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

Attachment 1

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 South Houston (CN 600548390) operates South Houston Wastewater Treatment Plant, a POTW (RN 102986312), a domestic wastewater treatment plant. The facility is located at 306 Michigan Street, in South Houston, Harris County, Texas 77587. South Houston has applied for a permit renewal to discharge 4,000,000 gallons per day of treated domestic wastewater.

Discharges from the facility are expected to contain BOD, TSS, Ammonia Nitrogen and Chlorine. The domestic wastewater is treated by grit removal, activated sludge process, clarification, disinfection by chlorine addition, dichlorination and finally exit by outfall. Sludge is captured, dewatered and hauled to a landfill.

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 federale de la solicitud de permiso.

La Ciudad del Sur de Houston ((CN 600548390)) opera la Planta de Tratamiento de Aguas Residuales del Sur de Houston, (RN 102986312, una planta de tratamiento de aguas residuales domésticas. La instalación está ubicada en 306 Michigan Street, en el sur de Houston, Condado de Harris, Texas 77587. El sur de Houston ha solicitado la renovación de un permiso para descargar 4,000,000 de galones por día de aguas residuales domésticas tratadas..

Se espera que las descargas de la instalación contengan DBO, SST, nitrógeno amoniacal y cloro. Aguas residuales domésticas. está tratado por eliminación de arena, proceso de lodos activados, clarificación, desinfección por adición de cloro, dicloración y finalmente salida por emisario. Los lodos se capturan, se deshidratan y se transportan a un vertedero..

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

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

PERMIT NO. WQ0010287001

APPLICATION. City of South Houston, P.O. Box 238, South Houston, Texas 77587, has applied to the Texas Commission on Environmental Quality (TCEQ) to renew Texas Pollutant Discharge Elimination System (TPDES) Permit No. WQ0010287001 (EPA I.D. No. TX0057304) to authorize the discharge of treated wastewater at a volume not to exceed a daily average flow of 4,000,000 gallons per day. The domestic wastewater treatment facility is located at 206 Michigan Street, in the city of South Houston, in Harris County, Texas 77587. The discharge route is from the plant site to Berry Bayou; thence to Sims Bayou; thence to Houston Ship Channel/Buffalo Bayou Tidal. TCEQ received this application on July 20, 2024. The permit application will be available for viewing and copying at South Houston City Hall, City Secretary's Office, 1018 Dallas Street, South Houston, in Harris County, Texas prior to the date this notice is published in the newspaper. The application, including any updates, and associated notices are available electronically at the following webpage: https://www.tceq.texas.gov/permitting/wastewater/pending-permits/tpdes-applications. This link to an electronic map of the site or facility's general location is provided as a public courtesy and not part of the application or notice. For the exact location, refer to the application.
https://gisweb.tceq.texas.gov/LocationMapper/?marker=-95.236186,29.669743&level=18

ALTERNATIVE LANGUAGE NOTICE. Alternative language notice in Spanish is available at: https://www.tceq.texas.gov/permitting/wastewater/pending-permits/tpdes-applications. https://www.tceq.texas.gov/permitting/wastewater/pending-permits/cafo-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 South Houston at the address stated above or by calling Mr. Fred Gonzales, Water/Wastewater Superintendent, at 713-944-2027.

Issuance Date: August 2, 2024

Comisión de Calidad Ambiental del Estado de Texas

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

PERMISO NO. WQ0010287001

SOLICITUD. La Ciudad del Sur de Houston 206 Michigan Street, South Houston, Texas 77587, ha solicitado a la Comisión de Calidad Ambiental del Estado de Texas (TCEQ) para renovar el Permiso No. WQ0010287001 (Nº de identificación de la EPA. TX0057304) 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 4,000,000 galones por día. La planta está ubicada 206 Michigan Street en el sur de Houston, en el Condado de Harris, Texas 77587, Texas. La ruta de descarga es del sitio de la planta a Pantano de bayas; de allí a Sims Bayou; de allí al Canal de Navegación de Houston/ Marea del Pantano de Búfalo. La TCEQ recibió esta solicitud el 20 de julio de 2024. La solicitud para el permiso estará disponible para leerla y copiarla en South Houston City Hall, 1018 Dallas Street, Sur de Houston, TX 77587 antes de la fecha de publicación de este aviso en el periódico. Este enlace a un mapa electrónico de la ubicación general del sitio o de la instalación es proporcionado como una cortesía y no es parte de la solicitud o del aviso. Para la ubicación exacta, consulte la solicitud.
https://www.tceq.texas.gov/permitting/wastewater/pending-permits/tpdes-applications

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

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

OPORTUNIDAD DE UNA AUDIENCIA ADMINISTRATIVA DE LO CONTENCIOSO. Después del plazo para presentar comentarios públicos, el Director Ejecutivo considerará todos los comentarios apropiados y preparará una respuesta a todo los comentarios públicos

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

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

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

LISTA DE CORREO. Si somete comentarios públicos, un pedido para una audiencia administrativa de lo contencioso o una reconsideración de la decisión del Director Ejecutivo, la Oficina del Secretario Principal enviará por correo los avisos públicos en relación con la solicitud. 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 Ciudad del Sur de Houston a la dirección indicada arriba o llamando a Fred Gonzales al 713-944-2027.

Fecha de emission: 2 de agosto de 2024

Texas Commission on Environmental Quality

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

RENEWAL

PERMIT NO. WQ0010287001

APPLICATION AND PRELIMINARY DECISION. City of South Houston, P.O. Box 238, South Houston, Texas 77587, has applied to the Texas Commission on Environmental Quality (TCEQ) for a renewal of Texas Pollutant Discharge Elimination System (TPDES) Permit No. WQ0010287001, which authorizes the discharge of treated domestic wastewater at an annual average flow not to exceed 4,000,000 gallons per day. TCEQ received this application on July 20, 2024.

The facility is located at 206 Michigan Street, in the City of South Houston, Harris County, Texas 77587. The treated effluent is discharged to Berry Bayou, thence to Sims Bayou, thence to the Houston Ship Channel/Buffalo Bayou Tidal in Segment No. 1007 of the San Jacinto River Basin. The unclassified receiving water use is limited aquatic life use for Berry Bayou. The designated uses for Segment No. 1007 are navigation and industrial water supply. This link to an electronic map of the site or facility's general location is provided as a public courtesy and is not part of the application or notice. For the exact location, refer to the application. https://gisweb.tceq.texas.gov/LocationMapper/?marker=-95.236111,29.669722&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 South Houston City Hall, City Secretary's Office, 1018 Dallas Street, South Houston, in Harris County, Texas. The application, including any updates, and associated notices are available electronically at the following webpage: https://www.tceq.texas.gov/permitting/wastewater/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 South Houston at the address stated above or by calling Mr. Fred Gonzales, Water/Wastewater Superintendent, City of South Houston Public Works, at 713-944-2027.

Issuance Date: October 27, 2025

Comisión de Calidad Ambiental de Texas

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

RENOVACIÓN

PERMISO NÚMERO WQ0010287001

SOLICITUD Y DECISIÓN PRELIMINAR. La Ciudad de South Houston, Apartado Postal 238, South Houston, Texas 77587, ha solicitado a la Comisión de Calidad Ambiental de Texas (TCEQ) la renovación del Permiso n.º WQ0010287001 del Sistema de Eliminación de Descargas Contaminantes de Texas (TPDES), que autoriza la descarga de aguas residuales domésticas tratadas con un caudal promedio anual que no exceda los 4 000 000 de galones por día. La TCEQ recibió esta solicitud el 20 de julio de 2024.

La instalación está ubicada en el número 206 de la calle Michigan, en la Ciudad de South Houston, Condado de Harris, Texas 77587. El efluente tratado se vierte en el Bayou Berry, de allí en el Bayou Sims y, de allí, en el Canal de Navegación de Houston/Buffalo Bayou Tidal, en el Segmento n.º 1007 de la Cuenca del Río San Jacinto. El uso de agua receptora no clasificada es limitado para la vida acuática en el Bayou Berry. Los usos designados para el Segmento n.º 1007 son la navegación y el suministro de agua industrial. 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 ni del aviso. Para conocer la ubicación exacta, consulte la solicitud: https://gisweb.tceq.texas.gov/LocationMapper/?marker=-95.236111,29.669722&level=18

El Director Ejecutivo de la TCEQ ha completado la revisión técnica de la solicitud y ha preparado un borrador del permiso. De aprobarse, este borrador establecería las condiciones bajo las cuales la instalación deberá operar. El Director Ejecutivo ha tomado una decisión preliminar según la cual este permiso, de ser emitido, 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 su consulta y copia en el Ayuntamiento de South Houston, Oficina del Secretario de la Ciudad, 1018 Dallas Street, South Houston, Condado de Harris, Texas. La solicitud, incluyendo cualquier actualización, y los avisos relacionados están disponibles electrónicamente en la siguiente página web: https://www.tceq.texas.gov/permitting/wastewater/tpdes-applications.

AVISO DE LENGUAJE ALTERNATIVO. El aviso en español está disponible en 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.

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

OPORTUNIDAD PARA UNA AUDIENCIA DE CASO CONTENCIADO. Tras la fecha límite para la presentación de comentarios públicos, el Director Ejecutivo considerará todos los comentarios oportunos y preparará una respuesta a todos los comentarios públicos relevantes, sustanciales o significativos. **A menos que la solicitud se remita directamente a una audiencia de caso contencioso, la respuesta a los comentarios se enviará por correo a todos los que presentaron comentarios públicos y a las personas que estén en la lista de correo de esta solicitud. Si se reciben comentarios, el correo también incluirá instrucciones para solicitar una audiencia de caso contencioso o la reconsideración de la decisión del Director Ejecutivo.** Una audiencia de caso contencioso es un procedimiento legal similar a un juicio civil en un tribunal de distrito estatal.

PARA SOLICITAR UNA AUDIENCIA DE CASO CONTROVERTIDO, DEBE INCLUIR LOS SIGUIENTES DATOS 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 con respecto a la instalación propuesta; una descripción específica de cómo la instalación le afectaría negativamente de una manera inusual para el público general; una lista de todas las cuestiones de hecho controvertidas que presente durante el período de comentarios; y la declaración "Solicito/Solicitamos una audiencia de caso controvertido". Si la solicitud de audiencia de caso controvertido 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 del grupo que se vería afectado negativamente por la instalación o actividad propuesta; proporcionar la información mencionada anteriormente sobre la ubicación y distancia del miembro afectado con respecto a 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 su propósito.

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

La Comisión solo podrá conceder una solicitud de audiencia de caso contencioso sobre cuestiones que el solicitante presentó en sus comentarios oportunos y que no fueron posteriormente retiradas**. Si se concede una audiencia, el tema de esta se limitará a cuestiones de hecho controvertidas o cuestiones mixtas de hecho y derecho relacionadas con preocupaciones relevantes y sustanciales sobre la calidad del agua presentadas durante el período de comentarios. La TCEQ podrá resolver una solicitud de renovación de un permiso para la descarga de aguas residuales sin otorgar la oportunidad de una audiencia de caso contencioso si se cumplen ciertos criterios.**

ACCIÓN DEL DIRECTOR EJECUTIVO. El Director Ejecutivo podrá emitir la aprobación final de la solicitud a menos que se presente una solicitud de audiencia de caso contencioso o una solicitud de reconsideración en tiempo oportuno. Si se presenta una solicitud de audiencia o una solicitud de reconsideración en tiempo oportuno, el Director Ejecutivo no emitirá la aprobación final del permiso y remitirá 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 presenta comentarios públicos, una solicitud de audiencia de caso impugnado o una reconsideración de la decisión del Director Ejecutivo, se le añadirá a la lista de correo de esta solicitud específica para recibir futuras notificaciones públicas enviadas por la Oficina del Secretario General. Además, puede solicitar ser incluido en: (1) la lista de correo permanente para un nombre de solicitante y número de permiso específicos; y/o (2) la lista de correo de un condado específico. Si desea ser incluido en la lista de correo permanente y/o en la lista de correo del condado, especifique claramente cuál(es) lista(s) y envíe su solicitud a la Oficina del Secretario General de la TCEQ a la dirección que figura a continuación.

Todos los comentarios públicos por escrito y las solicitudes de reuniones públicas deben enviarse a la Oficina del Secretario General, MC 105, Comisión de Calidad Ambiental de Texas, P.O. Apartado Postal 13087, Austin, TX 78711 3087 o electrónicamente en 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 de esta solicitud, que se encuentra en la parte superior de este aviso.

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

También puede obtener más información de la Ciudad de South Houston en la dirección indicada anteriormente o llamando al Sr. Fred Gonzales, Superintendente de Agua y Aguas Residuales, Obras Públicas de la Ciudad de South Houston, al 713-944-2027.

Fecha de emisión: 27 de octubre de 2025

1018 Dallas
South Houston, Texas 77587

CERTIFIED MAIL # 9589 0710 5270 1430 0305 34

July 11, 2024

Texas Commission on Environmental Quality
Water Quality Division
Applications Review and Processing Team (MC 148)
P.O. Box 13087
Austin, Texas 78711-3087

Re: Permit Renewal City of South Houston, Texas Domestic POTW, Permit Expires 3-1-25, Application Due 9-12-24, Permit # WQ0010287001.

Attached is the permit renewal application on the above referenced domestic wastewater treatment plant (POTW).

Should you have any questions, please contact our Water/Wastewater Superintendent Fred Gonzales at email sohowwtp@yahoo.com, phone (713) 944-2027 or at the above address.

Sincerely;

Joe Soto, Mayor

cc: Fred Gonzales, South Houston Water/Wastewater Superintendent
Bob Hunt, B & B Consulting Group

Attachment: TCEQ domestic wastewater permit renewal QW0010287001

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:** WQ0010287-001

1. Check or Money Order Number: 142273
2. Check or Money Order Amount: $2,015.00
3. Date of Check or Money Order: 6/24/2024
4. Name on Check or Money Order: City of South Houston
5. APPLICATION INFORMATION

   Name of Project or Site: **City of South Houston WatewaterTreatment Plant**

   Physical Address of Project or Site: 206 Michigan Street, South Houston, Texas 77587/ Harris Co.

   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

[redacted]

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

DOMESTIC WASTEWATER PERMIT APPLICATION CHECKLIST

Complete and submit this checklist with the application.

APPLICANT NAME: City of South Houston

PERMIT NUMBER (If new, leave blank): WQ10287001

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 PERMIT RENEWAL

CITY OF SOUTH HOUSTON TPDES # WQ0010287-001

DOMESTIC WASTEWATER PERMIT APPLICATION ATTACHMENTS INCLUDED

- **Attachments to Domestic wastewater permit application administrative report 1.0**

  Attachment 1 - Plain Language Summary Form TCEQ -20972

  Attachment 2 - SPIF (Supplemental Permit Information Form TCEQ-20971

  Attachment 3 - USGS Map

  Attachment 4 - Payment submittal Form Copy

- **Attachments to Domestic Technical Wastewater Permit Application Technical Report 1.0**

  Attachment 5 – Process Flow Schematic

  Attachment 6 – Property Boundary and Service Area Map

  Attachment 7 – Laboratory report effluent analysis 8-17-23

  Attachment 8 – Effluent Parameters above MAL last three years

  Attachment 9 – Lab Results for Table 1.0(0) Pollutant Analysis for Wastewater Treatment Facilities

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

DOMESTIC WASTEWATER PERMIT APPLICATION ADMINISTRATIVE REPORT 1.0

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

Section 1. Application Fees (Instructions Page 26)

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

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

Minor Amendment (for any flow) $150.00 ☐

Payment Information:

Mailed — Check/Money Order Number: check # 142273

Check/Money Order Amount: $2,015.00

Name Printed on Check: City of South Houston

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 WQ10287001

EPA I.D. (TPDES only): TX 0057304

Expiration Date: 03/11/2025

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 South Houston

(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: 600548390

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: Soto Joe

Title: Mayor Credential: Click to enter text.

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

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

Click to enter text.

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

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

CN: Click to enter text.

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

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

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

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

C. Core Data Form

Complete the Core Data Form for each customer and include as an attachment. If the customer type selected on the Core Data Form is **Individual**, complete **Attachment 1** of Administrative Report 1.0. Already in TCEQ data base, no changes required.

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: Gonzales Fred

Title: Water/Wastewater Superintendent Credential: Click to enter text.

Organization Name: City of South Houston Public Works

Mailing Address: P.O. Box 238 City, State, Zip Code: South Houston, TX 77587-0238

Phone No.: (713) 944-2027 E-mail Address: sohowwtp@yahoo.com

Check one or both: ☒ Administrative Contact ☒ Technical Contact

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

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

Organization Name: Click to enter text.

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

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

Check one or both: ☐ 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: Gonzales Fred

Title: Water/Wastewater Superintendent Credential: Click to enter text.

Organization Name: City of South Houston, Public Works, Water/Wastewater

Mailing Address: P.O. Box 238 City, State, Zip Code: South Houston, TX 77587-

0238

Phone No.: (713) 944-2027 E-mail Address: sohowwtp@yahoo.com

B. Prefix: Mr. Last Name, First Name: Avant Lance

Title: Finance Director Credential: Click to enter text.

Organization Name: City of South Housto

Mailing Address: P.O. Box 238 City, State, Zip Code: South Houston, TX 77587-0238

Phone No.: (713) 947-7700 E-mail Address: lavant @southhoustontx.gov

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: Gonzales Fred

Title: Water/Wastewater Superintendent Credential: Click to enter text.

Organization Name: City of South Houston, Public Works, Water/Wastewater

Mailing Address: P.O. Box 238 City, State, Zip Code: South Houston, TX 77587-0238

Phone No.: (713) 944-2027 E-mail Address: sohowwtp@yahoo.com

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

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

Prefix: Mr. Last Name, First Name: Gonzales Fred

Title: Water/Wastewater Superintendent Credential: Click to enter text.

Organization Name: City of South Houston, Public Works, Water/Wastewater

Mailing Address: P.O. Box 238 City, State, Zip Code: South Houston, TX 77587-0238

Phone No.: (713) 944-2027 E-mail Address: sohowwtp@yahoo.com

Section 8. Public Notice Information (Instructions Page 27)

A. Individual Publishing the Notices

Prefix: **Mr.** Last Name, First Name: Gonzales Fred

Title: **Water/Wastewater Superintendent** Credential: Click to enter text.

Organization Name: City of South Houston, Public Works, Water/Wastewater

Mailing Address: **P.O. Box 238** City, State, Zip Code: South Houston, TX 77587-

0238

Phone No.: (713) 944-2027 E-mail Address: sohowwtp@yahoo.com

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

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

☐ E-mail Address

☐ Fax

☒ Regular Mail

C. Contact permit to be listed in the Notices

Prefix: **Mr.** Last Name, First Name: Gonzales Fred

Title: Water/Wastewater Superintendent Credential: Click to enter text.

Organization Name: City of South Houston, Public Works, Water/Wastewater

Mailing Address: P.O. Box 238 City, State, Zip Code: South Houston, TX 77587-0238

Phone No.: **(713) 944-2027** E-mail Address: sohowwtp@yahoo.com

D. Public Viewing Information

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

Public building name: South Houston City Hall

Location within the building: City Secretary's office

Physical Address of Building: 1018 Dallas Street

City: South Houston County: Harris

Contact (Last Name, First Name): Lance Avant

Phone No.: (713) 947-7700 Ext.: Click to enter text.

E. Bilingual Notice Requirements

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

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

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

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

   ☒ Yes ☐ No

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

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

   ☒ Yes ☐ No

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

   ☒ Yes ☐ No

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

   ☒ Yes ☐ No

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

F. Plain Language Summary Template

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

Attachment: See Attachment 1

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: Not Required

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** 102986312

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):

South Houston Wastewater Treatment Plant

C. Owner of treatment facility: City of South Houston

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 South Houston

Mailing Address: P.O. Box 238 City, State, Zip Code: South Houston, TX 77587-0238

Phone No.: (713) 947-7700 E-mail Address: lavant @southhoustontx.gov

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

Attachment: Click to enter text.

E. Owner of effluent disposal site:

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

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

Organization Name: Click to enter text.

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

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

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

Attachment: Click to enter text.

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

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

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

Organization Name: Click to enter text.

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

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

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

Attachment: Click to enter text.

Section 10. TPDES Discharge Information (Instructions Page 31)

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

☒ Yes ☐ No

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

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): South Houston

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

C. Is or will the treated wastewater discharge to a city, county, or state highway right-of-way, or

a flood control district drainage ditch?

☒ Yes ☐ No

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

☒ Authorization granted ☐ Authorization pending

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

Attachment: Click to enter text.

D. For all applications involving an average daily discharge of 5 MGD or more, provide the names of all counties located within 100 statute miles downstream of the point(s) of discharge: Click to enter text.

Section 11. TLAP Disposal Information (Instructions Page 32)

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

☐ Yes ☐ No

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

Click to enter text.

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

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

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

Click to enter text.

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

Section 12. Miscellaneous Information (Instructions Page 32)

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

☐ Yes ☒ No

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

☐ Yes ☐ No ☒ Not Applicable

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

Click to enter text.

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

☐ Yes ☒ No

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

D. Do you owe any fees to the TCEQ?

☐ Yes ☒ No

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

Account number: Click to enter text.

Amount past due: Click to enter text.

E. Do you owe any penalties to the TCEQ?

☐ Yes ☒ No

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

Enforcement order number: Click to enter text.

Amount past due: Click to enter text.

Section 13. Attachments (Instructions Page 33)

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

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

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

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

☐ Attachment 1 for Individuals as co-applicants

☒ Other Attachments. Please specify: **SEE ATTACHMENT 3 FOR USGS MAP**

Section 14. Signature Page (Instructions Page 34)

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

Permit Number: WQ0010287001

Applicant: City of South Houston

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): Joe Soto

Signatory title: Mayor

Signature: _____ Date: 7/11/2024

(Use blue ink)

Subscribed and Sworn to before me by the said Joe Soto

on this 11th day of July, 2024.

My commission expires on the 11th day of March, 2027.

W Lance Avant

Notary Public

SEAL
WARREN LANCE AVANT
My Notary ID # 130123141
Expires March 11, 2027

arris

County, Texas

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 2

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

Attachment 1

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 South Houston (CN 600548390) operates South Houston Wastewater Treatment Plant, a POTW (RN 102986312), a domestic wastewater treatment plant. The facility is located at 306 Michigan Street, in South Houston, Harris County, Texas 77587. South Houston has applied for a permit renewal to discharge 4,000,000 gallons per day of treated domestic wastewater.

Discharges from the facility are expected to contain BOD, TSS, Ammonia Nitrogen and Chlorine. The domestic wastewater is treated by grit removal, activated sludge process, clarification, disinfection by chlorine addition, dichlorination and finally exit by outfall. Sludge is captured, dewatered and hauled to a landfill.

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 federale de la solicitud de permiso.

La Ciudad del Sur de Houston ((CN 600548390)) opera la Planta de Tratamiento de Aguas Residuales del Sur de Houston, (RN 102986312, una planta de tratamiento de aguas residuales domésticas. La instalación está ubicada en 306 Michigan Street, en el sur de Houston, Condado de Harris, Texas 77587. El sur de Houston ha solicitado la renovación de un permiso para descargar 4,000,000 de galones por día de aguas residuales domésticas tratadas..

Se espera que las descargas de la instalación contengan DBO, SST, nitrógeno amoniacal y cloro. Aguas residuales domésticas. está tratado por eliminación de arena, proceso de lodos activados, clarificación, desinfección por adición de cloro, dicloración y finalmente salida por emisario. Los lodos se capturan, se deshidratan y se transportan a un vertedero..

Attachment 2

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

SUPPLEMENTAL PERMIT INFORMATION FORM (SPIF)

FOR AGENCIES REVIEWING DOMESTIC OR INDUSTRIAL TPDES WASTEWATER PERMIT APPLICATIONS

TCEQ USE ONLY:

Application type: _____Renewal _____Major Amendment ____Minor Amendment _____New

County: _____ Segment Number: _____

Admin Complete Date: _____

Agency Receiving SPIF:

_____ Texas Historical Commission _____ U.S. Fish and Wildlife

_____ Texas Parks and Wildlife Department _____ U.S. Army Corps of Engineers

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

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

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

The following applies to all applications:

1. Permittee: City of South Houston

   Permit No. WQ00 WQ10287001 EPA ID No. TX 0057307

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

   206 Michigan Street, South Houston TX 77587 / Harris 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: Fred Gonzales

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

Title: Water / Wastewater Superintendent

Mailing Address: P.O. Box 238

City, State, Zip Code: South Houston, TX 77587-0238

Phone No.: (713) 944-2027 Ext.: Fax No.:

E-mail Address: sohowwtp@yahoo.com

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

N/A

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

Berry Bayou; thence to Sims Bayou; thence to the Houston Ship Channel / Buffalo Bayou Tidal in Segment 1007 of the San Jacinto 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

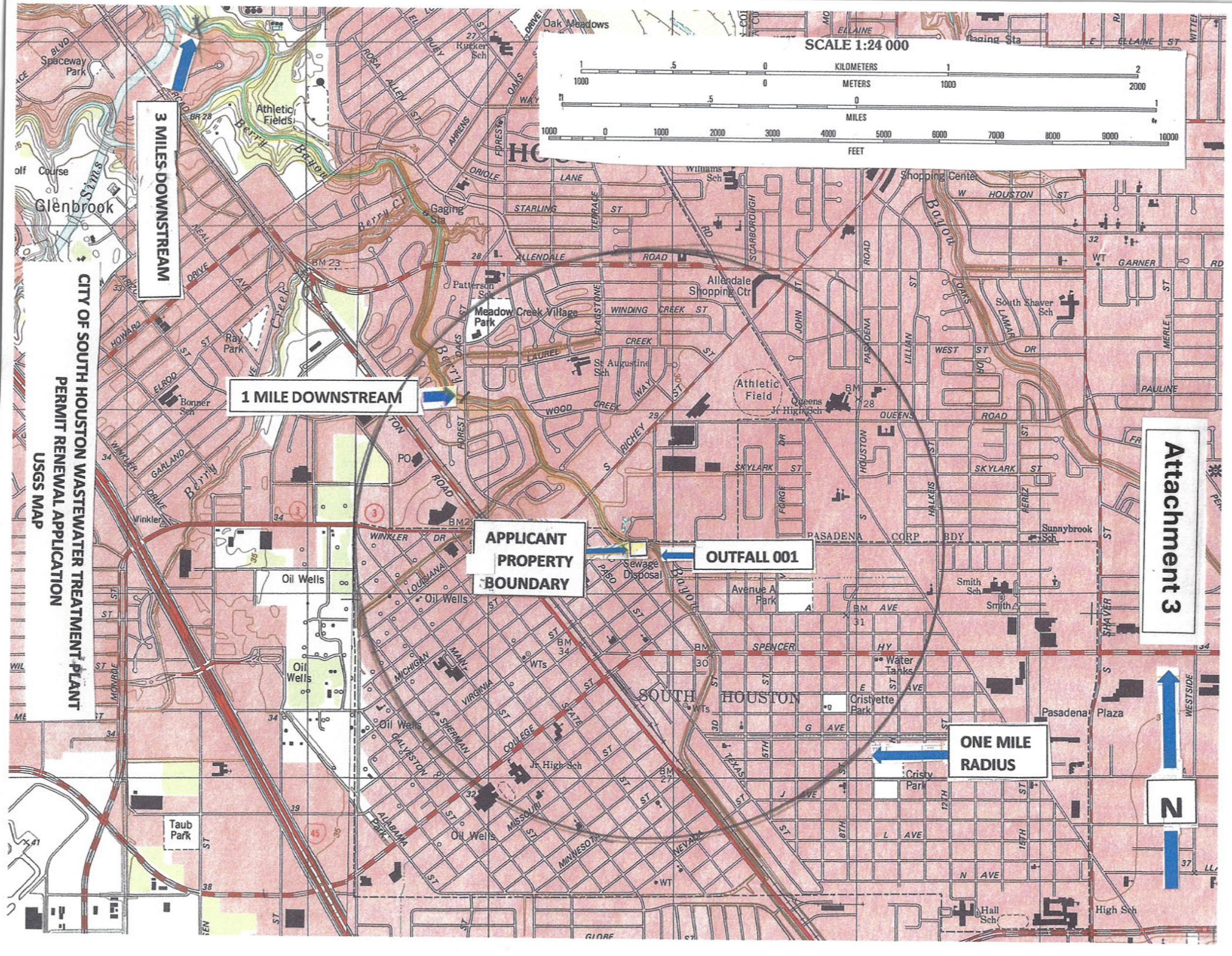
1. List proposed construction impact (surface acres to be impacted, depth of excavation, sealing of caves, or other karst features):

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

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

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

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


SCALE 1:24 000
KILOMETERS
METERS
MILES
FEET
3 MILES DOWNSTREAM
1 MILE DOWNSTREAM
APPLICANT PROPERTY BOUNDARY
OUTFALL 001
ONE MILE RADIUS
CITY OF SOUTH HOUSTON WASTEWATER TREATMENT PLANT
PERMIT RENEWAL APPLICATION
USGS MAP
Attachment 3
N
Glenbrook
Golf Course
Spaceway Park
Athletic Fields
Gaging Sta
Meadow Creek Village Park
Ray Park
Patterson Sch
Williams Sch
Allendale Shopping Ctr
Shopping Center
Athletic Field
Queens Jr High Sch
St Augustine Sch
Bonner Sch
South Shaver Sch
Smith Sch
Sunnybrook Sch
Avenue A Park
Sewage Disposal
Water Tanks
Cristvette Park
Cristy Park
Pasadena Plaza
Taub Park
Jr High Sch
Hall Sch
High Sch
Oil Wells
SOUTH HOUSTON
PASADENA CORP BDY
Berry Bayou
Berry Cr
Berry Creek

Attachment 4

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:** WQ0010287-001

1. Check or Money Order Number: 142273
2. Check or Money Order Amount: $2,015.00
3. Date of Check or Money Order: 6/24/2024
4. Name on Check or Money Order: City of South Houston
5. APPLICATION INFORMATION

   Name of Project or Site: **City of South Houston WatewaterTreatment Plant**

   Physical Address of Project or Site: 206 Michigan Street, South Houston, Texas 77587/ Harris Co.

   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

[redacted]

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): 4.0

2-Hr Peak Flow (MGD): 20

Estimated construction start date: N/A

Estimated waste disposal start date: N/A

B. Interim II Phase

Design Flow (MGD): N/A

2-Hr Peak Flow (MGD): N/A

Estimated construction start date: N/A

Estimated waste disposal start date: N/A

C. Final Phase

Design Flow (MGD): N/A

2-Hr Peak Flow (MGD): N/A

Estimated construction start date: N/A

Estimated waste disposal start date: N/A

D. Current Operating Phase

Provide the startup date of the facility: 1995

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 treatment process uses the complete mix modification of the Activated Sludge Process. The treatment train employs influent lift station, bar screens, aerated mixing/oxidation (biological/nitrification combined), final clarification, effluent chlorination, dechlorination and final flow measurement with discharge through 42" outfall to Berry Bayou. The waste activated sludge is treated by aerobic digestion, dewatered on wedgewater filter beds with final disposal in landfill.

B. Treatment Units

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

Table 1.0(1) - Treatment Units

Treatment Unit Type	Number of Units	Dimensions (L x W x D)
Degritting Basin	1	25' X 25' X 12.5'
Aeration Basins(same size)	2	106' X 31.5' X 20'
Rapid Mix Zone (same Size)	2	30' X 21' X 20"
Clarifier (same size)	2	105' diameter X 15' deep
Chlorine Contact(same size)	2	96' X 37' X 15'

C. Process Flow Diagram

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

Attachment: See 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: 29-40-08
- Longitude: -95-14-05

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

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

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

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

Attachment: See Attachment 6

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

Service area is the City limits for the City of South Houston, Texas.

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
South Houston System city limit boundaries	**City of South Houston**	**Publicly Owned**	17,548
		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.**

N/A

Section 5. Closure Plans (Instructions Page 45)

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

☐ Yes ☒ No

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

☐ Yes ☐ No

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

N/A

Section 6. Permit Specific Requirements (Instructions Page 45)

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

A. Summary transmittal

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

☒ Yes ☐ No

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

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

Click to enter text.

B. Buffer zones

Have the buffer zone requirements been met?

☒ Yes ☐ No

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

Existing permit "Other Requirements" states " Issuance of this permit continues the variance authorized in the previous permit issued July 30, 1993. That authorization provides the permittee a variance to the buffer zone in accordance with the prior buffer zone rule 30 TAC Section 309.13(e)(1)(a). "

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.*

Settlement Agreement Other Requirements 8. The testing for Total Mercury shall use EPA method 245.1 with a Minimum Analytical Level (MAL) of 0.0005 mg/l. The effluent monitoring data shall be submitted each month, to the TCEQ Wastewater Permitting Section (MC 148), 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 discharge. Should the results from the testing exceed the MAL In six or more monitoring results over the duration of the permit or within three consecutive tests over the duration of the permit, the permittee shall file a formal request to the TCEQ Wastewater Permitting Section (MC 148) to modify its permit include an effluent limit for Total Mercury. This effluent limit will be determined by the TCEQ and be based on the TEXTOX calculation, The Total Mercury reporting requirements at Outfall 0011 will expire at the expiration of this permit. The reported values will be evaluated, and the reporting requirements may be reinstated or an effluent limit added at the next permit action.

Please note there have been no exceedances of the EPA Method 245.1 with a Minimum Analytical Level (MAL) of 0.0005 mg/l during the term of the current permit.

D. Grit and grease treatment

1. *Acceptance of grit and grease waste*

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

☐ Yes ☒ No

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

2. *Grit and grease processing*

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

N/A

3. *Grit disposal*

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

☐ Yes ☒ No

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

Describe the method of grit disposal.

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.

N/A

E. Stormwater management

1. ***Applicability***

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

☒ Yes ☐ No

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

☒ Yes ☐ No

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

2. ***MSGP coverage***

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

☒ Yes ☐ No

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

TXR05 5c109 or TXRNE 103727053

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

☒ Yes ☐ No

3. ***Conditional exclusion***

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

☐ Yes ☒ No

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

N/A

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

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

☐ Yes ☒ No

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

N/A

5. ***Zero stormwater discharge***

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

☐ Yes ☒ No

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

N/A

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

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

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

☐ Yes ☒ No

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

N/A

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

F. Discharges to the Lake Houston Watershed

Does the facility discharge in the Lake Houston watershed?

☐ Yes ☒ No

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

N/A

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

2. *Acceptance of septic waste*

Is the facility accepting or will it accept septic waste?

☐ Yes ☒ No

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

☐ Yes ☒ No

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

☐ Yes ☒ No

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

N/A

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

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

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

☐ Yes ☒ No

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

N/A

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

Is the facility in operation?

☒ Yes ☐ No

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

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

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

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

Pollutant	Average Conc.	Max Conc.	No. of Samples	Sample Type	Sample Date/Time
$CBOD_5$, mg/l	6.6	6.6	1	comp	6/26/24 8:00 am - 6/27/24 8:00 am
Total Suspended Solids, mg/l	<2.0	<2.0	1	comp	6/26/24 8:00 am - 6/27/24 8:00 am
Ammonia Nitrogen, mg/l	<0.20	<0.20	1	comp	6/26/24 8:00 am - 6/27/24 8:00 am
Nitrate Nitrogen, mg/l	13.1	13.1	1	comp	6/26/24 8:00 am - 6/27/24 8:00 am
Total Kjeldahl Nitrogen, mg/l	1.71	1.71	1	comp	6/26/24 8:00 am - 6/27/24 8:00 am
Sulfate, mg/l	82.7	82.7	1	comp	6/26/24 8:00 am - 6/27/24 8:00 am
Chloride, mg/l	164	164	1	comp	6/26/24 8:00 am - 6/27/24 8:00 am
Total Phosphorus, mg/l	4.86	4.86	1	comp	6/26/24 8:00 am - 6/27/24 8:00 am
pH, standard units	6.4	6.4	1	grab	6/27/24 8:55 am
Dissolved Oxygen*, mg/l	9.3	9.3	1	grab	6/27/24 8:55 am
Chlorine Residual, mg/l	2.3	2.2	1	grab	6/27/24 11:07 am
E.coli (CFU/100ml) freshwater	13	13	1	grab	6/27/24 11:00 am
Entercocci (CFU/100ml) saltwater	8	8	1	grab	6/27/24 11:00 am
Total Dissolved Solids, mg/l	472	472	1	grab	6/26/24 8:00 am - 6/27/24 8:00 am
Electrical Conductivity, µmohs/cm, †	751	751	1	comp	6/26/24 8:00 am - 6/27/24 8:00 am
Oil & Grease, mg/l	<5.0	<5.0	1	grab	6/27/24 8:50 am
Alkalinity ($CaCO_3$)*, mg/l	67.5	67.5	1		6/26/24 8:00 am - 6/27/24 8:00 am

*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					

Section 8. Facility Operator (Instructions Page 50)

Facility Operator Name: Fred Gonzales

Facility Operator's License Classification and Level: B

Facility Operator's License Number: WW0029469

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
Disposal in Landfill	On-Site Owner or Operator	Bulk		Class B: PSRP Anaerobic Digestion	Choose an item.
Choose an item.	Choose an item.	Choose an item.		Choose an item.	Choose an item.
Choose an item.	Choose an item.	Choose an item.		Choose an item.	Choose an item.

If "Other" is selected for Management Practice, please explain (e.g. monofill or transport to another WWTP): Click to enter text.

D. Disposal site

Disposal site name: BFI McCarty Road Landfill TX LP (5757A Oats Rd. 77078)

TCEQ permit or registration number: 261B

County where disposal site is located: Harris

E. Transportation method

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

Name of the hauler: City of South Houston

Hauler registration number: 21971

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: Joe Soto (NELAP Lab is Envirodyne Laboratories, Inc.)

Title: Mayor

Signature: _____

Date: 7/11/2024

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 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: **8/17/23 (SEE ATTACHMENT 7 FOR LAB REPORT)**

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		1	50
Aldrin	<01		1	0.01
Aluminum	24		1	2.5
Anthracene	<10		1	10
Antimony	<5		1	5
Arsenic	<0.05		1	0.5
Barium	22.1		1	3
Benzene	<10		1	10
Benzidine	<50		1	50
Benzo(a)anthracene	<5		1	5
Benzo(a)pyrene	<5		1	5
Bis(2-chloroethyl)ether	<10		1	10
Bis(2-ethylhexyl)phthalate	<10		1	10
Bromodichloromethane	<10		1	10
Bromoform	<10		1	10
Cadmium	<1		1	1
Carbon Tetrachloride	<2		1	2
Carbaryl	<5		1	5
Chlordane*	<0.2		1	0.2
Chlorobenzene	<10		1	10
Chlorodibromomethane	18		1	10

Pollutant	AVG Effluent Conc. (µg/l)	MAX Effluent Conc. (µg/l)	Number of Samples	MAL (µg/l)
Chloroform	47.4		1	10
Chlorpyrifos	<0.05		1	0.05
Chromium (Total)	<3		1	3
Chromium (Tri) **(*1)**	N/A		1	N/A
Chromium (Hex)	<3		1	3
Copper	<2		1	2
Chrysene	<5		1	5
p-Chloro-m-Cresol	<10		1	10
4,6-Dinitro-o-Cresol	<50		1	50
p-Cresol	<10		1	10
Cyanide **(*2)**	<10		1	10
4,4'- DDD	<0.1		1	0.1
4,4'- DDE	<0.1		1	0.1
4,4'- DDT	<0.02		1	0.02
2,4-D	<0.7		1	0.7
Demeton (O and S)	<0.20		1	0.20
Diazinon	<0.5		1	0.5/0.1
1,2-Dibromoethane	<10		1	10
m-Dichlorobenzene	<10		1	10
o-Dichlorobenzene	<10		1	10
p-Dichlorobenzene	<10		1	10
3,3'-Dichlorobenzidine	<5		1	5
1,2-Dichloroethane	<10		1	10
1,1-Dichloroethylene	<10		1	10
Dichloromethane	<20		1	20
1,2-Dichloropropane	<10		1	10
1,3-Dichloropropene	<10		1	10
Dicofol	<1		1	1
Dieldrin	<0.02		1	0.02
2,4-Dimethylphenol	<10		1	10
Di-n-Butyl Phthalate	<10		1	10
Diuron	<0.09		1	0.09
Endosulfan I (alpha)	<0.01		1	0.01

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

Pollutant	AVG Effluent Conc. (µg/l)	MAX Effluent Conc. (µg/l)	Number of Samples	MAL (µg/l)
Polychlorinated Biphenyls (PCB's) (*3)	<0.2		1	0.2
Pyridine	<20		1	20
Selenium	<5		1	5
Silver	<0.5		1	0.5
1,2,4,5-Tetrachlorobenzene	<20		1	20
1,1,2,2-Tetrachloroethane	<10		1	10
Tetrachloroethylene	<10		1	10
Thallium	<0.5		1	0.5
Toluene	<10		1	10
Toxaphene	<0.3		1	0.3
2,4,5-TP (Silvex)	<0.3		1	0.3
Tributyltin (see instructions for explanation)	<0.01		1	0.01
1,1,1-Trichloroethane	<10		1	10
1,1,2-Trichloroethane	<10		1	10
Trichloroethylene	<10		1	10
2,4,5-Trichlorophenol	<10		1	50
TTHM (Total Trihalomethanes)	61.9		1	10
Vinyl Chloride	<10		1	10
Zinc	<10		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: 8-17-23

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		1	5
Arsenic	0.9		1	0.5
Beryllium	<0.5		1	0.5
Cadmium	<1.0		1	1
Chromium (Total)	<3		1	3
Chromium (Hex)	<3		1	3
Chromium (Tri) **(*1)**	N/A		1	N/A
Copper	23.1		1	2
Lead	<0.5		1	0.5
Mercury	<0.005		1	0.005
Nickel	12.2		1	2
Selenium	<5		1	5
Silver	<0.5		1	0.5
Thallium	<0.5		1	0.5
Zinc	80.5		1	5
Cyanide **(*2)**	<10		1	10
Phenols, Total	<10		1	10

(*1) Determined by subtracting hexavalent Cr from total Cr.

(*2) Cyanide, amenable to chlorination or weak-acid dissociable

Table 4.0(2)B – Volatile Compounds

Pollutant	AVG Effluent Conc. (µg/l)	MAX Effluent Conc. (µg/l)	Number of Samples	MAL (µg/l)
Acrolein	<50		1	50
Acrylonitrile	<50		1	50
Benzene	<10		1	10
Bromoform	<10		1	10
Carbon Tetrachloride	<2		1	2
Chlorobenzene	<10		1	10
Chlorodibromomethane	<10		1	10
Chloroethane	<50		1	50
2-Chloroethylvinyl Ether	<10		1	10
Chloroform	<10		1	10
Dichlorobromomethane [Bromodichloromethane]	14.5		1	10
1,1-Dichloroethane	<10		1	10
1,2-Dichloroethane	<10		1	10
1,1-Dichloroethylene	<10		1	10
1,2-Dichloropropane	<10		1	10
1,3-Dichloropropylene [1,3-Dichloropropene]	<10		1	10
1,2-Trans-Dichloroethylene	<10		1	10
Ethylbenzene	<10		1	10
Methyl Bromide	<50		1	50
Methyl Chloride	<50		1	50
Methylene Chloride	<20		1	20
1,1,2,2-Tetrachloroethane	<10		1	10
Tetrachloroethylene	<10		1	10
Toluene	<10		1	10
1,1,1-Trichloroethane	<10		1	10
1,1,2-Trichloroethane	<10		1	10
Trichloroethylene	<10		1	10
Vinyl Chloride	<10		1	10

Table 4.0(2)C – Acid Compounds

Pollutant	AVG Effluent Conc. (µg/l)	MAX Effluent Conc. (µg/l)	Number of Samples	MAL (µg/l)
2-Chlorophenol	<10		1	10
2,4-Dichlorophenol	<10		1	10
2,4-Dimethylphenol	<10		1	10
4,6-Dinitro-o-Cresol	<50		1	50
2,4-Dinitrophenol	<50		1	50
2-Nitrophenol	<20		1	20
4-Nitrophenol	<50		1	50
P-Chloro-m-Cresol	<10		1	10
Pentalchlorophenol	<5		1	5
Phenol	<10		1	10
2,4,6-Trichlorophenol	<10		1	10

Table 4.0(2)D – Base/Neutral Compounds

Pollutant	AVG Effluent Conc. (µg/l)	MAX Effluent Conc. (µg/l)	Number of Samples	MAL (µg/l)
Acenaphthene	<10		1	10
Acenaphthylene	<10		1	10
Anthracene	<10		1	10
Benzidine	<50		1	50
Benzo(a)Anthracene	<5		1	5
Benzo(a)Pyrene	<5		1	5
3,4-Benzofluoranthene	<10		1	10
Benzo(ghi)Perylene	<20		1	20
Benzo(k)Fluoranthene	<5		1	5
Bis(2-Chloroethoxy)Methane	<10		1	10
Bis(2-Chloroethyl)Ether	<10		1	10
Bis(2-Chloroisopropyl)Ether	<10		1	10
Bis(2-Ethylhexyl)Phthalate	<10		1	10
4-Bromophenyl Phenyl Ether	<10		1	10
Butyl benzyl Phthalate	<10		1	10
2-Chloronaphthalene	<10		1	10
4-Chlorophenyl phenyl ether	<10		1	10
Chrysene	<5		1	5
Dibenzo(a,h)Anthracene	<5		1	5
1,2-(o)Dichlorobenzene	<10		1	10
1,3-(m)Dichlorobenzene	<10		1	10
1,4-(p)Dichlorobenzene	<10		1	10
3,3-Dichlorobenzidine	<5		1	5
Diethyl Phthalate	<10		1	10
Dimethyl Phthalate	<10		1	10
Di-n-Butyl Phthalate	<10		1	10
2,4-Dinitrotoluene	<10		1	10
2,6-Dinitrotoluene	<10		1	10
Di-n-Octyl Phthalate	<10		1	10
1,2-Diphenylhydrazine (as Azo-benzene)	<20		1	20
Fluoranthene	<10		1	10

Pollutant	AVG Effluent Conc. (µg/l)	MAX Effluent Conc. (µg/l)	Number of Samples	MAL (µg/l)
Fluorene	<10		1	10
Hexachlorobenzene	<5		1	5
Hexachlorobutadiene	<10		1	10
Hexachlorocyclo-pentadiene	<10		1	10
Hexachloroethane	<20		1	20
Indeno(1,2,3-cd)pyrene	<5		1	5
Isophorone	<10		1	10
Naphthalene	<10		1	10
Nitrobenzene	<10		1	10
N-Nitrosodimethylamine	<50		1	50
N-Nitrosodi-n-Propylamine	<20		1	20
N-Nitrosodiphenylamine	<20		1	20
Phenanthrene	<10		1	10
Pyrene	<10		1	10
1,2,4-Trichlorobenzene	<10		1	10

Table 4.0(2)E - Pesticides

Pollutant	AVG Effluent Conc. (µg/l)	MAX Effluent Conc. (µg/l)	Number of Samples	MAL (µg/l)
Aldrin	<0.01		1	0.01
alpha-BHC (Hexachlorocyclohexane)	<0.05		1	0.05
beta-BHC (Hexachlorocyclohexane)	<0.05		1	0.05
gamma-BHC (Hexachlorocyclohexane)	<0.05		1	0.05
delta-BHC (Hexachlorocyclohexane)	<0.05		1	0.05
Chlordane	<0.2		1	0.2
4,4-DDT	<0.02		1	0.02
4,4-DDE	<0.1		1	0.1
4,4,-DDD	<0.1		1	0.1
Dieldrin	<0.02		1	0.02
Endosulfan I (alpha)	<0.01		1	0.01
Endosulfan II (beta)	<0.02		1	0.02
Endosulfan Sulfate	<0.1		1	0.1
Endrin	<0.02		1	0.02
Endrin Aldehyde	<0.1		1	0.1
Heptachlor	<0.01		1	0.01
Heptachlor Epoxide	<0.01		1	0.01
PCB-1242	<0.2		1	0.2
PCB-1254	<0.2		1	0.2
PCB-1221	<0.2		1	0.2
PCB-1232	<0.2		1	0.2
PCB-1248	<0.2		1	0.2
PCB-1260	<0.2		1	0.2
PCB-1016	<0.2		1	0.2
Toxaphene	<0.2		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: 24

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

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: 3

Average Daily Flows, in MGD: 0.011

Significant IUs – non-categorical:

Number of IUs: 0

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

Other IUs:

Number of IUs: 1

Average Daily Flows, in MGD: 0.005

B. Treatment plant interference

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

☐ Yes ☒ No

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

N/A

C. Treatment plant pass through

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

☐ Yes ☒ No

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

N/A

D. Pretreatment program

Does your POTW have an approved pretreatment program?

☒ Yes ☐ No

If yes, complete Section 2 only of this Worksheet.

Is your POTW required to develop an approved pretreatment program?

☐ Yes ☒ No

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

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

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

A. Substantial modifications

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

☐ Yes ☒ No

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

N/A

B. Non-substantial modifications

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

☐ Yes ☒ No

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

N/A

C. Effluent parameters above the MAL

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

Table 6.0(1) – Parameters Above the MAL

Pollutant	Concentration	MAL	Units	Date
See Attachment 8				

D. Industrial user interruptions

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

☐ Yes ☒ No

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

N/A

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

A. General information

Company Name: 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 instructions?

☐ Yes ☐ No

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

☐ Yes ☐ No

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

Category: Subcategories: Click to enter text.

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

Category: Click to enter text.

Subcategories: Click to enter text.

Category: Click to enter text.

Subcategories: Click to enter text.

Category: Click to enter text.

Subcategories: Click to enter text.

Category: Click to enter text.

Subcategories: Click to enter text.

F. Industrial user interruptions

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

☐ Yes ☐ No

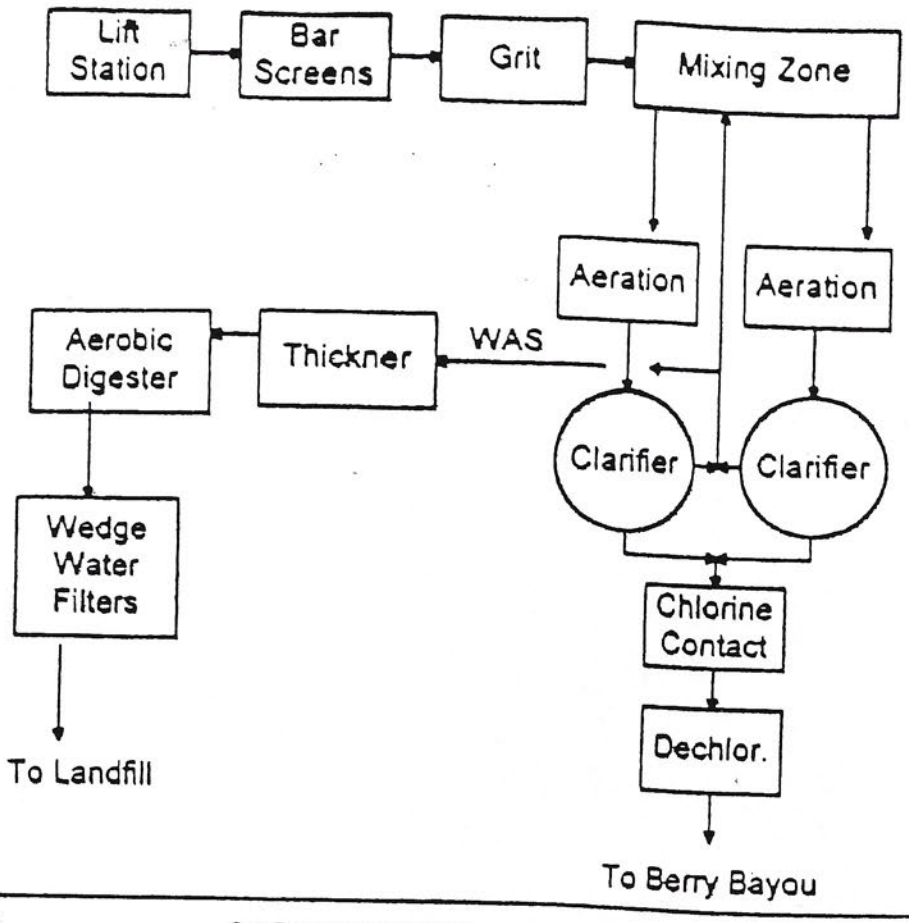
If yes, identify the SIU, describe each episode, including dates, duration, description of problems, and probable pollutants.

Click to enter text.

Attachment 5

CITY OF SOUTH HOUSTON WASTEWATER TREATMENT PLANT

PROCESS FLOW

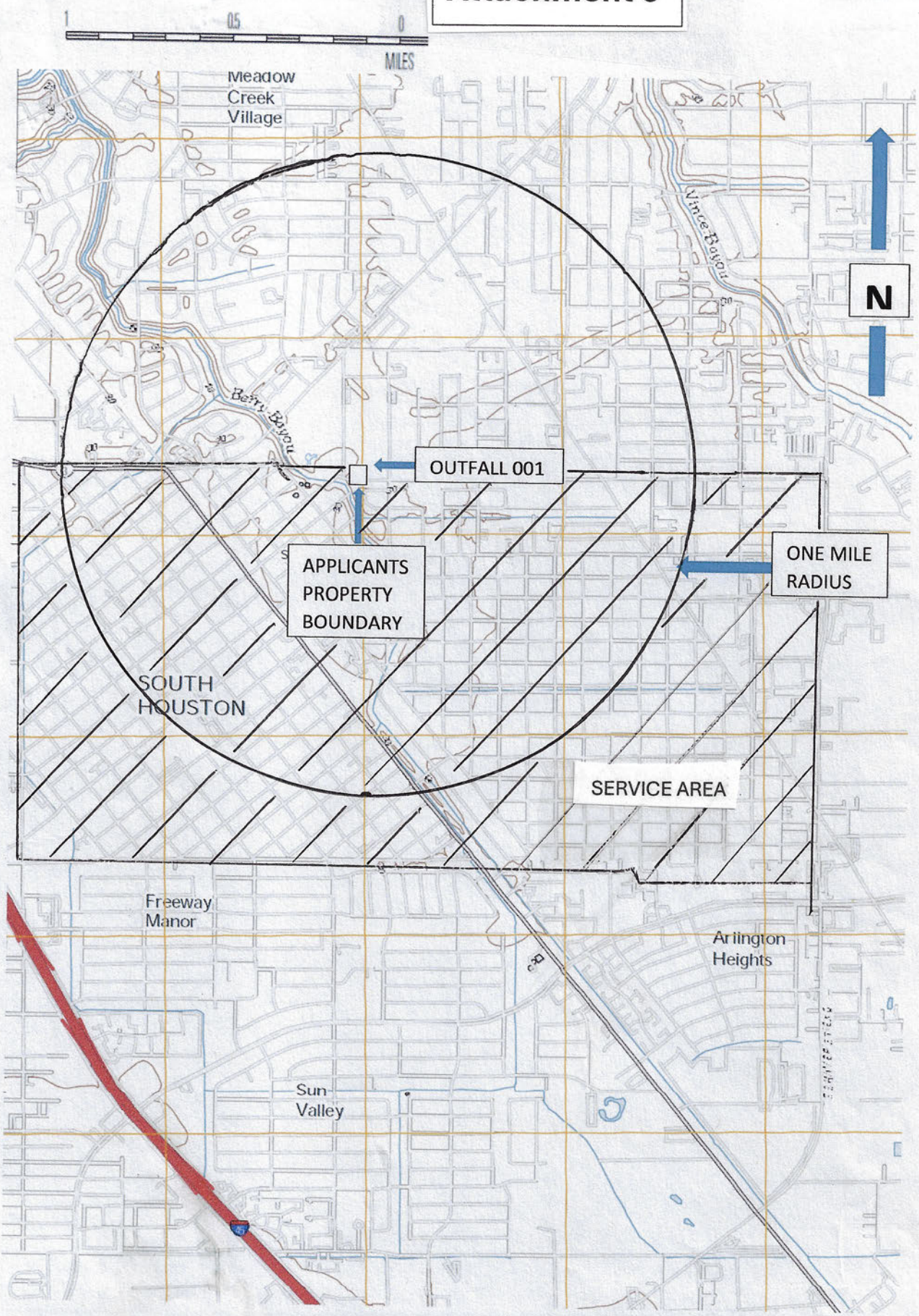


UNIT	CAPACITY MGD
LIFT STATION	20.0
AERATION	4.0
CLARIFIER	20.0 (2HR. PEAK)
CHLORINECONTACT	20.0 (2HR. PEAK)

PROCESS DESCRIPTION

The facility is designed for average flow of 4.0 MGD and peak 2 hour flow of 20.0 MGD with effluent design of 10 mg/l BOD, 15 mg/l TSS and 3mg/l NH3-N. The treatment process uses the complete mix modification of the activated sludge process. The treatment train employs aerated mixing/oxidation, final clarification, effluent chlorination with dechlorination and final flow measurement. The waste activated sludge is treated by thickening, aerobic digestion, dewatered on Wedgewater filter beds with final disposal in landfill.

Attachment 6



CITY OF SOUTH HOUSTON WASTEWATER TREATMENT PLANT
PERMIT RENEWAL APPLICATION
USGS MAP

Attachment 7

Envirodyne Laboratories, Inc
11011 Brooklet Dr., # 230
Houston, TX 77099
281.568.7880 Phone
www.envirodyne.com

02 November 2023

South Houston - Pretreatment
Fred Gonzales
206 Michigan
South Houston, TX 77587

South Houston WWTP (Pretreatment)

Enclosed are the results of analyses for samples received by the laboratory on 17-Aug-23 13:50. The analytical data provided relates only to the samples as received in this laboratory report.

ELI certifies that all results are NELAP compliant and performed in accordance with the referenced method except as noted in the Case Narrative or as noted with a qualifier. Any reproductions of this laboratory report should be in full and only with the written authorization from the client.

The total number of pages in this report is 35

Thank you for selecting ELI for your analytical needs. If you have any questions regarding this report, please contact us.

Sincerely,

Laura Bonjonia

Laura Bonjonia For Tinesha Robinson
Client Services Representative

NELAP ACCREDITED LABORATORY

Certificate No: T104704265-22-20

Envirodyne Laboratories, Inc
11011 Brooklet Dr., # 230
Houston, TX 77099
281.568.7880 Phone
www.envirodyne.com

Client:	South Houston - Pretreatment
Project:	South Houston WWTP (Pretreatment)
Work Order:	23H2576

Reported:
02-Nov-23 21:43

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Effluent - Composite	23H2576-01	Water	17-Aug-23 08:00	17-Aug-23 13:50
Effluent - Grab	23H2576-02	Water	16-Aug-23 10:00	17-Aug-23 13:50
Effluent - Grab	23H2576-03	Water	16-Aug-23 12:00	17-Aug-23 13:50
Effluent - Grab	23H2576-04	Water	16-Aug-23 14:00	17-Aug-23 13:50
Effluent - Grab	23H2576-05	Water	16-Aug-23 16:00	17-Aug-23 13:50

Volatiles-
C=Vinyl Chloride, Styrene, MTBE, and 2-Chloroethyl Vinyl Ether are highly reactive compounds when samples are preserved with acids (pH <2). 2-Chloroethyl Vinyl Ether recoveries deteriorate with acid preservative. Acrolein or Acrylonitrile should be received with acidic preservation at pH> 4-5 and analyzed as soon as possible if it's a compound of interest.

Samples were non detect for bias high spike recoveries in the LCS/LCSD and MS/MSD.
L-Sample analyzed by TNI accredited lab T104704231-22-29

Envirodyne Laboratories, Inc.

Laura Bonjonia

Laura Bonjonia For Tinesha Robinson, Client Services Representative

ENVIRODYNE LABORATORIES, INC.

CLIENT: **CITY OF SOUTH HOUSTON**

LAB NUMBER: 23H2576-01A

DATE COLLECTED: 17-Aug-23

DATE RECEIVED: 17-Aug-23

DATE COMPLETED: 25-Aug-23

SAMPLED BY: AG

LOCATION: Comp **EFFLUENT**

PARAMETERS:

METALS	CONCENTRATION	METHOD	INITIALS	MAL
TOTAL ALUMINUM (ug/l)	24.0	EPA 200.8	FOS	2.5
TOTAL ANTIMONY (ug/l)	<5.0	EPA 200.8	FOS	5.0
TOTAL ARSENIC (ug/l)	0.9	EPA 200.8	FOS	0.5
TOTAL BARIUM (ug/l)	22.1	EPA 200.8	FOS	3.0
TOTAL BERYLLIUM (ug/l)	<0.5	EPA 200.8	FOS	0.5
TOTAL CADMIUM (ug/l)	<1.0	EPA 200.8	FOS	1.0
TOTAL CHROMIUM (ug/l)	<3.0	EPA 200.8	FOS	3.0
HEX CHROMIUM (ug/l)	<3.0	3500 - Cr D	SSJ	3.0
TRI CHROMIUM (ug/l)	<3.0	N/A	FOS	3.0
TOTAL COPPER (ug/l)	23.1	EPA 200.8	FOS	2.0
TOTAL LEAD (ug/l)	<0.5	EPA 200.8	FOS	<0.5
TOTAL MERCURY (ug/l)	*< 0.005	245.1	SUB	<0.005
TOTAL NICKEL (ug/l)	12.2	EPA 200.8	FOS	2.0
TOTAL SELENIUM (ug/l)	<5.0	EPA 200.8	FOS	5.0
TOTAL SILVER (ug/l)	<0.5	EPA 200.8	FOS	0.5
TOTAL THALLIUM (ug/l)	<0.5	EPA 200.8	FOS	0.5
TOTAL ZINC (ug/l)	80.5	EPA 200.8	FOS	5.0
TOTAL CYANIDE (ug/l)	*< 10.0	EPA 335.4	SUB	10.0
AMENABLE CYANIDE (ug/l)	*< 10.0	SM 4500 CN E&G	SUB	10.0
TOTAL PHENOLS (ug/l)	*<10.0	EPA 420.4	SUB	10.0
FLUORIDE (ug/l)	<500.0	SM 4500-F C	SKP	500.0
NITRATE-N (ug/l)	25,800.0	SM 4500-NO3 D	SSJ	100.0

LAB REPRESENTATIVE

Ref. EPA METHODS FOR CHEMICAL ANALYSIS
*Analyzed by TNI certified lab T104704231

ENVIRODYNE LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: CITY OF SOUTH HOUSTON

LAB NUMBER: 23H2576-01B

DATE COLLECTED: 17-Aug-23

DATE RECEIVED: 17-Aug-23

DATE COMPLETED 31-Aug-23

SAMPLED BY: AG

SAMPLE TYPE:	EFFLUENT
LOCATION:	Comp
PARAMETERS:	PESTICIDES-PCB
EPA 1657*	
Guthion (Azinphos Methyl) (ug/l)	< 0.10
Chlorpyrifos (ug/l)	< 0.05
Demeton -O (ug/l)	< 0.20
Demeton -S (ug/l)	< 0.20
Diazinon (ug/l)	< 0.5
Disulfoton (ug/l)	< 0.5
EPN (ug/l)	< 0.5
Ethion (ug/l)	< 0.5
Ethyl Parathion (ug/l)	< 0.1
Malathion (ug/l)	< 0.10
Methyl Parathion (ug/l)	< 0.1
Parathion (ug/l)	< 0.10
EPA 608*	
Aldrin (ug/l)	< 0.01
Alpha - BHC (ug/l) (Hexachlorocyclohexane)	< 0.05
Beta - BHC (ug/l)	< 0.05

	EFFLUENT
	Comp
	PESTICIDES-PCB
EPA SW8081B*	
Chlordane (ug/l)	< 0.15
4-4' - DDD (ug/l)	< 0.10
4-4' - DDE (ug/l)	< 0.10
4-4' - DDT (ug/l)	< 0.02
Dieldrin (ug/l)	< 0.02
Dicofol (ug/l)	< 1.0
Endosulfan I (ug/l)	< 0.01
Endosulfan II (ug/l)	< 0.02
Endosulfan Sulfate (ug/l)	< 0.10
Endrin (ug/l)	< 0.02
Gamma-BHC (Lindane) (ug/l)	< 0.05
Heptachlor (ug/l)	< 0.01
Heptaclor Epoxide (ug/l)	< 0.01
Methoxychlor (ug/l)	< 0.20
Mirex (ug/l)	< 0.02
Total PCBs (ug/l)	< 0.2
PCB-1016 (ug/l)	< 0.2
PCB-1221 (ug/l)	< 0.2
PCB-1232 (ug/l)	< 0.2
PCB-1242 (ug/l)	< 0.2
PCB-1248 (ug/l)	< 0.2
PCB-1254 (ug/l)	< 0.2
PCB-1260 (ug/l)	< 0.2
Toxaphene (ug/l)	< 0.3
Endrin Aldehyde (ug/l)	< 0.10
Delta - BHC (ug/l)	< 0.05
EPA 632*	
Diuron (ug/l)	<0.09
EPA 8151*	
2,4-D (ug/l)	< 0.7
2,4,5-TP (Silvex) (ug/l)	< 0.3
EPA 625*	
Carbaryl (ug/l)	< 5.0

*Analyzed by NELAP certified lab T104704231

LAB REPRESENTATIVE

ENVIRODYNE LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: **CITY OF SOUTH HOUSTON**

LAB NUMBER: 23H2576-01C

DATE COLLECTED: 17-Aug-23

DATE RECEIVED: 17-Aug-23

DATE COMPLETED: 24-Aug-23

SAMPLED BY: AG

LOCATION: **24 Hr - COMP**

EFFLUENT
@ 0800 - 0800
Start - Stop
Aug 16th - Aug 17th

PARAMETERS:
BASE/ NEUTRALS

ACENAPHTHENE (ug/l)	10.0 U
ACENAPHTHYLENE (ug/l)	10.0 U
ANTHRACENE (ug/l)	10.0 U
BENZIDINE (ug/l)	50.0 U
BENZO (a) ANTHRACENE (ug/l)	5.0 U
BENZO (a) PYRENE (ug/l)	5.0 U
BENZO (B) FLUORANTHENE (ug/l)	10.0 U
BENZO (GHI) PERYLENE (ug/l)	20.0 U
BENZO (k) FLUORANTHENE (ug/l)	5.0 U
BIS (2-CHLOROETHYL) ETHER (ug/l)	10.0 U
BIS (2-CHLOROETHOXY) METHANE (ug/l)	10.0 U
BIS (2-CHLOROISOPROPYL) ETHER (ug/l)	10.0 U
BIS (2-ETHYLHEXYL) PHTHALATE (ug/l)	10.0 U
4-BROMOPHENYL PHENYL ETHER (ug/l)	10.0 U
BUTYL BENZYL PHTHALATE (ug/l)	10.0 U
2-CHLORONAPHTHALENE (ug/l)	10.0 U
4-CHLOROPHENYL PHENYL ETHER (ug/l)	10.0 U
CHRYSENE (ug/l)	5.0 U
DIBENZO (a,h) ANTHRACENE (ug/l)	5.0 U
1,2-DICHLOROBENZENE (ug/l)	10.0 U
1,3-DICHLOROBENZENE (ug/l)	10.0 U
(p)1,4-DICHLOROBENZENE (ug/l)	10.0 U
3,3-DICHLOROBENZIDINE (ug/l)	5.0 U
DIETHYL PHTHALATE (ug/l)	10.0 U
DIMETHYL PHTHALATE (ug/l)	10.0 U
DI-N-BUTYL PHTHALATE (ug/l)	10.0 U
DIBENZOFURAN (ug/l)	10.0 U
FLUORANTHENE (ug/l)	10.0 U
FLUORENE (ug/l)	10.0 U
HEXACHLOROBENZENE (ug/l)	5.0 U
HEXACHLOROBUTADIENE (ug/l)	10.0 U
HEXACHLOROETHANE (ug/l)	20.0 U
HEXACHLOROCYCLOPENTADIENE (ug/l)	10.0 U
HEXACHLOROPHENE (ug/l)	10.0 U
IDENO (1,2,3,cd) PYRENE (ug/l)	5.0 U
1,2-Diphenyl Hydrazine (ug/l)	20.0 U
N-NITROSO-di-n-BUTYLAMINE (ug/l)	20.0 U
N-NITROSO-DI-ETHYLAMINE (ug/l)	20.0 U
ISOPHORONE (ug/l)	10.0 U
NAPHTHALENE (ug/l)	10.0 U
NITROBENZENE (ug/l)	10.0 U
N-NITROSO-di-n-PROPYLAMINE (ug/l)	20.0 U
N-NITROSODIPHENYLAMINE (ug/l)	20.0 U
N-NITROSODIMETHYLAMINE (ug/l)	50.0 U
PHENANTHRENE (ug/l)	10.0 U
PYRENE (ug/l)	10.0 U
1,2,4-TRICHLOROBENZENE (ug/l)	10.0 U
1,2,4,5-TETRACHLOROBENZENE (ug/l	20.0 U
2, 4-DINITROTOLUENE (ug/l)	10.0 U
2, 6-DINTROTOLUENE (ug/l)	10.0 U
2-METHYLNAPHTHALENE (ug/l)	10.0 U
Di-n-octyl PHTHALATE (ug/l)	10.0 U
PYRIDINE (ug/l)	20.0 U
p-CRESOL (ug/l)	10.0 U

ACID COMPOUNDS
EFFLUENT (Cont.)

2-CHLOROPHENOL (ug/l)	10.0 U
2,4-DICHLOROPHENOL (ug/l)	10.0 U
2,4-DIMETHYLPHENOL (ug/l)	10.0 U
4, 6-DINITRO-o-CRESOL (ug/l)	50.0 U
4,6-DINITRO-2-METHYLPHENOL (ug/l)	20.0 U
2,4-DINITROPHENOL (ug/l)	50.0 U
2-NITROPHENOL (ug/l)	20.0 U
4-NITROPHENOL (ug/l)	50.0 U
p-CHLORO-m-CRESOL (ug/l)	10.0 U
2-METHYLPHENOL (ug/l)	10.0 U
PENTACHLOROPHENOL (ug/l)	5.0 U
PHENOL (ug/l)	10.0 U
2,4,6-TRICHLOROPHENOL (ug/l)	10.0 U
2,4,5-TRICHLOROPHENOL (ug/l)	50.0 U
PENTACHLOROBENZENE (ug/l)	20.0 U
4-CHLORO-3-METHYL PHENOL (ug/l)	10.0 U
NONYLPHENOL (ug/l)	5.0 U

Analyzed by NELAC certified lab T104704231
Ref. EPA-625 (Base/Neutrals & Acids)
U - Analyte Not Detected at the listed Detection Limit
J - Analyte Present but below Detection Limit

LAB REPRESENTATIVE

Envirodyne Laboratories, Inc
11011 Brooklet Dr., # 230
Houston, TX 77099
281.568.7880 Phone
www.envirodyne.com

Client:	South Houston - Pretreatment
Project:	South Houston WWTP (Pretreatment)
Work Order:	23H2576

Reported: 02-Nov-23 21:43

Effluent - Grab

23H2576-02 (Water) Sampled: 16-Aug-23 10:00

Envirodyne Laboratories, Inc.

Volatile Organic Compounds by EPA 624.1

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
Dichlorodifluoromethane	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:11	EPA 624.1	PCASTR	
Chloromethane	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:11	EPA 624.1	PCASTR	
Vinyl Chloride	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:11	EPA 624.1	PCASTR	
Bromomethane	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:11	EPA 624.1	PCASTR	
Chloroethane	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:11	EPA 624.1	PCASTR	
Trichlorofluoromethane	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:11	EPA 624.1	PCASTR	
Acetone	<10.0	10.0	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:11	EPA 624.1	PCASTR	
Acrolein	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:11	EPA 624.1	PCASTR	
1,1-Dichloroethene	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:11	EPA 624.1	PCASTR	
Carbon Disulfide	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:11	EPA 624.1	PCASTR	
Acetonitrile	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:11	EPA 624.1	PCASTR	
Methylene Chloride	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:11	EPA 624.1	PCASTR	
Acrylonitrile	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:11	EPA 624.1	PCASTR	
MTBE (Methyl tert-butyl ether)	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:11	EPA 624.1	PCASTR	
trans-1,2-Dichloroethene	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:11	EPA 624.1	PCASTR	
1,1-Dichloroethane	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:11	EPA 624.1	PCASTR	
Vinyl Acetate	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:11	EPA 624.1	PCASTR	
2,2-Dichloropropane	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:11	EPA 624.1	PCASTR	
cis-1,2-Dichloroethene	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:11	EPA 624.1	PCASTR	
Bromochloromethane	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:11	EPA 624.1	PCASTR	
Chloroform	**52.7**	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:11	EPA 624.1	PCASTR	
2-Butanone	<10.0	10.0	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:11	EPA 624.1	PCASTR	
1,2-Dichloroethane	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:11	EPA 624.1	PCASTR	
1,1,1-Trichloroethane	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:11	EPA 624.1	PCASTR	
Tetrahydrofuran	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:11	EPA 624.1	PCASTR	
Carbon Tetrachloride	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:11	EPA 624.1	PCASTR	
1,1-Dichloropropene	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:11	EPA 624.1	PCASTR	
Benzene	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:11	EPA 624.1	PCASTR	
Trichloroethene	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:11	EPA 624.1	PCASTR	
1,2-Dichloropropane	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:11	EPA 624.1	PCASTR	

Envirodyne Laboratories, Inc.

Laura Bonjonia

Laura Bonjonia For Tinesha Robinson, Client Services Representative

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Envirodyne Laboratories, Inc
11011 Brooklet Dr., # 230
Houston, TX 77099
281.568.7880 Phone
www.envirodyne.com

Client:	South Houston - Pretreatment
Project:	South Houston WWTP (Pretreatment)
Work Order:	23H2576

Reported:
02-Nov-23 21:43

Effluent - Grab

23H2576-02 (Water) Sampled: 16-Aug-23 10:00

Envirodyne Laboratories, Inc.

Volatile Organic Compounds by EPA 624.1

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
2-Pentanone	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:11	EPA 624.1	PCASTR	
Dibromomethane	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:11	EPA 624.1	PCASTR	
Bromodichloromethane	**16.2**	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:11	EPA 624.1	PCASTR	
2-Chloroethyl vinyl ether	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:11	EPA 624.1	PCASTR	
cis-1,3-Dichloropropene	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:11	EPA 624.1	PCASTR	
trans-1,3-Dichloropropene	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:11	EPA 624.1	PCASTR	
1,1,2-Trichloroethane	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:11	EPA 624.1	PCASTR	
Dibromochloromethane	**3.47**	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:11	EPA 624.1	PCASTR	
1,2-Dibromoethane	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:11	EPA 624.1	PCASTR	
4-Methyl-2-Pentanone	<10.0	10.0	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:11	EPA 624.1	PCASTR	
Toluene	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:11	EPA 624.1	PCASTR	
Tetrachloroethene	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:11	EPA 624.1	PCASTR	
1,3-Dichloropropane	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:11	EPA 624.1	PCASTR	
2-Hexanone	<10.0	10.0	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:11	EPA 624.1	PCASTR	
Chlorobenzene	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:11	EPA 624.1	PCASTR	
1,1,1,2-Tetrachloroethane	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:11	EPA 624.1	PCASTR	
Ethylbenzene	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:11	EPA 624.1	PCASTR	
m,p-Xylene	<10.0	10.0	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:11	EPA 624.1	PCASTR	
o-Xylene	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:11	EPA 624.1	PCASTR	
Styrene	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:11	EPA 624.1	PCASTR	
Bromoform	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:11	EPA 624.1	PCASTR	
Isopropylbenzene (Cumene)	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:11	EPA 624.1	PCASTR	
1,1,2,2-Tetrachloroethane	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:11	EPA 624.1	PCASTR	
1,2,3-Trichloropropane	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:11	EPA 624.1	PCASTR	
Bromobenzene	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:11	EPA 624.1	PCASTR	
Propylbenzene	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:11	EPA 624.1	PCASTR	
2-Chlorotoluene	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:11	EPA 624.1	PCASTR	
1,3,5-Trimethylbenzene	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:11	EPA 624.1	PCASTR	
4-Chlorotoluene	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:11	EPA 624.1	PCASTR	
tert-butyl Benzene	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:11	EPA 624.1	PCASTR	

Envirodyne Laboratories, Inc.

Laura Bonjonia

Laura Bonjonia For Tinesha Robinson, Client Services Representative

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Envirodyne Laboratories, Inc
11011 Brooklet Dr., # 230
Houston, TX 77099
281.568.7880 Phone
www.envirodyne.com

Client:	South Houston - Pretreatment
Project:	South Houston WWTP (Pretreatment)
Work Order:	23H2576

Reported:
02-Nov-23 21:43

Effluent - Grab

23H2576-02 (Water) Sampled: 16-Aug-23 10:00

Envirodyne Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
Volatile Organic Compounds by EPA 624.1										
1,2,4-Trimethylbenzene	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:11	EPA 624.1	PCASTR	
sec-butyl Benzene	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:11	EPA 624.1	PCASTR	
p-Isopropyltoluene	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:11	EPA 624.1	PCASTR	
1,3-Dichlorobenzene	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:11	EPA 624.1	PCASTR	
1,4-Dichlorobenzene	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:11	EPA 624.1	PCASTR	
Benzyl Chloride	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:11	EPA 624.1	PCASTR	
n-butyl Benzene	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:11	EPA 624.1	PCASTR	
1,2-Dichlorobenzene	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:11	EPA 624.1	PCASTR	
1,2-Dibromo-3-chloropropane	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:11	EPA 624.1	PCASTR	
1,2,4-Trichlorobenzene	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:11	EPA 624.1	PCASTR	
Hexachlorobutadiene	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:11	EPA 624.1	PCASTR	
Naphthalene	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:11	EPA 624.1	PCASTR	
1,2,3-Trichlorobenzene	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:11	EPA 624.1	PCASTR	
Total Trihalomethanes	**72.3**	10.0	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:11	EPA 624.1	PCASTR	
Total Xylenes	<7.50	7.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:11	EPA 624.1	PCASTR	
Surrogate: Dibromofluoromethane		*113 %*	*70-130*		*B3H5061*	*22-Aug-23*	*22-Aug-23 14:11*	*EPA 624.1*	PCASTR	
Surrogate: 1,2-Dichloroethane-d4		*103 %*	*70-130*		*B3H5061*	*22-Aug-23*	*22-Aug-23 14:11*	*EPA 624.1*	PCASTR	
Surrogate: Toluene-d8		*99.7 %*	*70-130*		*B3H5061*	*22-Aug-23*	*22-Aug-23 14:11*	*EPA 624.1*	PCASTR	
Surrogate: 4-Bromofluorobenzene		*100 %*	*70-130*		*B3H5061*	*22-Aug-23*	*22-Aug-23 14:11*	*EPA 624.1*	PCASTR	
Wet Chemistry										
Cyanide, Amenable	**0.009**	0.005	mg/L	1	B3I2935	25-Aug-23	25-Aug-23 15:15	SM 4500 CN E&GSUB		L
Cyanide, Total	**0.009**	0.005	mg/L	1	B3I2935	25-Aug-23	25-Aug-23 15:15	SM 4500 CN E&GSUB		L
Phenol	<0.05	0.05	mg/L	1	B3I2934	24-Aug-23	24-Aug-23 11:48	EPA 420.1	SUB	L

Envirodyne Laboratories, Inc.

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Laura Bonjonia

Laura Bonjonia For Tinesha Robinson, Client Services Representative

Envirodyne Laboratories, Inc
11011 Brooklet Dr., # 230
Houston, TX 77099
281.568.7880 Phone
www.envirodyne.com

Client:	South Houston - Pretreatment
Project:	South Houston WWTP (Pretreatment)
Work Order:	23H2576

Reported: 02-Nov-23 21:43

Effluent - Grab

23H2576-03 (Water) Sampled: 16-Aug-23 12:00

Envirodyne Laboratories, Inc.

Volatile Organic Compounds by EPA 624.1

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
Dichlorodifluoromethane	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:34	EPA 624.1	PCASTR	
Chloromethane	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:34	EPA 624.1	PCASTR	
Vinyl Chloride	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:34	EPA 624.1	PCASTR	
Bromomethane	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:34	EPA 624.1	PCASTR	
Chloroethane	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:34	EPA 624.1	PCASTR	
Trichlorofluoromethane	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:34	EPA 624.1	PCASTR	
Acetone	<10.0	10.0	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:34	EPA 624.1	PCASTR	
Acrolein	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:34	EPA 624.1	PCASTR	
1,1-Dichloroethene	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:34	EPA 624.1	PCASTR	
Carbon Disulfide	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:34	EPA 624.1	PCASTR	
Acetonitrile	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:34	EPA 624.1	PCASTR	
Methylene Chloride	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:34	EPA 624.1	PCASTR	
Acrylonitrile	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:34	EPA 624.1	PCASTR	
MTBE (Methyl tert-butyl ether)	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:34	EPA 624.1	PCASTR	
trans-1,2-Dichloroethene	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:34	EPA 624.1	PCASTR	
1,1-Dichloroethane	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:34	EPA 624.1	PCASTR	
Vinyl Acetate	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:34	EPA 624.1	PCASTR	
2,2-Dichloropropane	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:34	EPA 624.1	PCASTR	
cis-1,2-Dichloroethene	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:34	EPA 624.1	PCASTR	
Bromochloromethane	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:34	EPA 624.1	PCASTR	
Chloroform	**55.5**	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:34	EPA 624.1	PCASTR	
2-Butanone	<10.0	10.0	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:34	EPA 624.1	PCASTR	
1,2-Dichloroethane	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:34	EPA 624.1	PCASTR	
1,1,1-Trichloroethane	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:34	EPA 624.1	PCASTR	
Tetrahydrofuran	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:34	EPA 624.1	PCASTR	
Carbon Tetrachloride	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:34	EPA 624.1	PCASTR	
1,1-Dichloropropene	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:34	EPA 624.1	PCASTR	
Benzene	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:34	EPA 624.1	PCASTR	
Trichloroethene	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:34	EPA 624.1	PCASTR	
1,2-Dichloropropane	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:34	EPA 624.1	PCASTR	

Envirodyne Laboratories, Inc.

Laura Bonjonia

Laura Bonjonia For Tinesha Robinson, Client Services Representative

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Envirodyne Laboratories, Inc
11011 Brooklet Dr., # 230
Houston, TX 77099
281.568.7880 Phone
www.envirodyne.com

Client:	South Houston - Pretreatment
Project:	South Houston WWTP (Pretreatment)
Work Order:	23H2576

Reported:
02-Nov-23 21:43

Effluent - Grab

23H2576-03 (Water) Sampled: 16-Aug-23 12:00

Envirodyne Laboratories, Inc.

Volatile Organic Compounds by EPA 624.1

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
2-Pentanone	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:34	EPA 624.1	PCASTR	
Dibromomethane	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:34	EPA 624.1	PCASTR	
Bromodichloromethane	**17.3**	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:34	EPA 624.1	PCASTR	
2-Chloroethyl vinyl ether	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:34	EPA 624.1	PCASTR	
cis-1,3-Dichloropropene	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:34	EPA 624.1	PCASTR	
trans-1,3-Dichloropropene	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:34	EPA 624.1	PCASTR	
1,1,2-Trichloroethane	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:34	EPA 624.1	PCASTR	
Dibromochloromethane	**3.28**	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:34	EPA 624.1	PCASTR	
1,2-Dibromoethane	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:34	EPA 624.1	PCASTR	
4-Methyl-2-Pentanone	<10.0	10.0	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:34	EPA 624.1	PCASTR	
Toluene	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:34	EPA 624.1	PCASTR	
Tetrachloroethene	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:34	EPA 624.1	PCASTR	
1,3-Dichloropropane	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:34	EPA 624.1	PCASTR	
2-Hexanone	<10.0	10.0	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:34	EPA 624.1	PCASTR	
Chlorobenzene	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:34	EPA 624.1	PCASTR	
1,1,1,2-Tetrachloroethane	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:34	EPA 624.1	PCASTR	
Ethylbenzene	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:34	EPA 624.1	PCASTR	
m,p-Xylene	<10.0	10.0	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:34	EPA 624.1	PCASTR	
o-Xylene	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:34	EPA 624.1	PCASTR	
Styrene	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:34	EPA 624.1	PCASTR	
Bromoform	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:34	EPA 624.1	PCASTR	
Isopropylbenzene (Cumene)	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:34	EPA 624.1	PCASTR	
1,1,2,2-Tetrachloroethane	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:34	EPA 624.1	PCASTR	
1,2,3-Trichloropropane	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:34	EPA 624.1	PCASTR	
Bromobenzene	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:34	EPA 624.1	PCASTR	
Propylbenzene	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:34	EPA 624.1	PCASTR	
2-Chlorotoluene	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:34	EPA 624.1	PCASTR	
1,3,5-Trimethylbenzene	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:34	EPA 624.1	PCASTR	
4-Chlorotoluene	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:34	EPA 624.1	PCASTR	
tert-butyl Benzene	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:34	EPA 624.1	PCASTR	

Envirodyne Laboratories, Inc.

Laura Bonjonia

Laura Bonjonia For Tinesha Robinson, Client Services Representative

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Houston, TX 77099
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www.envirodyne.com

Client:	South Houston - Pretreatment
Project:	South Houston WWTP (Pretreatment)
Work Order:	23H2576

Reported: 02-Nov-23 21:43

Effluent - Grab

23H2576-03 (Water) Sampled: 16-Aug-23 12:00

Envirodyne Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
Volatile Organic Compounds by EPA 624.1										
1,2,4-Trimethylbenzene	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:34	EPA 624.1	PCASTR	
sec-butyl Benzene	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:34	EPA 624.1	PCASTR	
p-Isopropyltoluene	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:34	EPA 624.1	PCASTR	
1,3-Dichlorobenzene	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:34	EPA 624.1	PCASTR	
1,4-Dichlorobenzene	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:34	EPA 624.1	PCASTR	
Benzyl Chloride	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:34	EPA 624.1	PCASTR	
n-butyl Benzene	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:34	EPA 624.1	PCASTR	
1,2-Dichlorobenzene	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:34	EPA 624.1	PCASTR	
1,2-Dibromo-3-chloropropane	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:34	EPA 624.1	PCASTR	
1,2,4-Trichlorobenzene	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:34	EPA 624.1	PCASTR	
Hexachlorobutadiene	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:34	EPA 624.1	PCASTR	
Naphthalene	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:34	EPA 624.1	PCASTR	
1,2,3-Trichlorobenzene	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:34	EPA 624.1	PCASTR	
Total Trihalomethanes	**76.1**	10.0	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:34	EPA 624.1	PCASTR	
Total Xylenes	<7.50	7.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:34	EPA 624.1	PCASTR	
Surrogate: Dibromofluoromethane		*118 %*	*70-130*		*B3H5061*	*22-Aug-23*	*22-Aug-23 14:34*	*EPA 624.1*	PCASTR	
Surrogate: 1,2-Dichloroethane-d4		*102 %*	*70-130*		*B3H5061*	*22-Aug-23*	*22-Aug-23 14:34*	*EPA 624.1*	PCASTR	
Surrogate: Toluene-d8		*99.9 %*	*70-130*		*B3H5061*	*22-Aug-23*	*22-Aug-23 14:34*	*EPA 624.1*	PCASTR	
Surrogate: 4-Bromofluorobenzene		*102 %*	*70-130*		*B3H5061*	*22-Aug-23*	*22-Aug-23 14:34*	*EPA 624.1*	PCASTR	
Wet Chemistry										
Cyanide, Amenable	<0.005	0.005	mg/L	1	B3I2935	25-Aug-23	25-Aug-23 15:15	SM 4500 CN E&GSUB		L
Cyanide, Total	<0.005	0.005	mg/L	1	B3I2935	25-Aug-23	25-Aug-23 15:15	SM 4500 CN E&GSUB		L
Phenol	<0.05	0.05	mg/L	1	B3I2934	24-Aug-23	24-Aug-23 11:48	EPA 420.1	SUB	L

Envirodyne Laboratories, Inc.

Laura Bonjonia

Laura Bonjonia For Tinesha Robinson, Client Services Representative

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Houston, TX 77099
281.568.7880 Phone
www.envirodyne.com

Client:	South Houston - Pretreatment
Project:	South Houston WWTP (Pretreatment)
Work Order:	23H2576

Reported:
02-Nov-23 21:43

Effluent - Grab

23H2576-04 (Water) Sampled: 16-Aug-23 14:00

Envirodyne Laboratories, Inc.

Volatile Organic Compounds by EPA 624.1

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
Dichlorodifluoromethane	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:58	EPA 624.1	PCASTR	
Chloromethane	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:58	EPA 624.1	PCASTR	
Vinyl Chloride	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:58	EPA 624.1	PCASTR	
Bromomethane	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:58	EPA 624.1	PCASTR	
Chloroethane	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:58	EPA 624.1	PCASTR	
Trichlorofluoromethane	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:58	EPA 624.1	PCASTR	
Acetone	<10.0	10.0	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:58	EPA 624.1	PCASTR	
Acrolein	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:58	EPA 624.1	PCASTR	
1,1-Dichloroethene	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:58	EPA 624.1	PCASTR	
Carbon Disulfide	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:58	EPA 624.1	PCASTR	
Acetonitrile	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:58	EPA 624.1	PCASTR	
Methylene Chloride	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:58	EPA 624.1	PCASTR	
Acrylonitrile	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:58	EPA 624.1	PCASTR	
MTBE (Methyl tert-butyl ether)	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:58	EPA 624.1	PCASTR	
trans-1,2-Dichloroethene	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:58	EPA 624.1	PCASTR	
1,1-Dichloroethane	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:58	EPA 624.1	PCASTR	
Vinyl Acetate	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:58	EPA 624.1	PCASTR	
2,2-Dichloropropane	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:58	EPA 624.1	PCASTR	
cis-1,2-Dichloroethene	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:58	EPA 624.1	PCASTR	
Bromochloromethane	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:58	EPA 624.1	PCASTR	
Chloroform	**54.3**	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:58	EPA 624.1	PCASTR	
2-Butanone	<10.0	10.0	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:58	EPA 624.1	PCASTR	
1,2-Dichloroethane	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:58	EPA 624.1	PCASTR	
1,1,1-Trichloroethane	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:58	EPA 624.1	PCASTR	
Tetrahydrofuran	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:58	EPA 624.1	PCASTR	
Carbon Tetrachloride	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:58	EPA 624.1	PCASTR	
1,1-Dichloropropene	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:58	EPA 624.1	PCASTR	
Benzene	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:58	EPA 624.1	PCASTR	
Trichloroethene	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:58	EPA 624.1	PCASTR	
1,2-Dichloropropane	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:58	EPA 624.1	PCASTR	

Envirodyne Laboratories, Inc.

Laura Bonjonia

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www.envirodyne.com

Client:	South Houston - Pretreatment
Project:	South Houston WWTP (Pretreatment)
Work Order:	23H2576
Reported:	02-Nov-23 21:43

Effluent - Grab

23H2576-04 (Water) Sampled: 16-Aug-23 14:00

Envirodyne Laboratories, Inc.

Volatile Organic Compounds by EPA 624.1

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
2-Pentanone	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:58	EPA 624.1	PCASTR	
Dibromomethane	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:58	EPA 624.1	PCASTR	
Bromodichloromethane	**18.2**	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:58	EPA 624.1	PCASTR	
2-Chloroethyl vinyl ether	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:58	EPA 624.1	PCASTR	
cis-1,3-Dichloropropene	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:58	EPA 624.1	PCASTR	
trans-1,3-Dichloropropene	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:58	EPA 624.1	PCASTR	
1,1,2-Trichloroethane	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:58	EPA 624.1	PCASTR	
Dibromochloromethane	**3.42**	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:58	EPA 624.1	PCASTR	
1,2-Dibromoethane	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:58	EPA 624.1	PCASTR	
4-Methyl-2-Pentanone	<10.0	10.0	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:58	EPA 624.1	PCASTR	
Toluene	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:58	EPA 624.1	PCASTR	
Tetrachloroethene	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:58	EPA 624.1	PCASTR	
1,3-Dichloropropane	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:58	EPA 624.1	PCASTR	
2-Hexanone	<10.0	10.0	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:58	EPA 624.1	PCASTR	
Chlorobenzene	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:58	EPA 624.1	PCASTR	
1,1,1,2-Tetrachloroethane	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:58	EPA 624.1	PCASTR	
Ethylbenzene	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:58	EPA 624.1	PCASTR	
m,p-Xylene	<10.0	10.0	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:58	EPA 624.1	PCASTR	
o-Xylene	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:58	EPA 624.1	PCASTR	
Styrene	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:58	EPA 624.1	PCASTR	
Bromoform	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:58	EPA 624.1	PCASTR	
Isopropylbenzene (Cumene)	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:58	EPA 624.1	PCASTR	
1,1,2,2-Tetrachloroethane	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:58	EPA 624.1	PCASTR	
1,2,3-Trichloropropane	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:58	EPA 624.1	PCASTR	
Bromobenzene	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:58	EPA 624.1	PCASTR	
Propylbenzene	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:58	EPA 624.1	PCASTR	
2-Chlorotoluene	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:58	EPA 624.1	PCASTR	
1,3,5-Trimethylbenzene	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:58	EPA 624.1	PCASTR	
4-Chlorotoluene	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:58	EPA 624.1	PCASTR	
tert-butyl Benzene	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:58	EPA 624.1	PCASTR	

Envirodyne Laboratories, Inc.

Laura Bonjonia

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Client: South Houston - Pretreatment
Project: South Houston WWTP (Pretreatment)
Work Order: 23H2576

Reported: 02-Nov-23 21:43

Effluent - Grab

23H2576-04 (Water) Sampled: 16-Aug-23 14:00

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
Envirodyne Laboratories, Inc.										
Volatile Organic Compounds by EPA 624.1										
1,2,4-Trimethylbenzene	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:58	EPA 624.1	PCASTR	
sec-butyl Benzene	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:58	EPA 624.1	PCASTR	
p-Isopropyltoluene	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:58	EPA 624.1	PCASTR	
1,3-Dichlorobenzene	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:58	EPA 624.1	PCASTR	
1,4-Dichlorobenzene	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:58	EPA 624.1	PCASTR	
Benzyl Chloride	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:58	EPA 624.1	PCASTR	
n-butyl Benzene	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:58	EPA 624.1	PCASTR	
1,2-Dichlorobenzene	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:58	EPA 624.1	PCASTR	
1,2-Dibromo-3-chloropropane	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:58	EPA 624.1	PCASTR	
1,2,4-Trichlorobenzene	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:58	EPA 624.1	PCASTR	
Hexachlorobutadiene	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:58	EPA 624.1	PCASTR	
Naphthalene	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:58	EPA 624.1	PCASTR	
1,2,3-Trichlorobenzene	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:58	EPA 624.1	PCASTR	
Total Trihalomethanes	**75.9**	10.0	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:58	EPA 624.1	PCASTR	
Total Xylenes	<7.50	7.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 14:58	EPA 624.1	PCASTR	
Surrogate: Dibromofluoromethane		*110 %*	*70-130*		*B3H5061*	*22-Aug-23*	*22-Aug-23 14:58*	*EPA 624.1*	PCASTR	
Surrogate: 1,2-Dichloroethane-d4		*103 %*	*70-130*		*B3H5061*	*22-Aug-23*	*22-Aug-23 14:58*	*EPA 624.1*	PCASTR	
Surrogate: Toluene-d8		*99.5 %*	*70-130*		*B3H5061*	*22-Aug-23*	*22-Aug-23 14:58*	*EPA 624.1*	PCASTR	
Surrogate: 4-Bromofluorobenzene		*98.2 %*	*70-130*		*B3H5061*	*22-Aug-23*	*22-Aug-23 14:58*	*EPA 624.1*	PCASTR	
Wet Chemistry										
Cyanide, Amenable	<0.005	0.005	mg/L	1	B3I2935	25-Aug-23	25-Aug-23 15:15	SM 4500 CN E&GSUB		L
Cyanide, Total	<0.005	0.005	mg/L	1	B3I2935	25-Aug-23	25-Aug-23 15:15	SM 4500 CN E&GSUB		L
Phenol	<0.05	0.05	mg/L	1	B3I2934	24-Aug-23	24-Aug-23 11:48	EPA 420.1	SUB	L

Envirodyne Laboratories, Inc.

Laura Bonjonia

Laura Bonjonia For Tinesha Robinson, Client Services Representative

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Envirodyne Laboratories, Inc
11011 Brooklet Dr., # 230
Houston, TX 77099
281.568.7880 Phone
www.envirodyne.com

Client:	South Houston - Pretreatment
Project:	South Houston WWTP (Pretreatment)
Work Order:	23H2576

Reported: 02-Nov-23 21:43

Effluent - Grab

23H2576-05 (Water) Sampled: 16-Aug-23 16:00

Envirodyne Laboratories, Inc.

Volatile Organic Compounds by EPA 624.1

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
Dichlorodifluoromethane	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 15:22	EPA 624.1	PCASTR	
Chloromethane	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 15:22	EPA 624.1	PCASTR	
Vinyl Chloride	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 15:22	EPA 624.1	PCASTR	
Bromomethane	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 15:22	EPA 624.1	PCASTR	
Chloroethane	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 15:22	EPA 624.1	PCASTR	
Trichlorofluoromethane	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 15:22	EPA 624.1	PCASTR	
Acetone	<10.0	10.0	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 15:22	EPA 624.1	PCASTR	
Acrolein	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 15:22	EPA 624.1	PCASTR	
1,1-Dichloroethene	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 15:22	EPA 624.1	PCASTR	
Carbon Disulfide	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 15:22	EPA 624.1	PCASTR	
Acetonitrile	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 15:22	EPA 624.1	PCASTR	
Methylene Chloride	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 15:22	EPA 624.1	PCASTR	
Acrylonitrile	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 15:22	EPA 624.1	PCASTR	
MTBE (Methyl tert-butyl ether)	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 15:22	EPA 624.1	PCASTR	
trans-1,2-Dichloroethene	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 15:22	EPA 624.1	PCASTR	
1,1-Dichloroethane	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 15:22	EPA 624.1	PCASTR	
Vinyl Acetate	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 15:22	EPA 624.1	PCASTR	
2,2-Dichloropropane	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 15:22	EPA 624.1	PCASTR	
cis-1,2-Dichloroethene	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 15:22	EPA 624.1	PCASTR	
Bromochloromethane	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 15:22	EPA 624.1	PCASTR	
Chloroform	**55.0**	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 15:22	EPA 624.1	PCASTR	
2-Butanone	<10.0	10.0	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 15:22	EPA 624.1	PCASTR	
1,2-Dichloroethane	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 15:22	EPA 624.1	PCASTR	
1,1,1-Trichloroethane	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 15:22	EPA 624.1	PCASTR	
Tetrahydrofuran	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 15:22	EPA 624.1	PCASTR	
Carbon Tetrachloride	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 15:22	EPA 624.1	PCASTR	
1,1-Dichloropropene	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 15:22	EPA 624.1	PCASTR	
Benzene	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 15:22	EPA 624.1	PCASTR	
Trichloroethene	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 15:22	EPA 624.1	PCASTR	
1,2-Dichloropropane	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 15:22	EPA 624.1	PCASTR	

Envirodyne Laboratories, Inc.

Laura Bonjonia

Laura Bonjonia For Tinesha Robinson, Client Services Representative

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Houston, TX 77099
281.568.7880 Phone
www.envirodyne.com

Client:	South Houston - Pretreatment
Project:	South Houston WWTP (Pretreatment)
Work Order:	23H2576

Reported:
02-Nov-23 21:43

Effluent - Grab

23H2576-05 (Water) Sampled: 16-Aug-23 16:00

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
Envirodyne Laboratories, Inc.										
Volatile Organic Compounds by EPA 624.1										
2-Pentanone	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 15:22	EPA 624.1	PCASTR	
Dibromomethane	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 15:22	EPA 624.1	PCASTR	
Bromodichloromethane	**18.3**	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 15:22	EPA 624.1	PCASTR	
2-Chloroethyl vinyl ether	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 15:22	EPA 624.1	PCASTR	
cis-1,3-Dichloropropene	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 15:22	EPA 624.1	PCASTR	
trans-1,3-Dichloropropene	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 15:22	EPA 624.1	PCASTR	
1,1,2-Trichloroethane	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 15:22	EPA 624.1	PCASTR	
Dibromochloromethane	**3.71**	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 15:22	EPA 624.1	PCASTR	
1,2-Dibromoethane	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 15:22	EPA 624.1	PCASTR	
4-Methyl-2-Pentanone	<10.0	10.0	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 15:22	EPA 624.1	PCASTR	
Toluene	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 15:22	EPA 624.1	PCASTR	
Tetrachloroethene	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 15:22	EPA 624.1	PCASTR	
1,3-Dichloropropane	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 15:22	EPA 624.1	PCASTR	
2-Hexanone	<10.0	10.0	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 15:22	EPA 624.1	PCASTR	
Chlorobenzene	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 15:22	EPA 624.1	PCASTR	
1,1,1,2-Tetrachloroethane	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 15:22	EPA 624.1	PCASTR	
Ethylbenzene	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 15:22	EPA 624.1	PCASTR	
m,p-Xylene	<10.0	10.0	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 15:22	EPA 624.1	PCASTR	
o-Xylene	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 15:22	EPA 624.1	PCASTR	
Styrene	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 15:22	EPA 624.1	PCASTR	
Bromoform	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 15:22	EPA 624.1	PCASTR	
Isopropylbenzene (Cumene)	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 15:22	EPA 624.1	PCASTR	
1,1,2,2-Tetrachloroethane	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 15:22	EPA 624.1	PCASTR	
1,2,3-Trichloropropane	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 15:22	EPA 624.1	PCASTR	
Bromobenzene	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 15:22	EPA 624.1	PCASTR	
Propylbenzene	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 15:22	EPA 624.1	PCASTR	
2-Chlorotoluene	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 15:22	EPA 624.1	PCASTR	
1,3,5-Trimethylbenzene	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 15:22	EPA 624.1	PCASTR	
4-Chlorotoluene	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 15:22	EPA 624.1	PCASTR	
tert-butyl Benzene	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 15:22	EPA 624.1	PCASTR	

Envirodyne Laboratories, Inc.

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Laura Bonjonia

Laura Bonjonia For Tinesha Robinson, Client Services Representative

Envirodyne Laboratories, Inc
11011 Brooklet Dr., # 230
Houston, TX 77099
281.568.7880 Phone
www.envirodyne.com

Client:	South Houston - Pretreatment
Project:	South Houston WWTP (Pretreatment)
Work Order:	23H2576

Reported:
02-Nov-23 21:43

Effluent - Grab

23H2576-05 (Water) Sampled: 16-Aug-23 16:00

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
Envirodyne Laboratories, Inc.										
Volatile Organic Compounds by EPA 624.1										
1,2,4-Trimethylbenzene	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 15:22	EPA 624.1	PCASTR	
sec-butyl Benzene	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 15:22	EPA 624.1	PCASTR	
p-Isopropyltoluene	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 15:22	EPA 624.1	PCASTR	
1,3-Dichlorobenzene	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 15:22	EPA 624.1	PCASTR	
1,4-Dichlorobenzene	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 15:22	EPA 624.1	PCASTR	
Benzyl Chloride	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 15:22	EPA 624.1	PCASTR	
n-butyl Benzene	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 15:22	EPA 624.1	PCASTR	
1,2-Dichlorobenzene	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 15:22	EPA 624.1	PCASTR	
1,2-Dibromo-3-chloropropane	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 15:22	EPA 624.1	PCASTR	
1,2,4-Trichlorobenzene	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 15:22	EPA 624.1	PCASTR	
Hexachlorobutadiene	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 15:22	EPA 624.1	PCASTR	
Naphthalene	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 15:22	EPA 624.1	PCASTR	
1,2,3-Trichlorobenzene	<2.50	2.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 15:22	EPA 624.1	PCASTR	
Total Trihalomethanes	**77.1**	10.0	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 15:22	EPA 624.1	PCASTR	
Total Xylenes	<7.50	7.50	ug/L	1	B3H5061	22-Aug-23	22-Aug-23 15:22	EPA 624.1	PCASTR	
Surrogate: Dibromofluoromethane		*114 %*	*70-130*		*B3H5061*	*22-Aug-23*	*22-Aug-23 15:22*	*EPA 624.1*	PCASTR	
Surrogate: 1,2-Dichloroethane-d4		*104 %*	*70-130*		*B3H5061*	*22-Aug-23*	*22-Aug-23 15:22*	*EPA 624.1*	PCASTR	
Surrogate: Toluene-d8		*97.4 %*	*70-130*		*B3H5061*	*22-Aug-23*	*22-Aug-23 15:22*	*EPA 624.1*	PCASTR	
Surrogate: 4-Bromofluorobenzene		*96.7 %*	*70-130*		*B3H5061*	*22-Aug-23*	*22-Aug-23 15:22*	*EPA 624.1*	PCASTR	
Wet Chemistry										
Cyanide, Amenable	<0.005	0.005	mg/L	1	B3I2935	25-Aug-23	25-Aug-23 15:15	SM 4500 CN E&GSUB		L
Cyanide, Total	<0.005	0.005	mg/L	1	B3I2935	25-Aug-23	25-Aug-23 15:15	SM 4500 CN E&GSUB		L
Phenol	<0.05	0.05	mg/L	1	B3I2934	24-Aug-23	24-Aug-23 11:48	EPA 420.1	SUB	L

Envirodyne Laboratories, Inc.

Laura Bonjonia

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Client:	South Houston - Pretreatment
Project:	South Houston WWTP (Pretreatment)
Work Order:	23H2576

Reported:
02-Nov-23 21:43

Volatile Organic Compounds by EPA 624.1 - Quality Control

Envirodyne Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B3H5061 - Organics										
Blank (B3H5061-BLK1)				Prepared & Analyzed: 22-Aug-23						
Dichlorodifluoromethane	<2.50	2.50	ug/L							
Chloromethane	<2.50	2.50	"							
Vinyl Chloride	<2.50	2.50	"							
Bromomethane	<2.50	2.50	"							
Chloroethane	<2.50	2.50	"							
Trichlorofluoromethane	<2.50	2.50	"							
Acetone	<10.0	10.0	"							
Acrolein	<2.50	2.50	"							
1,1-Dichloroethene	<2.50	2.50	"							
Carbon Disulfide	<2.50	2.50	"							
Acetonitrile	<2.50	2.50	"							
Methylene Chloride	<2.50	2.50	"							
Acrylonitrile	<2.50	2.50	"							
MTBE (Methyl tert-butyl ether)	<2.50	2.50	"							
trans-1,2-Dichloroethene	<2.50	2.50	"							
1,1-Dichloroethane	<2.50	2.50	"							
Vinyl Acetate	<2.50	2.50	"							
2,2-Dichloropropane	<2.50	2.50	"							
cis-1,2-Dichloroethene	<2.50	2.50	"							
Bromochloromethane	<2.50	2.50	"							
Chloroform	<2.50	2.50	"							
2-Butanone	<10.0	10.0	"							
1,2-Dichloroethane	<2.50	2.50	"							
1,1,1-Trichloroethane	<2.50	2.50	"							
Tetrahydrofuran	<2.50	2.50	"							
Carbon Tetrachloride	<2.50	2.50	"							
1,1-Dichloropropene	<2.50	2.50	"							
Benzene	<2.50	2.50	"							
Trichloroethene	<2.50	2.50	"							
1,2-Dichloropropane	<2.50	2.50	"							
2-Pentanone	<2.50	2.50	"							
Dibromomethane	<2.50	2.50	"							

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Client:	South Houston - Pretreatment
Project:	South Houston WWTP (Pretreatment)
Work Order:	23H2576

Reported:
02-Nov-23 21:43

Volatile Organic Compounds by EPA 624.1 - Quality Control

Envirodyne Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B3H5061 - Organics										
Blank (B3H5061-BLK1)				Prepared & Analyzed: 22-Aug-23						
Bromodichloromethane	<2.50	2.50	ug/L							
2-Chloroethyl vinyl ether	<2.50	2.50	"							
cis-1,3-Dichloropropene	<2.50	2.50	"							
trans-1,3-Dichloropropene	<2.50	2.50	"							
1,1,2-Trichloroethane	<2.50	2.50	"							
Dibromochloromethane	<2.50	2.50	"							
1,2-Dibromoethane	<2.50	2.50	"							
4-Methyl-2-Pentanone	<10.0	10.0	"							
Toluene	<2.50	2.50	"							
Tetrachloroethene	<2.50	2.50	"							
1,3-Dichloropropane	<2.50	2.50	"							
2-Hexanone	<10.0	10.0	"							
Chlorobenzene	<2.50	2.50	"							
1,1,1,2-Tetrachloroethane	<2.50	2.50	"							
Ethylbenzene	<2.50	2.50	"							
m,p-Xylene	<10.0	10.0	"							
o-Xylene	<2.50	2.50	"							
Styrene	<2.50	2.50	"							
Bromoform	<2.50	2.50	"							
Isopropylbenzene (Cumene)	<2.50	2.50	"							
1,1,2,2-Tetrachloroethane	<2.50	2.50	"							
1,2,3-Trichloropropane	<2.50	2.50	"							
Bromobenzene	<2.50	2.50	"							
Propylbenzene	<2.50	2.50	"							
2-Chlorotoluene	<2.50	2.50	"							
1,3,5-Trimethylbenzene	<2.50	2.50	"							
4-Chlorotoluene	<2.50	2.50	"							
tert-butyl Benzene	<2.50	2.50	"							
1,2,4-Trimethylbenzene	<2.50	2.50	"							
sec-butyl Benzene	<2.50	2.50	"							
p-Isopropyltoluene	<2.50	2.50	"							
1,3-Dichlorobenzene	<2.50	2.50	"							

Envirodyne Laboratories, Inc.

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Laura Bonjonia For Tinesha Robinson, Client Services Representative

Envirodyne Laboratories, Inc
11011 Brooklet Dr., # 230
Houston, TX 77099
281.568.7880 Phone
www.envirodyne.com

Client:	South Houston - Pretreatment
Project:	South Houston WWTP (Pretreatment)
Work Order:	23H2576

Reported:
02-Nov-23 21:43

Volatile Organic Compounds by EPA 624.1 - Quality Control

Envirodyne Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B3H5061 - Organics										
Blank (B3H5061-BLK1)				Prepared & Analyzed: 22-Aug-23						
1,4-Dichlorobenzene	<2.50	2.50	ug/L							
Benzyl Chloride	<2.50	2.50	"							
n-butyl Benzene	<2.50	2.50	"							
1,2-Dichlorobenzene	<2.50	2.50	"							
1,2-Dibromo-3-chloropropane	<2.50	2.50	"							
1,2,4-Trichlorobenzene	<2.50	2.50	"							
Hexachlorobutadiene	<2.50	2.50	"							
Naphthalene	<2.50	2.50	"							
1,2,3-Trichlorobenzene	<2.50	2.50	"							
Total Trihalomethanes	<10.0	10.0	"							
Total Xylenes	<7.50	7.50	"							
Surrogate: Dibromofluoromethane	*33*		"	*30.0*		*111*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*31*		"	*30.0*		*102*	*70-130*			
Surrogate: Toluene-d8	*29*		"	*30.0*		*98.1*	*70-130*			
Surrogate: 4-Bromofluorobenzene	*30*		"	*30.0*		*99.3*	*70-130*			

Envirodyne Laboratories, Inc.

Laura Bonjonia

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Reported:
02-Nov-23 21:43

Volatile Organic Compounds by EPA 624.1 - Quality Control

Envirodyne Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B3H5061 - Organics										
LCS (B3H5061-BS1)				Prepared & Analyzed: 22-Aug-23						
Dichlorodifluoromethane	20.6	2.50	ug/L	20.0		103	1.16-250			
Chloromethane	20.9	2.50	"	20.0		104	1-205			
Vinyl Chloride	21.0	2.50	"	20.0		105	1-251			
Bromomethane	15.9	2.50	"	20.0		79.4	15-185			
Chloroethane	20.1	2.50	"	20.0		101	40-160			
Trichlorofluoromethane	22.4	2.50	"	20.0		112	17-181			
Acetone	22.2	10.0	"	20.0		111	35.9-210			
Acrolein	17.0	2.50	"	20.0		84.8	60-140			
1,1-Dichloroethene	26.1	2.50	"	20.0		130	50-150			
Carbon Disulfide	23.2	2.50	"	20.0		116	7-120			
Acetonitrile	25.6	2.50	"	20.0		128	70-120			Q
Methylene Chloride	23.5	2.50	"	20.0		118	60-140			
Acrylonitrile	23.5	2.50	"	20.0		117	60-140			
MTBE (Methyl tert-butyl ether)	25.5	2.50	"	20.0		127	70-120			Q
trans-1,2-Dichloroethene	24.1	2.50	"	20.0		121	70-130			
1,1-Dichloroethane	25.6	2.50	"	20.0		128	70-130			
Vinyl Acetate	25.4	2.50	"	20.0		127	60-140			
2,2-Dichloropropane	25.7	2.50	"	20.0		128	70-120			Q
cis-1,2-Dichloroethene	24.7	2.50	"	20.0		124	70-120			Q
Bromochloromethane	26.3	2.50	"	20.0		132	70-120			Q
Chloroform	24.0	2.50	"	20.0		120	70-135			
2-Butanone	18.9	10.0	"	20.0		94.4	48.6-151			
1,2-Dichloroethane	21.1	2.50	"	20.0		106	70-130			
1,1,1-Trichloroethane	22.0	2.50	"	20.0		110	56-162			
Tetrahydrofuran	20.1	2.50	"	20.0		100	70-130			
Carbon Tetrachloride	21.4	2.50	"	20.0		107	70-130			
1,1-Dichloropropene	20.8	2.50	"	20.0		104	70-120			
Benzene	21.9	2.50	"	20.0		110	65-135			
Trichloroethene	21.9	2.50	"	20.0		109	70-157			
1,2-Dichloropropane	21.8	2.50	"	20.0		109	35-165			
2-Pentanone	21.3	2.50	"	20.0		106	70-120			
Dibromomethane	22.4	2.50	"	20.0		112	70-120			

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Work Order:	23H2576

Reported:
02-Nov-23 21:43

Volatile Organic Compounds by EPA 624.1 - Quality Control

Envirodyne Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B3H5061 - Organics										
LCS (B3H5061-BS1)				Prepared & Analyzed: 22-Aug-23						
Bromodichloromethane	21.9	2.50	ug/L	20.0		110	65-135			
2-Chloroethyl vinyl ether	19.0	2.50	"	20.0		94.8	1-225			
cis-1,3-Dichloropropene	22.4	2.50	"	20.0		112	25-175			
trans-1,3-Dichloropropene	21.8	2.50	"	20.0		109	50-150			
1,1,2-Trichloroethane	22.2	2.50	"	20.0		111	52-150			
Dibromochloromethane	21.9	2.50	"	20.0		110	70-135			
1,2-Dibromoethane	21.5	2.50	"	20.0		108	70-130			
4-Methyl-2-Pentanone	20.1	10.0	"	20.0		100	58.2-144			
Toluene	21.1	2.50	"	20.0		106	47-150			
Tetrachloroethene	16.0	2.50	"	20.0		80.0	64-148			
1,3-Dichloropropane	20.7	2.50	"	20.0		104	70-120			
2-Hexanone	20.2	10.0	"	20.0		101	51.8-156			
Chlorobenzene	20.2	2.50	"	20.0		101	65-135			
1,1,1,2-Tetrachloroethane	21.5	2.50	"	20.0		107	46-157			
Ethylbenzene	22.4	2.50	"	20.0		112	60-140			
m,p-Xylene	44.9	10.0	"	40.0		112	70-120			
o-Xylene	21.6	2.50	"	20.0		108	70-120			
Styrene	21.6	2.50	"	20.0		108	70-120			
Bromoform	20.8	2.50	"	20.0		104	70-130			
Isopropylbenzene (Cumene)	23.9	2.50	"	20.0		119	70-120			
1,1,2,2-Tetrachloroethane	22.0	2.50	"	20.0		110	46-157			
1,2,3-Trichloropropane	21.5	2.50	"	20.0		108	70-120			
Bromobenzene	22.3	2.50	"	20.0		112	70-120			
Propylbenzene	23.4	2.50	"	20.0		117	70-120			
2-Chlorotoluene	22.8	2.50	"	20.0		114	70-120			
1,3,5-Trimethylbenzene	24.0	2.50	"	20.0		120	70-120			
4-Chlorotoluene	22.8	2.50	"	20.0		114	70-120			
tert-butyl Benzene	25.2	2.50	"	20.0		126	70-120			Q
1,2,4-Trimethylbenzene	22.9	2.50	"	20.0		115	70-120			
sec-butyl Benzene	23.7	2.50	"	20.0		119	70-130			
p-Isopropyltoluene	23.6	2.50	"	20.0		118	70-120			
1,3-Dichlorobenzene	23.2	2.50	"	20.0		116	70-130			

Envirodyne Laboratories, Inc.

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Project:	South Houston WWTP (Pretreatment)
Work Order:	23H2576

Reported:
02-Nov-23 21:43

Volatile Organic Compounds by EPA 624.1 - Quality Control

Envirodyne Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B3H5061 - Organics										
LCS (B3H5061-BS1)				Prepared & Analyzed: 22-Aug-23						
1,4-Dichlorobenzene	23.0	2.50	ug/L	20.0		115	65-135			
Benzyl Chloride	20.0	2.50	"	20.0		99.8	70-120			
n-butyl Benzene	23.9	2.50	"	20.0		119	70-120			
1,2-Dichlorobenzene	22.6	2.50	"	20.0		113	65-135			
1,2-Dibromo-3-chloropropane	21.4	2.50	"	20.0		107	60-140			
1,2,4-Trichlorobenzene	22.2	2.50	"	20.0		111	70-120			
Hexachlorobutadiene	23.0	2.50	"	20.0		115	70-120			
Naphthalene	21.8	2.50	"	20.0		109	60-140			
1,2,3-Trichlorobenzene	22.2	2.50	"	20.0		111	60-140			
Total Trihalomethanes	88.7	10.0	"	80.0		111	35-155			
Total Xylenes	66.5	7.50	"	60.0		111	70-120			
Surrogate: Dibromofluoromethane	*34*		"	*30.0*		*115*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*29*		"	*30.0*		*97.2*	*70-130*			
Surrogate: Toluene-d8	*29*		"	*30.0*		*96.5*	*70-130*			
Surrogate: 4-Bromofluorobenzene	*30*		"	*30.0*		*99.4*	*70-130*			

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Volatile Organic Compounds by EPA 624.1 - Quality Control

Envirodyne Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B3H5061 - Organics										
LCS Dup (B3H5061-BSD1)				Prepared & Analyzed: 22-Aug-23						
Dichlorodifluoromethane	23.5	2.50	ug/L	20.0		118	1.16-250	13.1	20	
Chloromethane	21.5	2.50	"	20.0		107	1-205	2.79	60	
Vinyl Chloride	23.2	2.50	"	20.0		116	1-251	9.85	66	
Bromomethane	17.4	2.50	"	20.0		87.0	15-185	9.07	61	
Chloroethane	24.4	2.50	"	20.0		122	40-160	19.2	78	
Trichlorofluoromethane	23.8	2.50	"	20.0		119	17-181	6.12	84	
Acetone	24.2	10.0	"	20.0		121	35.9-210	8.68	25.2	
Acrolein	18.9	2.50	"	20.0		94.4	60-140	10.7	60	
1,1-Dichloroethene	27.2	2.50	"	20.0		136	50-150	4.17	32	
Carbon Disulfide	24.9	2.50	"	20.0		124	7-120	6.78	20	Q
Acetonitrile	28.1	2.50	"	20.0		140	70-120	9.12	20	Q
Methylene Chloride	25.6	2.50	"	20.0		128	60-140	8.32	28	
Acrylonitrile	24.3	2.50	"	20.0		122	60-140	3.55	60	
MTBE (Methyl tert-butyl ether)	26.4	2.50	"	20.0		132	70-120	3.36	20	Q
trans-1,2-Dichloroethene	25.6	2.50	"	20.0		128	70-130	5.99	45	
1,1-Dichloroethane	26.5	2.50	"	20.0		132	70-130	3.50	40	Q
Vinyl Acetate	26.2	2.50	"	20.0		131	60-140	3.14	20	
2,2-Dichloropropane	26.9	2.50	"	20.0		134	70-120	4.53	20	Q
cis-1,2-Dichloroethene	26.7	2.50	"	20.0		134	70-120	7.70	20	Q
Bromochloromethane	26.0	2.50	"	20.0		130	70-120	1.22	20	Q
Chloroform	25.5	2.50	"	20.0		128	70-135	6.18	54	
2-Butanone	20.6	10.0	"	20.0		103	48.6-151	8.81	21.6	
1,2-Dichloroethane	22.4	2.50	"	20.0		112	70-130	5.84	49	
1,1,1-Trichloroethane	22.2	2.50	"	20.0		111	56-162	1.04	36	
Tetrahydrofuran	21.0	2.50	"	20.0		105	70-130	4.53	20	
Carbon Tetrachloride	22.6	2.50	"	20.0		113	70-130	5.37	41	
1,1-Dichloropropene	22.4	2.50	"	20.0		112	70-120	7.31	20	
Benzene	22.9	2.50	"	20.0		114	65-135	4.42	61	
Trichloroethene	22.7	2.50	"	20.0		113	70-157	3.68	48	
1,2-Dichloropropane	23.0	2.50	"	20.0		115	35-165	5.49	55	
2-Pentanone	22.5	2.50	"	20.0		112	70-120	5.49	20	
Dibromomethane	23.1	2.50	"	20.0		116	70-120	3.21	20	

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Client:	South Houston - Pretreatment
Project:	South Houston WWTP (Pretreatment)
Work Order:	23H2576

Reported:
02-Nov-23 21:43

Volatile Organic Compounds by EPA 624.1 - Quality Control

Envirodyne Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B3H5061 - Organics										
LCS Dup (B3H5061-BSD1)				Prepared & Analyzed: 22-Aug-23						
Bromodichloromethane	22.6	2.50	ug/L	20.0		113	65-135	3.10	56	
2-Chloroethyl vinyl ether	19.8	2.50	"	20.0		98.9	1-225	4.18	71	
cis-1,3-Dichloropropene	23.3	2.50	"	20.0		117	25-175	4.20	58	
trans-1,3-Dichloropropene	22.8	2.50	"	20.0		114	50-150	4.43	86	
1,1,2-Trichloroethane	23.0	2.50	"	20.0		115	52-150	3.32	45	
Dibromochloromethane	22.5	2.50	"	20.0		112	70-135	2.48	50	
1,2-Dibromoethane	22.6	2.50	"	20.0		113	70-130	4.81	20	
4-Methyl-2-Pentanone	23.6	10.0	"	20.0		118	58.2-144	16.2	24.8	
Toluene	23.0	2.50	"	20.0		115	47-150	8.57	41	
Tetrachloroethene	19.1	2.50	"	20.0		95.6	64-148	17.7	39	
1,3-Dichloropropane	23.0	2.50	"	20.0		115	70-120	10.3	20	
2-Hexanone	22.7	10.0	"	20.0		114	51.8-156	11.6	23.6	
Chlorobenzene	22.6	2.50	"	20.0		113	65-135	11.3	53	
1,1,1,2-Tetrachloroethane	22.6	2.50	"	20.0		113	46-157	5.35	20	
Ethylbenzene	23.8	2.50	"	20.0		119	60-140	6.49	63	
m,p-Xylene	48.1	10.0	"	40.0		120	70-120	6.86	20	
o-Xylene	23.4	2.50	"	20.0		117	70-120	8.31	20	
Styrene	23.0	2.50	"	20.0		115	70-120	6.09	20	
Bromoform	23.9	2.50	"	20.0		120	70-130	13.9	42	
Isopropylbenzene (Cumene)	25.6	2.50	"	20.0		128	70-120	7.00	20	Q
1,1,2,2-Tetrachloroethane	23.7	2.50	"	20.0		118	46-157	7.50	61	
1,2,3-Trichloropropane	23.7	2.50	"	20.0		118	70-120	9.52	20	
Bromobenzene	24.4	2.50	"	20.0		122	70-120	8.99	20	Q
Propylbenzene	25.2	2.50	"	20.0		126	70-120	7.44	20	Q
2-Chlorotoluene	24.7	2.50	"	20.0		123	70-120	7.66	20	Q
1,3,5-Trimethylbenzene	25.6	2.50	"	20.0		128	70-120	6.29	20	Q
4-Chlorotoluene	24.6	2.50	"	20.0		123	70-120	7.21	20	Q
tert-butyl Benzene	26.8	2.50	"	20.0		134	70-120	6.03	20	Q
1,2,4-Trimethylbenzene	24.7	2.50	"	20.0		123	70-120	7.31	20	Q
sec-butyl Benzene	24.8	2.50	"	20.0		124	70-130	4.41	20	
p-Isopropyltoluene	24.9	2.50	"	20.0		125	70-120	5.27	20	Q
1,3-Dichlorobenzene	24.3	2.50	"	20.0		122	70-130	4.63	43	

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Work Order:	23H2576

Reported:
02-Nov-23 21:43

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Envirodyne Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B3H5061 - Organics										
LCS Dup (B3H5061-BSD1)				Prepared & Analyzed: 22-Aug-23						
1,4-Dichlorobenzene	25.0	2.50	ug/L	20.0		125	65-135	8.58	57	
Benzyl Chloride	21.7	2.50	"	20.0		108	70-120	8.31	20	
n-butyl Benzene	25.1	2.50	"	20.0		126	70-120	5.10	20	Q
1,2-Dichlorobenzene	24.4	2.50	"	20.0		122	65-135	7.41	57	
1,2-Dibromo-3-chloropropane	23.8	2.50	"	20.0		119	60-140	11.0	20	
1,2,4-Trichlorobenzene	24.9	2.50	"	20.0		124	70-120	11.6	20	Q
Hexachlorobutadiene	24.5	2.50	"	20.0		123	70-120	6.36	20	Q
Naphthalene	24.1	2.50	"	20.0		120	60-140	10.1	20	
1,2,3-Trichlorobenzene	24.9	2.50	"	20.0		124	60-140	11.6	20	
Total Trihalomethanes	94.5	10.0	"	80.0		118	35-155	6.41	20	
Total Xylenes	71.5	7.50	"	60.0		119	70-120	7.33	20	
Surrogate: Dibromofluoromethane	*33*		"	*30.0*		*112*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*29*		"	*30.0*		*95.1*	*70-130*			
Surrogate: Toluene-d8	*30*		"	*30.0*		*99.6*	*70-130*			
Surrogate: 4-Bromofluorobenzene	*30*		"	*30.0*		*99.4*	*70-130*			

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Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B3H5061 - Organics										
Matrix Spike (B3H5061-MS1)	**Source: 23H2269-03**			Prepared & Analyzed: 22-Aug-23						
Dichlorodifluoromethane	25.8	2.50	ug/L	20.0	ND	129	1.16-250			
Chloromethane	19.9	2.50	"	20.0	ND	99.4	1-273			
Vinyl Chloride	21.7	2.50	"	20.0	ND	108	5-195			
Bromomethane	7.24	2.50	"	20.0	ND	36.2	1-242			
Chloroethane	<2.50	2.50	"	20.0	<2.50		14-230	0		Q
Trichlorofluoromethane	23.4	2.50	"	20.0	ND	117	50-150			
Acetone	25.8	10.0	"	20.0	ND	129	11.5-191			
Acrolein	18.5	2.50	"	20.0	ND	92.6	40-160			
1,1-Dichloroethene	26.3	2.50	"	20.0	ND	132	1-234			
Carbon Disulfide	26.5	2.50	"	20.0	ND	132	7-120			Q
Acetonitrile	25.7	2.50	"	20.0	ND	129	70-120			Q
Methylene Chloride	25.4	2.50	"	20.0	ND	127	1-221			
Acrylonitrile	25.8	2.50	"	20.0	ND	129	40-160			
MTBE (Methyl tert-butyl ether)	26.0	2.50	"	20.0	ND	130	70-120			Q
trans-1,2-Dichloroethene	26.5	2.50	"	20.0	ND	133	54-156			
1,1-Dichloroethane	25.4	2.50	"	20.0	ND	127	59-155			
Vinyl Acetate	4.52	2.50	"	20.0	ND	22.6	60-140			Q
2,2-Dichloropropane	24.6	2.50	"	20.0	ND	123	70-120			Q
cis-1,2-Dichloroethene	25.8	2.50	"	20.0	ND	129	70-120			Q
Bromochloromethane	25.9	2.50	"	20.0	ND	130	70-120			Q
Chloroform	48.7	2.50	"	20.0	22.7	130	51-138			
2-Butanone	27.0	10.0	"	20.0	ND	135	32.5-154			
1,2-Dichloroethane	24.8	2.50	"	20.0	ND	124	49-155			
1,1,1-Trichloroethane	24.4	2.50	"	20.0	ND	122	70-130			
Tetrahydrofuran	22.9	2.50	"	20.0	ND	115	70-130			
Carbon Tetrachloride	23.8	2.50	"	20.0	ND	119	70-140			
1,1-Dichloropropene	24.7	2.50	"	20.0	ND	124	70-120			Q
Benzene	23.8	2.50	"	20.0	ND	119	37-151			
Trichloroethene	24.9	2.50	"	20.0	ND	125	65-135			
1,2-Dichloropropane	23.7	2.50	"	20.0	ND	119	1-210			
2-Pentanone	24.7	2.50	"	20.0	ND	123	70-120			Q
Dibromomethane	24.8	2.50	"	20.0	ND	124	70-120			Q

Envirodyne Laboratories, Inc.

Laura Bonjonia

Laura Bonjonia For Tinesha Robinson, Client Services Representative

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Client:	South Houston - Pretreatment
Project:	South Houston WWTP (Pretreatment)
Work Order:	23H2576

Reported:
02-Nov-23 21:43

Volatile Organic Compounds by EPA 624.1 - Quality Control

Envirodyne Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B3H5061 - Organics										
Matrix Spike (B3H5061-MS1)	**Source: 23H2269-03**			Prepared & Analyzed: 22-Aug-23						
Bromodichloromethane	41.0	2.50	ug/L	20.0	15.9	126	35-155			
2-Chloroethyl vinyl ether	<2.50	2.50	"	20.0	<2.50		1-305	0		Q
cis-1,3-Dichloropropene	24.1	2.50	"	20.0	ND	121	1-227			
trans-1,3-Dichloropropene	23.4	2.50	"	20.0	ND	117	17-183			
1,1,2-Trichloroethane	25.2	2.50	"	20.0	ND	126	70-130			
Dibromochloromethane	31.5	2.50	"	20.0	6.33	126	53-149			
1,2-Dibromoethane	24.6	2.50	"	20.0	ND	123	70-120			Q
4-Methyl-2-Pentanone	27.7	10.0	"	20.0	ND	139	44.3-156			
Toluene	23.2	2.50	"	20.0	ND	116	70-130			
Tetrachloroethene	17.2	2.50	"	20.0	ND	86.2	70-130			
1,3-Dichloropropane	24.1	2.50	"	20.0	ND	121	70-120			Q
2-Hexanone	28.2	10.0	"	20.0	ND	141	39.5-157			
Chlorobenzene	21.8	2.50	"	20.0	ND	109	37-160			
1,1,1,2-Tetrachloroethane	23.7	2.50	"	20.0	ND	119	46-157			
Ethylbenzene	24.6	2.50	"	20.0	ND	123	37-162			
m,p-Xylene	49.5	10.0	"	40.0	ND	124	70-120			Q
o-Xylene	24.0	2.50	"	20.0	ND	120	70-120			
Styrene	24.8	2.50	"	20.0	ND	124	70-120			Q
Bromoform	23.0	2.50	"	20.0	ND	115	45-169			
Isopropylbenzene (Cumene)	24.9	2.50	"	20.0	ND	125	70-120			Q
1,1,2,2-Tetrachloroethane	24.2	2.50	"	20.0	ND	121	60-140			
1,2,3-Trichloropropane	24.0	2.50	"	20.0	ND	120	70-120			
Bromobenzene	24.2	2.50	"	20.0	ND	121	70-120			Q
Propylbenzene	24.8	2.50	"	20.0	ND	124	70-120			Q
2-Chlorotoluene	24.5	2.50	"	20.0	ND	122	70-120			Q
1,3,5-Trimethylbenzene	24.3	2.50	"	20.0	ND	121	70-120			Q
4-Chlorotoluene	24.7	2.50	"	20.0	ND	123	70-120			Q
tert-butyl Benzene	26.3	2.50	"	20.0	ND	132	70-120			Q
1,2,4-Trimethylbenzene	24.4	2.50	"	20.0	ND	122	70-120			Q
sec-butyl Benzene	24.3	2.50	"	20.0	ND	122	70-120			Q
p-Isopropyltoluene	23.7	2.50	"	20.0	ND	118	70-120			
1,3-Dichlorobenzene	24.4	2.50	"	20.0	ND	122	59-156			

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Laura Bonjonia

Laura Bonjonia For Tinesha Robinson, Client Services Representative

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281.568.7880 Phone
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Client:	South Houston - Pretreatment
Project:	South Houston WWTP (Pretreatment)
Work Order:	23H2576

Reported:
02-Nov-23 21:43

Volatile Organic Compounds by EPA 624.1 - Quality Control

Envirodyne Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B3H5061 - Organics										
Matrix Spike (B3H5061-MS1)	**Source: 23H2269-03**			Prepared & Analyzed: 22-Aug-23						
1,4-Dichlorobenzene	24.4	2.50	ug/L	20.0	ND	122	18-190			
Benzyl Chloride	21.9	2.50	"	20.0	ND	109	70-120			
n-butyl Benzene	23.6	2.50	"	20.0	ND	118	70-120			
1,2-Dichlorobenzene	23.8	2.50	"	20.0	ND	119	18-190			
1,2-Dibromo-3-chloropropane	23.9	2.50	"	20.0	ND	120	60-140			
1,2,4-Trichlorobenzene	21.8	2.50	"	20.0	ND	109	70-120			
Hexachlorobutadiene	20.5	2.50	"	20.0	ND	102	70-120			
Naphthalene	22.9	2.50	"	20.0	ND	114	60-140			
1,2,3-Trichlorobenzene	21.8	2.50	"	20.0	ND	109	60-140			
Total Trihalomethanes	144	10.0	"	80.0	45.0	124	35-155			
Total Xylenes	73.5	7.50	"	60.0	ND	122	70-120			Q
Surrogate: Dibromofluoromethane	*33*		"	*30.0*		*109*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*31*		"	*30.0*		*103*	*70-130*			
Surrogate: Toluene-d8	*29*		"	*30.0*		*98.0*	*70-130*			
Surrogate: 4-Bromofluorobenzene	*30*		"	*30.0*		*101*	*70-130*			

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Volatile Organic Compounds by EPA 624.1 - Quality Control

Envirodyne Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B3H5061 - Organics										
Matrix Spike Dup (B3H5061-MSD1)	**Source: 23H2269-03**			Prepared & Analyzed: 22-Aug-23						
Dichlorodifluoromethane	23.9	2.50	ug/L	20.0	ND	119	1.16-250	7.85	20	
Chloromethane	18.4	2.50	"	20.0	ND	92.2	1-273	7.62	60	
Vinyl Chloride	19.9	2.50	"	20.0	ND	99.4	5-195	8.71	66	
Bromomethane	8.37	2.50	"	20.0	ND	41.8	1-242	14.5	61	
Chloroethane	<2.50	2.50	"	20.0	<2.50		14-230	0	78	Q
Trichlorofluoromethane	21.8	2.50	"	20.0	ND	109	50-150	6.94	84	
Acetone	24.8	10.0	"	20.0	ND	124	11.5-191	3.60	27.6	
Acrolein	18.1	2.50	"	20.0	ND	90.4	40-160	2.35	60	
1,1-Dichloroethene	25.0	2.50	"	20.0	ND	125	1-234	5.26	32	
Carbon Disulfide	24.8	2.50	"	20.0	ND	124	7-120	6.68	20	Q
Acetonitrile	24.4	2.50	"	20.0	ND	122	70-120	5.30	20	Q
Methylene Chloride	24.2	2.50	"	20.0	ND	121	1-221	4.52	28	
Acrylonitrile	24.8	2.50	"	20.0	ND	124	40-160	3.91	60	
MTBE (Methyl tert-butyl ether)	25.2	2.50	"	20.0	ND	126	70-120	3.09	20	Q
trans-1,2-Dichloroethene	24.3	2.50	"	20.0	ND	121	54-156	8.89	45	
1,1-Dichloroethane	24.6	2.50	"	20.0	ND	123	59-155	3.08	40	
Vinyl Acetate	4.34	2.50	"	20.0	ND	21.7	60-140	4.06	20	Q
2,2-Dichloropropane	23.6	2.50	"	20.0	ND	118	70-120	4.40	20	
cis-1,2-Dichloroethene	24.6	2.50	"	20.0	ND	123	70-120	4.81	20	Q
Bromochloromethane	23.9	2.50	"	20.0	ND	120	70-120	7.99	20	
Chloroform	46.0	2.50	"	20.0	22.7	117	51-138	5.53	54	
2-Butanone	26.2	10.0	"	20.0	ND	131	32.5-154	3.35	21.6	
1,2-Dichloroethane	22.9	2.50	"	20.0	ND	114	49-155	8.17	49	
1,1,1-Trichloroethane	22.8	2.50	"	20.0	ND	114	70-130	6.81	36	
Tetrahydrofuran	21.4	2.50	"	20.0	ND	107	70-130	6.86	20	
Carbon Tetrachloride	22.6	2.50	"	20.0	ND	113	70-140	5.16	41	
1,1-Dichloropropene	23.5	2.50	"	20.0	ND	117	70-120	5.19	20	
Benzene	22.9	2.50	"	20.0	ND	115	37-151	3.85	61	
Trichloroethene	22.8	2.50	"	20.0	ND	114	65-135	9.14	48	
1,2-Dichloropropane	23.2	2.50	"	20.0	ND	116	1-210	2.04	55	
2-Pentanone	24.0	2.50	"	20.0	ND	120	70-120	2.75	20	
Dibromomethane	22.2	2.50	"	20.0	ND	111	70-120	10.7	20	

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Laura Bonjonia

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Client:	South Houston - Pretreatment
Project:	South Houston WWTP (Pretreatment)
Work Order:	23H2576

Reported:
02-Nov-23 21:43

Volatile Organic Compounds by EPA 624.1 - Quality Control

Envirodyne Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B3H5061 - Organics										
Matrix Spike Dup (B3H5061-MSD1)	**Source: 23H2269-03**			Prepared & Analyzed: 22-Aug-23						
Bromodichloromethane	39.7	2.50	ug/L	20.0	15.9	119	35-155	3.24	56	
2-Chloroethyl vinyl ether	<2.50	2.50	"	20.0	<2.50		1-305	0	71	Q
cis-1,3-Dichloropropene	22.5	2.50	"	20.0	ND	112	1-227	7.03	58	
trans-1,3-Dichloropropene	22.3	2.50	"	20.0	ND	112	17-183	4.98	86	
1,1,2-Trichloroethane	22.4	2.50	"	20.0	ND	112	70-130	11.8	45	
Dibromochloromethane	29.8	2.50	"	20.0	6.33	117	53-149	5.58	50	
1,2-Dibromoethane	22.8	2.50	"	20.0	ND	114	70-120	7.42	20	
4-Methyl-2-Pentanone	27.0	10.0	"	20.0	ND	135	44.3-156	2.63	27.4	
Toluene	21.8	2.50	"	20.0	ND	109	70-130	6.39	41	
Tetrachloroethene	15.8	2.50	"	20.0	ND	78.8	70-130	9.03	39	
1,3-Dichloropropane	22.9	2.50	"	20.0	ND	114	70-120	5.28	20	
2-Hexanone	26.6	10.0	"	20.0	ND	133	39.5-157	5.87	23.6	
Chlorobenzene	20.4	2.50	"	20.0	ND	102	37-160	6.16	53	
1,1,1,2-Tetrachloroethane	22.1	2.50	"	20.0	ND	110	46-157	7.20	20	
Ethylbenzene	23.2	2.50	"	20.0	ND	116	37-162	5.89	63	
m,p-Xylene	45.8	10.0	"	40.0	ND	115	70-120	7.64	20	
o-Xylene	22.3	2.50	"	20.0	ND	112	70-120	7.08	20	
Styrene	23.1	2.50	"	20.0	ND	115	70-120	7.15	20	
Bromoform	22.0	2.50	"	20.0	ND	110	45-169	4.48	42	
Isopropylbenzene (Cumene)	23.1	2.50	"	20.0	ND	115	70-120	7.67	20	
1,1,2,2-Tetrachloroethane	24.1	2.50	"	20.0	ND	120	60-140	0.332	61	
1,2,3-Trichloropropane	23.5	2.50	"	20.0	ND	117	70-120	2.40	20	
Bromobenzene	22.3	2.50	"	20.0	ND	112	70-120	7.91	20	
Propylbenzene	23.7	2.50	"	20.0	ND	119	70-120	4.53	20	
2-Chlorotoluene	23.3	2.50	"	20.0	ND	117	70-120	4.85	20	
1,3,5-Trimethylbenzene	23.5	2.50	"	20.0	ND	118	70-120	3.22	20	
4-Chlorotoluene	23.7	2.50	"	20.0	ND	118	70-120	4.18	20	
tert-butyl Benzene	25.4	2.50	"	20.0	ND	127	70-120	3.52	20	Q
1,2,4-Trimethylbenzene	23.0	2.50	"	20.0	ND	115	70-120	5.90	20	
sec-butyl Benzene	23.2	2.50	"	20.0	ND	116	70-120	4.58	20	
p-Isopropyltoluene	22.8	2.50	"	20.0	ND	114	70-120	3.65	20	
1,3-Dichlorobenzene	23.1	2.50	"	20.0	ND	115	59-156	5.44	43	

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Envirodyne Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B3H5061 - Organics										
Matrix Spike Dup (B3H5061-MSD1)	**Source: 23H2269-03**			Prepared & Analyzed: 22-Aug-23						
1,4-Dichlorobenzene	23.2	2.50	ug/L	20.0	ND	116	18-190	5.00	57	
Benzyl Chloride	20.9	2.50	"	20.0	ND	104	70-120	4.59	20	
n-butyl Benzene	22.9	2.50	"	20.0	ND	115	70-120	3.09	20	
1,2-Dichlorobenzene	22.8	2.50	"	20.0	ND	114	18-190	4.51	57	
1,2-Dibromo-3-chloropropane	24.2	2.50	"	20.0	ND	121	60-140	0.957	20	
1,2,4-Trichlorobenzene	20.8	2.50	"	20.0	ND	104	70-120	5.02	20	
Hexachlorobutadiene	20.6	2.50	"	20.0	ND	103	70-120	0.730	20	
Naphthalene	22.3	2.50	"	20.0	ND	112	60-140	2.52	20	
1,2,3-Trichlorobenzene	20.8	2.50	"	20.0	ND	104	60-140	5.02	20	
Total Trihalomethanes	138	10.0	"	80.0	45.0	116	35-155	4.72	20	
Total Xylenes	68.2	7.50	"	60.0	ND	114	70-120	7.45	20	
Surrogate: Dibromofluoromethane	*32*		"	*30.0*		*108*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*31*		"	*30.0*		*103*	*70-130*			
Surrogate: Toluene-d8	*30*		"	*30.0*		*100*	*70-130*			
Surrogate: 4-Bromofluorobenzene	*30*		"	*30.0*		*99.1*	*70-130*			

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Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes

Wet Chemistry - Quality Control

Envirodyne Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B3H4778 - Inorganics										
Blank (B3H4778-BLK1)				Prepared & Analyzed: 17-Aug-23						
Nitrate-N	<0.50	0.50	mg/L							
LCS (B3H4778-BS1)				Prepared & Analyzed: 17-Aug-23						
Nitrate-N	3.16		mg/L	3.00		105	90-110			
Matrix Spike (B3H4778-MS1)	Source: 23H1902-03			Prepared & Analyzed: 17-Aug-23						
Nitrate-N	2.98	0.50	mg/L	3.00	ND	99.3	80-120			
Matrix Spike Dup (B3H4778-MSD1)	Source: 23H1902-03			Prepared & Analyzed: 17-Aug-23						
Nitrate-N	2.94	0.50	mg/L	3.00	ND	98.0	80-120	1.35	20	
Batch B3H5356 - Inorganics										
Blank (B3H5356-BLK1)				Prepared & Analyzed: 24-Aug-23						
Fluoride	<0.10	0.10	mg/L							
LCS (B3H5356-BS1)				Prepared & Analyzed: 24-Aug-23						
Fluoride	0.46		mg/L	0.500		91.8	90-110			
Matrix Spike (B3H5356-MS1)	Source: 23H1851-01			Prepared & Analyzed: 24-Aug-23						
Fluoride	1.37	0.20	mg/L	1.00	0.41	95.9	80-120			
Matrix Spike Dup (B3H5356-MSD1)	Source: 23H1851-01			Prepared & Analyzed: 24-Aug-23						
Fluoride	1.36	0.20	mg/L	1.00	0.41	95.5	80-120	0.293	20	

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Metals - Quality Control

Envirodyne Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B3H4785 - Inorganics										
Blank (B3H4785-BLK1)				Prepared & Analyzed: 17-Aug-23						
Chromium, Hexavalent	<1.0	1.0	ug/L							
LCS (B3H4785-BS1)				Prepared & Analyzed: 17-Aug-23						
Chromium, Hexavalent	49.7		ug/L	50.0		99.4	95-105			
Matrix Spike (B3H4785-MS1)	Source: 23H2417-01			Prepared & Analyzed: 17-Aug-23						
Chromium, Hexavalent	49.0	1.0	ug/L	50.0	ND	98.0	80-120			
Matrix Spike Dup (B3H4785-MSD1)	Source: 23H2417-01			Prepared & Analyzed: 17-Aug-23						
Chromium, Hexavalent	49.1	1.0	ug/L	50.0	ND	98.2	80-120	0.204	20	

Envirodyne Laboratories, Inc.

Laura Bonjonia

Laura Bonjonia For Tinesha Robinson, Client Services Representative

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.

Envirodyne Laboratories, Inc
11011 Brooklet Dr., # 230
Houston, TX 77099
281.568.7880 Phone
www.envirodyne.com

Client:	South Houston - Pretreatment
Project:	South Houston WWTP (Pretreatment)
Work Order:	23H2576

Reported:
02-Nov-23 21:43

Total Metals by ICP-MS - Quality Control

Envirodyne Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B3H5508 - Metals - EPA 200.2										
Blank (B3H5508-BLK1)				Prepared: 23-Aug-23 Analyzed: 24-Aug-23						
Thallium	<0.5	0.5	ug/L							
Copper	<0.5	0.5	"							
Cadmium	<0.50	0.50	"							
Beryllium	<0.5	0.5	"							
Chromium	<2.0	2.0	"							
Barium	<2.0	2.0	"							
Lead	<0.5	0.5	"							Q
Arsenic	<0.5	0.5	"							
Nickel	<0.5	0.5	"							
Aluminum	<2.0	2.0	"							
Silver	<0.5	0.5	"							
Zinc	<2.0	2.0	"							
Antimony	<0.5	0.5	"							
LCS (B3H5508-BS1)				Prepared: 23-Aug-23 Analyzed: 24-Aug-23						
Silver	73		ug/L	75.0		97.1	85-115			
Lead	70		"	75.0		92.8	85-115			
Copper	70.5		"	75.0		94.0	85-115			
Nickel	70.5		"	75.0		94.1	85-115			
Chromium	74.2		"	75.0		98.9	85-115			
Thallium	71.3		"	75.0		95.1	85-115			
Cadmium	71		"	75.0		94.9	85-115			
Beryllium	70.0		"	75.0		93.3	85-115			
Barium	72.6		"	75.0		96.9	85-115			Q
Arsenic	71.3		"	75.0		95.0	85-115			
Aluminum	70.8		"	75.0		94.4	85-115			
Zinc	70.7		"	75.0		94.3	85-115			
Antimony	72.8		"	75.0		97.1	85-115			

Envirodyne Laboratories, Inc.

Laura Bonjonia

Laura Bonjonia For Tinesha Robinson, Client Services Representative

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Envirodyne Laboratories, Inc
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Houston, TX 77099
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www.envirodyne.com

Client:	South Houston - Pretreatment
Project:	South Houston WWTP (Pretreatment)
Work Order:	23H2576

Reported:
02-Nov-23 21:43

Total Metals by ICP-MS - Quality Control

Envirodyne Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B3H5508 - Metals - EPA 200.2										
Matrix Spike (B3H5508-MS1)	**Source: 23H2822-01**			Prepared: 23-Aug-23 Analyzed: 24-Aug-23						
Thallium	98.7	0.5	ug/L	100	ND	98.7	70-130			
Silver	100	0.5	"	100	ND	99.5	70-130			
Nickel	99.1	0.5	"	100	1.35	97.8	70-130			
Beryllium	94.0	0.5	"	100	ND	94.0	70-130			
Lead	96	0.5	"	100	0.22	95.3	70-130			
Aluminum	103	2.0	"	100	2.34	100	70-130			
Copper	103	0.5	"	100	5.66	97.2	70-130			
Chromium	94.7	2.0	"	100	ND	94.7	70-130			
Arsenic	99.8	0.5	"	100	0.492	99.3	70-130			
Cadmium	98	0.50	"	100	ND	98.3	70-130			
Barium	267	2.0	"	100	0.614	267	70-130			Q
Zinc	167	2.0	"	100	79.0	87.8	70-130			
Antimony	104	0.5	"	100	0.618	104	70-130			
Matrix Spike Dup (B3H5508-MSD1)	**Source: 23H2822-01**			Prepared: 23-Aug-23 Analyzed: 25-Aug-23						
Aluminum	90.2	2.0	ug/L	100	2.34	87.9	70-130	12.8	20	
Arsenic	96.2	0.5	"	100	0.492	95.7	70-130	3.60	20	
Barium	272	2.0	"	100	0.614	272	70-130	1.77	20	Q
Thallium	94.5	0.5	"	100	ND	94.5	70-130	4.33	20	
Lead	92	0.5	"	100	0.22	91.3	70-130	4.30	20	
Cadmium	94	0.50	"	100	ND	94.3	70-130	4.20	20	
Silver	95	0.5	"	100	ND	95.1	70-130	4.52	20	
Chromium	89.8	2.0	"	100	ND	89.8	70-130	5.35	20	
Copper	98.6	0.5	"	100	5.66	93.0	70-130	4.22	20	
Nickel	94.9	0.5	"	100	1.35	93.6	70-130	4.33	20	
Beryllium	89.4	0.5	"	100	ND	89.4	70-130	5.00	20	
Zinc	170	2.0	"	100	79.0	90.8	70-130	1.78	20	
Antimony	100	0.5	"	100	0.618	99.8	70-130	3.93	20	

Envirodyne Laboratories, Inc.

Laura Bonjonia

Laura Bonjonia For Tinesha Robinson, Client Services Representative

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.

Envirodyne Laboratories, Inc
11011 Brooklet Dr., # 230
Houston, TX 77099
281.568.7880 Phone
www.envirodyne.com

Client:	South Houston - Pretreatment
Project:	South Houston WWTP (Pretreatment)
Work Order:	23H2576

Reported:
02-Nov-23 21:43

Notes and Definitions

Q	QC did not meet ELI acceptance criteria
L	Analyzed by third party laboratory
ND	Analyte NOT DETECTED at or above the reporting limit
<	Result is less than the RL
a	Analyte not available for TNI/NELAP accreditation
n	Not accredited

Envirodyne Laboratories, Inc.

Laura Bonjonia

Laura Bonjonia For Tinesha Robinson, Client Services Representative

23H2576

Envirodyne Laboratories, Inc.
11011 Brooklet, Ste. 230
Houston, Texas 77099-3543
Phone (281)568-7880 - Fax (281)568-8004

TCEQ Certification # T104704265

Analysis Request and Chain of Custody Record

Name: City of South Houston
Address: PO Box 238
City: So. Houston, TX 77587
Contact: Alfred Gonzales
Phone: 713-724-9913 Email:

Project No. | Client/Project: 24- Hr Sampling- So. Houston Se

Lab ID No.	Field Sample No./ Indentification	Date & Time	Grab	Comp	Sample Container (Size/Mat'l)	Sample Type (Liquid, Sludge, etc)	Preservative	ANALYSIS REQUESTED	pH	D.O.	Temp.	Analysis Time
Time collected: 06:34 Time dorked 06:39	Effluent	8-16-17-23 0800 0800		✓	3-1 Lt/Amb	Liquid	Ice	BNA's,Pesticides,PCBs	6.01		27.7°C	8-17-23
	Effluent	8-16-17-23 0800 0800		✓	500 ml/p	Liquid	Ice,HNO3	s,Sb,Cd,Ag,Pb,Hg,Cu,Zn,Ni,Be,Cr,Tl,Al,S				
	Effluent	8-16-17-23 0800 0800		✓	500 ml/p	Liquid	Ice	Cr+6,Cr+3,Fluoride				
	Effluent	8-16-17-23 0800 0800		✓	250 ml/p	Liquid	Ice,H2SO4	NO3-N				
	Effluent	8-16-23 1000	✓		250 ml/p	Liquid	Ice,NaOH	Total & Amenable CN				
	Effluent	8-16-23 12:00	✓		250 ml/p	Liquid	Ice,NaOH	Total & Amenable CN				
	Effluent	8-16-23 14:00	✓		250 ml/p	Liquid	Ice,NaOH	Total & Amenable CN				
	Effluent	8-16-23 16:00	✓		250 ml/p	Liquid	Ice,NaOH	Total & Amenable CN				
					(In Temp)			(out Temp)				

Samplers: (Signature) Alfred Gonzales	Relinquished by: (Signature) Alfred Gonzales	Date: 8-17-23 Time: 06:00	Received by: (Signature)	Date: 8-17-23 Time: 1245 Seal Intact?
Affiliation	Relinquished by: (Signature)	Date: Time:	Received by: (Signature)	Date: Time: Seal Intact?
	Relinquished by: (Signature)	Date: 8-17-23 Time: 1350	Received by Lab: (Signature)	Date: 8/17/23 Time: 1350 Seal Intact?
Remarks:	FLOW Meter Reading Cl2 Residual: Mr Correction: Cl2 Corrected	Arrival Temp. 2 4/7 2 (RM)	Data Results To: 1. Site Representative:	Date: Time: Laboratory No.

Client: Envirodyne Laboratories, Inc.
Project: 23H2576
WorkOrder: HS23081351

QC BATCH REPORT

Batch ID: 199365 (1) **Instrument:** ECD_15 **Method:** ORGANOCHLORINE PESTICIDES BY SW8081B

MBLK Sample ID: **MBLK-199365** Units: **ug/L** Analysis Date: **31-Aug-2023 01:06**
Client ID: Run ID: **ECD_15_445281** SeqNo: **7520083** PrepDate: **23-Aug-2023** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
4,4'-DDD	ND	0.10								
4,4'-DDE	ND	0.10								
4,4'-DDT	ND	0.10								
Aldrin	ND	0.050								
alpha-BHC	ND	0.050								
beta-BHC	ND	0.050								
Chlordane	ND	0.50								
delta-BHC	ND	0.050								
Dieldrin	ND	0.10								
Endosulfan I	ND	0.050								
Endosulfan II	ND	0.10								
Endosulfan sulfate	ND	0.10								
Endrin	ND	0.10								
Endrin aldehyde	ND	0.10								
Endrin ketone	ND	0.10								
gamma-BHC	ND	0.050								
Heptachlor	ND	0.050								
Heptachlor epoxide	ND	0.050								
Methoxychlor	ND	0.50								
Toxaphene	ND	0.50								
Surr: Decachlorobiphenyl	*0.1984*	*0*	*0.2*	*0*	*99.2*	*54.9 - 145*				
Surr: Tetrachloro-m-xylene	*0.2234*	*0*	*0.2*	*0*	*112*	*51.5 - 142*				

Client: Envirodyne Laboratories, Inc.
Project: 23H2576
WorkOrder: HS23081351

QC BATCH REPORT

Batch ID: 199365 (1) **Instrument:** ECD_15 **Method:** ORGANOCHLORINE PESTICIDES BY SW8081B

LCS Sample ID: LCS-199365 Units: ug/L Analysis Date: 31-Aug-2023 01:44
Client ID: Run ID: ECD_15_445281 SeqNo: 7520084 PrepDate: 23-Aug-2023 DF: 1

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
4,4'-DDD	0.7144	0.10	0.5	0	143	53 - 144				
4,4'-DDE	0.6909	0.10	0.5	0	138	55 - 144				
4,4'-DDT	0.5385	0.10	0.5	0	108	53 - 149				
Aldrin	0.3311	0.050	0.25	0	132	47 - 141				
alpha-BHC	0.3414	0.050	0.25	0	137	51 - 141				
beta-BHC	0.3198	0.050	0.25	0	128	58 - 144				
delta-BHC	0.3401	0.050	0.25	0	136	48 - 146				
Dieldrin	0.7067	0.10	0.5	0	141	56 - 144				
Endosulfan I	0.2839	0.050	0.25	0	114	55 - 141				
Endosulfan II	0.5754	0.10	0.5	0	115	57 - 144				
Endosulfan sulfate	0.7118	0.10	0.5	0	142	58 - 145				
Endrin	0.8278	0.10	0.5	0	166	60 - 163				S
Endrin aldehyde	0.7201	0.10	0.5	0	144	59 - 158				
Endrin ketone	0.6887	0.10	0.5	0	138	59 - 154				
gamma-BHC	0.3311	0.050	0.25	0	132	53 - 142				
Heptachlor	0.2289	0.050	0.25	0	91.6	51 - 144				
Heptachlor epoxide	0.261	0.050	0.25	0	104	55 - 142				
Methoxychlor	2.732	0.50	2.5	0	109	59 - 150				
Surr: Decachlorobiphenyl	*0.2001*	*0*	*0.2*	*0*	*100*	*54.9 - 145*				
Surr: Tetrachloro-m-xylene	*0.2487*	*0*	*0.2*	*0*	*124*	*51.5 - 142*				

Client: Envirodyne Laboratories, Inc.
Project: 23H2576
WorkOrder: HS23081351

QC BATCH REPORT

Batch ID: 199365 (1) **Instrument:** ECD_15 **Method:** ORGANOCHLORINE PESTICIDES BY SW8081B

LCSD Sample ID: LCSD-199365 Units: ug/L Analysis Date: 31-Aug-2023 02:04
Client ID: Run ID: ECD_15_445281 SeqNo: 7520085 PrepDate: 23-Aug-2023 DF: 1

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
4,4'-DDD	0.7018	0.10	0.5	0	140	53 - 144	0.7144	1.79	20	
4,4'-DDE	0.6757	0.10	0.5	0	135	55 - 144	0.6909	2.23	20	
4,4'-DDT	0.5694	0.10	0.5	0	114	53 - 149	0.5385	5.57	20	
Aldrin	0.336	0.050	0.25	0	134	47 - 141	0.3311	1.48	20	
alpha-BHC	0.3474	0.050	0.25	0	139	51 - 141	0.3414	1.76	20	
beta-BHC	0.3246	0.050	0.25	0	130	58 - 144	0.3198	1.46	20	
delta-BHC	0.3523	0.050	0.25	0	141	48 - 146	0.3401	3.55	20	
Dieldrin	0.6904	0.10	0.5	0	138	56 - 144	0.7067	2.34	20	
Endosulfan I	0.2783	0.050	0.25	0	111	55 - 141	0.2839	2	20	
Endosulfan II	0.5729	0.10	0.5	0	115	57 - 144	0.5754	0.437	20	
Endosulfan sulfate	0.7154	0.10	0.5	0	143	58 - 145	0.7118	0.497	20	
Endrin	0.8881	0.10	0.5	0	178	60 - 163	0.8278	7.03	20	S
Endrin aldehyde	0.6882	0.10	0.5	0	138	59 - 158	0.7201	4.52	20	
Endrin ketone	0.6768	0.10	0.5	0	135	59 - 154	0.6887	1.74	20	
gamma-BHC	0.3406	0.050	0.25	0	136	53 - 142	0.3311	2.82	20	
Heptachlor	0.2452	0.050	0.25	0	98.1	51 - 144	0.2289	6.86	20	
Heptachlor epoxide	0.2724	0.050	0.25	0	109	55 - 142	0.261	4.3	20	
Methoxychlor	2.882	0.50	2.5	0	115	59 - 150	2.732	5.35	20	
Surr: Decachlorobiphenyl	*0.2071*	*0*	*0.2*	*0*	*104*	*54.9 - 145*	*0.2001*	*3.47*	*20*	
Surr: Tetrachloro-m-xylene	*0.2433*	*0*	*0.2*	*0*	*122*	*51.5 - 142*	*0.2487*	*2.2*	*20*	

The following samples were analyzed in this batch: HS23081351-01

Client: Envirodyne Laboratories, Inc.
Project: 23H2576
WorkOrder: HS23081351

QC BATCH REPORT

Batch ID: 199366 (0) **Instrument:** ECD_7 **Method:** PCBS BY SW8082A

MBLK Sample ID: **MBLK-199366** Units: **ug/L** Analysis Date: **28-Aug-2023 19:21**
Client ID: Run ID: **ECD_7_445102** SeqNo: **7515877** PrepDate: **23-Aug-2023** DF: 1

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Aroclor 1016	ND	0.500								
Aroclor 1221	ND	0.500								
Aroclor 1232	ND	0.500								
Aroclor 1242	ND	0.500								
Aroclor 1248	ND	0.500								
Aroclor 1254	ND	0.500								
Aroclor 1260	ND	0.500								
PCBs (Total)	ND	0.500								
Surr: Decachlorobiphenyl	*0.2014*	*0.0500*	*0.2*	*0*	*101*	*54 - 140*				
Surr: Tetrachloro-m-xylene	*0.2481*	*0.0500*	*0.2*	*0*	*124*	*53 - 137*				

LCS Sample ID: **LCS-199366** Units: **ug/L** Analysis Date: **28-Aug-2023 19:46**
Client ID: Run ID: **ECD_7_445102** SeqNo: **7515878** PrepDate: **23-Aug-2023** DF: 1

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Aroclor 1016	5.619	0.500	5	0	112	54 - 138				
Aroclor 1260	5.687	0.500	5	0	114	57 - 136				
PCBs (Total)	11.31	0.500	10	0	113	57 - 136				
Surr: Decachlorobiphenyl	*0.2147*	*0.0500*	*0.2*	*0*	*107*	*54 - 140*				
Surr: Tetrachloro-m-xylene	*0.2461*	*0.0500*	*0.2*	*0*	*123*	*53 - 137*				

LCSD Sample ID: **LCSD-199366** Units: **ug/L** Analysis Date: **28-Aug-2023 19:59**
Client ID: Run ID: **ECD_7_445102** SeqNo: **7515879** PrepDate: **23-Aug-2023** DF: 1

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Aroclor 1016	5.576	0.500	5	0	112	54 - 138	5.619	0.776	20	
Aroclor 1260	5.556	0.500	5	0	111	57 - 136	5.687	2.34	20	
PCBs (Total)	11.13	0.500	10	0	111	57 - 136	11.31	1.56		
Surr: Decachlorobiphenyl	*0.2123*	*0.0500*	*0.2*	*0*	*106*	*54 - 140*	*0.2147*	*1.11*	*20*	
Surr: Tetrachloro-m-xylene	*0.2476*	*0.0500*	*0.2*	*0*	*124*	*53 - 137*	*0.2461*	*0.604*	*20*	

The following samples were analyzed in this batch: HS23081351-01

Client: Envirodyne Laboratories, Inc.
Project: 23H2576
WorkOrder: HS23081351

QC BATCH REPORT

Batch ID: 199463 (0) **Instrument:** HG04 **Method:** MERCURY BY E245.1, R3.0, 1994

MBLK Sample ID: **MBLK-199463** Units: **mg/L** Analysis Date: **24-Aug-2023 15:01**
Client ID: Run ID: **HG04_444783** SeqNo: **7508440** PrepDate: **24-Aug-2023** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	ND	0.000200								

LCS Sample ID: **LCS-199463** Units: **mg/L** Analysis Date: **24-Aug-2023 15:05**
Client ID: Run ID: **HG04_444783** SeqNo: **7508441** PrepDate: **24-Aug-2023** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.00469	0.000200	0.005	0	93.8	85 - 115				

MS Sample ID: **HS23081330-01MS** Units: **mg/L** Analysis Date: **24-Aug-2023 15:08**
Client ID: Run ID: **HG04_444783** SeqNo: **7508443** PrepDate: **24-Aug-2023** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.00494	0.000200	0.005	0.000009	98.6	70 - 130				

MSD Sample ID: **HS23081330-01MSD** Units: **mg/L** Analysis Date: **24-Aug-2023 15:10**
Client ID: Run ID: **HG04_444783** SeqNo: **7508444** PrepDate: **24-Aug-2023** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.00487	0.000200	0.005	0.000009	97.2	70 - 130	0.00494	1.43	20	

The following samples were analyzed in this batch: HS23081351-01

Client: Envirodyne Laboratories, Inc.
Project: 23H2576
WorkOrder: HS23081351

QC BATCH REPORT

Batch ID: 199317 (0) **Instrument:** SV-4 **Method:** SEMIVOLATILE

MBLK Sample ID: **MBLK-199317** Units: **ug/L** Analysis Date: **22-Aug-2023 16:50**
Client ID: Run ID: **SV-4_444591** SeqNo: **7505581** PrepDate: **22-Aug-2023** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD	RPD Limit	Qual
1,2,4-Trichlorobenzene	ND	5.00								
1,2-Dichlorobenzene	ND	5.00								
1,2-Diphenylhydrazine	ND	5.00								
1,3-Dichlorobenzene	ND	5.00								
1,4-Dichlorobenzene	ND	5.00								
2,4,6-Trichlorophenol	ND	5.00								
2,4-Dichlorophenol	ND	5.00								
2,4-Dimethylphenol	ND	5.00								
2,4-Dinitrophenol	ND	5.00								
2,4-Dinitrotoluene	ND	5.00								
2,6-Dinitrotoluene	ND	5.00								
2-Chloronaphthalene	ND	5.00								
2-Chlorophenol	ND	5.00								
2-Nitrophenol	ND	5.00								
3,3'-Dichlorobenzidine	ND	5.00								
4,6-Dinitro-2-methylphenol	ND	5.00								
4-Bromophenyl phenyl ether	ND	5.00								
4-Chloro-3-methylphenol	ND	5.00								
4-Chlorophenyl phenyl ether	ND	5.00								
4-Nitrophenol	ND	5.00								
Acenaphthene	ND	5.00								
Acenaphthylene	ND	5.00								
Anthracene	ND	5.00								
Benz(a)anthracene	ND	5.00								
Benzidine	ND	5.00								
Benzo(a)pyrene	ND	5.00								
Benzo(b)fluoranthene	ND	5.00								
Benzo(g,h,i)perylene	ND	5.00								
Benzo(k)fluoranthene	ND	5.00								
Bis(2-chloroethoxy)methane	ND	5.00								
Bis(2-chloroethyl)ether	ND	5.00								
Bis(2-chloroisopropyl)ether	ND	5.00								
Bis(2-ethylhexyl)phthalate	ND	5.00								
Butyl benzyl phthalate	ND	5.00								

Client: Envirodyne Laboratories, Inc.
Project: 23H2576
WorkOrder: HS23081351

QC BATCH REPORT

Batch ID: 199317 (0) **Instrument:** SV-4 **Method:** SEMIVOLATILE

MBLK Sample ID: **MBLK-199317** Units: **ug/L** Analysis Date: **22-Aug-2023 16:50**
Client ID: Run ID: **SV-4_444591** SeqNo: **7505581** PrepDate: **22-Aug-2023** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chrysene	ND	5.00								
Dibenz(a,h)anthracene	ND	5.00								
Diethyl phthalate	ND	5.00								
Dimethyl phthalate	ND	5.00								
Di-n-butyl phthalate	ND	5.00								
Di-n-octyl phthalate	ND	5.00								
Fluoranthene	ND	5.00								
Fluorene	ND	5.00								
Hexachlorobenzene	ND	5.00								
Hexachlorobutadiene	ND	5.00								
Hexachlorocyclopentadiene	ND	5.00								
Hexachloroethane	ND	5.00								
Indeno(1,2,3-cd)pyrene	ND	5.00								
Isophorone	ND	5.00								
Naphthalene	ND	5.00								
Nitrobenzene	ND	5.00								
N-Nitrosodimethylamine	ND	5.00								
N-Nitrosodi-n-propylamine	ND	5.00								
N-Nitrosodiphenylamine	ND	5.00								
Pentachlorophenol	ND	5.00								
Phenanthrene	ND	5.00								
Phenol	ND	5.00								
Pyrene	ND	5.00								
Surr: 2,4,6-Tribromophenol	*63.18*	*5.00*	*100*	*0*	*63.2*	*42 - 124*				
Surr: 2-Fluorobiphenyl	*64.83*	*5.00*	*100*	*0*	*64.8*	*48 - 120*				
Surr: 2-Fluorophenol	*54.07*	*5.00*	*100*	*0*	*54.1*	*20 - 120*				
Surr: 4-Terphenyl-d14	*65.9*	*5.00*	*100*	*0*	*65.9*	*51 - 135*				
Surr: Nitrobenzene-d5	*66.08*	*5.00*	*100*	*0*	*66.1*	*41 - 120*				
Surr: Phenol-d6	*63.45*	*5.00*	*100*	*0*	*63.5*	*20 - 120*				

Client: Envirodyne Laboratories, Inc.
Project: 23H2576
WorkOrder: HS23081351

QC BATCH REPORT

Batch ID: 199317 (0) **Instrument:** SV-4 **Method:** SEMIVOLATILE

LCS Sample ID: **LCS-199317** Units: **ug/L** Analysis Date: **22-Aug-2023 17:11**
Client ID: Run ID: **SV-4_444591** SeqNo: **7505582** PrepDate: **22-Aug-2023** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,2,4-Trichlorobenzene	71.72	5.00	100	0	71.7	54 - 118				
1,2-Dichlorobenzene	74.45	5.00	100	0	74.4	49 - 115				
1,2-Diphenylhydrazine	84.89	5.00	100	0	84.9	57 - 134				
1,3-Dichlorobenzene	71.3	5.00	100	0	71.3	56 - 115				
1,4-Dichlorobenzene	72.58	5.00	100	0	72.6	56 - 115				
2,4,6-Trichlorophenol	69.52	5.00	100	0	69.5	56 - 115				
2,4-Dichlorophenol	73.16	5.00	100	0	73.2	53 - 115				
2,4-Dimethylphenol	76.08	5.00	100	0	76.1	53 - 115				
2,4-Dinitrophenol	70.51	5.00	100	0	70.5	47 - 115				
2,4-Dinitrotoluene	73.42	5.00	100	0	73.4	56 - 115				
2,6-Dinitrotoluene	72.09	5.00	100	0	72.1	57 - 115				
2-Chloronaphthalene	100.7	5.00	100	0	101	65 - 125				
2-Chlorophenol	74.45	5.00	100	0	74.4	54 - 115				
2-Nitrophenol	71.71	5.00	100	0	71.7	53 - 115				
3,3'-Dichlorobenzidine	80.34	5.00	100	0	80.3	25 - 115				
4,6-Dinitro-2-methylphenol	84.51	5.00	100	0	84.5	51 - 121				
4-Bromophenyl phenyl ether	74.36	5.00	100	0	74.4	49 - 115				
4-Chloro-3-methylphenol	79.87	5.00	100	0	79.9	51 - 115				
4-Chlorophenyl phenyl ether	69.81	5.00	100	0	69.8	56 - 115				
4-Nitrophenol	70.92	5.00	100	0	70.9	26 - 133				
Acenaphthene	73.6	5.00	100	0	73.6	57 - 115				
Acenaphthylene	73.33	5.00	100	0	73.3	57 - 118				
Anthracene	75.74	5.00	100	0	75.7	65 - 115				
Benz(a)anthracene	76.63	5.00	100	0	76.6	53 - 115				
Benzidine	22.1	5.00	100	0	22.1	10 - 115				
Benzo(a)pyrene	73.82	5.00	100	0	73.8	57 - 115				
Benzo(b)fluoranthene	81.28	5.00	100	0	81.3	54 - 117				
Benzo(g,h,i)perylene	74.77	5.00	100	0	74.8	56 - 115				
Benzo(k)fluoranthene	61.09	5.00	100	0	61.1	50 - 115				
Bis(2-chloroethoxy)methane	83.74	5.00	100	0	83.7	54 - 115				
Bis(2-chloroethyl)ether	72.58	5.00	100	0	72.6	56 - 115				
Bis(2-chloroisopropyl)ether	66.66	5.00	100	0	66.7	48 - 115				
Bis(2-ethylhexyl)phthalate	79.99	5.00	100	0	80.0	50 - 115				
Butyl benzyl phthalate	79.36	5.00	100	0	79.4	51 - 115				

Client: Envirodyne Laboratories, Inc.
Project: 23H2576
WorkOrder: HS23081351

QC BATCH REPORT

Batch ID: 199317 (0) **Instrument:** SV-4 **Method:** SEMIVOLATILE

LCS Sample ID: **LCS-199317** Units: **ug/L** Analysis Date: **22-Aug-2023 17:11**
Client ID: Run ID: **SV-4_444591** SeqNo: **7505582** PrepDate: **22-Aug-2023** DF: 1

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chrysene	76.32	5.00	100	0	76.3	52 - 120				
Dibenz(a,h)anthracene	72.96	5.00	100	0	73.0	56 - 115				
Diethyl phthalate	73.48	5.00	100	0	73.5	57 - 115				
Dimethyl phthalate	71.69	5.00	100	0	71.7	56 - 115				
Di-n-butyl phthalate	76.17	5.00	100	0	76.2	54 - 115				
Di-n-octyl phthalate	74.38	5.00	100	0	74.4	49 - 115				
Fluoranthene	73.89	5.00	100	0	73.9	58 - 115				
Fluorene	71.32	5.00	100	0	71.3	56 - 115				
Hexachlorobenzene	72.01	5.00	100	0	72.0	54 - 115				
Hexachlorobutadiene	70.37	5.00	100	0	70.4	51 - 115				
Hexachlorocyclopentadiene	60.82	5.00	100	0	60.8	48 - 115				
Hexachloroethane	72.65	5.00	100	0	72.7	54 - 115				
Indeno(1,2,3-cd)pyrene	72.93	5.00	100	0	72.9	51 - 115				
Isophorone	72.16	5.00	100	0	72.2	55 - 115				
Naphthalene	74.12	5.00	100	0	74.1	55 - 115				
Nitrobenzene	71.8	5.00	100	0	71.8	40 - 124				
N-Nitrosodimethylamine	69.22	5.00	100	0	69.2	42 - 115				
N-Nitrosodi-n-propylamine	77.18	5.00	100	0	77.2	55 - 119				
N-Nitrosodiphenylamine	76.18	5.00	100	0	76.2	52 - 115				
Pentachlorophenol	76.77	5.00	100	0	76.8	45 - 125				
Phenanthrene	72.63	5.00	100	0	72.6	57 - 115				
Phenol	67.75	5.00	100	0	67.8	38 - 115				
Pyrene	80.44	5.00	100	0	80.4	54 - 119				
Surr: 2,4,6-Tribromophenol	*63.51*	*5.00*	*100*	*0*	*63.5*	*42 - 124*				
Surr: 2-Fluorobiphenyl	*65.95*	*5.00*	*100*	*0*	*65.9*	*48 - 120*				
Surr: 2-Fluorophenol	*59.33*	*5.00*	*100*	*0*	*59.3*	*20 - 120*				
Surr: 4-Terphenyl-d14	*67.01*	*5.00*	*100*	*0*	*67.0*	*51 - 135*				
Surr: Nitrobenzene-d5	*64.23*	*5.00*	*100*	*0*	*64.2*	*41 - 120*				
Surr: Phenol-d6	*65.55*	*5.00*	*100*	*0*	*65.6*	*20 - 120*				

Client: Envirodyne Laboratories, Inc.
Project: 23H2576
WorkOrder: HS23081351

QC BATCH REPORT

Batch ID: 199317 (0) **Instrument:** SV-4 **Method:** SEMIVOLATILE

LCSD Sample ID: **LCSD-199317** Units: **ug/L** Analysis Date: **22-Aug-2023 17:33**
Client ID: Run ID: **SV-4_444591** SeqNo: **7505583** PrepDate: **22-Aug-2023** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD	RPD Limit	Qual
1,2,4-Trichlorobenzene	71.56	5.00	100	0	71.6	54 - 118	71.72	0.227	20	
1,2-Dichlorobenzene	73.98	5.00	100	0	74.0	49 - 115	74.45	0.629	20	
1,2-Diphenylhydrazine	85.78	5.00	100	0	85.8	57 - 134	84.89	1.03	20	
1,3-Dichlorobenzene	70.74	5.00	100	0	70.7	56 - 115	71.3	0.785	20	
1,4-Dichlorobenzene	72.03	5.00	100	0	72.0	56 - 115	72.58	0.759	20	
2,4,6-Trichlorophenol	68.43	5.00	100	0	68.4	56 - 115	69.52	1.58	20	
2,4-Dichlorophenol	72.54	5.00	100	0	72.5	53 - 115	73.16	0.857	20	
2,4-Dimethylphenol	77.01	5.00	100	0	77.0	53 - 115	76.08	1.22	20	
2,4-Dinitrophenol	69.68	5.00	100	0	69.7	47 - 115	70.51	1.18	20	
2,4-Dinitrotoluene	72.24	5.00	100	0	72.2	56 - 115	73.42	1.62	20	
2,6-Dinitrotoluene	71.51	5.00	100	0	71.5	57 - 115	72.09	0.8	20	
2-Chloronaphthalene	97.42	5.00	100	0	97.4	65 - 125	100.7	3.31	20	
2-Chlorophenol	74.45	5.00	100	0	74.4	54 - 115	74.45	0.00505	20	
2-Nitrophenol	72.85	5.00	100	0	72.9	53 - 115	71.71	1.57	20	
3,3'-Dichlorobenzidine	76.39	5.00	100	0	76.4	25 - 115	80.34	5.04	20	
4,6-Dinitro-2-methylphenol	85.39	5.00	100	0	85.4	51 - 121	84.51	1.03	20	
4-Bromophenyl phenyl ether	73.61	5.00	100	0	73.6	49 - 115	74.36	1.01	20	
4-Chloro-3-methylphenol	77.53	5.00	100	0	77.5	51 - 115	79.87	2.97	20	
4-Chlorophenyl phenyl ether	67.79	5.00	100	0	67.8	56 - 115	69.81	2.94	20	
4-Nitrophenol	83.9	5.00	100	0	83.9	26 - 133	70.92	16.8	20	
Acenaphthene	72.25	5.00	100	0	72.3	57 - 115	73.6	1.84	20	
Acenaphthylene	73.92	5.00	100	0	73.9	57 - 118	73.33	0.803	20	
Anthracene	75.95	5.00	100	0	76.0	65 - 115	75.74	0.274	20	
Benz(a)anthracene	75.45	5.00	100	0	75.5	53 - 115	76.63	1.54	20	
Benzidine	21.51	5.00	100	0	21.5	10 - 115	22.1	2.68	20	
Benzo(a)pyrene	74.13	5.00	100	0	74.1	57 - 115	73.82	0.418	20	
Benzo(b)fluoranthene	79.56	5.00	100	0	79.6	54 - 117	81.28	2.13	20	
Benzo(g,h,i)perylene	74.07	5.00	100	0	74.1	56 - 115	74.77	0.938	20	
Benzo(k)fluoranthene	64.23	5.00	100	0	64.2	50 - 115	61.09	5	20	
Bis(2-chloroethoxy)methane	84.14	5.00	100	0	84.1	54 - 115	83.74	0.48	20	
Bis(2-chloroethyl)ether	74.03	5.00	100	0	74.0	56 - 115	72.58	1.97	20	
Bis(2-chloroisopropyl)ether	66.15	5.00	100	0	66.2	48 - 115	66.66	0.772	20	
Bis(2-ethylhexyl)phthalate	80.66	5.00	100	0	80.7	50 - 115	79.99	0.836	20	
Butyl benzyl phthalate	80.1	5.00	100	0	80.1	51 - 115	79.36	0.927	20	

Client: Envirodyne Laboratories, Inc.
Project: 23H2576
WorkOrder: HS23081351

QC BATCH REPORT

Batch ID: 199317 (0) **Instrument:** SV-4 **Method:** SEMIVOLATILE

LCSD Sample ID: **LCSD-199317** Units: **ug/L** Analysis Date: **22-Aug-2023 17:33**
Client ID: Run ID: **SV-4_444591** SeqNo: **7505583** PrepDate: **22-Aug-2023** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chrysene	77.13	5.00	100	0	77.1	52 - 120	76.32	1.06	20	
Dibenz(a,h)anthracene	72.42	5.00	100	0	72.4	56 - 115	72.96	0.744	20	
Diethyl phthalate	72.42	5.00	100	0	72.4	57 - 115	73.48	1.45	20	
Dimethyl phthalate	70.27	5.00	100	0	70.3	56 - 115	71.69	2	20	
Di-n-butyl phthalate	76.02	5.00	100	0	76.0	54 - 115	76.17	0.206	20	
Di-n-octyl phthalate	77.29	5.00	100	0	77.3	49 - 115	74.38	3.84	20	
Fluoranthene	74.35	5.00	100	0	74.4	58 - 115	73.89	0.62	20	
Fluorene	69.99	5.00	100	0	70.0	56 - 115	71.32	1.88	20	
Hexachlorobenzene	70.78	5.00	100	0	70.8	54 - 115	72.01	1.72	20	
Hexachlorobutadiene	69.99	5.00	100	0	70.0	51 - 115	70.37	0.545	20	
Hexachlorocyclopentadiene	64.77	5.00	100	0	64.8	48 - 115	60.82	6.28	20	
Hexachloroethane	72.57	5.00	100	0	72.6	54 - 115	72.65	0.118	20	
Indeno(1,2,3-cd)pyrene	72.4	5.00	100	0	72.4	51 - 115	72.93	0.727	20	
Isophorone	72	5.00	100	0	72.0	55 - 115	72.16	0.228	20	
Naphthalene	74.19	5.00	100	0	74.2	55 - 115	74.12	0.0993	20	
Nitrobenzene	74.96	5.00	100	0	75.0	40 - 124	71.8	4.31	20	
N-Nitrosodimethylamine	70.9	5.00	100	0	70.9	42 - 115	69.22	2.41	20	
N-Nitrosodi-n-propylamine	77.19	5.00	100	0	77.2	55 - 119	77.18	0.0098	20	
N-Nitrosodiphenylamine	75.11	5.00	100	0	75.1	52 - 115	76.18	1.42	20	
Pentachlorophenol	76.43	5.00	100	0	76.4	45 - 125	76.77	0.436	20	
Phenanthrene	72.79	5.00	100	0	72.8	57 - 115	72.63	0.225	20	
Phenol	67.93	5.00	100	0	67.9	38 - 115	67.75	0.265	20	
Pyrene	81.94	5.00	100	0	81.9	54 - 119	80.44	1.85	20	
Surr: 2,4,6-Tribromophenol	*61.39*	*5.00*	*100*	*0*	*61.4*	*42 - 124*	*63.51*	*3.4*	*20*	
Surr: 2-Fluorobiphenyl	*65.45*	*5.00*	*100*	*0*	*65.5*	*48 - 120*	*65.95*	*0.75*	*20*	
Surr: 2-Fluorophenol	*60.57*	*5.00*	*100*	*0*	*60.6*	*20 - 120*	*59.33*	*2.08*	*20*	
Surr: 4-Terphenyl-d14	*66.24*	*5.00*	*100*	*0*	*66.2*	*51 - 135*	*67.01*	*1.16*	*20*	
Surr: Nitrobenzene-d5	*65.2*	*5.00*	*100*	*0*	*65.2*	*41 - 120*	*64.23*	*1.49*	*20*	
Surr: Phenol-d6	*67.88*	*5.00*	*100*	*0*	*67.9*	*20 - 120*	*65.55*	*3.49*	*20*	

The following samples were analyzed in this batch: HS23081351-01

Client: Envirodyne Laboratories, Inc.
Project: 23H2576
WorkOrder: HS23081351

QC BATCH REPORT

Batch ID: 199458 (0) **Instrument:** UV-2450 **Method:** PHENOLICS BY E420.1,1978

MBLK Sample ID: **MBLK-199458** Units: **mg/L** Analysis Date: **24-Aug-2023 11:48**
Client ID: Run ID: **UV-2450_444737** SeqNo: **7507478** PrepDate: **24-Aug-2023** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Phenolics, Total Recoverable	ND	0.0500								

LCS Sample ID: **LCS-199458** Units: **mg/L** Analysis Date: **24-Aug-2023 11:48**
Client ID: Run ID: **UV-2450_444737** SeqNo: **7507477** PrepDate: **24-Aug-2023** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Phenolics, Total Recoverable	0.46	0.0500	0.5	0	92.0	84.6 - 104				

MS Sample ID: **HS23081351-02MS** Units: **mg/L** Analysis Date: **24-Aug-2023 11:48**
Client ID: **Effluent** Run ID: **UV-2450_444737** SeqNo: **7507475** PrepDate: **24-Aug-2023** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Phenolics, Total Recoverable	0.57	0.0500	0.5	0.052	104	80 - 120				

MSD Sample ID: **HS23081351-02MSD** Units: **mg/L** Analysis Date: **24-Aug-2023 11:48**
Client ID: **Effluent** Run ID: **UV-2450_444737** SeqNo: **7507476** PrepDate: **24-Aug-2023** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Phenolics, Total Recoverable	0.571	0.0500	0.5	0.052	104	80 - 120	0.57	0.175	20	

The following samples were analyzed in this batch: HS23081351-02 HS23081351-03 HS23081351-04 HS23081351-05

Client: Envirodyne Laboratories, Inc.
Project: 23H2576
WorkOrder: HS23081351

QC BATCH REPORT

Batch ID: 199530 (0) **Instrument:** UV-2450 **Method:** CYANIDE BY SM 4500CN E&G-2011

MBLK Sample ID: **MBLK-199530** Units: **mg/L** Analysis Date: **25-Aug-2023 15:15**
Client ID: Run ID: **UV-2450_444941** SeqNo: **7512011** PrepDate: **25-Aug-2023** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Cyanide	ND	0.00500								
Cyanide, Amenable to Chlorination	ND	0.00500								

LCS Sample ID: **LCS-199530** Units: **mg/L** Analysis Date: **25-Aug-2023 15:15**
Client ID: Run ID: **UV-2450_444941** SeqNo: **7512010** PrepDate: **25-Aug-2023** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Cyanide	0.208	0.00500	0.2	0	104	85 - 115				
Cyanide, Amenable to Chlorination	0.208	0.00500	0.2	0	104	85 - 115				

MS Sample ID: **HS23081332-01MS** Units: **mg/L** Analysis Date: **25-Aug-2023 15:15**
Client ID: Run ID: **UV-2450_444941** SeqNo: **7512008** PrepDate: **25-Aug-2023** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Cyanide	0.199	0.00500	0.2	0.003	98.0	80 - 120				
Cyanide, Amenable to Chlorination	0.199	0.00500	0.2	0	99.5	80 - 120				

MSD Sample ID: **HS23081332-01MSD** Units: **mg/L** Analysis Date: **25-Aug-2023 15:15**
Client ID: Run ID: **UV-2450_444941** SeqNo: **7512009** PrepDate: **25-Aug-2023** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Cyanide	0.203	0.00500	0.2	0.003	100	80 - 120	0.199	1.99	20	
Cyanide, Amenable to Chlorination	0.203	0.00500	0.2	0	102	80 - 120	0.199	1.99	20	

The following samples were analyzed in this batch: HS23081351-02 HS23081351-03 HS23081351-04 HS23081351-05

23H2576

TCEQ Certification # T104704265

Envirodyne Laboratories, Inc.
11011 Brooklet, Ste. 230
Houston, Texas 77099-3543
Phone (281)568-7880 - Fax (281)568-8004

Name: City of South Houston
Address: PO Box 238
City: So. Houston, TX 77587
Contact: Alfred Gonzales

Analysis Request and Chain of Custody Record

Phone: 713-724-9913 Email:

Project No.

Client/Project: 24- Hr Sampling- So. Houston Se

Lab ID No.	Field Sample No./ Indentification	Date & Time	Grab	Comp	Sample Container (Size/Mat'l)	Sample Type (Liquid, Sludge, etc)	Preservative	ANALYSIS REQUESTED	pH	D.O.	Temp.	Analysis Time
	Effluent	8.16.23 10:00	✓		2- 40 ml/vial	Liquid	Ice,HCl	VOC				
	Effluent	8.16.23 12:00	✓		2- 40 ml/vial	Liquid	Ice,HCl	VOC				
	Effluent	8.16.23 14:00	✓		2- 40 ml/vial	Liquid	Ice,HCl	VOC				
	Effluent	8.16.23 16:00	✓		2- 40 ml/vial	Liquid	Ice,HCl	VOC				
	Effluent	8.16.23 10:00	✓		1 Lt/Amb	Liquid	Ice,H2SO4	Phenols				
	Effluent	8.16.23 12:00	✓		1 Lt/Amb	Liquid	Ice,H2SO4	Phenols				
	Effluent	8.16.23 14:00	✓		1 Lt/Amb	Liquid	Ice,H2SO4	Phenols				
	Effluent	8.16.23 16:00	✓		1 Lt/Amb	Liquid	Ice,H2SO4	Phenols				

(FW Proj)

(Lab Proj)

Samplers: (Signature) Alfred Gonzales

Affiliation

Relinquished by: (Signature) Alfred Gonzales Date: 8.17.23 Time: 06:00

Received by: (Signature) Date: 8-17-23 Time: 1245 Seal Intact?

Relinquished by (Signature) Date: Time:

Received by: (Signature) Date: Time: Seal Intact?

Relinquished by (Signature) Date: 8-17-23 Time: 1350

Received by Lab: (Signature) Date: 8/17/23 Time: 1350 Seal Intact?

Remarks:

FLOW:
Meter Reading:
Cl2 Residual:
Mn Correction:
Cl2 Corrected:

Arrival Temp. 2.4/2.2 IR Gun

Data Results To: 1.

Site Representative: Date: Time:

Laboratory No.

Attachment 8

A. 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)

Pollutant	Concentration	MAL	Units	Date
See Attachment 8				
TOTAL ALUMINUM	33.4	2.5	(ug/l)	2-15-24
TOTAL ARSENIC	0.6	0.5	(ug/l)	2-15-24
TOTAL BARIUM	36.0	3.0	(ug/l)	2-15-24
TOTAL COPPER	15.3	2.0	(ug/l)	2-15-24
TOTAL NICKEL	12.7	2.0	(ug/l)	2-15-24
TOTAL ZINC	56.1	5.0	(ug/l)	2-15-24
NITRATE-N	21500	100	(ug/l)	2-15-24
TOTAL ALUMINUM	24	2.5	(ug/l)	8-17-23
TOTAL ARSENIC	0.9	0.5	(ug/l)	8-17-23
TOTAL BARIUM	22.1	3.0	(ug/l)	8-17-23
TOTAL COPPER	23.1	2.0	(ug/l)	8-17-23
TOTAL NICKEL	12.2	2.0	(ug/l)	8-17-23
TOTAL ZINC	80.5	5.0	(ug/l)	8-17-23
NITRATE-N	25800	500	(ug/l)	8-17-23
Chloroform	52.7	2.5	(ug/l)	8-17-23
Bromodichloromethane	16.2	2.5	(ug/l)	8-17-23
Dibromochloromethane	3.47	2.5	(ug/l)	8-17-23
Total Trihalomethanes	72.3	10.0	(ug/l)	8-17-23
Cyanide, Amenable	0.009	0.005	(ug/l)	8-17-23
Cyanide, Total	0.009	0.005	(ug/l)	8-17-23
TOTAL ALUMINUM	24.5	2.5	(ug/l)	2-21-23

Pollutant	Concentration	MAL	Units	Date
TOTAL ARSENIC	1.3	0.5	(ug/l)	2-21-23
TOTAL BARIUM	30.1	3.0	(ug/l)	2-21-23
TOTAL CADMIUM	2.0	1.0	(ug/l)	2-21-23
TOTAL COPPER	19.1	2.0	(ug/l)	2-21-23
TOTAL NICKEL	16.2	2.0	(ug/l)	2-21-23
TOTAL ZINC	81.8	5.0	(ug/l)	2-21-23
Cyanide, Amenable	0.011	0.005	(ug/l)	2-21-23
Cyanide, Total	0.011	0.005	(ug/l)	2-21-23
TOTAL ALUMINUM	21.5	2.5	(ug/l)	8-16-22
TOTAL ARSENIC	1.5	0.5	(ug/l)	8-16-22
TOTAL BARIUM	23.6	3.0	(ug/l)	8-16-22
TOTAL COPPER	43.1	2.0	(ug/l)	8-16-22
TOTAL LEAD	0.6	<0.5	(ug/l)	8-16-22
TOTAL NICKEL	7.0	2.0	(ug/l)	8-16-22
TOTAL ZINC	234.0	5.0	(ug/l)	8-16-22
NITRATE-N	24400	100	(ug/l)	8-16-22
CHLOROFORM	47.4	10.0	(ug/l)	8-16-22
DICHLOROBROMOMETHANE	14.5	10.0	(ug/l)	8-16-22
TOTAL TRIHALOMETHANES	61.9	10.0	(ug/l)	8-16-22
TOTAL ALUMINUM	25.8	2.5	(ug/l)	2-9-22
TOTAL ARSENIC	1.3	0.5	(ug/l)	2-9-22
TOTAL BARIUM	34.3	3.0	(ug/l)	2-9-22
TOTAL COPPER	13.1	3.0	(ug/l)	2-9-22
TOTAL NICKEL	7.1	2.0	(ug/l)	2-9-22
TOTAL ZINC	89.2	5.0	(ug/l)	2-9-22
NITRATE-N	19700	100	(ug/l)	2-9-22
TOTAL ALUMINUM	21.9	2.5	(ug/l)	8-12-21

Pollutant	Concentration	MAL	Units	Date
TOTAL BARIUM	47.7	3	(ug/l)	8-12-21
TOTAL COPPER	22.2	2.0	(ug/l)	8-12-21
TOTAL LEAD	1.0	<0.5	(ug/l)	8-12-21
TOTAL NICKEL	7.1	2.0	(ug/l)	8-12-21
TOTAL ZINC	78.5	5.0	(ug/l)	8-12-21
NITRATE-N	18000	100	(ug/l)	8-12-21
Chloroform	43.3	2.5	(ug/l)	8-12-21
Bromodichloromethane	20.9	2.5	(ug/l)	8-12-21
Dibromochloromethane	5.56	2.5	(ug/l)	8-12-21
Total Trihalomethane	69.8	2.5	(ug/l)	8-12-21
TOTAL ALUMINUM	15.9	2.5		2-5-21
TOTAL BARIUM	31.3	3.0		
TOTAL COPPER	11.6	2.0		
TOTAL NICKEL	8.8	2.0		
TOTAL ZINC	46.8	5.0		
NITRATE	19600	100		

Attachment 9

Lab Results for Table 1.0(0) Pollutant Analysis for Wastewater Treatment Facilities

Envirodyne Laboratories, Inc
11011 Brooklet Dr., # 230
Houston, TX 77099
281.568.7880 Phone
www.envirodyne.com

Client:	South Houston , City of
Project:	South Houston, City of (Permit Renewal)
Work Order:	24F3087

Reported: 18-Jul-24 11:02

Effluent

24F3087-01 (Water) Sampled: 27-Jun-24 11:00

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
Envirodyne Laboratories, Inc.										
Field Analysis										
Chlorine Residual, Total	**2.20**	0.01	mg/L	1	B4G4551	27-Jun-24	27-Jun-24 11:00	SM 4500-Cl G	CLT	a
Dissolved Oxygen (DO)	**9.30**		mg/L	1	B4G4551	27-Jun-24	27-Jun-24 11:00	SM4500-O C	CLT	a
pH	**6.40**		SU	1	B4G4551	27-Jun-24	27-Jun-24 11:00	SM4500H+ B	CLT	a
Microbiology										
E.coli	**13**	1	MPN/100 mL	1	B4F6046	27-Jun-24	27-Jun-24 15:08	SM9223 B	LN	
Enterococci	**8**	1	MPN/100 mL	1	B4G3303	27-Jun-24	27-Jun-24 15:27	Enterolert	LN	
Wet Chemistry										
Alkalinity (Total) as CaCO3	**67.5**	20.0	mg/L	1	B4G3299	01-Jul-24	01-Jul-24 10:25	EPA 310.2	SSJ	
Ammonia-N (NH3-N)	<0.20	0.20	mg/L	1	B4G3234	28-Jun-24	28-Jun-24 13:35	EPA 350.1	SSJ	
CBOD-5	**6.6**	2.0	mg/L	1	B4G3599	27-Jun-24	27-Jun-24 15:00	SM5210 B	AGT	B, I
Chloride	**164**	12.0	mg/L	4	B4G3917	09-Jul-24	09-Jul-24 13:00	SM4500 Cl-B	BRC	
Conductivity at 25 C	**751**	30	umho/cm	1	B4F6036	09-Jul-24	09-Jul-24 11:38	SM2510 B	BRC	
Nitrate-N	**13.1**	2.50	mg/L	5	B4F5965	28-Jun-24	28-Jun-24 07:55	EPA 353.1	SSJ	
Oil & Grease	<5.0	5.0	mg/L	1	B4G4376	15-Jul-24	15-Jul-24 07:50	EPA 1664 A	BRC	
Phosphorus, Total	**4.86**	0.20	mg/L	2	B4G3251	01-Jul-24	01-Jul-24 14:34	SM4500-P E	DRJ	
Sulfate	**82.7**	10.0	mg/L	5	B4G3448	02-Jul-24	02-Jul-24 14:05	EPA 375.4	SSJ	
TDS	**472**	50.0	mg/L	1	B4G3500	02-Jul-24	02-Jul-24 14:34	SM2540 C	SKP	
TKN-N	**1.71**	0.50	mg/L	1	B4G4529	09-Jul-24	10-Jul-24 00:00	SM 4500-NH3 D	SUB	L
TSS	<2.0	2.0	mg/L	1	B4F5996	01-Jul-24	01-Jul-24 10:15	SM2540 D	JH	

Envirodyne Laboratories, Inc.

Amanda Heiman

Amanda Heiman, Client Service Manager

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.

Candice Calhoun

From: City of South Houston W/S Dept <sohowwtp@yahoo.com>
Sent: Sunday, July 28, 2024 5:28 AM
To: Candice Calhoun
Subject: Application to Renew Permit No. WQ0010287001 - City of South Houston
Attachments: Response to TCEQ letter regarding permit renewal - 7-28-24 AG.pdf

Follow Up Flag: Follow up
Flag Status: Completed

Attached is a response to TCEQ Notice of Deficiency (NOD) letter dated July 25, 2024.

Fred G.

Fred Gonzales
Water / Wastewater Superintendent
City of South Houston
Office: (713) 944-2027
email: sohowwtp@yahoo.com

1018 Dallas
South Houston, Texas 77587

July 27, 2024

Candice Calhoun
Texas Commission on Environmental Quality
Water Quality Division
Applications Review and Processing Team (MC 148)
P.O. Box 13087
Austin, Texas 78711-3087

Re: Response to TCEQ letter dated 7/25/24, Permit Renewal City of South Houston, Texas Domestic POTW, Permit Expires 3-1-25, Application Due 9-12-24, Permit # WQ0010287001.

Your letter of 7/25/24 requested four (4) items for the City to address as follows:

1. The original application plus two copies and the original check for $ 2,015 were mailed by certified mail on 7/24/24. If you do not receive those in the next few days, please let us know.
2. Attached is the core data form requested.
3. We are confirming the English NORI draft is correct.
4. The NORI Spanish translation is attached.

This letter and attachments are also being sent by email to you so you will have the electronic file for the core data form and the NORI Spanish translation.

Should you have any questions, please contact me at email sohowwtp@yahoo.com, phone (713) 944-2027 or at the above address.

Sincerely;

Alfred Gonzales

Fred Gonzales, Water/Wastewater Superintendent

cc: Bob Hunt, B & B Consulting Group

Attachment: Core Data Form for TCEQ domestic wastewater permit renewal QW0010287001
Spanish translation NORI South Houston wastewater permit renewal

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 600548390		RN 102986312

SECTION II: Customer Information

4. General Customer Information	5. Effective Date for Customer Information Updates (mm/dd/yyyy)	7/25/2024

☐ 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 South Hpouston, Texas	

7. TX SOS/CPA Filing Number	8. TX State Tax ID (11 digits)	9. Federal Tax ID (9 digits)	10. DUNS Number *(if applicable)*
N/A	17460023306	746002330	00254683

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

12. Number of Employees	13. Independently Owned and Operated?
☐ 0-20 ☒ 21-100 ☐ 101-250 ☐ 251-500 ☐ 501 and higher	☒ Yes ☐ No

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

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

15. Mailing Address:	P.O.Box 238						
	City	South Houston	State	TX	ZIP	77587	ZIP + 4	0238

16. Country Mailing Information *(if outside USA)*	17. E-Mail Address *(if applicable)*

18. Telephone Number	19. Extension or Code	20. Fax Number *(if applicable)*
(713) 944-2027		(713) 947-8320

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.)*

City of South Houston Wastewater Treatment Plant

23. Street Address of the Regulated Entity: ***(No PO Boxes)***	206 Michagan Street							
	City	South Houston	**State**	TX	**ZIP**	77587	**ZIP + 4**	238
24. County	Harris							

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

25. Description to Physical Location:					
26. Nearest City			**State**		**Nearest ZIP Code**
City of Pasadena			TX		77506

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	40	08	95	14	05

29. Primary SIC Code (4 digits)	**30. Secondary SIC Code** (4 digits)	**31. Primary NAICS Code** (5 or 6 digits)	**32. Secondary NAICS Code** (5 or 6 digits)
4952		22132	

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

Treatment of domestic wastewater

34. Mailing Address:	**City of South Houston**	
	P.O. Box 238	

	City	South Houston	State	TX	ZIP	77587	ZIP + 4	238
35. E-Mail Address:	sohowwtp@yahoo.com							
36. Telephone Number		37. Extension or Code		38. Fax Number *(if applicable)*				
(713) 944-2027				(713) 947-8320				

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:
	WQ0010287001			

SECTION IV: Preparer Information

40. Name:	Fred Gonzales		41. Title:	Water/Wastewater Superintendent
42. Telephone Number	43. Ext./Code	44. Fax Number	45. E-Mail Address	
(713) 947-2027		(713) 947-8320	sohowwtp@yahoo.com	

SECTION V: Authorized Signature

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

Company:	City of South Houston	Job Title:	Mayor
Name *(In Print)*:	Joe Soto	Phone:	(713) 947- 7700
Signature:		Date:	7/25/2024

Comisión de Calidad Ambiental del Estado de Texas

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

PERMISO NO. WQ00 10287001

SOLICITUD. *La Ciudad del Sur de Houston 306 Michigan Street* ha solicitado a la Comisión de Calidad Ambiental del Estado de Texas (TCEQ) para renovar el Permiso No. WQ0010287001 ((Nº de identificación de la EPA. TX0057304) 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 _4,000,000 galones por día. La planta está ubicada 306 Michigan Street en el sur de Houston, en el Condado de Harris, Texas 77587 , Texas. La ruta de descarga es del sitio de la planta a Pantano de bayas; de allí a Sims Bayou; de allí al Canal de Navegación de Houston/ Marea del Pantano de Búfalo. La TCEQ recibió esta solicitud el July 20, 2024. La solicitud para el permiso estará disponible para leerla y copiarla en 1018 Dallas Street, Sur de Houston, TX 77587 antes de la fecha de publicación de este aviso en el periódico. Este enlace a un mapa electrónico de la ubicación general del sitio o de la instalación es proporcionado como una cortesía y no es parte de la solicitud o del aviso. Para la ubicación exacta, consulte la solicitud.
https://www.tceq.texas.gov/permitting/wastewater/pending-permits/tpdes-applications

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

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

OPORTUNIDAD DE UNA AUDIENCIA ADMINISTRATIVA DE LO CONTENCIOSO. Después del plazo para presentar comentarios públicos, el Director Ejecutivo considerará todos los comentarios apropiados y preparará una respuesta a todo los comentarios públicos esenciales, pertinentes, o significativos. **A menos que la solicitud haya sido referida**

directamente a una audiencia administrativa de lo contencioso, la respuesta a los comentarios y la decisión del Director Ejecutivo sobre la solicitud serán enviados por correo a todos los que presentaron un comentario público y a las personas que están en la lista para recibir avisos sobre esta solicitud. Si se reciben comentarios, el aviso también proveerá instrucciones para pedir una reconsideración de la decisión del Director Ejecutivo y para pedir una audiencia administrativa de lo contencioso. Una audiencia administrativa de lo contencioso es un procedimiento legal similar a un procedimiento legal civil en un tribunal de distrito del estado.

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

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

LISTA DE CORREO. Si somete comentarios públicos, un pedido para una audiencia administrativa de lo contencioso o una reconsideración de la decisión del Director Ejecutivo, la Oficina del Secretario Principal enviará por correo los avisos públicos en relación con la solicitud. 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 Ciudad del Sur de Houston a la dirección indicada arriba o llamando a Fred Gonzales al 713-944-2027.

Fecha de emission:

Candice Calhoun

From: Cashiers
Sent: Tuesday, July 30, 2024 8:28 AM
To: Candice Calhoun
Subject: RE: Verification of Check Payment Received
Attachments: M419842.pdf

Follow Up Flag: Follow up
Flag Status: Completed

Attached is a copy of your receipt.

If you have any questions or need any additional information please feel free to contact me.

Thanks,

Veronica Torrez
Cashier's Office Work Lead
OAS/FA/Revenue Operations
Ph: 512-239-0328 Fax: 512-239-0364
Veronica.torrez@tceq.texas.gov

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

From: Candice Calhoun <Candice.Calhoun@tceq.texas.gov>
Sent: Monday, July 29, 2024 4:46 PM
To: Cashiers <Cashiers@tceq.texas.gov>
Subject: Verification of Check Payment Received
Importance: High

Good afternoon,

Can you please verify if the check below was received? I was not able to locate it in BASIS.

Basis2 Receipt Report by Endorsement Number

JUL-30-24 08:27 AM

Acct. #: PTGQ **Account Name:** NOTICE FEES WQP WATER QUALITY PMT

Paid For	Endors. #	Ref #2	Paid In By	PayTyp	Chk #	Card#	Bank Slip	Tran.Date	Receipt Amnt.
	M419842B	10287001	SOUTH HOUSTON, CITY OF	CK	142273		BS00110260	29-JUL-24	$15.00

Acct. #: WQP **Account Name:** WATER QUALITY PERMIT APPLICATION

Paid For	Endors. #	Ref #2	Paid In By	PayTyp	Chk #	Card#	Bank Slip	Tran.Date	Receipt Amnt.
CITY OF SOUTH HOUSTON WWTP	M419842A	10287001	SOUTH HOUSTON, CITY OF	CK	142273		BS00110260	29-JUL-24	$2000.00

TPDES PERMIT NO.
WQ0010287001
[For TCEQ office use only - EPA I.D. No. TX0057304]

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

This is a renewal that replaces TPDES Permit No. WQ0010287001 issued on March 11, 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 South Houston

whose mailing address is

P.O. Box 238
South Houston, Texas 77587

is authorized to treat and discharge wastes from the City of South Houston Wastewater Treatment Facility, SIC Code 4952

located at 206 Michigan Street, in the City of South Houston, Harris County, Texas 77587

to Berry Bayou, thence to Sims Bayou, thence to the Houston Ship Channel/Buffalo Bayou Tidal in Segment No. 1007 of the San Jacinto River Basin

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

This permit shall expire at midnight, **three 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 4.0 million gallons per day (MGD), nor shall the average discharge during any two-hour period (2-hour peak) exceed 13,889 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 (334)	15	25	35	Two/week	Composite
Total Suspended Solids	15 (500)	25	40	60	Two/week	Composite
Ammonia Nitrogen	3 (100)	6	10	N/A	Two/week	Composite
Total Kjeldahl Nitrogen*	Report (Report)	N/A	Report	N/A	Two/week	Composite
E. coli, colony-forming units or most probable number per 100 ml	63	N/A	200	N/A	One/week	Grab

*See Other Requirement No. 4.

2. The effluent shall contain a total chlorine residual of at least 1.0 mg/l after a detention time of at least 20 minutes (based on peak flow) and shall be monitored daily by grab sample. The permittee shall dechlorinate the chlorinated effluent to less than 0.1 mg/l total chlorine residual and shall monitor total chlorine residual daily by grab sample after the dechlorination process. An equivalent method of disinfection may be substituted only with prior approval of the Executive Director.
3. The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units and shall be monitored 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 4.0 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.

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS Outfall Number 001

Effluent Characteristic	Discharge Limitations		Minimum Self-Monitoring Requirements	
	Daily Avg	Daily Max	Measurement Frequency	Sample Type
Sublethal WET limit 69% (Parameter 51710)[2] *Ceriodaphnia dubia* (3-brood chronic NOEC[1])	69%	69%	one/quarter	Composite

1 The no observed effect concentration (NOEC) is defined as the greatest effluent dilution at which no significant effect is demonstrated. A significant effect is defined as a statistically significant difference between a specified effluent dilution and the control for toxicity (lethal or sublethal effects, whichever is specified).

2 The sublethal WET limit NOEC of not less than 69% is effective at the permit issue date.

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.

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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 Houston Regional Director (MC Region 12) within seven (7) days after failing the TCLP Test.

The report shall contain test results, certification that unauthorized waste management has stopped, and a summary of alternative disposal plans that comply with RCRA standards for the management of hazardous waste. The report shall be addressed to: Director, Permitting and Registration Support Division (MC 129), Texas Commission on Environmental Quality, P.O. Box 13087, Austin, Texas 78711-3087. In addition, the permittee shall prepare an annual report on the results of all sludge toxicity testing. This annual report shall be submitted to the TCEQ Houston Regional Office (MC Region 12) and the Enforcement Division (MC 224), by September 30th of each year. The permittee must submit this annual report using the online electronic reporting system available through the TCEQ website unless the permittee requests and obtains an electronic reporting waiver.

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)(2)(A) for specific information;

Alternative 5 (PFRP) - Sewage sludge that is used or disposed of must be treated in one of the Processes to Further Reduce Pathogens (PFRP) described in 40 CFR Part 503, Appendix B. PFRP include composting, heat drying, heat treatment, and thermophilic aerobic digestion; or

Alternative 6 (PFRP Equivalent) - Sewage sludge that is used or disposed of must be treated in a process that has been approved by the U. S. Environmental Protection Agency as being equivalent to those in Alternative 5.

b. For sewage sludge to be classified as Class AB biosolids with respect to pathogens, the density of fecal coliform in the sewage sludge must be less than 1,000 MPN per gram of total solids (dry weight basis), or the density of *Salmonella* sp. bacteria in the sewage sludge be less than three MPN per four grams of total solids (dry weight basis) at the time the sewage sludge is used or disposed. In addition, one of the alternatives listed below must be met:

Alternative 2 - The pH of the sewage sludge that is used or disposed shall be raised to above 12 std. units and shall remain above 12 std. units for 72 hours.

The temperature of the sewage sludge shall be above 52° Celsius for 12 hours or longer during the period that the pH of the sewage sludge is above 12 std. units.

At the end of the 72-hour period during which the pH of the sewage sludge is above 12 std. units, the sewage sludge shall be air dried to achieve a percent solids in the sewage sludge greater than 50%; or

Alternative 3 - The sewage sludge shall be analyzed for enteric viruses prior to pathogen treatment. The limit for enteric viruses is less than one Plaque-forming Unit per four grams of total solids (dry weight basis) either before or following pathogen treatment. See 30 TAC § 312.82(a)(2)(C)(i-iii) for specific information. The sewage sludge shall be analyzed for viable helminth ova prior to pathogen treatment. The limit for viable helminth ova is less than one per four grams of total solids (dry weight basis) either before or following pathogen treatment. See 30 TAC § 312.82(a)(2)(C)(iv-vi) for specific information; or

Alternative 4 - The density of enteric viruses in the sewage sludge shall be less than one Plaque-forming Unit per four grams of total solids (dry weight basis) at the time the sewage sludge is used or disposed. The density of viable helminth ova in the sewage sludge shall be less than one per four grams of total solids (dry weight basis) at the time the sewage sludge is used or disposed.

c. Sewage sludge that meets the requirements of Class AB biosolids may be classified a Class A biosolids if a variance request is submitted in writing that is supported by substantial documentation demonstrating equivalent methods for reducing odors and written approval is granted by the executive director. The executive director may deny the variance request or revoke that approved variance if it is determined that the variance may potentially endanger human health or the environment, or create nuisance odor conditions.

d. Three alternatives are available to demonstrate compliance with Class B biosolids

criteria.

Alternative 1

i. A minimum of seven random samples of the sewage sludge shall be collected within 48 hours of the time the sewage sludge is used or disposed of during each monitoring episode for the sewage sludge.

ii. The geometric mean of the density of fecal coliform in the samples collected shall be less than either 2,000,000 MPN per gram of total solids (dry weight basis) or 2,000,000 Colony Forming Units per gram of total solids (dry weight basis).

Alternative 2 - Sewage sludge that is used or disposed of shall be treated in one of the Processes to Significantly Reduce Pathogens (PSRP) described in 40 CFR Part 503, Appendix B, so long as all of the following requirements are met by the generator of the sewage sludge.

i. Prior to use or disposal, all the sewage sludge must have been generated from a single location, except as provided in paragraph v. below;

ii. An independent Texas Licensed Professional Engineer must make a certification to the generator of a sewage sludge that the wastewater treatment facility generating the sewage sludge is designed to achieve one of the PSRP at the permitted design loading of the facility. The certification need only be repeated if the design loading of the facility is increased. The certification shall include a statement indicating the design meets all the applicable standards specified in Appendix B of 40 CFR Part 503;

iii. Prior to any off-site transportation or on-site use or disposal of any sewage sludge generated at a wastewater treatment facility, the chief certified operator of the wastewater treatment facility or other responsible official who manages the processes to significantly reduce pathogens at the wastewater treatment facility for the permittee, shall certify that the sewage sludge underwent at least the minimum operational requirements necessary in order to meet one of the PSRP. The acceptable processes and the minimum operational and record keeping requirements shall be in accordance with established U.S. Environmental Protection Agency final guidance;

iv. All certification records and operational records describing how the requirements of this paragraph were met shall be kept by the generator for a minimum of three years and be available for inspection by commission staff for review; and

v. If the sewage sludge is generated from a mixture of sources, resulting from a person who prepares sewage sludge from more than one wastewater treatment facility, the resulting derived product shall meet one of the PSRP, and shall meet the certification, operation, and record keeping requirements of this paragraph.

Alternative 3 - Sewage sludge shall be treated in an equivalent process that has been approved by the U.S. Environmental Protection Agency, so long as all of the following requirements are met by the generator of the sewage sludge.

i. Prior to use or disposal, all the sewage sludge must have been generated from a

single location, except as provided in paragraph v. below;

ii. Prior to any off-site transportation or on-site use or disposal of any sewage sludge generated at a wastewater treatment facility, the chief certified operator of the wastewater treatment facility or other responsible official who manages the processes to significantly reduce pathogens at the wastewater treatment facility for the permittee, shall certify that the sewage sludge underwent at least the minimum operational requirements necessary in order to meet one of the PSRP. The acceptable processes and the minimum operational and record keeping requirements shall be in accordance with established U.S. Environmental Protection Agency final guidance;

iii. All certification records and operational records describing how the requirements of this paragraph were met shall be kept by the generator for a minimum of three years and be available for inspection by commission staff for review;

iv. The Executive Director will accept from the U.S. Environmental Protection Agency a finding of equivalency to the defined PSRP; and

v. If the sewage sludge is generated from a mixture of sources resulting from a person who prepares sewage sludge from more than one wastewater treatment facility, the resulting derived product shall meet one of the Processes to Significantly Reduce Pathogens, and shall meet the certification, operation, and record keeping requirements of this paragraph.

In addition to the Alternatives 1 – 3, the following site restrictions must be met if Class B biosolids are land applied:

i. Food crops with harvested parts that touch the biosolids/soil mixture and are totally above the land surface shall not be harvested for 14 months after application of biosolids.

ii. Food crops with harvested parts below the surface of the land shall not be harvested for 20 months after application of biosolids when the biosolids remain on the land surface for 4 months or longer prior to incorporation into the soil.

iii. Food crops with harvested parts below the surface of the land shall not be harvested for 38 months after application of biosolids when the biosolids remain on the land surface for less than 4 months prior to incorporation into the soil.

iv. Food crops, feed crops, and fiber crops shall not be harvested for 30 days after application of biosolids.

v. Domestic livestock shall not be allowed to graze on the land for 30 days after application of biosolids.

vi. Turf grown on land where biosolids are applied shall not be harvested for 1 year after application of the biosolids when the harvested turf is placed on either land with a high potential for public exposure or a lawn.

vii. Public access to land with a high potential for public exposure shall be restricted for 1 year after application of biosolids.

viii. Public access to land with a low potential for public exposure shall be restricted for 30 days after application of biosolids.

ix. Land application of biosolids shall be in accordance with the buffer zone requirements found in 30 TAC § 312.44.

4. Vector Attraction Reduction Requirements

All bulk sewage sludge that is applied to agricultural land, forest, a public contact site, or a reclamation site shall be treated by one of the following Alternatives 1 through 10 for vector attraction reduction.

Alternative 1 - The mass of volatile solids in the sewage sludge shall be reduced by a minimum of 38%.

Alternative 2 - If Alternative 1 cannot be met for an anaerobically digested sludge, demonstration can be made by digesting a portion of the previously digested sludge anaerobically in the laboratory in a bench-scale unit for 40 additional days at a temperature between 30° and 37° Celsius. Volatile solids must be reduced by less than 17% to demonstrate compliance.

Alternative 3 - If Alternative 1 cannot be met for an aerobically digested sludge, demonstration can be made by digesting a portion of the previously digested sludge with percent solids of two percent or less aerobically in the laboratory in a bench-scale unit for 30 additional days at 20° Celsius. Volatile solids must be reduced by less than 15% to demonstrate compliance.

Alternative 4 - The specific oxygen uptake rate (SOUR) for sewage sludge treated in an aerobic process shall be equal to or less than 1.5 milligrams of oxygen per hour per gram of total solids (dry weight basis) at a temperature of 20° Celsius.

Alternative 5 - Sewage sludge shall be treated in an aerobic process for 14 days or longer. During that time, the temperature of the sewage sludge shall be higher than 40° Celsius and the average temperature of the sewage sludge shall be higher than 45° Celsius.

Alternative 6 - The pH of sewage sludge shall be raised to 12 or higher by alkali addition and, without the addition of more alkali shall remain at 12 or higher for two hours and then remain at a pH of 11.5 or higher for an additional 22 hours at the time the sewage sludge is prepared for sale or given away in a bag or other container.

Alternative 7 - The percent solids of sewage sludge that does not contain unstabilized solids generated in a primary wastewater treatment process shall be equal to or greater than 75% based on the moisture content and total solids prior to mixing with other materials. Unstabilized solids are defined as organic materials in sewage sludge that have not been treated in either an aerobic or anaerobic treatment process.

Alternative 8 - The percent solids of sewage sludge that contains unstabilized solids generated in a primary wastewater treatment process shall be equal to or greater than 90% based on the moisture content and total solids prior to mixing with other materials at the time the sludge is used. Unstabilized solids are defined as organic materials in sewage sludge that have not been treated in either an aerobic or anaerobic treatment process.

Alternative 9 -

i. Biosolids shall be injected below the surface of the land.

ii. No significant amount of the biosolids shall be present on the land surface within one hour after the biosolids are injected.

iii. When sewage sludge that is injected below the surface of the land is Class A or Class AB with respect to pathogens, the biosolids shall be injected below the land surface within eight hours after being discharged from the pathogen treatment process.

Alternative 10-

i. Biosolids applied to the land surface or placed on a surface disposal site shall be incorporated into the soil within six hours after application to or placement on the land.

ii. When biosolids that 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.

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 report annually to the TCEQ Regional Office (MC Region 12) and the Enforcement Division (MC 224), by September 30th of each year the following information.

The permittee must submit this annual report using the online electronic reporting system available through the TCEQ website unless the permittee requests and obtains an electronic reporting waiver.

1. Identify in the following categories (as applicable) the sewage sludge or biosolids treatment process or processes at the facility: preliminary operations (e.g., sludge or biosolids grinding and degritting), thickening (concentration), stabilization, anaerobic digestion, aerobic digestion, composting, conditioning, disinfection (e.g., beta ray irradiation, gamma ray irradiation, pasteurization), dewatering (e.g., centrifugation, sludge drying beds, sludge lagoons), heat drying, thermal reduction, and methane or biogas capture and recovery.

2. Identify the nature of material generated by the facility (such as a biosolid for beneficial use or land-farming, or sewage sludge for disposal at a monofill) and whether the material is ultimately conveyed off-site in bulk or in bags.

3. Results of tests performed for pollutants found in either Table 2 or 3 as appropriate for the permittee's land application practices.

4. The frequency of monitoring listed in Section I.C. that applies to the permittee.

5. Toxicity Characteristic Leaching Procedure (TCLP) results.

6. PCB concentration in sludge or biosolids in mg/kg.

7. Identity of hauler(s) and TCEQ transporter number.

8. Date(s) of transport.

9. Texas Commission on Environmental Quality registration number, if applicable.

10. Amount of sludge or biosolids disposal dry weight (lbs/acre) at each disposal site.

11. The concentration (mg/kg) in the sludge of each pollutant listed in Table 1 (defined as a monthly average) as well as the applicable pollutant concentration criteria (mg/kg) listed in Table 3 above, or the applicable pollutant loading rate limit (lbs/acre) listed in Table 2 above if it exceeds 90% of the limit.

12. Level of pathogen reduction achieved (Class A, Class AB or Class B).

13. Alternative used as listed in Section I.B.3.(a. or b.). Alternatives describe how the pathogen reduction requirements are met. If Class B biosolids, include information on how site restrictions were met.

14. Identify each of the analytic methods used by the facility to analyze enteric viruses, fecal coliforms, helminth ova, *Salmonella* sp., and other regulated parameters.

15. Vector attraction reduction alternative used as listed in Section I.B.4.

16. Amount of sludge or biosolids transported in dry tons/year.

17. The certification statement listed in either 30 TAC § 312.47(a)(4)(A)(ii) or 30 TAC § 312.47(a)(5)(A)(ii) as applicable to the permittee's sludge or biosolids treatment activities, shall be attached to the annual reporting form.

18. When the amount of any pollutant applied to the land exceeds 90% of the cumulative pollutant loading rate for that pollutant, as described in Table 2, the permittee shall report the following information as an attachment to the annual reporting form.

    a. The location, by street address, and specific latitude and longitude.

    b. The number of acres in each site on which bulk biosolids are applied.

    c. The date and time bulk biosolids are applied to each site.

    d. The cumulative amount of each pollutant (i.e., pounds/acre) listed in Table 2 in the bulk biosolids applied to each site.

    e. The amount of biosolids (i.e., dry tons) applied to each site.

    The above records shall be maintained on a monthly basis and shall be made available to the Texas Commission on Environmental Quality upon request.

SECTION III. REQUIREMENTS APPLYING TO ALL SEWAGE SLUDGE OR BIOSOLIDS DISPOSED IN A MUNICIPAL SOLID WASTE LANDFILL

A. The permittee shall handle and dispose of sewage sludge or biosolids in accordance with 30 TAC § 330 and all other applicable state and federal regulations to protect public health and the environment from any reasonably anticipated adverse effects due to any toxic pollutants that may be present. The permittee shall ensure that the sewage sludge 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.

D. 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 12) of the appropriate TCEQ field office within 7 days after failing the TCLP Test.

   The report shall contain test results, certification that unauthorized waste management has stopped, and a summary of alternative disposal plans that comply with RCRA standards for the management of hazardous waste. The report shall be addressed to: Director, Permitting and Registration Support Division (MC 129), Texas Commission on Environmental Quality, P. O. Box 13087, Austin, Texas 78711-3087. In addition, the permittee shall prepare an annual report on the results of all sludge toxicity testing. This annual report shall be submitted to the TCEQ Regional Office (MC Region 12MC Region 10) and the Enforcement Division (MC 224), by September 30 of each year.

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

F. 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.

G. Reporting Requirements

The permittee shall report annually to the TCEQ Regional Office (MC Region 12) and the Enforcement Division (MC 224), by September 30th of each year the following information. The permittee must submit this annual report using the online electronic reporting system available through the TCEQ website unless the permittee requests and obtains an electronic reporting waiver.

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 report the following information annually to the TCEQ Regional Office (MC Region 12) and the Enforcement Division (MC 224), by September 30th of each year. The permittee must submit this annual report using the online electronic reporting system available through the TCEQ website unless the permittee requests and obtains an electronic reporting waiver.

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.

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 Executive Director has reviewed this action for consistency with the goals and policies of the Texas Coastal Management Program (CMP) in accordance with the regulations of the General Land Office (GLO) and has determined that the action is consistent with the applicable CMP goals and policies.

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 make provisions in the design of these facilities for the addition of effluent filters if future studies of the Houston Ship Channel show filtration to be necessary as an additional waste treatment process.

5. Reporting and monitoring requirements pursuant to 30 TAC §§ 319.1-319.11 for Total Kjeldahl Nitrogen (TKN) are suspended from the effective date of this permit. The Executive Director may request resumption of reporting and monitoring requirements within forty-five (45) days of written notice to the permittee.

6. 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). Issuance of this permit continues the variance authorized in the previous permit issued July 30, 1993. That authorization provides the permittee a variance to the buffer zone in accordance with the prior buffer zone rule 30 TAC Section 309.13(e)(1)(a). Permittee shall provide equipment to mitigate noise and odors associated with the existing and proposed treatment units. See Attachment A.

7. In accordance with 30 TAC § 319.9, a permittee that has at least twelve months of uninterrupted compliance with its bacteria limit may notify the commission in writing of its compliance and request a less frequent measurement schedule. To request a less frequent schedule, the permittee shall submit a written request to the TCEQ Domestic Wastewater Section (MC 148) for each phase that includes a different monitoring frequency. The request must contain all of the reported bacteria values (Daily Avg. and Daily Max/Single Grab) for the twelve consecutive months immediately prior to the request. If the Executive Director finds that a less frequent measurement schedule is protective of human health and the environment, the permittee may be given a less frequent measurement schedule. For this

permit, one/week may be reduced to two/month. **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 permittee shall operate an industrial pretreatment program in accordance with Sections 402(b)(8) and (9) of the Clean Water Act, the General Pretreatment Regulations (40 CFR Part 403), and the approved **City of South Houston** publicly owned treatment works (POTW) pretreatment program submitted by the permittee. The pretreatment program was approved on **October 21, 1998,** and modified on **July 23, 2007,** and on **May 14, 2020** (nonsubstantial Streamlining Rule).

   The POTW pretreatment program is hereby incorporated by reference and shall be implemented in a manner consistent with the following requirements:

   a. Industrial user (IU) information shall be kept current according to 40 CFR §§ 403.8(f)(2)(i) and (ii) and updated at a frequency set forth in the approved pretreatment program to reflect the accurate characterization of all IUs.

   b. The frequency and nature of IU compliance monitoring activities by the permittee shall be consistent with the approved POTW pretreatment program and commensurate with the character, consistency, and volume of waste. The permittee is required to inspect and sample the effluent from each significant industrial user (SIU) at least once per year, except as specified in 40 CFR § 403.8(f)(2)(v). This is in addition to any industrial self-monitoring activities.

   c. The permittee shall enforce and obtain remedies for IU noncompliance with applicable pretreatment standards and requirements and the approved POTW pretreatment program.

   d. The permittee shall control through permit, order, or similar means, the contribution to the POTW by each IU to ensure compliance with applicable pretreatment standards and requirements and the approved POTW pretreatment program. In the case of SIUs (identified as significant under 40 CFR § 403.3(v)), this control shall be achieved through individual permits or general control mechanisms, in accordance with 40 CFR § 403.8(f)(1)(iii).

      Both individual and general control mechanisms must be enforceable and contain, at a minimum, the following conditions:

      (1) Statement of duration (in no case more than five years);
      (2) Statement of non-transferability without, at a minimum, prior notification to the POTW and provision of a copy of the existing control mechanism to the new owner or operator;
      (3) Effluent limits, which may include enforceable best management practices (BMPs), based on applicable general pretreatment standards, categorical pretreatment standards, local limits, and State and local law;
      (4) Self-monitoring, sampling, reporting, notification and record keeping requirements, identification of the pollutants to be monitored (including, if applicable, the process for seeking a waiver for a pollutant neither present nor expected to be present in the IU's discharge in accordance with 40 CFR § 403.12(e)(2), or a specific waived pollutant in the case of an individual control mechanism), sampling location, sampling frequency, and sample type, based on the applicable general pretreatment standards in 40 CFR Part 403, categorical pretreatment standards, local limits, and State and local law;

(5) Statement of applicable civil and criminal penalties for violation of pretreatment standards and requirements, and any applicable compliance schedule. Such schedules may not extend the compliance date beyond federal deadlines; and

(6) Requirements to control slug discharges, if determined by the POTW to be necessary.

e. For those IUs who are covered by a general control mechanism, in order to implement 40 CFR § 403.8(f)(1)(iii)(A)(2), a monitoring waiver for a pollutant neither present nor expected to be present in the IU's discharge is not effective in the general control mechanism until after the POTW has provided written notice to the SIU that such a waiver request has been granted in accordance with 40 CFR § 403.12(e)(2).

f. The permittee shall evaluate whether each SIU needs a plan or other action to control slug discharges, in accordance with 40 CFR §403.8(f)(2)(vi). If the POTW decides that a slug control plan is needed, the plan shall contain at least the minimum elements required in 40 CFR § 403.8(f)(2)(vi).

g. The permittee shall provide adequate staff, equipment, and support capabilities to carry out all elements of the pretreatment program.

h. The approved program shall not be modified by the permittee without the prior approval of the Executive Director, according to 40 CFR § 403.18.

2. The permittee is under a continuing duty to establish and enforce specific local limits to implement the provisions of 40 CFR §403.5, develop and enforce local limits as necessary, and modify the approved pretreatment program as necessary to comply with federal, state, and local law, as amended. The permittee may develop BMPs to implement 40 CFR §403.5(c)(1) and (2). Such BMPs shall be considered local limits and pretreatment standards. The permittee is required to effectively enforce such limits and to modify its pretreatment program, including the Legal Authority, Enforcement Response Plan, and Standard Operating Procedures (including forms), if required by the Executive Director to reflect changing conditions at the POTW. Substantial modifications will be approved in accordance with 40 CFR §403.18, and modifications will become effective upon approval by the Executive Director in accordance with 40 CFR § 403.18.

   The permittee shall submit to the TCEQ Pretreatment Team (MC 148) of the Water Quality Division, within **sixty (60) days** of the issued date of this permit, either:

   1) a written certification that a technical reassessment has been performed, and that the evaluation demonstrates that existing technically based local limits (TBLLs) attain the Texas Surface Water Quality Standards [30 TAC Chapter 307] in water in the state, and are adequate to prevent pass through of pollutants, inhibition of or interference with the treatment facility, worker health and safety problems, and sludge contamination [submit the Reassessment Form No. TCEQ-20221]; **or**

   2) a written notification that a technical redevelopment of the current TBLLs, draft legal authority which incorporates such revisions, and any additional modifications to the pretreatment program, as required by 40 CFR Part 403 *[rev. 10/14/05]*, and applicable state and local law, including an Enforcement Response Plan and Standard Operating Procedures (including forms), will be submitted within **twelve**

(12) months of the issued date of this permit. The POTW is required to evaluate any enforceable BMP loadings during the redevelopment of the current TBLLs. The technical redevelopment of the current TBLLs should be developed in accordance with EPA's *Local Limits Development Guidance*, July 2004, and EPA Region 6's Technically Based Local Limits Development Guidance, October 12, 1993. This submission shall be signed and certified by the permittee *[according to 40 CFR §122.41(k)]*.

3. The permittee shall analyze the treatment facility influent and effluent for the presence of the toxic pollutants listed in the Texas Surface Water Quality Standards [30 TAC Chapter 307], and 40 CFR Part 122, Appendix D, Table II at least **once per year** and the toxic pollutants listed in 40 CFR Part 122, Appendix D, Table III at least **once per six months**. If, based upon information available to the permittee, there is reason to suspect the presence of any toxic or hazardous pollutant listed in 40 CFR Part 122, Appendix D, Table V, or any other pollutant, known or suspected to adversely affect treatment plant operation, receiving water quality, or solids disposal procedures, analysis for those pollutants shall be performed at least **once per six months** on both the influent and the effluent.

   The influent and effluent samples collected shall be composite samples consisting of at least 12 aliquots collected at approximately equal intervals over a representative 24-hour period and composited according to flow. Sampling and analytical procedures shall be in accordance with guidelines established in 40 CFR Part 136, as amended; as approved by the EPA through the application for alternate test procedures; or as suggested in Tables E-1 and E-2 of the *Procedures to Implement the Texas Surface Water Quality Standards* (RG-194), June 2010, as amended and adopted by the TCEQ. The effluent samples shall be analyzed to the minimum analytical level (MAL), if necessary, to determine compliance with the daily average water quality based effluent concentration from the TCEQ's Texas Toxicity Modeling Program (TEXTOX) and other applicable water quality discharge standards. Where composite samples are inappropriate due to sampling, holding time, or analytical constraints, at least four (4) grab samples shall be taken at equal intervals over a representative 24-hour period.

4. The permittee shall prepare annually a list of IUs, which during the preceding twelve (12) months were in significant noncompliance (SNC) with applicable pretreatment requirements. For the purposes of this section of the permit, "CONTRIBUTING INDUSTRIES AND PRETREATMENT REQUIREMENTS," SNC shall be determined based upon the more stringent of either criteria established at 40 CFR §403.8(f)(2)(viii) *[rev. 10/14/05]* or criteria established in the approved POTW pretreatment program. This list is to be published annually during the month of **November** in a newspaper of general circulation that provides meaningful public notice within the jurisdiction(s) served by the POTW.

   In addition, each **November** the permittee shall submit an updated pretreatment program annual status report, in accordance with 40 CFR §§403.12(i) [*rev. 10/22/15*] and (m), to the TCEQ Pretreatment Team (MC148) of the Water Quality Division. The report summary shall be submitted on the Pretreatment Performance Summary (PPS) form [TCEQ-20218]. The report shall contain the following information as well as the information on the tables in this section:

   a. An updated list of all regulated IUs as indicated in this section. For each listed IU, the following information shall be included:

(1) Standard Industrial Classification (SIC) or North American Industry Classification System (NAICS) code *and* categorical determination.

(2) If the pretreatment program has been modified and approved to incorporate reduced monitoring for any of the categorical IUs as provided by 40 CFR Part 403 [*rev. 10/14/05*], then the list must also identify:

- categorical IUs subject to the conditions for reduced monitoring and reporting requirements under 40 CFR § 403.12(e)(1) [*rev. 10/22/15*] and (3);
- those IUs that are non-significant categorical industrial users (NSCIUs) under 40 CFR § 403.3(v)(2); and
- those IUs that are middle tier categorical industrial users (MTCIUs) under 40 CFR § 403.12(e)(3).

(3) Control mechanism status.

- Indicate whether the IU has an effective individual or general control mechanism, and the date such control mechanism was last issued, reissued, or modified;
- Indicate which IUs were added to the system, or newly identified, during the pretreatment year reporting period;
- Include the type of general control mechanisms; and
- Report all NSCIU annual evaluations performed, as applicable.

(4) A summary of all compliance monitoring activities performed by the POTW during the pretreatment year reporting period. The following information shall be reported:

- Total number of inspections performed; and
- Total number of sampling events conducted.

(5) Status of IU compliance with effluent limitations, reporting, and narrative standard (which may include enforceable BMPs, narrative limits, and/or operational standards) requirements. Compliance status shall be defined as follows:

- Compliant (C) - no violations during the pretreatment year reporting period;
- Non-compliant (NC) - one or more violations during the pretreatment year reporting period but does not meet the criteria for SNC; and
- Significant Noncompliance (SNC) - in accordance with requirements described above in this section.

(6) For noncompliant IUs, indicate the nature of the violations, the type and number of actions taken (notice of violation, administrative order, criminal or civil suit, fines or penalties collected, etc.), and the current compliance status. If any IU was on a schedule to attain compliance with effluent limits or narrative standards, indicate the date the schedule was issued and the date compliance is to be attained.

b. A list of each IU whose authorization to discharge was terminated or revoked during the pretreatment year reporting period and the reason for termination.

c. A report on any interference, pass through, Act of God, or POTW permit violations known or suspected to be caused by IUs and response actions taken by the permittee.

d. The results of all influent and effluent analyses performed pursuant to Item 3 of this section.

e. An original newspaper public notice, or copy of the newspaper publication with official affidavit, of the list of IUs that meet the criteria of SNC, giving the name of the newspaper and date the list was published.

f. The daily average water quality based effluent concentrations (from the TCEQ's Texas Toxicity Modeling Program (TexTox)) necessary to attain the Texas Surface Water Quality Standards, 30 TAC Chapter 307, in water in the state.

g. The maximum allowable headworks loading (MAHL) in pounds per day (lb/day) of the approved TBLLs or for each pollutant of concern (POC) for which the permittee has calculated a MAHL. In addition, the influent loading as a percent of the MAHL, using the annual average flow of the wastewater treatment plant in million gallons per day (MGD) during the pretreatment year reporting period, for each pollutant that has an adopted TBLL or for each POC for which the permittee has calculated a MAHL. (*See Endnotes No. 2 at the end of this section for the influent loading as a percent of the MAHL equation.*)

h. The permittee may submit the updated pretreatment program annual status report information in tabular form using the example table format provided. Please attach, on a separate sheet, explanations to document the various pretreatment activities, including IU permits that have expired, BMP violations, and any sampling events that were not conducted by the permittee as required.

i. A summary of changes to the POTW's approved pretreatment program that have not been previously reported to the Approval Authority.

Effective December 21, 2025, the permittee must submit the updated pretreatment program annual status report required by this section electronically using the online electronic reporting system available through the TCEQ website unless the permittee requests and obtains an electronic reporting waiver. *[rev. Federal Register/ Vol. 80/ No. 204/ Friday, October 22, 2015/ Rules and Regulations, pages 64064-64158].*

5. The permittee shall provide adequate written notification to the Executive Director, care of the Domestic Wastewater Section (MC 148) of the Water Quality Division, within 30 days of

the permittee's knowledge of the following:

a. Any new introduction of pollutants into the treatment works from an indirect discharger that would be subject to Sections 301 and 306 of the Clean Water Act, if the indirect discharger was 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.

Adequate 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 March 2022

TPDES Pretreatment Program Annual Report Form for Updated Industrial Users List

Reporting month/year: _____, _____ to _____, _____

TPDES Permit No.: _____ Permittee:_____ Treatment Plant: _____

PRETREATMENT PROGRAM STATUS REPORT UPDATED INDUSTRIAL USERS[1] LIST																
Industrial User Name	SIC or NAICS Code	CIU[2]	CONTROL MECHANISM				New User[3] (Y or N)	Times Inspected by the CA	Times Sampled by the CA	COMPLIANCE STATUS During the Pretreatment Year Reporting Period[4] (C = Compliant, NC = Noncompliant, SNC= Significant Noncompliance)						
			Y/N or NR[5]	IND or GEN or NR	Last Action[6]	TBLLs or TBLLs only[7]				REPORTS				NSCIU Certifications	Effluent Limits	Narrative Standards
										BMR	90-Day	Semi-Annual	Self-Monitoring[8]			

1 Include all significant industrial users (SIUs), non-significant categorical industrial users (NSCIUs) as defined in 40 CFR §403.3(v)(2), and/or middle tier categorical industrial users (MTCIUs) as defined in 40 CFR §403.12(e)(3). Please do not include non-significant noncategorical IUs that are covered under best management practices (BMPs) or general control mechanisms.

2 Categorical determination (include 40 CFR citation and NSCIU or MTCIU status, if applicable).

3 Indicate whether the IU is a new user. If the answer is No or N, then indicate the expiration date of the last issued IU permit.

4 The term SNC applies to a broader range of violations, such as daily maximum, long-term average, instantaneous limits, and narrative standards (which may include enforceable BMPs, narrative limits and/or operational standards). Any other violation, or group of violations, which the POTW determines will adversely affect the operation or implementation of the local Pretreatment Program now includes BMP violations (40 CFR § 403.8(f)(2)(viii)(H)).

5 Code NR= None required (NSCIUs only); IND = individual control mechanism; GEN = general control mechanism. Include as a footnote (or on a separate page) the name of the general control mechanism used for similar groups of IUs, identify the similar types of operations and types of wastes that are the same for each general control mechanism. Any BMPs through general control mechanisms that are applied to nonsignificant IUs need to be reported separately, *e.g*. the sector type and BMP description.

6 Permit or NSCIU evaluations as applicable.

7 According to 40 CFR § 403.12(i)(1), indicate whether the IU is subject to technically based local limits (TBLLs) that are more stringent than categorical pretreatment standards, *e.g*. where there is one end-of-pipe sampling point at a CIU, and you have determined that the TBLLs are more stringent than the categorical pretreatment standards for any pollutant at the end-of-pipe sampling point; **OR** the IU is subject only to local limits (TBLLs only), *e.g*. the IU is a non-categorical SIU subject only to TBLLs at the end-of-pipe sampling point.

8 For those IUs where a monitoring waiver has been granted, please add the code "W" (after either C, NC, or SNC codes) and indicate the pollutant(s) for which the waiver has been granted.

TPDES Pretreatment Program Annual Report Form for Industrial User Inventory Modifications

Reporting month/year: _____, _____ to _____, _____

TPDES Permit No: _____ Permittee: _____ Treatment Plant: _____

INDUSTRIAL USER INVENTORY MODIFICATIONS					
FACILITY NAME, ADDRESS AND CONTACT PERSON	ADD, CHANGE, DELETE (Including categorical reclassification to NSCIU or MTCIU)	IF DELETION: Reason For Deletion	IF ADDITION OR SIGNIFICANT CHANGE:		
			PROCESS DESCRIPTION	POLLUTANTS (Including any sampling waiver given for each pollutant not present)	FLOW RATE [9] (In gpd) R = Regulated U = Unregulated T = Total

9 For NSCIUs, total flow must be given, if regulated flow is not determined.

TPDES Pretreatment Program Annual Report Form for Enforcement Actions Taken

Reporting month/year: _____, _____ to _____, _____

TPDES Permit No: _____Permittee:_____Treatment Plant: _____

Overall SNC ___% SNC [10] based on: Effluent Violations_____%
Reporting Violations_____% Narrative Standard Violations___%

Noncompliant Industrial Users - Enforcement Actions Taken															
Industrial User Name	Nature of Violation [11]				Number of Actions Taken					Penalties Collected (Do not Include Surcharge)	Compliance Schedule			Current Status Returned to Compliance: (Y or N)	Comments
	Effluent Limits	Reports	NSCIU Certifications	Narrative Standards	NOV	A.O.	Civil	Criminal	Other		Y or N	Date Issued	Date Due		

10 # %
__ __ Pretreatment Standards [WENDB-PSNC] (Local Limits/Categorical Standards)
__ __ Reporting Requirements [WENDB-PSNC]
__ __ Narrative Standards

11 Please specify a separate number for each type of violation, *e.g.* report, notification, and/or NSCIU certification.

TPDES Pretreatment Program Annual Report Form for Influent and Effluent Monitoring Results[1]

Reporting month/year: _____, _____ to _____, _____

TPDES Permit No.: _____ Permittee:_____Treatment Plant: _____

PRETREATMENT PROGRAM INFLUENT AND EFFLUENT MONITORING RESULTS												
POLLUTANT	MAHL, if Applicable in lb/day	Influent Measured in µg/L (Actual Concentration or < MAL)				Average Influent % of the MAHL[2]	Daily Average Effluent Limit (µg/L) [3]	Effluent Measured in µg/L (Actual Concentration or < MAL) [4]			
		Date	Date	Date	Date			Date	Date	Date	Date
METALS, CYANIDE AND PHENOLS												
Antimony, Total												
Arsenic, Total												
Beryllium, Total												
Cadmium, Total												
Chromium, Total												
Chromium (Hex)												
Chromium (Tri)[5]												
Copper, Total												
Lead, Total												
Mercury, Total												
Nickel, Total												
Selenium, Total												
Silver, Total												
Thallium, Total												
Zinc, Total												

PRETREATMENT PROGRAM INFLUENT AND EFFLUENT MONITORING RESULTS											
POLLUTANT	MAHL, if Applicable in lb/day	Influent Measured in µg/L (Actual Concentration or < MAL)				Average Influent % of the MAHL[2]	Daily Average Effluent Limit (µg/L) [3]	Effluent Measured in µg/L (Actual Concentration or < MAL) [4]			
		Date	Date	Date	Date			Date	Date	Date	Date
Cyanide, Available [6]											
Cyanide, Total											
Phenols, Total											
VOLATILE COMPOUNDS											
Acrolein											
Acrylonitrile											
Benzene											
Bromoform							See TTHM				
Carbon Tetrachloride											
Chlorobenzene											
Chlorodibromomethane							See TTHM				
Chloroethane											
2-Chloroethylvinyl Ether											
Chloroform							See TTHM				
Dichlorobromomethane							See TTHM				
1,1-Dichloroethane											
1,2-Dichloroethane											
1,1-Dichloroethylene											
1,2-Dichloropropane											

PRETREATMENT PROGRAM INFLUENT AND EFFLUENT MONITORING RESULTS											
POLLUTANT	MAHL, if Applicable in lb/day	Influent Measured in µg/L (Actual Concentration or < MAL)				Average Influent % of the MAHL[2]	Daily Average Effluent Limit (µg/L) [3]	Effluent Measured in µg/L (Actual Concentration or < MAL) [4]			
		Date	Date	Date	Date			Date	Date	Date	Date
1,3-Dichloropropylene											
Ethyl benzene											
Methyl Bromide											
Methyl Chloride											
Methylene Chloride											
1,1,2,2-Tetra-chloroethane											
Tetrachloroethylene											
Toluene											
1,2-Trans-Dichloroethylene											
1,1,1-Trichloroethane											
1,1,2-Trichloroethane											
Trichloroethylene											
Vinyl Chloride											
ACID COMPOUNDS											
2-Chlorophenol											
2,4-Dichlorophenol											
2,4-Dimethylphenol											
4,6-Dinitro-o-Cresol											
2,4-Dinitrophenol											
2-Nitrophenol											

PRETREATMENT PROGRAM INFLUENT AND EFFLUENT MONITORING RESULTS											
POLLUTANT	MAHL, if Applicable in lb/day	Influent Measured in µg/L (Actual Concentration or < MAL)				Average Influent % of the MAHL[2]	Daily Average Effluent Limit (µg/L) [3]	Effluent Measured in µg/L (Actual Concentration or < MAL) [4]			
		Date	Date	Date	Date			Date	Date	Date	Date
4-Nitrophenol											
P-Chloro-m-Cresol											
Pentachlorophenol											
Phenol											
2,4,6-Trichlorophenol											
BASE/NEUTRAL COMPOUNDS											
Acenaphthene											
Acenaphthylene											
Anthracene											
Benzidine											
Benzo(a)Anthracene											
Benzo(a)Pyrene											
3,4-Benzofluoranthene											
Benzo(ghi)Perylene											
Benzo(k)Fluoranthene											
Bis(2-Chloroethoxy)Methane											
Bis(2-Chloroethyl)Ether											
Bis(2-Chloroisopropyl)Ether											
Bis(2-Ethylhexyl)Phthalate											
4-Bromophenyl Phenyl Ether											

PRETREATMENT PROGRAM INFLUENT AND EFFLUENT MONITORING RESULTS											
POLLUTANT	MAHL, if Applicable in lb/day	Influent Measured in µg/L (Actual Concentration or < MAL)				Average Influent % of the MAHL[2]	Daily Average Effluent Limit (µg/L) [3]	Effluent Measured in µg/L (Actual Concentration or < MAL) [4]			
		Date	Date	Date	Date			Date	Date	Date	Date
Butylbenzyl Phthalate											
2-Chloronaphthalene											
4-Chlorophenyl Phenyl Ether											
Chrysene											
Dibenzo(a,h)Anthracene											
1,2-Dichlorobenzene											
1,3-Dichlorobenzene											
1,4-Dichlorobenzene											
3,3-Dichlorobenzidine											
Diethyl Phthalate											
Dimethyl Phthalate											
Di-n-Butyl Phthalate											
2,4-Dinitrotoluene											
2,6-Dinitrotoluene											
Di-n-Octyl Phthalate											
1,2-Diphenyl Hydrazine											
Fluoranthene											
Fluorene											
Hexachlorobenzene											
Hexachlorobutadiene											

PRETREATMENT PROGRAM INFLUENT AND EFFLUENT MONITORING RESULTS											
POLLUTANT	MAHL, if Applicable in lb/day	Influent Measured in µg/L (Actual Concentration or < MAL)				Average Influent % of the MAHL[2]	Daily Average Effluent Limit (µg/L) [3]	Effluent Measured in µg/L (Actual Concentration or < MAL) [4]			
		Date	Date	Date	Date			Date	Date	Date	Date
Hexachloro- cyclopentadiene											
Hexachloroethane											
Indeno(1,2,3-cd)pyrene											
Isophorone											
Naphthalene											
Nitrobenzene											
N-Nitrosodimethylamine											
N-Nitrosodi-n-Propylamine											
N-Nitrosodiphenylamine											
Phenanthrene											
Pyrene											
1,2,4-Trichlorobenzene											
PESTICIDES											
Aldrin											
Alpha-hexachlorocyclohexane (BHC)											
beta-BHC											
gamma-BHC (Lindane)											
delta-BHC											
Chlordane											

PRETREATMENT PROGRAM INFLUENT AND EFFLUENT MONITORING RESULTS											
POLLUTANT	MAHL, if Applicable in lb/day	Influent Measured in µg/L (Actual Concentration or < MAL)				Average Influent % of the MAHL[2]	Daily Average Effluent Limit (µg/L) [3]	Effluent Measured in µg/L (Actual Concentration or < MAL) [4]			
		Date	Date	Date	Date			Date	Date	Date	Date
4,4-DDT											
4,4-DDE											
4,4-DDD											
Dieldrin											
alpha-Endosulfan											
beta-Endosulfan											
Endosulfan Sulfate											
Endrin											
Endrin Aldehyde											
Heptachlor											
Heptachlor Epoxide											
Polychlorinated biphenols (PCBs) *The sum of PCB concentrations not to exceed daily average value.*											
PCB-1242							See PCBs				
PCB-1254							See PCBs				
PCB-1221							See PCBs				
PCB-1232							See PCBs				
PCB-1248							See PCBs				
PCB-1260							See PCBs				

PRETREATMENT PROGRAM INFLUENT AND EFFLUENT MONITORING RESULTS											
POLLUTANT	MAHL, if Applicable in lb/day	Influent Measured in µg/L (Actual Concentration or < MAL)				Average Influent % of the MAHL[2]	Daily Average Effluent Limit (µg/L) [3]	Effluent Measured in µg/L (Actual Concentration or < MAL) [4]			
		Date	Date	Date	Date			Date	Date	Date	Date
PCB-1016							See PCBs				
Toxaphene											
ADDITIONAL TOXIC POLLUTANTS REGULATED UNDER 30 TAC CHAPTER 307											
Aluminum											
Barium											
Bis(chloromethyl)ether [7]											
Carbaryl											
Chloropyrifos											
Cresols											
2,4-D											
Danitol [8]											
Demeton											
Diazinon											
Dicofol											
Dioxin/Furans [9]											
Diuron											
Epichlorohydrin [9]											
Ethylene glycol [9]											
Fluoride											
Guthion											

PRETREATMENT PROGRAM INFLUENT AND EFFLUENT MONITORING RESULTS												
POLLUTANT	MAHL, if Applicable in lb/day	Influent Measured in µg/L (Actual Concentration or < MAL)				Average Influent % of the MAHL[2]	Daily Average Effluent Limit (µg/L) [3]	Effluent Measured in µg/L (Actual Concentration or < MAL) [4]			
		Date	Date	Date	Date			Date	Date	Date	Date
Hexachlorophene											
4,4-Isopropylidenediphenol (bisphenol A) [9]											
Malathion											
Methoxychlor											
Methyl Ethyl Ketone											
Methyl tert-butyl-ether (MTBE) [9]											
Mirex											
Nitrate-Nitrogen											
N-Nitrosodiethylamine											
N-Nitroso-di-n-Butylamine											
Nonylphenol											
Parathion											
Pentachlorobenzene											
Pyridine											
1,2-Dibromoethane											
1,2,4,5-Tetrachlorobenzene											
2,4,5-TP (Silvex)											
Tributyltin [9]											
2,4,5-Trichlorophenol											
TTHM (Total											

PRETREATMENT PROGRAM INFLUENT AND EFFLUENT MONITORING RESULTS											
POLLUTANT	MAHL, if Applicable in lb/day	Influent Measured in µg/L (Actual Concentration or < MAL)				Average Influent % of the MAHL[2]	Daily Average Effluent Limit (µg/L) [3]	Effluent Measured in µg/L (Actual Concentration or < MAL) [4]			
		Date	Date	Date	Date			Date	Date	Date	Date
Trihalomethanes)											

Endnotes:

1. It is advised that the permittee collect the influent and effluent samples considering flow detention time through each wastewater treatment plant (WWTP).

2. The MAHL of the approved TBLLs or for each pollutant of concern (POC) for which the permittee has calculated a MAHL. Only complete the column labeled "Average Influent % of the MAHL," as a percentage, for pollutants that have approved TBLLs or for each POC for which the permittee has calculated a MAHL (U.S. Environmental Protection Agency *Local Limits Development Guidance*, July 2004, EPA933-R-04-002A).

   The % of the MAHL is to be calculated using the following formulas:

   Equation A: $L_{INF} = (C_{POLL} \times Q_{WWTP} \times 8.34) / 1000$

   Equation B: $L_{\%} = (L_{INF} / MAHL) \times 100$

   Where:

L_{INF} =	Current Average (Avg) influent loading in lb/day
C_{POLL} =	Avg concentration in µg/L of all influent samples collected during the pretreatment year.
Q_{WWTP} =	Annual average flow of the WWTP in MGD, defined as the arithmetic average of all daily flow determinations taken within the preceding 12 consecutive calendar months (or during the pretreatment year), and as described in the Definitions and Standard Permit Conditions section.
$L_{\%}$ =	% of the MAHL
MAHL =	Calculated MAHL in lb/day
8.34 =	Unit conversion factor

3. Daily average effluent limit (metal values are for total metals) as derived by the Texas Toxicity Modeling Program (TexTox). Effluent limits as calculated are designed to be protective of the Texas Surface Water Quality Standards. The permittee shall determine and indicate which effluent limit is the most stringent between the 30 TAC Chapter 319, Subchapter B (Hazardous Metals) limit, TexTox values, or any applicable limit in the Effluent Limitations and Monitoring Requirements Section of this TPDES permit. Shaded blocks need not be filled in unless the permittee has received a permit requirement/limit for the particular parameter.

4. Minimum analytical levels (MALs) and analytical methods as suggested in Tables E-1 and E-2 of the *Procedures to Implement the Texas Surface Water Quality Standards* (June 2010), as amended and adopted by the TCEQ. Pollutants that are not detectable above the MAL need to be reported as less than (<) the MAL numeric value.

5. Report result by subtracting Hexavalent Chromium from Total Chromium.

6. Either the method for Amenable to Chlorination or Weak-Acid Dissociable is authorized.

7. Hydrolyzes in water. Will not require permittee to analyze at this time.

8. EPA procedure not approved. Will not require permittee to analyze at this time.

9. Analyses are not required at this time for these pollutants unless there is reason to believe that these pollutants may be present.

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 29%, 39%, 52%, 69%, and 92% effluent. The critical dilution, defined as 69% 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 limit, a best management practice, or other appropriate actions to address toxicity to the fathead minnow. The permittee may be required to conduct a toxicity reduction evaluation (TRE) after multiple toxic events.

   e. Should a test fail (i.e., demonstrate significant toxicity), the testing frequency for the fathead minnow increases to monthly until three consecutive tests pass (i.e., do not demonstrate significant toxicity), at which time the testing frequency of once per quarter resumes. If three or more failures are demonstrated during the

permit term for the fathead minnow, a WET limit will be included for that species in the subsequently reissued permit. Any two lethal failures in a three-month period will require the permittee to initiate a TRE (see Part 4. Toxicity Reduction Evaluation).

f. The sublethal No Observed Effect Concentration (NOEC) effluent limitation of not less than 69% (see the EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS section) is effective on permit issue date, for the water flea.

g. If a water flea test fails to pass the sublethal endpoint at the 69% effluent concentration after the permit issue date, the testing frequency will increase to monthly until such time compliance with the NOEC effluent limitation is demonstrated for a period of three consecutive months, at which time the quarterly testing frequency may be resumed.

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."

e. The permittee shall report the lethal and sublethal WET values for the 30-day average and the 7-day minimum under Parameter No. 51710 for the appropriate reporting period for the water flea. If more than one valid test was performed during the reporting period, the NOECs will be averaged arithmetically and reported as the 30-day average. The 7-day minimum value submitted should reflect the lowest results during the reporting period.

4. Persistent Toxicity

The requirements of this part apply only to the fathead minnow 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%	29%	39%	52%	69%	92%
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 (69%): _____ YES _____ NO

PERCENT SURVIVAL

	Percent effluent					
Time of Reading	0%	29%	39%	52%	69%	92%
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 (69%): _____ 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

		Date Time		Date Time
Dates and Times Composites Collected	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%							
29%							
39%							
52%							
69%							
92%							
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 (69%): _____ 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%									
29%									
39%									
52%									
69%									
92%									

* 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 (69%): _____ 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. WQ0010287001, EPA I.D. No. TX0057304, 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 South Houston P.O. Box 238 South Houston, Texas 77587
Prepared By:	Sonia Bhuiya Domestic Permits Team Domestic Wastewater Section (MC 148) Water Quality Division (512) 239-1205
Date:	August 14, 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 **three 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 4.0 million gallons per day (MGD). The existing wastewater treatment facility serves the City of South Houston.

3. FACILITY AND DISCHARGE LOCATION

The plant site is located at 206 Michigan Street, in the City of South Houston, Harris County, Texas 77587.

Outfall Location:

Outfall Number	Latitude	Longitude
001	29.669875 N	95.234895 W

The treated effluent is discharged to Berry Bayou, thence to Sims Bayou, thence to the Houston Ship Channel/Buffalo Bayou Tidal in Segment No. 1007 of the San Jacinto River Basin. The unclassified receiving water use is limited aquatic life use for Berry Bayou. The designated uses for Segment No. 1007 are navigation and industrial water supply.

4. TREATMENT PROCESS DESCRIPTION AND SEWAGE SLUDGE DISPOSAL

The City of South Houston Wastewater Treatment Facility is an activated sludge process plant operated in the complete mix aeration mode. Treatment units include bar screens, grit chambers, two aeration basins, rapid mix zone, two final clarifiers, two chlorine contact chambers, a dechlorination chamber, a gravity thickener, an aerobic sludge digester and Wedge Water Filters. The facility is in operation.

Sludge generated from the treatment facility is hauled by a registered transporter and disposed of at a TCEQ-permitted landfill, BFI McCarty Road Landfill, Permit No. 261B, in Harris County. 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 City of South Houston WWTP receives significant industrial wastewater contributions.

6. SUMMARY OF SELF-REPORTED EFFLUENT ANALYSES

The following is a summary of the applicant's effluent monitoring data for the period June 2019 through June 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), ammonia nitrogen (NH_3-N), total Mercury, Total Kjeldahl Nitrogen (TKN). 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	1.97
$CBOD_5$, mg/l	2.9
TSS, mg/l	3.1
NH_3-N, mg/l	0.26

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 4.0 MGD, nor shall the average discharge during any two-hour period (2-hour peak) exceed 13,889 gallons per minute.

Parameter	30-Day Average		7-Day Average	Daily Maximum
	mg/l	lbs/day	mg/l	mg/l
$CBOD_5$	10	334	15	25

TSS	15	500	25	40
NH3-N	3.0	100	6	10
Total Kjeldahl Nitrogen (TKN)	Report	Report	N/A	Report
DO (minimum)				
E. coli, CFU or MPN per 100 ml	63	N/A	N/A	200
WET Limit				
Sublethal WET limit 69% (Parameter 51710)[2] *Ceriodaphnia dubia* (3-brood chronic NOEC[1])	69%	N/A	N/A	69%

1. The no observed effect concentration (NOEC is defined as the greatest effluent dilution at which no significant effect id demonstrated. A significant effect is defined as a statistically significant difference between a specified effluent dilution and the control for toxicity (lethal or sublet effects, whichever is specified).
2. The sublethal WET limit NOEC of not less than 69% is effective at the permit issue date

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 effluent shall contain a total chlorine residual of at least 1.0 mg/l after a detention time of at least 20 minutes (based on peak flow) and shall be monitored daily by grab sample. The permittee shall dechlorinate the chlorinated effluent to less than 0.1 mg/l total chlorine residual and shall monitor total chlorine residual daily by grab sample after the dechlorination process. An equivalent method of disinfection may be substituted only with prior approval of the Executive Director.

Parameter	Monitoring Requirement
Flow, MGD	Continuous
$CBOD_5$	Two/week
TSS	Two/week
NH_3-N	Two/week
TKN	Two/week
DO	Two/week
E. coli	One/week
Sublethal WET Limit	One/quarter

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 and disposed of at a TCEQ-permitted landfill, BFI McCarty Road Landfill, Permit No. 261B, in Harris County. 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 CFR Part 403, General Pretreatment Regulations for Existing and New Sources of Pollution *[rev. Federal Register/ Vol. 70/ No. 198/ Friday, October 14, 2005/ Rules and Regulations, pages 60134-60798].* The permit includes specific requirements that establish responsibilities of local government, industry, and the public to implement the standards to control pollutants which pass through or interfere with treatment processes in publicly owned treatment works or which may contaminate the sewage sludge. This permit has appropriate pretreatment language for a facility of this size and complexity.

The permittee has a pretreatment program which was approved by the U.S. Environmental Protection Agency (EPA) on October 21, 1998, and modified on July 23, 2007, and on May 14, 2020 (nonsubstantial Streamlining Rule). The permittee is required, under the conditions of the approved pretreatment program, to prepare annually a list of industrial users which during the preceding twelve months were in significant noncompliance with applicable pretreatment requirements for those facilities covered under the program. This list is to be published annually during the month of **November** in a newspaper of general circulation that provides meaningful public notice within the jurisdiction(s) served by POTW.

Effective December 21, 2025, the permittee must submit the pretreatment program annual status report electronically using the online electronic reporting system available through the TCEQ website unless the permittee requests and obtains an electronic reporting waiver. [rev. Federal Register/ Vol. 80/ No. 204/ Friday, October 22, 2015/ Rules and Regulations, pages 64064-64158].

The permittee is under a continuing duty to: establish and enforce specific local limits to implement the provisions of 40 CFR §403.5, to develop and enforce local limits as necessary, and to modify the approved POTW pretreatment program as necessary to comply with federal, state, and local law, as amended. The permittee is required to effectively enforce such limits and to modify their pretreatment program, including the Legal Authority, Enforcement Response Plan, and/or Standard Operating Procedures, if required by the Executive Director to reflect changing conditions at the POTW.

The permittee shall submit to the TCEQ Pretreatment Team (MC 148) of the Water Quality Division, within **sixty (60) days** of the issued date of this permit, either: (1) a **WRITTEN CERTIFICATION** that a technical reassessment has been performed and that the evaluation demonstrates that the existing technically based local limits (TBLLs) attain the Texas Surface Water Quality

Standards [30 TAC Chapter 307] in water in the state, and are adequate to prevent pass through of pollutants, inhibition of or interference with the treatment facility, worker health and safety problems, and sludge contamination [submit the TBLLs Reassessment Form No. TCEQ-20221], **OR** (2) a **WRITTEN NOTIFICATION** that a technical redevelopment of the current TBLLs, a draft legal authority, which incorporates such revisions, and any additional modifications to the approved Pretreatment Program, as required by 40 CFR Part 403 *[rev. 10/14/05]* and applicable state and local law, including an Enforcement Response Plan and Standard Operating Procedures (including forms), will be submitted within **twelve (12) months** of the issued date of the permit.

Substantial modifications will be approved in accordance with 40 CFR § 403.18, and the modification will become effective upon approval by the Executive Director in accordance with 40 CFR § 403.18.

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 29%, 39%, 52%, 69%, and 92%, The low-flow effluent concentration (critical dilution) is defined as 69% 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.

F. SUMMARY OF CHANGES FROM EXISTING PERMIT

The Standard Permit Conditions, Sludge Provisions, Other Requirements, and Biomonitoring sections of the draft permit have been updated.

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 draft permit includes all updates based on the 30 TAC § 312 rule change effective April 23, 2020.

Due to Settlement agreement (Other Requirement 8 on the existing Permit) The Total Mercury reporting requirements at Outfall 001 will expire at the expiration of this permit.

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 to Berry Bayou, thence to Sims Bayou, thence to the Houston Ship Channel/Buffalo Bayou Tidal in Segment No. 1007 of the San Jacinto River Basin. The unclassified receiving water use is limited aquatic life use for Berry Bayou. The designated uses for Segment No. 1007 are navigation and industrial water supply. 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. 1007 is currently listed on the State's inventory of impaired and threatened waters (the 2022 CWA § 303(d) list). The listings are for dioxin in edible tissue and Polychlorinated Biphenyls (PCBs) in edible tissue in Houston Ship Channel (HSC) from a point immediately upstream of Greens Bayou Tidal to immediately upstream of the 69th Street WWTP outfall [Assessment Unit (AU)] 1007_01), Sims Bayou Tidal from the HSC confluence to a point 11 km (6.8 mi) upstream (AU 1007_02), Hunting Bayou Tidal from the HSC confluence to Interstate Highway-10 (AU 1007_03), Brays Bayou Tidal from the HSC confluence to downstream of Interstate Highway-45 (AU 1007_04), Vince Bayou Tidal from the HSC confluence to State Highway 225 (AU 1007_05), Berry Bayou from the HSC confluence to a point 2.4 km (1.5 mi) upstream of the Sims Bayou confluence (AU1007_06), Buffalo Bayou from immediately upstream of 69th Street WWTP outfall to US 59 (AU 1007_07) and Little Vince Bayou Tidal from the Vince Bayou confluence to SH 225 (AU 1007_08). Segment No. 1007 is also listed for bacteria in water and toxicity in sediment in Vince Bayou Tidal from the HSC confluence to State Highway 225 (AU 1007_05).

This is a public domestic wastewater treatment facility. The facility does receive industrial wastewater contributions, therefore the effluent from this facility should not contribute to the dioxin PCBs in edible tissue, and toxicity impairment of this segment. This facility is designed to provide adequate disinfection and, when operated properly, should not add to the bacterial impairment of the segment. In addition, in order to ensure that the proposed discharge meets the stream bacterial standard, an effluent limitation of 63 colony-forming units (CFU) or most probable number (MPN) of *E. coli* per 100 ml has been added to the draft permit.

The pollutant analysis of treated effluent provided by the permittee in the application indicated 568 mg/l total dissolved solids (TDS), 38 mg/l sulfate, and 125 mg/l chloride present in the effluent. This discharge is into a freshwater body that flows into a saltwater segment. Therefore, data from a representative freshwater segment was used for screening the freshwater portion of the discharge route. **Segment No. 1102 values for pH, TSS, hardness, and chloride** were used for the evaluation of the immediate receiving waters. The segment criteria for Segment No. 1102 are 600 mg/l for TDS, 100 mg/l for sulfate, and 200 mg/l for chlorides. Based on dissolved solids screening, no additional limits or monitoring requirements are needed for total dissolved solids, chloride, or sulfate. See Attachment A of this Fact Sheet.

The Total Maximum Daily Loads (TMDL) project *Fourteen Total Maximum Daily Loads for Nickel in the Houston Ship Channel System* (TMDL Project No.1) has been withdrawn and is no longer applicable to the segment No. 1007.

TMDL Project 72A *Thirteen Total Maximum Daily Loads for Indicator Bacteria in Eastern Houston Watersheds* is available for this segment.

On September 15, 2010, TCEQ adopted TMDL Project No. 72D. The EPA approved the TMDL on September 27, 2010. TMDL addresses elevated levels of bacteria in multiple segments and assessment units of these bayous and their tributaries. The waste load allocation (WLA) for wastewater treatment facilities was established as the permitted flow for each facility multiplied by one-half the geometric mean criterion for bacteria. Future growth from existing or new permitted sources is not limited by these TMDLs as long as the sources do not exceed the limits of one-half the bacteria geometric mean criterion for *E. coli*. To ensure that effluent limitations for this discharge are consistent with the WLAs provided in the TMDL, a concentration based effluent limitation for *E. coli* of 63 CFU or MPN per 100 ml has been continued in the draft permit.

Monitoring and reporting of total Kjeldahl nitrogen (TKN) were an original requirement of WLE-1 (*Waste Load Evaluation for the Houston Ship Channel System in the San Jacinto River Basin*, 1984). WLE-1 has since been superseded by WLE-1R, and with deterministic modeling now used to set effluent limits for all dischargers, reporting of TKN was suspended.

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 limits recommended above have been reviewed for consistency with the State of Texas Water Quality Management Plan (WQMP). The recommended limits 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 Executive Director has reviewed this action for consistency with the goals and policies of the Texas Coastal Management Program (CMP) in

accordance with the regulations of the General Land Office (GLO) and has determined that the action is consistent with the applicable CMP goals and policies.

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* (IP) (June 2010) 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 Berry Bayou (above tidal). 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 Berry Bayou (above tidal).

Menu 3: Berry Bayou (above tidal)

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 4.0 MGD and the 7-day, 2-year (7Q2) flow of 2.75 cfs for Berry Bayou (above tidal). The estimated dilution at the edge of the ZID is calculated using the permitted flow of 4.0 MGD and 25% of the 7Q2 flow. The following critical effluent percentages are being used:

Acute Effluent %:	90%	Chronic Effluent %:	69.24%

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 90th 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 99th 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 1007 mg 352 mg/l for chlorides, 7.2 standard units for pH, and 7 mg/l for TSS. For additional details on the calculation of water quality-based effluent limitations, refer to the TCEQ guidance document.

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 1102 mg/l for hardness (as calcium carbonate), 110 mg/l for chlorides, 7.4 standard units for pH, and 14 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 are 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 4.0 MGD and the harmonic mean flow of 4.51 cfs for Berry Bayou (above tidal). The following critical effluent percentage is being used:

Human Health Effluent %: 57.85%

Water quality-based effluent limitations for the protection of human health are calculated using criteria for the consumption of marine fish tissue found in Table 2 of the Texas Surface Water Quality Standards (30 TAC Chapter 307). Marine fish tissue bioaccumulation criteria are applied at the edge of the human health mixing zone for discharges into bays, estuaries, and wide tidal rivers. The human health mixing zone for this discharge is defined as a 50-foot radius from the point where the discharge enters Berry Bayou. TCEQ uses the Environmental Protection Agency (EPA) horizontal jet plume model to estimate dilution at the edge of the human health mixing zone for both discharges greater than 10 MGD into a bay, estuary, or wide tidal river and discharges into sections of bays, estuaries, or wide tidal rivers that are less than 400 feet wide. General assumptions used in the horizontal jet plume model are a non-buoyant discharge, a submersed pipe, and no cross flow. Based on this analysis, the following critical effluent percentage is calculated based on the permitted flow of 4.0 MGD:

Human Health Effluent %: 17%

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 99th 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 and C 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. 1007, 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. A summary of the biomonitoring testing for the facility indicates that in the past three years, the permittee has performed twenty-eight chronic tests, with one demonstration of significant toxicity (i.e., one failure) by the fathead minnow and two demonstrations of significant toxicity (i.e., two failures) by the water flea.

A reasonable potential (RP) 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. The RP determination is based on representative data from the previous three years of chronic 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.

The sublethal WET limit for the water flea will be carried over from the current permit.

With one failure by the fathead minnow, a determination of no RP was made. Additional (sublethal) WET limits are not required. A three-year permit will be issued in accordance with the methodology referenced

above.

(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 twelve 24-hour acute tests, with zero demonstrations of significant lethality (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 Sonia Bhuiya at (512) 239-1205.

11. ADMINISTRATIVE RECORD

The following items were considered in developing the draft permit:

A. PERMIT(S)

TPDES Permit No. WQ0010287001 issued on March 11, 2020.

B. APPLICATION

Application received on July 20, 2024, and additional information received on August 2, 2024.

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 2022 Clean Water Act Section 303(d) List, Texas Commission on Environmental Quality, June 1, 2022; approved by the U.S. Environmental Protection Agency on July 7, 2022.

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.

Thirteen Total Maximum Daily Loads for Indicator Bacteria in Eastern Houston Watersheds (TMDL Project No. 72A).

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

Applicant Name:	**City of South Houston**
Permit Number, Outfall:	**10287-001**
Segment Number:	**1007 (Using 1102 for above tidal section)**

Enter values needed for screening:			**Data Source (edit if different)**
QE - Average effluent flow	**4**	MGD	
QS - Perennial stream harmonic mean flow	**4.51**	cfs	cc memo dec. 17th 2024
QE - Average effluent flow	**6.1889**	cfs	Calculated
CA - TDS - ambient segment concentration	**568**	mg/L	2010 IP, Appendix D
CA - chloride - ambient segment concentration	**125**	mg/L	2010 IP, Appendix D
CA - sulfate - ambient segment concentration	**38**	mg/L	2010 IP, Appendix D
CC - TDS - segment criterion	**600**	mg/L	2022 TSWQS, Appendix A
CC - chloride - segment criterion	**200**	mg/L	2022 TSWQS, Appendix A
CC - sulfate - segment criterion	**100**	mg/L	2022 TSWQS, Appendix A
CE - TDS - average effluent concentration	**472**	mg/L	Permit application
CE - chloride - average effluent concentration	**164**	mg/L	Permit application
CE - sulfate - average effluent concentration	**82.2**	mg/L	Permit application

Permit Limit Calculations

TDS

Calculate the WLA	WLA= [CC(QE+QS) - (QS)(CA)]/QE	623.32
Calculate the LTA	LTA = WLA * 0.93	579.69
Calculate the daily average	Daily Avg. = LTA * 1.47	**852.14**
Calculate the daily maximum	Daily Max. = LTA * 3.11	**1802.83**
Calculate 70% of the daily average	70% of Daily Avg. =	596.50
Calculate 85% of the daily average	85% of Daily Avg. =	724.32

No permit limitations needed if:	**472**	**≤**	**596.50**		
Reporting needed if:	**472**	**>**	**596.50**	**but ≤**	**724.32**
Permit limits may be needed if:	**472**	**>**	**724.32**		

No permit limitations needed for TDS

Chloride

Calculate the WLA	WLA= [CC(QE+QS) - (QS)(CA)]/QE	254.65
Calculate the LTA	LTA = WLA * 0.93	236.83
Calculate the daily average	Daily Avg. = LTA * 1.47	**348.14**
Calculate the daily maximum	Daily Max. = LTA * 3.11	**736.54**
Calculate 70% of the daily average	70% of Daily Avg. =	243.70
Calculate 85% of the daily average	85% of Daily Avg. =	295.92

No permit limitations needed if:	**164**	**≤**	**243.70**		
Reporting needed if:	**164**	**>**	**243.70**	**but ≤**	**295.92**
Permit limits may be needed if:	**164**	**>**	**295.92**		

No permit limitations needed for chloride

Sulfate

Calculate the WLA	WLA= [CC(QE+QS) - (QS)(CA)]/QE	145.18
Calculate the LTA	LTA = WLA * 0.93	135.02
Calculate the daily average	Daily Avg. = LTA * 1.47	**198.48**
Calculate the daily maximum	Daily Max. = LTA * 3.11	**419.91**
Calculate 70% of the daily average	70% of Daily Avg. =	138.93
Calculate 85% of the daily average	85% of Daily Avg. =	168.71

No permit limitations needed if:	**82.2**	**≤**	**138.93**		
Reporting needed if:	**82.2**	**>**	**138.93**	**but ≤**	**168.71**
Permit limits may be needed if:	**82.2**	**>**	**168.71**		

No permit limitations needed for sulfate

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 South Houston
TPDES Permit No.:	WQ0010287001
Outfall No.:	001
Prepared by:	Sonia Bhuiya
Date:	August 18, 2025

DISCHARGE INFORMATION

Receiving Waterbody:	Berry Bayou
Segment No.:	1102
TSS (mg/L):	14
pH (Standard Units):	7.4
Hardness (mg/L as $CaCO_3$):	110
Chloride (mg/L):	112
Effluent Flow for Aquatic Life (MGD):	4
Critical Low Flow [7Q2] (cfs):	2.75
% Effluent for Chronic Aquatic Life (Mixing Zone):	69.24
% Effluent for Acute Aquatic Life (ZID):	90.00
Effluent Flow for Human Health (MGD):	4
Harmonic Mean Flow (cfs):	4.51
% Effluent for Human Health:	57.85
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	69715.05	0.506		1.00	Assumed
Cadmium	6.60	-1.13	########	0.261		1.00	Assumed
Chromium (total)	6.52	-0.93	########	0.201		1.00	Assumed
Chromium (trivalent)	6.52	-0.93	########	0.201		1.00	Assumed
Chromium (hexavalent)	N/A	N/A	N/A	1.00	Assumed	1.00	Assumed
Copper	6.02	-0.74	########	0.325		1.00	Assumed
Lead	6.45	-0.80	########	0.173		1.00	Assumed
Mercury	N/A	N/A	N/A	1.00	Assumed	1.00	Assumed

Nickel	5.69	-0.57	####### ##	0.396		1.00	Assumed
Selenium	N/A	N/A	N/A	1.00	Assumed	1.00	Assumed
Silver	6.38	-1.03	####### ##	0.311		1.00	Assumed
Zinc	6.10	-0.70	####### ##	0.265		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	3.33	N/A	1.91	N/A	2.80	5.93
Aluminum	991	N/A	1101	N/A	631	N/A	927	1962
Arsenic	340	150	746	428	428	330	484	1025
Cadmium	9.4	0.263	40.0	1.45	22.9	1.12	1.64	3.47
Carbaryl	2.0	N/A	2.22	N/A	1.27	N/A	1.87	3.95
Chlordane	2.4	0.004	2.67	0.00578	1.53	0.00445	0.00653	0.0138
Chlorpyrifos	0.083	0.041	0.0922	0.0592	0.0528	0.0456	0.0670	0.141
Chromium (trivalent)	616	80	3411	577	1954	444	652	1381
Chromium (hexavalent)	15.7	10.6	17.4	15.3	10.00	11.8	14.6	31.0
Copper	15.5	10.3	53.2	45.7	30.5	35.2	44.7	94.7
Cyanide (free)	45.8	10.7	50.9	15.5	29.2	11.9	17.4	37.0
4,4'-DDT	1.1	0.001	1.22	0.00144	0.700	0.00111	0.00163	0.00345
Demeton	N/A	0.1	N/A	0.144	N/A	0.111	0.163	0.345
Diazinon	0.17	0.17	0.189	0.246	0.108	0.189	0.159	0.336
Dicofol [Kelthane]	59.3	19.8	65.9	28.6	37.8	22.0	32.3	68.4
Dieldrin	0.24	0.002	0.267	0.00289	0.153	0.00222	0.00326	0.00691
Diuron	210	70	233	101	134	77.9	114	242
Endosulfan I (*alpha*)	0.22	0.056	0.244	0.0809	0.140	0.0623	0.0915	0.193
Endosulfan II (*beta*)	0.22	0.056	0.244	0.0809	0.140	0.0623	0.0915	0.193
Endosulfan sulfate	0.22	0.056	0.244	0.0809	0.140	0.0623	0.0915	0.193
Endrin	0.086	0.002	0.0956	0.00289	0.0548	0.00222	0.00326	0.00691
Guthion [Azinphos Methyl]	N/A	0.01	N/A	0.0144	N/A	0.0111	0.0163	0.0345
Heptachlor	0.52	0.004	0.578	0.00578	0.331	0.00445	0.00653	0.0138
Hexachlorocyclohexane (*gamma*) [Lindane]	1.126	0.08	1.25	0.116	0.717	0.0890	0.130	0.276
Lead	72	2.79	460	23.3	263	17.9	26.3	55.7
Malathion	N/A	0.01	N/A	0.0144	N/A	0.0111	0.0163	0.0345
Mercury	2.4	1.3	2.67	1.88	1.53	1.45	2.12	4.49
Methoxychlor	N/A	0.03	N/A	0.0433	N/A	0.0334	0.0490	0.103
Mirex	N/A	0.001	N/A	0.00144	N/A	0.00111	0.00163	0.00345
Nickel	508	56.4	1423	205	815	158	232	492
Nonylphenol	28	6.6	31.1	9.53	17.8	7.34	10.7	22.8
Parathion (ethyl)	0.065	0.013	0.0722	0.0188	0.0414	0.0145	0.0212	0.0449
Pentachlorophenol	13.0	10.0	14.5	14.4	8.30	11.1	12.2	25.8
Phenanthrene	30	30	33.3	43.3	19.1	33.4	28.0	59.3
Polychlorinated Biphenyls [PCBs]	2.0	0.014	2.22	0.0202	1.27	0.0156	0.0228	0.0484
Selenium	20	5	22.2	7.22	12.7	5.56	8.17	17.2
Silver	0.8	N/A	26.2	N/A	15.0	N/A	22.1	46.7
Toxaphene	0.78	0.0002	0.867	0.000289	0.497	0.000222	0.000326	0.000691
Tributyltin [TBT]	0.13	0.024	0.144	0.0347	0.0828	0.0267	0.0392	0.0830
2,4,5 Trichlorophenol	136	64	151	92.4	86.6	71.2	104	221
Zinc	127	128	533	699	306	538	449	950

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	199	185	271	574
Aldrin	########	########	1.147E-04	0.000019	0.000018	0.000027	0.000053
Anthracene	1109	1317	13170	2277	2117	3112	6584
Antimony	6	1071	10710	1851	1722	2531	5354
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	1004	934	1373	2904
Benzidine	0.0015	0.107	1.07	0.185	0.172	0.252	0.534
Benzo(*a*)anthracene	0.024	0.025	0.25	0.0432	0.0402	0.0590	0.124
Benzo(*a*)pyrene	0.0025	0.0025	0.025	0.00432	0.00402	0.00590	0.0124
Bis(chloromethyl)ether	0.0024	0.2745	2.745	0.475	0.441	0.648	1.37
Bis(2-chloroethyl)ether	0.60	42.83	428.3	74.0	68.9	101	214
Bis(2-ethylhexyl) phthalate [Di(2-ethylhexyl) phthalate]	6	7.55	75.5	13.1	12.1	17.8	37.7
Bromodichloromethane [Dichlorobromomethane]	10.2	275	2750	475	442	649	1374
Bromoform [Tribromomethane]	66.9	1060	10600	1832	1704	2505	5299
Cadmium	5	N/A	N/A	N/A	N/A	N/A	N/A
Carbon Tetrachloride	4.5	46	460	79.5	74.0	108	229
Chlordane	0.0025	0.0025	0.025	0.00432	0.00402	0.00590	0.0124
Chlorobenzene	100	2737	27370	4732	4400	6468	13684
Chlorodibromomethane [Dibromochloromethane]	7.5	183	1830	316	294	432	914
Chloroform [Trichloromethane]	70	7697	76970	13306	12375	18190	38484
Chromium (hexavalent)	62	502	5020	868	807	1186	2509
Chrysene	2.45	2.52	25.2	4.36	4.05	5.95	12.5
Cresols [Methylphenols]	1041	9301	93010	16079	14953	21981	46504
Cyanide (free)	200	N/A	N/A	N/A	N/A	N/A	N/A
4,4'-DDD	0.002	0.002	0.02	0.00346	0.00322	0.00472	0.00999
4,4'-DDE	0.00013	0.00013	0.0013	0.000225	0.000209	0.000307	0.000649
4,4'-DDT	0.0004	0.0004	0.004	0.000691	0.000643	0.000945	0.00199
2,4'-D	70	N/A	N/A	N/A	N/A	N/A	N/A
Danitol [Fenpropathrin]	262	473	4730	818	760	1117	2364
1,2-Dibromoethane [Ethylene Dibromide]	0.17	4.24	42.4	7.33	6.82	10.0	21.1
m-Dichlorobenzene [1,3-Dichlorobenzene]	322	595	5950	1029	957	1406	2974
o-Dichlorobenzene [1,2-Dichlorobenzene]	600	3299	32990	5703	5304	7796	16494
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	3.87	3.60	5.29	11.1
1,2-Dichloroethane	5	364	3640	629	585	860	1819
1,1-Dichloroethylene [1,1-Dichloroethene]	7	55114	551140	95277	88608	130253	275569
Dichloromethane [Methylene Chloride]	5	13333	133330	23049	21436	31510	66664
1,2-Dichloropropane	5	259	2590	448	416	612	1294

1,3-Dichloropropene [1,3-Dichloropropylene]	2.8	119	1190	206	191	281	594
Dicofol [Kelthane]	0.30	0.30	3	0.519	0.482	0.709	1.49
Dieldrin	2.0E-05	2.0E-05	2.0E-04	0.0000346	0.0000322	0.0000472	0.0000999
2,4-Dimethylphenol	444	8436	84360	14584	13563	19937	42179
Di-*n*-Butyl Phthalate	88.9	92.4	924	160	149	218	461
Dioxins/Furans [TCDD Equivalents]	7.80E-08	7.97E-08	7.97E-07	1.38E-07	1.28E-07	1.88E-07	3.98E-07
Endrin	0.02	0.02	0.2	0.0346	0.0322	0.0472	0.0999
Epichlorohydrin	53.5	2013	20130	3480	3236	4757	10064
Ethylbenzene	700	1867	18670	3228	3002	4412	9334
Ethylene Glycol	46744	1.68E+07	1.68E+08	29042593	27009612	39704129	83999893
Fluoride	4000	N/A	N/A	N/A	N/A	N/A	N/A
Heptachlor	8.0E-05	0.0001	0.001	0.000173	0.000161	0.000236	0.000499
Heptachlor Epoxide	0.00029	0.00029	0.0029	0.000501	0.000466	0.000685	0.00144
Hexachlorobenzene	0.00068	0.00068	0.0068	0.00118	0.00109	0.00160	0.00339
Hexachlorobutadiene	0.21	0.22	2.2	0.380	0.354	0.519	1.09
Hexachlorocyclohexane (*alpha*)	0.0078	0.0084	0.084	0.0145	0.0135	0.0198	0.0419
Hexachlorocyclohexane (*beta*)	0.15	0.26	2.6	0.449	0.418	0.614	1.29
Hexachlorocyclohexane (*gamma*) [Lindane]	0.2	0.341	3.41	0.589	0.548	0.805	1.70
Hexachlorocyclopentadiene	10.7	11.6	116	20.1	18.6	27.4	57.9
Hexachloroethane	1.84	2.33	23.3	4.03	3.75	5.50	11.6
Hexachlorophene	2.05	2.90	29	5.01	4.66	6.85	14.4
4,4'-Isopropylidenediphenol	1092	15982	159820	27628	25695	37770	79909
Lead	1.15	3.83	38.3	38.3	35.6	52.2	110
Mercury	0.0122	0.0122	0.122	0.0211	0.0196	0.0288	0.0609
Methoxychlor	2.92	3.0	30	5.19	4.82	7.09	14.9
Methyl Ethyl Ketone	13865	9.92E+05	9.92E+06	1714896	1594853	2344434	4959993
Methyl *tert*-butyl ether [MTBE]	15	10482	104820	18121	16852	24772	52409
Nickel	332	1140	11400	4973	4625	6798	14383
Nitrate-Nitrogen (as Total Nitrogen)	10000	N/A	N/A	N/A	N/A	N/A	N/A
Nitrobenzene	45.7	1873	18730	3238	3011	4426	9364
N-Nitrosodiethylamine	0.0037	2.1	21	3.63	3.38	4.96	10.4
N-Nitroso-di-*n*-Butylamine	0.119	4.2	42	7.26	6.75	9.92	20.9
Pentachlorobenzene	0.348	0.355	3.55	0.614	0.571	0.838	1.77
Pentachlorophenol	0.22	0.29	2.9	0.501	0.466	0.685	1.44
Polychlorinated Biphenyls [PCBs]	6.4E-04	6.4E-04	6.40E-03	0.00111	0.00103	0.00151	0.00319
Pyridine	23	947	9470	1637	1523	2238	4734
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	0.415	0.386	0.567	1.19
1,1,2,2-Tetrachloroethane	1.64	26.35	263.5	45.6	42.4	62.2	131
Tetrachloroethylene [Tetrachloroethylene]	5	280	2800	484	450	661	1399
Thallium	0.12	0.23	2.3	0.398	0.370	0.543	1.14
Toluene	1000	N/A	N/A	N/A	N/A	N/A	N/A
Toxaphene	0.011	0.011	0.11	0.0190	0.0177	0.0259	0.0549
2,4,5-TP [Silvex]	50	369	3690	638	593	872	1844
1,1,1-Trichloroethane	200	784354	7843540	1355933	1261018	1853695	3921765
1,1,2-Trichloroethane	5	166	1660	287	267	392	829
Trichloroethylene [Trichloroethene]	5	71.9	719	124	116	169	359
2,4,5-Trichlorophenol	1039	1867	18670	3228	3002	4412	9334

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	28.5	26.5	38.9	82.4

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	1.96	2.38
Aluminum	649	788
Arsenic	339	411
Cadmium	1.15	1.39
Carbaryl	1.31	1.59
Chlordane	0.00457	0.00555
Chlorpyrifos	0.0469	0.0569
Chromium (trivalent)	456	554
Chromium (hexavalent)	10.2	12.4
Copper	31.3	38.0
Cyanide (free)	12.2	14.8
4,4'-DDT	0.00114	0.00138
Demeton	0.114	0.138
Diazinon	0.111	0.135
Dicofol [Kelthane]	22.6	27.5
Dieldrin	0.00228	0.00277
Diuron	80.1	97.2
Endosulfan I (*alpha*)	0.0640	0.0778
Endosulfan II (*beta*)	0.0640	0.0778
Endosulfan sulfate	0.0640	0.0778
Endrin	0.00228	0.00277
Guthion [Azinphos Methyl]	0.0114	0.0138
Heptachlor	0.00457	0.00555
Hexachlorocyclohexane (*gamma*) [Lindane]	0.0915	0.111
Lead	18.4	22.4
Malathion	0.0114	0.0138
Mercury	1.48	1.80
Methoxychlor	0.0343	0.0416
Mirex	0.00114	0.00138
Nickel	162	197
Nonylphenol	7.55	9.17
Parathion (ethyl)	0.0148	0.0180
Pentachlorophenol	8.54	10.3
Phenanthrene	19.6	23.8
Polychlorinated Biphenyls [PCBs]	0.0160	0.0194
Selenium	5.72	6.94
Silver	15.4	18.7
Toxaphene	0.000228	0.000277
Tributyltin [TBT]	0.0274	0.0333
2,4,5 Trichlorophenol	73.2	88.9
Zinc	314	381

Human Health	***70% of Daily Avg.***	***85% of Daily Avg.***

Parameter	***(µg/L)***	***(µg/L)***
Acrylonitrile	190	231
Aldrin	0.0000189	0.0000230
Anthracene	2178	2645
Antimony	1771	2151
Arsenic	N/A	N/A
Barium	N/A	N/A
Benzene	961	1167
Benzidine	0.177	0.214
Benzo(*a*)anthracene	0.0413	0.0502
Benzo(*a*)pyrene	0.00413	0.00502
Bis(chloromethyl)ether	0.454	0.551
Bis(2-chloroethyl)ether	70.8	86.0
Bis(2-ethylhexyl) phthalate [Di(2-ethylhexyl) phthalate]	12.4	15.1
Bromodichloromethane [Dichlorobromomethane]	454	552
Bromoform [Tribromomethane]	1753	2129
Cadmium	N/A	N/A
Carbon Tetrachloride	76.0	92.4
Chlordane	0.00413	0.00502
Chlorobenzene	4527	5498
Chlorodibromomethane [Dibromochloromethane]	302	367
Chloroform [Trichloromethane]	12733	15462
Chromium (hexavalent)	830	1008
Chrysene	4.16	5.06
Cresols [Methylphenols]	15387	18684
Cyanide (free)	N/A	N/A
4,4'-DDD	0.00330	0.00401
4,4'-DDE	0.000215	0.000261
4,4'-DDT	0.000661	0.000803
2,4'-D	N/A	N/A
Danitol [Fenpropathrin]	782	950
1,2-Dibromoethane [Ethylene Dibromide]	7.01	8.51
m-Dichlorobenzene [1,3-Dichlorobenzene]	984	1195
o-Dichlorobenzene [1,2-Dichlorobenzene]	5457	6627
p-Dichlorobenzene [1,4-Dichlorobenzene]	N/A	N/A
3,3'-Dichlorobenzidine	3.70	4.49
1,2-Dichloroethane	602	731
1,1-Dichloroethylene [1,1-Dichloroethene]	91177	110715
Dichloromethane [Methylene Chloride]	22057	26783
1,2-Dichloropropane	428	520
1,3-Dichloropropene [1,3-Dichloropropylene]	196	239
Dicofol [Kelthane]	0.496	0.602
Dieldrin	0.0000330	0.0000401
2,4-Dimethylphenol	13956	16946
Di-*n*-Butyl Phthalate	152	185
Dioxins/Furans [TCDD Equivalents]	1.31E-07	1.60E-07

Endrin	0.0330	0.0401
Epichlorohydrin	3330	4043
Ethylbenzene	3088	3750
Ethylene Glycol	27792890	33748510
Fluoride	N/A	N/A
Heptachlor	0.000165	0.000200
Heptachlor Epoxide	0.000479	0.000582
Hexachlorobenzene	0.00112	0.00136
Hexachlorobutadiene	0.363	0.441
Hexachlorocyclohexane (*alpha*)	0.0138	0.0168
Hexachlorocyclohexane (*beta*)	0.430	0.522
Hexachlorocyclohexane (*gamma*) [Lindane]	0.564	0.685
Hexachlorocyclopentadiene	19.1	23.3
Hexachloroethane	3.85	4.68
Hexachlorophene	4.79	5.82
4,4'-Isopropylidenediphenol	26439	32105
Lead	36.6	44.4
Mercury	0.0201	0.0245
Methoxychlor	4.96	6.02
Methyl Ethyl Ketone	1641104	1992769
Methyl *tert*-butyl ether [MTBE]	17340	21056
Nickel	4759	5778
Nitrate-Nitrogen (as Total Nitrogen)	N/A	N/A
Nitrobenzene	3098	3762
N-Nitrosodiethylamine	3.47	4.21
N-Nitroso-di-*n*-Butylamine	6.94	8.43
Pentachlorobenzene	0.587	0.713
Pentachlorophenol	0.479	0.582
Polychlorinated Biphenyls [PCBs]	0.00105	0.00128
Pyridine	1566	1902
Selenium	N/A	N/A
1,2,4,5-Tetrachlorobenzene	0.397	0.482
1,1,2,2-Tetrachloroethane	43.5	52.9
Tetrachloroethylene [Tetrachloroethylene]	463	562
Thallium	0.380	0.462
Toluene	N/A	N/A
Toxaphene	0.0181	0.0220
2,4,5-TP [Silvex]	610	741
1,1,1-Trichloroethane	1297587	1575641
1,1,2-Trichloroethane	274	333
Trichloroethylene [Trichloroethene]	118	144
2,4,5-Trichlorophenol	3088	3750
TTHM [Sum of Total Trihalomethanes]	N/A	N/A
Vinyl Chloride	27.2	33.1

Attachment C: Calculated Water Quality Based Effluent Limitations

TEXTOX MENU #5 - BAY OR WIDE TIDAL RIVER

The water quality-based effluent limitations developed below are calculated using:

Table 1, 2014 Texas Surface Water Quality Standards (30 TAC 307) for Saltwater 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 South Houston
TPDES Permit No:	WQ0010287001
Outfall No:	001
Prepared by:	Sonia Bhuiya
Date:	August 18, 2025

DISCHARGE INFORMATION

Receiving Waterbody:	Berry Bayou
Segment No:	1007
TSS (mg/L):	7
Oyster Waters?	**no**
Effluent Flow for Human Health (MGD):	4.0
% Effluent for Human Health:	17

CALCULATE DISSOLVED FRACTION (AND ENTER WATER EFFECT RATIO IF APPLICABLE):

Estuarine 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	N/A	N/A	N/A	1.00	Assumed	1.00	Assumed
Cadmium	N/A	N/A	N/A	1.00	Assumed	1.00	Assumed
Chromium (total)	N/A	N/A	N/A	1.00	Assumed	1.00	Assumed
Chromium (trivalent)	N/A	N/A	N/A	1.00	Assumed	1.00	Assumed
Chromium (hexavalent)	N/A	N/A	N/A	1.00	Assumed	1.00	Assumed
Copper	4.85	-0.72	#DIV/0!	#DIV/0!		1.00	Assumed
Lead	6.06	-0.85	#DIV/0!	#DIV/0!		1.00	Assumed
Mercury	N/A	N/A	N/A	1.00	Assumed	1.00	Assumed
Nickel	N/A	N/A	N/A	1.00	Assumed	1.00	Assumed
Selenium	N/A	N/A	N/A	1.00	Assumed	1.00	Assumed
Silver	5.86	-0.74	#DIV/0!	#DIV/0!		1.00	Assumed
Zinc	5.36	-0.52	#DIV/0!	#DIV/0!		1.00	Assumed

AQUATIC LIFE
CALCULATE DAILY AVERAGE AND DAILY MAXIMUM EFFLUENT LIMITATIONS:

Parameter	*SW Acute Criterion (µg/L)*	*SW Chronic Criterion (µg/L)*	*WLAa (µg/L)*	*WLAc (µg/L)*	*LTAa (µg/L)*	*LTAc (µg/L)*	*Daily Avg. (µg/L)*	*Daily Max. (µg/L)*
Acrolein	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Aldrin	1.3	N/A	#VALUE!	N/A	#VALUE!	N/A	#VALUE!	#VALUE!
Aluminum	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Arsenic	149	78	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!
Cadmium	40.0	8.75	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!
Carbaryl	613	N/A	#VALUE!	N/A	#VALUE!	N/A	#VALUE!	#VALUE!
Chlordane	0.09	0.004	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!
Chlorpyrifos	0.011	0.006	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!
Chromium (trivalent)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Chromium (hexavalent)	1090	49.6	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!
Copper	13.5	3.6	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!
Copper (oyster waters)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Cyanide (free)	5.6	5.6	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!
4,4'-DDT	0.13	0.001	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!
Demeton	N/A	0.1	N/A	#VALUE!	N/A	#VALUE!	#VALUE!	#VALUE!
Diazinon	0.819	0.819	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!
Dicofol [Kelthane]	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dieldrin	0.71	0.002	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!
Diuron	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Endosulfan I (*alpha*)	0.034	0.009	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!
Endosulfan II (*beta*)	0.034	0.009	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!
Endosulfan sulfate	0.034	0.009	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!
Endrin	0.037	0.002	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!
Guthion [Azinphos Methyl]	N/A	0.01	N/A	#VALUE!	N/A	#VALUE!	#VALUE!	#VALUE!
Heptachlor	0.053	0.004	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!
Hexachlorocyclohexane (*gamma*) [Lindane]	0.16	N/A	#VALUE!	N/A	#VALUE!	N/A	#VALUE!	#VALUE!
Lead	133	5.3	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!
Malathion	N/A	0.01	N/A	#VALUE!	N/A	#VALUE!	#VALUE!	#VALUE!
Mercury	2.1	1.1	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!
Methoxychlor	N/A	0.03	N/A	#VALUE!	N/A	#VALUE!	#VALUE!	#VALUE!
Mirex	N/A	0.001	N/A	#VALUE!	N/A	#VALUE!	#VALUE!	#VALUE!
Nickel	118	13.1	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!

Nonylphenol	7	1.7	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!
Parathion (ethyl)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Pentachlorophenol	15.1	9.6	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!
Phenanthrene	7.7	4.6	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!
Polychlorinated Biphenyls [PCBs]	10	0.03	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!
Selenium	564	136	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!
Silver	2	N/A	#VALUE!	N/A	#VALUE!	N/A	#VALUE!	#VALUE!
Toxaphene	0.21	0.0002	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!
Tributyltin [TBT]	0.24	0.0074	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!
2,4,5 Trichlorophenol	259	12	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!
Zinc	92.7	84.2	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!

HUMAN HEALTH

CALCULATE DAILY AVERAGE AND DAILY MAXIMUM EFFLUENT LIMITATIONS:

Parameter	***Fish Only Criterion (µg/L)***	***WLAh (µg/L)***	***LTAh (µg/L)***	***Daily Avg. (µg/L)***	***Daily Max. (µg/L)***
Acrylonitrile	115	676	629	924	1956
Aldrin	1.147E-05	0.0000675	0.0000627	0.0000922	0.000195
Anthracene	1317	7747	7205	10591	22406
Antimony	1071	6300	5859	8612	18221
Arsenic	N/A	N/A	N/A	N/A	N/A
Barium	N/A	N/A	N/A	N/A	N/A
Benzene	581	3418	3178	4672	9884
Benzidine	0.107	0.629	0.585	0.860	1.82
Benzo(*a*)anthracene	0.025	0.147	0.137	0.201	0.425
Benzo(*a*)pyrene	0.0025	0.0147	0.0137	0.0201	0.0425
Bis(chloromethyl)ether	0.2745	1.61	1.50	2.20	4.67
Bis(2-chloroethyl)ether	42.83	252	234	344	728
Bis(2-ethylhexyl) phthalate [Di(2-ethylhexyl) phthalate]	7.55	44.4	41.3	60.7	128
Bromodichloromethane [Dichlorobromomethane]	275	1618	1504	2211	4678
Bromoform [Tribromomethane]	1060	6235	5799	8524	18034
Cadmium	N/A	N/A	N/A	N/A	N/A
Carbon Tetrachloride	46	271	252	369	782
Chlordane	0.0025	0.0147	0.0137	0.0201	0.0425
Chlorobenzene	2737	16100	14973	22010	46566
Chlorodibromomethane [Dibromochloromethane]	183	1076	1001	1471	3113
Chloroform [Trichloromethane]	7697	45276	42107	61897	130953
Chromium (hexavalent)	502	2953	2746	4036	8540
Chrysene	2.52	14.8	13.8	20.2	42.8
Cresols [Methylphenols]	9301	54712	50882	74796	158242
Cyanide (free)	N/A	N/A	N/A	N/A	N/A
4,4'-DDD	0.002	0.0118	0.0109	0.0160	0.0340
4,4'-DDE	0.00013	0.000765	0.000711	0.00104	0.00221

4,4'-DDT	0.0004	0.00235	0.00219	0.00321	0.00680
2,4'-D	N/A	N/A	N/A	N/A	N/A
Danitol [Fenpropathrin]	473	2782	2588	3803	8047
1,2-Dibromoethane [Ethylene Dibromide]	4.24	24.9	23.2	34.0	72.1
m-Dichlorobenzene [1,3-Dichlorobenzene]	595	3500	3255	4784	10123
o-Dichlorobenzene [1,2-Dichlorobenzene]	3299	19406	18047	26529	56127
p-Dichlorobenzene [1,4-Dichlorobenzene]	N/A	N/A	N/A	N/A	N/A
3,3'-Dichlorobenzidine	2.24	13.2	12.3	18.0	38.1
1,2-Dichloroethane	364	2141	1991	2927	6192
1,1-Dichloroethylene [1,1-Dichloroethene]	55114	324200	301506	443213	937683
Dichloromethane [Methylene Chloride]	13333	78429	72939	107220	226841
1,2-Dichloropropane	259	1524	1417	2082	4406
1,3-Dichloropropene [1,3-Dichloropropylene]	119	700	651	956	2024
Dicofol [Kelthane]	0.30	1.76	1.64	2.41	5.10
Dieldrin	2.0E-05	0.000118	0.000109	0.000160	0.000340
2,4-Dimethylphenol	8436	49624	46150	67840	143526
Di-*n*-Butyl Phthalate	92.4	544	505	743	1572
Dioxins/Furans [TCDD Equivalents]	7.97E-08	4.69E-07	4.36E-07	6.40E-07	0.0000014
Endrin	0.02	0.118	0.109	0.160	0.340
Epichlorohydrin	2013	11841	11012	16188	34248
Ethylbenzene	1867	10982	10214	15013	31764
Ethylene Glycol	1.68E+07	98823529	91905882	135101647	285827294
Fluoride	N/A	N/A	N/A	N/A	N/A
Heptachlor	0.0001	0.000588	0.000547	0.000804	0.00170
Heptachlor Epoxide	0.00029	0.00171	0.00159	0.00233	0.00493
Hexachlorobenzene	0.00068	0.00400	0.00372	0.00546	0.0115
Hexachlorobutadiene	0.22	1.29	1.20	1.76	3.74
Hexachlorocyclohexane (*alpha*)	0.0084	0.0494	0.0460	0.0675	0.142
Hexachlorocyclohexane (*beta*)	0.26	1.53	1.42	2.09	4.42
Hexachlorocyclohexane (*gamma*) [Lindane]	0.341	2.01	1.87	2.74	5.80
Hexachlorocyclopentadiene	11.6	68.2	63.5	93.2	197
Hexachloroethane	2.33	13.7	12.7	18.7	39.6
Hexachlorophene	2.90	17.1	15.9	23.3	49.3
4,4'-Isopropylidenediphenol [Bisphenol A]	15982	94012	87431	128523	271910
Lead	3.83	#VALUE!	#VALUE!	#VALUE!	#VALUE!
Mercury	0.0250	0.147	0.137	0.201	0.425
Methoxychlor	3.0	17.6	16.4	24.1	51.0
Methyl Ethyl Ketone	9.92E+05	5835294	5426824	7977430	16877421
Methyl *tert*-butyl ether [MTBE]	10482	61659	57343	84293	178335
Nickel	1140	6706	6236	9167	19395
Nitrate-Nitrogen (as Total Nitrogen)	N/A	N/A	N/A	N/A	N/A
Nitrobenzene	1873	11018	10246	15062	31866
N-Nitrosodiethylamine	2.1	12.4	11.5	16.8	35.7
N-Nitroso-di-*n*-Butylamine	4.2	24.7	23.0	33.7	71.4
Pentachlorobenzene	0.355	2.09	1.94	2.85	6.03
Pentachlorophenol	0.29	1.71	1.59	2.33	4.93
Polychlorinated Biphenyls [PCBs]	6.4E-04	0.00376	0.00350	0.00514	0.0108

Pyridine	947	5571	5181	7615	16111
Selenium	N/A	N/A	N/A	N/A	N/A
1,2,4,5-Tetrachlorobenzene	0.24	1.41	1.31	1.93	4.08
1,1,2,2-Tetrachloroethane	26.35	155	144	211	448
Tetrachloroethylene [Tetrachloroethylene]	280	1647	1532	2251	4763
Thallium	0.23	1.35	1.26	1.84	3.91
Toluene	N/A	N/A	N/A	N/A	N/A
Toxaphene	0.011	0.0647	0.0602	0.0884	0.187
2,4,5-TP [Silvex]	369	2171	2019	2967	6277
1,1,1-Trichloroethane	784354	4613847	4290878	6307590	13344629
1,1,2-Trichloroethane	166	976	908	1334	2824
Trichloroethylene [Trichloroethene]	71.9	423	393	578	1223
2,4,5-Trichlorophenol	1867	10982	10214	15013	31764
TTHM [Sum of Total Trihalomethanes]	N/A	N/A	N/A	N/A	N/A
Vinyl Chloride	16.5	97.1	90.3	132	280

CALCULATE 70% AND 85% OF DAILY AVERAGE EFFLUENT LIMITATIONS:

Aquatic Life	***70% of Daily Avg.***	***85% of Daily Avg.***
Parameter	***(µg/L)***	***(µg/L)***
Acrolein	N/A	N/A
Aldrin	#VALUE!	#VALUE!
Aluminum	N/A	N/A
Arsenic	#VALUE!	#VALUE!
Cadmium	#VALUE!	#VALUE!
Carbaryl	#VALUE!	#VALUE!
Chlordane	#VALUE!	#VALUE!
Chlorpyrifos	#VALUE!	#VALUE!
Chromium (trivalent)	N/A	N/A
Chromium (hexavalent)	#VALUE!	#VALUE!
Copper	#VALUE!	#VALUE!
Copper (oyster waters)	N/A	N/A
Cyanide (free)	#VALUE!	#VALUE!
4,4'-DDT	#VALUE!	#VALUE!
Demeton	#VALUE!	#VALUE!
Diazinon	#VALUE!	#VALUE!
Dicofol [Kelthane]	N/A	N/A
Dieldrin	#VALUE!	#VALUE!
Diuron	N/A	N/A
Endosulfan I (*alpha*)	#VALUE!	#VALUE!
Endosulfan II (*beta*)	#VALUE!	#VALUE!
Endosulfan sulfate	#VALUE!	#VALUE!
Endrin	#VALUE!	#VALUE!
Guthion [Azinphos Methyl]	#VALUE!	#VALUE!
Heptachlor	#VALUE!	#VALUE!
Hexachlorocyclohexane (*gamma*) [Lindane]	#VALUE!	#VALUE!
Lead	#VALUE!	#VALUE!
Malathion	#VALUE!	#VALUE!
Mercury	#VALUE!	#VALUE!
Methoxychlor	#VALUE!	#VALUE!

Mirex	#VALUE!	#VALUE!
Nickel	#VALUE!	#VALUE!
Nonylphenol	#VALUE!	#VALUE!
Parathion (ethyl)	N/A	N/A
Pentachlorophenol	#VALUE!	#VALUE!
Phenanthrene	#VALUE!	#VALUE!
Polychlorinated Biphenyls [PCBs]	#VALUE!	#VALUE!
Selenium	#VALUE!	#VALUE!
Silver	#VALUE!	#VALUE!
Toxaphene	#VALUE!	#VALUE!
Tributyltin [TBT]	#VALUE!	#VALUE!
2,4,5 Trichlorophenol	#VALUE!	#VALUE!
Zinc	#VALUE!	#VALUE!

Human Health	***70% of Daily Avg.***	***85% of Daily Avg.***
Parameter	***(µg/L)***	***(µg/L)***
Acrylonitrile	647	786
Aldrin	0.0000645	0.0000784
Anthracene	7413	9002
Antimony	6028	7320
Arsenic	N/A	N/A
Barium	N/A	N/A
Benzene	3270	3971
Benzidine	0.602	0.731
Benzo(*a*)anthracene	0.140	0.170
Benzo(*a*)pyrene	0.0140	0.0170
Bis(chloromethyl)ether	1.54	1.87
Bis(2-chloroethyl)ether	241	292
Bis(2-ethylhexyl) phthalate [Di(2-ethylhexyl) phthalate]	42.5	51.6
Bromodichloromethane [Dichlorobromomethane]	1548	1879
Bromoform [Tribromomethane]	5966	7245
Cadmium	N/A	N/A
Carbon Tetrachloride	258	314
Chlordane	0.0140	0.0170
Chlorobenzene	15407	18708
Chlorodibromomethane [Dibromochloromethane]	1030	1250
Chloroform [Trichloromethane]	43328	52612
Chromium (hexavalent)	2825	3431
Chrysene	14.1	17.2
Cresols [Methylphenols]	52357	63576
Cyanide (free)	N/A	N/A
4,4'-DDD	0.0112	0.0136
4,4'-DDE	0.000731	0.000888
4,4'-DDT	0.00225	0.00273
2,4'-D	N/A	N/A
Danitol [Fenpropathrin]	2662	3233
1,2-Dibromoethane [Ethylene Dibromide]	23.8	28.9
m-Dichlorobenzene [1,3-Dichlorobenzene]	3349	4067

o-Dichlorobenzene [1,2-Dichlorobenzene]	18570	22550
p-Dichlorobenzene [1,4-Dichlorobenzene]	N/A	N/A
3,3'-Dichlorobenzidine	12.6	15.3
1,2-Dichloroethane	2049	2488
1,1-Dichloroethylene [1,1-Dichloroethene]	310249	376731
Dichloromethane [Methylene Chloride]	75054	91137
1,2-Dichloropropane	1457	1770
1,3-Dichloropropene [1,3-Dichloropropylene]	669	813
Dicofol [Kelthane]	1.68	2.05
Dieldrin	0.000112	0.000136
2,4-Dimethylphenol	47488	57664
Di-*n*-Butyl Phthalate	520	631
Dioxins/Furans [TCDD Equivalents]	4.48E-07	5.44E-07
Endrin	0.112	0.136
Epichlorohydrin	11331	13759
Ethylbenzene	10509	12761
Ethylene Glycol	94571152	114836400
Fluoride	N/A	N/A
Heptachlor	0.000562	0.000683
Heptachlor Epoxide	0.00163	0.00198
Hexachlorobenzene	0.00382	0.00464
Hexachlorobutadiene	1.23	1.50
Hexachlorocyclohexane (*alpha*)	0.0472	0.0574
Hexachlorocyclohexane (*beta*)	1.46	1.77
Hexachlorocyclohexane (*gamma*) [Lindane]	1.91	2.33
Hexachlorocyclopentadiene	65.2	79.2
Hexachloroethane	13.1	15.9
Hexachlorophene	16.3	19.8
4,4'-Isopropylidenediphenol [Bisphenol A]	89966	109244
Lead	#VALUE!	#VALUE!
Mercury	0.140	0.170
Methoxychlor	16.8	20.5
Methyl Ethyl Ketone	5584201	6780816
Methyl *tert*-butyl ether [MTBE]	59005	71649
Nickel	6417	7792
Nitrate-Nitrogen (as Total Nitrogen)	N/A	N/A
Nitrobenzene	10543	12802
N-Nitrosodiethylamine	11.8	14.3
N-Nitroso-di-*n*-Butylamine	23.6	28.7
Pentachlorobenzene	1.99	2.42
Pentachlorophenol	1.63	1.98
Polychlorinated Biphenyls [PCBs]	0.00360	0.00437
Pyridine	5330	6473
Selenium	N/A	N/A
1,2,4,5-Tetrachlorobenzene	1.35	1.64
1,1,2,2-Tetrachloroethane	148	180
Tetrachloroethylene [Tetrachloroethylene]	1576	1913
Thallium	1.29	1.57

Toluene	N/A	N/A
Toxaphene	0.0619	0.0751
2,4,5-TP [Silvex]	2077	2522
1,1,1-Trichloroethane	4415313	5361451
1,1,2-Trichloroethane	934	1134
Trichloroethylene [Trichloroethene]	404	491
2,4,5-Trichlorophenol	10509	12761
TTHM [Sum of Total Trihalomethanes]	N/A	N/A
Vinyl Chloride	92.8	112