Administrative Package Cover Page

This file contains the following documents:

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

Portada de Paquete Administrativo

Este archivo contiene los siguientes documentos:

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

City of Houston
Upper Brays WWTF
WQ0010495116

Plain Language Summary

DOMESTIC WASTEWATER

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

City of Houston (CN600128995) operates the Upper Brays Wastewater Treatment Facility (RN101607174), an activated sludge wastewater treatment facility. The facility is located at 13525 West Houston Center Boulevard, in Houston, Harris County, Texas 77082.

This application is for a renewal to discharge an annual average flow of 18,000,000 gallons per day of treated domestic wastewater via Outfall 001.

Discharges from the facility are expected to contain five-day carbonaceous biochemical oxygen demand ($CBOD_5$), total suspended solids (TSS), ammonia-nitrogen (NH_3-N), and *Escherichia coli* (*E. coli*). Additional potential pollutants are included in the permit application package in Domestic Technical Report 1.0, Section 7 – Pollutant Analysis of Treated Effluent and Domestic Technical Report 4.0. Domestic wastewater is treated by activated sludge with combined nitrification. Treatment units include bar screens for preliminary treatment, aeration basins for biological treatment, secondary clarifiers for solids settling, and chlorine contact basins for disinfection. Solids from the facility are stabilized in an aerobic digester, thickened in an gravity thickener, and dewatered on a belt press before being hauled to a landfill for disposal.

City of Houston
Upper Brays WWTF
WQ0010495116

Resumen en Lenguaje Sencillo

AGUAS RESIDUALES DOMÉSTICAS

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

La ciudad de Houston (CN600128995) opera la instalación de tratamiento de aguas residuales Upper Brays Wastewater Treatment Facility (RN101607174), un lodos activados - aireación prolongada instalación de tratamiento de aguas residuales. La instalación está situada en 13525 West Houston Center Boulevard, Houston, en el condado de Harris, Texas 77082.

Esta solicitud es para la renovación para descargar un flujo medio anual de 18.000.000 galones por día de aguas residuales domesticas tratadas por el emisario 001.

Se espera que los vertidos de la instalación contengan demanda bioquímica de oxígeno carbónico de cinco días (CBOD5), sólidos suspendidos totales (TSS), nitrógeno amoniacal (NH3-N), y Escherichia coli (E. coli). Otros contaminantes potenciales se incluyen en el Informe Técnico Doméstico 1.0, Sección 7 - Análisis de Contaminantes del Efluente Tratado y en la hoja de trabajo doméstica 4.0. Las aguas residuales domésticas se tratan con lodos activados con nitrificación combinada. Las unidades de tratamiento incluyen pantalla de barra para tratamiento preliminar, cuencas de aireación y canales para tratamiento biológico, clarificadores secundario para la sedimentación de sólidos, y cuenca de contacto con el cloro para la desinfección. Sólidos de la instalación se estabilizan en un digestor aeróbico, se espesan en un espesador por gravedad y se deshidratan en una prensa de cinta antes de ser transportados a un vertedero para su eliminación.

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

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

PERMIT NO. WQ0010495116

APPLICATION. City of Houston, 10500 Bellaire Boulevard, Houston, Texas 77072, has applied to the Texas Commission on Environmental Quality (TCEQ) to renew Texas Pollutant Discharge Elimination System (TPDES) Permit No. WQ0010495116 (EPA I.D. No. TX0088153) to authorize the discharge of treated wastewater at a volume not to exceed an annual average flow of 18,000,000 gallons per day. The domestic wastewater treatment facility is located at 13525 West Houston Center Boulevard, near the city of Houston, in Harris County, Texas 77082. The discharge route is from the plant site to Brays Bayou; thence to Houston Ship Channel/Buffalo Bayou Tidal. TCEQ received this application on May 10, 2024. The permit application will be available for viewing and copying at Houston Public Works, Wastewater Operations Building, 10500 Bellaire Boulevard, Houston, in Harris County, Texas prior to the date this notice is published in the newspaper. 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=-95.590833,29.716944&level=18

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.

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 Houston at the address stated above or by calling Mr. Walid Samarneh, P.E., Managing Engineer, at 832-395-5771.

Issuance Date: May 29, 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. WQ0010495116

SOLICITUD. La Ciudad de Houston, 10500 Bellaire Boulevard, Houston, Texas 77072, ha solicitado a la Comisión de Calidad Ambiental del Estado de Texas (TCEQ) para renovar el Permiso No. WQ0010495116 (EPA I.D. No. TX0088153) 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 anual de 18,000,000 galones por día. La facilidad está ubicada 13525 West Houston Center Boulevard, en el Condado de Harris, Texas 77082. La ruta de descarga es del sitio de la planta al pantano Brays Bayou; de allí al Canal para buques de Houston/la marea del pantano Buffalo Bayou. La TCEQ recibió esta solicitud en Mayo 10, 2024. La solicitud para el permiso está disponible para leerla y copiarla en la Ciudad de Houston, Trabajos Públicos de Houston, Operaciones de Wastewater edificio, biblioteca, 10500 Bellaire Boulevard, Houston, Condado de Harris, Texas 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.
https://gisweb.tceq.texas.gov/LocationMapper/?marker=-95.590833,29.716944&level=18

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

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

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

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

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

LISTA DE CORREO. Si somete comentarios públicos, un pedido para una audiencia administrativa de lo contencioso o una reconsideración de la decisión del Director Ejecutivo, la Oficina del Secretario Principal enviará por correo los avisos públicos en relación con la solicitud. Ademas, puede pedir que la TCEQ ponga su nombre en una or mas de las listas correos siguientes (1) la lista de correo permanente para recibir los avisos del 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 del TCEQ.

INFORMACIÓN DISPONIBLE ONLINE. Para más detalles sobre el estado de la aplicación, visite la base de datos integrada del Comisario al www.tceq.texas.gov/goto/cid. Buscar en la base de datos usando el número de permiso para esta aplicación, que se puede encontrar al inicio de este aviso.

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

También se puede obtener información adicional del La Ciudad de Houston a la dirección indicada arriba o llamando a Sr. Walid Samarneh, P.E., Ingeniero Gerente, al (832) 395-5771.

Fecha de emission: 29 de mayo de 2024

Application to Renew

TPDES Permit Number WQ0010495116

Upper Brays Wastewater Treatment Facility

Prepared Spring 2024

Application to Renew TPDES Permit Number WQ0010495116
Upper Brays Wastewater Treatment Facility

Permit Application Forms

Administrative Report 1.0
Technical Report 1.0
Worksheet 2.0
Worksheet 4.0
Worksheet 5.0
Worksheet 6.0

Attachments

1	Copy of Application Fee Check	Administrative Report 1.0, Section 1
2	Core Data Form	Administrative Report 1.0, Section 3.C.
3	Plain Language Summary	Administrative Report 1.0, Section 8.F.
4	USGS Map	Administrative Report 1.0, Section 13
5	Supplemental Permit Information Form	SPIF
6	Treatment Units	Technical Report 1.0, Section 2.B.
7	Process Flow Diagram	Technical Report 1.0, Section 2.C.
8	Site Drawing	Technical Report 1.0, Section 3
		Worksheet 6.0, Section 1.E.
9	Laboratory Test Reports and COCs	Technical Report 1.0, Section 7, Table 1.0(2)
		Worksheet 4.0, Section 1
		Worksheet 4.0, Section 2
10	Facility Operators	Technical Report 1.0, Section 8
11	WET Test Reports	Worksheet 5.0, Section 1
		Worksheet 5.0, Section 3
12	Effluent Parameters Above the MAL	Worksheet 6.0, Section 2.C.

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

DOMESTIC WASTEWATER PERMIT APPLICATION CHECKLIST

Complete and submit this checklist with the application.

APPLICANT NAME: City of Houston

PERMIT NUMBER (If new, leave blank): WQ00 10495116

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

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

For TCEQ Use Only

Segment Number _____County _____
Expiration Date _____Region_____
Permit Number _____

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

DOMESTIC WASTEWATER PERMIT APPLICATION ADMINISTRATIVE REPORT 1.0

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

Section 1. Application Fees (Instructions Page 26)

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

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

Minor Amendment (for any flow) $150.00 ☐

Payment Information: Attachment 1

Mailed — Check/Money Order Number: 21078142

Check/Money Order Amount: $2,015.00

Name Printed on Check: City of 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 10495116

EPA I.D. (TPDES only): TX 0088153

Expiration Date: November 27, 2024

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 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: 600128995

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: Macchi, Randall V.

Title: Chief Operating Officer, Houston Public Works Credential:

N/A **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. **Attachment 2**

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: Samarneh, Walid

Title: Managing Engineer Credential: P.E.

Organization Name: City of Houston

Mailing Address: 10500 Bellaire Blvd City, State, Zip Code: Houston, Texas 77072

Phone No.: 832-395-5771 E-mail Address: walid.samarneh@houstontx.gov

Check one or both: ☒ Administrative Contact ☒ Technical Contact

N/A **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: Macchi, Randall V.

Title: Chief Operating Officer, Houston Public Works Credential:

Organization Name: City of Houston

Mailing Address: 10500 Bellaire Blvd City, State, Zip Code: Houston, Texas 77072

Phone No.: 832-395-2936 E- mail Address: randy.macchi@houstontx.gov

B. Prefix: Mr. Last Name, First Name: Whitmire, John

Title: Mayor Credential: Click to enter text.

Organization Name: City of Houston

Mailing Address: P.O. Box 1562 City, State, Zip Code: Houston, Texas 77251

Phone No.: 713-837-0311 E-mail Address: mayor@houstontx.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: Samarneh, Walid

Title: Managing Engineer Credential: P.E.

Organization Name: City of Houston

Mailing Address: 10500 Bellaire Blvd City, State, Zip Code: Houston, Texas 77072

Phone No.: 832-395-5771 E-mail Address: walid.samarneh@houstontx.gov

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: Samarneh, Walid

Title: Managing Engineer Credential: P.E.

Organization Name: City of Houston

Mailing Address: 10500 Bellaire Blvd City, State, Zip Code: Houston, Texas 77072

Phone No.: 832-395-5771 E-mail Address: walid.samarneh@houstontx.gov

Section 8. Public Notice Information (Instructions Page 27)

A. Individual Publishing the Notices

Prefix: Mr. Last Name, First Name: Samarneh, Walid

Title: Managing Engineer Credential: P.E.

Organization Name: City of Houston

Mailing Address: 10500 Bellaire Blvd City, State, Zip Code: Houston, Texas 77072

Phone No.: 832-395-5771 E-mail Address: walid.samarneh@houstontx.gov

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: Samarneh, Walid

Title: Managing Engineer Credential: P.E.

Organization Name: City of Houston

Mailing Address: 10500 Bellaire Blvd City, State, Zip Code: Houston, Texas 77072

Phone No.: 832-395-5771 E-mail Address: walid.samarneh@houstontx.gov

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: City of Houston, Houston Public Works, Wastewater Operations Building

Location within the building: Library

Physical Address of Building: 10500 Bellaire Blvd

City: Houston County: Harris

Contact (Last Name, First Name): Samarneh, Walid

Phone No.: 832-395-5771 Ext.: N/A

E. Bilingual Notice Requirements

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

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

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

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

   ☒ Yes ☐ No

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

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

   ☒ Yes ☐ No

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

   ☐ Yes ☒ No

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

   ☐ Yes ☒ No

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

F. Plain Language Summary Template

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

Attachment: Attachment 3

N/A **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: Click to enter text.

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** 101607174

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):

Upper Brays Wastewater Treatment Facility

C. Owner of treatment facility: City of 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 Houston

Mailing Address: 10500 Bellaire Blvd City, State, Zip Code: Houston, Texas 77072

Phone No.: 832-395-5771 E-mail Address: walid.samarneh@houstontx.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: N/A

N/A **E.** Owner of effluent disposal site:

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

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

Organization Name: 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.

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

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

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

Organization Name: Click to enter text.

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

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

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

Attachment: 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): 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: Harris, Chambers, and Galveston Counties

N/A

Section 11. TLAP Disposal Information (Instructions Page 32)

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

☐ Yes ☐ No

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

Click to enter text.

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

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

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

Click to enter text.

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

Section 12. Miscellaneous Information (Instructions Page 32)

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

☐ Yes ☒ No

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

☐ Yes ☐ No ☒ Not Applicable

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

Click to enter text.

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

☐ Yes ☒ No

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

D. Do you owe any fees to the TCEQ?

☐ Yes ☒ No

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

Account number: Click to enter text.

Amount past due: Click to enter text.

E. Do you owe any penalties to the TCEQ?

☐ Yes ☒ No

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

Enforcement order number: Click to enter text.

Amount past due: Click to enter text.

Section 13. Attachments (Instructions Page 33)

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

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

☒ Original full-size USGS Topographic Map with the following information: **Attachment 4**

- 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 Table of Contents

Section 14. Signature Page (Instructions Page 34)

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

Permit Number: WQ0010495116

Applicant: City of 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): Randall V. Macchi

Signatory title: Chief Operating Officer, Houston Public Works

Signature:_____ Date:_____

(Use blue ink)

Subscribed and Sworn to before me by the said_____

on this_____ day of_____, 20_____.

My commission expires on the_____ day of_____, 20_____.

_____

Notary Public *[SEAL]*

_____

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 5

DOMESTIC WASTEWATER PERMIT APPLICATION CHECKLIST OF COMMON DEFICIENCIES

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

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

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

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

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

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

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

Things to Know:

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

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

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

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

Plain Language Summary ☒ Yes

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

DOMESTIC WASTEWATER PERMIT APPLICATION TECHNICAL REPORT 1.0

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

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

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

A. Existing/Interim I Phase

Design Flow (MGD): 18.0

2-Hr Peak Flow (MGD): 70.0

Estimated construction start date: N/A

Estimated waste disposal start date: N/A

N/A

B. Interim II Phase

Design Flow (MGD): Click to enter text.

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

Estimated construction start date: Click to enter text.

Estimated waste disposal start date: Click to enter text.

N/A

C. Final Phase

Design Flow (MGD): Click to enter text.

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

Estimated construction start date: Click to enter text.

Estimated waste disposal start date: Click to enter text.

D. Current Operating Phase

Provide the startup date of the facility: Existing

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.**

Influent is initially treated by mechanical bar screens (02), then biologically treated using activated sludge with combined nitrification (24), followed by secondary clarification (22), chlorination (51), dechlorination (50), and discharge to the receiving stream through Outfall 001. Sludge is treated by aerobic digestion (65), followed by a thickener (79), then dewatered using a belt press before being hauled to a landfill for disposal.

B. Treatment Units

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

Table 1.0(1) - Treatment Units

Treatment Unit Type	Number of Units	Dimensions (L x W x D)
Attachment 6		

C. Process Flow Diagram

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

Attachment: Attachment 7

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

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

- Latitude: 29.716756
- Longitude: -95.588916

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: Attachment 8

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

Upper Brays service area. The facility serves residential areas around Alief, Bunker Hill Village, and the Royal Oaks Country Club.

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
Upper Brays Collection System	City of Houston	Publicly Owned	11604
Harris County MUD 372	Harris County MUD 372	Publicly Owned	Unknown
Bunker Hill Village	Bunker Hill Village	Publicly Owned	3761
		Choose an item.	

Section 4. Unbuilt Phases (Instructions Page 45)

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

☐ Yes ☒ No

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

☐ Yes ☐ No

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

Click to enter text.

Section 5. Closure Plans (Instructions Page 45)

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

☐ Yes ☒ No

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

☐ Yes ☐ No

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

Click to enter text.

Section 6. Permit Specific Requirements (Instructions Page 45)

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

A. Summary transmittal

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

☒ Yes ☐ No

If yes, provide the date(s) of approval for each phase: Prior to December 1988

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**.

N/A

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.

No changes from the existing permit.

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*.

Other Requirements No. 7 – Sludge records are maintained as required

D. Grit and grease treatment

1. Acceptance of grit and grease waste

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

☐ Yes ☒ No

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

2. Grit and grease processing

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

Click to enter text.

3. Grit disposal

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

☐ Yes ☐ No

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

Describe the method of grit disposal.

Click to enter text.

4. *Grease and decanted liquid disposal*

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

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

Click to enter text.

E. Stormwater management

1. *Applicability*

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

☒ Yes ☐ No

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

☒ Yes ☐ No

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

2. *MSGP coverage*

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

☒ Yes ☐ No

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

TXR05 FF92 or TXRNE Click to enter text.

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

☐ Yes ☐ No

3. *Conditional exclusion*

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

☐ Yes ☒ No

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

Click to enter text.

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

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

☐ Yes ☒ No

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

Click to enter text.

5. ***Zero stormwater discharge***

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

☐ Yes ☒ No

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

Click to enter text.

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

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

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

☐ Yes ☒ No

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

Click to enter text.

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

F. Discharges to the Lake Houston Watershed

Does the facility discharge in the Lake Houston watershed?

☐ Yes ☒ No

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

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

1. Acceptance of sludge from other WWTPs

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

☐ Yes ☒ No

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

Click to enter text.

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

2. Acceptance of septic waste

Is the facility accepting or will it accept septic waste?

☐ Yes ☒ No

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

☐ Yes ☒ No

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

☐ Yes ☒ No

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

Click to enter text.

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

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

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

☐ Yes ☒ No

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

Click to enter text.

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

Is the facility in operation?

☒ Yes ☐ No

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

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

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

Table1.0(2) – Pollutant Analysis for Wastewater Treatment Facilities Attachment 9

Pollutant	Average Conc.	Max Conc.	No. of Samples	Sample Type	Sample Date/Time
$CBOD_5$, mg/l	2.30	2.30	1	Comp	2/16/2024 @ 8:00 am
Total Suspended Solids, mg/l	8.1	8.1	1	Comp	2/16/2024 @ 8:00 am
Ammonia Nitrogen, mg/l	<0.0204	<0.0204	1	Comp	2/16/2024 @ 8:00 am
Nitrate Nitrogen, mg/l	26.0	26.0	1	Comp	2/16/2024 @ 8:00 am

Total Kjeldahl Nitrogen, mg/l	1.58	1.58	1	Comp	2/16/2024 @ 8:00 am
Sulfate, mg/l	60.0	60.0	1	Comp	2/16/2024 @ 8:00 am
Chloride, mg/l	97.2	97.2	1	Comp	2/16/2024 @ 8:00 am
Total Phosphorus, mg/l	23.9	23.9	1	Comp	2/16/2024 @ 8:00 am
pH, standard units	6.80	6.80	1	Grab	2/15/2024 @ 7:10 am
Dissolved Oxygen*, mg/l	7.80	7.80	1	Grab	2/15/2024 @ 7:10 am
Chlorine Residual, mg/l	<0.100	<0.100	1	Grab	2/15/2024 @ 7:10 am
E.coli (CFU/100ml) freshwater	4	4	1	Grab	2/15/2024 @ 7:10 am
Entercocci (CFU/100ml) saltwater	N/A				
Total Dissolved Solids, mg/l	578	578	1	Comp	2/16/2024 @ 8:00 am
Electrical Conductivity, µmohs/cm, †	N/A				
Oil & Grease, mg/l	<1.72	<1.72	1	Grab	2/16/2024 @ 8:59 am
Alkalinity ($CaCO_3$)*, mg/l	61.1	61.1	1	Comp	2/16/2024 @ 8:00 am

*TPDES permits only
†TLAP permits only

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

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

Section 8. Facility Operator (Instructions Page 50)

Facility Operator Name: **Attachment 10**

Facility Operator's License Classification and Level: Click to enter text.

Facility Operator's License Number: Click to enter text.

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

A. WWTP's Biosolids Management Facility Type

Check all that apply. See instructions for guidance

☒ Design flow>= 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	Not Applicable	950.54	Choose an item.	Choose an item.
Choose an item.	Choose an item.	Choose an item.		Choose an item.	Choose an item.
Choose an item.	Choose an item.	Choose an item.		Choose an item.	Choose an item.

If "Other" is selected for Management Practice, please explain (e.g. monofill or transport to another WWTP): N/A

D. Disposal site

Disposal site name: Fort Bend Regional Landfill

TCEQ permit or registration number: 2270

County where disposal site is located: Fort Bend

E. Transportation method

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

Name of the hauler: FCC Environmental

Hauler registration number: 24903

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:

Reclaimed water authorization R10495116

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:

On March 31, 2021 the U.S. District Court for the Southern District of Texas approved entry of a Consent Decree (Civil ActionNo.4:18-cv-03368) embodying the agreement of the City of Houston ("City") with the United States Environmental Protection Agency ("EPA") and the State of Texas ("State") to improve the City's Wastewater Treatment and Collection System including requirements to address sanitary sewer overflows ("SSOs") and wastewater treatment plant permit exceedances. The consent decree provides formal authorization for the City to continue and build upon its prior and ongoing work for wastewater assessment and rehabilitation programs over the next 15 years. Details of the approved consent decree are posted on the City's website at https://www.publicworks.houstontx.gov/.

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: Randall V. Macchi

Title: Chief Operating Officer, Houston Public Works

Signature: _____

Date: _____

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: Brays Bayou Above Tidal

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: USGS Topographical Map

C. Downstream perennial confluences

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

None

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.

Low flow upstream of outfall. Moderate flow downstream of outfall. Receiving stream clear. No wildlife observed.

Date and time of observation: April 16, 2024 at 9:53 am

Was the water body influenced by stormwater runoff during observations?

☐ Yes ☒ No

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

A. Upstream influences

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

☐ Oil field activities
☐ Upstream discharges
☐ Septic tanks
☒ Urban runoff
☐ Agricultural runoff
☐ Other(s), specify: 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: Stormwater conveyance

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: 2/15/2024 @ 11:28 pm, 2/16/2024 @ 8:00 am

Table 4.0(1) – Toxics Analysis

Attachment 9

Pollutant	AVG Effluent Conc. (µg/l)	MAX Effluent Conc. (µg/l)	Number of Samples	MAL (µg/l)
Acrylonitrile	<50	<50	1	50
Aldrin	<0.01	<0.01	1	0.01
Aluminum	54.4	54.4	1	2.5
Anthracene	<10	<10	1	10
Antimony	<5	<5	1	5
Arsenic	1.90	1.90	1	0.5
Barium	79.0	79.0	1	3
Benzene	<10	<10	1	10
Benzidine	<50	<50	1	50
Benzo(a)anthracene	<5	<5	1	5
Benzo(a)pyrene	<5	<5	1	5
Bis(2-chloroethyl)ether	<10	<10	1	10
Bis(2-ethylhexyl)phthalate	<10	<10	1	10
Bromodichloromethane	16.2	16.2	1	10
Bromoform	<10	<10	1	10
Cadmium	<1	<1	1	1
Carbon Tetrachloride	<2	<2	1	2
Carbaryl	<5	<5	1	5
Chlordane*	<0.2	<0.2	1	0.2
Chlorobenzene	<10	<10	1	10

Pollutant	AVG Effluent Conc. (µg/l)	MAX Effluent Conc. (µg/l)	Number of Samples	MAL (µg/l)
Chlorodibromomethane	<10	<10	1	10
Chloroform	41.2	41.2	1	10
Chlorpyrifos	<0.05	<0.05	1	0.05
Chromium (Total)	<3	<3	1	3
Chromium (Tri) **(*1)**	<3	<3	1	N/A
Chromium (Hex)	<3	<3	1	3
Copper	9.46	9.46	1	2
Chrysene	<5	<5	1	5
p-Chloro-m-Cresol	<10	<10	1	10
4,6-Dinitro-o-Cresol	<50	<50	1	50
p-Cresol	<10	<10	1	10
Cyanide **(*2)**	<10	<10	1	10
4,4'- DDD	<0.1	<0.1	1	0.1
4,4'- DDE	<0.1	<0.1	1	0.1
4,4'- DDT	<0.02	<0.02	1	0.02
2,4-D	<0.7	<0.7	1	0.7
Demeton (O and S)	<0.20	<0.20	1	0.20
Diazinon	<0.5	<0.5	1	0.5/0.1
1,2-Dibromoethane	<10	<10	1	10
m-Dichlorobenzene	<10	<10	1	10
o-Dichlorobenzene	<10	<10	1	10
p-Dichlorobenzene	<10	<10	1	10
3,3'-Dichlorobenzidine	<5	<5	1	5
1,2-Dichloroethane	<10	<10	1	10
1,1-Dichloroethylene	<10	<10	1	10
Dichloromethane	<20	<20	1	20
1,2-Dichloropropane	<10	<10	1	10
1,3-Dichloropropene	<10	<10	1	10
Dicofol	<1	<1	1	1
Dieldrin	<0.02	<0.02	1	0.02
2,4-Dimethylphenol	<10	<10	1	10
Di-n-Butyl Phthalate	<10	<10	1	10
Diuron	<0.09	<0.09	1	0.09

Pollutant	AVG Effluent Conc. (µg/l)	MAX Effluent Conc. (µg/l)	Number of Samples	MAL (µg/l)
Endosulfan I (alpha)	<0.01	<0.01	1	0.01
Endosulfan II (beta)	<0.02	<0.02	1	0.02
Endosulfan Sulfate	<0.1	<0.1	1	0.1
Endrin	<0.02	<0.02	1	0.02
Ethylbenzene	<10	<10	1	10
Fluoride	<500	<500	1	500
Guthion	<0.1	<0.1	1	0.1
Heptachlor	<0.01	<0.01	1	0.01
Heptachlor Epoxide	<0.01	<0.01	1	0.01
Hexachlorobenzene	<5	<5	1	5
Hexachlorobutadiene	<10	<10	1	10
Hexachlorocyclohexane (alpha)	<0.05	<0.05	1	0.05
Hexachlorocyclohexane (beta)	<0.05	<0.05	1	0.05
gamma-Hexachlorocyclohexane (Lindane)	<0.05	<0.05	1	0.05
Hexachlorocyclopentadiene	<10	<10	1	10
Hexachloroethane	<20	<20	1	20
Hexachlorophene	<10	<10	1	10
Lead	<0.5	<0.5	1	0.5
Malathion	<0.1	<0.1	1	0.1
Mercury	<0.005	<0.005	1	0.005
Methoxychlor	<2	<2	1	2
Methyl Ethyl Ketone	<50	<50	1	50
Mirex	<0.02	<0.02	1	0.02
Nickel	2.76	2.76	1	2
Nitrate-Nitrogen	26000	26000	1	100
Nitrobenzene	<10	<10	1	10
N-Nitrosodiethylamine	<20	<20	1	20
N-Nitroso-di-n-Butylamine	<20	<20	1	20
Nonylphenol	<333	<333	1	333
Parathion (ethyl)	<0.1	<0.1	1	0.1
Pentachlorobenzene	<20	<20	1	20
Pentachlorophenol	<5	<5	1	5

Pollutant	AVG Effluent Conc. (µg/l)	MAX Effluent Conc. (µg/l)	Number of Samples	MAL (µg/l)
Phenanthrene	<10	<10	1	10
Polychlorinated Biphenyls (PCB's) **(*3)**	<0.2	<0.2	1	0.2
Pyridine	<20	<20	1	20
Selenium	<5	<5	1	5
Silver	<0.5	<0.5	1	0.5
1,2,4,5-Tetrachlorobenzene	<20	<20	1	20
1,1,2,2-Tetrachloroethane	<10	<10	1	10
Tetrachloroethylene	<10	<10	1	10
Thallium	<0.5	<0.5	1	0.5
Toluene	<10	<10	1	10
Toxaphene	<0.3	<0.3	1	0.3
2,4,5-TP (Silvex)	<0.3	<0.3	1	0.3
Tributyltin (see instructions for explanation)	N/A			0.01
1,1,1-Trichloroethane	<10	<10	1	10
1,1,2-Trichloroethane	<10	<10	1	10
Trichloroethylene	<10	<10	1	10
2,4,5-Trichlorophenol	<50	<50	1	50
TTHM (Total Trihalomethanes)	62.5	62.5	1	10
Vinyl Chloride	<10	<10	1	10
Zinc	55.2	55.2	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: 2/15/2024 @ 11:28 pm, 2/16/2024 @ 8:00 am

Table 4.0(2)A – Metals, Cyanide, and Phenols Attachment 9

Pollutant	AVG Effluent Conc. (µg/l)	MAX Effluent Conc. (µg/l)	Number of Samples	MAL (µg/l)
Antimony	<5	<5	1	5
Arsenic	1.90	1.90	1	0.5
Beryllium	<0.5	<0.5	1	0.5
Cadmium	<1	<1	1	1
Chromium (Total)	<3	<3	1	3
Chromium (Hex)	<3	<3	1	3
Chromium (Tri) **(*1)**	<3	<3	1	N/A
Copper	9.46	9.46	1	2
Lead	<0.5	<0.5	1	0.5
Mercury	<0.005	<0.005	1	0.005
Nickel	2.76	2.76	1	2
Selenium	<5	<5	1	5
Silver	<0.5	<0.5	1	0.5
Thallium	<0.5	<0.5	1	0.5
Zinc	55.2	55.2	1	5
Cyanide **(*2)**	<10	<10	1	10
Phenols, Total	<10	<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	<50	1	50
Acrylonitrile	<50	<50	1	50
Benzene	<10	<10	1	10
Bromoform	<10	<10	1	10
Carbon Tetrachloride	<2	<2	1	2
Chlorobenzene	<10	<10	1	10
Chlorodibromomethane	<10	<10	1	10
Chloroethane	<50	<50	1	50
2-Chloroethylvinyl Ether	<10	<10	1	10
Chloroform	41.2	41.2	1	10
Dichlorobromomethane [Bromodichloromethane]	16.2	16.2	1	10
1,1-Dichloroethane	<10	<10	1	10
1,2-Dichloroethane	<10	<10	1	10
1,1-Dichloroethylene	<10	<10	1	10
1,2-Dichloropropane	<10	<10	1	10
1,3-Dichloropropylene [1,3-Dichloropropene]	<10	<10	1	10
1,2-Trans-Dichloroethylene	<10	<10	1	10
Ethylbenzene	<10	<10	1	10
Methyl Bromide	<50	<50	1	50
Methyl Chloride	<50	<50	1	50
Methylene Chloride	<20	<20	1	20
1,1,2,2-Tetrachloroethane	<10	<10	1	10
Tetrachloroethylene	<10	<10	1	10
Toluene	<10	<10	1	10
1,1,1-Trichloroethane	<10	<10	1	10
1,1,2-Trichloroethane	<10	<10	1	10
Trichloroethylene	<10	<10	1	10
Vinyl Chloride	<10	<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	<10	1	10
2,4-Dichlorophenol	<10	<10	1	10
2,4-Dimethylphenol	<10	<10	1	10
4,6-Dinitro-o-Cresol	<50	<50	1	50
2,4-Dinitrophenol	<50	<50	1	50
2-Nitrophenol	<20	<20	1	20
4-Nitrophenol	<50	<50	1	50
P-Chloro-m-Cresol	<10	<10	1	10
Pentalchlorophenol	<5	<5	1	5
Phenol	<10	<10	1	10
2,4,6-Trichlorophenol	<10	<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	<10	1	10
Acenaphthylene	<10	<10	1	10
Anthracene	<10	<10	1	10
Benzidine	<50	<50	1	50
Benzo(a)Anthracene	<5	<5	1	5
Benzo(a)Pyrene	<5	<5	1	5
3,4-Benzofluoranthene	<10	<10	1	10
Benzo(ghi)Perylene	<20	<20	1	20
Benzo(k)Fluoranthene	<5	<5	1	5
Bis(2-Chloroethoxy)Methane	<10	<10	1	10
Bis(2-Chloroethyl)Ether	<10	<10	1	10
Bis(2-Chloroisopropyl)Ether	<10	<10	1	10
Bis(2-Ethylhexyl)Phthalate	<10	<10	1	10
4-Bromophenyl Phenyl Ether	<10	<10	1	10
Butyl benzyl Phthalate	<10	<10	1	10
2-Chloronaphthalene	<10	<10	1	10
4-Chlorophenyl phenyl ether	<10	<10	1	10
Chrysene	<5	<5	1	5
Dibenzo(a,h)Anthracene	<5	<5	1	5
1,2-(o)Dichlorobenzene	<10	<10	1	10
1,3-(m)Dichlorobenzene	<10	<10	1	10
1,4-(p)Dichlorobenzene	<10	<10	1	10
3,3-Dichlorobenzidine	<5	<5	1	5
Diethyl Phthalate	<10	<10	1	10
Dimethyl Phthalate	<10	<10	1	10
Di-n-Butyl Phthalate	<10	<10	1	10
2,4-Dinitrotoluene	<10	<10	1	10
2,6-Dinitrotoluene	<10	<10	1	10
Di-n-Octyl Phthalate	<10	<10	1	10
1,2-Diphenylhydrazine (as Azo-benzene)	<20	<20	1	20
Fluoranthene	<10	<10	1	10

Pollutant	AVG Effluent Conc. (µg/l)	MAX Effluent Conc. (µg/l)	Number of Samples	MAL (µg/l)
Fluorene	<10	<10	1	10
Hexachlorobenzene	<5	<5	1	5
Hexachlorobutadiene	<10	<10	1	10
Hexachlorocyclo-pentadiene	<10	<10	1	10
Hexachloroethane	<20	<20	1	20
Indeno(1,2,3-cd)pyrene	<5	<5	1	5
Isophorone	<10	<10	1	10
Naphthalene	<10	<10	1	10
Nitrobenzene	<10	<10	1	10
N-Nitrosodimethylamine	<50	<50	1	50
N-Nitrosodi-n-Propylamine	<20	<20	1	20
N-Nitrosodiphenylamine	<20	<20	1	20
Phenanthrene	<10	<10	1	10
Pyrene	<10	<10	1	10
1,2,4-Trichlorobenzene	<10	<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	<0.01	1	0.01
alpha-BHC (Hexachlorocyclohexane)	<0.05	<0.05	1	0.05
beta-BHC (Hexachlorocyclohexane)	<0.05	<0.05	1	0.05
gamma-BHC (Hexachlorocyclohexane)	<0.05	<0.05	1	0.05
delta-BHC (Hexachlorocyclohexane)	<0.05	<0.05	1	0.05
Chlordane	<0.2	<0.2	1	0.2
4,4-DDT	<0.02	<0.02	1	0.02
4,4-DDE	<0.1	<0.1	1	0.1
4,4,-DDD	<0.1	<0.1	1	0.1
Dieldrin	<0.02	<0.02	1	0.02
Endosulfan I (alpha)	<0.01	<0.01	1	0.01
Endosulfan II (beta)	<0.02	<0.02	1	0.02
Endosulfan Sulfate	<0.1	<0.1	1	0.1
Endrin	<0.02	<0.02	1	0.02
Endrin Aldehyde	<0.1	<0.1	1	0.1
Heptachlor	<0.01	<0.01	1	0.01
Heptachlor Epoxide	<0.01	<0.01	1	0.01
PCB-1242	<0.2	<0.2	1	0.2
PCB-1254	<0.2	<0.2	1	0.2
PCB-1221	<0.2	<0.2	1	0.2
PCB-1232	<0.2	<0.2	1	0.2
PCB-1248	<0.2	<0.2	1	0.2
PCB-1260	<0.2	<0.2	1	0.2
PCB-1016	<0.2	<0.2	1	0.2
Toxaphene	<0.3	<0.3	1	0.3

* For PCBS, if all are non-detects, enter the highest non-detect preceded by a “<”.

N/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: **Attachment 11**

48-hour Acute: Click to enter text.

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
Attachment 11			

DOMESTIC WASTEWATER PERMIT APPLICATION WORKSHEET 6.0: INDUSTRIAL WASTE CONTRIBUTION

The following **is required** for **all publicly owned treatment works**.

Section 1. All POTWs (Instructions Page 89)

A. Industrial users (IUs)

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

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

Categorical IUs:

Number of IUs: 0

Average Daily Flows, in MGD: 0

Significant IUs – non-categorical:

Number of IUs: 0

Average Daily Flows, in MGD: 0

Other IUs:

Number of IUs: 0

Average Daily Flows, in MGD: 0

B. Treatment plant interference

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

☐ Yes ☒ No

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

Click to enter text.

C. Treatment plant pass through

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

☐ Yes ☒ No

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

Click to enter text.

D. Pretreatment program

Does your POTW have an approved pretreatment program?

☒ Yes ☐ No

If yes, complete Section 2 only of this Worksheet.

Is your POTW required to develop an approved pretreatment program?

☒ Yes ☐ No

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

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

E. Service Area Map

Attach a map indicating the service area of the POTW. The map should include the applicant's service area boundaries and the location of any known industrial users discharging to the POTW. Please see the instructions for guidance.

Attachment: Attachment 8

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

A. Substantial modifications

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

☐ Yes ☒ No

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

Click to enter text.

B. Non-substantial modifications

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

☐ Yes ☒ No

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

Click to enter text.

C. Effluent parameters above the MAL

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

Table 6.0(1) – Parameters Above the MAL

Pollutant	Concentration	MAL	Units	Date
Attachment 12				

D. Industrial user interruptions

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

☐ Yes ☒ No

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

Click to enter text.

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 *i*nstructions?

☐ Yes ☐ No

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

☐ Yes ☐ No

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

Category: Subcategories: Click to enter text.

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

Category: Click to enter text.

Subcategories: Click to enter text.

Category: Click to enter text.

Subcategories: Click to enter text.

Category: Click to enter text.

Subcategories: Click to enter text.

Category: Click to enter text.

Subcategories: Click to enter text.

F. Industrial user interruptions

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

☐ Yes ☐ No

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

Click to enter text.

Attachment 1

Copy of Application Fee Check

Administrative Report 1.0, Section 1

Attachment 2

Core Data Form

Administrative Report 1.0, Section 3.C.

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 600128995		**RN 101607174**

SECTION II: Customer Information

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

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

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

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

City of Houston

7. TX SOS/CPA Filing Number	**8. TX State Tax ID** (11 digits)	**9. Federal Tax ID** (9 digits)	**10. DUNS Number** *(if applicable)*
		746001164	

11. Type of Customer:

☐ Corporation ☐ Individual Partnership: ☐ General ☐ Limited
Government: ☒ City ☐ County ☐ Federal ☐ Local ☐ State ☐ Other ☐ Sole Proprietorship ☐ Other:

12. Number of Employees

☐ 0-20 ☐ 21-100 ☐ 101-250 ☐ 251-500 ☒ 501 and higher

13. Independently Owned and Operated?

☒ **Yes** ☐ **No**

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

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

15. Mailing Address:

10500 Bellaire Boulevard

City	Houston	**State**	TX	**ZIP**	77072	**ZIP + 4**	5212

16. Country Mailing Information *(if outside USA)*	**17. E-Mail Address** *(if applicable)*
	walid.samarneh@houstontx.gov

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

(832) 395-5771		(832) 395-5838

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.)*

Upper Brays Wastewater Treatment Facility

23. Street Address of the Regulated Entity: ***(No PO Boxes)***	13525 West Houston Center Boulevard							
	City	Houston	**State**	TX	**ZIP**	77082	**ZIP + 4**	
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**

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

27. Latitude (N) In Decimal:	29.717775		**28. Longitude (W) In Decimal:**	-95.591854	
Degrees	Minutes	Seconds	Degrees	Minutes	Seconds

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

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

This facility treats domestic wastewater

34. Mailing Address:	**10500 Bellaire Boulevard**							
	City	**Houston**	**State**	**TX**	**ZIP**	**77072**	**ZIP + 4**	**5212**
35. E-Mail Address:	**walid.samarneh@houstontx.gov**							

36. Telephone Number	**37. Extension or Code**	**38. Fax Number** *(if applicable)*
(832) 395-5771		**(832) 395-5838**

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:
	WQ0010495116			

SECTION IV: Preparer Information

40. Name:	Heather Maloney	**41. Title:**	Environmental Investigator V

42. Telephone Number	**43. Ext./Code**	**44. Fax Number**	**45. E-Mail Address**
(832 **)** 395-5756		**(** 832 **)** 395-5838	heather.maloney@houstontx.gov

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 Houston, Houston Public Works	**Job Title:**	Chief Operating Officer, Houston Public Works
Name *(In Print):*	Randall V. Macchi	**Phone:**	**(** 832 **)** 395- **2936**
Signature:		**Date:**	

Attachment 3

Plain Language Summary

Administrative Report 1.0, Section 8.F.

City of Houston
Upper Brays WWTF
WQ0010495116

Plain Language Summary

DOMESTIC WASTEWATER

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

City of Houston (CN600128995) operates the Upper Brays Wastewater Treatment Facility (RN101607174), an activated sludge wastewater treatment facility. The facility is located at 13525 West Houston Center Boulevard, in Houston, Harris County, Texas 77082.

This application is for a renewal to discharge an annual average flow of 18,000,000 gallons per day of treated domestic wastewater via Outfall 001.

Discharges from the facility are expected to contain five-day carbonaceous biochemical oxygen demand ($CBOD_5$), total suspended solids (TSS), ammonia-nitrogen (NH_3-N), and *Escherichia coli* (*E. coli*). Additional potential pollutants are included in the permit application package in Domestic Technical Report 1.0, Section 7 – Pollutant Analysis of Treated Effluent and Domestic Technical Report 4.0. Domestic wastewater is treated by activated sludge with combined nitrification. Treatment units include bar screens for preliminary treatment, aeration basins for biological treatment, secondary clarifiers for solids settling, and chlorine contact basins for disinfection. Solids from the facility are stabilized in an aerobic digester, thickened in an gravity thickener, and dewatered on a belt press before being hauled to a landfill for disposal.

City of Houston
Upper Brays WWTF
WQ0010495116

Resumen en Lenguaje Sencillo

AGUAS RESIDUALES DOMÉSTICAS

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

La ciudad de Houston (CN600128995) opera la instalación de tratamiento de aguas residuales Upper Brays Wastewater Treatment Facility (RN101607174), un lodos activados - aireación prolongada instalación de tratamiento de aguas residuales. La instalación está situada en 13525 West Houston Center Boulevard, Houston, en el condado de Harris, Texas 77082.

Esta solicitud es para la renovación para descargar un flujo medio anual de 18.000.000 galones por día de aguas residuales domesticas tratadas por el emisario 001.

Se espera que los vertidos de la instalación contengan demanda bioquímica de oxígeno carbónico de cinco días (CBOD5), sólidos suspendidos totales (TSS), nitrógeno amoniacal (NH3-N), y Escherichia coli (E. coli). Otros contaminantes potenciales se incluyen en el Informe Técnico Doméstico 1.0, Sección 7 - Análisis de Contaminantes del Efluente Tratado y en la hoja de trabajo doméstica 4.0. Las aguas residuales domésticas se tratan con lodos activados con nitrificación combinada. Las unidades de tratamiento incluyen pantalla de barra para tratamiento preliminar, cuencas de aireación y canales para tratamiento biológico, clarificadores secundario para la sedimentación de sólidos, y cuenca de contacto con el cloro para la desinfección. Sólidos de la instalación se estabilizan en un digestor aeróbico, se espesan en un espesador por gravedad y se deshidratan en una prensa de cinta antes de ser transportados a un vertedero para su eliminación.

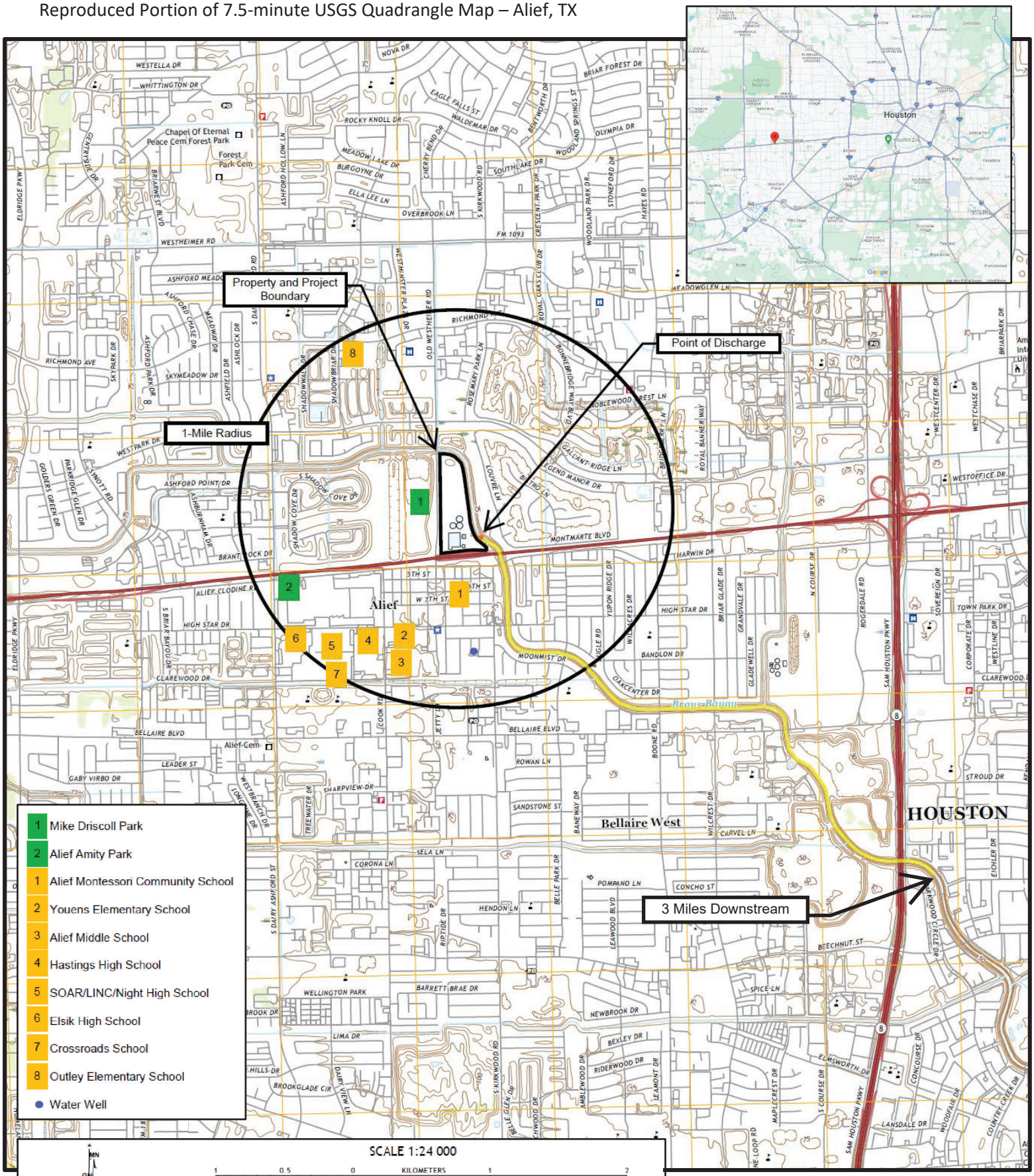
Attachment 4

USGS Map

Administrative Report 1.0, Section 13

USGS Map

Reproduced Portion of 7.5-minute USGS Quadrangle Map – Alief, TX



4/11/2024

Attachment 5

Supplemental Permit Information Form

SPIF

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

SUPPLEMENTAL PERMIT INFORMATION FORM (SPIF)

FOR AGENCIES REVIEWING DOMESTIC OR INDUSTRIAL TPDES WASTEWATER PERMIT APPLICATIONS

TCEQ USE ONLY:

Application type: ____Renewal ____Major Amendment ____Minor Amendment ____New

County: _____ Segment Number: _____

Admin Complete Date: _____

Agency Receiving SPIF:

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

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

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

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

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

The following applies to all applications:

1. Permittee: City of Houston

   Permit No. WQ00 10495116 EPA ID No. TX 0088153

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

   13525 West Houston Center Boulevard, Houston, Harris County, Texas 77082

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: Walid Samarneh

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

Title: Managing Engineer

Mailing Address: 10500 Bellaire Blvd

City, State, Zip Code: Houston, Texas 77072

Phone No.: 832-395-2500 Ext.: Click here to enter text. Fax No.: 832-395-5839

E-mail Address: walid.samarneh@houstontx.gov

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.

From Outfall 001 to Brays Bayou, thence to Houston Ship Channel/Buffalo Bayou Tidal in Segment No. 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. **N/A**

Does your project involve any of the following? Check all that apply. **N/A**

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

☐ Disturbance of vegetation or wetlands

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

N/A

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

Disturbances, vegetation, and land use are typical of a wastewater treatment facility site.

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

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

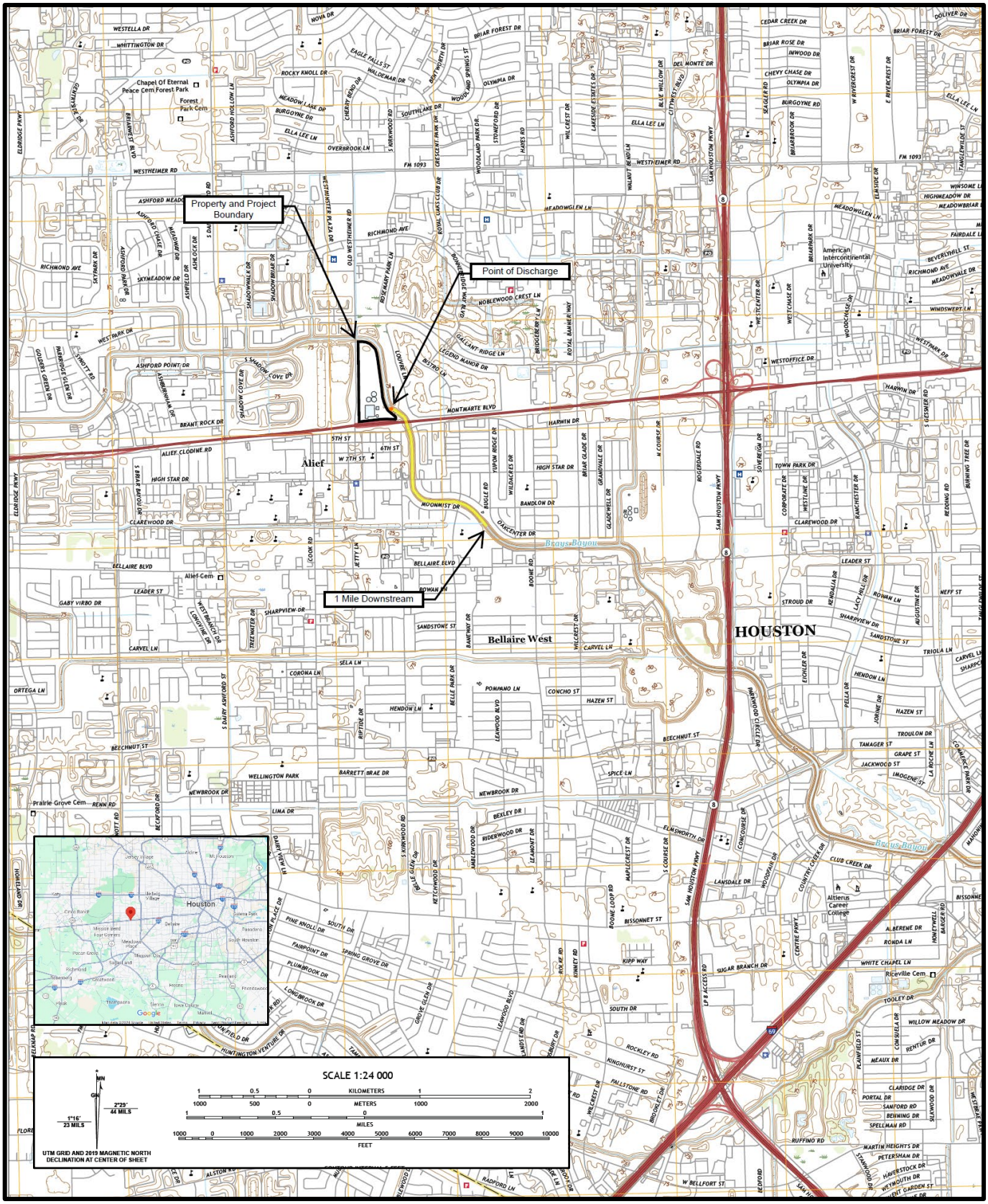
N/A

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

N/A

Vicinity Map and Edited USGS Map

Reproduced Portion of 7.5-minute USGS Quadrangle Map – Alief, TX



4/8/2024

Attachment 6

Treatment Units

Technical Report 1.0, Section 2.B.

CITY OF HOUSTON
UPPER BRAYS WWTF
TPDES PERMIT RENEWAL

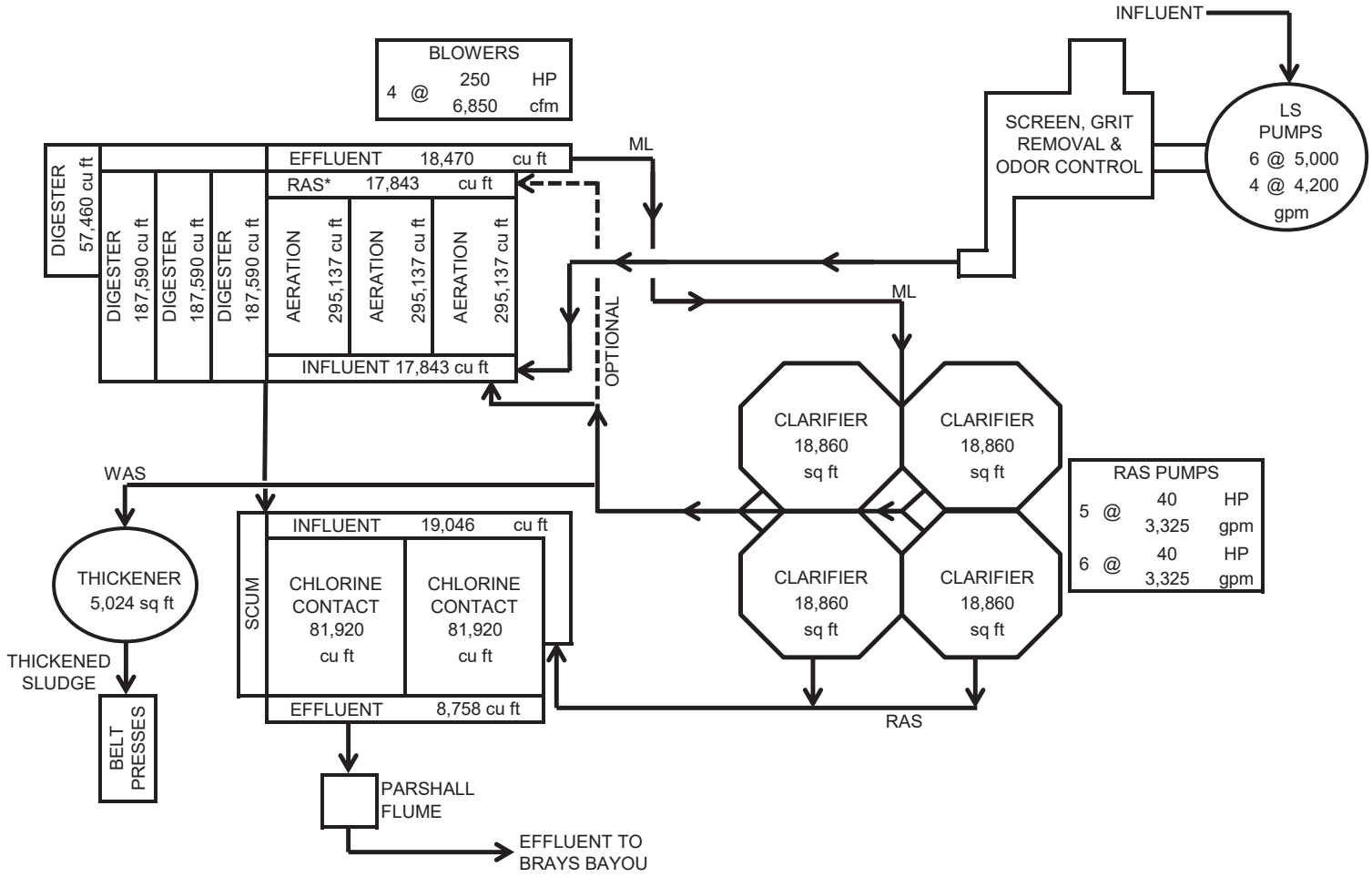
TREATMENT UNITS

Unit	Quantity	Dimensions
Aeration Basin	3	255' x 60' x 19.29'
Influent Channel	1	185' x 5' x 19.29'
Effluent Channel	1	191' x 5' x 19.29'
Clarifier (octagonal)	4	155' diameter x 12.83' SWD
Influent Chlorine Contact Basin	1	186' x 5' x 20.48'
Chlorine Contact Basin (parallel operation)	2	80' x 50' x 20.48'
Effluent Chlorine Contact Basin	1	113' x 5' x 15.5'
Thickener	1	80' diameter x 12' SWD
Aerobic Digester	1	85' x 50' x 13'
	3	277.5' x 50' x 13'

Attachment 7

Process Flow Diagram

Technical Report 1.0, Section 2.C.



*NOT IN USE

UPPER BRAYS WWTP - PROCESS FLOW DIAGRAM

PLANT LOCATION

13525 W. HOUSTON CENTER BLVD.
HOUSTON, TX 77082

QUADRANT	SOUTHWEST
KEY MAP NUMBER	570K

OVERALL PLANT CAPACITY (MGD)

	FIRM	TOTAL
LIFT STATION	60.19	67.39
	AVG.	2 HR PEAK
PLANT	19.3	90.5
PERMITTED FLOW LIMITS	18	70.0

UNIT PROCESS CAPACITY (MGD)

	DESIGN	2 HR PEAK
AERATION SYSTEM	19.3	NA
SECONDARY CLARIFIERS	45.3	90.5
DISINFECTION	NA	103.2

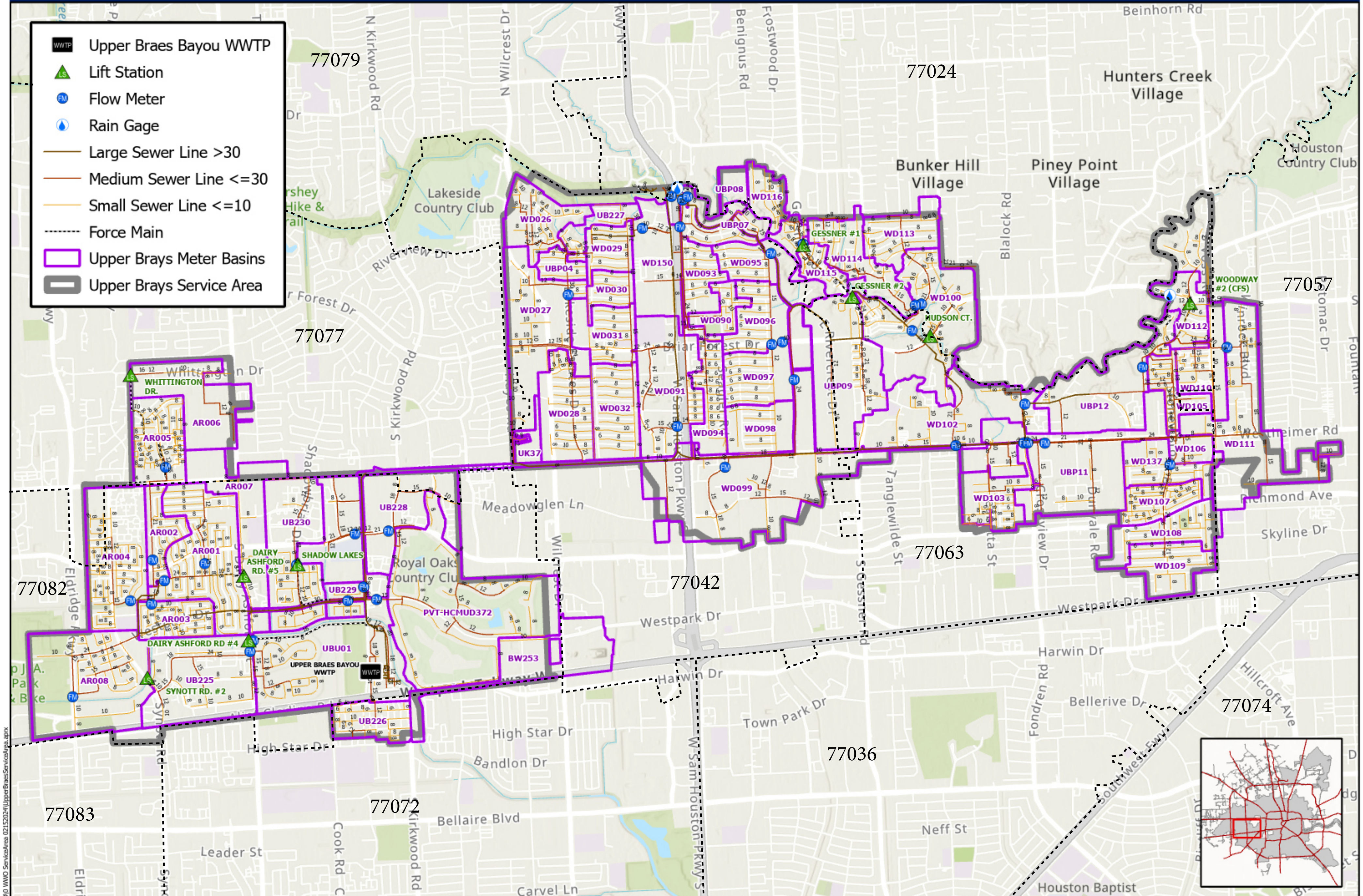
Reviewed March 2024

Attachment 8

Site Drawing

Technical Report 1.0, Section 3
Worksheet 6.0, Section 1.E.

Upper Brays Service Area



Geospatial or map data maintained by Houston Public Works is for informational purposes and may not have been prepared for or be suitable for legal, engineering, or surveying purposes. It does not represent an on-the-ground survey and only represents the approximate location of property boundaries.

0.5 0.3 0 0.5 1 Miles

N

HOUSTON PUBLIC WORKS

Attachment 9

Laboratory Test Reports and COCs

Technical Report 1.0, Section 7, Table 1.0(2)
Worksheet 4.0, Section 1
Worksheet 4.0, Section 2

March 08, 2024

Report # 153111
Revision # 0

ANALYTICAL REPORT

City of Houston Wastewater Operations Laboratory
10500 Bellaire Blvd
Houston, TX 77072

Regulatory Compliance

Upper Brays
13525 W Houston Center Blvd

Houston, TX 77082

Project Site: Upper Brays Pollutants

Enclosed are the results of analyses for samples received by the laboratory on 2/15/2024.
If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Brandon Grimm
Division Manager

Upper Brays	Project: UB Full Scan + Permit		
13525 W Houston Center Blvd	Project Number: 10495-116		
Houston, TX 77082	Project Manager: Regulatory Compliance	**Reported:**	04/04/2024 10:27

PDFFileStart [TOCPAGEMARKER] PDFFileEnd

Upper Brays	Project: UB Full Scan + Permit	
13525 W Houston Center Blvd	Project Number: 10495-116	
Houston, TX 77082	Project Manager: Regulatory Compliance	**Reported:** 04/04/2024 10:27

Samples in this Report

Lab ID	Sample	Alias	Matrix	Date Sampled	Date Received
24B0662-01	SP 2_Grab	Upper Brays Effluent	Water	02/15/2024 07:10	02/15/2024 08:54

HOUSTON PUBLIC WORKS

Upper Brays	Project: UB Full Scan + Permit	
13525 W Houston Center Blvd	Project Number: 10495-116	
Houston, TX 77082	Project Manager: Regulatory Compliance	**Reported:** 04/04/2024 10:27

Sample Results

Sample: SP 2_Grab Upper Brays Effluent

24B0662-01 (Water)

Date Collected: 2/15/2024 7:10
Date Received: 2/15/2024 8:54

Analyte	Result	Qual	DL	RL	Units	Date Prepared	Date Analyzed	Analyst Initials	Method
Wet Chemistry									
Chlorine, total residual	ND		0.100	0.100	mg/L	02/15/2024 07:10	02/15/2024 07:10	AXH	SM 4500-Cl D
Microbiology									
E.coli	**4**		1	1	MPN/100mL	02/15/2024 11:55	02/16/2024 12:00	CML	Colilert
Field									
Temperature, Celsius	**22.6**		0.00	0.100	°C	02/15/2024 07:10	02/15/2024 07:10	AXH	EPA 170.1
Oxygen, dissolved	**7.80**		1.00	1.00	mg/L	02/15/2024 07:10	02/15/2024 07:10	AXH	SM 4500-O G
pH	**6.80**		0.0100	2.00	SU	02/15/2024 07:10	02/15/2024 07:10	AXH	SM 4500-H+ B

Quality Control

Microbiology

Analyte	Result	Qual	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: B24B238 - Colilert										
Blank (B24B238-BLK1)			Prepared: 02/15/24 11:55			Analyzed: 02/16/24 12:00				
E.coli	ND		1	MPN/100mL						
Duplicate (B24B238-DUP1)	**Source: 24B0589-03**		Prepared: 02/15/24 11:55			Analyzed: 02/16/24 12:00				
E.coli	ND		1	MPN/100mL		ND				50
Duplicate (B24B238-DUP2)	**Source: 24B0604-03**		Prepared: 02/15/24 11:55			Analyzed: 02/16/24 12:00				
E.coli	ND		1	MPN/100mL		ND				50

Notes and Definitions

Item	Definition
Dry	Sample results reported on a dry weight basis.
ND	Analyte NOT DETECTED at or above the reporting limit.
DL	Detection Limit
RL	Reporting Limit

Company Name:	Upper Brays Pollutant Monitoring
Address:	13525 W Houston Center Blvd Houston, TX 77082
Permit Number:	10495-116

Sampler: A. Hernandez

IWS Sample Reason

[ ] Permit Requirement
[ ] Special Report
[ ] Other
[ ] Compliance Verification
[✓] POTW Permit Application

UB Full Scan + Permit

AtA

24B0662

Composite Info		
Sample ID:		
Split Samples:	Yes No	Yes No
Number of bottles:	1 2 3 4 5 __	1 2 3 4 5 __
Sample Volume:	mL	mL
Sample Interval:	min	min
Autosampler secured/locked:	Yes No N/A	Yes No N/A
Comp Temp(°C)		

n/a

Field Test Traceability Info	
TRC ID: AtA	TL13A089 08120E1L563
Temperature ID:	TL13A089
pH Measured By:	Paper Meter
pH ID:	T31177D022
Eff Sampler temp(°C)	
Inf Sampler temp(°C)	

Sample comments key:
ND - No Discharge IQ - Insufficient Quantity CC - Company Closed EF - Equipment Failure Other (write in description)

*Matrix: W - Water, S - Solid, C - Chemical

Sample Identification	# Cont	Grab/ Comp	Matrix*	Location	Begin Sampled Date/Time	(End) Sampled Date/Time	Container with Preservation	Test Method	Field Test	Comments
24B0662-01	1	G	W	SP 2_Grab	[redacted]	7:10 2/15/24	(1) IDEXX Sterile Plastic, 0.008% Na2S2O3 Cool <10°C, 0.008% Na2S2O3	Total Coliform and E.coli by Colilert [A]	DO (mg/L) 7.8	DO S/N 08120E1L563
							(1) N/A None	Temperature 2550 B [B]	pH 6.8	
								pH 4500-H+ B [B]	Temp (°C) 22.6	
								Dissolved Oxygen 4500-O G [B]		
								Chlorine 4500 G [B]	TRC (mg/L) 0.01	

Relinquished by: (Signature)	Date/Time	Location	Received by: (Signature)	Date/Time	Location
	2/15/24 - 854			2/15/24 - 854	COH
Relinquished by: (Signature)	Date/Time	Location	Received by: (Signature)	Date/Time	Location

April 02, 2024

Report # 110151
Revision # 0

ANALYTICAL REPORT

City of Houston Wastewater Operations Laboratory
10500 Bellaire Blvd
Houston, TX 77072

Regulatory Compliance

Upper Brays
13525 W Houston Center Blvd

Houston, TX 77082

Project Site: Upper Brays Pollutants

Enclosed are the results of analyses for samples received by the laboratory on 2/16/2024.
If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Brandon Grimm
Division Manager

PDFFileStart [TOCPAGEMARKER] PDFFileEnd

Upper Brays 13525 W Houston Center Blvd Houston, TX 77082	Project: UB Full Scan + Permit Project Number: 10495-116 Project Manager: Regulatory Compliance	**Reported:**	04/04/2024 10:25

Samples in this Report

Lab ID	Sample	Alias	Matrix	Date Sampled	Date Received
24B0663-01	SP 2_CompMan	Upper Brays Effluent	Water	02/15/2024 23:28	02/16/2024 11:11
24B0663-02	SP 2_Comp		Water	02/16/2024 08:00	02/16/2024 11:11
24B0663-02	SP 2_Comp	Upper Brays Effluent	Water	02/16/2024 08:00	02/16/2024 11:11
24B0663-03	Field Blank		Water	02/15/2024 11:58	02/16/2024 11:11
24B0663-03	Field Blank	Field Blank UB	Water	02/15/2024 11:58	02/16/2024 11:11

HOUSTON PUBLIC WORKS

Upper Brays	Project: UB Full Scan + Permit	
13525 W Houston Center Blvd	Project Number: 10495-116	
Houston, TX 77082	Project Manager: Regulatory Compliance	**Reported:** 04/04/2024 10:25

Sample Results

Sample: SP 2_CompMan Upper Brays Effluent

24B0663-01 (Water)

Date Collected: 2/15/2024 23:28
Date Received: 2/16/2024 11:11

Analyte	Result	Qual	DL	RL	Units	Date Prepared	Date Analyzed	Analyst Initials	Method
Total Metals									
Mercury	**3.41**		0.0928	0.500	ng/L	02/19/2024 10:02	02/20/2024 12:53	KEN	EPA 1631E
Volatile Organics									
1,1,1-Trichloroethane	ND		1.03	5.00	ug/L	02/19/2024 08:14	02/19/2024 13:13	SRB	EPA 624.1
1,1,2,2-Tetrachloroethane	ND		0.502	5.00	ug/L	02/19/2024 08:14	02/19/2024 13:13	SRB	EPA 624.1
1,1,2-Trichloroethane	ND		0.471	5.00	ug/L	02/19/2024 08:14	02/19/2024 13:13	SRB	EPA 624.1
1,1-Dichloroethane	ND		0.919	5.00	ug/L	02/19/2024 08:14	02/19/2024 13:13	SRB	EPA 624.1
1,1-Dichloroethene	ND		0.745	5.00	ug/L	02/19/2024 08:14	02/19/2024 13:13	SRB	EPA 624.1
1,2-Dibromoethane	ND		0.621	5.00	ug/L	02/19/2024 08:14	02/19/2024 13:13	SRB	EPA 624.1
1,2-Dichlorobenzene	ND		1.23	5.00	ug/L	02/19/2024 08:14	02/19/2024 13:13	SRB	EPA 624.1
1,2-Dichloroethane	ND		0.803	5.00	ug/L	02/19/2024 08:14	02/19/2024 13:13	SRB	EPA 624.1
1,2-Dichloropropane	ND		0.513	5.00	ug/L	02/19/2024 08:14	02/19/2024 13:13	SRB	EPA 624.1
1,3-Dichlorobenzene	ND		1.28	5.00	ug/L	02/19/2024 08:14	02/19/2024 13:13	SRB	EPA 624.1
1,4-Dichlorobenzene	ND		1.21	5.00	ug/L	02/19/2024 08:14	02/19/2024 13:13	SRB	EPA 624.1
2-Butanone	ND		2.56	10.0	ug/L	02/19/2024 08:14	02/19/2024 13:13	SRB	EPA 624.1
2-Chloroethyl vinyl ether	ND		0.704	5.00	ug/L	02/19/2024 08:14	02/19/2024 13:13	SRB	EPA 624.1
Acrolein	ND		1.29	5.00	ug/L	02/19/2024 08:14	02/19/2024 13:13	SRB	EPA 624.1
Acrylonitrile	ND		1.96	5.00	ug/L	02/19/2024 08:14	02/19/2024 13:13	SRB	EPA 624.1
Benzene	ND		0.591	5.00	ug/L	02/19/2024 08:14	02/19/2024 13:13	SRB	EPA 624.1
Bromodichloromethane	**16.2**		0.336	5.00	ug/L	02/19/2024 08:14	02/19/2024 13:13	SRB	EPA 624.1
Bromoform	ND		0.416	5.00	ug/L	02/19/2024 08:14	02/19/2024 13:13	SRB	EPA 624.1
Bromomethane	ND		1.09	5.00	ug/L	02/19/2024 08:14	02/19/2024 13:13	SRB	EPA 624.1
Carbon Disulfide	ND		1.16	5.00	ug/L	02/19/2024 08:14	02/19/2024 13:13	SRB	EPA 624.1
Carbon Tetrachloride	ND		0.785	5.00	ug/L	02/19/2024 08:14	02/19/2024 13:13	SRB	EPA 624.1
Chlorobenzene	ND		0.782	5.00	ug/L	02/19/2024 08:14	02/19/2024 13:13	SRB	EPA 624.1
Chloroethane	ND		0.583	5.00	ug/L	02/19/2024 08:14	02/19/2024 13:13	SRB	EPA 624.1
Chloroform	**41.2**		0.727	4.00	ug/L	02/19/2024 08:14	02/19/2024 13:13	SRB	EPA 624.1
chloromethane	ND		1.38	5.00	ug/L	02/19/2024 08:14	02/19/2024 13:13	SRB	EPA 624.1
cis-1,2-Dichloroethene	ND		0.562	5.00	ug/L	02/19/2024 08:14	02/19/2024 13:13	SRB	EPA 624.1
cis-1,3-Dichloropropene	ND		0.728	5.00	ug/L	02/19/2024 08:14	02/19/2024 13:13	SRB	EPA 624.1
Dibromochloromethane	**5.14**		0.504	5.00	ug/L	02/19/2024 08:14	02/19/2024 13:13	SRB	EPA 624.1
Epichlorohydrin	ND		4.78	25.0	ug/L	02/19/2024 08:14	02/19/2024 13:13	SRB	EPA 624.1
Ethylbenzene	ND		0.807	5.00	ug/L	02/19/2024 08:14	02/19/2024 13:13	SRB	EPA 624.1
m+p-Xylene	ND		1.68	10.0	ug/L	02/19/2024 08:14	02/19/2024 13:13	SRB	EPA 624.1
Methylene Chloride	ND		2.14	5.00	ug/L	02/19/2024 08:14	02/19/2024 13:13	SRB	EPA 624.1
Methyl-tert-butyl ether (MTBE)	ND		0.428	5.00	ug/L	02/19/2024 08:14	02/19/2024 13:13	SRB	EPA 624.1
o-Xylene	ND		1.00	5.00	ug/L	02/19/2024 08:14	02/19/2024 13:13	SRB	EPA 624.1
Styrene	ND		0.793	5.00	ug/L	02/19/2024 08:14	02/19/2024 13:13	SRB	EPA 624.1
Tetrachloroethene	ND		0.920	5.00	ug/L	02/19/2024 08:14	02/19/2024 13:13	SRB	EPA 624.1
Toluene	ND		0.737	5.00	ug/L	02/19/2024 08:14	02/19/2024 13:13	SRB	EPA 624.1

Sample Results
(Continued)

Sample: SP 2_CompMan (Continued)Upper Brays Effluen

24B0663-01 (Water)

Date Collected: 2/15/2024 23:28
Date Received: 2/16/2024 11:11

Analyte	Result	Qual	DL	RL	Units	Date Prepared	Date Analyzed	Analyst Initials	Method
Volatile Organics (Continued)									
trans-1,2-Dichloroethene	ND		1.26	4.00	ug/L	02/19/2024 08:14	02/19/2024 13:13	SRB	EPA 624.1
trans-1,3-Dichloropropene	ND		1.16	5.00	ug/L	02/19/2024 08:14	02/19/2024 13:13	SRB	EPA 624.1
Trichloroethene	ND		0.432	5.00	ug/L	02/19/2024 08:14	02/19/2024 13:13	SRB	EPA 624.1
Vinyl acetate	ND		0.712	5.00	ug/L	02/19/2024 08:14	02/19/2024 13:13	SRB	EPA 624.1
Vinyl chloride	ND		1.15	5.00	ug/L	02/19/2024 08:14	02/19/2024 13:13	SRB	EPA 624.1
Xylenes, Total	ND		1.00	5.00	ug/L	02/19/2024 08:14	02/19/2024 13:13	SRB	EPA 624.1
Total Trihalomethanes	**62.5**		1.11	5.00	ug/L	02/19/2024 08:14	02/19/2024 13:13	SRB	EPA 624.1
1,3-Dichloropropene, Total	ND		0.738	5.00	ug/L	02/19/2024 08:14	02/19/2024 13:13	SRB	EPA 624.1
Wet Chemistry									
Cyanide, Amenable	**2.24**		0.946	2.00	ug/L	02/22/2024 10:08	02/22/2024 13:07	SBL	OIA 1677
Cyanide, Total	**4.17**	J	3.14	10.0	ug/L	02/22/2024 10:08	02/22/2024 13:07	SBL	ASTM D7511

Sample Results
(Continued)

Sample: SP 2_Comp Upper Brays Effluent
24B0663-02 (Water)

Date Collected: 2/16/2024 8:00
Date Received: 2/16/2024 11:11

Analyte	Result	Qual	DL	RL	Units	Date Prepared	Date Analyzed	Analyst Initials	Method
Total Metals									
Chromium Trivalent	**0.643**	J	0.346	2.00	ug/L	03/01/2024 07:45	03/01/2024 12:10	KEN	[CALC]
Semivolatile Organics									
Chlorpyrifos (2)	ND		0.00909	0.253	ug/L	02/21/2024 08:18	02/22/2024 15:50	RD	EPA 1657
Demeton-o (2)	ND		0.0192	0.253	ug/L	02/21/2024 08:18	02/22/2024 15:50	RD	EPA 1657
Demeton-s (2)	ND		0.0162	0.253	ug/L	02/21/2024 08:18	02/22/2024 15:50	RD	EPA 1657
Diazinon (2)	ND		0.0131	0.253	ug/L	02/21/2024 08:18	02/22/2024 15:50	RD	EPA 1657
ethyl-Parathion (2)	ND		0.0121	0.253	ug/L	02/21/2024 08:18	02/22/2024 15:50	RD	EPA 1657
Malathion (2)	ND		0.0121	0.253	ug/L	02/21/2024 08:18	02/22/2024 15:50	RD	EPA 1657
methyl Azinphos (Guthion) (2)	ND		0.0152	0.253	ug/L	02/21/2024 08:18	02/22/2024 15:50	RD	EPA 1657
4,4'-DDD	ND		0.00386	0.0253	ug/L	02/20/2024 08:33	02/23/2024 11:19	SRB	EPA 608.3
4,4'-DDE	ND		0.00155	0.00505	ug/L	02/20/2024 08:33	02/23/2024 11:19	SRB	EPA 608.3
4,4'-DDT	ND		0.00514	0.0253	ug/L	02/20/2024 08:33	02/23/2024 11:19	SRB	EPA 608.3
Aldrin	ND		0.00155	0.00505	ug/L	02/20/2024 08:33	02/23/2024 11:19	SRB	EPA 608.3
Alpha-BHC	ND		0.00120	0.00505	ug/L	02/20/2024 08:33	02/23/2024 11:19	SRB	EPA 608.3
Beta-BHC	ND		0.00240	0.00505	ug/L	02/20/2024 08:33	02/23/2024 11:19	SRB	EPA 608.3
Delta-BHC	ND		0.00170	0.00505	ug/L	02/20/2024 08:33	02/23/2024 11:19	SRB	EPA 608.3
Dicofol	ND		0.0118	0.0505	ug/L	02/20/2024 08:33	02/23/2024 11:19	SRB	EPA 608.3
Dieldrin	ND		0.00183	0.00505	ug/L	02/20/2024 08:33	02/23/2024 11:19	SRB	EPA 608.3
Endosulfan I	ND		0.00120	0.00505	ug/L	02/20/2024 08:33	02/23/2024 11:19	SRB	EPA 608.3
Endosulfan II	ND		0.00339	0.0253	ug/L	02/20/2024 08:33	02/23/2024 11:19	SRB	EPA 608.3
Endosulfan Sulfate	ND		0.00427	0.0253	ug/L	02/20/2024 08:33	02/23/2024 11:19	SRB	EPA 608.3
Endrin	ND		0.0132	0.0253	ug/L	02/20/2024 08:33	02/23/2024 11:19	SRB	EPA 608.3
Endrin-Aldehyde	ND		0.00219	0.00505	ug/L	02/20/2024 08:33	02/23/2024 11:19	SRB	EPA 608.3
Gamma-BHC	ND		0.00120	0.00505	ug/L	02/20/2024 08:33	02/23/2024 11:19	SRB	EPA 608.3
Heptachlor	ND		0.00219	0.00505	ug/L	02/20/2024 08:33	02/23/2024 11:19	SRB	EPA 608.3
Heptachlor epoxide	ND		0.00155	0.00505	ug/L	02/20/2024 08:33	02/23/2024 11:19	SRB	EPA 608.3
Methoxychlor	ND		0.00249	0.00505	ug/L	02/20/2024 08:33	02/23/2024 11:19	SRB	EPA 608.3
Mirex	ND		0.00155	0.00505	ug/L	02/20/2024 08:33	02/23/2024 11:19	SRB	EPA 608.3
PCB-1016	ND		0.0770	0.202	ug/L	02/20/2024 08:33	02/23/2024 11:19	SRB	EPA 608.3
PCB-1221	ND		0.0120	0.202	ug/L	02/20/2024 08:33	02/23/2024 11:19	SRB	EPA 608.3
PCB-1232	ND		0.121	0.202	ug/L	02/20/2024 08:33	02/23/2024 11:19	SRB	EPA 608.3
PCB-1242	ND		0.117	0.202	ug/L	02/20/2024 08:33	02/23/2024 11:19	SRB	EPA 608.3
PCB-1248	ND		0.0943	0.202	ug/L	02/20/2024 08:33	02/23/2024 11:19	SRB	EPA 608.3
PCB-1254	ND		0.0739	0.202	ug/L	02/20/2024 08:33	02/23/2024 11:19	SRB	EPA 608.3
PCB-1260	ND		0.164	0.202	ug/L	02/20/2024 08:33	02/23/2024 11:19	SRB	EPA 608.3
Toxaphene	ND		0.102	0.202	ug/L	02/20/2024 08:33	02/23/2024 11:19	SRB	EPA 608.3
Polychlorinated biphenyls, Total	ND		0.0739	0.202	ug/L	02/20/2024 08:33	02/23/2024 11:19	SRB	EPA 608.3
1,2,4,5-Tetrachlorobenzene	ND		0.949	5.03	ug/L	02/19/2024 07:48	02/22/2024 13:01	SRB	EPA 625.1
1,2,4-Trichlorobenzene	ND		0.503	5.03	ug/L	02/19/2024 07:48	02/22/2024 13:01	SRB	EPA 625.1

Sample Results
(Continued)

Sample: SP 2_Comp (Continued)Upper Brays Effluent
24B0663-02 (Water)

Date Collected: 2/16/2024 8:00
Date Received: 2/16/2024 11:11

Semivolatile Organics (Continued)

Analyte	Result	Qual	DL	RL	Units	Date Prepared	Date Analyzed	Analyst Initials	Method
2,4,5-Trichlorophenol	ND		1.64	5.03	ug/L	02/19/2024 07:48	02/22/2024 13:01	SRB	EPA 625.1
2,4,6-Trichlorophenol	ND		1.16	5.03	ug/L	02/19/2024 07:48	02/22/2024 13:01	SRB	EPA 625.1
2,4-Dichlorophenol	ND		1.03	5.03	ug/L	02/19/2024 07:48	02/22/2024 13:01	SRB	EPA 625.1
2,4-Dimethylphenol	ND		0.710	5.03	ug/L	02/19/2024 07:48	02/22/2024 13:01	SRB	EPA 625.1
2,4-Dinitrophenol	ND		3.12	5.03	ug/L	02/19/2024 07:48	02/22/2024 13:01	SRB	EPA 625.1
2,4-Dinitrotoluene	ND		1.36	5.03	ug/L	02/19/2024 07:48	02/22/2024 13:01	SRB	EPA 625.1
2,6-Dinitrotoluene	ND		1.35	5.03	ug/L	02/19/2024 07:48	02/22/2024 13:01	SRB	EPA 625.1
2-Chloronaphthalene	ND		0.964	5.03	ug/L	02/19/2024 07:48	02/22/2024 13:01	SRB	EPA 625.1
2-Chlorophenol	ND		1.05	5.03	ug/L	02/19/2024 07:48	02/22/2024 13:01	SRB	EPA 625.1
2-Methylphenol	ND		1.08	5.03	ug/L	02/19/2024 07:48	02/22/2024 13:01	SRB	EPA 625.1
2-Nitrophenol	ND		0.710	5.03	ug/L	02/19/2024 07:48	02/22/2024 13:01	SRB	EPA 625.1
3,3'-Dichlorobenzidine	ND		1.48	5.03	ug/L	02/19/2024 07:48	02/22/2024 13:01	SRB	EPA 625.1
4,6-Dinitro-2-methylphenol	ND		2.28	5.03	ug/L	02/19/2024 07:48	02/22/2024 13:01	SRB	EPA 625.1
4-Bromophenyl phenyl ether	ND		0.819	5.03	ug/L	02/19/2024 07:48	02/22/2024 13:01	SRB	EPA 625.1
4-Chloro-3-methylphenol	ND		1.19	5.03	ug/L	02/19/2024 07:48	02/22/2024 13:01	SRB	EPA 625.1
4-Chlorophenyl phenyl Ether	ND		1.19	5.03	ug/L	02/19/2024 07:48	02/22/2024 13:01	SRB	EPA 625.1
4-Methylphenol	ND		1.39	5.03	ug/L	02/19/2024 07:48	02/22/2024 13:01	SRB	EPA 625.1
4-Nitrophenol	ND		0.973	5.03	ug/L	02/19/2024 07:48	02/22/2024 13:01	SRB	EPA 625.1
Acenaphthene	ND		1.06	5.03	ug/L	02/19/2024 07:48	02/22/2024 13:01	SRB	EPA 625.1
Acenaphthylene	ND		0.875	5.03	ug/L	02/19/2024 07:48	02/22/2024 13:01	SRB	EPA 625.1
Aniline	ND		1.23	5.03	ug/L	02/19/2024 07:48	02/22/2024 13:01	SRB	EPA 625.1
Anthracene	ND		0.860	5.03	ug/L	02/19/2024 07:48	02/22/2024 13:01	SRB	EPA 625.1
Azobenzene	ND		0.982	5.03	ug/L	02/19/2024 07:48	02/22/2024 13:01	SRB	EPA 625.1
Benzidine	ND		1.61	5.03	ug/L	02/19/2024 07:48	02/22/2024 13:01	SRB	EPA 625.1
Benzo(a)pyrene	ND		1.54	5.03	ug/L	02/19/2024 07:48	02/22/2024 13:01	SRB	EPA 625.1
Benzo(b)fluoranthene	ND		1.44	5.03	ug/L	02/19/2024 07:48	02/22/2024 13:01	SRB	EPA 625.1
Benzo(k)Fluoranthene	ND		1.02	5.03	ug/L	02/19/2024 07:48	02/22/2024 13:01	SRB	EPA 625.1
Benzo(g,h,i)perylene	ND		1.13	5.03	ug/L	02/19/2024 07:48	02/22/2024 13:01	SRB	EPA 625.1
Benzo[a]anthracene	ND		1.13	5.03	ug/L	02/19/2024 07:48	02/22/2024 13:01	SRB	EPA 625.1
Bis(2-chloroethoxy) methane	ND		0.835	5.03	ug/L	02/19/2024 07:48	02/22/2024 13:01	SRB	EPA 625.1
Bis(2-chloroethyl) ether	ND		1.09	5.03	ug/L	02/19/2024 07:48	02/22/2024 13:01	SRB	EPA 625.1
Bis(2-chloroisopropyl) ether	ND		0.970	5.03	ug/L	02/19/2024 07:48	02/22/2024 13:01	SRB	EPA 625.1
Bis(2-ethylhexyl) phthalate	ND		2.67	5.03	ug/L	02/19/2024 07:48	02/22/2024 13:01	SRB	EPA 625.1
Butyl benzyl phthalate	ND		1.29	5.03	ug/L	02/19/2024 07:48	02/22/2024 13:01	SRB	EPA 625.1
Carbazole	ND		1.56	5.03	ug/L	02/19/2024 07:48	02/22/2024 13:01	SRB	EPA 625.1
Chrysene	ND		1.30	5.03	ug/L	02/19/2024 07:48	02/22/2024 13:01	SRB	EPA 625.1
Dibenzo(a,h)anthracene	ND		1.32	5.03	ug/L	02/19/2024 07:48	02/22/2024 13:01	SRB	EPA 625.1
Diethyl phthalate	ND		1.28	5.03	ug/L	02/19/2024 07:48	02/22/2024 13:01	SRB	EPA 625.1
Dimethyl phthalate	ND		0.916	5.03	ug/L	02/19/2024 07:48	02/22/2024 13:01	SRB	EPA 625.1
Di-n-butyl phthalate	ND		1.34	5.03	ug/L	02/19/2024 07:48	02/22/2024 13:01	SRB	EPA 625.1

Sample Results
(Continued)

Sample: SP 2_Comp (Continued)Upper Brays Effluent
24B0663-02 (Water)

Date Collected: 2/16/2024 8:00
Date Received: 2/16/2024 11:11

Analyte	Result	Qual	DL	RL	Units	Date Prepared	Date Analyzed	Analyst Initials	Method
Semivolatile Organics (Continued)									
Di-n-octyl phthalate	ND		2.08	5.03	ug/L	02/19/2024 07:48	02/22/2024 13:01	SRB	EPA 625.1
Fluoranthene	ND		1.28	5.03	ug/L	02/19/2024 07:48	02/22/2024 13:01	SRB	EPA 625.1
Fluorene	ND		1.03	5.03	ug/L	02/19/2024 07:48	02/22/2024 13:01	SRB	EPA 625.1
Hexachlorobenzene	ND		0.952	5.03	ug/L	02/19/2024 07:48	02/22/2024 13:01	SRB	EPA 625.1
Hexachlorobutadiene	ND		0.523	5.03	ug/L	02/19/2024 07:48	02/22/2024 13:01	SRB	EPA 625.1
Hexachlorocyclopentadiene	ND		0.744	5.03	ug/L	02/19/2024 07:48	02/22/2024 13:01	SRB	EPA 625.1
Hexachloroethane	ND		0.750	5.03	ug/L	02/19/2024 07:48	02/22/2024 13:01	SRB	EPA 625.1
Indeno(1,2,3-cd)pyrene	ND		1.72	5.03	ug/L	02/19/2024 07:48	02/22/2024 13:01	SRB	EPA 625.1
Isophorone	ND		0.487	5.03	ug/L	02/19/2024 07:48	02/22/2024 13:01	SRB	EPA 625.1
Naphthalene	ND		0.643	5.03	ug/L	02/19/2024 07:48	02/22/2024 13:01	SRB	EPA 625.1
n-Decane	ND		0.523	5.03	ug/L	02/19/2024 07:48	02/22/2024 13:01	SRB	EPA 625.1
Nitrobenzene	ND		0.763	5.03	ug/L	02/19/2024 07:48	02/22/2024 13:01	SRB	EPA 625.1
N-Nitosodi-n-butylamine	ND		0.967	5.03	ug/L	02/19/2024 07:48	02/22/2024 13:01	SRB	EPA 625.1
N-Nitrosodiethylamine	ND		1.06	5.03	ug/L	02/19/2024 07:48	02/22/2024 13:01	SRB	EPA 625.1
N-Nitrosodimethylamine	ND		0.762	5.03	ug/L	02/19/2024 07:48	02/22/2024 13:01	SRB	EPA 625.1
N-Nitrosodi-n-propylamine	ND		1.50	5.03	ug/L	02/19/2024 07:48	02/22/2024 13:01	SRB	EPA 625.1
N-Nitrosodiphenylamine	ND		0.856	5.03	ug/L	02/19/2024 07:48	02/22/2024 13:01	SRB	EPA 625.1
n-Octadecane	ND		0.891	5.03	ug/L	02/19/2024 07:48	02/22/2024 13:01	SRB	EPA 625.1
Pentachlorobenzene	ND		0.646	5.03	ug/L	02/19/2024 07:48	02/22/2024 13:01	SRB	EPA 625.1
Pentachlorophenol	ND		1.75	5.03	ug/L	02/19/2024 07:48	02/22/2024 13:01	SRB	EPA 625.1
Phenanthrene	ND		0.933	5.03	ug/L	02/19/2024 07:48	02/22/2024 13:01	SRB	EPA 625.1
Phenol	ND		1.07	5.03	ug/L	02/19/2024 07:48	02/22/2024 13:01	SRB	EPA 625.1
Pyrene	ND		1.07	5.03	ug/L	02/19/2024 07:48	02/22/2024 13:01	SRB	EPA 625.1
Pyridine	ND		0.982	5.03	ug/L	02/19/2024 07:48	02/22/2024 13:01	SRB	EPA 625.1
3-Methylphenol	ND		5.61	10.1	ug/L	02/19/2024 07:48	02/22/2024 13:01	SRB	EPA 625.1
Wet Chemistry									
Chromium Hexavalent	ND		0.244	1.00	ug/L	03/01/2024 07:45	03/01/2024 12:10	VP	EPA 218.6
Total Alkalinity as CaCO3	**61.1**		20.0	20.0	mg/L	02/20/2024 09:36	02/20/2024 09:36	VP	SM 2320 B
Total Dissolved Solids	**578**		5.0	5.0	mg/L	02/16/2024 13:25	02/20/2024 14:00	VP	SM 2540 C
Total Suspended Solids	**8.1**		2.0	2.0	mg/L	02/16/2024 11:30	02/19/2024 09:40	RNH	SM 2540 D
Ammonia as N	ND		0.0204	0.0500	mg/L	02/20/2024 17:27	02/20/2024 17:27	ZS	EPA 350.1
Total Kjeldahl Nitrogen	**1.58**		0.209	0.500	mg/L	02/20/2024 10:00	02/23/2024 07:10	VP	SM 4500-NH3 D
Biochemical Oxygen Demand, Carbonaceous	**2.30**	BOD t	0.200	2.30	mg/L	02/16/2024 11:45	02/21/2024 09:56	MNB	SM 5210 B

Sample Results
(Continued)

Sample: SP 2_Comp Upper Brays Effluent
24B0663-02 (Water)

Date Collected: 2/16/2024 8:00
Date Received: 2/16/2024 11:11

Total Metals

Analyte	Result	Qual	DL	RL	Units	Date Prepared	Date Analyzed	Analyst Initials	Method
Phosphorous, Total (Reshot)	**23900**		158	1250	ug/L	02/26/2024 07:59	02/27/2024 11:12	KEN	EPA 200.7
Silver (Reshot)	ND		0.0423	0.500	ug/L	02/29/2024 08:31	02/29/2024 11:43	KEN	EPA 200.8
Aluminum (Reshot)	**54.4**	B 10x, MS3	0.260	2.00	ug/L	02/29/2024 08:31	02/29/2024 11:43	KEN	EPA 200.8
Arsenic (Reshot)	**1.90**		0.352	0.500	ug/L	02/29/2024 08:31	02/29/2024 11:43	KEN	EPA 200.8
Barium (Reshot)	**79.0**	B 10x	0.0324	0.500	ug/L	02/29/2024 08:31	02/29/2024 11:43	KEN	EPA 200.8
Beryllium (Reshot)	ND		0.0354	0.500	ug/L	02/29/2024 08:31	02/29/2024 11:43	KEN	EPA 200.8
Cadmium (Reshot)	**0.0432**	J	0.0238	0.500	ug/L	02/29/2024 08:31	02/29/2024 11:43	KEN	EPA 200.8
Chromium (Reshot)	**0.643**	J	0.346	2.00	ug/L	02/29/2024 08:31	02/29/2024 11:43	KEN	EPA 200.8
Copper (Reshot)	**9.46**	B 10x	0.0520	0.500	ug/L	02/29/2024 08:31	02/29/2024 11:43	KEN	EPA 200.8
Nickel (Reshot)	**2.76**		0.0653	0.500	ug/L	02/29/2024 08:31	02/29/2024 11:43	KEN	EPA 200.8
Lead (Reshot)	**0.385**	J, B 10x	0.0253	0.500	ug/L	02/29/2024 08:31	02/29/2024 11:43	KEN	EPA 200.8
Antimony (Reshot)	ND		0.617	2.00	ug/L	02/29/2024 08:31	02/29/2024 11:43	KEN	EPA 200.8
Selenium (Reshot)	**0.829**	J	0.339	2.50	ug/L	02/29/2024 08:31	02/29/2024 11:43	KEN	EPA 200.8
Thallium (Reshot)	ND		0.0660	0.500	ug/L	02/29/2024 08:31	02/29/2024 11:43	KEN	EPA 200.8
Vanadium (Reshot)	**1.48**	J	0.153	5.00	ug/L	02/29/2024 08:31	02/29/2024 11:43	KEN	EPA 200.8
Zinc (Reshot)	**55.2**	B 10x	0.220	2.00	ug/L	02/29/2024 08:31	02/29/2024 11:43	KEN	EPA 200.8

Sample Results
(Continued)

Sample: Field Blank Field Blank UB
24B0663-03 (Water)

Date Collected: 2/15/2024 11:58
Date Received: 2/16/2024 11:11

Analyte	Result	Qual	DL	RL	Units	Date Prepared	Date Analyzed	Analyst Initials	Method
Total Metals									
Mercury	**0.114**	J	0.0928	0.500	ng/L	02/19/2024 10:02	02/20/2024 13:23	KEN	EPA 1631E

Sample Results
(Continued)

Sample: Field Blank Field Blank UB
24B0663-03 (Water)

Date Collected: 2/15/2024 11:58
Date Received: 2/16/2024 11:11

Total Metals

Analyte	Result	Qual	DL	RL	Units	Date Prepared	Date Analyzed	Analyst Initials	Method
Silver (Reshot)	ND		0.0423	0.500	ug/L	02/29/2024 08:31	02/29/2024 11:39	KEN	EPA 200.8
Aluminum (Reshot)	**0.618**	J, B FLD	0.260	2.00	ug/L	02/29/2024 08:31	02/29/2024 11:39	KEN	EPA 200.8
Arsenic (Reshot)	ND		0.352	0.500	ug/L	02/29/2024 08:31	02/29/2024 11:39	KEN	EPA 200.8
Barium (Reshot)	**0.0398**	J, B FLD	0.0324	0.500	ug/L	02/29/2024 08:31	02/29/2024 11:39	KEN	EPA 200.8
Beryllium (Reshot)	ND		0.0354	0.500	ug/L	02/29/2024 08:31	02/29/2024 11:39	KEN	EPA 200.8
Cadmium (Reshot)	ND		0.0238	0.500	ug/L	02/29/2024 08:31	02/29/2024 11:39	KEN	EPA 200.8
Chromium (Reshot)	ND		0.346	2.00	ug/L	02/29/2024 08:31	02/29/2024 11:39	KEN	EPA 200.8
Copper (Reshot)	**0.0706**	J, B FLD	0.0520	0.500	ug/L	02/29/2024 08:31	02/29/2024 11:39	KEN	EPA 200.8
Nickel (Reshot)	ND		0.0653	0.500	ug/L	02/29/2024 08:31	02/29/2024 11:39	KEN	EPA 200.8
Lead (Reshot)	**0.0316**	J, B FLD	0.0253	0.500	ug/L	02/29/2024 08:31	02/29/2024 11:39	KEN	EPA 200.8
Antimony (Reshot)	ND		0.617	2.00	ug/L	02/29/2024 08:31	02/29/2024 11:39	KEN	EPA 200.8
Selenium (Reshot)	ND		0.339	2.50	ug/L	02/29/2024 08:31	02/29/2024 11:39	KEN	EPA 200.8
Thallium (Reshot)	ND		0.0660	0.500	ug/L	02/29/2024 08:31	02/29/2024 11:39	KEN	EPA 200.8
Vanadium (Reshot)	ND		0.153	5.00	ug/L	02/29/2024 08:31	02/29/2024 11:39	KEN	EPA 200.8
Zinc (Reshot)	**0.455**	B FLD, J	0.220	2.00	ug/L	02/29/2024 08:31	02/29/2024 11:39	KEN	EPA 200.8

Quality Control

Total Metals

Analyte	Result	Qual	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: B24B279 - EPA 1631E										
Blank (B24B279-BLK1)					Prepared: 02/19/24 10:02 Analyzed: 02/20/24 12:13					
Mercury	ND		0.500	ng/L						
Blank (B24B279-BLK2)					Prepared: 02/19/24 10:02 Analyzed: 02/20/24 13:13					
Mercury	ND		0.500	ng/L						
Blank (B24B279-BLK3)					Prepared: 02/19/24 10:02 Analyzed: 02/20/24 14:22					
Mercury	ND		0.500	ng/L						
Blank (B24B279-BLK4)					Prepared: 02/19/24 10:02 Analyzed: 02/20/24 13:52					
Mercury	0.120	J	0.500	ng/L						
Blank (B24B279-BLK5)					Prepared: 02/19/24 10:02 Analyzed: 02/20/24 14:02					
Mercury	ND		0.500	ng/L						
Blank (B24B279-BLK6)					Prepared: 02/19/24 10:02 Analyzed: 02/20/24 14:12					
Mercury	ND		0.500	ng/L						
LCS (B24B279-BS1)					Prepared: 02/19/24 10:02 Analyzed: 02/20/24 11:53					
Mercury	5.09		0.500	ng/L	5.00		102	77-123		
LCS (B24B279-BS2)					Prepared: 02/19/24 10:02 Analyzed: 02/20/24 13:03					
Mercury	5.08		0.500	ng/L	5.00		102	77-123		
LCS (B24B279-BS3)					Prepared: 02/19/24 10:02 Analyzed: 02/20/24 14:32					
Mercury	4.89		0.500	ng/L	5.00		97.8	77-123		
Matrix Spike (B24B279-MS1)	**Source: 24B0664-03**				Prepared: 02/19/24 10:02 Analyzed: 02/20/24 12:33					
Mercury	7.66		0.500	ng/L	5.00	2.82	96.9	71-125		

Quality Control
(Continued)

Total Metals (Continued)

Analyte	Result	Qual	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: B24B279 - EPA 1631E (Continued)										
Matrix Spike Dup (B24B279-MSD1)	**Source: 24B0664-03**			Prepared: 02/19/24 10:02		Analyzed: 02/20/24 12:43				
Mercury	7.32		0.500	ng/L	5.00	2.82	90.0	71-125	4.61	24
Batch: B24B381 - EPA 200.7										
Blank (B24B381-BLK1)				Prepared: 02/26/24 07:59		Analyzed: 02/27/24 10:47				
Phosphorous, Total	ND		250	ug/L						
LCS (B24B381-BS1)				Prepared: 02/26/24 07:59		Analyzed: 02/27/24 10:37				
Phosphorous, Total	1980		250	ug/L	2000		98.9	85-115		
LCS (B24B381-BS2)				Prepared: 02/26/24 07:59		Analyzed: 02/27/24 10:40				
Phosphorous, Total	1890		250	ug/L	2000		94.7	85-115		
LCS (B24B381-BS3)				Prepared: 02/26/24 07:59		Analyzed: 02/27/24 10:42				
Phosphorous, Total	2000		250	ug/L	2000		99.9	85-115		
LCS (B24B381-BS4)				Prepared: 02/26/24 07:59		Analyzed: 02/27/24 10:45				
Phosphorous, Total	1960		250	ug/L	2000		98.1	85-115		
Duplicate (B24B381-DUP2)	**Source: 24B0663-02R**			Prepared: 02/26/24 07:59		Analyzed: 02/27/24 11:15				
Phosphorous, Total	23500		1250	ug/L		23900			1.73	20
Matrix Spike (B24B381-MS2)	**Source: 24B0663-02R**			Prepared: 02/26/24 07:59		Analyzed: 02/27/24 11:18				
Phosphorous, Total	25800		1250	ug/L	2000	23900	96.8	70-130		
Matrix Spike Dup (B24B381-MSD2)	**Source: 24B0663-02R**			Prepared: 02/26/24 07:59		Analyzed: 02/27/24 11:21				
Phosphorous, Total	25700		1250	ug/L	2000	23900	92.9	70-130	0.305	20

Quality Control
(Continued)

Total Metals (Continued)

Analyte	Result	Qual	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: B24B425 - EPA 200.8										
Blank (B24B425-BLK1)					Prepared: 02/28/24 08:05 Analyzed: 02/28/24 11:40					
Aluminum	ND		2.00	ug/L						
Chromium	ND		2.00	ug/L						
Antimony	ND		2.00	ug/L						
Arsenic	ND		0.500	ug/L						
Barium	ND		0.500	ug/L						
Beryllium	ND		0.500	ug/L						
Cadmium	ND		0.500	ug/L						
Copper	ND		0.500	ug/L						
Lead	ND		0.500	ug/L						
Nickel	ND		0.500	ug/L						
Selenium	ND		2.50	ug/L						
Silver	ND		0.500	ug/L						
Thallium	ND		0.500	ug/L						
Vanadium	ND		5.00	ug/L						
Zinc	ND		2.00	ug/L						
LCS (B24B425-BS1)					Prepared: 02/28/24 08:05 Analyzed: 02/28/24 12:09					
Aluminum	20.4		2.00	ug/L	20.0		102	85-115		
Chromium	20.9		2.00	ug/L	20.0		104	85-115		
Antimony	20.4		2.00	ug/L	20.0		102	85-115		
Arsenic	20.2		0.500	ug/L	20.0		101	85-115		
Barium	20.6		0.500	ug/L	20.0		103	85-115		
Beryllium	20.2		0.500	ug/L	20.0		101	85-115		
Cadmium	20.4		0.500	ug/L	20.0		102	85-115		
Copper	20.9		0.500	ug/L	20.0		105	85-115		
Lead	19.7		0.500	ug/L	20.0		98.7	85-115		
Nickel	20.9		0.500	ug/L	20.0		105	85-115		
Selenium	103		2.50	ug/L	100		103	85-115		
Silver	20.0		0.500	ug/L	20.0		100	85-115		
Thallium	18.4		0.500	ug/L	20.0		91.8	85-115		
Vanadium	21.3		5.00	ug/L	20.0		107	85-115		
Zinc	20.4		2.00	ug/L	20.0		102	85-115		

Quality Control
(Continued)

Total Metals (Continued)

Analyte	Result	Qual	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: B24B425 - EPA 200.8 (Continued)										
Duplicate (B24B425-DUP1)	**Source: 24B0664-04**		Prepared: 02/28/24 08:05 Analyzed: 02/28/24 11:56							
Aluminum	73.7		2.00	ug/L		91.4			21.5	20
Chromium	0.965	J	2.00	ug/L		1.08			11.3	20
Antimony	0.648	J	2.00	ug/L		0.715			9.82	20
Arsenic	1.93		0.500	ug/L		2.16			11.2	20
Barium	80.1		0.500	ug/L		87.5			8.91	20
Beryllium	ND		0.500	ug/L		ND				20
Cadmium	ND		0.500	ug/L		0.0265				20
Copper	7.46		0.500	ug/L		8.17			9.06	20
Lead	0.561		0.500	ug/L		0.613			8.83	20
Nickel	2.89		0.500	ug/L		3.28			12.6	20
Selenium	0.768	J	2.50	ug/L		0.857			10.9	20
Silver	ND		0.500	ug/L		ND				20
Thallium	ND		0.500	ug/L		ND				20
Vanadium	1.99	J	5.00	ug/L		2.19			9.69	20
Zinc	45.5		2.00	ug/L		49.9			9.36	20
Duplicate (B24B425-DUP2)	**Source: 24B0664-04R**		Prepared: 02/28/24 08:05 Analyzed: 02/28/24 12:34							
Aluminum	77.5		2.00	ug/L		84.0			8.09	20
Chromium	0.966	J	2.00	ug/L		1.12			14.6	20
Antimony	0.630	J	2.00	ug/L		0.739			15.9	20
Arsenic	1.86		0.500	ug/L		2.19			16.0	20
Barium	81.3		0.500	ug/L		89.4			9.50	20
Beryllium	ND		0.500	ug/L		ND				20
Cadmium	ND		0.500	ug/L		0.0244				20
Copper	7.54		0.500	ug/L		8.28			9.40	20
Lead	0.589		0.500	ug/L		0.624			5.70	20
Nickel	2.96		0.500	ug/L		3.38			13.2	20
Selenium	0.715	J	2.50	ug/L		0.875			20.1	20
Silver	ND		0.500	ug/L		ND				20
Thallium	ND		0.500	ug/L		ND				20
Vanadium	1.92	J	5.00	ug/L		2.14			10.9	20
Zinc	45.9		2.00	ug/L		50.5			9.51	20

Quality Control
(Continued)

Total Metals (Continued)

Analyte	Result	Qual	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: B24B425 - EPA 200.8 (Continued)										
Matrix Spike (B24B425-MS1)	**Source: 24B0664-04**		Prepared: 02/28/24 08:05			Analyzed: 02/28/24 12:00				
Aluminum	99.3		2.00	ug/L	20.0	91.4	39.5	70-130		
Chromium	21.4		2.00	ug/L	20.0	1.08	102	70-130		
Antimony	20.0		2.00	ug/L	20.0	0.715	96.6	70-130		
Arsenic	21.5		0.500	ug/L	20.0	2.16	96.5	70-130		
Barium	99.6		0.500	ug/L	20.0	87.5	60.3	70-130		
Beryllium	20.2		0.500	ug/L	20.0	ND	101	70-130		
Cadmium	19.4		0.500	ug/L	20.0	0.0265	96.7	70-130		
Copper	26.6		0.500	ug/L	20.0	8.17	92.2	70-130		
Lead	20.7		0.500	ug/L	20.0	0.613	100	70-130		
Nickel	22.1		0.500	ug/L	20.0	3.28	94.2	70-130		
Selenium	98.1		2.50	ug/L	100	0.857	97.2	70-130		
Silver	18.2		0.500	ug/L	20.0	ND	91.2	70-130		
Thallium	20.1		0.500	ug/L	20.0	ND	101	70-130		
Vanadium	23.9		5.00	ug/L	20.0	2.19	109	70-130		
Zinc	64.5		2.00	ug/L	20.0	49.9	72.7	70-130		
Matrix Spike (B24B425-MS2)	**Source: 24B0664-04R**		Prepared: 02/28/24 08:05			Analyzed: 02/28/24 12:38				
Aluminum	98.6		2.00	ug/L	20.0	84.0	73.0	70-130		
Chromium	21.2		2.00	ug/L	20.0	1.12	100	70-130		
Antimony	20.0		2.00	ug/L	20.0	0.739	96.2	70-130		
Arsenic	21.2		0.500	ug/L	20.0	2.19	95.0	70-130		
Barium	98.9		0.500	ug/L	20.0	89.4	47.7	70-130		
Beryllium	20.5		0.500	ug/L	20.0	ND	102	70-130		
Cadmium	19.2		0.500	ug/L	20.0	0.0244	95.7	70-130		
Copper	26.4		0.500	ug/L	20.0	8.28	90.5	70-130		
Lead	20.4		0.500	ug/L	20.0	0.624	98.9	70-130		
Nickel	22.0		0.500	ug/L	20.0	3.38	93.1	70-130		
Selenium	97.9		2.50	ug/L	100	0.875	97.1	70-130		
Silver	18.1		0.500	ug/L	20.0	ND	90.6	70-130		
Thallium	19.5		0.500	ug/L	20.0	ND	97.5	70-130		
Vanadium	24.0		5.00	ug/L	20.0	2.14	109	70-130		
Zinc	63.6		2.00	ug/L	20.0	50.5	65.3	70-130		

Quality Control
(Continued)

Total Metals (Continued)

Batch: B24B425 - EPA 200.8 (Continued)

Matrix Spike Dup (B24B425-MSD1) Source: 24B0664-04 Prepared: 02/28/24 08:05 Analyzed: 02/28/24 12:05

Analyte	Result	Qual	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Aluminum	100		2.00	ug/L	20.0	91.4	45.1	70-130	1.11	20
Chromium	21.4		2.00	ug/L	20.0	1.08	102	70-130	0.0855	20
Antimony	20.1		2.00	ug/L	20.0	0.715	97.0	70-130	0.410	20
Arsenic	21.8		0.500	ug/L	20.0	2.16	98.1	70-130	1.41	20
Barium	98.9		0.500	ug/L	20.0	87.5	56.7	70-130	0.736	20
Beryllium	20.1		0.500	ug/L	20.0	ND	100	70-130	0.490	20
Cadmium	19.2		0.500	ug/L	20.0	0.0265	96.0	70-130	0.731	20
Copper	26.9		0.500	ug/L	20.0	8.17	93.6	70-130	1.08	20
Lead	20.6		0.500	ug/L	20.0	0.613	99.8	70-130	0.478	20
Nickel	22.3		0.500	ug/L	20.0	3.28	95.2	70-130	0.934	20
Selenium	99.2		2.50	ug/L	100	0.857	98.3	70-130	1.11	20
Silver	18.4		0.500	ug/L	20.0	ND	92.1	70-130	1.03	20
Thallium	19.7		0.500	ug/L	20.0	ND	98.6	70-130	2.12	20
Vanadium	23.9		5.00	ug/L	20.0	2.19	108	70-130	0.175	20
Zinc	64.9		2.00	ug/L	20.0	49.9	74.7	70-130	0.620	20

Matrix Spike Dup (B24B425-MSD2) Source: 24B0664-04R Prepared: 02/28/24 08:05 Analyzed: 02/28/24 12:42

Aluminum	99.3		2.00	ug/L	20.0	84.0	76.5	70-130	0.691	20
Chromium	21.4		2.00	ug/L	20.0	1.12	102	70-130	1.09	20
Antimony	20.5		2.00	ug/L	20.0	0.739	99.0	70-130	2.82	20
Arsenic	21.1		0.500	ug/L	20.0	2.19	94.5	70-130	0.464	20
Barium	102		0.500	ug/L	20.0	89.4	64.0	70-130	3.24	20
Beryllium	20.9		0.500	ug/L	20.0	ND	105	70-130	2.04	20
Cadmium	19.4		0.500	ug/L	20.0	0.0244	96.8	70-130	1.13	20
Copper	26.5		0.500	ug/L	20.0	8.28	91.2	70-130	0.581	20
Lead	20.2		0.500	ug/L	20.0	0.624	97.9	70-130	0.953	20
Nickel	21.9		0.500	ug/L	20.0	3.38	92.7	70-130	0.330	20
Selenium	97.4		2.50	ug/L	100	0.875	96.5	70-130	0.548	20
Silver	18.0		0.500	ug/L	20.0	ND	90.2	70-130	0.476	20
Thallium	19.6		0.500	ug/L	20.0	ND	97.9	70-130	0.401	20
Vanadium	24.4		5.00	ug/L	20.0	2.14	111	70-130	1.30	20
Zinc	64.0		2.00	ug/L	20.0	50.5	67.4	70-130	0.636	20

Quality Control
(Continued)

Total Metals (Continued)

Analyte	Result	Qual	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: B24B445 - EPA 200.8										
Blank (B24B445-BLK1)					Prepared: 02/29/24 08:31 Analyzed: 02/29/24 11:30					
Aluminum	ND		2.00	ug/L						
Chromium	ND		2.00	ug/L						
Antimony	ND		2.00	ug/L						
Arsenic	ND		0.500	ug/L						
Barium	ND		0.500	ug/L						
Beryllium	ND		0.500	ug/L						
Cadmium	ND		0.500	ug/L						
Copper	ND		0.500	ug/L						
Lead	ND		0.500	ug/L						
Nickel	ND		0.500	ug/L						
Selenium	ND		2.50	ug/L						
Silver	ND		0.500	ug/L						
Thallium	ND		0.500	ug/L						
Vanadium	ND		5.00	ug/L						
Zinc	ND		2.00	ug/L						
LCS (B24B445-BS1)					Prepared: 02/29/24 08:31 Analyzed: 02/29/24 12:08					
Aluminum	20.3		2.00	ug/L	20.0		101	85-115		
Chromium	20.3		2.00	ug/L	20.0		101	85-115		
Antimony	20.0		2.00	ug/L	20.0		100	85-115		
Arsenic	19.4		0.500	ug/L	20.0		96.9	85-115		
Barium	19.6		0.500	ug/L	20.0		97.9	85-115		
Beryllium	20.6		0.500	ug/L	20.0		103	85-115		
Cadmium	19.6		0.500	ug/L	20.0		98.2	85-115		
Copper	20.0		0.500	ug/L	20.0		100	85-115		
Lead	20.2		0.500	ug/L	20.0		101	85-115		
Nickel	19.4		0.500	ug/L	20.0		97.1	85-115		
Selenium	99.4		2.50	ug/L	100		99.4	85-115		
Silver	19.8		0.500	ug/L	20.0		99.2	85-115		
Thallium	18.9		0.500	ug/L	20.0		94.5	85-115		
Vanadium	21.0		5.00	ug/L	20.0		105	85-115		
Zinc	19.9		2.00	ug/L	20.0		99.3	85-115		

Quality Control
(Continued)

Total Metals (Continued)

Analyte	Result	Qual	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: B24B445 - EPA 200.8 (Continued)										
Duplicate (B24B445-DUP1)	**Source: 24B0663-02R**		Prepared: 02/29/24 08:31	Analyzed: 02/29/24 11:47						
Aluminum	58.2		2.00	ug/L		54.4			6.85	20
Antimony	ND		2.00	ug/L		ND				20
Chromium	0.643	J	2.00	ug/L		0.643			0.0860	20
Arsenic	1.78		0.500	ug/L		1.90			6.89	20
Barium	80.6		0.500	ug/L		79.0			1.99	20
Beryllium	ND		0.500	ug/L		ND				20
Cadmium	0.0402	J	0.500	ug/L		0.0432			7.10	20
Copper	9.41		0.500	ug/L		9.46			0.472	20
Lead	0.389	J	0.500	ug/L		0.385			0.817	20
Nickel	2.88		0.500	ug/L		2.76			4.40	20
Selenium	0.797	J	2.50	ug/L		0.829			3.98	20
Silver	ND		0.500	ug/L		ND				20
Thallium	ND		0.500	ug/L		ND				20
Vanadium	1.38	J	5.00	ug/L		1.48			6.94	20
Zinc	57.2		2.00	ug/L		55.2			3.47	20
Duplicate (B24B445-DUP2)	**Source: 24B0250-02**		Prepared: 02/29/24 08:31	Analyzed: 02/29/24 12:41						
Aluminum	31.4		2.00	ug/L		32.3			2.74	20
Antimony	ND		2.00	ug/L		ND				20
Chromium	0.567	J	2.00	ug/L		0.533			6.21	20
Arsenic	0.943		0.500	ug/L		0.946			0.272	20
Barium	157		0.500	ug/L		160			1.64	20
Beryllium	ND		0.500	ug/L		ND				20
Cadmium	ND		0.500	ug/L		ND				20
Copper	5.53		0.500	ug/L		5.51			0.468	20
Lead	0.131	J	0.500	ug/L		0.129			0.887	20
Nickel	2.72		0.500	ug/L		2.71			0.465	20
Selenium	0.673	J	2.50	ug/L		0.723			7.08	20
Silver	ND		0.500	ug/L		ND				20
Thallium	ND		0.500	ug/L		ND				20
Vanadium	1.03	J	5.00	ug/L		1.02			1.04	20
Zinc	29.7		2.00	ug/L		29.3			1.44	20

Quality Control
(Continued)

Total Metals (Continued)

Analyte	Result	Qual	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: B24B445 - EPA 200.8 (Continued)										
Matrix Spike (B24B445-MS1)	**Source: 24B0663-02R**		Prepared: 02/29/24 08:31		Analyzed: 02/29/24 11:51					
Aluminum	81.3	MS3	2.00	ug/L	20.0	54.4	135	70-130		
Chromium	21.0		2.00	ug/L	20.0	0.643	102	70-130		
Antimony	20.5		2.00	ug/L	20.0	ND	102	70-130		
Arsenic	22.0		0.500	ug/L	20.0	1.90	100	70-130		
Barium	103		0.500	ug/L	20.0	79.0	119	70-130		
Beryllium	19.6		0.500	ug/L	20.0	ND	98.2	70-130		
Cadmium	19.3		0.500	ug/L	20.0	0.0432	96.3	70-130		
Copper	29.3		0.500	ug/L	20.0	9.46	99.3	70-130		
Lead	20.8		0.500	ug/L	20.0	0.385	102	70-130		
Nickel	21.8		0.500	ug/L	20.0	2.76	95.4	70-130		
Selenium	98.4		2.50	ug/L	100	0.829	97.5	70-130		
Silver	19.0		0.500	ug/L	20.0	ND	94.9	70-130		
Thallium	20.1		0.500	ug/L	20.0	ND	101	70-130		
Vanadium	23.2		5.00	ug/L	20.0	1.48	109	70-130		
Zinc	77.4		2.00	ug/L	20.0	55.2	111	70-130		
Matrix Spike (B24B445-MS2)	**Source: 24B0250-02**		Prepared: 02/29/24 08:31		Analyzed: 02/29/24 12:45					
Aluminum	56.2		2.00	ug/L	20.0	32.3	120	70-130		
Antimony	19.9		2.00	ug/L	20.0	ND	99.7	70-130		
Chromium	20.1		2.00	ug/L	20.0	0.533	97.9	70-130		
Arsenic	20.6		0.500	ug/L	20.0	0.946	98.1	70-130		
Barium	173		0.500	ug/L	20.0	160	65.0	70-130		
Beryllium	19.6		0.500	ug/L	20.0	ND	97.9	70-130		
Cadmium	19.1		0.500	ug/L	20.0	ND	95.3	70-130		
Copper	24.5		0.500	ug/L	20.0	5.51	94.9	70-130		
Lead	20.4		0.500	ug/L	20.0	0.129	102	70-130		
Nickel	21.2		0.500	ug/L	20.0	2.71	92.3	70-130		
Selenium	97.1		2.50	ug/L	100	0.723	96.4	70-130		
Silver	18.6		0.500	ug/L	20.0	ND	93.1	70-130		
Thallium	20.0		0.500	ug/L	20.0	ND	99.9	70-130		
Vanadium	21.6		5.00	ug/L	20.0	1.02	103	70-130		
Zinc	47.6		2.00	ug/L	20.0	29.3	91.3	70-130		

Quality Control
(Continued)

Total Metals (Continued)

Analyte	Result	Qual	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: B24B445 - EPA 200.8 (Continued)										
Matrix Spike Dup (B24B445-MSD1) Source: 24B0663-02R Prepared: 02/29/24 08:31 Analyzed: 02/29/24 11:59										
Aluminum	83.9	MS3	2.00	ug/L	20.0	54.4	148	70-130	3.19	20
Antimony	20.2		2.00	ug/L	20.0	ND	101	70-130	1.40	20
Chromium	21.0		2.00	ug/L	20.0	0.643	102	70-130	0.303	20
Arsenic	22.3		0.500	ug/L	20.0	1.90	102	70-130	1.36	20
Barium	103		0.500	ug/L	20.0	79.0	120	70-130	0.370	20
Beryllium	20.0		0.500	ug/L	20.0	ND	100	70-130	2.00	20
Cadmium	19.5		0.500	ug/L	20.0	0.0432	97.0	70-130	0.743	20
Copper	29.2		0.500	ug/L	20.0	9.46	98.7	70-130	0.415	20
Lead	20.5		0.500	ug/L	20.0	0.385	100	70-130	1.64	20
Nickel	22.0		0.500	ug/L	20.0	2.76	96.3	70-130	0.859	20
Selenium	98.7		2.50	ug/L	100	0.829	97.9	70-130	0.370	20
Silver	19.1		0.500	ug/L	20.0	ND	95.7	70-130	0.819	20
Thallium	19.7		0.500	ug/L	20.0	ND	98.5	70-130	2.21	20
Vanadium	23.2		5.00	ug/L	20.0	1.48	109	70-130	0.236	20
Zinc	79.0		2.00	ug/L	20.0	55.2	119	70-130	2.11	20
Matrix Spike Dup (B24B445-MSD2) Source: 24B0250-02 Prepared: 02/29/24 08:31 Analyzed: 02/29/24 12:53										
Aluminum	61.9		2.00	ug/L	20.0	32.3	148	70-130	9.59	20
Antimony	19.9		2.00	ug/L	20.0	ND	99.3	70-130	0.345	20
Chromium	20.7		2.00	ug/L	20.0	0.533	101	70-130	2.86	20
Arsenic	20.3		0.500	ug/L	20.0	0.946	96.6	70-130	1.52	20
Barium	177		0.500	ug/L	20.0	160	85.5	70-130	2.35	20
Beryllium	20.3		0.500	ug/L	20.0	ND	101	70-130	3.59	20
Cadmium	19.1		0.500	ug/L	20.0	ND	95.5	70-130	0.149	20
Copper	24.2		0.500	ug/L	20.0	5.51	93.3	70-130	1.27	20
Lead	20.3		0.500	ug/L	20.0	0.129	101	70-130	0.817	20
Nickel	20.8		0.500	ug/L	20.0	2.71	90.4	70-130	1.83	20
Selenium	95.3		2.50	ug/L	100	0.723	94.5	70-130	1.92	20
Silver	18.4		0.500	ug/L	20.0	ND	91.8	70-130	1.47	20
Thallium	19.1		0.500	ug/L	20.0	ND	95.6	70-130	4.40	20
Vanadium	22.0		5.00	ug/L	20.0	1.02	105	70-130	1.67	20
Zinc	47.8		2.00	ug/L	20.0	29.3	92.3	70-130	0.420	20

Quality Control
(Continued)

Semivolatile Organics

Analyte	Result	Qual	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: B24B229 - EPA 625.1_SPE										
Blank (B24B229-BLK1)					Prepared: 02/19/24 07:48 Analyzed: 02/22/24 11:08					
1,2,4,5-Tetrachlorobenzene	ND		5.00	ug/L						
1,2,4-Trichlorobenzene	ND		5.00	ug/L						
2,4,5-Trichlorophenol	ND		5.00	ug/L						
2,4,6-Trichlorophenol	ND		5.00	ug/L						
2,4-Dichlorophenol	ND		5.00	ug/L						
2,4-Dimethylphenol	ND		5.00	ug/L						
2,4-Dinitrophenol	ND		5.00	ug/L						
2,4-Dinitrotoluene	ND		5.00	ug/L						
2,6-Dinitrotoluene	ND		5.00	ug/L						
2-Chloronaphthalene	ND		5.00	ug/L						
2-Chlorophenol	ND		5.00	ug/L						
2-Methylphenol	ND		5.00	ug/L						
2-Nitrophenol	ND		5.00	ug/L						
3,3'-Dichlorobenzidine	ND		5.00	ug/L						
4,6-Dinitro-2-methylphenol	ND		5.00	ug/L						
4-Bromophenyl phenyl ether	ND		5.00	ug/L						
4-Chloro-3-methylphenol	ND		5.00	ug/L						
4-Chlorophenyl phenyl Ether	ND		5.00	ug/L						
4-Methylphenol	ND		5.00	ug/L						
4-Nitrophenol	ND		5.00	ug/L						
Acenaphthene	ND		5.00	ug/L						
Acenaphthylene	ND		5.00	ug/L						
Aniline	ND		5.00	ug/L						
Anthracene	ND		5.00	ug/L						
Azobenzene	ND		5.00	ug/L						
Benzidine	ND		5.00	ug/L						
Benzo(a)pyrene	ND		5.00	ug/L						
Benzo(b)fluoranthene	ND		5.00	ug/L						
Benzo(k)Fluoranthene	ND		5.00	ug/L						
Benzo(g,h,i)perylene	ND		5.00	ug/L						
Benzo[a]anthracene	ND		5.00	ug/L						
Bis(2-chloroethoxy) methane	ND		5.00	ug/L						
Bis(2-chloroethyl) ether	ND		5.00	ug/L						
Bis(2-chloroisopropyl) ether	ND		5.00	ug/L						
Bis(2-ethylhexyl) phthalate	ND		5.00	ug/L						
Butyl benzyl phthalate	ND		5.00	ug/L						
Carbazole	ND		5.00	ug/L						
Chrysene	ND		5.00	ug/L						
Dibenzo(a,h)anthracene	ND		5.00	ug/L						
Diethyl phthalate	ND		5.00	ug/L						
Dimethyl phthalate	ND		5.00	ug/L						
Di-n-butyl phthalate	ND		5.00	ug/L						
Di-n-octyl phthalate	ND		5.00	ug/L						
Fluoranthene	ND		5.00	ug/L						
Fluorene	ND		5.00	ug/L						
Hexachlorobenzene	ND		5.00	ug/L						
Hexachlorobutadiene	ND		5.00	ug/L						

Quality Control
(Continued)

Semivolatile Organics (Continued)

Analyte	Result	Qual	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: B24B229 - EPA 625.1_SPE (Continued)										
Blank (B24B229-BLK1)					Prepared: 02/19/24 07:48 Analyzed: 02/22/24 11:08					
Hexachlorocyclopentadiene	ND		5.00	ug/L						
Hexachloroethane	ND		5.00	ug/L						
Indeno(1,2,3-cd)pyrene	ND		5.00	ug/L						
Isophorone	ND		5.00	ug/L						
Naphthalene	ND		5.00	ug/L						
n-Decane	ND		5.00	ug/L						
Nitrobenzene	ND		5.00	ug/L						
N-Nitosodi-n-butylamine	ND		5.00	ug/L						
N-Nitrosodiethylamine	ND		5.00	ug/L						
N-Nitrosodimethylamine	ND		5.00	ug/L						
N-Nitrosodi-n-propylamine	ND		5.00	ug/L						
N-Nitrosodiphenylamine	ND		5.00	ug/L						
n-Octadecane	ND		5.00	ug/L						
Pentachlorobenzene	ND		5.00	ug/L						
Pentachlorophenol	ND		5.00	ug/L						
Phenanthrene	ND		5.00	ug/L						
Phenol	ND		5.00	ug/L						
Pyrene	ND		5.00	ug/L						
Pyridine	ND		5.00	ug/L						
3-Methylphenol	ND		10.0	ug/L						
LCS (B24B229-BS1)					Prepared: 02/19/24 07:48 Analyzed: 02/22/24 11:36					
1,2,4-Trichlorobenzene	29.7		5.00	ug/L	40.0		74.2	44-142		
2,4,5-Trichlorophenol	36.5		5.00	ug/L	40.0		91.3	1-140		
2,4,6-Trichlorophenol	37.8		5.00	ug/L	40.0		94.6	37-144		
2,4-Dichlorophenol	34.4		5.00	ug/L	40.0		86.0	39-135		
2,4-Dimethylphenol	23.6		5.00	ug/L	40.0		59.1	32-120		
2,4-Dinitrophenol	46.7		5.00	ug/L	40.0		117	1-191		
2,4-Dinitrotoluene	40.9		5.00	ug/L	40.0		102	39-139		
2,6-Dinitrotoluene	40.5		5.00	ug/L	40.0		101	50-158		
2-Chloronaphthalene	32.3		5.00	ug/L	40.0		80.8	20-120		
2-Chlorophenol	33.8		5.00	ug/L	40.0		84.4	23-134		
2-Methylphenol	33.4		5.00	ug/L	40.0		83.5	1-140		
2-Nitrophenol	36.0		5.00	ug/L	40.0		90.1	29-182		
3,3'-Dichlorobenzidine	58.1		5.00	ug/L	100		58.1	1-262		
4,6-Dinitro-2-methylphenol	49.2		5.00	ug/L	40.0		123	1-181		
4-Bromophenyl phenyl ether	34.0		5.00	ug/L	40.0		84.9	53-127		
4-Chloro-3-methylphenol	36.4		5.00	ug/L	40.0		90.9	22-147		
4-Chlorophenyl phenyl Ether	32.5		5.00	ug/L	40.0		81.3	25-158		
4-Methylphenol	20.5		5.00	ug/L	20.0		102	1-140		
4-Nitrophenol	43.6		5.00	ug/L	40.0		109	1-132		
Acenaphthene	36.1		5.00	ug/L	40.0		90.3	47-145		
Acenaphthylene	30.8		5.00	ug/L	40.0		77.1	33-145		
Aniline	24.3		5.00	ug/L	40.0		60.7	1-140		
Anthracene	37.5		5.00	ug/L	40.0		93.7	27-133		
Azobenzene	38.2		5.00	ug/L	40.0		95.5	1-140		
Benzidine	20.6		5.00	ug/L	100		20.6	1-140		

Quality Control
(Continued)

Semivolatile Organics (Continued)

Analyte	Result	Qual	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: B24B229 - EPA 625.1_SPE (Continued)										
LCS (B24B229-BS1)					Prepared: 02/19/24 07:48		Analyzed: 02/22/24 11:36			
Benzo(a)pyrene	34.7		5.00	ug/L	40.0		86.7	17-163		
Benzo(b)fluoranthene	36.0		5.00	ug/L	40.0		90.0	24-159		
Benzo(k)Fluoranthene	38.6		5.00	ug/L	40.0		96.4	11-162		
Benzo(g,h,i)perylene	30.3		5.00	ug/L	40.0		75.9	1-219		
Benzo[a]anthracene	33.5		5.00	ug/L	40.0		83.8	33-143		
Bis(2-chloroethoxy) methane	37.1		5.00	ug/L	40.0		92.8	33-184		
Bis(2-chloroethyl) ether	37.9		5.00	ug/L	40.0		94.7	12-158		
Bis(2-chloroisopropyl) ether	33.2		5.00	ug/L	40.0		83.1	36-166		
Bis(2-ethylhexyl) phthalate	39.6		5.00	ug/L	40.0		98.9	8-158		
Butyl benzyl phthalate	36.1		5.00	ug/L	40.0		90.2	1-152		
Carbazole	36.9		5.00	ug/L	40.0		92.3	1-140		
Chrysene	39.2		5.00	ug/L	40.0		98.1	17-168		
Dibenzo(a,h)anthracene	32.1		5.00	ug/L	40.0		80.2	1-227		
Diethyl phthalate	37.0		5.00	ug/L	40.0		92.4	1-120		
Dimethyl phthalate	36.7		5.00	ug/L	40.0		91.7	1-120		
Di-n-butyl phthalate	35.9		5.00	ug/L	40.0		89.7	1-120		
Di-n-octyl phthalate	38.0		5.00	ug/L	40.0		94.9	4-146		
Fluoranthene	35.1		5.00	ug/L	40.0		87.7	26-137		
Fluorene	33.6		5.00	ug/L	40.0		84.0	59-121		
Hexachlorobenzene	37.0		5.00	ug/L	40.0		92.4	1-152		
Hexachlorobutadiene	27.6		5.00	ug/L	40.0		68.9	24-120		
Hexachlorocyclopentadiene	13.9		5.00	ug/L	40.0		34.8	1-140		
Hexachloroethane	26.1		5.00	ug/L	40.0		65.2	40-120		
Indeno(1,2,3-cd)pyrene	33.8		5.00	ug/L	40.0		84.6	1-171		
Isophorone	34.4		5.00	ug/L	40.0		86.0	21-196		
Naphthalene	35.1		5.00	ug/L	40.0		87.8	21-133		
n-Decane	9.92		5.00	ug/L	40.0		24.8	1-140		
Nitrobenzene	35.2		5.00	ug/L	40.0		87.9	35-140		
N-Nitosodi-n-butylamine	39.4		5.00	ug/L	40.0		98.5	1-140		
N-Nitrosodiethylamine	31.5		5.00	ug/L	40.0		78.8	1-140		
N-Nitrosodimethylamine	13.8		5.00	ug/L	40.0		34.5	1-140		
N-Nitrosodi-n-propylamine	36.2		5.00	ug/L	40.0		90.6	1-230		
N-Nitrosodiphenylamine	37.0		5.00	ug/L	40.0		92.5	1-140		
n-Octadecane	33.9		5.00	ug/L	40.0		84.6	1-140		
Pentachlorobenzene	32.1		5.00	ug/L	40.0		80.3	1-140		
Pentachlorophenol	50.5		5.00	ug/L	40.0		126	14-176		
Phenanthrene	37.5		5.00	ug/L	40.0		93.8	54-120		
Phenol	20.0		5.00	ug/L	40.0		50.0	5-120		
Pyrene	37.9		5.00	ug/L	40.0		94.7	52-120		
Pyridine	ND	BS Org	5.00	ug/L	40.0			1-140		
3-Methylphenol	20.4		10.0	ug/L	20.0		102	1-140		

Quality Control
(Continued)

Semivolatile Organics (Continued)

Batch: B24B229 - EPA 625.1_SPE (Continued)

Matrix Spike (B24B229-MS1) **Source: 24B0663-02** Prepared: 02/19/24 07:48 Analyzed: 02/22/24 13:57

Analyte	Result	Qual	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
1,2,4-Trichlorobenzene	52.0		10.0	ug/L	80.0	ND	65.1	44-142		
2,4,5-Trichlorophenol	72.1		10.0	ug/L	80.0	ND	90.2	1-140		
2,4,6-Trichlorophenol	69.7		10.0	ug/L	80.0	ND	87.1	37-144		
2,4-Dichlorophenol	64.3		10.0	ug/L	80.0	ND	80.4	39-135		
2,4-Dimethylphenol	35.3		10.0	ug/L	80.0	ND	44.1	32-120		
2,4-Dinitrophenol	110		10.0	ug/L	80.0	ND	137	1-191		
2,4-Dinitrotoluene	79.2		10.0	ug/L	80.0	ND	99.0	39-139		
2,6-Dinitrotoluene	77.0		10.0	ug/L	80.0	ND	96.3	50-158		
2-Chloronaphthalene	56.6		10.0	ug/L	80.0	ND	70.8	20-120		
2-Chlorophenol	64.1		10.0	ug/L	80.0	ND	80.1	23-134		
2-Methylphenol	56.1		10.0	ug/L	80.0	ND	70.1	1-140		
2-Nitrophenol	66.2		10.0	ug/L	80.0	ND	82.7	29-182		
3,3'-Dichlorobenzidine	68.3		10.0	ug/L	200	ND	34.1	1-262		
4,6-Dinitro-2-methylphenol	103		10.0	ug/L	80.0	ND	128	1-181		
4-Bromophenyl phenyl ether	62.5		10.0	ug/L	80.0	ND	78.1	53-127		
4-Chloro-3-methylphenol	68.2		10.0	ug/L	80.0	ND	85.2	22-147		
4-Chlorophenyl phenyl Ether	58.5		10.0	ug/L	80.0	ND	73.1	25-158		
4-Methylphenol	35.7		10.0	ug/L	40.0	ND	89.1	1-140		
4-Nitrophenol	94.1		10.0	ug/L	80.0	ND	118	1-132		
Acenaphthene	61.3		10.0	ug/L	80.0	ND	76.6	47-145		
Acenaphthylene	52.2		10.0	ug/L	80.0	ND	65.3	33-145		
Aniline	26.0		10.0	ug/L	80.0	ND	32.6	1-140		
Anthracene	69.8		10.0	ug/L	80.0	ND	87.3	27-133		
Azobenzene	71.8		10.0	ug/L	80.0	ND	89.7	1-140		
Benzidine	ND	MS1	10.0	ug/L	200	ND		1-140		
Benzo(a)pyrene	64.1		10.0	ug/L	80.0	ND	80.1	17-163		
Benzo(b)fluoranthene	69.5		10.0	ug/L	80.0	ND	86.9	24-159		
Benzo(k)Fluoranthene	72.1		10.0	ug/L	80.0	ND	90.2	11-162		
Benzo(g,h,i)perylene	57.5		10.0	ug/L	80.0	ND	71.9	1-219		
Benzo[a]anthracene	64.1		10.0	ug/L	80.0	ND	80.2	33-143		
Bis(2-chloroethoxy) methane	63.1		10.0	ug/L	80.0	ND	78.8	33-184		
Bis(2-chloroethyl) ether	64.1		10.0	ug/L	80.0	ND	80.1	12-158		
Bis(2-chloroisopropyl) ether	60.7		10.0	ug/L	80.0	ND	75.9	36-166		
Bis(2-ethylhexyl) phthalate	71.7		10.0	ug/L	80.0	ND	89.6	8-158		
Butyl benzyl phthalate	67.2		10.0	ug/L	80.0	ND	84.0	1-152		
Carbazole	72.4		10.0	ug/L	80.0	ND	90.5	1-140		
Chrysene	72.2		10.0	ug/L	80.0	ND	90.3	17-168		
Dibenzo(a,h)anthracene	60.2		10.0	ug/L	80.0	ND	75.2	1-227		
Diethyl phthalate	68.9		10.0	ug/L	80.0	ND	86.1	1-120		
Dimethyl phthalate	67.2		10.0	ug/L	80.0	ND	84.0	1-120		
Di-n-butyl phthalate	66.8		10.0	ug/L	80.0	ND	83.5	1-120		
Di-n-octyl phthalate	73.8		10.0	ug/L	80.0	ND	92.3	4-146		
Fluoranthene	67.5		10.0	ug/L	80.0	ND	84.4	26-137		
Fluorene	58.8		10.0	ug/L	80.0	ND	73.5	59-121		
Hexachlorobenzene	68.6		10.0	ug/L	80.0	ND	85.8	1-152		
Hexachlorobutadiene	48.7		10.0	ug/L	80.0	ND	60.9	24-120		
Hexachlorocyclopentadiene	19.1		10.0	ug/L	80.0	ND	23.8	1-140		

Quality Control
(Continued)

Semivolatile Organics (Continued)

Analyte	Result	Qual	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: B24B229 - EPA 625.1_SPE (Continued)										
Matrix Spike (B24B229-MS1)	**Source: 24B0663-02**		Prepared: 02/19/24 07:48			Analyzed: 02/22/24 13:57				
Hexachloroethane	51.2		10.0	ug/L	80.0	ND	64.1	40-120		
Indeno(1,2,3-cd)pyrene	66.0		10.0	ug/L	80.0	ND	82.5	1-171		
Isophorone	59.0		10.0	ug/L	80.0	ND	73.7	21-196		
Naphthalene	60.0		10.0	ug/L	80.0	ND	75.0	21-133		
n-Decane	24.5		10.0	ug/L	80.0	ND	30.6	1-140		
Nitrobenzene	64.0		10.0	ug/L	80.0	ND	80.0	35-180		
N-Nitosodi-n-butylamine	65.5		10.0	ug/L	80.0	ND	81.9	1-140		
N-Nitrosodiethylamine	59.9		10.0	ug/L	80.0	ND	74.9	1-140		
N-Nitrosodimethylamine	24.6		10.0	ug/L	80.0	ND	30.8	1-140		
N-Nitrosodi-n-propylamine	65.0		10.0	ug/L	80.0	ND	81.3	1-230		
N-Nitrosodiphenylamine	66.0		10.0	ug/L	80.0	ND	82.5	1-140		
n-Octadecane	64.2		10.0	ug/L	80.0	ND	80.3	1-140		
Pentachlorobenzene	61.6		10.0	ug/L	80.0	ND	77.0	1-140		
Pentachlorophenol	113		10.0	ug/L	80.0	ND	141	14-176		
Phenanthrene	70.2		10.0	ug/L	80.0	ND	87.7	54-120		
Phenol	39.0		10.0	ug/L	80.0	ND	48.8	5-120		
Pyrene	68.9		10.0	ug/L	80.0	ND	86.2	52-120		
Pyridine	ND	MS1	10.0	ug/L	80.0	ND		1-140		
3-Methylphenol	35.6		20.0	ug/L	40.0	ND	89.1	1-140		
Matrix Spike Dup (B24B229-MSD1)	**Source: 24B0663-02**		Prepared: 02/19/24 07:48			Analyzed: 02/22/24 14:25				
1,2,4-Trichlorobenzene	50.5		10.0	ug/L	80.0	ND	63.1	44-142	3.07	50
2,4,5-Trichlorophenol	71.1		10.0	ug/L	80.0	ND	88.9	1-140	1.48	50
2,4,6-Trichlorophenol	70.1		10.0	ug/L	80.0	ND	87.6	37-144	0.545	58
2,4-Dichlorophenol	65.3		10.0	ug/L	80.0	ND	81.6	39-135	1.52	50
2,4-Dimethylphenol	36.4		10.0	ug/L	80.0	ND	45.5	32-120	3.04	58
2,4-Dinitrophenol	108		10.0	ug/L	80.0	ND	134	1-191	1.89	132
2,4-Dinitrotoluene	80.2		10.0	ug/L	80.0	ND	100	39-139	1.27	42
2,6-Dinitrotoluene	77.2		10.0	ug/L	80.0	ND	96.5	50-158	0.263	48
2-Chloronaphthalene	55.7		10.0	ug/L	80.0	ND	69.6	20-120	1.68	24
2-Chlorophenol	65.3		10.0	ug/L	80.0	ND	81.6	23-134	1.87	61
2-Methylphenol	46.7		10.0	ug/L	80.0	ND	58.4	1-140	18.2	50
2-Nitrophenol	65.5		10.0	ug/L	80.0	ND	81.8	29-182	1.10	55
3,3'-Dichlorobenzidine	60.3		10.0	ug/L	200	ND	30.2	1-262	12.3	50
4,6-Dinitro-2-methylphenol	106		10.0	ug/L	80.0	ND	132	1-181	3.01	203
4-Bromophenyl phenyl ether	60.4		10.0	ug/L	80.0	ND	75.5	53-127	3.42	50
4-Chloro-3-methylphenol	68.4		10.0	ug/L	80.0	ND	85.5	22-147	0.338	73
4-Chlorophenyl phenyl Ether	57.6		10.0	ug/L	80.0	ND	71.9	25-158	1.60	61
4-Methylphenol	36.7		10.0	ug/L	40.0	ND	91.9	1-140	3.02	50
4-Nitrophenol	95.2		10.0	ug/L	80.0	ND	119	1-132	1.19	131
Acenaphthene	61.9		10.0	ug/L	80.0	ND	77.4	47-145	1.02	48
Acenaphthylene	51.1		10.0	ug/L	80.0	ND	63.9	33-145	2.10	74
Aniline	24.8		10.0	ug/L	80.0	ND	31.0	1-140	4.81	50
Anthracene	67.9		10.0	ug/L	80.0	ND	84.9	27-133	2.80	50
Azobenzene	69.0		10.0	ug/L	80.0	ND	86.3	1-140	3.91	50
Benzidine	3.48	J	10.0	ug/L	200	ND	1.74	1-140	11.1	50
Benzo(a)pyrene	65.3		10.0	ug/L	80.0	ND	81.6	17-163	1.81	72

Quality Control
(Continued)

Semivolatile Organics (Continued)

Batch: B24B229 - EPA 625.1_SPE (Continued)

Matrix Spike Dup (B24B229-MSD1) Source: 24B0663-02 Prepared: 02/19/24 07:48 Analyzed: 02/22/24 14:25

Analyte	Result	Qual	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Benzo(b)fluoranthene	71.7		10.0	ug/L	80.0	ND	89.6	24-159	3.07	71
Benzo(k)Fluoranthene	75.3		10.0	ug/L	80.0	ND	94.1	11-162	4.26	63
Benzo(g,h,i)perylene	57.5		10.0	ug/L	80.0	ND	71.9	1-219	0.0191	97
Benzo[a]anthracene	67.7		10.0	ug/L	80.0	ND	84.6	33-143	5.36	53
Bis(2-chloroethoxy) methane	63.1		10.0	ug/L	80.0	ND	78.9	33-184	0.116	54
Bis(2-chloroethyl) ether	64.1		10.0	ug/L	80.0	ND	80.2	12-158	0.0402	50
Bis(2-chloroisopropyl) ether	61.1		10.0	ug/L	80.0	ND	76.3	36-166	0.555	76
Bis(2-ethylhexyl) phthalate	76.5		10.0	ug/L	80.0	ND	95.6	8-158	6.48	82
Butyl benzyl phthalate	73.8		10.0	ug/L	80.0	ND	92.3	1-152	9.41	60
Carbazole	71.1		10.0	ug/L	80.0	ND	88.9	1-140	1.82	50
Chrysene	76.6		10.0	ug/L	80.0	ND	95.8	17-168	5.90	87
Dibenzo(a,h)anthracene	61.2		10.0	ug/L	80.0	ND	76.4	1-227	1.61	126
Diethyl phthalate	69.4		10.0	ug/L	80.0	ND	86.8	1-120	0.832	100
Dimethyl phthalate	65.2		10.0	ug/L	80.0	ND	81.5	1-120	2.97	183
Di-n-butyl phthalate	66.4		10.0	ug/L	80.0	ND	83.1	1-120	0.518	47
Di-n-octyl phthalate	81.3		10.0	ug/L	80.0	ND	102	4-146	9.63	69
Fluoranthene	66.8		10.0	ug/L	80.0	ND	83.6	26-137	0.969	66
Fluorene	58.6		10.0	ug/L	80.0	ND	73.3	59-121	0.295	38
Hexachlorobenzene	67.2		10.0	ug/L	80.0	ND	84.0	1-152	2.11	55
Hexachlorobutadiene	50.0		10.0	ug/L	80.0	ND	62.5	24-120	2.67	62
Hexachlorocyclopentadiene	20.8		10.0	ug/L	80.0	ND	26.0	1-140	8.92	50
Hexachloroethane	51.5		10.0	ug/L	80.0	ND	64.3	40-120	0.406	52
Indeno(1,2,3-cd)pyrene	66.5		10.0	ug/L	80.0	ND	83.1	1-171	0.760	99
Isophorone	59.9		10.0	ug/L	80.0	ND	74.8	21-196	1.54	93
Naphthalene	60.5		10.0	ug/L	80.0	ND	75.6	21-133	0.819	65
n-Decane	22.0		10.0	ug/L	80.0	ND	27.5	1-140	11.0	50
Nitrobenzene	62.9		10.0	ug/L	80.0	ND	78.6	35-180	1.87	50
N-Nitosodi-n-butylamine	67.5		10.0	ug/L	80.0	ND	84.4	1-140	2.96	50
N-Nitrosodiethylamine	59.3		10.0	ug/L	80.0	ND	74.1	1-140	1.15	50
N-Nitrosodimethylamine	23.5		10.0	ug/L	80.0	ND	29.4	1-140	4.56	50
N-Nitrosodi-n-propylamine	66.9		10.0	ug/L	80.0	ND	83.6	1-230	2.78	87
N-Nitrosodiphenylamine	67.2		10.0	ug/L	80.0	ND	84.0	1-140	1.80	50
n-Octadecane	63.2		10.0	ug/L	80.0	ND	79.0	1-140	1.60	50
Pentachlorobenzene	63.9		10.0	ug/L	80.0	ND	79.9	1-140	3.63	50
Pentachlorophenol	112		10.0	ug/L	80.0	ND	140	14-176	0.949	86
Phenanthrene	69.9		10.0	ug/L	80.0	ND	87.4	54-120	0.390	39
Phenol	30.4		10.0	ug/L	80.0	ND	38.0	5-120	25.0	64
Pyrene	73.5		10.0	ug/L	80.0	ND	91.9	52-120	6.40	49
Pyridine	6.28	J	10.0	ug/L	80.0	ND	7.85	1-140		50
3-Methylphenol	36.6		20.0	ug/L	40.0	ND	91.5	1-140	2.70	50

Quality Control
(Continued)

Semivolatile Organics (Continued)

Analyte	Result	Qual	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: B24B287 - EPA 608.3										
Blank (B24B287-BLK1)			Prepared: 02/20/24 08:33 Analyzed: 02/23/24 10:34							
4,4'-DDD	ND		0.0250	ug/L						
4,4'-DDE	ND		0.00500	ug/L						
4,4'-DDT	ND		0.0250	ug/L						
Aldrin	ND		0.00500	ug/L						
Alpha-BHC	ND		0.00500	ug/L						
Beta-BHC	ND		0.00500	ug/L						
Chlordane	ND		0.200	ug/L						
Delta-BHC	ND		0.00500	ug/L						
Dicofol	ND		0.0500	ug/L						
Dieldrin	ND		0.00500	ug/L						
Endosulfan I	ND		0.00500	ug/L						
Endosulfan II	ND		0.0250	ug/L						
Endosulfan Sulfate	ND		0.0250	ug/L						
Endrin	ND		0.0250	ug/L						
Endrin-Aldehyde	ND		0.00500	ug/L						
Gamma-BHC	ND		0.00500	ug/L						
Heptachlor	ND		0.00500	ug/L						
Heptachlor epoxide	ND		0.00500	ug/L						
Methoxychlor	ND		0.00500	ug/L						
Mirex	ND		0.00500	ug/L						
PCB-1016	ND		0.200	ug/L						
PCB-1221	ND		0.200	ug/L						
PCB-1232	ND		0.200	ug/L						
PCB-1242	ND		0.200	ug/L						
PCB-1248	ND		0.200	ug/L						
PCB-1254	ND		0.200	ug/L						
PCB-1260	ND		0.200	ug/L						
Toxaphene	ND		0.200	ug/L						
Polychlorinated biphenyls, Total	ND		0.200	ug/L						

Quality Control
(Continued)

Semivolatile Organics (Continued)

Analyte	Result	Qual	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: B24B287 - EPA 608.3 (Continued)										
LCS (B24B287-BS1)				Prepared: 02/20/24 08:33		Analyzed: 02/23/24 10:49				
4,4'-DDD	0.0460		0.0250	ug/L	0.0500		92.0	31-141		
4,4'-DDE	0.0380		0.00500	ug/L	0.0500		76.0	30-145		
4,4'-DDT	0.0420		0.0250	ug/L	0.0500		84.0	25-160		
Aldrin	0.0330		0.00500	ug/L	0.0500		66.0	42-140		
Alpha-BHC	0.0450		0.00500	ug/L	0.0500		90.0	37-140		
Beta-BHC	0.0460		0.00500	ug/L	0.0500		92.0	17-147		
Delta-BHC	0.0470		0.00500	ug/L	0.0500		94.0	34-140		
Dicofol (2)	0.143	BS Org	0.0500	ug/L	0.500		28.6	50-150		
Dieldrin	0.0480		0.00500	ug/L	0.0500		96.0	36-146		
Endosulfan I	0.0490		0.00500	ug/L	0.0500		98.0	45-153		
Endosulfan II	0.0520		0.0250	ug/L	0.0500		104	0-202		
Endosulfan Sulfate	0.0450		0.0250	ug/L	0.0500		90.0	50-150		
Endrin	0.0500		0.0250	ug/L	0.0500		100	30-147		
Endrin-Aldehyde	0.0370		0.00500	ug/L	0.0500		74.0	50-150		
Gamma-BHC	0.0480		0.00500	ug/L	0.0500		96.0	32-140		
Heptachlor	0.0380		0.00500	ug/L	0.0500		76.0	19-140		
Heptachlor epoxide	0.0480		0.00500	ug/L	0.0500		96.0	37-142		
Methoxychlor	0.0570		0.00500	ug/L	0.0500		114	26-144		
Mirex	0.0240	BS Org	0.00500	ug/L	0.0500		48.0	50-150		
LCS (B24B287-BS2)				Prepared: 02/20/24 08:33		Analyzed: 02/23/24 11:04				
PCB-1016	0.700		0.200	ug/L	1.00		70.0	50-140		
PCB-1260	0.520		0.200	ug/L	1.00		52.0	8-140		
Matrix Spike (B24B287-MS1)	**Source: 24B0663-02**			Prepared: 02/20/24 08:33		Analyzed: 02/23/24 11:50				
4,4'-DDD	0.0980		0.0500	ug/L	0.100	ND	98.0	31-141		
4,4'-DDE	0.0900		0.0100	ug/L	0.100	ND	90.0	30-145		
4,4'-DDT	0.0880		0.0500	ug/L	0.100	ND	88.0	25-160		
Aldrin	0.140		0.0100	ug/L	0.100	ND	140	42-140		
Alpha-BHC	0.0980		0.0100	ug/L	0.100	ND	98.0	37-140		
Beta-BHC	0.132		0.0100	ug/L	0.100	ND	132	17-147		
Delta-BHC	0.120		0.0100	ug/L	0.100	ND	120	34-140		
Dicofol	0.706		0.100	ug/L	1.00	ND	70.6	50-150		
Dieldrin	0.0940		0.0100	ug/L	0.100	ND	94.0	36-146		
Endosulfan I	0.0900		0.0100	ug/L	0.100	ND	90.0	45-153		
Endosulfan II	0.126		0.0500	ug/L	0.100	ND	126	0-202		
Endosulfan Sulfate	0.116		0.0500	ug/L	0.100	ND	116	50-150		
Endrin	0.114		0.0500	ug/L	0.100	ND	114	30-147		
Endrin-Aldehyde	0.104		0.0100	ug/L	0.100	ND	104	50-150		
Gamma-BHC	0.114		0.0100	ug/L	0.100	ND	114	32-140		
Heptachlor	0.0980		0.0100	ug/L	0.100	ND	98.0	19-140		
Heptachlor epoxide	0.150	MS1	0.0100	ug/L	0.100	ND	150	37-142		
Methoxychlor (2)	0.0980		0.0100	ug/L	0.100	ND	98.0	26-144		
Mirex	0.0560		0.0100	ug/L	0.100	ND	56.0	50-150		

Quality Control
(Continued)

Semivolatile Organics (Continued)

Analyte	Result	Qual	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: B24B287 - EPA 608.3 (Continued)										
Matrix Spike Dup (B24B287-MSD1)	**Source: 24B0663-02**		Prepared: 02/20/24 08:33			Analyzed: 02/23/24 12:05				
4,4'-DDD	0.102		0.0500	ug/L	0.100	ND	102	31-141	4.00	39
4,4'-DDE	0.0860		0.0100	ug/L	0.100	ND	86.0	30-145	4.55	35
4,4'-DDT	0.0880		0.0500	ug/L	0.100	ND	88.0	25-160	0.00	42
Aldrin (2)	0.0500		0.0100	ug/L	0.100	ND	50.0	42-140	14.8	35
Alpha-BHC	0.106		0.0100	ug/L	0.100	ND	106	37-140	7.84	36
Beta-BHC	0.138		0.0100	ug/L	0.100	ND	138	17-147	4.44	44
Delta-BHC	0.128		0.0100	ug/L	0.100	ND	128	34-140	6.45	43
Dicofol	0.684		0.100	ug/L	1.00	ND	68.4	50-150	3.17	50
Dieldrin	0.114		0.0100	ug/L	0.100	ND	114	36-146	19.2	49
Endosulfan I	0.0980		0.0100	ug/L	0.100	ND	98.0	45-153	8.51	28
Endosulfan II	0.130		0.0500	ug/L	0.100	ND	130	0-202	3.12	53
Endosulfan Sulfate	0.118		0.0500	ug/L	0.100	ND	118	50-150	1.71	50
Endrin	0.120		0.0500	ug/L	0.100	ND	120	30-147	5.13	48
Endrin-Aldehyde	0.102		0.0100	ug/L	0.100	ND	102	50-150	1.94	50
Gamma-BHC	0.118		0.0100	ug/L	0.100	ND	118	32-140	3.45	39
Heptachlor	0.106		0.0100	ug/L	0.100	ND	106	19-140	7.84	52
Heptachlor epoxide	0.224	MS1, R, E	0.0100	ug/L	0.100	ND	224	37-142	39.6	26
Methoxychlor (2)	0.102		0.0100	ug/L	0.100	ND	102	26-144	4.00	38
Mirex	0.0520		0.0100	ug/L	0.100	ND	52.0	50-150	7.41	50
Mirex (2)	0.0420		0.0100	ug/L	0.100	ND	42.0	50-150	4.65	50
PCB-1016	ND		0.400	ug/L		ND		50-140		36
Batch: B24B290 - EPA 1657										
Blank (B24B290-BLK1)			Prepared: 02/21/24 08:18			Analyzed: 02/22/24 14:46				
Chlorpyrifos (2)	ND		0.250	ug/L						
Demeton-o (2)	ND		0.250	ug/L						
Demeton-s (2)	ND		0.250	ug/L						
Diazinon (2)	ND		0.250	ug/L						
ethyl-Parathion (2)	ND		0.250	ug/L						
Malathion (2)	ND		0.250	ug/L						
methyl Azinphos (Guthion) (2)	ND		0.250	ug/L						

Quality Control
(Continued)

Semivolatile Organics (Continued)

Analyte	Result	Qual	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: B24B290 - EPA 1657 (Continued)										
LCS (B24B290-BS1)					Prepared: 02/21/24 08:18		Analyzed: 02/22/24 15:07			
Chlorpyrifos (2)	0.835		0.250	ug/L	1.00		83.5	48-150		
Demeton-o (2)	0.480		0.250	ug/L	1.00		48.0	16-150		
Demeton-s (2)	0.610		0.250	ug/L	1.00		61.0	16-150		
Diazinon (2)	0.850		0.250	ug/L	1.00		85.0	50-150		
ethyl-Parathion (2)	0.845		0.250	ug/L	1.00		84.5	50-150		
Malathion (2)	0.850		0.250	ug/L	1.00		85.0	50-150		
methyl Azinphos (Guthion) (2)	0.860		0.250	ug/L	1.00		86.0	37-150		
Matrix Spike (B24B290-MS1)	**Source: 24B0663-02**				Prepared: 02/21/24 08:18		Analyzed: 02/22/24 16:11			
Chlorpyrifos (2)	1.77		0.500	ug/L	2.00	ND	88.5	25-150		
Demeton-o (2)	0.770		0.500	ug/L	2.00	ND	38.5	25-150		
Demeton-s (2)	0.810		0.500	ug/L	2.00	ND	40.5	25-150		
Diazinon (2)	2.24		0.500	ug/L	2.00	ND	112	25-150		
ethyl-Parathion (2)	1.82		0.500	ug/L	2.00	ND	91.0	25-150		
Malathion (2)	1.93		0.500	ug/L	2.00	ND	96.5	25-150		
methyl Azinphos (Guthion) (2)	1.84		0.500	ug/L	2.00	ND	92.0	25-150		
Matrix Spike Dup (B24B290-MSD1)	**Source: 24B0663-02**				Prepared: 02/21/24 08:18		Analyzed: 02/22/24 16:32			
Chlorpyrifos (2)	1.78		0.500	ug/L	2.00	ND	89.0	25-150	0.563	200
Demeton-o (2)	1.21		0.500	ug/L	2.00	ND	60.5	25-150	44.4	200
Demeton-s (2)	1.28		0.500	ug/L	2.00	ND	64.0	25-150	45.0	200
Diazinon (2)	2.21		0.500	ug/L	2.00	ND	110	25-150	1.35	200
ethyl-Parathion (2)	1.83		0.500	ug/L	2.00	ND	91.5	25-150	0.548	200
Malathion (2)	1.91		0.500	ug/L	2.00	ND	95.5	25-150	1.04	200
methyl Azinphos (Guthion) (2)	1.89		0.500	ug/L	2.00	ND	94.5	25-150	2.68	200

Quality Control
(Continued)

Volatile Organics

Analyte	Result	Qual	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: B24B272 - EPA 624.1										
Blank (B24B272-BLK1)			Prepared: 02/19/24 08:14 Analyzed: 02/19/24 09:27							
1,1,1-Trichloroethane	ND		5.00	ug/L						
1,1,2,2-Tetrachloroethane	ND		5.00	ug/L						
1,1,2-Trichloroethane	ND		5.00	ug/L						
1,1-Dichloroethane	ND		5.00	ug/L						
1,1-Dichloroethene	ND		5.00	ug/L						
1,2-Dibromoethane	ND		5.00	ug/L						
1,2-Dichlorobenzene	ND		5.00	ug/L						
1,2-Dichloroethane	ND		5.00	ug/L						
1,2-Dichloropropane	ND		5.00	ug/L						
1,3-Dichlorobenzene	ND		5.00	ug/L						
1,4-Dichlorobenzene	ND		5.00	ug/L						
2-Butanone	ND		10.0	ug/L						
2-Chloroethyl vinyl ether	ND		5.00	ug/L						
Acrolein	ND		5.00	ug/L						
Acrylonitrile	ND		5.00	ug/L						
Benzene	ND		5.00	ug/L						
Bromodichloromethane	ND		5.00	ug/L						
Bromoform	ND		5.00	ug/L						
Bromomethane	ND		5.00	ug/L						
Carbon Disulfide	ND		5.00	ug/L						
Carbon Tetrachloride	ND		5.00	ug/L						
Chlorobenzene	ND		5.00	ug/L						
Chloroethane	ND		5.00	ug/L						
Chloroform	ND		4.00	ug/L						
chloromethane	ND		5.00	ug/L						
cis-1,2-Dichloroethene	ND		5.00	ug/L						
cis-1,3-Dichloropropene	ND		5.00	ug/L						
Dibromochloromethane	ND		5.00	ug/L						
Epichlorohydrin	ND		25.0	ug/L						
Ethylbenzene	ND		5.00	ug/L						
m+p-Xylene	ND		10.0	ug/L						
Methylene Chloride	ND		5.00	ug/L						
Methyl-tert-butyl ether (MTBE)	ND		5.00	ug/L						
o-Xylene	ND		5.00	ug/L						
Styrene	ND		5.00	ug/L						
Tetrachloroethene	ND		5.00	ug/L						
Toluene	ND		5.00	ug/L						
trans-1,2-Dichloroethene	ND		4.00	ug/L						
trans-1,3-Dichloropropene	ND		5.00	ug/L						
Trichloroethene	ND		5.00	ug/L						
Vinyl acetate	ND		5.00	ug/L						
Vinyl chloride	ND		5.00	ug/L						
Xylenes, Total	ND		5.00	ug/L						
Total Trihalomethanes	ND		5.00	ug/L						
1,3-Dichloropropene, Total	ND		5.00	ug/L						

Quality Control
(Continued)

Volatile Organics (Continued)

Batch: B24B272 - EPA 624.1 (Continued)

Matrix Spike (B24B272-MS1) **Source: 24B0663-01** Prepared: 02/19/24 08:14 Analyzed: 02/19/24 14:38

Analyte	Result	Qual	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
1,1,1-Trichloroethane	21.0			ug/L	20.0	0.00	105	52-162		
1,1,2,2-Tetrachloroethane	21.1			ug/L	20.0	0.00	106	46-157		
1,1,2-Trichloroethane	21.3			ug/L	20.0	0.00	106	52-150		
1,1-Dichloroethane	20.4			ug/L	20.0	0.00	102	59-155		
1,1-Dichloroethene	17.1			ug/L	20.0	0.00	85.4	0-234		
1,2-Dibromoethane	20.7			ug/L	20.0	0.00	104	60-140		
1,2-Dichlorobenzene	20.4			ug/L	20.0	0.00	102	18-190		
1,2-Dichloroethane	21.6			ug/L	20.0	0.00	108	49-155		
1,2-Dichloropropane	21.6			ug/L	20.0	0.00	108	0-210		
1,3-Dichlorobenzene	20.3			ug/L	20.0	0.00	101	59-156		
1,4-Dichlorobenzene	20.6			ug/L	20.0	0.00	103	18-190		
2-Butanone	36.5			ug/L	40.0	0.00	91.3	60-140		
2-Chloroethyl vinyl ether	24.5			ug/L	20.0	0.00	123	0-305		
Acrolein	0.00	MS1		ug/L	20.0	0.00		40-160		
Acrylonitrile	24.7			ug/L	20.0	0.00	123	40-160		
Benzene	20.8			ug/L	20.0	0.00	104	37-151		
Bromodichloromethane	37.3			ug/L	20.0	16.2	106	35-155		
Bromoform	21.5			ug/L	20.0	0.00	107	45-169		
Bromomethane	17.0			ug/L	20.0	0.00	84.8	0-242		
Carbon Disulfide	17.4			ug/L	20.0	0.00	86.9	60-140		
Carbon Tetrachloride	20.5			ug/L	20.0	0.00	102	70-140		
Chlorobenzene	20.8			ug/L	20.0	0.00	104	37-160		
Chloroethane	23.5			ug/L	20.0	0.00	118	14-230		
Chloroform	62.8			ug/L	20.0	41.2	108	51-138		
chloromethane	21.0			ug/L	20.0	0.00	105	0-273		
cis-1,2-Dichloroethene	20.6			ug/L	20.0	0.00	103	60-140		
cis-1,3-Dichloropropene	21.4			ug/L	20.0	0.00	107	0-227		
Dibromochloromethane	26.8			ug/L	20.0	5.14	108	53-149		
Epichlorohydrin	112			ug/L	100	0.00	112	70-130		
Ethylbenzene	20.8			ug/L	20.0	0.00	104	37-162		
m+p-Xylene	41.4			ug/L	40.0	0.00	103	60-140		
Methylene Chloride	19.6			ug/L	20.0	0.00	97.9	0-221		
Methyl-tert-butyl ether (MTBE)	21.1			ug/L	20.0	0.00	106	70-130		
o-Xylene	20.1			ug/L	20.0	0.00	101	60-140		
Styrene	20.4			ug/L	20.0	0.00	102	60-140		
Tetrachloroethene	20.3			ug/L	20.0	0.00	101	64-148		
Toluene	20.5			ug/L	20.0	0.00	103	47-150		
trans-1,2-Dichloroethene	19.3			ug/L	20.0	0.00	96.4	54-156		
trans-1,3-Dichloropropene	20.7			ug/L	20.0	0.00	104	17-183		
Trichloroethene	21.0			ug/L	20.0	0.00	105	70-157		
Vinyl acetate	22.9			ug/L	20.0	0.00	115	60-140		
Vinyl chloride	22.9			ug/L	20.0	0.00	114	0-251		

Quality Control
(Continued)

Volatile Organics (Continued)

Batch: B24B272 - EPA 624.1 (Continued)

Matrix Spike Dup (B24B272-MSD1) Source: 24B0663-01 Prepared: 02/19/24 08:14 Analyzed: 02/19/24 15:06

Analyte	Result	Qual	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
1,1,1-Trichloroethane	20.9			ug/L	20.0	0.00	104	52-162	0.668	36
1,1,2,2-Tetrachloroethane	21.1			ug/L	20.0	0.00	106	46-157	0.142	61
1,1,2-Trichloroethane	21.5			ug/L	20.0	0.00	107	52-150	0.983	45
1,1-Dichloroethane	20.3			ug/L	20.0	0.00	102	59-155	0.393	40
1,1-Dichloroethene	16.9			ug/L	20.0	0.00	84.6	0-234	0.942	32
1,2-Dibromoethane	21.0			ug/L	20.0	0.00	105	60-140	1.39	20
1,2-Dichlorobenzene	20.2			ug/L	20.0	0.00	101	18-190	0.789	57
1,2-Dichloroethane	20.9			ug/L	20.0	0.00	105	49-155	3.20	49
1,2-Dichloropropane	21.7			ug/L	20.0	0.00	108	0-210	0.323	55
1,3-Dichlorobenzene	20.2			ug/L	20.0	0.00	101	59-156	0.148	43
1,4-Dichlorobenzene	20.8			ug/L	20.0	0.00	104	18-190	1.02	57
2-Butanone	35.6			ug/L	40.0	0.00	89.0	60-140	2.52	20
2-Chloroethyl vinyl ether	23.7			ug/L	20.0	0.00	119	0-305	3.32	71
Acrolein	0.00	MS1		ug/L	20.0	0.00		40-160		60
Acrylonitrile	24.0			ug/L	20.0	0.00	120	40-160	2.71	60
Benzene	20.5			ug/L	20.0	0.00	103	37-151	1.36	61
Bromodichloromethane	37.8			ug/L	20.0	16.2	108	35-155	1.31	56
Bromoform	21.8			ug/L	20.0	0.00	109	45-169	1.25	42
Bromomethane	16.4			ug/L	20.0	0.00	82.2	0-242	3.11	61
Carbon Disulfide	16.5			ug/L	20.0	0.00	82.6	60-140	5.07	20
Carbon Tetrachloride	20.5			ug/L	20.0	0.00	102	70-140	0.146	41
Chlorobenzene	21.0			ug/L	20.0	0.00	105	37-160	1.15	53
Chloroethane	24.6			ug/L	20.0	0.00	123	14-230	4.29	78
Chloroform	63.7			ug/L	20.0	41.2	112	51-138	1.44	54
chloromethane	20.3			ug/L	20.0	0.00	102	0-273	3.10	60
cis-1,2-Dichloroethene	20.5			ug/L	20.0	0.00	102	60-140	0.632	20
cis-1,3-Dichloropropene	21.2			ug/L	20.0	0.00	106	0-227	0.987	58
Dibromochloromethane	27.2			ug/L	20.0	5.14	110	53-149	1.44	50
Epichlorohydrin	113			ug/L	100	0.00	113	70-130	1.06	20
Ethylbenzene	21.2			ug/L	20.0	0.00	106	37-162	1.81	63
m+p-Xylene	41.8			ug/L	40.0	0.00	105	60-140	1.18	20
Methylene Chloride	19.2			ug/L	20.0	0.00	96.0	0-221	1.91	28
Methyl-tert-butyl ether (MTBE)	20.9			ug/L	20.0	0.00	104	70-130	1.24	20
o-Xylene	20.5			ug/L	20.0	0.00	102	60-140	1.72	20
Styrene	20.6			ug/L	20.0	0.00	103	60-140	1.02	20
Tetrachloroethene	20.5			ug/L	20.0	0.00	102	64-148	0.982	39
Toluene	20.8			ug/L	20.0	0.00	104	47-150	1.45	41
trans-1,2-Dichloroethene	18.8			ug/L	20.0	0.00	94.0	54-156	2.63	45
trans-1,3-Dichloropropene	21.1			ug/L	20.0	0.00	106	17-183	1.77	86
Trichloroethene	20.6			ug/L	20.0	0.00	103	70-157	1.59	48
Vinyl acetate	20.2			ug/L	20.0	0.00	101	60-140	12.8	20
Vinyl chloride	22.4			ug/L	20.0	0.00	112	0-251	1.90	66

Quality Control
(Continued)

Wet Chemistry

Analyte	Result	Qual	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: B24B251 - SM 2540 C										
Blank (B24B251-BLK1)					Prepared: 02/16/24 13:25 Analyzed: 02/20/24 14:00					
Total Dissolved Solids	ND		5.0	mg/L						
LCS (B24B251-BS1)					Prepared: 02/16/24 13:25 Analyzed: 02/20/24 14:00					
Total Dissolved Solids	147			mg/L	150		98.0	85-115		
Duplicate (B24B251-DUP1)	**Source: 24B0663-02**				Prepared: 02/16/24 13:25 Analyzed: 02/20/24 14:00					
Total Dissolved Solids	547		5.0	mg/L		578			5.51	10
Batch: B24B254 - SM 5210 B										
Blank (B24B254-BLK1)					Prepared: 02/16/24 08:31 Analyzed: 02/21/24 08:28					
Biochemical Oxygen Demand, Carbonaceous	ND	BOD t	2.00	mg/L						
Blank (B24B254-BLK2)					Prepared: 02/16/24 08:31 Analyzed: 02/21/24 08:28					
Biochemical Oxygen Demand, Carbonaceous	ND	BOD t	2.00	mg/L						
Blank (B24B254-BLK3)					Prepared: 02/16/24 08:31 Analyzed: 02/21/24 08:28					
Biochemical Oxygen Demand, Carbonaceous	ND	BOD t	2.00	mg/L						
Blank (B24B254-BLK4)					Prepared: 02/16/24 08:31 Analyzed: 02/21/24 08:28					
Biochemical Oxygen Demand, Carbonaceous	ND	BOD t	2.00	mg/L						
LCS (B24B254-BS1)					Prepared: 02/16/24 08:31 Analyzed: 02/21/24 08:35					
Biochemical Oxygen Demand, Carbonaceous	209	BOD t	31.0	mg/L	198		106	85-115		
LCS (B24B254-BS2)					Prepared: 02/16/24 08:31 Analyzed: 02/21/24 08:35					
Biochemical Oxygen Demand, Carbonaceous	205	BOD t	31.0	mg/L	198		104	85-115		

Quality Control
(Continued)

Wet Chemistry (Continued)

Analyte	Result	Qual	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: B24B254 - SM 5210 B (Continued)										
LCS (B24B254-BS3)				Prepared: 02/16/24 08:31		Analyzed: 02/21/24 08:35				
Biochemical Oxygen Demand, Carbonaceous	193	BOD t	31.0	mg/L	198		97.5	85-115		
LCS (B24B254-BS4)				Prepared: 02/16/24 08:31		Analyzed: 02/21/24 08:35				
Biochemical Oxygen Demand, Carbonaceous	212	BOD t	31.0	mg/L	198		107	85-115		
Batch: B24B260 - SM 2540 D, E										
Blank (B24B260-BLK1)				Prepared: 02/16/24 11:30		Analyzed: 02/19/24 09:40				
Total Suspended Solids	ND		2.0	mg/L						
LCS (B24B260-BS1)				Prepared: 02/16/24 11:30		Analyzed: 02/19/24 09:40				
Total Suspended Solids	20.7		2.0	mg/L	21.1		98.1	85-115		
Duplicate (B24B260-DUP1)	**Source: 24B0663-02**			Prepared: 02/16/24 11:30		Analyzed: 02/19/24 09:40				
Total Suspended Solids	8.7		2.0	mg/L		8.1			7.14	10
Duplicate (B24B260-DUP2)	**Source: 24B0692-01**			Prepared: 02/16/24 11:30		Analyzed: 02/19/24 09:40				
Total Suspended Solids	374		57.1	mg/L		394			5.20	10
Batch: B24B281 - EPA 350.1										
Blank (B24B281-BLK1)				Prepared: 02/20/24 16:28		Analyzed: 02/20/24 16:28				
Ammonia as N	ND		0.0500	mg/L						
LCS (B24B281-BS1)				Prepared: 02/20/24 16:31		Analyzed: 02/20/24 16:31				
Ammonia as N	1.06			mg/L	1.00		106	90-110		

Quality Control
(Continued)

Wet Chemistry (Continued)

Analyte	Result	Qual	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: B24B281 - EPA 350.1 (Continued)										
Matrix Spike (B24B281-MS1)	**Source: 24B0718-02**				Prepared: 02/20/24 16:35		Analyzed: 02/20/24 16:35			
Ammonia as N	1.04		0.0500	mg/L	1.00	ND	104	90-110		
Matrix Spike (B24B281-MS2)	**Source: 24B0721-02**				Prepared: 02/20/24 17:08		Analyzed: 02/20/24 17:08			
Ammonia as N	0.999		0.0500	mg/L	1.00	ND	99.9	90-110		
Matrix Spike Dup (B24B281-MSD1)	**Source: 24B0718-02**				Prepared: 02/20/24 16:38		Analyzed: 02/20/24 16:38			
Ammonia as N	1.03		0.0500	mg/L	1.00	ND	103	90-110	1.13	200
Matrix Spike Dup (B24B281-MSD2)	**Source: 24B0721-02**				Prepared: 02/20/24 17:10		Analyzed: 02/20/24 17:10			
Ammonia as N	1.04		0.0500	mg/L	1.00	ND	104	90-110	4.26	200
Batch: B24B291 - SM 2320										
Blank (B24B291-BLK1)					Prepared: 02/20/24 09:26		Analyzed: 02/20/24 09:26			
Total Alkalinity as CaCO3	ND		20.0	mg/L						
Blank (B24B291-BLK2)					Prepared: 02/20/24 09:55		Analyzed: 02/20/24 09:55			
Total Alkalinity as CaCO3	ND		20.0	mg/L						
LCS (B24B291-BS1)					Prepared: 02/20/24 09:19		Analyzed: 02/20/24 09:19			
Total Alkalinity as CaCO3	140			mg/L	150		93.1	90-110		
LCS (B24B291-BS2)					Prepared: 02/20/24 09:47		Analyzed: 02/20/24 09:47			
Total Alkalinity as CaCO3	141			mg/L	150		94.1	90-110		
Duplicate (B24B291-DUP1)	**Source: 24B0663-02**				Prepared: 02/20/24 09:42		Analyzed: 02/20/24 09:42			
Total Alkalinity as CaCO3	61.2		20.0	mg/L		61.1			0.164	10

Quality Control
(Continued)

Wet Chemistry (Continued)

Analyte	Result	Qual	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: B24B291 - SM 2320 (Continued)										
Reference (B24B291-SRM1)				Prepared: 02/20/24 09:29	Analyzed: 02/20/24 09:29					
Total Alkalinity as CaCO3	47.0			mg/L	50.0		94.0	0-200		
Batch: B24B295 - SM 4500-N ORG B										
Blank (B24B295-BLK1)				Prepared: 02/20/24 10:00	Analyzed: 02/23/24 07:10					
Total Kjeldahl Nitrogen	ND		0.500	mg/L						
LCS (B24B295-BS1)				Prepared: 02/20/24 10:00	Analyzed: 02/23/24 07:10					
Total Kjeldahl Nitrogen	2.99		0.500	mg/L	3.00		99.7	85-115		
Duplicate (B24B295-DUP1)	**Source: 24B0663-02**			Prepared: 02/20/24 10:00	Analyzed: 02/23/24 07:10					
Total Kjeldahl Nitrogen	1.64		0.500	mg/L		1.58			3.73	20
Matrix Spike (B24B295-MS1)	**Source: 24B0663-02**			Prepared: 02/20/24 10:00	Analyzed: 02/23/24 07:10					
Total Kjeldahl Nitrogen	4.22		0.500	mg/L	3.00	1.58	88.0	70-130		
Reference (B24B295-SRM1)				Prepared: 02/20/24 10:00	Analyzed: 02/23/24 07:10					
Total Kjeldahl Nitrogen	2.90			mg/L	3.00		96.7	90-110		
Batch: B24B338 - OIA 1677										
Blank (B24B338-BLK1)				Prepared: 02/22/24 10:08	Analyzed: 02/22/24 12:37					
Cyanide, Amenable	ND		2.00	ug/L						
Cyanide, Total	ND		10.0	ug/L						
LCS (B24B338-BS1)				Prepared: 02/22/24 10:08	Analyzed: 02/22/24 12:42					
Cyanide, Total	107			ug/L	100		107	84-116		
Cyanide, Amenable	57.5			ug/L	50.0		115	82-132		

Quality Control
(Continued)

Wet Chemistry (Continued)

Analyte	Result	Qual	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: B24B338 - OIA 1677 (Continued)										
Duplicate (B24B338-DUP1)	**Source: 24B0663-01**		Prepared: 02/22/24 10:08			Analyzed: 02/22/24 13:12				
Cyanide, Total	4.56	J	10.0	ug/L		4.17			8.91	47
Cyanide, Amenable	1.89	J	2.00	ug/L		2.24			17.3	15
Matrix Spike (B24B338-MS1)	**Source: 24B0663-01**		Prepared: 02/22/24 10:08			Analyzed: 02/22/24 13:17				
Cyanide, Total	58.1		10.0	ug/L	50.0	4.17	108	64-136		
Cyanide, Amenable	51.3		2.00	ug/L	50.0	2.24	98.2	82-130		
Batch: B24B461 - EPA 218.6										
Blank (B24B461-BLK1)			Prepared: 03/01/24 07:45			Analyzed: 03/01/24 11:47				
Chromium Hexavalent	ND		1.00	ug/L						
LCS (B24B461-BS1)			Prepared: 03/01/24 07:45			Analyzed: 03/01/24 11:59				
Chromium Hexavalent	4.94			ug/L	5.00		98.9	90-110		
Matrix Spike (B24B461-MS1)	**Source: 24B0664-02**		Prepared: 03/01/24 07:45			Analyzed: 03/01/24 12:32				
Chromium Hexavalent	4.35		1.01	ug/L	5.03	ND	86.7	80-120		
Matrix Spike (B24B461-MS2)	**Source: 24B0955-04**		Prepared: 03/01/24 07:45			Analyzed: 03/01/24 14:12				
Chromium Hexavalent	5.15		1.01	ug/L	5.03	ND	102	80-120		
Matrix Spike Dup (B24B461-MSD1)	**Source: 24B0664-02**		Prepared: 03/01/24 07:45			Analyzed: 03/01/24 12:43				
Chromium Hexavalent	4.61		1.01	ug/L	5.03	ND	91.8	80-120	5.78	20
Matrix Spike Dup (B24B461-MSD2)	**Source: 24B0955-04**		Prepared: 03/01/24 07:45			Analyzed: 03/01/24 14:23				
Chromium Hexavalent	5.25		1.01	ug/L	5.03	ND	104	80-120	1.93	20

Notes and Definitions

Item	Definition
B 10x	Blanks contained target analytes above the MDL. Associated sample concentrations were greater than 10x the detect in the blank, therefore data have been reported.
B FLD	The Field and/or Equipment (Rinsate) Blank contained target compounds above the detection limit. Contamination from the sampling site, sample collection, or transportation is suspected as laboratory blanks met QC criteria. Data reported with narration.
BOD t	The temperature of the BOD incubator was outside of method criteria for all or part of the 5-day incubation period. Data have been qualified.
BS Org	Blank Spike recovered outside of acceptance criteria for the selected compounds. These compounds have been identified as poor performing compounds for this method. Data have been reported.
E	The reported result is above the calibration range for this analysis. Results should be considered ESTIMATED.
J	Analyte was detected. However, the analyte concentration is an estimated value, which is between the Method Detection Limit (MDL) and the Practical Quantitation Limit (PQL).
MS1	MS/MSD recovery was outside of acceptance criteria due to matrix interference.
MS3	MS/MSD recovery was outside of acceptance llimits. All other QC was acceptable, therefore data have been reported.
R	The RPD was outside of acceptance criteria due to possible matrix interference. All other QC criteria was met, therefore data have been reported.
R Log	The RPD for the sample duplicate was outside of acceptance criteria but within the method required logarithmic precision criteria, therefore, data has been reported.
Dry	Sample results reported on a dry weight basis.
ND	Analyte NOT DETECTED at or above the reporting limit.
DL	Detection Limit
RL	Reporting Limit

RPD	Relative Percent Difference
%REC	Percent Recovery
Source	Sample that was matrix spiked or duplicated.

Company Name:	Upper Brays Pollutant Monitoring
Address:	13525 W Houston Center Blvd Houston, TX 77082
Permit Number:	10495-116

Sampler: JEFFREY FARLEY / Aaron Hernandez

IWS Sample Reason

[✓] Permit Requirement [ ] Compliance Verification
[ ] Special Report [✓] POTW Permit Application
[ ] Other

UB Full Scan + Permit

24B0663

Composite Info		
Sample ID:	24B0663-01	24B0663-02
Split Samples:	Yes No	Yes (No)
Number of bottles:	1 2 3 4 5 __	1 2 3 4 5 16
Sample Volume:	mL	200 mL
Sample Interval:	min	FLOW min
Autosampler secured/locked:	Yes No N/A	Yes No N/A
Comp Temp(°C)		5.6

Field Test Traceability Info	
TRC ID:	
Temperature ID:	
pH Measured By:	Paper Meter
pH ID:	
Eff Sampler temp(°C)	
Inf Sampler temp(°C)	

N.A.

Sample comments key:
ND - No Discharge IQ - Insufficient Quantity CC - Company Closed EF - Equipment Failure Other (write in description)

*Matrix: W - Water, S - Solid, C - Chemical

Sample Identification	# Cont	Grab/ Comp	Matrix*	Location	Begin Sampled Date/Time	(End) Sampled Date/Time	Container with Preservation	Test Method	Field Test	Comments
24B0663-01	25	CMan	W	SP 2_CompMan	7:10 02/15/24	23:28 02/15/24	(1) 1 L Amber Glass, PTFE Lined Cap, NaOH to pH >10 Cool <6°C, NaOH to pH >10, NaAsO2 if TRC present	Cyanide OIA 1677 [A] Cyanide D7511 * [A]		
							(16) 40 mL Glass, PTFE lined septum Cool <6°C 12 Hg and 4 VOAs	Mercury 1631E △ [B] VOA 624.1 ▭ [N]		
							(8) 40 mL Glass, PTFE lined septum, HCl to pH <2 Cool <6°C, HCl to pH <2	VOA 624.1 ▭ [N]		

* COLLECTED AS 4 PARTS GRAB, 7:10, 11:58, 1810, 23 28 COMPOSITED IN FIELD

△ COLLECTED AS 4 PARTS GRAB, 7:10, 11:58, 1810 23 28 COMPOSITED AT ANALYSIS

▭ COLLECTED AS 4 PARTS GRAB, 7:10, 11:58, 1810 23 28 COMPOSITED AT ANALYSIS

Relinquished by: (Signature)	Date/Time	Location	Received by: (Signature)	Date/Time	Location
	02/16/24 11:11			2/16/24 1111	Cod
Relinquished by: (Signature)	Date/Time	Location	Received by: (Signature)	Date/Time	Location

Company Name:	Upper Brays Pollutant Monitoring
Address:	13525 W Houston Center Blvd Houston, TX 77082
Permit Number:	10495-116

Sampler: [illegible] / Juan Hernandez

IWS Sample Reason

- [ ] Permit Requirement
- [ ] Special Report
- [ ] Other
- [ ] Compliance Verification
- [x] POTW Permit Application

UB Full Scan + Permit

24B0663

Sample Identification	# Cont	Grab/ Comp	Matrix*	Location	Begin Sampled Date/Time	(End) Sampled Date/Time	Container with Preservation	Test Method	Field Test	Comments
24B0663-02	18	C	W	SP 2_Comp	8:00 02/15/24	8:00 02/16/24	(9) 1 L Amber Glass, PTFE Lined Cap, 0.008% Na2S2O3 Coo <6°C, 0.008% Na2S2O3	Pesticides 1657 [D] Pesticides 608.3 [G] BNA 625.1 [J]		
							(4) 1 L PE Cool <6°C (3)	~~Nitrate as N 300.0 [C]~~ ~~Sulfate 300.0 [C]~~ ~~Chloride 300.0 [C]~~ ~~Fluoride 300.0 [C]~~ CBOD 5210 B [M] TSS 2540 D [N] TDS 2540 C [P] Alkalinity 2320 B [P]		
							(1) 1 L PE or G, (NH4)2SO4 buffer, NaOH to pH 9.3-9.7 Cool <6°C, (NH4)2SO4 buffer, NaOH to pH 9.3-9.7	Chromium, Hexavalent 218.6 [A]		
							(3) 500 mL PE, H2SO4 to pH <2 Cool <6°C, H2SO4 to pH <2	NH3 as N 350.1 [O] TKN 4500-NH3 D [Q] Phosphorus 200.7 [R]		
							(1) 500 mL PE, HNO3 to pH <2 Cool <6°C, HNO3 to pH <2	Metals WWTP Eff [B]		
24B0663-03	2	G	W	Field Blank	[redacted]	11:58 02/15/24	(1) 1 L PE or Glass, HNO3 to pH <2 Cool <6°C, HNO3 to pH <2	Metals WWTP Eff [B]		
							(1) 40 mL Glass, PTFE lined septum, HCl to pH <2 Cool <6°C	Mercury 1631E [A]		

Relinquished by: (Signature)	Date/Time	Location	Received by: (Signature)	Date/Time	Location
[signature]	02/16/24 11:11		[signature]	2/16/24 1111	Cool
Relinquished by: (Signature)	Date/Time	Location	Received by: (Signature)	Date/Time	Location

Industrial Wastewater Service

Analysis Request and Chain of Custody

Company Name: **Upper Brays Regional**
Ne Corner Old Westheimer & Alief, Houston, TX

Location: **EFFLUENT**

Sample No. **5341632** Permit No. **5073** Outfall: **2** Scheduled Date: 2/16/2024
Sample Type: CMAN Sample Matrix: Liquid

SAMPLE COLLECTED ✓ **Yes** ____ **No** If No: ____ No Discharge ____ Quantity Not Sufficient ____ Company Closed ____ Equipment Failure: ____

COMPOSITE TIME/DATE:
Begin: 7:10
End: 23:28
Begin Date: 02/15/24
End Date: 02/15/24

SAMPLE DETAILS: Temp: ____
Split Sample: ____ Yes ✓ No
# of Bottles: (1) 2 3 4 5 ___
Sample Volume: 250 ml
Sample Interval: 300 min.

GRAB TIME/DATE: N.A.
Time: ___:___
Date: ___/___/___
TRC ____, Lot #84032C
Temperature ____ °C, S/N ____

FIELD TESTS:
pH: ___.___
☐ Paper, Lot # ____
☐ Meter, S/N ____

Autosampler Secured/Locked? ____ Yes ____ No ✓ NA **Sampler (Print):** JEFFREY FARRELL, ~~Aaron Hammond~~ A.H

Comments: COLLECTED AS A 4 POINT GRAB, 7:10, 11:58, 18:10, 23:28

Analysis Requested

*	Bottle #	Tests/Method	Sample Size/Container	Preservation	# of containers
✓	5341632-006	Phenol, Total (EPA 420.1)	1 L Amber Glass, PTFE lined cap	Cool <6°C, H2SO4 to pH <2	1
	LIMS Comments				

CHAIN OF CUSTODY

Lab Delivered To: ____ COH Wastewater Lab X City Contract Lab: A&B

Seals Intact: ____ **Yes** ____ **No** 568 IR Thermometer S/N # 27910254 ___ S/N # 29650075 ___ Temp ____ °C Initial ___

pH Strip Manufacturer: ____ Lot #: ____ Initial: ____

Relinquished By: [signature] Date: 02/16/24 Time: 13.40

Received By: [signature] Date: 2/16/24 Time: 13.46

Relinquished By: ____ Date: ___/___/___ Time: ___.___

Received By: ____ Date: ___/___/___ Time: ___.___

Relinquished By: ____ Received By: ____ Date: ___/___/___ Time: ___.___

* Deliverd to Lab if Box is Checked

LABORATORY TEST RESULTS

Job ID : 24021880

Date 2/23/2024

Client Name: Houston, City of

Attn: James Nguyen

Project Name:

Client Sample ID:	5341632	Job Sample ID:	24021880.14
Date Collected:	02/15/24	Sample Matrix	Water
Time Collected:	23:28	% Moisture	
Other Information:			

Test Method	Parameter/Test Description	Result	Units	DF	SDL	SQL	Reg Limit	Q	Date Time	Analyst
EPA 420.4	Phenolics (Total Phenols)									
	Phenols	<0.0045	mg/L	1	0.0045	0.01		U	02/16/24 15:37	SKC

ab-q212-0321

Industrial Wastewater Service

Analysis Request and Chain of Custody

Company Name: **Upper Brays Regional**
Ne Corner Old Westheimer & Alief, Houston, TX

Location: **EFFLUENT**

Sample No. **5341631** Permit No. **5073** Outfall: **2** Scheduled Date: 2/16/2024

Sample Type: Grab Sample Matrix: Liquid

SAMPLE COLLECTED ✓ **Yes** ____ **No** If No: ____ No Discharge ____ Quantity Not Sufficient ____ Company Closed ____ Equipment Failure: ________

COMPOSITE TIME/DATE:
Begin: ____:____
End: ____:____
Begin Date: ___/___/___ N.A.
End Date: ___/___/___

SAMPLE DETAILS: Temp: ____
Split Sample: ____ Yes ✓ No
\# of Bottles: (1) 2 3 4 5 ___
Sample Volume: 1000 ml
Sample Interval: 0 min.

GRAB TIME/DATE:
Time: 8:59
Date: 02/16/24
TRC ______, Lot #84032C
Temperature ______ °C, S/N ______

FIELD TESTS:
pH: ____.____
☐ Paper, Lot #______
☐ Meter, S/N ______

Autosampler Secured/Locked? ____Yes ____ No ✓ NA **Sampler (Print):** JEFFREY FARRELL

Comments: ________

Analysis Requested

*	Bottle #	Tests/Method	Sample Size/Container	Preservation	# of containers
✓	5341631-005	Oil and Grease (Total) / HEM (EPA 1664)	1 L Amber Glass, PTFE lined cap	Cool <6°C, H_2SO_4 to pH <2	1
	LIMS Comments				

CHAIN OF CUSTODY

Lab Delivered To: ____ COH Wastewater Lab X City Contract Lab: A&B

Seals Intact: ____ **Yes** ____ **No** 568 IR Thermometer S/N # 27910254 ___ S/N # 29650075 ___ Temp ____ °C Initial ___

pH Strip Manufacturer: ________ Lot #: ________ Initial: ________

Relinquished By: [signature] Date: 02/16/24 Time: 13.40

Received By: [signature] Date: 2/16/24 Time: 13.40

Relinquished By: ________ Date: ___/___/___ Time: ____.____

Received By: ________ Date: ___/___/___ Time: ____.____

Relinquished By: ________ Received By: ________ Date: ___/___/___ Time: ____.____

* Deliverd to Lab if Box is Checked

LABORATORY TEST RESULTS

Job ID : 24021880

Date 2/23/2024

Client Name: Houston, City of

Attn: James Nguyen

Project Name:

Client Sample ID:	5341631	Job Sample ID:	24021880.04
Date Collected:	02/16/24	Sample Matrix	Water
Time Collected:	08:59	% Moisture	
Other Information:			

Test Method	Parameter/Test Description	Result	Units	DF	SDL	SQL	Reg Limit	Q	Date Time	Analyst
EPA 1664B	Oil & Grease, Hexane Extractables									
	Oil & Grease	<1.72	mg/L	1.23	1.72	3.08		U	02/19/24 08:05	SG

ab-q212-0321

Industrial Wastewater Service

Analysis Request and Chain of Custody

Company Name: **Upper Brays Regional**
Ne Corner Old Westheimer & Alief, Houston, TX

Location: **EFFLUENT**

Sample No. **5341632** Permit No. **5073** Outfall: **2** Scheduled Date: 2/16/2024

Sample Type: COMP Sample Matrix: Liquid

SAMPLE COLLECTED ✓ **Yes** ____ **No** If No: ____ No Discharge ____ Quantity Not Sufficient ____ Company Closed ____ Equipment Failure: ____

COMPOSITE TIME/DATE:
Begin: 8:00
End: 8:00
Begin Date: 02/15/24
End Date: 02/16/24

SAMPLE DETAILS: Temp: 5.6
Split Sample: ____ Yes ✓ No
# of Bottles: 1 2 3 4 5
Sample Volume: 800 ml
Sample Interval: Flow min.

GRAB TIME/DATE:
Time: ____:____
Date: ____/____/____

FIELD TESTS:
pH: ____.____
N.A ☐ Paper, Lot #____
TRC ____, Lot #84032C ☐ Meter, S/N ____
Temperature ____ °C, S/N ____

Autosampler Secured/Locked? ✓ **Yes** ____ **No** ____ **NA** **Sampler (Print):** JEFFREY FARRELL

Comments: ____

*	Bottle #	Tests/Method	Analysis Requested	Sample Size/Container	Preservation	# of containers
✓	5341632-001	Bisphenol A (ASTM D7065-11 or 625); Nonylphenol (1625 or ASTM D7065)		1 L Amber Glass, PTFE lined cap	Cool <6°C, H2SO4 to pH <2	2
✓	5341632-004	Hexachlorophene (EPA 604.1)		1 L Amber Glass, PTFE lined cap	Cool <6°C	2
✓	5341632-007	Chloride, Sulfate (EPA 300.0); Fluoride (EPA 300.0); Nitrate as N (EPA 300.0)		1 L Polyethylene	Cool <6°C	1
	LIMS Comments					

CHAIN OF CUSTODY

Lab Delivered To: ____ COH Wastewater Lab X City Contract Lab: A&B

Seals Intact: ____ **Yes** ____ **No** 568 IR Thermometer S/N # 27910254 ___ S/N # 29650075 ___ Temp ____ °C Initial ___

pH Strip Manufacturer: ____ Lot #: ____ Initial: ____

Relinquished By: [signature] Date: 02/16/24 Time: 13.40

Received By: [signature] Date: 2/16/24 Time: 13.40

Relinquished By: ____ Date: ____/____/____ Time: ____.____

Received By: ____ Date: ____/____/____ Time: ____.____

Relinquished By: ____ Received By: ____ Date: ___/___/___ Time: ____.____

* Deliverd to Lab if Box is Checked

LABORATORY TEST RESULTS

Job ID : 24021880

Date 2/23/2024

Client Name: Houston, City of

Attn: James Nguyen

Project Name:

Client Sample ID:	5341632	Job Sample ID:	24021880.17
Date Collected:	02/16/24	Sample Matrix	Water
Time Collected:	08:00	% Moisture	
Other Information:			

Test Method	Parameter/Test Description	Result	Units	DF	SDL	SQL	Reg Limit	Q	Date Time	Analyst
EPA 300.0	Anions									
	Fluoride	0.250	mg/L	1.00	0.02	0.100			02/16/24 21:26	KPE
	Chloride	97.2	mg/L	20.00	0.360	2.00			02/16/24 21:46	KPE
	Nitrate-N	26.0	mg/L	20.00	0.140	2.00			02/16/24 21:46	KPE
	Sulfate	60.0	mg/L	20.00	0.200	2.00			02/16/24 21:46	KPE
ASTM D7065-11										
	Bisphenol A[2]	<5.00	ug/L	1.00		5.00		U	02/21/24 21:06	GM
	Nonylphenol[1]	<5.00	ug/L	1.00	5.00	5.00		U	02/20/24 11:48	GM
	Terphenyl-d14(surr)	72.8	%	1.00		18-137			02/21/24 21:06	GM

ab-q212-0321

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

SPL The Science of Sure

ABL2-G

A & B Labs
Shantall Carpenter
10100 East Freeway
Suite 100
Houston, TX 77029

Project 1092387

Printed: 02/23/2024

51808/24021880.17

RESULTS

Sample Results

2274276 **5341632-004** Received: 02/20/2024

Non-Potable Water Collected by: Client A & B Labs PO: 51808/24021880.17
Taken: 02/15/2024 08:00:00

EPA 604.1 Prepared: 1105152 02/20/2024 13:45:00 Analyzed 1105656 02/22/2024 03:43:00 BRU

	Parameter	Results	Units	RL	Flags	CAS	Bottle
z	**Hexachlorophene**	**<0.00134**	**mg/L**	0.00134		**70-30-4**	03

Sample Preparation

2274276 **5341632-004** Received: 02/20/2024

51808/24021880.17

02/15/2024

Prepared: 02/20/2024 14:14:49 Calculated 02/20/2024 14:14:49 CAL

z	**Environmental Fee (per Project)**	**Verified**						

EPA 604.1 Prepared: 1105152 02/20/2024 13:45:00 Analyzed 1105152 02/20/2024 13:45:00 MCC

	Hexachlorophene Extraction	**5/935**	**ml**					01

EPA 604.1 Prepared: 1105152 02/20/2024 13:45:00 Analyzed 1105656 02/22/2024 03:43:00 BRU

	Hexachlorophene Expansion	**Entered**				**70-30-4**		03

Industrial Wastewater Service

Analysis Request and Chain of Custody

Company Name: **Upper Brays Regional**
Ne Corner Old Westheimer & Alief, Houston, TX

Location: **EFFLUENT**

Sample No. **5341632** Permit No. **5073** Outfall: **2** Scheduled Date: 2/16/2024

Sample Type: COMP Sample Matrix: Liquid

SAMPLE COLLECTED ✓ **Yes** ____ **No** If No: ____ No Discharge ____ Quantity Not Sufficient ____ Company Closed ____ Equipment Failure: ____

COMPOSITE TIME/DATE:
Begin: 8:00
End: 8:00
Begin Date: 02/15/24
End Date: 02/16/24

SAMPLE DETAILS: Temp: 5.6
Split Sample: ____ Yes ✓ No
# of Bottles: 1 2 3 (4) 5 ___
Sample Volume: 800 ml
Sample Interval: Flow min.

GRAB TIME/DATE:
Time: ____:____
Date: ____/____/____ N.A.
TRC ____, Lot #84032C
Temperature ____ °C, S/N ____

FIELD TESTS:
pH: ____.____
☐ Paper, Lot #____
☐ Meter, S/N ____

Autosampler Secured/Locked? ✓ **Yes** ____ **No** ____ **NA** **Sampler (Print):** JEFFREY FAMELL

Comments: ____

*	Bottle #	Tests/Method	Analysis Requested	Sample Size/Container	Preservation	# of containers
✓	5341632-002	Carbaryl (EPA 632); Diuron (EPA 632)		1 L Amber Glass, PTFE lined cap	Cool <6°C	2
✓	5341632-003	Herbicides (EPA 615 or SM 6640B)		1 L Amber Glass, PTFE lined cap	Cool <6°C	2
	LIMS Comments					

CHAIN OF CUSTODY

Lab Delivered To: ____ COH Wastewater Lab X City Contract Lab: Eurofins Xenco

Seals Intact: ____ **Yes** ____ **No** 568 IR Thermometer S/N # 27910254 ___ S/N # 29650075 ___ Temp ____ °C Initial ___

pH Strip Manufacturer: ____ Lot #: ____ Initial: ____

Relinquished By: [signature] Date: 02/16/24 Time: 13.54

Received By: [signature] Date: 2/16/24 Time: 13.54

Relinquished By: ____ Date: ____/____/____ Time: ____.____

Received By: ____ Date: ____/____/____ Time: ____.____

Relinquished By: ____ Received By: ____ Date: ___/___/___ Time: ____.____

* Deliverd to Lab if Box is Checked

Client: City of Houston
Project/Site: 5341632 Upper Brays Regional Effluent

Job ID: 860-68181-1
SDG: 5073_2

Client Sample ID: 5341632-002

Lab Sample ID: 860-68181-1

Date Collected: 02/16/24 08:00
Matrix: Water
Date Received: 02/16/24 14:25

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbaryl	<1.85		5.00	1.85	ug/L		02/19/24 14:10	02/21/24 13:43	1
Diuron	<0.0514		0.0900	0.0514	ug/L		02/19/24 14:10	02/21/24 13:43	1

Client Sample ID: 5341632-003

Lab Sample ID: 860-68181-2

Date Collected: 02/16/24 08:00
Matrix: Water
Date Received: 02/16/24 14:25

Method: EPA-01 615 - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-D	<0.0000511		0.000190	0.0000511	mg/L		02/17/24 07:16	02/20/24 18:39	1
2,4,5-TP	<0.0000400		0.000190	0.0000400	mg/L		02/17/24 07:16	02/20/24 18:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4-Dichlorophenylacetic acid	*172*	*S1+*	*45 - 150*	*02/17/24 07:16*	*02/20/24 18:39*	*1*

Attachment 10

Facility Operators

Technical Report 1.0, Section 8

TPDES Permit Number 10495-116
Upper Brays

Facility Operations Chain-of-Command

		License Class	License Number	Expiration
Deputy Assistant Director:	Arturo Carillo			
Operations Manager:	LeAndrea Scott	A	WW0012577	8/21/2024
Assistant Operations Manager:	Damien Derousselle	A	WW0030514	4/12/2027
Operations Section Chief:				
Plant Operator Supervisor:	Lashandra Hall	B	WW0062714	4/17/2025
Tech II:				
Tech I:	Demetrian Morris	B	WW0074559	2/9/2027

Attachment 11

WET Test Reports

Worksheet 5.0, Section 1
Worksheet 5.0, Section 3

Summary of WET Tests

Upper Brays
10495-116 TX0088153

Test Initiation Date	Species	Lethal Endpoint	Sublethal Endpoint
10/29/2019	*Ceriodaphnia dubia*	>83	>83
10/29/2019	*Pimephales promelas*	>83	>83
1/14/2020	*Ceriodaphnia dubia*	>100	>100
1/14/2020	*Pimephales promelas*	>100	>100
4/14/2020	*Ceriodaphnia dubia*	>100	>100
4/14/2020	*Pimephales promelas*	>100	>100
7/7/2020	*Ceriodaphnia dubia*	>100	>100
7/7/2020	*Pimephales promelas*	>100	>100
10/6/2020	*Ceriodaphnia dubia*	>100	>100
10/6/2020	*Pimephales promelas*	>100	>100
1/5/2021	*Ceriodaphnia dubia*	>100	>100
1/5/2021	*Pimephales promelas*	>100	>100
4/13/2021	*Ceriodaphnia dubia*	>100	>100
4/13/2021	*Pimephales promelas*	>100	>100
7/13/2021	*Ceriodaphnia dubia*	>100	>100
7/13/2021	*Pimephales promelas*	>100	>100
10/5/2021	*Ceriodaphnia dubia*	>100	>100
10/5/2021	*Pimephales promelas*	>100	>100
1/11/2022	*Ceriodaphnia dubia*	>100	>100
1/11/2022	*Pimephales promelas*	>100	>100
4/12/2022	*Ceriodaphnia dubia*	>100	>100
4/12/2022	*Pimephales promelas*	>100	>100
7/26/2022	*Ceriodaphnia dubia*	>100	>100
7/26/2022	*Pimephales promelas*	>100	>100
10/4/2022	*Ceriodaphnia dubia*	>100	>100
10/4/2022	*Pimephales promelas*	>100	>100
1/10/2023	*Ceriodaphnia dubia*	>100	>100
1/10/2023	*Pimephales promelas*	>100	>100
4/4/2023	*Ceriodaphnia dubia*	>100	>100
4/4/2023	*Pimephales promelas*	>100	>100

Test Initiation Date	Species	Lethal Endpoint	Sublethal Endpoint
7/11/2023	*Ceriodaphnia dubia*	>100	>100
7/11/2023	*Pimephales promelas*	>100	>100
10/18/2023	*Ceriodaphnia dubia*	>100	>100
10/18/2023	*Pimephales promelas*	>100	>100
1/9/2024	*Ceriodaphnia dubia*	>100	>100
1/9/2024	*Pimephales promelas*	>100	>100

Attachment 12

Effluent Parameters Above the MAL

Worksheet 6.0, Section 2.C.

Attachment 12

Table 6.0(1) - Parameters Above the MAL

Pollutant	Concentration	MAL	Units	Date
Aluminum	54.4	2.5	ug/L	2/15/2024
Arsenic	1.9	0.5	ug/L	2/15/2024
Barium	79.0	3	ug/L	2/15/2024
Copper	9.46	2	ug/L	2/15/2024
Nickel	2.76	2	ug/L	2/15/2024
Zinc	55.2	5	ug/L	2/15/2024
Bromodichloromethane	16.2	10	ug/L	2/15/2024
Chloroform	41.2	10	ug/L	2/15/2024
Total Trihalomethane	62.5	10	ug/L	2/15/2024
Nitrate-Nitrogen	26,000	100	ug/L	2/15/2024

Section 14. Signature Page (Instructions Page 34)

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

Permit Number: WQ0010495116

Applicant: City of 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): Randall V. Macchi

Signatory title: Chief Operating Officer, Houston Public Works

Signature: _____ Date: 5-6-24

(Use blue ink)

Subscribed and Sworn to before me by the said Randall V. Macchi

on this 6th day of May, 2024.

My commission expires on the 9th day of March, 2027.

Ruth C. Bocanegra

Notary Public *[SEAL]*

Harris

County, Texas

RUTH C. BOCANEGRA
NOTARY PUBLIC
ID# 12591095
State of Texas
Comm. Exp. 03-09-2027

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: Randall V. Macchi

Title: Chief Operating Officer, Houston Public Works

Signature: _____

Date: 5-6-24

☐ 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:
	WQ0010495116			

SECTION IV: Preparer Information

40. Name:	Heather Maloney	41. Title:	Environmental Investigator V

42. Telephone Number	43. Ext./Code	44. Fax Number	45. E-Mail Address
(832) 395-5756		(832) 395-5838	heather.maloney@houstontx.gov

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 Houston, Houston Public Works	Job Title:	Chief Operating Officer, Houston Public Works
Name *(In Print)*:	Randall V. Macchi	Phone:	(832) 395- 2936
Signature:		Date:	5-6-24

Candice Calhoun

From: John Hearn
Sent: Wednesday, April 30, 2025 8:21 AM
To: Candice Calhoun
Subject: FW: WQ0010495116 City of Houston
Attachments: UB_Section4_2024 Admin Rpt rev1.pdf; wq0010495116-contact-routing-sheets.docx

Good morning Candice,

Please see the admin page for the updated application contact. I have also attached the old contact routing sheet. Please let me know if you need anything else for this one.

Thanks,
John

From: Maloney, Heather - HPW <Heather.Maloney@houstontx.gov>
Sent: Wednesday, April 30, 2025 8:02 AM
To: John Hearn <John.Hearn@tceq.texas.gov>
Cc: Samarneh, Walid - HPW <Walid.Samarneh@houstontx.gov>; Fragassi, Arielle - HPW <Arielle.Fragassi@houstontx.gov>
Subject: RE: WQ0010495116 City of Houston

Good morning John,

Please see attached.

Thank you,
Heather

Heather Maloney
Division Manager
Regulatory Compliance | Houston Water
(o) 832-395-5756

HOUSTON PUBLIC WORKS

From: John Hearn <John.Hearn@tceq.texas.gov>
Sent: Tuesday, April 29, 2025 3:51 PM
To: Maloney, Heather - HPW <Heather.Maloney@houstontx.gov>
Cc: Samarneh, Walid - HPW <Walid.Samarneh@houstontx.gov>; Fragassi, Arielle - HPW <Arielle.Fragassi@houstontx.gov>
Subject: FW: WQ0010495116 City of Houston

[This message came from outside the City of Houston email system. Please be careful while clicking links, opening attachments, or replying to this email.]
Good afternoon Heather,

Thank you for the comments on the draft permit package. In order to change the contact, we will need the below items mentioned in Candice's email. Please provide them ASAP via email, and I will get those changes into the draft.

Thanks!
John

The only thing I would need is the updated administrative contact section (section 4) of the admin report, and that should be all for me. Once I receive that, I can update PARIS, the application-updates file, as well as the contact/routing sheet.

Regards,

Candice Courville
License & Permit Specialist
ARP Team | Water Quality Division
Texas Commission on Environmental Quality
512-239-4312
candice.calhoun@tceq.texas.gov

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

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From: John Hearn <John.Hearn@tceq.texas.gov>
Sent: Tuesday, April 29, 2025 3:44 PM
To: Candice Calhoun <Candice.Calhoun@tceq.texas.gov>
Subject: FW: WQ0010495116 City of Houston

Good afternoon Candice,

I saw you were the admin reviewer for this one. The applicant is wanting to change the technical contact for this one (Please see point 1. below). Do you need anything from the applicant at this time to make this change?

I think I will also need a new contact sheet for this one now.

Thanks,
John

From: Maloney, Heather - HPW <Heather.Maloney@houstontx.gov>
Sent: Thursday, April 24, 2025 8:30 AM
To: John Hearn <John.Hearn@tceq.texas.gov>
Cc: Samarneh, Walid - HPW <Walid.Samarneh@houstontx.gov>; Fragassi, Arielle - HPW <Arielle.Fragassi@houstontx.gov>
Subject: RE: WQ0010495116 City of Houston

Good morning John,

We have received the draft permit dated April 16, 2025 and a second version of the draft with WET revisions on April 23, 2025. In compliance with the response deadline of April 24, 2025, please accept the following comments.

1. Draft NAPD, contact name/number
    a. There have been personnel changes since the application was submitted. Please update the contact to Ms. Heather Maloney, Division Manager, at 832-395-5756.
2. Fact Sheet, Item 3.
    a. Latitude should be 29.716756 N.
3. Fact Sheet, Item 8.C.(5)(a) & Draft Permit, Biomonitoring Requirements, Chronic Biomonitoring Requirements: Freshwater
    a. The fact sheet indicates that both species are eligible for testing frequency reductions. However, this provision does not appear in the draft permit.

Thank you,
Heather

Heather Maloney
Division Manager
Regulatory Compliance | Houston Water
(o) 832-395-5756

HOUSTON PUBLIC WORKS

From: Samarneh, Walid - HPW <Walid.Samarneh@houstontx.gov>
Sent: Wednesday, April 23, 2025 2:35 PM
To: Maloney, Heather - HPW <Heather.Maloney@houstontx.gov>
Subject: FW: WQ0010495116 City of Houston

FYI

Thank You,

Walid Samarneh, P. E.
Managing Engineer – Regulatory Compliance
City of Houston |Houston Public Works |
(832) 395-5771 (O) | (713) 501-2782 (C) |

From: John Hearn <John.Hearn@tceq.texas.gov>
Sent: Wednesday, April 23, 2025 10:57 AM
To: Samarneh, Walid - HPW <Walid.Samarneh@houstontx.gov>
Subject: RE: WQ0010495116 City of Houston

[This message came from outside the City of Houston email system. Please be careful while clicking links, opening attachments, or replying to this email.]
Hello Walid,

The dilution series and second page has been revised after comments from the biomonitoring team. Please review the attached revisions and reply to this email with comments/approval and the translated NAPD ASAP, but no later than, ***Thursday, April 24, 2025*, so that the permitting process can proceed in a timely manner.**

Please let me know if you have any questions.

Thanks,
John

From: Shemica Wilford <Shemica.Wilford@tceq.texas.gov>
Sent: Thursday, April 17, 2025 4:23 PM
To: walid.samarneh@houstontx.gov
Cc: John Hearn <John.Hearn@tceq.texas.gov>
Subject: WQ0010495116 City of Houston

To whom it may concern,

Attached for your review, is the letter, DRAFT permit, NAPD, and statement of basis/technical summary, for Permit WQ0010495116 City of Houston.

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

Please note, a translated copy of the NAPD in the alternative language must be submitted with your comments on the draft permit. If a translated NAPD is not received, the draft permit cannot be filed with the Office of the Chief Clerk. For notice templates in Spanish, please visit: https://www.tceq.texas.gov/permitting/wastewater/review/napd/wqspanish_napd.html

Please submit any **comments and/or approval** no later than, ***Thursday, April 24, 2025.*** If the comments and/ or approval are not received by the given deadline, it may cause significant delays in the permit process. Please contact John Hearn with your comments and/ or approval to:John.Hearn@tceq.texas.gov .

Thank you,

Shemica Wilford
Customer Information Assistance (CIA)
Water Quality Division
Texas Commission on Environmental Quality (TCEQ)
Shemica.Wiflord@tceq.texas.gov

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. **Attachment 2**

Section 4. Application Contact Information (Instructions Page 27)

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

A. Prefix: Ms. Last Name, First Name: Maloney, Heather

Title: Division Manager Credential: N/A

Organization Name: City of Houston

Mailing Address: 10500 Bellaire Blvd City, State, Zip Code: Houston, Texas 77072

Phone No.: 832-395-5756 E-mail Address: heather.maloney@houstontx.gov

Check one or both: ☒ Administrative Contact ☒ Technical Contact

N/A **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: Ms. Last Name, First Name: Haddock, Carol

Title: Director, Houston Public Works Credential: P.E.

Organization Name: City of Houston

Mailing Address: 10500 Bellaire Blvd City, State, Zip Code: Houston, Texas 77072

Phone No.: 832-395-2500 E-mail Address: PublicWorks@houstontx.gov

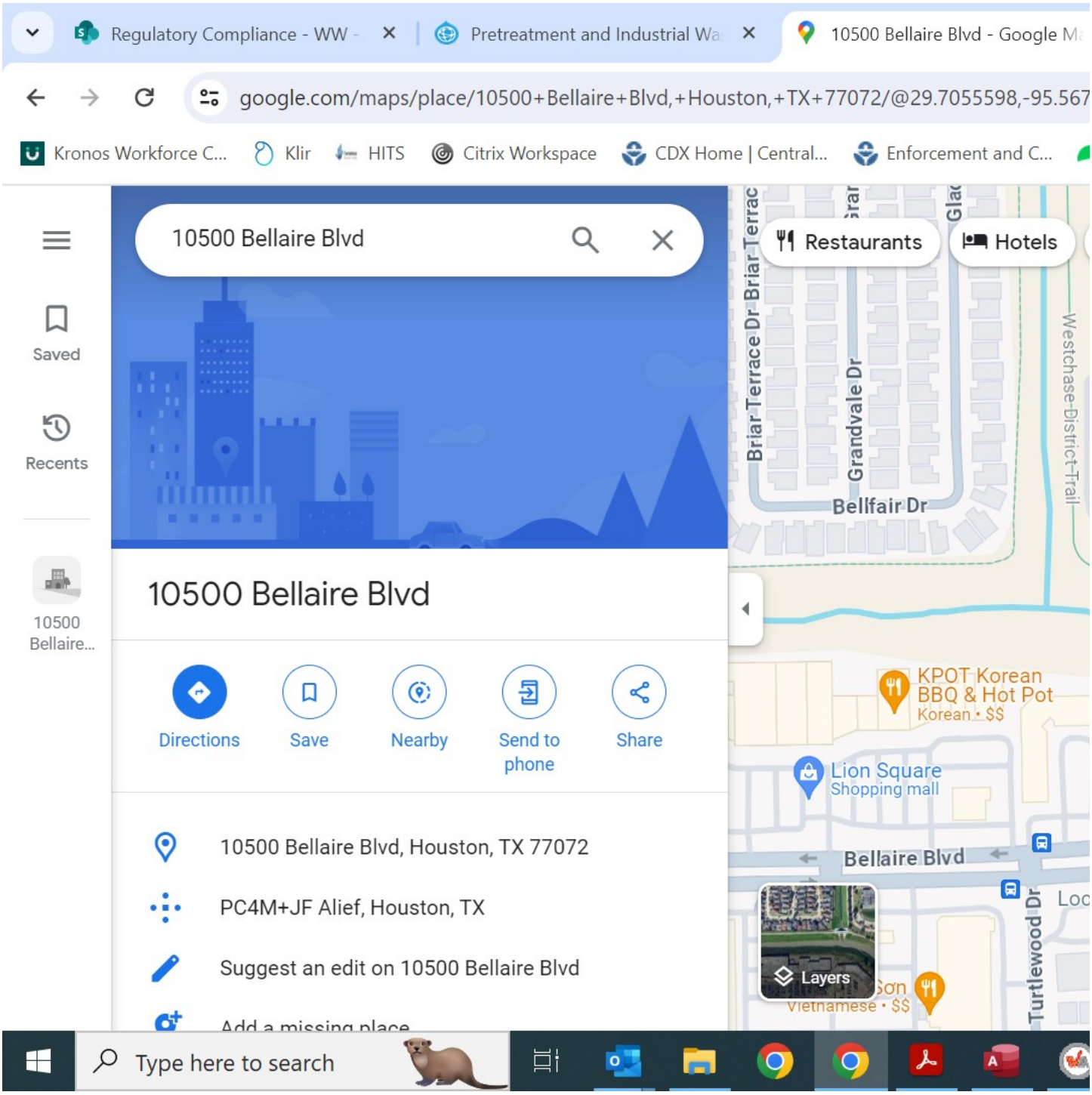
Candice Calhoun

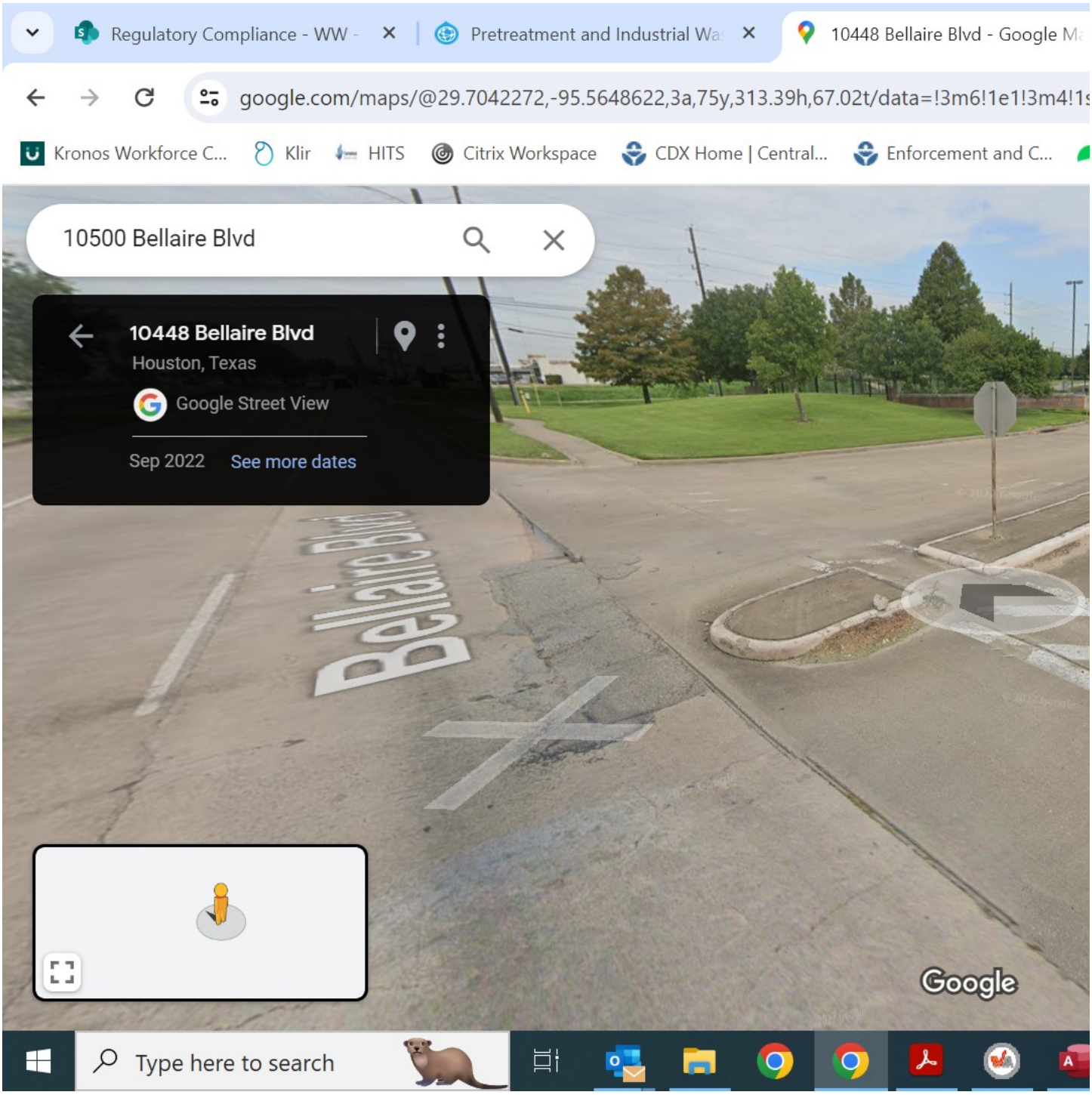
From: Maloney, Heather - HPW <Heather.Maloney@houstontx.gov>
Sent: Wednesday, May 29, 2024 9:13 AM
To: Candice Calhoun
Cc: Samarneh, Walid - HPW; Sanchez, Jose F. - HPW
Subject: RE: Application to Renew Permit No. WQ0010495116 - City of Houston

Follow Up Flag: Follow up
Flag Status: Completed

Good morning Candice,

The City of Houston Wastewater Operations Laboratory building mailing address is 10500 Bellaire Boulevard, Houston 77072. Entering this address into Google Maps returns the correct location. Here are the map results and street view of the address search. The City building shares a driveway with an old Halliburton facility. The laboratory building is accessed by taking the driveway to the left.


Regulatory Compliance - WW -
Pretreatment and Industrial Wa
10500 Bellaire Blvd - Google M
google.com/maps/place/10500+Bellaire+Blvd,+Houston,+TX+77072/@29.7055598,-95.567
Kronos Workforce C...
Klir
HITS
Citrix Workspace
CDX Home | Central...
Enforcement and C...
10500 Bellaire Blvd
Saved
Recents
10500 Bellaire...
10500 Bellaire Blvd
Directions
Save
Nearby
Send to phone
Share
10500 Bellaire Blvd, Houston, TX 77072
PC4M+JF Alief, Houston, TX
Suggest an edit on 10500 Bellaire Blvd
Restaurants
Hotels
Briar Terrace Dr
Briar Terrac
Grandvale Dr
Bellfair Dr
Westchase District Trail
KPOT Korean BBQ & Hot Pot
Korean • $$
Lion Square
Shopping mall
Bellaire Blvd
Turtlewood Dr
Layers
Vietnamese • $$
Type here to search



The Wastewater Operations Laboratory houses the Laboratory, Permitting, and Industrial Pretreatment Groups. This link shows the address: https://www.houstonpublicworks.org/pretreatment-and-industrial-wastewater-service

This public viewing location has been used for all City of Houston wastewater permit applications for facilities in Harris County.

Thank you,
Heather

Heather Maloney
Environmental Investigator V, Houston Public Works
832-395-5756

From: Candice Calhoun <Candice.Calhoun@tceq.texas.gov>
Sent: Wednesday, May 29, 2024 8:46 AM
To: Maloney, Heather - HPW <Heather.Maloney@houstontx.gov>
Cc: Samarneh, Walid - HPW <Walid.Samarneh@houstontx.gov>; Sanchez, Jose F. - HPW <Jose.Sanchez2@houstontx.gov>
Subject: RE: Application to Renew Permit No. WQ0010495116 - City of Houston

[This message came from outside the City of Houston email system. Please be careful while clicking links, opening attachments, or replying to this email.]
Good morning Ms. Maloney,

Thank you for your response. The information provided, for the authorization type for the permit and items 2 and 3, of the NOD, are sufficient. However, with the information provided, I am still not able to verify the public viewing location name and address. Please, either provide a snip-it showing the building name, address, and business hours, or provide a new public viewing location name and address.

Thank you,

Candice Calhoun
Texas Commission on Environmental Quality
Water Quality Division
512-239-4312
candice.calhoun@tceq.texas.gov

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

From: Maloney, Heather - HPW <Heather.Maloney@houstontx.gov>
Sent: Tuesday, May 28, 2024 2:48 PM
To: Candice Calhoun <Candice.Calhoun@tceq.texas.gov>
Cc: Samarneh, Walid - HPW <Walid.Samarneh@houstontx.gov>; Sanchez, Jose F. - HPW <Jose.Sanchez2@houstontx.gov>
Subject: RE: Application to Renew Permit No. WQ0010495116 - City of Houston

Good afternoon Candice,

Please accept the attached response regarding the administrative review of the Upper Brays permit application.

Thank you,
Heather

Heather Maloney
Environmental Investigator V, Houston Public Works
832-395-5756

From: Samarneh, Walid - HPW <Walid.Samarneh@houstontx.gov>
Sent: Monday, May 20, 2024 2:09 PM
To: Maloney, Heather - HPW <Heather.Maloney@houstontx.gov>
Cc: Sanchez, Jose F. - HPW <Jose.Sanchez2@houstontx.gov>
Subject: FW: Application to Renew Permit No. WQ0010495116 - City of Houston
Importance: High

FYI

Thank You,

Walid Samarneh, P. E.
Managing Engineer – Regulatory Compliance
City of Houston |Houston Public Works |
(832) 395-5771 (O) | (713) 501-2782 (C) |

From: Candice Calhoun <Candice.Calhoun@tceq.texas.gov>
Sent: Monday, May 20, 2024 1:43 PM
To: Samarneh, Walid - HPW <Walid.Samarneh@houstontx.gov>
Subject: Application to Renew Permit No. WQ0010495116 - City of Houston
Importance: High

[This message came from outside the City of Houston email system. Please be careful while clicking links, opening attachments, or replying to this email.]
Good afternoon Mr. Samarneh,

The attached Notice of Deficiency (NOD) letter dated May 20, 2024, requests additional information needed to declare the application administratively complete. Please send complete response by June 3, 2024.

Please let me know if you have any questions.

Regards,

Candice Calhoun
Texas Commission on Environmental Quality
Water Quality Division
512-239-4312
candice.calhoun@tceq.texas.gov

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

Candice Calhoun

From: Maloney, Heather - HPW <Heather.Maloney@houstontx.gov>
Sent: Tuesday, May 28, 2024 2:48 PM
To: Candice Calhoun
Cc: Samarneh, Walid - HPW; Sanchez, Jose F. - HPW
Subject: RE: Application to Renew Permit No. WQ0010495116 - City of Houston
Attachments: UB_NODResponse.pdf; UB_SpanishNORI.docx

Follow Up Flag: Follow up
Flag Status: Completed

Good afternoon Candice,

Please accept the attached response regarding the administrative review of the Upper Brays permit application.

Thank you,
Heather

Heather Maloney
Environmental Investigator V, Houston Public Works
832-395-5756
HOUSTON PUBLIC WORKS

From: Samarneh, Walid - HPW <Walid.Samarneh@houstontx.gov>
Sent: Monday, May 20, 2024 2:09 PM
To: Maloney, Heather - HPW <Heather.Maloney@houstontx.gov>
Cc: Sanchez, Jose F. - HPW <Jose.Sanchez2@houstontx.gov>
Subject: FW: Application to Renew Permit No. WQ0010495116 - City of Houston
Importance: High

FYI

Thank You,

Walid Samarneh, P. E.
Managing Engineer – Regulatory Compliance
City of Houston |Houston Public Works |
(832) 395-5771 (O) | (713) 501-2782 (C) |

From: Candice Calhoun <Candice.Calhoun@tceq.texas.gov>
Sent: Monday, May 20, 2024 1:43 PM
To: Samarneh, Walid - HPW <Walid.Samarneh@houstontx.gov>
Subject: Application to Renew Permit No. WQ0010495116 - City of Houston
Importance: High

[This message came from outside the City of Houston email system. Please be careful while clicking links, opening attachments, or replying to this email.]
Good afternoon Mr. Samarneh,

The attached Notice of Deficiency (NOD) letter dated May 20, 2024, requests additional information needed to declare the application administratively complete. Please send complete response by June 3, 2024.

Please let me know if you have any questions.

Regards,

Candice Calhoun
Texas Commission on Environmental Quality
Water Quality Division
512-239-4312
candice.calhoun@tceq.texas.gov

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

HOUSTON PUBLIC WORKS

May 30, 2024

Candice Calhoun
Applications Review and Processing Team (MC 148)
Water Quality Division, Texas Commission on Environmental Quality
12100 Park 35 Circle
Austin, Texas 78753

Subject: Upper Brays Wastewater Treatment Facility
Application to Renew TCEQ Permit Number: WQ0010495116, CN600128995, RN101607174
Notice of Deficiency Letter dated May 20, 2024

Dear Ms. Calhoun,

A Notice of Deficiency letter outlining items that must be addressed before the above-referenced application can be declared administratively complete was received on May 20, 2024. Please accept the following responses.

1. Administrative Report 1.0, Section 2, item A.
    a. The authorization type is "Publicly-Owned Domestic Wastewater."
2. Administrative Report 1.0, Section 8, item D.
    a. The location and address listed in the application is the City of Houston's Wastewater Laboratory. The building is open to the public during normal business hours.
3. Please make the following revision to the portion of the Notice of Receipt of Application and Intent to Obtain a Water Quality Permit (NORI).
    a. "…at a volume not to exceed an annual average flow of…"
4. Spanish NORI is attached with the above correction.

Please contact me or Heather Maloney at 832-395-5756 or heather.maloney@houstontx.gov with any questions.

Sincerely,

Walid Samarneh, P.E.
Managing Engineer
City of Houston, Houston Public Works

Attachment(s): Spanish NORI

W:\Facility Records\UpperBrays116\Permits\Applications\2024Renewal\AdminReview\UB_NODResponse.docx

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. WQ0010495116

SOLICITUD. La Ciudad de Houston, 10500 Bellaire Boulevard, Houston, Texas 77072, ha solicitado a la Comisión de Calidad Ambiental del Estado de Texas (TCEQ) para renovar el Permiso No. WQ0010495116 (EPA I.D. No. TX0088153) 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 anual de 18,000,000 galones por día. La facilidad está ubicada 13525 West Houston Center Boulevard, en el Condado de Harris, Texas 77082. La ruta de descarga es del sitio de la planta al pantano Brays Bayou; de allí al Canal para buques de Houston/la marea del pantano Buffalo Bayou. La TCEQ recibió esta solicitud en Mayo 10, 2024. La solicitud para el permiso está disponible para leerla y copiarla en la Ciudad de Houston, Trabajos Públicos de Houston, Operaciones de Wastewater edificio, biblioteca, 10500 Bellaire Boulevard, Houston, Condado de Harris, Texas 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.
https://gisweb.tceq.texas.gov/LocationMapper/?marker=-95.590833,29.716944&level=18

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

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

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

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

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

LISTA DE CORREO. Si somete comentarios públicos, un pedido para una audiencia administrativa de lo contencioso o una reconsideración de la decisión del Director Ejecutivo, la Oficina del Secretario Principal enviará por correo los avisos públicos en relación con la solicitud. Ademas, puede pedir que la TCEQ ponga su nombre en una or mas de las listas correos siguientes (1) la lista de correo permanente para recibir los avisos del 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 del TCEQ.

INFORMACIÓN DISPONIBLE ONLINE. Para más detalles sobre el estado de la aplicación, visite la base de datos integrada del Comisario al www.tceq.texas.gov/goto/cid. Buscar en la base de datos usando el número de permiso para esta aplicación, que se puede encontrar al inicio de este aviso.

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

También se puede obtener información adicional del La Ciudad de Houston a la dirección indicada arriba o llamando a Sr. Walid Samarneh, P.E., Ingeniero Gerente, al (832) 395-5771.

Fecha de emission: