | G | Routine 428 except | 234/203 | | | |
| | | WW | 2-40mL VOA | | | | Cr6+, Cr3+, Fluoride, and Nitrate | | | | |
| | | WW | 2 - 1 Qt G | | | | | | | H2SO4 | |
| | | WW | 1 - 250mL Amb G | | | | | | | H2SO4 | |
| | | WW | 1 - 500mL P | | | | | | | HNO3 | |
| | | WW | 3 - 40mL VOA | | | | | | | Na2S2O3 | |
| | | WW | 2 - 500mL G | | | | | | | HCl | |
| | | WW | 2 - 250mL Amb P | | | | | | | NaOH | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |

Matrices: WW=Wastewater, DW=Drinking Water, SW=Surface Water, S=Sludge/Soil

Samples marked above as "Sub Out" will be subcontracted to a laboratory that meets the regulatory or end-user requirements of these samples

Expedite Samples: 24hr/Holiday (4x Fee) 48hr/Weekend (3x Fee) 3-5 days (2x Fee) Due Date:

| Sampler Name (Print): | | Sampler Signature: | |
|---|---|---|---|
| Relinquished By: GBRA Common Courier | Date/Time: 10/7/24 | Transferred To: Common Courier | Date/Time: 10/7/24 |
| Relinquished By: | Date/Time: 10/8/24 | Received By: Raysham Thompson | Date/Time: 10/8/24 1010 |
| Relinquished By: | Date/Time: | Received By: | Date/Time: |
| Relinquished By: | Date/Time: | Received By: | Date/Time: |

NOTES / COMMENTS / SHIP TO:
+pH tested at subcontracted lab

Status: Published
Issue Date: 12/11/2023 Revision: 3

Page1 of 1

Qualtrax ID: 17988

1120706 CoC Print Group 001 of 001

2600 Dudley Rd. Kilgore, Texas 75662
Office: 903-984-0551 * Fax. 903-984-5914

SPL
The Science of Sure

# CHAIN OF CUSTODY

Printed 09/10/2024 Page 1 of 4

GBRA/Seguin
Miliana Hernandez
Regional Laboratory
933 E. Court St
Seguin, TX 78155-5819

GBRL-C-4
428

Lab Number _____
cc dept= LabInvoices@gbra.org
PO Number _____
Phone 830/379-5822

## Domestic Worksheet 4.0

*Hand Delivered by Client to Region or LAB*

✓

**Matrix: Non-Potable Water**

**Sample Collection Start**

Date: _____ Time: _____

Sampler Printed Name: _____

Sampler Affiliation: _____

Sampler Signature: _____

☐ Samples Radioactive? ☐ Samples Contains Dioxin? ☐ Samples Biological Hazard?

| | | | | | |
|---|---|---|---|---|---|
| | 9 | **Amber Glass Qt w/Teflon lined lid** | | | |
| | | !CPP | Permit Organophos. Pesticides | EPA 614 (7.00 days) | |
| NELAC | | !D2S | Table D-1/ D-2 Semivolatiles Exp | EPA 625.1 (7.00 days) | |
| NELAC | | !HER | Herbicides by GC | EPA 615 (7.00 days) | |
| NELAC | | !PCB | Polychlorinated Biphenyls | EPA 608.3 (7.00 days) | |
| NELAC | | !PPR | TTO Pesticides | EPA 608.3 (7.00 days) | |
| z | | #MDR | For use with !PPR only | EPA 617 (7.00 days) | |
| NELAC | | 402E | For use with EXP !CPP only | EPA 622 (7.00 days) | |
| | | HXPE | Hexachlorophene Expansion | EPA 604.1 CAS:70-30-4 (7.00 days) | |
| | | TBTE | Butyltin Expansion | TX 1001 (14.0 days) | |
| NELAC | | TYLC | Carbaryl/Diuron | EPA 632 (7.00 days) | |
| | 2 | **Glass Vial 40 mL (Zero Headspace) w/Teflon lined lid** | | | |
| NELAC | Short Hold | $AAE | Acrolein/Acrylonitrile Exp. | EPA 624.1 (3.00 days) | |
| | 2 | **H2SO4 to pH <2 GlQt w/Tef-lined lid** | | | |
| | | NYPE | Nonyl Phenol Expansion | ASTM D7065-11 (14.0 days) | |

2600 Dudley Rd. Kilgore, Texas 75662
Office: 903-984-0551 * Fax: 90 -984-5914

SPL
The Science of Sure

# CHAIN OF CUSTODY

Printed 09/10/2024 Page 2 of 4

GBRA/Seguin
Miliana Hernandez
Regional Laboratory
933 E. Court St
Seguin, TX 78155-5819

GBRL-C-4
428

cc dept= LabInvoices@gbra.org

Phone 830/379-5822

## 1 H2SO4 to pH <2 Amber Glass 250 mL w/Teflon lined lid

| | | | | |
|---|---|---|---|---|
| NELAC | | Phns | Phenolics, Total Recoverable | EPA 420.4 1 (28.0 days) |

## 0 Z -- No bottle required

| | | | | |
|---|---|---|---|---|
| | | CKLM | Check Limits | |
| NELAC | Short Hold | Cr+3 | Trivalent Chromium | Calculation CAS:16065-83-1 (1.00 days) |
| | | HgKt | LL Mercury Test Prep | |

## 1 HNO3 to pH <2 Polyethylene 500 mL for Metals

| | | | | |
|---|---|---|---|---|
| NELAC | | *AgM | Silver, Total | EPA 200.8 5.4 CAS:7440-22-4 (180 days) |
| NELAC | | *AlM | Aluminum, Total | EPA 200.8 5.4 CAS:7429-90-5 (180 days) |
| NELAC | | *AsM | Arsenic, Total | EPA 200.8 5.4 CAS:7440-38-2 (180 days) |
| NELAC | | *BaM | Barium, Total | EPA 200.8 5.4 CAS:7440-39-3 (180 days) |
| NELAC | | *BeM | Beryllium, Total | EPA 200.8 5.4 CAS:7440-41-7 (180 days) |
| NELAC | | *CdM | Cadmium, Total | EPA 200.8 5.4 CAS:7440-43-9 (180 days) |
| NELAC | | *CrM | Chromium, Total | EPA 200.8 5.4 CAS:7440-47-3 (180 days) |
| NELAC | | *CuM | Copper, Total | EPA 200.8 5.4 CAS:7440-50-8 (180 days) |
| NELAC | | *NiM | Nickel, Total | EPA 200.8 5.4 CAS:7440-02-0 (180 days) |
| NELAC | | *PbM | Lead, Total | EPA 200.8 5.4 CAS:7439-92-1 (180 days) |
| NELAC | | *SbM | Antimony, Total | EPA 200.8 5.4 CAS:7440-36-0 (180 days) |
| NELAC | | *SeM | Selenium, Total | EPA 200.8 5.4 CAS:7782-49-2 (180 days) |
| NELAC | | *TlM | Thallium, Total | EPA 200.8 5.4 CAS:7440-28-0 (180 days) |
| NELAC | | *ZnM | Zinc, Total | EPA 200.8 5.4 CAS:7440-66-6 (180 days) |
| | | 301L | Liquid Metals Digestion | EPA 200.2 2.8 (180 days) |

## 3 Na2S2O3 (0.008%) Glass 40 mL vial w/Teflon lined lid (zero headspace)

2600 Dudley Rd. Kilgore, Texas 75662
Office: 903-984-0551 * Fax: 903-984-5914

SPL
The Science of Sure

# CHAIN OF CUSTODY

Printed 09/10/2024 Page 3 of 4

GBRA/Seguin
Miliana Hernandez
Regional Laboratory
933 E. Court St
Seguin, TX 78155-5819

GBRL-C-4
428

cc dept= LabInvoices@gbra.org

Phone 830/379-5822

| | | | | |
|---|---|---|---|---|
| | Short Hold | ID2V | Table D-1/D-2 Volatile Expansion | EPA 624.1 (3.00 days) |

**1 Glass /clean metals w/HCl**

| | | | | |
|---|---|---|---|---|
| NELAC | | *Hg | Mercury, Total (low level) | EPA 245.7 2 CAS:7439-97-6 (90.0 days) |
| NELAC | | 245I | Low Level Mercury Liquid Metals | EPA 245.7 2 (90.0 days) |

**2 NaOH to pH >12 Polyethylene 250 mL/amber**

| | | | | |
|---|---|---|---|---|
| NELAC | | CNa | Cyanide, total | SM 4500-CN⁻ E-2016 (14.0 days) |
| NELAC | | CN-A | Cyanide - Available/Amenable | SM 4500-CN⁻ G-2016 (14.0 days) |
| NELAC | | CNCl | Cyanide After Chlorination | SM 4500-CN⁻ G-2016 (14.0 days) |

**1 Polyethylene Quart**

| | | | | |
|---|---|---|---|---|
| NELAC | | IBL | Fluoride | EPA 300.0 2.1 (28.0 days) |
| NELAC | Short Hold | IN3L | Nitrate-Nitrogen Total | EPA 300.0 2.1 CAS:14797-55-8 (2.00 days) |
| NELAC | Short Hold | Cr+6 | Hexavalent Chromium | SM 3500-Cr B-2011 CAS:18540-29-9 (1.00 days) |

Do Not analyze Subbed to Closer lab. KG 100724

Ambient Conditions/Comments

| Date Time | Relinquished | | Date Time | Received | |
|---|---|---|---|---|---|
| | Printed Name | Affiliation | | Printed Name | Affiliation |
| | Signature | | | Signature | |
| | Printed Name | Affiliation | | Printed Name | Affiliation |
| | Signature | | | Signature | |
| | Printed Name | Affiliation | | Printed Name | Affiliation |
| | Signature | | | Signature | |
| | Printed Name | Affiliation | | Printed Name | Affiliation |
| | Signature | | | Signature | |

ORIGIN ID:NRA (830) 379-5822
JENNIFER SANCHEZ
GUADALUPE-BLANCO RIVER AUTHORITY
933 E COURT ST
SUITE 305
SEGUIN, TX 78155
UNITED STATES US

SHIP DATE: 07OCT24
ACTWGT: 75.00 LB
CAD: 104384799/INET4535
DIMS: 24x14x14 IN
BILL SENDER

TO SPL KILGORE
ANA-LAB CORP.
2600 DUDLEY RD.

KILGORE TX 75662
(903) 984-0551
INV:
PO:
REF:
DEPT:

FedEx Express

TUE - 08 OCT 5:00P
STANDARD OVERNIGHT

TRK# 7790 2254 5636
0201

AH GGGA

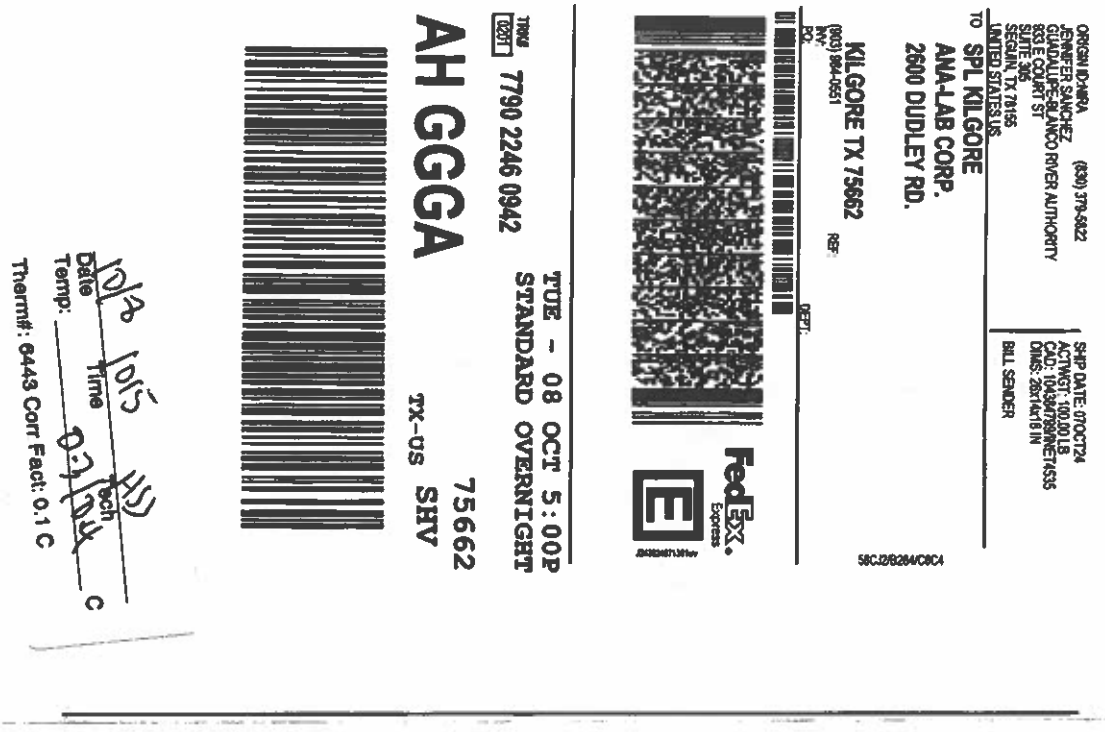
75662
TX-US SHV

10/8/2015 KW
Date Time Tech
Temp: 11.2 C
Therm#: 6443 Corr Fact: 0.1 C

After printing this label:
CONSIGNEE COPY - PLEASE PLACE IN FRONT OF POUCH
1. Fold the printed page along the horizontal line.
2. Place label in shipping pouch and affix it to your shipment.

Use of this system constitutes your agreement to the service conditions in the current FedEx Service Guide, available on fedex.com. FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery, misdelivery, or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim. Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental, consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss. Maximum for items of extraordinary value is $1,000, e.g. jewelry, precious metals, negotiable instruments and other items listed in our Service Guide. Written claims must be filed within strict time limits, see current FedEx Service Guide.

*1120706 CoC Print Group 001 of 001*




After printing this label:
**CONSIGNEE COPY - PLEASE PLACE IN FRONT OF POUCH**
1. Fold the printed page along the horizontal line.
2. Place label in shipping pouch and affix it to your shipment.

Use of this system constitutes your agreement to the service conditions in the current FedEx Service Guide, available on fedex.com. FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery, misdelivery, or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim. Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental, consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss. Maximum for items of extraordinary value is $1,000, e.g. jewelry, precious metals, negotiable instruments and other items listed in our Service Guide. Written claims must be filed within strict time limits, see current FedEx Service Guide.

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



Project
1123466

## GBRL-C

GBRA/Seguin
Miliana Hernandez
Regional Laboratory
933 E. Court St
Seguin, TX 78155-5819

Printed 10/30/2024
14:20

# TABLE OF CONTENTS

**split**

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


| Report Name | Description | Pages |
|---|---|---|
| **1123466_r02_01_ProjectSamples** | SPL Kilgore Project P:1123466 C:GBRL Project Sample Cross Reference t:304 | 1 |
| **1123466_r03_03_ProjectResults** | SPL Kilgore Project P:1123466 C:GBRL Project Results t:304 PO: acc dept= LabInvoices@gbra.org | 2 |
| **1123466_r10_05_ProjectQC** | SPL Kilgore Project P:1123466 C:GBRL Project Quality Control Groups | 1 |
| **1123466_r99_09_CoC__1_of_1** | SPL Kilgore CoC GBRL 1123466_1_of_1 | 2 |
| | **Total Pages:** | **6** |

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

1 2 3 4 5

# SAMPLE CROSS REFERENCE

Project
1123466

Printed 10/30/2024 Page 1 of 1

GBRA/Seguin
Miliana Hernandez
Regional Laboratory
933 E. Court St
Seguin, TX 78155-5819

| Sample | Sample ID | Taken | Time | Received |
|---|---|---|---|---|
| 2345480 | *24101016-01* | 10/10/2024 | | 10/17/2024 |

Bottle 01 Glass /clean metals w/HCl
Bottle 02 Prepared Bottle: Mercury Preparation for Metals (Batch 1144323) Volume: 50.00000 mL <== Derived from 01 ( 47 ml )

| Method | Bottle | PrepSet | Preparation | QcGroup | Analytical |
|---|---|---|---|---|---|
| EPA 245.7 2 | 02 | 1144323 | 10/24/2024 | 1144444 | 10/24/2024 |

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



# GBRL-C



Project
1123466

GBRA/Seguin
Miliana Hernandez
Regional Laboratory
933 E. Court St
Seguin, TX 78155-5819

Printed: 10/30/2024

*split*

## RESULTS

### Sample Results

**2345480** **24101016-01** *Received:* 10/17/2024

Non-Potable Water *Collected by:* Client GBRA/Seguin *PO:* dept= LabInvoices@gbra.org
*Taken:* 10/10/2024

*EPA 245.7 2* *Prepared:* 1144323 10/24/2024 09:00:00 *Analyzed* 1144444 10/24/2024 11:19:00 MPI

| | Parameter | Results | Units | RL | Flags | CAS | Bottle |
|---|---|---|---|---|---|---|---|
| NELAC | **Mercury, Total (low level)** | **<0.00000128** | **mg/L** | 0.00000128 | | **7439-97-6** | 02 |

### Sample Preparation

**2345480** **24101016-01** *Received:* 10/17/2024

dept= LabInvoices@gbra.org

10/10/2024

*EPA 245.7 2* *Prepared:* 1144323 10/24/2024 09:00:00 *Analyzed* 1144323 10/24/2024 09:00:00 MPI

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| NELAC | **Low Level Mercury Liquid Metals** | **50/47** | **ml** | | | | 01 |

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



Project
1123466

# GBRL-C

GBRA/Seguin
Miliana Hernandez
Regional Laboratory
933 E. Court St
Seguin, TX 78155-5819

Printed: 10/30/2024

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

SPL The Science of Sure



## GBRL-C

GBRA/Seguin
Miliana Hernandez
Regional Laboratory
933 E. Court St
Seguin, TX 78155-5819

Project
1123466

Printed 10/30/2024

Analytical Set 1144444 — EPA 245.7 2

### Blank

| Parameter | PrepSet | Reading | MDL | MQL | Units | File |
|---|---|---|---|---|---|---|
| Mercury, Total (low level) | 1144323 | ND | 1.20 | 5.00 | ng/L | 126926670 |

### CCB

| Parameter | PrepSet | Reading | MDL | MQL | Units | File |
|---|---|---|---|---|---|---|
| Mercury, Total (low level) | 1144323 | 2.07 | 1.20 | 5.00 | ng/L | 126926669 |
| Mercury, Total (low level) | 1144323 | 1.87 | 1.20 | 5.00 | ng/L | 126926681 |
| Mercury, Total (low level) | 1144323 | 2.00 | 1.20 | 5.00 | ng/L | 126926693 |
| Mercury, Total (low level) | 1144444 | 1.73 | 1.20 | 5.00 | ng/L | 126926732 |

### CCV

| Parameter | Reading | Known | Units | Recover% | Limits% | File |
|---|---|---|---|---|---|---|
| Mercury, Total (low level) | 24.6 | 25 | ng/L | 98.4 | 87.0 - 113 | 126926668 |
| Mercury, Total (low level) | 24.1 | 25 | ng/L | 96.4 | 87.0 - 113 | 126926680 |
| Mercury, Total (low level) | 23.4 | 25 | ng/L | 93.6 | 87.0 - 113 | 126926692 |
| Mercury, Total (low level) | 23.7 | 25 | ng/L | 94.8 | 87.0 - 113 | 126926701 |
| Mercury, Total (low level) | 23.4 | 25 | ng/L | 93.6 | 87.0 - 113 | 126926713 |
| Mercury, Total (low level) | 23.5 | 25 | ng/L | 94.0 | 87.0 - 113 | 126926725 |
| Mercury, Total (low level) | 23.2 | 25 | ng/L | 92.8 | 87.0 - 113 | 126926731 |

### ICL

| Parameter | Reading | Known | Units | Recover% | Limits% | File |
|---|---|---|---|---|---|---|
| Mercury, Total (low level) | ND | 50 | ng/L | 0 | 90.0 - 110 | 126926666 |

### ICV

| Parameter | Reading | Known | Units | Recover% | Limits% | File |
|---|---|---|---|---|---|---|
| Mercury, Total (low level) | 24.4 | 25 | ng/L | 97.6 | 90.0 - 110 | 126926667 |

### LCS Dup

| Parameter | PrepSet | LCS | LCSD | Known | Limits% | LCS% | LCSD% | Units | RPD | Limit% |
|---|---|---|---|---|---|---|---|---|---|---|
| Mercury, Total (low level) | 1144323 | 21.6 | 21.6 | 25.0 | 76.0 - 115 | 86.4 | 86.4 | ng/L | 0 | 50.0 |

### MSD

| Parameter | Sample | MS | MSD | UNK | Known | Limits | MS% | MSD% | Units | RPD | Limit% |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Mercury, Total (low level) | 2345344 | 28.2 | 31.3 | 12.3 | 26.6 | 63.0 - 111 | 59.8 * | 71.4 | ng/L | 17.8 | 18.0 |
| Mercury, Total (low level) | 2345921 | 21.9 | 22.5 | ND | 26.6 | 63.0 - 111 | 82.3 | 84.6 | ng/L | 2.70 | 18.0 |

* 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), CCB - Continuing Calibration Blank, CCV - Continuing Calibration Verification (same standard used to prepare the curve; typically a mid-range concentration, verifies the continued validity of the calibration curve), MSD - Matrix Spike Duplicate (replicate of the matrix spike, same solution and amount of target analyte added to the MS is added to a third aliquot of sample; quantifies matrix bias and precision.), ICV - Initial Calibration Verification, LCS Dup - Laboratory Control Sample Duplicate (replicate LCS, analyzed when there is insufficient sample for duplicate or MSD, quantifies accuracy and precision.)

1123466 CoC Print Group 001 of 001

GBRA Laboratory

GBRA COC Form

Qualtrax ID: 17988

# Chain-Of-Custody Record

| Report To | | | | | | Invoice To (if applicable) | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Name: GBRA Kylie Gudgell | | | | | | Name: | | | | | |
| Address: 933 East Court St Seguin | | | | | | Address: | | | | | |
| Phone #: 830-379-5822 | | | | | | Phone #: | | | | | |
| Email: labreports@gbra.org | | | | | | Email: labsubinvoices@gbra.org | | | | | |
| Thermometer #: | | Observed / Corrected Temp(°C): / | | | | Chlorine Check Reagent ID: | | | Chlorine : Absent/ Present | | |
| Sample Iced (Circle One): Yes / No | | CoC Page: of | | | | pH Paper Reagent ID: | | | | | |
| No. of Containers: | | Containers Intact (Circle One): Yes / No | | | | Residual Chlorine (Total/Free) Results: | | | | | |
| Date Collected | Time Collected | Matrix | 8x Vol. P=Plastic G=Glass A=Amber | Sample Name/Description | Preservation ID (PID#)/ TCEQ ID Number | Grab / Comp. | Analysis Requested | 10/11/24 MMV GBRA Sample ID | pH | Preservative | Sub Out |
| 10/10/2024 | 1000 | WW | 3 -1Qt G | 241010.18-01 | | G | Low Level Mercury (from Routine 428) | ~~2443955~~ 2441139 + 1143 | | HNO3 | |

Matrices: WW=Wastewater, DW=Drinking Water, SW=Surface Water, S=Sludge/Soil

Samples marked above as "Sub Out" will be subcontracted to a laboratory that meets the regulatory or end-user requirements of these samples

Expedite Samples: 24hr/Holiday (4x Fee) 48hr/Weekend (3x Fee) 3-5 days (2x Fee) Due Date:

| Sampler Name (Print): | | Sampler Signature: | |
|---|---|---|---|
| Relinquished By: GBRA Courier | Date/Time: 10/11/24 | Transferred To: Common Courier | Date/Time: 10/10/24 |
| Relinquished By: Common Courier | Date/Time: 10/11/24 1030 | Received By: Mccgo | Date/Time: 10/11/24 1030 |
| Relinquished By: | Date/Time: | Received By: | Date/Time: |
| Relinquished By: | Date/Time: | Received By: | Date/Time: |

NOTES / COMMENTS / SHIP TO:
+pH tested at subcontracted lab
*This sample is to replace the broken bottle from sample 241 007 01-01

Status: Published
Issue Date: 12/11/2023 Revision 3

Page1 of 1

Qualtrax ID: 17988

Report Page 6 of 7

ORIGIN ID:NIRA (830) 379-5822
JENNIFER SANCHEZ
GUADALUPE-BLANCO RIVER AUTHORITY
933 E COURT ST
SUITE 305
SEGUIN, TX 78155
UNITED STATES US

SHIP DATE: 10OCT24
ACTWGT: 20.00 LB
CAD: 104384799/INET4535
DIMS: 16x14x14 IN

BILL SENDER

TO SPL KILGORE
ANA-LAB CORP.
2600 DUDLEY RD.

KILGORE TX 75662
(903) 984-0551 REF:
INV:
PO: DEPT:

FedEx Express

FRI - 11 OCT 5:00P
STANDARD OVERNIGHT

TRK# 0201 7791 3497 2431

AH GGGA

75662
TX-US SHV

10/11 1030 (HJ)
Date Time Tech
Temp: 0.6/0.7 C
Therm#: 6443 Corr Fact: 0.1 C

SAN ANTONIO TESTING LABORATORY

October 16, 2024

**Kylie Gudgell**
GBRA
2225 East Common Street
New Braunfels, TX 78130

**SATL Report No.: 2410148**
**RE: Discharge Permit**
**Project Number:** 241007.01-01

Dear Kylie Gudgell

SATL received 1 Sample(s) on 10/07/2024 for analyses identified on the chain of custody. The analyses were performed using methods indicated on the laboratory report. Any deviations observed at sample receiving are notated on the Sample Receipt Checklist and/or Chain of Custody documents attached as part of this analytical report.

Sincerely,

For San Antonio Testing Laboratory, Inc.

Marcela G. Hawk,
President

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

GBRA
2225 East Common Street
New Braunfels TX, 78130

Additional Notes:

Project Manager: Kylie Gudgell
Project: Discharge Permit
Project Number: 241007.01-01

**Reported:**
10/16/24 15:10
**Received:**
10/07/24 14:20

**Report No. 2410148**

## SAMPLE SUMMARY

Total Samples received in this work order: 1

The following samples were requested for analysis as per the CoC. Any re-runs or re-analyses requested are identified as such.

| Sample ID | Laboratory ID | Matrix | Sampling Method | Date Sampled | Date Received |
|---|---|---|---|---|---|
| 241007.01-01 | 2410148-01 | Liquid | Composite | 10/07/24 07:30 | 10/07/24 14:20 |

### Notes

All quality control samples and checks are within acceptance limits unless otherwise indicated.
Test results pertain only to those items tested.
All samples were in good condition when received by the laboratory unless otherwise noted.

GBRA
2225 East Common Street
New Braunfels TX, 78130

Additional Notes:

Project Manager: Kylie Gudgell
Project: Discharge Permit
Project Number: 241007.01-01

**Reported:**
10/16/24 15:10
**Received:**
10/07/24 14:20

**Report No. 2410148**

**Sample ID #: 241007.01-01** **Sampling Method: Composite** **Lab Sample ID #: 2410148-01**

**Sample Matrix: Liquid** **Date/Time Collected: 10/07/24 07:30**

| Analyte | Result | Units | PQL | Prep Method | Batch | Analyzed | Method | Analyst | Notes |
|---|---|---|---|---|---|---|---|---|---|
| **General Chemistry** | | | | | | | | | |
| Hexavalent Chromium * | <0.010 | mg/L | 0.010 | I-1230-85 | B442211 | 10/08/24 12:30 | I-1230-85 | SG | |
| **Total Metals By ICP** | | | | | | | | | P2 |
| Chromium * | <0.010 | mg/L | 0.010 | EPA 200.7 | B441177 | 10/08/24 14:47 | EPA 200.7 | SJ | |
| **Trivalent Chromium (Calculated)** | | | | | | | | | |
| Trivalent Chromium | <0.0100 | mg/L | 0.0100 | [CALC] | [CALC] | 10/08/24 14:47 | CALC | SG | |

GBRA
2225 East Common Street
New Braunfels TX, 78130

Additional Notes:

Project Manager: Kylie Gudgell
Project: Discharge Permit
Project Number: 241007.01-01

**Reported:**
10/16/24 15:10
**Received:**
10/07/24 14:20

**Report No. 2410148**

## General Chemistry - Quality Control

| Analyte | Result | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| **Batch B442211 - I-1230-85** | | | | | | | | | |
| **Blank (B442211-BLK1)** | | | | Prepared: 10/08/24 12:00 | | Analyzed: 10/08/24 12:00 | | | |
| Hexavalent Chromium | <0.010 | 0.010 | mg/L | | | | | | |
| **LCS (B442211-BS1)** | | | | Prepared: 10/08/24 12:00 | | Analyzed: 10/08/24 12:00 | | | |
| Hexavalent Chromium | 0.397 | 0.010 | mg/L | 0.400 | | 99 | 90-110 | | |
| **LCS Dup (B442211-BSD1)** | | | | Prepared: 10/08/24 12:00 | | Analyzed: 10/08/24 12:00 | | | |
| Hexavalent Chromium | 0.405 | 0.010 | mg/L | 0.400 | | 101 | 90-110 | 2 | 20 |
| **Duplicate (B442211-DUP1)** | | **Source: 2410148-01** | | Prepared: 10/08/24 12:00 | | Analyzed: 10/08/24 12:45 | | | |
| Hexavalent Chromium | <0.010 | 0.010 | mg/L | | <0.010 | | | | 20 |
| **Matrix Spike (B442211-MS1)** | | **Source: 2410148-01** | | Prepared: 10/08/24 12:00 | | Analyzed: 10/08/24 12:45 | | | |
| Hexavalent Chromium | 0.390 | 0.010 | mg/L | 0.400 | <0.010 | 97 | 80-120 | | |
| **Matrix Spike Dup (B442211-MSD1)** | | **Source: 2410148-01** | | Prepared: 10/08/24 12:00 | | Analyzed: 10/08/24 12:45 | | | |
| Hexavalent Chromium | 0.387 | 0.010 | mg/L | 0.400 | <0.010 | 97 | 80-120 | 0.8 | 20 |

## Total Metals By ICP - Quality Control

| Analyte | Result | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| **Batch B441177 - EPA 200.7** | | | | | | | | | |
| **Blank (B441177-BLK1)** | | | | Prepared: 10/08/24 09:15 | | Analyzed: 10/08/24 12:23 | | | |
| Chromium | <0.010 | 0.010 | mg/L | | | | | | |
| **LCS (B441177-BS1)** | | | | Prepared: 10/08/24 09:15 | | Analyzed: 10/08/24 12:35 | | | |
| Chromium | 2.08 | 0.010 | mg/L | 2.00 | | 104 | 85-115 | | |
| **LCS Dup (B441177-BSD1)** | | | | Prepared: 10/08/24 09:15 | | Analyzed: 10/08/24 12:41 | | | |
| Chromium | 2.08 | 0.010 | mg/L | 2.00 | | 104 | 85-115 | 0.05 | 20 |
| **Duplicate (B441177-DUP1)** | | **Source: 2410149-01** | | Prepared: 10/08/24 09:15 | | Analyzed: 10/09/24 12:39 | | | |
| Chromium | 0.000600 | 0.010 | mg/L | | 0.000700 | | | 15 | 20 |
| **Matrix Spike (B441177-MS1)** | | **Source: 2410149-01** | | Prepared: 10/08/24 09:15 | | Analyzed: 10/09/24 13:00 | | | |
| Chromium | 2.06 | 0.010 | mg/L | 2.00 | 0.000700 | 103 | 75-125 | | |

GBRA
2225 East Common Street
New Braunfels TX, 78130

Additional Notes:

Project Manager: Kylie Gudgell
Project: Discharge Permit
Project Number: 241007.01-01

**Reported:**
10/16/24 15:10
**Received:**
10/07/24 14:20

**Report No. 2410148**

## Total Metals By ICP - Quality Control

| Analyte | Result | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| **Batch B441177 - EPA 200.7** | | | | | | | | | |
| **Matrix Spike Dup (B441177-MSD1)** | | **Source: 2410149-01** | | Prepared: 10/08/24 09:15 Analyzed: 10/09/24 13:05 | | | | | |
| Chromium | 2.06 | 0.010 | mg/L | 2.00 | 0.000700 | 103 | 75-125 | 0.3 | 20 |

**SAMPLE QUALIFIERS**

P2 Samples received at pH<2

**DEFINITIONS**

| | |
|---|---|
| * | TNI / NELAC accredited analyte |
| PQL | Practical Quantitation Limit |
| MCL | Maximum Contaminant Level |
| mg/Kg | Milligrams per Kilogram (Parts per Million) |
| mg/L | Milligrams per Liter (Parts per Million) |
| PPM | Parts per Million |
| L | LCS recovery is outside QC acceptance limits, the results may have a slight bias. |
| M | MS recovery is outside QC limits, the results may have a slight bias due to possible matrix interferences. |
| NR | Not Recovered due to source sample concentration exceeds spiked concentration. |
| RMCCL | Recommended Maximum Concentration of Contaminants Level |
| Surr L | Surrogate recovery is low outside QC limits. |
| Surr H | Surrogate recovery is high outside QC limits. |
| HT | Sample received past holdtime |
| IC | Improper Container for this analyte(s) |
| IP | Improper preservation for this analyte(s) |
| IT | Improper Temperature |
| V | Inssuficient Volume |
| B | Sample collected in Bulk |
| S | RPD is outside QC limits. |
| AB | VOA Vial contained air bubbles. |
| OP | ortho-Phosphate was not filtered in the field within 15minutes of collection. |
| CCV | Continuing Calibration Verification Standard. |
| ICV | Initial Calibration Verification Standard. |

Test Methods followed by the laboratory are referenced in the following approved methodology, unless otherwise specified.

Standard Methods for the Examination of Water and Wastewater, 23rd Edition, 2017
Methods for Chemical Analysis of Water and Wastes, EPA 600/4-79-020, Rev. March 1983
EPA SW Test Methods for the Examination of Solid Waste, SW-846, 1996

SAN ANTONIO TESTING LABORATORY

# LABORATORY REPORT

GBRA
2225 East Common Street
New Braunfels TX, 78130

Additional Notes:

Project Manager: Kylie Gudgell
Project: Discharge Permit
Project Number: 241007.01-01

**Reported:**
10/16/24 15:10
**Received:**
10/07/24 14:20

**Report No. 2410148**

Aimee Landon For Marissa Esquivel, Lab Manager For

Marcela G. Hawk, President

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

GBRA Laboratory

GBRA COC Form

Qualtrax ID: 17988

GBRA
Guadalupe-Blanco River Authority

# Chain-Of-Custody Record

2410148

ACCREDITED IN ACCORDANCE WITH nelac

| Report To | Customer Acct.#: | Invoice To (if applicable) | |
|---|---|---|---|
| Name: GBRA Kylie Gudgell | | Name: | |
| Address: 933 East Court St Seguin | | Address: | |
| Phone #: 830-379-5822 | | Phone #: | |
| Email: labreports@gbra.org | | Email: labsubinvoices@gbra.org | |
| Thermometer #: 9 | Observed / Corrected Temp(°C): 8.8C / 8.8°C with CF | Chlorine Check Reagent ID: | Chlorine : Absent/ Present |
| Sample Iced (Circle One): (Yes) / No | CoC Page: of | pH Paper Reagent ID: | |
| No. of Containers: 2 | Containers Intact (Circle One): (Yes) / No | Residual Chlorine (Total/Free) Results: | |

| Date Collected | Time Collected | Matrix | Sx Vol. P=Plastic G=Glass A=Amber | Sample Name/Description | Preservation ID (PID#)/ TCEQ ID Number | Grab / Comp. | Analysis Requested | GBRA Sample ID | pH | Preservative | Sub Out |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 10/7/24 | 0730 | WW | 1-125mL | 241007.01-01 | | C | Trivalent and Hexavalent | | | NaOH | |
| 1 | 1 | WW | 1-125mL | 1 | | C | Chromium | | | H2SO4 | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |

Page 75 of 86

Matrices: WW=Wastewater, DW=Drinking Water, SW=Surface Water, S=Sludge/Soil

Samples marked above as "Sub Out" will be subcontracted to a laboratory that meets the regulatory or end-user requirements of these samples

Expedite Samples: 24hr/Holiday (4x Fee) 48hr/Weekend (3x Fee) 3-5 days (2x Fee) Due Date:

| Sampler Name (Print): | | Sampler Signature: | |
|---|---|---|---|
| Relinquished By: GBRA | Date/Time: 10/7/24 1420 | Transferred To: Aimee Landon-STL | Date/Time: OCT 07 2024 1420 |
| Relinquished By: | Date/Time: | Received By: | Date/Time: |
| Relinquished By: | Date/Time: | Received By: | Date/Time: |
| Relinquished By: | Date/Time: | Received By: | Date/Time: |

NO... COMMENTS / SHIP TO:
+pH ...ed at subcontracted lab

Page 7 of 8

Status: Published
Issue Date: 12/11/2023 Revision: 3



Qualtrax ID: 17988

SAN ANTONIO TESTING LABORATORY

# Sample Receipt Checklist

| | |
|---|---|
| **Client: GBRA** | **Project Manager: Marissa Esquivel** |
| **Project: Discharge Permit** | **Project Number: 241007.01-01** |

**Report To:**
Kylie Gudgell

**SATL Report Number: 2410148**

Work Order Due by: 10/16/24 17:00 (7 day TAT)
Received By: Aimee Landon — Date Received: 10/07/24 14:20
Logged In By: Aimee Landon — Date Logged In: 10/07/24 14:33

| | |
|---|---|
| Sample(s) Received on ICE/evidence of Ice (cooler with melted ice,etc): | *Yes* |
| Sample temperature at receipt *: | *8.8°C* |
| Custody Seals Present: | *No* |
| All containers intact: | *Yes* |
| Sample labels/COC agree: | *Yes* |
| Samples Received within Holding time : | *Yes* |
| Samples appropriately preserved **: | *Yes* |
| Containers received broken/damaged/leaking: | *No* |
| Air bubbles present in VOA vials for VOC/TPH analyses, if applicable: | *Not Applicable* |
| TRRP 13 Reporting requested? | *No* |
| BacT Sample bottles filled to volume (100mL mark), if applicable: | *Not Applicable* |
| LCR Sample bottles filled to volume (1 Liter mark), if applicable: | *Not Applicable* |
| Subcontracting required for any analyses: | *No* |
| RUSH turnaround time requested: | *No* |
| Requested Turnaround Time: | *No* |
| Samples delivered via : | *Hand Delivered* |
| Air bill included if Samples were shipped: | *No* |
| Other deviations not meeting SATL sample acceptance criteria notated on CoC: | *None* |

*Notes:*
** Samples delivered to the laboratory on the same day that they are collected may not meet thermal preservation criteria (>0°C but <6°C) but are acceptable, if they arrive on ice.*
*** If improperly preserved, notate client authorization on CoC to proceed with analysis.*

Checked By : *Aimee Landon* Date : *10/07/24 14:20*

SATL#FO001
Revised 09/15/2022

# 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: Click to enter text.

### *Table 4.0(1) – Toxics Analysis*

| Pollutant | AVG Effluent Conc. (µg/l) | MAX Effluent Conc. (µg/l) | Number of Samples | MAL (µg/l) |
|---|---|---|---|---|
| Acrylonitrile | | | | 50 |
| Aldrin | | | | 0.01 |
| Aluminum | | | | 2.5 |
| Anthracene | | | | 10 |
| Antimony | | | | 5 |
| Arsenic | | | | 0.5 |
| Barium | | | | 3 |
| Benzene | | | | 10 |
| Benzidine | | | | 50 |
| Benzo(a)anthracene | | | | 5 |
| Benzo(a)pyrene | | | | 5 |
| Bis(2-chloroethyl)ether | | | | 10 |
| Bis(2-ethylhexyl)phthalate | | | | 10 |
| Bromodichloromethane | | | | 10 |
| Bromoform | | | | 10 |
| Cadmium | | | | 1 |
| Carbon Tetrachloride | | | | 2 |
| Carbaryl | | | | 5 |
| Chlordane* | | | | 0.2 |
| Chlorobenzene | | | | 10 |
| Chlorodibromomethane | | | | 10 |

| Pollutant | AVG Effluent Conc. (µg/l) | MAX Effluent Conc. (µg/l) | Number of Samples | MAL (µg/l) |
|---|---|---|---|---|
| Chloroform | | | | 10 |
| Chlorpyrifos | | | | 0.05 |
| Chromium (Total) | | | | 3 |
| Chromium (Tri) **(*1)** | | | | N/A |
| Chromium (Hex) | | | | 3 |
| Copper | | | | 2 |
| Chrysene | | | | 5 |
| p-Chloro-m-Cresol | | | | 10 |
| 4,6-Dinitro-o-Cresol | | | | 50 |
| p-Cresol | | | | 10 |
| Cyanide **(*2)** | | | | 10 |
| 4,4'- DDD | | | | 0.1 |
| 4,4'- DDE | | | | 0.1 |
| 4,4'- DDT | | | | 0.02 |
| 2,4-D | | | | 0.7 |
| Demeton (O and S) | | | | 0.20 |
| Diazinon | | | | 0.5/0.1 |
| 1,2-Dibromoethane | | | | 10 |
| m-Dichlorobenzene | | | | 10 |
| o-Dichlorobenzene | | | | 10 |
| p-Dichlorobenzene | | | | 10 |
| 3,3'-Dichlorobenzidine | | | | 5 |
| 1,2-Dichloroethane | | | | 10 |
| 1,1-Dichloroethylene | | | | 10 |
| Dichloromethane | | | | 20 |
| 1,2-Dichloropropane | | | | 10 |
| 1,3-Dichloropropene | | | | 10 |
| Dicofol | | | | 1 |
| Dieldrin | | | | 0.02 |
| 2,4-Dimethylphenol | | | | 10 |
| Di-n-Butyl Phthalate | | | | 10 |
| Diuron | | | | 0.09 |
| Endosulfan I (alpha) | | | | 0.01 |

| Pollutant | AVG Effluent Conc. (µg/l) | MAX Effluent Conc. (µg/l) | Number of Samples | MAL (µg/l) |
|---|---|---|---|---|
| Endosulfan II (beta) | | | | 0.02 |
| Endosulfan Sulfate | | | | 0.1 |
| Endrin | | | | 0.02 |
| Ethylbenzene | | | | 10 |
| Fluoride | | | | 500 |
| Guthion | | | | 0.1 |
| Heptachlor | | | | 0.01 |
| Heptachlor Epoxide | | | | 0.01 |
| Hexachlorobenzene | | | | 5 |
| Hexachlorobutadiene | | | | 10 |
| Hexachlorocyclohexane (alpha) | | | | 0.05 |
| Hexachlorocyclohexane (beta) | | | | 0.05 |
| gamma-Hexachlorocyclohexane (Lindane) | | | | 0.05 |
| Hexachlorocyclopentadiene | | | | 10 |
| Hexachloroethane | | | | 20 |
| Hexachlorophene | | | | 10 |
| Lead | | | | 0.5 |
| Malathion | | | | 0.1 |
| Mercury | | | | 0.005 |
| Methoxychlor | | | | 2 |
| Methyl Ethyl Ketone | | | | 50 |
| Mirex | | | | 0.02 |
| Nickel | | | | 2 |
| Nitrate-Nitrogen | | | | 100 |
| Nitrobenzene | | | | 10 |
| N-Nitrosodiethylamine | | | | 20 |
| N-Nitroso-di-n-Butylamine | | | | 20 |
| Nonylphenol | | | | 333 |
| Parathion (ethyl) | | | | 0.1 |
| Pentachlorobenzene | | | | 20 |
| Pentachlorophenol | | | | 5 |
| Phenanthrene | | | | 10 |

| Pollutant | AVG Effluent Conc. (µg/l) | MAX Effluent Conc. (µg/l) | Number of Samples | MAL (µg/l) |
|---|---|---|---|---|
| Polychlorinated Biphenyls (PCB's) (*3) | | | | 0.2 |
| Pyridine | | | | 20 |
| Selenium | | | | 5 |
| Silver | | | | 0.5 |
| 1,2,4,5-Tetrachlorobenzene | | | | 20 |
| 1,1,2,2-Tetrachloroethane | | | | 10 |
| Tetrachloroethylene | | | | 10 |
| Thallium | | | | 0.5 |
| Toluene | | | | 10 |
| Toxaphene | | | | 0.3 |
| 2,4,5-TP (Silvex) | | | | 0.3 |
| Tributyltin (see instructions for explanation) | | | | 0.01 |
| 1,1,1-Trichloroethane | | | | 10 |
| 1,1,2-Trichloroethane | | | | 10 |
| Trichloroethylene | | | | 10 |
| 2,4,5-Trichlorophenol | | | | 50 |
| TTHM (Total Trihalomethanes) | | | | 10 |
| Vinyl Chloride | | | | 10 |
| Zinc | | | | 5 |

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

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

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

## Section 2. Priority Pollutants

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

Grab ☐ Composite ☐

Date and time sample(s) collected: Click to enter text.

### *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 | | | | 5 |
| Arsenic | | | | 0.5 |
| Beryllium | | | | 0.5 |
| Cadmium | | | | 1 |
| Chromium (Total) | | | | 3 |
| Chromium (Hex) | | | | 3 |
| Chromium (Tri) (*1) | | | | N/A |
| Copper | | | | 2 |
| Lead | | | | 0.5 |
| Mercury | | | | 0.005 |
| Nickel | | | | 2 |
| Selenium | | | | 5 |
| Silver | | | | 0.5 |
| Thallium | | | | 0.5 |
| Zinc | | | | 5 |
| Cyanide (*2) | | | | 10 |
| Phenols, Total | | | | 10 |

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

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

### *Table 4.0(2)B – Volatile Compounds*

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

### *Table 4.0(2)C – Acid Compounds*

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

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

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

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

### *Table 4.0(2)E - Pesticides*

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

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

Name of Point: City of Lockhart Wastewater Plant(FM20) Monthly Operating Report for the FM 20 East Plant August 2024. Permit No. WQ0010210-002

| Date | Air Temp *F | Prec. in " | FLOW EFF. gpd | RAW SEWAGE TSS mg/L | RAW SEWAGE BOD mg/L | RAW SEWAGE PH | FINAL EFFLUENT E-Coli #/100ML daily | Avg. WKLY E-Coli #/100ML | PH mg/L | DO mg/L | NH3(C) mg/L | NH3(C) lbs/ day | BOD(C) mg/L | BOD(C) lbs/ day | TSS(C) mg/L | TSS(C) lbs/ day | TSS(G) mg/L | Avg. WKLY NH3(C) mg/L | Avg. WKLY BOD(C) mg/L | Avg. WKLY BOD(C) lbs/dy | Avg. WKLY TSS(C) mg/L | Avg. WKLY TSS(C) lbs/dy | 2 Hour Peak Flow |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 81 | 0 | 0.6390 | 180 | 253.00 | 7.40 | 1.0 | | 7.78 | 7.83 | 0.10 | 0.53 | 1 | 5.33 | 1.80 | 9.59 | 3.00 | 0.10 | 2.00 | 11.00 | 2.00 | 11.27 | |
| 2 | 82 | 0 | 0.7205 | | | | 18.4 | | | 7.83 | | 0.00 | | 0.00 | | 0.00 | | | | | | | |
| 3 | 90 | 0 | 0.6101 | | | | 4.1 | | | | | 0.00 | | 0.00 | | 0.00 | | | | | | | |
| 4 | 88 | 0 | 0.6963 | | | | 6.1 | | | | | 0.00 | | 0.00 | | 0.00 | | | | | | | |
| 5 | 82 | 0 | 0.8265 | | | | 3.0 | | | 7.63 | | 0.00 | | 0.00 | | 0.00 | | | | | | | |
| 6 | 86 | 0 | 0.7748 | 100 | | 7.31 | 5.0 | | 7.72 | 8.17 | | 0.00 | | 0.00 | | 0.00 | 5.67 | | | | | | |
| 7 | 84 | 0 | 0.7801 | | | | 4.0 | 6 | | 7.94 | 0.10 | 0.65 | 1 | 6.51 | 2.00 | 13.01 | | | | | | | |
| 8 | 84 | 0 | 0.7971 | 108 | 195.00 | 7.41 | 5.1 | | 7.81 | 7.59 | 0.10 | 0.66 | 2 | 13.30 | 2.40 | 15.95 | 2.67 | 0.10 | 1.50 | 9.90 | 2.20 | 14.48 | |
| 9 | 85 | 0.7 | 0.6628 | | | | 2.0 | | | 7.70 | | 0.00 | | 0.00 | | 0.00 | | | | | | | |
| 10 | 80 | 0 | 0.6006 | | | | 1.0 | | | | | 0.00 | | 0.00 | | 0.00 | | | | | | | |
| 11 | 83 | 0 | 0.6913 | | | | 3.0 | | | | | 0.00 | | 0.00 | | 0.00 | | | | | | | |
| 12 | 83 | 0 | 0.8084 | 104 | | 7.21 | 5.1 | | 7.84 | | | 0.00 | | 0.00 | | 0.00 | 4.00 | | | | | | |
| 13 | 82 | 0 | 0.7261 | | | | 5.0 | | | 7.74 | | 0.00 | | 0.00 | | 0.00 | | | | | | | |
| 14 | 86 | 0 | 0.6115 | | | | 3.0 | 3 | | 7.46 | 0.10 | 0.51 | 5 | 25.50 | 2.30 | 11.73 | | | | | | | |
| 15 | 82 | 0 | 0.6287 | 72 | 168.00 | 7.38 | 4.0 | | 7.87 | 7.50 | 0.10 | 0.52 | 2 | 10.49 | 1.90 | 9.96 | 2.00 | 0.10 | 3.50 | 17.99 | 2.10 | 10.85 | |
| 16 | 84 | 0 | 0.6341 | | | | 44.8 | | | 7.66 | | 0.00 | | 0.00 | | 0.00 | | | | | | | |
| 17 | 84 | 0 | 0.5912 | | | | 1.0 | | | | | 0.00 | | 0.00 | | 0.00 | | | | | | | |
| 18 | 84 | 0 | 0.7644 | | | | 4.0 | | | | | 0.00 | | 0.00 | | 0.00 | | | | | | | |
| 19 | 83 | 0 | 0.7882 | | | | 5.1 | | | 7.66 | | 0.00 | | 0.00 | | 0.00 | | | | | | | |
| 20 | 84 | 0 | 0.7119 | 72 | | 7.54 | 5.0 | | 7.82 | 7.57 | | 0.00 | | 0.00 | | 0.00 | 2.33 | | | | | | |
| 21 | 91 | 0 | 0.6550 | | | | 1.0 | 9 | | | 0.19 | 1.04 | 2 | 10.93 | 1.80 | 9.83 | | | | | | | |
| 22 | 85 | 0 | 0.7275 | 112 | 61.00 | 7.51 | 5.0 | | 7.84 | 7.52 | 0.30 | 1.82 | 2 | 12.13 | 2.40 | 14.56 | 2.00 | 0.25 | 2.00 | 11.53 | 2.10 | 12.20 | |
| 23 | 84 | 0.6 | 0.6899 | | | | 1.0 | | | | | 0.00 | | 0.00 | | 0.00 | | | | | | | 2.2 |
| 24 | 85 | 0 | 0.5833 | | | | 1.0 | | | | | 0.00 | | 0.00 | | 0.00 | | | | | | | 0.5 |
| 25 | 89 | 0 | 0.5906 | | | | 3.0 | | | | | 0.00 | | 0.00 | | 0.00 | | | | | | | 0.8 |
| 26 | 78 | 0.3 | 0.7907 | | | | 2.0 | | | | | 0.00 | | 0.00 | | 0.00 | | | | | | | 1.4 |
| 27 | 74 | 0.1 | 0.8216 | 244 | | 7.47 | 2.0 | | 7.70 | | | 0.00 | | 0.00 | | 0.00 | 4.00 | | | | | | 0.8 |
| 28 | 81 | 0.6 | 0.7996 | | | | 1.0 | 2 | | 7.65 | 0.10 | 0.67 | 4 | 26.67 | 2.20 | 14.67 | | | | | | | 1.5 |
| 29 | 81 | 0 | 0.7291 | 96 | | 7.38 | 1.0 | | 7.68 | 7.50 | 0.10 | 0.61 | 2 | 12.16 | 1.30 | 7.90 | 3.33 | 0.10 | 3.00 | 19.42 | 1.75 | 11.29 | 1.4 |
| 30 | 81 | 0 | 0.7795 | | | | 3.0 | | | | | 0.00 | | 0.00 | | 0.00 | | | | | | | 1.75 |
| 31 | 78 | 0 | 0.5906 | | | | 3.0 | | | | | 0.00 | | 0.00 | | 0.00 | | | | | | | 1.2 |
| Total | | 2.3 | 21.8210 | 1088 | 677 | 66.61 | geomean | geomean | 70.06 | 122.95 | 1.19 | 7.02 | 21.00 | 123.01 | 18.10 | 107.22 | 29.00 | 0.65 | 12.00 | 69.84 | 10.15 | 60.08 | 11.55 |
| AVG. | 83 | 0.07 | 0.7039 | 120.89 | 169.25 | 7.40 | 3.0 | 4.49 | 7.78 | 7.68 | 0.13 | 0.78 | 2.3 | 13.67 | 2.01 | 11.91 | 3.22 | 0.13 | 2.40 | 13.97 | 2.03 | 12.02 | 891 |
| Max | | | 0.8265 | | | | 44.8 | | 7.87 | | 0.30 | 1.82 | 5.0 | 26.7 | 2.40 | 15.95 | | | | | | | |
| Min | | | 0.5833 | | | | | | 7.68 | 7.46 | | | | | | | | | | | | | |

0.7484 Ann. Avg parameter

2hr 3125

Signature of Certified _____ Certificate No.: #_____

GBRA
Guadalupe-Blanco River Authority

Your Trusted
Water Resource

2225 E. Common Street
New Braunfels, TX 78130
830-379-5822

GBRA.ORG

January 16, 2024

Ms. Francesca Findlay
Application Review and Processing Team (MC148)
TCEQ - Water Quality Division
PO Box 13087
Austin, TX 78711-3087

Re: Application to Renew, for Permit No.: WQ0010210002 (EPA I.D. No. TX0113565)
Applicant Name: City of Lockhart (CN600245195); Guadalupe-Blanco River Authority (CN601180565)
Site Name: Lockhart WWTP 2 (RN101325926)
Type of Application: Renewal without changes

**VIA EMAIL – Francesca.Findlay@tceq.texas.gov**

Dear Ms. Findlay:

In response to your letter dated January 16, 2025, addressed to Mr. Eduardo Montana, Division Manager, GBRA. I am offering the following response to your complete our application.

1. Core Data Form, Section III, items 27-28: are completed with copies of the corrected pages attached to this letter.

2. The physical mailing address for the City of Lockhart is 308 W. San Antonio St., Lockhart, TX 78644

3. The check number for the application payment is 330987, drawn on First United Bank, Seguin, TX in the amount of $2,015.00 and dated 12/12/24. I have attached a copy of the payment for your file.

4. We found no additions or corrections to the NORI paragraghs sent with item 4. Also attached is a WORD document of the NORI translated in Spanish per your request.

Sincerely,

Mary C Newman
Executive Assistant

Enclosures as stated

CC: Mr. David Harris, GBRA
Mr. Hunter Duncan, GBRA
Mr. Eduardo Montana, GBRA

Guadalupe-Blanco River Authority
2225 E Common Street
New Braunfels, TX 78130
(830) 379-5822

*330987*

Check Number 330987
Check Date 12/12/2024
Vendor Account No. DWC 48136
Vendor No. 2486

**TCEQ MC 214**
**CASHIER'S OFFICE**
**PO BOX 13088 MC-214**
**AUSTIN, TX 78711-3088**

| Invoice No. | Net Amount Paid | Invoice No. | Net Amount Paid |
|---|---|---|---|
| LOCKHARTFM20 APP FEE | 2015 | | 0 |

TCEQ MC 214

| Total | $2,015.00 |
|---|---|

GBRA
Guadalupe-Blanco River Authority

Guadalupe-Blanco River Authority
2225 E Common Street
New Braunfels, TX 78130
(830) 379-5822

This Check is Protected By™
CheckGuard

First United Bank
Seguin, TX

Disbursing Fund

Check Number
330987

| CHECK DATE | CHECK AMOUNT |
|---|---|
| 12/12/2024 | $**2,015.00 |

$2,015.00
DOLLAR TWO THOUSAND ZERO ONE FIVE PERIOD ZERO ZERO

TWO THOUSAND FIFTEEN DOLLARS AND 0 CENTS

Payee TCEQ MC 214

TO THE ORDER OF

TCEQ MC 214
CASHIER'S OFFICE
PO BOX 13088 MC-214
AUSTIN, TX 78711-3088

*** Non Negotiable ***

*** Office Copy ***

| ( 830 ) 379-5822 | | ( ) - |
|---|---|---|

## SECTION III: Regulated Entity Information

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

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

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

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

Lockhart Wastewater Treatment Facility No. 2

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **23. Street Address of the Regulated Entity:** ***(No PO Boxes)*** | 167 Creekview | | | | | | | |
| | **City** | Lockhart | **State** | TX | **ZIP** | 78644 | **ZIP + 4** | |
| **24. County** | Caldwell | | | | | | | |

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

| | | | | | |
|---|---|---|---|---|---|
| **25. Description to Physical Location:** | | | | | |
| **26. Nearest City** | | | **State** | **Nearest ZIP Code** | |
| | | | | | |

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

| **27. Latitude (N) In Decimal:** | | | **28. Longitude (W) In Decimal:** | | |
|---|---|---|---|---|---|
| Degrees | Minutes | Seconds | Degrees | Minutes | Seconds |
| 29 | 52' | 14.0412" | 97 | 37' | 10.9272" |

| **29. Primary SIC Code** (4 digits) | **30. Secondary SIC Code** (4 digits) | **31. Primary NAICS Code** (5 or 6 digits) | **32. Secondary NAICS Code** (5 or 6 digits) |
|---|---|---|---|
| 4952 | | 221320 | |

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

Wastewater Treatment Facility

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **34. Mailing Address:** | **2225 E. Common Street** | | | | | | | |
| | **City** | **New Braunfels** | **State** | **TX** | **ZIP** | **78130** | **ZIP + 4** | |
| **35. E-Mail Address:** | **dnichols@gbra.org** | | | | | | | |

| **36. Telephone Number** | **37. Extension or Code** | **38. Fax Number** *(if applicable)* |
|---|---|---|
| **( 830 ) 379-5822** | | ( ) - |

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

| ( 512 ) 398-3461 | | ( ) - |
|---|---|---|

## SECTION III: Regulated Entity Information

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

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

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

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

Lockhart Wastewater Treatment Facility No. 2

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **23. Street Address of the Regulated Entity:** ***(No PO Boxes)*** | 167 Creekview | | | | | | | |
| | **City** | Lockhart | **State** | TX | **ZIP** | 78644 | **ZIP + 4** | |
| **24. County** | Caldwell | | | | | | | |

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

| | | | | | |
|---|---|---|---|---|---|
| **25. Description to Physical Location:** | | | | | |
| **26. Nearest City** | | | **State** | | **Nearest ZIP Code** |
| | | | | | |

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

| **27. Latitude (N) In Decimal:** | | | **28. Longitude (W) In Decimal:** | | |
|---|---|---|---|---|---|
| Degrees | Minutes | Seconds | Degrees | Minutes | Seconds |
| 29 | 52' | 14.0412" | 97 | 37' | 10.9272" |

| **29. Primary SIC Code** (4 digits) | **30. Secondary SIC Code** (4 digits) | **31. Primary NAICS Code** (5 or 6 digits) | **32. Secondary NAICS Code** (5 or 6 digits) |
|---|---|---|---|
| 4952 | | 221320 | |

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

Wastewater Treatment Facility

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **34. Mailing Address:** | **P.O. Box 239** | | | | | | | |
| | **City** | **Lockhart** | **State** | **TX** | **ZIP** | **78644** | **ZIP + 4** | |
| **35. E-Mail Address:** | **lwhite@lockhart-tx.org** | | | | | | | |

| **36. Telephone Number** | **37. Extension or Code** | **38. Fax Number** *(if applicable)* |
|---|---|---|
| **( 512 ) 398-3461** | | ( ) - |

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

APLICACIÓN. Ciudad de Lockhart y Autoridad del Río Guadalupe-Blanco, P.O. Box 239, Lockhart, Texas 78644, ha solicitado a la Comisión de Calidad Ambiental de Texas (TCEQ) para renovar el Permiso No. WQ0010210002 (No. de identificación de la EPA. TX0113565) autorizar el vertido de aguas residuales tratadas a un volumen que no exceda un flujo promedio anual de 1,500,000 galones por día. El servicio doméstico La planta de tratamiento de aguas residuales está ubicada en 167 Creekview, en la ciudad de Lockhart, en Caldwell Condado, Texas 78644. La ruta de descarga es desde el sitio de la planta hasta Plum Creek. TCEQ recibido esta solicitud el 14 de enero de 2025. La solicitud de permiso estará disponible para su visualización y copiando en la Biblioteca Dr. Eugene Clark, 217 South Main Street, Lockhart, en el condado de Caldwell, Texas antes de la fecha en que este aviso se publique en el periódico. La solicitud, que incluye Cualquier actualización y avisos asociados están disponibles electrónicamente en la siguiente página web: https://www.tceq.texas.gov/permitting/wastewater/pending-permits/tpdes-applications. Éste enlace a un mapa electrónico de la ubicación general del sitio o instalación se proporciona como un cortesía y no forma parte de la solicitud o notificación. Para conocer la ubicación exacta, consulte la aplicación.
https://gisweb.tceq.texas.gov/LocationMapper/?marker=-97.624166,29.873333&level=18

**APPLICATION.** City of Lockhart and Guadalupe-Blanco River Authority, P.O. Box 239, Lockhart, Texas 78644, has applied to the Texas Commission on Environmental Quality (TCEQ) to renew Texas Pollutant Discharge Elimination System (TPDES) Permit No. WQ0010210002 (EPA I.D. No. TX0113565) to authorize the discharge of treated wastewater at a volume not to exceed an annual average flow of 1,500,000 gallons per day. The domestic wastewater treatment facility is located at 167 Creekview, in the city of Lockhart, in Caldwell County, Texas 78644. The discharge route is from the plant site to Plum Creek. TCEQ received this application on January 14, 2025. The permit application will be available for viewing and copying at Dr. Eugene Clark Library, 217 South Main Street, Lockhart, in Caldwell 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=-97.624166,29.873333&level=18

The application indicates that public notices in Spanish are required. After confirming the portion of the NORI above does not contain any errors or omissions, please use the attached template to translate the NORI into Spanish. Only the first and last paragraphs are unique to this application and require translation. Please provide the translated Spanish NORI in a Microsoft Word document.

Please submit the complete response, addressed to my attention by January 30, 2025. If you should have any questions, please do not hesitate to contact me by phone at (512) 239-2441 or by email at Francesca.Findlay@tceq.texas.gov

Sincerely,

Fran Findlay

Francesca Findlay
Application Review and Processing Team (MC148)
Water Quality Division
Texas Commission of Environmental Quality

f.f.

Enclosure(s)

cc: Mr. David Harris, Executive Manager of Operations, Guadalupe-Blanco River Authority, 2225 East Common Street, New Braufels, Texas 78130

APLICACIÓN. Ciudad de Lockhart y Autoridad del Río Guadalupe-Blanco, P.O. Box 239, Lockhart, Texas 78644, ha solicitado a la Comisión de Calidad Ambiental de Texas (TCEQ) para renovar el Permiso No. WQ0010210002 (No. de identificación de la EPA. TX0113565) autorizar el vertido de aguas residuales tratadas a un volumen que no exceda un flujo promedio anual de 1,500,000 galones por día. El servicio doméstico La planta de tratamiento de aguas residuales está ubicada en 167 Creekview, en la ciudad de Lockhart, en Caldwell Condado, Texas 78644. La ruta de descarga es desde el sitio de la planta hasta Plum Creek. TCEQ recibido esta solicitud el 14 de enero de 2025. La solicitud de permiso estará disponible para su visualización y copiando en la Biblioteca Dr. Eugene Clark, 217 South Main Street, Lockhart, en el condado de Caldwell, Texas antes de la fecha en que este aviso se publique en el periódico. La solicitud, que incluye Cualquier actualización y avisos asociados están disponibles electrónicamente en la siguiente página web: https://www.tceq.texas.gov/permitting/wastewater/pending-permits/tpdes-applications. Éste enlace a un mapa electrónico de la ubicación general del sitio o instalación se proporciona como un cortesía y no forma parte de la solicitud o notificación. Para conocer la ubicación exacta, consulte la aplicación.
https://gisweb.tceq.texas.gov/LocationMapper/?marker=-97.624166,29.873333&level=18

## Francesca Findlay

**From:** Mary Newman <mnewman@gbra.org>
**Sent:** Thursday, January 16, 2025 5:39 PM
**To:** Francesca Findlay
**Cc:** David Harris; Hunter Duncan; Eduardo Montana
**Subject:** Permit Renewal Application WQ0010210002 FM20 City of Lockhart
**Attachments:** 2025 01 16 FM20 Application response.pdf; Core Data Section III - Updated items 27 and 28.pdf; Application Payment Copy 330987 12.12.24.pdf; NORI - Approval and pdf of Spanish translation.pdf; FM20 NORI - Spanish.docx

Good evening Francesca: Please see my response attached to complete our application. I will be mailing the original and two copies of our response to your attention.

Please feel free to contact me should you require any additional changes.

GBRA
Guadalupe-Blanco River Authority

**Mary Newman**
Executive Assistant
**o** (830) 379-5822 ext. 525
**c** (830) 305-7347

2225 E. Common Street
New Braunfels TX 78130

TPDES PERMIT NO.
WQ0010210002
*[For TCEQ office use only - EPA I.D. No. TX0113565]*

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

This is a renewal that replaces TPDES Permit No. WQ0010210002 issued on July 30, 2020.

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

City of Lockhart and Guadalupe-Blanco River Authority

whose mailing address is

P.O. Box 239
Lockhart, Texas 78644

is authorized to treat and discharge wastes from the Lockhart Wastewater Treatment Facility No. 2, SIC Code 4952

located at 167 Creekview, in Caldwell County, Texas 78644

directly to Plum Creek in Segment No. 1810 of the Guadalupe River Basin

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

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

ISSUED DATE:

For the Commission

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS Outfall Number 001

1. During the period beginning upon the date of issuance and lasting through the date of expiration, the permittee is authorized to discharge subject to the following effluent limitations:

   The annual average flow of effluent shall not exceed 1.50 million gallons per day (MGD), nor shall the average discharge during any two-hour period (2-hour peak) exceed 3,125 gallons per minute.

| Effluent Characteristic | Discharge Limitations | | | | Min. Self-Monitoring Requirements | |
|---|---|---|---|---|---|---|
| | Daily Avg | 7-day Avg | Daily Max | Single Grab | Report Daily Avg. & Daily Max. | |
| | mg/l (lbs/day) | mg/l | mg/l | mg/l | Measurement Frequency | Sample Type |
| Flow, MGD | Report | N/A | Report | N/A | Continuous | Totalizing Meter |
| Carbonaceous Biochemical Oxygen Demand (5-day) | 10 (125) | 15 | 25 | 35 | Two/week | Composite |
| Total Suspended Solids | 15 (188) | 25 | 40 | 60 | Two/week | Composite |
| Ammonia Nitrogen | 3 (38) | 6 | 10 | 15 | Two/week | Composite |
| *E. coli*, colony-forming units or most probable number per 100 ml | 126 | N/A | 399 | N/A | Daily | Grab |

2. The permittee shall utilize an Ultraviolet Light (UV) system for disinfection purposes. An equivalent method of disinfection may be substituted only with prior approval of the Executive Director.
3. The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units and shall be monitored once per week by grab sample.
4. There shall be no discharge of floating solids or visible foam in other than trace amounts and no discharge of visible oil.
5. Effluent monitoring samples shall be taken at the following location(s): Following the final treatment unit.
6. The effluent shall contain a minimum dissolved oxygen of 5.0 mg/l and shall be monitored twice per week by grab sample.
7. The annual average flow and maximum 2-hour peak flow shall be reported monthly.

**DEFINITIONS AND STANDARD PERMIT CONDITIONS**

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

1. Flow Measurements

    a. Annual average flow - the arithmetic average of all daily flow determinations taken within the preceding 12 consecutive calendar months. The annual average flow determination shall consist of daily flow volume determinations made by a totalizing meter, charted on a chart recorder and limited to major domestic wastewater discharge facilities with one million gallons per day or greater permitted flow.

    b. Daily average flow - the arithmetic average of all determinations of the daily flow within a period of one calendar month. The daily average flow determination shall consist of determinations made on at least four separate days. If instantaneous measurements are used to determine the daily flow, the determination shall be the arithmetic average of all instantaneous measurements taken during that month. Daily average flow determination for intermittent discharges shall consist of a minimum of three flow determinations on days of discharge.

    c. Daily maximum flow - the highest total flow for any 24-hour period in a calendar month.

    d. Instantaneous flow - the measured flow during the minimum time required to interpret the flow measuring device.

    e. 2-hour peak flow (domestic wastewater treatment plants) - the maximum flow sustained for a two-hour period during the period of daily discharge. The average of multiple measurements of instantaneous maximum flow within a two-hour period may be used to calculate the 2-hour peak flow.

    f. Maximum 2-hour peak flow (domestic wastewater treatment plants) - the highest 2-hour peak flow for any 24-hour period in a calendar month.

2. Concentration Measurements

    a. Daily average concentration - the arithmetic average of all effluent samples, composite or grab as required by this permit, within a period of one calendar month, consisting of at least four separate representative measurements.

        i. For domestic wastewater treatment plants - When four samples are not available in a calendar month, the arithmetic average (weighted by flow) of all values in the previous four consecutive month period consisting of at least four measurements shall be utilized as the daily average concentration.

ii. For all other wastewater treatment plants - When four samples are not available in a calendar month, the arithmetic average (weighted by flow) of all values taken during the month shall be utilized as the daily average concentration.

b. 7-day average concentration - the arithmetic average of all effluent samples, composite or grab as required by this permit, within a period of one calendar week, Sunday through Saturday.

c. Daily maximum concentration - the maximum concentration measured on a single day, by the sample type specified in the permit, within a period of one calendar month.

d. Daily discharge - the discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling. For pollutants with limitations expressed in terms of mass, the daily discharge is calculated as the total mass of the pollutant discharged over the sampling day. For pollutants with limitations expressed in other units of measurement, the daily discharge is calculated as the average measurement of the pollutant over the sampling day.

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

e. Bacteria concentration (*E. coli* or Enterococci) - Colony Forming Units (CFU) or Most Probable Number (MPN) of bacteria per 100 milliliters effluent. The daily average bacteria concentration is a geometric mean of the values for the effluent samples collected in a calendar month. The geometric mean shall be determined by calculating the nth root of the product of all measurements made in a calendar month, where n equals the number of measurements made; or, computed as the antilogarithm of the arithmetic mean of the logarithms of all measurements made in a calendar month. For any measurement of bacteria equaling zero, a substituted value of one shall be made for input into either computation method. If specified, the 7-day average for bacteria is the geometric mean of the values for all effluent samples collected during a calendar week.

f. Daily average loading (lbs/day) - the arithmetic average of all daily discharge loading calculations during a period of one calendar month. These calculations must be made for each day of the month that a parameter is analyzed. The daily discharge, in terms of mass (lbs/day), is calculated as (Flow, MGD x Concentration, mg/l x 8.34).

g. Daily maximum loading (lbs/day) - the highest daily discharge, in terms of mass (lbs/day), within a period of one calendar month.

3. Sample Type

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

b. Grab sample - an individual sample collected in less than 15 minutes.

4. Treatment Facility (facility) - wastewater facilities used in the conveyance, storage, treatment, recycling, reclamation and/or disposal of domestic sewage, industrial wastes, agricultural wastes, recreational wastes, or other wastes including sludge handling or disposal facilities under the jurisdiction of the Commission.

5. The term "sewage sludge" is defined as solid, semi-solid, or liquid residue generated during the treatment of domestic sewage in 30 TAC Chapter 312. This includes the solids that have not been classified as hazardous waste separated from wastewater by unit processes.

6. The term "biosolids" is defined as sewage sludge that has been tested or processed to meet Class A, Class AB, or Class B pathogen standards in 30 TAC Chapter 312 for beneficial use.

7. Bypass - the intentional diversion of a waste stream from any portion of a treatment facility.

**MONITORING AND REPORTING REQUIREMENTS**

1. Self-Reporting

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

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

2. Test Procedures

a. Unless otherwise specified in this permit, test procedures for the analysis of pollutants shall comply with procedures specified in 30 TAC §§ 319.11 - 319.12. Measurements, tests, and calculations shall be accurately accomplished in a representative manner.

b. All laboratory tests submitted to demonstrate compliance with this permit must meet the requirements of 30 TAC § 25, Environmental Testing Laboratory Accreditation and Certification.

3. Records of Results

a. Monitoring samples and measurements shall be taken at times and in a manner so as to be representative of the monitored activity.

b. Except for records of monitoring information required by this permit related to the permittee's sewage sludge or biosolids use and disposal activities, which shall be retained for a period of at least five years (or longer as required by 40 CFR Part 503), monitoring and reporting records, including strip charts and records of calibration and maintenance, copies of all records required by this permit, records of all data used to complete the application for this permit, and the certification required by 40 CFR § 264.73(b)(9) shall be retained at the facility site, or shall be readily available for review by a TCEQ representative for a period of three years from the date of the record or sample, measurement, report, application or certification. This period shall be extended at the request of the Executive Director.

c. Records of monitoring activities shall include the following:

i. date, time and place of sample or measurement;

ii. identity of individual who collected the sample or made the measurement.

iii. date and time of analysis;

iv. identity of the individual and laboratory who performed the analysis;

v. the technique or method of analysis; and

vi. the results of the analysis or measurement and quality assurance/quality control records.

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

4. Additional Monitoring by Permittee

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

5. Calibration of Instruments

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

6. Compliance Schedule Reports

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

Division (MC 224).

7. Noncompliance Notification

   a. In accordance with 30 TAC § 305.125(9) any noncompliance which may endanger human health or safety, or the environment shall be reported by the permittee to the TCEQ. Except as allowed by 30 TAC § 305.132, report of such information shall be provided orally or by facsimile transmission (FAX) to the Regional Office within 24 hours of becoming aware of the noncompliance. A written submission of such information shall also be provided by the permittee to the Regional Office and the Enforcement Division (MC 224) within five working days of becoming aware of the noncompliance. For Publicly Owned Treatment Works (POTWs), effective December 21, 2025, the permittee must submit the written report for unauthorized discharges and unanticipated bypasses that exceed any effluent limit in the permit using the online electronic reporting system available through the TCEQ website unless the permittee requests and obtains an electronic reporting waiver. The written submission shall contain a description of the noncompliance and its cause; the potential danger to human health or safety, or the environment; the period of noncompliance, including exact dates and times; if the noncompliance has not been corrected, the time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance, and to mitigate its adverse effects.

   b. The following violations shall be reported under Monitoring and Reporting Requirement 7.a.:

      i. Unauthorized discharges as defined in Permit Condition 2(g).

      ii. Any unanticipated bypass that exceeds any effluent limitation in the permit.

      iii. Violation of a permitted maximum daily discharge limitation for pollutants listed specifically in the Other Requirements section of an Industrial TPDES permit.

   c. In addition to the above, any effluent violation which deviates from the permitted effluent limitation by more than 40% shall be reported by the permittee in writing to the Regional Office and the Enforcement Division (MC 224) within 5 working days of becoming aware of the noncompliance.

   d. Any noncompliance other than that specified in this section, or any required information not submitted or submitted incorrectly, shall be reported to the Enforcement Division (MC 224) as promptly as possible. For effluent limitation violations, noncompliances shall be reported on the approved self-report form.

8. In accordance with the procedures described in 30 TAC §§ 35.301 - 35.303 (relating to Water Quality Emergency and Temporary Orders) if the permittee knows in advance of the need for a bypass, it shall submit prior notice by applying for such authorization.

9. Changes in Discharges of Toxic Substances

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

a. That any activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant listed at 40 CFR Part 122, Appendix D, Tables II and III (excluding Total Phenols) which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":

   i. One hundred micrograms per liter (100 μg/L);

   ii. Two hundred micrograms per liter (200 μg/L) for acrolein and acrylonitrile; five hundred micrograms per liter (500 μg/L) for 2,4-dinitrophenol and for 2-methyl-4,6-dinitrophenol; and one milligram per liter (1 mg/L) for antimony;

   iii. Five (5) times the maximum concentration value reported for that pollutant in the permit application; or

   iv. The level established by the TCEQ.

b. That any activity has occurred or will occur which would result in any discharge, on a nonroutine or infrequent basis, of a toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":

   i. Five hundred micrograms per liter (500 μg/L);

   ii. One milligram per liter (1 mg/L) for antimony;

   iii. Ten (10) times the maximum concentration value reported for that pollutant in the permit application; or

   iv. The level established by the TCEQ.

10. Signatories to Reports

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

11. All POTWs must provide adequate notice to the Executive Director of the following:

    a. Any new introduction of pollutants into the POTW from an indirect discharger which would be subject to CWA § 301 or § 306 if it were directly discharging those pollutants;

    b. Any substantial change in the volume or character of pollutants being introduced into that POTW by a source introducing pollutants into the POTW at the time of issuance of the permit; and

    c. For the purpose of this paragraph, adequate notice shall include information on:

       i. The quality and quantity of effluent introduced into the POTW; and

       ii. Any anticipated impact of the change on the quantity or quality of effluent to be discharged from the POTW.

**PERMIT CONDITIONS**

1. General

    a. When the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in an application or in any report to the Executive Director, it shall promptly submit such facts or information.

    b. This permit is granted on the basis of the information supplied and representations made by the permittee during action on an application, and relying upon the accuracy and completeness of that information and those representations. After notice and opportunity for a hearing, this permit may be modified, suspended, or revoked, in whole or in part, in accordance with 30 TAC Chapter 305, Subchapter D, during its term for good cause including, but not limited to, the following:

        i. Violation of any terms or conditions of this permit;

        ii. Obtaining this permit by misrepresentation or failure to disclose fully all relevant facts; or

        iii. A change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge.

    c. The permittee shall furnish to the Executive Director, upon request and within a reasonable time, any information to determine whether cause exists for amending, revoking, suspending or terminating the permit. The permittee shall also furnish to the Executive Director, upon request, copies of records required to be kept by the permit.

2. Compliance

    a. Acceptance of the permit by the person to whom it is issued constitutes acknowledgment and agreement that such person will comply with all the terms and conditions embodied in the permit, and the rules and other orders of the Commission.

    b. The permittee has a duty to comply with all conditions of the permit. Failure to comply with any permit condition constitutes a violation of the permit and the Texas Water Code or the Texas Health and Safety Code, and is grounds for enforcement action, for permit amendment, revocation, or suspension, or for denial of a permit renewal application or an application for a permit for another facility.

    c. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit.

    d. The permittee shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal or other permit violation that has a reasonable likelihood of adversely affecting human health or the environment.

    e. Authorization from the Commission is required before beginning any change in the permitted facility or activity that may result in noncompliance with any permit requirements.

    f. A permit may be amended, suspended and reissued, or revoked for cause in accordance

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

g. There shall be no unauthorized discharge of wastewater or any other waste. For the purpose of this permit, an unauthorized discharge is considered to be any discharge of wastewater into or adjacent to water in the state at any location not permitted as an outfall or otherwise defined in the Other Requirements section of this permit.

h. In accordance with 30 TAC § 305.535(a), the permittee may allow any bypass to occur from a TPDES permitted facility which does not cause permitted effluent limitations to be exceeded or an unauthorized discharge to occur, but only if the bypass is also for essential maintenance to assure efficient operation.

i. The permittee is subject to administrative, civil, and criminal penalties, as applicable, under TWC §§ 7.051 - 7.075 (relating to Administrative Penalties), 7.101 - 7.111 (relating to Civil Penalties), and 7.141 - 7.202 (relating to Criminal Offenses and Penalties) for violations including, but not limited to, negligently or knowingly violating the federal CWA §§ 301, 302, 306, 307, 308, 318, or 405, or any condition or limitation implementing any sections in a permit issued under the CWA § 402, or any requirement imposed in a pretreatment program approved under the CWA §§ 402 (a)(3) or 402 (b)(8).

3. Inspections and Entry

a. Inspection and entry shall be allowed as prescribed in the TWC Chapters 26, 27, and 28, and THSC § 361.

b. The members of the Commission and employees and agents of the Commission are entitled to enter any public or private property at any reasonable time for the purpose of inspecting and investigating conditions relating to the quality of water in the state or the compliance with any rule, regulation, permit or other order of the Commission. Members, employees, or agents of the Commission and Commission contractors are entitled to enter public or private property at any reasonable time to investigate or monitor or, if the responsible party is not responsive or there is an immediate danger to public health or the environment, to remove or remediate a condition related to the quality of water in the state. Members, employees, Commission contractors, or agents acting under this authority who enter private property shall observe the establishment's rules and regulations concerning safety, internal security, and fire protection, and if the property has management in residence, shall notify management or the person then in charge of his presence and shall exhibit proper credentials. If any member, employee, Commission contractor, or agent is refused the right to enter in or on public or private property under this authority, the Executive Director may invoke the remedies authorized in TWC § 7.002. The statement above, that Commission entry shall occur in accordance with an establishment's rules and regulations concerning safety, internal security, and fire protection, is not grounds for denial or restriction of entry to any part of the facility, but merely describes the Commission's duty to observe appropriate rules and regulations during an inspection.

4. Permit Amendment and/or Renewal

   a. The permittee shall give notice to the Executive Director as soon as possible of any planned physical alterations or additions to the permitted facility if such alterations or additions would require a permit amendment or result in a violation of permit requirements. Notice shall also be required under this paragraph when:

      i. The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in accordance with 30 TAC § 305.534 (relating to New Sources and New Dischargers); or

      ii. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants that are subject neither to effluent limitations in the permit, nor to notification requirements in Monitoring and Reporting Requirements No. 9; or

      iii. The alteration or addition results in a significant change in the permittee's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan.

   b. Prior to any facility modifications, additions, or expansions that will increase the plant capacity beyond the permitted flow, the permittee must apply for and obtain proper authorization from the Commission before commencing construction.

   c. The permittee must apply for an amendment or renewal at least 180 days prior to expiration of the existing permit in order to continue a permitted activity after the expiration date of the permit. If an application is submitted prior to the expiration date of the permit, the existing permit shall remain in effect until the application is approved, denied, or returned. If the application is returned or denied, authorization to continue such activity shall terminate upon the effective date of the action. If an application is not submitted prior to the expiration date of the permit, the permit shall expire and authorization to continue such activity shall terminate.

   d. Prior to accepting or generating wastes which are not described in the permit application or which would result in a significant change in the quantity or quality of the existing discharge, the permittee must report the proposed changes to the Commission. The permittee must apply for a permit amendment reflecting any necessary changes in permit conditions, including effluent limitations for pollutants not identified and limited by this permit.

   e. In accordance with the TWC § 26.029(b), after a public hearing, notice of which shall be given to the permittee, the Commission may require the permittee, from time to time, for good cause, in accordance with applicable laws, to conform to new or additional conditions.

   f. If any toxic effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is promulgated under CWA § 307(a) for a toxic pollutant which is present in the discharge and that standard or prohibition is more stringent than any limitation on the pollutant in this permit, this permit shall be modified or revoked and reissued to conform to the toxic effluent standard or

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

5. Permit Transfer

   a. Prior to any transfer of this permit, Commission approval must be obtained. The Commission shall be notified in writing of any change in control or ownership of facilities authorized by this permit. Such notification should be sent to the Applications Review and Processing Team (MC 148) of the Water Quality Division.

   b. A permit may be transferred only according to the provisions of 30 TAC § 305.64 (relating to Transfer of Permits) and 30 TAC § 50.133 (relating to Executive Director Action on Application or WQMP update).

6. Relationship to Hazardous Waste Activities

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

7. Relationship to Water Rights

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

8. Property Rights

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

9. Permit Enforceability

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

10. Relationship to Permit Application

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

11. Notice of Bankruptcy

    a. Each permittee shall notify the Executive Director, in writing, immediately following the filing of a voluntary or involuntary petition for bankruptcy under any chapter of Title 11 (Bankruptcy) of the United States Code (11 USC) by or against:

       i. the permittee;

       ii. an entity (as that term is defined in 11 USC, § 101(14)) controlling the permittee or listing the permit or permittee as property of the estate; or

iii. an affiliate (as that term is defined in 11 USC, § 101(2)) of the permittee.

b. This notification must indicate:

i. the name of the permittee;

ii. the permit number(s);

iii. the bankruptcy court in which the petition for bankruptcy was filed; and

iv. the date of filing of the petition.

**OPERATIONAL REQUIREMENTS**

1. The permittee shall at all times ensure that the facility and all of its systems of collection, treatment, and disposal are properly operated and maintained. This includes, but is not limited to, the regular, periodic examination of wastewater solids within the treatment plant by the operator in order to maintain an appropriate quantity and quality of solids inventory as described in the various operator training manuals and according to accepted industry standards for process control. Process control, maintenance, and operations records shall be retained at the facility site, or shall be readily available for review by a TCEQ representative, for a period of three years.

2. Upon request by the Executive Director, the permittee shall take appropriate samples and provide proper analysis in order to demonstrate compliance with Commission rules. Unless otherwise specified in this permit or otherwise ordered by the Commission, the permittee shall comply with all applicable provisions of 30 TAC Chapter 312 concerning sewage sludge or biosolids use and disposal and 30 TAC §§ 319.21 - 319.29 concerning the discharge of certain hazardous metals.

3. Domestic wastewater treatment facilities shall comply with the following provisions:

   a. The permittee shall notify the Domestic Permits Team, Domestic Wastewater Section (MC 148) of the Water Quality Division, in writing, of any facility expansion at least 90 days prior to conducting such activity.

   b. The permittee shall submit a closure plan for review and approval to the Domestic Permits Team, Domestic Wastewater Section (MC 148) of the Water Quality Division, for any closure activity at least 90 days prior to conducting such activity. Closure is the act of permanently taking a waste management unit or treatment facility out of service and includes the permanent removal from service of any pit, tank, pond, lagoon, surface impoundment and/or other treatment unit regulated by this permit.

4. The permittee is responsible for installing prior to plant start-up, and subsequently maintaining, adequate safeguards to prevent the discharge of untreated or inadequately treated wastes during electrical power failures by means of alternate power sources, standby generators, and/or retention of inadequately treated wastewater.

5. Unless otherwise specified, the permittee shall provide a readily accessible sampling point and, where applicable, an effluent flow measuring device or other acceptable means by which effluent flow may be determined.

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

7. Documentation

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

8. Facilities that generate domestic wastewater shall comply with the following provisions; domestic wastewater treatment facilities at permitted industrial sites are excluded.

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

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

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

secured.

c. Permits for domestic wastewater treatment plants are granted subject to the policy of the Commission to encourage the development of area-wide waste collection, treatment, and disposal systems. The Commission reserves the right to amend any domestic wastewater permit in accordance with applicable procedural requirements to require the system covered by this permit to be integrated into an area-wide system, should such be developed; to require the delivery of the wastes authorized to be collected in, treated by or discharged from said system, to such area-wide system; or to amend this permit in any other particular to effectuate the Commission's policy. Such amendments may be made when the changes required are advisable for water quality control purposes and are feasible on the basis of waste treatment technology, engineering, financial, and related considerations existing at the time the changes are required, exclusive of the loss of investment in or revenues from any then existing or proposed waste collection, treatment or disposal system.

9. Domestic wastewater treatment plants shall be operated and maintained by sewage plant operators holding a valid certificate of competency at the required level as defined in 30 TAC Chapter 30.

10. For Publicly Owned Treatment Works (POTWs), the 30-day average (or monthly average) percent removal for BOD and TSS shall not be less than 85%, unless otherwise authorized by this permit.

11. Facilities that generate industrial solid waste as defined in 30 TAC § 335.1 shall comply with these provisions:

a. Any solid waste, as defined in 30 TAC § 335.1 (including but not limited to such wastes as garbage, refuse, sludge from a waste treatment, water supply treatment plant or air pollution control facility, discarded materials, discarded materials to be recycled, whether the waste is solid, liquid, or semisolid), generated by the permittee during the management and treatment of wastewater, must be managed in accordance with all applicable provisions of 30 TAC Chapter 335, relating to Industrial Solid Waste Management.

b. Industrial wastewater that is being collected, accumulated, stored, or processed before discharge through any final discharge outfall, specified by this permit, is considered to be industrial solid waste until the wastewater passes through the actual point source discharge and must be managed in accordance with all applicable provisions of 30 TAC Chapter 335.

c. The permittee shall provide written notification, pursuant to the requirements of 30 TAC § 335.8(b)(1), to the Corrective Action Section (MC 127) of the Remediation Division informing the Commission of any closure activity involving an Industrial Solid Waste Management Unit, at least 90 days prior to conducting such an activity.

d. Construction of any industrial solid waste management unit requires the prior written notification of the proposed activity to the Registration and Reporting Section (MC 129) of the Permitting and Registration Support Division. No person shall dispose of industrial solid waste, including sludge or other solids from wastewater treatment processes, prior to fulfilling the deed recordation requirements of 30 TAC § 335.5.

e. The term "industrial solid waste management unit" means a landfill, surface impoundment, waste-pile, industrial furnace, incinerator, cement kiln, injection well, container, drum, salt dome waste containment cavern, or any other structure vessel, appurtenance, or other improvement on land used to manage industrial solid waste.

f. The permittee shall keep management records for all sludge (or other waste) removed from any wastewater treatment process. These records shall fulfill all applicable requirements of 30 TAC § 335 and must include the following, as it pertains to wastewater treatment and discharge:

i. Volume of waste and date(s) generated from treatment process;
ii. Volume of waste disposed of on-site or shipped off-site;
iii. Date(s) of disposal;
iv. Identity of hauler or transporter;
v. Location of disposal site; and
vi. Method of final disposal.

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

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

TCEQ Revision 06/2020

**SLUDGE PROVISIONS**

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

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

**A. General Requirements**

1. The permittee shall handle and dispose of sewage sludge or biosolids in accordance with 30 TAC § 312 and all other applicable state and federal regulations in a manner that protects public health and the environment from any reasonably anticipated adverse effects due to any toxic pollutants that may be present in the sludge or biosolids.

2. In all cases, if the person (permit holder) who prepares the sewage sludge supplies the sewage sludge to another person for land application use or to the owner or lease holder of the land, the permit holder shall provide necessary information to the parties who receive the sludge to assure compliance with these regulations.

3. The land application of processed or unprocessed chemical toilet waste, grease trap waste, grit trap waste, milk solids, or similar non-hazardous municipal or industrial solid wastes, or any of the wastes listed in this provision combined with biosolids, WTP residuals or domestic septage is prohibited unless the grease trap waste is added at a fats, oil and grease (FOG) receiving facility as part of an anaerobic digestion process.

**B. Testing Requirements**

1. Sewage sludge or biosolids shall be tested annually in accordance with the method specified in both 40 CFR Part 261, Appendix II and 40 CFR Part 268, Appendix I [Toxicity Characteristic Leaching Procedure (TCLP)] or other method that receives the prior approval of the TCEQ for the contaminants listed in 40 CFR Part 261.24, Table 1. Sewage sludge or biosolids failing this test shall be managed according to RCRA standards for generators of hazardous waste, and the waste's disposition must be in accordance with all applicable requirements for hazardous waste processing, storage, or disposal. Following failure of any TCLP test, the management or disposal of sewage sludge or biosolids at a facility other than an authorized hazardous waste processing, storage, or disposal facility shall be prohibited until such time as the permittee can demonstrate the sewage sludge or biosolids no longer exhibits the hazardous waste toxicity characteristics (as demonstrated by the results of the TCLP tests). A written report shall be provided to both the TCEQ Registration and Reporting Section (MC 129) of the Permitting and Registration Support Division and the Regional Director (MC Region 11) within seven (7) days after failing the TCLP Test.

The report shall contain test results, certification that unauthorized waste management has stopped, and a summary of alternative disposal plans that comply with RCRA standards for the management of hazardous waste. The report shall be addressed to: Director, Permitting and Registration Support Division (MC 129), Texas Commission on Environmental Quality, P.O. Box 13087, Austin, Texas 78711-3087. In addition, the permittee shall prepare an annual report on the results of all sludge toxicity testing. The permittee shall submit the following information in an annual report to the TCEQ by September 30th of each year. The permittee must submit this annual report using the online electronic reporting system available through TCEQ's website. If the permittee requests and obtains an electronic reporting waiver, the annual report can be submitted in hard copy to the TCEQ Regional Office (MC Region 11) and the Enforcement Division (MC 224).

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

TABLE 1

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

* Dry weight basis

3. Pathogen Control

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

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

Alternative 1 - The temperature of the sewage sludge that is used or disposed shall be maintained at or above a specific value for a period of time. See 30 TAC § 312.82(a)(3)(A) for specific information;

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

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

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

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

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

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

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

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

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

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

Alternative 1

i. A minimum of seven random samples of the sewage sludge shall be collected within 48 hours of the time the sewage sludge is used or disposed of during each monitoring episode for the sewage sludge.

ii. The geometric mean of the density of fecal coliform in the samples collected shall be less than either 2,000,000 MPN per gram of total solids (dry weight basis) or 2,000,000 Colony Forming Units per gram of total solids (dry weight basis).

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

i. Prior to use or disposal, all the sewage sludge must have been generated from a single location, except as provided in paragraph v. below;

ii. An independent Texas Licensed Professional Engineer must make a certification to the generator of a sewage sludge that the wastewater treatment facility generating the sewage sludge is designed to achieve one of the PSRP at the permitted design loading of the facility. The certification need only be repeated if the design loading of the facility is increased. The certification shall include a statement indicating the design meets all the applicable standards specified in Appendix B of 40 CFR Part 503;

iii. Prior to any off-site transportation or on-site use or disposal of any sewage sludge generated at a wastewater treatment facility, the chief certified operator of the wastewater treatment facility or other responsible official who manages the processes to significantly reduce pathogens at the wastewater treatment facility for the permittee, shall certify that the sewage sludge underwent at least the minimum operational requirements necessary in order to meet one of the PSRP. The acceptable processes and the minimum operational and record keeping requirements shall be in accordance with established U.S. Environmental Protection Agency final guidance;

iv. All certification records and operational records describing how the requirements of this paragraph were met shall be kept by the generator for a minimum of three years and be available for inspection by commission staff for review; and

v. If the sewage sludge is generated from a mixture of sources, resulting from a person who prepares sewage sludge from more than one wastewater treatment facility, the resulting derived product shall meet one of the PSRP, and shall meet the certification, operation, and record keeping requirements of this paragraph.

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

i. Prior to use or disposal, all the sewage sludge must have been generated from a single location, except as provided in paragraph v. below;

ii. Prior to any off-site transportation or on-site use or disposal of any sewage sludge generated at a wastewater treatment facility, the chief certified operator of the wastewater treatment facility or other responsible official who manages the processes to significantly reduce pathogens at the wastewater treatment facility for the permittee, shall certify that the sewage sludge underwent at least the minimum operational requirements necessary in order to meet one of the PSRP. The acceptable processes and the minimum operational and record keeping requirements shall be in accordance with established U.S. Environmental Protection Agency final guidance;

iii. All certification records and operational records describing how the requirements of this paragraph were met shall be kept by the generator for a minimum of three years and be available for inspection by commission staff for review;

iv. The Executive Director will accept from the U.S. Environmental Protection Agency a finding of equivalency to the defined PSRP; and

v. If the sewage sludge is generated from a mixture of sources resulting from a person who prepares sewage sludge from more than one wastewater treatment facility, the resulting derived product shall meet one of the Processes to Significantly Reduce Pathogens, and shall meet the certification, operation, and record keeping requirements of this paragraph.

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

i. Food crops with harvested parts that touch the biosolids/soil mixture and are totally above the land surface shall not be harvested for 14 months after application of biosolids.

ii. Food crops with harvested parts below the surface of the land shall not be harvested for 20 months after application of biosolids when the biosolids remain on the land surface for 4 months or longer prior to incorporation into the soil.

iii. Food crops with harvested parts below the surface of the land shall not be harvested for 38 months after application of biosolids when the biosolids remain on the land surface for less than 4 months prior to incorporation into the soil.

iv. Food crops, feed crops, and fiber crops shall not be harvested for 30 days after application of biosolids.

v. Domestic livestock shall not be allowed to graze on the land for 30 days after application of biosolids.

vi. Turf grown on land where biosolids are applied shall not be harvested for 1 year after application of the biosolids when the harvested turf is placed on either land with a high potential for public exposure or a lawn.

vii. Public access to land with a high potential for public exposure shall be restricted for 1 year after application of biosolids.

viii. Public access to land with a low potential for public exposure shall be restricted

for 30 days after application of biosolids.

ix. Land application of biosolids shall be in accordance with the buffer zone requirements found in 30 TAC § 312.44.

4. Vector Attraction Reduction Requirements

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

Alternative 1 - The mass of volatile solids in the sewage sludge shall be reduced by a minimum of 38%.

Alternative 2 - If Alternative 1 cannot be met for an anaerobically digested sludge, demonstration can be made by digesting a portion of the previously digested sludge anaerobically in the laboratory in a bench-scale unit for 40 additional days at a temperature between 30° and 37° Celsius. Volatile solids must be reduced by less than 17% to demonstrate compliance.

Alternative 3 - If Alternative 1 cannot be met for an aerobically digested sludge, demonstration can be made by digesting a portion of the previously digested sludge with percent solids of two percent or less aerobically in the laboratory in a bench-scale unit for 30 additional days at 20° Celsius. Volatile solids must be reduced by less than 15% to demonstrate compliance.

Alternative 4 - The specific oxygen uptake rate (SOUR) for sewage sludge treated in an aerobic process shall be equal to or less than 1.5 milligrams of oxygen per hour per gram of total solids (dry weight basis) at a temperature of 20° Celsius.

Alternative 5 - Sewage sludge shall be treated in an aerobic process for 14 days or longer. During that time, the temperature of the sewage sludge shall be higher than 40° Celsius and the average temperature of the sewage sludge shall be higher than 45° Celsius.

Alternative 6 - The pH of sewage sludge shall be raised to 12 or higher by alkali addition and, without the addition of more alkali shall remain at 12 or higher for two hours and then remain at a pH of 11.5 or higher for an additional 22 hours at the time the sewage sludge is prepared for sale or given away in a bag or other container.

Alternative 7 - The percent solids of sewage sludge that does not contain unstabilized solids generated in a primary wastewater treatment process shall be equal to or greater than 75% based on the moisture content and total solids prior to mixing with other materials. Unstabilized solids are defined as organic materials in sewage sludge that have not been treated in either an aerobic or anaerobic treatment process.

Alternative 8 - The percent solids of sewage sludge that contains unstabilized solids

generated in a primary wastewater treatment process shall be equal to or greater than 90% based on the moisture content and total solids prior to mixing with other materials at the time the sludge is used. Unstabilized solids are defined as organic materials in sewage sludge that have not been treated in either an aerobic or anaerobic treatment process.

Alternative 9 - i. Biosolids shall be injected below the surface of the land.

ii. No significant amount of the biosolids shall be present on the land surface within one hour after the biosolids are injected.

iii. When sewage sludge that is injected below the surface of the land is Class A or Class AB with respect to pathogens, the biosolids shall be injected below the land surface within eight hours after being discharged from the pathogen treatment process.

Alternative 10- i. Biosolids applied to the land surface or placed on a surface disposal site shall be incorporated into the soil within six hours after application to or placement on the land.

ii. When biosolids that are incorporated into the soil is Class A or Class AB with respect to pathogens, the biosolids shall be applied to or placed on the land within eight hours after being discharged from the pathogen treatment process.

**C. Monitoring Requirements**

| | |
|---|---|
| Toxicity Characteristic Leaching Procedure (TCLP) Test | - annually |
| PCBs | - annually |

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

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

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

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

Identify each of the analytic methods used by the facility to analyze enteric viruses, fecal

coliforms, helminth ova, *Salmonella* sp., and other regulated parameters.

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

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

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

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

### A. Pollutant Limits

Table 2

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

Table 3

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

*Dry weight basis

### B. Pathogen Control

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

**C. Management Practices**

1. Bulk biosolids shall not be applied to agricultural land, forest, a public contact site, or a reclamation site that is flooded, frozen, or snow-covered so that the bulk sewage sludge enters a wetland or other waters in the State.

2. Bulk biosolids not meeting Class A requirements shall be land applied in a manner which complies with Applicability in accordance with 30 TAC §312.41 and the Management Requirements in accordance with 30 TAC § 312.44.

3. Bulk biosolids shall be applied at or below the agronomic rate of the cover crop.

4. An information sheet shall be provided to the person who receives bulk Class A or AB biosolids sold or given away. The information sheet shall contain the following information:

   a. The name and address of the person who prepared the Class A or AB biosolids that are sold or given away in a bag or other container for application to the land.

   b. A statement that application of the biosolids to the land is prohibited except in accordance with the instruction on the label or information sheet.

   c. The annual whole sludge application rate for the biosolids application rate for the biosolids that does not cause any of the cumulative pollutant loading rates in Table 2 above to be exceeded, unless the pollutant concentrations in Table 3 found in Section II above are met.

**D. Notification Requirements**

1. If bulk biosolids are applied to land in a State other than Texas, written notice shall be provided prior to the initial land application to the permitting authority for the State in which the bulk biosolids are proposed to be applied. The notice shall include:

   a. The location, by street address, and specific latitude and longitude, of each land application site.

   b. The approximate time period bulk biosolids will be applied to the site.

   c. The name, address, telephone number, and National Pollutant Discharge Elimination System permit number (if appropriate) for the person who will apply the bulk biosolids.

**E. Record Keeping Requirements**

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

1. The concentration (mg/kg) in the sludge of each pollutant listed in Table 3 above and the applicable pollutant concentration criteria (mg/kg), or the applicable cumulative pollutant loading rate and the applicable cumulative pollutant loading rate limit (lbs/ac) listed in Table 2 above.

2. A description of how the pathogen reduction requirements are met (including site restrictions for Class AB and Class B biosolids, if applicable).

3. A description of how the vector attraction reduction requirements are met.

4. A description of how the management practices listed above in Section II.C are being met.

5. The following certification statement:

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

6. The recommended agronomic loading rate from the references listed in Section II.C.3. above, as well as the actual agronomic loading rate shall be retained. The person who applies bulk biosolids shall develop the following information and shall retain the information at the facility site and/or shall be readily available for review by a TCEQ representative indefinitely. If the permittee supplies the sludge to another person who land applies the sludge, the permittee shall notify the land applier of the requirements for record keeping found in 30 TAC § 312.47 for persons who land apply:

   a. A certification statement that all applicable requirements (specifically listed) have been met, and that the permittee understands that there are significant penalties for false certification including fine and imprisonment. See 30 TAC § 312.47(a)(4)(A)(ii) or 30 TAC § 312.47(a)(5)(A)(ii), as applicable, and to the permittee's specific sludge treatment activities.

   b. The location, by street address, and specific latitude and longitude, of each site on which biosolids are applied.

   c. The number of acres in each site on which bulk biosolids are applied.

   d. The date and time biosolids are applied to each site.

   e. The cumulative amount of each pollutant in pounds/acre listed in Table 2 applied to each site.

   f. The total amount of biosolids applied to each site in dry tons.

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

## F. Reporting Requirements

The permittee shall submit the following information in an annual report to the TCEQ by September 30th of each year. The permittee must submit this annual report using the online electronic reporting system available through TCEQ's website. If the permittee requests and obtains an electronic reporting waiver, the annual report can be submitted in hard copy to the TCEQ Regional Office (MC Region 11) and the Enforcement Division (MC 224).

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

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

3. Results of tests performed for pollutants found in either Table 2 or 3 as appropriate for the permittee's land application practices.

4. The frequency of monitoring listed in Section I.C. that applies to the permittee.

5. Toxicity Characteristic Leaching Procedure (TCLP) results.

6. PCB concentration in sludge or biosolids in mg/kg.

7. Identity of hauler(s) and TCEQ transporter number.

8. Date(s) of transport.

9. Texas Commission on Environmental Quality registration number, if applicable.

10. Amount of sludge or biosolids disposal dry weight (lbs/acre) at each disposal site.

11. The concentration (mg/kg) in the sludge of each pollutant listed in Table 1 (defined as a monthly average) as well as the applicable pollutant concentration criteria (mg/kg) listed in Table 3 above, or the applicable pollutant loading rate limit (lbs/acre) listed in Table 2 above if it exceeds 90% of the limit.

12. Level of pathogen reduction achieved (Class A, Class AB or Class B).

13. Alternative used as listed in Section I.B.3.(a. or b.). Alternatives describe how the pathogen reduction requirements are met. If Class B biosolids, include information on how site restrictions were met.

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

15. Vector attraction reduction alternative used as listed in Section I.B.4.

16. Amount of sludge or biosolids transported in dry tons/year.

17. The certification statement listed in either 30 TAC § 312.47(a)(4)(A)(ii) or 30 TAC § 312.47(a)(5)(A)(ii) as applicable to the permittee's sludge or biosolids treatment activities, shall be attached to the annual report.

18. When the amount of any pollutant applied to the land exceeds 90% of the cumulative pollutant loading rate for that pollutant, as described in Table 2, the permittee shall report the following information as an attachment to the annual report.

    a. The location, by street address, and specific latitude and longitude.

    b. The number of acres in each site on which bulk biosolids are applied.

    c. The date and time bulk biosolids are applied to each site.

    d. The cumulative amount of each pollutant (i.e., pounds/acre) listed in Table 2 in the bulk biosolids applied to each site.

    e. The amount of biosolids (i.e., dry tons) applied to each site.

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

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

A. The permittee shall handle and dispose of sewage sludge or biosolids in accordance with 30 TAC § 330 and all other applicable state and federal regulations to protect public health and the environment from any reasonably anticipated adverse effects due to any toxic pollutants that may be present. The permittee shall ensure that the sewage sludge meets the requirements in 30 TAC § 330 concerning the quality of the sludge or biosolids disposed in a municipal solid waste landfill.

B. If the permittee generates sewage sludge and supplies that sewage sludge or biosolids to the owner or operator of a municipal solid waste landfill (MSWLF) for disposal, the permittee shall provide to the owner or operator of the MSWLF appropriate information needed to be in compliance with the provisions of this permit.

C. Sewage sludge or biosolids shall be tested annually in accordance with the method specified in both 40 CFR Part 261, Appendix II and 40 CFR Part 268, Appendix I (Toxicity Characteristic Leaching Procedure) or other method, which receives the prior approval of the TCEQ for contaminants listed in Table 1 of 40 CFR § 261.24. Sewage sludge or biosolids failing this test shall be managed according to RCRA standards for generators of hazardous waste, and the waste's disposition must be in accordance with all applicable requirements for hazardous waste processing, storage, or disposal.

   Following failure of any TCLP test, the management or disposal of sewage sludge or biosolids at a facility other than an authorized hazardous waste processing, storage, or disposal facility shall be prohibited until such time as the permittee can demonstrate the sewage sludge or biosolids no longer exhibits the hazardous waste toxicity characteristics (as demonstrated by the results of the TCLP tests). A written report shall be provided to both the TCEQ Registration and Reporting Section (MC 129) of the Permitting and Registration Support Division and the Regional Director (MC Region 11) of the appropriate TCEQ field office within 7 days after failing the TCLP Test.

   The report shall contain test results, certification that unauthorized waste management has stopped, and a summary of alternative disposal plans that comply with RCRA standards for the management of hazardous waste. The report shall be addressed to: Director, Permitting and Registration Support Division (MC 129), Texas Commission on Environmental Quality, P. O. Box 13087, Austin, Texas 78711-3087. In addition, the permittee shall prepare an annual report on the results of all sludge toxicity testing. This annual report shall be submitted to the TCEQ Regional Office (MC Region 11) and the Enforcement Division (MC 224), by September 30 of each year.

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

E. Record Keeping Requirements

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

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

2. The description (including procedures followed and results) of all TCLP tests performed.

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

F. Reporting Requirements

The permittee shall submit the following information in an annual report to the TCEQ by September 30th of each year. The permittee must submit this annual report using the online electronic reporting system available through TCEQ's website. If the permittee requests and obtains an electronic reporting waiver, the annual report can be submitted in hard copy to the TCEQ Regional Office (MC Region 11) and the Enforcement Division (MC 224).

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

2. Toxicity Characteristic Leaching Procedure (TCLP) results.

3. Annual sludge or biosolids production in dry tons/year.

4. Amount of sludge or biosolids disposed in a municipal solid waste landfill in dry tons/year.

5. Amount of sludge or biosolids transported interstate in dry tons/year.

6. A certification that the sewage sludge or biosolids meets the requirements of 30 TAC § 330 concerning the quality of the sludge disposed in a municipal solid waste landfill.

7. Identity of hauler(s) and transporter registration number.

8. Owner of disposal site(s).

9. Location of disposal site(s).

10. Date(s) of disposal.

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

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

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

### A. General Requirements

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

2. Sludge or biosolids may only be transported using a registered transporter or using an approved pipeline.

### B. Record Keeping Requirements

1. For sludge transported by an approved pipeline, the permittee must maintain records of the following:

   a. the amount of sludge or biosolids transported;

   b. the date of transport;

   c. the name and TCEQ permit number of the receiving facility or facilities;

   d. the location of the receiving facility or facilities;

   e. the name and TCEQ permit number of the facility that generated the waste; and

   f. copy of the written agreement between the permittee and the receiving facility to accept sludge or biosolids.

2. For sludge or biosolids transported by a registered transporter, the permittee must maintain records of the completed trip tickets in accordance with 30 TAC § 312.145(a)(1)-(7) and amount of sludge or biosolids transported.

3. The above records shall be maintained on-site on a monthly basis and shall be made available to the TCEQ upon request. These records shall be retained for at least five years.

**C. Reporting Requirements**

The permittee shall submit the following information in an annual report to the TCEQ by September 30th of each year. The permittee must submit this annual report using the online electronic reporting system available through TCEQ's website. If the permittee requests and obtains an electronic reporting waiver, the annual report can be submitted in hard copy to the TCEQ Regional Office (MC Region 11) and the Enforcement Division (MC 224).

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

2. the annual sludge or biosolids production;

3. the amount of sludge or biosolids transported;

4. the owner of each receiving facility;

5. the location of each receiving facility; and

6. the date(s) of disposal at each receiving facility.

TCEQ Revision 06/2020

**OTHER REQUIREMENTS**

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

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

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

3. Chronic toxic criteria apply at the edge of the mixing zone. The mixing zone is defined as 300 feet downstream and 100 feet upstream from the point of discharge.

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

5. The permittee shall provide facilities for the protection of its wastewater treatment facility from a 100-year flood.

6. In accordance with 30 TAC § 319.9, a permittee that has at least twelve months of uninterrupted compliance with its bacteria limit may notify the commission in writing of its compliance and request a less frequent measurement schedule. To request a less frequent schedule, the permittee shall submit a written request to the TCEQ Domestic Wastewater Section (MC 148) for each phase that includes a different monitoring frequency. The request must contain all of the reported bacteria values (Daily Avg. and Daily Max/Single Grab) for the twelve consecutive months immediately prior to the request. If the Executive Director finds that a less frequent measurement schedule is protective of human health and the environment, the permittee may be given a less frequent measurement schedule. For this permit, daily may be reduced to five/week. **A violation of any bacteria limit by a facility that has been granted a less frequent measurement schedule will require the permittee to return to the standard frequency schedule and submit written notice to the TCEQ Domestic Wastewater Section (MC 148).** The permittee may not apply for another reduction in measurement frequency for at least 24 months from the date of the last violation. The Executive Director may establish a more frequent measurement schedule if necessary to protect human health or the environment.

**CONTRIBUTING INDUSTRIES AND PRETREATMENT REQUIREMENTS**

1. The following pollutants may not be introduced into the treatment facility:

   a. Pollutants which create a fire or explosion hazard in the publicly owned treatment works (POTW), including, but not limited to, waste streams with a closed-cup flash point of less than 140° Fahrenheit (60° Celsius) using the test methods specified in 40 CFR § 261.21;

   b. Pollutants which will cause corrosive structural damage to the POTW, but in no case shall there be discharges with a pH lower than 5.0 standard units, unless the works are specifically designed to accommodate such discharges;

   c. Solid or viscous pollutants in amounts which will cause obstruction to the flow in the POTW, resulting in Interference;

   d. Any pollutant, including oxygen-demanding pollutants (e.g., biochemical oxygen demand), released in a discharge at a flow rate and/or pollutant concentration which will cause Interference with the POTW;

   e. Heat in amounts which will inhibit biological activity in the POTW, resulting in Interference, but in no case shall there be heat in such quantities that the temperature at the POTW treatment plant exceeds 104° Fahrenheit (40° Celsius) unless the Executive Director, upon request of the POTW, approves alternate temperature limits;

   f. Petroleum oil, nonbiodegradable cutting oil, or products of mineral oil origin in amounts that will cause Interference or Pass Through;

   g. Pollutants which result in the presence of toxic gases, vapors, or fumes within the POTW in a quantity that may cause acute worker health and safety problems; and

   h. Any trucked or hauled pollutants except at discharge points designated by the POTW.

2. The permittee shall require any indirect discharger to the treatment works to comply with the reporting requirements of Sections 204(b), 307, and 308 of the Clean Water Act, including any requirements established under 40 CFR Part 403 [*rev. Federal Register/ Vol. 70/ No. 198/ Friday, October 14, 2005/ Rules and Regulations, pages 60134-60798*].

3. The permittee shall provide adequate notification to the Executive Director, care of the Domestic Wastewater Section (MC 148) of the Water Quality Division, within 30 days subsequent to the permittee's knowledge of either of the following:

   a. Any new introduction of pollutants into the treatment works from an indirect discharger which would be subject to Sections 301 and 306 of the Clean Water Act if it were directly discharging those pollutants; and

   b. Any substantial change in the volume or character of pollutants being introduced into the treatment works by a source introducing pollutants into the treatment works at the time of issuance of the permit.

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

Revised July 2007

**BIOMONITORING REQUIREMENTS**

CHRONIC BIOMONITORING REQUIREMENTS: FRESHWATER

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

1. Scope, Frequency, and Methodology

   a. The permittee shall test the effluent for toxicity in accordance with the provisions below. Such testing will determine if an appropriately dilute effluent sample adversely affects the survival, reproduction, or growth of the test organisms.

   b. The permittee shall conduct the following toxicity tests using the test organisms, procedures, and quality assurance requirements specified in this part of this permit and in accordance with "Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms," fourth edition (EPA-821-R-02-013) or its most recent update:

      1) Chronic static renewal survival and reproduction test using the water flea (*Ceriodaphnia dubia*) (Method 1002.0). This test should be terminated when 60% of the surviving adults in the control produce three broods or at the end of eight days, whichever occurs first. This test shall be conducted once per quarter.

      2) Chronic static renewal 7-day larval survival and growth test using the fathead minnow (*Pimephales promelas*) (Method 1000.0). A minimum of five replicates with eight organisms per replicate shall be used in the control and in each dilution. This test shall be conducted once per quarter.

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

   c. The permittee shall use five effluent dilution concentrations and a control in each toxicity test. These effluent dilution concentrations are 27%, 36%, 48%, 64%, and 87% effluent. The critical dilution, defined as 87% effluent, is the effluent concentration representative of the proportion of effluent in the receiving water during critical low flow or critical mixing conditions.

   d. This permit may be amended to require a WET limit, a chemical-specific effluent limit, a best management practice, or other appropriate actions to address toxicity. The permittee may be required to conduct a toxicity reduction evaluation (TRE) after multiple toxic events.

   e. Testing Frequency Reduction

      1) If none of the first four consecutive quarterly tests demonstrates significant toxicity, the permittee may submit this information in writing

and, upon approval, reduce the testing frequency to once per six months for the invertebrate test species and once per year for the vertebrate test species.

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

2. Required Toxicity Testing Conditions

a. Test Acceptance - The permittee shall repeat any toxicity test, including the control and all effluent dilutions, which fail to meet the following criteria:

1) a control mean survival of 80% or greater;

2) a control mean number of water flea neonates per surviving adult of 15 or greater;

3) a control mean dry weight of surviving fathead minnow larvae of 0.25 mg or greater;

4) a control coefficient of variation percent (CV%) of 40 or less in between replicates for the young of surviving females in the water flea test; and the growth and survival endpoints in the fathead minnow test;

5) a critical dilution CV% of 40 or less for the young of surviving females in the water flea test; and the growth and survival endpoints for the fathead minnow test. However, if statistically significant lethal or nonlethal effects are exhibited at the critical dilution, a CV% greater than 40 shall not invalidate the test;

6) a percent minimum significant difference of 47 or less for water flea reproduction; and

7) a percent minimum significant difference of 30 or less for fathead minnow growth.

b. Statistical Interpretation

1) For the water flea survival test, the statistical analyses used to determine if there is a significant difference between the control and an effluent dilution shall be the Fisher's exact test as described in the manual referenced in in Part 1.b.

2) For the water flea reproduction test and the fathead minnow larval survival and growth tests, the statistical analyses used to determine if there is a significant difference between the control and an effluent dilution shall be in accordance with the manual referenced in Part 1.b.

3) The permittee is responsible for reviewing test concentration-response relationships to ensure that calculated test-results are interpreted and reported correctly. The document entitled "Method Guidance and Recommendation for Whole Effluent Toxicity (WET) Testing (40 CFR Part 136)" (EPA 821-B-00-004) provides guidance on determining the validity of test results.

4) If significant lethality is demonstrated (that is, there is a statistically significant difference in survival at the critical dilution when compared to the survival in the control), the conditions of test acceptability are met, and the survival of the test organisms are equal to or greater than 80% in the critical dilution and all dilutions below that, then the permittee shall report a survival No Observed Effect Concentration (NOEC) of not less than the critical dilution for the reporting requirements.

5) The NOEC is defined as the greatest effluent dilution at which no significant effect is demonstrated. The Lowest Observed Effect Concentration (LOEC) is defined as the lowest effluent dilution at which a significant effect is demonstrated. A significant effect is defined as a statistically significant difference between the survival, reproduction, or growth of the test organism in a specified effluent dilution when compared to the survival, reproduction, or growth of the test organism in the control.

6) The use of NOECs and LOECs assumes either a monotonic (continuous) concentration-response relationship or a threshold model of the concentration-response relationship. For any test result that demonstrates a non-monotonic (non-continuous) response, the NOEC should be determined based on the guidance manual referenced in Item 3.

7) Pursuant to the responsibility assigned to the permittee in Part 2.b.3), test results that demonstrate a non-monotonic (non-continuous) concentration-response relationship may be submitted, prior to the due date, for technical review. The guidance manual referenced in Item 3 will be used when making a determination of test acceptability.

8) TCEQ staff will review test results for consistency with rules, procedures, and permit requirements.

c. Dilution Water

1) Dilution water used in the toxicity tests must be the receiving water collected at a point upstream of the discharge point as close as possible to the discharge point but unaffected by the discharge. Where the toxicity tests are conducted on effluent discharges to receiving waters that are classified as intermittent streams, or where the toxicity tests are conducted on effluent discharges where no receiving water is available due to zero flow conditions, the permittee shall:

a) substitute a synthetic dilution water that has a pH, hardness, and

alkalinity similar to that of the closest downstream perennial water unaffected by the discharge; or

b) use the closest downstream perennial water unaffected by the discharge.

2) Where the receiving water proves unsatisfactory as a result of pre-existing instream toxicity (i.e. fails to fulfill the test acceptance criteria of Part 2.a.), the permittee may substitute synthetic dilution water for the receiving water in all subsequent tests provided the unacceptable receiving water test met the following stipulations:

a) a synthetic lab water control was performed (in addition to the receiving water control) which fulfilled the test acceptance requirements of Part 2.a;

b) the test indicating receiving water toxicity was carried out to completion (i.e., 7 days); and

c) the permittee submitted all test results indicating receiving water toxicity with the reports and information required in Part 3.

3) The synthetic dilution water shall consist of standard, moderately hard, reconstituted water. Upon approval, the permittee may substitute other appropriate dilution water with chemical and physical characteristics similar to that of the receiving water.

d. Samples and Composites

1) The permittee shall collect a minimum of three composite samples from Outfall 001. The second and third composite samples will be used for the renewal of the dilution concentrations for each toxicity test.

2) The permittee shall collect the composite samples such that the samples are representative of any periodic episode of chlorination, biocide usage, or other potentially toxic substance being discharged on an intermittent basis.

3) The permittee shall initiate the toxicity tests within 36 hours after collection of the last portion of the first composite sample. The holding time for any subsequent composite sample shall not exceed 72 hours. Samples shall be maintained at a temperature of 0-6 degrees Centigrade during collection, shipping, and storage.

4) If Outfall 001 ceases discharging during the collection of effluent samples, the requirements for the minimum number of effluent samples, the minimum number of effluent portions, and the sample holding time are waived during that sampling period. However, the permittee must have collected an effluent composite sample volume sufficient to complete the required toxicity tests with renewal of the effluent. When possible, the effluent samples used for the toxicity tests shall be collected on separate

days if the discharge occurs over multiple days. The sample collection duration and the static renewal protocol associated with the abbreviated sample collection must be documented in the full report.

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

3. Reporting

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

a. The permittee shall prepare a full report of the results of all tests conducted in accordance with the manual referenced in Part 1.b. for every valid and invalid toxicity test initiated whether carried to completion or not.

b. The permittee shall routinely report the results of each biomonitoring test on the Table 1 forms provided with this permit.

1) Annual biomonitoring test results are due on or before January 20th for biomonitoring conducted during the previous 12-month period.

2) Semiannual biomonitoring test results are due on or before July 20th and January 20th for biomonitoring conducted during the previous 6-month period.

3) Quarterly biomonitoring test results are due on or before April 20th, July 20th, October 20th, and January 20th for biomonitoring conducted during the previous calendar quarter.

4) Monthly biomonitoring test results are due on or before the 20th day of the month following sampling.

c. Enter the following codes for the appropriate parameters for valid tests only:

1) For the water flea, Parameter TLP3B, enter a “1” if the NOEC for survival is less than the critical dilution; otherwise, enter a “0.”

2) For the water flea, Parameter TOP3B, report the NOEC for survival.

3) For the water flea, Parameter TXP3B, report the LOEC for survival.

4) For the water flea, Parameter TWP3B, enter a “1” if the NOEC for reproduction is less than the critical dilution; otherwise, enter a “0.”

5) For the water flea, Parameter TPP3B, report the NOEC for reproduction.

6) For the water flea, Parameter TYP3B, report the LOEC for reproduction.

7) For the fathead minnow, Parameter TLP6C, enter a “1” if the NOEC for survival is less than the critical dilution; otherwise, enter a “0.”

8) For the fathead minnow, Parameter TOP6C, report the NOEC for survival.

9) For the fathead minnow, Parameter TXP6C, report the LOEC for survival.

10) For the fathead minnow, Parameter TWP6C, enter a "1" if the NOEC for growth is less than the critical dilution; otherwise, enter a "0."

11) For the fathead minnow, Parameter TPP6C, report the NOEC for growth.

12) For the fathead minnow, Parameter TYP6C, report the LOEC for growth.

d. Enter the following codes for retests only:

1) For retest number 1, Parameter 22415, enter a "1" if the NOEC for survival is less than the critical dilution; otherwise, enter a "0."

2) For retest number 2, Parameter 22416, enter a "1" if the NOEC for survival is less than the critical dilution; otherwise, enter a "0."

4. Persistent Toxicity

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

a. The permittee shall conduct a total of 2 additional tests (retests) for any species that demonstrates a significant effect (lethal or sublethal) at the critical dilution. The two retests shall be conducted monthly during the next two consecutive months. The permittee shall not substitute either of the two retests in lieu of routine toxicity testing. All reports shall be submitted within 20 days of test completion. Test completion is defined as the last day of the test.

b. If the retests are performed due to a demonstration of significant lethality, and one or both of the two retests specified in Part 4.a. demonstrates significant lethality, the permittee shall initiate the TRE requirements as specified in Part 5. The provisions of Part 4.a. are suspended upon completion of the two retests and submittal of the TRE action plan and schedule defined in Part 5.

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

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

d. If the two retests are performed due to a demonstration of significant

sublethality, and neither test demonstrates significant lethality, the permittee shall continue testing at the quarterly frequency.

e. Regardless of whether retesting for lethal or sublethal effects, or a combination of the two, no more than one retest per month is required for a species.

5. Toxicity Reduction Evaluation

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

b. Within 90 days of the retest that demonstrates significant lethality, or within 90 days of being so instructed due to multiple toxic events, the permittee shall submit a TRE action plan and schedule for conducting a TRE. The plan shall specify the approach and methodology to be used in performing the TRE. A TRE is a step-wise investigation combining toxicity testing with physical and chemical analyses to determine actions necessary to eliminate or reduce effluent toxicity to a level not effecting significant lethality at the critical dilution. The TRE action plan shall describe an approach for the reduction or elimination of lethality for both test species defined in Part 1.b. At a minimum, the TRE action plan shall include the following:

1) Specific Activities - The TRE action plan shall specify the approach the permittee intends to utilize in conducting the TRE, including toxicity characterizations, identifications, confirmations, source evaluations, treatability studies, and alternative approaches. When conducting characterization analyses, the permittee shall perform multiple characterizations and follow the procedures specified in the document entitled “Toxicity Identification Evaluation: Characterization of Chronically Toxic Effluents, Phase I” (EPA/600/6-91/005F) or alternate procedures. The permittee shall perform multiple identifications and follow the methods specified in the documents entitled “Methods for Aquatic Toxicity Identification Evaluations, Phase II Toxicity Identification Procedures for Samples Exhibiting Acute and Chronic Toxicity” (EPA/600/R-92/080) and “Methods for Aquatic Toxicity Identification Evaluations: Phase III Toxicity Confirmation Procedures for Samples Exhibiting Acute and Chronic Toxicity” (EPA/600/R-92/081). All characterization, identification, and confirmation tests shall be conducted in an orderly and logical progression;

2) Sampling Plan - The TRE action plan should describe sampling locations, methods, holding times, chain of custody, and preservation techniques. The effluent sample volume collected for all tests shall be adequate to perform the toxicity characterization/identification/confirmation procedures and chemical-specific analyses when the toxicity tests show significant lethality. Where the permittee has identified or suspects a specific pollutant and source of effluent toxicity, the permittee shall

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

3) Quality Assurance Plan - The TRE action plan should address record keeping and data evaluation, calibration and standardization, baseline tests, system blanks, controls, duplicates, spikes, toxicity persistence in the samples, randomization, reference toxicant control charts, and mechanisms to detect artifactual toxicity; and

4) Project Organization - The TRE action plan should describe the project staff, project manager, consulting engineering services (where applicable), consulting analytical and toxicological services, etc.

c. Within 30 days of submittal of the TRE action plan and schedule, the permittee shall implement the TRE.

d. The permittee shall submit quarterly TRE activities reports concerning the progress of the TRE. The quarterly reports are due on or before April 20th, July 20th, October 20th, and January 20th. The report shall detail information regarding the TRE activities including:

1) results and interpretation of any chemical-specific analyses for the identified and suspected pollutant performed during the quarter;

2) results and interpretation of any characterization, identification, and confirmation tests performed during the quarter;

3) any data and substantiating documentation which identifies the pollutant(s) and source of effluent toxicity;

4) results of any studies/evaluations concerning the treatability of the facility's effluent toxicity;

5) any data that identifies effluent toxicity control mechanisms that will reduce effluent toxicity to the level necessary to meet no significant lethality at the critical dilution; and

6) any changes to the initial TRE plan and schedule that are believed necessary as a result of the TRE findings.

e. During the TRE, the permittee shall perform, at a minimum, quarterly testing using the more sensitive species. Testing for the less sensitive species shall continue at the frequency specified in Part 1.b.

f. If the effluent ceases to effect significant lethality, i.e., there is a cessation of lethality, the permittee may end the TRE. A cessation of lethality is defined as no significant lethality for a period of 12 consecutive months with at least monthly testing. At the end of the 12 months, the permittee shall submit a statement of intent to cease the TRE and may then resume the testing frequency specified in Part 1.b.

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

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

g. The permittee shall complete the TRE and submit a final report on the TRE activities no later than 28 months from the last test day of the retest that confirmed significant lethal effects at the critical dilution. The permittee may petition the Executive Director (in writing) for an extension of the 28-month limit. However, to warrant an extension the permittee must have demonstrated due diligence in its pursuit of the toxicity identification evaluation/TRE and must prove that circumstances beyond its control stalled the toxicity identification evaluation/TRE. The report shall provide information pertaining to the specific control mechanism selected that will, when implemented, result in the reduction of effluent toxicity to no significant lethality at the critical dilution. The report shall also provide a specific corrective action schedule for implementing the selected control mechanism.

h. Based on the results of the TRE and proposed corrective actions, this permit may be amended to modify the biomonitoring requirements, where necessary, require a compliance schedule for implementation of corrective actions, specify a WET limit, specify a best management practice, and specify a chemical-specific limit.

i. Copies of any and all required TRE plans and reports shall also be submitted to the U.S. EPA Region 6 office, 6WQ-PO.

TABLE 1 (SHEET 1 OF 4)

BIOMONITORING REPORTING

CERIODAPHNIA DUBIA SURVIVAL AND REPRODUCTION

Dates and Times Composites Collected

Date Time Date Time

No. 1 FROM: _____TO: _____

No. 2 FROM: _____TO: _____

No. 3 FROM:_____TO: _____

Test initiated: _____am/pm _____date

Dilution water used: _____ Receiving water _____ Synthetic Dilution water

NUMBER OF YOUNG PRODUCED PER ADULT AT END OF TEST

| REP | Percent effluent | | | | | |
|---|---|---|---|---|---|---|
| | 0% | 27% | 36% | 48% | 64% | 87% |
| A | | | | | | |
| B | | | | | | |
| C | | | | | | |
| D | | | | | | |
| E | | | | | | |
| F | | | | | | |
| G | | | | | | |
| H | | | | | | |
| I | | | | | | |
| J | | | | | | |
| Survival Mean | | | | | | |
| Total Mean | | | | | | |
| CV%* | | | | | | |
| PMSD | | | | | | |

*Coefficient of Variation = standard deviation x 100/mean (calculation based on young of the surviving adults)
Designate males (M), and dead females (D), along with number of neonates (x) released prior to death.

TABLE 1 (SHEET 2 OF 4)

CERIODAPHNIA DUBIA SURVIVAL AND REPRODUCTION TEST

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

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

   CRITICAL DILUTION (87%): _____ YES _____ NO

PERCENT SURVIVAL

| | Percent effluent | | | | | |
|---|---|---|---|---|---|---|
| Time of Reading | 0% | 27% | 36% | 48% | 64% | 87% |
| 24h | | | | | | |
| 48h | | | | | | |
| End of Test | | | | | | |

2. Fisher's Exact Test:

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

   CRITICAL DILUTION (87%): _____ YES _____ NO

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

   a.) NOEC survival = _____% effluent

   b.) LOEC survival = _____% effluent

   c.) NOEC reproduction = _____% effluent

   d.) LOEC reproduction = _____% effluent

TABLE 1 (SHEET 3 OF 4)

BIOMONITORING REPORTING

FATHEAD MINNOW LARVAE GROWTH AND SURVIVAL

Dates and Times Composites Collected

Date Time Date Time

No. 1 FROM: _____TO:_____

No. 2 FROM:_____TO:_____

No. 3 FROM: _____TO_____

Test initiated: _____am/pm _____date

Dilution water used: _____ Receiving water _____ Synthetic dilution water

FATHEAD MINNOW GROWTH DATA

| Effluent Concentration | Average Dry Weight in replicate chambers | | | | | Mean Dry Weight | CV%* |
|---|---|---|---|---|---|---|---|
| | A | B | C | D | E | | |
| 0% | | | | | | | |
| 27% | | | | | | | |
| 36% | | | | | | | |
| 48% | | | | | | | |
| 64% | | | | | | | |
| 87% | | | | | | | |
| PMSD | | | | | | | |

* Coefficient of Variation = standard deviation x 100/mean

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

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

   CRITICAL DILUTION (87%): _____ YES _____ NO

TABLE 1 (SHEET 4 OF 4)

BIOMONITORING REPORTING

FATHEAD MINNOW GROWTH AND SURVIVAL TEST

FATHEAD MINNOW SURVIVAL DATA

| Effluent Concentration | Percent Survival in replicate chambers | | | | | Mean percent survival | | | CV%* |
|---|---|---|---|---|---|---|---|---|---|
| | A | B | C | D | E | 24h | 48h | 7 day | |
| 0% | | | | | | | | | |
| 27% | | | | | | | | | |
| 36% | | | | | | | | | |
| 48% | | | | | | | | | |
| 64% | | | | | | | | | |
| 87% | | | | | | | | | |

* Coefficient of Variation = standard deviation x 100/mean

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

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

   CRITICAL DILUTION (87%): _____ YES _____ NO

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

   a.) NOEC survival = _____% effluent

   b.) LOEC survival = _____% effluent

   c.) NOEC growth = _____% effluent

   d.) LOEC growth = _____% effluent

24-HOUR ACUTE BIOMONITORING REQUIREMENTS: FRESHWATER

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

1. Scope, Frequency, and Methodology

a. The permittee shall test the effluent for lethality in accordance with the provisions in this section. Such testing will determine compliance with Texas Surface Water Quality Standard 30 TAC § 307.6(e)(2)(B), which requires greater than 50% survival of the appropriate test organisms in 100% effluent for a 24-hour period.

b. The toxicity tests specified shall be conducted once per six months. The permittee shall conduct the following toxicity tests using the test organisms, procedures, and quality assurance requirements specified in this section of the permit and in accordance with "Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms," fifth edition (EPA-821-R-02-012) or its most recent update:

1) Acute 24-hour static toxicity test using the water flea (*Daphnia pulex* or *Ceriodaphnia dubia*). A minimum of five replicates with eight organisms per replicate shall be used in the control and each dilution.

2) Acute 24-hour static toxicity test using the fathead minnow (*Pimephales promelas*). A minimum of five replicates with eight organisms per replicate shall be used in the control and each dilution.

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

c. In addition to an appropriate control, a 100% effluent concentration shall be used in the toxicity tests. The control and dilution water shall consist of standard, synthetic, moderately hard, reconstituted water.

d. This permit may be amended to require a WET limit, a best management practice, a chemical-specific limit, or other appropriate actions to address toxicity. The permittee may be required to conduct a toxicity reduction evaluation (TRE) after multiple toxic events.

2. Required Toxicity Testing Conditions

a. Test Acceptance - The permittee shall repeat any toxicity test, including the control, if the control fails to meet a mean survival equal to or greater than 90%.

b. Dilution Water - In accordance with Part 1.c., the control and dilution water shall consist of standard, synthetic, moderately hard, reconstituted water.

c. Samples and Composites

1) The permittee shall collect one composite sample from Outfall 001.

2) The permittee shall collect the composite sample such that the sample is representative of any periodic episode of chlorination, biocide usage, or other potentially toxic substance being discharged.

3) The permittee shall initiate the toxicity tests within 36 hours after collection of the last portion of the composite sample. The sample shall be maintained at a temperature of 0-6 degrees Centigrade during collection, shipping, and storage.

4) If Outfall 001 ceases discharging during the collection of the effluent composite sample, the requirements for the minimum number of effluent portions are waived. However, the permittee must have collected a composite sample volume sufficient for completion of the required test. The abbreviated sample collection, duration, and methodology must be documented in the full report.

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

3. Reporting

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

a. The permittee shall prepare a full report of the results of all tests conducted in accordance with the manual referenced in Part 1.b. for every valid and invalid toxicity test initiated.

b. The permittee shall routinely report the results of each biomonitoring test on the Table 2 forms provided with this permit.

1) Semiannual biomonitoring test results are due on or before July 20th and January 20th for biomonitoring conducted during the previous 6-month period.

2) Quarterly biomonitoring test results are due on or before April 20th, July 20th, and October 20th, and January 20th for biomonitoring conducted during the previous calendar quarter.

c. Enter the following codes for the appropriate parameters for valid tests only:

1) For the water flea, Parameter TIE3D, enter a “0” if the mean survival at 24 hours is greater than 50% in the 100% effluent dilution; if the mean survival is less than or equal to 50%, enter a “1.”

2) For the fathead minnow, Parameter TIE6C, enter a “0” if the mean

survival at 24 hours is greater than 50% in the 100% effluent dilution; if the mean survival is less than or equal to 50%, enter a "1."

d. Enter the following codes for retests only:

1) For retest number 1, Parameter 22415, enter a "0" if the mean survival at 24 hours is greater than 50% in the 100% effluent dilution; if the mean survival is less than or equal to 50%, enter a "1."

2) For retest number 2, Parameter 22416, enter a "0" if the mean survival at 24 hours is greater than 50% in the 100% effluent dilution; if the mean survival is less than or equal to 50%, enter a "1."

4. Persistent Mortality

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

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

b. If one or both of the two retests specified in Part 4.a. demonstrates significant lethality, the permittee shall initiate the TRE requirements as specified in Part 5.

5. Toxicity Reduction Evaluation

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

b. Within 90 days of the retest that demonstrates significant lethality, the permittee shall submit a TRE action plan and schedule for conducting a TRE. The plan shall specify the approach and methodology to be used in performing the TRE. A TRE is a step-wise investigation combining toxicity testing with physical and chemical analyses to determine actions necessary to eliminate or reduce effluent toxicity to a level not effecting significant lethality at the critical dilution. The TRE action plan shall lead to the successful elimination of significant lethality for both test species defined in Part 1.b. At a minimum, the TRE action plan shall include the following:

1) Specific Activities - The TRE action plan shall specify the approach the permittee intends to utilize in conducting the TRE, including toxicity

characterizations, identifications, confirmations, source evaluations, treatability studies, and alternative approaches. When conducting characterization analyses, the permittee shall perform multiple characterizations and follow the procedures specified in the document entitled "Methods for Aquatic Toxicity Identification Evaluations: Phase I Toxicity Characterization Procedures" (EPA/600/6-91/003) or alternate procedures. The permittee shall perform multiple identifications and follow the methods specified in the documents entitled "Methods for Aquatic Toxicity Identification Evaluations: Phase II Toxicity Identification Procedures for Samples Exhibiting Acute and Chronic Toxicity" (EPA/600/R-92/080) and "Methods for Aquatic Toxicity Identification Evaluations: Phase III Toxicity Confirmation Procedures for Samples Exhibiting Acute and Chronic Toxicity" (EPA/600/R-92/081). All characterization, identification, and confirmation tests shall be conducted in an orderly and logical progression;

2) Sampling Plan - The TRE action plan should describe sampling locations, methods, holding times, chain of custody, and preservation techniques. The effluent sample volume collected for all tests shall be adequate to perform the toxicity characterization/identification/confirmation procedures and chemical-specific analyses when the toxicity tests show significant lethality. Where the permittee has identified or suspects specific pollutant and source of effluent toxicity, the permittee shall conduct, concurrent with toxicity testing, chemical-specific analyses for the identified and suspected pollutant and source of effluent toxicity;

3) Quality Assurance Plan - The TRE action plan should address record keeping and data evaluation, calibration and standardization, baseline tests, system blanks, controls, duplicates, spikes, toxicity persistence in the samples, randomization, reference toxicant control charts, and mechanisms to detect artifactual toxicity; and

4) Project Organization - The TRE Action Plan should describe the project staff, project manager, consulting engineering services (where applicable), consulting analytical and toxicological services, etc.

c. Within 30 days of submittal of the TRE action plan and schedule, the permittee shall implement the TRE.

d. The permittee shall submit quarterly TRE activities reports concerning the progress of the TRE. The quarterly TRE activities reports are due on or before April 20th, July 20th, October 20th, and January 20th. The report shall detail information regarding the TRE activities including:

1) results and interpretation of any chemical-specific analyses for the identified and suspected pollutant performed during the quarter;

2) results and interpretation of any characterization, identification, and confirmation tests performed during the quarter;

3) any data and substantiating documentation that identifies the pollutant

and source of effluent toxicity;

4) results of any studies/evaluations concerning the treatability of the facility's effluent toxicity;

5) any data that identifies effluent toxicity control mechanisms that will reduce effluent toxicity to the level necessary to eliminate significant lethality; and

6) any changes to the initial TRE plan and schedule that are believed necessary as a result of the TRE findings.

e. During the TRE, the permittee shall perform, at a minimum, quarterly testing using the more sensitive species. Testing for the less sensitive species shall continue at the frequency specified in Part 1.b.

f. If the effluent ceases to effect significant lethality, i.e., there is a cessation of lethality, the permittee may end the TRE. A cessation of lethality is defined as no significant lethality for a period of 12 consecutive weeks with at least weekly testing. At the end of the 12 weeks, the permittee shall submit a statement of intent to cease the TRE and may then resume the testing frequency specified in Part 1.b.

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

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

g. The permittee shall complete the TRE and submit a final report on the TRE activities no later than 18 months from the last test day of the retest that demonstrates significant lethality. The permittee may petition the Executive Director (in writing) for an extension of the 18-month limit. However, to warrant an extension the permittee must have demonstrated due diligence in its pursuit of the toxicity identification evaluation/TRE and must prove that circumstances beyond its control stalled the toxicity identification evaluation/TRE. The report shall specify the control mechanism that will, when implemented, reduce effluent toxicity as specified in Part 5.h. The report shall also specify a corrective action schedule for implementing the selected control mechanism.

h. Within 3 years of the last day of the test confirming toxicity, the permittee shall comply with 30 TAC § 307.6(e)(2)(B), which requires greater than 50% survival of the test organism in 100% effluent at the end of 24-hours. The permittee may petition the Executive Director (in writing) for an extension of the 3-year limit. However, to warrant an extension the permittee must have demonstrated due diligence in its pursuit of the toxicity identification evaluation/TRE and must prove that circumstances beyond its control stalled the toxicity identification evaluation/TRE.

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

i. Based upon the results of the TRE and proposed corrective actions, this permit may be amended to modify the biomonitoring requirements where necessary, require a compliance schedule for implementation of corrective actions, specify a WET limit, specify a best management practice, and specify a chemical-specific limit.

j. Copies of any and all required TRE plans and reports shall also be submitted to the U.S. EPA Region 6 office, 6WQ-PO.

TABLE 2 (SHEET 1 OF 2)

WATER FLEA SURVIVAL

GENERAL INFORMATION

| | Time | Date |
|---|---|---|
| Composite Sample Collected | | |
| Test Initiated | | |

PERCENT SURVIVAL

| Time | Rep | Percent effluent | | | | | |
|---|---|---|---|---|---|---|---|
| | | 0% | 6% | 13% | 25% | 50% | 100% |
| 24h | A | | | | | | |
| | B | | | | | | |
| | C | | | | | | |
| | D | | | | | | |
| | E | | | | | | |
| | MEAN | | | | | | |

Enter percent effluent corresponding to the LC50 below:

24 hour LC50 = _____% effluent

TABLE 2 (SHEET 2 OF 2)

FATHEAD MINNOW SURVIVAL

GENERAL INFORMATION

| | Time | Date |
|---|---|---|
| Composite Sample Collected | | |
| Test Initiated | | |

PERCENT SURVIVAL

| Time | Rep | Percent effluent | | | | | |
|---|---|---|---|---|---|---|---|
| | | 0% | 6% | 13% | 25% | 50% | 100% |
| 24h | A | | | | | | |
| | B | | | | | | |
| | C | | | | | | |
| | D | | | | | | |
| | E | | | | | | |
| | MEAN | | | | | | |

Enter percent effluent corresponding to the LC50 below:

24 hour LC50 = _____% effluent

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

For draft Texas Pollutant Discharge Elimination System (TPDES) Permit No. WQ0010210002, EPA I.D. No. TX0113565, to discharge to water in the state.

Issuing Office: Texas Commission on Environmental Quality
P.O. Box 13087
Austin, Texas 78711-3087

Applicant: City of Lockhart and Guadalupe-Blanco River Authority
P.O. Box 239
Lockhart, Texas 78644

Prepared By: Paula Palmar
Domestic Permits Team
Domestic Wastewater Section (MC 148)
Water Quality Division
(512) 239-4561

Date: October 29, 2025

Permit Action: Renewal

## 1. EXECUTIVE DIRECTOR RECOMMENDATION

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

## 2. APPLICANT ACTIVITY

The applicant has applied to the Texas Commission on Environmental Quality (TCEQ) for a renewal of the existing permit that authorizes the discharge of treated domestic wastewater at an annual average flow not to exceed 1.5 million gallons per day (MGD). The existing wastewater treatment facility serves the City of Lockhart.

## 3. FACILITY AND DISCHARGE LOCATION

The plant site is located at 167 Creekview, in Caldwell County, Texas 78644.

Outfall Location:

| Outfall Number | Latitude | Longitude |
|---|---|---|
| 001 | 29.870567 N | 97.619702 W |

The treated effluent is discharged directly to Plum Creek in Segment No. 1810 of the Guadalupe River Basin. The designated uses for Segment No. 1810 are primary contact recreation, aquifer protection, and high aquatic life use.

## 4. TREATMENT PROCESS DESCRIPTION AND SEWAGE SLUDGE DISPOSAL

The Lockhart WWTP No. 2 is an activated sludge process plant operated in the extended aeration mode. Treatment units include two bar screens, a grit removal chamber, an aeration basin, two octagonal final clarifiers, a thickener pre-mix basin, a gravity sludge thickener, a belt filter press, a sludge holding tank, a post aeration basin, and an Ultraviolet Light (UV) disinfection system. The facility is in operation.

In addition, the facility accepts septic waste that averages to about 875,000 gallons per month.

Sludge generated from the treatment facility is hauled by a registered transporter to J-V Dirt and Loam 5RC Facility, TCEQ No. 2310 and to Texas Organic Recovery TCEQ No. 42016 to be digested, dewatered, and then disposed of with the bulk of the sludge from the plant accepting the sludge. The draft permit also authorizes the disposal of sludge at a TCEQ-authorized land application site, co-disposal landfill, wastewater treatment facility, or facility that further processes sludge.

## 5. INDUSTRIAL WASTE CONTRIBUTION

The draft permit includes pretreatment requirements that are appropriate for a facility of this size and complexity. The facility receives industrial wastewater. The WWTP receives process wastewater from nine non-significant industrial users (IU). The process wastewater flow from the IUs contributes less than 1.109% of the WWTP current maximum hydraulic capacity.

## 6. SUMMARY OF SELF-REPORTED EFFLUENT ANALYSES

The following is a summary of the applicant's effluent monitoring data for the period December 2022 through December 2024. The average of Daily Average value is computed by the averaging of all 30-day average values for the reporting period for each parameter: flow, five-day carbonaceous biochemical oxygen demand ($CBOD_5$), total suspended solids (TSS), and ammonia nitrogen ($NH_3$-N). The average of Daily Average value for *Escherichia coli* (*E. coli*) in colony-forming units (CFU) or most probable number (MPN) per 100 ml is calculated via geometric mean.

| Parameter | Average of Daily Avg |
|---|---|
| Flow, MGD | 0.70 |
| $CBOD_5$, mg/l | 1.6 |
| TSS, mg/l | 2.5 |
| $NH_3$-N, mg/l | 0.26 |
| *E. coli*, CFU or MPN per 100 ml | 4 |

## 7. DRAFT PERMIT CONDITIONS AND MONITORING REQUIREMENTS

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

### A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

The annual average flow of effluent shall not exceed 1.5 MGD, nor shall the

average discharge during any two-hour period (2-hour peak) exceed 3,125 gallons per minute (gpm).

| Parameter | 30-Day Average | | 7-Day Average | Daily Maximum |
|---|---|---|---|---|
| | mg/l | lbs/day | mg/l | mg/l |
| $CBOD_5$ | 10 | 125 | 15 | 25 |
| TSS | 15 | 188 | 25 | 40 |
| $NH_3$-N | 3 | 38 | 6 | 10 |
| DO (minimum) | 5.0 | N/A | N/A | N/A |
| *E. coli,* CFU or MPN per 100 ml | 126 | N/A | N/A | 399 |

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

The permittee shall utilize an Ultraviolet Light (UV) system for disinfection purposes. An equivalent method of disinfection may be substituted only with prior approval of the Executive Director.

| Parameter | Monitoring Requirement |
|---|---|
| Flow, MGD | Continuous |
| $CBOD_5$ | Two/week |
| TSS | Two/week |
| $NH_3$-N | Two/week |
| DO | Two/week |
| *E. coli* | Daily |

B. SEWAGE SLUDGE REQUIREMENTS

The draft permit includes Sludge Provisions according to the requirements of 30 TAC Chapter 312, Sludge Use, Disposal, and Transportation. Sludge generated from the treatment facility is hauled by a registered transporter to J-V Dirt and Loam 5RC Facility, TCEQ No. 2310 and Texas Organic Recovery TCEQ No. 42016, to be digested, dewatered, and then disposed of with the bulk of the sludge from the plant accepting the sludge. The draft permit also authorizes the disposal of sludge at a TCEQ-authorized land application site, co-disposal landfill, wastewater treatment facility, or facility that further processes sludge.

C. PRETREATMENT REQUIREMENTS

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

may contaminate the sewage sludge. This permit has appropriate pretreatment language for a facility of this size and complexity.

D. WHOLE EFFLUENT TOXICITY (BIOMONITORING) REQUIREMENTS

(1) The draft permit includes chronic freshwater biomonitoring requirements as follows. The permit requires five dilutions in addition to the control (0% effluent) to be used in the toxicity tests. These additional effluent concentrations shall be 27%, 36%, 48%, 64%, and 87%. The low-flow effluent concentration (critical dilution) is defined as 87% effluent. The critical dilution is in accordance with the "Aquatic Life Criteria" section of the "Water Quality Based Effluent Limitations/Conditions" section.

(a) Chronic static renewal survival and reproduction test using the water flea (*Ceriodaphnia dubia*). The frequency of the testing is once per quarter for at least the first year of testing, after which the permittee may apply for a testing frequency reduction.

(b) Chronic static renewal 7-day larval survival and growth test using the fathead minnow (*Pimephales promelas*). The frequency of the testing is once per quarter for at least the first year of testing, after which the permittee may apply for a testing frequency reduction.

(2) The draft permit includes the following minimum 24-hour acute freshwater biomonitoring requirements at a frequency of once per six months:

(a) Acute 24-hour static toxicity test using the water flea (*Daphnia pulex* or *Ceriodaphnia dubia*).

(b) Acute 24-hour static toxicity test using the fathead minnow (*Pimephales promelas*).

E. SUMMARY OF CHANGES FROM APPLICATION

None.

H. SUMMARY OF CHANGES FROM EXISTING PERMIT

The Standard Permit Conditions, Sludge Provisions, Other Requirements, and Biomonitoring sections of the draft permit have been updated.

The WET testing dilution series on page 36 of the existing permit has been updated on page 36 of the draft permit.

For Publicly Owned Treatment Works (POTWs), effective December 21, 2025, the permittee must submit the written report for unauthorized discharges and unanticipated bypasses that exceed any effluent limit in the permit using the online electronic reporting system available through the TCEQ website unless the permittee requests and obtains an electronic reporting waiver.

Certain accidental discharges or spills of treated or untreated wastewater from wastewater treatment facilities or collection systems owned or operated by a local government may be reported on a monthly basis in accordance with 30 TAC § 305.132.

The draft permit includes all updates based on the 30 TAC § 312 rule change effective April 23, 2020.

## 8. DRAFT PERMIT RATIONALE

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

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

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

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

#### (1) WATER QUALITY SUMMARY

The treated effluent is discharged directly to Plum Creek in Segment No. 1810 of the Guadalupe River Basin. The designated uses for Segment No. 1810 are primary contact recreation, aquifer protection, and high aquatic life use. The effluent limitations in the draft permit will maintain and protect the existing instream uses. All determinations are preliminary and subject to additional review and/or revisions.

The discharge from this permit action is not expected to have an effect on any federal endangered or threatened aquatic or aquatic dependent species or proposed species or their critical habitat. This determination is based on the United States Fish and Wildlife Service's (USFWS) biological opinion on the State of Texas authorization of the Texas Pollutant Discharge Elimination System TPDES (September 14, 1998; October 21, 1998 update). To make this determination for TPDES permits, TCEQ and EPA only considered aquatic or aquatic dependent species occurring in watersheds of critical concern or high priority as listed in Appendix A of the USFWS biological opinion. The determination is subject to reevaluation due to subsequent updates or amendments to the biological opinion. The permit does not require EPA review with respect to the presence of endangered or threatened species.

Segment No. 1810 is not currently listed on the state's inventory of impaired and threatened waters (the 2024 CWA § 303(d) list).

The pollutant analysis of treated effluent provided by the permittee in the application indicated 620 mg/l total dissolved solids (TDS), 80.3 mg/l sulfate, and 183 mg/l chloride present in the effluent. The segment

criteria for Segment No. 1810 are 1,120 mg/l for TDS, 150 mg/l for sulfate, and 150 mg/l for chlorides. Based on dissolved solids screening, additional limits or monitoring requirements are needed for chloride. See Attachment A of this Fact Sheet.

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

(2) CONVENTIONAL PARAMETERS

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

The effluent limitations in the draft permit have been reviewed for consistency with the WQMP. The existing effluent limitations are consistent with the approved WQMP.

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

(3) COASTAL MANAGEMENT PLAN

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

C. WATER QUALITY-BASED EFFLUENT LIMITATIONS/CONDITIONS

(1) GENERAL COMMENTS

The Texas Surface Water Quality Standards (30 TAC Chapter 307) state that surface waters will not be toxic to man, or to terrestrial or aquatic life. The methodology outlined in the "Procedures to Implement the Texas Surface Water Quality Standards" is designed to ensure compliance with 30 TAC Chapter 307. Specifically, the methodology is designed to ensure that no source will be allowed to discharge any wastewater that: (1) results in instream aquatic toxicity; (2) causes a violation of an applicable narrative or numerical state water quality standard; (3) results in the endangerment of a drinking water supply; or (4) results in aquatic bioaccumulation that threatens human health.

(2) AQUATIC LIFE CRITERIA

(a) SCREENING

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

Acute freshwater criteria are applied at the edge of the zone of initial dilution (ZID), and chronic freshwater criteria are applied at the edge of the aquatic life mixing zone. The ZID for this discharge is defined as 20 feet upstream and 60 feet downstream from the point where the discharge enters Plum Creek. The aquatic life mixing zone for this discharge is defined as 100 feet upstream and 300 feet downstream from the point where the discharge enters Plum Creek.

TCEQ uses the mass balance equation to estimate dilutions at the edges of the ZID and aquatic life mixing zone during critical conditions. The estimated dilution at the edge of the aquatic life mixing zone is calculated using the permitted flow of 1.50 MGD and the 7-day, 2-year (7Q2) flow of 0.57 cubic feet per second (cfs) for Plum Creek. The estimated dilution at the edge of the ZID is calculated using the permitted flow of 1.50 MGD and 25% of the 7Q2 flow. The following critical effluent percentages are being used:

| | | | |
|---|---|---|---|
| Acute Effluent %: | 94.22% | Chronic Effluent %: | 80.28% |

Waste load allocations (WLAs) are calculated using the above estimated effluent percentages, criteria outlined in the Texas Surface Water Quality Standards, and partitioning coefficients for metals (when appropriate and designated in the implementation procedures). The WLA is the end-of-pipe effluent concentration that can be discharged when, after mixing in the receiving stream, instream numerical criteria will not be exceeded. From the WLA, a long-term average (LTA) is calculated using a log normal probability distribution, a given coefficient of variation (0.6), and a 90$^{th}$ percentile confidence level. The LTA is the long-term average effluent concentration for which the WLA will never be exceeded using a selected percentile confidence level. The lower of the two LTAs (acute and chronic) is used to calculate a daily average and daily maximum effluent limitation for the protection of aquatic life using the same statistical considerations with the 99$^{th}$ percentile confidence level and a standard number of monthly effluent samples collected (12). Assumptions used in deriving the effluent limitations include segment values for hardness, chlorides, pH, and total suspended solids (TSS) according to the segment-specific values contained in the TCEQ guidance document "Procedures to Implement the Texas Surface Water Quality Standards." The segment values are 224 mg/l for hardness (as calcium carbonate), 126 mg/l chlorides, 7.6 standard units for pH, and 7.2 mg/l for TSS. For additional details on the calculation of water quality-based effluent limitations, refer to the TCEQ guidance document.

TCEQ practice for determining significant potential is to compare the reported analytical data against percentages of the calculated daily average water quality-based effluent limitation. Permit limitations are

required when analytical data reported in the application exceeds 85% of the calculated daily average water quality-based effluent limitation. Monitoring and reporting is required when analytical data reported in the application exceeds 70% of the calculated daily average water quality-based effluent limitation. See Attachment B of this Fact Sheet.

(b) PERMIT ACTION

Analytical data reported in the application was screened against calculated water quality-based effluent limitations for the protection of aquatic life. Reported analytical data does not exceed 70% of the calculated daily average water quality-based effluent limitations for aquatic life protection.

(3) AQUATIC ORGANISM BIOACCUMULATION CRITERIA

(a) SCREENING

Water quality-based effluent limitations for the protection of human health are calculated using criteria for the consumption of freshwater fish tissue found in Table 2 of the Texas Surface Water Quality Standards (30 TAC Chapter 307). Freshwater fish tissue bioaccumulation criteria are applied at the edge of the human health mixing zone. The human health mixing zone for this discharge is identical to the aquatic life mixing zone. TCEQ uses the mass balance equation to estimate dilution at the edge of the human health mixing zone during average flow conditions. The estimated dilution at the edge of the human health mixing zone is calculated using the permitted flow of 1.5 MGD and the harmonic mean flow of 1.24 cfs for Plum Creek. The following critical effluent percentage is being used:

Human Health Effluent %: 65.18%

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

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

(b) PERMIT ACTION

Reported analytical data does not exceed 70% of the calculated daily average water quality-based effluent limitation for human health protection

(4) DRINKING WATER SUPPLY PROTECTION

(a) SCREENING

Water Quality Segment No. 1810, which receives the discharge from this facility, is not designated as a public water supply. Screening reported analytical data of the effluent against water quality-based effluent limitations calculated for the protection of a drinking water supply is not applicable.

(b) PERMIT ACTION

None.

(5) WHOLE EFFLUENT TOXICITY (BIOMONITORING) CRITERIA

(a) SCREENING

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

The existing permit includes chronic freshwater biomonitoring requirements.

**REASONABLE POTENTIAL (RP) DETERMINATION**

A summary of the biomonitoring testing for the facility indicates that in the past three years, the permittee has performed ten chronic tests, with zero demonstrations of significant toxicity (i.e., zero failures).

A reasonable potential determination was performed in accordance with 40 CFR §122.44(d)(1)(ii) to determine whether the discharge will reasonably be expected to cause or contribute to an exceedance of a state water quality standard or criterion within that standard. Each test species is evaluated separately. The RP determination is based on representative data from the previous three years of WET testing. This determination was performed in accordance with the methodology outlined in the TCEQ letter to the EPA dated December 28, 2015, and approved by the EPA in a letter dated December 28, 2015.

With zero failures, a determination of no RP was made. WET limits are not required and both test species may be eligible for the testing frequency reduction after one year of quarterly testing.

(b) PERMIT ACTION

The test species are appropriate to measure the toxicity of the effluent

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

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

(a) SCREENING

The existing permit includes 24-hour acute freshwater biomonitoring language. A summary of the biomonitoring testing for the facility indicates that in the past three years, the permittee has performed ten 24-hour acute tests, with zero demonstrations of significant toxicity (i.e., zero failures).

(b) PERMIT ACTION

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

## 9. WATER QUALITY VARIANCE REQUESTS

No variance requests have been received.

## 10. PROCEDURES FOR FINAL DECISION

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

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

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

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

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

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

For additional information about this application, contact Paula Palmar at (512) 239-4561.

## 11. ADMINISTRATIVE RECORD

The following items were considered in developing the draft permit:

A. PERMIT(S)

TPDES Permit No. WQ0010210002 issued on July 30, 2020.

B. APPLICATION

Application received on January 14, 2025, and additional information received on October 21, 2025.

C. MEMORANDA

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

D. MISCELLANEOUS

Federal Clean Water Act § 402; Texas Water Code § 26.027; 30 TAC Chapters 30,

305, 309, 312, and 319; Commission policies; and U.S. Environmental Protection Agency guidelines.

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

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

Texas 2024 Clean Water Act Section 303(d) List, Texas Commission on Environmental Quality, June 26, 2024; approved by the U.S. Environmental Protection Agency on November 13, 2024.

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

## Attachment A: Screening Calculations for Total Dissolved Solids, Chloride, and Sulfate

# Screening Calculations for Total Dissolved Solids, Chloride, and Sulfate

## Menu 3 - Discharge to a Perennial Stream or River

| | |
|---|---|
| | **City of Lockhart, GBRA Lockhart WWTP2** |
| **Permit Number, Outfall:** | **10210-002** |
| **Segment Number:** | **1810** |

| **Enter values needed for screening:** | | | **Data Source (edit if different)** |
|---|---|---|---|
| QE - Average effluent flow | **1.5** | MGD | |
| QS - Perennial stream harmonic mean flow | **1.24** | cfs | Critical conditions memo |
| QE - Average effluent flow | **2.3208** | cfs | Calculated |
| CA - TDS - ambient segment concentration | **673** | mg/L | 2010 IP, Appendix D |
| CA - chloride - ambient segment concentration | | mg/L | 2010 IP, Appendix D |
| CA - sulfate - ambient segment concentration | | mg/L | 2010 IP, Appendix D |
| CC - TDS - segment criterion | **1120** | mg/L | Latest appr'vd TSWQS, App. A |
| CC - chloride - segment criterion | | mg/L | Latest appr'vd TSWQS, App. A |
| CC - sulfate - segment criterion | | mg/L | Latest appr'vd TSWQS, App. A |
| CE - TDS - average effluent concentration | **620** | mg/L | Permit application |
| CE - chloride - average effluent concentration | | mg/L | Permit application |
| CE - sulfate - average effluent concentration | | mg/L | Permit application |

**Screening Equation**

$$CC \geq [(QS)(CA) + (QE)(CE)]/[QE + QS]$$

| **Preliminary Calculations** | **Load in River** | **Effluent Load** | **New Concentration** | **% Change in Ambient** | **% Change in Assim. Capacity** |
|---|---|---|---|---|---|
| **Parameter** | **QSCA** | **QECE** | **Equation 2** | | |
| TDS | 834.52 | 1438.924 | 638.46 | -5.1 | -7.7 |
| Chloride | 0 | 0 | 0.00 | #DIV/0! | #DIV/0! |

| | | | | | |
|---|---|---|---|---|---|
| Sulfate | 0 | 0 | 0.00 | #DIV/0! | #DIV/0! |

| | | | | | |
|---|---|---|---|---|---|
| | **638.4** | | | | |
| **No further screening for TDS needed if:** | **6** | **≤** | **1120** | | |
| **No further screening for chloride needed if:** | **0.00** | **≤** | **0** | | |
| **No further screening for sulfate needed if:** | **0.00** | **≤** | **0** | | |

**Permit Limit Calculations**

**TDS**

| | | | | | |
|---|---|---|---|---|---|
| Calculate the WLA | WLA= [CC(QE+QS) - (QS)(CA)]/QE | | | 1358.83 | |
| Calculate the LTA | LTA = WLA * 0.93 | | | 1263.71 | |
| Calculate the daily average | Daily Avg. = LTA * 1.47 | | | **1857.65** | |
| Calculate the daily maximum | Daily Max. = LTA * 3.11 | | | **3930.13** | |
| Calculate 70% of the daily average | 70% of Daily Avg. = | | | 1300.36 | |
| Calculate 85% of the daily average | 85% of Daily Avg. = | | | 1579.00 | |
| **No permit limitations needed if:** | **620** | **≤** | **1300.36** | | |
| **Reporting needed if:** | **620** | **>** | **1300.36** | **but ≤** | **1579.00** |
| **Permit limits may be needed if:** | **620** | **>** | **1579.00** | | |

**No permit limitations needed for TDS**

The submitted effluent TDS and sulfate both passed the dissolved solids screening. According to TDS Screening Procedures in *Procedures to Implement the Texas Surface Water Quality Standards* (June 2010), screening of TDS is normally sufficient to address dissolved minerals, i.e. salts. The submitted effluent chloride concentration was slightly elevated, in which the Standard Operating Procedure is to refer to the biomonitoring review and memo. The biomonitoring memo stated that the facility had no failures; therefore, it is assumed that the salts are in osmotic balance. Therefore, as stated in previous memo dated 8/26/25, no additional TDS, chloride, or sulfate limits or monitoring are warranted.

# Attachment B: Calculated Water Quality Based Effluent Limitations

**TEXTOX MENU #3 - PERENNIAL STREAM OR RIVER**

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

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

**PERMIT INFORMATION**

| | |
|---|---|
| Permittee Name: | City of Lockhart and Guadalupe Blanco River Authority |
| TPDES Permit No.: | WQ0010210002 |
| Outfall No.: | 001 |
| Prepared by: | Paula Palmar |
| Date: | 10/17/2025 |

**DISCHARGE INFORMATION**

| | |
|---|---|
| Receiving Waterbody: | directly to Plum Creek |
| Segment No.: | 1810 |
| TSS (mg/L): | 7.2 |
| pH (Standard Units): | 7.6 |
| Hardness (mg/L as $CaCO_3$): | 224 |
| Chloride (mg/L): | 126 |
| Effluent Flow for Aquatic Life (MGD): | 1.5 |
| Critical Low Flow [7Q2] (cfs): | 0.57 |
| % Effluent for Chronic Aquatic Life (Mixing Zone): | 80.28 |
| % Effluent for Acute Aquatic Life (ZID): | 94.22 |
| Effluent Flow for Human Health (MGD): | 1.5 |
| Harmonic Mean Flow (cfs): | 1.24 |
| % Effluent for Human Health: | 65.18 |
| Human Health Criterion (select: PWS, FISH, or INC) | **FISH** |

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

| *Stream/River Metal* | *Intercept (b)* | *Slope (m)* | *Partition Coefficient (Kp)* | *Dissolved Fraction (Cd/Ct)* | *Source* | *Water Effect Ratio (WER)* | *Source* |
|---|---|---|---|---|---|---|---|
| Aluminum | N/A | N/A | N/A | 1.00 | Assumed | 1.00 | Assumed |
| Arsenic | 5.68 | -0.73 | 113278.44 | 0.551 | | 1.00 | Assumed |
| Cadmium | 6.60 | -1.13 | 427773.90 | 0.245 | | 1.00 | Assumed |
| Chromium (total) | 6.52 | -0.93 | 528056.97 | 0.208 | | 1.00 | Assumed |
| Chromium (trivalent) | 6.52 | -0.93 | 528056.97 | 0.208 | | 1.00 | Assumed |
| Chromium (hexavalent) | N/A | N/A | N/A | 1.00 | Assumed | 1.00 | Assumed |
| Copper | 6.02 | -0.74 | 242981.92 | 0.364 | | 1.00 | Assumed |
| Lead | 6.45 | -0.80 | 580943.64 | 0.193 | | 1.00 | Assumed |
| Mercury | N/A | N/A | N/A | 1.00 | Assumed | 1.00 | Assumed |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Nickel | 5.69 | -0.57 | 158971.94 | 0.466 | | 1.00 | Assumed |
| Selenium | N/A | N/A | N/A | 1.00 | Assumed | 1.00 | Assumed |
| Silver | 6.38 | -1.03 | 314012.93 | 0.307 | | 1.00 | Assumed |
| Zinc | 6.10 | -0.70 | 316131.12 | 0.305 | | 1.00 | Assumed |

**AQUATIC LIFE**

**CALCULATE DAILY AVERAGE AND DAILY MAXIMUM EFFLUENT LIMITATIONS:**

| *Parameter* | *FW Acute Criterion (µg/L)* | *FW Chronic Criterion (µg/L)* | *WLAa (µg/L)* | *WLAc (µg/L)* | *LTAa (µg/L)* | *LTAc (µg/L)* | *Daily Avg. (µg/L)* | *Daily Max. (µg/L)* |
|---|---|---|---|---|---|---|---|---|
| Aldrin | 3.0 | N/A | 3.18 | N/A | 1.82 | N/A | 2.68 | 5.67 |
| Aluminum | 991 | N/A | 1052 | N/A | 603 | N/A | 885 | 1874 |
| Arsenic | 340 | 150 | 655 | 339 | 375 | 261 | 383 | 812 |
| Cadmium | 18.8 | 0.431 | 81.4 | 2.19 | 46.6 | 1.68 | 2.47 | 5.23 |
| Carbaryl | 2.0 | N/A | 2.12 | N/A | 1.22 | N/A | 1.78 | 3.78 |
| Chlordane | 2.4 | 0.004 | 2.55 | 0.00498 | 1.46 | 0.00384 | 0.00563 | 0.0119 |
| Chlorpyrifos | 0.083 | 0.041 | 0.0881 | 0.0511 | 0.0505 | 0.0393 | 0.0578 | 0.122 |
| Chromium (trivalent) | 1103 | 143 | 5621 | 858 | 3221 | 661 | 971 | 2054 |
| Chromium (hexavalent) | 15.7 | 10.6 | 16.7 | 13.2 | 9.55 | 10.2 | 14.0 | 29.6 |
| Copper | 30.4 | 18.9 | 88.6 | 64.6 | 50.8 | 49.7 | 73.1 | 154 |
| Cyanide (free) | 45.8 | 10.7 | 48.6 | 13.3 | 27.9 | 10.3 | 15.0 | 31.9 |
| 4,4'-DDT | 1.1 | 0.001 | 1.17 | 0.00125 | 0.669 | 0.000959 | 0.00140 | 0.00298 |
| Demeton | N/A | 0.1 | N/A | 0.125 | N/A | 0.0959 | 0.140 | 0.298 |
| Diazinon | 0.17 | 0.17 | 0.180 | 0.212 | 0.103 | 0.163 | 0.151 | 0.321 |
| Dicofol [Kelthane] | 59.3 | 19.8 | 62.9 | 24.7 | 36.1 | 19.0 | 27.9 | 59.0 |
| Dieldrin | 0.24 | 0.002 | 0.255 | 0.00249 | 0.146 | 0.00192 | 0.00281 | 0.00596 |
| Diuron | 210 | 70 | 223 | 87.2 | 128 | 67.1 | 98.6 | 208 |
| Endosulfan I (*alpha*) | 0.22 | 0.056 | 0.234 | 0.0698 | 0.134 | 0.0537 | 0.0789 | 0.167 |
| Endosulfan II (*beta*) | 0.22 | 0.056 | 0.234 | 0.0698 | 0.134 | 0.0537 | 0.0789 | 0.167 |
| Endosulfan sulfate | 0.22 | 0.056 | 0.234 | 0.0698 | 0.134 | 0.0537 | 0.0789 | 0.167 |
| Endrin | 0.086 | 0.002 | 0.0913 | 0.00249 | 0.0523 | 0.00192 | 0.00281 | 0.00596 |
| Guthion [Azinphos Methyl] | N/A | 0.01 | N/A | 0.0125 | N/A | 0.00959 | 0.0140 | 0.0298 |
| Heptachlor | 0.52 | 0.004 | 0.552 | 0.00498 | 0.316 | 0.00384 | 0.00563 | 0.0119 |
| Hexachlorocyclohexane (*gamma*) [Lindane] | 1.126 | 0.08 | 1.20 | 0.0996 | 0.685 | 0.0767 | 0.112 | 0.238 |
| Lead | 154 | 5.98 | 844 | 38.6 | 484 | 29.7 | 43.7 | 92.4 |
| Malathion | N/A | 0.01 | N/A | 0.0125 | N/A | 0.00959 | 0.0140 | 0.0298 |
| Mercury | 2.4 | 1.3 | 2.55 | 1.62 | 1.46 | 1.25 | 1.83 | 3.87 |
| Methoxychlor | N/A | 0.03 | N/A | 0.0374 | N/A | 0.0288 | 0.0422 | 0.0894 |
| Mirex | N/A | 0.001 | N/A | 0.00125 | N/A | 0.000959 | 0.00140 | 0.00298 |
| Nickel | 926 | 102.9 | 2109 | 275 | 1208 | 212 | 311 | 658 |
| Nonylphenol | 28 | 6.6 | 29.7 | 8.22 | 17.0 | 6.33 | 9.30 | 19.6 |
| Parathion (ethyl) | 0.065 | 0.013 | 0.0690 | 0.0162 | 0.0395 | 0.0125 | 0.0183 | 0.0387 |
| Pentachlorophenol | 15.9 | 12.2 | 16.9 | 15.2 | 9.70 | 11.7 | 14.2 | 30.1 |
| Phenanthrene | 30 | 30 | 31.8 | 37.4 | 18.2 | 28.8 | 26.8 | 56.7 |
| Polychlorinated Biphenyls [PCBs] | 2.0 | 0.014 | 2.12 | 0.0174 | 1.22 | 0.0134 | 0.0197 | 0.0417 |
| Selenium | 20 | 5 | 21.2 | 6.23 | 12.2 | 4.80 | 7.04 | 14.9 |
| Silver | 0.8 | N/A | 28.2 | N/A | 16.2 | N/A | 23.7 | 50.2 |
| Toxaphene | 0.78 | 0.0002 | 0.828 | 0.000249 | 0.474 | 0.000192 | 0.000281 | 0.000596 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Tributyltin [TBT] | 0.13 | 0.024 | 0.138 | 0.0299 | 0.0791 | 0.0230 | 0.0338 | 0.0715 |
| 2,4,5 Trichlorophenol | 136 | 64 | 144 | 79.7 | 82.7 | 61.4 | 90.2 | 190 |
| Zinc | 232 | 234 | 807 | 955 | 462 | 735 | 679 | 1438 |

**HUMAN HEALTH**

**CALCULATE DAILY AVERAGE AND DAILY MAXIMUM EFFLUENT LIMITATIONS:**

| *Parameter* | *Water and Fish Criterion (µg/L)* | *Fish Only Criterion (µg/L)* | *Incidental Fish Criterion (µg/L)* | *WLAh (µg/L)* | *LTAh (µg/L)* | *Daily Avg. (µg/L)* | *Daily Max. (µg/L)* |
|---|---|---|---|---|---|---|---|
| Acrylonitrile | 1.0 | 115 | 1150 | 176 | 164 | 241 | 510 |
| Aldrin | 1.146E-05 | 1.147E-05 | 1.147E-04 | 0.0000176 | 0.0000164 | 0.0000240 | 0.0000508 |
| Anthracene | 1109 | 1317 | 13170 | 2021 | 1879 | 2762 | 5844 |
| Antimony | 6 | 1071 | 10710 | 1643 | 1528 | 2246 | 4752 |
| Arsenic | 10 | N/A | N/A | N/A | N/A | N/A | N/A |
| Barium | 2000 | N/A | N/A | N/A | N/A | N/A | N/A |
| Benzene | 5 | 581 | 5810 | 891 | 829 | 1218 | 2578 |
| Benzidine | 0.0015 | 0.107 | 1.07 | 0.164 | 0.153 | 0.224 | 0.474 |
| Benzo(*a*)anthracene | 0.024 | 0.025 | 0.25 | 0.0384 | 0.0357 | 0.0524 | 0.110 |
| Benzo(*a*)pyrene | 0.0025 | 0.0025 | 0.025 | 0.00384 | 0.00357 | 0.00524 | 0.0110 |
| Bis(chloromethyl)ether | 0.0024 | 0.2745 | 2.745 | 0.421 | 0.392 | 0.575 | 1.21 |
| Bis(2-chloroethyl)ether | 0.60 | 42.83 | 428.3 | 65.7 | 61.1 | 89.8 | 190 |
| Bis(2-ethylhexyl) phthalate [Di(2-ethylhexyl) phthalate] | 6 | 7.55 | 75.5 | 11.6 | 10.8 | 15.8 | 33.5 |
| Bromodichloromethane [Dichlorobromomethane] | 10.2 | 275 | 2750 | 422 | 392 | 576 | 1220 |
| Bromoform [Tribromomethane] | 66.9 | 1060 | 10600 | 1626 | 1513 | 2223 | 4703 |
| Cadmium | 5 | N/A | N/A | N/A | N/A | N/A | N/A |
| Carbon Tetrachloride | 4.5 | 46 | 460 | 70.6 | 65.6 | 96.4 | 204 |
| Chlordane | 0.0025 | 0.0025 | 0.025 | 0.00384 | 0.00357 | 0.00524 | 0.0110 |
| Chlorobenzene | 100 | 2737 | 27370 | 4199 | 3905 | 5740 | 12145 |
| Chlorodibromomethane [Dibromochloromethane] | 7.5 | 183 | 1830 | 281 | 261 | 383 | 812 |
| Chloroform [Trichloromethane] | 70 | 7697 | 76970 | 11809 | 10983 | 16144 | 34156 |
| Chromium (hexavalent) | 62 | 502 | 5020 | 770 | 716 | 1052 | 2227 |
| Chrysene | 2.45 | 2.52 | 25.2 | 3.87 | 3.60 | 5.28 | 11.1 |
| Cresols [Methylphenols] | 1041 | 9301 | 93010 | 14270 | 13272 | 19509 | 41274 |
| Cyanide (free) | 200 | N/A | N/A | N/A | N/A | N/A | N/A |
| 4,4'-DDD | 0.002 | 0.002 | 0.02 | 0.00307 | 0.00285 | 0.00419 | 0.00887 |
| 4,4'-DDE | 0.00013 | 0.00013 | 0.0013 | 0.000199 | 0.000185 | 0.00027 | 0.000576 |
| 4,4'-DDT | 0.0004 | 0.0004 | 0.004 | 0.000614 | 0.000571 | 0.000839 | 0.00177 |
| 2,4'-D | 70 | N/A | N/A | N/A | N/A | N/A | N/A |
| Danitol [Fenpropathrin] | 262 | 473 | 4730 | 726 | 675 | 992 | 2098 |
| 1,2-Dibromoethane [Ethylene Dibromide] | 0.17 | 4.24 | 42.4 | 6.51 | 6.05 | 8.89 | 18.8 |
| *m*-Dichlorobenzene [1,3-Dichlorobenzene] | 322 | 595 | 5950 | 913 | 849 | 1248 | 2640 |
| *o*-Dichlorobenzene [1,2-Dichlorobenzene] | 600 | 3299 | 32990 | 5062 | 4707 | 6919 | 14639 |
| *p*-Dichlorobenzene [1,4-Dichlorobenzene] | 75 | N/A | N/A | N/A | N/A | N/A | N/A |
| 3,3'-Dichlorobenzidine | 0.79 | 2.24 | 22.4 | 3.44 | 3.20 | 4.69 | 9.94 |
| 1,2-Dichloroethane | 5 | 364 | 3640 | 558 | 519 | 763 | 1615 |
| 1,1-Dichloroethylene [1,1-Dichloroethene] | 7 | 55114 | 551140 | 84561 | 78642 | 115603 | 244575 |
| Dichloromethane [Methylene Chloride] | 5 | 13333 | 133330 | 20457 | 19025 | 27966 | 59166 |
| 1,2-Dichloropropane | 5 | 259 | 2590 | 397 | 370 | 543 | 1149 |
| 1,3-Dichloropropene [1,3-Dichloropropylene] | 2.8 | 119 | 1190 | 183 | 170 | 249 | 528 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Dicofol [Kelthane] | 0.30 | 0.30 | 3 | 0.460 | 0.428 | 0.629 | 1.33 |
| Dieldrin | 2.0E-05 | 2.0E-05 | 2.0E-04 | 0.00003 07 | 0.00002 85 | 0.00004 19 | 0.00008 87 |
| 2,4-Dimethylphenol | 444 | 8436 | 84360 | 12943 | 12037 | 17694 | 37435 |
| Di-*n*-Butyl Phthalate | 88.9 | 92.4 | 924 | 142 | 132 | 193 | 410 |
| Dioxins/Furans [TCDD Equivalents] | 7.80E-08 | 7.97E-08 | 7.97E-07 | 1.22E-07 | 1.14E- 07 | 1.67E- 07 | 3.53E- 07 |
| Endrin | 0.02 | 0.02 | 0.2 | 0.0307 | 0.0285 | 0.0419 | 0.0887 |
| Epichlorohydrin | 53.5 | 2013 | 20130 | 3089 | 2872 | 4222 | 8932 |
| Ethylbenzene | 700 | 1867 | 18670 | 2865 | 2664 | 3916 | 8285 |
| Ethylene Glycol | 46744 | 1.68E+0 7 | 1.68E+0 8 | 2577609 2 | 239717 66 | 352384 95 | 745521 91 |
| Fluoride | 4000 | N/A | N/A | N/A | N/A | N/A | N/A |
| Heptachlor | 8.0E-05 | 0.0001 | 0.001 | 0.00015 3 | 0.00014 3 | 0.00020 9 | 0.00044 3 |
| Heptachlor Epoxide | 0.00029 | 0.00029 | 0.0029 | 0.00044 5 | 0.00041 4 | 0.00060 8 | 0.00128 |
| Hexachlorobenzene | 0.00068 | 0.00068 | 0.0068 | 0.00104 | 0.00097 0 | 0.00142 | 0.00301 |
| Hexachlorobutadiene | 0.21 | 0.22 | 2.2 | 0.338 | 0.314 | 0.461 | 0.976 |
| Hexachlorocyclohexane (*alpha*) | 0.0078 | 0.0084 | 0.084 | 0.0129 | 0.0120 | 0.0176 | 0.0372 |
| Hexachlorocyclohexane (*beta*) | 0.15 | 0.26 | 2.6 | 0.399 | 0.371 | 0.545 | 1.15 |
| Hexachlorocyclohexane (*gamma*) [Lindane] | 0.2 | 0.341 | 3.41 | 0.523 | 0.487 | 0.715 | 1.51 |
| Hexachlorocyclopentadiene | 10.7 | 11.6 | 116 | 17.8 | 16.6 | 24.3 | 51.4 |
| Hexachloroethane | 1.84 | 2.33 | 23.3 | 3.57 | 3.32 | 4.88 | 10.3 |
| Hexachlorophene | 2.05 | 2.90 | 29 | 4.45 | 4.14 | 6.08 | 12.8 |
| 4,4'-Isopropylidenediphenol | 1092 | 15982 | 159820 | 24521 | 22805 | 33522 | 70922 |
| Lead | 1.15 | 3.83 | 38.3 | 30.5 | 28.3 | 41.6 | 88.0 |
| Mercury | 0.0122 | 0.0122 | 0.122 | 0.0187 | 0.0174 | 0.0255 | 0.0541 |
| Methoxychlor | 2.92 | 3.0 | 30 | 4.60 | 4.28 | 6.29 | 13.3 |
| Methyl Ethyl Ketone | 13865 | 9.92E+0 5 | 9.92E+0 6 | 1522017 | 141547 6 | 208074 9 | 440212 9 |
| Methyl *tert*-butyl ether [MTBE] | 15 | 10482 | 104820 | 16082 | 14957 | 21986 | 46515 |
| Nickel | 332 | 1140 | 11400 | 3751 | 3489 | 5128 | 10849 |
| Nitrate-Nitrogen (as Total Nitrogen) | 10000 | N/A | N/A | N/A | N/A | N/A | N/A |
| Nitrobenzene | 45.7 | 1873 | 18730 | 2874 | 2673 | 3928 | 8311 |
| N-Nitrosodiethylamine | 0.0037 | 2.1 | 21 | 3.22 | 3.00 | 4.40 | 9.31 |
| N-Nitroso-di-*n*-Butylamine | 0.119 | 4.2 | 42 | 6.44 | 5.99 | 8.80 | 18.6 |
| Pentachlorobenzene | 0.348 | 0.355 | 3.55 | 0.545 | 0.507 | 0.744 | 1.57 |
| Pentachlorophenol | 0.22 | 0.29 | 2.9 | 0.445 | 0.414 | 0.608 | 1.28 |
| Polychlorinated Biphenyls [PCBs] | 6.4E-04 | 6.4E-04 | 6.40E-03 | 0.00098 2 | 0.00091 3 | 0.00134 | 0.00284 |
| Pyridine | 23 | 947 | 9470 | 1453 | 1351 | 1986 | 4202 |
| Selenium | 50 | N/A | N/A | N/A | N/A | N/A | N/A |
| 1,2,4,5-Tetrachlorobenzene | 0.23 | 0.24 | 2.4 | 0.368 | 0.342 | 0.503 | 1.06 |
| 1,1,2,2-Tetrachloroethane | 1.64 | 26.35 | 263.5 | 40.4 | 37.6 | 55.2 | 116 |
| Tetrachloroethylene [Tetrachloroethylene] | 5 | 280 | 2800 | 430 | 400 | 587 | 1242 |
| Thallium | 0.12 | 0.23 | 2.3 | 0.353 | 0.328 | 0.482 | 1.02 |
| Toluene | 1000 | N/A | N/A | N/A | N/A | N/A | N/A |
| Toxaphene | 0.011 | 0.011 | 0.11 | 0.0169 | 0.0157 | 0.0230 | 0.0488 |
| 2,4,5-TP [Silvex] | 50 | 369 | 3690 | 566 | 527 | 773 | 1637 |
| 1,1,1-Trichloroethane | 200 | 784354 | 7843540 | 1203427 | 111918 8 | 164520 5 | 348067 3 |
| 1,1,2-Trichloroethane | 5 | 166 | 1660 | 255 | 237 | 348 | 736 |
| Trichloroethylene [Trichloroethene] | 5 | 71.9 | 719 | 110 | 103 | 150 | 319 |
| 2,4,5-Trichlorophenol | 1039 | 1867 | 18670 | 2865 | 2664 | 3916 | 8285 |
| TTHM [Sum of Total Trihalomethanes] | 80 | N/A | N/A | N/A | N/A | N/A | N/A |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Vinyl Chloride | 0.23 | 16.5 | 165 | 25.3 | 23.5 | 34.6 | 73.2 |

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

| **Aquatic Life** | ***70% of Daily Avg.*** | ***85% of Daily Avg.*** |
|---|---|---|
| ***Parameter*** | ***(µg/L)*** | ***(µg/L)*** |
| Aldrin | 1.87 | 2.27 |
| Aluminum | 620 | 753 |
| Arsenic | 268 | 326 |
| Cadmium | 1.73 | 2.10 |
| Carbaryl | 1.25 | 1.51 |
| Chlordane | 0.00394 | 0.00479 |
| Chlorpyrifos | 0.0404 | 0.0491 |
| Chromium (trivalent) | 679 | 825 |
| Chromium (hexavalent) | 9.82 | 11.9 |
| Copper | 51.1 | 62.1 |
| Cyanide (free) | 10.5 | 12.8 |
| 4,4'-DDT | 0.000986 | 0.00119 |
| Demeton | 0.0986 | 0.119 |
| Diazinon | 0.106 | 0.129 |
| Dicofol [Kelthane] | 19.5 | 23.7 |
| Dieldrin | 0.00197 | 0.00239 |
| Diuron | 69.0 | 83.8 |
| Endosulfan I (*alpha*) | 0.0552 | 0.0671 |
| Endosulfan II (*beta*) | 0.0552 | 0.0671 |
| Endosulfan sulfate | 0.0552 | 0.0671 |
| Endrin | 0.00197 | 0.00239 |
| Guthion [Azinphos Methyl] | 0.00986 | 0.0119 |
| Heptachlor | 0.00394 | 0.00479 |
| Hexachlorocyclohexane (*gamma*) [Lindane] | 0.0789 | 0.0958 |
| Lead | 30.5 | 37.1 |
| Malathion | 0.00986 | 0.0119 |
| Mercury | 1.28 | 1.55 |
| Methoxychlor | 0.0296 | 0.0359 |
| Mirex | 0.000986 | 0.00119 |
| Nickel | 217 | 264 |
| Nonylphenol | 6.51 | 7.90 |
| Parathion (ethyl) | 0.0128 | 0.0155 |
| Pentachlorophenol | 9.97 | 12.1 |
| Phenanthrene | 18.7 | 22.7 |
| Polychlorinated Biphenyls [PCBs] | 0.0138 | 0.0167 |
| Selenium | 4.93 | 5.99 |
| Silver | 16.6 | 20.1 |
| Toxaphene | 0.000197 | 0.000239 |
| Tributyltin [TBT] | 0.0236 | 0.0287 |
| 2,4,5 Trichlorophenol | 63.1 | 76.6 |
| Zinc | 475 | 577 |

| **Human Health** | ***70% of Daily Avg.*** | ***85% of Daily Avg.*** |
|---|---|---|

| ***Parameter*** | ***(µg/L)*** | ***(µg/L)*** |
|---|---|---|
| Acrylonitrile | 168 | 205 |
| Aldrin | 0.0000168 | 0.0000204 |
| Anthracene | 1933 | 2348 |
| Antimony | 1572 | 1909 |
| Arsenic | N/A | N/A |
| Barium | N/A | N/A |
| Benzene | 853 | 1035 |
| Benzidine | 0.157 | 0.190 |
| Benzo(*a*)anthracene | 0.0367 | 0.0445 |
| Benzo(*a*)pyrene | 0.00367 | 0.00445 |
| Bis(chloromethyl)ether | 0.403 | 0.489 |
| Bis(2-chloroethyl)ether | 62.8 | 76.3 |
| Bis(2-ethylhexyl) phthalate [Di(2-ethylhexyl) phthalate] | 11.0 | 13.4 |
| Bromodichloromethane [Dichlorobromomethane] | 403 | 490 |
| Bromoform [Tribromomethane] | 1556 | 1889 |
| Cadmium | N/A | N/A |
| Carbon Tetrachloride | 67.5 | 82.0 |
| Chlordane | 0.00367 | 0.00445 |
| Chlorobenzene | 4018 | 4879 |
| Chlorodibromomethane [Dibromochloromethane] | 268 | 326 |
| Chloroform [Trichloromethane] | 11301 | 13722 |
| Chromium (hexavalent) | 737 | 895 |
| Chrysene | 3.70 | 4.49 |
| Cresols [Methylphenols] | 13656 | 16582 |
| Cyanide (free) | N/A | N/A |
| 4,4'-DDD | 0.00293 | 0.00356 |
| 4,4'-DDE | 0.000190 | 0.000231 |
| 4,4'-DDT | 0.000587 | 0.000713 |
| 2,4'-D | N/A | N/A |
| Danitol [Fenpropathrin] | 694 | 843 |
| 1,2-Dibromoethane [Ethylene Dibromide] | 6.22 | 7.55 |
| *m*-Dichlorobenzene [1,3-Dichlorobenzene] | 873 | 1060 |
| *o*-Dichlorobenzene [1,2-Dichlorobenzene] | 4843 | 5881 |
| *p*-Dichlorobenzene [1,4-Dichlorobenzene] | N/A | N/A |
| 3,3'-Dichlorobenzidine | 3.28 | 3.99 |
| 1,2-Dichloroethane | 534 | 648 |
| 1,1-Dichloroethylene [1,1-Dichloroethene] | 80922 | 98262 |
| Dichloromethane [Methylene Chloride] | 19576 | 23771 |
| 1,2-Dichloropropane | 380 | 461 |
| 1,3-Dichloropropene [1,3-Dichloropropylene] | 174 | 212 |
| Dicofol [Kelthane] | 0.440 | 0.534 |
| Dieldrin | 0.0000293 | 0.0000356 |
| 2,4-Dimethylphenol | 12386 | 15040 |
| Di-*n*-Butyl Phthalate | 135 | 164 |
| Dioxins/Furans [TCDD Equivalents] | 1.17E-07 | 1.42E-07 |
| Endrin | 0.0293 | 0.0356 |
| Epichlorohydrin | 2955 | 3588 |
| Ethylbenzene | 2741 | 3328 |

| | | |
|---|---|---|
| Ethylene Glycol | 2466694<br>6 | 2995272<br>1 |
| Fluoride | N/A | N/A |
| Heptachlor | 0.00014<br>6 | 0.00017<br>8 |
| Heptachlor Epoxide | 0.00042<br>5 | 0.00051<br>7 |
| Hexachlorobenzene | 0.00099<br>8 | 0.00121 |
| Hexachlorobutadiene | 0.323 | 0.392 |
| Hexachlorocyclohexane (*alpha*) | 0.0123 | 0.0149 |
| Hexachlorocyclohexane (*beta*) | 0.381 | 0.463 |
| Hexachlorocyclohexane (*gamma*) [Lindane] | 0.500 | 0.607 |
| Hexachlorocyclopentadiene | 17.0 | 20.6 |
| Hexachloroethane | 3.42 | 4.15 |
| Hexachlorophene | 4.25 | 5.17 |
| 4,4'-Isopropylidenediphenol | 23465 | 28494 |
| Lead | 29.1 | 35.3 |
| Mercury | 0.0179 | 0.0217 |
| Methoxychlor | 4.40 | 5.34 |
| Methyl Ethyl Ketone | 1456524 | 1768636 |
| Methyl *tert*-butyl ether [MTBE] | 15390 | 18688 |
| Nickel | 3589 | 4358 |
| Nitrate-Nitrogen (as Total Nitrogen) | N/A | N/A |
| Nitrobenzene | 2750 | 3339 |
| N-Nitrosodiethylamine | 3.08 | 3.74 |
| N-Nitroso-di-*n*-Butylamine | 6.16 | 7.48 |
| Pentachlorobenzene | 0.521 | 0.632 |
| Pentachlorophenol | 0.425 | 0.517 |
| Polychlorinated Biphenyls [PCBs] | 0.00093<br>9 | 0.00114 |
| Pyridine | 1390 | 1688 |
| Selenium | N/A | N/A |
| 1,2,4,5-Tetrachlorobenzene | 0.352 | 0.427 |
| 1,1,2,2-Tetrachloroethane | 38.6 | 46.9 |
| Tetrachloroethylene [Tetrachloroethylene] | 411 | 499 |
| Thallium | 0.337 | 0.410 |
| Toluene | N/A | N/A |
| Toxaphene | 0.0161 | 0.0196 |
| 2,4,5-TP [Silvex] | 541 | 657 |
| 1,1,1-Trichloroethane | 1151643 | 1398424 |
| 1,1,2-Trichloroethane | 243 | 295 |
| Trichloroethylene [Trichloroethene] | 105 | 128 |
| 2,4,5-Trichlorophenol | 2741 | 3328 |
| TTHM [Sum of Total Trihalomethanes] | N/A | N/A |
| Vinyl Chloride | 24.2 | 29.4 |