



# Technical Package Cover Page

**This file contains the following documents:**

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

\* **NOTE:** This application was declared Administratively Complete before June 1, 2024. The application materials, draft permit, and technical summary or fact sheet are available for review at the Public Viewing Location provided in the NAPD.

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# Portada de Paquete Técnico

**Este archivo contiene los siguientes documentos:**

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

\*\* **NOTA:** Esta solicitud se declaró administrativamente completa antes del 1 de junio de 2024. Los materiales de la solicitud, el proyecto de permiso, y los resumen técnico u hoja de datos están disponibles para revisión en la ubicación de consulta pública que se indica en el NAPD.

## Section 15. Plain Language Summary (Instructions Page 40)

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

### ENGLISH TEMPLATE FOR TPDES or TLAP NEW/RENEWAL/AMENDMENT APPLICATIONS

#### DOMESTIC WASTEWATER

*The following summary is provided for this pending water quality permit application being reviewed by the Texas Commission on Environmental Quality as required by 30 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 Northwest Wastewater Treatment Facility (RN101610665). an activated sludge – extended aeration wastewater treatment facility. The facility is located at 5423 Mangum Road, in Houston, Harris County, Texas 77091.

This application is for a permit 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<sub>5</sub>), total suspended solids (TSS), ammonia-nitrogen (NH<sub>3</sub>N), and *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 – extended aeration. 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 pumped or trucked offsite for further treatment and disposal.



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

### **AGUAS RESIDUALES DOMÉSTICAS**

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

La ciudad de Houston (CN600128995) opera la instalación de tratamiento de aguas residuales Northwest Wastewater Treatment Facility (RN101610665), un lodos activados - aireación prolongada instalación de tratamiento de aguas residuales. La instalación está situada en 5423 Mangum Road, Houston, en el condado de Harris, Texas 77091.

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 (CBOD<sub>5</sub>), sólidos suspendidos totales (TSS), nitrógeno amoniacal (NH<sub>3</sub>-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 - aireación prolongada. Las unidades de tratamiento incluyen pantalla de barra para tratamiento preliminar; cuencas de aireación y canales de licor mixto 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 bombean o son transportadas en camión para más tratamiento y eliminación.

# Texas Commission on Environmental Quality



## COMBINED

### NOTICE OF RECEIPT OF APPLICATION AND INTENT TO OBTAIN WATER QUALITY PERMIT (NORI)

### AND

### NOTICE OF APPLICATION AND PRELIMINARY DECISION FOR TPDES PERMIT FOR MUNICIPAL WASTEWATER (NAPD)

### RENEWAL

**PERMIT NO. WQ0010495076**

**APPLICATION AND PRELIMINARY DECISION.** City of Houston, 10500 Bellaire Boulevard, Houston, Texas 77072, has applied to the Texas Commission on Environmental Quality (TCEQ) for a renewal of Texas Pollutant Discharge Elimination System (TPDES) Permit No. WQ0010495076, which authorizes the discharge of treated domestic wastewater at an annual average flow not to exceed 18,000,000 gallons per day. TCEQ received this application on December 1, 2023.

**This combined notice is being issued to correct the technical contact from what was previously stated in the NORI issued February 7, 2024.**

The facility is located at 5423 Mangum Road, in the City of Houston, Harris County, Texas 77091. The treated effluent is discharged to Cole Creek, thence to Whiteoak Bayou Above Tidal in Segment No. 1017 of the San Jacinto River Basin. The designated uses for Segment No. 1017 are primary contact recreation and limited aquatic life use. This link to an electronic map of the site or facility's general location is provided as a public courtesy and is not part of the application or notice. For the exact location, refer to the application.

<https://gisweb.tceq.texas.gov/LocationMapper/?marker=-95.463055,29.844722&level=18>

The TCEQ Executive Director has completed the technical review of the application and prepared a draft permit. The draft permit, if approved, would establish the conditions under which the facility must operate. The Executive Director has made a preliminary decision that this permit, if issued, meets all statutory and regulatory requirements. The permit application, Executive Director's preliminary decision, and draft permit are available for viewing and copying at City of Houston Public Works Building, 10500 Bellaire Boulevard, Houston, Texas.

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

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

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

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

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

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

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

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

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

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

**AGENCY CONTACTS AND INFORMATION.** Public comments and requests must be submitted either electronically at [www.tceq.texas.gov/goto/comment](http://www.tceq.texas.gov/goto/comment), or in writing to the Texas Commission on Environmental Quality, Office of the Chief Clerk, MC 105, P.O. Box 13087, Austin, Texas 78711-3087. Any personal information you submit to the TCEQ will become part of the agency's record; this includes email addresses. For more information about this permit application or the permitting process, please call the TCEQ Public Education Program, Toll Free, at 1-800-687-4040 or visit their website at [www.tceq.texas.gov/goto/pep](http://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., at 832-395-5771.**

Issuance Date: June 11, 2025

# Comisión De Calidad Ambiental Del Estado De Texas



## COMBINADO

### AVISO DE RECIBO DE LA SOLICITUD Y EL INTENTO DE OBTENER PERMISO PARA LA CALIDAD DEL AGUA (NORI)

Y

### AVISO DE LA SOLICITUD Y DECISIÓN PRELIMINAR PARA ÉL PERMISO TPDES PARA AGUAS RESIDUALES MUNICIPALES (NAPD)

## RENOVACIÓN

**PERMISO NO. WQ0010495076**

**SOLICITUD Y DECISIÓN PRELIMINAR.** Ciudad de Houston, 10500 Bellaire Boulevard, Houston, Texas 77072, ha solicitado a la Comisión de Calidad Ambiental del Estado de Texas (TCEQ) para una renovación del Sistema de Eliminación de Descargas de Contaminantes de Texas (TPDES) Permiso No. WQ0010495076, cuál autoriza la descarga de malgaste agua tratados domésticos en un flujo anual a no exceder 18,000,000 galones por día. La TCEQ recibió esta solicitud el 1 de diciembre de 2023.

**Este aviso combinado se emite para corregir el contacto técnico de lo que se indicó anteriormente en el NORI emitido el 7 de febrero de 2024.**

La facilidad está ubicada en 5423 Mangum Road, Condado de Harris, Texas, 77091. El efluente tratado es descargado al riachuelo Cole Creek; de allí al pantano Whiteoak Bayou por encima de la marea en la cuenca del Segmento No. 1017 del río San Jacinto River. Los usos designados para el Segmento No. 1017 el uso principal es la recreación de contacto y uso limitado de la vidas acuáticas. Este enlace a un mapa electrónico de la ubicación general del sitio o de la instalación es proporcionado como una cortesía y no es parte de la solicitud o del aviso. Para la ubicación exacta, consulte la solicitud.

<https://gisweb.tceq.texas.gov/LocationMapper/?marker=-95.463055,29.844722&level=18>

El Director Ejecutivo de la TCEQ ha completado la revisión técnica de la solicitud y ha preparado un borrador del permiso. El borrador del permiso, si es aprobado, establecería las condiciones bajo las cuales la instalación debe operar. El Director Ejecutivo ha tomado una decisión preliminar que, si este permiso es emitido, cumple con todos los requisitos normativos y legales. La solicitud del permiso, la decisión preliminar del Director Ejecutivo y el borrador del permiso están disponibles para leer y copiar en el Departamento de Trabajos Públicos de Houston, Operaciones de Wastewater edificio, 10500 Bellaire Boulevard, Houston, Condado de Harris, Texas.

**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 todos 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.** La TCEQ puede actuar sobre una solicitud para renovar un permiso para descargar aguas residuales sin proveer una oportunidad de una audiencia administrativa de lo contencioso.

**ACCIÓN DEL DIRECTOR EJECUTIVO.** El Director Ejecutivo puede emitir una aprobación final de la solicitud a menos que exista un pedido antes del plazo de vencimiento de una audiencia administrativa de lo contencioso o se ha presentado un pedido de reconsideración. Si un pedido ha llegado antes del plazo de vencimiento de la audiencia o el pedido de reconsideración ha sido presentado, el Director Ejecutivo no emitirá una aprobación final sobre el permiso y enviará la solicitud y el pedido a los Comisionados de la TCEQ para consideración en una reunión programada de la Comisión.

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

**Todos los comentarios escritos del público y los pedidos para una reunión deben ser presentados a la Oficina del Secretario Principal, MC 105, Texas Commission on Environmental Quality, P.O. Box 13087, Austin, TX 78711-3087 o por el internet a [www.tceq.texas.gov/goto/comment](http://www.tceq.texas.gov/goto/comment) durante los 30 días después de la publicación del aviso.**

**INFORMACION 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](http://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.

**AGENCIA CONTACTOS Y INFORMACIÓN.** Todos los comentarios escritos del público y los pedidos para una reunión deben ser por el internet [www.tceq.texas.gov/goto/comment](http://www.tceq.texas.gov/goto/comment) o por escrito a la Oficina del Secretario Principal, MC 105, P.O. Box 13087, Austin, Texas 78711-3087. Cualquier información personal que usted envíe formará parte del registro del TCEQ, incluidas las direcciones de correo electrónico. Si necesita más información en español sobre esta solicitud para un permiso o el proceso del permiso, por favor llame a El Programa de Educación Pública de la TCEQ, sin cobro, al 1-800-687-4040. La información general sobre la TCEQ puede ser encontrada en nuestro sitio de la red: [www.tceq.texas.gov/goto/pep](http://www.tceq.texas.gov/goto/pep). Para 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., al 832-395- 5771.

Fecha de emission: 11 de junio de 2025





TPDES PERMIT NO. WQ0010495076  
[For TCEQ office use only - EPA I.D.  
No. TX0063011]

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

This is a renewal that replaces TPDES  
Permit No. WQ0010495076 issued on  
June 14, 2021.

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

City of Houston

whose mailing address is

10500 Bellaire Boulevard  
Houston, Texas 77072

is authorized to treat and discharge wastes from the Northwest Wastewater Treatment Facility,  
SIC Code 4952

located at 5423 Mangum Road, in the City of Houston, Harris County, Texas 77091

to Cole Creek, thence to Whiteoak Bayou Above Tidal in Segment No. 1017 of the San Jacinto  
River Basin

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

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

ISSUED DATE:

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For the Commission

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTSOutfall Number 001

1. During the period beginning upon the date of issuance and lasting through the date of expiration, the permittee is authorized to discharge subject to the following effluent limitations:

The annual average flow of effluent shall not exceed 18 million gallons per day (MGD), nor shall the average discharge during any two-hour period (2-hour peak) exceed 56,944 gallons per minute.

Effluent Characteristic	Discharge Limitations				Min. Self-Monitoring Requirements	
	Daily Avg mg/l (lbs/day)	7-day Avg mg/l	Daily Max mg/l	Single Grab mg/l	Report Daily Avg. & Daily Max. Measurement Frequency	Daily Max. Sample Type
Flow, MGD	Report	N/A	Report	N/A	Continuous	Totalizing Meter
Carbonaceous Biochemical Oxygen Demand (5-day)	10 (1,501)	15	25	35	One/day	Composite
Total Suspended Solids	15 (2,252)	25	40	60	One/day	Composite
Ammonia Nitrogen	3 (450)	5	10	15	One/day	Composite
<i>E. coli</i> , colony-forming units or most probable number per 100 ml	63	N/A	200	N/A	Five/week	Grab

2. The effluent shall contain a total chlorine residual of at least 1.0 mg/l after a detention time of at least 20 minutes (based on peak flow) and shall be monitored daily by grab sample at each chlorine contact chamber. The permittee shall dechlorinate the chlorinated effluent to less than 0.1 mg/l total chlorine residual and shall monitor total chlorine residual daily by grab sample after the dechlorination process. An equivalent method of disinfection may be substituted only with prior approval of the Executive Director.
3. The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units and shall be monitored once per day by grab sample.
4. There shall be no discharge of floating solids or visible foam in other than trace amounts and no discharge of visible oil.
5. Effluent monitoring samples shall be taken at the following location(s): CBOD<sub>5</sub>, TSS, NH<sub>3</sub>-N, *E. coli* and Cl<sub>2</sub> residual shall be taken after obtaining a 20-minute detention time in the chlorination basin and prior to dechlorination. dissolved oxygen, Cl<sub>2</sub> residual, and pH shall be taken after the final treatment unit.
6. The effluent shall contain a minimum dissolved oxygen of 4.0 mg/l and shall be monitored once per day by grab sample.
7. The annual average flow and maximum 2-hour peak flow shall be reported monthly.

## DEFINITIONS AND STANDARD PERMIT CONDITIONS

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

### 1. Flow Measurements

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

### 2. Concentration Measurements

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

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

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

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

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

## **MONITORING AND REPORTING REQUIREMENTS**

### **1. Self-Reporting**

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

As provided by state law, the permittee is subject to administrative, civil and criminal penalties, as applicable, for negligently or knowingly violating the Clean Water Act (CWA); TWC §§ 26, 27, and 28; and THSC § 361, including but not limited to knowingly making any false statement, representation, or certification on any report, record, or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or noncompliance, or falsifying, tampering with or knowingly rendering inaccurate any monitoring device or method required by this permit or violating any other requirement imposed by state or federal regulations.

### **2. Test Procedures**

- a. Unless otherwise specified in this permit, test procedures for the analysis of pollutants shall comply with procedures specified in 30 TAC §§ 319.11 - 319.12. Measurements, tests, and calculations shall be accurately accomplished in a representative manner.
- b. All laboratory tests submitted to demonstrate compliance with this permit must meet the requirements of 30 TAC § 25, Environmental Testing Laboratory Accreditation and Certification.

### **3. Records of Results**

- a. Monitoring samples and measurements shall be taken at times and in a manner so as to be representative of the monitored activity.

- b. Except for records of monitoring information required by this permit related to the permittee's sewage sludge or biosolids use and disposal activities, which shall be retained for a period of at least five years (or longer as required by 40 CFR Part 503), monitoring and reporting records, including strip charts and records of calibration and maintenance, copies of all records required by this permit, records of all data used to complete the application for this permit, and the certification required by 40 CFR § 264.73(b)(9) shall be retained at the facility site, or shall be readily available for review by a TCEQ representative for a period of three years from the date of the record or sample, measurement, report, application or certification. This period shall be extended at the request of the Executive Director.
- c. Records of monitoring activities shall include the following:
  - i. date, time and place of sample or measurement;
  - ii. identity of individual who collected the sample or made the measurement.
  - iii. date and time of analysis;
  - iv. identity of the individual and laboratory who performed the analysis;
  - v. the technique or method of analysis; and
  - vi. the results of the analysis or measurement and quality assurance/quality control records.

The period during which records are required to be kept shall be automatically extended to the date of the final disposition of any administrative or judicial enforcement action that may be instituted against the permittee.

#### 4. Additional Monitoring by Permittee

If the permittee monitors any pollutant at the location(s) designated herein more frequently than required by this permit using approved analytical methods as specified above, all results of such monitoring shall be included in the calculation and reporting of the values submitted on the approved self-report form. Increased frequency of sampling shall be indicated on the self-report form.

#### 5. Calibration of Instruments

All automatic flow measuring or recording devices and all totalizing meters for measuring flows shall be accurately calibrated by a trained person at plant start-up and as often thereafter as necessary to ensure accuracy, but not less often than annually unless authorized by the Executive Director for a longer period. Such person shall verify in writing that the device is operating properly and giving accurate results. Copies of the verification shall be retained at the facility site and/or shall be readily available for review by a TCEQ representative for a period of three years.

#### 6. Compliance Schedule Reports

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of the permit shall be submitted no later than 14 days following each schedule date to the Regional Office and the Compliance

Monitoring Team of the Enforcement Division (MC 224).

7. Noncompliance Notification

- a. In accordance with 30 TAC § 305.125(9) any noncompliance which may endanger human health or safety, or the environment shall be reported by the permittee to the TCEQ. Except as allowed by 30 TAC § 305.132, report of such information shall be provided orally or by facsimile transmission (FAX) to the Regional Office within 24 hours of becoming aware of the noncompliance. A written submission of such information shall also be provided by the permittee to the Regional Office and the Compliance Monitoring Team of the Enforcement Division (MC 224) within five working days of becoming aware of the noncompliance. For Publicly Owned Treatment Works (POTWs), effective December 21, 2025, the permittee must submit the written report for unauthorized discharges and unanticipated bypasses that exceed any effluent limit in the permit using the online electronic reporting system available through the TCEQ website unless the permittee requests and obtains an electronic reporting waiver. The written submission shall contain a description of the noncompliance and its cause; the potential danger to human health or safety, or the environment; the period of noncompliance, including exact dates and times; if the noncompliance has not been corrected, the time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance, and to mitigate its adverse effects.
  - b. The following violations shall be reported under Monitoring and Reporting Requirement 7.a.:
    - i. Unauthorized discharges as defined in Permit Condition 2(g).
    - ii. Any unanticipated bypass that exceeds any effluent limitation in the permit.
    - iii. Violation of a permitted maximum daily discharge limitation for pollutants listed specifically in the Other Requirements section of an Industrial TPDES permit.
  - c. In addition to the above, any effluent violation which deviates from the permitted effluent limitation by more than 40% shall be reported by the permittee in writing to the Regional Office and the Compliance Monitoring Team of the Enforcement Division (MC 224) within 5 working days of becoming aware of the noncompliance.
  - d. Any noncompliance other than that specified in this section, or any required information not submitted or submitted incorrectly, shall be reported to the Compliance Monitoring Team of the Enforcement Division (MC 224) as promptly as possible. For effluent limitation violations, noncompliances shall be reported on the approved self-report form.
8. In accordance with the procedures described in 30 TAC §§ 35.301 - 35.303 (relating to Water Quality Emergency and Temporary Orders) if the permittee knows in advance of the need for a bypass, it shall submit prior notice by applying for such authorization.
9. Changes in Discharges of Toxic Substances

All existing manufacturing, commercial, mining, and silvicultural permittees shall notify the Regional Office, orally or by facsimile transmission within 24 hours, and both the Regional Office and the Compliance Monitoring Team of the Enforcement Division (MC 224) in writing within five (5) working days, after becoming aware of or having reason to believe:



- a. That any activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant listed at 40 CFR Part 122, Appendix D, Tables II and III (excluding Total Phenols) which is not limited in the permit, if that discharge will exceed the highest of the following “notification levels”:
  - i. One hundred micrograms per liter (100 µg/L);
  - ii. Two hundred micrograms per liter (200 µg/L) for acrolein and acrylonitrile; five hundred micrograms per liter (500 µg/L) for 2,4-dinitrophenol and for 2-methyl-4,6-dinitrophenol; and one milligram per liter (1 mg/L) for antimony;
  - iii. Five (5) times the maximum concentration value reported for that pollutant in the permit application; or
  - iv. The level established by the TCEQ.
- b. That any activity has occurred or will occur which would result in any discharge, on a nonroutine or infrequent basis, of a toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following “notification levels”:
  - i. Five hundred micrograms per liter (500 µg/L);
  - ii. One milligram per liter (1 mg/L) for antimony;
  - iii. Ten (10) times the maximum concentration value reported for that pollutant in the permit application; or
  - iv. The level established by the TCEQ.

#### 10. Signatories to Reports

All reports and other information requested by the Executive Director shall be signed by the person and in the manner required by 30 TAC § 305.128 (relating to Signatories to Reports).

#### 11. All POTWs must provide adequate notice to the Executive Director of the following:

- a. Any new introduction of pollutants into the POTW from an indirect discharger which would be subject to CWA § 301 or § 306 if it were directly discharging those pollutants;
- b. Any substantial change in the volume or character of pollutants being introduced into that POTW by a source introducing pollutants into the POTW at the time of issuance of the permit; and
- c. For the purpose of this paragraph, adequate notice shall include information on:
  - i. The quality and quantity of effluent introduced into the POTW; and
  - ii. Any anticipated impact of the change on the quantity or quality of effluent to be discharged from the POTW.

**PERMIT CONDITIONS****1. General**

- a. When the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in an application or in any report to the Executive Director, it shall promptly submit such facts or information.
- b. This permit is granted on the basis of the information supplied and representations made by the permittee during action on an application, and relying upon the accuracy and completeness of that information and those representations. After notice and opportunity for a hearing, this permit may be modified, suspended, or revoked, in whole or in part, in accordance with 30 TAC Chapter 305, Subchapter D, during its term for good cause including, but not limited to, the following:
  - i. Violation of any terms or conditions of this permit;
  - ii. Obtaining this permit by misrepresentation or failure to disclose fully all relevant facts; or
  - iii. A change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge.
- c. The permittee shall furnish to the Executive Director, upon request and within a reasonable time, any information to determine whether cause exists for amending, revoking, suspending or terminating the permit. The permittee shall also furnish to the Executive Director, upon request, copies of records required to be kept by the permit.

**2. Compliance**

- a. Acceptance of the permit by the person to whom it is issued constitutes acknowledgment and agreement that such person will comply with all the terms and conditions embodied in the permit, and the rules and other orders of the Commission.
- b. The permittee has a duty to comply with all conditions of the permit. Failure to comply with any permit condition constitutes a violation of the permit and the Texas Water Code or the Texas Health and Safety Code, and is grounds for enforcement action, for permit amendment, revocation, or suspension, or for denial of a permit renewal application or an application for a permit for another facility.
- c. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit.
- d. The permittee shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal or other permit violation that has a reasonable likelihood of adversely affecting human health or the environment.
- e. Authorization from the Commission is required before beginning any change in the permitted facility or activity that may result in noncompliance with any permit requirements.
- f. A permit may be amended, suspended and reissued, or revoked for cause in accordance

with 30 TAC §§ 305.62 and 305.66 and TWC§ 7.302. The filing of a request by the permittee for a permit amendment, suspension and reissuance, or termination, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition.

- g. There shall be no unauthorized discharge of wastewater or any other waste. For the purpose of this permit, an unauthorized discharge is considered to be any discharge of wastewater into or adjacent to water in the state at any location not permitted as an outfall or otherwise defined in the Other Requirements section of this permit.
- h. In accordance with 30 TAC § 305.535(a), the permittee may allow any bypass to occur from a TPDES permitted facility which does not cause permitted effluent limitations to be exceeded or an unauthorized discharge to occur, but only if the bypass is also for essential maintenance to assure efficient operation.
- i. The permittee is subject to administrative, civil, and criminal penalties, as applicable, under TWC §§ 7.051 - 7.075 (relating to Administrative Penalties), 7.101 - 7.111 (relating to Civil Penalties), and 7.141 - 7.202 (relating to Criminal Offenses and Penalties) for violations including, but not limited to, negligently or knowingly violating the federal CWA §§ 301, 302, 306, 307, 308, 318, or 405, or any condition or limitation implementing any sections in a permit issued under the CWA § 402, or any requirement imposed in a pretreatment program approved under the CWA §§ 402 (a)(3) or 402 (b)(8).

### 3. Inspections and Entry

- a. Inspection and entry shall be allowed as prescribed in the TWC Chapters 26, 27, and 28, and THSC § 361.
- b. The members of the Commission and employees and agents of the Commission are entitled to enter any public or private property at any reasonable time for the purpose of inspecting and investigating conditions relating to the quality of water in the state or the compliance with any rule, regulation, permit or other order of the Commission. Members, employees, or agents of the Commission and Commission contractors are entitled to enter public or private property at any reasonable time to investigate or monitor or, if the responsible party is not responsive or there is an immediate danger to public health or the environment, to remove or remediate a condition related to the quality of water in the state. Members, employees, Commission contractors, or agents acting under this authority who enter private property shall observe the establishment's rules and regulations concerning safety, internal security, and fire protection, and if the property has management in residence, shall notify management or the person then in charge of his presence and shall exhibit proper credentials. If any member, employee, Commission contractor, or agent is refused the right to enter in or on public or private property under this authority, the Executive Director may invoke the remedies authorized in TWC § 7.002. The statement above, that Commission entry shall occur in accordance with an establishment's rules and regulations concerning safety, internal security, and fire protection, is not grounds for denial or restriction of entry to any part of the facility, but merely describes the Commission's duty to observe appropriate rules and regulations during an inspection.

### 4. Permit Amendment and/or Renewal

- a. The permittee shall give notice to the Executive Director as soon as possible of any planned physical alterations or additions to the permitted facility if such alterations or additions would require a permit amendment or result in a violation of permit requirements. Notice shall also be required under this paragraph when:
  - i. The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in accordance with 30 TAC § 305.534 (relating to New Sources and New Dischargers); or
  - ii. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants that are subject neither to effluent limitations in the permit, nor to notification requirements in Monitoring and Reporting Requirements No. 9; or
  - iii. The alteration or addition results in a significant change in the permittee's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan.
- b. Prior to any facility modifications, additions, or expansions that will increase the plant capacity beyond the permitted flow, the permittee must apply for and obtain proper authorization from the Commission before commencing construction.
- c. The permittee must apply for an amendment or renewal at least 180 days prior to expiration of the existing permit in order to continue a permitted activity after the expiration date of the permit. If an application is submitted prior to the expiration date of the permit, the existing permit shall remain in effect until the application is approved, denied, or returned. If the application is returned or denied, authorization to continue such activity shall terminate upon the effective date of the action. If an application is not submitted prior to the expiration date of the permit, the permit shall expire and authorization to continue such activity shall terminate.
- d. Prior to accepting or generating wastes which are not described in the permit application or which would result in a significant change in the quantity or quality of the existing discharge, the permittee must report the proposed changes to the Commission. The permittee must apply for a permit amendment reflecting any necessary changes in permit conditions, including effluent limitations for pollutants not identified and limited by this permit.
- e. In accordance with the TWC § 26.029(b), after a public hearing, notice of which shall be given to the permittee, the Commission may require the permittee, from time to time, for good cause, in accordance with applicable laws, to conform to new or additional conditions.
- f. If any toxic effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is promulgated under CWA § 307(a) for a toxic pollutant which is present in the discharge and that standard or prohibition is more stringent than any limitation on the pollutant in this permit, this permit shall be modified or revoked and reissued to conform to the toxic effluent standard or prohibition. The permittee shall comply with effluent standards or prohibitions established under CWA § 307(a) for toxic pollutants within the time provided in the

regulations that established those standards or prohibitions, even if the permit has not yet been modified to incorporate the requirement.

5. Permit Transfer

- a. Prior to any transfer of this permit, Commission approval must be obtained. The Commission shall be notified in writing of any change in control or ownership of facilities authorized by this permit. Such notification should be sent to the Applications Review and Processing Team (MC 148) of the Water Quality Division.
- b. A permit may be transferred only according to the provisions of 30 TAC § 305.64 (relating to Transfer of Permits) and 30 TAC § 50.133 (relating to Executive Director Action on Application or WQMP update).

6. Relationship to Hazardous Waste Activities

This permit does not authorize any activity of hazardous waste storage, processing, or disposal that requires a permit or other authorization pursuant to the Texas Health and Safety Code.

7. Relationship to Water Rights

Disposal of treated effluent by any means other than discharge directly to water in the state must be specifically authorized in this permit and may require a permit pursuant to TWC Chapter 11.

8. Property Rights

A permit does not convey any property rights of any sort, or any exclusive privilege.

9. Permit Enforceability

The conditions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstances, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

10. Relationship to Permit Application

The application pursuant to which the permit has been issued is incorporated herein; provided, however, that in the event of a conflict between the provisions of this permit and the application, the provisions of the permit shall control.

11. Notice of Bankruptcy

- a. Each permittee shall notify the Executive Director, in writing, immediately following the filing of a voluntary or involuntary petition for bankruptcy under any chapter of Title 11 (Bankruptcy) of the United States Code (11 USC) by or against:
  - i. the permittee;
  - ii. an entity (as that term is defined in 11 USC, § 101(14)) controlling the permittee or listing the permit or permittee as property of the estate; or
  - iii. an affiliate (as that term is defined in 11 USC, § 101(2)) of the permittee.

- b. This notification must indicate:
  - i. the name of the permittee;
  - ii. the permit number(s);
  - iii. the bankruptcy court in which the petition for bankruptcy was filed; and
  - iv. the date of filing of the petition.

## **OPERATIONAL REQUIREMENTS**

1. The permittee shall at all times ensure that the facility and all of its systems of collection, treatment, and disposal are properly operated and maintained. This includes, but is not limited to, the regular, periodic examination of wastewater solids within the treatment plant by the operator in order to maintain an appropriate quantity and quality of solids inventory as described in the various operator training manuals and according to accepted industry standards for process control. Process control, maintenance, and operations records shall be retained at the facility site, or shall be readily available for review by a TCEQ representative, for a period of three years.
2. Upon request by the Executive Director, the permittee shall take appropriate samples and provide proper analysis in order to demonstrate compliance with Commission rules. Unless otherwise specified in this permit or otherwise ordered by the Commission, the permittee shall comply with all applicable provisions of 30 TAC Chapter 312 concerning sewage sludge or biosolids use and disposal and 30 TAC §§ 319.21 - 319.29 concerning the discharge of certain hazardous metals.
3. Domestic wastewater treatment facilities shall comply with the following provisions:
  - a. The permittee shall notify the Municipal Permits Team, Wastewater Permitting Section (MC 148) of the Water Quality Division, in writing, of any facility expansion at least 90 days prior to conducting such activity.
  - b. The permittee shall submit a closure plan for review and approval to the Municipal Permits Team, Wastewater Permitting Section (MC 148) of the Water Quality Division, for any closure activity at least 90 days prior to conducting such activity. Closure is the act of permanently taking a waste management unit or treatment facility out of service and includes the permanent removal from service of any pit, tank, pond, lagoon, surface impoundment and/or other treatment unit regulated by this permit.
4. The permittee is responsible for installing prior to plant start-up, and subsequently maintaining, adequate safeguards to prevent the discharge of untreated or inadequately treated wastes during electrical power failures by means of alternate power sources, standby generators, and/or retention of inadequately treated wastewater.
5. Unless otherwise specified, the permittee shall provide a readily accessible sampling point and, where applicable, an effluent flow measuring device or other acceptable means by which effluent flow may be determined.
6. The permittee shall remit an annual water quality fee to the Commission as required by 30

TAC Chapter 21. Failure to pay the fee may result in revocation of this permit under TWC § 7.302(b)(6).

7. Documentation

For all written notifications to the Commission required of the permittee by this permit, the permittee shall keep and make available a copy of each such notification under the same conditions as self-monitoring data are required to be kept and made available. Except for information required for TPDES permit applications, effluent data, including effluent data in permits, draft permits and permit applications, and other information specified as not confidential in 30 TAC §§ 1.5(d), any information submitted pursuant to this permit may be claimed as confidential by the submitter. Any such claim must be asserted in the manner prescribed in the application form or by stamping the words confidential business information on each page containing such information. If no claim is made at the time of submission, information may be made available to the public without further notice. If the Commission or Executive Director agrees with the designation of confidentiality, the TCEQ will not provide the information for public inspection unless required by the Texas Attorney General or a court pursuant to an open records request. If the Executive Director does not agree with the designation of confidentiality, the person submitting the information will be notified.

8. Facilities that generate domestic wastewater shall comply with the following provisions; domestic wastewater treatment facilities at permitted industrial sites are excluded.

- a. Whenever flow measurements for any domestic sewage treatment facility reach 75% of the permitted daily average or annual average flow for three consecutive months, the permittee must initiate engineering and financial planning for expansion and/or upgrading of the domestic wastewater treatment and/or collection facilities. Whenever the flow reaches 90% of the permitted daily average or annual average flow for three consecutive months, the permittee shall obtain necessary authorization from the Commission to commence construction of the necessary additional treatment and/or collection facilities. In the case of a domestic wastewater treatment facility which reaches 75% of the permitted daily average or annual average flow for three consecutive months, and the planned population to be served or the quantity of waste produced is not expected to exceed the design limitations of the treatment facility, the permittee shall submit an engineering report supporting this claim to the Executive Director of the Commission.

If in the judgment of the Executive Director the population to be served will not cause permit noncompliance, then the requirement of this section may be waived. To be effective, any waiver must be in writing and signed by the Director of the Enforcement Division (MC 219) of the Commission, and such waiver of these requirements will be reviewed upon expiration of the existing permit; however, any such waiver shall not be interpreted as condoning or excusing any violation of any permit parameter.

- b. The plans and specifications for domestic sewage collection and treatment works associated with any domestic permit must be approved by the Commission and failure to secure approval before commencing construction of such works or making a discharge is a violation of this permit and each day is an additional violation until approval has been secured.



- c. Permits for domestic wastewater treatment plants are granted subject to the policy of the Commission to encourage the development of area-wide waste collection, treatment, and disposal systems. The Commission reserves the right to amend any domestic wastewater permit in accordance with applicable procedural requirements to require the system covered by this permit to be integrated into an area-wide system, should such be developed; to require the delivery of the wastes authorized to be collected in, treated by or discharged from said system, to such area-wide system; or to amend this permit in any other particular to effectuate the Commission's policy. Such amendments may be made when the changes required are advisable for water quality control purposes and are feasible on the basis of waste treatment technology, engineering, financial, and related considerations existing at the time the changes are required, exclusive of the loss of investment in or revenues from any then existing or proposed waste collection, treatment or disposal system.
9. Domestic wastewater treatment plants shall be operated and maintained by sewage plant operators holding a valid certificate of competency at the required level as defined in 30 TAC Chapter 30.
10. For Publicly Owned Treatment Works (POTWs), the 30-day average (or monthly average) percent removal for BOD and TSS shall not be less than 85%, unless otherwise authorized by this permit.
11. Facilities that generate industrial solid waste as defined in 30 TAC § 335.1 shall comply with these provisions:
  - a. Any solid waste, as defined in 30 TAC § 335.1 (including but not limited to such wastes as garbage, refuse, sludge from a waste treatment, water supply treatment plant or air pollution control facility, discarded materials, discarded materials to be recycled, whether the waste is solid, liquid, or semisolid), generated by the permittee during the management and treatment of wastewater, must be managed in accordance with all applicable provisions of 30 TAC Chapter 335, relating to Industrial Solid Waste Management.
  - b. Industrial wastewater that is being collected, accumulated, stored, or processed before discharge through any final discharge outfall, specified by this permit, is considered to be industrial solid waste until the wastewater passes through the actual point source discharge and must be managed in accordance with all applicable provisions of 30 TAC Chapter 335.
  - c. The permittee shall provide written notification, pursuant to the requirements of 30 TAC § 335.8(b)(1), to the Corrective Action Section (MC 127) of the Remediation Division informing the Commission of any closure activity involving an Industrial Solid Waste Management Unit, at least 90 days prior to conducting such an activity.
  - d. Construction of any industrial solid waste management unit requires the prior written notification of the proposed activity to the Registration and Reporting Section (MC 129) of the Permitting and Registration Support Division. No person shall dispose of industrial solid waste, including sludge or other solids from wastewater treatment processes, prior to fulfilling the deed recordation requirements of 30 TAC § 335.5.
  - e. The term "industrial solid waste management unit" means a landfill, surface impoundment, waste-pile, industrial furnace, incinerator, cement kiln, injection well,

container, drum, salt dome waste containment cavern, or any other structure vessel, appurtenance, or other improvement on land used to manage industrial solid waste.

- f. The permittee shall keep management records for all sludge (or other waste) removed from any wastewater treatment process. These records shall fulfill all applicable requirements of 30 TAC § 335 and must include the following, as it pertains to wastewater treatment and discharge:
  - i. Volume of waste and date(s) generated from treatment process;
  - ii. Volume of waste disposed of on-site or shipped off-site;
  - iii. Date(s) of disposal;
  - iv. Identity of hauler or transporter;
  - v. Location of disposal site; and
  - vi. Method of final disposal.

The above records shall be maintained on a monthly basis. The records shall be retained at the facility site, or shall be readily available for review by authorized representatives of the TCEQ for at least five years.

12. For industrial facilities to which the requirements of 30 TAC § 335 do not apply, sludge and solid wastes, including tank cleaning and contaminated solids for disposal, shall be disposed of in accordance with THSC § 361.

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## SLUDGE PROVISIONS

The permittee is authorized to dispose of sludge only at a Texas Commission on Environmental Quality (TCEQ) authorized land application site, co-disposal landfill, wastewater treatment facility, or facility that further processes sludge. **The disposal of sludge or biosolids by land application on property owned, leased or under the direct control of the permittee is a violation of the permit unless the site is authorized with the TCEQ. This provision does not authorize Distribution and Marketing of Class A or Class AB Biosolids. This provision does not authorize the permittee to land apply biosolids on property owned, leased or under the direct control of the permittee.**

### SECTION I. REQUIREMENTS APPLYING TO ALL SEWAGE SLUDGE OR BIOSOLIDS LAND APPLICATION

#### A. General Requirements

1. The permittee shall handle and dispose of sewage sludge or biosolids in accordance with 30 TAC § 312 and all other applicable state and federal regulations in a manner that protects public health and the environment from any reasonably anticipated adverse effects due to any toxic pollutants that may be present in the sludge or biosolids.
2. In all cases, if the person (permit holder) who prepares the sewage sludge supplies the sewage sludge to another person for land application use or to the owner or lease holder of the land, the permit holder shall provide necessary information to the parties who receive the sludge to assure compliance with these regulations.
3. The land application of processed or unprocessed chemical toilet waste, grease trap waste, grit trap waste, milk solids, or similar non-hazardous municipal or industrial solid wastes, or any of the wastes listed in this provision combined with biosolids, WTP residuals or domestic septage is prohibited unless the grease trap waste is added at a fats, oil and grease (FOG) receiving facility as part of an anaerobic digestion process.

#### B. Testing Requirements

1. Sewage sludge or biosolids shall be tested annually in accordance with the method specified in both 40 CFR Part 261, Appendix II and 40 CFR Part 268, Appendix I [Toxicity Characteristic Leaching Procedure (TCLP)] or other method that receives the prior approval of the TCEQ for the contaminants listed in 40 CFR Part 261.24, Table 1. Sewage sludge or biosolids failing this test shall be managed according to RCRA standards for generators of hazardous waste, and the waste's disposition must be in accordance with all applicable requirements for hazardous waste processing, storage, or disposal. Following failure of any TCLP test, the management or disposal of sewage sludge or biosolids at a facility other than an authorized hazardous waste processing, storage, or disposal facility shall be prohibited until such time as the permittee can demonstrate the sewage sludge or biosolids no longer exhibits the hazardous waste toxicity characteristics (as demonstrated by the results of the TCLP tests). A written report shall be provided to both the TCEQ Registration and Reporting Section (MC 129) of the Permitting and Registration Support Division and the Regional Director (MC Region 12) within seven (7) days after failing the TCLP Test.

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

2. Biosolids shall not be applied to the land if the concentration of the pollutants exceeds the pollutant concentration criteria in Table 1. The frequency of testing for pollutants in Table 1 is found in Section I.C. of this permit.

TABLE 1

<u>Pollutant</u>	<u>Ceiling Concentration</u> <u>(Milligrams per kilogram)*</u>
Arsenic	75
Cadmium	85
Chromium	3000
Copper	4300
Lead	840
Mercury	57
Molybdenum	75
Nickel	420
PCBs	49
Selenium	100
Zinc	7500

\* Dry weight basis

3. Pathogen Control

All sewage sludge that is applied to agricultural land, forest, a public contact site, or a reclamation site must be treated by one of the following methods to ensure that the sludge meets either the Class A, Class AB or Class B biosolids pathogen requirements.

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

Alternative 1 - The temperature of the sewage sludge that is used or disposed shall be maintained at or above a specific value for a period of time. See 30 TAC § 312.82(a)(2)(A) for specific information;

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

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

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

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

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

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

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

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

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

criteria.

Alternative 1

- i. A minimum of seven random samples of the sewage sludge shall be collected within 48 hours of the time the sewage sludge is used or disposed of during each monitoring episode for the sewage sludge.
- ii. The geometric mean of the density of fecal coliform in the samples collected shall be less than either 2,000,000 MPN per gram of total solids (dry weight basis) or 2,000,000 Colony Forming Units per gram of total solids (dry weight basis).

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

- i. Prior to use or disposal, all the sewage sludge must have been generated from a single location, except as provided in paragraph v. below;
- ii. An independent Texas Licensed Professional Engineer must make a certification to the generator of a sewage sludge that the wastewater treatment facility generating the sewage sludge is designed to achieve one of the PSRP at the permitted design loading of the facility. The certification need only be repeated if the design loading of the facility is increased. The certification shall include a statement indicating the design meets all the applicable standards specified in Appendix B of 40 CFR Part 503;
- iii. Prior to any off-site transportation or on-site use or disposal of any sewage sludge generated at a wastewater treatment facility, the chief certified operator of the wastewater treatment facility or other responsible official who manages the processes to significantly reduce pathogens at the wastewater treatment facility for the permittee, shall certify that the sewage sludge underwent at least the minimum operational requirements necessary in order to meet one of the PSRP. The acceptable processes and the minimum operational and record keeping requirements shall be in accordance with established U.S. Environmental Protection Agency final guidance;
- iv. All certification records and operational records describing how the requirements of this paragraph were met shall be kept by the generator for a minimum of three years and be available for inspection by commission staff for review; and
- v. If the sewage sludge is generated from a mixture of sources, resulting from a person who prepares sewage sludge from more than one wastewater treatment facility, the resulting derived product shall meet one of the PSRP, and shall meet the certification, operation, and record keeping requirements of this paragraph.

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

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

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

- ii. Prior to any off-site transportation or on-site use or disposal of any sewage sludge generated at a wastewater treatment facility, the chief certified operator of the wastewater treatment facility or other responsible official who manages the processes to significantly reduce pathogens at the wastewater treatment facility for the permittee, shall certify that the sewage sludge underwent at least the minimum operational requirements necessary in order to meet one of the PSRP. The acceptable processes and the minimum operational and record keeping requirements shall be in accordance with established U.S. Environmental Protection Agency final guidance;
- iii. All certification records and operational records describing how the requirements of this paragraph were met shall be kept by the generator for a minimum of three years and be available for inspection by commission staff for review;
- iv. The Executive Director will accept from the U.S. Environmental Protection Agency a finding of equivalency to the defined PSRP; and
- v. If the sewage sludge is generated from a mixture of sources resulting from a person who prepares sewage sludge from more than one wastewater treatment facility, the resulting derived product shall meet one of the Processes to Significantly Reduce Pathogens, and shall meet the certification, operation, and record keeping requirements of this paragraph.

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

- i. Food crops with harvested parts that touch the biosolids/soil mixture and are totally above the land surface shall not be harvested for 14 months after application of biosolids.
- ii. Food crops with harvested parts below the surface of the land shall not be harvested for 20 months after application of biosolids when the biosolids remain on the land surface for 4 months or longer prior to incorporation into the soil.
- iii. Food crops with harvested parts below the surface of the land shall not be harvested for 38 months after application of biosolids when the biosolids remain on the land surface for less than 4 months prior to incorporation into the soil.
- iv. Food crops, feed crops, and fiber crops shall not be harvested for 30 days after application of biosolids.
- v. Domestic livestock shall not be allowed to graze on the land for 30 days after application of biosolids.
- vi. Turf grown on land where biosolids are applied shall not be harvested for 1 year after application of the biosolids when the harvested turf is placed on either land with a high potential for public exposure or a lawn.
- vii. Public access to land with a high potential for public exposure shall be restricted for 1 year after application of biosolids.



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

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

#### 4. Vector Attraction Reduction Requirements

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

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

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

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

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

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

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

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

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

Alternative 9 -

- i. Biosolids shall be injected below the surface of the land.
- ii. No significant amount of the biosolids shall be present on the land surface within one hour after the biosolids are injected.
- iii. When sewage sludge that is injected below the surface of the land is Class A or Class AB with respect to pathogens, the biosolids shall be injected below the land surface within eight hours after being discharged from the pathogen treatment process.

Alternative 10 -

- i. Biosolids applied to the land surface or placed on a surface disposal site shall be incorporated into the soil within six hours after application to or placement on the land.
- ii. When biosolids that are incorporated into the soil is Class A or Class AB with respect to pathogens, the biosolids shall be applied to or placed on the land within eight hours after being discharged from the pathogen treatment process.

### C. Monitoring Requirements

Toxicity Characteristic Leaching Procedure (TCLP) Test	- annually
PCBs	- annually

All metal constituents and fecal coliform or *Salmonella* sp. bacteria shall be monitored at the appropriate frequency shown below, pursuant to 30 TAC § 312.46(a)(1):

<u>Amount of biosolids (*) metric tons per 365-day period</u>	<u>Monitoring Frequency</u>
0 to less than 290	Once/Year
290 to less than 1,500	Once/Quarter
1,500 to less than 15,000	Once/Two Months
15,000 or greater	Once/Month

(\*) *The amount of bulk biosolids applied to the land (dry wt. basis).*

Representative samples of sewage sludge shall be collected and analyzed in accordance with the methods referenced in 30 TAC § 312.7

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

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

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

**SECTION II. REQUIREMENTS SPECIFIC TO BULK SEWAGE SLUDGE OR BIOSOLIDS FOR APPLICATION TO THE LAND MEETING CLASS A, CLASS AB or B PATHOGEN REDUCTION AND THE CUMULATIVE LOADING RATES IN TABLE 2, OR CLASS B PATHOGEN REDUCTION AND THE POLLUTANT CONCENTRATIONS IN TABLE 3**

For those permittees meeting Class A, Class AB or B pathogen reduction requirements and that meet the cumulative loading rates in Table 2 below, or the Class B pathogen reduction requirements and contain concentrations of pollutants below listed in Table 3, the following conditions apply:

**A. Pollutant Limits**

Table 2

<u>Pollutant</u>	Cumulative Pollutant Loading Rate (pounds per acre)*
Arsenic	36
Cadmium	35
Chromium	2677
Copper	1339
Lead	268
Mercury	15
Molybdenum	Report Only
Nickel	375
Selenium	89
Zinc	2500

Table 3

<u>Pollutant</u>	Monthly Average Concentration (milligrams per kilogram)*
Arsenic	41
Cadmium	39
Chromium	1200
Copper	1500
Lead	300
Mercury	17
Molybdenum	Report Only
Nickel	420
Selenium	36
Zinc	2800

\*Dry weight basis

**B. Pathogen Control**

All bulk sewage sludge that is applied to agricultural land, forest, a public contact site, a reclamation site, shall be treated by either Class A, Class AB or Class B biosolids pathogen reduction requirements as defined above in Section I.B.3.

**C. Management Practices**

1. Bulk biosolids shall not be applied to agricultural land, forest, a public contact site, or a reclamation site that is flooded, frozen, or snow-covered so that the bulk sewage sludge enters a wetland or other waters in the State.
2. Bulk biosolids not meeting Class A requirements shall be land applied in a manner which complies with Applicability in accordance with 30 TAC §312.41 and the Management Requirements in accordance with 30 TAC § 312.44.
3. Bulk biosolids shall be applied at or below the agronomic rate of the cover crop.
4. An information sheet shall be provided to the person who receives bulk Class A or AB biosolids sold or given away. The information sheet shall contain the following information:
  - a. The name and address of the person who prepared the Class A or AB biosolids that are sold or given away in a bag or other container for application to the land.
  - b. A statement that application of the biosolids to the land is prohibited except in accordance with the instruction on the label or information sheet.
  - c. The annual whole sludge application rate for the biosolids application rate for the biosolids that does not cause any of the cumulative pollutant loading rates in Table 2 above to be exceeded, unless the pollutant concentrations in Table 3 found in Section II above are met.

**D. Notification Requirements**

1. If bulk biosolids are applied to land in a State other than Texas, written notice shall be provided prior to the initial land application to the permitting authority for the State in which the bulk biosolids are proposed to be applied. The notice shall include:
  - a. The location, by street address, and specific latitude and longitude, of each land application site.
  - b. The approximate time period bulk biosolids will be applied to the site.
  - c. The name, address, telephone number, and National Pollutant Discharge Elimination System permit number (if appropriate) for the person who will apply the bulk biosolids.
2. The permittee shall give 180 days prior notice to the Executive Director in care of the Wastewater Permitting Section (MC 148) of the Water Quality Division of any change planned in the biosolids disposal practice.

**E. Record Keeping Requirements**

The documents will be retained at the facility site and/or shall be readily available for review by a TCEQ representative. The person who prepares bulk sewage sludge or a biosolids material shall develop the following information and shall retain the information at the facility site and/or shall be readily available for review by a TCEQ representative for a

period of five years. If the permittee supplies the sludge to another person who land applies the sludge, the permittee shall notify the land applier of the requirements for record keeping found in 30 TAC § 312.47 for persons who land apply.

1. The concentration (mg/kg) in the sludge of each pollutant listed in Table 3 above and the applicable pollutant concentration criteria (mg/kg), or the applicable cumulative pollutant loading rate and the applicable cumulative pollutant loading rate limit (lbs/ac) listed in Table 2 above.
2. A description of how the pathogen reduction requirements are met (including site restrictions for Class AB and Class B biosolids, if applicable).
3. A description of how the vector attraction reduction requirements are met.
4. A description of how the management practices listed above in Section II.C are being met.
5. The following certification statement:

“I certify, under penalty of law, that the applicable pathogen requirements in 30 TAC § 312.82(a) or (b) and the vector attraction reduction requirements in 30 TAC § 312.83(b) have been met for each site on which bulk biosolids are applied. This determination has been made under my direction and supervision in accordance with the system designed to ensure that qualified personnel properly gather and evaluate the information used to determine that the management practices have been met. I am aware that there are significant penalties for false certification including fine and imprisonment.”

6. The recommended agronomic loading rate from the references listed in Section II.C.3. above, as well as the actual agronomic loading rate shall be retained. The person who applies bulk biosolids shall develop the following information and shall retain the information at the facility site and/or shall be readily available for review by a TCEQ representative indefinitely. If the permittee supplies the sludge to another person who land applies the sludge, the permittee shall notify the land applier of the requirements for record keeping found in 30 TAC § 312.47 for persons who land apply:
  - a. A certification statement that all applicable requirements (specifically listed) have been met, and that the permittee understands that there are significant penalties for false certification including fine and imprisonment. See 30 TAC § 312.47(a)(4)(A)(ii) or 30 TAC § 312.47(a)(5)(A)(ii), as applicable, and to the permittee’s specific sludge treatment activities.
  - b. The location, by street address, and specific latitude and longitude, of each site on which biosolids are applied.
  - c. The number of acres in each site on which bulk biosolids are applied.
  - d. The date and time biosolids are applied to each site.
  - e. The cumulative amount of each pollutant in pounds/acre listed in Table 2 applied to each site.
  - f. The total amount of biosolids applied to each site in dry tons.

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

## **F. Reporting Requirements**

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

1. Identify in the following categories (as applicable) the sewage sludge or biosolids treatment process or processes at the facility: preliminary operations (e.g., sludge or biosolids grinding and degritting), thickening (concentration), stabilization, anaerobic digestion, aerobic digestion, composting, conditioning, disinfection (e.g., beta ray irradiation, gamma ray irradiation, pasteurization), dewatering (e.g., centrifugation, sludge drying beds, sludge lagoons), heat drying, thermal reduction, and methane or biogas capture and recovery.
2. Identify the nature of material generated by the facility (such as a biosolid for beneficial use or land-farming, or sewage sludge for disposal at a monofill) and whether the material is ultimately conveyed off-site in bulk or in bags.
3. Results of tests performed for pollutants found in either Table 2 or 3 as appropriate for the permittee's land application practices.
4. The frequency of monitoring listed in Section I.C. that applies to the permittee.
5. Toxicity Characteristic Leaching Procedure (TCLP) results.
6. PCB concentration in sludge or biosolids in mg/kg.
7. Identity of hauler(s) and TCEQ transporter number.
8. Date(s) of transport.
9. Texas Commission on Environmental Quality registration number, if applicable.
10. Amount of sludge or biosolids disposal dry weight (lbs/acre) at each disposal site.
11. The concentration (mg/kg) in the sludge of each pollutant listed in Table 1 (defined as a monthly average) as well as the applicable pollutant concentration criteria (mg/kg) listed in Table 3 above, or the applicable pollutant loading rate limit (lbs/acre) listed in Table 2 above if it exceeds 90% of the limit.
12. Level of pathogen reduction achieved (Class A, Class AB or Class B).
13. Alternative used as listed in Section I.B.3.(a. or b.). Alternatives describe how the pathogen reduction requirements are met. If Class B biosolids, include information on how site restrictions were met.
14. Identify each of the analytic methods used by the facility to analyze enteric viruses, fecal coliforms, helminth ova, *Salmonella* sp., and other regulated parameters.
15. Vector attraction reduction alternative used as listed in Section I.B.4.

16. Amount of sludge or biosolids transported in dry tons/year.
17. The certification statement listed in either 30 TAC § 312.47(a)(4)(A)(ii) or 30 TAC § 312.47(a)(5)(A)(ii) as applicable to the permittee's sludge or biosolids treatment activities, shall be attached to the annual reporting form.
18. When the amount of any pollutant applied to the land exceeds 90% of the cumulative pollutant loading rate for that pollutant, as described in Table 2, the permittee shall report the following information as an attachment to the annual reporting form.
  - a. The location, by street address, and specific latitude and longitude.
  - b. The number of acres in each site on which bulk biosolids are applied.
  - c. The date and time bulk biosolids are applied to each site.
  - d. The cumulative amount of each pollutant (i.e., pounds/acre) listed in Table 2 in the bulk biosolids applied to each site.
  - e. The amount of biosolids (i.e., dry tons) applied to each site.

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



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

- A. The permittee shall handle and dispose of sewage sludge or biosolids in accordance with 30 TAC § 330 and all other applicable state and federal regulations to protect public health and the environment from any reasonably anticipated adverse effects due to any toxic pollutants that may be present. The permittee shall ensure that the sewage sludge meets the requirements in 30 TAC § 330 concerning the quality of the sludge or biosolids disposed in a municipal solid waste landfill.
- B. If the permittee generates sewage sludge and supplies that sewage sludge or biosolids to the owner or operator of a municipal solid waste landfill (MSWLF) for disposal, the permittee shall provide to the owner or operator of the MSWLF appropriate information needed to be in compliance with the provisions of this permit.
- C. The permittee shall give 180 days prior notice to the Executive Director in care of the Wastewater Permitting Section (MC 148) of the Water Quality Division of any change planned in the sewage sludge or biosolids disposal practice.
- D. Sewage sludge or biosolids shall be tested annually in accordance with the method specified in both 40 CFR Part 261, Appendix II and 40 CFR Part 268, Appendix I (Toxicity Characteristic Leaching Procedure) or other method, which receives the prior approval of the TCEQ for contaminants listed in Table 1 of 40 CFR § 261.24. Sewage sludge or biosolids failing this test shall be managed according to RCRA standards for generators of hazardous waste, and the waste's disposition must be in accordance with all applicable requirements for hazardous waste processing, storage, or disposal.

Following failure of any TCLP test, the management or disposal of sewage sludge or biosolids at a facility other than an authorized hazardous waste processing, storage, or disposal facility shall be prohibited until such time as the permittee can demonstrate the sewage sludge or biosolids no longer exhibits the hazardous waste toxicity characteristics (as demonstrated by the results of the TCLP tests). A written report shall be provided to both the TCEQ Registration and Reporting Section (MC 129) of the Permitting and Registration Support Division and the Regional Director (MC Region 12) of the appropriate TCEQ field office within 7 days after failing the TCLP Test.

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

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

The permittee shall develop the following information and shall retain the information for five years.

1. The description (including procedures followed and the results) of all liquid Paint Filter Tests performed.
2. The description (including procedures followed and results) of all TCLP tests performed.

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

#### G. Reporting Requirements

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

1. Identify in the following categories (as applicable) the sewage sludge or biosolids treatment process or processes at the facility: preliminary operations (e.g., sludge or biosolids grinding and degritting), thickening (concentration), stabilization, anaerobic digestion, aerobic digestion, composting, conditioning, disinfection (e.g., beta ray irradiation, gamma ray irradiation, pasteurization), dewatering (e.g., centrifugation, sludge drying beds, sludge lagoons), heat drying, thermal reduction, and methane or biogas capture and recovery.
2. Toxicity Characteristic Leaching Procedure (TCLP) results.
3. Annual sludge or biosolids production in dry tons/year.
4. Amount of sludge or biosolids disposed in a municipal solid waste landfill in dry tons/year.
5. Amount of sludge or biosolids transported interstate in dry tons/year.
6. A certification that the sewage sludge or biosolids meets the requirements of 30 TAC § 330 concerning the quality of the sludge disposed in a municipal solid waste landfill.
7. Identity of hauler(s) and transporter registration number.
8. Owner of disposal site(s).
9. Location of disposal site(s).
10. Date(s) of disposal.

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

#### **SECTION IV. REQUIREMENTS APPLYING TO SLUDGE OR BIOSOLIDS TRANSPORTED TO ANOTHER FACILITY FOR FURTHER PROCESSING**

These provisions apply to sludge or biosolids that is transported to another wastewater treatment facility or facility that further processes sludge or biosolids. These provisions are intended to allow transport of sludge or biosolids to facilities that have been authorized to accept sludge or biosolids. These provisions do not limit the ability of the receiving facility to determine whether to accept the sludge or biosolids, nor do they limit the ability of the receiving facility to request additional testing or documentation.

##### **A. General Requirements**

1. The permittee shall handle and dispose of sewage sludge or biosolids in accordance with 30 TAC Chapter 312 and all other applicable state and federal regulations in a manner that protects public health and the environment from any reasonably anticipated adverse effects due to any toxic pollutants that may be present in the sludge.
2. Sludge or biosolids may only be transported using a registered transporter or using an approved pipeline.

##### **B. Record Keeping Requirements**

1. For sludge transported by an approved pipeline, the permittee must maintain records of the following:
  - a. the amount of sludge or biosolids transported;
  - b. the date of transport;
  - c. the name and TCEQ permit number of the receiving facility or facilities;
  - d. the location of the receiving facility or facilities;
  - e. the name and TCEQ permit number of the facility that generated the waste; and
  - f. copy of the written agreement between the permittee and the receiving facility to accept sludge or biosolids.
2. For sludge or biosolids transported by a registered transporter, the permittee must maintain records of the completed trip tickets in accordance with 30 TAC § 312.145(a)(1)-(7) and amount of sludge or biosolids transported.
3. The above records shall be maintained on-site on a monthly basis and shall be made available to the TCEQ upon request. These records shall be retained for at least five years.

**C. Reporting Requirements**

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

1. Identify in the following categories (as applicable) the sewage sludge or biosolids treatment process or processes at the facility: preliminary operations (e.g., sludge or biosolids grinding and degritting), thickening (concentration), stabilization, anaerobic digestion, aerobic digestion, composting, conditioning, disinfection (e.g., beta ray irradiation, gamma ray irradiation, pasteurization), dewatering (e.g., centrifugation, sludge drying beds, sludge lagoons), heat drying, thermal reduction, and methane or biogas capture and recovery.
2. the annual sludge or biosolids production;
3. the amount of sludge or biosolids transported;
4. the owner of each receiving facility;
5. the location of each receiving facility; and
6. the date(s) of disposal at each receiving facility.

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**OTHER REQUIREMENTS**

1. The permittee shall employ or contract with one or more licensed wastewater treatment facility operators or wastewater system operations companies holding a valid license or registration according to the requirements of 30 TAC Chapter 30, Occupational Licenses and Registrations, and in particular 30 TAC Chapter 30, Subchapter J, Wastewater Operators and Operations Companies.

This Category A facility must be operated by a chief operator or an operator holding a Class A license or higher. The facility must be operated a minimum of five days per week by the licensed chief operator or an operator holding the required level of license or higher. The licensed chief operator or operator holding the required level of license or higher must be available by telephone or pager seven days per week. Where shift operation of the wastewater treatment facility is necessary, each shift that does not have the on-site supervision of the licensed chief operator must be supervised by an operator in charge who is licensed not less than one level below the category for the facility.

2. The facility is not located in the Coastal Management Program boundary.
3. Chronic toxic criteria apply at the edge of the mixing zone. The mixing zone is defined as 300 feet downstream and 100 feet upstream from the point of discharge.
4. The permittee has submitted sufficient evidence of legal restrictions prohibiting residential structures within the part of the buffer zone not owned by the permittee according to 30 TAC § 309.13(e)(3) (See Attachment A.)
5. In accordance with 30 TAC § 319.9, a permittee that has at least twelve months of uninterrupted compliance with its bacteria limit may notify the commission in writing of its compliance and request a less frequent measurement schedule. To request a less frequent schedule, the permittee shall submit a written request to the TCEQ Wastewater Permitting Section (MC 148) for each phase that includes a different monitoring frequency. The request must contain all of the reported bacteria values (Daily Avg. and Daily Max/Single Grab) for the twelve consecutive months immediately prior to the request. If the Executive Director finds that a less frequent measurement schedule is protective of human health and the environment, the permittee may be given a less frequent measurement schedule. For this permit, five/week may be reduced to three/week. **A violation of any bacteria limit by a facility that has been granted a less frequent measurement schedule will require the permittee to return to the standard frequency schedule and submit written notice to the TCEQ Wastewater Permitting Section (MC 148).** The permittee may not apply for another reduction in measurement frequency for at least 24 months from the date of the last violation. The Executive Director may establish a more frequent measurement schedule if necessary to protect human health or the environment.
6. In addition, the permittee is also authorized to transport sludge from the wastewater treatment facility, by a licensed hauler or via pipeline, to another of the permittee's permitted wastewater treatment plants, to be treated and then disposed of with the sludge from the plant accepting the sludge.

The permittee shall keep records of all sludge removed from the wastewater treatment plant and these records shall include the following information:

- a. The volume of sludge transported to another treatment plant;
- b. The date(s) that sludge was transported;
- c. The identity of haulers, if applicable; and
- d. The TCEQ permit number, and location of the wastewater treatment plant to which the sludge is transported.

These records shall be maintained on a monthly basis and shall be reported to the TCEQ Regional Office (MC Region 12) and the TCEQ Water Quality Compliance Monitoring Team (MC 224) of the Enforcement Division by September 30 of each year.

**CONTRIBUTING INDUSTRIES AND PRETREATMENT REQUIREMENTS**

1. The permittee shall operate an industrial pretreatment program in accordance with Sections 402(b)(8) and (9) of the Clean Water Act, the General Pretreatment Regulations (40 CFR Part 403), and the approved **City of Houston** publicly owned treatment works (POTW) pretreatment program submitted by the permittee. The pretreatment program was approved on **November 27, 1984**, and modified on **February 26, 1993**, and **March 11, 2020 (nonsubstantial Streamlining Rule modification)**, and modified on **June 14, 2021 (TBLLs)**.

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

- a. Industrial user (IU) information shall be kept current according to 40 CFR §§403.8(f)(2)(i) and (ii) and updated at a frequency set forth in the approved pretreatment program to reflect the accurate characterization of all IUs.
- b. The frequency and nature of IU compliance monitoring activities by the permittee shall be consistent with the approved POTW pretreatment program and commensurate with the character, consistency, and volume of waste. The permittee is required to inspect and sample the effluent from each significant industrial user (SIU) at least once per year, except as specified in 40 CFR §403.8(f)(2)(v). This is in addition to any industrial self-monitoring activities.
- c. The permittee shall enforce and obtain remedies for IU noncompliance with applicable pretreatment standards and requirements and the approved POTW pretreatment program.
- d. The permittee shall control through permit, order, or similar means, the contribution to the POTW by each IU to ensure compliance with applicable pretreatment standards and requirements and the approved POTW pretreatment program. In the case of SIUs (identified as significant under 40 CFR §403.3(v)), this control shall be achieved through individual permits or general control mechanisms, in accordance with 40 CFR §403.8(f)(1)(iii).

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

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

- (5) 403, categorical pretreatment standards, local limits, and State and local law; Statement of applicable civil and criminal penalties for violation of pretreatment standards and requirements, and any applicable compliance schedule. Such schedules may not extend the compliance date beyond federal deadlines; and
    - (6) Requirements to control slug discharges, if determined by the POTW to be necessary.
  - e. For those IUs who are covered by a general control mechanism, in order to implement 40 CFR §403.8(f)(1)(iii)(A)(2), a monitoring waiver for a pollutant neither present nor expected to be present in the IU's discharge is not effective in the general control mechanism until after the POTW has provided written notice to the SIU that such a waiver request has been granted in accordance with 40 CFR §403.12(e)(2).
  - f. The permittee shall evaluate whether each SIU needs a plan or other action to control slug discharges, in accordance with 40 CFR §403.8(f)(2)(vi). If the POTW decides that a slug control plan is needed, the plan shall contain at least the minimum elements required in 40 CFR §403.8(f)(2)(vi).
  - g. The permittee shall provide adequate staff, equipment, and support capabilities to carry out all elements of the pretreatment program.
  - h. The approved program shall not be modified by the permittee without the prior approval of the Executive Director, according to 40 CFR §403.18.
2. The permittee is under a continuing duty to establish and enforce specific local limits to implement the provisions of 40 CFR §403.5, develop and enforce local limits as necessary, and modify the approved pretreatment program as necessary to comply with federal, state, and local law, as amended. The permittee may develop BMPs to implement 40 CFR §403.5(c)(1) and (2). Such BMPs shall be considered local limits and pretreatment standards. The permittee is required to effectively enforce such limits and to modify its pretreatment program, including the Legal Authority, Enforcement Response Plan, and Standard Operating Procedures (including forms), if required by the Executive Director to reflect changing conditions at the POTW. Substantial modifications will be approved in accordance with 40 CFR §403.18, and modifications will become effective upon approval by the Executive Director in accordance with 40 CFR §403.18.

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

- 1) a written certification that a technical reassessment has been performed, and that the evaluation demonstrates that existing technically based local limits (TBLLs) attain the Texas Surface Water Quality Standards [30 TAC Chapter 307] in water in the state, and are adequate to prevent pass through of pollutants, inhibition of or interference with the treatment facility, worker health and safety problems, and sludge contamination [submit the Reassessment Form No. TCEQ-20221]; **or**
- 2) a written notification that a technical redevelopment of the current TBLLs, draft legal authority which incorporates such revisions, and any additional modifications to the pretreatment program, as required by 40 CFR Part 403 [rev. 10/14/05], and applicable state and local law, including an Enforcement Response Plan and



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

Upon approval by the Executive Director of a substantial modification to this approved POTW pretreatment program, the requirement to develop and enforce specific prohibitions and/or limits to implement the prohibitions and limits set forth in 40 CFR §§403.5(a)(1), (b), (c)(1) and (3), and (d) is a condition of this permit. The specific prohibitions set out in 40 CFR §403.5(b) shall be enforced by the permittee unless modified under this provision.

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

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

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

In addition, each **November** the permittee shall submit an updated pretreatment program

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

- a. An updated list of all regulated IUs as indicated in this section. For each listed IU, the following information shall be included:
  - (1) Standard Industrial Classification (SIC) or North American Industry Classification System (NAICS) code *and* categorical determination.
  - (2) If the pretreatment program has been modified and approved to incorporate reduced monitoring for any of the categorical IUs as provided by 40 CFR Part 403 [*rev. 10/14/05*], then the list must also identify:
    - categorical IUs subject to the conditions for reduced monitoring and reporting requirements under 40 CFR § 403.12(e)(1) [*rev. 10/22/15*] and (3);
    - those IUs that are non-significant categorical industrial users (NSCIUs) under 40 CFR §403.3(v)(2); and
    - those IUs that are middle tier categorical industrial users (MTCIUs) under 40 CFR §403.12(e)(3).
  - (3) Control mechanism status.
    - Indicate whether the IU has an effective individual or general control mechanism, and the date such control mechanism was last issued, reissued, or modified;
    - Indicate which IUs were added to the system, or newly identified, during the pretreatment year reporting period;
    - Include the type of general control mechanisms; and
    - Report all NSCIU annual evaluations performed, as applicable.
  - (4) A summary of all compliance monitoring activities performed by the POTW during the pretreatment year reporting period. The following information shall be reported:
    - Total number of inspections performed; and
    - Total number of sampling events conducted.
  - (5) Status of IU compliance with effluent limitations, reporting, and narrative standard (which may include enforceable BMPs, narrative limits, and/or operational standards) requirements. Compliance status shall be defined as follows:

- Compliant (C) - no violations during the pretreatment year reporting period;
  - Non-compliant (NC) - one or more violations during the pretreatment year reporting period but does not meet the criteria for SNC; and
  - Significant Noncompliance (SNC) - in accordance with requirements described above in this section.
- (6) For noncompliant IUs, indicate the nature of the violations, the type and number of actions taken (notice of violation, administrative order, criminal or civil suit, fines or penalties collected, etc.), and the current compliance status. If any IU was on a schedule to attain compliance with effluent limits or narrative standards, indicate the date the schedule was issued and the date compliance is to be attained.
- b. A list of each IU whose authorization to discharge was terminated or revoked during the pretreatment year reporting period and the reason for termination.
  - c. A report on any interference, pass through, Act of God, or POTW permit violations known or suspected to be caused by IUs and response actions taken by the permittee.
  - d. The results of all influent and effluent analyses performed pursuant to Item 3 of this section.
  - e. An original newspaper public notice, or copy of the newspaper publication with official affidavit, of the list of IUs that meet the criteria of SNC, giving the name of the newspaper and date the list was published.
  - f. The daily average water quality based effluent concentrations (from the TCEQ's Texas Toxicity Modeling Program (TexTox)) necessary to attain the Texas Surface Water Quality Standards, 30 TAC Chapter 307, in water in the state.
  - g. The maximum allowable headworks loading (MAHL) in pounds per day (lb/day) of the approved TBLLs or for each pollutant of concern (POC) for which the permittee has calculated a MAHL. In addition, the influent loading as a percent of the MAHL, using the annual average flow of the wastewater treatment plant in million gallons per day (MGD) during the pretreatment year reporting period, for each pollutant that has an adopted TBLL or for each POC for which the permittee has calculated a MAHL. *(See Endnotes No. 2 at the end of this section for the influent loading as a percent of the MAHL equation.)*
  - h. The permittee may submit the updated pretreatment program annual status report information in tabular form using the example table format provided. Please attach, on a separate sheet, explanations to document the various pretreatment activities, including IU permits that have expired, BMP violations, and any sampling events that were not conducted by the permittee as required.
  - i. A summary of changes to the POTW's approved pretreatment program that have not been previously reported to the Approval Authority.

Effective December 21, 2025, the permittee must submit the updated pretreatment program

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

5. The permittee shall provide adequate written notification to the Executive Director, care of the Wastewater Permitting Section (MC 148) of the Water Quality Division, within 30 days of the permittee's knowledge of the following:
  - a. Any new introduction of pollutants into the treatment works from an indirect discharger that would be subject to Sections 301 and 306 of the Clean Water Act, if the indirect discharger was directly discharging those pollutants; and
  - b. Any substantial change in the volume or character of pollutants being introduced into the treatment works by a source introducing pollutants into the treatment works at the time of issuance of the permit.

Adequate notice shall include information on the quality and quantity of effluent to be introduced into the treatment works and any anticipated impact of the change on the quality or quantity of effluent to be discharged from the POTW.

*Revised March 2022*

**TPDES Pretreatment Program Annual Report Form for Updated Industrial Users List****Reporting month/year:** \_\_\_\_\_, \_\_\_\_\_ **to** \_\_\_\_\_, \_\_\_\_\_**TPDES Permit No.:** \_\_\_\_\_ **Permittee:** \_\_\_\_\_ **Treatment Plant:** \_\_\_\_\_

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

- 1 Include all significant industrial users (SIUs), non-significant categorical industrial users (NSCIUs) as defined in 40 CFR §403.3(v)(2), and/or middle tier categorical industrial users (MTCIUs) as defined in 40 CFR §403.12(e)(3). Please do not include non-significant noncategorical IUs that are covered under best management practices (BMPs) or general control mechanisms.
- 2 Categorical determination (include 40 CFR citation and NSCIU or MTCIU status, if applicable).
- 3 Indicate whether the IU is a new user. If the answer is No or N, then indicate the expiration date of the last issued IU permit.
- 4 The term SNC applies to a broader range of violations, such as daily maximum, long-term average, instantaneous limits, and narrative standards (which may include enforceable BMPs, narrative limits and/or operational standards). Any other violation, or group of violations, which the POTW determines will adversely affect the operation or implementation of the local Pretreatment Program now includes BMP violations (40 CFR §403.8(f)(2)(viii)(H)).
- 5 Code NR= None required (NSCIUs only); IND = individual control mechanism; GEN = general control mechanism. Include as a footnote (or on a separate page) the name of the general control mechanism used for similar groups of IUs, identify the similar types of operations and types of wastes that are the same for each general control mechanism. Any BMPs through general control mechanisms that are applied to nonsignificant IUs need to be reported separately, *e.g.* the sector type and BMP description.
- 6 Permit or NSCIU evaluations as applicable.
- 7 According to 40 CFR §403.12(i)(1), indicate whether the IU is subject to technically based local limits (TBLLs) that are more stringent than categorical pretreatment standards, *e.g.* where there is one end-of-pipe sampling point at a CIU, and you have determined that the TBLLs are more stringent than the categorical pretreatment standards for any pollutant at the end-of-pipe sampling point; **OR** the IU is subject only to local limits (TBLLs only), *e.g.* the IU is a non-categorical SIU subject only to TBLLs at the end-of-pipe sampling point.
- 8 For those IUs where a monitoring waiver has been granted, please add the code "W" (after either C, NC, or SNC codes) and indicate the pollutant(s) for which the waiver has been granted.

**TPDES Pretreatment Program Annual Report Form for  
Industrial User Inventory Modifications**

**Reporting month/year:** \_\_\_\_\_, \_\_\_\_\_ **to** \_\_\_\_\_, \_\_\_\_\_

**TPDES Permit No:** \_\_\_\_\_ **Permittee:** \_\_\_\_\_ **Treatment Plant:** \_\_\_\_\_

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

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

**TPDES Pretreatment Program Annual Report Form for Enforcement Actions Taken****Reporting month/year:** \_\_\_\_\_, \_\_\_\_\_ **to** \_\_\_\_\_, \_\_\_\_\_**TPDES Permit No:** \_\_\_\_\_ **Permittee:** \_\_\_\_\_ **Treatment Plant:** \_\_\_\_\_**Overall SNC** \_\_\_\_\_% **SNC <sup>10</sup> based on:** **Effluent Violations** \_\_\_\_\_%  
**Reporting Violations** \_\_\_\_\_% **Narrative Standard Violations** \_\_\_\_\_%

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

10       #       %

\_\_\_\_\_ Pretreatment Standards [WENDB-PSNC] (Local Limits/Categorical Standards)

\_\_\_\_\_ Reporting Requirements [WENDB-PSNC]

\_\_\_\_\_ Narrative Standards

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

**TPDES Pretreatment Program Annual Report Form for  
Influent and Effluent Monitoring Results<sup>1</sup>**

**Reporting month/year:** \_\_\_\_\_, \_\_\_\_\_ to \_\_\_\_\_, \_\_\_\_\_

**TPDES Permit No.:** \_\_\_\_\_ **Permittee:** \_\_\_\_\_ **Treatment Plant:** \_\_\_\_\_

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



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

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

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

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

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

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

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

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



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

**Endnotes:**

1. It is advised that the permittee collect the influent and effluent samples considering flow detention time through each wastewater treatment plant (WWTP).
2. The MAHL of the approved TBLLs or for each pollutant of concern (POC) for which the permittee has calculated a MAHL. Only complete the column labeled "Average Influent % of the MAHL," as a percentage, for pollutants that have approved TBLLs or for each POC for which the permittee has calculated a MAHL (U.S. Environmental Protection Agency *Local Limits Development Guidance*, July 2004, EPA933-R-04-002A).

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

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

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

Where:

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

3. Daily average effluent limit (metal values are for total metals) as derived by the Texas Toxicity Modeling Program (TexTox). Effluent limits as calculated are designed to be protective of the Texas Surface Water Quality Standards. The permittee shall determine and indicate which effluent limit is the most stringent between the 30 TAC Chapter 319, Subchapter B (Hazardous Metals) limit, TexTox values, or any applicable limit in the Effluent Limitations and Monitoring Requirements Section of this TPDES permit. Shaded blocks need not be filled in unless the permittee has received a permit requirement/limit for the particular parameter.
4. Minimum analytical levels (MALs) and analytical methods as suggested in Tables E-1 and E-2 of the *Procedures to Implement the Texas Surface Water Quality Standards* (June 2010), as amended and adopted by the TCEQ. Pollutants that are not detectable above the MAL need to be reported as less than (<) the MAL numeric value.
5. Report result by subtracting Hexavalent Chromium from Total Chromium.
6. Either the method for Amenable to Chlorination or Weak-Acid Dissociable is authorized.
7. Hydrolyzes in water. Will not require permittee to analyze at this time.
8. EPA procedure not approved. Will not require permittee to analyze at this time.
9. Analyses are not required at this time for these pollutants unless there is reason to believe that these pollutants may be present.

**BIOMONITORING REQUIREMENTS****CHRONIC BIOMONITORING REQUIREMENTS: FRESHWATER**

The provisions of this section apply to Outfall 001 for whole effluent toxicity (WET) testing.

1. **Scope, Frequency, and Methodology**

- a. The permittee shall test the effluent for toxicity in accordance with the provisions below. Such testing will determine if an appropriately dilute effluent sample adversely affects the survival, reproduction, or growth of the test organisms.
- b. The permittee shall conduct the following toxicity tests using the test organisms, procedures and quality assurance requirements specified in this part of this permit and in accordance with "Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms," fourth edition (EPA-821-R-02-013) or its most recent update:
  - 1) Chronic static renewal survival and reproduction test using the water flea (*Ceriodaphnia dubia*) (Method 1002.0). This test should be terminated when 60% of the surviving adults in the control produce three broods or at the end of eight days, whichever occurs first. This test shall be conducted once per quarter.
  - 2) Chronic static renewal 7-day larval survival and growth test using the fathead minnow (*Pimephales promelas*) (Method 1000.0). A minimum of five replicates with eight organisms per replicate shall be used in the control and in each dilution. This test shall be conducted once per quarter.

The permittee must perform and report a valid test for each test species during the prescribed reporting period. An invalid test must be repeated during the same reporting period. An invalid test is defined as any test failing to satisfy the test acceptability criteria, procedures, and quality assurance requirements specified in the test methods and permit.

- c. The permittee shall use five effluent dilution concentrations and a control in each toxicity test. These effluent dilution concentrations are 27%, 37%, 49%, 65%, and 100% effluent. The critical dilution, defined as 65% effluent, is the effluent concentration representative of the proportion of effluent in the receiving water during critical low flow or critical mixing conditions.
- d. This permit may be amended to require a WET limit, a chemical-specific effluent limit, a best management practice, or other appropriate actions to address toxicity. The permittee may be required to conduct a toxicity reduction evaluation (TRE) after multiple toxic events.
- e. Testing Frequency Reduction
  - 1) If none of the first four consecutive quarterly tests demonstrates significant toxicity, the permittee may submit this information in writing

and, upon approval, reduce the testing frequency to once per six months for the invertebrate test species and once per year for the vertebrate test species.

- 2) If one or more of the first four consecutive quarterly tests demonstrates significant toxicity, the permittee shall continue quarterly testing for that species until this permit is reissued. If a testing frequency reduction had been previously granted and a subsequent test demonstrates significant toxicity, the permittee shall resume a quarterly testing frequency for that species until this permit is reissued.

## 2. Required Toxicity Testing Conditions

- a. Test Acceptance - The permittee shall repeat any toxicity test, including the control and all effluent dilutions, which fail to meet the following criteria:
  - 1) a control mean survival of 80% or greater;
  - 2) a control mean number of water flea neonates per surviving adult of 15 or greater;
  - 3) a control mean dry weight of surviving fathead minnow larvae of 0.25 mg or greater;
  - 4) a control coefficient of variation percent (CV%) of 40 or less in between replicates for the young of surviving females in the water flea test; and the growth and survival endpoints in the fathead minnow test;
  - 5) a critical dilution CV% of 40 or less for young of surviving females in the water flea test; and the growth and survival endpoints for the fathead minnow test, unless statistically significant toxicity is demonstrated at the critical dilution, in which case the test shall be considered valid;
  - 6) a percent minimum significant difference of 47 or less for water flea reproduction, unless statistically significant sublethal toxicity is demonstrated at the critical dilution, in which case the test shall be considered valid; and
  - 7) a PMSD of 30 or less for fathead minnow growth, unless statistically significant sublethal toxicity is demonstrated at the critical dilution, in which case the test shall be considered valid.
- b. Statistical Interpretation
  - 1) For the water flea survival and reproduction test, the statistical analyses used to determine the inhibition concentration of effluent that would cause a 25% reduction (IC25) in survival or mean young per female shall be as described in the methods manual referenced in Part 1.b.
  - 2) For the fathead minnow larval survival and growth tests, the statistical analyses used to determine the IC25 in survival or growth shall be as

described in the methods manual referenced in Part 1.b.

- 3) The permittee is responsible for reviewing test concentration-response relationships to ensure that calculated test-results are interpreted and reported correctly. The document entitled "Method Guidance and Recommendation for Whole Effluent Toxicity (WET) Testing (40 CFR Part 136)" (EPA 821-B-00-004) provides guidance on determining the validity of test results.
- 4) Most point estimates are derived from a mathematical model that assumes a continuous dose-response relationship. For any test result that demonstrates a non-continuous (threshold) response, or a non-monotonic dose-response relationship, the IC<sub>25</sub> should be determined based on the method guidance manual referenced in Item 3.
- 5) Pursuant to the responsibility assigned to the permittee in Part 2.b.3), test results that demonstrate a non-monotonic dose-response relationship may be submitted, prior to the due date, for technical review of test validity and acceptability. The method guidance manual referenced in Item 3 will be used as the basis, along with best professional judgement, for making a determination of test validity and acceptability.

c. Dilution Water

- 1) Dilution water used in the toxicity tests shall be the receiving water collected at a point upstream of the discharge as close as possible to the discharge point but unaffected by the discharge. Where the toxicity tests are conducted on effluent discharges to receiving waters that are classified as intermittent streams, or where the toxicity tests are conducted on effluent discharges where no receiving water is available due to zero flow conditions, the permittee shall:
  - a) substitute a synthetic dilution water that has a pH, hardness, and alkalinity similar to that of the closest downstream perennial water unaffected by the discharge; or
  - b) use the closest downstream perennial water unaffected by the discharge.
- 2) Where the receiving water proves unsatisfactory as a result of pre-existing instream toxicity (i.e. fails to fulfill the test acceptance criteria of Part 2.a.), the permittee may substitute synthetic dilution water for the receiving water in all subsequent tests provided the unacceptable receiving water test met the following stipulations:
  - a) a synthetic lab water control was performed (in addition to the receiving water control) which fulfilled the test acceptance requirements of Part 2.a;
  - b) the test indicating receiving water toxicity was carried out to completion (i.e., 7 days);

- c) the permittee submitted all test results indicating receiving water toxicity with the reports and information required in Part 3.
- 3) The synthetic dilution water shall consist of standard, moderately hard, reconstituted water. Upon approval, the permittee may substitute other appropriate dilution water with chemical and physical characteristics similar to that of the receiving water.
- d. Samples and Composites
  - 1) The permittee shall collect a minimum of three composite samples from Outfall 001. The second and third composite samples will be used for the renewal of the dilution concentrations for each toxicity test.
  - 2) The permittee shall collect the composite samples such that the samples are representative of any periodic episode of chlorination, biocide usage, or other potentially toxic substance being discharged on an intermittent basis.
  - 3) The permittee shall initiate the toxicity tests within 36 hours after collection of the last portion of the first composite sample. The holding time for any subsequent composite sample shall not exceed 72 hours. Samples shall be maintained at a temperature of 0-6 degrees Centigrade during collection, shipping, and storage.
  - 4) If Outfall 001 ceases discharging during the collection of effluent samples, the requirements for the minimum number of effluent samples, the minimum number of effluent portions, and the sample holding time are waived during that sampling period. However, the permittee must have collected an effluent composite sample volume sufficient to complete the required toxicity tests with renewal of the effluent. When possible, the effluent samples used for the toxicity tests shall be collected on separate days if the discharge occurs over multiple days. The sample collection duration and the static renewal protocol associated with the abbreviated sample collection must be documented in the full report.
  - 5) The effluent samples shall not be dechlorinated after sample collection.

### 3. Reporting

All reports, tables, plans, summaries, and related correspondence required in this section shall be submitted to the attention of the Standards Implementation Team (MC 150) of the Water Quality Division.

- a. The permittee shall prepare a full report of the results of all tests conducted in accordance with the manual referenced in Part 1.b. for every valid and invalid toxicity test initiated whether carried to completion or not.
- b. The permittee shall routinely report the results of each biomonitoring test on the Table 1 forms provided with this permit.

- 1) Annual biomonitoring test results are due on or before January 20th for biomonitoring conducted during the previous 12-month period.
  - 2) Semiannual biomonitoring test results are due on or before July 20th and January 20th for biomonitoring conducted during the previous 6-month period.
  - 3) Quarterly biomonitoring test results are due on or before April 20th, July 20th, October 20th, and January 20th for biomonitoring conducted during the previous calendar quarter.
  - 4) Monthly biomonitoring test results are due on or before the 20th day of the month following sampling.
- c. Enter the following codes for the appropriate parameters for valid tests only:
- 1) For the water flea, Parameter T4P3B, enter a "1" if the IC25 for survival is less than the critical dilution; otherwise, enter a "0."
  - 2) For the water flea, Parameter T6P3B, report the IC25 for survival.
  - 3) For the water flea, Parameter T5P3B, enter a "1" if the IC25 for reproduction is less than the critical dilution; otherwise, enter a "0."
  - 4) For the water flea, Parameter T7P3B, report the IC25 for reproduction.
  - 5) For the fathead minnow, Parameter T4P6C, enter a "1" if the IC25 for survival is less than the critical dilution; otherwise, enter a "0."
  - 6) For the fathead minnow, Parameter T6P6C, report the IC25 for survival.
  - 7) For the fathead minnow, Parameter T5P6C, enter a "1" if the IC25 for growth is less than the critical dilution; otherwise, enter a "0."
  - 8) For the fathead minnow, Parameter T7P6C, report the IC25 for growth.
- d. Enter the following codes for retests only:
- 1) For retest number 1, Parameter 22415, enter a "1" if the IC25 for survival is less than the critical dilution; otherwise, enter a "0."
  - 2) For retest number 2, Parameter 22416, enter a "1" if the IC25 for survival is less than the critical dilution; otherwise, enter a "0."

4. Persistent Toxicity

The requirements of this Part apply only when a test demonstrates a significant effect at the critical dilution. Significant lethality and significant effect were defined in Part 2.b. Significant sublethality is defined as a statistically significant difference in growth/reproduction at the critical dilution when compared to the growth/reproduction

in the control.

- a. The permittee shall conduct a total of 2 additional tests (retests) for any test that demonstrates a significant effect (lethal or sublethal) at the critical dilution. The two retests shall be conducted monthly during the next two consecutive months. The permittee shall not substitute either of the two retests in lieu of routine toxicity testing. All reports shall be submitted within 20 days of test completion. Test completion is defined as the last day of the test.
- b. If the retests are performed due to a demonstration of significant lethality, and one or both of the two retests specified in Part 4.a. demonstrates significant lethality, the permittee shall initiate the TRE requirements as specified in Part 5. The provisions of Part 4.a. are suspended upon completion of the two retests and submittal of the TRE action plan and schedule defined in Part 5.

If neither test demonstrates significant lethality and the permittee is testing under the reduced testing frequency provision of Part 1.e., the permittee shall return to a quarterly testing frequency for that species.

- c. If the two retests are performed due to a demonstration of significant sublethality, and one or both of the two retests specified in Part 4.a. demonstrates significant lethality, the permittee shall again perform two retests as stipulated in Part 4.a.
- d. If the two retests are performed due to a demonstration of significant sublethality, and neither test demonstrates significant lethality, the permittee shall continue testing at the quarterly frequency.
- e. Regardless of whether retesting for lethal or sublethal effects, or a combination of the two, no more than one retest per month is required for a species.

5. Toxicity Reduction Evaluation

- a. Within 45 days of the retest that demonstrates significant lethality, or within 45 days of being so instructed due to multiple toxic events, the permittee shall submit a general outline for initiating a TRE. The outline shall include, but not be limited to, a description of project personnel, a schedule for obtaining consultants (if needed), a discussion of influent and effluent data available for review, a sampling and analytical schedule, and a proposed TRE initiation date.
- b. Within 90 days of the retest that demonstrates significant lethality, or within 90 days of being so instructed due to multiple toxic events, the permittee shall submit a TRE action plan and schedule for conducting a TRE. The plan shall specify the approach and methodology to be used in performing the TRE. A TRE is a step-wise investigation combining toxicity testing with physical and chemical analyses to determine actions necessary to eliminate or reduce effluent toxicity to a level not effecting significant lethality at the critical dilution. The TRE action plan shall describe an approach for the reduction or elimination of lethality for both test species defined in Part 1.b. At a minimum, the TRE action plan shall include the following:



- 1) Specific Activities - The TRE action plan shall specify the approach the permittee intends to utilize in conducting the TRE, including toxicity characterizations, identifications, confirmations, source evaluations, treatability studies, and alternative approaches. When conducting characterization analyses, the permittee shall perform multiple characterizations and follow the procedures specified in the document entitled "Toxicity Identification Evaluation: Characterization of Chronically Toxic Effluents, Phase I" (EPA/600/6-91/005F) or alternate procedures. The permittee shall perform multiple identifications and follow the methods specified in the documents entitled "Methods for Aquatic Toxicity Identification Evaluations, Phase II Toxicity Identification Procedures for Samples Exhibiting Acute and Chronic Toxicity" (EPA/600/R-92/080) and "Methods for Aquatic Toxicity Identification Evaluations: Phase III Toxicity Confirmation Procedures for Samples Exhibiting Acute and Chronic Toxicity" (EPA/600/R-92/081). All characterization, identification, and confirmation tests shall be conducted in an orderly and logical progression;
  - 2) Sampling Plan - The TRE action plan should describe sampling locations, methods, holding times, chain of custody, and preservation techniques. The effluent sample volume collected for all tests shall be adequate to perform the toxicity characterization/identification/confirmation procedures and chemical-specific analyses when the toxicity tests show significant lethality. Where the permittee has identified or suspects a specific pollutant and source of effluent toxicity, the permittee shall conduct, concurrent with toxicity testing, chemical-specific analyses for the identified and suspected pollutant and source of effluent toxicity;
  - 3) Quality Assurance Plan - The TRE action plan should address record keeping and data evaluation, calibration and standardization, baseline tests, system blanks, controls, duplicates, spikes, toxicity persistence in the samples, randomization, reference toxicant control charts, and mechanisms to detect artifactual toxicity; and
  - 4) Project Organization - The TRE action plan should describe the project staff, project manager, consulting engineering services (where applicable), consulting analytical and toxicological services, etc.
- c. Within 30 days of submittal of the TRE action plan and schedule, the permittee shall implement the TRE.
- d. The permittee shall submit quarterly TRE activities reports concerning the progress of the TRE. The quarterly reports are due on or before April 20th, July 20th, October 20th, and January 20th. The report shall detail information regarding the TRE activities including:
- 1) results and interpretation of any chemical-specific analyses for the identified and suspected pollutant performed during the quarter;
  - 2) results and interpretation of any characterization, identification, and confirmation tests performed during the quarter;

- 3) any data and substantiating documentation which identifies the pollutant(s) and source of effluent toxicity;
  - 4) results of any studies/evaluations concerning the treatability of the facility's effluent toxicity;
  - 5) any data that identifies effluent toxicity control mechanisms that will reduce effluent toxicity to the level necessary to meet no significant lethality at the critical dilution; and
  - 6) any changes to the initial TRE plan and schedule that are believed necessary as a result of the TRE findings.
- e. During the TRE, the permittee shall perform, at a minimum, quarterly testing using the more sensitive species. Testing for the less sensitive species shall continue at the frequency specified in Part 1.b.
- f. If the effluent ceases to effect significant lethality, i.e., there is a cessation of lethality, the permittee may end the TRE. A cessation of lethality is defined as no significant lethality for a period of 12 consecutive months with at least monthly testing. At the end of the 12 months, the permittee shall submit a statement of intent to cease the TRE and may then resume the testing frequency specified in Part 1.b.

This provision accommodates situations where operational errors and upsets, spills, or sampling errors triggered the TRE, in contrast to a situation where a single toxicant or group of toxicants cause lethality. This provision does not apply as a result of corrective actions taken by the permittee. Corrective actions are defined as proactive efforts that eliminate or reduce effluent toxicity. These include, but are not limited to, source reduction or elimination, improved housekeeping, changes in chemical usage, and modifications of influent streams and effluent treatment.

The permittee may only apply this cessation of lethality provision once. If the effluent again demonstrates persistent significant lethality to the same species, the permit will be amended to add a WET limit with a compliance period, if appropriate. However, prior to the effective date of the WET limit, the permittee may apply for a permit amendment removing and replacing the WET limit with an alternate toxicity control measure by identifying and confirming the toxicant and an appropriate control measure.

- g. The permittee shall complete the TRE and submit a final report on the TRE activities no later than 28 months from the last test day of the retest that confirmed significant lethal effects at the critical dilution. The permittee may petition the Executive Director (in writing) for an extension of the 28-month limit. However, to warrant an extension the permittee must have demonstrated due diligence in its pursuit of the toxicity identification evaluation/TRE and must prove that circumstances beyond its control stalled the toxicity identification evaluation/TRE. The report shall provide information pertaining to the specific control mechanism selected that will, when implemented, result in the reduction

of effluent toxicity to no significant lethality at the critical dilution. The report shall also provide a specific corrective action schedule for implementing the selected control mechanism.

- h. Based on the results of the TRE and proposed corrective actions, this permit may be amended to modify the biomonitoring requirements, where necessary, require a compliance schedule for implementation of corrective actions, specify a WET limit, specify a best management practice, and specify a chemical-specific limit.
- i. Copies of any and all required TRE plans and reports shall also be submitted to the U.S. EPA Region 6 office, 6WQ-PO.

TABLE 1 (SHEET 1 OF 4)

## BIOMONITORING REPORTING

## CERIODAPHNIA DUBIA SURVIVAL AND REPRODUCTION

Dates and Times      Date      Time      Date      Time  
 Composites      No. 1 FROM: \_\_\_\_\_ TO: \_\_\_\_\_  
 Collected      No. 2 FROM: \_\_\_\_\_ TO: \_\_\_\_\_  
                     No. 3 FROM: \_\_\_\_\_ TO: \_\_\_\_\_

Test initiated: \_\_\_\_\_ am/pm \_\_\_\_\_ date

Dilution water used: \_\_\_\_\_ Receiving water      \_\_\_\_\_ Synthetic Dilution water

## NUMBER OF YOUNG PRODUCED PER ADULT AT END OF TEST

REP	Percent effluent					
	0%	27%	37%	49%	65%	100%
A						
B						
C						
D						
E						
F						
G						
H						
I						
J						
Survival Mean						
Total Mean						
CV%*						

\*Coefficient of Variation = standard deviation x 100/mean (calculation based on young of the surviving adults)

Designate males (M), and dead females (D), along with number of neonates (x) released prior to death.

TABLE 1 (SHEET 2 OF 4)

## CERIODAPHNIA DUBIA SURVIVAL AND REPRODUCTION TEST

## PERCENT SURVIVAL

	Percent effluent					
Time of Reading	0%	27%	37%	49%	65%	100%
24h						
48h						
End of Test						

1. Is the IC<sub>25</sub> for reproduction less than the critical dilution (65%)? \_\_\_\_\_ YES  
\_\_\_\_\_ NO
2. Is the IC<sub>25</sub> for survival less than the critical dilution (65%)? \_\_\_\_\_ YES \_\_\_\_\_ NO
3. Enter percent effluent corresponding to each IC<sub>25</sub> below:  
IC<sub>25</sub> reproduction = \_\_\_\_\_ %  
IC<sub>25</sub> survival = \_\_\_\_\_ %

TABLE 1 (SHEET 3 OF 4)

## BIOMONITORING REPORTING

## FATHEAD MINNOW LARVAE GROWTH AND SURVIVAL

Dates and Times      No. 1      FROM: \_\_\_\_\_ Date      Time      TO: \_\_\_\_\_ Date      Time  
 Composites  
 Collected      No. 2      FROM: \_\_\_\_\_ TO: \_\_\_\_\_  
                          No. 3      FROM: \_\_\_\_\_ TO: \_\_\_\_\_

Test initiated: \_\_\_\_\_ am/pm \_\_\_\_\_ date

Dilution water used: \_\_\_\_\_ Receiving water      \_\_\_\_\_ Synthetic dilution water

## FATHEAD MINNOW GROWTH DATA

Effluent Concentration	Average Dry Weight in replicate chambers					Mean Dry Weight	CV%*
	A	B	C	D	E		
0%							
27%							
37%							
49%							
65%							
100%							

\* Coefficient of Variation = standard deviation x 100/mean

TABLE 1 (SHEET 4 OF 4)

## BIOMONITORING REPORTING

## FATHEAD MINNOW GROWTH AND SURVIVAL TEST

## FATHEAD MINNOW SURVIVAL DATA

Effluent Concentration	Percent Survival in replicate chambers					Mean percent survival			CV%*
	A	B	C	D	E	24h	48h	7 day	
0%									
27%									
37%									
49%									
65%									
100%									

\* Coefficient of Variation = standard deviation x 100/mean

- Is the IC<sub>25</sub> for growth less than the critical dilution (65%)? \_\_\_\_\_ YES \_\_\_\_\_ NO
- Is the IC<sub>25</sub> for survival less than the critical dilution (65%)? \_\_\_\_\_ YES \_\_\_\_\_ NO
- Enter percent effluent corresponding to each IC<sub>25</sub> below:  
 IC<sub>25</sub> growth = \_\_\_\_\_%  
 IC<sub>25</sub> survival = \_\_\_\_\_%

24-HOUR ACUTE BIOMONITORING REQUIREMENTS: FRESHWATER

The provisions of this section apply to Outfall 001 for whole effluent toxicity (WET) testing.

1. Scope, Frequency, and Methodology

- a. The permittee shall test the effluent for lethality in accordance with the provisions in this section. Such testing will determine compliance with Texas Surface Water Quality Standard 30 TAC § 307.6(e)(2)(B), which requires greater than 50% survival of the appropriate test organisms in 100% effluent for a 24-hour period.
- b. The toxicity tests specified shall be conducted once per six months. The permittee shall conduct the following toxicity tests using the test organisms, procedures, and quality assurance requirements specified in this section of the permit and in accordance with "Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms," fifth edition (EPA-821-R-02-012) or its most recent update:
  - 1) Acute 24-hour static toxicity test using the water flea (*Daphnia pulex* or *Ceriodaphnia dubia*). A minimum of five replicates with eight organisms per replicate shall be used in the control and each dilution.
  - 2) Acute 24-hour static toxicity test using the fathead minnow (*Pimephales promelas*). A minimum of five replicates with eight organisms per replicate shall be used in the control and each dilution.

The permittee must perform and report a valid test for each test species during the prescribed reporting period. An invalid test must be repeated during the same reporting period. An invalid test is defined as any test failing to satisfy the test acceptability criteria, procedures, and quality assurance requirements specified in the test methods and permit.

- c. In addition to an appropriate control, a 100% effluent concentration shall be used in the toxicity tests. The control and dilution water shall consist of standard, synthetic, moderately hard, reconstituted water.
- d. This permit may be amended to require a WET limit, a best management practice, a chemical-specific limit, or other appropriate actions to address toxicity. The permittee may be required to conduct a toxicity reduction evaluation (TRE) after multiple toxic events.
- e. As the dilution series specified in the Chronic Biomonitoring Requirements includes a 100% effluent concentration, the results from those tests may fulfill the requirements of this section; any tests performed in the proper time interval may be substituted. Compliance will be evaluated as specified in Part 1.a. The 50% survival in 100% effluent for a 24-hour period standard applies to all tests utilizing a 100% effluent dilution, regardless of whether the results are submitted to comply with the minimum testing frequency.



2. Required Toxicity Testing Conditions

- a. Test Acceptance – The permittee shall repeat any toxicity test, including the control, if the control fails to meet a mean survival equal to or greater than 90%.
- b. Dilution Water - In accordance with Part 1.c., the control and dilution water shall consist of standard, synthetic, moderately hard, reconstituted water.

2. Required Toxicity Testing Conditions

- a. Test Acceptance – The permittee shall repeat any toxicity test, including the control, if the control fails to meet a mean survival equal to or greater than 90%.
- b. Dilution Water - In accordance with Part 1.c., the control and dilution water shall consist of standard, synthetic, moderately hard, reconstituted water.
- c. Samples and Composites
  - 1) The permittee shall collect one composite sample from Outfall 001.
  - 2) The permittee shall collect the composite samples such that the sample is representative of any periodic episode of chlorination, biocide usage, or other potentially toxic substance being discharged.
  - 3) The permittee shall initiate the toxicity tests within 36 hours after collection of the last portion of the composite sample. The samples shall be maintained at a temperature of 0-6 degrees Centigrade during collection, shipping, and storage.
  - 4) If Outfall 001 ceases discharging during the collection of the effluent composite sample, the requirements for the minimum number of effluent portions are waived. However, the permittee must have collected a composite sample volume sufficient for completion of the required test. The abbreviated sample collection, duration, and methodology must be documented in the full report.
  - 5) The effluent sample shall not be dechlorinated after sample collection.

3. Reporting

All reports, tables, plans, summaries, and related correspondence required in this section shall be submitted to the attention of the Standards Implementation Team (MC 150) of the Water Quality Division.

- a. The permittee shall prepare a full report of the results of all tests conducted pursuant to this permit in accordance with the manual referenced in Part 1.b. for every valid and invalid toxicity test initiated.
- b. The permittee shall routinely report the results of each biomonitoring test on the Table 2 forms provided with this permit.

- 1) Semiannual biomonitoring test results are due on or before July 20th and January 20th for biomonitoring conducted during the previous 6-month period.
  - 2) Quarterly biomonitoring test results are due on or before April 20th, July 20th, October 20th, and January 20th for biomonitoring conducted during the previous calendar quarter.
- c. Enter the following codes for the appropriate parameters for valid tests only:
- 1) For the water flea, Parameter TIE3D, enter a "0" if the mean survival at 24 hours is greater than 50% in the 100% effluent dilution; if the mean survival is less than or equal to 50%, enter "1."
  - 2) For the fathead minnow, Parameter TIE6C, enter a "0" if the mean survival at 24 hours is greater than 50% in the 100% effluent dilution; if the mean survival is less than or equal to 50%, enter "1."
- d. Enter the following codes for retests only:
- 1) For retest number 1, Parameter 22415, enter a "0" if the mean survival at 24 hours is greater than 50% in the 100% effluent dilution; if the mean survival is less than or equal to 50%, enter "1."
  - 2) For retest number 2, Parameter 22416, enter a "0" if the mean survival at 24 hours is greater than 50% in the 100% effluent dilution; if the mean survival is less than or equal to 50%, enter "1."

4. Persistent Mortality

The requirements of this part apply when a toxicity test demonstrates significant lethality, which is defined as a mean mortality of 50% or greater of organisms exposed to the 100% effluent concentration for 24 hours.

- a. The permittee shall conduct 2 additional tests (retests) for each species that demonstrates significant lethality. The two retests shall be conducted once per week for 2 weeks. Five effluent dilution concentrations in addition to an appropriate control shall be used in the retests. These effluent concentrations are 6%, 13%, 25%, 50% and 100% effluent. The first retest shall be conducted within 15 days of the laboratory determination of significant lethality. All test results shall be submitted within 20 days of test completion of the second retest. Test completion is defined as the 24th hour.
- b. If one or both of the two retests specified in Part 4.a. demonstrates significant lethality, the permittee shall initiate the TRE requirements as specified in Part 5.

5. Toxicity Reduction Evaluation

- a. Within 45 days of the retest that demonstrates significant lethality, the permittee shall submit a general outline for initiating a TRE. The outline shall include, but not be limited to, a description of project personnel, a schedule for obtaining

consultants (if needed), a discussion of influent and effluent data available for review, a sampling and analytical schedule, and a proposed TRE initiation date.

- b. Within 90 days of the retest that demonstrates significant lethality, the permittee shall submit a TRE action plan and schedule for conducting a TRE. The plan shall specify the approach and methodology to be used in performing the TRE. A TRE is a step-wise investigation combining toxicity testing with physical and chemical analysis to determine actions necessary to eliminate or reduce effluent toxicity to a level not effecting significant lethality at the critical dilution. The TRE action plan shall lead to the successful elimination of significant lethality for both test species defined in Part 1.b. At a minimum, the TRE action plan shall include the following:
- 1) Specific Activities - The TRE action plan shall specify the approach the permittee intends to utilize in conducting the TRE, including toxicity characterizations, identifications, confirmations, source evaluations, treatability studies, and alternative approaches. When conducting characterization analyses, the permittee shall perform multiple characterizations and follow the procedures specified in the document entitled "Methods for Aquatic Toxicity Identification Evaluations: Phase I Toxicity Characterization Procedures" (EPA/600/6-91/003) or alternate procedures. The permittee shall perform multiple identifications and follow the methods specified in the documents entitled "Methods for Aquatic Toxicity Identification Evaluations: Phase II Toxicity Identification Procedures for Samples Exhibiting Acute and Chronic Toxicity" (EPA/600/R-92/080) and "Methods for Aquatic Toxicity Identification Evaluations: Phase III Toxicity Confirmation Procedures for Samples Exhibiting Acute and Chronic Toxicity" (EPA/600/R-92/081). All characterization, identification, and confirmation tests shall be conducted in an orderly and logical progression;
  - 2) Sampling Plan - The TRE action plan should describe sampling locations, methods, holding times, chain of custody, and preservation techniques. The effluent sample volume collected for all tests shall be adequate to perform the toxicity characterization/identification/confirmation procedures, and chemical-specific analyses when the toxicity tests show significant lethality. Where the permittee has identified or suspects a specific pollutant and source of effluent toxicity, the permittee shall conduct, concurrent with toxicity testing, chemical-specific analyses for the identified and suspected pollutant and source of effluent toxicity;
  - 3) Quality Assurance Plan - The TRE action plan should address record keeping and data evaluation, calibration and standardization, baseline tests, system blanks, controls, duplicates, spikes, toxicity persistence in the samples, randomization, reference toxicant control charts, and mechanisms to detect artifactual toxicity; and
  - 4) Project Organization - The TRE action plan should describe the project staff, manager, consulting engineering services (where applicable), consulting analytical and toxicological services, etc.

- c. Within 30 days of submittal of the TRE action plan and schedule, the permittee shall implement the TRE.
- d. The permittee shall submit quarterly TRE activities reports concerning the progress of the TRE. The quarterly TRE activities reports are due on or before April 20th, July 20th, October 20th, and January 20th. The report shall detail information regarding the TRE activities including:
  - 1) results and interpretation of any chemical-specific analyses for the identified and suspected pollutant performed during the quarter;
  - 2) results and interpretation of any characterization, identification, and confirmation tests performed during the quarter;
  - 3) any data and substantiating documentation that identifies the pollutant and source of effluent toxicity;
  - 4) results of any studies/evaluations concerning the treatability of the facility's effluent toxicity;
  - 5) any data that identifies effluent toxicity control mechanisms that will reduce effluent toxicity to the level necessary to eliminate significant lethality; and
  - 6) any changes to the initial TRE plan and schedule that are believed necessary as a result of the TRE findings.
- e. During the TRE, the permittee shall perform, at a minimum, quarterly testing using the more sensitive species. Testing for the less sensitive species shall continue at the frequency specified in Part 1.b.
- f. If the effluent ceases to effect significant lethality, i.e., there is a cessation of lethality, the permittee may end the TRE. A cessation of lethality is defined as no significant lethality for a period of 12 consecutive weeks with at least weekly testing. At the end of the 12 weeks, the permittee shall submit a statement of intent to cease the TRE and may then resume the testing frequency specified in Part 1.b.

This provision accommodates situations where operational errors and upsets, spills, or sampling errors triggered the TRE, in contrast to a situation where a single toxicant or group of toxicants cause lethality. This provision does not apply as a result of corrective actions taken by the permittee. Corrective actions are defined as proactive efforts that eliminate or reduce effluent toxicity. These include, but are not limited to, source reduction or elimination, improved housekeeping, changes in chemical usage, and modifications of influent streams and effluent treatment.

The permittee may only apply this cessation of lethality provision once. If the effluent again demonstrates persistent significant lethality to the same species, the permit will be amended to add a WET limit with a compliance period, if appropriate. However, prior to the effective date of the WET limit, the permittee

may apply for a permit amendment removing and replacing the WET limit with an alternate toxicity control measure by identifying and confirming the toxicant and an appropriate control measure.

- g. The permittee shall complete the TRE and submit a final report on the TRE activities no later than 18 months from the last test day of the retest that demonstrates significant lethality. The permittee may petition the Executive Director (in writing) for an extension of the 18-month limit. However, to warrant an extension the permittee must have demonstrated due diligence in its pursuit of the toxicity identification evaluation/TRE and must prove that circumstances beyond its control stalled the toxicity identification evaluation/TRE. The report shall specify the control mechanism that will, when implemented, reduce effluent toxicity as specified in item 5.h. The report will also specify a corrective action schedule for implementing the selected control mechanism.
- h. Within 3 years of the last day of the test confirming toxicity, the permittee shall comply with 30 TAC § 307.6(e)(2)(B), which requires greater than 50% survival of the test organism in 100% effluent at the end of 24-hours. The permittee may petition the Executive Director (in writing) for an extension of the 3-year limit. However, to warrant an extension the permittee must have demonstrated due diligence in its pursuit of the toxicity identification evaluation/TRE and must prove that circumstances beyond its control stalled the toxicity identification evaluation/TRE.

The permittee may be exempted from complying with 30 TAC § 307.6(e)(2)(B) upon proving that toxicity is caused by an excess, imbalance, or deficiency of dissolved salts. This exemption excludes instances where individually toxic components (e.g., metals) form a salt compound. Following the exemption, this permit may be amended to include an ion-adjustment protocol, alternate species testing, or single species testing.

- i. Based upon the results of the TRE and proposed corrective actions, this permit may be amended to modify the biomonitoring requirements where necessary, require a compliance schedule for implementation of corrective actions, specify a WET limit, specify a best management practice, and specify a chemical-specific limit.
- j. Copies of any and all required TRE plans and reports shall also be submitted to the U.S. EPA Region 6 office, 6WQ-PO.

TABLE 2 (SHEET 1 OF 2)

## WATER FLEA SURVIVAL

## GENERAL INFORMATION

	Time	Date
Composite Sample Collected		
Test Initiated		

## PERCENT SURVIVAL

Time	Rep	Percent effluent					
		0%	6%	13%	25%	50%	100%
24h	A						
	B						
	C						
	D						
	E						
	MEAN						

Enter percent effluent corresponding to the LC<sub>50</sub> below:

24 hour LC<sub>50</sub> = \_\_\_\_\_% effluent

TABLE 2 (SHEET 2 OF 2)  
FATHEAD MINNOW SURVIVAL

## GENERAL INFORMATION

	Time	Date
Composite Sample Collected		
Test Initiated		

## PERCENT SURVIVAL

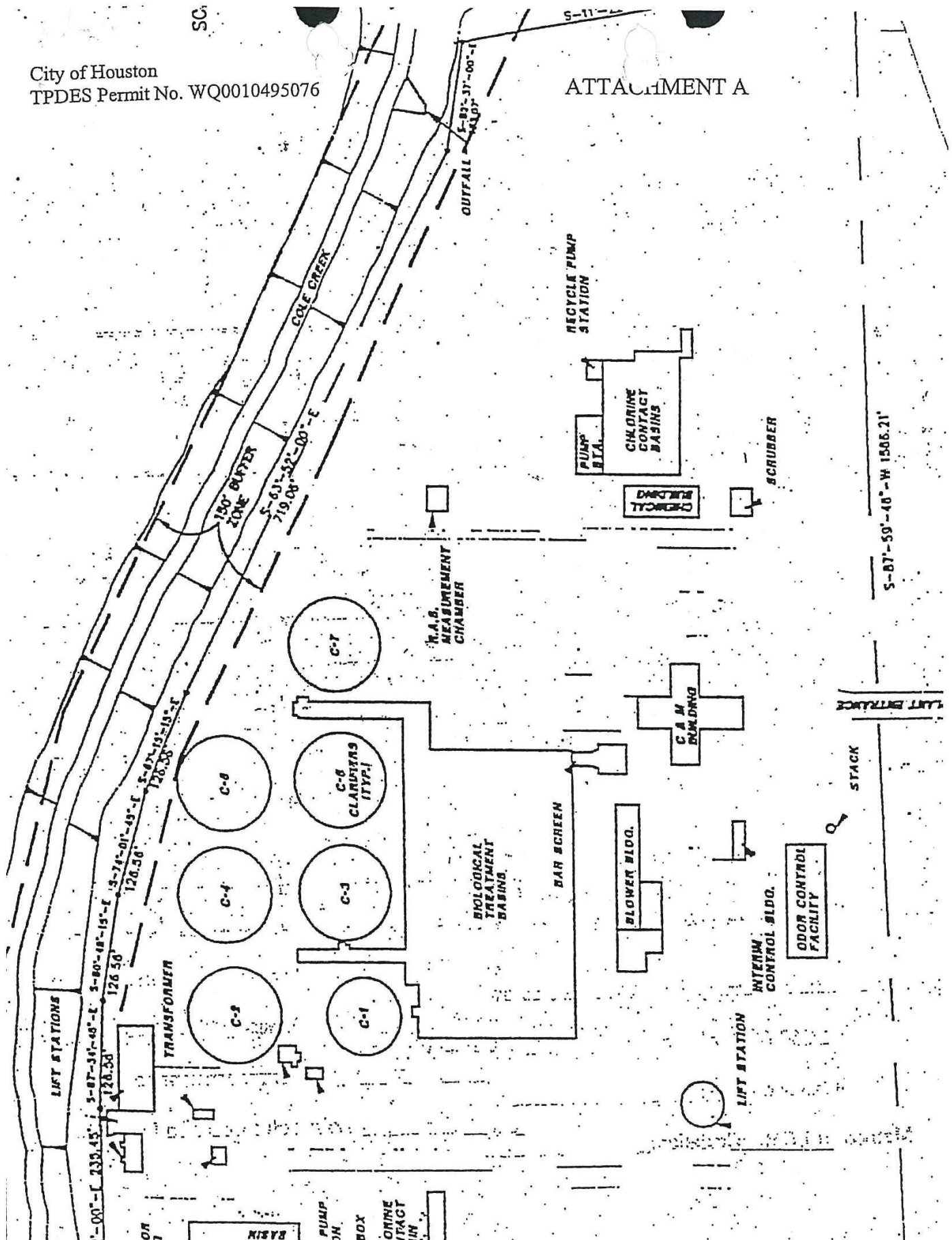
Time	Rep	Percent effluent					
		0%	6%	13%	25%	50%	100%
24h	A						
	B						
	C						
	D						
	E						
	MEAN						

Enter percent effluent corresponding to the LC<sub>50</sub> below:

24 hour LC<sub>50</sub> = \_\_\_\_\_% effluent

City of Houston  
TPDES Permit No. WQ0010495076

# ATTACHMENT A





## FACT SHEET AND EXECUTIVE DIRECTOR'S PRELIMINARY DECISION

For draft Texas Pollutant Discharge Elimination System (TPDES) Permit No. WQ0010495076, EPA I.D. No. TX0063011, to discharge to water in the state.

Issuing Office: Texas Commission on Environmental Quality  
P.O. Box 13087  
Austin, Texas 78711-3087

Applicant: City of Houston  
10500 Bellaire Boulevard  
Houston, Texas 77072

Prepared By: Miguel A. Mercado  
Municipal Permits Team  
Wastewater Permitting Section (MC 148)  
Water Quality Division  
(512) 239-4547

Date: June 14, 2024

Permit Action: Renewal

### 1. EXECUTIVE DIRECTOR RECOMMENDATION

The Executive Director has made a preliminary decision that this permit, if issued, meets all statutory and regulatory requirements. The draft permit includes an expiration date of **five years from the date of issuance**.

### 2. APPLICANT ACTIVITY

The applicant has applied to the Texas Commission on Environmental Quality (TCEQ) for a renewal of the existing permit that authorizes the discharge of treated domestic wastewater at an annual average flow not to exceed 18 million gallons per day (MGD). The existing wastewater treatment facility serves a residential area in northwest Houston between the Interstate 610 Loop and Beltway 8.

### 3. FACILITY AND DISCHARGE LOCATION

The plant site is located at 5423 Mangum Road, in the City of Houston, Harris County, Texas 77091.

#### Outfall Location:

Outfall Number	Latitude	Longitude
001	29.844860 N	95.460813 W

The treated effluent is discharged to Cole Creek, thence to Whiteoak Bayou Above Tidal in Segment No. 1017 of the San Jacinto River Basin. The designated uses for Segment No. 1017 are primary contact recreation and limited aquatic life use.

#### **4. TREATMENT PROCESS DESCRIPTION AND SEWAGE SLUDGE DISPOSAL**

The Northwest Wastewater Treatment Facility is an activated sludge process plant operated in the extended aeration mode. Treatment units include bar screens, ten aeration basins, six final clarifiers, two chlorine contact chambers and a dechlorination chamber. The facility is in operation.

Sludge generated from the treatment facility is pumped or hauled by a registered transporter to 69th Street Wastewater Treatment Facility, Permit No. WQ0010495090, to be digested, dewatered, and then disposed of with the bulk of the sludge from the plant accepting the sludge. The draft permit also authorizes the disposal of sludge at a TCEQ-authorized land application site, co-disposal landfill, wastewater treatment facility, or facility that further processes sludge.

#### **5. INDUSTRIAL WASTE CONTRIBUTION**

The draft permit includes pretreatment requirements that are appropriate for a facility of this size and complexity. The Northwest WWTP receives significant industrial wastewater contributions.

#### **6. SUMMARY OF SELF-REPORTED EFFLUENT ANALYSES**

The following is a summary of the applicant's effluent monitoring data for the period November 2021 through November 2023. The average of Daily Average value is computed by the averaging of all 30-day average values for the reporting period for each parameter: flow, five-day carbonaceous biochemical oxygen demand (CBOD<sub>5</sub>), total suspended solids (TSS), and ammonia nitrogen (NH<sub>3</sub>-N). The average of Daily Average value for *Escherichia coli* (*E. coli*) in colony-forming units (CFU) or most probable number (MPN) per 100 ml is calculated via geometric mean.

<u>Parameter</u>	<u>Average of Daily Avg</u>
Flow, MGD	8.8
CBOD <sub>5</sub> , mg/l	2.3
TSS, mg/l	2.4
NH <sub>3</sub> -N, mg/l	1.2
<i>E. coli</i> , CFU or MPN per 100 ml	1

#### **7. DRAFT PERMIT CONDITIONS AND MONITORING REQUIREMENTS**

The effluent limitations and monitoring requirements for those parameters that are limited in the draft permit are as follows:

##### **A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS**

The annual average flow of effluent shall not exceed 18 MGD, nor shall the average discharge during any two-hour period (2-hour peak) exceed 56,944 gallons per minute.

<u>Parameter</u>	<u>30-Day Average</u>		<u>7-Day</u>	<u>Daily</u>
	<u>mg/l</u>	<u>lbs/day</u>	<u>Average</u> <u>mg/l</u>	<u>Maximum</u> <u>mg/l</u>
CBOD <sub>5</sub>	10	1,501	15	25
TSS	15	2,252	25	40
NH <sub>3</sub> -N	3	450	5	10
DO (minimum)	4.0	N/A	N/A	N/A
<i>E. coli</i> , CFU or MPN/100 ml	63	N/A	N/A	200

The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units and shall be monitored once per day by grab sample. There shall be no discharge of floating solids or visible foam in other than trace amounts and no discharge of visible oil.

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

<u>Parameter</u>	<u>Monitoring Requirement</u>
Flow, MGD	Continuous
CBOD <sub>5</sub>	One/day
TSS	One/day
NH <sub>3</sub> -N	One/day
DO	One/day
<i>E. coli</i>	Five/week

#### B. SEWAGE SLUDGE REQUIREMENTS

The draft permit includes Sludge Provisions according to the requirements of 30 TAC Chapter 312, Sludge Use, Disposal, and Transportation. Sludge generated from the treatment facility is pumped or hauled by a registered transporter to 69th Street Wastewater Treatment Facility, Permit No. WQ0010495090, to be digested, dewatered, and then disposed of with the bulk of the sludge from the plant accepting the sludge. The draft permit also authorizes the disposal of sludge at a TCEQ-authorized land application site, co-disposal landfill, wastewater treatment facility, or facility that further processes sludge.

#### C. PRETREATMENT REQUIREMENTS

Permit requirements for pretreatment are based on TPDES regulations contained in 30 TAC Chapter 305, which references 40 Code of Federal Regulations (CFR) Part 403, "General Pretreatment Regulations for Existing and New Sources of Pollution" [*rev. Federal Register/ Vol. 70/ No. 198/ Friday, October 14, 2005/ Rules and Regulations, pages 60134-60798*]. The permit includes specific requirements that establish responsibilities of local government, industry, and

the public to implement the standards to control pollutants which pass through or interfere with treatment processes in publicly owned treatment works or which may contaminate the sewage sludge. This permit has appropriate pretreatment language for a facility of this size and complexity.

The permittee has a pretreatment program which was approved by the U.S. Environmental Protection Agency (EPA) on **November 27, 1984**, and modified on **February 26, 1993**, and **March 11, 2020 (nonsubstantial Streamlining Rule modification)** and on **June 14, 2021 (TBLLs)**. The permittee is required, under the conditions of the approved pretreatment program, to prepare annually a list of industrial users which during the preceding twelve months were in significant noncompliance with applicable pretreatment requirements for those facilities covered under the program. This list is to be published annually during the month of **November** in a newspaper of general circulation that provides meaningful public notice within the jurisdiction(s) served by the POTW.

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

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

The permittee shall submit to the TCEQ Pretreatment Team (MC 148) of the Water Quality Division, within **sixty (60) days** of the issued date of this permit, either: (1) a **WRITTEN CERTIFICATION** that a technical reassessment has been performed and that the evaluation demonstrates that the existing technically based local limits (TBLLs) attain the Texas Surface Water Quality Standards [30 TAC Chapter 307] in water in the state, and are adequate to prevent pass through of pollutants, inhibition of or interference with the treatment facility, worker health and safety problems, and sludge contamination [submit the TBLLs Reassessment Form No. TCEQ-20221], **OR** (2) a **WRITTEN NOTIFICATION** that a technical redevelopment of the current TBLLs, a draft legal authority, which incorporates such revisions, and any additional modifications to the approved Pretreatment Program, as required by 40 CFR Part 403 [rev. 10/14/05] and applicable state and local law, including an Enforcement Response Plan and Standard Operating Procedures (including forms), will be submitted within **twelve (12) months** of the issued date of the permit

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

**D. WHOLE EFFLUENT TOXICITY (BIOMONITORING) REQUIREMENTS**

- (1) The draft permit includes chronic freshwater biomonitoring requirements as follows. The permit requires five dilutions in addition to the control (0% effluent) to be used in the toxicity tests. These additional effluent concentrations shall be 27%, 37%, 49%, 65%, and 100%. The low-flow effluent concentration (critical dilution) is defined as 65% effluent. The critical dilution is in accordance with the "Aquatic Life Criteria" section of the "Water Quality Based Effluent Limitations/Conditions" section.
  - a) Chronic static renewal survival and reproduction test using the water flea (*Ceriodaphnia dubia*). The frequency of the testing is once per quarter for at least the first year of testing, after which the permittee may apply for a testing frequency reduction.
  - b) Chronic static renewal 7-day larval survival and growth test using the fathead minnow (*Pimephales promelas*). The frequency of the testing is once per quarter for at least the first year of testing, after which the permittee may apply for a testing frequency reduction.
- (2) The draft permit includes the following minimum 24-hour acute freshwater biomonitoring requirements at a frequency of once per six months:

**FRESHWATER**

- (a) Acute 24-hour static toxicity test using the water flea (*Daphnia pulex* or *Ceriodaphnia dubia*).
- (b) Acute 24-hour static toxicity test using the fathead minnow (*Pimephales promelas*).

**E. SUMMARY OF CHANGES FROM APPLICATION**

None.

**I. SUMMARY OF CHANGES FROM EXISTING PERMIT**

Effluent limitations and monitoring requirements in the draft permit remain the same as the existing permit requirements.

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

*E. coli* bacteria limits have been continued in the draft permit in accordance with the recent amendments to 30 TAC Chapters 309 and 319. The bacteria limits in the draft permit are consistent with the requirements of the Total Maximum Daily Load (TMDL), Project No. 22, and any subsequent associated WQMP

updates.

For Publicly Owned Treatment Works (POTWs), effective December 21, 2025, the permittee must submit the written report for unauthorized discharges and unanticipated bypasses that exceed any effluent limit in the permit using the online electronic reporting system available through the TCEQ website unless the permittee requests and obtains an electronic reporting waiver.

Certain accidental discharges or spills of treated or untreated wastewater from wastewater treatment facilities or collection systems owned or operated by a local government may be reported on a monthly basis in accordance with 30 TAC § 305.132.

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

## **8. DRAFT PERMIT RATIONALE**

### **A. TECHNOLOGY-BASED EFFLUENT LIMITATIONS/CONDITIONS**

Regulations promulgated in Title 40 of the CFR require that technology-based limitations be placed in wastewater discharge permits based on effluent limitations guidelines, where applicable, or on best professional judgment (BPJ) in the absence of guidelines.

Effluent limitations for maximum and minimum pH are in accordance with 40 CFR § 133.102(c) and 30 TAC § 309.1(b).

Texas Surface Water Quality Standards (TSWQS) at 30 TAC Chapter 307 allow for consideration of the mixing of effluent and receiving water when evaluating discharge compliance with water quality criteria for pH. The discharge authorized by this permit shall meet the TSWQS pH criterion for Segment No. 1017 of 6.5 to 9.0 standard units at the edge of the chronic mixing zone.

A mixing zone evaluation for pH is included within Attachment A of this Fact Sheet. The evaluation has demonstrated that the technology based pH limitations of 6.0 to 9.0 standard units will ensure compliance with the TSWQS pH criterion at the edge of the chronic mixing zone. See Attachment A of this Fact Sheet.

### **B. WATER QUALITY SUMMARY AND COASTAL MANAGEMENT PLAN**

#### **(1) WATER QUALITY SUMMARY**

The treated effluent is discharged to Cole Creek, thence to Whiteoak Bayou Above Tidal in Segment No. 1017 of the San Jacinto River Basin. The designated uses for Segment No. 1017 are primary contact recreation and limited aquatic life use. The effluent limitations in the draft permit will maintain and protect the existing instream uses. All determinations are preliminary and subject to additional review and/or revisions.

The discharge from this permit action is not expected to have an effect on any federal endangered or threatened aquatic or aquatic-dependent species or proposed species or their critical habitat. This determination is based on the United States Fish and Wildlife Service's (USFWS's) biological opinion on the State of Texas authorization of the TPDES (September 14, 1998; October 21, 1998, update). To make this determination for TPDES permits, TCEQ and EPA only considered aquatic or aquatic-dependent species occurring in watersheds of critical concern or high priority as listed in Appendix A of the USFWS biological opinion. The determination is subject to reevaluation due to subsequent updates or amendments to the biological opinion. The permit does not require EPA review with respect to the presence of endangered or threatened species.

Segment No. 1017 is not currently listed on the state's inventory of impaired and threatened waters (the 2022 CWA § 303(d) list).

The pollutant analysis of treated effluent provided by the permittee in the application indicated 589 mg/l total dissolved solids (TDS), 100 mg/l sulfate, and 134 mg/l chloride present in the effluent. The segment criteria for Segment No. 1017 are 600 mg/l for TDS, 65 mg/l for sulfate, and 110 mg/l for chlorides. Based on dissolved solids screening, the Standards Implementation Team recommendation, and information received from the applicant on July 3, 2024, no monitoring requirements were placed in the draft permit for TDS, chloride, or sulfate. See Attachment B of this Fact Sheet.

The total maximum daily load (TMDL) Project No. 22, *Eighteen Total Maximum Daily Loads for Bacteria in Buffalo and Whiteoak Bayous and Tributaries Segments 1013, 1013A, 1013C, 1014, 1014A, 1014B, 1014E, 1014H, 1014K, 1014L, 1014M, 1014N, 1014O, 1017, 1017A, 1017B, 1017D, and 1017E*, has been approved for this segment.

On April 8, 2009, the TCEQ adopted the TMDL, and the EPA approved it on June 11, 2009. The TMDL addresses elevated levels of bacteria in multiple segments and assessment units of these bayous and their tributaries. The waste load allocation (WLA) for wastewater treatment facilities was established as the permitted flow for each facility multiplied by one-half the geometric mean criterion for bacteria. Future growth from existing or new permitted sources is not limited by these TMDLs as long as the sources do not exceed the limits of one-half the bacteria geometric mean criterion for *E. coli*. To ensure that effluent limitations for this discharge are consistent with the WLAs provided in the TMDL, a concentration based effluent limitation for *E. coli* of 63 MPN per 100 ml has been continued in the draft permit.

The TMDL Project No. 1, *Fourteen Total Maximum Daily Loads for Nickel in the Houston Ship Channel System*, has been withdrawn, and is no longer applicable to Segment No. 1017.

The effluent limitations and conditions in the draft permit comply with

EPA-approved portions of the 2018 Texas Surface Water Quality Standards (TSWQS), 30 TAC §§ 307.1 - 307.10, effective March 1, 2018; 2014 TSWQS, effective March 6, 2014; 2010 TSWQS, effective July 22, 2010; and 2000 TSWQS, effective July 26, 2000.

(2) CONVENTIONAL PARAMETERS

Effluent limitations for the conventional effluent parameters (i.e., Five-Day Biochemical Oxygen Demand or Five-Day Carbonaceous Biochemical Oxygen Demand, Ammonia Nitrogen, etc.) are based on stream standards and waste load allocations for water quality-limited streams as established in the TSWQS and the State of Texas Water Quality Management Plan (WQMP).

The effluent limitations in the draft permit have been reviewed for consistency with the WQMP. The proposed effluent limitations are contained in the approved WQMP.

The effluent limitations in the draft permit meet the requirements for secondary treatment and the requirements for disinfection according to 30 TAC Chapter 309, Subchapter A: Effluent Limitations.

(3) COASTAL MANAGEMENT PLAN

The facility is not located in the Coastal Management Program boundary.

C. WATER QUALITY-BASED EFFLUENT LIMITATIONS/CONDITIONS

(1) GENERAL COMMENTS

The Texas Surface Water Quality Standards (30 TAC Chapter 307) state that surface waters will not be toxic to man, or to terrestrial or aquatic life. The methodology outlined in the "Procedures to Implement the Texas Surface Water Quality Standards, June 2010" is designed to ensure compliance with 30 TAC Chapter 307. Specifically, the methodology is designed to ensure that no source will be allowed to discharge any wastewater that: (1) results in instream aquatic toxicity; (2) causes a violation of an applicable narrative or numerical state water quality standard; (3) results in the endangerment of a drinking water supply; or (4) results in aquatic bioaccumulation that threatens human health.

(2) AQUATIC LIFE CRITERIA

(a) SCREENING

Water quality-based effluent limitations are calculated from freshwater aquatic life criteria found in Table 1 of the Texas Surface Water Quality Standards (30 TAC Chapter 307).

Acute freshwater criteria are applied at the edge of the zone of initial



dilution (ZID), and chronic freshwater criteria are applied at the edge of the aquatic life mixing zone. The ZID for this discharge is defined as 20 feet upstream and 60 feet downstream from the point where the discharge enters Whiteoak Bayou Above Tidal. The aquatic life mixing zone for this discharge is defined as 100 feet upstream and 300 feet downstream from the point where the discharge enters Whiteoak Bayou Above Tidal.

TCEQ uses the mass balance equation to estimate dilutions at the edges of the ZID and aquatic life mixing zone during critical conditions. The estimated dilution at the edge of the aquatic life mixing zone is calculated using the permitted flow of 18 MGD and the 7-day, 2-year (7Q2) flow of 14.98 cubic feet per second (cfs) for Whiteoak Bayou Above Tidal. The estimated dilution at the edge of the ZID is calculated using the permitted flow of 18 MGD and 25% of the 7Q2 flow. The following critical effluent percentages are being used:

Acute Effluent %:	88.15%	Chronic Effluent %:	65.02%
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Waste load allocations (WLAs) are calculated using the above estimated effluent percentages, criteria outlined in the Texas Surface Water Quality Standards, and partitioning coefficients for metals (when appropriate and designated in the implementation procedures). The WLA is the end-of-pipe effluent concentration that can be discharged when, after mixing in the receiving stream, instream numerical criteria will not be exceeded. From the WLA, a long-term average (LTA) is calculated using a log normal probability distribution, a given coefficient of variation (0.6), and a 90<sup>th</sup> percentile confidence level.

The LTA is the long-term average effluent concentration for which the WLA will never be exceeded using a selected percentile confidence level. The lower of the two LTAs (acute and chronic) is used to calculate a daily average and daily maximum effluent limitation for the protection of aquatic life using the same statistical considerations with the 99<sup>th</sup> percentile confidence level and a standard number of monthly effluent samples collected (12).

Assumptions used in deriving the effluent limitations include segment values for hardness, chlorides, pH, and total suspended solids (TSS) according to the segment-specific values contained in the TCEQ guidance document "Procedures to Implement the Texas Surface Water Quality Standards, June 2010." The segment values are 40 mg/l for hardness (as calcium carbonate), 86 mg/l chlorides, 7.6 standard units for pH, and 10 mg/l for TSS. For additional details on the calculation of water quality-based effluent limitations, refer to the TCEQ guidance document.

TCEQ practice for determining significant potential is to compare the reported analytical data against percentages of the calculated daily average water quality-based effluent limitation. Permit limitations are required when analytical data reported in the application exceeds 85% of the calculated daily average water quality-based effluent limitation.

Monitoring and reporting is required when analytical data reported in the application exceeds 70% of the calculated daily average water quality-based effluent limitation. See Attachment C of this Fact Sheet.

(b) PERMIT ACTION

Analytical data reported in the application was screened against calculated water quality-based effluent limitations for the protection of aquatic life. Reported analytical data does not exceed 70% of the calculated daily average water quality-based effluent limitations for aquatic life protection.

(3) AQUATIC ORGANISM BIOACCUMULATION CRITERIA

(a) SCREENING

Water quality-based effluent limitations for the protection of human health are calculated using criteria for the consumption of freshwater fish tissue found in Table 2 of the Texas Surface Water Quality Standards (30 TAC Chapter 307). Freshwater fish tissue bioaccumulation criteria are applied at the edge of the human health mixing zone. The human health mixing zone for this discharge is identical to the aquatic life mixing zone. TCEQ uses the mass balance equation to estimate dilution at the edge of the human health mixing zone during average flow conditions. The estimated dilution at the edge of the human health mixing zone is calculated using the permitted flow of 18 MGD and the harmonic mean flow of 28.45 cfs for Whiteoak Bayou Above Tidal. The following critical effluent percentage is being used:

Human Health Effluent %: 49.47%

Water quality-based effluent limitations for human health protection against the consumption of fish tissue are calculated using the same procedure as outlined for calculation of water quality-based effluent limitations for aquatic life protection. A 99<sup>th</sup> percentile confidence level in the long-term average calculation is used with only one long-term average value being calculated.

Significant potential is again determined by comparing reported analytical data against 70% and 85% of the calculated daily average water quality-based effluent limitation. See Attachment C of this Fact Sheet.

(b) PERMIT ACTION

Reported analytical data does not exceed 70% of the calculated daily average water quality-based effluent limitation for human health protection.

(4) DRINKING WATER SUPPLY PROTECTION

(a) SCREENING

Water Quality Segment No. 1017, which receives the discharge from this facility, is not designated as a public water supply. Screening reported analytical data of the effluent against water quality-based effluent limitations calculated for the protection of a drinking water supply is not applicable.

(b) PERMIT ACTION

None.

(5) WHOLE EFFLUENT TOXICITY (BIOMONITORING) CRITERIA

(a) SCREENING

TCEQ has determined that there may be pollutants present in the effluent that may have the potential to cause toxic conditions in the receiving stream. Whole effluent biomonitoring is the most direct measure of potential toxicity that incorporates the effects of synergism of effluent components and receiving stream water quality characteristics. Biomonitoring of the effluent is, therefore, required as a condition of this permit to assess potential toxicity.

The existing permit includes chronic freshwater biomonitoring requirements. A summary of the biomonitoring testing for the facility indicates that in the past three years, the permittee performed eighteen chronic tests, with zero demonstrations of significant toxicity (i.e., zero failures).

A reasonable potential determination was performed in accordance with 40 CFR §122.44(d)(1)(ii) to determine whether the discharge will reasonably be expected to cause or contribute to an exceedance of a state water quality standard or criterion within that standard. Each test species is evaluated separately. The RP determination is based on representative data from the previous three years of chronic WET testing. This determination was performed in accordance with the methodology outlined in the TCEQ letter to the EPA dated December 28, 2015, and approved by the EPA in a letter dated December 28, 2015.

With zero failures, a determination of no RP was made. WET limits are not required and both test species may be eligible for the testing frequency reduction after one year of quarterly testing.

(b) PERMIT ACTION

The test species are appropriate to measure the toxicity of the effluent consistent with the requirements of the State water quality standards. The biomonitoring frequency has been established to reflect the likelihood of ambient toxicity and to provide data representative of the toxic potential of the facility's discharge. This permit may be reopened to require effluent limits, additional testing, and/or other appropriate actions to address

toxicity if biomonitoring data show actual or potential ambient toxicity to be the result of the permittee's discharge to the receiving stream or water body.

(6) **WHOLE EFFLUENT TOXICITY CRITERIA (24-HOUR ACUTE)**

(a) **SCREENING**

The existing permit includes 24-hour acute freshwater biomonitoring language. A summary of the biomonitoring testing for the facility indicates that in the past three years, the permittee has performed twelve 24-hour acute tests, with zero demonstrations of significant mortality (i.e., zero failures).

(b) **PERMIT ACTION**

The draft permit includes 24-hour 100% acute biomonitoring tests for the life of the permit.

**9. WATER QUALITY VARIANCE REQUESTS**

No variance requests have been received.

**10. PROCEDURES FOR FINAL DECISION**

When an application is declared administratively complete, the Chief Clerk sends a letter to the applicant advising the applicant to publish the Notice of Receipt of Application and Intent to Obtain Permit in the newspaper. In addition, the Chief Clerk instructs the applicant to place a copy of the application in a public place for review and copying in the county where the facility is or will be located. This application will be in a public place throughout the comment period. The Chief Clerk also mails this notice to any interested persons and, if required, to landowners identified in the permit application. This notice informs the public about the application and provides that an interested person may file comments on the application or request a contested case hearing or a public meeting.

Once a draft permit is completed, it is sent, along with the Executive Director's preliminary decision, as contained in the technical summary or fact sheet, to the Chief Clerk. At that time, the Notice of Application and Preliminary Decision will be mailed to the same people and published in the same newspaper as the prior notice. This notice sets a deadline for making public comments. The applicant must place a copy of the Executive Director's preliminary decision and draft permit in the public place with the application.

Any interested person may request a public meeting on the application until the deadline for filing public comments. A public meeting is intended for the taking of public comment and is not a contested case proceeding.

After the public comment deadline, the Executive Director prepares a response to all significant public comments on the application or the draft permit raised during the public comment period. The Chief Clerk then mails the Executive Director's response to comments and final decision to people who have filed comments, requested a contested

case hearing, or requested to be on the mailing list. This notice provides that if a person is not satisfied with the Executive Director's response and decision, they can request a contested case hearing or file a request to reconsider the Executive Director's decision within 30 days after the notice is mailed.

The Executive Director will issue the permit unless a written hearing request or request for reconsideration is filed within 30 days after the Executive Director's response to comments and final decision is mailed. If a hearing request or request for reconsideration is filed, the Executive Director will not issue the permit and will forward the application and request to the TCEQ Commissioners for their consideration at a scheduled Commission meeting. If a contested case hearing is held, it will be a legal proceeding similar to a civil trial in state district court.

If the Executive Director calls a public meeting or the Commission grants a contested case hearing as described above, the Commission will give notice of the date, time, and place of the meeting or hearing. If a hearing request or request for reconsideration is made, the Commission will consider all public comments in making its decision and shall either adopt the Executive Director's response to public comments or prepare its own response.

For additional information about this application, contact Miguel A. Mercado at (512) 239-4547.

#### **11. ADMINISTRATIVE RECORD**

The following items were considered in developing the draft permit:

**A. PERMIT(S)**

TPDES Permit No. WQ0010495076 issued on June 14, 2021.

**B. APPLICATION**

Application received on December 1, 2023, and additional information received on December 15, 2023, February 7, 2024, May 10, 2024.

**C. MEMORANDA**

Interoffice Memoranda from the Water Quality Assessment Section of the TCEQ Water Quality Division. Interoffice Memorandum from the Pretreatment Team of the TCEQ Water Quality Division.

**D. MISCELLANEOUS**

Federal Clean Water Act § 402; Texas Water Code § 26.027; 30 TAC Chapters 30, 305, 309, 312, and 319; Commission policies; and U.S. Environmental Protection Agency guidelines.

Texas Surface Water Quality Standards, 30 TAC §§ 307.1 - 307.10.

*Procedures to Implement the Texas Surface Water Quality Standards (IP),*

Texas Commission on Environmental Quality, June 2010, as approved by the U.S. Environmental Protection Agency, and the IP, January 2003, for portions of the 2010 IP not approved by the U.S. Environmental Protection Agency.

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

Texas Natural Resource Conservation Commission, Guidance Document for Establishing Monitoring Frequencies for Domestic and Industrial Wastewater Discharge Permits, Document No. 98-001.000-OWR-WQ, May 1998.

*Eighteen Total Maximum Daily Loads for Bacteria in Buffalo and Whiteoak Bayous and Tributaries Segments 1013, 1013A, 1013C, 1014, 1014A, 1014B, 1014E, 1014H, 1014K, 1014L, 1014M, 1014N, 1014O, 1017, 1017A, 1017B, 1017D, and 1017E (TMDL Project No. 22).*

## Attachment A: pH Screening

Calculation of pH of a mixture of two flows. Based on the procedure in EPA's DESCON program (EPA, 1988. Technical Guidance on Supplementary Stream Design Conditions for Steady State Modeling. USEPA Office of Water, Washington D.C.)  
CowTown Pipeline, pre-app

City of Houston; 10495-076  
Segment 1017

INPUT		
1. DILUTION FACTOR AT MIXING ZONE BOUNDARY	1.530	1.530
RECEIVING WATER CHARACTERISTICS		
2. Temperature (deg C):	31.00	31.00
3. pH:	7.70	7.70
4. Alkalinity (mg CaCO3/L):	81.00	81.00
EFFLUENT CHARACTERISTICS		
5. Temperature (deg C):	20.00	30.00
6. pH:	6.00	9.00
7. Alkalinity (mg CaCO3/L):	20.00 *	80.00
OUTPUT		
1. IONIZATION CONSTANTS		
Upstream/Background pKa:	6.32	6.32
Effluent pKa:	6.38	6.32
2. IONIZATION FRACTIONS		
Upstream/Background Ionization Fraction:	0.96	0.96
Effluent Ionization Fraction:	0.29	1.00
3. TOTAL INORGANIC CARBON		
Upstream/Background Total Inorganic Carbon (mg CaCO3/L):	84.37	84.37
Effluent Total Inorganic Carbon (mg CaCO3/L):	68.20	80.17
4. CONDITIONS AT MIXING ZONE BOUNDARY		
Temperature (deg C):	23.81	30.35
Alkalinity (mg CaCO3/L):	41.13	80.35
Total Inorganic Carbon (mg CaCO3/L):	73.80	81.63
pKa:	6.36	6.32
<b>pH at Mixing Zone Boundary:</b>	<b>6.46</b>	<b>8.12</b>

**Source Data:** Critical conditions memo feb 13, 2024

fraction at edge of chronic mixing zone: **65.02**  
Eff. Flow (cfs): **27.85** 7Q2 flow: **14.98**  
Next: take reciprocal of % @ edge of mixing zone to get dilution factor

IPs Table D-08 **7.6**  
IPs Table D-08  
Seg. 1017

Segment criteria 6.5-9.0

Rounds to 6.5

\* Assume minimal total alkalinity at low effluent pH based on carbonate equilibrium chemistry of natural and treated waters

## Attachment B: Screening Calculations for Total Dissolved Solids, Chloride, and Sulfate

### Screening Calculations for Total Dissolved Solids, Chloride, and Sulfate

#### Menu 3 - Discharge to a Perennial Stream or River

<b>Applicant Name:</b>	<b>City of Houston</b>
<b>Permit Number, Outfall:</b>	<b>10495076</b>
<b>Segment Number:</b>	<b>1017</b>

Enter values needed for screening:		Data Source (edit if different)	
QE - Average effluent flow	<b>18</b>	MGD	
QS - Perennial stream harmonic mean flow	<b>28.45</b>	cfs	Critical conditions memo
QE - Average effluent flow	<b>27.8501</b>	cfs	Calculated
CA - TDS - ambient segment concentration	<b>463</b>	mg/L	2010 IP, Appendix D
CA - chloride - ambient segment concentration	<b>86</b>	mg/L	2010 IP, Appendix D
CA - sulfate - ambient segment concentration	<b>33</b>	mg/L	2010 IP, Appendix D
CC - TDS - segment criterion	<b>600</b>	mg/L	2022 TSWQS, Appendix A
CC - chloride - segment criterion	<b>110</b>	mg/L	2022 TSWQS, Appendix A
CC - sulfate - segment criterion	<b>65</b>	mg/L	2022 TSWQS, Appendix A
CE - TDS - average effluent concentration	<b>589</b>	mg/L	Permit application
CE - chloride - average effluent concentration	<b>134</b>	mg/L	Permit application
CE - sulfate - average effluent concentration	<b>100</b>	mg/L	Permit application

#### Screening Equation

$$CC \geq [(QS)(CA) + (QE)(CE)]/[QE + QS]$$

<b>No further screening for TDS needed if:</b>	<b>525.33</b>	<b>≤</b>	<b>600</b>
<b>No further screening for chloride needed if:</b>	<b>109.74</b>	<b>≤</b>	<b>110</b>
<b>No further screening for sulfate needed if:</b>	<b>66.14</b>	<b>≤</b>	<b>65</b>

#### Permit Limit Calculations

##### TDS

Calculate the WLA	WLA= $[CC(QE+QS) - (QS)(CA)]/QE$	<b>739.95</b>
Calculate the LTA	LTA = WLA * 0.93	<b>688.15</b>
Calculate the daily average	Daily Avg. = LTA * 1.47	<b>1011.59</b>
Calculate the daily maximum	Daily Max. = LTA * 3.11	<b>2140.16</b>
Calculate 70% of the daily average	70% of Daily Avg. =	<b>708.11</b>



City of Houston TPDES Permit No. WQ0010495076  
Fact Sheet and Executive Director's Preliminary Decision

Calculate 85% of the daily average	85% of Daily Avg. =	859.85		
<b>No permit limitations needed if:</b>	<b>589</b>	<b>≤</b>	<b>708.11</b>	
<b>Reporting needed if:</b>	<b>589</b>	<b>&gt;</b>	<b>708.11</b>	<b>but ≤ 859.85</b>
<b>Permit limits may be needed if:</b>	<b>589</b>	<b>&gt;</b>	<b>859.85</b>	

**No permit limitations needed for TDS**

**Chloride**

Calculate the WLA	WLA= [CC(QE+QS) - (QS)(CA)]/QE	134.52		
Calculate the LTA	LTA = WLA * 0.93	125.10		
Calculate the daily average	Daily Avg. = LTA * 1.47	<b>183.90</b>		
Calculate the daily maximum	Daily Max. = LTA * 3.11	<b>389.06</b>		
Calculate 70% of the daily average	70% of Daily Avg. =	128.73		
Calculate 85% of the daily average	85% of Daily Avg. =	156.31		
<b>No permit limitations needed if:</b>	<b>134</b>	<b>≤</b>	<b>128.73</b>	
<b>Reporting needed if:</b>	<b>134</b>	<b>&gt;</b>	<b>128.73</b>	<b>but ≤ 156.31</b>
<b>Permit limits may be needed if:</b>	<b>134</b>	<b>&gt;</b>	<b>156.31</b>	

**Reporting needed for chloride**

**Sulfate**

Calculate the WLA	WLA= [CC(QE+QS) - (QS)(CA)]/QE	97.69		
Calculate the LTA	LTA = WLA * 0.93	90.85		
Calculate the daily average	Daily Avg. = LTA * 1.47	<b>133.55</b>		
Calculate the daily maximum	Daily Max. = LTA * 3.11	<b>282.55</b>		
Calculate 70% of the daily average	70% of Daily Avg. =	93.49		
Calculate 85% of the daily average	85% of Daily Avg. =	113.52		
<b>No permit limitations needed if:</b>	<b>100</b>	<b>≤</b>	<b>93.49</b>	
<b>Reporting needed if:</b>	<b>100</b>	<b>&gt;</b>	<b>93.49</b>	<b>but ≤ 113.52</b>
<b>Permit limits may be needed if:</b>	<b>100</b>	<b>&gt;</b>	<b>113.52</b>	

**Reporting needed for sulfate**

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## Attachment C: Calculated Water Quality Based Effluent Limitations

### TEXTOX MENU #3 - PERENNIAL STREAM OR RIVER

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

Table 1, 2014 Texas Surface Water Quality Standards (30 TAC 307) for Freshwater Aquatic Life

Table 2, 2018 Texas Surface Water Quality Standards for Human Health

"Procedures to Implement the Texas Surface Water Quality Standards," TCEQ, June 2010

#### PERMIT INFORMATION

Permittee Name:	City of Houston
TPDES Permit No.:	WQ0010495076
Outfall No.:	001
Prepared by:	Miguel A. Mercado
Date:	May 6, 2024

#### DISCHARGE INFORMATION

Receiving Waterbody:	Whiteoak Bayou Above Tidal
Segment No.:	1017
TSS (mg/L):	9
pH (Standard Units):	7.7
Hardness (mg/L as CaCO <sub>3</sub> ):	65
Chloride (mg/L):	85
Effluent Flow for Aquatic Life (MGD):	18
Critical Low Flow [7Q2] (cfs):	14.98
% Effluent for Chronic Aquatic Life (Mixing Zone):	65.02
% Effluent for Acute Aquatic Life (ZID):	88.15
Effluent Flow for Human Health (MGD):	18
Harmonic Mean Flow (cfs):	28.45
% Effluent for Human Health:	49.47
Human Health Criterion (select: PWS, FISH, or INC)	FISH

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

Stream/River Metal	Intercept (b)	Slope (m)	Partition Coefficient (Kp)	Dissolved Fraction (Cd/Ct)	Source	Water Effect Ratio (WER)	Source
Aluminum	N/A	N/A	N/A	1.00	Assumed	1.00	Assumed
Arsenic	5.68	-0.73	96250.4	0.536		1.00	Assumed
Cadmium	6.60	-1.13	332434.40	0.251		1.00	Assumed
Chromium (total)	6.52	-0.93	429096.00	0.206		1.00	Assumed
Chromium (trivalent)	6.52	-0.93	429096.00	0.206		1.00	Assumed
Chromium (hexavalent)	N/A	N/A	N/A	1.00	Assumed	1.00	Assumed
Copper	6.02	-0.74	205996.83	0.350		1.00	Assumed
Lead	6.45	-0.80	485966.12	0.186		1.00	Assumed
Mercury	N/A	N/A	N/A	1.00	Assumed	1.00	Assumed

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Nickel	5.69	-0.57	139985.09	0.443	1.00	Assumed
Selenium	N/A	N/A	N/A	1.00	1.00	Assumed
Silver	6.38	-1.03	249534.28	0.308	1.00	Assumed
Zinc	6.10	-0.70	270414.67	0.291	1.00	Assumed

**AQUATIC LIFE**

**CALCULATE DAILY AVERAGE AND DAILY MAXIMUM EFFLUENT LIMITATIONS:**

<i>Parameter</i>	<i>FW Acute Criterion (µg/L)</i>	<i>FW Chronic Criterion (µg/L)</i>	<i>WLAa (µg/L)</i>	<i>WLAc (µg/L)</i>	<i>LTAa (µg/L)</i>	<i>LTAc (µg/L)</i>	<i>Daily Avg. (µg/L)</i>	<i>Daily Max. (µg/L)</i>
Aldrin	3.0	N/A	3.40	N/A	1.95	N/A	2.86	6.06
Aluminum	991	N/A	1124	N/A	644	N/A	946	2003
Arsenic	340	150	720	431	412	331	487	1030
Cadmium	5.6	0.182	25.6	1.12	14.6	0.862	1.26	2.68
Carbaryl	2.0	N/A	2.27	N/A	1.30	N/A	1.91	4.04
Chlordane	2.4	0.004	2.72	0.00615	1.56	0.00474	0.00696	0.0147
Chlorpyrifos	0.083	0.041	0.0942	0.0631	0.0540	0.0486	0.0713	0.150
Chromium (trivalent)	400	52	2208	389	1265	300	440	932
Chromium (hexavalent)	15.7	10.6	17.8	16.3	10.2	12.6	15.0	31.7
Copper	9.5	6.6	30.6	28.8	17.6	22.1	25.8	54.6
Cyanide (free)	45.8	10.7	52.0	16.5	29.8	12.7	18.6	39.4
4,4'-DDT	1.1	0.001	1.25	0.00154	0.715	0.00118	0.00174	0.00368
Demeton	N/A	0.1	N/A	0.154	N/A	0.118	0.174	0.368
Diazinon	0.17	0.17	0.193	0.261	0.111	0.201	0.162	0.343
Dicofol [Kelthane]	59.3	19.8	67.3	30.5	38.5	23.4	34.4	72.9
Dieldrin	0.24	0.002	0.272	0.00308	0.156	0.00237	0.00348	0.00736
Diuron	210	70	238	108	137	82.9	121	257
Endosulfan I ( <i>alpha</i> )	0.22	0.056	0.250	0.0861	0.143	0.0663	0.0974	0.206
Endosulfan II ( <i>beta</i> )	0.22	0.056	0.250	0.0861	0.143	0.0663	0.0974	0.206
Endosulfan sulfate	0.22	0.056	0.250	0.0861	0.143	0.0663	0.0974	0.206
Endrin	0.086	0.002	0.0976	0.00308	0.0559	0.00237	0.00348	0.00736
Guthion [Azinphos Methyl]	N/A	0.01	N/A	0.0154	N/A	0.0118	0.0174	0.0368
Heptachlor	0.52	0.004	0.590	0.00615	0.338	0.00474	0.00696	0.0147
Hexachlorocyclohexane ( <i>gamma</i> ) [Lindane]	1.126	0.08	1.28	0.123	0.732	0.0947	0.139	0.294
Lead	40	1.57	246	13.0	141	9.99	14.6	31.0
Malathion	N/A	0.01	N/A	0.0154	N/A	0.0118	0.0174	0.0368
Mercury	2.4	1.3	2.72	2.00	1.56	1.54	2.26	4.78
Methoxychlor	N/A	0.03	N/A	0.0461	N/A	0.0355	0.0522	0.110
Mirex	N/A	0.001	N/A	0.00154	N/A	0.00118	0.00174	0.00368
Nickel	325	36.1	834	126	478	96.7	142	300
Nonylphenol	28	6.6	31.8	10.2	18.2	7.82	11.4	24.3
Parathion (ethyl)	0.065	0.013	0.0737	0.0200	0.0423	0.0154	0.0226	0.0478
Pentachlorophenol	17.6	13.5	20.0	20.8	11.5	16.0	16.8	35.6
Phenanthrene	30	30	34.0	46.1	19.5	35.5	28.6	60.6
Polychlorinated Biphenyls [PCBs]	2.0	0.014	2.27	0.0215	1.30	0.0166	0.0243	0.0515
Selenium	20	5	22.7	7.69	13.0	5.92	8.70	18.4
Silver	0.8	N/A	21.0	N/A	12.0	N/A	17.6	37.4

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				0.00030		0.00023	0.00034	0.0007
Toxaphene	0.78	0.0002	0.885	8	0.507	7	8	36
Tributyltin [TBT]	0.13	0.024	0.147	0.0369	0.0845	0.0284	0.0417	0.0883
2,4,5 Trichlorophenol	136	64	154	98.4	88.4	75.8	111	235
Zinc	81	82	317	433	182	333	266	564

**HUMAN HEALTH**

**CALCULATE DAILY AVERAGE AND DAILY MAXIMUM EFFLUENT LIMITATIONS:**

<i>Parameter</i>	<i>Water and Fish Criterion n (µg/L)</i>	<i>Fish Only Criterion n (µg/L)</i>	<i>Incidental Fish Criterion (µg/L)</i>	<i>WLAh (µg/L)</i>	<i>LTAh (µg/L)</i>	<i>Daily Avg. (µg/L)</i>	<i>Daily Max. (µg/L)</i>
Acrylonitrile	1.0	115	1150	232	216	317	672
Aldrin	1.146E-05	1.147E-05	1.147E-04	0.00002	0.00002	0.00003	0.00006
Anthracene	1109	1317	13170	2662	2476	3639	7700
Antimony	6	1071	10710	2165	2014	2959	6262
Arsenic	10	N/A	N/A	N/A	N/A	N/A	N/A
Barium	2000	N/A	N/A	N/A	N/A	N/A	N/A
Benzene	5	581	5810	1175	1092	1605	3397
Benzidine	0.0015	0.107	1.07	0.216	0.201	0.295	0.625
Benzo(a)anthracene	0.024	0.025	0.25	0.0505	0.0470	0.0690	0.146
Benzo(a)pyrene	0.0025	0.0025	0.025	0.00505	0.00470	0.00690	0.0146
Bis(chloromethyl)ether	0.0024	0.2745	2.745	0.555	0.516	0.758	1.60
Bis(2-chloroethyl)ether	0.60	42.83	428.3	86.6	80.5	118	250
Bis(2-ethylhexyl) phthalate [Di(2-ethylhexyl) phthalate]	6	7.55	75.5	15.3	14.2	20.8	44.1
Bromodichloromethane [Dichlorobromomethane]	10.2	275	2750	556	517	760	1607
Bromoform [Tribromomethane]	66.9	1060	10600	2143	1993	2929	6197
Cadmium	5	N/A	N/A	N/A	N/A	N/A	N/A
Carbon Tetrachloride	4.5	46	460	93.0	86.5	127	268
Chlordane	0.0025	0.0025	0.025	0.00505	0.00470	0.00690	0.0146
Chlorobenzene	100	2737	27370	5533	5146	7564	16003
Chlorodibromomethane [Dibromochloromethane]	7.5	183	1830	370	344	505	1069
Chloroform [Trichloromethane]	70	7697	76970	15560	14471	21271	45003
Chromium (hexavalent)	62	502	5020	1015	944	1387	2935
Chrysene	2.45	2.52	25.2	5.09	4.74	6.96	14.7
Cresols [Methylphenols]	1041	9301	93010	18802	17486	25704	54382
Cyanide (free)	200	N/A	N/A	N/A	N/A	N/A	N/A
4,4'-DDD	0.002	0.002	0.02	0.00404	0.00376	0.00552	0.0116
				0.00026	0.00024	0.00035	0.00076
4,4'-DDE	0.00013	0.00013	0.0013	3	4	9	0
				0.00080	0.00075		
4,4'-DDT	0.0004	0.0004	0.004	9	2	0.00110	0.00233
2,4'-D	70	N/A	N/A	N/A	N/A	N/A	N/A
Danitol [Fenpropathrin]	262	473	4730	956	889	1307	2765
1,2-Dibromoethane [Ethylene Dibromide]	0.17	4.24	42.4	8.57	7.97	11.7	24.7
<i>m</i> -Dichlorobenzene [1,3-Dichlorobenzene]	322	595	5950	1203	1119	1644	3478
<i>o</i> -Dichlorobenzene [1,2-Dichlorobenzene]	600	3299	32990	6669	6202	9117	19288
<i>p</i> -Dichlorobenzene [1,4-Dichlorobenzene]	75	N/A	N/A	N/A	N/A	N/A	N/A
3,3'-Dichlorobenzidine	0.79	2.24	22.4	4.53	4.21	6.19	13.0
1,2-Dichloroethane	5	364	3640	736	684	1005	2128
1,1-Dichloroethylene [1,1-Dichloroethene]	7	55114	551140	111415	103616	152316	322246
Dichloromethane [Methylene Chloride]	5	13333	133330	26953	25067	36847	77956

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1,2-Dichloropropane	5	259	2590	524	487	715	1514
1,3-Dichloropropene [1,3-Dichloropropylene]	2.8	119	1190	241	224	328	695
Dicofol [Kelthane]	0.30	0.30	3	0.606	0.564	0.829	1.75
				0.00004	0.00003	0.00005	0.00011
Dieldrin	2.0E-05	2.0E-05	2.0E-04	04	76	52	6
2,4-Dimethylphenol	444	8436	84360	17054	15860	23314	49324
Di-n-Butyl Phthalate	88.9	92.4	924	187	174	255	540
	7.80E-08	7.97E-08		1.61E-07	1.50E-07	2.20E-07	4.65E-07
Dioxins/Furans [TCDD Equivalents]			7.97E-07				
Endrin	0.02	0.02	0.2	0.0404	0.0376	0.0552	0.116
Epichlorohydrin	53.5	2013	20130	4069	3785	5563	11769
Ethylbenzene	700	1867	18670	3774	3510	5159	10916
		1.68E+0	1.68E+0	339619	315846	464293	982281
Ethylene Glycol	46744	7	8	50	14	82	49
Fluoride	4000	N/A	N/A	N/A	N/A	N/A	N/A
				0.00020	0.00018	0.00027	0.00058
Heptachlor	8.0E-05	0.0001	0.001	2	8	6	4
				0.00058	0.00054	0.00080	
Heptachlor Epoxide	0.00029	0.00029	0.0029	6	5	1	0.00169
Hexachlorobenzene	0.00068	0.00068	0.0068	0.00137	0.00128	0.00187	0.00397
Hexachlorobutadiene	0.21	0.22	2.2	0.445	0.414	0.608	1.28
Hexachlorocyclohexane ( <i>alpha</i> )	0.0078	0.0084	0.084	0.0170	0.0158	0.0232	0.0491
Hexachlorocyclohexane ( <i>beta</i> )	0.15	0.26	2.6	0.526	0.489	0.718	1.52
Hexachlorocyclohexane ( <i>gamma</i> ) [Lindane]	0.2	0.341	3.41	0.689	0.641	0.942	1.99
Hexachlorocyclopentadiene	10.7	11.6	116	23.4	21.8	32.0	67.8
Hexachloroethane	1.84	2.33	23.3	4.71	4.38	6.43	13.6
Hexachlorophene	2.05	2.90	29	5.86	5.45	8.01	16.9
4,4'-Isopropylidenediphenol	1092	15982	159820	32308	30047	44168	93445
Lead	1.15	3.83	38.3	41.6	38.7	56.8	120
Mercury	0.0122	0.0122	0.122	0.0247	0.0229	0.0337	0.0713
Methoxychlor	2.92	3.0	30	6.06	5.64	8.29	17.5
		9.92E+0	9.92E+0	200537	186499	274154	580013
Methyl Ethyl Ketone	13865	5	6	2	6	4	8
Methyl tert-butyl ether [MTBE]	15	10482	104820	21190	19707	28968	61287
Nickel	332	1140	11400	5208	4843	7119	15063
Nitrate-Nitrogen (as Total Nitrogen)	10000	N/A	N/A	N/A	N/A	N/A	N/A
Nitrobenzene	45.7	1873	18730	3786	3521	5176	10951
N-Nitrosodiethylamine	0.0037	2.1	21	4.25	3.95	5.80	12.2
N-Nitroso-di-n-Butylamine	0.119	4.2	42	8.49	7.90	11.6	24.5
Pentachlorobenzene	0.348	0.355	3.55	0.718	0.667	0.981	2.07
Pentachlorophenol	0.22	0.29	2.9	0.586	0.545	0.801	1.69
Polychlorinated Biphenyls [PCBs]	6.4E-04	6.4E-04	6.40E-03	0.00129	0.00120	0.00176	0.00374
Pyridine	23	947	9470	1914	1780	2617	5537
Selenium	50	N/A	N/A	N/A	N/A	N/A	N/A
1,2,4,5-Tetrachlorobenzene	0.23	0.24	2.4	0.485	0.451	0.663	1.40
1,1,2,2-Tetrachloroethane	1.64	26.35	263.5	53.3	49.5	72.8	154
Tetrachloroethylene [Tetrachloroethylene]	5	280	2800	566	526	773	1637
Thallium	0.12	0.23	2.3	0.465	0.432	0.635	1.34
Toluene	1000	N/A	N/A	N/A	N/A	N/A	N/A
Toxaphene	0.011	0.011	0.11	0.0222	0.0207	0.0304	0.0643
2,4,5-TP [Silvex]	50	369	3690	746	694	1019	2157
				158560	147461	216768	458605
1,1,1-Trichloroethane	200	784354	7843540	7	4	2	0
1,1,2-Trichloroethane	5	166	1660	336	312	458	970
Trichloroethylene [Trichloroethene]	5	71.9	719	145	135	198	420
2,4,5-Trichlorophenol	1039	1867	18670	3774	3510	5159	10916

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TTHM [Sum of Total Trihalomethanes]	80	N/A	N/A	N/A	N/A	N/A	N/A
Vinyl Chloride	0.23	16.5	165	33.4	31.0	45.6	96.4

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

	<b>70% of Daily Avg.</b>	<b>85% of Daily Avg.</b>
<b>Aquatic Life</b>		
<b>Parameter</b>	<b>(µg/L)</b>	<b>(µg/L)</b>
Aldrin	2.00	2.43
Aluminum	662	804
Arsenic	341	414
Cadmium	0.886	1.07
Carbaryl	1.33	1.62
Chlordane	0.00487	0.00591
Chlorpyrifos	0.0499	0.0606
Chromium (trivalent)	308	374
Chromium (hexavalent)	10.5	12.7
Copper	18.0	21.9
Cyanide (free)	13.0	15.8
4,4'-DDT	0.00121	0.00147
Demeton	0.121	0.147
Diazinon	0.113	0.138
Dicofol [Kelthane]	24.1	29.2
Dieldrin	0.00243	0.00295
Diuron	85.2	103
Endosulfan I ( <i>alpha</i> )	0.0682	0.0828
Endosulfan II ( <i>beta</i> )	0.0682	0.0828
Endosulfan sulfate	0.0682	0.0828
Endrin	0.00243	0.00295
Guthion [Azinphos Methyl]	0.0121	0.0147
Heptachlor	0.00487	0.00591
Hexachlorocyclohexane ( <i>gamma</i> ) [Lindane]	0.0974	0.118
Lead	10.2	12.4
Malathion	0.0121	0.0147
Mercury	1.58	1.92
Methoxychlor	0.0365	0.0443
Mirex	0.00121	0.00147
Nickel	99.4	120
Nonylphenol	8.04	9.76
Parathion (ethyl)	0.0158	0.0192
Pentachlorophenol	11.7	14.3
Phenanthrene	20.0	24.3
Polychlorinated Biphenyls [PCBs]	0.0170	0.0207
Selenium	6.09	7.39
Silver	12.3	15.0
Toxaphene	0.00024	0.00029
	3	5
Tributyltin [TBT]	0.0292	0.0355
2,4,5 Trichlorophenol	77.9	94.6
Zinc	186	226
	<b>70% of Daily Avg.</b>	<b>85% of Daily Avg.</b>
<b>Human Health</b>		

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<i>Parameter</i>	<i>(µg/L)</i>	<i>(µg/L)</i>
Acrylonitrile	222	270
	0.00002	0.00002
Aldrin	21	69
Anthracene	2547	3093
Antimony	2071	2515
Arsenic	N/A	N/A
Barium	N/A	N/A
Benzene	1123	1364
Benzidine	0.206	0.251
Benzo(a)anthracene	0.0483	0.0587
Benzo(a)pyrene	0.00483	0.00587
Bis(chloromethyl)ether	0.531	0.644
Bis(2-chloroethyl)ether	82.8	100
Bis(2-ethylhexyl) phthalate [Di(2-ethylhexyl) phthalate]	14.6	17.7
Bromodichloromethane [Dichlorobromomethane]	532	646
Bromoform [Tribromomethane]	2050	2490
Cadmium	N/A	N/A
Carbon Tetrachloride	88.9	108
Chlordane	0.00483	0.00587
Chlorobenzene	5294	6429
Chlorodibromomethane [Dibromochloromethane]	354	429
Chloroform [Trichloromethane]	14890	18081
Chromium (hexavalent)	971	1179
Chrysene	4.87	5.91
Cresols [Methylphenols]	17993	21849
Cyanide (free)	N/A	N/A
4,4'-DDD	0.00386	0.00469
	0.00025	0.00030
4,4'-DDE	1	5
	0.00077	0.00093
4,4'-DDT	3	9
2,4'-D	N/A	N/A
Danitol [Fenprothrin]	915	1111
1,2-Dibromoethane [Ethylene Dibromide]	8.20	9.96
<i>m</i> -Dichlorobenzene [1,3-Dichlorobenzene]	1151	1397
<i>o</i> -Dichlorobenzene [1,2-Dichlorobenzene]	6382	7749
<i>p</i> -Dichlorobenzene [1,4-Dichlorobenzene]	N/A	N/A
3,3'-Dichlorobenzidine	4.33	5.26
1,2-Dichloroethane	704	855
1,1-Dichloroethylene [1,1-Dichloroethene]	106621	129468
Dichloromethane [Methylene Chloride]	25793	31320
1,2-Dichloropropane	501	608
1,3-Dichloropropene [1,3-Dichloropropylene]	230	279
Dicofol [Kelthane]	0.580	0.704
	0.00003	0.00004
Dieldrin	86	69
2,4-Dimethylphenol	16319	19817
Di- <i>n</i> -Butyl Phthalate	178	217
	1.54E-	1.87E-
Dioxins/Furans [TCDD Equivalents]	07	07
Endrin	0.0386	0.0469
Epichlorohydrin	3894	4728

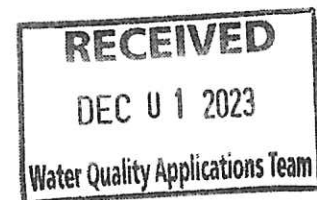
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Ethylbenzene	3611	4385
	325005	394649
Ethylene Glycol	67	75
Fluoride	N/A	N/A
	0.00019	0.00023
Heptachlor	3	4
	0.00056	0.00068
Heptachlor Epoxide	1	1
Hexachlorobenzene	0.00131	0.00159
Hexachlorobutadiene	0.425	0.516
Hexachlorocyclohexane ( <i>alpha</i> )	0.0162	0.0197
Hexachlorocyclohexane ( <i>beta</i> )	0.502	0.610
Hexachlorocyclohexane ( <i>gamma</i> ) [Lindane]	0.659	0.801
Hexachlorocyclopentadiene	22.4	27.2
Hexachloroethane	4.50	5.47
Hexachlorophene	5.61	6.81
4,4'-Isopropylidenediphenol	30918	37543
Lead	39.8	48.3
Mercury	0.0236	0.0286
Methoxychlor	5.80	7.04
	191908	233031
Methyl Ethyl Ketone	1	2
Methyl <i>tert</i> -butyl ether [MTBE]	20278	24623
Nickel	4983	6051
Nitrate-Nitrogen (as Total Nitrogen)	N/A	N/A
Nitrobenzene	3623	4399
N-Nitrosodiethylamine	4.06	4.93
N-Nitroso-di- <i>n</i> -Butylamine	8.12	9.86
Pentachlorobenzene	0.686	0.833
Pentachlorophenol	0.561	0.681
Polychlorinated Biphenyls [PCBs]	0.00123	0.00150
Pyridine	1832	2224
Selenium	N/A	N/A
1,2,4,5-Tetrachlorobenzene	0.464	0.563
1,1,2,2-Tetrachloroethane	50.9	61.8
Tetrachloroethylene [Tetrachloroethylene]	541	657
Thallium	0.444	0.540
Toluene	N/A	N/A
Toxaphene	0.0212	0.0258
2,4,5-TP [Silvex]	713	866
	151737	184253
1,1,1-Trichloroethane	7	0
1,1,2-Trichloroethane	321	389
Trichloroethylene [Trichloroethene]	139	168
2,4,5-Trichlorophenol	3611	4385
TTHM [Sum of Total Trihalomethanes]	N/A	N/A
Vinyl Chloride	31.9	38.7





**Application to Renew**  
**TPDES Permit Number WQ0010495076**  
**Northwest Wastewater Treatment Facility**



Prepared Fall 2023

# City of Houston | Houston Public Works | Houston Water

Application to Renew TPDES Permit Number WQ0010495076

Northwest Wastewater Treatment Facility

## Application for a Domestic Wastewater Permit

- 1) Administrative Report 1.0
- 2) Supplemental Permit Information Form (SPIF)
- 3) Domestic Technical Report 1.0
- 4) Domestic Technical Report Worksheet 2.0
- 5) Domestic Worksheet 4.0
- 6) Domestic Worksheet 5.0
- 7) Domestic Worksheet 6.0

## Attachments

<u>Description</u>	<u>Reference</u>
1 Copy of Application Fee Check	Administrative Report 1.0, Section 1
2 Core Data Form	Administrative Report 1.0, Section 3.C.
3 USGS Map	Administrative Report 1.0, Section 13
4 Treatment Units	Domestic Technical Report 1.0, Section 2.B.
5 Process Flow Diagram	Domestic Technical Report 1.0, Section 2.C.
6 Site Drawing	Domestic Technical Report 1.0, Section 3
7 Laboratory Test Reports and COCs	Domestic Technical Report 1.0, Section 7, Table 1.0(2) Domestic Worksheet 4.0, Section 1 Domestic Worksheet 4.0, Section 2
8 Facility Operators	Domestic Technical Report 1.0, Section 8
9 WET Test Results	Domestic Worksheet 5.0, Section 1. Domestic Worksheet 5.0, Section 3.
10 Effluent Parameters Above the MAL	Domestic Worksheet 6.0, Section 2.C.

**Attachment 2**

Core Data Form

Administrative Report 1.0, Section 3.C.



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY  
DOMESTIC WASTEWATER PERMIT APPLICATION  
CHECKLIST

Complete and submit this checklist with the application.

APPLICANT: City of Houston

PERMIT NUMBER: WQ0010495076

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

	Y	N		Y	N
Administrative Report 1.0	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Original USGS Map (8.5" x 11")	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Administrative Report 1.1	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Affected Landowners Map	<input type="checkbox"/>	<input checked="" type="checkbox"/>
SPIF	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Landowner Disk or Labels	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Core Data Form	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Buffer Zone Map	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Public Involvement Plan Form	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Flow Diagram	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Technical Report 1.0	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Site Drawing	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Technical Report 1.1	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Original Photographs	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Worksheet 2.0	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Design Calculations	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Worksheet 2.1	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Solids Management Plan	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Worksheet 3.0	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Water Balance	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Worksheet 3.1	<input type="checkbox"/>	<input checked="" type="checkbox"/>			
Worksheet 3.2	<input type="checkbox"/>	<input checked="" type="checkbox"/>			
Worksheet 3.3	<input type="checkbox"/>	<input checked="" type="checkbox"/>			
Worksheet 4.0	<input checked="" type="checkbox"/>	<input type="checkbox"/>			
Worksheet 5.0	<input checked="" type="checkbox"/>	<input type="checkbox"/>			
Worksheet 6.0	<input checked="" type="checkbox"/>	<input type="checkbox"/>			
Worksheet 7.0	<input type="checkbox"/>	<input checked="" type="checkbox"/>			



For TCEQ Use Only

Segment Number 1017 County Harris  
Expiration Date 06/14/2024 Region 12-Houston  
Permit Number 0010495076



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY  
**APPLICATION FOR A DOMESTIC WASTEWATER PERMIT  
ADMINISTRATIVE REPORT 1.0**

If you have questions about completing this form please contact the Applications Review and Processing Team at 512-239-4671.

**Section 1. Application Fees (Instructions Page 29)**

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

Flow	New/Major Amendment	Renewal
<0.05 MGD	\$350.00 <input type="checkbox"/>	\$315.00 <input type="checkbox"/>
≥0.05 but <0.10 MGD	\$550.00 <input type="checkbox"/>	\$515.00 <input type="checkbox"/>
≥0.10 but <0.25 MGD	\$850.00 <input type="checkbox"/>	\$815.00 <input type="checkbox"/>
≥0.25 but <0.50 MGD	\$1,250.00 <input type="checkbox"/>	\$1,215.00 <input type="checkbox"/>
≥0.50 but <1.0 MGD	\$1,650.00 <input type="checkbox"/>	\$1,615.00 <input type="checkbox"/>
≥1.0 MGD	\$2,050.00 <input type="checkbox"/>	\$2,015.00 <input checked="" type="checkbox"/>

Minor Amendment (for any flow) \$150.00 ☐

**Payment Information:** Attachment 1

Mailed Check/Money Order Number: 21060763

Check/Money Order Amount: \$2,015.00

Name Printed on Check: City of Houston

EPAY Voucher Number: Click here to enter text.

Copy of Payment Voucher enclosed? Yes ☐

**Section 2. Type of Application (Instructions Page 29)**

- |   |   |
|---|---|
| <input type="checkbox"/> New TPDES                              | <input type="checkbox"/> New TLAP                               |
| <input type="checkbox"/> Major Amendment <u>with</u> Renewal    | <input type="checkbox"/> Minor Amendment <u>with</u> Renewal    |
| <input type="checkbox"/> Major Amendment <u>without</u> Renewal | <input type="checkbox"/> Minor Amendment <u>without</u> Renewal |
| <input checked="" type="checkbox"/> Renewal without changes     | <input type="checkbox"/> Minor Modification of permit           |

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

**For existing permits:**

Permit Number: WQ0010495076

EPA I.D. (TPDES only): TX0063011

Expiration Date: June 14, 2024

### Section 3. Facility Owner (Applicant) and Co-Applicant Information (Instructions Page 29)

#### 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., Ms., Miss): Ms.

First and Last Name: Carol Haddock

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

Title: Director, Houston Public Works

#### 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 here 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 here to enter text.

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

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

First and Last Name: Click here to enter text.

Credential (P.E, P.G., Ph.D., etc.): Click here to enter text.

Title: Click here to enter text.

Provide a brief description of the need for a co-permittee: Click here 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 30)

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., Ms., Miss): Mr.

First and Last Name: Walid Samarneh

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

Title: Managing Engineer, Houston Public Works

Organization Name: City of Houston, Houston Public Works

Mailing Address: 10500 Bellaire Boulevard

City, State, Zip Code: Houston, Texas 77072

Phone No.: 832-395-5771 Ext.: Click here to enter text Fax No.: 832-395-5838

E-mail Address: Walid.Samarneh@houstontx.gov

Check one or both: ☐ Administrative Contact ☒ Technical Contact

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

First and Last Name: Carol La Breche

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

Title: Supervising Engineer, Houston Public Works

Organization Name: City of Houston, Houston Public Works

Mailing Address: 10500 Bellaire Boulevard

City, State, Zip Code: Houston, Texas 77072

Phone No.: 832-395-5813 Ext.: Click here to enter text Fax No.: 832-395-5838

E-mail Address: Carol.LaBreche@houstontx.gov

Check one or both: ☒ Administrative Contact ☐ Technical Contact

## Section 5. Permit Contact Information (Instructions Page 30)

Provide two names of individuals that can be contacted throughout the permit term.

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

First and Last Name: Carol Haddock

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

Title: Director, Houston Public Works

Organization Name: City of Houston, Houston Public Works

Mailing Address: 10500 Bellaire Boulevard

City, State, Zip Code: Houston, Texas 77072

Phone No.: 832-395-2500 Ext.: Click here to enter text Fax No.: 832-395-2480

E-mail Address: PublicWorks@houstontx.gov

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

First and Last Name: Sylvester Turner

Credential (P.E, P.G., Ph.D., etc.): Click here to enter text

Title: Mayor

Organization Name: City of Houston

Mailing Address: P.O. Box 1562

City, State, Zip Code: Houston, Texas 77251

Phone No.: 832-395-1011 Ext.: Click here to enter text Fax No.: 832-393-1067

E-mail Address: Sylvester.Turner@houstontx.gov

## **Section 6. Billing Information (Instructions Page 30)**

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., Ms., Miss): Mr.

First and Last Name: Walid Samarneh

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

Title: Managing Engineer, Houston Public Works

Organization Name: City of Houston, Houston Public Works

Mailing Address: 10500 Bellaire Boulevard

City, State, Zip Code: Houston, Texas 77072

Phone No.: 832-395-5771 Ext.: Click here to enter text Fax No.: 832-395-5838

E-mail Address: Walid.Samarneh@houstontx.gov

## **Section 7. DMR/MER Contact Information (Instructions Page 31)**

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



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

First and Last Name: Walid Samarneh

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

Title: Managing Engineer, Houston Public Works

Organization Name: City of Houston, Houston Public Works

Mailing Address: 10500 Bellaire Boulevard

City, State, Zip Code: Houston, Texas 77072

Phone No.: 832-395-5771 Ext.: Click here to enter text Fax No.: 832-395-5838

E-mail Address: Walid.Samarneh@houstontx.gov

DMR data is required to be submitted electronically. Create an account at:

<https://www.tceq.texas.gov/permitting/netdmr/netdmr.html>.

## Section 8. Public Notice Information (Instructions Page 31)

### A. Individual Publishing the Notices

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

First and Last Name: Carol La Breche

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

Title: Supervising Engineer, Houston Public Works

Organization Name: City of Houston, Houston Public Works

Mailing Address: 10500 Bellaire Boulevard

City, State, Zip Code: Houston, Texas 77072

Phone No.: 832-395-5813 Ext.: Click here to enter text Fax No.: 832-395-5838

E-mail Address: Carol.LaBreche@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 person to be listed in the Notices

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

First and Last Name: Carol La Breche

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

Title: Supervising Engineer, Houston Public Works

Organization Name: City of Houston, Houston Public Works

Phone No.: 832-395-5813 Ext.: Click here to enter text

E-mail: Carol.LaBreche@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 Boulevard

City: Houston

County: Harris

Contact Name: Carol La Breche

Phone No.: 832-395-5813 Ext.: Click here to enter text

#### E. Bilingual Notice Requirements:

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

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

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

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

☒ Yes ☐ No

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

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

☒ Yes ☐ No

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

☐ Yes ☒ No

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

☐ Yes ☒ No

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

#### F. Public Involvement Plan Form

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

Attachment: N/A

### Section 9. Regulated Entity and Permitted Site Information (Instructions Page 33)

- A. If the site is currently regulated by TCEQ, provide the Regulated Entity Number (RN) issued to this site. RN101610665

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):

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

First and Last Name: City of Houston

Mailing Address: 10500 Bellaire Boulevard

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: Click here to enter text

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

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

First and Last Name: Click here to enter text

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

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

Phone No.: [Click here to enter text](#) E-mail Address: [Click here 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 here to enter text](#)

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

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

First and Last Name: [Click here to enter text](#)

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

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

Phone No.: [Click here to enter text](#) E-mail Address: [Click here 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 here to enter text](#)

## Section 10. TPDES Discharge Information (Instructions Page 34)

**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 here 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 here to enter text](#)

City nearest the outfall(s): Houston

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

Outfall Latitude: 29.844860

Longitude: -95.460813

- 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 here 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, Galveston, and Brazoria Counties

## N/A Section 11. TLAP Disposal Information (Instructions Page 36)

- 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 here to enter text](#)

- B. City nearest the disposal site: [Click here to enter text](#)

- C. County in which the disposal site is located: [Click here to enter text](#)

- D. Disposal Site Latitude: [Click here to enter text](#)    Longitude: [Click here to enter text](#)

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

[Click here to enter text](#)

- F. For **TLAPs**, please identify the nearest watercourse to the disposal site to which rainfall runoff might flow if not contained:

[Click here to enter text](#)

## Section 12. Miscellaneous Information (Instructions Page 37)

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 here 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 here to enter text.](#)

D. Do you owe any fees to the TCEQ?

☐ Yes ☒ No

If yes, provide the following information:

Account number: [Click here to enter text.](#)

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

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

## Section 13. Attachments (Instructions Page 38)

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 3
  - 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 39)

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

Permit Number: W00010495076

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): Carol Haddock, P.E.

Signatory title: Director, Houston Public Works

Signature: Carol Haddock Date: 11/28/2023

(Use blue ink)

Subscribed and Sworn to before me by the said Carol Haddock  
on this 28<sup>th</sup> day of November, 2023.  
My commission expires on the 9<sup>th</sup> day of March, 2027.

Ruth C. Bocanegra  
Notary Public

[SEAL]

Harris  
County, Texas





## Section 15. Plain Language Summary (Instructions Page 40)

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

### ENGLISH TEMPLATE FOR TPDES or TLAP NEW/RENEWAL/AMENDMENT APPLICATIONS

#### DOMESTIC WASTEWATER

*The following summary is provided for this pending water quality permit application being reviewed by the Texas Commission on Environmental Quality as required by 30 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 Northwest Wastewater Treatment Facility (RN101610665). an activated sludge – extended aeration wastewater treatment facility. The facility is located at 5423 Mangum Road, in Houston, Harris County, Texas 77091.

This application is for a permit 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<sub>5</sub>), total suspended solids (TSS), ammonia-nitrogen (NH<sub>3</sub>N), and *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 – extended aeration. 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 pumped or trucked offsite for further treatment and disposal.

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

### **AGUAS RESIDUALES DOMÉSTICAS**

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

La ciudad de Houston (CN600128995) opera la instalación de tratamiento de aguas residuales Northwest Wastewater Treatment Facility (RN101610665), un lodos activados - aireación prolongada instalación de tratamiento de aguas residuales. La instalación está situada en 5423 Mangum Road, Houston, en el condado de Harris, Texas 77091.

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 (CBOD<sub>5</sub>), sólidos suspendidos totales (TSS), nitrógeno amoniacal (NH<sub>3</sub>-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 - aireación prolongada. Las unidades de tratamiento incluyen pantalla de barra para tratamiento preliminar; cuencas de aireación y canales de licor mixto 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 bombean o son transportadas en camión para más tratamiento y eliminación.

## 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 applications 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 Attached ☒ 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)*



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY  
DOMESTIC WASTEWATER PERMIT APPLICATION

**DOMESTIC TECHNICAL REPORT 1.0**

The Following Is Required For All Applications  
Renewal, New, And Amendment

**Section 1. Permitted or Proposed Flows (Instructions Page 51)**

**A. Existing/Interim I Phase**

Design Flow (MGD): 18

2-Hr Peak Flow (MGD): 82

Estimated construction start date: N/A

Estimated waste disposal start date: N/A

**N/A B. Interim II Phase**

Design Flow (MGD):

2-Hr Peak Flow (MGD): [Click here to enter text.](#)

Estimated construction start date: [Click here to enter text.](#)

Estimated waste disposal start date: [Click here to enter text.](#)

**N/A C. Final Phase**

Design Flow (MGD): [Click here to enter text.](#)

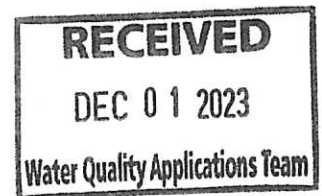
2-Hr Peak Flow (MGD): [Click here to enter text.](#)

Estimated construction start date: [Click here to enter text.](#)

Estimated waste disposal start date: [Click here to enter text.](#)

**D. Current operating phase: Existing**

Provide the startup date of the facility: Annexed by the City of Houston prior to 1970



**Section 2. Treatment Process (Instructions Page 51)**

**A. Treatment process description**

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 in the permit, a description of each phase must be provided.** Process description:

Influent is initially treated by bar screens (02), followed by biological treatment using activated sludge - extended aeration (17), secondary clarification (22), disinfection (51), dechlorination (50), and discharge to the receiving stream via Outfall 001. Sludge is pumped or trucked offsite for further treatment and disposal.

Port or pipe diameter at the discharge point, in inches: 96

#### **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 4		

#### **C. Process flow diagrams**

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

**Attachment:** 5

### Section 3. Site Drawing (Instructions Page 52)

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: 6

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

The facility serves a residential area in northwest Houston between the IH-610 Loop and Beltway 8.

### Section 4. Unbuilt Phases (Instructions Page 52)

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 here to enter text.](#)

## Section 5. Closure Plans (Instructions Page 53)

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 here to enter text.](#)

## Section 6. Permit Specific Requirements (Instructions Page 53)

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: 1970

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.



Click here to enter text

### C. Other actions required by the current permit

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

Yes ☒ No ☐

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

Sludge information is maintained as required by Other Requirements, No. 6.

### 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.

#### N/A 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 here to enter text.

**N/A 3. Grit disposal**

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

Yes ☐

No ☐

**If No**, contact the TCEQ Municipal Solid Waste team at 512-239-0000. 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 here to enter text.

**N/A 4. Grease and decanted liquid disposal**

Note: A registration or permit is required for grease disposal. Grease shall not be combined with treatment plant sludge. For more information, contact the TCEQ Municipal Solid Waste team at 512-239-0000.

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

Click here 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 FF62 or TXRNE [Click here 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 here 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 here 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 here 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 here 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, a Sewage Sludge Solids Management Plan is required. See Example 5 in the instructions.

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

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

Does the facility accept or will it 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 that the plant started accepting sludge or is anticipated to start accepting sludge, an estimate of monthly sludge acceptance (gallons or millions of gallons), an estimate of the BOD<sub>5</sub> concentration of the sludge, and the design BOD<sub>5</sub> concentration of the influent from the collection system. Also note if this information has or has not changed since the last permit action.

Click here 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 a the date that the plant started accepting septic waste, 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<sub>5</sub> concentration of the septic waste, and the design BOD<sub>5</sub> concentration of the influent from the collection system. Also note if this information has or has not changed since the last permit action.

Click here 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 the facility accepting or will it 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 here to enter text.

## Section 7. Pollutant Analysis of Treated Effluent (Instructions Page 58)

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).

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

Attachment 7

**Table 1.0(2) - Pollutant Analysis for Wastewater Treatment Facilities**

Pollutant	Average Conc.	Max Conc.	No. of Samples	Sample Type	Sample Date/Time
CBOD <sub>5</sub> , mg/l	3.40	3.40	1	Comp	10/10/23 @ 8:00 am
Total Suspended Solids, mg/l	5.2	5.2	1	Comp	10/10/23 @ 8:00 am
Ammonia Nitrogen, mg/l	0.628	0.628	1	Comp	10/10/23 @ 8:00 am
Nitrate Nitrogen, mg/l	5.895	8.85	2	Comp	10/10/23 @ 8:00 am
Total Kjeldahl Nitrogen, mg/l	2.02	2.02	1	Comp	10/10/23 @ 8:00 am
Sulfate, mg/l	99.9	99.9	1	Comp	10/10/23 @ 8:00 am
Chloride, mg/l	134	134	1	Comp	10/10/23 @ 8:00 am
Total Phosphorus, mg/l	0.303	0.303	1	Comp	10/10/23 @ 8:00 am
pH, standard units	7.40	7.40	1	Grab	10/9/23 @ 6:59 am
Dissolved Oxygen*, mg/l	6.40	6.40	1	Grab	10/9/23 @ 6:59 am
Chlorine Residual, mg/l	<0.100	<0.100	1	Grab	10/9/23 @ 6:59 am
<i>E.coli</i> (CFU/100ml) freshwater	<1	<1	1	Grab	10/9/23 @ 6:59 am
Enterococci (CFU/100ml)	n/a				

Pollutant	Average Conc.	Max Conc.	No. of Samples	Sample Type	Sample Date/Time
saltwater					
Total Dissolved Solids, mg/l	589	589	1	Comp	10/10/23 @ 8:00 am
Electrical Conductivity, $\mu$ mohs/cm, †	n/a				
Oil & Grease, mg/l	<1.62	<1.62	1	Grab	10/9/23 @ 12:03 pm
Alkalinity (CaCO <sub>3</sub> )*, mg/l	116	116	1	Comp	10/10/23 @ 8:00 am

\*TPDES permits only

†TLAP permits only

**N/A Table 1.0(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 <sub>3</sub> ), mg/l					

## Section 8. Facility Operator (Instructions Page 60)

Facility Operator Name: Attachment 8

Facility Operator's License Classification and Level: Attachment 8

Facility Operator's License Number: Attachment 8

## Section 9. Sewage Sludge Management and Disposal (Instructions Page 60)

### A. Sludge disposal method

Identify the current or anticipated sludge disposal method or methods from the

following list. Check all that apply.

- ☐ Permitted landfill
- ☐ Permitted or Registered land application site for beneficial use
- ☐ Land application for beneficial use authorized in the wastewater permit
- ☐ Permitted sludge processing facility
- ☐ Marketing and distribution as authorized in the wastewater permit
- ☐ Composting as authorized in the wastewater permit
- ☐ Permitted surface disposal site (sludge monofill)
- ☐ Surface disposal site (sludge monofill) authorized in the wastewater permit
- ☒ Transported to another permitted wastewater treatment plant or permitted sludge processing facility. If you selected this method, a written statement or contractual agreement from the wastewater treatment plant or permitted sludge processing facility accepting the sludge must be included with this application. **WWTPs accepting sludge will be owned by the City of Houston.**
- ☐ Other:

#### B. Sludge disposal site

Disposal site name: City of Houston - 69th Street WWTP

TCEQ permit or registration number: WQ0010495090

County where disposal site is located: Harris

#### C. Sludge transportation method

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

Name of the hauler: n/a

Hauler registration number: n/a

Sludge is transported as a:

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



## Section 10. Permit Authorization for Sewage Sludge Disposal (Instructions Page 60)

### 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 61)

Does this facility include sewage sludge lagoons?

Yes ☐ No ☒

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

### N/A 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 here to enter text.](#)
- USDA Natural Resources Conservation Service Soil Map:  
**Attachment:** [Click here to enter text.](#)
- Federal Emergency Management Map:  
**Attachment:** [Click here to enter text.](#)
- Site map:  
**Attachment:** [Click here 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 here 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:

#### N/A B. Temporary storage information

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

Nitrate Nitrogen, mg/kg: [Click here to enter text.](#)

Total Kjeldahl Nitrogen, mg/kg: [Click here to enter text.](#)

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

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

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

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

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

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

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

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

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

Lead: [Click here to enter text.](#)

Mercury: [Click here to enter text.](#)

Molybdenum: [Click here to enter text.](#)

Nickel: [Click here to enter text.](#)

Selenium: [Click here to enter text.](#)

Zinc: [Click here to enter text.](#)

Total PCBs: [Click here to enter text.](#)

Provide the following information:

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

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

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

#### **N/A C. Liner information**

Does the active/proposed sludge lagoon(s) have a liner with a maximum hydraulic conductivity of  $1 \times 10^{-7}$  cm/sec?

Yes ☐ No ☐

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

[Click here to enter text.](#)

#### **N/A D. Site development plan**

Provide a detailed description of the methods used to deposit sludge in the

lagoon(s):

[Click here to enter text.](#)

Attach the following documents to the application.

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

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

- Copy of the closure plan

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

- Copy of deed recordation for the site

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

- Size of the sludge lagoon(s) in surface acres and capacity in cubic feet and gallons

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

- Description of the method of controlling infiltration of groundwater and surface water from entering the site

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

- Procedures to prevent the occurrence of nuisance conditions

**Attachment:**

#### N/A E. Groundwater monitoring

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

Yes ☐ No ☐

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

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

## Section 12. Authorizations/Compliance/Enforcement

## (Instructions Page 63)

### 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:

MSGP Stormwater Permit TXR05FF62, Chapter 210 Reclaimed Water Authorization R10495076

### 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 Action No.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 63)

### 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 here to enter text.](#)

## Section 14. Laboratory Accreditation (Instructions Page 64)

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: Carol Haddock, P.E.

Title: Director, Houston Public Works

Signature: 

Date: 11/28/2023

## DOMESTIC TECHNICAL REPORT WORKSHEET 2.0

### RECEIVING WATERS

The following is required for all TPDES permit applications

#### Section 1. Domestic Drinking Water Supply (Instructions Page 73)

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 yes, provide the following:

Owner of the drinking water supply: [Click here to enter text](#)

Distance and direction to the intake: [Click here to enter text](#)

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

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

#### Section 2. Discharge into Tidally Affected Waters (Instructions Page 73)

Does the facility discharge into tidally affected waters?

Yes ☐ No ☒

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

##### N/A A. Receiving water outfall

Width of the receiving water at the outfall, in feet: [Click here to enter text](#)

##### N/A B. Oyster waters

Are there oyster waters in the vicinity of the discharge?

Yes ☐ No ☐

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

[Click here to enter text](#)



**N/A C. Sea grasses**

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

Yes ☐

No ☐

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

[Click here to enter text.](#)

**Section 3. Classified Segments (Instructions Page 73)**

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.

N/A

**Section 4. Description of Immediate Receiving Waters  
(Instructions Page 75)**

Name of the immediate receiving waters: [Click here to enter text.](#)

**A. Receiving water type**

Identify the appropriate description of the receiving waters.

☐

Stream

☐

Freshwater Swamp or Marsh

☐

Lake or Pond

Surface area, in acres: [Click here to enter text.](#)

Average depth of the entire water body, in feet: [Click here to enter](#)

[text.](#)

Average depth of water body within a 500-foot radius of discharge point, in feet: [Click here to enter text.](#)

☐

Man-made Channel or Ditch

- ☐ Open Bay
- ☐ Tidal Stream, Bayou, or Marsh
- ☐ Other, specify: [Click here to enter text.](#)

#### **B. Flow characteristics**

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

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

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

- ☐ USGS flow records
- ☐ Historical observation by adjacent landowners
- ☐ Personal observation
- ☐ Other, specify: [Click here to enter text.](#)

#### **C. Downstream perennial confluences**

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

[Click here to enter text.](#)

#### **D. Downstream characteristics**

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

Yes ☐ No ☐

If yes, discuss how.

Click here to enter text

#### E. Normal dry weather characteristics

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

Click here to enter text

Date and time of observation: Click here to enter text

Was the water body influenced by stormwater runoff during observations?

Yes ☐ No ☐

N/A

### Section 5. General Characteristics of the Waterbody (Instructions Page 74)

#### 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.

- |   |  |
|---|--|
| <input type="checkbox"/> Oil field activities | <input type="checkbox"/> Urban runoff        |
| <input type="checkbox"/> Upstream discharges  | <input type="checkbox"/> Agricultural runoff |
| <input type="checkbox"/> Septic tanks         | <input type="checkbox"/> Other(s), specify   |

#### B. Waterbody uses

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

- |  |   |
|--|---|
| <input type="checkbox"/> Livestock watering    | <input type="checkbox"/> Contact recreation     |
| <input type="checkbox"/> Irrigation withdrawal | <input type="checkbox"/> Non-contact recreation |
| <input type="checkbox"/> Fishing               | <input type="checkbox"/> Navigation             |

☐ Domestic water supply

☐ Industrial water supply

☐ Park activities

☐ Other(s), specify [Click here to enter](#)

### 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 WORKSHEET 4.0

### POLLUTANT ANALYSES 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 for minor amendments without renewal

#### Section 1. Toxic Pollutants (Instructions Page 87)

For pollutants identified in Table 4.0(1), indicate the type of sample.

Grab ☐ Composite ☒

Date and time sample(s) collected: 8/24/23 @ 9:50 pm, 8/25/23 @ 8:00 am,  
10/9/23 @ 10:30 pm, 10/10/23 @ 8:00 am

Attachment 7

**Table 4.0(1) - Toxics Analysis**

Pollutant	AVG Effluent Conc. (µg/l)	MAX Effluent Conc. (µg/l)	Number of Samples	MAL (µg/l)
Acrylonitrile	<50	<50	1	50
Aldrin	<0.01	<0.01	1	0.01
Aluminum	31	31	1	2.5
Anthracene	<10	<10	1	10
Antimony	<5	<5	1	5
Arsenic	1.54	1.54	1	0.5
Barium	55.5	55.5	1	3
Benzene	<10	<10	1	10
Benzidine	<50	<50	1	50

Pollutant	AVG Effluent Conc. (µg/l)	MAX Effluent Conc. (µg/l)	Number of Samples	MAL (µg/l)
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	<10	<10	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
Chlorodibromomethane	<10	<10	1	10
Chloroform	13.5	13.5	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	3.9	3.9	1	2
Chrysene	<5	<5	1	5
p-Chloro-m-Cresol	<10	<10	1	10
4,6-Dinitro-o-Cresol	<50	<50	1	50

Pollutant	AVG Effluent Conc. (µg/l)	MAX Effluent Conc. (µg/l)	Number of Samples	MAL (µg/l)
p-Cresol	<10	<10	1	10
Cyanide (*2)	<10	<10	2	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)	<0.2	<0.2	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

Pollutant	AVG Effluent Conc. (µg/l)	MAX Effluent Conc. (µg/l)	Number of Samples	MAL (µg/l)
Di-n-Butyl Phthalate	<10	<10	1	10
Diuron	<0.09	<0.09	1	0.09
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



Pollutant	AVG Effluent Conc. (µg/l)	MAX Effluent Conc. (µg/l)	Number of Samples	MAL (µg/l)
Malathion	<0.1	<0.1	1	0.1
Mercury	<0.005	<0.005	2	0.005
Methoxychlor	<2	<2	1	2
Methyl Ethyl Ketone	<50	<50	1	50
Mirex	<0.02	<0.02	1	0.02
Nickel	2.35	2.35	1	2
Nitrate-Nitrogen	5895	8850	2	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
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

Pollutant	AVG Effluent Conc. (µg/l)	MAX Effluent Conc. (µg/l)	Number of Samples	MAL (µg/l)
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)	<10	<10	1	10
Vinyl Chloride	<10	<10	1	10
Zinc	39.9	39.9	1	5

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

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

(\*3) The sum of seven PCB congeners 1242, 1254, 1221, 1232, 1248, 1260, and 1016.

## Section 2. Priority Pollutants

For pollutants identified in Tables 4.0(2)A-E, indicate type of sample.

Grab ☐ Composite ☒

Date and time sample(s) collected: 8/24/23 @ 9:50 pm, 8/25/23 @ 8:00 am,  
10/9/23 @ 10:30 pm, 10/10/23 @ 8:00 am

Attachment 7

**Table 4.0(2)A - Metals, Cyanide, Phenols**

Pollutant	AVG Effluent Conc. (µg/l)	MAX Effluent Conc. (µg/l)	Number of Samples	MAL (µg/l)
Antimony	<5	<5	1	5
Arsenic	1.54	1.54	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	3.9	3.9	1	2
Lead	<0.5	<0.5	1	0.5
Mercury	<0.005	<0.005	2	0.005
Nickel	2.35	2.35	1	2
Selenium	<5	<5	1	5
Silver	<0.5	<0.5	1	0.5
Thallium	<0.5	<0.5	1	0.5
Zinc	39.9	39.9	1	5
Cyanide (*2)	<10	<10	2	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**

<b>Pollutant</b>	<b>AVG Effluent Conc. (µg/l)</b>	<b>MAX Effluent Conc. (µg/l)</b>	<b>Number of Samples</b>	<b>MAL (µg/l)</b>
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	13.5	13.5	1	10
Dichlorobromomethane [Bromodichloromethane]	<10	<10	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

<b>Pollutant</b>	<b>AVG Effluent Conc. (µg/l)</b>	<b>MAX Effluent Conc. (µg/l)</b>	<b>Number of Samples</b>	<b>MAL (µg/l)</b>
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**

<b>Pollutant</b>	<b>AVG Effluent Conc. (µg/l)</b>	<b>MAX Effluent Conc. (µg/l)</b>	<b>Number of Samples</b>	<b>MAL (µg/l)</b>
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**

<b>Pollutant</b>	<b>AVG Effluent Conc. (µg/l)</b>	<b>MAX Effluent Conc. (µg/l)</b>	<b>Number of Samples</b>	<b>MAL (µg/l)</b>
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

<b>Pollutant</b>	<b>AVG Effluent Conc. (µg/l)</b>	<b>MAX Effluent Conc. (µg/l)</b>	<b>Number of Samples</b>	<b>MAL (µg/l)</b>
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
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**

<b>Pollutant</b>	<b>AVG Effluent Conc. (µg/l)</b>	<b>MAX Effluent Conc. (µg/l)</b>	<b>Number of Samples</b>	<b>MAL (µg/l)</b>
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



Pollutant	AVG Effluent Conc. (µg/l)	MAX Effluent Conc. (µg/l)	Number of Samples	MAL (µg/l)
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.

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 here to enter text.](#)

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 here 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	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	0.01					50
OCDD	0.0003					100
OCDF	0.0003					100
PCB 77	0.0001					0.5
PCB 81	0.0003					0.5

Compound	Toxic Equivalency Factors	Wastewater Concentration (ppq)	Wastewater Equivalents (ppq)	Sludge Concentration (ppt)	Sludge Equivalents (ppt)	MAL (ppq)
PCB 126	0.1					0.5
PCB 169	0.03					0.5
Total						

## DOMESTIC WORKSHEET 5.0

### TOXICITY TESTING REQUIREMENTS

The following is required for facilities with a currently-operating design flow greater than or equal to 1.0 MGD, with an EPA-approved pretreatment program (or those that are required to have one under 40 CFR Part 403), or are required by the TCEQ to perform Whole Effluent Toxicity testing. This worksheet is not required for minor amendments without renewal.

#### Section 1. Required Tests (Instructions Page 97)

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 9

48-hour Acute: n/a

#### 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 here 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 9		

## DOMESTIC WORKSHEET 6.0

### INDUSTRIAL WASTE CONTRIBUTION

The following is required for all publicly owned treatment works (POTWs)

#### Section 1. All POTWs (Instructions Page 99)

##### A. Industrial users

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: 5

Average Daily Flows, in MGD: 0.04279

Significant IUs - non-categorical:

Number of IUs: 4

Average Daily Flows, in MGD: 0.30427

Other IUs:

Number of IUs: 4

Average Daily Flows, in MGD: 0.08707

##### B. Treatment plant interference

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

Yes ☐

No ☒

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

n/a

### C. Treatment plant pass through

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

Yes ☐

No ☒

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

n/a

### D. Pretreatment program

Does your POTW have an approved pretreatment program?

Yes ☒

No ☐

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

Is your POTW required to develop an approved pretreatment program?

Yes ☒

No ☐

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

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

## Section 2. POTWs with Approved Programs or Those Required to Develop a Program (Instructions Page 100)

### A. Substantial modifications

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

Yes ☐

No ☒

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

n/a

**B. Non-substantial modifications**

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

Yes ☐

No ☒

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

n/a

**C. Effluent parameters above the MAL**

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

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

Pollutant	Concentration	MAL	Units	Date
Attachment 10				



#### D. Industrial user interruptions

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

Yes ☐

No ☒

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

n/a

N/A

### Section 3. Significant Industrial User (SIU) Information and Categorical Industrial User (CIU) (Instructions Page 100)

#### A. General information

Company Name:

SIC Code:

Telephone number:  Fax number:

Contact name:

Address:

City, State, and Zip Code:

#### 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).

#### C. Product and service information

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

Click here 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 here to enter text.

Discharge Type: ☐ Continuous ☐ Batch ☐ Intermittent

Non-Process Wastewater:

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

Discharge Type: ☐ Continuous ☐ Batch ☐ Intermittent

#### E. Pretreatment standards

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

Yes ☐ No ☐

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

Yes ☐ No ☐

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

Category: Click here to enter text.  
Subcategories: Click here to enter text.

Category: Click here to enter text.  
Subcategories: Click here to enter text.

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Subcategories: Click here to enter text.

Category: Click here to enter text.  
Subcategories: Click here to enter text.

Category: Click here to enter text.  
Subcategories: Click here 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 here to enter text

**Attachment 1**

Copy of Application Fee Check

Administrative Report 1.0, Section 1

**Attachment 3**

USGS Map

Administrative Report 1.0, Section 13

**Attachment 4**

**Treatment Units**

Domestic Technical Report 1.0, Section 2.B.

**CITY OF HOUSTON  
NORTHWEST WWTP  
TPDES PERMIT RENEWAL**

**TREATMENT UNITS**

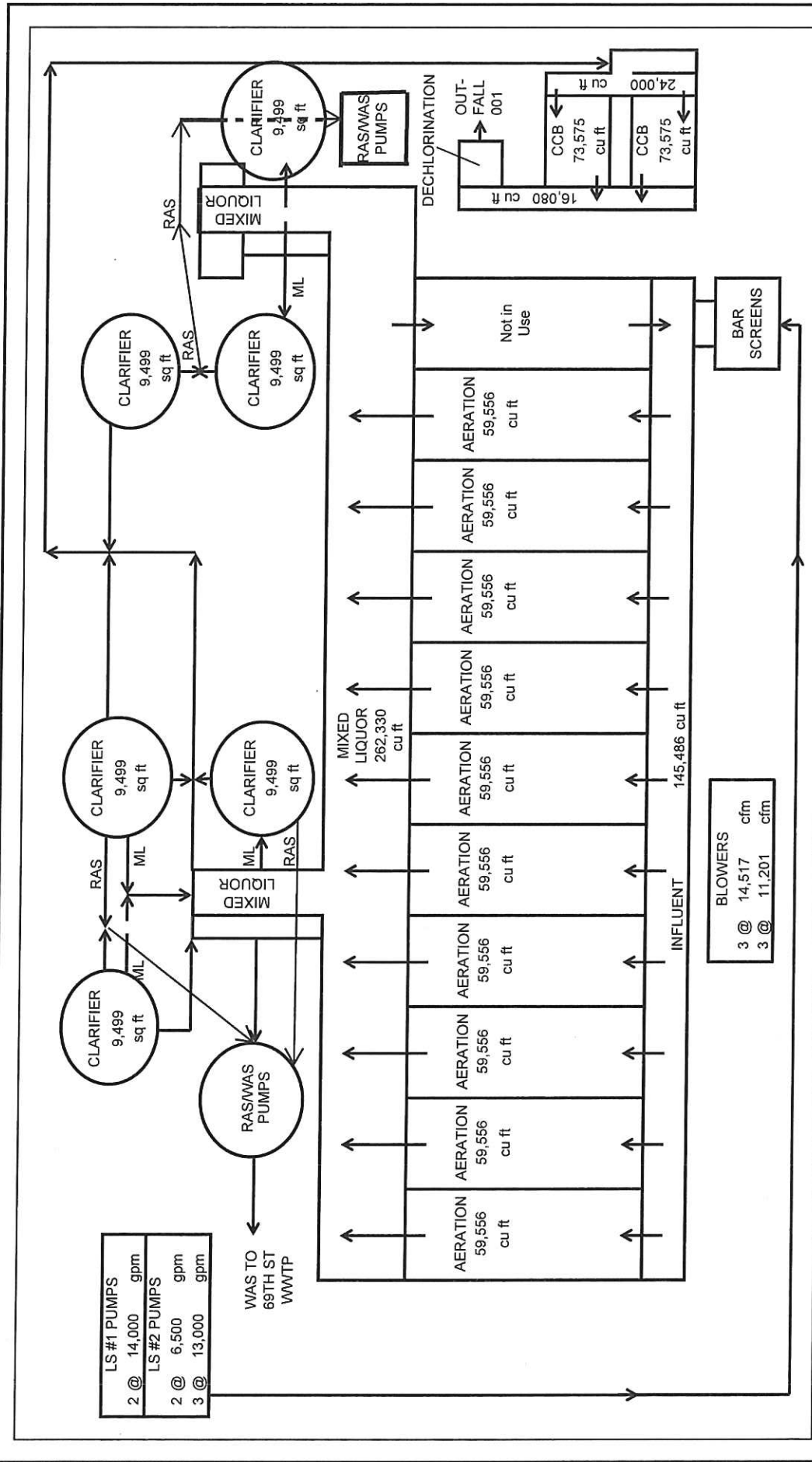
<b>Unit</b>	<b>Quantity</b>	<b>Dimensions</b>
Aeration Basin	10	140' x 30' x 14.18'
Influent Channel	1	342' x 30' x 14.18'
Mixed Channel	2	400' x 20' x 14.18'
	2	125' x 10' x 14.18'
Clarifier	6	110' Diameter x 13.55' SWD
Chlorine Contact Basin Influent Channel	1	100' x 16' x 15'
Chlorine Contact Basin	2	109' x 45' x 15'
Chlorine Contact Basin Effluent Channel	1	134' x 8' x 15'

**Attachment 5**

Process Flow Diagram

Domestic Technical Report 1.0, Section 2.C.





**NORTHWEST WWTP (CFS) - PROCESS FLOW DIAGRAM**



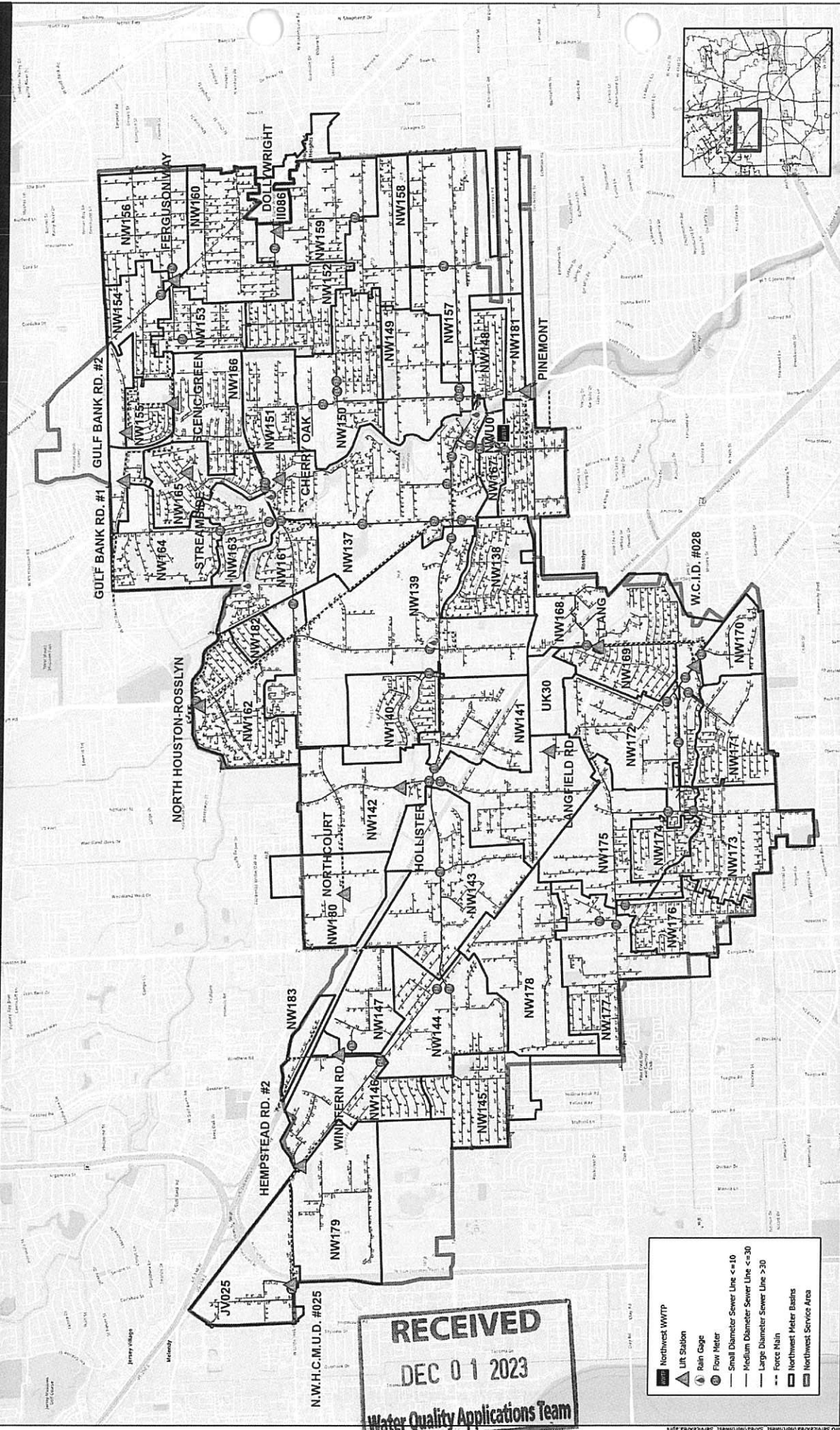
<b>PLANT LOCATION</b> 5423 MANGUM HOUSTON, TX 77091  <b>QUADRANT</b> KEY MAP NUMBER	<b>PLANT</b> SOUTHWEST 570K	<b>OVERALL PLANT CAPACITY (MGD)</b>			<b>UNIT PROCESS CAPACITY (MGD)</b>		
		LIFT STATION	FIRM	TOTAL	AERATION SYSTEM		
			76.32	115.20	DESIGN		
		PERMITTED FLOW LIMITS	AVG.	2 HR PEAK	SECONDARY CLARIFIERS		
			18.5	68.4	DISINFECTION		
			21	82.0	2 HR PEAK		
					NA		
					68.4		
					100.8		

**Attachment 6**

Site Drawing

Domestic Technical Report 1.0, Section 3

# Northwest Service Area



Geographical or map data maintained by Houston Public Works is for informational purposes only. It is not intended to be used 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 1,000 2,000 4,000 6,000 Feet

Northwest WWP  
 Lin Station  
 Rain Gauge  
 Flow Meter  
 Small Diameter Sewer Line <=10  
 Medium Diameter Sewer Line <=30  
 Large Diameter Sewer Line >30  
 Force Main  
 Northwest Meter Basins  
 Northwest Service Area

HOUSTON  
PUBLIC WORKS

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 Water Quality Applications Team

N.W.H.C.M.U.D. #025

- Northwest WWP
- Lin Station
- Rain Gauge
- Flow Meter
- Small Diameter Sewer Line <=10
- Medium Diameter Sewer Line <=30
- Large Diameter Sewer Line >30
- Force Main
- Northwest Meter Basins
- Northwest Service Area

**Attachment 7**

Laboratory Test Reports and COCs

Domestic Technical Report 1.0, Section 7, Table 1.0(2)

Domestic Worksheet 4.0, Section 1

Domestic Worksheet 4.0, Section 2



November 09, 2023

## **ANALYTICAL REPORT**

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

Regulatory Compliance

Northwest  
5423 Mangum Rd  
Houston, TX 77091

Project Site: Northwest Pollutants

Enclosed are the results of analyses for samples received by the laboratory on 8/25/2023.  
If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Brandon Grimm  
Division Manager



Northwest  
5423 Mangum Rd  
Houston, TX 77091

Project: NW Full Scan  
Project Number: 10495-076  
Project Manager: Regulatory Compliance

**Reported:**  
11/09/2023 07:32

PDFFileStart [TOCPAGEMARKER] PDFFileEnd



Northwest  
5423 Mangum Rd  
Houston, TX 77091

Project: NW Full Scan  
Project Number: 10495-076  
Project Manager: Regulatory Compliance

**Reported:**  
11/09/2023 07:32

### Samples in this Report

Lab ID	Sample		Matrix	Date Sampled	Date Received
23H1064-01	SP 1_CompMan	Northwest Influent	Water	08/24/2023 22:07	08/25/2023 11:56
23H1064-02	SP 1_Comp	Northwest Influent	Water	08/25/2023 06:00	08/25/2023 11:56
23H1064-03	SP 2_CompMan	Northwest Effluent	Water	08/24/2023 21:50	08/25/2023 11:56
23H1064-04	SP 2_Comp	Northwest Effluent	Water	08/25/2023 08:00	08/25/2023 11:56
23H1064-05	Field Blank	Field Blank Northwest	Water	08/24/2023 04:59	08/25/2023 11:56



Northwest  
5423 Mangum Rd  
Houston, TX 77091

Project: NW Full Scan  
Project Number: 10495-076  
Project Manager: Regulatory Compliance

**Reported:**  
11/09/2023 07:32

## Sample Results

**Sample: SP 1\_CompMan Northwest Influent**  
**23H1064-01 (Water)**

Analyte	Result	Qual	DL	RL	Units	Date Prepared	Date Analyzed	Analyst Initials	Method
<b>Volatile Organics</b>									
1,1,1-Trichloroethane	ND		1.03	5.00	ug/L	08/28/2023	08:00 08/28/2023	13:13	SRB EPA 624.1
1,1,2,2-Tetrachloroethane	ND		0.502	5.00	ug/L	08/28/2023	08:00 08/28/2023	13:13	SRB EPA 624.1
1,1,2-Trichloroethane	ND		0.471	5.00	ug/L	08/28/2023	08:00 08/28/2023	13:13	SRB EPA 624.1
1,1-Dichloroethane	ND		0.919	5.00	ug/L	08/28/2023	08:00 08/28/2023	13:13	SRB EPA 624.1
1,1-Dichloroethene	ND		0.745	5.00	ug/L	08/28/2023	08:00 08/28/2023	13:13	SRB EPA 624.1
1,2-Dibromoethane	ND		0.621	5.00	ug/L	08/28/2023	08:00 08/28/2023	13:13	SRB EPA 624.1
1,2-Dichlorobenzene	ND		1.23	5.00	ug/L	08/28/2023	08:00 08/28/2023	13:13	SRB EPA 624.1
1,2-Dichloroethane	ND		0.803	5.00	ug/L	08/28/2023	08:00 08/28/2023	13:13	SRB EPA 624.1
1,2-Dichloropropane	ND		0.513	5.00	ug/L	08/28/2023	08:00 08/28/2023	13:13	SRB EPA 624.1
1,3-Dichlorobenzene	ND		1.28	5.00	ug/L	08/28/2023	08:00 08/28/2023	13:13	SRB EPA 624.1
<b>1,4-Dichlorobenzene</b>	<b>4.41</b>	J	1.21	5.00	ug/L	08/28/2023	08:00 08/28/2023	13:13	SRB EPA 624.1
<b>2-Butanone</b>	<b>9.35</b>	J	2.56	10.0	ug/L	08/28/2023	08:00 08/28/2023	13:13	SRB EPA 624.1
2-Chloroethyl vinyl ether	ND		0.704	5.00	ug/L	08/28/2023	08:00 08/28/2023	13:13	SRB EPA 624.1
Acrolein	ND		1.29	5.00	ug/L	08/28/2023	08:00 08/28/2023	13:13	SRB EPA 624.1
Acrylonitrile	ND		1.96	5.00	ug/L	08/28/2023	08:00 08/28/2023	13:13	SRB EPA 624.1
Benzene	ND		0.591	5.00	ug/L	08/28/2023	08:00 08/28/2023	13:13	SRB EPA 624.1
Bromodichloromethane	ND		0.336	5.00	ug/L	08/28/2023	08:00 08/28/2023	13:13	SRB EPA 624.1
Bromoform	ND		0.416	5.00	ug/L	08/28/2023	08:00 08/28/2023	13:13	SRB EPA 624.1
Bromomethane	ND		1.09	5.00	ug/L	08/28/2023	08:00 08/28/2023	13:13	SRB EPA 624.1
Carbon Disulfide	ND		1.16	5.00	ug/L	08/28/2023	08:00 08/28/2023	13:13	SRB EPA 624.1
Carbon Tetrachloride	ND		0.785	5.00	ug/L	08/28/2023	08:00 08/28/2023	13:13	SRB EPA 624.1
Chlorobenzene	ND		0.782	5.00	ug/L	08/28/2023	08:00 08/28/2023	13:13	SRB EPA 624.1
Chloroethane	ND		0.583	5.00	ug/L	08/28/2023	08:00 08/28/2023	13:13	SRB EPA 624.1
<b>Chloroform</b>	<b>5.81</b>		0.727	4.00	ug/L	08/28/2023	08:00 08/28/2023	13:13	SRB EPA 624.1
chloromethane	ND		1.38	5.00	ug/L	08/28/2023	08:00 08/28/2023	13:13	SRB EPA 624.1
cis-1,2-Dichloroethene	ND		0.562	5.00	ug/L	08/28/2023	08:00 08/28/2023	13:13	SRB EPA 624.1
cis-1,3-Dichloropropene	ND		0.728	5.00	ug/L	08/28/2023	08:00 08/28/2023	13:13	SRB EPA 624.1
Dibromochloromethane	ND		0.504	5.00	ug/L	08/28/2023	08:00 08/28/2023	13:13	SRB EPA 624.1
Epichlorohydrin	ND		4.78	25.0	ug/L	08/28/2023	08:00 08/28/2023	13:13	SRB EPA 624.1
Ethylbenzene	ND		0.807	5.00	ug/L	08/28/2023	08:00 08/28/2023	13:13	SRB EPA 624.1
m+p-Xylene	ND		1.68	10.0	ug/L	08/28/2023	08:00 08/28/2023	13:13	SRB EPA 624.1
Methylene Chloride	ND		2.14	5.00	ug/L	08/28/2023	08:00 08/28/2023	13:13	SRB EPA 624.1
Methyl-tert-butyl ether (MTBE)	ND		0.428	5.00	ug/L	08/28/2023	08:00 08/28/2023	13:13	SRB EPA 624.1
o-Xylene	ND		1.00	5.00	ug/L	08/28/2023	08:00 08/28/2023	13:13	SRB EPA 624.1
Styrene	ND		0.793	5.00	ug/L	08/28/2023	08:00 08/28/2023	13:13	SRB EPA 624.1
Tetrachloroethene	ND		0.920	5.00	ug/L	08/28/2023	08:00 08/28/2023	13:13	SRB EPA 624.1
<b>Toluene</b>	<b>4.12</b>	J	0.737	5.00	ug/L	08/28/2023	08:00 08/28/2023	13:13	SRB EPA 624.1
trans-1,2-Dichloroethene	ND		1.26	4.00	ug/L	08/28/2023	08:00 08/28/2023	13:13	SRB EPA 624.1
trans-1,3-Dichloropropene	ND		1.16	5.00	ug/L	08/28/2023	08:00 08/28/2023	13:13	SRB EPA 624.1
Trichloroethene	ND		0.432	5.00	ug/L	08/28/2023	08:00 08/28/2023	13:13	SRB EPA 624.1





Northwest  
5423 Mangum Rd  
Houston, TX 77091

Project: NW Full Scan  
Project Number: 10495-076  
Project Manager: Regulatory Compliance

**Reported:**  
11/09/2023 07:32

### Sample Results (Continued)

**Sample: SP 1\_CompMan (Continued)Northwest Influent**  
**23H1064-01 (Water)**

Analyte	Result	Qual	DL	RL	Units	Date Prepared	Date Analyzed	Analyst Initials	Method
<b>Volatile Organics (Continued)</b>									
Vinyl acetate	ND		0.712	5.00	ug/L	08/28/2023 08:00	08/28/2023 13:13	SRB	EPA 624.1
Vinyl chloride	ND		1.15	5.00	ug/L	08/28/2023 08:00	08/28/2023 13:13	SRB	EPA 624.1
Xylenes, Total	ND		1.00	5.00	ug/L	08/28/2023 08:00	08/28/2023 13:13	SRB	EPA 624.1
Total Trihalomethanes	ND		1.11	5.00	ug/L	08/28/2023 08:00	08/28/2023 13:13	SRB	EPA 624.1
1,3-Dichloropropene, Total	ND		0.738	5.00	ug/L	08/28/2023 08:00	08/28/2023 13:13	SRB	EPA 624.1
<b>Wet Chemistry</b>									
Cyanide, Amenable	19.9		0.946	2.00	ug/L	08/25/2023 12:30	08/25/2023 15:02	SRB	OIA 1677
Cyanide, Total	37.5		3.14	10.0	ug/L	08/25/2023 12:30	08/25/2023 15:02	SRB	ASTM D7511



Northwest  
5423 Mangum Rd  
Houston, TX 77091

Project: NW Full Scan  
Project Number: 10495-076  
Project Manager: Regulatory Compliance

**Reported:**  
11/09/2023 07:32

### Sample Results (Continued)

**Sample: SP 1\_Comp Northwest Influent  
23H1064-02 (Water)**

Analyte	Result	Qual	DL	RL	Units	Date Prepared	Date Analyzed	Analyst Initials	Method
<b>Total Metals</b>									
Silver	ND		1.74	20.0	ug/L	09/07/2023	08:12 09/08/2023	10:07	VP EPA 200.7
Aluminum	991		18.0	100	ug/L	09/07/2023	08:12 09/08/2023	10:07	VP EPA 200.7
Arsenic	ND		32.0	100	ug/L	09/07/2023	08:12 09/08/2023	10:07	VP EPA 200.7
Barium	181		7.94	100	ug/L	09/07/2023	08:12 09/08/2023	10:07	VP EPA 200.7
Beryllium	ND		1.42	20.0	ug/L	09/07/2023	08:12 09/08/2023	10:07	VP EPA 200.7
Cadmium	ND		2.74	20.0	ug/L	09/07/2023	08:12 09/08/2023	10:07	VP EPA 200.7
Chromium	18.9 J		7.39	100	ug/L	09/07/2023	08:12 09/08/2023	10:07	VP EPA 200.7
Copper	65.0 J		7.25	100	ug/L	09/07/2023	08:12 09/08/2023	10:07	VP EPA 200.7
Nickel	ND		12.6	100	ug/L	09/07/2023	08:12 09/08/2023	10:07	VP EPA 200.7
Lead	ND		27.2	100	ug/L	09/07/2023	08:12 09/08/2023	10:07	VP EPA 200.7
Antimony	ND		37.1	100	ug/L	09/07/2023	08:12 09/08/2023	10:07	VP EPA 200.7
Selenium	ND		43.1	100	ug/L	09/07/2023	08:12 09/08/2023	10:07	VP EPA 200.7
Thallium	ND		82.3	200	ug/L	09/07/2023	08:12 09/08/2023	10:07	VP EPA 200.7
Vanadium	ND		11.9	100	ug/L	09/07/2023	08:12 09/08/2023	10:07	VP EPA 200.7
Zinc	227		12.9	100	ug/L	09/07/2023	08:12 09/08/2023	10:07	VP EPA 200.7
Mercury	0.0929 J		0.0253	0.100	ug/L	08/28/2023	08:00 08/30/2023	11:44	VP EPA 245.1
Chromium Trivalent	18.9 J		7.39	100	ug/L	09/15/2023	12:00 09/15/2023	16:06	VP Calculated
<b>Semivolatile Organics</b>									
Chlorpyrifos (2)	ND		1.00923	0.256	ug/L	08/31/2023	08:20 09/15/2023	15:51	RD EPA 1657
Demeton-o (2)	ND		0.0195	0.256	ug/L	08/31/2023	08:20 09/15/2023	15:51	RD EPA 1657
Demeton-s (2)	ND		0.0164	0.256	ug/L	08/31/2023	08:20 09/15/2023	15:51	RD EPA 1657
Diazinon (2)	ND		0.0133	0.256	ug/L	08/31/2023	08:20 09/15/2023	15:51	RD EPA 1657
ethyl-Parathion (2)	ND		0.0123	0.256	ug/L	08/31/2023	08:20 09/15/2023	15:51	RD EPA 1657
Malathion (2)	ND		0.0123	0.256	ug/L	08/31/2023	08:20 09/15/2023	15:51	RD EPA 1657
methyl Azinphos (Guthion) (2)	ND		0.0154	0.256	ug/L	08/31/2023	08:20 09/15/2023	15:51	RD EPA 1657
4,4'-DDD	ND		1.003900	0.0255	ug/L	08/29/2023	09:07 08/31/2023	12:57	SRB EPA 608.3
4,4'-DDE	ND		1.00156	0.00510	ug/L	08/29/2023	09:07 08/31/2023	12:57	SRB EPA 608.3
4,4'-DDT	ND		1.005190	0.0255	ug/L	08/29/2023	09:07 08/31/2023	12:57	SRB EPA 608.3
Aldrin	ND		1.00156	0.00510	ug/L	08/29/2023	09:07 08/31/2023	12:57	SRB EPA 608.3
Alpha-BHC	ND		1.00121	0.00510	ug/L	08/29/2023	09:07 08/31/2023	12:57	SRB EPA 608.3
Beta-BHC	ND		1.00243	0.00510	ug/L	08/29/2023	09:07 08/31/2023	12:57	SRB EPA 608.3
Chlordane	ND		0.0439	0.204	ug/L	08/29/2023	09:07 08/31/2023	12:57	SRB EPA 608.3
Delta-BHC	ND		1.00171	0.00510	ug/L	08/29/2023	09:07 08/31/2023	12:57	SRB EPA 608.3
Dicofol	ND		0.01190	0.0510	ug/L	08/29/2023	09:07 08/31/2023	12:57	SRB EPA 608.3
Dieldrin	ND		1.00185	0.00510	ug/L	08/29/2023	09:07 08/31/2023	12:57	SRB EPA 608.3
Endosulfan I	ND		1.00121	0.00510	ug/L	08/29/2023	09:07 08/31/2023	12:57	SRB EPA 608.3
Endosulfan II	ND		1.003430	0.0255	ug/L	08/29/2023	09:07 08/31/2023	12:57	SRB EPA 608.3
Endosulfan Sulfate	ND		1.004320	0.0255	ug/L	08/29/2023	09:07 08/31/2023	12:57	SRB EPA 608.3
Endrin	ND		0.01340	0.0255	ug/L	08/29/2023	09:07 08/31/2023	12:57	SRB EPA 608.3



Northwest  
5423 Mangum Rd  
Houston, TX 77091

Project: NW Full Scan  
Project Number: 10495-076  
Project Manager: Regulatory Compliance

**Reported:**  
11/09/2023 07:32

### Sample Results (Continued)

**Sample: SP 1\_Comp (Continued) Northwest Influent**  
**23H1064-02 (Water)**

Analyte	Result	Qual	DL	RL	Units	Date Prepared	Date Analyzed	Analyst Initials	Method
<b>Semivolatile Organics (Continued)</b>									
Endrin-Aldehyde	ND		1.00221	0.00510	ug/L	08/29/2023	09:07 08/31/2023	12:57	SRB EPA 608.3
Gamma-BHC	ND		1.00121	0.00510	ug/L	08/29/2023	09:07 08/31/2023	12:57	SRB EPA 608.3
Heptachlor	ND		1.00221	0.00510	ug/L	08/29/2023	09:07 08/31/2023	12:57	SRB EPA 608.3
Heptachlor epoxide	ND		1.00156	0.00510	ug/L	08/29/2023	09:07 08/31/2023	12:57	SRB EPA 608.3
Methoxychlor	ND		1.00252	0.00510	ug/L	08/29/2023	09:07 08/31/2023	12:57	SRB EPA 608.3
Mirex	ND		1.00156	0.00510	ug/L	08/29/2023	09:07 08/31/2023	12:57	SRB EPA 608.3
PCB-1016	ND		0.0778	0.204	ug/L	08/29/2023	09:07 08/31/2023	12:57	SRB EPA 608.3
PCB-1221	ND		0.0121	0.204	ug/L	08/29/2023	09:07 08/31/2023	12:57	SRB EPA 608.3
PCB-1232	ND		0.122	0.204	ug/L	08/29/2023	09:07 08/31/2023	12:57	SRB EPA 608.3
PCB-1242	ND		0.118	0.204	ug/L	08/29/2023	09:07 08/31/2023	12:57	SRB EPA 608.3
PCB-1248	ND		0.0953	0.204	ug/L	08/29/2023	09:07 08/31/2023	12:57	SRB EPA 608.3
PCB-1254	ND		0.0747	0.204	ug/L	08/29/2023	09:07 08/31/2023	12:57	SRB EPA 608.3
PCB-1260	ND		0.165	0.204	ug/L	08/29/2023	09:07 08/31/2023	12:57	SRB EPA 608.3
Toxaphene	ND		0.103	0.204	ug/L	08/29/2023	09:07 08/31/2023	12:57	SRB EPA 608.3
Polychlorinated biphenyls, Total	ND		0.0747	0.204	ug/L	08/29/2023	09:07 08/31/2023	12:57	SRB EPA 608.3
1,2,4,5-Tetrachlorobenzene	ND		0.968	5.13	ug/L	08/29/2023	08:31 08/30/2023	20:33	SRB EPA 625.1
1,2,4-Trichlorobenzene	ND		0.513	5.13	ug/L	08/29/2023	08:31 08/30/2023	20:33	SRB EPA 625.1
2,4,5-Trichlorophenol	ND		1.67	5.13	ug/L	08/29/2023	08:31 08/30/2023	20:33	SRB EPA 625.1
2,4,6-Trichlorophenol	ND		1.18	5.13	ug/L	08/29/2023	08:31 08/30/2023	20:33	SRB EPA 625.1
2,4-Dichlorophenol	ND		1.05	5.13	ug/L	08/29/2023	08:31 08/30/2023	20:33	SRB EPA 625.1
2,4-Dimethylphenol	ND		0.724	5.13	ug/L	08/29/2023	08:31 08/30/2023	20:33	SRB EPA 625.1
2,4-Dinitrophenol	ND		3.19	5.13	ug/L	08/29/2023	08:31 08/30/2023	20:33	SRB EPA 625.1
2,4-Dinitrotoluene	ND		1.39	5.13	ug/L	08/29/2023	08:31 08/30/2023	20:33	SRB EPA 625.1
2,6-Dinitrotoluene	ND		1.37	5.13	ug/L	08/29/2023	08:31 08/30/2023	20:33	SRB EPA 625.1
2-Chloronaphthalene	ND		0.984	5.13	ug/L	08/29/2023	08:31 08/30/2023	20:33	SRB EPA 625.1
2-Chlorophenol	ND		1.07	5.13	ug/L	08/29/2023	08:31 08/30/2023	20:33	SRB EPA 625.1
2-Methylphenol	ND		1.10	5.13	ug/L	08/29/2023	08:31 08/30/2023	20:33	SRB EPA 625.1
2-Nitrophenol	ND		0.724	5.13	ug/L	08/29/2023	08:31 08/30/2023	20:33	SRB EPA 625.1
3,3'-Dichlorobenzidine	ND		1.51	5.13	ug/L	08/29/2023	08:31 08/30/2023	20:33	SRB EPA 625.1
4,6-Dinitro-2-methylphenol	ND		2.33	5.13	ug/L	08/29/2023	08:31 08/30/2023	20:33	SRB EPA 625.1
4-Bromophenyl phenyl ether	ND		0.836	5.13	ug/L	08/29/2023	08:31 08/30/2023	20:33	SRB EPA 625.1
4-Chloro-3-methylphenol	ND		1.22	5.13	ug/L	08/29/2023	08:31 08/30/2023	20:33	SRB EPA 625.1
4-Chlorophenyl phenyl Ether	ND		1.21	5.13	ug/L	08/29/2023	08:31 08/30/2023	20:33	SRB EPA 625.1
<b>4-Methylphenol</b>	<b>61.6</b>		1.42	5.13	ug/L	08/29/2023	08:31 08/30/2023	20:33	SRB EPA 625.1
4-Nitrophenol	ND		0.993	5.13	ug/L	08/29/2023	08:31 08/30/2023	20:33	SRB EPA 625.1
Acenaphthene	ND		1.08	5.13	ug/L	08/29/2023	08:31 08/30/2023	20:33	SRB EPA 625.1
Acenaphthylene	ND		0.893	5.13	ug/L	08/29/2023	08:31 08/30/2023	20:33	SRB EPA 625.1
Aniline	ND		1.25	5.13	ug/L	08/29/2023	08:31 08/30/2023	20:33	SRB EPA 625.1
Anthracene	ND		0.878	5.13	ug/L	08/29/2023	08:31 08/30/2023	20:33	SRB EPA 625.1
Azobenzene	ND		1.00	5.13	ug/L	08/29/2023	08:31 08/30/2023	20:33	SRB EPA 625.1



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Project: NW Full Scan  
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Project Manager: Regulatory Compliance

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### Sample Results (Continued)

**Sample: SP 1\_Comp (Continued) Northwest Influent**  
**23H1064-02 (Water)**

Analyte	Result	Qual	DL	RL	Units	Date Prepared	Date Analyzed	Analyst Initials	Method
<b>Semivolatile Organics (Continued)</b>									
Benzidine	ND		1.65	5.13	ug/L	08/29/2023	08:31 08/30/2023	20:33	SRB EPA 625.1
Benzo(a)pyrene	ND		1.57	5.13	ug/L	08/29/2023	08:31 08/30/2023	20:33	SRB EPA 625.1
Benzo(b)fluoranthene	ND		1.47	5.13	ug/L	08/29/2023	08:31 08/30/2023	20:33	SRB EPA 625.1
Benzo(k)Fluoranthene	ND		1.04	5.13	ug/L	08/29/2023	08:31 08/30/2023	20:33	SRB EPA 625.1
Benzo(g,h,i)perylene	ND		1.16	5.13	ug/L	08/29/2023	08:31 08/30/2023	20:33	SRB EPA 625.1
Benzo[a]anthracene	ND		1.15	5.13	ug/L	08/29/2023	08:31 08/30/2023	20:33	SRB EPA 625.1
Bis(2-chloroethoxy) methane	ND		0.852	5.13	ug/L	08/29/2023	08:31 08/30/2023	20:33	SRB EPA 625.1
Bis(2-chloroethyl) ether	ND		1.11	5.13	ug/L	08/29/2023	08:31 08/30/2023	20:33	SRB EPA 625.1
Bis(2-chloroisopropyl) ether	ND		0.990	5.13	ug/L	08/29/2023	08:31 08/30/2023	20:33	SRB EPA 625.1
<b>Bis(2-ethylhexyl) phthalate</b>	<b>3.68</b>	J	2.72	5.13	ug/L	08/29/2023	08:31 08/30/2023	20:33	SRB EPA 625.1
Butyl benzyl phthalate	ND		1.32	5.13	ug/L	08/29/2023	08:31 08/30/2023	20:33	SRB EPA 625.1
Carbazole	ND		1.59	5.13	ug/L	08/29/2023	08:31 08/30/2023	20:33	SRB EPA 625.1
Chrysene	ND		1.33	5.13	ug/L	08/29/2023	08:31 08/30/2023	20:33	SRB EPA 625.1
Dibenzo(a,h)anthracene	ND		1.35	5.13	ug/L	08/29/2023	08:31 08/30/2023	20:33	SRB EPA 625.1
<b>Diethyl phthalate</b>	<b>5.48</b>		1.31	5.13	ug/L	08/29/2023	08:31 08/30/2023	20:33	SRB EPA 625.1
Dimethyl phthalate	ND		0.934	5.13	ug/L	08/29/2023	08:31 08/30/2023	20:33	SRB EPA 625.1
Di-n-butyl phthalate	ND		1.37	5.13	ug/L	08/29/2023	08:31 08/30/2023	20:33	SRB EPA 625.1
Di-n-octyl phthalate	ND		2.13	5.13	ug/L	08/29/2023	08:31 08/30/2023	20:33	SRB EPA 625.1
Fluoranthene	ND		1.30	5.13	ug/L	08/29/2023	08:31 08/30/2023	20:33	SRB EPA 625.1
Fluorene	ND		1.05	5.13	ug/L	08/29/2023	08:31 08/30/2023	20:33	SRB EPA 625.1
Hexachlorobenzene	ND		0.971	5.13	ug/L	08/29/2023	08:31 08/30/2023	20:33	SRB EPA 625.1
Hexachlorobutadiene	ND		0.533	5.13	ug/L	08/29/2023	08:31 08/30/2023	20:33	SRB EPA 625.1
Hexachlorocyclopentadiene	ND		0.759	5.13	ug/L	08/29/2023	08:31 08/30/2023	20:33	SRB EPA 625.1
Hexachloroethane	ND		0.765	5.13	ug/L	08/29/2023	08:31 08/30/2023	20:33	SRB EPA 625.1
Indeno(1,2,3-cd)pyrene	ND		1.76	5.13	ug/L	08/29/2023	08:31 08/30/2023	20:33	SRB EPA 625.1
Isophorone	ND		0.497	5.13	ug/L	08/29/2023	08:31 08/30/2023	20:33	SRB EPA 625.1
Naphthalene	ND		0.656	5.13	ug/L	08/29/2023	08:31 08/30/2023	20:33	SRB EPA 625.1
n-Decane	ND		0.533	5.13	ug/L	08/29/2023	08:31 08/30/2023	20:33	SRB EPA 625.1
Nitrobenzene	ND		0.778	5.13	ug/L	08/29/2023	08:31 08/30/2023	20:33	SRB EPA 625.1
N-Nitosodi-n-butylamine	ND		0.987	5.13	ug/L	08/29/2023	08:31 08/30/2023	20:33	SRB EPA 625.1
N-Nitrosodiethylamine	ND		1.08	5.13	ug/L	08/29/2023	08:31 08/30/2023	20:33	SRB EPA 625.1
N-Nitrosodimethylamine	ND		0.777	5.13	ug/L	08/29/2023	08:31 08/30/2023	20:33	SRB EPA 625.1
N-Nitrosodi-n-propylamine	ND		1.54	5.13	ug/L	08/29/2023	08:31 08/30/2023	20:33	SRB EPA 625.1
N-Nitrosodiphenylamine	ND		0.874	5.13	ug/L	08/29/2023	08:31 08/30/2023	20:33	SRB EPA 625.1
n-Octadecane	ND		0.910	5.13	ug/L	08/29/2023	08:31 08/30/2023	20:33	SRB EPA 625.1
Pentachlorobenzene	ND		0.659	5.13	ug/L	08/29/2023	08:31 08/30/2023	20:33	SRB EPA 625.1
Pentachlorophenol	ND		1.78	5.13	ug/L	08/29/2023	08:31 08/30/2023	20:33	SRB EPA 625.1
Phenanthrene	ND		0.952	5.13	ug/L	08/29/2023	08:31 08/30/2023	20:33	SRB EPA 625.1
<b>Phenol</b>	<b>50.4</b>		1.09	5.13	ug/L	08/29/2023	08:31 08/30/2023	20:33	SRB EPA 625.1
Pyrene	ND		1.09	5.13	ug/L	08/29/2023	08:31 08/30/2023	20:33	SRB EPA 625.1



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Project: NW Full Scan  
Project Number: 10495-076  
Project Manager: Regulatory Compliance

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### Sample Results (Continued)

**Sample: SP 1\_Comp (Continued) Northwest Influent  
23H1064-02 (Water)**

Analyte	Result	Qual	DL	RL	Units	Date Prepared	Date Analyzed	Analyst Initials	Method
<b>Semivolatile Organics (Continued)</b>									
Pyridine	ND		1.00	5.13	ug/L	08/29/2023 08:31	08/30/2023 20:33	SRB	EPA 625.1
3-Methylphenol	ND		5.72	10.3	ug/L	08/29/2023 08:31	08/30/2023 20:33	SRB	EPA 625.1
<b>Wet Chemistry</b>									
Chromium Hexavalent	ND		0.244	1.00	ug/L	09/15/2023 12:00	09/15/2023 16:06	VP	EPA 218.6



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### Sample Results (Continued)

**Sample: SP 2\_CompMan Northwest Effluent**  
**23H1064-03 (Water)**

Analyte	Result	Qual	DL	RL	Units	Date Prepared	Date Analyzed	Analyst Initials	Method
<b>Total Metals</b>									
Mercury	1.05		0.0928	0.500	ng/L	08/28/2023 11:03	08/29/2023 14:25	KEN	EPA 1631E
<b>Volatile Organics</b>									
1,1,1-Trichloroethane	ND		1.03	5.00	ug/L	08/28/2023 08:00	08/28/2023 11:49	SRB	EPA 624.1
1,1,2,2-Tetrachloroethane	ND		0.502	5.00	ug/L	08/28/2023 08:00	08/28/2023 11:49	SRB	EPA 624.1
1,1,2-Trichloroethane	ND		0.471	5.00	ug/L	08/28/2023 08:00	08/28/2023 11:49	SRB	EPA 624.1
1,1-Dichloroethane	ND		0.919	5.00	ug/L	08/28/2023 08:00	08/28/2023 11:49	SRB	EPA 624.1
1,1-Dichloroethene	ND		0.745	5.00	ug/L	08/28/2023 08:00	08/28/2023 11:49	SRB	EPA 624.1
1,2-Dibromoethane	ND		0.621	5.00	ug/L	08/28/2023 08:00	08/28/2023 11:49	SRB	EPA 624.1
1,2-Dichlorobenzene	ND		1.23	5.00	ug/L	08/28/2023 08:00	08/28/2023 11:49	SRB	EPA 624.1
1,2-Dichloroethane	ND		0.803	5.00	ug/L	08/28/2023 08:00	08/28/2023 11:49	SRB	EPA 624.1
1,2-Dichloropropane	ND		0.513	5.00	ug/L	08/28/2023 08:00	08/28/2023 11:49	SRB	EPA 624.1
1,3-Dichlorobenzene	ND		1.28	5.00	ug/L	08/28/2023 08:00	08/28/2023 11:49	SRB	EPA 624.1
1,4-Dichlorobenzene	ND		1.21	5.00	ug/L	08/28/2023 08:00	08/28/2023 11:49	SRB	EPA 624.1
2-Butanone	ND		2.56	10.0	ug/L	08/28/2023 08:00	08/28/2023 11:49	SRB	EPA 624.1
2-Chloroethyl vinyl ether	ND		0.704	5.00	ug/L	08/28/2023 08:00	08/28/2023 11:49	SRB	EPA 624.1
Acrolein	ND		1.29	5.00	ug/L	08/28/2023 08:00	08/28/2023 11:49	SRB	EPA 624.1
Acrylonitrile	ND		1.96	5.00	ug/L	08/28/2023 08:00	08/28/2023 11:49	SRB	EPA 624.1
Benzene	ND		0.591	5.00	ug/L	08/28/2023 08:00	08/28/2023 11:49	SRB	EPA 624.1
Bromodichloromethane	4.63	J	0.336	5.00	ug/L	08/28/2023 08:00	08/28/2023 11:49	SRB	EPA 624.1
Bromoform	ND		0.416	5.00	ug/L	08/28/2023 08:00	08/28/2023 11:49	SRB	EPA 624.1
Bromomethane	ND		1.09	5.00	ug/L	08/28/2023 08:00	08/28/2023 11:49	SRB	EPA 624.1
Carbon Disulfide	ND		1.16	5.00	ug/L	08/28/2023 08:00	08/28/2023 11:49	SRB	EPA 624.1
Carbon Tetrachloride	ND		0.785	5.00	ug/L	08/28/2023 08:00	08/28/2023 11:49	SRB	EPA 624.1
Chlorobenzene	ND		0.782	5.00	ug/L	08/28/2023 08:00	08/28/2023 11:49	SRB	EPA 624.1
Chloroethane	ND		0.583	5.00	ug/L	08/28/2023 08:00	08/28/2023 11:49	SRB	EPA 624.1
Chloroform	13.5		0.727	4.00	ug/L	08/28/2023 08:00	08/28/2023 11:49	SRB	EPA 624.1
chloromethane	ND		1.38	5.00	ug/L	08/28/2023 08:00	08/28/2023 11:49	SRB	EPA 624.1
cis-1,2-Dichloroethene	ND		0.562	5.00	ug/L	08/28/2023 08:00	08/28/2023 11:49	SRB	EPA 624.1
cis-1,3-Dichloropropene	ND		0.728	5.00	ug/L	08/28/2023 08:00	08/28/2023 11:49	SRB	EPA 624.1
Dibromochloromethane	ND		0.504	5.00	ug/L	08/28/2023 08:00	08/28/2023 11:49	SRB	EPA 624.1
Epichlorohydrin	ND		4.78	25.0	ug/L	08/28/2023 08:00	08/28/2023 11:49	SRB	EPA 624.1
Ethylbenzene	ND		0.807	5.00	ug/L	08/28/2023 08:00	08/28/2023 11:49	SRB	EPA 624.1
m+p-Xylene	ND		1.68	10.0	ug/L	08/28/2023 08:00	08/28/2023 11:49	SRB	EPA 624.1
Methylene Chloride	ND		2.14	5.00	ug/L	08/28/2023 08:00	08/28/2023 11:49	SRB	EPA 624.1
Methyl-tert-butyl ether (MTBE)	ND		0.428	5.00	ug/L	08/28/2023 08:00	08/28/2023 11:49	SRB	EPA 624.1
o-Xylene	ND		1.00	5.00	ug/L	08/28/2023 08:00	08/28/2023 11:49	SRB	EPA 624.1
Styrene	ND		0.793	5.00	ug/L	08/28/2023 08:00	08/28/2023 11:49	SRB	EPA 624.1
Tetrachloroethene	ND		0.920	5.00	ug/L	08/28/2023 08:00	08/28/2023 11:49	SRB	EPA 624.1
Toluene	ND		0.737	5.00	ug/L	08/28/2023 08:00	08/28/2023 11:49	SRB	EPA 624.1





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Project: NW Full Scan  
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Project Manager: Regulatory Compliance

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**Sample Results**  
(Continued)

**Sample: SP 2\_CompMan (Continued) Northwest Effluent**  
**23H1064-03 (Water)**

Analyte	Result	Qual	DL	RL	Units	Date Prepared	Date Analyzed	Analyst Initials	Method
<b>Volatile Organics (Continued)</b>									
trans-1,2-Dichloroethene	ND		1.26	4.00	ug/L	08/28/2023 08:00	08/28/2023 11:49	SRB	EPA 624.1
trans-1,3-Dichloropropene	ND		1.16	5.00	ug/L	08/28/2023 08:00	08/28/2023 11:49	SRB	EPA 624.1
Trichloroethene	ND		0.432	5.00	ug/L	08/28/2023 08:00	08/28/2023 11:49	SRB	EPA 624.1
Vinyl acetate	ND		0.712	5.00	ug/L	08/28/2023 08:00	08/28/2023 11:49	SRB	EPA 624.1
Vinyl chloride	ND		1.15	5.00	ug/L	08/28/2023 08:00	08/28/2023 11:49	SRB	EPA 624.1
Xylenes, Total	ND		1.00	5.00	ug/L	08/28/2023 08:00	08/28/2023 11:49	SRB	EPA 624.1
Total Trihalomethanes	ND		1.11	5.00	ug/L	08/28/2023 08:00	08/28/2023 11:49	SRB	EPA 624.1
1,3-Dichloropropene, Total	ND		0.738	5.00	ug/L	08/28/2023 08:00	08/28/2023 11:49	SRB	EPA 624.1
<b>Wet Chemistry</b>									
Cyanide, Amenable	3.66		0.946	2.00	ug/L	08/25/2023 12:30	08/25/2023 14:52	SRB	OIA 1677
Cyanide, Total	3.65 J		3.14	10.0	ug/L	08/25/2023 12:30	08/25/2023 14:52	SRB	ASTM D7511



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Project: NW Full Scan  
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## Sample Results (Continued)

**Sample: SP 2\_Comp Northwest Effluent**  
**23H1064-04 (Water)**

Analyte	Result	Qual	DL	RL	Units	Date Prepared	Date Analyzed	Analyst Initials	Method
<b>Semivolatile Organics</b>									
Chlorpyrifos (2)	ND		1.00918	0.255	ug/L	08/31/2023	08:20 09/15/2023	15:28	RD EPA 1657
Demeton-o (2)	ND		0.0194	0.255	ug/L	08/31/2023	08:20 09/15/2023	15:28	RD EPA 1657
Demeton-s (2)	ND		0.0163	0.255	ug/L	08/31/2023	08:20 09/15/2023	15:28	RD EPA 1657
Diazinon (2)	ND		0.0133	0.255	ug/L	08/31/2023	08:20 09/15/2023	15:28	RD EPA 1657
ethyl-Parathion (2)	ND		0.0122	0.255	ug/L	08/31/2023	08:20 09/15/2023	15:28	RD EPA 1657
Malathion (2)	ND		0.0122	0.255	ug/L	08/31/2023	08:20 09/15/2023	15:28	RD EPA 1657
methyl Azinphos (Guthion) (2)	ND		0.0153	0.255	ug/L	08/31/2023	08:20 09/15/2023	15:28	RD EPA 1657
4,4'-DDD	ND		1.003880	0.254	ug/L	08/29/2023	09:07 08/31/2023	12:08	SRB EPA 608.3
4,4'-DDE	ND		1.00155	0.0508	ug/L	08/29/2023	09:07 08/31/2023	12:08	SRB EPA 608.3
4,4'-DDT	ND		1.005170	0.254	ug/L	08/29/2023	09:07 08/31/2023	12:08	SRB EPA 608.3
Aldrin	ND		1.00155	0.0508	ug/L	08/29/2023	09:07 08/31/2023	12:08	SRB EPA 608.3
Alpha-BHC	ND		1.00121	0.0508	ug/L	08/29/2023	09:07 08/31/2023	12:08	SRB EPA 608.3
Beta-BHC	ND		1.00242	0.0508	ug/L	08/29/2023	09:07 08/31/2023	12:08	SRB EPA 608.3
Chlordane	ND		0.0437	0.203	ug/L	08/29/2023	09:07 08/31/2023	12:08	SRB EPA 608.3
Delta-BHC	ND		1.00171	0.0508	ug/L	08/29/2023	09:07 08/31/2023	12:08	SRB EPA 608.3
Dicofol	ND		0.01190	0.0508	ug/L	08/29/2023	09:07 08/31/2023	12:08	SRB EPA 608.3
Dieldrin	ND		1.00184	0.0508	ug/L	08/29/2023	09:07 08/31/2023	12:08	SRB EPA 608.3
Endosulfan I	ND		1.00121	0.0508	ug/L	08/29/2023	09:07 08/31/2023	12:08	SRB EPA 608.3
Endosulfan II	ND		1.003410	0.254	ug/L	08/29/2023	09:07 08/31/2023	12:08	SRB EPA 608.3
Endosulfan Sulfate	ND		1.004290	0.254	ug/L	08/29/2023	09:07 08/31/2023	12:08	SRB EPA 608.3
Endrin	ND		0.01330	0.254	ug/L	08/29/2023	09:07 08/31/2023	12:08	SRB EPA 608.3
Endrin-Aldehyde	ND		1.00220	0.0508	ug/L	08/29/2023	09:07 08/31/2023	12:08	SRB EPA 608.3
Gamma-BHC	ND		1.00121	0.0508	ug/L	08/29/2023	09:07 08/31/2023	12:08	SRB EPA 608.3
Heptachlor	ND		1.00220	0.0508	ug/L	08/29/2023	09:07 08/31/2023	12:08	SRB EPA 608.3
Heptachlor epoxide	ND		1.00155	0.0508	ug/L	08/29/2023	09:07 08/31/2023	12:08	SRB EPA 608.3
Methoxychlor	ND		1.00251	0.0508	ug/L	08/29/2023	09:07 08/31/2023	12:08	SRB EPA 608.3
Mirex	ND		1.00155	0.0508	ug/L	08/29/2023	09:07 08/31/2023	12:08	SRB EPA 608.3
PCB-1016	ND		0.0774	0.203	ug/L	08/29/2023	09:07 08/31/2023	12:08	SRB EPA 608.3
PCB-1221	ND		0.0121	0.203	ug/L	08/29/2023	09:07 08/31/2023	12:08	SRB EPA 608.3
PCB-1232	ND		0.122	0.203	ug/L	08/29/2023	09:07 08/31/2023	12:08	SRB EPA 608.3
PCB-1242	ND		0.118	0.203	ug/L	08/29/2023	09:07 08/31/2023	12:08	SRB EPA 608.3
PCB-1248	ND		0.0948	0.203	ug/L	08/29/2023	09:07 08/31/2023	12:08	SRB EPA 608.3
PCB-1254	ND		0.0743	0.203	ug/L	08/29/2023	09:07 08/31/2023	12:08	SRB EPA 608.3
PCB-1260	ND		0.164	0.203	ug/L	08/29/2023	09:07 08/31/2023	12:08	SRB EPA 608.3
Toxaphene	ND		0.103	0.203	ug/L	08/29/2023	09:07 08/31/2023	12:08	SRB EPA 608.3
Polychlorinated biphenyls, Total	ND		0.0743	0.203	ug/L	08/29/2023	09:07 08/31/2023	12:08	SRB EPA 608.3
1,2,4,5-Tetrachlorobenzene	ND		0.963	5.10	ug/L	08/29/2023	08:31 08/30/2023	18:41	SRB EPA 625.1
1,2,4-Trichlorobenzene	ND		0.510	5.10	ug/L	08/29/2023	08:31 08/30/2023	18:41	SRB EPA 625.1
2,4,5-Trichlorophenol	ND		1.66	5.10	ug/L	08/29/2023	08:31 08/30/2023	18:41	SRB EPA 625.1
2,4,6-Trichlorophenol	ND		1.18	5.10	ug/L	08/29/2023	08:31 08/30/2023	18:41	SRB EPA 625.1





Northwest  
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Project: NW Full Scan  
Project Number: 10495-076  
Project Manager: Regulatory Compliance

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## Sample Results (Continued)

**Sample: SP 2\_Comp (Continued) Northwest Effluent  
23H1064-04 (Water)**

Analyte	Result	Qual	DL	RL	Units	Date Prepared	Date Analyzed	Analyst Initials	Method
<b>Semivolatile Organics (Continued)</b>									
2,4-Dichlorophenol	ND		1.04	5.10	ug/L	08/29/2023 08:31	08/30/2023 18:41	SRB	EPA 625.1
2,4-Dimethylphenol	ND		0.720	5.10	ug/L	08/29/2023 08:31	08/30/2023 18:41	SRB	EPA 625.1
2,4-Dinitrophenol	ND		3.17	5.10	ug/L	08/29/2023 08:31	08/30/2023 18:41	SRB	EPA 625.1
2,4-Dinitrotoluene	ND		1.38	5.10	ug/L	08/29/2023 08:31	08/30/2023 18:41	SRB	EPA 625.1
2,6-Dinitrotoluene	ND		1.37	5.10	ug/L	08/29/2023 08:31	08/30/2023 18:41	SRB	EPA 625.1
2-Chloronaphthalene	ND		0.979	5.10	ug/L	08/29/2023 08:31	08/30/2023 18:41	SRB	EPA 625.1
2-Chlorophenol	ND		1.07	5.10	ug/L	08/29/2023 08:31	08/30/2023 18:41	SRB	EPA 625.1
2-Methylphenol	ND		1.10	5.10	ug/L	08/29/2023 08:31	08/30/2023 18:41	SRB	EPA 625.1
2-Nitrophenol	ND		0.720	5.10	ug/L	08/29/2023 08:31	08/30/2023 18:41	SRB	EPA 625.1
3,3'-Dichlorobenzidine	ND		1.50	5.10	ug/L	08/29/2023 08:31	08/30/2023 18:41	SRB	EPA 625.1
4,6-Dinitro-2-methylphenol	ND		2.31	5.10	ug/L	08/29/2023 08:31	08/30/2023 18:41	SRB	EPA 625.1
4-Bromophenyl phenyl ether	ND		0.832	5.10	ug/L	08/29/2023 08:31	08/30/2023 18:41	SRB	EPA 625.1
4-Chloro-3-methylphenol	ND		1.21	5.10	ug/L	08/29/2023 08:31	08/30/2023 18:41	SRB	EPA 625.1
4-Chlorophenyl phenyl Ether	ND		1.20	5.10	ug/L	08/29/2023 08:31	08/30/2023 18:41	SRB	EPA 625.1
4-Methylphenol	ND		1.41	5.10	ug/L	08/29/2023 08:31	08/30/2023 18:41	SRB	EPA 625.1
4-Nitrophenol	ND		0.988	5.10	ug/L	08/29/2023 08:31	08/30/2023 18:41	SRB	EPA 625.1
Acenaphthene	ND		1.07	5.10	ug/L	08/29/2023 08:31	08/30/2023 18:41	SRB	EPA 625.1
Acenaphthylene	ND		0.889	5.10	ug/L	08/29/2023 08:31	08/30/2023 18:41	SRB	EPA 625.1
Aniline	ND		1.24	5.10	ug/L	08/29/2023 08:31	08/30/2023 18:41	SRB	EPA 625.1
Anthracene	ND		0.873	5.10	ug/L	08/29/2023 08:31	08/30/2023 18:41	SRB	EPA 625.1
Azobenzene	ND		0.997	5.10	ug/L	08/29/2023 08:31	08/30/2023 18:41	SRB	EPA 625.1
Benzidine	ND		1.64	5.10	ug/L	08/29/2023 08:31	08/30/2023 18:41	SRB	EPA 625.1
Benzo(a)pyrene	ND		1.57	5.10	ug/L	08/29/2023 08:31	08/30/2023 18:41	SRB	EPA 625.1
Benzo(b)fluoranthene	ND		1.46	5.10	ug/L	08/29/2023 08:31	08/30/2023 18:41	SRB	EPA 625.1
Benzo(k)Fluoranthene	ND		1.04	5.10	ug/L	08/29/2023 08:31	08/30/2023 18:41	SRB	EPA 625.1
Benzo(g,h,i)perylene	ND		1.15	5.10	ug/L	08/29/2023 08:31	08/30/2023 18:41	SRB	EPA 625.1
Benzo[a]anthracene	ND		1.15	5.10	ug/L	08/29/2023 08:31	08/30/2023 18:41	SRB	EPA 625.1
Bis(2-chloroethoxy) methane	ND		0.848	5.10	ug/L	08/29/2023 08:31	08/30/2023 18:41	SRB	EPA 625.1
Bis(2-chloroethyl) ether	ND		1.11	5.10	ug/L	08/29/2023 08:31	08/30/2023 18:41	SRB	EPA 625.1
Bis(2-chloroisopropyl) ether	ND		0.985	5.10	ug/L	08/29/2023 08:31	08/30/2023 18:41	SRB	EPA 625.1
Bis(2-ethylhexyl) phthalate	ND		2.71	5.10	ug/L	08/29/2023 08:31	08/30/2023 18:41	SRB	EPA 625.1
Butyl benzyl phthalate	ND		1.31	5.10	ug/L	08/29/2023 08:31	08/30/2023 18:41	SRB	EPA 625.1
Carbazole	ND		1.58	5.10	ug/L	08/29/2023 08:31	08/30/2023 18:41	SRB	EPA 625.1
Chrysene	ND		1.32	5.10	ug/L	08/29/2023 08:31	08/30/2023 18:41	SRB	EPA 625.1
Dibenzo(a,h)anthracene	ND		1.34	5.10	ug/L	08/29/2023 08:31	08/30/2023 18:41	SRB	EPA 625.1
Diethyl phthalate	ND		1.30	5.10	ug/L	08/29/2023 08:31	08/30/2023 18:41	SRB	EPA 625.1
Dimethyl phthalate	ND		0.930	5.10	ug/L	08/29/2023 08:31	08/30/2023 18:41	SRB	EPA 625.1
Di-n-butyl phthalate	ND		1.36	5.10	ug/L	08/29/2023 08:31	08/30/2023 18:41	SRB	EPA 625.1
Di-n-octyl phthalate	ND		2.11	5.10	ug/L	08/29/2023 08:31	08/30/2023 18:41	SRB	EPA 625.1
Fluoranthene	ND		1.30	5.10	ug/L	08/29/2023 08:31	08/30/2023 18:41	SRB	EPA 625.1



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Project: NW Full Scan  
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Project Manager: Regulatory Compliance

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### Sample Results (Continued)

**Sample: SP 2\_Comp (Continued) Northwest Effluent**  
**23H1064-04 (Water)**

Analyte	Result	Qual	DL	RL	Units	Date Prepared	Date Analyzed	Analyst Initials	Method
<b>Semivolatile Organics (Continued)</b>									
Fluorene	ND		1.05	5.10	ug/L	08/29/2023	08:31 08/30/2023	18:41	SRB EPA 625.1
Hexachlorobenzene	ND		0.966	5.10	ug/L	08/29/2023	08:31 08/30/2023	18:41	SRB EPA 625.1
Hexachlorobutadiene	ND		0.531	5.10	ug/L	08/29/2023	08:31 08/30/2023	18:41	SRB EPA 625.1
Hexachlorocyclopentadiene	ND		0.755	5.10	ug/L	08/29/2023	08:31 08/30/2023	18:41	SRB EPA 625.1
Hexachloroethane	ND		0.761	5.10	ug/L	08/29/2023	08:31 08/30/2023	18:41	SRB EPA 625.1
Indeno(1,2,3-cd)pyrene	ND		1.75	5.10	ug/L	08/29/2023	08:31 08/30/2023	18:41	SRB EPA 625.1
Isophorone	ND		0.495	5.10	ug/L	08/29/2023	08:31 08/30/2023	18:41	SRB EPA 625.1
Naphthalene	ND		0.653	5.10	ug/L	08/29/2023	08:31 08/30/2023	18:41	SRB EPA 625.1
n-Decane	ND		0.531	5.10	ug/L	08/29/2023	08:31 08/30/2023	18:41	SRB EPA 625.1
Nitrobenzene	ND		0.774	5.10	ug/L	08/29/2023	08:31 08/30/2023	18:41	SRB EPA 625.1
N-Nitosodi-n-butylamine	ND		0.982	5.10	ug/L	08/29/2023	08:31 08/30/2023	18:41	SRB EPA 625.1
N-Nitrosodiethylamine	ND		1.08	5.10	ug/L	08/29/2023	08:31 08/30/2023	18:41	SRB EPA 625.1
N-Nitrosodimethylamine	ND		0.773	5.10	ug/L	08/29/2023	08:31 08/30/2023	18:41	SRB EPA 625.1
N-Nitrosodi-n-propylamine	ND		1.53	5.10	ug/L	08/29/2023	08:31 08/30/2023	18:41	SRB EPA 625.1
N-Nitrosodiphenylamine	ND		0.869	5.10	ug/L	08/29/2023	08:31 08/30/2023	18:41	SRB EPA 625.1
n-Octadecane	ND		0.905	5.10	ug/L	08/29/2023	08:31 08/30/2023	18:41	SRB EPA 625.1
Pentachlorobenzene	ND		0.656	5.10	ug/L	08/29/2023	08:31 08/30/2023	18:41	SRB EPA 625.1
Pentachlorophenol	ND		1.77	5.10	ug/L	08/29/2023	08:31 08/30/2023	18:41	SRB EPA 625.1
Phenanthrene	ND		0.947	5.10	ug/L	08/29/2023	08:31 08/30/2023	18:41	SRB EPA 625.1
Phenol	ND		1.08	5.10	ug/L	08/29/2023	08:31 08/30/2023	18:41	SRB EPA 625.1
Pyrene	ND		1.08	5.10	ug/L	08/29/2023	08:31 08/30/2023	18:41	SRB EPA 625.1
Pyridine	ND		0.997	5.10	ug/L	08/29/2023	08:31 08/30/2023	18:41	SRB EPA 625.1
3-Methylphenol	ND		5.69	10.2	ug/L	08/29/2023	08:31 08/30/2023	18:41	SRB EPA 625.1



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**Sample Results**  
(Continued)

**Sample: Field Blank Field Blank Northwest**  
**23H1064-05 (Water)**

Analyte	Result	Qual	DL	RL	Units	Date Prepared	Date Analyzed	Analyst		
								Initials	Method	
Total Metals										
Mercury	ND		0.0928	0.500	ng/L	08/28/2023 11:03	08/31/2023 13:57	KEN	EPA 1631E	



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## Quality Control

### Total Metals

Analyte	Result	Qual	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<b>Batch: B23H376 - EPA 245.1</b>										
<b>Blank (B23H376-BLK1)</b>										
Mercury	ND		0.100	ug/L						
Prepared: 08/28/23 08:00 Analyzed: 08/30/23 10:46										
<b>Blank (B23H376-BLK2)</b>										
Mercury	ND		0.100	ug/L						
Prepared: 08/28/23 08:00 Analyzed: 08/30/23 12:04										
<b>LCS (B23H376-BS1)</b>										
Mercury	5.39		0.100	ug/L	5.33		101	90-110		
Prepared: 08/28/23 08:00 Analyzed: 08/30/23 10:41										
<b>LCS (B23H376-BS2)</b>										
Mercury	5.38		0.100	ug/L	5.33		101	90-110		
Prepared: 08/28/23 08:00 Analyzed: 08/30/23 12:01										
<b>Duplicate (B23H376-DUP1)</b>										
Mercury	ND	Source: 23H0188-01	0.100	ug/L		0.0260				20
Prepared: 08/28/23 08:00 Analyzed: 08/30/23 10:50										
<b>Duplicate (B23H376-DUP2)</b>										
Mercury	ND	Source: 23H1069-01	0.100	ug/L		ND				20
Prepared: 08/28/23 08:00 Analyzed: 08/30/23 11:32										
<b>Matrix Spike (B23H376-MS1)</b>										
Mercury	5.32	Source: 23H0188-01	0.100	ug/L	5.33	0.0260	99.2	70-130		
Prepared: 08/28/23 08:00 Analyzed: 08/30/23 10:52										
<b>Matrix Spike (B23H376-MS2)</b>										
Mercury	5.26	Source: 23H1069-01	0.100	ug/L	5.33	ND	98.7	70-130		
Prepared: 08/28/23 08:00 Analyzed: 08/30/23 10:56										
<b>Matrix Spike Dup (B23H376-MSD1)</b>										
Mercury	5.49	Source: 23H0188-01	0.100	ug/L	5.33	0.0260	102	70-130	3.12	20
Prepared: 08/28/23 08:00 Analyzed: 08/30/23 11:34										
<b>Matrix Spike Dup (B23H376-MSD2)</b>										
Mercury	5.51	Source: 23H1069-01	0.100	ug/L	5.33	ND	103	70-130	4.58	20
Prepared: 08/28/23 08:00 Analyzed: 08/30/23 11:38										



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### Quality Control (Continued)

#### Total Metals (Continued)

Analyte	Result	Qual	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: B23H388 - EPA 1631E										
Blank (B23H388-BLK1)			Prepared: 08/28/23 11:03 Analyzed: 08/29/23 14:05							
Mercury	ND		0.500	ng/L						
Blank (B23H388-BLK2)			Prepared: 08/28/23 11:03 Analyzed: 08/29/23 15:34							
Mercury	ND		0.500	ng/L						
Blank (B23H388-BLK3)			Prepared: 08/28/23 11:03 Analyzed: 08/29/23 15:54							
Mercury	ND		0.500	ng/L						
Blank (B23H388-BLK4)			Prepared: 08/28/23 11:03 Analyzed: 08/29/23 15:44							
Mercury	ND		0.500	ng/L						
LCS (B23H388-BS1)			Prepared: 08/28/23 11:03 Analyzed: 08/29/23 13:55							
Mercury	5.09		0.500	ng/L	5.00		102	77-123		
LCS (B23H388-BS2)			Prepared: 08/28/23 11:03 Analyzed: 08/29/23 15:24							
Mercury	4.95		0.500	ng/L	5.00		99.0	77-123		
LCS (B23H388-BS3)			Prepared: 08/28/23 11:03 Analyzed: 08/29/23 16:04							
Mercury	4.91		0.500	ng/L	5.00		98.3	77-123		
Matrix Spike (B23H388-MS1)			Source: 23H1064-03		Prepared: 08/28/23 11:03 Analyzed: 08/29/23 14:35					
Mercury	6.03		0.500	ng/L	5.00	1.05	99.6	71-125		
Matrix Spike Dup (B23H388-MSD1)			Source: 23H1064-03		Prepared: 08/28/23 11:03 Analyzed: 08/29/23 14:45					
Mercury	5.82		0.500	ng/L	5.00	1.05	95.5	71-125	3.50	24
Batch: B23H424 - EPA 1631E										
Blank (B23H424-BLK1)			Prepared: 08/30/23 09:21 Analyzed: 08/31/23 11:48							
Mercury	ND		0.500	ng/L						



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### Quality Control (Continued)

#### Total Metals (Continued)

Analyte	Result	Qual	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: B23H424 - EPA 1631E (Continued)										
Blank (B23H424-BLK2)										
Mercury	0.366	J	0.500	ng/L		Prepared: 08/30/23 09:21	Analyzed: 08/31/23 13:08			
Blank (B23H424-BLK3)										
Mercury	ND		0.500	ng/L		Prepared: 08/30/23 09:21	Analyzed: 08/31/23 14:27			
Blank (B23H424-BLK4)										
Mercury	ND		0.500	ng/L		Prepared: 08/28/23 11:03	Analyzed: 08/31/23 14:07			
Blank (B23H424-BLK5)										
Mercury	ND		0.500	ng/L		Prepared: 08/28/23 11:03	Analyzed: 08/31/23 14:17			
LCS (B23H424-BS1)										
Mercury	4.99		0.500	ng/L	5.00	Prepared: 08/30/23 09:21	Analyzed: 08/31/23 11:38	99.8	77-123	
LCS (B23H424-BS2)										
Mercury	5.47		0.500	ng/L	5.00	Prepared: 08/30/23 09:21	Analyzed: 08/31/23 12:58	109	77-123	
LCS (B23H424-BS3)										
Mercury	4.84		0.500	ng/L	5.00	Prepared: 08/30/23 09:21	Analyzed: 08/31/23 14:37	96.8	77-123	
Matrix Spike (B23H424-MS1)										
Mercury	5.76		0.500	ng/L	5.00	Source: 23H1064-03R Prepared: 08/30/23 09:21	Analyzed: 08/31/23 12:18	1.01	95.0	71-125
Matrix Spike Dup (B23H424-MSD1) Source: 23H1064-03R										
Mercury	5.81		0.500	ng/L	5.00	Prepared: 08/30/23 09:21	Analyzed: 08/31/23 12:28	1.01	96.0	71-125
									0.783	24

#### Batch: B23I075 - EPA 200.7

##### Blank (B23I075-BLK1)

Prepared: 09/07/23 08:12 Analyzed: 09/08/23 09:26										
Aluminum	ND		100	ug/L						
Antimony	ND		100	ug/L						
Arsenic	ND		100	ug/L						
Barium	ND		100	ug/L						
Beryllium	ND		20.0	ug/L						
Cadmium	ND		20.0	ug/L						
Chromium	ND		100	ug/L						
Copper	ND		100	ug/L						
Lead	ND		100	ug/L						
Nickel	ND		100	ug/L						
Selenium	ND		100	ug/L						
Silver	ND		20.0	ug/L						
Thallium	ND		200	ug/L						
Vanadium	ND		100	ug/L						
Zinc	ND		100	ug/L						



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### Quality Control (Continued)

#### Total Metals (Continued)

Analyte	Result	Qual	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
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#### Batch: B23I075 - EPA 200.7 (Continued)

##### LCS (B23I075-BS1)

Prepared: 09/07/23 08:12 Analyzed: 09/08/23 09:23

Aluminum	1880		100	ug/L	2000		94.0	85-115		
Antimony	1870		100	ug/L	2000		93.6	85-115		
Arsenic	1920		100	ug/L	2000		96.1	85-115		
Barium	1890		100	ug/L	2000		94.4	85-115		
Beryllium	383		20.0	ug/L	400		95.8	85-115		
Cadmium	365		20.0	ug/L	400		91.2	85-115		
Chromium	1910		100	ug/L	2000		95.7	85-115		
Copper	1910		100	ug/L	2000		95.5	85-115		
Lead	1870		100	ug/L	2000		93.7	85-115		
Nickel	1890		100	ug/L	2000		94.5	85-115		
Selenium	1850		100	ug/L	2000		92.7	85-115		
Silver	382		20.0	ug/L	400		95.4	85-115		
Thallium	1880		200	ug/L	2000		93.9	85-115		
Vanadium	1920		100	ug/L	2000		96.2	85-115		
Zinc	1850		100	ug/L	2000		92.4	85-115		

##### Duplicate (B23I075-DUP1)

##### Source: 23H0785-02

Prepared: 09/07/23 08:12 Analyzed: 09/08/23 09:33

Aluminum	1330		100	ug/L		1330			0.475	20
Antimony	ND		100	ug/L		ND				20
Arsenic	ND		100	ug/L		ND				20
Barium	90.9 J		100	ug/L		91.5			0.703	20
Beryllium	ND		20.0	ug/L		ND				20
Cadmium	ND		20.0	ug/L		ND				20
Chromium	8.74 J		100	ug/L		7.85			10.7	20
Copper	16.2 J		100	ug/L		15.7			2.66	20
Lead	ND		100	ug/L		ND				20
Nickel	ND		100	ug/L		ND				20
Selenium	ND		100	ug/L		ND				20
Silver	ND		20.0	ug/L		ND				20
Thallium	ND		200	ug/L		ND				20
Vanadium	ND		100	ug/L		ND				20
Zinc	70.3 J		100	ug/L		71.1			1.09	20



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### Quality Control (Continued)

#### Total Metals (Continued)

Analyte	Result	Qual	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
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#### Batch: B23I075 - EPA 200.7 (Continued)

<b>Matrix Spike (B23I075-MS1)</b>		<b>Source: 23H0785-02</b>		Prepared: 09/07/23 08:12		Analyzed: 09/08/23 09:36				
Aluminum	3610		100	ug/L	2000	1330	114	70-130		
Antimony	1900		100	ug/L	2000	ND	95.1	70-130		
Arsenic	1970		100	ug/L	2000	ND	98.5	70-130		
Barium	1960		100	ug/L	2000	91.5	93.5	70-130		
Beryllium	382		20.0	ug/L	400	ND	95.6	70-130		
Cadmium	371		20.0	ug/L	400	ND	92.9	70-130		
Chromium	1900		100	ug/L	2000	7.85	94.4	70-130		
Copper	1930		100	ug/L	2000	15.7	95.8	70-130		
Lead	1880		100	ug/L	2000	ND	93.9	70-130		
Nickel	1870		100	ug/L	2000	ND	93.3	70-130		
Selenium	1890		100	ug/L	2000	ND	94.6	70-130		
Silver	382		20.0	ug/L	400	ND	95.5	70-130		
Thallium	1810		200	ug/L	2000	ND	90.7	70-130		
Vanadium	1960		100	ug/L	2000	ND	97.8	70-130		
Zinc	1950		100	ug/L	2000	71.1	93.9	70-130		

<b>Matrix Spike Dup (B23I075-MSD1)</b>		<b>Source: 23H0785-02</b>		Prepared: 09/07/23 08:12		Analyzed: 09/08/23 09:49				
Aluminum	3620		100	ug/L	2000	1330	114	70-130	0.178	20
Antimony	1910		100	ug/L	2000	ND	95.3	70-130	0.232	20
Arsenic	1950		100	ug/L	2000	ND	97.7	70-130	0.841	20
Barium	1970		100	ug/L	2000	91.5	93.7	70-130	0.221	20
Beryllium	383		20.0	ug/L	400	ND	95.8	70-130	0.140	20
Cadmium	373		20.0	ug/L	400	ND	93.2	70-130	0.382	20
Chromium	1900		100	ug/L	2000	7.85	94.6	70-130	0.216	20
Copper	1930		100	ug/L	2000	15.7	95.9	70-130	0.170	20
Lead	1860		100	ug/L	2000	ND	92.8	70-130	1.20	20
Nickel	1870		100	ug/L	2000	ND	93.6	70-130	0.346	20
Selenium	1930		100	ug/L	2000	ND	96.3	70-130	1.75	20
Silver	381		20.0	ug/L	400	ND	95.4	70-130	0.0938	20
Thallium	1850		200	ug/L	2000	ND	92.5	70-130	1.93	20
Vanadium	1960		100	ug/L	2000	ND	97.8	70-130	0.0332	20
Zinc	1950		100	ug/L	2000	71.1	94.2	70-130	0.224	20





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## Quality Control (Continued)

### Semivolatile Organics

Analyte	Result	Qual	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
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#### Batch: B23H385 - EPA 625.1\_SPE

##### Blank (B23H385-BLK1)

Prepared: 08/29/23 08:31 Analyzed: 08/30/23 17:44

1,2,4,5-Tetrachlorobenzene	ND		5.10	ug/L
1,2,4-Trichlorobenzene	ND		5.10	ug/L
2,4,5-Trichlorophenol	ND		5.10	ug/L
2,4,6-Trichlorophenol	ND		5.10	ug/L
2,4-Dichlorophenol	ND		5.10	ug/L
2,4-Dimethylphenol	ND		5.10	ug/L
2,4-Dinitrophenol	ND		5.10	ug/L
2,4-Dinitrotoluene	ND		5.10	ug/L
2,6-Dinitrotoluene	ND		5.10	ug/L
2-Chloronaphthalene	ND		5.10	ug/L
2-Chlorophenol	ND		5.10	ug/L
2-Methylphenol	ND		5.10	ug/L
2-Nitrophenol	ND		5.10	ug/L
3,3'-Dichlorobenzidine	ND		5.10	ug/L
4,6-Dinitro-2-methylphenol	ND		5.10	ug/L
4-Bromophenyl phenyl ether	ND		5.10	ug/L
4-Chloro-3-methylphenol	ND		5.10	ug/L
4-Chlorophenyl phenyl Ether	ND		5.10	ug/L
4-Methylphenol	ND		5.10	ug/L
4-Nitrophenol	ND		5.10	ug/L
Acenaphthene	ND		5.10	ug/L
Acenaphthylene	ND		5.10	ug/L
Aniline	ND		5.10	ug/L
Anthracene	ND		5.10	ug/L
Azobenzene	ND		5.10	ug/L
Benzidine	ND		5.10	ug/L
Benzo(a)pyrene	ND		5.10	ug/L
Benzo(b)fluoranthene	ND		5.10	ug/L
Benzo(k)Fluoranthene	ND		5.10	ug/L
Benzo(g,h,i)perylene	ND		5.10	ug/L
Benzo[a]anthracene	ND		5.10	ug/L
Bis(2-chloroethoxy) methane	ND		5.10	ug/L
Bis(2-chloroethyl) ether	ND		5.10	ug/L
Bis(2-chloroisopropyl) ether	ND		5.10	ug/L
Bis(2-ethylhexyl) phthalate	ND		5.10	ug/L
Butyl benzyl phthalate	ND		5.10	ug/L
Carbazole	ND		5.10	ug/L
Chrysene	ND		5.10	ug/L
Dibenzo(a,h)anthracene	ND		5.10	ug/L
Diethyl phthalate	ND		5.10	ug/L
Dimethyl phthalate	ND		5.10	ug/L
Di-n-butyl phthalate	ND		5.10	ug/L
Di-n-octyl phthalate	ND		5.10	ug/L
Fluoranthene	ND		5.10	ug/L
Fluorene	ND		5.10	ug/L
Hexachlorobenzene	ND		5.10	ug/L
Hexachlorobutadiene	ND		5.10	ug/L



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## Quality Control (Continued)

### Semivolatile Organics (Continued)

Analyte	Result	Qual	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
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#### Batch: B23H385 - EPA 625.1\_SPE (Continued)

##### Blank (B23H385-BLK1)

Prepared: 08/29/23 08:31 Analyzed: 08/30/23 17:44

Hexachlorocyclopentadiene	ND		5.10	ug/L						
Hexachloroethane	ND		5.10	ug/L						
Indeno(1,2,3-cd)pyrene	ND		5.10	ug/L						
Isophorone	ND		5.10	ug/L						
Naphthalene	ND		5.10	ug/L						
n-Decane	ND		5.10	ug/L						
Nitrobenzene	ND		5.10	ug/L						
N-Nitosodi-n-butylamine	ND		5.10	ug/L						
N-Nitrosodiethylamine	ND		5.10	ug/L						
N-Nitrosodimethylamine	ND		5.10	ug/L						
N-Nitrosodi-n-propylamine	ND		5.10	ug/L						
N-Nitrosodiphenylamine	ND		5.10	ug/L						
n-Octadecane	ND		5.10	ug/L						
Pentachlorobenzene	ND		5.10	ug/L						
Pentachlorophenol	ND		5.10	ug/L						
Phenanthrene	ND		5.10	ug/L						
Phenol	ND		5.10	ug/L						
Pyrene	ND		5.10	ug/L						
Pyridine	ND		5.10	ug/L						
3-Methylphenol	ND		10.2	ug/L						

##### LCS (B23H385-BS1)

Prepared: 08/29/23 08:31 Analyzed: 08/30/23 18:12

1,2,4-Trichlorobenzene	24.8		5.08	ug/L	40.6		61.1	44-142		
2,4,5-Trichlorophenol	33.4		5.08	ug/L	40.6		82.4	1-140		
2,4,6-Trichlorophenol	34.8		5.08	ug/L	40.6		85.7	37-144		
2,4-Dichlorophenol	32.3		5.08	ug/L	40.6		79.6	39-135		
2,4-Dimethylphenol	33.4		5.08	ug/L	40.6		82.3	32-120		
2,4-Dinitrophenol	39.3		5.08	ug/L	40.6		96.9	1-191		
2,4-Dinitrotoluene	38.4		5.08	ug/L	40.6		94.6	39-139		
2,6-Dinitrotoluene	36.9		5.08	ug/L	40.6		90.8	50-158		
2-Chloronaphthalene	29.5		5.08	ug/L	40.6		72.6	20-120		
2-Chlorophenol	32.5		5.08	ug/L	40.6		80.0	23-134		
2-Methylphenol	32.4		5.08	ug/L	40.6		79.8	1-140		
2-Nitrophenol	27.3		5.08	ug/L	40.6		67.2	29-182		
3,3'-Dichlorobenzidine	60.4		5.08	ug/L	102		59.5	1-262		
4,6-Dinitro-2-methylphenol	39.6		5.08	ug/L	40.6		97.4	1-181		
4-Bromophenyl phenyl ether	31.4		5.08	ug/L	40.6		77.2	53-127		
4-Chloro-3-methylphenol	37.7		5.08	ug/L	40.6		93.0	22-147		
4-Chlorophenyl phenyl Ether	31.9		5.08	ug/L	40.6		78.6	25-158		
4-Methylphenol	12.5		5.08	ug/L	20.3		61.7	1-140		
4-Nitrophenol	36.7		5.08	ug/L	40.6		90.3	1-132		
Acenaphthene	32.6		5.08	ug/L	40.6		80.2	47-145		
Acenaphthylene	29.4		5.08	ug/L	40.6		72.4	33-145		
Aniline	27.6		5.08	ug/L	40.6		67.9	1-140		
Anthracene	34.0		5.08	ug/L	40.6		83.8	27-133		
Azobenzene	36.3		5.08	ug/L	40.6		89.3	1-140		
Benidine	7.53		5.08	ug/L	102		7.42	1-140		



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## Quality Control (Continued)

### Semivolatile Organics (Continued)

Analyte	Result	Qual	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<b>Batch: B23H385 - EPA 625.1_SPE (Continued)</b>										
<b>LCS (B23H385-BS1)</b>										
					Prepared: 08/29/23 08:31 Analyzed: 08/30/23 18:12					
Benzo(a)pyrene	25.2		5.08	ug/L	40.6		61.9	17-163		
Benzo(b)fluoranthene	28.7		5.08	ug/L	40.6		70.6	24-159		
Benzo(k)Fluoranthene	28.4		5.08	ug/L	40.6		70.0	11-162		
Benzo(g,h,i)perylene	16.5		5.08	ug/L	40.6		40.6	1-219		
Benzo[a]anthracene	31.9		5.08	ug/L	40.6		78.5	33-143		
Bis(2-chloroethoxy) methane	31.8		5.08	ug/L	40.6		78.2	33-184		
Bis(2-chloroethyl) ether	33.8		5.08	ug/L	40.6		83.3	12-158		
Bis(2-chloroisopropyl) ether	35.1		5.08	ug/L	40.6		86.4	36-166		
Bis(2-ethylhexyl) phthalate	41.3		5.08	ug/L	40.6		102	8-158		
Butyl benzyl phthalate	39.4		5.08	ug/L	40.6		97.1	1-152		
Carbazole	35.4		5.08	ug/L	40.6		87.2	1-140		
Chrysene	34.5		5.08	ug/L	40.6		84.9	17-168		
Dibenzo(a,h)anthracene	17.4		5.08	ug/L	40.6		42.8	1-227		
Diethyl phthalate	38.3		5.08	ug/L	40.6		94.3	1-120		
Dimethyl phthalate	36.2		5.08	ug/L	40.6		89.1	1-120		
Di-n-butyl phthalate	37.8		5.08	ug/L	40.6		93.2	1-120		
Di-n-octyl phthalate	37.7		5.08	ug/L	40.6		92.8	4-146		
Fluoranthene	31.9		5.08	ug/L	40.6		78.6	26-137		
Fluorene	32.2		5.08	ug/L	40.6		79.4	59-121		
Hexachlorobenzene	29.0		5.08	ug/L	40.6		71.5	1-152		
Hexachlorobutadiene	21.2		5.08	ug/L	40.6		52.2	24-120		
Hexachlorocyclopentadiene	20.4		5.08	ug/L	40.6		50.3	1-140		
Hexachloroethane	19.0		5.08	ug/L	40.6		46.9	40-120		
Indeno(1,2,3-cd)pyrene	18.2		5.08	ug/L	40.6		44.9	1-171		
Isophorone	36.2		5.08	ug/L	40.6		89.1	21-196		
Naphthalene	31.7		5.08	ug/L	40.6		78.0	21-133		
n-Decane	4.74	J	5.08	ug/L	40.6		11.7	1-140		
Nitrobenzene	32.3		5.08	ug/L	40.6		79.7	35-140		
N-Nitosodi-n-butylamine	32.2		5.08	ug/L	40.6		79.2	1-140		
N-Nitrosodiethylamine	35.6		5.08	ug/L	40.6		87.7	1-140		
N-Nitrosodimethylamine	15.8		5.08	ug/L	40.6		38.9	1-140		
N-Nitrosodi-n-propylamine	35.5		5.08	ug/L	40.6		87.5	1-230		
N-Nitrosodiphenylamine	36.0		5.08	ug/L	40.6		88.6	1-140		
n-Octadecane	28.1		5.08	ug/L	40.6		69.1	1-140		
Pentachlorobenzene	29.8		5.08	ug/L	40.6		73.4	1-140		
Pentachlorophenol	35.8		5.08	ug/L	40.6		88.1	14-176		
Phenanthrene	35.3		5.08	ug/L	40.6		86.8	54-120		
Phenol	23.9		5.08	ug/L	40.6		58.8	5-120		
Pyrene	35.9		5.08	ug/L	40.6		88.5	52-120		
Pyridine	10.6		5.08	ug/L	40.6		26.1	1-140		
3-Methylphenol	12.6		10.2	ug/L	20.3		61.9	1-140		



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## Quality Control (Continued)

### Semivolatile Organics (Continued)

Analyte	Result	Qual	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
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#### Batch: B23H385 - EPA 625.1\_SPE (Continued)

Matrix Spike (B23H385-MS1) Source: 23H1064-04 Prepared: 08/29/23 08:31 Analyzed: 08/30/23 19:09

1,2,4-Trichlorobenzene	62.5		10.0	ug/L	80.0	ND	78.2	44-142		
2,4,5-Trichlorophenol	79.1		10.0	ug/L	80.0	ND	98.8	1-140		
2,4,6-Trichlorophenol	77.1		10.0	ug/L	80.0	ND	96.4	37-144		
2,4-Dichlorophenol	70.8		10.0	ug/L	80.0	ND	88.5	39-135		
2,4-Dimethylphenol	69.2		10.0	ug/L	80.0	ND	86.5	32-120		
2,4-Dinitrophenol	106		10.0	ug/L	80.0	ND	133	1-191		
2,4-Dinitrotoluene	84.5		10.0	ug/L	80.0	ND	106	39-139		
2,6-Dinitrotoluene	80.4		10.0	ug/L	80.0	ND	100	50-158		
2-Chloronaphthalene	65.2		10.0	ug/L	80.0	ND	81.5	20-120		
2-Chlorophenol	69.8		10.0	ug/L	80.0	ND	87.2	23-134		
2-Methylphenol	70.0		10.0	ug/L	80.0	ND	87.5	1-140		
2-Nitrophenol	68.9		10.0	ug/L	80.0	ND	86.1	29-182		
3,3'-Dichlorobenzidine	ND	MS1	10.0	ug/L	200	ND		1-262		
4,6-Dinitro-2-methylphenol	92.0		10.0	ug/L	80.0	ND	115	1-181		
4-Bromophenyl phenyl ether	70.0		10.0	ug/L	80.0	ND	87.5	53-127		
4-Chloro-3-methylphenol	89.5		10.0	ug/L	80.0	ND	112	22-147		
4-Chlorophenyl phenyl Ether	76.3		10.0	ug/L	80.0	ND	95.3	25-158		
4-Methylphenol	36.1		10.0	ug/L	40.0	ND	90.3	1-140		
4-Nitrophenol	80.5		10.0	ug/L	80.0	ND	101	1-132		
Acenaphthene	72.8		10.0	ug/L	80.0	ND	90.9	47-145		
Acenaphthylene	63.0		10.0	ug/L	80.0	ND	78.8	33-145		
Aniline	62.8		10.0	ug/L	80.0	ND	78.5	1-140		
Anthracene	76.3		10.0	ug/L	80.0	ND	95.3	27-133		
Azobenzene	74.1		10.0	ug/L	80.0	ND	92.6	1-140		
Benzidine	ND	MS1	10.0	ug/L	200	ND		1-140		
Benzo(a)pyrene	65.6		10.0	ug/L	80.0	ND	82.0	17-163		
Benzo(b)fluoranthene	71.8		10.0	ug/L	80.0	ND	89.7	24-159		
Benzo(k)Fluoranthene	70.9		10.0	ug/L	80.0	ND	88.6	11-162		
Benzo(g,h,i)perylene	52.9		10.0	ug/L	80.0	ND	66.1	1-219		
Benzo[a]anthracene	72.6		10.0	ug/L	80.0	ND	90.7	33-143		
Bis(2-chloroethoxy) methane	66.5		10.0	ug/L	80.0	ND	83.2	33-184		
Bis(2-chloroethyl) ether	78.3		10.0	ug/L	80.0	ND	97.8	12-158		
Bis(2-chloroisopropyl) ether	78.3		10.0	ug/L	80.0	ND	97.8	36-166		
Bis(2-ethylhexyl) phthalate	96.2		10.0	ug/L	80.0	ND	120	8-158		
Butyl benzyl phthalate	86.0		10.0	ug/L	80.0	ND	108	1-152		
Carbazole	75.0		10.0	ug/L	80.0	ND	93.7	1-140		
Chrysene	78.9		10.0	ug/L	80.0	ND	98.6	17-168		
Dibenzo(a,h)anthracene	54.4		10.0	ug/L	80.0	ND	67.9	1-227		
Diethyl phthalate	86.3		10.0	ug/L	80.0	ND	108	1-120		
Dimethyl phthalate	77.4		10.0	ug/L	80.0	ND	96.8	1-120		
Di-n-butyl phthalate	83.3		10.0	ug/L	80.0	ND	104	1-120		
Di-n-octyl phthalate	98.1		10.0	ug/L	80.0	ND	123	4-146		
Fluoranthene	75.4		10.0	ug/L	80.0	ND	94.3	26-137		
Fluorene	74.0		10.0	ug/L	80.0	ND	92.5	59-121		
Hexachlorobenzene	68.3		10.0	ug/L	80.0	ND	85.4	1-152		
Hexachlorobutadiene	54.6		10.0	ug/L	80.0	ND	68.3	24-120		
Hexachlorocyclopentadiene	57.2		10.0	ug/L	80.0	ND	71.5	1-140		



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### Quality Control (Continued)

#### Semivolatile Organics (Continued)

Analyte	Result	Qual	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
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#### Batch: B23H385 - EPA 625.1\_SPE (Continued)

**Matrix Spike (B23H385-MS1)** Source: 23H1064-04 Prepared: 08/29/23 08:31 Analyzed: 08/30/23 19:09

Hexachloroethane	50.6		10.0	ug/L	80.0	ND	63.3	40-120		
Indeno(1,2,3-cd)pyrene	58.6		10.0	ug/L	80.0	ND	73.3	1-171		
Isophorone	80.1		10.0	ug/L	80.0	ND	100	21-196		
Naphthalene	69.6		10.0	ug/L	80.0	ND	87.0	21-133		
n-Decane	19.6		10.0	ug/L	80.0	ND	24.5	1-140		
Nitrobenzene	71.5		10.0	ug/L	80.0	ND	89.4	35-180		
N-Nitrosodi-n-butylamine	92.6		10.0	ug/L	80.0	ND	116	1-140		
N-Nitrosodiethylamine	75.3		10.0	ug/L	80.0	ND	94.1	1-140		
N-Nitrosodimethylamine	27.8		10.0	ug/L	80.0	ND	34.7	1-140		
N-Nitrosodi-n-propylamine	78.1		10.0	ug/L	80.0	ND	97.7	1-230		
N-Nitrosodiphenylamine	75.6		10.0	ug/L	80.0	ND	94.5	1-140		
n-Octadecane	73.3		10.0	ug/L	80.0	ND	91.7	1-140		
Pentachlorobenzene	77.3		10.0	ug/L	80.0	ND	96.6	1-140		
Pentachlorophenol	91.2		10.0	ug/L	80.0	ND	114	14-176		
Phenanthrene	76.1		10.0	ug/L	80.0	ND	95.1	54-120		
Phenol	48.4		10.0	ug/L	80.0	ND	60.5	5-120		
Pyrene	80.9		10.0	ug/L	80.0	ND	101	52-120		
Pyridine	ND MS1		10.0	ug/L	80.0	ND		1-140		
3-Methylphenol	27.7		20.0	ug/L	40.0	ND	69.1	1-140		

**Matrix Spike Dup (B23H385-MSD1)** Source: 23H1064-04 Prepared: 08/29/23 08:31 Analyzed: 08/30/23 19:37

1,2,4-Trichlorobenzene	62.5		10.0	ug/L	80.0	ND	78.1	44-142	0.106	50
2,4,5-Trichlorophenol	81.7		10.0	ug/L	80.0	ND	102	1-140	3.28	50
2,4,6-Trichlorophenol	79.1		10.0	ug/L	80.0	ND	98.8	37-144	2.47	58
2,4-Dichlorophenol	72.0		10.0	ug/L	80.0	ND	90.1	39-135	1.70	50
2,4-Dimethylphenol	65.7		10.0	ug/L	80.0	ND	82.1	32-120	5.26	58
2,4-Dinitrophenol	101		10.0	ug/L	80.0	ND	126	1-191	4.88	132
2,4-Dinitrotoluene	85.5		10.0	ug/L	80.0	ND	107	39-139	1.21	42
2,6-Dinitrotoluene	80.9		10.0	ug/L	80.0	ND	101	50-158	0.638	48
2-Chloronaphthalene	69.0		10.0	ug/L	80.0	ND	86.2	20-120	5.69	24
2-Chlorophenol	69.7		10.0	ug/L	80.0	ND	87.1	23-134	0.113	61
2-Methylphenol	73.6		10.0	ug/L	80.0	ND	92.0	1-140	4.96	50
2-Nitrophenol	66.0		10.0	ug/L	80.0	ND	82.5	29-182	4.22	55
3,3'-Dichlorobenzidine	ND MS1		10.0	ug/L	200	ND		1-262		50
4,6-Dinitro-2-methylphenol	98.8		10.0	ug/L	80.0	ND	123	1-181	7.06	203
4-Bromophenyl phenyl ether	74.3		10.0	ug/L	80.0	ND	92.9	53-127	5.96	50
4-Chloro-3-methylphenol	85.6		10.0	ug/L	80.0	ND	107	22-147	4.48	73
4-Chlorophenyl phenyl Ether	77.4		10.0	ug/L	80.0	ND	96.7	25-158	1.45	61
4-Methylphenol	37.6		10.0	ug/L	40.0	ND	94.0	1-140	4.00	50
4-Nitrophenol	83.8		10.0	ug/L	80.0	ND	105	1-132	3.96	131
Acenaphthene	77.2		10.0	ug/L	80.0	ND	96.4	47-145	5.86	48
Acenaphthylene	67.6		10.0	ug/L	80.0	ND	84.5	33-145	7.03	74
Aniline	66.0		10.0	ug/L	80.0	ND	82.5	1-140	5.04	50
Anthracene	79.8		10.0	ug/L	80.0	ND	99.7	27-133	4.49	50
Azobenzene	78.5		10.0	ug/L	80.0	ND	98.1	1-140	5.75	50
Benzidine	ND MS1		10.0	ug/L	200	ND		1-140		50
Benzo(a)pyrene	66.1		10.0	ug/L	80.0	ND	82.7	17-163	0.816	72



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## Quality Control (Continued)

### Semivolatile Organics (Continued)

Analyte	Result	Qual	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<b>Batch: B23H385 - EPA 625.1_SPE (Continued)</b>										
<b>Matrix Spike Dup (B23H385-MSD1) Source: 23H1064-04</b>										
					Prepared: 08/29/23 08:31		Analyzed: 08/30/23 19:37			
Benzo(b)fluoranthene	73.6		10.0	ug/L	80.0	ND	92.0	24-159	2.55	71
Benzo(k)Fluoranthene	72.4		10.0	ug/L	80.0	ND	90.5	11-162	2.10	63
Benzo(g,h,i)perylene	54.5		10.0	ug/L	80.0	ND	68.1	1-219	2.95	97
Benzo[a]anthracene	79.5		10.0	ug/L	80.0	ND	99.3	33-143	9.06	53
Bis(2-chloroethoxy) methane	64.6		10.0	ug/L	80.0	ND	80.7	33-184	2.97	54
Bis(2-chloroethyl) ether	79.5		10.0	ug/L	80.0	ND	99.4	12-158	1.59	50
Bis(2-chloroisopropyl) ether	80.9		10.0	ug/L	80.0	ND	101	36-166	3.25	76
Bis(2-ethylhexyl) phthalate	106		10.0	ug/L	80.0	ND	132	8-158	9.62	82
Butyl benzyl phthalate	95.1		10.0	ug/L	80.0	ND	119	1-152	10.0	60
Carbazole	77.6		10.0	ug/L	80.0	ND	97.0	1-140	3.51	50
Chrysene	86.1		10.0	ug/L	80.0	ND	108	17-168	8.67	87
Dibenzo(a,h)anthracene	56.6		10.0	ug/L	80.0	ND	70.7	1-227	4.00	126
Diethyl phthalate	89.2		10.0	ug/L	80.0	ND	112	1-120	3.36	100
Dimethyl phthalate	79.5		10.0	ug/L	80.0	ND	99.4	1-120	2.70	183
Di-n-butyl phthalate	86.7		10.0	ug/L	80.0	ND	108	1-120	3.93	47
Di-n-octyl phthalate	101		10.0	ug/L	80.0	ND	127	4-146	3.26	69
Fluoranthene	75.2		10.0	ug/L	80.0	ND	94.0	26-137	0.294	66
Fluorene	75.2		10.0	ug/L	80.0	ND	94.0	59-121	1.63	38
Hexachlorobenzene	72.9		10.0	ug/L	80.0	ND	91.1	1-152	6.50	55
Hexachlorobutadiene	51.8		10.0	ug/L	80.0	ND	64.7	24-120	5.32	62
Hexachlorocyclopentadiene	54.0		10.0	ug/L	80.0	ND	67.5	1-140	5.88	50
Hexachloroethane	50.8		10.0	ug/L	80.0	ND	63.5	40-120	0.253	52
Indeno(1,2,3-cd)pyrene	60.5		10.0	ug/L	80.0	ND	75.6	1-171	3.12	99
Isophorone	77.0		10.0	ug/L	80.0	ND	96.2	21-196	4.02	93
Naphthalene	65.9		10.0	ug/L	80.0	ND	82.4	21-133	5.47	65
n-Decane	18.2		10.0	ug/L	80.0	ND	22.8	1-140	7.21	50
Nitrobenzene	67.9		10.0	ug/L	80.0	ND	84.9	35-180	5.09	50
N-Nitosodi-n-butylamine	92.9		10.0	ug/L	80.0	ND	116	1-140	0.273	50
N-Nitrosodiethylamine	77.3		10.0	ug/L	80.0	ND	96.7	1-140	2.74	50
N-Nitrosodimethylamine	27.8		10.0	ug/L	80.0	ND	34.8	1-140	0.215	50
N-Nitrosodi-n-propylamine	80.5		10.0	ug/L	80.0	ND	101	1-230	2.96	87
N-Nitrosodiphenylamine	79.1		10.0	ug/L	80.0	ND	98.8	1-140	4.48	50
n-Octadecane	78.5		10.0	ug/L	80.0	ND	98.2	1-140	6.85	50
Pentachlorobenzene	79.5		10.0	ug/L	80.0	ND	99.3	1-140	2.79	50
Pentachlorophenol	91.1		10.0	ug/L	80.0	ND	114	14-176	0.161	86
Phenanthrene	80.8		10.0	ug/L	80.0	ND	101	54-120	6.08	39
Phenol	49.9		10.0	ug/L	80.0	ND	62.3	5-120	2.96	64
Pyrene	90.9		10.0	ug/L	80.0	ND	114	52-120	11.6	49
Pyridine	4.58 J		10.0	ug/L	80.0	ND	5.73	1-140		50
3-Methylphenol	26.0		20.0	ug/L	40.0	ND	64.9	1-140	6.29	50



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### Quality Control (Continued)

#### Semivolatile Organics (Continued)

Analyte	Result	Qual	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<b>Batch: B23H395 - EPA 608.3</b>										
<b>Blank (B23H395-BLK1)</b>										
					Prepared: 08/29/23 09:07 Analyzed: 08/31/23 11:19					
4,4'-DDD	ND		0.0256	ug/L						
4,4'-DDE	ND		0.00513	ug/L						
4,4'-DDT	ND		0.0256	ug/L						
Aldrin	ND		0.00513	ug/L						
Alpha-BHC	ND		0.00513	ug/L						
Beta-BHC	ND		0.00513	ug/L						
Chlordane	ND		0.205	ug/L						
Delta-BHC	ND		0.00513	ug/L						
Dicofol	ND		0.0513	ug/L						
Dieldrin	ND		0.00513	ug/L						
Endosulfan I	ND		0.00513	ug/L						
Endosulfan II	ND		0.0256	ug/L						
Endosulfan Sulfate	ND		0.0256	ug/L						
Endrin	ND		0.0256	ug/L						
Endrin-Aldehyde	ND		0.00513	ug/L						
Gamma-BHC	ND		0.00513	ug/L						
Heptachlor	ND		0.00513	ug/L						
Heptachlor epoxide	ND		0.00513	ug/L						
Methoxychlor	ND		0.00513	ug/L						
Mirex	ND		0.00513	ug/L						
PCB-1016	ND		0.205	ug/L						
PCB-1221	ND		0.205	ug/L						
PCB-1232	ND		0.205	ug/L						
PCB-1242	ND		0.205	ug/L						
PCB-1248	ND		0.205	ug/L						
PCB-1254	ND		0.205	ug/L						
PCB-1260	ND		0.205	ug/L						
Toxaphene	ND		0.205	ug/L						
Polychlorinated biphenyls, Total	ND		0.205	ug/L						





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## Quality Control (Continued)

### Semivolatile Organics (Continued)

Analyte	Result	Qual	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<b>Batch: B23H395 - EPA 608.3 (Continued)</b>										
<b>LCS (B23H395-BS1)</b>										
					Prepared: 08/29/23 09:07 Analyzed: 09/07/23 15:25					
4,4'-DDD	0.0365		0.0254	ug/L	0.0508		72.0	31-141		
4,4'-DDE	0.0294		0.00508	ug/L	0.0508		58.0	30-145		
4,4'-DDT	0.0325		0.0254	ug/L	0.0508		64.0	25-160		
Aldrin	0.0315		0.00508	ug/L	0.0508		62.0	42-140		
Alpha-BHC	0.0426		0.00508	ug/L	0.0508		84.0	37-140		
Beta-BHC	0.0457		0.00508	ug/L	0.0508		90.0	17-147		
Chlordane	ND		0.203	ug/L				45-140		
Delta-BHC	0.0457		0.00508	ug/L	0.0508		90.0	34-140		
Dicofol (2)	0.104	BS ND	0.0508	ug/L	0.508		20.4	50-150		
Dieldrin	0.0406		0.00508	ug/L	0.0508		80.0	36-146		
Endosulfan I	0.0426		0.00508	ug/L	0.0508		84.0	45-153		
Endosulfan II	0.0437		0.0254	ug/L	0.0508		86.0	0-202		
Endosulfan Sulfate	0.0355		0.0254	ug/L	0.0508		70.0	50-150		
Endrin	0.0416		0.0254	ug/L	0.0508		82.0	30-147		
Endrin-Aldehyde	0.0274		0.00508	ug/L	0.0508		54.0	50-150		
Gamma-BHC	0.0457		0.00508	ug/L	0.0508		90.0	32-140		
Heptachlor	0.0335		0.00508	ug/L	0.0508		66.0	19-140		
Heptachlor epoxide	0.0406		0.00508	ug/L	0.0508		80.0	37-142		
Methoxychlor	0.0365		0.00508	ug/L	0.0508		72.0	26-144		
Mirex (2)	0.0203	BS ND	0.00508	ug/L	0.0508		40.0	50-150		
PCB-1016	ND		0.203	ug/L				50-140		
PCB-1221	ND		0.203	ug/L				15-178		
PCB-1232	ND		0.203	ug/L				10-215		
PCB-1242	ND		0.203	ug/L				39-150		
PCB-1248	ND		0.203	ug/L				38-158		
PCB-1254	ND		0.203	ug/L				29-140		
PCB-1260	ND		0.203	ug/L				8-140		
Toxaphene	ND		0.203	ug/L				41-140		





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### Quality Control (Continued)

#### Semivolatile Organics (Continued)

Analyte	Result	Qual	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
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#### Batch: B23H395 - EPA 608.3 (Continued)

##### LCS (B23H395-BS2)

Prepared: 08/29/23 09:07 Analyzed: 08/31/23 11:52

PCB-1016	0.630		0.203	ug/L	1.02		62.1	50-140		
PCB-1260	0.519		0.203	ug/L	1.02		51.1	8-140		

##### Matrix Spike (B23H395-MS1)

Source: 23H1064-04

Prepared: 08/29/23 09:07 Analyzed: 08/31/23 12:24

4,4'-DDD	0.0940		0.0500	ug/L	0.100	ND	94.0	31-141		
4,4'-DDE	0.0780		0.0100	ug/L	0.100	ND	78.0	30-145		
4,4'-DDT	0.0900		0.0500	ug/L	0.100	ND	90.0	25-160		
Aldrin (2)	0.0740		0.0100	ug/L	0.100	ND	74.0	42-140		
Alpha-BHC	0.0940		0.0100	ug/L	0.100	ND	94.0	37-140		
Beta-BHC (2)	0.120		0.0100	ug/L	0.100	ND	120	17-147		
Delta-BHC (2)	0.114		0.0100	ug/L	0.100	ND	114	34-140		
Dicofol (2)	0.492	MS1	0.100	ug/L	1.00	ND	49.2	50-150		
Dieldrin	0.0880		0.0100	ug/L	0.100	ND	88.0	36-146		
Endosulfan I	0.0780		0.0100	ug/L	0.100	ND	78.0	45-153		
Endosulfan II	0.134		0.0500	ug/L	0.100	ND	134	0-202		
Endosulfan Sulfate	0.116		0.0500	ug/L	0.100	ND	116	50-150		
Endrin	0.106		0.0500	ug/L	0.100	ND	106	30-147		
Endrin-Aldehyde	0.0920		0.0100	ug/L	0.100	ND	92.0	50-150		
Gamma-BHC	0.118		0.0100	ug/L	0.100	ND	118	32-140		
Heptachlor (2)	0.106		0.0100	ug/L	0.100	ND	106	19-140		
Heptachlor epoxide	0.0860		0.0100	ug/L	0.100	ND	86.0	37-142		
Methoxychlor	0.144		0.0100	ug/L	0.100	ND	144	26-144		
Mirex	0.0920		0.0100	ug/L	0.100	ND	92.0	50-150		

##### Matrix Spike Dup (B23H395-MSD1)

Source: 23H1064-04

Prepared: 08/29/23 09:07 Analyzed: 08/31/23 12:41

4,4'-DDD	0.0860		0.0500	ug/L	0.100	ND	86.0	31-141	8.89	39
4,4'-DDE	0.0600		0.0100	ug/L	0.100	ND	60.0	30-145	26.1	35
4,4'-DDT	0.0720		0.0500	ug/L	0.100	ND	72.0	25-160	22.2	42
Aldrin (2)	0.0500		0.0100	ug/L	0.100	ND	50.0	42-140	38.7	35
Alpha-BHC	0.0900		0.0100	ug/L	0.100	ND	90.0	37-140	4.35	36
Beta-BHC (2)	0.118		0.0100	ug/L	0.100	ND	118	17-147	1.68	44
Chlordane	ND		0.400	ug/L		ND		45-140		24
Delta-BHC (2)	0.106		0.0100	ug/L	0.100	ND	106	34-140	7.27	43
Dicofol (2)	0.618		0.100	ug/L	1.00	ND	61.8	50-150	22.7	50
Dieldrin	0.0760		0.0100	ug/L	0.100	ND	76.0	36-146	14.6	49
Endosulfan I	0.0640		0.0100	ug/L	0.100	ND	64.0	45-153	19.7	28
Endosulfan II	0.142		0.0500	ug/L	0.100	ND	142	0-202	5.80	53
Endosulfan Sulfate	0.116		0.0500	ug/L	0.100	ND	116	50-150	0.00	50
Endrin	0.0940		0.0500	ug/L	0.100	ND	94.0	30-147	12.0	48
Endrin-Aldehyde	0.0640		0.0100	ug/L	0.100	ND	64.0	50-150	35.9	50
Gamma-BHC	0.100		0.0100	ug/L	0.100	ND	100	32-140	16.5	39
Heptachlor	0.124		0.0100	ug/L	0.100	ND	124	19-140	19.0	52
Heptachlor epoxide	0.0760		0.0100	ug/L	0.100	ND	76.0	37-142	12.3	26
Methoxychlor	0.138		0.0100	ug/L	0.100	ND	138	26-144	4.26	38
Mirex	0.0980		0.0100	ug/L	0.100	ND	98.0	50-150	6.32	50



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### Quality Control (Continued)

#### Semivolatile Organics (Continued)

Analyte	Result	Qual	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
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#### Batch: B23H416 - EPA 1657

##### Blank (B23H416-BLK1)

Prepared: 08/31/23 08:20 Analyzed: 09/15/23 15:04

Chlorpyrifos (2)	ND		0.255	ug/L						
Demeton-o (2)	ND		0.255	ug/L						
Demeton-s (2)	ND		0.255	ug/L						
Diazinon (2)	ND		0.255	ug/L						
ethyl-Parathion (2)	ND		0.255	ug/L						
Malathion (2)	ND		0.255	ug/L						
methyl Azinphos (Guthion) (2)	ND		0.255	ug/L						
Surrogate: Tributylphosphate (2)			0.974	ug/L	1.02		95.5	40-120		
Surrogate: Triphenylphosphate (2)			0.944	ug/L	1.02		92.5	40-120		

##### LCS (B23H416-BS1)

Prepared: 08/31/23 08:20 Analyzed: 09/15/23 16:15

Chlorpyrifos (2)	0.950		0.250	ug/L	1.00		95.0	48-150		
Demeton-o (2)	0.485		0.250	ug/L	0.955		50.8	16-150		
Demeton-s (2)	0.670		0.250	ug/L	1.05		63.8	16-150		
Diazinon (2)	0.920		0.250	ug/L	1.00		92.0	50-150		
ethyl-Parathion (2)	0.900		0.250	ug/L	1.00		90.0	50-150		
Malathion (2)	0.960		0.250	ug/L	1.00		96.0	50-150		
methyl Azinphos (Guthion) (2)	1.20		0.250	ug/L	1.00		120	37-150		

##### Matrix Spike (B23H416-MS1)

Source: 23H1064-04

Prepared: 08/31/23 08:20 Analyzed: 09/15/23 16:38

Chlorpyrifos (2)	2.01		0.500	ug/L	2.00	ND	100	25-150		
Demeton-o (2)	1.26		0.500	ug/L	1.91	ND	66.0	25-150		
Demeton-s (2)	1.43		0.500	ug/L	2.10	ND	68.1	25-150		
Diazinon (2)	2.81		0.500	ug/L	2.00	ND	140	25-150		
ethyl-Parathion (2)	2.04		0.500	ug/L	2.00	ND	102	25-150		
Malathion (2)	2.01		0.500	ug/L	2.00	ND	100	25-150		
methyl Azinphos (Guthion) (2)	2.70		0.500	ug/L	2.00	ND	135	25-150		



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### Quality Control (Continued)

#### Semivolatile Organics (Continued)

Analyte	Result	Qual	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<b>Batch: B23H416 - EPA 1657 (Continued)</b>										
<b>Matrix Spike Dup (B23H416-MSD1) Source: 23H1064-04</b> Prepared: 08/31/23 08:20 Analyzed: 09/15/23 17:01										
Chlorpyrifos (2)	1.82		0.500	ug/L	2.00	ND	91.0	25-150	9.92	200
Demeton-o (2)	1.21		0.500	ug/L	1.91	ND	63.4	25-150	4.05	200
Demeton-s (2)	1.38		0.500	ug/L	2.10	ND	65.7	25-150	3.56	200
Diazinon (2)	2.63		0.500	ug/L	2.00	ND	132	25-150	6.62	200
ethyl-Parathion (2)	1.65		0.500	ug/L	2.00	ND	82.5	25-150	21.1	200
Malathion (2)	1.90		0.500	ug/L	2.00	ND	95.0	25-150	5.63	200
methyl Azinphos (Guthion) (2)	2.40		0.500	ug/L	2.00	ND	120	25-150	11.8	200



Northwest  
5423 Mangum Rd  
Houston, TX 77091

Project: NW Full Scan  
Project Number: 10495-076  
Project Manager: Regulatory Compliance

**Reported:**  
11/09/2023 07:32

### Quality Control (Continued)

#### Volatile Organics

Analyte	Result	Qual	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
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#### Batch: B23H397 - EPA 624.1

##### Blank (B23H397-BLK1)

Prepared: 08/28/23 08:48 Analyzed: 08/28/23 09:12

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



Northwest  
5423 Mangum Rd  
Houston, TX 77091

Project: NW Full Scan  
Project Number: 10495-076  
Project Manager: Regulatory Compliance

**Reported:**  
11/09/2023 07:32

## Quality Control (Continued)

### Volatile Organics (Continued)

Analyte	Result	Qual	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<b>Batch: B23H397 - EPA 624.1 (Continued)</b>										
<b>Matrix Spike (B23H397-MS1)</b>	<b>Source: 23H1064-03</b>				Prepared: 08/28/23 08:48		Analyzed: 08/28/23 12:17			
1,1,1-Trichloroethane	21.0			ug/L	20.0	0.00	105	52-162		
1,1,2,2-Tetrachloroethane	20.6			ug/L	20.0	0.00	103	46-157		
1,1,2-Trichloroethane	21.1			ug/L	20.0	0.00	105	52-150		
1,1-Dichloroethane	20.6			ug/L	20.0	0.00	103	59-155		
1,1-Dichloroethene	18.9			ug/L	20.0	0.00	94.5	0-234		
1,2-Dibromoethane	20.6			ug/L	20.0	0.00	103	60-140		
1,2-Dichlorobenzene	20.1			ug/L	20.0	0.00	100	18-190		
1,2-Dichloroethane	21.0			ug/L	20.0	0.00	105	49-155		
1,2-Dichloropropane	21.2			ug/L	20.0	0.00	106	0-210		
1,3-Dichlorobenzene	19.9			ug/L	20.0	0.00	99.5	59-156		
1,4-Dichlorobenzene	20.6			ug/L	20.0	0.00	103	18-190		
2-Butanone	35.1			ug/L	40.0	0.00	87.8	60-140		
2-Chloroethyl vinyl ether	25.5			ug/L	20.0	0.00	128	0-305		
Acrolein	2.22	MS1		ug/L	20.0	0.00	11.1	40-160		
Acrylonitrile	21.8			ug/L	20.0	0.00	109	40-160		
Benzene	20.9			ug/L	20.0	0.00	104	37-151		
Bromodichloromethane	25.4			ug/L	20.0	4.63	104	35-155		
Bromoform	20.4			ug/L	20.0	0.00	102	45-169		
Bromomethane	22.0			ug/L	20.0	0.00	110	0-242		
Carbon Disulfide	22.7			ug/L	20.0	0.00	114	60-140		
Carbon Tetrachloride	20.1			ug/L	20.0	0.00	100	70-140		
Chlorobenzene	20.7			ug/L	20.0	0.00	104	37-160		
Chloroethane	23.8			ug/L	20.0	0.00	119	14-230		
Chloroform	33.8			ug/L	20.0	13.5	102	51-138		
chloromethane	24.5			ug/L	20.0	0.00	122	0-273		
cis-1,2-Dichloroethene	20.6			ug/L	20.0	0.00	103	60-140		
cis-1,3-Dichloropropene	20.7			ug/L	20.0	0.00	103	0-227		
Dibromochloromethane	21.8			ug/L	20.0	0.00	109	53-149		
Epichlorohydrin	104			ug/L	100	0.00	104	70-130		
Ethylbenzene	20.9			ug/L	20.0	0.00	105	37-162		
m+p-Xylene	41.4			ug/L	40.0	0.00	104	60-140		
Methylene Chloride	20.3			ug/L	20.0	0.00	102	0-221		
Methyl-tert-butyl ether (MTBE)	21.0			ug/L	20.0	0.00	105	70-130		
o-Xylene	20.2			ug/L	20.0	0.00	101	60-140		
Styrene	20.3			ug/L	20.0	0.00	102	60-140		
Tetrachloroethene	20.3			ug/L	20.0	0.00	101	64-148		
Toluene	20.7			ug/L	20.0	0.00	104	47-150		
trans-1,2-Dichloroethene	20.4			ug/L	20.0	0.00	102	54-156		
trans-1,3-Dichloropropene	20.1			ug/L	20.0	0.00	100	17-183		
Trichloroethene	20.7			ug/L	20.0	0.00	104	70-157		
Vinyl acetate	25.4			ug/L	20.0	0.00	127	60-140		
Vinyl chloride	24.2			ug/L	20.0	0.00	121	0-251		



Northwest  
5423 Mangum Rd  
Houston, TX 77091

Project: NW Full Scan  
Project Number: 10495-076  
Project Manager: Regulatory Compliance

**Reported:**  
11/09/2023 07:32

## Quality Control (Continued)

### Volatile Organics (Continued)

Analyte	Result	Qual	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<b>Batch: B23H397 - EPA 624.1 (Continued)</b>										
<b>Matrix Spike Dup (B23H397-MSD1) Source: 23H1064-03</b>					Prepared: 08/28/23 08:48 Analyzed: 08/28/23 12:45					
1,1,1-Trichloroethane	20.8			ug/L	20.0	0.00	104	52-162	0.815	36
1,1,2,2-Tetrachloroethane	20.8			ug/L	20.0	0.00	104	46-157	0.532	61
1,1,2-Trichloroethane	20.7			ug/L	20.0	0.00	104	52-150	1.82	45
1,1-Dichloroethane	20.4			ug/L	20.0	0.00	102	59-155	0.926	40
1,1-Dichloroethene	18.7			ug/L	20.0	0.00	93.3	0-234	1.28	32
1,2-Dibromoethane	20.2			ug/L	20.0	0.00	101	60-140	2.16	20
1,2-Dichlorobenzene	20.2			ug/L	20.0	0.00	101	18-190	0.497	57
1,2-Dichloroethane	21.0			ug/L	20.0	0.00	105	49-155	0.00	49
1,2-Dichloropropane	21.0			ug/L	20.0	0.00	105	0-210	1.33	55
1,3-Dichlorobenzene	20.1			ug/L	20.0	0.00	100	59-156	0.950	43
1,4-Dichlorobenzene	20.8			ug/L	20.0	0.00	104	18-190	0.966	57
2-Butanone	35.3			ug/L	40.0	0.00	88.3	60-140	0.625	20
2-Chloroethyl vinyl ether	25.6			ug/L	20.0	0.00	128	0-305	0.157	71
Acrolein	1.92	MS1		ug/L	20.0	0.00	9.60	40-160	14.5	60
Acrylonitrile	21.4			ug/L	20.0	0.00	107	40-160	2.31	60
Benzene	20.6			ug/L	20.0	0.00	103	37-151	1.50	61
Bromodichloromethane	25.4			ug/L	20.0	4.63	104	35-155	0.0393	56
Bromoform	20.2			ug/L	20.0	0.00	101	45-169	1.33	42
Bromomethane	23.6			ug/L	20.0	0.00	118	0-242	7.20	61
Carbon Disulfide	22.4			ug/L	20.0	0.00	112	60-140	1.51	20
Carbon Tetrachloride	20.2			ug/L	20.0	0.00	101	70-140	0.694	41
Chlorobenzene	20.4			ug/L	20.0	0.00	102	37-160	1.36	53
Chloroethane	22.4			ug/L	20.0	0.00	112	14-230	5.92	78
Chloroform	34.1			ug/L	20.0	13.5	103	51-138	0.766	54
chloromethane	24.0			ug/L	20.0	0.00	120	0-273	2.02	60
cis-1,2-Dichloroethene	20.8			ug/L	20.0	0.00	104	60-140	0.966	20
cis-1,3-Dichloropropene	20.5			ug/L	20.0	0.00	102	0-227	0.826	58
Dibromochloromethane	21.6			ug/L	20.0	0.00	108	53-149	0.830	50
Epichlorohydrin	105			ug/L	100	0.00	105	70-130	0.892	20
Ethylbenzene	20.6			ug/L	20.0	0.00	103	37-162	1.49	63
m+p-Xylene	41.0			ug/L	40.0	0.00	102	60-140	1.04	20
Methylene Chloride	19.9			ug/L	20.0	0.00	99.6	0-221	1.94	28
Methyl-tert-butyl ether (MTBE)	20.8			ug/L	20.0	0.00	104	70-130	1.05	20
o-Xylene	19.9			ug/L	20.0	0.00	99.7	60-140	1.30	20
Styrene	20.2			ug/L	20.0	0.00	101	60-140	0.592	20
Tetrachloroethene	20.1			ug/L	20.0	0.00	100	64-148	0.843	39
Toluene	20.4			ug/L	20.0	0.00	102	47-150	1.66	41
trans-1,2-Dichloroethene	20.2			ug/L	20.0	0.00	101	54-156	1.38	45
trans-1,3-Dichloropropene	20.0			ug/L	20.0	0.00	100	17-183	0.399	86
Trichloroethene	20.6			ug/L	20.0	0.00	103	70-157	0.532	48
Vinyl acetate	24.8			ug/L	20.0	0.00	124	60-140	2.39	20
Vinyl chloride	23.9			ug/L	20.0	0.00	119	0-251	1.25	66



Northwest  
5423 Mangum Rd  
Houston, TX 77091

Project: NW Full Scan  
Project Number: 10495-076  
Project Manager: Regulatory Compliance

**Reported:**  
11/09/2023 07:32

### Quality Control (Continued)

#### Wet Chemistry

Analyte	Result	Qual	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<b>Batch: B23H367 - ASTM D7511</b>										
<b>Blank (B23H367-BLK1)</b>					Prepared: 08/25/23 08:45 Analyzed: 08/25/23 13:03					
Cyanide, Amenable	ND		2.00	ug/L						
Cyanide, Total	ND		10.0	ug/L						
<b>LCS (B23H367-BS1)</b>					Prepared: 08/25/23 08:45 Analyzed: 08/25/23 13:08					
Cyanide, Total	103			ug/L	100		103	84-116		
Cyanide, Amenable	50.3			ug/L	50.0		101	82-132		
<b>Duplicate (B23H367-DUP1)</b>					<b>Source: 23H1063-03</b>		Prepared: 08/25/23 08:45 Analyzed: 08/25/23 14:43			
Cyanide, Amenable	7.55		2.00	ug/L		7.20			4.67	15
Cyanide, Total	11.6		10.0	ug/L		12.1			4.50	47
<b>Matrix Spike (B23H367-MS1)</b>					<b>Source: 23H1063-03</b>		Prepared: 08/25/23 08:45 Analyzed: 08/25/23 14:48			
Cyanide, Amenable	55.1			ug/L	50.0	7.20	95.8	82-130		
Cyanide, Total	61.9			ug/L	50.0	12.1	99.6	64-136		
<b>Batch: B23I218 - EPA 218.6</b>										
<b>Blank (B23I218-BLK1)</b>					Prepared: 09/15/23 12:00 Analyzed: 09/15/23 15:33					
Chromium Hexavalent	ND		1.00	ug/L						
<b>LCS (B23I218-BS1)</b>					Prepared: 09/15/23 12:00 Analyzed: 09/15/23 15:44					
Chromium Hexavalent	4.97			ug/L	5.00		99.3	90-110		
<b>Matrix Spike (B23I218-MS1)</b>					<b>Source: 23I0574-02</b>		Prepared: 09/15/23 12:00 Analyzed: 09/15/23 17:13			
Chromium Hexavalent	4.88		1.01	ug/L	5.03	ND	97.0	80-120		
<b>Matrix Spike Dup (B23I218-MSD1)</b>					<b>Source: 23I0574-02</b>		Prepared: 09/15/23 12:00 Analyzed: 09/15/23 17:24			
Chromium Hexavalent	5.19		1.01	ug/L	5.03	ND	103	80-120	6.33	20



Northwest  
5423 Mangum Rd  
Houston, TX 77091

Project: NW Full Scan  
Project Number: 10495-076  
Project Manager: Regulatory Compliance

**Reported:**  
11/09/2023 07:32

### Quality Control (Continued)

#### Wet Chemistry (Continued)

Analyte	Result	Qual	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<b>Batch: B23I218 - EPA 218.6 (Continued)</b>										
<b>Reference (B23I218-SRM1)</b>										
Chromium Hexavalent	7.86			ug/L	7.50		105	0-200		
<b>Reference (B23I218-SRM2)</b>										
Chromium Hexavalent	15.8			ug/L	15.0		105	0-200		
<b>Reference (B23I218-SRM3)</b>										
Chromium Hexavalent	31.7			ug/L	30.0		106	0-200		





Northwest  
5423 Mangum Rd  
Houston, TX 77091

Project: NW Full Scan  
Project Number: 10495-076  
Project Manager: Regulatory Compliance

**Reported:**  
11/09/2023 07:32

## Notes and Definitions

Item	Definition
BS ND	Blank Spike recovered above acceptance limits. Associated samples were non-detect, therefore data have been reported.
CCV ND	Continuing Calibration Verification (CCV) contained target analytes above the acceptance limit. Associated samples were non-detect for those analytes, therefore data have been reported.
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.
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.

23H1064



Sampler:	Raymond Canallero, C1023, America Farm State
IWS Sample Reason	
Permit Requirement	<input type="checkbox"/> Compliance Verification
Special Report	<input type="checkbox"/> POTW Permit Application
Other	
NW Full Scan	



Company Name:	Northwest Pollutants Monitoring
Address:	5423 Mangum Rd Houston, TX 77091
Permit Number:	10495-076

Composite Info	
Sample ID:	23H1064-04
Split Samples:	Yes (No) 123459
Number of bottles:	200 mL
Sample Volume:	800 mL
Sample Interval:	30 min
Autosampler secured/locked:	Yes (No) N/A
Comp Temp(°C)	5.4

Field Test Traceability Info	
TRC ID:	
Temperature ID:	N/A
pH Measured By:	Paper Meter
pH ID:	
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
23H1064-01	13	CMan	W	SP 1_CompMan	0527 8/24/23	2207 8/24/23	(1) 1 L Amber Glass, PTFE lined Cap Cool <6°C, NaOH to pH >10, NaAsO2 if TRC present (8) 40 mL Glass, PTFE lined septum Cool <6°C, HCl to pH <2 (9) 1 L Amber Glass, PTFE lined Cap Cool <6°C, 0.008% Na2S2O3	Cyanide OIA 1677 Cyanide D7511 VOA 624.1 Pesticides 608.3 Pesticides 1657 BNA 625.1		(4) VOA's 624.1, 40.2 GUTSS, PTFE lined septum, cool 6.0 *collecting AS AS A 4 parts GRAB.
23H1064-02	9	C	W	SP 1_Comp	6:00 8/24/23	6:00 8/24/23	(1) 1 L PE or G Cool <6°C, (NH4)2SO4 buffer, NaOH to pH 9.3-9.7 (2) 1 L PE or Glass Cool <6°C, HNO3 to pH <2	Chromium, Hexavalent 218.6 Metals WWTP Inf Mercury 245.1		(4) VOA's 624.1, 40.2 GUTSS, PTFE lined septum, cool 6.0 *collecting AS AS A 4 parts GRAB.
23H1064-03	25	CMan	W	SP 2_CompMan	0509 8/24/23	2150 8/24/23	(1) 1 L Amber Glass, PTFE lined Cap Cool <6°C, NaOH to pH >10, NaAsO2 if TRC present (8) 40 mL Glass, PTFE lined septum Cool <6°C (9) 1 L Amber Glass, PTFE lined Cap Cool <6°C, 0.008% Na2S2O3	Cyanide OIA 1677 Cyanide D7511 Mercury 1631E VOA 624.1 Pesticides 608.3 Pesticides 1657 BNA 625.1		(4) VOA's 624.1, 40.2 GUTSS, PTFE lined septum, cool 6.0 *collecting AS AS A 4 parts GRAB.
23H1064-04	9	C	W	SP 2_Comp	8:00 8/24/23	8:00 8/24/23	(1) 1 L Amber Glass, PTFE lined Cap Cool <6°C, NaOH to pH >10, NaAsO2 if TRC present (8) 40 mL Glass, PTFE lined septum Cool <6°C (9) 1 L Amber Glass, PTFE lined Cap Cool <6°C, 0.008% Na2S2O3	Pesticides 608.3 Pesticides 1657 BNA 625.1		(4) VOA's 624.1, 40.2 GUTSS, PTFE lined septum, cool 6.0 *collecting AS AS A 4 parts GRAB.
23H1064-05	1	G	W	Field Blank	0459 8/24/203	0459 8/24/203	(1) 40 mL Glass, PTFE lined septum Cool <6°C	Mercury 1631E		(4) VOA's 624.1, 40.2 GUTSS, PTFE lined septum, cool 6.0 *collecting AS AS A 4 parts GRAB.

Relinquished by: (Signature)	Relinquished by: (Signature)	Relinquished by: (Signature)
Date/Time	Date/Time	Date/Time
Location	Location	Location
Received by: (Signature)	Received by: (Signature)	Received by: (Signature)
Date/Time	Date/Time	Date/Time
Location	Location	Location



November 09, 2023

## **ANALYTICAL REPORT**

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

Regulatory Compliance

Northwest  
5423 Mangum Rd  
Houston, TX 77091

Project Site: Northwest Pollutants

Enclosed are the results of analyses for samples received by the laboratory on 10/9/2023.  
If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Brandon Grimm  
Division Manager



Northwest  
5423 Mangum Rd  
Houston, TX 77091

Project: NW Metals, CN + Permit  
Project Number: 10495-076  
Project Manager: Regulatory Compliance

**Reported:**  
11/09/2023 07:31

PDFFileStart [TOCPAGEMARKER] PDFFileEnd



Northwest  
5423 Mangum Rd  
Houston, TX 77091

Project: NW Metals, CN + Permit  
Project Number: 10495-076  
Project Manager: Regulatory Compliance

**Reported:**  
11/09/2023 07:31

### Samples in this Report

Lab ID	Sample		Matrix	Date Sampled	Date Received
23J0229-01	SP 02_Grab	Northwest Effluent	Water	10/09/2023 06:59	10/09/2023 09:25



Northwest  
5423 Mangum Rd  
Houston, TX 77091

Project: NW Metals, CN + Permit  
Project Number: 10495-076  
Project Manager: Regulatory Compliance

**Reported:**  
11/09/2023 07:31

## Sample Results

**Sample: SP 02\_Grab Northwest Effluent**  
**23J0229-01 (Water)**

Analyte	Result	Qual	DL	RL	Units	Date Prepared	Date Analyzed	Analyst Initials	Method
<b>Wet Chemistry</b>									
Chlorine, total residual	ND		0.100	0.100	mg/L	10/09/2023 06:59	10/09/2023 06:59	JF	SM 4500-Cl D
<b>Microbiology</b>									
E.coli	ND		1	1	MPN/100 mL	10/09/2023 10:23	10/10/2023 11:08	JT	Colilert
<b>Field</b>									
Temperature, Celsius	24.2		0.00	0.100	°C	10/09/2023 06:59	10/09/2023 06:59	JF	EPA 170.1
Oxygen, dissolved	6.40		1.00	1.00	mg/L	10/09/2023 06:59	10/09/2023 06:59	JF	SM 4500-O G
pH	7.40		0.0100	2.00	SU	10/09/2023 06:59	10/09/2023 06:59	JF	SM 4500-H+ B



Northwest  
5423 Mangum Rd  
Houston, TX 77091

Project: NW Metals, CN + Permit  
Project Number: 10495-076  
Project Manager: Regulatory Compliance

**Reported:**  
11/09/2023 07:31

## Quality Control

### Microbiology

Analyte	Result	Qual	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<b>Batch: B23J117 - Colilert</b>										
<b>Blank (B23J117-BLK1)</b>										
E.coli	ND				Prepared: 10/09/23 10:23	Analyzed: 10/10/23 11:08				
					1 MPN/100mL					
<b>LCS (B23J117-BS1)</b>										
E.coli	127				Prepared: 10/09/23 10:23	Analyzed: 10/10/23 11:08				
					MPN/100mL 141		90.4	50-150		
<b>Duplicate (B23J117-DUP1)</b>										
E.coli	ND				Prepared: 10/09/23 10:23	Analyzed: 10/10/23 11:08				50
					1 MPN/100mL	1				
<b>Duplicate (B23J117-DUP2)</b>										
E.coli	ND				Prepared: 10/09/23 10:23	Analyzed: 10/10/23 11:08				50
					1 MPN/100mL	ND				



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**Reported:**  
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### 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



Handwritten initials

23J02229



Company Name:	Northwest Pollutants Monitoring
Address:	5423 Mangum Rd Houston, TX 77091
Permit Number:	10495-076

Sampler:	08789 fave
IWS Sample Reason	
Permit Requirement	<input type="checkbox"/> Compliance Verification
Special Report	<input checked="" type="checkbox"/> POTW Permit Application
Other	

NW Metals, CN + Permit

Composite Info			
Sample ID:		Yes	No
Split Samples:		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
Comp Temp(°C)		Yes	No

Field Test Traceability Info	
TRC ID:	08120616563
Temperature ID:	72134289
pH Measured By:	Paper (Meter)
pH ID:	131770022
Eff Sampler temp(°C)	
Inf Sampler temp(°C)	

Not for

\*Matrix: W - Water, S - Solid, C - Chemicals  
p.d. 11/11/10 1333

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

Sample Identification	# Cont	Grab/Comp	Matrix*	Location	Begin Sampled Date/Time	(End) Sampled Date/Time	Container with Preservation	Test Method	Field Test	Comments
23J02229-01	1	G	W	SP 02_Grab	6:59 10/09/23		(1) 280 mL Sterile Plastic Cool <10°C, 0.008% Na2S2O3 (1) N/A None	Total Coliform and E.coli by Colliert Temperature 2550 B pH 4500-H+ B Dissolved Oxygen 4500-O G Chlorine 4500 G	DO (mg/L) 6.4 pH 7.4 Temp (°C) 24.2 TRC (mg/L) 0.01	

Relinquished by: (Signature)	10/09/23 - 925	Location	Received by: (Signature)	10/09/23 - 925	Date/Time	Location
Relinquished by: (Signature)		Location	Received by: (Signature)		Date/Time	Location



November 09, 2023

## **ANALYTICAL REPORT**

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

Regulatory Compliance

Northwest  
5423 Mangum Rd  
Houston, TX 77091

Project Site: Northwest Pollutants

Enclosed are the results of analyses for samples received by the laboratory on 10/10/2023.  
If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Brandon Grimm  
Division Manager



Northwest  
5423 Mangum Rd  
Houston, TX 77091

Project: NW Metals, CN + Permit  
Project Number: 10495-076  
Project Manager: Regulatory Compliance

**Reported:**  
11/09/2023 07:29

PDFFileStart [TOCPAGEMARKER] PDFFileEnd



Northwest  
5423 Mangum Rd  
Houston, TX 77091

Project: NW Metals, CN + Permit  
Project Number: 10495-076  
Project Manager: Regulatory Compliance

**Reported:**  
11/09/2023 07:29

### Samples in this Report

Lab ID	Sample		Matrix	Date Sampled	Date Received
23J0230-01	SP 1_CompMan	Northwest Influent	Water	10/09/2023 22:41	10/10/2023 11:27
23J0230-02	SP 1_Comp	Northwest Influent	Water	10/10/2023 06:00	10/10/2023 11:27
23J0230-03	SP 2_CompMan	Northwest Effluent	Water	10/09/2023 22:30	10/10/2023 11:27
23J0230-04	SP 2_Comp	Northwest Effluent	Water	10/10/2023 08:00	10/10/2023 11:27
23J0230-05	Field Blank	Field Blank Northwest	Water	10/09/2023 12:03	10/10/2023 11:27



Northwest  
5423 Mangum Rd  
Houston, TX 77091

Project: NW Metals, CN + Permit  
Project Number: 10495-076  
Project Manager: Regulatory Compliance

**Reported:**  
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### Sample Results

**Sample: SP 1\_CompMan Northwest Influent**  
**23J0230-01 (Water)**

Analyte	Result	Qual	DL	RL	Units	Date Prepared	Date Analyzed	Analyst Initials	Method
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#### Wet Chemistry

Cyanide, Amenable	7.27		0.946	2.00	ug/L	10/12/2023 11:01	10/12/2023 16:38	SBL	OIA 1677
Cyanide, Total	25.8		3.14	10.0	ug/L	10/12/2023 11:01	10/12/2023 16:38	SBL	ASTM D7511



Northwest  
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Houston, TX 77091

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**Reported:**  
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### Sample Results (Continued)

**Sample: SP 1\_Comp Northwest Influent**  
**23J0230-02 (Water)**

Analyte	Result	Qual	DL	RL	Units	Date Prepared	Date Analyzed	Analyst Initials	Method
<b>Total Metals</b>									
Silver	ND		1.74	20.0	ug/L	10/30/2023 07:45	10/31/2023 13:06	VP	EPA 200.7
<b>Aluminum</b>	<b>408</b>		18.0	100	ug/L	10/30/2023 07:45	10/31/2023 13:06	VP	EPA 200.7
Arsenic	ND		32.0	100	ug/L	10/30/2023 07:45	10/31/2023 13:06	VP	EPA 200.7
<b>Barium</b>	<b>112</b>		7.94	100	ug/L	10/30/2023 07:45	10/31/2023 13:06	VP	EPA 200.7
Beryllium	ND		1.42	20.0	ug/L	10/30/2023 07:45	10/31/2023 13:06	VP	EPA 200.7
Cadmium	ND		2.74	20.0	ug/L	10/30/2023 07:45	10/31/2023 13:06	VP	EPA 200.7
<b>Chromium</b>	<b>9.53 J</b>		7.39	100	ug/L	10/30/2023 07:45	10/31/2023 13:06	VP	EPA 200.7
<b>Copper</b>	<b>32.4 J</b>		7.25	100	ug/L	10/30/2023 07:45	10/31/2023 13:06	VP	EPA 200.7
Nickel	ND		12.6	100	ug/L	10/30/2023 07:45	10/31/2023 13:06	VP	EPA 200.7
Lead	ND		27.2	100	ug/L	10/30/2023 07:45	10/31/2023 13:06	VP	EPA 200.7
Antimony	ND		37.1	100	ug/L	10/30/2023 07:45	10/31/2023 13:06	VP	EPA 200.7
Selenium	ND		43.1	100	ug/L	10/30/2023 07:45	10/31/2023 13:06	VP	EPA 200.7
Thallium	ND		82.3	200	ug/L	10/30/2023 07:45	10/31/2023 13:06	VP	EPA 200.7
Vanadium	ND		11.9	100	ug/L	10/30/2023 07:45	10/31/2023 13:06	VP	EPA 200.7
<b>Zinc</b>	<b>124</b>		12.9	100	ug/L	10/30/2023 07:45	10/31/2023 13:06	VP	EPA 200.7
<b>Mercury</b>	<b>0.0589 J</b>		0.0253	0.100	ug/L	10/25/2023 08:04	10/26/2023 14:04	KEN	EPA 245.1
<b>Chromium Trivalent</b>	<b>9.53 J</b>		7.39	100	ug/L	10/30/2023 07:45	10/31/2023 13:06	VP	Calculated
<b>Wet Chemistry</b>									
Chromium Hexavalent	ND		0.244	1.00	ug/L	10/27/2023 07:45	10/27/2023 10:42	VP	EPA 218.6



Northwest  
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**Reported:**  
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**Sample Results**  
(Continued)

**Sample: SP 2\_CompMan Northwest Effluent**  
**23J0230-03 (Water)**

Analyte	Result	Qual	DL	RL	Units	Date Prepared	Date Analyzed	Analyst Initials	Method
<b>Total Metals</b>									
Mercury	0.888		0.0928	0.500	ng/L	10/18/2023 11:26	10/19/2023 12:12	KEN	EPA 1631E
<b>Wet Chemistry</b>									
Cyanide, Amenable	4.37		0.946	2.00	ug/L	10/12/2023 11:01	10/12/2023 16:03	SBL	OIA 1677
Cyanide, Total	6.29 J		3.14	10.0	ug/L	10/12/2023 11:01	10/12/2023 16:03	SBL	ASTM D7511



Northwest  
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Houston, TX 77091

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**Reported:**  
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### Sample Results (Continued)

**Sample: SP 2\_Comp Northwest Effluent**  
**23J0230-04 (Water)**

Analyte	Result	Qual	DL	RL	Units	Date Prepared	Date Analyzed	Analyst Initials	Method
<b>Total Metals</b>									
Phosphorous, Total	303		19.4	250	ug/L	10/16/2023 13:07	10/17/2023 10:05	KEN	EPA 200.7
<b>Wet Chemistry</b>									
Total Alkalinity as CaCO <sub>3</sub>	116		20.0	20.0	mg/L	10/13/2023 12:43	10/13/2023 12:43	KEN	SM 2320 B
Total Dissolved Solids	589		5.0	5.0	mg/L	10/12/2023 13:38	10/13/2023 10:52	KEN	SM 2540 C
Total Suspended Solids	5.2		2.0	2.0	mg/L	10/10/2023 12:02	10/10/2023 14:15	SMS	SM 2540 D
Nitrate as N	8.85		.00700	0.100	mg/L	10/11/2023 14:07	10/11/2023 14:07	KEN	EPA 300.0
Ammonia as N	0.628		0.02040	0.0500	mg/L	10/12/2023 15:02	10/12/2023 15:02	BVC	EPA 350.1
Total Kjeldahl Nitrogen	2.02		0.209	0.500	mg/L	10/16/2023 11:00	10/17/2023 11:00	VP	SM 4500-NH <sub>3</sub> D
Biochemical Oxygen Demand, Carbonaceous	3.40		0.200	2.26	mg/L	10/11/2023 08:53	10/16/2023 10:29	ZS	SM 5210 B





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**Reported:**  
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### Sample Results (Continued)

**Sample: SP 2\_Comp Northwest Effluent**  
**23J0230-04 (Water)**

Analyte	Result	Qual	DL	RL	Units	Date Prepared	Date Analyzed	Analyst Initials	Method
Wet Chemistry									
Chloride (Reshot)	134		1.16	4.00	mg/L	10/11/2023 16:55	10/11/2023 16:55	KEN	EPA 300.0
Sulfate (Reshot)	99.9		1.77	4.00	mg/L	10/11/2023 16:55	10/11/2023 16:55	KEN	EPA 300.0



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**Reported:**  
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**Sample Results**  
(Continued)

**Sample: Field Blank Field Blank Northwest**  
**23J0230-05 (Water)**

Analyte	Result	Qual	DL	RL	Units	Date Prepared	Date Analyzed	Analyst		
								Initials	Method	
Total Metals										
Mercury	ND		0.0928	0.500	ng/L	10/18/2023 11:26	10/19/2023 13:12	KEN	EPA 1631E	



Northwest  
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Houston, TX 77091

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**Reported:**  
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## Quality Control

### Total Metals

Analyte	Result	Qual	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<b>Batch: B23J234 - EPA 200.7</b>										
<b>Blank (B23J234-BLK1)</b>										
Phosphorous, Total	ND		250	ug/L						
					Prepared: 10/16/23 13:07 Analyzed: 10/17/23 10:02					
<b>LCS (B23J234-BS1)</b>										
Phosphorous, Total	1960		250	ug/L	2000		97.9	85-115		
					Prepared: 10/16/23 13:07 Analyzed: 10/17/23 10:00					
<b>Duplicate (B23J234-DUP1)</b>										
Phosphorous, Total	310	Source: 23J0230-04	250	ug/L		303			2.28	20
					Prepared: 10/16/23 13:07 Analyzed: 10/17/23 10:08					
<b>Matrix Spike (B23J234-MS1)</b>										
Phosphorous, Total	2440	Source: 23J0230-04	250	ug/L	2000	303	107	70-130		
					Prepared: 10/16/23 13:07 Analyzed: 10/17/23 10:10					
<b>Matrix Spike Dup (B23J234-MSD1)</b>										
Phosphorous, Total	2420	Source: 23J0230-04	250	ug/L	2000	303	106	70-130	0.868	20
					Prepared: 10/16/23 13:07 Analyzed: 10/17/23 10:13					
<b>Batch: B23J271 - EPA 1631E</b>										
<b>Blank (B23J271-BLK1)</b>										
Mercury	ND		0.500	ng/L						
					Prepared: 10/18/23 11:26 Analyzed: 10/19/23 11:52					
<b>Blank (B23J271-BLK2)</b>										
Mercury	ND		0.500	ng/L						
					Prepared: 10/18/23 11:26 Analyzed: 10/19/23 13:02					
<b>Blank (B23J271-BLK3)</b>										
Mercury	ND		0.500	ng/L						
					Prepared: 10/18/23 11:26 Analyzed: 10/19/23 13:42					
<b>Blank (B23J271-BLK4)</b>										
Mercury	ND		0.500	ng/L						
					Prepared: 10/18/23 11:26 Analyzed: 10/19/23 13:32					



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### Quality Control (Continued)

#### Total Metals (Continued)

Analyte	Result	Qual	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<b>Batch: B23J271 - EPA 1631E (Continued)</b>										
<b>LCS (B23J271-BS1)</b>										
Mercury	5.17		0.500	ng/L	5.00		103	77-123		
<b>LCS (B23J271-BS2)</b>										
Mercury	4.96		0.500	ng/L	5.00		99.3	77-123		
<b>LCS (B23J271-BS3)</b>										
Mercury	4.85		0.500	ng/L	5.00		97.0	77-123		
<b>Matrix Spike (B23J271-MS1)</b>										
Mercury	5.68		0.500	ng/L	5.00	0.888	95.8	71-125		
<b>Matrix Spike Dup (B23J271-MSD1)</b>										
Mercury	5.67		0.500	ng/L	5.00	0.888	95.6	71-125	0.167	24
<b>Batch: B23J330 - EPA 245.1</b>										
<b>Blank (B23J330-BLK1)</b>										
Mercury	ND		0.100	ug/L						
<b>LCS (B23J330-BS2)</b>										
Mercury	5.35		0.100	ug/L	5.33		100	90-110		
<b>Duplicate (B23J330-DUP1)</b>										
Mercury	ND		0.100	ug/L		ND				20
<b>Matrix Spike (B23J330-MS1)</b>										
Mercury	5.04		0.100	ug/L	5.33	ND	94.6	70-130		



Northwest  
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**Reported:**  
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### Quality Control (Continued)

#### Total Metals (Continued)

Analyte	Result	Qual	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<b>Batch: B23J330 - EPA 245.1 (Continued)</b>										
<b>Matrix Spike Dup (B23J330-MSD1) Source: 23J0804-01</b>										
Mercury	5.08		0.100	ug/L	5.33	ND	95.3	70-130	0.785	20

#### Batch: B23J438 - EPA 200.7

##### Blank (B23J438-BLK1)

Prepared: 10/30/23 07:45 Analyzed: 10/31/23 12:37

Aluminum	ND	100	ug/L
Antimony	ND	100	ug/L
Arsenic	ND	100	ug/L
Barium	ND	100	ug/L
Beryllium	ND	20.0	ug/L
Cadmium	ND	20.0	ug/L
Chromium	ND	100	ug/L
Copper	ND	100	ug/L
Lead	ND	100	ug/L
Nickel	ND	100	ug/L
Selenium	ND	100	ug/L
Silver	ND	20.0	ug/L
Thallium	ND	200	ug/L
Vanadium	ND	100	ug/L
Zinc	ND	100	ug/L

##### LCS (B23J438-BS1)

Prepared: 10/30/23 07:45 Analyzed: 10/31/23 12:34

Aluminum	1930	100	ug/L	2000	96.6	85-115
Antimony	1920	100	ug/L	2000	96.2	85-115
Arsenic	1880	100	ug/L	2000	94.1	85-115
Barium	1930	100	ug/L	2000	96.5	85-115
Beryllium	380	20.0	ug/L	400	95.1	85-115
Cadmium	378	20.0	ug/L	400	94.6	85-115
Chromium	1940	100	ug/L	2000	96.8	85-115
Copper	1930	100	ug/L	2000	96.6	85-115
Lead	1920	100	ug/L	2000	95.8	85-115
Nickel	1920	100	ug/L	2000	95.9	85-115
Selenium	1930	100	ug/L	2000	96.6	85-115
Silver	388	20.0	ug/L	400	96.9	85-115
Thallium	1970	200	ug/L	2000	98.4	85-115
Vanadium	1960	100	ug/L	2000	97.8	85-115
Zinc	1890	100	ug/L	2000	94.5	85-115



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**Reported:**  
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### Quality Control (Continued)

#### Total Metals (Continued)

Analyte	Result	Qual	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<b>Batch: B23J438 - EPA 200.7 (Continued)</b>										
<b>Duplicate (B23J438-DUP1)</b>	<b>Source: 23J1110-02</b>		Prepared: 10/30/23 07:45 Analyzed: 10/31/23 12:44							
Aluminum	2540		100	ug/L		2550			0.126	20
Antimony	ND		100	ug/L		ND				20
Arsenic	ND		100	ug/L		ND				20
Barium	161		100	ug/L		162			0.584	20
Beryllium	ND		20.0	ug/L		ND				20
Cadmium	ND		20.0	ug/L		ND				20
Chromium	17.2 J		100	ug/L		16.5			4.37	20
Copper	48.9 J		100	ug/L		49.0			0.172	20
Lead	ND		100	ug/L		ND				20
Nickel	ND		100	ug/L		ND				20
Selenium	ND		100	ug/L		ND				20
Silver	ND		20.0	ug/L		ND				20
Thallium	ND		200	ug/L		ND				20
Vanadium	ND		100	ug/L		ND				20
Zinc	252		100	ug/L		252			0.128	20

<b>Matrix Spike (B23J438-MS1)</b>	<b>Source: 23J1110-02</b>		Prepared: 10/30/23 07:45 Analyzed: 10/31/23 12:47							
Aluminum	5140		100	ug/L	2000	2550	130	70-130		
Antimony	1890		100	ug/L	2000	ND	94.6	70-130		
Arsenic	1930		100	ug/L	2000	ND	96.3	70-130		
Barium	2010		100	ug/L	2000	162	92.2	70-130		
Beryllium	377		20.0	ug/L	400	ND	94.3	70-130		
Cadmium	369		20.0	ug/L	400	ND	92.2	70-130		
Chromium	1880		100	ug/L	2000	16.5	93.0	70-130		
Copper	1890		100	ug/L	2000	49.0	92.1	70-130		
Lead	1860		100	ug/L	2000	ND	92.8	70-130		
Nickel	1860		100	ug/L	2000	ND	92.8	70-130		
Selenium	1920		100	ug/L	2000	ND	95.9	70-130		
Silver	377		20.0	ug/L	400	ND	94.2	70-130		
Thallium	1870		200	ug/L	2000	ND	93.6	70-130		
Vanadium	1930		100	ug/L	2000	ND	96.4	70-130		
Zinc	2100		100	ug/L	2000	252	92.4	70-130		



Northwest  
5423 Mangum Rd  
Houston, TX 77091

Project: NW Metals, CN + Permit  
Project Number: 10495-076  
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**Reported:**  
11/09/2023 07:29

### Quality Control (Continued)

#### Total Metals (Continued)

Analyte	Result	Qual	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<b>Batch: B23J438 - EPA 200.7 (Continued)</b>										
<b>Matrix Spike Dup (B23J438-MSD1) Source: 23J1110-02</b>										
					Prepared: 10/30/23 07:45 Analyzed: 10/31/23 12:50					
Aluminum	5140		100	ug/L	2000	2550	130	70-130	0.0751	20
Antimony	1910		100	ug/L	2000	ND	95.4	70-130	0.822	20
Arsenic	1950		100	ug/L	2000	ND	97.6	70-130	1.36	20
Barium	2000		100	ug/L	2000	162	92.1	70-130	0.0334	20
Beryllium	378		20.0	ug/L	400	ND	94.5	70-130	0.154	20
Cadmium	368		20.0	ug/L	400	ND	92.0	70-130	0.216	20
Chromium	1870		100	ug/L	2000	16.5	92.8	70-130	0.312	20
Copper	1920		100	ug/L	2000	49.0	93.8	70-130	1.78	20
Lead	1850		100	ug/L	2000	ND	92.7	70-130	0.114	20
Nickel	1860		100	ug/L	2000	ND	92.8	70-130	0.00485	20
Selenium	1890		100	ug/L	2000	ND	94.5	70-130	1.55	20
Silver	375		20.0	ug/L	400	ND	93.8	70-130	0.495	20
Thallium	1850		200	ug/L	2000	ND	92.5	70-130	1.18	20
Vanadium	1930		100	ug/L	2000	ND	96.3	70-130	0.0436	20
Zinc	2100		100	ug/L	2000	252	92.6	70-130	0.177	20



Northwest  
5423 Mangum Rd  
Houston, TX 77091

Project: NW Metals, CN + Permit  
Project Number: 10495-076  
Project Manager: Regulatory Compliance

**Reported:**  
11/09/2023 07:29

### Quality Control (Continued)

#### Wet Chemistry

Analyte	Result	Qual	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<b>Batch: B23J136 - SM 2540 D, E</b>										
<b>Blank (B23J136-BLK1)</b>										
Total Suspended Solids	ND		2.0	mg/L						
					Prepared: 10/10/23 12:02 Analyzed: 10/10/23 14:15					
<b>LCS (B23J136-BS1)</b>										
Total Suspended Solids	19.4			mg/L	20.0		97.0	85-115		
					Prepared: 10/10/23 12:02 Analyzed: 10/10/23 14:15					
<b>Duplicate (B23J136-DUP1)</b>										
Total Suspended Solids	ND		2.0	mg/L		2.0				10
					Prepared: 10/10/23 12:02 Analyzed: 10/10/23 14:15					
<b>Duplicate (B23J136-DUP2)</b>										
Total Suspended Solids	2.9		2.0	mg/L		3.0			3.39	10
<b>Batch: B23J151 - SM 5210 B</b>										
<b>Blank (B23J151-BLK1)</b>										
Biochemical Oxygen Demand, Carbonaceous	ND		2.00	mg/L						
					Prepared: 10/11/23 08:53 Analyzed: 10/16/23 08:56					
<b>Blank (B23J151-BLK2)</b>										
Biochemical Oxygen Demand, Carbonaceous	ND		2.00	mg/L						
					Prepared: 10/11/23 08:53 Analyzed: 10/16/23 08:56					
<b>Blank (B23J151-BLK3)</b>										
Biochemical Oxygen Demand, Carbonaceous	ND		2.00	mg/L						
					Prepared: 10/11/23 08:53 Analyzed: 10/16/23 08:56					
<b>Blank (B23J151-BLK4)</b>										
Biochemical Oxygen Demand, Carbonaceous	ND		2.00	mg/L						
					Prepared: 10/11/23 08:53 Analyzed: 10/16/23 08:56					
<b>LCS (B23J151-BS1)</b>										
Biochemical Oxygen Demand, Carbonaceous	205			mg/L	198		104	85-115		
					Prepared: 10/11/23 08:53 Analyzed: 10/16/23 09:04					





Northwest  
5423 Mangum Rd  
Houston, TX 77091

Project: NW Metals, CN + Permit  
Project Number: 10495-076  
Project Manager: Regulatory Compliance

**Reported:**  
11/09/2023 07:29

### Quality Control (Continued)

#### Wet Chemistry (Continued)

Analyte	Result	Qual	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
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#### Batch: B23J151 - SM 5210 B (Continued)

##### LCS (B23J151-BS2)

Biochemical Oxygen Demand,  
Carbonaceous

214

Prepared: 10/11/23 08:53 Analyzed: 10/16/23 09:04  
mg/L 198 108 85-115

##### LCS (B23J151-BS3)

Biochemical Oxygen Demand,  
Carbonaceous

205

Prepared: 10/11/23 08:53 Analyzed: 10/16/23 09:04  
mg/L 198 104 85-115

##### LCS (B23J151-BS4)

Biochemical Oxygen Demand,  
Carbonaceous

203

Prepared: 10/11/23 08:53 Analyzed: 10/16/23 09:04  
mg/L 198 103 85-115

#### Batch: B23J169 - EPA 300.0

##### Blank (B23J169-BLK1)

Chloride  
Nitrate as N  
Sulfate

ND  
ND  
ND

Prepared: 10/11/23 13:21 Analyzed: 10/11/23 13:21  
0.400 mg/L  
0.100 mg/L  
0.400 mg/L

##### LCS (B23J169-BS1)

Chloride  
Nitrate as N  
Sulfate

7.32  
4.83  
7.27

Prepared: 10/11/23 13:05 Analyzed: 10/11/23 13:05  
mg/L 7.50 97.6 90-110  
mg/L 5.00 96.6 90-110  
mg/L 7.50 96.9 90-110

##### Matrix Spike (B23J169-MS1)

Nitrate as N

5.76

Source: 23J0231-02

Prepared: 10/11/23 15:38 Analyzed: 10/11/23 15:38  
0.105 mg/L 5.26 0.768 94.9 80-120

##### Matrix Spike (B23J169-MS2)

Chloride  
Sulfate

217 E  
120

Source: 23J0231-02R

Prepared: 10/11/23 16:09 Analyzed: 10/11/23 16:09  
4.21 mg/L 78.9 136 103 80-120  
4.21 mg/L 78.9 37.5 104 80-120



Northwest  
5423 Mangum Rd  
Houston, TX 77091

Project: NW Metals, CN + Permit  
Project Number: 10495-076  
Project Manager: Regulatory Compliance

**Reported:**  
11/09/2023 07:29

### Quality Control (Continued)

#### Wet Chemistry (Continued)

Analyte	Result	Qual	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<b>Batch: B23J169 - EPA 300.0 (Continued)</b>										
<b>Matrix Spike Dup (B23J169-MSD1) Source: 23J0231-02</b> Prepared: 10/11/23 15:54 Analyzed: 10/11/23 15:54										
Nitrate as N	5.56		0.105	mg/L	5.26	0.768	91.0	80-120	3.59	15
<b>Matrix Spike Dup (B23J169-MSD2) Source: 23J0231-02R</b> Prepared: 10/11/23 16:24 Analyzed: 10/11/23 16:24										
Chloride	217 E		4.21	mg/L	78.9	136	103	80-120	0.180	15
Sulfate	120		4.21	mg/L	78.9	37.5	105	80-120	0.351	15
<b>Batch: B23J170 - EPA 350.1</b>										
<b>Blank (B23J170-BLK1)</b> Prepared: 10/12/23 13:36 Analyzed: 10/12/23 13:36										
Ammonia as N	ND		0.0500	mg/L						
<b>LCS (B23J170-BS1)</b> Prepared: 10/12/23 13:38 Analyzed: 10/12/23 13:38										
Ammonia as N	1.34			mg/L	1.30		103	90-110		
<b>Duplicate (B23J170-DUP1) Source: 23J0435-02</b> Prepared: 10/12/23 13:41 Analyzed: 10/12/23 13:41										
Ammonia as N	0.0242		0.0500	mg/L		ND				10
<b>Duplicate (B23J170-DUP2) Source: 23J0436-02</b> Prepared: 10/12/23 14:25 Analyzed: 10/12/23 14:25										
Ammonia as N	ND		0.0500	mg/L		ND				10
<b>Matrix Spike (B23J170-MS1) Source: 23J0435-02</b> Prepared: 10/12/23 13:43 Analyzed: 10/12/23 13:43										
Ammonia as N	0.976		0.0505	mg/L	1.01	ND	96.6	90-110		
<b>Matrix Spike (B23J170-MS2) Source: 23J0436-02</b> Prepared: 10/12/23 14:27 Analyzed: 10/12/23 14:27										
Ammonia as N	1.07		0.0505	mg/L	1.01	ND	106	90-110		



Northwest  
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**Reported:**  
11/09/2023 07:29

### Quality Control (Continued)

#### Wet Chemistry (Continued)

Analyte	Result	Qual	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<b>Batch: B23J174 - SM 2540 C</b>										
<b>Blank (B23J174-BLK1)</b>										
Total Dissolved Solids	ND		5.0	mg/L						
					Prepared: 10/12/23 13:38 Analyzed: 10/13/23 10:52					
<b>LCS (B23J174-BS1)</b>										
Total Dissolved Solids	153			mg/L	150		102	85-115		
					Prepared: 10/12/23 13:38 Analyzed: 10/13/23 10:52					
<b>Duplicate (B23J174-DUP1)</b>										
Total Dissolved Solids	578		5.0	mg/L		589			1.89	10
<b>Batch: B23J175 - OIA 1677</b>										
<b>Blank (B23J175-BLK1)</b>										
Cyanide, Amenable	ND		2.00	ug/L						
Cyanide, Total	ND		10.0	ug/L						
					Prepared: 10/12/23 11:01 Analyzed: 10/12/23 15:28					
<b>LCS (B23J175-BS1)</b>										
Cyanide, Amenable	57.4			ug/L	50.0		115	82-132		
Cyanide, Total	104			ug/L	100		104	84-116		
					Prepared: 10/12/23 11:01 Analyzed: 10/12/23 15:33					
<b>Duplicate (B23J175-DUP1)</b>										
Cyanide, Total	5.60 J		10.0	ug/L		6.29			11.6	47
Cyanide, Amenable	4.01		2.00	ug/L		4.37			8.57	15
<b>Matrix Spike (B23J175-MS1)</b>										
Cyanide, Total	58.7		10.0	ug/L	50.0	6.29	105	64-136		
Cyanide, Amenable	55.0		2.00	ug/L	50.0	4.37	101	82-130		
					Prepared: 10/12/23 11:01 Analyzed: 10/12/23 16:13					



Northwest  
5423 Mangum Rd  
Houston, TX 77091

Project: NW Metals, CN + Permit  
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Project Manager: Regulatory Compliance

Reported:  
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### Quality Control (Continued)

#### Wet Chemistry (Continued)

Analyte	Result	Qual	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: B23J199 - SM 2320										
Blank (B23J199-BLK1)										
Total Alkalinity as CaCO3	ND		20.0	mg/L		Prepared: 10/13/23 12:34 Analyzed: 10/13/23 12:34				
Blank (B23J199-BLK2)										
Total Alkalinity as CaCO3	ND		20.0	mg/L		Prepared: 10/13/23 13:31 Analyzed: 10/13/23 13:31				
LCS (B23J199-BS1)										
Total Alkalinity as CaCO3	142			mg/L	150	Prepared: 10/13/23 12:26 Analyzed: 10/13/23 12:26	94.5	90-110		
LCS (B23J199-BS2)										
Total Alkalinity as CaCO3	143			mg/L	150	Prepared: 10/13/23 13:24 Analyzed: 10/13/23 13:24	95.2	90-110		
Duplicate (B23J199-DUP1)										
Total Alkalinity as CaCO3	117	Source: 23J0230-04	20.0	mg/L		Prepared: 10/13/23 12:50 Analyzed: 10/13/23 12:50	116		0.858	10
Reference (B23J199-SRM1)										
Total Alkalinity as CaCO3	47.6			mg/L	50.0	Prepared: 10/13/23 12:36 Analyzed: 10/13/23 12:36	95.2	0-200		
Batch: B23J215 - SM 4500-N ORG B										
Blank (B23J215-BLK1)										
Total Kjeldahl Nitrogen	ND		0.500	mg/L		Prepared: 10/16/23 11:00 Analyzed: 10/17/23 11:00				
LCS (B23J215-BS1)										
Total Kjeldahl Nitrogen	2.94		0.500	mg/L	3.00	Prepared: 10/16/23 11:00 Analyzed: 10/17/23 11:00	98.0	85-115		
Duplicate (B23J215-DUP1)										
Total Kjeldahl Nitrogen	2.08	Source: 23J0230-04	0.500	mg/L		Prepared: 10/16/23 11:00 Analyzed: 10/17/23 11:00	2.02		2.93	20



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**Reported:**  
11/09/2023 07:29

### Quality Control (Continued)

#### Wet Chemistry (Continued)

Analyte	Result	Qual	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<b>Batch: B23J215 - SM 4500-N ORG B (Continued)</b>										
<b>Matrix Spike (B23J215-MS1)</b>	<b>Source: 23J0230-04</b>									
Total Kjeldahl Nitrogen	4.65		0.500	mg/L	3.00	2.02	87.7	70-130		
<b>Reference (B23J215-SRM1)</b>										
Total Kjeldahl Nitrogen	2.95			mg/L	3.00		98.3	0-200		
<b>Batch: B23J414 - EPA 218.6</b>										
<b>Blank (B23J414-BLK1)</b>	<b>Source: 23J0231-02</b>									
Chromium Hexavalent	ND		1.00	ug/L						
<b>LCS (B23J414-BS1)</b>										
Chromium Hexavalent	5.19			ug/L	5.00		104	90-110		
<b>Matrix Spike (B23J414-MS1)</b>	<b>Source: 23J0231-02</b>									
Chromium Hexavalent	4.65		1.01	ug/L	5.03	ND	92.4	80-120		
<b>Matrix Spike Dup (B23J414-MSD1)</b>	<b>Source: 23J0231-02</b>									
Chromium Hexavalent	4.94		1.01	ug/L	5.03	ND	98.3	80-120	6.10	20



Northwest  
5423 Mangum Rd  
Houston, TX 77091

Project: NW Metals, CN + Permit  
Project Number: 10495-076  
Project Manager: Regulatory Compliance

**Reported:**  
11/09/2023 07:29

## Notes and Definitions

Item	Definition
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).
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.





FOR ADOPTION #  
 23J0230



Company Name:	Northwest Pollutants Monitoring
Address:	5423 Mangum Rd Houston, TX 77091
Permit Number:	10495-076

Sampler:	Crescento Fonseca
IWS Sample Reason	
<input type="checkbox"/> Permit Requirement <input type="checkbox"/> Special Report <input type="checkbox"/> Other	<input type="checkbox"/> Compliance Verification <input type="checkbox"/> POTW Permit Application
NW Metals, CN + Permit	



Sample Identification	# Cont	Grab/Comp	Matrix*	Location	Begin Sampled Date/Time	(End) Sampled Date/Time	Container with Preservation	Test Method	Field Test	Comments
23J0230-05	1	G	W	Field Blank		12:03 10/09/23	(1) 40 mL Glass, PTFE lined septum Cool <6°C	Mercury 1631E	[A]	

\* COVERED AS 4 PARTS GRAB, 7:40, 12:18, 17:28, 22:41  
 A COVERED AS 4 PARTS GRAB, 6:59, 12:03, 17:20, 22:30  
 COVERED AS 4 PARTS GRAB, 6:59, 12:03, 17:20, 22:30  
 COMPOSTED IN THE FIELD  
 COMPOSTED AT 10/09/23  
 COMPOSTED IN FIELD  
 COMPOSTED AT ANALYSIS

Relinquished by: (Signature)	Date/Time	Location	Received by: (Signature)	Date/Time	Location
<i>[Signature]</i>	10/10/23 11:27		<i>[Signature]</i>	10/10/23 - 11:27	COT
Relinquished by: (Signature)	Date/Time	Location	Received by: (Signature)	Date/Time	Location



## Client Sample Results

Client: City of Houston  
Project/Site: City of Houston Analytical Testing

Job ID: 860-56021-1

**Client Sample ID: 5334832-008**

**Lab Sample ID: 860-56021-1**

Date Collected: 08/25/23 08:00

Matrix: Water

Date Received: 08/25/23 15:21

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		08/28/23 15:40	08/31/23 10:06	1
Diuron	<0.0514		0.0900	0.0514	ug/L		08/28/23 15:40	08/31/23 10:06	1

6

**Client Sample ID: 5334832-009**

**Lab Sample ID: 860-56021-2**

Date Collected: 08/25/23 08:00

Matrix: Water

Date Received: 08/25/23 15:21

Method: EPA-01 615 - Herbicides (GC)									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-D	<0.0000539		0.000200	0.0000539	mg/L		08/30/23 18:03	08/31/23 20:36	1
2,4,5-TP	<0.0000422		0.000200	0.0000422	mg/L		08/30/23 18:03	08/31/23 20:36	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4-Dichlorophenylacetic acid	97		45 - 150				08/30/23 18:03	08/31/23 20:36	1

# Industrial Wastewater Service

## Analysis Request and Chain of Custody

Company Name: **Northwest**  
5423 Mangum Rd, Houston, TX 77091

Location: **EFFLUENT**

Sample No. **5334832** Permit No. **5008** Outfall: **2** Scheduled Date: **8/25/2023**

Sample Type: **COMP** Sample Matrix: **Liquid**

SAMPLE COLLECTED ☒ Yes ☐ No If No: ☐ No Discharge ☐ Quantity Not Sufficient  
☐ Company Closed ☐ Equipment Failure:

<b>COMPOSITE TIME/DATE:</b>	<b>SAMPLE DETAILS:</b> Temp: <b>5.3</b>	<b>GRAB TIME/DATE:</b>	<b>FIELD TESTS:</b>
Begin: <b>8:00</b>	Split Sample: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Time: <b>1:11</b>	pH: <b>7.0</b>
End: <b>8:00</b>	# of Bottles: <b>1 2 3 4 5</b>	Date: <b>8/25/23</b>	<input type="checkbox"/> Paper, Lot #
Begin Date: <b>08/24/23</b>	Sample Volume: <b>800</b> ml	TRC <b>N/A</b> , Lot # <b>84032C</b>	<input type="checkbox"/> Meter, S/N
End Date: <b>08/25/23</b>	Sample Interval: <b>Flow</b> min.	Temperature <b>14.00</b> °C, S/N	

Autosampler Secured/Locked? ☒ Yes ☐ No ☐ NA Sampler (Print): **JOSEPH FRANEK**

Comments:

* Bottle #	Tests/Method	Analysis Requested	Sample Size/Container	Preservation	# of containers
5334832-008	Carbaryl (EPA 632); Diuron (EPA 632)		1 L Amber Glass, PTFE lined cap	Cool <6°C	2
5334832-009	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 ☒ City Contract Lab: Eurofins Xenco

Seals Intact: ☐ Yes ☐ No 568 IR Thermometer S/N # 27910254 ☐ S/N # 29650075 Temp **14.00** °C Initial **14.00**

pH Strip Manufacturer: **14.00** Lot #: **14.00** Initial: **14.00**

Relinquished By: **14.00** Date: **8/25/23** Time: **14.00**

Received By: **14.00** Date: **8/25/23** Time: **14.00**

Relinquished By: **14.00** Date: **1/1/1** Time: **14.00**

Received By: **14.00** Date: **1/1/1** Time: **14.00**

Relinquished By: **14.00** Received By: **14.00** Date: **1/1/1** Time: **14.00**

\* Delivered to Lab if Box is Checked



## LABORATORY TEST RESULTS

Job ID : 23082774

Date 9/1/2023

Client Name: Houston, City of

Attn: James Nguyen

Project Name:

Client Sample ID: 5334832

Job Sample ID: 23082774.15

Date Collected: 08/25/23

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	0.348	mg/L	1.00	0.02	0.100			08/25/23 21:39	KPE
	Nitrate-N	2.94	mg/L	1.00	0.01	0.100			08/25/23 21:39	KPE
SM 3500Cr B	Chromium, Hexavalent	<0.0005	mg/L	1	0.0005	0.00100		U	08/25/23 17:00	RRA
SM 3500Cr B	Chromium, Trivalent <sup>2</sup>	<0.0005	mg/L	1	0.0005	0.00100		U	08/28/23 17:40	RRA
EPA 200.8	Metals by ICP/MS									
	Aluminum	0.0310	mg/L	1	0.00100	0.00100			08/28/23 14:19	YWZ
	Antimony	0.00112	mg/L	1	0.00031	0.00050			08/28/23 14:19	YWZ
	Arsenic	0.00154	mg/L	1	0.00003	0.00025			08/28/23 14:19	YWZ
	Barium	0.0555	mg/L	1	0.00013	0.00050			08/28/23 14:19	YWZ
	Beryllium	<0.00009	mg/L	1	0.00009	0.00025		U	08/28/23 14:19	YWZ
	Cadmium	<0.00006	mg/L	1	0.00006	0.00025		U	08/28/23 14:19	YWZ
	Chromium	0.00048	mg/L	1	0.00003	0.00025			08/28/23 14:19	YWZ
	Copper	0.00390	mg/L	1	0.00009	0.00050			08/28/23 14:19	YWZ
	Lead	0.00026	mg/L	1	0.00019	0.00025			08/28/23 14:19	YWZ
	Nickel	0.00235	mg/L	1	0.00025	0.00025			08/28/23 14:19	YWZ
	Selenium	<0.00060	mg/L	1	0.00060	0.00100		U	08/28/23 14:19	YWZ
	Silver	<0.00006	mg/L	1	0.00006	0.00050		U	08/28/23 14:19	YWZ
	Thallium	<0.00003	mg/L	1	0.00003	0.00025		U	08/28/23 14:19	YWZ
	Vanadium	0.00312	mg/L	1	0.00006	0.00025			08/28/23 14:19	YWZ
	Zinc	0.0399	mg/L	1	0.00190	0.00200			08/28/23 14:19	YWZ
ASTM D7065-11	Bisphenol A <sup>2</sup>	<5.00	ug/L	1.00		5.00		U	09/01/23 13:40	MSH
	Nonyl Phenol <sup>2</sup>	<5.00	ug/L	1.00	5.00	5.00		U	08/28/23 17:26	MSH
	Terphenyl-d14(surr)	66.5	%	1.00		18-137			08/28/23 17:26	MSH

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

1  
2

**ABL2-G**

Page 1 of 2

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

Project  
**1073259**

Printed: 09/14/2023

Split

## RESULTS

### Sample Results

<b>2226285</b>	<b>5334832-004</b>			Received:	08/29/2023
Non-Potable Water	Collected by: Client	A & B Labs	PO:	50483-23082774	
	Taken: 08/25/2023	08:00:00			

<i>EPA 8321B</i>	Prepared:	1079771	08/31/2023	14:20:00	Analyzed	1080192	09/03/2023	03:29:00	BRU
Parameter	Results	Units	RL	Flags	CAS	Bottle			
Hexachlorophene	<0.00503	mg/L	0.00503		70-30-4	03			

### Sample Preparation

<b>2226285</b>	<b>5334832-004</b>			Received:	08/29/2023
	08/25/2023			50483-23082774	

Prepared:	08/30/2023	09:31:28	Calculated	08/30/2023	09:31:28	CAL
-----------	------------	----------	------------	------------	----------	-----

Environmental Fee (per Project)	Verified
---------------------------------	----------

<i>EPA 604.1</i>	Prepared:	1079771	08/31/2023	14:20:00	Analyzed	1079771	08/31/2023	14:20:00	CED
Hexachlorophene Extraction	5/995	ml							02

<i>EPA 8321B</i>	Prepared:	1079771	08/31/2023	14:20:00	Analyzed	1080192	09/03/2023	03:29:00	BRU
Hexachlorophene Expansion	Entered				70-30-4				03



Report Page 3 of 5

# Industrial Wastewater Service

## Analysis Request and Chain of Custody

Company Name: **Northwest**  
5423 Mangum Rd, Houston, TX 77091

Location: **EFFLUENT**

Sample No. **5334832** Permit No. **5008** Outfall: **2** Scheduled Date: **8/25/2023**  
Sample Type: **COMP** Sample Matrix: **Liquid**

SAMPLE COLLECTED ☒ Yes ☐ No If No: ☐ No Discharge ☐ Quantity Not Sufficient  
☐ Company Closed ☐ Equipment Failure:

COMPOSITE TIME/DATE: **8:00** SAMPLE DETAILS: Temp: **4.7** GRAB TIME/DATE: **8:00** FIELD TESTS:  
Begin: **8:00** Split Sample: ☐ Yes ☒ No Time: **8:00** pH: **7.34**  
End: **8:00** # of Bottles: 1 2 3 4 5 **7** Date: **8/25/23** ☐ Paper, Lot #  
Begin Date: **08/24/23** Sample Volume: **800** ml TRC **Lot #84032C** ☐ Meter, S/N  
End Date: **08/25/23** Sample Interval: **Flow** min. Temperature **4.7** °C, S/N

Autosampler Secured/Locked? ☒ Yes ☐ No ☒ NA Sampler (Print): **DAVID FANER**

Comments:

* Bottle #	Tests/Method	Analysis Requested	Sample Size/Container	Preservation	# of containers
5334832-001	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
5334832-002	Chromium, Trivalent (Cr3) (CALCULATE)				0
5334832-003	Chromium, Hexavalent (Cr+6) (218.6 or 3500 Cr-B)		1 L Polyethylene or Glass	Cool <6°C, (NH4)2SO4 buffer, NaOH to pH 9.3-9.7	1
5334832-004	Hexachlorophene (EPA 604.1)		1 L Amber Glass, PTFE lined cap	Cool <6°C	2
5334832-005	Metals POTW Effluent, Vanadium (EPA 200.8)		1 L Polyethylene	Cool <6°C, HNO3 to pH <2	1
5334832-006	Fluoride, Total (F) (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 ☒ City Contract Lab: A&B

Seals Intact: ☐ Yes ☐ No 568 IR Thermometer S/N # 27910254 S/N # 29650075 Temp **4.7** °C Initial **7.34**

pH Strip Manufacturer: **HI** Lot #: **8/25/23** Initial: **7.34**

Relinquished By: **[Signature]** Date: **8/25/23** Time: **12:34**

Received By: **[Signature]** Date: **8/25/23** Time: **12:34**

Relinquished By: **[Signature]** Date: **8/25/23** Time: **12:34**

Received By: **[Signature]** Date: **8/25/23** Time: **12:34**

Relinquished By: **[Signature]** Received By: **[Signature]** Date: **8/25/23** Time: **12:34**

\* Delivered to Lab if Box is Checked

**LABORATORY TEST RESULTS**

Job ID : 23082774

Date 9/1/2023

Client Name: Houston, City of

Attn: James Nguyen

Project Name:

Client Sample ID: 5334832

Job Sample ID: 23082774.14

Date Collected: 08/24/23

Sample Matrix Water

Time Collected: 21:50

% 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	08/28/23 12:08	KTH

ab-q212-0321

# Industrial Wastewater Service

## Analysis Request and Chain of Custody

Company Name: Northwest  
5423 Mangum Rd, Houston, TX 77091

Location: EFFLUENT

Sample No. 5334832 Permit No. 5008 Outfall: 2 Scheduled Date: 8/25/2023  
Sample Type: CMAN Sample Matrix: Liquid  
SAMPLE COLLECTED ☒ Yes ☐ No If No: ☐ No Discharge ☐ Quantity Not Sufficient  
☐ Company Closed ☐ Equipment Failure:

COMPOSITE TIME/DATE: SAMPLE DETAILS: Temp: GRAB TIME/DATE: FIELD TESTS:  
Begin: 05:09 Split Sample: ☐ Yes ☒ No Time: Date: pH: ☐ Paper, Lot #  
End: 21:50 # of Bottles: 1/2 3 4 5 TRC Lot #84032C ☐ Meter, S/N  
Begin Date: 8/24/2023 Sample Volume: 250 ml Temperature °C, S/N  
End Date: 8/24/2023 Sample Interval: 360 min.

Autosampler Secured/Locked? ☐ Yes ☐ No ☒ NA Sampler (Print): Raymond Caballero

Comments: collected as 4 part grab 0500, 1044, 1608, 2100

14A

* Bottle #	Tests/Method	Analysis Requested	Sample Size/Container	Preservation	# of containers
5334832-007	Phenol, Total (EPA 420.1)		1 L Amber Gl: PTFE lined cap	Cool <6°C, H2SO4 to pH <2	1
LIMS Comments	JES				

### CHAIN OF CUSTODY

Lab Delivered To: COH Wastewater Lab ☒ City Contract Lab: A&B

Seris intact: ☒ Yes ☐ No 568 IR Thermometer S/N # 27910254 S/N # 29650075 Temp 14.1°C Initial

pH Strip Manufacturer: Lot #: Initial:

Relinquished By: Date: 8/25/23 Time: 12:24

Received By: Date: 8/25/23 Time: 12:24

Relinquished By: Date: 8/25/23 Time: 12:34

Received By: Date: 8/25/23 Time: 12:34

Relinquished By: Received By: Date: 8/25/23 Time: 14:10

\* Delivered to Lab if Box is Checked

**LABORATORY TEST RESULTS**

Job ID : 23101344

Date 10/18/2023

Client Name: Houston, City of

Attn: James Nguyen

Project Name:

Client Sample ID: 5337521

Job Sample ID: 23101344.05

Date Collected: 10/09/23

Sample Matrix Water

Time Collected: 12:03

% 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	<1.62	mg/L	1.16	1.62	2.90		U	10/13/23 07:10	SG

ab-q212-0321



# Industrial Wastewater Service

## Analysis Request and Chain of Custody

Company Name: Northwest  
5423 Mangum Rd, Houston, TX 77091

Location: EFFLUENT

Sample No. 5337521 Permit No. 5008 Outfall: 2 Scheduled Date: 10/10/2023  
Sample Type: Grab Sample Matrix: Liquid  
SAMPLE COLLECTED ☒ Yes ☐ No If No: ☐ No Discharge ☐ Quantity Not Sufficient  
☐ Company Closed ☐ Equipment Failure:

COMPOSITE TIME/DATE: SAMPLE DETAILS: Temp: GRAB TIME/DATE: FIELD TESTS:  
Begin: Split Sample: Yes ☒ No Time: 12:03 pH:   
End: # of Bottles: 1 2 3 4 5 Date: 10/09/23 ☐ Paper, Lot #   
Begin Date: Sample Volume: 1000 ml TRC Lot #84032C ☐ Meter, S/N   
End Date: Sample Interval: 0 min. Temperature °C, S/N   
Autosampler Secured/Locked? Yes ☐ No ☒ NA Sampler (Print): DEBBY FOWELL

Comments:

Bottle #	Tests/Method	Analysis Requested	Sample Size/Container	Preservation	# of containers
5337521-005	Oil and Grease (Total) / HEM (EPA 1364)		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 ☒ City Contract Lab: A&B  
Seals Intact: Yes ☒ No 568 IR Thermometer S/N # 27910254 S/N # 29650075 Temp 30 °C Initial 56  
pH Strip Manufacturer: Lot #: Initial: 1RS  
Relinquished By: Date: 10/11/23 Time: 9:40  
Received By: Date: 10/11/23 Time: 9:40  
Relinquished By: Date: 10/11/23 Time: 15:21  
Received By: Date: 10/11/23 Time: 15:21  
Relinquished By: Received By: Date: / / Time:

\* Delivered to Lab if Box is Checked

**Attachment 8**

Facility Operators

Domestic Technical Report 1.0, Section 8

# TPDES Permit Number 10495-076

## Northwest

### Facility Operations Chain-of-Command

		License Class	License Number	Expiration
Deputy Assistant Director:	Raymond Ramdeo			
Operations Manager:	Tomas Martinez	A	WW0015642	7/31/2026
Assistant Operations Manager:	Rondrick Wallace	A	WW0054457	11/25/2024
Operations Section Chief:	Phillip Cain	A	WW0047091	3/6/2025
Plant Operator Supervisor:	Ricky Wolfe	B	WW0031091	7/13/2024
Tech II:	Shenell Bingham	B	WW0056474	8/29/2025
	Edward Hardy	B	WW0072221	4/3/2026
	Dale Singletary	B	WW0067930	8/20/2024

**Attachment 9**

**WET Test Results**

Domestic Worksheet 5.0, Section 1.  
Domestic Worksheet 5.0, Section 3.

# Summary of WET Tests

Northwest

10495-076 TX0063011

Test Initiation Date	Species	Lethal Endpoint	Sublethal Endpoint
5/21/2019	<i>Ceriodaphnia dubia</i>	>100	>100
5/21/2019	<i>Pimephales promelas</i>	>100	>100
8/6/2019	<i>Ceriodaphnia dubia</i>	>100	>100
11/5/2019	<i>Ceriodaphnia dubia</i>	>100	>100
2/4/2020	<i>Ceriodaphnia dubia</i>	>100	>100
2/4/2020	<i>Pimephales promelas</i>	>100	>100
5/19/2020	<i>Ceriodaphnia dubia</i>	>100	>100
8/25/2020	<i>Ceriodaphnia dubia</i>	>100	>100
11/10/2020	<i>Ceriodaphnia dubia</i>	>100	>100
1/12/2021	<i>Ceriodaphnia dubia</i>	>100	>100
1/12/2021	<i>Pimephales promelas</i>	>100	>100
5/4/2021	<i>Ceriodaphnia dubia</i>	>100	>100
8/24/2021	<i>Ceriodaphnia dubia</i>	>100	>100
8/24/2021	<i>Pimephales promelas</i>	>100	>100
10/19/2021	<i>Ceriodaphnia dubia</i>	>100	>100
10/19/2021	<i>Pimephales promelas</i>	>100	>100
1/5/2022	<i>Ceriodaphnia dubia</i>	>100	>100
1/5/2022	<i>Pimephales promelas</i>	>100	>100
5/10/2022	<i>Ceriodaphnia dubia</i>	>100	>100
5/10/2022	<i>Pimephales promelas</i>	>100	>100
8/23/2022	<i>Ceriodaphnia dubia</i>	>100	>100
10/11/2022	<i>Ceriodaphnia dubia</i>	>100	>100
1/31/2023	<i>Ceriodaphnia dubia</i>	>100	>100
1/31/2023	<i>Pimephales promelas</i>	>100	>100
4/18/2023	<i>Ceriodaphnia dubia</i>	>100	>100
7/18/2023	<i>Ceriodaphnia dubia</i>	>100	>100
10/10/2023	<i>Ceriodaphnia dubia</i>	>100	>100

**Attachment 10**

Effluent Parameters Above the MAL

Domestic Worksheet 6.0, Section 2.C.

b. List all parameters measured above the MAL in the POTW's effluent annual monitoring scans during the last three years.

Pollutant	Concentration	MAL	Units	Date
Aluminum	38.5	2.5	ug/L	10/10/23
Arsenic	0.6	0.5	ug/L	10/10/23
Barium	73	3	ug/L	10/10/23
Copper	5.5	2	ug/L	10/10/23
Nickel	3.1	2	ug/L	10/10/23
Zinc	50.8	5	ug/L	10/10/23
Aluminum	31.0	2.5	ug/L	8/24/2023
Arsenic	1.54	0.5	ug/L	8/24/2023
Barium	55.5	3	ug/L	8/24/2023
Copper	3.90	2	ug/L	8/24/2023
Zinc	39.9	5	ug/L	8/24/2023
Nitrate-nitrogen	2940	100	ug/L	8/24/2023
Chloroform	13.5	10	ug/L	8/24/2023
Total Trihalomethane	18.1	10	ug/L	8/24/2023
Aluminum	36	2.5	ug/L	5/25/2023
Arsenic	0.48	0.5	ug/L	5/25/2023
Barium	83.7	3	ug/L	5/25/2023
Copper	3.85	2	ug/L	5/25/2023
Nickel	2.13	2	ug/L	5/25/2023
Zinc	33	5	ug/L	5/25/2023
Nitrate-nitrogen	7700	100	ug/L	5/25/2023
Bromodichloromethane	24.7	10	Ug/L	5/25/2023
Chloroform	69	10	ug/L	5/25/2023

Pollutant	Concentration	MAL	Units	Date
Total Trihalomethane	100	10	ug/L	5/25/2023
Aluminum	7.83	2.5	ug/L	1/26/2023
Barium	62.5	3	ug/L	1/26/2023
Copper	5.85	2	ug/L	1/26/2023
Nickel	2.80	2	ug/L	1/26/2023
Zinc	26.5	5	ug/L	1/26/2023
Aluminum	10.6	2.5	ug/L	11/17/2022
Barium	44.3	3	ug/L	11/17/2022
Copper	2.35	2	ug/L	11/17/2022
Nickel	3.11	2	ug/L	11/17/2022
Zinc	37.3	5.0	ug/L	11/17/2022
Aluminum	21.9	2.5	ug/L	8/25/2022
Arsenic	0.69	0.5	ug/L	8/25/2022
Barium	68.6	3	ug/L	8/25/2022
Copper	4.83	2	ug/L	8/25/2022
Nickel	4.19	2	ug/L	8/25/2022
Zinc	43.8	5	ug/L	8/25/2022
Nitrate-nitrogen	7480	100	ug/L	8/25/2022
Bromodichloromethane	26.3	10	ug/L	8/25/2022
Chloroform	65.6	10	ug/L	8/25/2022
Total Trihalomethane	99.0	10	ug/L	8/25/2022
Mercury	0.00851	0.005	ug/L	8/25/2022



Pollutant	Concentration	MAL	Units	Date
Phenol	52	10	ug/L	8/25/2022
Aluminum	14.9	2.5	ug/L	5/19/2022
Arsenic	0.66	0.5	ug/L	5/19/2022
Barium	45.6	3	ug/L	5/19/2022
Copper	4.06	2	ug/L	5/19/2022
Nickel	3.97	2	ug/L	5/19/2022
Zinc	40.6	5	ug/L	5/19/2022
Nitrate-nitrogen	7320	100	ug/L	5/19/2022
Bromodichloromethane	16.6	10	ug/L	5/19/2022
Chloroform	36.8	10	ug/L	5/19/2022
Total Trihalomethane	58.6	10	ug/L	5/19/2022
Aluminum	10.5	2.5	ug/L	3/10/2022
Barium	78.2	3	ug/L	3/10/2022
Copper	2.58	2	ug/L	3/10/2022
Nickel	3.91	2	ug/L	3/10/2022
Zinc	33.3	5	ug/L	3/10/2022
Mercury	0.00879	0.005	ug/L	3/10/2022
Aluminum	17.4	2.5	ug/L	11/09/2021
Arsenic	0.567	0.5	ug/L	11/09/2021
Barium	64.0	3	ug/L	11/09/2021

Pollutant	Concentration	MAL	Units	Date
Copper	2.94	2	ug/L	11/09/2021
Nickel	3.35	2	ug/L	11/09/2021
Zinc	37.1	5.0	ug/L	11/09/2021
Nitrate-nitrogen	6540	100	ug/L	11/09/2021
Bromodichloromethane	22.1	10	ug/L	11/09/2021
Chloroform	49.0	10	ug/L	11/09/2021
Total Trihalomethane	78.2	10	ug/L	11/09/2021
Aluminum	22.1	2.5	ug/L	5/27/2021
Arsenic	0.898	0.5	ug/L	5/27/2021
Barium	122	3	ug/L	5/27/2021
Copper	2.33	2	ug/L	5/27/2021
Nickel	3.35	2	ug/L	5/27/2021
Zinc	30.4	5	ug/L	5/27/2021
Nitrate-nitrogen	200	100	ug/L	5/27/2021
Bromodichloromethane	34.7	10	ug/L	5/27/2021
Chloroform	76.4	10	ug/L	5/27/2021
Dibromochloromethane	10.2	10	ug/L	5/27/2021
Total Trihalomethane	121	10	ug/L	5/27/2021
Mercury	0.00781	0.005	ug/L	5/27/2021
Aluminum	22.5	2.5	ug/L	1/14/2021

<b>Pollutant</b>	<b>Concentration</b>	<b>MAL</b>	<b>Units</b>	<b>Date</b>
Barium	101	3	ug/L	1/14/2021
Copper	3.38	2	ug/L	1/14/2021
Nickel	3.26	2	ug/L	1/14/2021
Zinc	38.9	5	ug/L	1/14/2021
Phenol	21.8	10	ug/L	1/14/2021
Mercury	0.127	0.005	ug/L	1/14/2021
Aluminum	11.2	2.5	ug/L	8/20/2020
Arsenic	0.524	0.5	ug/L	8/20/2020
Barium	59.9	3	ug/L	8/20/2020
Nickel	3.69	2	ug/L	8/20/2020
Zinc	39.4	5	ug/L	8/20/2020

Jon Niermann, *Chairman*  
Bobby Janecka, *Commissioner*  
Catarina R. Gonzales, *Commissioner*  
Kelly Keel, *Executive Director*



## TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

*Protecting Texas by Reducing and Preventing Pollution*

Date, 2024

Mr. Walid Samarneh, P.E.  
City of Houston  
10500 Bellaire Boulevard  
Houston, Texas 77072

RE: Notice of Preliminary Decision and Draft Permit  
Applicant Name: City of Houston  
Facility Name: Northwest WWTP  
Permit No.: WQ0010495076  
Customer Reference Number: CN600128995  
Regulated Entity Number: RN101610665  
Type of Application: Renewal

Dear Mr. Samarneh:

The executive director has completed the technical review of the above referenced application, received on December 1, 2023 and has prepared a preliminary decision and draft permit.

You are now required to publish another notice of your proposed activity. To help you meet the requirements associated with this notice, we have included the following items:

- Instructions for Public Notice
- Notice for Newspaper Publication
- Publisher's Affidavits
- Draft Permit
- Executive Director's Preliminary Decision
- Public Notice Verification Form

You must follow all the directions in the enclosed instructions. The most common mistakes are the unauthorized changing of notice, wording, or font. If you fail to follow these instructions, you may be required to republish the notices.

The following requirements are also described in the enclosed instructions. However, due to their importance, they are highlighted here as well.

1. You must publish the enclosed notice within as soon as possible, but no later than 45 days from the date on the cover letter. **You may be required to publish the**

**notice in more than one newspaper, including a newspaper published in an alternative language, to satisfy all of the notice requirements.**

2. On or before the date you publish notice, you must place the following items in a public place in the county where the facility is or will be located.
  - (a) a copy of your permit application, including any subsequent revisions;
  - (b) the executive director's preliminary decision as contained in the technical summary and fact sheet; and
  - (c) the draft permit, including any subsequent revisions.

These items must be accessible to the public for review and copying, must be updated to reflect changes to the application, and must remain in place until the commission has taken action on the application or the commission refers issues to the State Office of Administrative Hearings.

3. For each publication, submit proof of publication of the notice that shows the publication date and newspaper name to the Office of the Chief Clerk within **30 calendar days** after notice is published in the newspaper.
4. Return the original enclosed Public Notice Verification and the Publisher's Affidavits to the Office of the Chief Clerk within **30 calendar days** after the notice is published in the newspaper.

If you do not comply with **all** the requirements described in the instructions, further processing of your application may be suspended or the agency may take other actions.

If you have any questions regarding publication requirements, please contact the Office of Legal Services at (512) 239-0600. If you have any questions regarding the content of the notice, please contact the individual in the permitting area assigned to your application.

Sincerely,

Laurie Gharis  
Chief Clerk  
Office of the Chief Clerk  
Texas Commission on Environmental Quality

LG/MAM/CIA team member initials

Enclosures

Mr. Walid Samarneh, P.E., Page 3  
Date, 2024  
Permit No. WQ0010495076

bcc: TCEQ Region 12, Water Program Manager

Jon Niermann, *Chairman*  
Bobby Janecka, *Commissioner*  
Catarina R. Gonzales, *Commissioner*  
Kelly Keel, *Executive Director*



## TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

*Protecting Texas by Reducing and Preventing Pollution*

Date, 2024

Mr. Walid Samarneh, P.E.  
City of Houston  
10500 Bellaire Boulevard  
Houston, Texas 77072

RE: Permit Application  
Permit No.: WQ0010495076  
City of Houston  
Northwest WWTP  
Houston, Texas 77072, Harris County  
Customer Reference Number: CN600128995  
Regulated Entity Number: RN101610665

Dear Mr. Samarneh:

The Texas Commission on Environmental Quality (TCEQ) has made a preliminary decision on the above-referenced permit applications. In accordance with Title 30 Texas Administrative Code § 39.419(b), you are now required to publish Notice of Application and Preliminary Decision. You must provide a copy of the preliminary decision letter with the draft permit at the public place referenced in the public notice.

If you have any questions, please contact the individual in the permitting area assigned to your application, or write to the TCEQ, Office of Water, Water Quality Division, MC-148, Austin, Texas, 78711-3087.

Sincerely,

Matthew Udenenwu  
Section Manager, Wastewater Permitting  
Office of Water  
Texas Commission on Environmental Quality

MU/MAM/CIA team member initials

Enclosures

Mr. Walid Samarneh, P.E., Page 2  
Date, 2023  
Permit No. WQ0010495076

cc: TCEQ Region 12, Water Program Manager





## TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

*Protecting Texas by Reducing and Preventing Pollution*

Mr. Walid Samarneh, P.E.  
City of Houston  
10500 Bellaire Boulevard  
Houston, Texas 77072

Re: City of Houston - TPDES Permit No. WQ0010495076, EPA ID No. TX0063011  
(CN600128995; RN101610665)

Dear Mr. Samarneh:

Enclosed for your review and comment is a copy of a draft permit, Fact Sheet and Executive Director's Preliminary Decision for the above-referenced operation. This draft permit is subject to further staff review and modification; however, we believe it generally includes the terms and conditions that are appropriate to your discharge. **Please read the entire draft carefully as there may be changes from the existing permit and note the following:**

1. The draft permit will be issued to expire **five years from the date of issuance**.
2. The Standard Permit Conditions, Sludge Provisions, Other Requirements, Pretreatment Requirements, and Biomonitoring sections of the draft permit have been updated.
3. *E. coli* bacteria limits have been continued in the draft permit in accordance with the recent amendments to 30 TAC Chapters 309 and 319. The bacteria limits in the draft permit are consistent with the requirements of the TMDL, Project No. 22, and any subsequent associated Water Quality Management Project updates.
4. For Publicly Owned Treatment Works (POTWs), effective December 21, 2025, the permittee must submit the written report for unauthorized discharges and unanticipated bypasses that exceed any effluent limit in the permit using the online electronic reporting system available through the TCEQ website unless the permittee requests and obtains an electronic reporting waiver.
5. Certain accidental discharges or spills of treated or untreated wastewater from wastewater treatment facilities or collection systems owned or operated by a local government may be reported on a monthly basis in accordance with 30 TAC § 305.132.
6. The draft permit includes all updates based on the 30 TAC § 312 rule change effective April 23, 2020.

7. This application was declared administratively complete on February 7, 2024. 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](https://www.tceq.texas.gov/permitting/wastewater/review/napd/wqspanish_napd.html).

Also enclosed for your review and comment is a copy of the draft second notice, the Notice of Application and Preliminary Decision (NAPD), that was prepared for your application. Please review this notice and provide comments if there are any inaccuracies or any information that is not consistent with your application. Please do not publish the notice at this time; after the draft permit is filed with the Office of the Chief Clerk, you will receive instructions for publishing this notice in a newspaper from the Office of the Chief Clerk. Please note that these instructions will not be mailed if the Office of the Chief Clerk has not received the requested proof that the first notice (Notice of Receipt and Intent to Obtain a Permit) has been published. This could cause delays in the processing of your application and the final issuance of the draft permit. When the NAPD notice is received, please publish promptly and submit proof of publication (affidavit and tearsheet) to the Office of the Chief Clerk. **Failure to publish notice and submit proof of publication in a timely manner may result in returning of the application and loss of authorization to operate.**

It is your responsibility to submit your comments on the draft permit prior to the deadline that is indicated in the email. Comments can be sent to [miguel.mercado@tceq.texas.gov](mailto:miguel.mercado@tceq.texas.gov) in place of or in addition to a hard copy.

If you have any comments or questions, please contact me at (512) 239-4547, or if by correspondence, include MC 148 in the letterhead address following my name.

Sincerely,

*Miguel A. Mercado*

Miguel A. Mercado, Permit Coordinator  
Municipal Permits Team  
Wastewater Permitting Section (MC 148)  
Water Quality Division  
Texas Commission on Environmental Quality

MAM/SW

Enclosures

# Texas Commission on Environmental Quality

## INTEROFFICE MEMORANDUM

To: Deba Dutta, P.E., Team Leader  
Municipal Team, Wastewater Permitting Section

Date: 06/14/2024

From: Miguel A. Mercado, Municipal Permits Team

MAM 06/13/2024

APPLICANT: City of Houston  
PLANT NAME: Northwest WWTP  
TPDES PERMIT NO: WQ0010495076

EPA ID No: TX0063011

FILE NAME: C:\Users\MiMercad\Texas Commission on Environmental Quality\Water Quality Division - Documents\o Division Documents\Wastewater Permitting Section\MUNI\PERMIT FILES\WQ0010495076\Working Folder\WQ0010495076 - City of Houston Draft Permit Package.docx

Admin Complete Date:	02/07/2024	Pretreatment Memo:	02/29/2024
Standards Memo:	02/08/2024	Assign Date:	03/06/2024
Critical Condition Memo:	02/13/2024	Tech Complete Date:	06/14/2024
Modeling Memo:	02/14/2024	RFI Letter Date:	05/07/2024
Biomonitoring Memo:	02/14/2024	Response Letter Date:	05/10/2024

☒ Public Domestic

### PERMIT TYPE

☒ Discharge (TPDES)

☒ Major (> 1 MGD)

### PERMIT ACTION

Renewal

### PERMIT PACKAGE

YES	NO	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Transmittal letter to applicant
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Transmittal letter to EPA
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Fact Sheet and ED Preliminary Decision for major TPDES Permit
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Permit Draft
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Biomonitoring Requirements for Major TPDES Permits
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Pretreatment Requirements for POTWs
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Authorization to land apply or dispose of Class B Biosolids or sewage sludge on property adjacent to
<input type="checkbox"/>	<input checked="" type="checkbox"/>	WWTP in draft permit.
		Includes appropriate other requirements (including quarterly and annual reporting, soil monitoring, language in notice and fact sheet, attachments.
<input checked="" type="checkbox"/>	<input type="checkbox"/>	EPA REVIEW CHECKLIST
<input checked="" type="checkbox"/>	<input type="checkbox"/>	FACILITY PROCESS FORM for PARIS
<input checked="" type="checkbox"/>	<input type="checkbox"/>	TEXTTOX Printout in file
<input checked="" type="checkbox"/>	<input type="checkbox"/>	NOTICE for admin complete on or after 9/1/99
<input checked="" type="checkbox"/>	<input type="checkbox"/>	CAPTION (also saved in I:\EVERYONE\wq\CAPTION)
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Legislative Notice (SB709) required (saved in I:\WQ\Muni\LEGISLATIVE NOTICE)
<input type="checkbox"/>	<input checked="" type="checkbox"/>	MAJOR/MINOR DETERMINATION if needed
<input type="checkbox"/>	<input checked="" type="checkbox"/>	LOCATED IN THE COASTAL ZONE (if located in coastal zone, include <b>CMP Threshold Sheet</b> )
<input checked="" type="checkbox"/>	<input type="checkbox"/>	SPELLCHECK: DRAFT PERMIT/TECH SUM/SOB/FACT SHEET/NOTICE/LETTER(S)
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<b>SCHEDULE FOR ERC Part A: All major permits and permits in Edwards Aquifer area are scheduled for ERC</b>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Located in the Edwards Aquifer area:
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<b>COMPLIANCE HISTORY: CN=8.47 (Satisfactory) and RN=12.29 (Satisfactory)</b>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	ENFORCEMENT ORDER(S); ERC Part C on May 7, 2024
<input type="checkbox"/>	<input checked="" type="checkbox"/>	CHANGES TO THE DRAFT PERMIT based on discussion at ERC

**COMMENTS:** A renewal of the existing permit that authorizes the discharge of treated domestic wastewater at an annual average flow not to exceed 18 million gallons per day.

The pretreatment language in the existing permit has been updated in the draft permit. The pretreatment requirements will continue until permit expiration.

**Request for Comments on Draft Permit  
TCEQ – Water Quality Division**

**Phone: (512)239-4671**

**Fax: (512)239-4430**

**Mailing Address: TCEQ, Water Quality Division, P.O. Box 13087, Austin, TX 78711-3087**

TO: Region: **12**

Submitted by: **Miguel A. Mercado** E-Mail ID: **miguel.mercado@tceq.texas.gov** Phone: **(512) 239-4547**

Date Request Submitted:

Comments Deadline: Within 7 days

Date Application Received by TCEQ in Austin: **December 1, 2023**

**REGIONAL OFFICES:** The entity below has submitted an application for the project referenced below in accordance with regulations of the TCEQ. Please return comments ASAP, but no later than the comments deadline, which is 10 days from the submittal date. Permit disposition will proceed after comments are received or after the comments deadline has passed. If no comments are received within this time frame, we will assume you have no comments or objections to the project as proposed. Please return a complete copy of the form (both sides) with your comments.

PROJECT TYPE: **Renewal**

TEAM ASSIGNED: **MUNICIPAL**

APPLICATION TYPE: ☒ **TPDES** ☐ **TLAP**

REGULATED ENTITY NO.: **RN101610665**

PERMIT NO.: **WQ0010495076**

CUSTOMER REFERENCE NO.: **CN600128995**

COMPANY NAME: **City of Houston**

PLANT NAME: **Northwest WWTP**

ADDRESS: **10500 Bellaire Boulevard, Houston, Texas 77072**

SEGMENT: **1017**

COUNTY: **Harris**

TECHNICAL CONTACT: **Mr. Walid Samarneh, P.E.**

PHONE: **832-395-5771**

PERMIT CLASSIFICATION: **MAJOR**

COMPLIANCE RATING: **CN=8.47 (Satisfactory) and RN=12.29 (Satisfactory)**

**SUMMARY OF APPLICATION REQUEST:** A renewal of the existing permit that authorizes the discharge of treated domestic wastewater at an annual average flow not to exceed 18 million gallons per day (MGD).

**PERMIT WRITER COMMENTS:** The pretreatment language in the existing permit has been updated in the draft permit. The pretreatment requirements will continue until permit expiration.

**RESPONSE TO REQUEST FOR COMMENTS ON DRAFT PERMIT**

**TO: Miguel A. Mercado**

**FROM: Region: 12**

Copy of Application Received by your Office: ☐ YES ☐ NO      Date Received: \_\_\_\_\_

**COMPANY NAME: City of Houston**

**PERMIT NO.: WQ0010495076**

**REGULATED ENTITY NO: RN101610665**

Investigator's/Compliance Officer's Name (Please Print): \_\_\_\_\_

Phone: \_\_\_\_\_

Comments Deadline (from pg. 1):

Date of Last Site Visit: \_\_\_\_\_

**COMMENTS ON CONDITIONS: (Please mark up the draft special conditions with your comments. Please address applicability and enforceability. List any additional conditions below):**

**Compliance Determination Conditions:** \_\_\_\_\_

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**Operational Limitations:** \_\_\_\_\_

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**General Comments:** \_\_\_\_\_

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# MUNICIPAL EPA REVIEW CHECKLIST

**Permittee Name:** City of Houston  
**Permit Number:** TPDES Permit No. WQ0010495076, EPA ID No. TX0063011

**NOTE: Minor amendments, endorsements, and minor modifications (except for pretreatment) are exempt from EPA review. However, HSC permits Seg Nos. 1001, 1005, 1006, 1007, 1016, 2426, 2427, 2428, 2429, 2430, and 2436 require review by modeling to ensure that the loading is consistent with the revised WLE-1R, so you may need to check with the modeler or check the most recent modeling memo to confirm that the loading is consistent.**

**For renewal, amendment or new permits check any items that apply to determine if the permit is subject to EPA review:**

**PLEASE CHECK ☒ ALL THE APPLICABLE BELOW:**

Draft permit authorizes:

**YES NO**

- |                                     |                                     |  |
|-------------------------------------|-------------------------------------|--|
| <input checked="" type="checkbox"/> | <input type="checkbox"/>            | Discharge from a designated major facility   |
| <input checked="" type="checkbox"/> | <input type="checkbox"/>            | Discharge from a POTW with an approved pretreatment program  |
| <input checked="" type="checkbox"/> | <input type="checkbox"/>            | Discharge from a facility with a daily/annual average flow >1.0 MGD  |
| <input type="checkbox"/>            | <input checked="" type="checkbox"/> | Discharge to a critical concern species watershed that requires EPA review   |
| <input type="checkbox"/>            | <input checked="" type="checkbox"/> | Discharge that includes a request for a water quality variance   |
| <input type="checkbox"/>            | <input checked="" type="checkbox"/> | Storm water discharge to high priority species watershed   |
| <input type="checkbox"/>            | <input checked="" type="checkbox"/> | First time implementation of a final TMDL for an existing facility   |
| <input type="checkbox"/>            | <input checked="" type="checkbox"/> | Prior to a final TMDL, new permit, or expanded discharge to an impaired listed 303(d) listed segment, and that has the potential to discharge any pollutant that is causing or contributing to the impairment.   |
| <input type="checkbox"/>            | <input checked="" type="checkbox"/> | After a final TMDL, new permit or expanded discharge to an impaired listed 303(d) listed segment where the TMDL does not allocate the loadings described in the draft permit   |
| <input type="checkbox"/>            | <input checked="" type="checkbox"/> | After a final TMDL, a permit with effluent limits that allow loadings in excess of those prescribed by the TMDL for the segment  |
| <input type="checkbox"/>            | <input checked="" type="checkbox"/> | After a final TMDL, a permit that allows <b>more</b> than a 3-year schedule for an existing facility to be in compliance with final effluent limits based on the TMDL allocation (new facilities have to be compliant upon discharge)  |
| <input type="checkbox"/>            | <input checked="" type="checkbox"/> | Discharge directly to territorial seas of the United States (from the coastline to 3 miles out but not including Bays and Estuaries)   |
| <input type="checkbox"/>            | <input checked="" type="checkbox"/> | Discharge or sewage sludge management that may affect another state or Mexico. For sewage sludge management, may affect means, accepts sewage sludge from another state or Mexico. For discharge, it means a discharge within 3 miles of a boundary with another state or Mexico.  |
| <input type="checkbox"/>            | <input checked="" type="checkbox"/> | Discharge from a Class I sludge management facility. (A Class I facility is a POTW or combination of POTWs operated by the same authority with a design flow of >5 MGD and that have IUs and are required to have an approved pretreatment program or are subject to pretreatment standards, <b>OR</b> any other treatment works treating domestic sewage sludge classified as a Class I sludge management facility by the Regional Administrator in conjunction with the TCEQ.) |

**If any column is marked "YES", EPA must receive a copy of the full permit package.**  
**If all columns are marked "NO", EPA does not need to review the draft permit.**

**Permit Writer:** Miguel A. Mercado

**Date:** May 20, 2024

# **MUNICIPAL MAJOR/MINOR DETERMINATION**

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**Permittee Name:** City of Houston

**Permit Number:** TPDES Permit No. WQ0010495076, EPA ID No. TX0063011

**Type of Application:**Renewal

**Check Appropriate Classification:**

- ☒ Major  
☐ Minor

**Permitted Flow:** 18 million gallons per day.

**Permit Writer:** Miguel A. Mercado

**Date:** May 20, 2024



**PARIS FACILITY EXTENSION - TREATMENT PROCESS**  
**TPDES PERMIT NO. WQ0010495076**

PERMITTEE: City of Houston  
PLANT NAME Northwest WWTP  
Application Renewal ☐ Interim I ☐ Interim II ☐ Interim III ☒ Final  
Type:

**WASTEWATER TREATMENT**

**Primary Treatment**

02 Preliminary treatment – bar screen  
03 Preliminary treatment – grit removal  
04 Preliminary treatment –  
05 Preliminary treatment - others  
B1 Imhoff tank  
06 Scum removal  
07 Flow equalization basins  
08 Preaeration  
09 Primary sedimentation  
D2 Septic tank  
A5 Facultative lagoon

**Secondary Treatment**

10 Trickling filter – rock media  
11 Trickling filter – plastic media  
12 Trickling filter – redwood slats  
13 Trickling filter – other media  
14 Activate sludge – conventional  
15 Activate sludge – complete mix  
16 Activate sludge – contact  
17 Activated sludge – extended aeration  
18 Pure oxygen activate sludge  
19 Bio-Disc (rotating biological filter)  
20 Oxidation ditch  
21 Clarification using tube settlers  
22 Secondary clarification  
B6 Constructed wetlands  
E5 Natural treatment  
E6 Overland flow

**Advanced Treatment - Biological**

23 Biological nitrification – separate  
24 Biological nitrification - combined  
25 Biological denitrification  
26 Post aeration (reaeration)

**Advanced Treatment –**

27 Microstrainers – primary  
28 Microstrainers – secondary  
D1 Dunbar Beds  
29 Sand filters  
30 Mix media filters (sand and coal)  
31 Other filtrations  
B2 Bubble diffuser (compressor)  
32 Activated carbon – granular  
B3 Mechanical surface aerator  
33 Activated carbon-powered  
34 Two stage lime treatment of raw  
35 Two stage tertiary lime treatment  
36 Single stage lime treatment of raw  
37 Single state tertiary lime treatment  
38 Recarbonation  
39 Neutralization  
40 Alum addition to primary

41 Alum addition to secondary  
42 Alum addition to separate state  
43 Ferri-chloride addition to primary  
44 Ferri-chloride addition to secondary  
45 Ferri-chloride addition to separate  
46 Other chemical additions  
47 Ion exchange  
48 Breakpoint chlorination  
49 Ammonia stripping  
50 Dechlorination

**Disinfection**

51 Chlorination for disinfection  
52 Ozonation for disinfection  
53 Other disinfection  
D3 Ultra violet light

**Land Treatment**

54 Land treatment of primary effluent  
55 Land treatment of secondary effluent  
56 Land treatment of intermediate  
(less than secondary)

**Other Treatment**

57 Stabilization ponds  
58 Aerated lagoons  
59 Outfall pumping  
60 Outfall diffuser  
61 Effluent to other plants  
62 Effluent outfall  
63 Other treatment  
64 Evapo-transpiration beds  
64 Recalcination

**Disposal Method**

A7 Irrigation – public access  
A8 Irrigation – agricultural  
B4 Evapo-transpiration beds  
B6 Constructed wetlands  
C1 Irrigation – pastureland  
D4 Pressure dosing system  
D5 Percolation system  
D8 Other reuse method  
E1 Evaporation/plays  
E2 Discharge only  
E3 Discharge and (use other #)  
E4 Injection well(s)

**SLUDGE TREATMENT**

65 Aerobic digestion – air  
66 Aerobic digestion – oxygen  
67 Composting  
68 Anaerobic digestion  
69 Sludge lagoons  
70 Heat treatment – dryer  
71 Chlorine oxidation of sludge  
72 Lime stabilization

73 Wet air oxidation  
74 Dewatering – sludge drying beds, sand  
F2 Dewatering – sludge drying bed  
75 Dewatering – mechanical-vacuum  
76 Dewatering – mechanical – centrifuge  
77 Dewatering – mechanical – filter press  
78 Dewatering – others  
79 Gravity thickening  
80 Air flotation thickening  
D6 Sludge holding tank

**Incineration**

81 Incineration – multiple hearth  
82 Incineration – fluidized beds  
83 Incineration – rotary kiln  
84 Incineration – others  
85 Pyrolysis  
86 Co-incineration with solid waste  
87 Co-pyrolysis with solid waste  
88 Co-incineration - others

**SLUDGE DISPOSAL**

89 Co-disposal landfill  
D7 Sludge – only monofill  
90 Land application (permitted)  
91 Commercial land application  
92 Trenching  
B5 Transport to another WWTP  
F3 Transport to Regional compost facility  
94 Other sludge handling  
95 Digest gas utilization facilities  
E7 Commercial land application  
F4 Dedicated land disposal  
F5 Marketing and distribution  
F6 Marketing and distribution non-

**MISCELLANEOUS**

01 Pumping raw wastewater  
96 Control/lab/maintenance buildings  
97 Fully automated using digital control -  
98 Fully automated using analog control  
99 Semi-automated plant  
A1 Manually operated and controlled  
A2 Package plant  
A3 Semi-package plant  
A4 Custom built plant  
A7 Irrigation – public access  
A8 Irrigation – agriculture  
A9 Effluent storage ponds (irrigation)  
C1 Irrigation – pastureland  
D8 Other reuse method  
D9 Emergency holding ponds  
E1 Evaporation or plays  
E8 Monitoring wells  
E9 Biomonitoring  
F7 Stormwater (SSO)  
F8 Unconventional

PERMIT Miguel A. Mercado  
Municipal Permits Team  
Wastewater Permitting Section, Water Quality Division  
Date: May 20, 2024

# Comisión De Calidad Ambiental Del Estado De Texas



## COMBINADO AVISO DE RECIBO DE LA SOLICITUD Y EL INTENTO DE OBTENER PERMISO PARA LA CALIDAD DEL AGUA (NORI)

### AVISO DE LA SOLICITUD Y DECISIÓN PRELIMINAR PARA ÉL PERMISO TPDES PARA AGUAS RESIDUALES MUNICIPALES (NAPD)

#### RENOVACIÓN

**PERMISO NO. WQ0010495076**

**SOLICITUD Y DECISIÓN PRELIMINAR.** Ciudad de Houston, 10500 Bellaire Boulevard, Houston, Texas 77072, ha solicitado a la Comisión de Calidad Ambiental del Estado de Texas (TCEQ) para una renovación del Sistema de Eliminación de Descargas de Contaminantes de Texas (TPDES) Permiso No. WQ0010495076, cuál autoriza la descarga de malgaste agua tratados domésticos en un flujo anual a no exceder 18,000,000 galones por día. La TCEQ recibió esta solicitud el 1 de diciembre de 2023.

**Este aviso combinado se emite para corregir el contacto técnico de lo que se indicó anteriormente en el NORI emitido el 7 de febrero de 2024.**

La facilidad está ubicada en 5423 Mangum Road, Condado de Harris, Texas, 77091. El efluente tratado es descargado al riachuelo Cole Creek; de allí al pantano Whiteoak Bayou por encima de la marea en la cuenca del Segmento No. 1017 del río San Jacinto River. Los usos designados para el Segmento No. 1017 el uso principal es la recreación de contacto y uso limitado de la vidas acuáticas. Este enlace a un mapa electrónico de la ubicación general del sitio o de la instalación es proporcionado como una cortesía y no es parte de la solicitud o del aviso. Para la ubicación exacta, consulte la solicitud.

<https://gisweb.tceq.texas.gov/LocationMapper/?marker=-95.463055,29.844722&level=18>

El Director Ejecutivo de la TCEQ ha completado la revisión técnica de la solicitud y ha preparado un borrador del permiso. El borrador del permiso, si es aprobado, establecería las condiciones bajo las cuales la instalación debe operar. El Director Ejecutivo ha tomado una decisión preliminar que, si este permiso es emitido, cumple con todos los requisitos normativos y legales. La solicitud del permiso, la decisión preliminar del Director Ejecutivo y el borrador del permiso están disponibles para leer y copiar en el Departamento de Trabajos Públicos de Houston, Operaciones de Wastewater edificio, 10500 Bellaire Boulevard, Houston, Condado de Harris, Texas.

**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 todos 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.** La TCEQ puede actuar sobre una solicitud para renovar un permiso para descargar aguas residuales sin proveer una oportunidad de una audiencia administrativa de lo contencioso.

**ACCIÓN DEL DIRECTOR EJECUTIVO.** El Director Ejecutivo puede emitir una aprobación final de la solicitud a menos que exista un pedido antes del plazo de vencimiento de una audiencia administrativa de lo contencioso o se ha presentado un pedido de reconsideración. Si un pedido ha llegado antes del plazo de vencimiento de la audiencia o el pedido de reconsideración ha sido presentado, el Director Ejecutivo no emitirá una aprobación final sobre el permiso y enviará la solicitud y el pedido a los Comisionados de la TECQ para consideración en una reunión programada de la Comisión.

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

**Todos los comentarios escritos del público y los pedidos para una reunión deben ser presentados a la Oficina del Secretario Principal, MC 105, Texas Commission on Environmental Quality, P.O. Box 13087, Austin, TX 78711-3087 o por el internet a [www.tceq.texas.gov/goto/comment](http://www.tceq.texas.gov/goto/comment) durante los 30 días después de la publicación del aviso.**

**INFORMACION 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](http://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.

**AGENCIA CONTACTOS Y INFORMACIÓN.** Todos los comentarios escritos del público y los pedidos para una reunión deben ser por el internet [www.tceq.texas.gov/goto/comment](http://www.tceq.texas.gov/goto/comment) o por escrito a la Oficina del Secretario Principal, MC 105, P.O. Box 13087, Austin, Texas 78711-3087. Cualquier información personal que usted envíe formará parte del registro del TCEQ, incluidas las direcciones de correo electrónico. Si necesita más información en español sobre esta solicitud para un permiso o el proceso del permiso, por favor llame a El Programa de Educación Pública de la TCEQ, sin cobro, al 1-800-687-4040. La información general sobre la TCEQ puede ser encontrada en nuestro sitio de la red: [www.tceq.texas.gov/goto/pep](http://www.tceq.texas.gov/goto/pep). Para 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., al 832-395- 5771.

Fecha de emission:

## John Hearn

---

**From:** Fragassi, Arielle - HPW <Arielle.Fragassi@houstontx.gov>  
**Sent:** Wednesday, June 11, 2025 7:46 AM  
**To:** John Hearn  
**Cc:** Samarneh, Walid - HPW  
**Subject:** RE: NAPD for WQ0010495076; City of Houston  
**Attachments:** NW\_COMBO\_Spanish.docx

Apologies for the mix-up. Here is the Spanish translation of the combined notice.

Thank you,

**Arielle Fragassi**  
Environmental Investigator IV  
City of Houston | Houston Public Works  
832.395.5755

---

**From:** John Hearn <John.Hearn@tceq.texas.gov>  
**Sent:** Tuesday, June 10, 2025 1:54 PM  
**To:** Fragassi, Arielle - HPW <Arielle.Fragassi@houstontx.gov>  
**Cc:** Samarneh, Walid - HPW <Walid.Samarneh@houstontx.gov>  
**Subject:** RE: NAPD for WQ0010495076; 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 Arielle,

The attached Spanish translation does not incorporate the changes. Please revise and resubmit the Spanish translation of the combined notice.

Thanks,  
John

---

**From:** Fragassi, Arielle - HPW <Arielle.Fragassi@houstontx.gov>  
**Sent:** Thursday, June 5, 2025 1:50 PM  
**To:** John Hearn <John.Hearn@tceq.texas.gov>  
**Cc:** Samarneh, Walid - HPW <Walid.Samarneh@houstontx.gov>  
**Subject:** RE: NAPD for WQ0010495076; City of Houston

Hello John,

The notice looks good. Please see attached for the Spanish translation.

Thank you!

**Arielle Fragassi**  
Environmental Investigator IV



City of Houston | Houston Public Works  
832.395.5755

---

**From:** John Hearn <[John.Hearn@tceq.texas.gov](mailto:John.Hearn@tceq.texas.gov)>  
**Sent:** Wednesday, June 4, 2025 2:31 PM  
**To:** Maloney, Heather - HPW <[Heather.Maloney@houstontx.gov](mailto:Heather.Maloney@houstontx.gov)>  
**Cc:** Fragassi, Arielle - HPW <[Arielle.Fragassi@houstontx.gov](mailto:Arielle.Fragassi@houstontx.gov)>; Samarneh, Walid - HPW <[Walid.Samarneh@houstontx.gov](mailto:Walid.Samarneh@houstontx.gov)>  
**Subject:** RE: NAPD for WQ0010495076; 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 Arielle and Walid,

Please see the attached revised notice with Walid as the technical contact. Please review the revised notice and respond with either acceptance or comments ASAP.

I will also need a revised Spanish NAPD that incorporates the revisions. I have attached the one that the City submitted previously.

Please let me know if you have any questions.

Thanks,  
John

---

**From:** Maloney, Heather - HPW <[Heather.Maloney@houstontx.gov](mailto:Heather.Maloney@houstontx.gov)>  
**Sent:** Friday, May 30, 2025 3:10 PM  
**To:** John Hearn <[John.Hearn@tceq.texas.gov](mailto:John.Hearn@tceq.texas.gov)>  
**Cc:** Fragassi, Arielle - HPW <[Arielle.Fragassi@houstontx.gov](mailto:Arielle.Fragassi@houstontx.gov)>; Samarneh, Walid - HPW <[Walid.Samarneh@houstontx.gov](mailto:Walid.Samarneh@houstontx.gov)>  
**Subject:** RE: NAPD for WQ0010495076; City of Houston

Hello John,

I'm checking on this NAPD. Please work with Arielle and Walid, as today is my last day at the City.

Thank you,  
Heather

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



---

**From:** Maloney, Heather - HPW  
**Sent:** Wednesday, May 21, 2025 9:16 AM

**To:** WQDbNAPD <[WQDbNAPD@tceq.texas.gov](mailto:WQDbNAPD@tceq.texas.gov)>  
**Cc:** John Hearn <[John.Hearn@tceq.texas.gov](mailto:John.Hearn@tceq.texas.gov)>  
**Subject:** RE: NAPD for WQ0010495076; City of Houston

Good morning,

We have a last minute correction to the NAPD. I am listed as the point of contact, but my last day of employment at the City will be May 30. Can we update the contact to Walid Samarneh, P.E. at 832-395-5771, please?

Thank you,  
Heather

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



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**From:** WQDbNAPD <[WQDbNAPD@tceq.texas.gov](mailto:WQDbNAPD@tceq.texas.gov)>  
**Sent:** Tuesday, May 20, 2025 2:05 PM  
**To:** Samarneh, Walid - HPW <[Walid.Samarneh@houstontx.gov](mailto:Walid.Samarneh@houstontx.gov)>; Maloney, Heather - HPW <[Heather.Maloney@houstontx.gov](mailto:Heather.Maloney@houstontx.gov)>  
**Cc:** John Hearn <[John.Hearn@tceq.texas.gov](mailto:John.Hearn@tceq.texas.gov)>  
**Subject:** NAPD for WQ0010495076; 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,

Permit No. WQ0010495076

Applicants are required to publish the Notice of Application and Preliminary Decision Water Quality Permit within 45 days of the date of this correspondence.

Attached are:

- Applicant Letter
- Preliminary Decision Letter
- Instructions of Public Notice
- Notice of Application and Preliminary Decision
- Notice of Application and Preliminary Decision in Alternative Language
- Affidavit of Publication
- Public Notice Verification Form
- Draft Permit
- Fact Sheet

**IMPORTANT:** You must enter the Applicant Name and Permit Number into the sections provided in the upper right portion of the Affidavits of Publication. The CID or CCO Number section does not need to be entered and is intended for internal use only.

For any questions on this submittal, please contact us at [wqdbnapd@tceq.texas.gov](mailto:wqdbnapd@tceq.texas.gov).

Thank you



# Comisión De Calidad Ambiental Del Estado De Texas



## AVISO DE LA SOLICITUD Y DECISIÓN PRELIMINAR PARA ÉL PERMISO TPDES PARA AGUAS RESIDUALES MUNICIPALES

### RENOVACIÓN

**PERMISO NO. WQ0010495076**

**SOLICITUD Y DECISIÓN PRELIMINAR.** Ciudad de Houston, 10500 Bellaire Boulevard, Houston, Texas 77072, ha solicitado a la Comisión de Calidad Ambiental del Estado de Texas (TCEQ) para una renovación del Sistema de Eliminación de Descargas de Contaminantes de Texas (TPDES) Permiso No. WQ0010495076, cuál autoriza la descarga de malgaste agua tratados domésticos en un flujo anual a no exceder 18,000,000 galones por día. La TCEQ recibió esta solicitud 1 de diciembre de 2023.

La facilidad está ubicada en 5423 Mangum Road, Ciudad de Houston, Condado de Harris, Texas 77091. El efluente tratado es descargado al riachuelo Cole Creek; de allí al pantano Whiteoak Bayou por encima de la marea en la cuenca del Segmento No. 1017 del río San Jacinto River. Los usos designados para el Segmento No. 1017 el uso principal es la recreación de contacto y uso limitado de la vidas acuáticas. Este enlace a un mapa electrónico de la ubicación general del sitio o de la instalación es proporcionado como una cortesía y no es parte de la solicitud o del aviso. Para la ubicación exacta, consulte la solicitud.

<https://gisweb.tceq.texas.gov/LocationMapper/?marker=-95.463055,29.844722&level=18>

El Director Ejecutivo de la TCEQ ha completado la revisión técnica de la solicitud y ha preparado un borrador del permiso. El borrador del permiso, si es aprobado, establecería las condiciones bajo las cuales la instalación debe operar. El Director Ejecutivo ha tomado una decisión preliminar que, si este permiso es emitido, cumple con todos los requisitos normativos y legales. La solicitud del permiso, la decisión preliminar del Director Ejecutivo y el borrador del permiso están disponibles para leer y copiar en el edificio Departamento de Trabajos Públicos de Houston, 10500 Bellaire Boulevard, Houston, Texas.

**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 todos 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. La TCEQ puede actuar sobre una solicitud para renovar un permiso para descargar aguas residuales sin proveer una oportunidad de una audiencia administrativa de lo contencioso.**

**ACCIÓN DEL DIRECTOR EJECUTIVO.** El Director Ejecutivo puede emitir una aprobación final de la solicitud a menos que exista un pedido antes del plazo de vencimiento de una audiencia administrativa de lo contencioso o se ha presentado un pedido de reconsideración. Si un pedido ha llegado antes del plazo de vencimiento de la audiencia o el pedido de reconsideración ha sido presentado, el Director Ejecutivo no emitirá una aprobación final sobre el permiso y enviará la solicitud y el pedido a los Comisionados de la TECQ para consideración en una reunión programada de la Comisión.

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

**Todos los comentarios escritos del público y los pedidos para una reunión deben ser presentados a la Oficina del Secretario Principal, MC 105, Texas Commission on Environmental Quality, P.O. Box 13087, Austin, TX 78711-3087 o por el internet a [www.tceq.texas.gov/goto/comment](http://www.tceq.texas.gov/goto/comment) durante los 30 días después de la publicación del aviso.**

**INFORMACION 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](http://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.

**AGENCIA CONTACTOS Y INFORMACIÓN.** Todos los comentarios escritos del público y los pedidos para una reunión deben ser por el internet [www.tceq.texas.gov/goto/comment](http://www.tceq.texas.gov/goto/comment) o por escrito a la Oficina del Secretario Principal, MC 105, P.O. Box 13087, Austin, Texas 78711-3087. Cualquier información personal que usted envíe formará parte del registro del TCEQ, incluidas las direcciones de correo electrónico. Si necesita más información en español sobre esta solicitud para un permiso o el proceso del permiso, por favor llame a El Programa de Educación Pública de la TCEQ, sin cobro, al 1-800-687-4040. La información general sobre la TCEQ puede ser encontrada en nuestro sitio de la red: [www.tceq.texas.gov/goto/pep](http://www.tceq.texas.gov/goto/pep). Para 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 Sra. Heather Maloney, al 832-395- 5756.

Fecha de emission:

## John Hearn

---

**From:** Maloney, Heather - HPW <Heather.Maloney@houstontx.gov>  
**Sent:** Monday, May 5, 2025 2:54 PM  
**To:** John Hearn  
**Cc:** Samarneh, Walid - HPW; Fragassi, Arielle - HPW  
**Subject:** RE: WQ0010495076 CITY OF HOUSTON  
**Attachments:** WQ0010495076\_Revised.docx; NW\_NAPD\_Spanish.docx

Good afternoon John,

The City accepts the second draft permit (received on May 1, 2025). The Spanish NAPD is also attached.

Thank you,  
Heather

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



---

**From:** John Hearn <John.Hearn@tceq.texas.gov>  
**Sent:** Thursday, May 1, 2025 2:21 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:** RE: WQ0010495076 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,

Please see the revised draft permit attached. Other Requirement No. 7 instream monitoring has been removed from the draft.

Please review the draft permit and reply ASAP with either acceptance of the draft or further comments. I will also need a Spanish translation of the NAPD before I can move this one to OCC.

Thanks,  
John

**From:** Maloney, Heather - HPW <Heather.Maloney@houstontx.gov>  
**Sent:** Wednesday, July 3, 2024 1:28 PM  
**To:** Miguel Mercado <Mguel.Mercado@tceq.texas.gov>  
**Cc:** Samarneh, Walid - HPW <Walid.Samarneh@houstontx.gov>  
**Subject:** RE: WQ0010495076 CITY OF HOUSTON

Good afternoon Miguel,

Please accept the following comments regarding the draft permit dated June 14, 2024.

The City requests the removal of the instream monitoring study for chloride and sulfate for the following reasons:

1. Instream data is already sampled at surface water quality monitoring (SWQM) stations 15829 (Whiteoak Bayou, downstream of facility), 15831 (Whiteoak Bayou, upstream of confluence with Cole Creek), and 16593 (Cole Creek, upstream of facility).
2. The data show that for the past thirty years of monitoring, the instream concentration of total dissolved solids (TDS), chloride, and sulfate have decreased throughout the segment, and the segment is not listed on the Integrated Report for any of these parameters.
3. If the data from Station 15831 is used for the ambient segment concentration in TDS menu 2, then the preliminary calculations show that no further screening is required for TDS, chloride, or sulfate at the permitted flow of 18 MGD
4. The facility currently discharges less than half of its permitted flow. When using the ambient segment concentration from either the IPs or SWQM station 15831, no permit limitations are needed at the facility's average flow of 8 MGD.

Thank you,  
Heather

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



**From:** Samarneh, Walid - HPW <Walid.Samarneh@houstontx.gov>  
**Sent:** Thursday, June 27, 2024 3:20 PM  
**To:** Maloney, Heather - HPW <Heather.Maloney@houstontx.gov>  
**Cc:** Sanchez, Jose F. - HPW <Jose.Sanchez2@houstontx.gov>  
**Subject:** FW: WQ0010495076 CITY OF HOUSTON

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:** Sophia Houston <[Sophia.Houston@tceq.texas.gov](mailto:Sophia.Houston@tceq.texas.gov)>  
**Sent:** Wednesday, June 26, 2024 5:04 PM  
**To:** [carol.labreche@houston.tx.gov](mailto:carol.labreche@houston.tx.gov); Samarneh, Walid - HPW <[Walid.Samarneh@houston.tx.gov](mailto:Walid.Samarneh@houston.tx.gov)>  
**Cc:** Miguel Mercado <[Miguel.Mercado@tceq.texas.gov](mailto:Miguel.Mercado@tceq.texas.gov)>  
**Subject:** WQ0010495076 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.]

To whom it may concern,

Attached for your review, is the letter, DRAFT permit, NAPD, and statement of basis/technical summary, for Permit WQ0010495076 CITY OF HOUSTON.

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

Please submit any **comments and/or approval** no later than, *Wednesday July 3, 2024*. If the comments and/ or approval are not received by the given deadline, it may cause significant delays in the permit process. Please contact Miguel Mercado with your comments and/ or approval to: [Miguel.Mercado@tceq.texas.gov](mailto:Miguel.Mercado@tceq.texas.gov) .

Thank you,

*Sophia L. Houston*

Sophia Houston, Administrative Assistant V  
Water Quality Division  
Customer Information Assistance (CIA)  
Texas Commission on Environmental Quality (TCEQ)  
[Sophia.houston@tceq.texas.gov](mailto:Sophia.houston@tceq.texas.gov)  
512-239-6053



# TCEQ Interoffice Memorandum

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**To:** Municipal Permits Team  
Wastewater Permitting Section

**From:** Michelle Labrie, Standards Implementation Team  
Water Quality Assessment Section  
Water Quality Division

**Date:** March 10, 2025

**Subject:** City of Houston; Permit no. WQ0010495076  
Renewal; Application received 12/1/2023

This memo supersedes the one dated May 20, 2024.

The discharge route for the above referenced permit is to Cole Creek, thence to Whiteoak Bayou Above Tidal in Segment 1017 of the San Jacinto River Basin. The designated uses and dissolved oxygen criterion as stated in Appendix A of the Texas Surface Water Quality Standards (30 Texas Administrative Code §307.10) for Segment 1017 are primary contact recreation, limited aquatic life use, and 3.0 mg/L dissolved oxygen.

The discharge from this permit action is not expected to have an effect on any federal endangered or threatened aquatic or aquatic dependent species or proposed species or their critical habitat. This determination is based on the United States Fish and Wildlife Service's (USFWS) biological opinion on the State of Texas authorization of the Texas Pollutant Discharge Elimination System (TPDES; September 14, 1998; October 21, 1998 update). To make this determination for TPDES permits, TCEQ and EPA only considered aquatic or aquatic dependent species occurring in watersheds of critical concern or high priority as listed in Appendix A of the USFWS biological opinion. The determination is subject to reevaluation due to subsequent updates or amendments to the biological opinion. The permit does not require EPA review with respect to the presence of endangered or threatened species.

## John Hearn

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**From:** Michelle Labrie  
**Sent:** Monday, March 10, 2025 1:49 PM  
**To:** John Hearn  
**Subject:** RE: WQ0010495076 CITY OF HOUSTON  
**Attachments:** 10495076\_25a.docx

John, thank you for your patience! I know this one took a while. Please let me know if you need anything else, and I promise to be quicker 😊

Thanks,  
Michelle

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**From:** Michelle Labrie  
**Sent:** Monday, March 10, 2025 12:26 PM  
**To:** John Hearn <John.Hearn@tceq.texas.gov>  
**Subject:** RE: WQ0010495076 CITY OF HOUSTON

Hi John! I'm sorry, I finally got a response today. He said it is fine to remove the requirement. I'll send you an supersedes memo asap.

Thanks,  
Michelle

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**From:** John Hearn <[John.Hearn@tceq.texas.gov](mailto:John.Hearn@tceq.texas.gov)>  
**Sent:** Friday, March 7, 2025 12:07 PM  
**To:** Michelle Labrie <[Michelle.Labrie@tceq.texas.gov](mailto:Michelle.Labrie@tceq.texas.gov)>  
**Subject:** RE: WQ0010495076 CITY OF HOUSTON

Happy Friday Michelle,

Any update on this one?

Thanks,  
John

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**From:** Michelle Labrie <[Michelle.Labrie@tceq.texas.gov](mailto:Michelle.Labrie@tceq.texas.gov)>  
**Sent:** Tuesday, February 25, 2025 3:17 PM  
**To:** John Hearn <[John.Hearn@tceq.texas.gov](mailto:John.Hearn@tceq.texas.gov)>  
**Subject:** RE: WQ0010495076 CITY OF HOUSTON

Good afternoon John,

Apologies for the delay. And hope your week is going well and you are enjoying the warmer weather. I sent an email to my team leader last week asking if we should remove the monitoring requirement but didn't hear back yet. I sent a follow up email earlier this morning and am expecting him to respond today. I'll let you know as soon as I hear from him.



Thanks!  
Michelle

**From:** John Hearn <[John.Hearn@tceq.texas.gov](mailto:John.Hearn@tceq.texas.gov)>  
**Sent:** Tuesday, February 25, 2025 2:49 PM  
**To:** Michelle Labrie <[Michelle.Labrie@tceq.texas.gov](mailto:Michelle.Labrie@tceq.texas.gov)>  
**Subject:** RE: WQ0010495076 CITY OF HOUSTON

Good afternoon Michelle,

Hope your week is going well so far. Have you been able to look at the below yet?

Please let me know when you get a chance.

Thanks,  
John

**From:** John Hearn  
**Sent:** Thursday, February 20, 2025 9:44 PM  
**To:** Michelle Labrie <[Michelle.Labrie@tceq.texas.gov](mailto:Michelle.Labrie@tceq.texas.gov)>  
**Subject:** RE: WQ0010495076 CITY OF HOUSTON

Hello Michelle,

I may have misplaced your response to the below email. Do you think you could help me provide a response to City of Houston. They provided the below 4 points in trying to get rid of the instream monitoring study for chloride and sulfate.

Please let me know if you have any questions about this.

Thanks!  
John

**From:** John Hearn  
**Sent:** Wednesday, September 11, 2024 10:32 AM  
**To:** Michelle Labrie <[Michelle.Labrie@tceq.texas.gov](mailto:Michelle.Labrie@tceq.texas.gov)>  
**Subject:** FW: WQ0010495076 CITY OF HOUSTON

Good morning Michelle,

This applicant gave comments about the chloride and sulfate study for the subject permit you did the standards review (attached) for. Do you think you could provide a response to the below? Any help would be appreciated.

Thanks!  
John

**From:** Maloney, Heather - HPW <[Heather.Maloney@houstontx.gov](mailto:Heather.Maloney@houstontx.gov)>  
**Sent:** Wednesday, July 3, 2024 1:28 PM  
**To:** Miguel Mercado <[Miguel.Mercado@tceq.texas.gov](mailto:Miguel.Mercado@tceq.texas.gov)>  
**Cc:** Samarneh, Walid - HPW <[Walid.Samarneh@houstontx.gov](mailto:Walid.Samarneh@houstontx.gov)>  
**Subject:** RE: WQ0010495076 CITY OF HOUSTON

Good afternoon Miguel,

Please accept the following comments regarding the draft permit dated June 14, 2024.

The City requests the removal of the instream monitoring study for chloride and sulfate for the following reasons:

1. Instream data is already sampled at surface water quality monitoring (SWQM) stations 15829 (Whiteoak Bayou, downstream of facility), 15831 (Whiteoak Bayou, upstream of confluence with Cole Creek), and 16593 (Cole Creek, upstream of facility).
2. The data show that for the past thirty years of monitoring, the instream concentration of total dissolved solids (TDS), chloride, and sulfate have decreased throughout the segment, and the segment is not listed on the Integrated Report for any of these parameters.
3. If the data from Station 15831 is used for the ambient segment concentration in TDS menu 2, then the preliminary calculations show that no further screening is required for TDS, chloride, or sulfate at the permitted flow of 18 MGD
4. The facility currently discharges less than half of its permitted flow. When using the ambient segment concentration from either the IPs or SWQM station 15831, no permit limitations are needed at the facility's average flow of 8 MGD.

Thank you,  
Heather

**Heather Maloney**

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



---

**From:** Samarneh, Walid - HPW <[Walid.Samarneh@houston.tx.gov](mailto:Walid.Samarneh@houston.tx.gov)>  
**Sent:** Thursday, June 27, 2024 3:20 PM  
**To:** Maloney, Heather - HPW <[Heather.Maloney@houston.tx.gov](mailto:Heather.Maloney@houston.tx.gov)>  
**Cc:** Sanchez, Jose F. - HPW <[Jose.Sanchez2@houston.tx.gov](mailto:Jose.Sanchez2@houston.tx.gov)>  
**Subject:** FW: WQ0010495076 CITY OF HOUSTON

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:** Sophia Houston <[Sophia.Houston@tceq.texas.gov](mailto:Sophia.Houston@tceq.texas.gov)>  
**Sent:** Wednesday, June 26, 2024 5:04 PM  
**To:** [carol.labreche@houston.tx.gov](mailto:carol.labreche@houston.tx.gov); Samarneh, Walid - HPW <[Walid.Samarneh@houston.tx.gov](mailto:Walid.Samarneh@houston.tx.gov)>  
**Cc:** Miguel Mercado <[Miguel.Mercado@tceq.texas.gov](mailto:Miguel.Mercado@tceq.texas.gov)>  
**Subject:** WQ0010495076 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.]

To whom it may concern,

Attached for your review, is the letter, DRAFT permit, NAPD, and statement of basis/technical summary, for Permit WQ0010495076 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 submit any **comments and/or approval** no later than, *Wednesday July 3, 2024*. If the comments and/ or approval are not received by the given deadline, it may cause significant delays in the permit process. Please contact Miguel Mercado with your comments and/ or approval to: [Miguel.Mercado@tceq.texas.gov](mailto:Miguel.Mercado@tceq.texas.gov) .

Thank you,

*Sophia L. Houston*

Sophia Houston, Administrative Assistant V  
Water Quality Division  
Customer Information Assistance (CIA)  
Texas Commission on Environmental Quality (TCEQ)  
[Sophia.houston@tceq.texas.gov](mailto:Sophia.houston@tceq.texas.gov)  
512-239-6053

Calculation of pH of a mixture of two flows. Based on the procedure in EPA's DESCON program (EPA, 1988, Technical Guidance on Supplementary Stream Design Conditions for Steady State Modeling, USEPA Office of Water, Washington D.C.)  
CowTown Pipeline, pre-app

City of Houston; 10495-076  
Segment 1017

INPUT		
1. DILUTION FACTOR AT MIXING ZONE BOUNDARY	1.530	1.530
RECEIVING WATER CHARACTERISTICS		
2. Temperature (deg C):	31.00	31.00
3. pH:	7.70	7.70
4. Alkalinity (mg CaCO3/L):	81.00	81.00
EFFLUENT CHARACTERISTICS		
5. Temperature (deg C):	20.00	30.00
6. pH:	6.00	9.00
7. Alkalinity (mg CaCO3/L):	20.00 *	80.00
OUTPUT		
1. IONIZATION CONSTANTS		
Upstream/Background pKa:	6.32	6.32
Effluent pKa:	6.38	6.32
2. IONIZATION FRACTIONS		
Upstream/Background Ionization Fraction:	0.96	0.96
Effluent Ionization Fraction:	0.29	1.00
3. TOTAL INORGANIC CARBON		
Upstream/Background Total Inorganic Carbon (mg CaCO3/L):	84.37	84.37
Effluent Total Inorganic Carbon (mg CaCO3/L):	68.20	80.17
4. CONDITIONS AT MIXING ZONE BOUNDARY		
Temperature (deg C):	23.81	30.35
Alkalinity (mg CaCO3/L):	41.13	80.35
Total Inorganic Carbon (mg CaCO3/L):	73.80	81.63
pKa:	6.36	6.32
<b>pH at Mixing Zone Boundary:</b>	<b>6.46</b>	<b>8.12</b>

Source Data: Critical conditions memo feb 13, 2024

fraction at edge of chronic mixing zone: **65.02**  
 Eff. Flow (cfs): **27.85** 7Q2 flow: **14.98**  
 Next: take reciprocal of % @ edge of mixing zone to get dilution factor  
 IPs Table D-08 **7.6**  
 IPs Table D-08  
 Seq. 1017

Segment criteria 6.5-9.0

Rounds to 6.5

\* Assume minimal total alkalinity at low effluent pH based on carbonate equilibrium chemistry of natural and treated waters

## John Hearn

---

**From:** Michelle Labrie  
**Sent:** Monday, June 24, 2024 4:04 PM  
**To:** Miguel Mercado  
**Subject:** RE: WQ0010495076 - City of Houston  
**Attachments:** 10495076\_24pH.xlsm

Hi Miguel,

Here is the updated pH screening. It is recommended for the permit limits to remain at 6.0-9.0. Although the screening shows 6.46, my team lead says it is ok to round up to 6.5 so this one just squeaks by.

Thanks,  
Michelle

---

**From:** Miguel Mercado <Mguel.Mercado@tceq.texas.gov>  
**Sent:** Monday, June 24, 2024 12:12 PM  
**To:** Michelle Labrie <Michelle.Labrie@tceq.texas.gov>  
**Subject:** RE: WQ0010495076 - City of Houston

Hi Michelle,

Not to worry and thank you for your help.

Miguel

---

**From:** Michelle Labrie <Michelle.Labrie@tceq.texas.gov>  
**Sent:** Monday, June 24, 2024 12:03 PM  
**To:** Miguel Mercado <Mguel.Mercado@tceq.texas.gov>  
**Subject:** RE: WQ0010495076 - City of Houston

Hi Miguel,

Sorry for the late reply, I was out last week and boy does an inbox fill up quickly. I'll check with my team lead on this now and get back to you asap.

Thanks,  
Michelle

---

**From:** Miguel Mercado <Mguel.Mercado@tceq.texas.gov>  
**Sent:** Monday, June 24, 2024 9:23 AM  
**To:** Michelle Labrie <Michelle.Labrie@tceq.texas.gov>  
**Subject:** RE: WQ0010495076 - City of Houston

Good morning Michelle,

I hope you are doing well. I just wanted to follow up on this it. Thank you for your time.

Sincerely,

Miguel

**From:** Miguel Mercado

**Sent:** Friday, June 14, 2024 8:33 AM

**To:** Michelle Labrie <[Michelle.Labrie@tceq.texas.gov](mailto:Michelle.Labrie@tceq.texas.gov)>

**Subject:** WQ0010495076 - City of Houston

Good morning Michelle,

I hope you are doing well. I want to verify if it is recommended for the permit to remain at its current pH limitations of minimum of 6 to maximum of 9 or it is recommended to change it to 6.5 to 9.0? I have attached the pH screening. Thank you for your time.

Sincerely,  
Miguel

## TCEQ Interoffice Memorandum

---

**To:** Municipal Permits Team  
Wastewater Permitting Section

**From:** Michelle Labrie, Standards Implementation Team  
Water Quality Assessment Section  
Water Quality Division

**Date:** May 20, 2024

**Subject:** City of Houston; Permit no. WQ0010495076  
Renewal; Application received 12/1/2023

This memo supersedes the one dated February 8, 2024.

The discharge route for the above referenced permit is to Cole Creek, thence to Whiteoak Bayou Above Tidal in Segment 1017 of the San Jacinto River Basin. The designated uses and dissolved oxygen criterion as stated in Appendix A of the Texas Surface Water Quality Standards (30 Texas Administrative Code §307.10) for Segment 1017 are primary contact recreation, limited aquatic life use, and 3.0 mg/L dissolved oxygen.

*The Standards Implementation Team recommends the following requirement be added to the permit:*

*The permittee shall conduct an instream monitoring study for chloride and sulfate. Within 180 days of permit issuance, the permittee shall submit an instream monitoring plan for Cole Creek to the TCEQ Compliance Monitoring Team (MC-224), and cc the Standards Implementation Team (MC 150) for TCEQ review and approval prior to any sampling. The TCEQ may disapprove or modify the work plan within 60 days of receipt. The instream monitoring shall be conducted to collect representative values of ambient chloride and sulfate. Monitoring shall occur at 1) a minimum of one sampling station on Cole Creek located at least 500 feet upstream of the discharge point (i.e., outside of the mixing zone) in an area unimpacted by other wastewater discharges; and 2) a minimum of one sampling station where Cole Creek conflues with Whiteoak Bayou (Segment 1017). Monitoring shall be done at a minimum frequency of once per month, include at least 30 samples from each location, and continue for no less than one year. Samples should be taken at similar frequency each month to ensure data is obtained equally throughout the year. The data should reflect baseline conditions as best as possible. Data collection and analytical methods shall conform to guidelines set forth in the Surface Water Quality Monitoring Procedures, Volume 1 (RG-415, revised August 2012). Prior to the expiration of the issued permit, a final report shall be submitted to the TCEQ Compliance Monitoring Team (MC-224) and cc'ed to the Standards Implementation Team (MC 150)*

The discharge from this permit action is not expected to have an effect on any federal endangered or threatened aquatic or aquatic dependent species or proposed species or their critical habitat. This determination is based on the United States Fish and Wildlife Service's (USFWS) biological opinion on the State of Texas authorization of the Texas Pollutant Discharge Elimination System (TPDES; September 14, 1998; October 21, 1998 update). To make this determination for TPDES permits, TCEQ and EPA only considered aquatic or aquatic dependent species occurring in watersheds of critical concern or high priority as listed in Appendix A of the USFWS biological opinion. The determination is subject to reevaluation due to subsequent updates or amendments to the biological opinion. The permit does not require EPA review with respect to the presence of endangered or threatened species.



## John Hearn

---

**From:** Michelle Labrie  
**Sent:** Monday, May 20, 2024 11:59 AM  
**To:** Miguel Mercado  
**Subject:** RE: WQ0010495076 - City of Houston  
**Attachments:** 10495076\_24b.docx

Hi Miguel,

Again apologies for the delayed response. As for the first email, yes, it is because Cole Creek is less than 300 feet to Segment 1017. And as for the second email- I just made a mistake and left out Above Tidal, and that should be in there, so thank you for letting me know. Attached is a revised memo.

Thanks!  
Michelle

---

**From:** Miguel Mercado <Mguel.Mercado@tceq.texas.gov>  
**Sent:** Thursday, May 16, 2024 4:22 PM  
**To:** Michelle Labrie <Michelle.Labrie@tceq.texas.gov>  
**Subject:** RE: WQ0010495076 - City of Houston

Hi Michelle,

Sorry, I have one more question. Can I state the discharge route as "to Cole Creek, thence to Whiteoak Bayou **Above Tidal** in Segment No. 1017 of the San Jacinto River Basin"?

Thank you,  
Miguel

---

**From:** Miguel Mercado  
**Sent:** Wednesday, May 15, 2024 3:06 PM  
**To:** Michelle Labrie <Michelle.Labrie@tceq.texas.gov>  
**Subject:** WQ0010495076 - City of Houston

Good afternoon Michelle,

I hope you are doing well. The Standards Memo did not include the unclassified receiving water use for Cole Creek. I need to verify if it was because the discharge to Cole Creek is less than 300 feet to 1017?

Thank you,  
Miguel

## Miguel Mercado

---

**From:** Deba Dutta  
**Sent:** Tuesday, May 7, 2024 10:48 AM  
**To:** Miguel Mercado  
**Cc:** Deba Dutta  
**Subject:** FW: Renewal for Permit WQ0010495076 - City of Houston ERC Part C  
**Attachments:** WQ0010495076 - City of Houston ERC Part C Memo.docx

Approved.

Thanks.

*Deba*

---

**From:** Miguel Mercado <Mguel.Mercado@tceq.texas.gov>  
**Sent:** Tuesday, May 7, 2024 10:22 AM  
**To:** Deba Dutta <Deba.Dutta@tceq.texas.gov>  
**Subject:** Renewal for Permit WQ0010495076 - City of Houston ERC Part C

Good morning Deba,

Attached are the ERC Part C Memo for your review.

Thank you,

Miguel

---

**EXECUTIVE REVIEW COMMITTEE, PART C****May 7, 2024**

---

City of Houston, TCEQ Permit No. WQ0010495146

Reason brought to ERC: Court Order (Final Judgement-After Hearing/Trial). Civil Action No.4:18-cv-03368.

Issues: Failed to prevent an unauthorized discharge of sewage into or adjacent to any water in the state.

Effluent Data: **Average for November 2021 through November 2023**

<u>Parameter</u>	<u>Average of Daily Avg</u>	<u>Effluent Limit</u>
Flow, MGD	8.8	18
CBOD <sub>5</sub> , mg/l	2.3	10
TSS, mg/l	2.4	15
NH <sub>3</sub> -N, mg/l	1.2	3
<i>E. coli</i> , CFU or MPN per 100 ml	1.0	63

Current Permit Action: Renewal

Operator Classification: A

Court Order Status: On March 31, 2021, the U.S. District Court for the Southern District of Texas approved entry of a Consent Decree (Civil Action No.4:18-cv-03368) embodying the agreement of the City of Houston with the United States Environmental Protection Agency and the State of Texas to improve the City's Wastewater Treatment and Collection System including requirements to address sanitary sewer overflows 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/>.

Input from Region: The Region was not contacted since this is a common consent decree from the U.S District Court for all the wastewater treatment facilities of the City.

Input from Applicant: Applicant was not contacted since this is a common consent decree from the U.S District Court for all the wastewater treatment facilities of the City.

Recommendation: Based on the Civil Action, CH, and DMR, it is recommended to proceed with no changes.

Attachments: Compliance History

The TCEQ is committed to accessibility.

To request a more accessible version of this report, please contact the TCEQ Help Desk at (512) 239-4357.



## Compliance History Report

Compliance History Report for CN600128995, RN101610665, Rating Year 2023 which includes Compliance History (CH) components from September 1, 2018, through August 31, 2023.

<b>Customer, Respondent, or Owner/Operator:</b>	CN600128995, City of Houston	<b>Classification:</b>	SATISFACTORY	<b>Rating:</b>	8.47
<b>Regulated Entity:</b>	RN101610665, NORTHWEST WWTP	<b>Classification:</b>	SATISFACTORY	<b>Rating:</b>	12.29
<b>Complexity Points:</b>	11	<b>Repeat Violator:</b>	NO		
<b>CH Group:</b>	08 - Sewage Treatment Facilities				
<b>Location:</b>	5423 MANGUM RD HOUSTON, TX 77091-5126, HARRIS COUNTY				
<b>TCEQ Region:</b>	REGION 12 - HOUSTON				
<b>ID Number(s):</b>					
<b>AIR NEW SOURCE PERMITS ACCOUNT NUMBER</b>	HG3799H	<b>STORMWATER PERMIT</b>	TXR05FF62		
<b>WASTEWATER PERMIT</b>	WQ0010495076	<b>WASTEWATER EPA ID</b>	TX0063011		
<b>WASTEWATER AUTHORIZATION</b>	R10495076	<b>INDUSTRIAL AND HAZARDOUS WASTE SOLID WASTE REGISTRATION # (SWR)</b>	87386		
<b>INDUSTRIAL AND HAZARDOUS WASTE EPA ID</b>	TXR000057018				
<b>Compliance History Period:</b>	September 01, 2018 to August 31, 2023	<b>Rating Year:</b>	2023	<b>Rating Date:</b>	09/01/2023
<b>Date Compliance History Report Prepared:</b>	February 12, 2024				
<b>Agency Decision Requiring Compliance History:</b>	Permit - Issuance, renewal, amendment, modification, denial, suspension, or revocation of a permit.				
<b>Component Period Selected:</b>	December 01, 2018 to February 12, 2024				
<b>TCEQ Staff Member to Contact for Additional Information Regarding This Compliance History.</b>					
<b>Name:</b>	PT	<b>Phone:</b>	(512) 239-3581		

### Site and Owner/Operator History:

- |  |     |
|--|-----|
| 1) Has the site been in existence and/or operation for the full five year compliance period?       | YES |
| 2) Has there been a (known) change in ownership/operator of the site during the compliance period? | NO  |

### Components (Multimedia) for the Site Are Listed in Sections A - J

#### **A. Final Orders, court judgments, and consent decrees:**

- |   |  |            |                                       |
|---|--|------------|---------------------------------------|
| 1 | Effective Date: 04/01/2021   | COURTORDER | (Final Judgement-After Hearing/Trial) |
|   | Classification: Major  |            |                                       |
|   | Citation: 2D TWC Chapter 26, SubChapter A 26.121(a)(1)   |            |                                       |
|   | 30 TAC Chapter 305, SubChapter F 305.125(1)  |            |                                       |
|   | Rqmt Prov: Permit Conditions No. 2.g PERMIT  |            |                                       |
|   | Description: Failed to prevent an unauthorized discharge of sewage into or adjacent to any water in the state. |            |                                       |

See addendum for information regarding federal actions.

#### **B. Criminal convictions:**

N/A

#### **C. Chronic excessive emissions events:**

N/A

#### **D. The approval dates of investigations (CCEDS Inv. Track. No.):**

Item 1	December 18, 2018	(1545986)
Item 2	January 15, 2019	(1561987)
Item 3	February 19, 2019	(1561985)
Item 4	March 18, 2019	(1561986)
Item 5	April 16, 2019	(1572584)
Item 6	May 17, 2019	(1584779)
Item 7	June 20, 2019	(1584780)
Item 8	July 18, 2019	(1593930)
Item 9	August 15, 2019	(1600255)
Item 10	September 20, 2019	(1607149)
Item 11	November 18, 2019	(1619812)
Item 12	December 17, 2019	(1627173)
Item 13	January 21, 2020	(1634810)
Item 14	March 17, 2020	(1647931)
Item 15	April 20, 2020	(1654285)
Item 16	May 15, 2020	(1660850)
Item 17	June 03, 2020	(1640041)
Item 18	June 12, 2020	(1667383)
Item 19	July 20, 2020	(1674333)
Item 20	September 16, 2020	(1687677)
Item 21	September 22, 2020	(1681107)
Item 22	November 18, 2020	(1714725)
Item 23	November 24, 2020	(1678212)
Item 24	December 18, 2020	(1714726)
Item 25	January 20, 2021	(1714727)
Item 26	February 17, 2021	(1727790)
Item 27	April 19, 2021	(1727792)
Item 28	May 18, 2021	(1741196)
Item 29	July 20, 2021	(1752457)
Item 30	August 19, 2021	(1757886)
Item 31	September 21, 2021	(1767111)
Item 32	October 19, 2021	(1777585)
Item 33	November 16, 2021	(1784384)
Item 34	December 16, 2021	(1791414)
Item 35	January 18, 2022	(1799196)
Item 36	April 19, 2022	(1820712)
Item 37	June 17, 2022	(1835841)
Item 38	July 20, 2022	(1843042)
Item 39	August 17, 2022	(1849171)
Item 40	September 16, 2022	(1856971)
Item 41	October 14, 2022	(1840993)
Item 42	October 18, 2022	(1863329)
Item 43	February 07, 2023	(1860745)
Item 44	February 20, 2023	(1890722)
Item 45	March 17, 2023	(1899288)
Item 46	March 28, 2023	(1894540)
Item 47	September 19, 2023	(1939925)
Item 48	October 20, 2023	(1946767)
Item 49	December 15, 2023	(1962228)
Item 50	February 07, 2024	(1944469)

#### E. Written notices of violations (NOV) (CCEDS Inv. Track. No.):

A notice of violation represents a written allegation of a violation of a specific regulatory requirement from the commission to a regulated entity. A notice of violation is not a final enforcement action, nor proof that a violation has actually occurred.

1	Date:	03/31/2023	(1906093)
	Self Report?	YES	Classification: Moderate
	Citation:	2D TWC Chapter 26, SubChapter A 26.121(a) 30 TAC Chapter 305, SubChapter F 305.125(1)	
	Description:	Failure to meet the limit for one or more permit parameter	

Compliance History Report for CN600128995, RN101610665, Rating Year 2023 which includes Compliance History (CH) components from December 01, 2018, through February 12, 2024.

2	Date: 04/30/2023 (1913248)		
	Self Report? YES	Classification: Moderate	
	Citation: 2D TWC Chapter 26, SubChapter A 26.121(a)		
	30 TAC Chapter 305, SubChapter F 305.125(1)		
	Description: Failure to meet the limit for one or more permit parameter		
3	Date: 05/31/2023 (1919858)		
	Self Report? YES	Classification: Moderate	
	Citation: 2D TWC Chapter 26, SubChapter A 26.121(a)		
	30 TAC Chapter 305, SubChapter F 305.125(1)		
	Description: Failure to meet the limit for one or more permit parameter		
4	Date: 06/30/2023 (1926822)		
	Self Report? YES	Classification: Moderate	
	Citation: 2D TWC Chapter 26, SubChapter A 26.121(a)		
	30 TAC Chapter 305, SubChapter F 305.125(1)		
	Description: Failure to meet the limit for one or more permit parameter		
5	Date: 07/31/2023 (1933781)		
	Self Report? YES	Classification: Moderate	
	Citation: 2D TWC Chapter 26, SubChapter A 26.121(a)		
	30 TAC Chapter 305, SubChapter F 305.125(1)		
	Description: Failure to meet the limit for one or more permit parameter		
6	Date: 10/31/2023 (1952457)		
	Self Report? YES	Classification: Moderate	
	Citation: 2D TWC Chapter 26, SubChapter A 26.121(a)		
	30 TAC Chapter 305, SubChapter F 305.125(1)		
	Description: Failure to meet the limit for one or more permit parameter		

**F. Environmental audits:**

N/A

**G. Type of environmental management systems (EMSs):**

N/A

**H. Voluntary on-site compliance assessment dates:**

N/A

**I. Participation in a voluntary pollution reduction program:**

N/A

**J. Early compliance:**

N/A

**Sites Outside of Texas:**

N/A

## Miguel Mercado

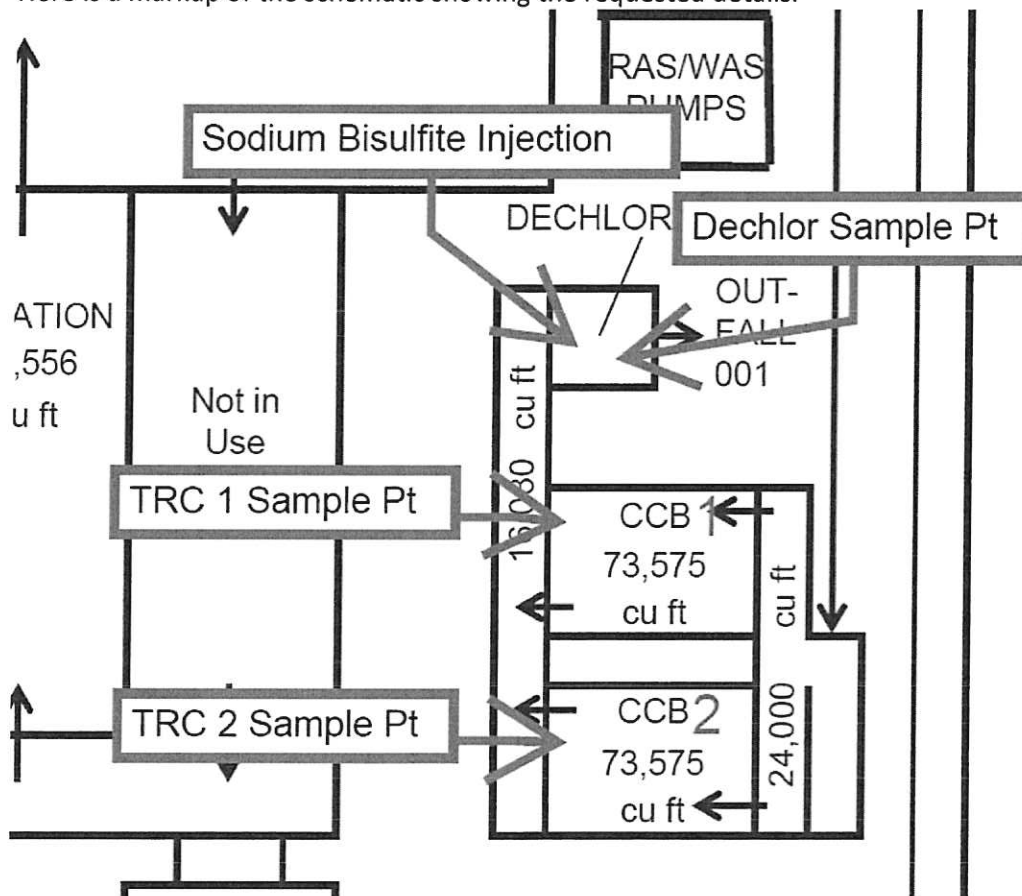
**From:** Maloney, Heather - HPW <Heather.Maloney@houstontx.gov>  
**Sent:** Friday, May 10, 2024 8:14 AM  
**To:** Miguel Mercado  
**Cc:** Samarneh, Walid - HPW  
**Subject:** RE: WQ0010495076 - City of Houston technical review

**Follow Up Flag:** Follow up  
**Flag Status:** Flagged

Good morning Miguel,

Please accept the following in response to your Technical Review of the application for the Northwest WWTF.

- Treatment Process
  - The facility was modified from the complete mix mode to extended aeration. The RAS channel was converted to an aeration basin and the return sludge is now pumped to the influent channel.
- Treatment Units
  - Here is a markup of the schematic showing the requested details.



- 
- Compliance History
  - During the noted timeframe, there were nine Ecoli violations. The cause of seven of those violations could not be determined. In 2022 into 2023, sample contamination was suspected by one of the sample technicians. While it was suspected that a particular sample technician's technique was contaminating samples, it could not be confirmed. As such, all results from samples collected by that sample technician

were reported. The technician was retrained on multiple occasions. The two remaining violations were due to issues with the chlorine pump.

Date	Cause
2/2/2022	Undetermined
4/21/2022	Undetermined
4/22/2022	Undetermined
11/29/2022	Undetermined
3/29/2023	Undetermined
5/15/2023	Pump priming failures
6/21/2023	Undetermined
7/13/2023	Unknown – SCADA outage
10/19/2023	Pump failure – suction line leak

Please let me know if you have additional questions or need more information.

Thank you,  
Heather

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



---

**From:** Miguel Mercado <Mguel.Mercado@tceq.texas.gov>  
**Sent:** Tuesday, May 7, 2024 9:14 AM  
**To:** Samarneh, Walid - HPW <Walid.Samarneh@houstontx.gov>; Maloney, Heather - HPW <Heather.Maloney@houstontx.gov>  
**Subject:** WQ0010495076 - City of Houston technical review

[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

My name is Miguel A. Mercado, I am the permit writer assigned to this application. Below are the items needed to complete my technical review:

#### **Technical Report Data Completeness Review - Domestic Wastewater Permit Application**

- **Domestic Technical Report 1.0, Section 2. Treatment Process**
  - **Subsection A. Treatment process description:** Need to verify if the plant operates in the active sludge extended aeration mode, for the fact sheet of the current permit documents the facility operates in the active sludge complete mix mode.
  - **Subsection B. Treatment units:** Can you please provide more details on the chlorination and dechlorination process. Need to clarify if there are two chlorine contact chambers and if the chlorine is sampled at each chlorine contact chamber or at the end of the effluent channel? Where does the dechlorination occur and sampled?
- **Compliance History Report:**



- Can you provide information that might help explain the cause of the *E. coli* Daily Max violations in February 2022, April 2022, November 2022, March 2023, May 2023, June 2023, July 2023, and October 2023? Were any corrective actions been taken?

Please provide this information by May 21, 2024, let me know if you have any questions. Thank you for your time and have a great day.

Miguel A. Mercado  
Municipal Permits Team  
Water Quality Division  
Texas Commission on Environmental Quality  
(512) 239-4547 | [miguel.mercado@tceq.texas.gov](mailto:miguel.mercado@tceq.texas.gov)



*For status of permit, visit [www.tceq.texas.gov/goto/cid](http://www.tceq.texas.gov/goto/cid).*

## Miguel Mercado

---

**From:** Miguel Mercado  
**Sent:** Tuesday, May 7, 2024 9:14 AM  
**To:** walid.samarneh@houstontx.gov; Heather.Maloney@houstontx.gov  
**Subject:** WQ0010495076 - City of Houston technical review

Good morning

My name is Miguel A. Mercado, I am the permit writer assigned to this application. Below are the items needed to complete my technical review:

### Technical Report Data Completeness Review - Domestic Wastewater Permit Application

- **Domestic Technical Report 1.0, Section 2. Treatment Process**
  - **Subsection A. Treatment process description:** Need to verify if the plant operates in the active sludge extended aeration mode, for the fact sheet of the current permit documents the facility operates in the active sludge complete mix mode.
  - **Subsection B. Treatment units:** Can you please provide more details on the chlorination and dechlorination process. Need to clarify if there are two chlorine contact chambers and if the chlorine is sampled at each chlorine contact chamber or at the end of the effluent channel? Where does the dechlorination occur and sampled?
- **Compliance History Report:**
  - Can you provide information that might help explain the cause of the *E. coli* Daily Max violations in February 2022, April 2022, November 2022, March 2023, May 2023, June 2023, July 2023, and October 2023? Were any corrective actions been taken?

Please provide this information by May 21, 2024, let me know if you have any questions. Thank you for your time and have a great day.

Miguel A. Mercado  
Municipal Permits Team  
Water Quality Division  
Texas Commission on Environmental Quality  
(512) 239-4547 | [miguel.mercado@tceq.texas.gov](mailto:miguel.mercado@tceq.texas.gov)



For status of permit, visit [www.tceq.texas.gov/goto/cid](http://www.tceq.texas.gov/goto/cid).

# DMR DATA

## WQ0010495076 - CITY OF HOUSTON

EPA ID	Monitoring Period	Outfall	Parameter	Reported Measure		Reported Measure	
				DAILY AV (mg/L)	DAILY MX (mg/L)	DAILY AV (lb/d)	DAILY AV (lb/d)
TX0063011	11/30/2018	001A	BOD, carbonaceous [5 day, 20 C]	<2	5	<132	<132
TX0063011	12/31/2018	001A	BOD, carbonaceous [5 day, 20 C]	<2	5	<187	<187
TX0063011	1/31/2019	001A	BOD, carbonaceous [5 day, 20 C]	<2	4	<232	<232
TX0063011	2/28/2019	001A	BOD, carbonaceous [5 day, 20 C]	<2	2	<171	<171
TX0063011	3/31/2019	001A	BOD, carbonaceous [5 day, 20 C]	2	3	146	146
TX0063011	4/30/2019	001A	BOD, carbonaceous [5 day, 20 C]	2	4	183	183
TX0063011	5/31/2019	001A	BOD, carbonaceous [5 day, 20 C]	2	4	236	236
TX0063011	6/30/2019	001A	BOD, carbonaceous [5 day, 20 C]	3	8	252	252
TX0063011	7/31/2019	001A	BOD, carbonaceous [5 day, 20 C]	<2	2	<143	<143
TX0063011	8/31/2019	001A	BOD, carbonaceous [5 day, 20 C]	<2	3	<141	<141
TX0063011	9/30/2019	001A	BOD, carbonaceous [5 day, 20 C]	<2	6	<235	<235
TX0063011	10/31/2019	001A	BOD, carbonaceous [5 day, 20 C]	<2	5	<160	<160
TX0063011	11/30/2019	001A	BOD, carbonaceous [5 day, 20 C]	<2	3	<150	<150
TX0063011	12/31/2019	001A	BOD, carbonaceous [5 day, 20 C]	<2	4	<118	<118
TX0063011	1/31/2020	001A	BOD, carbonaceous [5 day, 20 C]	5	20	342	342
TX0063011	2/29/2020	001A	BOD, carbonaceous [5 day, 20 C]	4	6	264	264
TX0063011	3/31/2020	001A	BOD, carbonaceous [5 day, 20 C]	3	6	168	168
TX0063011	4/30/2020	001A	BOD, carbonaceous [5 day, 20 C]	3	5	259	259
TX0063011	5/31/2020	001A	BOD, carbonaceous [5 day, 20 C]	4	8	282	282
TX0063011	6/30/2020	001A	BOD, carbonaceous [5 day, 20 C]	3	5	258	258
TX0063011	7/31/2020	001A	BOD, carbonaceous [5 day, 20 C]	2	4	182	182
TX0063011	8/31/2020	001A	BOD, carbonaceous [5 day, 20 C]	3	12	206	206
TX0063011	9/30/2020	001A	BOD, carbonaceous [5 day, 20 C]	2	5	290	290
TX0063011	10/31/2020	001A	BOD, carbonaceous [5 day, 20 C]	<2	3	<153	<153
TX0063011	11/30/2020	001A	BOD, carbonaceous [5 day, 20 C]	3	5	209	209

TX0063011	12/31/2020	001A	BOD, carbonaceous [5 day, 20 C]	3	4	240
TX0063011	1/31/2021	001A	BOD, carbonaceous [5 day, 20 C]	3	8	306
TX0063011	2/28/2021	001A	BOD, carbonaceous [5 day, 20 C]	2	4	200
TX0063011	3/31/2021	001A	BOD, carbonaceous [5 day, 20 C]	2	4	207
TX0063011	4/30/2021	001A	BOD, carbonaceous [5 day, 20 C]	2	3	226
TX0063011	5/31/2021	001A	BOD, carbonaceous [5 day, 20 C]	2	6	379
TX0063011	6/30/2021	001A	BOD, carbonaceous [5 day, 20 C]	<2	3	<270
TX0063011	7/31/2021	001A	BOD, carbonaceous [5 day, 20 C]	<2	3	<304
TX0063011	8/31/2021	001A	BOD, carbonaceous [5 day, 20 C]	<2	6	<199
TX0063011	9/30/2021	001A	BOD, carbonaceous [5 day, 20 C]	<2	4	<210
TX0063011	10/31/2021	001A	BOD, carbonaceous [5 day, 20 C]	<2	4	<198
TX0063011	11/30/2021	001A	BOD, carbonaceous [5 day, 20 C]	<2	6	<187
TX0063011	12/31/2021	001A	BOD, carbonaceous [5 day, 20 C]	<2	4	<171
TX0063011	1/31/2022	001A	BOD, carbonaceous [5 day, 20 C]	<3	>12	<249
TX0063011	2/28/2022	001A	BOD, carbonaceous [5 day, 20 C]	<2	3	<181
TX0063011	3/31/2022	001A	BOD, carbonaceous [5 day, 20 C]	<2	5	<172
TX0063011	4/30/2022	001A	BOD, carbonaceous [5 day, 20 C]	2	4	140
TX0063011	5/31/2022	001A	BOD, carbonaceous [5 day, 20 C]	<2	3	<162
TX0063011	6/30/2022	001A	BOD, carbonaceous [5 day, 20 C]	<2	2	<141
TX0063011	7/31/2022	001A	BOD, carbonaceous [5 day, 20 C]	<2	3	<127
TX0063011	8/31/2022	001A	BOD, carbonaceous [5 day, 20 C]	<3	9	<181
TX0063011	9/30/2022	001A	BOD, carbonaceous [5 day, 20 C]	<2	4	<135
TX0063011	10/31/2022	001A	BOD, carbonaceous [5 day, 20 C]	<3	>13	<183
TX0063011	11/30/2022	001A	BOD, carbonaceous [5 day, 20 C]	<2	<3	<167
TX0063011	12/31/2022	001A	BOD, carbonaceous [5 day, 20 C]	<2	>11	<169
TX0063011	1/31/2023	001A	BOD, carbonaceous [5 day, 20 C]	<2	5	<166
TX0063011	2/28/2023	001A	BOD, carbonaceous [5 day, 20 C]	<2	3	<138
TX0063011	3/31/2023	001A	BOD, carbonaceous [5 day, 20 C]	<2	3	<120
TX0063011	4/30/2023	001A	BOD, carbonaceous [5 day, 20 C]	3	>12	282
TX0063011	5/31/2023	001A	BOD, carbonaceous [5 day, 20 C]	<2	5	<303
TX0063011	6/30/2023	001A	BOD, carbonaceous [5 day, 20 C]	<2	<3	<220
TX0063011	7/31/2023	001A	BOD, carbonaceous [5 day, 20 C]	<2	<3	<174
TX0063011	8/31/2023	001A	BOD, carbonaceous [5 day, 20 C]	<3	9	<170
TX0063011	9/30/2023	001A	BOD, carbonaceous [5 day, 20 C]	3	4	165
TX0063011	10/31/2023	001A	BOD, carbonaceous [5 day, 20 C]	3	3	180
TX0063011	11/30/2023	001A	BOD, carbonaceous [5 day, 20 C]	<2	3	<187
2 YEAR AVERAGE				2.28	5.40	178.80

## 5 YEAR AVERAGE

201.77

2.36

5.26

EPA ID	Monitoring Period	Outfall	Parameter	Reported Measure	
				DA GEOAV (CFU/100mL)	DAILY MX (CFU/100mL)
TX0063011	11/30/2018	001A	E. coli	1	2
TX0063011	12/31/2018	001A	E. coli	<1	64
TX0063011	1/31/2019	001A	E. coli	<1	1
TX0063011	2/28/2019	001A	E. coli	<1	5
TX0063011	3/31/2019	001A	E. coli	<1	51
TX0063011	4/30/2019	001A	E. coli	<1	21
TX0063011	5/31/2019	001A	E. coli	<1	3
TX0063011	6/30/2019	001A	E. coli	<1	4
TX0063011	7/31/2019	001A	E. coli	<1	6
TX0063011	8/31/2019	001A	E. coli	<1	1
TX0063011	9/30/2019	001A	E. coli	<1	8
TX0063011	10/31/2019	001A	E. coli	<1	13
TX0063011	11/30/2019	001A	E. coli	<1	<1
TX0063011	12/31/2019	001A	E. coli	<1	1
TX0063011	1/31/2020	001A	E. coli	<2	488
TX0063011	2/29/2020	001A	E. coli	<1	3
TX0063011	3/31/2020	001A	E. coli	<1	1
TX0063011	4/30/2020	001A	E. coli	<1	3
TX0063011	5/31/2020	001A	E. coli	<1	8
TX0063011	6/30/2020	001A	E. coli	<2	50
TX0063011	7/31/2020	001A	E. coli	<1	8
TX0063011	8/31/2020	001A	E. coli	<1	8
TX0063011	9/30/2020	001A	E. coli	2	>4839
TX0063011	10/31/2020	001A	E. coli	<1	2
TX0063011	11/30/2020	001A	E. coli	<1	3
TX0063011	12/31/2020	001A	E. coli	<1	25
TX0063011	1/31/2021	001A	E. coli	<1	4
TX0063011	2/28/2021	001A	E. coli	<1	25
TX0063011	3/31/2021	001A	E. coli	<1	4
TX0063011	4/30/2021	001A	E. coli	<2	31
TX0063011	5/31/2021	001A	E. coli	2	>12100
TX0063011	6/30/2021	001A	E. coli	<1	22

TX0063011	7/31/2021	001A	E. coli	<1	3
TX0063011	8/31/2021	001A	E. coli	<1	8
TX0063011	9/30/2021	001A	E. coli	<1	13
TX0063011	10/31/2021	001A	E. coli	<2	78
TX0063011	11/30/2021	001A	E. coli	<1	33
TX0063011	12/31/2021	001A	E. coli	<1	29
TX0063011	1/31/2022	001A	E. coli	<2	122
TX0063011	2/28/2022	001A	E. coli	<2	435
TX0063011	3/31/2022	001A	E. coli	<2	121
TX0063011	4/30/2022	001A	E. coli	<2	2420
TX0063011	5/31/2022	001A	E. coli	<1	140
TX0063011	6/30/2022	001A	E. coli	<1	33
TX0063011	7/31/2022	001A	E. coli	<1	194
TX0063011	8/31/2022	001A	E. coli	<1	14
TX0063011	9/30/2022	001A	E. coli	<1	4
TX0063011	10/31/2022	001A	E. coli	<1	9
TX0063011	11/30/2022	001A	E. coli	<2	1200
TX0063011	12/31/2022	001A	E. coli	<2	88
TX0063011	1/31/2023	001A	E. coli	<1	34
TX0063011	2/28/2023	001A	E. coli	<1	2
TX0063011	3/31/2023	001A	E. coli	<1	345
TX0063011	4/30/2023	001A	E. coli	<1	68
TX0063011	5/31/2023	001A	E. coli	<2	2420
TX0063011	6/30/2023	001A	E. coli	<2	1990
TX0063011	7/31/2023	001A	E. coli	<1	272
TX0063011	8/31/2023	001A	E. coli	<1	2
TX0063011	9/30/2023	001A	E. coli	<1	11
TX0063011	10/31/2023	001A	E. coli	2	>2420
TX0063011	11/30/2023	001A	E. coli	<1	39
2 YEAR GEOMEAN				1.28	87.00
5 YEAR GEOMEAN				1.19	25.71

EPA ID	Monitoring Period	Outfall	Parameter	Reported Measure	
				DAILY AV (MGD)	DAILY MX (MGD)
TX0063011	11/30/2018	001A	Flow, in conduit or thru treatment plant	6.75	17.16
TX0063011	12/31/2018	001A	Flow, in conduit or thru treatment plant	9.48	18.2

TX0063011	1/31/2019	001A	Flow, in conduit or thru treatment plant	12.09	32.04
TX0063011	2/28/2019	001A	Flow, in conduit or thru treatment plant	10.04	16.22
TX0063011	3/31/2019	001A	Flow, in conduit or thru treatment plant	8.43	9.72
TX0063011	4/30/2019	001A	Flow, in conduit or thru treatment plant	8.97	26.52
TX0063011	5/31/2019	001A	Flow, in conduit or thru treatment plant	10.72	32.45
TX0063011	6/30/2019	001A	Flow, in conduit or thru treatment plant	9.46	25.21
TX0063011	7/31/2019	001A	Flow, in conduit or thru treatment plant	8.10	15.24
TX0063011	8/31/2019	001A	Flow, in conduit or thru treatment plant	7.46	17.39
TX0063011	9/30/2019	001A	Flow, in conduit or thru treatment plant	11.14	55.87
TX0063011	10/31/2019	001A	Flow, in conduit or thru treatment plant	8.26	18.65
TX0063011	11/30/2019	001A	Flow, in conduit or thru treatment plant	8.18	28.78
TX0063011	12/31/2019	001A	Flow, in conduit or thru treatment plant	6.14	7.72
TX0063011	1/31/2020	001A	Flow, in conduit or thru treatment plant	7.67	12.65
TX0063011	2/29/2020	001A	Flow, in conduit or thru treatment plant	7.43	14.65
TX0063011	3/31/2020	001A	Flow, in conduit or thru treatment plant	7.01	8.92
TX0063011	4/30/2020	001A	Flow, in conduit or thru treatment plant	9.40	18.33
TX0063011	5/31/2020	001A	Flow, in conduit or thru treatment plant	9.09	21.04
TX0063011	6/30/2020	001A	Flow, in conduit or thru treatment plant	10.33	27.78
TX0063011	7/31/2020	001A	Flow, in conduit or thru treatment plant	9.04	15.05
TX0063011	8/31/2020	001A	Flow, in conduit or thru treatment plant	8.73	17.28
TX0063011	9/30/2020	001A	Flow, in conduit or thru treatment plant	11.83	57.18
TX0063011	10/31/2020	001A	Flow, in conduit or thru treatment plant	8.32	10.73
TX0063011	11/30/2020	001A	Flow, in conduit or thru treatment plant	8.75	28.56
TX0063011	12/31/2020	001A	Flow, in conduit or thru treatment plant	11.44	28.06
TX0063011	1/31/2021	001A	Flow, in conduit or thru treatment plant	12.82	34.93
TX0063011	2/28/2021	001A	Flow, in conduit or thru treatment plant	10.33	18.07
TX0063011	3/31/2021	001A	Flow, in conduit or thru treatment plant	10.60	13.91
TX0063011	4/30/2021	001A	Flow, in conduit or thru treatment plant	10.28	34.42
TX0063011	5/31/2021	001A	Flow, in conduit or thru treatment plant	17.08	38.08
TX0063011	6/30/2021	001A	Flow, in conduit or thru treatment plant	14.89	32.72
TX0063011	7/31/2021	001A	Flow, in conduit or thru treatment plant	16.59	39.96
TX0063011	8/31/2021	001A	Flow, in conduit or thru treatment plant	10.71	16.14
TX0063011	9/30/2021	001A	Flow, in conduit or thru treatment plant	11.58	21.77
TX0063011	10/31/2021	001A	Flow, in conduit or thru treatment plant	10.31	27.51
TX0063011	11/30/2021	001A	Flow, in conduit or thru treatment plant	9.30	17.42
TX0063011	12/31/2021	001A	Flow, in conduit or thru treatment plant	9.09	23.79
TX0063011	1/31/2022	001A	Flow, in conduit or thru treatment plant	10.46	36.69



TX0063011	2/28/2022	001A	Flow, in conduit or thru treatment plant	9.48	12.34
TX0063011	3/31/2022	001A	Flow, in conduit or thru treatment plant	8.66	19.99
TX0063011	4/30/2022	001A	Flow, in conduit or thru treatment plant	7.37	15.63
TX0063011	5/31/2022	001A	Flow, in conduit or thru treatment plant	9.21	15.52
TX0063011	6/30/2022	001A	Flow, in conduit or thru treatment plant	7.67	10.92
TX0063011	7/31/2022	001A	Flow, in conduit or thru treatment plant	6.72	9.42
TX0063011	8/31/2022	001A	Flow, in conduit or thru treatment plant	8.08	14.52
TX0063011	9/30/2022	001A	Flow, in conduit or thru treatment plant	6.69	12.68
TX0063011	10/31/2022	001A	Flow, in conduit or thru treatment plant	7.23	14.28
TX0063011	11/30/2022	001A	Flow, in conduit or thru treatment plant	8.76	20.9
TX0063011	12/31/2022	001A	Flow, in conduit or thru treatment plant	8.83	18.53
TX0063011	1/31/2023	001A	Flow, in conduit or thru treatment plant	8.08	22.04
TX0063011	2/28/2023	001A	Flow, in conduit or thru treatment plant	7.58	17.13
TX0063011	3/31/2023	001A	Flow, in conduit or thru treatment plant	6.88	9.43
TX0063011	4/30/2023	001A	Flow, in conduit or thru treatment plant	10.82	31.08
TX0063011	5/31/2023	001A	Flow, in conduit or thru treatment plant	14.18	39.28
TX0063011	6/30/2023	001A	Flow, in conduit or thru treatment plant	11.89	18
TX0063011	7/31/2023	001A	Flow, in conduit or thru treatment plant	9.00	24.17
TX0063011	8/31/2023	001A	Flow, in conduit or thru treatment plant	7.81	9.36
TX0063011	9/30/2023	001A	Flow, in conduit or thru treatment plant	7.35	10.07
TX0063011	10/31/2023	001A	Flow, in conduit or thru treatment plant	7.98	14.3
TX0063011	11/30/2023	001A	Flow, in conduit or thru treatment plant	10.32	20.76
2 YEAR AVERAGE				8.78	18.33
5 YEAR AVERAGE				9.49	21.59

EPA ID	Monitoring Period	Outfall	Parameter	Reported Measure		Reported Measure	
				DAILY AV (mg/L)	DAILY MX (mg/L)	DAILY AV (lb/d)	DAILY AV (lb/d)
TX0063011	11/30/2018	001A	Nitrogen, ammonia total [as N]	<1	2	<10	<10
TX0063011	12/31/2018	001A	Nitrogen, ammonia total [as N]	<1	2	<25	<25
TX0063011	1/31/2019	001A	Nitrogen, ammonia total [as N]	<1	1	52	52
TX0063011	2/28/2019	001A	Nitrogen, ammonia total [as N]	1	4	84	84
TX0063011	3/31/2019	001A	Nitrogen, ammonia total [as N]	<1	2	34	34
TX0063011	4/30/2019	001A	Nitrogen, ammonia total [as N]	1	2	81	81
TX0063011	5/31/2019	001A	Nitrogen, ammonia total [as N]	1	2	85	85
TX0063011	6/30/2019	001A	Nitrogen, ammonia total [as N]	2	4	162	162
TX0063011	7/31/2019	001A	Nitrogen, ammonia total [as N]	<1	3	<61	<61



TX0063011	8/31/2019	001A	Nitrogen, ammonia total [as N]	<1	2	<19
TX0063011	9/30/2019	001A	Nitrogen, ammonia total [as N]	<1	3	<18
TX0063011	10/31/2019	001A	Nitrogen, ammonia total [as N]	<1	5	<23
TX0063011	11/30/2019	001A	Nitrogen, ammonia total [as N]	<1	1	<9
TX0063011	12/31/2019	001A	Nitrogen, ammonia total [as N]	<1	1	<4
TX0063011	1/31/2020	001A	Nitrogen, ammonia total [as N]	3	5	180
TX0063011	2/29/2020	001A	Nitrogen, ammonia total [as N]	2	4	120
TX0063011	3/31/2020	001A	Nitrogen, ammonia total [as N]	1	3	41
TX0063011	4/30/2020	001A	Nitrogen, ammonia total [as N]	1	4	90
TX0063011	5/31/2020	001A	Nitrogen, ammonia total [as N]	1	6	103
TX0063011	6/30/2020	001A	Nitrogen, ammonia total [as N]	<1	2	<18
TX0063011	7/31/2020	001A	Nitrogen, ammonia total [as N]	<1	1	<11
TX0063011	8/31/2020	001A	Nitrogen, ammonia total [as N]	<1	8	<30
TX0063011	9/30/2020	001A	Nitrogen, ammonia total [as N]	<1	1	<42
TX0063011	10/31/2020	001A	Nitrogen, ammonia total [as N]	<1	<1	<4
TX0063011	11/30/2020	001A	Nitrogen, ammonia total [as N]	<1	2	28
TX0063011	12/31/2020	001A	Nitrogen, ammonia total [as N]	<1	5	<93
TX0063011	1/31/2021	001A	Nitrogen, ammonia total [as N]	<1	1	<14
TX0063011	2/28/2021	001A	Nitrogen, ammonia total [as N]	<1	12	<42
TX0063011	3/31/2021	001A	Nitrogen, ammonia total [as N]	<1	2	<18
TX0063011	4/30/2021	001A	Nitrogen, ammonia total [as N]	<1	3	<34
TX0063011	5/31/2021	001A	Nitrogen, ammonia total [as N]	<1	1	<33
TX0063011	6/30/2021	001A	Nitrogen, ammonia total [as N]	<1	1	<25
TX0063011	7/31/2021	001A	Nitrogen, ammonia total [as N]	<1	1	<23
TX0063011	8/31/2021	001A	Nitrogen, ammonia total [as N]	<1	1	<15
TX0063011	9/30/2021	001A	Nitrogen, ammonia total [as N]	<1	2	<28
TX0063011	10/31/2021	001A	Nitrogen, ammonia total [as N]	<1	6	<92
TX0063011	11/30/2021	001A	Nitrogen, ammonia total [as N]	<1	2	<12
TX0063011	12/31/2021	001A	Nitrogen, ammonia total [as N]	<1	2	<23
TX0063011	1/31/2022	001A	Nitrogen, ammonia total [as N]	<1	7	<35
TX0063011	2/28/2022	001A	Nitrogen, ammonia total [as N]	<1	2	33
TX0063011	3/31/2022	001A	Nitrogen, ammonia total [as N]	<1	2	39
TX0063011	4/30/2022	001A	Nitrogen, ammonia total [as N]	<1	4	<40
TX0063011	5/31/2022	001A	Nitrogen, ammonia total [as N]	<1	4	27
TX0063011	6/30/2022	001A	Nitrogen, ammonia total [as N]	<1	<1	<4
TX0063011	7/31/2022	001A	Nitrogen, ammonia total [as N]	<1	2	<19
TX0063011	8/31/2022	001A	Nitrogen, ammonia total [as N]	<1	4	<34

TX0063011	9/30/2022	001A	Nitrogen, ammonia total [as N]	<1	2	<15
TX0063011	10/31/2022	001A	Nitrogen, ammonia total [as N]	<1	1	<13
TX0063011	11/30/2022	001A	Nitrogen, ammonia total [as N]	<1	3	<31
TX0063011	12/31/2022	001A	Nitrogen, ammonia total [as N]	<1	3	<30
TX0063011	1/31/2023	001A	Nitrogen, ammonia total [as N]	<1	1	<12
TX0063011	2/28/2023	001A	Nitrogen, ammonia total [as N]	<1	<1	<5
TX0063011	3/31/2023	001A	Nitrogen, ammonia total [as N]	1	3	34
TX0063011	4/30/2023	001A	Nitrogen, ammonia total [as N]	1	4	83
TX0063011	5/31/2023	001A	Nitrogen, ammonia total [as N]	<1	2	<25
TX0063011	6/30/2023	001A	Nitrogen, ammonia total [as N]	<1	1	<29
TX0063011	7/31/2023	001A	Nitrogen, ammonia total [as N]	1	3	85
TX0063011	8/31/2023	001A	Nitrogen, ammonia total [as N]	3	9	172
TX0063011	9/30/2023	001A	Nitrogen, ammonia total [as N]	3	7	203
TX0063011	10/31/2023	001A	Nitrogen, ammonia total [as N]	<1	3	38
TX0063011	11/30/2023	001A	Nitrogen, ammonia total [as N]	<1	2	<19
2 YEAR AVERAGE				1.16	3.00	42.40
5 YEAR AVERAGE				1.13	2.97	46.08

EPA ID	Monitoring Period	Outfall	Parameter	Reported Measure	
				MO MIN (mg/L)	
TX0063011	11/30/2018	001A	Oxygen, dissolved [DO]	6.7	
TX0063011	12/31/2018	001A	Oxygen, dissolved [DO]	5.9	
TX0063011	1/31/2019	001A	Oxygen, dissolved [DO]	7	
TX0063011	2/28/2019	001A	Oxygen, dissolved [DO]	7.2	
TX0063011	3/31/2019	001A	Oxygen, dissolved [DO]	6.4	
TX0063011	4/30/2019	001A	Oxygen, dissolved [DO]	6	
TX0063011	5/31/2019	001A	Oxygen, dissolved [DO]	5.8	
TX0063011	6/30/2019	001A	Oxygen, dissolved [DO]	4.6	
TX0063011	7/31/2019	001A	Oxygen, dissolved [DO]	5	
TX0063011	8/31/2019	001A	Oxygen, dissolved [DO]	5.2	
TX0063011	9/30/2019	001A	Oxygen, dissolved [DO]	5	
TX0063011	10/31/2019	001A	Oxygen, dissolved [DO]	5.8	
TX0063011	11/30/2019	001A	Oxygen, dissolved [DO]	7.1	
TX0063011	12/31/2019	001A	Oxygen, dissolved [DO]	6.9	
TX0063011	1/31/2020	001A	Oxygen, dissolved [DO]	6.9	
TX0063011	2/29/2020	001A	Oxygen, dissolved [DO]	5.1	

TX0063011	3/31/2020	001A	Oxygen, dissolved [DO]	6.2
TX0063011	4/30/2020	001A	Oxygen, dissolved [DO]	6.7
TX0063011	5/31/2020	001A	Oxygen, dissolved [DO]	6.4
TX0063011	6/30/2020	001A	Oxygen, dissolved [DO]	6
TX0063011	7/31/2020	001A	Oxygen, dissolved [DO]	5.6
TX0063011	8/31/2020	001A	Oxygen, dissolved [DO]	6.1
TX0063011	9/30/2020	001A	Oxygen, dissolved [DO]	5.6
TX0063011	10/31/2020	001A	Oxygen, dissolved [DO]	5.9
TX0063011	11/30/2020	001A	Oxygen, dissolved [DO]	5.6
TX0063011	12/31/2020	001A	Oxygen, dissolved [DO]	6
TX0063011	1/31/2021	001A	Oxygen, dissolved [DO]	6.5
TX0063011	2/28/2021	001A	Oxygen, dissolved [DO]	6.9
TX0063011	3/31/2021	001A	Oxygen, dissolved [DO]	7
TX0063011	4/30/2021	001A	Oxygen, dissolved [DO]	7
TX0063011	5/31/2021	001A	Oxygen, dissolved [DO]	6.3
TX0063011	6/30/2021	001A	Oxygen, dissolved [DO]	6.2
TX0063011	7/31/2021	001A	Oxygen, dissolved [DO]	6.1
TX0063011	8/31/2021	001A	Oxygen, dissolved [DO]	5.7
TX0063011	9/30/2021	001A	Oxygen, dissolved [DO]	5.4
TX0063011	10/31/2021	001A	Oxygen, dissolved [DO]	6
TX0063011	11/30/2021	001A	Oxygen, dissolved [DO]	6.4
TX0063011	12/31/2021	001A	Oxygen, dissolved [DO]	6.1
TX0063011	1/31/2022	001A	Oxygen, dissolved [DO]	6.2
TX0063011	2/28/2022	001A	Oxygen, dissolved [DO]	7.1
TX0063011	3/31/2022	001A	Oxygen, dissolved [DO]	6.8
TX0063011	4/30/2022	001A	Oxygen, dissolved [DO]	6.3
TX0063011	5/31/2022	001A	Oxygen, dissolved [DO]	6.3
TX0063011	6/30/2022	001A	Oxygen, dissolved [DO]	6.1
TX0063011	7/31/2022	001A	Oxygen, dissolved [DO]	5.9
TX0063011	8/31/2022	001A	Oxygen, dissolved [DO]	5.8
TX0063011	9/30/2022	001A	Oxygen, dissolved [DO]	5.5
TX0063011	10/31/2022	001A	Oxygen, dissolved [DO]	5.6
TX0063011	11/30/2022	001A	Oxygen, dissolved [DO]	6.1
TX0063011	12/31/2022	001A	Oxygen, dissolved [DO]	5.8
TX0063011	1/31/2023	001A	Oxygen, dissolved [DO]	6
TX0063011	2/28/2023	001A	Oxygen, dissolved [DO]	5.9
TX0063011	3/31/2023	001A	Oxygen, dissolved [DO]	5.9

TX0063011	4/30/2023	001A	Oxygen, dissolved [DO]	6.5
TX0063011	5/31/2023	001A	Oxygen, dissolved [DO]	6.3
TX0063011	6/30/2023	001A	Oxygen, dissolved [DO]	5.8
TX0063011	7/31/2023	001A	Oxygen, dissolved [DO]	5.6
TX0063011	8/31/2023	001A	Oxygen, dissolved [DO]	5.5
TX0063011	9/30/2023	001A	Oxygen, dissolved [DO]	5.3
TX0063011	10/31/2023	001A	Oxygen, dissolved [DO]	5.8
TX0063011	11/30/2023	001A	Oxygen, dissolved [DO]	5.8

2 YEAR AVERAGE 6.02

5 YEAR AVERAGE 6.07

EPA ID	Monitoring Period	Outfall	Parameter	Reported Measure	
				MINIMUM (SU)	MAXIMUM (SU)
TX0063011	11/30/2018	001A	pH	6.8	7.3
TX0063011	12/31/2018	001A	pH	6.6	7.5
TX0063011	1/31/2019	001A	pH	6.3	7.5
TX0063011	2/28/2019	001A	pH	6.8	7.4
TX0063011	3/31/2019	001A	pH	6.7	7.3
TX0063011	4/30/2019	001A	pH	6.8	7.4
TX0063011	5/31/2019	001A	pH	6.8	7.6
TX0063011	6/30/2019	001A	pH	6.7	7.4
TX0063011	7/31/2019	001A	pH	6.9	7.7
TX0063011	8/31/2019	001A	pH	6.9	7.4
TX0063011	9/30/2019	001A	pH	6.2	7.5
TX0063011	10/31/2019	001A	pH	7	7.8
TX0063011	11/30/2019	001A	pH	6.9	7.8
TX0063011	12/31/2019	001A	pH	6.8	7.4
TX0063011	1/31/2020	001A	pH	6.7	7.4
TX0063011	2/29/2020	001A	pH	7	7.6
TX0063011	3/31/2020	001A	pH	6.9	7.5
TX0063011	4/30/2020	001A	pH	6.6	7.6
TX0063011	5/31/2020	001A	pH	6.7	7.7
TX0063011	6/30/2020	001A	pH	6.8	7.9
TX0063011	7/31/2020	001A	pH	6.7	7.4
TX0063011	8/31/2020	001A	pH	6.7	7.4
TX0063011	9/30/2020	001A	pH	6	8.2

TX0063011	10/31/2020	001A	pH	6.4	7.5
TX0063011	11/30/2020	001A	pH	6.7	7.7
TX0063011	12/31/2020	001A	pH	6.2	8.3
TX0063011	1/31/2021	001A	pH	6.8	7.9
TX0063011	2/28/2021	001A	pH	6.3	7.5
TX0063011	3/31/2021	001A	pH	6.7	7.4
TX0063011	4/30/2021	001A	pH	6.9	7.5
TX0063011	5/31/2021	001A	pH	6.4	7.8
TX0063011	6/30/2021	001A	pH	7	7.7
TX0063011	7/31/2021	001A	pH	6.9	7.7
TX0063011	8/31/2021	001A	pH	7	7.8
TX0063011	9/30/2021	001A	pH	6.9	7.6
TX0063011	10/31/2021	001A	pH	6.9	7.6
TX0063011	11/30/2021	001A	pH	6.4	7.7
TX0063011	12/31/2021	001A	pH	6.9	7.6
TX0063011	1/31/2022	001A	pH	6.9	7.7
TX0063011	2/28/2022	001A	pH	7	7.9
TX0063011	3/31/2022	001A	pH	6.5	7.7
TX0063011	4/30/2022	001A	pH	6.4	7.6
TX0063011	5/31/2022	001A	pH	6.7	7.7
TX0063011	6/30/2022	001A	pH	6.9	7.9
TX0063011	7/31/2022	001A	pH	6.5	7.5
TX0063011	8/31/2022	001A	pH	6.7	7.5
TX0063011	9/30/2022	001A	pH	6.8	7.5
TX0063011	10/31/2022	001A	pH	6.9	7.6
TX0063011	11/30/2022	001A	pH	6.9	7.6
TX0063011	12/31/2022	001A	pH	6.9	7.5
TX0063011	1/31/2023	001A	pH	6.8	7.5
TX0063011	2/28/2023	001A	pH	7	7.5
TX0063011	3/31/2023	001A	pH	7.1	7.6
TX0063011	4/30/2023	001A	pH	6.9	7.6
TX0063011	5/31/2023	001A	pH	7	7.6
TX0063011	6/30/2023	001A	pH	6.9	7.8
TX0063011	7/31/2023	001A	pH	6.8	7.4
TX0063011	8/31/2023	001A	pH	6.5	7.6
TX0063011	9/30/2023	001A	pH	6.6	7.6
TX0063011	10/31/2023	001A	pH	6.9	7.8

TX0063011	11/30/2023	001A	pH	6.9	7.5
			2 YEAR AVERAGE	6.79	7.62
			5 YEAR AVERAGE	6.74	7.61

EPA ID	Monitoring Period	Outfall	Parameter	Reported Measure		Reported Measure	
				DAILY AV (mg/L)	DAILY MX (mg/L)	DAILY AV (lb/d)	DAILY MX (lb/d)
TX0063011	11/30/2018	001A	Solids, total suspended	<2	3	<123	<123
TX0063011	12/31/2018	001A	Solids, total suspended	<3	9	<205	<205
TX0063011	1/31/2019	001A	Solids, total suspended	<2	7	<269	<269
TX0063011	2/28/2019	001A	Solids, total suspended	<2	3	<174	<174
TX0063011	3/31/2019	001A	Solids, total suspended	<2	3	<145	<145
TX0063011	4/30/2019	001A	Solids, total suspended	<2	4	<177	<177
TX0063011	5/31/2019	001A	Solids, total suspended	<3	14	<368	<368
TX0063011	6/30/2019	001A	Solids, total suspended	<2	4	<180	<180
TX0063011	7/31/2019	001A	Solids, total suspended	<2	3	<138	<138
TX0063011	8/31/2019	001A	Solids, total suspended	<2	5	<139	<139
TX0063011	9/30/2019	001A	Solids, total suspended	<3	10	<370	<370
TX0063011	10/31/2019	001A	Solids, total suspended	<2	6	<163	<163
TX0063011	11/30/2019	001A	Solids, total suspended	<2	5	<167	<167
TX0063011	12/31/2019	001A	Solids, total suspended	<2	4	<115	<115
TX0063011	1/31/2020	001A	Solids, total suspended	9	41	637	637
TX0063011	2/29/2020	001A	Solids, total suspended	4	9	284	284
TX0063011	3/31/2020	001A	Solids, total suspended	3	10	198	198
TX0063011	4/30/2020	001A	Solids, total suspended	4	10	326	326
TX0063011	5/31/2020	001A	Solids, total suspended	4	10	297	297
TX0063011	6/30/2020	001A	Solids, total suspended	4	11	333	333
TX0063011	7/31/2020	001A	Solids, total suspended	<2	6	<171	<171
TX0063011	8/31/2020	001A	Solids, total suspended	<2	12	<174	<174
TX0063011	9/30/2020	001A	Solids, total suspended	<3	22	<577	<577
TX0063011	10/31/2020	001A	Solids, total suspended	3	5	177	177
TX0063011	11/30/2020	001A	Solids, total suspended	3	9	285	285
TX0063011	12/31/2020	001A	Solids, total suspended	3	7	362	362
TX0063011	1/31/2021	001A	Solids, total suspended	4	16	509	509
TX0063011	2/28/2021	001A	Solids, total suspended	4	18	342	342
TX0063011	3/31/2021	001A	Solids, total suspended	3	6	253	253
TX0063011	4/30/2021	001A	Solids, total suspended	3	5	261	261

TX0063011	5/31/2021	001A	Solids, total suspended	4	17	657
TX0063011	6/30/2021	001A	Solids, total suspended	<2	4	<276
TX0063011	7/31/2021	001A	Solids, total suspended	<2	4	<311
TX0063011	8/31/2021	001A	Solids, total suspended	<2	2	<184
TX0063011	9/30/2021	001A	Solids, total suspended	<2	4	<208
TX0063011	10/31/2021	001A	Solids, total suspended	<2	3	<177
TX0063011	11/30/2021	001A	Solids, total suspended	<2	5	<171
TX0063011	12/31/2021	001A	Solids, total suspended	<2	4	<174
TX0063011	1/31/2022	001A	Solids, total suspended	3	8	261
TX0063011	2/28/2022	001A	Solids, total suspended	3	5	220
TX0063011	3/31/2022	001A	Solids, total suspended	3	9	212
TX0063011	4/30/2022	001A	Solids, total suspended	<2	4	<142
TX0063011	5/31/2022	001A	Solids, total suspended	<2	4	<167
TX0063011	6/30/2022	001A	Solids, total suspended	<2	<2	<129
TX0063011	7/31/2022	001A	Solids, total suspended	<2	3	<116
TX0063011	8/31/2022	001A	Solids, total suspended	<3	8	<174
TX0063011	9/30/2022	001A	Solids, total suspended	<2	3	<119
TX0063011	10/31/2022	001A	Solids, total suspended	<2	4	<138
TX0063011	11/30/2022	001A	Solids, total suspended	<2	5	<184
TX0063011	12/31/2022	001A	Solids, total suspended	<2	4	<156
TX0063011	1/31/2023	001A	Solids, total suspended	3	12	225
TX0063011	2/28/2023	001A	Solids, total suspended	2	5	162
TX0063011	3/31/2023	001A	Solids, total suspended	2	4	134
TX0063011	4/30/2023	001A	Solids, total suspended	<3	16	<304
TX0063011	5/31/2023	001A	Solids, total suspended	<2	10	<304
TX0063011	6/30/2023	001A	Solids, total suspended	<2	2	<200
TX0063011	7/31/2023	001A	Solids, total suspended	<2	4	<167
TX0063011	8/31/2023	001A	Solids, total suspended	<2	4	<149
TX0063011	9/30/2023	001A	Solids, total suspended	3	4	154
TX0063011	10/31/2023	001A	Solids, total suspended	4	6	239
TX0063011	11/30/2023	001A	Solids, total suspended	<2	4	<196
2 YEAR AVERAGE				2.36	5.56	183.88
5 YEAR AVERAGE				2.66	7.38	234.90

EPA ID	Monitoring Period	Outfall	Parameter	Reported Measure	
				INST MAX (mg/L)	



TX0063011	11/30/2018	001A	Chlorine, total residual	0.04
TX0063011	12/31/2018	001A	Chlorine, total residual	0.04
TX0063011	1/31/2019	001A	Chlorine, total residual	0.08
TX0063011	2/28/2019	001A	Chlorine, total residual	0.03
TX0063011	3/31/2019	001A	Chlorine, total residual	0.03
TX0063011	4/30/2019	001A	Chlorine, total residual	0.05
TX0063011	5/31/2019	001A	Chlorine, total residual	0.05
TX0063011	6/30/2019	001A	Chlorine, total residual	0.03
TX0063011	7/31/2019	001A	Chlorine, total residual	0.04
TX0063011	8/31/2019	001A	Chlorine, total residual	0.03
TX0063011	9/30/2019	001A	Chlorine, total residual	0.04
TX0063011	10/31/2019	001A	Chlorine, total residual	0.03
TX0063011	11/30/2019	001A	Chlorine, total residual	0.03
TX0063011	12/31/2019	001A	Chlorine, total residual	0.04
TX0063011	1/31/2020	001A	Chlorine, total residual	0.03
TX0063011	2/29/2020	001A	Chlorine, total residual	0.04
TX0063011	3/31/2020	001A	Chlorine, total residual	0.04
TX0063011	4/30/2020	001A	Chlorine, total residual	0.07
TX0063011	5/31/2020	001A	Chlorine, total residual	0.03
TX0063011	6/30/2020	001A	Chlorine, total residual	0.04
TX0063011	7/31/2020	001A	Chlorine, total residual	0.03
TX0063011	8/31/2020	001A	Chlorine, total residual	0.05
TX0063011	9/30/2020	001A	Chlorine, total residual	0.05
TX0063011	10/31/2020	001A	Chlorine, total residual	0.04
TX0063011	11/30/2020	001A	Chlorine, total residual	0.07
TX0063011	12/31/2020	001A	Chlorine, total residual	0.06
TX0063011	1/31/2021	001A	Chlorine, total residual	0.03
TX0063011	2/28/2021	001A	Chlorine, total residual	0.05
TX0063011	3/31/2021	001A	Chlorine, total residual	0.03
TX0063011	4/30/2021	001A	Chlorine, total residual	0.03
TX0063011	5/31/2021	001A	Chlorine, total residual	0.04
TX0063011	6/30/2021	001A	Chlorine, total residual	0.05
TX0063011	7/31/2021	001A	Chlorine, total residual	0.08
TX0063011	8/31/2021	001A	Chlorine, total residual	0.04
TX0063011	9/30/2021	001A	Chlorine, total residual	0.04
TX0063011	10/31/2021	001A	Chlorine, total residual	0.03
TX0063011	11/30/2021	001A	Chlorine, total residual	0.04



TX0063011	12/31/2021	001A	Chlorine, total residual	0.07
TX0063011	1/31/2022	001A	Chlorine, total residual	0.04
TX0063011	2/28/2022	001A	Chlorine, total residual	0.03
TX0063011	3/31/2022	001A	Chlorine, total residual	0.04
TX0063011	4/30/2022	001A	Chlorine, total residual	0.03
TX0063011	5/31/2022	001A	Chlorine, total residual	0.04
TX0063011	6/30/2022	001A	Chlorine, total residual	0.04
TX0063011	7/31/2022	001A	Chlorine, total residual	0.04
TX0063011	8/31/2022	001A	Chlorine, total residual	0.04
TX0063011	9/30/2022	001A	Chlorine, total residual	0.04
TX0063011	10/31/2022	001A	Chlorine, total residual	0.04
TX0063011	11/30/2022	001A	Chlorine, total residual	0.04
TX0063011	12/31/2022	001A	Chlorine, total residual	0.05
TX0063011	1/31/2023	001A	Chlorine, total residual	0.04
TX0063011	2/28/2023	001A	Chlorine, total residual	0.05
TX0063011	3/31/2023	001A	Chlorine, total residual	0.04
TX0063011	4/30/2023	001A	Chlorine, total residual	0.05
TX0063011	5/31/2023	001A	Chlorine, total residual	0.04
TX0063011	6/30/2023	001A	Chlorine, total residual	0.07
TX0063011	7/31/2023	001A	Chlorine, total residual	0.05
TX0063011	8/31/2023	001A	Chlorine, total residual	0.05
TX0063011	9/30/2023	001A	Chlorine, total residual	0.06
TX0063011	10/31/2023	001A	Chlorine, total residual	0.05
TX0063011	11/30/2023	001A	Chlorine, total residual	0.06
2 YEAR AVERAGE				0.05
5 YEAR AVERAGE				0.04

EPA ID	Monitoring Period	Outfall	Parameter	Reported Measure	
				MO MIN (mg/L)	
TX0063011	11/30/2018	001A	Chlorine, total residual	1	
TX0063011	12/31/2018	001A	Chlorine, total residual	1	
TX0063011	1/31/2019	001A	Chlorine, total residual	1.3	
TX0063011	2/28/2019	001A	Chlorine, total residual	1	
TX0063011	3/31/2019	001A	Chlorine, total residual	1.1	
TX0063011	4/30/2019	001A	Chlorine, total residual	1	
TX0063011	5/31/2019	001A	Chlorine, total residual	1.1	

TX0063011	6/30/2019	001A	Chlorine, total residual	1
TX0063011	7/31/2019	001A	Chlorine, total residual	1.2
TX0063011	8/31/2019	001A	Chlorine, total residual	1.1
TX0063011	9/30/2019	001A	Chlorine, total residual	1
TX0063011	10/31/2019	001A	Chlorine, total residual	1
TX0063011	11/30/2019	001A	Chlorine, total residual	1.1
TX0063011	12/31/2019	001A	Chlorine, total residual	1.7
TX0063011	1/31/2020	001A	Chlorine, total residual	1
TX0063011	2/29/2020	001A	Chlorine, total residual	1.2
TX0063011	3/31/2020	001A	Chlorine, total residual	1
TX0063011	4/30/2020	001A	Chlorine, total residual	1
TX0063011	5/31/2020	001A	Chlorine, total residual	1.2
TX0063011	6/30/2020	001A	Chlorine, total residual	1.1
TX0063011	7/31/2020	001A	Chlorine, total residual	1
TX0063011	8/31/2020	001A	Chlorine, total residual	1
TX0063011	9/30/2020	001A	Chlorine, total residual	1
TX0063011	10/31/2020	001A	Chlorine, total residual	1
TX0063011	11/30/2020	001A	Chlorine, total residual	1
TX0063011	12/31/2020	001A	Chlorine, total residual	1
TX0063011	1/31/2021	001A	Chlorine, total residual	1
TX0063011	2/28/2021	001A	Chlorine, total residual	1.1
TX0063011	3/31/2021	001A	Chlorine, total residual	1
TX0063011	4/30/2021	001A	Chlorine, total residual	1.2
TX0063011	5/31/2021	001A	Chlorine, total residual	1.1
TX0063011	6/30/2021	001A	Chlorine, total residual	1.2
TX0063011	7/31/2021	001A	Chlorine, total residual	1
TX0063011	8/31/2021	001A	Chlorine, total residual	1.2
TX0063011	9/30/2021	001A	Chlorine, total residual	1
TX0063011	10/31/2021	001A	Chlorine, total residual	1.3
TX0063011	11/30/2021	001A	Chlorine, total residual	1.3
TX0063011	12/31/2021	001A	Chlorine, total residual	1
TX0063011	1/31/2022	001A	Chlorine, total residual	1.1
TX0063011	2/28/2022	001A	Chlorine, total residual	1.2
TX0063011	3/31/2022	001A	Chlorine, total residual	1.2
TX0063011	4/30/2022	001A	Chlorine, total residual	1.7
TX0063011	5/31/2022	001A	Chlorine, total residual	1.2
TX0063011	6/30/2022	001A	Chlorine, total residual	1

TX0063011	7/31/2022	001A	Chlorine, total residual	1.3
TX0063011	8/31/2022	001A	Chlorine, total residual	1.2
TX0063011	9/30/2022	001A	Chlorine, total residual	1.1
TX0063011	10/31/2022	001A	Chlorine, total residual	1.6
TX0063011	11/30/2022	001A	Chlorine, total residual	1.6
TX0063011	12/31/2022	001A	Chlorine, total residual	1.7
TX0063011	1/31/2023	001A	Chlorine, total residual	1.1
TX0063011	2/28/2023	001A	Chlorine, total residual	1.5
TX0063011	3/31/2023	001A	Chlorine, total residual	1.2
TX0063011	4/30/2023	001A	Chlorine, total residual	1.7
TX0063011	5/31/2023	001A	Chlorine, total residual	1.6
TX0063011	6/30/2023	001A	Chlorine, total residual	1.3
TX0063011	7/31/2023	001A	Chlorine, total residual	1.6
TX0063011	8/31/2023	001A	Chlorine, total residual	2.1
TX0063011	9/30/2023	001A	Chlorine, total residual	2.4
TX0063011	10/31/2023	001A	Chlorine, total residual	1.3
TX0063011	11/30/2023	001A	Chlorine, total residual	1.8

2 YEAR AVERAGE 1.43

5 YEAR AVERAGE 1.23

EPA ID	Monitoring Period	Outfall	Parameter	Reported Measure
TX0063011	11/30/2018	001A	Flow, in conduit or thru treatment plant	2HR PEAK (gal/min)
TX0063011	12/31/2018	001A	Flow, in conduit or thru treatment plant	14583
TX0063011	1/31/2019	001A	Flow, in conduit or thru treatment plant	33333
TX0063011	2/28/2019	001A	Flow, in conduit or thru treatment plant	33500
TX0063011	3/31/2019	001A	Flow, in conduit or thru treatment plant	22083
TX0063011	4/30/2019	001A	Flow, in conduit or thru treatment plant	8917
TX0063011	5/31/2019	001A	Flow, in conduit or thru treatment plant	36583
TX0063011	6/30/2019	001A	Flow, in conduit or thru treatment plant	45000
TX0063011	7/31/2019	001A	Flow, in conduit or thru treatment plant	33500
TX0063011	8/31/2019	001A	Flow, in conduit or thru treatment plant	22333
TX0063011	9/30/2019	001A	Flow, in conduit or thru treatment plant	34333
TX0063011	10/31/2019	001A	Flow, in conduit or thru treatment plant	57083
TX0063011	11/30/2019	001A	Flow, in conduit or thru treatment plant	33833
TX0063011	12/31/2019	001A	Flow, in conduit or thru treatment plant	35333
TX0063011		001A	Flow, in conduit or thru treatment plant	10000

TX0063011	1/31/2020	001A	Flow, in conduit or thru treatment plant	29167
TX0063011	2/29/2020	001A	Flow, in conduit or thru treatment plant	15917
TX0063011	3/31/2020	001A	Flow, in conduit or thru treatment plant	11333
TX0063011	4/30/2020	001A	Flow, in conduit or thru treatment plant	22667
TX0063011	5/31/2020	001A	Flow, in conduit or thru treatment plant	20583
TX0063011	6/30/2020	001A	Flow, in conduit or thru treatment plant	28333
TX0063011	7/31/2020	001A	Flow, in conduit or thru treatment plant	28722
TX0063011	8/31/2020	001A	Flow, in conduit or thru treatment plant	18083
TX0063011	9/30/2020	001A	Flow, in conduit or thru treatment plant	48917
TX0063011	10/31/2020	001A	Flow, in conduit or thru treatment plant	17250
TX0063011	11/30/2020	001A	Flow, in conduit or thru treatment plant	30250
TX0063011	12/31/2020	001A	Flow, in conduit or thru treatment plant	34500
TX0063011	1/31/2021	001A	Flow, in conduit or thru treatment plant	38000
TX0063011	2/28/2021	001A	Flow, in conduit or thru treatment plant	11417
TX0063011	3/31/2021	001A	Flow, in conduit or thru treatment plant	18667
TX0063011	4/30/2021	001A	Flow, in conduit or thru treatment plant	32750
TX0063011	5/31/2021	001A	Flow, in conduit or thru treatment plant	41417
TX0063011	6/30/2021	001A	Flow, in conduit or thru treatment plant	39583
TX0063011	7/31/2021	001A	Flow, in conduit or thru treatment plant	36000
TX0063011	8/31/2021	001A	Flow, in conduit or thru treatment plant	22000
TX0063011	9/30/2021	001A	Flow, in conduit or thru treatment plant	28583
TX0063011	10/31/2021	001A	Flow, in conduit or thru treatment plant	48500
TX0063011	11/30/2021	001A	Flow, in conduit or thru treatment plant	25833
TX0063011	12/31/2021	001A	Flow, in conduit or thru treatment plant	24583
TX0063011	1/31/2022	001A	Flow, in conduit or thru treatment plant	26389
TX0063011	2/28/2022	001A	Flow, in conduit or thru treatment plant	14583
TX0063011	3/31/2022	001A	Flow, in conduit or thru treatment plant	25000
TX0063011	4/30/2022	001A	Flow, in conduit or thru treatment plant	25333
TX0063011	5/31/2022	001A	Flow, in conduit or thru treatment plant	23083
TX0063011	6/30/2022	001A	Flow, in conduit or thru treatment plant	14833
TX0063011	7/31/2022	001A	Flow, in conduit or thru treatment plant	7250
TX0063011	8/31/2022	001A	Flow, in conduit or thru treatment plant	15278
TX0063011	9/30/2022	001A	Flow, in conduit or thru treatment plant	20750
TX0063011	10/31/2022	001A	Flow, in conduit or thru treatment plant	18833
TX0063011	11/30/2022	001A	Flow, in conduit or thru treatment plant	28917
TX0063011	12/31/2022	001A	Flow, in conduit or thru treatment plant	22750
TX0063011	1/31/2023	001A	Flow, in conduit or thru treatment plant	28083

TX0063011	2/28/2023	001A	Flow, in conduit or thru treatment plant	17583
TX0063011	3/31/2023	001A	Flow, in conduit or thru treatment plant	14333
TX0063011	4/30/2023	001A	Flow, in conduit or thru treatment plant	45667
TX0063011	5/31/2023	001A	Flow, in conduit or thru treatment plant	36000
TX0063011	6/30/2023	001A	Flow, in conduit or thru treatment plant	27083
TX0063011	7/31/2023	001A	Flow, in conduit or thru treatment plant	39833
TX0063011	8/31/2023	001A	Flow, in conduit or thru treatment plant	11417
TX0063011	9/30/2023	001A	Flow, in conduit or thru treatment plant	33500
TX0063011	10/31/2023	001A	Flow, in conduit or thru treatment plant	21667
TX0063011	11/30/2023	001A	Flow, in conduit or thru treatment plant	25917
2 YEAR AVERAGE				23780
5 YEAR AVERAGE				26845

EPA ID	Monitoring Period	Outfall	Parameter	Reported Measure	ANNL AVG (MGD)	ANNL AVG LIMIT = 18.0 MGD	PERCENT OF FLOW LIMIT
TX0063011	11/30/2018	001A	Flow, in conduit or thru treatment plant	8.72			48.44%
TX0063011	12/31/2018	001A	Flow, in conduit or thru treatment plant	8.9			49.44%
TX0063011	1/31/2019	001A	Flow, in conduit or thru treatment plant	9.2			51.11%
TX0063011	2/28/2019	001A	Flow, in conduit or thru treatment plant	9.03			50.17%
TX0063011	3/31/2019	001A	Flow, in conduit or thru treatment plant	8.85			49.17%
TX0063011	4/30/2019	001A	Flow, in conduit or thru treatment plant	8.85			49.17%
TX0063011	5/31/2019	001A	Flow, in conduit or thru treatment plant	8.95			49.72%
TX0063011	6/30/2019	001A	Flow, in conduit or thru treatment plant	8.98			49.89%
TX0063011	7/31/2019	001A	Flow, in conduit or thru treatment plant	8.95			49.72%
TX0063011	8/31/2019	001A	Flow, in conduit or thru treatment plant	8.96			49.78%
TX0063011	9/30/2019	001A	Flow, in conduit or thru treatment plant	9.21			51.17%
TX0063011	10/31/2019	001A	Flow, in conduit or thru treatment plant	9.24			51.33%
TX0063011	11/30/2019	001A	Flow, in conduit or thru treatment plant	9.35			51.94%
TX0063011	12/31/2019	001A	Flow, in conduit or thru treatment plant	9.07			50.39%
TX0063011	1/31/2020	001A	Flow, in conduit or thru treatment plant	8.7			48.33%
TX0063011	2/29/2020	001A	Flow, in conduit or thru treatment plant	8.49			47.17%
TX0063011	3/31/2020	001A	Flow, in conduit or thru treatment plant	8.37			46.50%
TX0063011	4/30/2020	001A	Flow, in conduit or thru treatment plant	8.41			46.72%
TX0063011	5/31/2020	001A	Flow, in conduit or thru treatment plant	8.27			45.94%
TX0063011	6/30/2020	001A	Flow, in conduit or thru treatment plant	8.34			46.33%
TX0063011	7/31/2020	001A	Flow, in conduit or thru treatment plant	8.42			46.78%

TX0063011	8/31/2020	001A	Flow, in conduit or thru treatment plant	8.53	47.39%
TX0063011	9/30/2020	001A	Flow, in conduit or thru treatment plant	8.59	47.72%
TX0063011	10/31/2020	001A	Flow, in conduit or thru treatment plant	8.59	47.72%
TX0063011	11/30/2020	001A	Flow, in conduit or thru treatment plant	8.64	48.00%
TX0063011	12/31/2020	001A	Flow, in conduit or thru treatment plant	9.085	50.47%
TX0063011	1/31/2021	001A	Flow, in conduit or thru treatment plant	9.521	52.89%
TX0063011	2/28/2021	001A	Flow, in conduit or thru treatment plant	9.748	54.16%
TX0063011	3/31/2021	001A	Flow, in conduit or thru treatment plant	10.05	55.83%
TX0063011	4/30/2021	001A	Flow, in conduit or thru treatment plant	10.125	56.25%
TX0063011	5/31/2021	001A	Flow, in conduit or thru treatment plant	10.804	60.02%
TX0063011	6/30/2021	001A	Flow, in conduit or thru treatment plant	11.178	62.10%
TX0063011	7/31/2021	001A	Flow, in conduit or thru treatment plant	11.82	65.67%
TX0063011	8/31/2021	001A	Flow, in conduit or thru treatment plant	11.987	66.59%
TX0063011	9/30/2021	001A	Flow, in conduit or thru treatment plant	11.967	66.48%
TX0063011	10/31/2021	001A	Flow, in conduit or thru treatment plant	12.136	67.42%
TX0063011	11/30/2021	001A	Flow, in conduit or thru treatment plant	12.182	67.68%
TX0063011	12/31/2021	001A	Flow, in conduit or thru treatment plant	11.982	66.57%
TX0063011	1/31/2022	001A	Flow, in conduit or thru treatment plant	11.782	65.46%
TX0063011	2/28/2022	001A	Flow, in conduit or thru treatment plant	11.717	65.09%
TX0063011	3/31/2022	001A	Flow, in conduit or thru treatment plant	11.552	64.18%
TX0063011	4/30/2022	001A	Flow, in conduit or thru treatment plant	11.313	62.85%
TX0063011	5/31/2022	001A	Flow, in conduit or thru treatment plant	10.644	59.13%
TX0063011	6/30/2022	001A	Flow, in conduit or thru treatment plant	10.051	55.84%
TX0063011	7/31/2022	001A	Flow, in conduit or thru treatment plant	9.213	51.18%
TX0063011	8/31/2022	001A	Flow, in conduit or thru treatment plant	8.99	49.94%
TX0063011	9/30/2022	001A	Flow, in conduit or thru treatment plant	8.588	47.71%
TX0063011	10/31/2022	001A	Flow, in conduit or thru treatment plant	8.326	46.26%
TX0063011	11/30/2022	001A	Flow, in conduit or thru treatment plant	8.282	46.01%
TX0063011	12/31/2022	001A	Flow, in conduit or thru treatment plant	8.26	45.89%
TX0063011	1/31/2023	001A	Flow, in conduit or thru treatment plant	8.058	44.77%
TX0063011	2/28/2023	001A	Flow, in conduit or thru treatment plant	7.913	43.96%
TX0063011	3/31/2023	001A	Flow, in conduit or thru treatment plant	7.762	43.12%
TX0063011	4/30/2023	001A	Flow, in conduit or thru treatment plant	8.046	44.70%
TX0063011	5/31/2023	001A	Flow, in conduit or thru treatment plant	8.468	47.04%
TX0063011	6/30/2023	001A	Flow, in conduit or thru treatment plant	8.815	48.97%
TX0063011	7/31/2023	001A	Flow, in conduit or thru treatment plant	9.008	50.04%
TX0063011	8/31/2023	001A	Flow, in conduit or thru treatment plant	8.985	49.92%

TX0063011	9/30/2023	001A	Flow, in conduit or thru treatment plant	9.038	50.21%
TX0063011	10/31/2023	001A	Flow, in conduit or thru treatment plant	9.102	50.57%
TX0063011	11/30/2023	001A	Flow, in conduit or thru treatment plant	9.23	51.28%
2 YEAR AVERAGE				9.49	75% Limit = 13.5
5 YEAR AVERAGE				9.43	90% Limit = 16.2

75/90 Rule  
NO  
NO

EPA ID	Monitoring Period	Outfall	Parameter	Reported Measure
TX0063011	7/31/2019	SLDF	Compliance w/part 258 sludge requirement	VALUE (N=0; Y=1)
TX0063011	7/31/2020	SLDF	Compliance w/part 258 sludge requirement	NODI=9
				NODI=9

EPA ID	Monitoring Period	Outfall	Parameter	Reported Measure
TX0063011	7/31/2019	SLDP	Annual amount of sludge land applied	ANNL TOT (DMT/y)
TX0063011	7/31/2020	SLDP	Annual amount of sludge land applied	0
				0

EPA ID	Monitoring Period	Outfall	Parameter	Reported Measure
TX0063011	7/31/2019	SLDP	Annual amt of sludge incinerated	ANNL TOT (DMT/y)
TX0063011	7/31/2020	SLDP	Annual amt of sludge incinerated	0
				0

EPA ID	Monitoring Period	Outfall	Parameter	Reported Measure
TX0063011	7/31/2019	SLDP	Annual amt sludge disposed in landfill	ANNL TOT (DMT/y)
TX0063011	7/31/2020	SLDP	Annual amt sludge disposed in landfill	0
				0

EPA ID	Monitoring Period	Outfall	Parameter	Reported Measure
TX0063011	7/31/2019	SLDP	Annual amt. sludge disposed surface unit	ANNL TOT (DMT/y)
TX0063011	7/31/2020	SLDP	Annual amt. sludge disposed surface unit	0
				0



EPA ID	Monitoring Period	Outfall	Parameter	Reported Measure
TX0063011	7/31/2019	SLDP	Annual amt sludge transported interstate	ANNL TOT (DMT/y)
TX0063011	7/31/2020	SLDP	Annual amt sludge transported interstate	0

EPA ID	Monitoring Period	Outfall	Parameter	Reported Measure
TX0063011	7/31/2019	SLDP	Annual sludge production, total	ANNL TOT (DMT/y)
TX0063011	7/31/2020	SLDP	Annual sludge production, total	2092.51

EPA ID	Monitoring Period	Outfall	Parameter	Reported Measure
TX0063011	7/31/2019	SLDP	Polychlorinated biphenyls [PCBs]	ANNL MAX (mg/kg)
TX0063011	7/31/2020	SLDP	Polychlorinated biphenyls [PCBs]	NODI=9

EPA ID	Monitoring Period	Outfall	Parameter	Reported Measure
TX0063011	7/31/2019	SLDP	Toxicity characteristic leaching procedure	MO AV MN (pass=0,fail=1)
TX0063011	7/31/2020	SLDP	Toxicity characteristic leaching procedure	NODI=9

EPA ID	Monitoring Period	Outfall	Parameter	Reported Measure
TX0063011	7/31/2019	SLDP	Ann. amt sludge disposed by other method	ANNL TOT (DMT/y)
TX0063011	7/31/2020	SLDP	Ann. amt sludge disposed by other method	2092.51

EPA ID	Monitoring Period	Outfall	Parameter	Reported Measure
TX0063011	7/31/2019	SLLA	Annual whole sludge application rate	MX VALUE (met t/ha/yr)
TX0063011	7/31/2020	SLLA	Annual whole sludge application rate	NODI=9



EPA ID	Monitoring Period	Outfall	Parameter	Reported Measure	Reported Measure	Reported Measure
TX0063011	7/31/2019	SLLA	Arsenic, dry weight	SINGSAMP (mg/kg)	MAXIMUM (mg/kg)	MX VALUE (lb/acr)
TX0063011	7/31/2020	SLLA	Arsenic, dry weight	NODI=9	NODI=9	NODI=9
TX0063011	7/31/2020	SLLA	Arsenic, dry weight	NODI=9	NODI=9	NODI=9

EPA ID	Monitoring Period	Outfall	Parameter	Reported Measure	Reported Measure	Reported Measure
TX0063011	7/31/2019	SLLA	Cadmium, dry weight	SINGSAMP (mg/kg)	MAXIMUM (mg/kg)	MX VALUE (lb/acr)
TX0063011	7/31/2020	SLLA	Cadmium, dry weight	NODI=9	NODI=9	NODI=9
TX0063011	7/31/2020	SLLA	Cadmium, dry weight	NODI=9	NODI=9	NODI=9

EPA ID	Monitoring Period	Outfall	Parameter	Reported Measure	Reported Measure	Reported Measure
TX0063011	7/31/2019	SLLA	Chromium, sludge, total, dry weight [as Cr]	SINGSAMP (mg/kg)	MAXIMUM (mg/kg)	MX VALUE (lb/acr)
TX0063011	7/31/2020	SLLA	Chromium, sludge, total, dry weight [as Cr]	NODI=9	NODI=9	NODI=9
TX0063011	7/31/2020	SLLA	Chromium, sludge, total, dry weight [as Cr]	NODI=9	NODI=9	NODI=9

EPA ID	Monitoring Period	Outfall	Parameter	Reported Measure	Reported Measure	Reported Measure
TX0063011	7/31/2019	SLLA	Copper, dry weight	SINGSAMP (mg/kg)	MAXIMUM (mg/kg)	MX VALUE (lb/acr)
TX0063011	7/31/2020	SLLA	Copper, dry weight	NODI=9	NODI=9	NODI=9
TX0063011	7/31/2020	SLLA	Copper, dry weight	NODI=9	NODI=9	NODI=9

EPA ID	Monitoring Period	Outfall	Parameter	Reported Measure	Reported Measure	Reported Measure
TX0063011	7/31/2019	SLLA	Lead, sludge, total, dry weight [as Pb]	SINGSAMP (mg/kg)	MAXIMUM (mg/kg)	MX VALUE (lb/acr)
TX0063011	7/31/2020	SLLA	Lead, sludge, total, dry weight [as Pb]	NODI=9	NODI=9	NODI=9
TX0063011	7/31/2020	SLLA	Lead, sludge, total, dry weight [as Pb]	NODI=9	NODI=9	NODI=9

EPA ID	Monitoring Period	Outfall	Parameter	Reported Measure	Reported Measure	Reported Measure
TX0063011	7/31/2019	SLLA	Mercury, sludge, total, dry weight [as Hg]	SINGSAMP (mg/kg)	MAXIMUM (mg/kg)	MX VALUE (lb/acr)
TX0063011	7/31/2020	SLLA	Mercury, sludge, total, dry weight [as Hg]	NODI=9	NODI=9	NODI=9
TX0063011	7/31/2020	SLLA	Mercury, sludge, total, dry weight [as Hg]	NODI=9	NODI=9	NODI=9

EPA ID	Monitoring Period	Outfall	Parameter	Reported Measure	Reported Measure	Reported Measure
TX0063011	7/31/2019	SLLA	Molybdenum, sludge, total, dry weight [as Mo]	SINGSAMP (mg/kg)	MAXIMUM (mg/kg)	MX VALUE (lb/acr)
TX0063011	7/31/2020	SLLA	Molybdenum, sludge, total, dry weight [as Mo]	NODI=9	NODI=9	NODI=9
TX0063011	7/31/2020	SLLA	Molybdenum, sludge, total, dry weight [as Mo]	NODI=9	NODI=9	NODI=9

TX0063011	7/31/2020	SLLA	Molybdenum, sludge, total, dry weight [as Mo]	NODI=9	NODI=9	NODI=9
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EPA ID	Monitoring Period	Outfall	Parameter	Reported Measure	Reported Measure	Reported Measure
TX0063011	7/31/2019	SLLA	Nickel, sludge, total, dry weight [as Ni]	SINGSAMP (mg/kg)	MAXIMUM (mg/kg)	MX VALUE (lb/acr)
TX0063011	7/31/2020	SLLA	Nickel, sludge, total, dry weight [as Ni]	NODI=9	NODI=9	NODI=9
				NODI=9	NODI=9	NODI=9

EPA ID	Monitoring Period	Outfall	Parameter	Reported Measure	Reported Measure	Reported Measure
TX0063011	7/31/2019	SLLA	Selenium, dry weight	SINGSAMP (mg/kg)	MAXIMUM (mg/kg)	MX VALUE (lb/acr)
TX0063011	7/31/2020	SLLA	Selenium, dry weight	NODI=9	NODI=9	NODI=9
				NODI=9	NODI=9	NODI=9

EPA ID	Monitoring Period	Outfall	Parameter	Reported Measure	Reported Measure	Reported Measure
TX0063011	7/31/2019	SLLA	Zinc, sludge, total, dry weight [as Zn]	SINGSAMP (mg/kg)	MAXIMUM (mg/kg)	MX VALUE (lb/acr)
TX0063011	7/31/2020	SLLA	Zinc, sludge, total, dry weight [as Zn]	NODI=9	NODI=9	NODI=9
				NODI=9	NODI=9	NODI=9

EPA ID	Monitoring Period	Outfall	Parameter	Reported Measure
TX0063011	7/31/2019	SLLA	Pollutant table from 503.13	VALUE (table #)
TX0063011	7/31/2020	SLLA	Pollutant table from 503.13	NODI=9
				NODI=9

EPA ID	Monitoring Period	Outfall	Parameter	Reported Measure
TX0063011	7/31/2019	SLLA	Description of pathogen option used	VALUE (alt #)
TX0063011	7/31/2020	SLLA	Description of pathogen option used	NODI=9
				NODI=9

EPA ID	Monitoring Period	Outfall	Parameter	Reported Measure
TX0063011	7/31/2019	SLLA	Vector attraction reduction alternative used	VALUE (alt #)
TX0063011	7/31/2020	SLLA	Vector attraction reduction alternative used	NODI=9
				NODI=9

EPA ID				Reported Measure

	Monitoring Period	Outfall	Parameter	MX VALUE (state class)
TX0063011	7/31/2019	SLLA	Level of pathogen requirements achieved	NODI=9
TX0063011	7/31/2020	SLLA	Level of pathogen requirements achieved	NODI=9

EPA ID	Monitoring Period	Outfall	Parameter	Reported Measure
TX0063011	7/31/2019	SLLY	Fecal coliform	MAXIMUM (MPN/g)
TX0063011	7/31/2020	SLLY	Fecal coliform	NODI=9
				NODI=9

EPA ID	Monitoring Period	Outfall	Parameter	Reported Measure
TX0063011	7/31/2019	SLLY	Salmonella	MAXIMUM (MPN/g)
TX0063011	7/31/2020	SLLY	Salmonella	NODI=9
				NODI=9

EPA ID	Monitoring Period	Outfall	Parameter	Reported Measure	Reported Measure
TX0063011	7/31/2019	SLSA	Arsenic, dry weight	ALLWCONC (mg/kg)	SINGSAMP (mg/kg)
TX0063011	7/31/2020	SLSA	Arsenic, dry weight	NODI=9	NODI=9
				NODI=9	NODI=9

EPA ID	Monitoring Period	Outfall	Parameter	Reported Measure
TX0063011	7/31/2019	SLSA	Boundary areas	VALUE (acr)
TX0063011	7/31/2020	SLSA	Boundary areas	NODI=9
				NODI=9

EPA ID	Monitoring Period	Outfall	Parameter	Reported Measure	Reported Measure
TX0063011	7/31/2019	SLSA	Chromium, sludge, total, dry weight [as Cr]	ALLWCONC (mg/kg)	SINGSAMP (mg/kg)
TX0063011	7/31/2020	SLSA	Chromium, sludge, total, dry weight [as Cr]	NODI=9	NODI=9
				NODI=9	NODI=9

EPA ID	Monitoring Period	Outfall	Parameter	Reported Measure
				VALUE (alt #)

TX0063011	7/31/2019	SLSA	Description of pathogen option used	NODI=9
TX0063011	7/31/2020	SLSA	Description of pathogen option used	NODI=9

EPA ID	Monitoring Period	Outfall	Parameter	Reported Measure	Reported Measure
TX0063011	7/31/2019	SLSA	Nickel, total [as Ni]	ALLWCONC (mg/kg)	SINGSAMP (mg/kg)
TX0063011	7/31/2020	SLSA	Nickel, total [as Ni]	NODI=9	NODI=9
TX0063011	7/31/2020	SLSA	Nickel, total [as Ni]	NODI=9	NODI=9

EPA ID	Monitoring Period	Outfall	Parameter	Reported Measure
TX0063011	7/31/2019	SLSA	pH	SINGSAMP (SU)
TX0063011	7/31/2020	SLSA	pH	NODI=9
TX0063011	7/31/2020	SLSA	pH	NODI=9

EPA ID	Monitoring Period	Outfall	Parameter	Reported Measure
TX0063011	7/31/2019	SLSA	Unit w/liner/leachate collection system	VALUE (N=0,Y=1)
TX0063011	7/31/2020	SLSA	Unit w/liner/leachate collection system	NODI=9
TX0063011	7/31/2020	SLSA	Unit w/liner/leachate collection system	NODI=9

EPA ID	Monitoring Period	Outfall	Parameter	Reported Measure
TX0063011	7/31/2019	SLSA	Vector attraction reduction alternative used	VALUE (alt #)
TX0063011	7/31/2020	SLSA	Vector attraction reduction alternative used	NODI=9
TX0063011	7/31/2020	SLSA	Vector attraction reduction alternative used	NODI=9

EPA ID	Monitoring Period	Outfall	Parameter	Reported Measure
TX0063011	7/31/2019	SLSA	Level of pathogen requirements achieved	SINGSAMP (state class)
TX0063011	7/31/2020	SLSA	Level of pathogen requirements achieved	NODI=9
TX0063011	7/31/2020	SLSA	Level of pathogen requirements achieved	NODI=9

EPA ID	Monitoring Period	Outfall	Parameter	Reported Measure	Reported Measure
TX0063011	12/31/2018	TX1Q	IC25 Lethal Static Renewal 7 Day Chronic Periodaphn	7 DA MIN (%)	MO AV MN (%)
TX0063011	3/31/2019	TX1Q	IC25 Lethal Static Renewal 7 Day Chronic Periodaphn	> 100	> 100
TX0063011	3/31/2019	TX1Q	IC25 Lethal Static Renewal 7 Day Chronic Periodaphn	> 100	> 100

TX0063011	6/30/2019	TX1Q	IC25 Lethal Static Renewal 7 Day Chronic Ceriodaphn	>100	>100
TX0063011	9/30/2019	TX1Q	IC25 Lethal Static Renewal 7 Day Chronic Ceriodaphn	>100	>100
TX0063011	12/31/2019	TX1Q	IC25 Lethal Static Renewal 7 Day Chronic Ceriodaphn	>100	>100
TX0063011	3/31/2020	TX1Q	IC25 Lethal Static Renewal 7 Day Chronic Ceriodaphn	>100	>100
TX0063011	6/30/2020	TX1Q	IC25 Lethal Static Renewal 7 Day Chronic Ceriodaphn	>100	>100
TX0063011	9/30/2020	TX1Q	IC25 Lethal Static Renewal 7 Day Chronic Ceriodaphn	>100	>100
TX0063011	12/31/2020	TX1Q	IC25 Lethal Static Renewal 7 Day Chronic Ceriodaphn	>100	>100
TX0063011	3/31/2021	TX1Q	IC25 Lethal Static Renewal 7 Day Chronic Ceriodaphn	>100	>100
TX0063011	6/30/2021	TX1Q	IC25 Lethal Static Renewal 7 Day Chronic Ceriodaphn	>100	>100
TX0063011	9/30/2021	TX1Q	IC25 Lethal Static Renewal 7 Day Chronic Ceriodaphn	>100	>100
TX0063011	12/31/2021	TX1Q	IC25 Lethal Static Renewal 7 Day Chronic Ceriodaphn	>100	>100
TX0063011	3/31/2022	TX1Q	IC25 Lethal Static Renewal 7 Day Chronic Ceriodaphn	>100	>100
TX0063011	6/30/2022	TX1Q	IC25 Lethal Static Renewal 7 Day Chronic Ceriodaphn	>100	>100
TX0063011	9/30/2022	TX1Q	IC25 Lethal Static Renewal 7 Day Chronic Ceriodaphn	>100	>100
TX0063011	12/31/2022	TX1Q	IC25 Lethal Static Renewal 7 Day Chronic Ceriodaphn	>100	>100
TX0063011	3/31/2023	TX1Q	IC25 Lethal Static Renewal 7 Day Chronic Ceriodaphn	>100	>100
TX0063011	6/30/2023	TX1Q	IC25 Lethal Static Renewal 7 Day Chronic Ceriodaphn	>100	>100
TX0063011	9/30/2023	TX1Q	IC25 Lethal Static Renewal 7 Day Chronic Ceriodaphn	>100	>100

EPA ID	Monitoring Period	Outfall	Parameter	Reported Measure	Reported Measure
TX0063011	9/30/2021	TX1Q	IC25 Lethal Static Renewal 7 Day Chronic Pimephales	7 DA MIN (%)	MO AV MN (%)
TX0063011	12/31/2021	TX1Q	IC25 Lethal Static Renewal 7 Day Chronic Pimephales	>100	>100
TX0063011	3/31/2022	TX1Q	IC25 Lethal Static Renewal 7 Day Chronic Pimephales	>100	>100
TX0063011	6/30/2022	TX1Q	IC25 Lethal Static Renewal 7 Day Chronic Pimephales	>100	>100

EPA ID	Monitoring Period	Outfall	Parameter	Reported Measure	Reported Measure
TX0063011	12/31/2018	TX1Q	IC25 Low Flow Pass/Fail Lethal Static Renewal 7 Day	7 DA MIN (pass=0;fail=1)	MO AV MN (pass=0;fail=1)
TX0063011	3/31/2019	TX1Q	IC25 Low Flow Pass/Fail Lethal Static Renewal 7 Day	0	0
TX0063011	6/30/2019	TX1Q	IC25 Low Flow Pass/Fail Lethal Static Renewal 7 Day	0	0
TX0063011	9/30/2019	TX1Q	IC25 Low Flow Pass/Fail Lethal Static Renewal 7 Day	0	0
TX0063011	12/31/2019	TX1Q	IC25 Low Flow Pass/Fail Lethal Static Renewal 7 Day	0	0
TX0063011	3/31/2020	TX1Q	IC25 Low Flow Pass/Fail Lethal Static Renewal 7 Day	0	0
TX0063011	6/30/2020	TX1Q	IC25 Low Flow Pass/Fail Lethal Static Renewal 7 Day	0	0
TX0063011	9/30/2020	TX1Q	IC25 Low Flow Pass/Fail Lethal Static Renewal 7 Day	0	0



TX0063011	12/31/2020	TX1Q	IC25 Low Flow Pass/Fail Lethal Static Renewal 7 Day	0	0
TX0063011	3/31/2021	TX1Q	IC25 Low Flow Pass/Fail Lethal Static Renewal 7 Day	0	0
TX0063011	6/30/2021	TX1Q	IC25 Low Flow Pass/Fail Lethal Static Renewal 7 Day	0	0
TX0063011	9/30/2021	TX1Q	IC25 Low Flow Pass/Fail Lethal Static Renewal 7 Day	0	0
TX0063011	12/31/2021	TX1Q	IC25 Low Flow Pass/Fail Lethal Static Renewal 7 Day	0	0
TX0063011	3/31/2022	TX1Q	IC25 Low Flow Pass/Fail Lethal Static Renewal 7 Day	0	0
TX0063011	6/30/2022	TX1Q	IC25 Low Flow Pass/Fail Lethal Static Renewal 7 Day	0	0
TX0063011	9/30/2022	TX1Q	IC25 Low Flow Pass/Fail Lethal Static Renewal 7 Day	0	0
TX0063011	12/31/2022	TX1Q	IC25 Low Flow Pass/Fail Lethal Static Renewal 7 Day	0	0
TX0063011	3/31/2023	TX1Q	IC25 Low Flow Pass/Fail Lethal Static Renewal 7 Day	0	0
TX0063011	6/30/2023	TX1Q	IC25 Low Flow Pass/Fail Lethal Static Renewal 7 Day	0	0
TX0063011	9/30/2023	TX1Q	IC25 Low Flow Pass/Fail Lethal Static Renewal 7 Day	0	0

EPA ID	Monitoring Period	Outfall	Parameter	Reported Measure	Reported Measure
TX0063011	9/30/2021	TX1Q	IC25 Low Flow Pass/Fail Lethal Static Renewal 7 Day	7 DA MIN (pass=0;fail=1)	MO AV MN (pass=0;fail=1)
TX0063011	12/31/2021	TX1Q	IC25 Low Flow Pass/Fail Lethal Static Renewal 7 Day	0	0
TX0063011	3/31/2022	TX1Q	IC25 Low Flow Pass/Fail Lethal Static Renewal 7 Day	0	0
TX0063011	6/30/2022	TX1Q	IC25 Low Flow Pass/Fail Lethal Static Renewal 7 Day	0	0

EPA ID	Monitoring Period	Outfall	Parameter	Reported Measure	Reported Measure
TX0063011	12/31/2018	TX1Q	IC25 Low Flow Pass/Fail Sub-Lethal Static Renewal 7	7 DA MIN (pass=0;fail=1)	MO AV MN (pass=0;fail=1)
TX0063011	3/31/2019	TX1Q	IC25 Low Flow Pass/Fail Sub-Lethal Static Renewal 7	0	0
TX0063011	6/30/2019	TX1Q	IC25 Low Flow Pass/Fail Sub-Lethal Static Renewal 7	0	0
TX0063011	9/30/2019	TX1Q	IC25 Low Flow Pass/Fail Sub-Lethal Static Renewal 7	0	0
TX0063011	12/31/2019	TX1Q	IC25 Low Flow Pass/Fail Sub-Lethal Static Renewal 7	0	0
TX0063011	3/31/2020	TX1Q	IC25 Low Flow Pass/Fail Sub-Lethal Static Renewal 7	0	0
TX0063011	6/30/2020	TX1Q	IC25 Low Flow Pass/Fail Sub-Lethal Static Renewal 7	0	0
TX0063011	9/30/2020	TX1Q	IC25 Low Flow Pass/Fail Sub-Lethal Static Renewal 7	0	0
TX0063011	12/31/2020	TX1Q	IC25 Low Flow Pass/Fail Sub-Lethal Static Renewal 7	0	0
TX0063011	3/31/2021	TX1Q	IC25 Low Flow Pass/Fail Sub-Lethal Static Renewal 7	0	0
TX0063011	6/30/2021	TX1Q	IC25 Low Flow Pass/Fail Sub-Lethal Static Renewal 7	0	0
TX0063011	9/30/2021	TX1Q	IC25 Low Flow Pass/Fail Sub-Lethal Static Renewal 7	0	0
TX0063011	12/31/2021	TX1Q	IC25 Low Flow Pass/Fail Sub-Lethal Static Renewal 7	0	0
TX0063011	3/31/2022	TX1Q	IC25 Low Flow Pass/Fail Sub-Lethal Static Renewal 7	0	0

TX0063011	6/30/2022	TX1Q	IC25 Low Flow Pass/Fail Sub-Lethal Static Renewal	7	0	0
TX0063011	9/30/2022	TX1Q	IC25 Low Flow Pass/Fail Sub-Lethal Static Renewal	7	0	0
TX0063011	12/31/2022	TX1Q	IC25 Low Flow Pass/Fail Sub-Lethal Static Renewal	7	0	0
TX0063011	3/31/2023	TX1Q	IC25 Low Flow Pass/Fail Sub-Lethal Static Renewal	7	0	0
TX0063011	6/30/2023	TX1Q	IC25 Low Flow Pass/Fail Sub-Lethal Static Renewal	7	0	0
TX0063011	9/30/2023	TX1Q	IC25 Low Flow Pass/Fail Sub-Lethal Static Renewal	7	0	0

EPA ID	Monitoring Period	Outfall	Parameter	Reported Measure		Reported Measure
				7 DA MIN	7 DA MIN (pass=0,fail=1)	
TX0063011	9/30/2021	TX1Q	IC25 Low Flow Pass/Fail Sub-Lethal Static Renewal	7	0	0
TX0063011	12/31/2021	TX1Q	IC25 Low Flow Pass/Fail Sub-Lethal Static Renewal	7	0	0
TX0063011	3/31/2022	TX1Q	IC25 Low Flow Pass/Fail Sub-Lethal Static Renewal	7	0	0
TX0063011	6/30/2022	TX1Q	IC25 Low Flow Pass/Fail Sub-Lethal Static Renewal	7	0	0

EPA ID	Monitoring Period	Outfall	Parameter	Reported Measure		Reported Measure
				7 DA MIN (%)	7 DA MIN (%)	
TX0063011	12/31/2018	TX1Q	IC25 Sub-Lethal Static Renewal 7 Day Chronic Period	>100	>100	>100
TX0063011	3/31/2019	TX1Q	IC25 Sub-Lethal Static Renewal 7 Day Chronic Period	>100	>100	>100
TX0063011	6/30/2019	TX1Q	IC25 Sub-Lethal Static Renewal 7 Day Chronic Period	>100	>100	>100
TX0063011	9/30/2019	TX1Q	IC25 Sub-Lethal Static Renewal 7 Day Chronic Period	>100	>100	>100
TX0063011	12/31/2019	TX1Q	IC25 Sub-Lethal Static Renewal 7 Day Chronic Period	>100	>100	>100
TX0063011	3/31/2020	TX1Q	IC25 Sub-Lethal Static Renewal 7 Day Chronic Period	>100	>100	>100
TX0063011	6/30/2020	TX1Q	IC25 Sub-Lethal Static Renewal 7 Day Chronic Period	>100	>100	>100
TX0063011	9/30/2020	TX1Q	IC25 Sub-Lethal Static Renewal 7 Day Chronic Period	>100	>100	>100
TX0063011	12/31/2020	TX1Q	IC25 Sub-Lethal Static Renewal 7 Day Chronic Period	>100	>100	>100
TX0063011	3/31/2021	TX1Q	IC25 Sub-Lethal Static Renewal 7 Day Chronic Period	>100	>100	>100
TX0063011	6/30/2021	TX1Q	IC25 Sub-Lethal Static Renewal 7 Day Chronic Period	>100	>100	>100
TX0063011	9/30/2021	TX1Q	IC25 Sub-Lethal Static Renewal 7 Day Chronic Period	>100	>100	>100
TX0063011	12/31/2021	TX1Q	IC25 Sub-Lethal Static Renewal 7 Day Chronic Period	>100	>100	>100
TX0063011	3/31/2022	TX1Q	IC25 Sub-Lethal Static Renewal 7 Day Chronic Period	>100	>100	>100
TX0063011	6/30/2022	TX1Q	IC25 Sub-Lethal Static Renewal 7 Day Chronic Period	>100	>100	>100
TX0063011	9/30/2022	TX1Q	IC25 Sub-Lethal Static Renewal 7 Day Chronic Period	>100	>100	>100
TX0063011	12/31/2022	TX1Q	IC25 Sub-Lethal Static Renewal 7 Day Chronic Period	>100	>100	>100
TX0063011	3/31/2023	TX1Q	IC25 Sub-Lethal Static Renewal 7 Day Chronic Period	>100	>100	>100
TX0063011	6/30/2023	TX1Q	IC25 Sub-Lethal Static Renewal 7 Day Chronic Period	>100	>100	>100
TX0063011	9/30/2023	TX1Q	IC25 Sub-Lethal Static Renewal 7 Day Chronic Period	>100	>100	>100

EPA ID	Monitoring Period	Outfall	Parameter	Reported Measure	Reported Measure
TX0063011	9/30/2021	TX1Q	IC25 Sub-Lethal Static Renewal 7 Day Chronic Pimepl	7 DA MIN (%)	MO AV MN (%)
TX0063011	12/31/2021	TX1Q	IC25 Sub-Lethal Static Renewal 7 Day Chronic Pimepl	>100	>100
TX0063011	3/31/2022	TX1Q	IC25 Sub-Lethal Static Renewal 7 Day Chronic Pimepl	>100	>100
TX0063011	6/30/2022	TX1Q	IC25 Sub-Lethal Static Renewal 7 Day Chronic Pimepl	>100	>100

EPA ID	Monitoring Period	Outfall	Parameter	Reported Measure	Reported Measure
TX0063011	12/31/2018	TX1Q	Whole effluent toxicity - retest #1	7 DA MIN (pass=0;fail=1)	MO AV MN (pass=0;fail=1)
TX0063011	3/31/2019	TX1Q	Whole effluent toxicity - retest #1	NODI=9	NODI=9
TX0063011	6/30/2019	TX1Q	Whole effluent toxicity - retest #1	NODI=9	NODI=9
TX0063011	9/30/2019	TX1Q	Whole effluent toxicity - retest #1	NODI=9	NODI=9
TX0063011	12/31/2019	TX1Q	Whole effluent toxicity - retest #1	NODI=9	NODI=9
TX0063011	3/31/2020	TX1Q	Whole effluent toxicity - retest #1	NODI=9	NODI=9
TX0063011	6/30/2020	TX1Q	Whole effluent toxicity - retest #1	NODI=9	NODI=9
TX0063011	9/30/2020	TX1Q	Whole effluent toxicity - retest #1	NODI=9	NODI=9
TX0063011	12/31/2020	TX1Q	Whole effluent toxicity - retest #1	NODI=9	NODI=9
TX0063011	3/31/2021	TX1Q	Whole effluent toxicity - retest #1	NODI=9	NODI=9
TX0063011	6/30/2021	TX1Q	Whole effluent toxicity - retest #1	NODI=9	NODI=9
TX0063011	9/30/2021	TX1Q	Whole effluent toxicity - retest #1	NODI=9	NODI=9
TX0063011	12/31/2021	TX1Q	Whole effluent toxicity - retest #1	NODI=9	NODI=9
TX0063011	3/31/2022	TX1Q	Whole effluent toxicity - retest #1	NODI=9	NODI=9
TX0063011	6/30/2022	TX1Q	Whole effluent toxicity - retest #1	NODI=9	NODI=9
TX0063011	9/30/2022	TX1Q	Whole effluent toxicity - retest #1	NODI=9	NODI=9
TX0063011	12/31/2022	TX1Q	Whole effluent toxicity - retest #1	NODI=9	NODI=9
TX0063011	3/31/2023	TX1Q	Whole effluent toxicity - retest #1	NODI=9	NODI=9
TX0063011	6/30/2023	TX1Q	Whole effluent toxicity - retest #1	NODI=9	NODI=9
TX0063011	9/30/2023	TX1Q	Whole effluent toxicity - retest #1	NODI=9	NODI=9

EPA ID	Monitoring Period	Outfall	Parameter	Reported Measure	Reported Measure
TX0063011	12/31/2018	TX1Q	Whole effluent toxicity - retest #2	7 DA MIN (pass=0;fail=1)	MO AV MN (pass=0;fail=1)
TX0063011	3/31/2019	TX1Q	Whole effluent toxicity - retest #2	NODI=9	NODI=9
TX0063011	6/30/2019	TX1Q	Whole effluent toxicity - retest #2	NODI=9	NODI=9



TX0063011	6/30/2019	TX1Q	Whole effluent toxicity - retest #2	NODI=9	NODI=9
TX0063011	9/30/2019	TX1Q	Whole effluent toxicity - retest #2	NODI=9	NODI=9
TX0063011	12/31/2019	TX1Q	Whole effluent toxicity - retest #2	NODI=9	NODI=9
TX0063011	3/31/2020	TX1Q	Whole effluent toxicity - retest #2	NODI=9	NODI=9
TX0063011	6/30/2020	TX1Q	Whole effluent toxicity - retest #2	NODI=9	NODI=9
TX0063011	9/30/2020	TX1Q	Whole effluent toxicity - retest #2	NODI=9	NODI=9
TX0063011	12/31/2020	TX1Q	Whole effluent toxicity - retest #2	NODI=9	NODI=9
TX0063011	3/31/2021	TX1Q	Whole effluent toxicity - retest #2	NODI=9	NODI=9
TX0063011	6/30/2021	TX1Q	Whole effluent toxicity - retest #2	NODI=9	NODI=9
TX0063011	9/30/2021	TX1Q	Whole effluent toxicity - retest #2	NODI=9	NODI=9
TX0063011	12/31/2021	TX1Q	Whole effluent toxicity - retest #2	NODI=9	NODI=9
TX0063011	3/31/2022	TX1Q	Whole effluent toxicity - retest #2	NODI=9	NODI=9
TX0063011	6/30/2022	TX1Q	Whole effluent toxicity - retest #2	NODI=9	NODI=9
TX0063011	9/30/2022	TX1Q	Whole effluent toxicity - retest #2	NODI=9	NODI=9
TX0063011	12/31/2022	TX1Q	Whole effluent toxicity - retest #2	NODI=9	NODI=9
TX0063011	3/31/2023	TX1Q	Whole effluent toxicity - retest #2	NODI=9	NODI=9
TX0063011	6/30/2023	TX1Q	Whole effluent toxicity - retest #2	NODI=9	NODI=9
TX0063011	9/30/2023	TX1Q	Whole effluent toxicity - retest #2	NODI=9	NODI=9

EPA ID	Monitoring Period	Outfall	Parameter	Reported Measure	Reported Measure
TX0063011	12/31/2019	TX1Y	IC25 Lethal Static Renewal 7 Day Chronic Pimephales	7 DA MIN (%)	MO AV MN (%)
TX0063011	12/31/2020	TX1Y	IC25 Lethal Static Renewal 7 Day Chronic Pimephales	>100	>100

EPA ID	Monitoring Period	Outfall	Parameter	Reported Measure	Reported Measure
TX0063011	12/31/2019	TX1Y	IC25 Low Flow Pass/Fail Lethal Static Renewal 7 Day	7 DA MIN (pass=0,fail=1)	MO AV MN (pass=0,fail=1)
TX0063011	12/31/2020	TX1Y	IC25 Low Flow Pass/Fail Lethal Static Renewal 7 Day	0	0

EPA ID	Monitoring Period	Outfall	Parameter	Reported Measure	Reported Measure
TX0063011	12/31/2019	TX1Y	IC25 Low Flow Pass/Fail Sub-Lethal Static Renewal 7	7 DA MIN (pass=0,fail=1)	MO AV MN (pass=0,fail=1)
TX0063011	12/31/2020	TX1Y	IC25 Low Flow Pass/Fail Sub-Lethal Static Renewal 7	0	0

EPA ID	Monitoring Period	Outfall	Parameter	Reported Measure	Reported Measure
TX0063011	12/31/2019	TX1Y	IC25 Low Flow Pass/Fail Sub-Lethal Static Renewal 7	7 DA MIN (pass=0,fail=1)	MO AV MN (pass=0,fail=1)
TX0063011	12/31/2020	TX1Y	IC25 Low Flow Pass/Fail Sub-Lethal Static Renewal 7	0	0

	Monitoring Period	Outfall	Parameter	7 DA MIN (%)	MO AV MN (%)
TX0063011	12/31/2019	TX1Y	IC25 Sub-Lethal Static Renewal 7 Day Chronic Pimepl	>100	>100
TX0063011	12/31/2020	TX1Y	IC25 Sub-Lethal Static Renewal 7 Day Chronic Pimepl	>100	>100

EPA ID	Monitoring Period	Outfall	Parameter	Reported Measure	Reported Measure
TX0063011	12/31/2019	TX1Y	Whole effluent toxicity - retest #1	7 DA MIN (pass=0;fail=1)	MO AV MN (pass=0;fail=1)
TX0063011	12/31/2020	TX1Y	Whole effluent toxicity - retest #1	NODI=9	NODI=9

EPA ID	Monitoring Period	Outfall	Parameter	Reported Measure	Reported Measure
TX0063011	12/31/2019	TX1Y	Whole effluent toxicity - retest #2	7 DA MIN (pass=0;fail=1)	MO AV MN (pass=0;fail=1)
TX0063011	12/31/2020	TX1Y	Whole effluent toxicity - retest #2	NODI=9	NODI=9

EPA ID	Monitoring Period	Outfall	Parameter	Reported Measure
TX0063011	12/31/2018	TXAS	LC50 Pass/Fail Static 24Hr Acute D. Pulex	SINGSAMP (pass=0;fail=1)
TX0063011	6/30/2019	TXAS	LC50 Pass/Fail Static 24Hr Acute D. Pulex	0
TX0063011	12/31/2019	TXAS	LC50 Pass/Fail Static 24Hr Acute D. Pulex	0
TX0063011	6/30/2020	TXAS	LC50 Pass/Fail Static 24Hr Acute D. Pulex	0
TX0063011	12/31/2020	TXAS	LC50 Pass/Fail Static 24Hr Acute D. Pulex	0
TX0063011	6/30/2021	TXAS	LC50 Pass/Fail Static 24Hr Acute D. Pulex	0
TX0063011	12/31/2021	TXAS	LC50 Pass/Fail Static 24Hr Acute D. Pulex	0
TX0063011	6/30/2022	TXAS	LC50 Pass/Fail Static 24Hr Acute D. Pulex	0
TX0063011	12/31/2022	TXAS	LC50 Pass/Fail Static 24Hr Acute D. Pulex	0
TX0063011	6/30/2023	TXAS	LC50 Pass/Fail Static 24Hr Acute D. Pulex	0

EPA ID	Monitoring Period	Outfall	Parameter	Reported Measure
TX0063011	12/31/2018	TXAS	LC50 Pass/Fail Static 24Hr Acute Pimephales promela	SINGSAMP (pass=0;fail=1)
TX0063011	6/30/2019	TXAS	LC50 Pass/Fail Static 24Hr Acute Pimephales promela	0
TX0063011	12/31/2019	TXAS	LC50 Pass/Fail Static 24Hr Acute Pimephales promela	0
TX0063011	6/30/2020	TXAS	LC50 Pass/Fail Static 24Hr Acute Pimephales promela	0

TX0063011	12/31/2020	TXAS	LC50 Pass/Fail Static 24Hr Acute Pimephales promela0
TX0063011	6/30/2021	TXAS	LC50 Pass/Fail Static 24Hr Acute Pimephales promela0
TX0063011	12/31/2021	TXAS	LC50 Pass/Fail Static 24Hr Acute Pimephales promela0
TX0063011	6/30/2022	TXAS	LC50 Pass/Fail Static 24Hr Acute Pimephales promela0
TX0063011	12/31/2022	TXAS	LC50 Pass/Fail Static 24Hr Acute Pimephales promela0
TX0063011	6/30/2023	TXAS	LC50 Pass/Fail Static 24Hr Acute Pimephales promela0

EPA ID	Monitoring Period	Outfall	Parameter	Reported Measure
TX0063011	12/31/2018	TXAS	Whole effluent toxicity - retest #1	SINGSAMP (pass=0;fail=1) NODI=9
TX0063011	6/30/2019	TXAS	Whole effluent toxicity - retest #1	NODI=9
TX0063011	12/31/2019	TXAS	Whole effluent toxicity - retest #1	NODI=9
TX0063011	6/30/2020	TXAS	Whole effluent toxicity - retest #1	NODI=9
TX0063011	12/31/2020	TXAS	Whole effluent toxicity - retest #1	NODI=9
TX0063011	6/30/2021	TXAS	Whole effluent toxicity - retest #1	NODI=9
TX0063011	12/31/2021	TXAS	Whole effluent toxicity - retest #1	NODI=9
TX0063011	6/30/2022	TXAS	Whole effluent toxicity - retest #1	NODI=9
TX0063011	12/31/2022	TXAS	Whole effluent toxicity - retest #1	NODI=9
TX0063011	6/30/2023	TXAS	Whole effluent toxicity - retest #1	NODI=9

EPA ID	Monitoring Period	Outfall	Parameter	Reported Measure
TX0063011	12/31/2018	TXAS	Whole effluent toxicity - retest #2	SINGSAMP (pass=0;fail=1) NODI=9
TX0063011	6/30/2019	TXAS	Whole effluent toxicity - retest #2	NODI=9
TX0063011	12/31/2019	TXAS	Whole effluent toxicity - retest #2	NODI=9
TX0063011	6/30/2020	TXAS	Whole effluent toxicity - retest #2	NODI=9
TX0063011	12/31/2020	TXAS	Whole effluent toxicity - retest #2	NODI=9
TX0063011	6/30/2021	TXAS	Whole effluent toxicity - retest #2	NODI=9
TX0063011	12/31/2021	TXAS	Whole effluent toxicity - retest #2	NODI=9
TX0063011	6/30/2022	TXAS	Whole effluent toxicity - retest #2	NODI=9
TX0063011	12/31/2022	TXAS	Whole effluent toxicity - retest #2	NODI=9
TX0063011	6/30/2023	TXAS	Whole effluent toxicity - retest #2	NODI=9

# Texas Commission on Environmental Quality

## INTEROFFICE MEMORANDUM

**Date:** February 29, 2024

**To:** Municipal Team

**Thru:** Colleen Cook, Pretreatment Team Leader

**From:** BM Bridget Malone, Pretreatment Coordinator

**Subject:** Pretreatment program option for the TPDES Permit No. WQ0010495076, City of Houston – Northwest WWTP summary sheet

I have reviewed the above referenced permit and have placed the following standard and any additional language in H:\WQ\muni\pret\10495-076.docx. This memo is placed in H:\WQ\muni\pret\memos\10495-076memo.docx.

Option 3 - General Pretreatment language for POTWs with regulated industrial users on the collection system and with an approved Program.

Within this standard language, the Pretreatment Program has incorporated additional pretreatment language requirements. Please incorporate the following language for permittee's FACT SHEET, if applicable, under:

1. INDUSTRIAL WASTE CONTRIBUTION

The Northwest WWTP receives significant industrial wastewater contributions.

2. PRETREATMENT REQUIREMENTS

Permit requirements for pretreatment are based on TPDES regulations contained in 30 TAC Chapter 305 which references 40 CFR Part 403, General Pretreatment Regulations for Existing and New Sources of Pollution [*rev. Federal Register/ Vol. 70/ No. 198/ Friday, October 14, 2005/ Rules and Regulations, pages 60134-60798*]. The permit includes specific requirements that establish responsibilities of local government, industry, and the public to implement the standards to control pollutants which pass through or interfere with treatment processes in publicly owned treatment works or which may contaminate the sewage sludge. This permit has appropriate pretreatment language for a facility of this size and complexity.

The permittee has a pretreatment program which was approved by the U.S. Environmental Protection Agency (EPA) on **November 27, 1984**, and modified on **February 26, 1993**, and **March 11, 2020 (nonsubstantial Streamlining Rule modification)** and on **June 14, 2021 (TBLLs)**. The permittee is required, under the conditions of the approved pretreatment program, to prepare annually a list of industrial users which during the preceding twelve months were in significant noncompliance with applicable pretreatment requirements for those facilities covered under the program. This list is to be published annually during the month of **November** in a newspaper of general circulation that provides meaningful public notice within the jurisdiction(s)

served by the POTW.

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

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

The permittee shall submit to the TCEQ Pretreatment Team (MC 148) of the Water Quality Division, within **sixty (60) days** of the issued date of this permit, either: (1) a **WRITTEN CERTIFICATION** that a technical reassessment has been performed and that the evaluation demonstrates that the existing technically based local limits (TBLLs) attain the Texas Surface Water Quality Standards [30 TAC Chapter 307] in water in the state, and are adequate to prevent pass through of pollutants, inhibition of or interference with the treatment facility, worker health and safety problems, and sludge contamination [submit the TBLLs Reassessment Form No. TCEQ-20221], **OR** (2) a **WRITTEN NOTIFICATION** that a technical redevelopment of the current TBLLs, a draft legal authority, which incorporates such revisions, and any additional modifications to the approved Pretreatment Program, as required by 40 CFR Part 403 [rev. 10/14/05] and applicable state and local law, including an Enforcement Response Plan and Standard Operating Procedures (including forms), will be submitted within **twelve (12) months** of the issued date of the permit

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

### 3. SUMMARY OF CHANGES FROM EXISTING PERMIT

The pretreatment language has been updated from the current permit. The pretreatment requirements will continue until permit expiration. Please see specific details in the Pretreatment Requirements Section of the fact sheet.



## CONTRIBUTING INDUSTRIES AND PRETREATMENT REQUIREMENTS

1. The permittee shall operate an industrial pretreatment program in accordance with Sections 402(b)(8) and (9) of the Clean Water Act, the General Pretreatment Regulations (40 CFR Part 403), and the approved **City of Houston** publicly owned treatment works (POTW) pretreatment program submitted by the permittee. The pretreatment program was approved on **November 27, 1984**, and modified on **February 26, 1993**, and **March 11, 2020 (nonsubstantial Streamlining Rule modification)**, and modified on **June 14, 2021 (TBLLs)**.

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

- a. Industrial user (IU) information shall be kept current according to 40 CFR §§403.8(f)(2)(i) and (ii) and updated at a frequency set forth in the approved pretreatment program to reflect the accurate characterization of all IUs.
- b. The frequency and nature of IU compliance monitoring activities by the permittee shall be consistent with the approved POTW pretreatment program and commensurate with the character, consistency, and volume of waste. The permittee is required to inspect and sample the effluent from each significant industrial user (SIU) at least once per year, except as specified in 40 CFR §403.8(f)(2)(v). This is in addition to any industrial self-monitoring activities.
- c. The permittee shall enforce and obtain remedies for IU noncompliance with applicable pretreatment standards and requirements and the approved POTW pretreatment program.
- d. The permittee shall control through permit, order, or similar means, the contribution to the POTW by each IU to ensure compliance with applicable pretreatment standards and requirements and the approved POTW pretreatment program. In the case of SIUs (identified as significant under 40 CFR §403.3(v)), this control shall be achieved through individual permits or general control mechanisms, in accordance with 40 CFR §403.8(f)(1)(iii).

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

- (1) Statement of duration (in no case more than five years);
  - (2) Statement of non-transferability without, at a minimum, prior notification to the POTW and provision of a copy of the existing control mechanism to the new owner or operator;
  - (3) Effluent limits, which may include enforceable best management practices (BMPs), based on applicable general pretreatment standards, categorical pretreatment standards, local limits, and State and local law;
  - (4) Self-monitoring, sampling, reporting, notification and record keeping requirements, identification of the pollutants to be monitored (including, if applicable, the process for seeking a waiver for a pollutant neither present nor expected to be present in the IU's discharge in accordance with 40 CFR §403.12(e)(2), or a specific waived pollutant in the case of an individual control mechanism), sampling location, sampling frequency, and sample type, based on the applicable general pretreatment standards in 40 CFR Part 403, categorical pretreatment standards, local limits, and State and local law;
  - (5) Statement of applicable civil and criminal penalties for violation of pretreatment standards and requirements, and any applicable compliance schedule. Such schedules may not extend the compliance date beyond federal deadlines; and
  - (6) Requirements to control slug discharges, if determined by the POTW to be necessary.
- e. For those IUs who are covered by a general control mechanism, in order to implement 40 CFR §403.8(f)(1)(iii)(A)(2), a monitoring waiver for a pollutant neither present nor expected

to be present in the IU's discharge is not effective in the general control mechanism until after the POTW has provided written notice to the SIU that such a waiver request has been granted in accordance with 40 CFR §403.12(e)(2).

- f. The permittee shall evaluate whether each SIU needs a plan or other action to control slug discharges, in accordance with 40 CFR §403.8(f)(2)(vi). If the POTW decides that a slug control plan is needed, the plan shall contain at least the minimum elements required in 40 CFR §403.8(f)(2)(vi).
  - g. The permittee shall provide adequate staff, equipment, and support capabilities to carry out all elements of the pretreatment program.
  - h. The approved program shall not be modified by the permittee without the prior approval of the Executive Director, according to 40 CFR §403.18.
2. The permittee is under a continuing duty to establish and enforce specific local limits to implement the provisions of 40 CFR §403.5, develop and enforce local limits as necessary, and modify the approved pretreatment program as necessary to comply with federal, state, and local law, as amended. The permittee may develop BMPs to implement 40 CFR §403.5(c)(1) and (2). Such BMPs shall be considered local limits and pretreatment standards. The permittee is required to effectively enforce such limits and to modify its pretreatment program, including the Legal Authority, Enforcement Response Plan, and Standard Operating Procedures (including forms), if required by the Executive Director to reflect changing conditions at the POTW. Substantial modifications will be approved in accordance with 40 CFR §403.18, and modifications will become effective upon approval by the Executive Director in accordance with 40 CFR §403.18.

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

- 1) a written certification that a technical reassessment has been performed, and that the evaluation demonstrates that existing technically based local limits (TBLLs) attain the Texas Surface Water Quality Standards [30 TAC Chapter 307] in water in the state, and are adequate to prevent pass through of pollutants, inhibition of or interference with the treatment facility, worker health and safety problems, and sludge contamination [submit the Reassessment Form No. TCEQ-20221]; **or**
- 2) a written notification that a technical redevelopment of the current TBLLs, draft legal authority which incorporates such revisions, and any additional modifications to the pretreatment program, as required by 40 CFR Part 403 [rev. 10/14/05], and applicable state and local law, including an Enforcement Response Plan and Standard Operating Procedures (including forms), will be submitted within **twelve (12) months** of the issued date of this permit. The POTW is required to evaluate any enforceable BMP loadings during the redevelopment of the current TBLLs. The technical redevelopment of the current TBLLs should be developed in accordance with EPA's *Local Limits Development Guidance*, July 2004, and EPA Region 6's *Technically Based Local Limits Development Guidance*, October 12, 1993. This submission shall be signed and certified by the permittee [according to 40 CFR §122.41(k)].

Upon approval by the Executive Director of a substantial modification to this approved POTW pretreatment program, the requirement to develop and enforce specific prohibitions and/or limits to implement the prohibitions and limits set forth in 40 CFR §§403.5(a)(1), (b), (c)(1) and (3), and (d) is a condition of this permit. The specific prohibitions set out in 40 CFR §403.5(b) shall be enforced by the permittee unless modified under this provision.

3. The permittee shall analyze the treatment facility influent and effluent for the presence of the toxic pollutants listed in the Texas Surface Water Quality Standards [30 TAC Chapter 307], and 40 CFR Part 122, Appendix D, Table II at least **once per six months** and the toxic pollutants listed in 40

CFR Part 122, Appendix D, Table III at least **once per three months**. If, based upon information available to the permittee, there is reason to suspect the presence of any toxic or hazardous pollutant listed in 40 CFR Part 122, Appendix D, Table V, or any other pollutant, known or suspected to adversely affect treatment plant operation, receiving water quality, or solids disposal procedures, analysis for those pollutants shall be performed at least **once per three months** on both the influent and the effluent.

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

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

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

- a. An updated list of all regulated IUs as indicated in this section. For each listed IU, the following information shall be included:
  - (1) Standard Industrial Classification (SIC) or North American Industry Classification System (NAICS) code *and* categorical determination.
  - (2) If the pretreatment program has been modified and approved to incorporate reduced monitoring for any of the categorical IUs as provided by 40 CFR Part 403 [rev. 10/14/05], then the list must also identify:
    - categorical IUs subject to the conditions for reduced monitoring and reporting requirements under 40 CFR § 403.12(e)(1) [rev. 10/22/15] and (3);
    - those IUs that are non-significant categorical industrial users (NSCIUs) under 40 CFR §403.3(v)(2); and
    - those IUs that are middle tier categorical industrial users (MTCIUs) under 40 CFR §403.12(e)(3).
  - (3) Control mechanism status.
    - Indicate whether the IU has an effective individual or general control mechanism,



and the date such control mechanism was last issued, reissued, or modified;

- Indicate which IUs were added to the system, or newly identified, during the pretreatment year reporting period;
- Include the type of general control mechanisms; and
- Report all NSCIU annual evaluations performed, as applicable.

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

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

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

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

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

- b. A list of each IU whose authorization to discharge was terminated or revoked during the pretreatment year reporting period and the reason for termination.
- c. A report on any interference, pass through, Act of God, or POTW permit violations known or suspected to be caused by IUs and response actions taken by the permittee.
- d. The results of all influent and effluent analyses performed pursuant to Item 3 of this section.
- e. An original newspaper public notice, or copy of the newspaper publication with official affidavit, of the list of IUs that meet the criteria of SNC, giving the name of the newspaper and date the list was published.
- f. The daily average water quality based effluent concentrations (from the TCEQ's Texas Toxicity Modeling Program (TexTox)) necessary to attain the Texas Surface Water Quality Standards, 30 TAC Chapter 307, in water in the state.
- g. The maximum allowable headworks loading (MAHL) in pounds per day (lb/day) of the approved TBLLs or for each pollutant of concern (POC) for which the permittee has calculated a MAHL. In addition, the influent loading as a percent of the MAHL, using the annual average flow of the wastewater treatment plant in million gallons per day (MGD) during the pretreatment year reporting period, for each pollutant that has an adopted TBLL or for each POC for which the permittee has calculated a MAHL. (*See Endnotes No. 2 at the*

end of this section for the influent loading as a percent of the MAHL equation.)

- h. The permittee may submit the updated pretreatment program annual status report information in tabular form using the example table format provided. Please attach, on a separate sheet, explanations to document the various pretreatment activities, including IU permits that have expired, BMP violations, and any sampling events that were not conducted by the permittee as required.
- i. A summary of changes to the POTW's approved pretreatment program that have not been previously reported to the Approval Authority.

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

- 5. The permittee shall provide adequate written notification to the Executive Director, care of the Wastewater Permitting Section (MC 148) of the Water Quality Division, within 30 days of the permittee's knowledge of the following:
  - a. Any new introduction of pollutants into the treatment works from an indirect discharger that would be subject to Sections 301 and 306 of the Clean Water Act, if the indirect discharger was directly discharging those pollutants; and
  - b. Any substantial change in the volume or character of pollutants being introduced into the treatment works by a source introducing pollutants into the treatment works at the time of issuance of the permit.

Adequate notice shall include information on the quality and quantity of effluent to be introduced into the treatment works and any anticipated impact of the change on the quality or quantity of effluent to be discharged from the POTW.

*Revised March 2022*

# TPDES Pretreatment Program Annual Report Form for Updated Industrial Users List

Reporting month/year: \_\_\_\_\_, \_\_\_\_\_ to \_\_\_\_\_, \_\_\_\_\_

TPDES Permit No.: \_\_\_\_\_ Permittee: \_\_\_\_\_ Treatment Plant: \_\_\_\_\_

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

- 1 Include all significant industrial users (SIUs), non-significant categorical industrial users (NSCIUs) as defined in 40 CFR §403.3(v)(2), and/or middle tier categorical industrial users (MTCIUs) as defined in 40 CFR §403.12(e)(3). Please do not include non-significant noncategorical IUs that are covered under best management practices (BMPs) or general control mechanisms.
- 2 Categorical determination (include 40 CFR citation and NSCIU or MTCIU status, if applicable).
- 3 Indicate whether the IU is a new user. If the answer is No or N, then indicate the expiration date of the last issued IU permit.
- 4 The term SNC applies to a broader range of violations, such as daily maximum, long-term average, instantaneous limits, and narrative standards (which may include enforceable BMPs, narrative limits and/or operational standards). Any other violation, or group of violations, which the POTW determines will adversely affect the operation or implementation of the local Pretreatment Program now includes BMP violations (40 CFR §403.8(f)(2)(viii)(H)).
- 5 Code NR= None required (NSCIUs only); IND = individual control mechanism; GEN = general control mechanism. Include as a footnote (or on a separate page) the name of the general control mechanism used for similar groups of IUs, identify the similar types of operations and types of wastes that are the same for each general control mechanism. Any BMPs through general control mechanisms that are applied to nonsignificant IUs need to be reported separately, *e.g.* the sector type and BMP description.
- 6 Permit or NSCIU evaluations as applicable.
- 7 According to 40 CFR §403.12(i)(1), indicate whether the IU is subject to technically based local limits (TBLLs) that are more stringent than categorical pretreatment standards, *e.g.* where there is one end-of-pipe sampling point at a CIU, and you have determined that the TBLLs are more stringent than the categorical pretreatment standards for any pollutant at the end-of-pipe sampling point; **OR** the IU is subject only to local limits (TBLLs only), *e.g.* the IU is a non-categorical SIU subject only to TBLLs at the end-of-pipe sampling point.
- 8 For those IUs where a monitoring waiver has been granted, please add the code "W" (after either C, NC, or SNC codes) and indicate the pollutant(s) for which the waiver has been granted.

**TPDES Pretreatment Program Annual Report Form for  
Industrial User Inventory Modifications**

Reporting month/year: \_\_\_\_\_, \_\_\_\_\_ to \_\_\_\_\_, \_\_\_\_\_

TPDES Permit No: \_\_\_\_\_ Permittee: \_\_\_\_\_ Treatment Plant: \_\_\_\_\_

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

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

# TPDES Pretreatment Program Annual Report Form for Enforcement Actions Taken

Reporting month/year: \_\_\_\_\_, \_\_\_\_\_ to \_\_\_\_\_, \_\_\_\_\_

TPDES Permit No: \_\_\_\_\_ Permittee: \_\_\_\_\_ Treatment Plant: \_\_\_\_\_

Overall SNC \_\_\_\_\_% SNC <sup>10</sup> based on: Effluent Violations \_\_\_\_\_%  
Reporting Violations \_\_\_\_\_% Narrative Standard Violations \_\_\_\_\_%

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

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

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

**TPDES Pretreatment Program Annual Report Form for  
Influent and Effluent Monitoring Results<sup>1</sup>**

**Reporting month/year:** \_\_\_\_\_, \_\_\_\_\_ to \_\_\_\_\_, \_\_\_\_\_

**TPDES Permit No.:** \_\_\_\_\_ **Permittee:** \_\_\_\_\_ **Treatment Plant:** \_\_\_\_\_

**PRETREATMENT PROGRAM INFLUENT AND EFFLUENT MONITORING RESULTS**

POLLUTANT	MAHL, if Applicable in lb/day	Influent Measured in µg/L (Actual Concentration or < MAL)				Average Influent % of the MAHL <sup>2</sup>	Daily Average Effluent Limit (µg/L) <sup>3</sup>	Effluent Measured in µg/L (Actual Concentration or < MAL) <sup>4</sup>			
		Date	Date	Date	Date			Date	Date	Date	Date
<b>METALS, CYANIDE AND PHENOLS</b>											
Antimony, Total											
Arsenic, Total											
Beryllium, Total											
Cadmium, Total											
Chromium, Total											
Chromium (Hex)											
Chromium (Tri) <sup>5</sup>											
Copper, Total											
Lead, Total											
Mercury, Total											
Nickel, Total											
Selenium, Total											
Silver, Total											
Thallium, Total											
Zinc, Total											
Cyanide, Available <sup>6</sup>											
Cyanide, Total											
Phenols, Total											



## PRETREATMENT PROGRAM INFLUENT AND EFFLUENT MONITORING RESULTS

POLLUTANT	MAHL, if Applicable in lb/day	Influent Measured in µg/L  (Actual Concentration or < MAL)	Average Influent % of the MAHL <sup>2</sup>	Daily Average Effluent Limit (µg/L) <sup>3</sup>	Effluent Measured in µg/L  (Actual Concentration or < MAL) <sup>4</sup>
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	Date	Date	Date	Date			Date	Date	Date	Date
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VOLATILE COMPOUNDS	
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[illegible]

# **PRETREATMENT PROGRAM INFLUENT AND EFFLUENT MONITORING RESULTS**

POLLUTANT	MAHL, if Applicable in lb/day	Influent Measured in µg/L (Actual Concentration or < MAL)				Average Influent % of the MAHL <sup>2</sup>	Daily Average Effluent Limit (µg/L) <sup>3</sup>	Effluent Measured in µg/L (Actual Concentration or < MAL) <sup>4</sup>			
		Date	Date	Date	Date			Date	Date	Date	Date
Tetrachloroethylene											
Toluene											
1,2-Trans-Dichloroethylene											
1,1,1-Trichloroethane											
1,1,2-Trichloroethane											
Trichloroethylene											
Vinyl Chloride											
<b>ACID COMPOUNDS</b>											
2-Chlorophenol											
2,4-Dichlorophenol											
2,4-Dimethylphenol											
4,6-Dinitro-o-Cresol											
2,4-Dinitrophenol											
2-Nitrophenol											
4-Nitrophenol											
P-Chloro-m-Cresol											
Pentachlorophenol											
Phenol											
2,4,6-Trichlorophenol											
<b>BASE/NEUTRAL COMPOUNDS</b>											
Acenaphthene											
Acenaphthylene											



## PRETREATMENT PROGRAM INFLUENT AND EFFLUENT MONITORING RESULTS

[illegible]

## PRETREATMENT PROGRAM INFLUENT AND EFFLUENT MONITORING RESULTS

[illegible]

# PRETREATMENT PROGRAM INFLUENT AND EFFLUENT MONITORING RESULTS

POLLUTANT	MAHL, if Applicable in lb/day	Influent Measured in µg/L (Actual Concentration or < MAL)				Average Influent % of the MAHL <sup>2</sup>	Daily Average Effluent Limit (µg/L) <sup>3</sup>	Effluent Measured in µg/L (Actual Concentration or < MAL) <sup>4</sup>			
		Date	Date	Date	Date			Date	Date	Date	Date
PESTICIDES											
Aldrin											
Alpha-hexachlorocyclohexane (BHC)											
beta-BHC											
gamma-BHC (Lindane)											
delta-BHC											
Chlordane											
4,4-DDT											
4,4-DDE											
4,4-DDD											
Dieldrin											
alpha-Endosulfan											
beta-Endosulfan											
Endosulfan Sulfate											
Endrin											
Endrin Aldehyde											
Heptachlor											
Heptachlor Epoxide											
Polychlorinated biphenols (PCBs) <i>The sum of PCB concentrations not to exceed daily average value.</i>											
PCB-1242							See PCBs				
PCB-1254							See PCBs				
PCB-1221							See PCBs				

## PRETREATMENT PROGRAM INFLUENT AND EFFLUENT MONITORING RESULTS

[illegible]

## ADDITIONAL TOXIC POLLUTANTS REGULATED UNDER 30 TAC CHAPTER 307

[illegible]

## PRETREATMENT PROGRAM INFLUENT AND EFFLUENT MONITORING RESULTS

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

## Endnotes:

1. It is advised that the permittee collect the influent and effluent samples considering flow detention time through each wastewater treatment plant (WWTP).
2. The MAHL of the approved TBLLs or for each pollutant of concern (POC) for which the permittee has calculated a MAHL. Only complete the column labeled "Average Influent % of the MAHL," as a percentage, for pollutants that have approved TBLLs or for each POC for which the permittee has calculated a MAHL (U.S. Environmental Protection Agency *Local Limits Development Guidance*, July 2004, EPA933-R-04-002A).

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

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

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

Where:

$L_{\text{INF}}$  = Current Average (Avg) influent loading in lb/day

$C_{\text{POLL}}$  = Avg concentration in  $\mu\text{g/L}$  of all influent samples collected during the pretreatment year.

$Q_{\text{WWTP}}$  = Annual average flow of the WWTP in MGD, defined as the arithmetic average of all daily flow determinations taken within the preceding 12 consecutive calendar months (or during the pretreatment year), and as described in the Definitions and Standard Permit Conditions section.

$L_{\%}$  = % of the MAHL

MAHL = Calculated MAHL in lb/day

8.34 = Unit conversion factor

3. Daily average effluent limit (metal values are for total metals) as derived by the Texas Toxicity Modeling Program (TexTox). Effluent limits as calculated are designed to be protective of the Texas Surface Water Quality Standards. The permittee shall determine and indicate which effluent limit is the most stringent between the 30 TAC Chapter 319, Subchapter B (Hazardous Metals) limit, TexTox values, or any applicable limit in the Effluent Limitations and Monitoring Requirements Section of this TPDES permit. Shaded blocks need not be filled in unless the permittee has received a permit requirement/limit for the particular parameter.
4. Minimum analytical levels (MALs) and analytical methods as suggested in Tables E-1 and E-2 of the *Procedures to Implement the Texas Surface Water Quality Standards* (June 2010), as amended and adopted by the TCEQ. Pollutants that are not detectable above the MAL need to be reported as less than (<) the MAL numeric value.
5. Report result by subtracting Hexavalent Chromium from Total Chromium.
6. Either the method for Amenable to Chlorination or Weak-Acid Dissociable is authorized.
7. Hydrolyzes in water. Will not require permittee to analyze at this time.
8. EPA procedure not approved. Will not require permittee to analyze at this time.
9. Analyses are not required at this time for these pollutants unless there is reason to believe that these pollutants may be present.



# TCEQ Interoffice Memorandum

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**To:** Municipal Permits Team  
Wastewater Permitting Section

**From:** Michael B. Pfeil, Standards Implementation Team  
*MBP* Water Quality Assessment Section  
Water Quality Division

**Date:** February 14, 2024

**Subject:** City of Houston  
Northwest WWTP  
Permit No. WQ0010495076

## WHOLE EFFLUENT TOXICITY (WET) TESTING (BIOMONITORING)

The following information applies to Outfall 001. We recommend freshwater chronic and 24-hour acute testing. For chronic testing, we recommend the water flea (*Ceriodaphnia dubia*) and the fathead minnow (*Pimephales promelas*) as test species and a testing frequency of once per quarter for both test species. We recommend a dilution series of 27%, 37%, 49%, 65%, and 100% with a critical dilution of 65%. The critical dilution is in accordance with the "Aquatic Life Criteria" section of the "Water Quality Based Effluent Limitations/Conditions" section.

For 24-hour acute testing, we recommend a water flea (*Ceriodaphnia dubia* or *Daphnia pulex*) and the fathead minnow as test species and a testing frequency of once per six months for both test species. In the past three years, the permittee has performed twelve 24-hour acute tests, with zero demonstrations of significant mortality (i.e., zero failures).

## REASONABLE POTENTIAL (RP) DETERMINATION

In the past three years, the permittee performed eighteen chronic tests, with zero demonstrations of significant toxicity (i.e., zero failures).

A reasonable potential determination was performed in accordance with 40 CFR §122.44(d)(1)(ii) to determine whether the discharge will reasonably be expected to cause or contribute to an exceedance of a state water quality standard or criterion within that standard. Each test species is evaluated separately. The RP determination is based on representative data from the previous three years of chronic WET testing. This determination was performed in accordance with the methodology outlined in the TCEQ letter to the EPA dated December 28, 2015, and approved by the EPA in a letter dated December 28, 2015.

With zero failures, a determination of no RP was made. WET limits are not required and both test species may be eligible for the testing frequency reduction after one year of quarterly testing.

# Houston, WQ0010495076, Three-year WET testing history

## Chronic

Outfall	Sp	Due date	Test date	Lethal Results	NOECsurv	Sub-Lethal Results	NOEC Subleth
001	cd	7/20/2021	5/4/2021	Pass	>100	Pass	>100
001	cd	10/20/2021	8/24/2021	Pass	>100	Pass	>100
001	pp	10/20/2021	8/24/2021	Pass	>100	Pass	>100
001	cd	1/20/2022	10/19/2021	Pass	>100	Pass	>100
001	pp	1/20/2022	10/19/2021	Pass	>100	Pass	>100
001	cd	4/20/2022	1/5/2022	Pass	>100	Pass	>100
001	pp	4/20/2022	1/5/2022	Pass	>100	Pass	>100
001	cd	7/20/2022	5/10/2022	Pass	>100	Pass	>100
001	cd	10/20/2022	8/23/2022	Pass	>100	Pass	>100
001	cd	1/20/2023	10/11/2022	Pass	>100	Pass	>100
001	pp	1/20/2023	5/10/2022	Pass	>100	Pass	>100
001	cd	4/20/2023	1/31/2023	Pass	>100	Pass	>100
001	cd	7/20/2023	4/18/2023	Pass	>100	Pass	>100
001	cd	10/20/2023	7/18/2023	Pass	>100	Pass	>100
001	cd	1/20/2024	10/10/2023	Pass	>100	Pass	>100
001	pp	1/20/2024	1/31/2023	Pass	>100	Pass	>100
001	cd	4/20/2024	1/19/2024	Pass	>100	Pass	>100
001	pp	1/20/2025	1/19/2024	Pass	>100	Pass	>100

## 24-hour Acute


Outfall	Sp	Due date	Test date	Results	LC50
001	dp	1/20/2022	8/24/2021	Pass	>100
001	pp	1/20/2022	8/24/2021	Pass	>100
001	dp	7/20/2022	1/5/2022	Pass	>100
001	pp	7/20/2022	1/5/2022	Pass	>100
001	dp	1/20/2023	8/23/2022	Pass	>100
001	pp	1/20/2023	8/23/2022	Pass	>100
001	dp	7/20/2023	1/31/2023	Pass	>100
001	pp	7/20/2023	1/31/2023	Pass	>100
001	dp	1/20/2024	7/18/2023	Pass	>100
001	pp	1/20/2024	7/18/2023	Pass	>100
001	dp	7/20/2024	1/19/2024	Pass	>100
001	pp	7/20/2024	1/19/2024	Pass	>100



# TCEQ Interoffice Memorandum

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**To:** Municipal Permits Team  
Wastewater Permitting Section

**From:**  Josi Robertson  
Water Quality Assessment Team  
Water Quality Assessment Section

**Date:** February 14, 2024

**Subject:** City of Houston  
Permit Renewal (WQ0010495076, TX0063011)  
Discharge to a tributary of Whiteoak Bayou Above Tidal (Segment No. 1017)

The referenced applicant is proposing to renew its permit authorizing the discharge of 18 MGD of treated domestic wastewater into the watershed of Whiteoak Bayou Above Tidal (Segment No. 1017). A dissolved oxygen analysis of the referenced discharge was conducted using an updated version of the calibrated QUAL-TX model documented in *Waste Load Evaluation WLE-1R for the Houston Ship Channel System (September 2006)*. The facility is located in Harris County.

Based on model results, the existing effluent limits of **10 mg/L CBOD<sub>5</sub>**, **3 mg/L Ammonia-nitrogen**, and **4.0 mg/L dissolved oxygen (DO)** are predicted to be adequate to maintain dissolved oxygen levels above the criteria stipulated by the Standards Implementation Team for the Cole Creek (3.0 mg/L) and Segment No. 1017 (3.0 mg/L).

Coefficients and kinetics used in the model are a combination of site-specific, standardized default, and estimated values. The results of this evaluation can be re-examined upon receipt of information that conflicts with the assumptions employed in this analysis.

Segment No. 1017 is not currently listed on the State's inventory of impaired and threatened waters (the **2022** Clean Water Act Section 303(d) list).

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

TMDL Project No. 22: *Eighteen Total Maximum Daily Loads for Bacteria in Buffalo and Whiteoak Bayous and Tributaries Segments 1013, 1013A, 1013C, 1014, 1014A, 1014B, 1014E, 1014H, 1014K, 1014L, 1014M, 1014N, 1014O, 1017, 1017A, 1017B, 1017D, and 1017E* has been approved for this segment.

The effluent limits recommended above have been reviewed for consistency with the State of Texas Water Quality Management Plan (WQMP). The recommended limits are consistent with the approved WQMP.

# TCEQ Interoffice Memorandum

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To: Municipal Permits Team  
Wastewater Permitting Section

From: Brian Christman, Water Quality Assessment Team  
Water Quality Assessment Section

Date: February 13, 2024

Subject: City of Houston  
Wastewater Permit No. WQ0010495076  
Critical Conditions Recommendation Memo

The following information applies to **Outfall 001**.

The TexTox menu number is **3** for a perennial freshwater ditch, stream, or river.

This discharge is to Whiteoak Bayou Above Tidal (Segment No. 1017).

Segment No.	1017
Effluent Flow for Aquatic Life (MGD)	18 (Permitted)
Critical Low Flow [7Q2] (cfs)	14.98
Effluent Flow for Human Health (MGD)	18 (Permitted)
Harmonic Mean Flow (cfs)	28.45

Human Health criteria apply for Fish Only.

The chronic aquatic life mixing zone is defined as 300 feet downstream and 100 feet upstream from the point of discharge. Chronic toxic criteria apply at the edge of the chronic aquatic life mixing zone.

**Additional comments:** The Standards Implementation Team considers the discharge to be direct to Whiteoak Bayou Above Tidal (Segment No. 1017) and Cole Creek is not assessed.

## OUTFALL LOCATION<sup>1</sup>

Outfall Number	Latitude	Longitude
001	29.844860 N	95.460813 W

<sup>1</sup> Latitude and Longitude values are approximations of the location for administrative purposes.

# TCEQ Interoffice Memorandum

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**To:** Municipal Permits Team  
Wastewater Permitting Section

**From:** Michelle Labrie, Standards Implementation Team  
Water Quality Assessment Section  
Water Quality Division

**Date:** February 8, 2024

**Subject:** City of Houston; Permit no. WQ0010495076  
Renewal; Application received 12/1/2023

The discharge route for the above referenced permit is to Cole Creek, thence to Whiteoak Bayou in Segment 1017 of the San Jacinto River Basin. The designated uses and dissolved oxygen criterion as stated in Appendix A of the Texas Surface Water Quality Standards (30 Texas Administrative Code §307.10) for Segment 1017 are primary contact recreation, limited aquatic life use, and 3.0 mg/L dissolved oxygen.

*The Standards Implementation Team recommends the following requirement be added to the permit:*

*The permittee shall conduct an instream monitoring study for chloride and sulfate. Within 180 days of permit issuance, the permittee shall submit an instream monitoring plan for Cole Creek to the TCEQ Compliance Monitoring Team (MC-224), and cc the Standards Implementation Team (MC 150) for TCEQ review and approval prior to any sampling. The TCEQ may disapprove or modify the work plan within 60 days of receipt. The instream monitoring shall be conducted to collect representative values of ambient chloride and sulfate. Monitoring shall occur at 1) a minimum of one sampling station on Cole Creek located at least 500 feet upstream of the discharge point (i.e., outside of the mixing zone) in an area unimpacted by other wastewater discharges; and 2) a minimum of one sampling station where Cole Creek confluent with Whiteoak Bayou (Segment 1017). Monitoring shall be done at a minimum frequency of once per month, include at least 30 samples from each location, and continue for no less than one year. Samples should be taken at similar frequency each month to ensure data is obtained equally throughout the year. The data should reflect baseline conditions as best as possible. Data collection and analytical methods shall conform to guidelines set forth in the Surface Water Quality Monitoring Procedures, Volume 1 (RG-415, revised August 2012). Prior to the expiration of the issued permit, a final report shall be submitted to the TCEQ Compliance Monitoring Team (MC-224) and cc'ed to the Standards Implementation Team (MC 150)*

The discharge from this permit action is not expected to have an effect on any federal endangered or threatened aquatic or aquatic dependent species or proposed species or their critical habitat. This determination is based on the United States Fish and Wildlife Service's (USFWS) biological opinion on the State of Texas authorization of the Texas Pollutant Discharge Elimination System (TPDES; September 14, 1998; October 21, 1998 update). To make this determination for TPDES permits, TCEQ and EPA only considered aquatic or aquatic dependent species occurring in watersheds of critical concern or high priority as listed in Appendix A of the USFWS biological opinion. The determination is subject to reevaluation due to subsequent updates or amendments to the biological opinion. The permit does not require EPA review with respect to the presence of endangered or threatened species.

Jon Niermann, *Chairman*  
Emily Lindley, *Commissioner*  
Bobby Janecka, *Commissioner*  
Kelly Keel, *Executive Director*



## TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

*Protecting Texas by Reducing and Preventing Pollution*

February 7, 2024

Ms. Heather Maloney  
Environmental Investigator V  
City of Houston, Houston Public Works  
10500 Bellaire Boulevard  
Houston, Texas 77072

RE: Declaration of Administrative Completeness  
Applicant Name: City of Houston (CN600128995)  
Permit No.: WQ0010495076 (EPA I.D. No. TX0063011)  
Site Name: Northwest WWTP (RN101610665)  
Type of Application: Renewal

Dear Ms. Maloney:

The executive director has declared the above referenced application, received on December 1, 2023, administratively complete on February 7, 2024.

You are now required to publish notice of your proposed activity and make a copy of the application available for public review. The following items are included to help you meet the regulatory requirements associated with this notice:

- Instructions for Public Notice
- Notice for Newspaper Publication
- Public Notice Verification Form
- Publisher's Affidavits

You must follow all the directions in the enclosed instructions. The most common mistakes are the unauthorized changing of notice, wording, or font. If you fail to follow these instructions, you may be required to republish the notices.

The following requirements are also described in the enclosed instructions. However, due to their importance, they are highlighted here as well.

1. Publish the enclosed notice within **30 calendar days** after your application is declared administratively complete. (See this letter's first paragraph for the declaration date.) **You may be required to publish the notice in more than one newspaper, including a newspaper published in an alternative language, to satisfy all of the notice requirements.**
2. On or before the date you publish notice, place a copy of your permit application in a public place in the county where the facility is or will be located. This copy must be accessible to the public for review and copying, must be updated to reflect changes to the application, and must remain in place throughout the comment period.

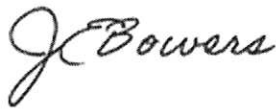
February 7, 2024

3. For each publication, submit proof of publication of the notice that shows the publication date and newspaper name to the Office of the Chief Clerk within **30 calendar days** after notice is published in the newspaper.
4. Return the original enclosed Public Notice Verification and the Publisher's Affidavits to the Office of the Chief Clerk within **30 calendar days** after the notice is published in the newspaper.

If you do not comply with all the requirements described in the instructions, further processing of your application may be suspended or the agency may take other actions.

If you have any questions regarding publication requirements, please contact the Office of Legal Services at (512) 239-0600. If you have any questions regarding the content of the notice, please contact Francesca Findlay at (512) 239-2441.

Sincerely,



Jennifer E. Bowers  
Section Manager, Water Quality Division Support  
Office of Water  
Texas Commission on Environmental Quality

JEB/fmf

Enclosures

**Texas Commission on Environmental Quality**  
**Instructions for Public Notice for a Water Quality Permit**  
**Notice of Receipt of Application and Intent to Obtain Permit (NORI)**

Your application has been declared administratively complete. You must comply with the following instructions. There are seven (7) steps involved in publishing notice. Complete each step.

**1. REVIEW THE NOTICE FOR ACCURACY**

**Read the enclosed notice carefully and notify the Application Review and Processing Team at 512-239-4671 immediately if it contains any errors or omissions.** You are responsible for ensuring the accuracy of all information published. Do not change the text or formatting of the notice or affidavit of publication without prior approval from the TCEQ. Changing the text or formatting of the notice may require new publication at your expense and delay processing of your application.

**2. PUBLISH THE NOTICE IN THE NEWSPAPER**

**You must publish the enclosed notice within 30 days after the date of administrative completeness.** Refer to the cover letter for the date of administrative completeness.

You must publish the enclosed notice at your expense, at least once in the newspaper of largest circulation within each county where the facility and discharge point are located or will be located. If the facility and discharge point are located or will be located in a municipality, the enclosed notice must be published at least once in a newspaper of general circulation in the municipality. These requirements may be satisfied by one publication if the newspaper meets all of the above requirements.

The bold text of the enclosed notice must be printed in the newspaper in a font style or size that distinguishes it from the rest of the notice (i.e., bold, italics). Failure to do so may require re-notice.

**3. PUBLISH THE NOTICE IN AN ALTERNATIVE LANGUAGE**

**You must publish notice in an alternative language IF:** either the elementary or middle school nearest to the facility or proposed facility is required to provide a "bilingual education program" (BEP) as required by Texas Education Code (TEC), Chapter 29, Subchapter B, and 19 Tex. Admin. Code §89.1205(a) AND one of the following conditions is met:

- students are enrolled in a program at that school;
- students from that school attend a bilingual education program at another location; or
- the school that otherwise would be required to provide a bilingual education program has been granted an exception from the requirements to provide the program as provided for in 19 Tex. Admin. Code §89.1207(a).

A "bilingual education program" is different from an "English as a second language program" (ESL). An ESL program alone, will not require public notice in an alternative language.



If triggered, you must publish the notice in a newspaper or publication primarily published in the alternative language taught in the bilingual education program. Publication in an alternative language section or insert within a large publication which is not printed primarily in that alternative language does not satisfy these requirements. The newspaper or publication must be of general circulation in the county in which the facility and discharge point are located or proposed to be located. If the facility and discharge point are located or proposed to be located in a municipality, and there exists a newspaper or publication of general circulation in the municipality, you must publish the notice only in the newspaper or publication in the municipality.

You must demonstrate a good faith effort to identify a newspaper or publication in the required language. If there is no general circulation newspaper or publication printed in such language, then publishing in that language is not required. You have the burden to demonstrate compliance with these requirements.

If you are required to publish notice in Spanish, you must translate the site-specific information in the notice that is specific to your application, at your own expense. You may then insert the Spanish translation of your site-specific information into a Spanish template developed by the TCEQ. The Spanish templates are available on the TCEQ website at [http://www.tceq.texas.gov/permitting/wastewater/review/wqspanish\\_nori.html](http://www.tceq.texas.gov/permitting/wastewater/review/wqspanish_nori.html). If you are required to publish notice in a language other than Spanish, you must translate the entire public notice, at your own expense.

#### **4. PUT THE APPLICATION IN A PUBLIC PLACE**

**You must put a copy of the administratively complete application in the public place identified in the enclosed notice.**

This copy must be accessible to the public for review and copying beginning on the first day of newspaper publication and remain in place for the publication's designated comment period.

During the technical review, you must update the publicly available application so that it includes all application revisions within 10 business days from the date the revision is transmitted to the TCEQ.

For confidential information contained in the application, you must indicate which specific portions of the application cannot be made available to the public. These portions of the application must be accompanied with the following statement: "Any request for portions of this application that are marked as confidential must be submitted in writing, pursuant to the Public Information Act, to the TCEQ Public Information Coordinator, MC 197, P.O. Box 13087, Austin, Texas 78711-3087."

#### **5. PROVIDE PROOF OF PUBLICATION**

**For each newspaper in which you published, you must submit proof of publication.** Proof of publication must include the following:

- a completed Publisher's Affidavit (enclosed); and
- a copy of the published notice which shows the notice, the date published, and the newspaper name. The copy must be on standard-size 8½ x 11" paper and must show the actual size of the published notice. Do not reduce the



image when making copies. Published notices longer than 11" must be copied onto multiple 8½ x 11" pages. Or you can submit the original newspaper clipping.

**If you are required to publish notice in an alternative language and are unable to do so, complete and submit the Alternative Language Exemption form (enclosed).**

**6. PROVIDE PROOF OF APPLICATION VIEWING LOCATION**

**You must submit a completed Public Notice Verification Form (enclosed) which certifies that the administratively complete application was placed at the public place identified in the enclosed notice.**

**7. SUBMIT PROOFS TO TCEQ**

**The proof of publication documents (Step 5) and the completed Public Notice Verification Form (Step 6) must be submitted to TCEQ within 30 days of publication.**

By email to: [PROOFS@tceq.texas.gov](mailto:PROOFS@tceq.texas.gov)

OR by mail at:

TCEQ

Office of the Chief Clerk, MC 105

Attn: Notice Team

P.O. Box 13087

Austin, Texas 78711-3087

NOTE: If proofs are submitted by email, you do not have to mail in the original documents.

**Additional Information**

**If you fail to publish the notice or submit proofs within the timeframes noted above, the TCEQ may suspend further processing on your application or take other actions in accordance with 30 Tex. Admin. Code §39.405(a).**

If you have any questions regarding publication requirements, please contact the Office of Legal Services at 512-239-0600. If you have any questions regarding the content of the notice, please contact the Wastewater Permitting Section at 512-239-4671. When contacting TCEQ regarding this application, please refer to the permit number at the top of the enclosed notice.

If you wish to obtain an electronic copy of the notice, please visit our web site at [http://www.tceq.texas.gov/agency/cc/cc\\_db.html](http://www.tceq.texas.gov/agency/cc/cc_db.html) or <http://www.tceq.texas.gov/agency/cc/eda.html>. Please be aware that formatting codes may be lost and that any notices downloaded from these web sites must be reformatted by you so that your downloaded copy looks like the notice document you received from us.

# TEXAS COMMISSION ON ENVIRONMENTAL QUALITY



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

**PERMIT NO. WQ0010495076**

**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. WQ0010495076 (EPA I.D. No. TX0063011) 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 5423 Mangum Road, Houston in Harris County, Texas 77091. The discharge route is from the plant site to Cole Creek; thence to Whiteoak Bayou Above Tidal. TCEQ received this application on December 1, 2023. The permit application will be available for viewing and copying at the City of Houston Public Works Building, 10500 Bellaire Boulevard, Houston, 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=-95.463055,29.844722&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](http://www.tceq.texas.gov/goto/cid). Search the database using the permit number for this application, which is provided at the top of this notice.

**AGENCY CONTACTS AND INFORMATION.** Public comments and requests must be submitted either electronically at <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](http://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 Ms. Heather Maloney, at 832-395-5756.

Issuance Date: February 7, 2024



**TEXAS COMMISSION ON ENVIRONMENTAL QUALITY**  
**Public Notice Verification Form**  
**Notice of Receipt of Application and Intent to Obtain Permit**  
**(NORI)**  
**Water Quality Permit**

---

**All applicants must complete this page.**

Applicant Name: [REDACTED]

Site or Facility Name: [REDACTED]

Water Quality Permit Number: [REDACTED]

Regulated Entity Number: RN [REDACTED] Customer Number: CN [REDACTED]

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**PUBLIC VIEWING LOCATION**

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I certify that a copy of the complete water quality application, and all revisions, were placed at the following public place for public viewing and copying. I understand that the copy will remain available at the public place from the 1<sup>st</sup> day of publication of the NORI until the end of the designated comment period. I further understand that the copy will be updated with any revisions to the application.

Name of Public Place: [REDACTED]

Address of Public Place: [REDACTED]

Applicant or Applicant Representative Signature: \_\_\_\_\_

Title: \_\_\_\_\_ Date: \_\_\_\_\_



**TEXAS COMMISSION ON ENVIRONMENTAL QUALITY**  
**Public Notice Verification Form**  
**Notice of Receipt of Application and Intent to Obtain Permit**  
**(NORI)**  
**Water Quality Permit**

---

**Complete this page only if you are required to publish in an alternative language and are not able to do so.**

Applicant Name: [REDACTED]

Site or Facility Name: [REDACTED]

Water Quality Permit Number: [REDACTED]

Regulated Entity Number: RN [REDACTED] Customer Number: CN [REDACTED]

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**ALTERNATIVE LANGUAGE EXEMPTION**

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I certify that I have conducted a diligent search for a newspaper or publication of general circulation in both the municipality and county in which the facility is located or proposed to be located and was unable to publish the notice in the required alternative language because:

- ☐ A newspaper or publication could not be found in any of the alternative languages in which notice is required.
- ☐ The publishers of the newspapers listed below refused to publish the notice as requested, and another newspaper or publication in the same language and of general circulation could not be found in the municipality or county in which the facility is located or proposed to be located.

Newspaper Name: [REDACTED]

Language: [REDACTED]

Applicant or Applicant Representative Signature: \_\_\_\_\_

Title: \_\_\_\_\_ Date: \_\_\_\_\_

Applicant Name: City of Houston  
Permit No.: WQ0010495076

**STATE OF TEXAS** §  
**COUNTY OF \_\_\_\_\_** §

\_\_\_\_\_ who being by me duly sworn, deposes  
(name of person representing newspaper)

of the \_\_\_\_\_; that this newspaper is a newspaper of  
(name of newspaper)

a newspaper of general circulation in \_\_\_\_\_,  
(name of municipality)

*(newspaper representative's signature)*

(Seal)

My Commission Expires \_\_\_\_\_



Applicant Name: City of Houston  
Permit No.: WQ0010495076

STATE OF TEXAS                               §  
COUNTY OF \_\_\_\_\_ §

My Commission Expires \_\_\_\_\_



# 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. WQ0010495076**

**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. WQ0010495076 (EPA I.D. No. TX0063011) 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 planta de tratamiento de aguas residuales domésticas está ubicada en 5423 Mangum Road, Houston, en el Condado de Harris, Texas 77091. La ruta de descarga es del sitio de la planta al riachuelo Cole Creek; de allí al pantano Whiteoak Bayou por encima de la marea. La TCEQ recibió esta solicitud en Diciembre 1, 2023. La solicitud para el permiso está disponible para leerla y copiarla en la Ciudad de Houston, Trabajos Públicos de Houston, Operaciones de Wastewater edificio, 10500 Bellaire Boulevard, Houston, 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=-95.463055,29.844722&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 todos los comentarios públicos.

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

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

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

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

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

También se puede obtener información adicional del La Ciudad de Houston a la dirección indicada arriba o llamando a Sra. Heather Maloney al (832) 395-5756.

Fecha de emission: 7 de febrero de 2024



**CHECKLIST FOR ADMIN REVIEW OF MUNICIPAL INDIVIDUAL PERMIT APPLICATION**

Permit No. WQ0010495076	EPA ID TX0063011	MGD 18 million gallons
CNCN600128995	RNRN101610665	County Harris Region No. 12
EPA Class. <input checked="" type="checkbox"/> Major <input type="checkbox"/> Minor	App Received Date 12/1/2023	Expiration Date <u>6-14-24</u>
Status <input type="checkbox"/> Inactive <input checked="" type="checkbox"/> Active	Segment No. 1017	Permit Type <input checked="" type="checkbox"/> TPDES <input type="checkbox"/> TLAP
Auth Type Public Domestic Wastewater	Application Type Renewal	

Note: A minor facility is generally one in which the final flow is less than 1.0 MGD.

Application Review Date: 12-12-23

- ☐ A copy of the **groundwater review** was provided (for TLAP new, major amendment, SADD minor amendment, and all applications with (or proposing) Class B sludge provisions).
- ☐ For **new and major amendment applications that propose surface water discharge (TPDES)**, the standards review for RWA comments is included.
- ☒ Coastal Zone sheet is included.

Fees or Penalties Owed: ☐ No ☐ Yes Amount Owed: \_\_\_\_\_

Verified in Basis2 Report: Outstanding Past Due Transactions Detail Report by Customer Name.

**ADMINISTRATIVE REPORT 1.0 – FOR ALL APPLICATIONS****SECTION 1. APPLICATION FEES**

**Application Fees:** Correct amount is checked **and** check or voucher number is provided and verified in Basis2 Report: Water Quality Receipt Report.  
Note: copies of checks should be removed and shredded.

**Municipal Application Fee Table**

Proposed/Final Phase Flow	New/Major Amend.	Renewals	Minor Amendment or Modification <b>without</b> Renewal (any flow)
< .05 MGD	<input type="checkbox"/> \$350.00	<input type="checkbox"/> \$315.00	<input type="checkbox"/> \$150.00
≥ .05 but < .10 MGD	<input type="checkbox"/> \$550.00	<input type="checkbox"/> \$515.00	
≥ .10 but < .25 MGD	<input type="checkbox"/> \$850.00	<input type="checkbox"/> \$815.00	
≥ .25 but < .50 MGD	<input type="checkbox"/> \$1,250.00	<input type="checkbox"/> \$1,215.00	
≥ .50 but < 1.0 MGD	<input type="checkbox"/> \$1,650.00	<input type="checkbox"/> \$1,615.00	
≥ 1.0 MGD	<input type="checkbox"/> \$2,050.00	<input type="checkbox"/> \$2,015.00	

**SECTION 2. TYPE OF APPLICATION**

- ☒ The correct application type is marked
- ☒ Reason for amendment or modification is listed (if applicable).
- Check Tech Report 1.0 Section 4 – Unbuilt Phases and Tech Report 1.1 Section 1.A – Justification for Permit.

Notes: Spanish

# **CHECKLIST FOR ADMIN REVIEW OF MUNICIPAL INDIVIDUAL PERMIT APPLICATION**

Permit No. _____	EPA ID _____	MGD _____
CN _____	RN _____	County _____ Region No. _____
EPA Class. <input type="checkbox"/> Major <input type="checkbox"/> Minor	App Received Date _____	Expiration Date _____
Status <input type="checkbox"/> Inactive <input type="checkbox"/> Active	Segment No. _____	Permit Type <input type="checkbox"/> TPDES <input type="checkbox"/> TLAP
Auth Type _____	Application Type _____	

Note: A minor facility is generally one in which the final flow is less than 1.0 MGD.

**Application Review Date:** \_\_\_\_\_

- ☐ A copy of the **groundwater review** was provided (for TLAP new, major amendment, SADD minor amendment, and all applications with (or proposing) Class B sludge provisions).
- ☐ For **new and major amendment applications that propose surface water discharge (TPDES)**, the standards review for RWA comments is included.
- ☐ Coastal Zone sheet is included.

**Fees or Penalties Owed:** ☐ No ☐ Yes Amount Owed: \_\_\_\_\_

Verified in Basis2 Report: Outstanding Past Due Transactions Detail Report by Customer Name.

## **ADMINISTRATIVE REPORT 1.0 – FOR ALL APPLICATIONS**

### **SECTION 1. APPLICATION FEES**

**Application Fees:** Correct amount is checked **and** check or voucher number is provided and verified in Basis2 Report: Water Quality Receipt Report.  
Note: copies of checks should be removed and shredded.

#### **Municipal Application Fee Table**

Proposed/Final Phase Flow	New/Major Amend.	Renewals	Minor Amendment or Modification <u>without</u> Renewal
< .05 MGD	<input type="checkbox"/> \$350.00	<input type="checkbox"/> \$315.00	<input type="checkbox"/> \$150.00 (any flow)
≥ .05 but < .10 MGD	<input type="checkbox"/> \$550.00	<input type="checkbox"/> \$515.00	
≥ .10 but < .25 MGD	<input type="checkbox"/> \$850.00	<input type="checkbox"/> \$815.00	
≥ .25 but < .50 MGD	<input type="checkbox"/> \$1,250.00	<input type="checkbox"/> \$1,215.00	
≥ .50 but < 1.0 MGD	<input type="checkbox"/> \$1,650.00	<input type="checkbox"/> \$1,615.00	
≥ 1.0 MGD	<input type="checkbox"/> \$2,050.00	<input type="checkbox"/> \$2,015.00	

### **SECTION 2. TYPE OF APPLICATION**

- ☐ The correct application type is marked
- ☐ Reason for amendment or modification is listed (if applicable).  
Check Tech Report 1.0 Section 4 – Unbuilt Phases and Tech Report 1.1 Section 1.A – Justification for Permit.

**Notes:** \_\_\_\_\_

### SECTION 3. FACILITY OWNER (APPLICANT) AND CO-APPLICANT INFORMATION

- ☒ Legal name of applicant is listed (***the owner of the facility must apply for the permit.***)
- ☒ CN is listed for existing customer.
- ☒ Name and title of the person signing the application is listed and matches signature page.
- ☒ Legal name of co-applicant is listed (***(if required to apply with facility owner).***)
- ☒ Core Data Form (CDF) is provided. A separate CDF is required for each customer.

### CORE DATA FORM TCEQ Core Data Standards

#### Section I – General Information

- ☒ Reason for submittal is marked.
- ☒ Customer (CN) and Regulated Entity (RN) Reference Nos. provided – verify with Central Registry.

#### Section II – Customer Information

- ☒ Customer legal name is provided and it matches name on admin report.
- ☒ Texas SOS/Filing number is provided for a private business entity – verify with SOS
- ☒ Texas State Tax ID is provided for a private business entity – verify with Comptroller
- ☒ Type of customer is marked – refer to information below
  - ☐ **Corporation:** Check with Secretary of State (SOS). Verify the entity status and charter number – print page. Verify correct legal spelling of applicant's name. Check spelling with SOS against the name listed in the application. (Permit must be issued in name as filed with SOS.) The applicant must be "**In existence and active**" before the application can be processed further.
  - ☐ **Those entities subject to state franchise taxes:** If applicable, check with Comptroller of Public Accounts (CPA) Verify the tax identification number is correct. Note: Non-profit organizations and partnerships are not subject to the state franchise tax.
  - ☐ **Individual: Complete Attachment 1 of Admin. Report 1.0** The complete legal name, including the middle name; and all other information is required. This info is required by Chapter 26.027C of the Texas Water Code. A separate attachment is required for each individual customer.
  - ☐ **Utility District:** Check iWDD to verify that district is not dissolved status (inactive is O.K. to process).
  - ☐ **Trust:** A copy of an executed trust agreement is provided. Verify that applicant's name is the same as the name in the trust agreement. NOTE: Executed trust must show signatures of trustees or beneficiaries forming the trust and the county in which it is recorded.
  - ☐ **Partnership:** Verify with Secretary of State (SOS) that partnership is registered, active, and has a filing number. Check spelling with SOS against the name submitted in Item 1; Check that SOS # is correct; Print page from SOS website. OR if the partnership is not listed with the SOS, the applicant must provide a copy of the partnership agreement. The agreement must: give the name of the partnership as provided on the application for permit; list names of partners; bear signatures of the partners; and state the terms of the partnership.
  - ☒ **Municipality/Governmental Agencies/School Districts:** City, County, ISD, Fed, etc. – applicable info is listed. Can verify with their public webpage.
  - ☐ Other \_\_\_\_\_
- ☒ Number of employees is marked
- ☒ Customer role is marked
- ☒ Mailing address for the applicant is provided - verify on USPS. This address is for mailing the permit.
- ☒ Email address is provided
- ☒ Telephone number is provided



### **Section III – Regulated Entity Information**

- ☒ Regulated Entity Name is provided and it matches name on admin report.
- ☒ Street address or location description of facility is adequately described. If different from current permit, new permit may be required. Use GIS mapping to confirm street address.
- ☒ The county where the facility is located is provided.
- ☒ The name of the nearest city is provided.
- ☒ The zip code is provided.
- ☒ The longitude and latitude of the facility is provided – check Map It link by searching for the Additional ID "AI" (WQ permit number) in Central Registry Internal Reporting Tool.
- ☒ Primary SIC Code is provided.
- ☒ Permit No. listed under appropriate program- if not listed, add it.
- ☒ **NOTE:** If other program ID numbers are listed and Update to Regulated Entity is checked in Section III, a copy of the CDF should be emailed to Central Registry EAMT at [registry@tceq.texas.gov](mailto:registry@tceq.texas.gov).

### **Section IV – Preparer Information**

- ☒ Name, title, telephone number, and email address are provided.

### **Section V – Authorized Signature**

- ☒ Company name, title, printed name, phone number, signature, and date are provided.

### **SECTION 4. APPLICATION CONTACT INFORMATION**

- ☒ Administrative and Technical contact name, address, electronic information provided.

### **SECTION 5. PERMIT CONTACT INFORMATION**

- ☒ 2 Permit contact names, addresses, electronic information provided.

### **SECTION 6. BILLING CONTACT INFORMATION**

- ☒ Billing contact name, address, electronic information provided.

### **SECTION 7. REPORTING CONTACT INFORMATION**

- ☒ DMR/MER contact name, address, electronic information provided.

### **SECTION 8. PUBLIC NOTICE INFORMATION**

- ☐ **Minor Amendment without Renewal** – NORI not required. Skip review of notice information.
- ☒ Name, address, and phone number of one person responsible for publishing NORI is provided.
- ☒ Method of sending NORI package is provided.
- ☒ Name and phone number of contact to be in NORI is provided.
- ☒ Location where application will be available is provided and is in the county where the facility is located - the location must be a building supported by taxpayer funds. Note: If discharge is directly into water body that borders two counties, application must be placed in a public facility in both counties and the notice must be published in both counties.
- ☒ Bilingual Items 1 – 5 are completed. If "Yes" to question 1 and "Yes" to either question 2, 3 or 4, then e.5 must be completed Spanish

### **Public Involvement Plan (PIP) All New or Major Amendment Applications**

For all PIP forms:

- ☐ Section 1 is completed.
- ☐ Section 2 is completed. All municipal new and major amendment applications require public notice. Verify the geographic location responses are correct using the statistical area map.

If ALL boxes in Section 2 are checked and verified:

- ☐ Sections 3, 6, and 7 are completed.
- ☐ Section 4 is completed, or plain language summary was provided by separate attachment for Section 15.
- ☐ Section 5 is completed. Any languages over 5% in items d and e will require alternative language notice and plain language summary.

## SECTION 9. REGULATED ENTITY and PERMITTED SITE INFORMATION

- ☒ Regulated Entity No. is listed. If not, it is not a deficiency. It can be verified with Central Registry and PARIS.
- ☒ Name of project or site is provided. Should correspond to Item 22 on CDF.
- ☒ Owner of the facility identified in the application is the same as the name given in Section 3.A  
**NOTE: THE OWNER OF THE FACILITY IS REQUIRED TO APPLY FOR THE PERMIT**  
(Refer to legal policy memo for complete definition and discussion of facility.)
- ☒ Marked whether ownership of the facility is public, private, or both.
- ☒ Owner of the land where permitted facility is or will be located is the **SAME** as the applicant.
- ☒ The owner of the land on which the facility is located is **DIFFERENT FROM** the owner of the facility: A copy of a lease agreement or easement, with a term for the duration of the permit, between applicant and landowner, has been provided. See Lease Agreement/Easement Memo dated 2/14/06, that states that a lease is sufficient for pond systems, and that details the provisions that a lease agreement or easement must contain. Lease must identify property by legal description or map.  
**OR** landowner can apply as a co-permittee.

### Effluent Disposal Site Owner:

- ☒ N/A - (no effluent disposal proposed)
- ☐ If land disposal is authorized in permit or proposed, the applicant **OWNS** land on which site is located.
- ☐ If applicant **DOES NOT OWN** land where site is located, a long-term lease agreement is provided which includes: a term of at least 5 years; is current or it includes an option to renew the term; is between the current applicant and the landowner; and includes description of property by legal description or map.  
(For new TLAP permits only: A copy of an executed option to purchase agreement may be provided to show that applicant will have ownership of the land upon permit approval.)

### Sewage Sludge Disposal Site Owner:

- ☒ N/A - (no sludge disposal proposed)
- ☐ If sludge is authorized in permit or proposed, the applicant **OWNS** land on which disposal site is located, otherwise lease is needed unless Class B sludge is land applied. Check the permit under Sludge Provisions to determine if sludge is authorized. Note: For BLU sludge application – lease is not needed; landowner just needs to sign sludge affidavit (if different from applicant).

If sludge disposal is proposed or authorized in the permit, the applicant must also submit the applicable sludge forms.

## SECTION 10. TPDES DISCHARGE INFORMATION

- ☒ Checked if treatment facility location in permit is correct.
- ☒ Checked if discharge info in permit is correct. If applicable, the discharge route description is adequately described and describes the discharge route to the nearest major watercourse. Changing the point of discharge and route from the current permit description requires a major amendment
- ☒ The name of the city (or nearest city) where the outfall(s) is/will be located has been provided
- ☒ The county where the outfall is located is provided
- ☒ The longitude and latitude of the outfall is provided
- ☒ Marked item regarding authorization for discharge into a city, county, or state ditch. If applicable, correspondence is provided. Email TXDOT if discharge is to a **state** highway right-of-way or roadside ditch.
- ☒ For a daily average flow of 5 MGD or more: the names of all counties located within 100 miles downstream from the point of discharge. These counties will be listed on contact sheet.

## SECTION 11. TLAP DISPOSAL INFORMATION

- ☐ The written location description of the disposal site is adequately described. (**NOTE: A CHANGE IN LOCATION OR INCREASE IN ACREAGE REQUIRES A MAJOR AMENDMENT. A decrease in acreage may also be a major amendment (due to flow rate) - check with permit writer**)
- ☐ The name of the city (or nearest city) has been provided
- ☐ The county where the disposal site is located is provided
- ☐ The longitude and latitude of the disposal site is provided
- ☐ The written flow of effluent from the facility to the effluent disposal site is adequately described
- ☐ The nearest watercourse to the disposal site is listed



## SECTION 12. MISCELLANEOUS INFORMATION

- ☒ Identified whether or not facility or discharge are on American Indian Land. If yes, we do not have permit authority.)
- ☒ For permits that allow sewage sludge disposal the location description is adequately described. For an existing permit, check to see that the location has not changed
- ☒ Indicated whether any former TCEQ employees who were paid for services regarding this application
- ☒ Fees or Penalties Owed: ☒ No ☐ Yes - See page 1 of checklist

## SECTION 13 ATTACHMENTS

- ☐ Lease agreement or deed recorded easement, if the land where the treatment facility or the effluent disposal site are located are not owned by the applicant or co-applicant.
- ☒ An ORIGINAL or equivalent FULL-SIZED USGS 7.5-minute topographic map (8½ x 11 acceptable for amendment and renewal applications) is provided and labeled showing:
  - ☒ applicant's property boundary
  - ☒ treatment facility boundaries
  - ☒ point(s) of discharge (outfalls)
  - ☒ discharge route for three miles downstream or until it reaches a classified segment
  - ☐ effluent disposal site(s)
  - ☒ pond(s)
  - ☒ sludge disposal/land application site
  - ☒ one-mile radius

### All original or equivalent full-sized maps must show:

- ☐ Color map
- ☐ Clear contour lines
- ☐ Upper left corner must identify map as USGS
- ☐ Lower left corner, datum & project information
- ☐ Bottom, magnetic declination
- ☐ Bottom, must show scale
- ☐ Bottom, identify contour intervals
- ☐ Bottom, national map accuracy std.
- ☐ Bottom, show State of TX and quad location
- ☐ Around map, lat and long coordinates
- ☐ Bottom, quadrangle name
- ☐ Bottom, must identify map date

## SECTION 14 SIGNATURE PAGE

Note: The signature information below lists the proper signatories for the various entities and the current version of the application contains a paragraph referencing 30 TAC 305.44. The person signing the application verifies that he or she is authorized, under this rule, to sign the application. We must verify that the title meets the requirements or signatory authority has been delegated.

☒ **Original Signature Page is required.**

☒ **Signature must be properly notarized – check that signature date and notarized date are the same.**

### Applicant

### Co-Applicant

- |                                     |                          |   |
|-------------------------------------|--------------------------|---|
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | City: Elected official or principle executive officer of the city may be public works director.   |
| <input type="checkbox"/>            | <input type="checkbox"/> | Individual: only the individual signs for himself/herself.  |
| <input type="checkbox"/>            | <input type="checkbox"/> | Partnership: General Partner or exec officer  |
| <input type="checkbox"/>            | <input type="checkbox"/> | Corporation: at least the level of vice president (CEO, Chairman of Board, Secretary)             |
| <input type="checkbox"/>            | <input type="checkbox"/> | Utility District: at least the level of vice president, on Board of Directors or District Manager |
| <input type="checkbox"/>            | <input type="checkbox"/> | Water Authority: Regional managers.   |
| <input type="checkbox"/>            | <input type="checkbox"/> | School Districts: at least level of the Assistant Superintendent or board members.                |
| <input type="checkbox"/>            | <input type="checkbox"/> | Governmental Agencies: Division Directors or Regional Directors.                                  |
| <input type="checkbox"/>            | <input type="checkbox"/> | Trust: The trustee that has been identified in the trust agreement.                               |
| <input type="checkbox"/>            | <input type="checkbox"/> | Other: _____  |

## SECTION 15. PLAIN LANGUAGE SUMMARY

- ☒ Plain Language Summary in English is provided for all applications. Verify the customer's name, facility name and location, type of facility, and flow are consistent with the application and notice.
- ☒ Plain Language Summary for any alternative language listed in Section 8, Item E, No. 5 is provided, if applicable.

## ADMIN REPORT 1.1 For All New or Major Amendment Applications

### SECTION 1. AFFECTED LANDOWNER INFORMATION

#### Landowner Map:

- ☐ The applicant's complete property boundaries are delineated which includes boundaries of contiguous property owned by the applicant.
- ☐ For domestic facilities, show the buffer zone and identify all of the landowners whose property is located within the buffer zone.
- ☐ The property boundaries of the landowners surrounding the applicant's property have been clearly delineated on the map.
- ☐ The location of the facility within applicant's property is shown.

#### For TPDES applications:

- ☐ The point(s) of discharge is clearly identified on the map and the discharge route(s) is highlighted.
- ☐ The scale of map is provided to measure one mile downstream **or** if discharge is into a lake, bay estuary, or affected by tides, ½ mile up & down stream is measured.
- ☐ The property boundaries of landowners adjacent to the discharge route(s) for one mile downstream from the point of discharge have been clearly delineated and the route is clearly delineated. **OR** If discharge is into a lake, bay estuary, or affected by tides, the property boundaries of landowners ½ mile up & downstream and those property owners across the lake along the shore line that fall within a ½ mile radius of the point of discharge are clearly delineated on the map.

#### For TLAP applications (i.e., irrigation, evaporation, etc.):

- ☐ The boundaries of the disposal site are clearly shown on the map.
- ☐ The boundaries of all landowners surrounding the disposal site are shown.

#### For all TPDES/TLAP applications:

- ☐ Cross-referenced list of landowners is provided.
- ☐ USB with Microsoft Word document formatted for mailing labels (Avery 5160) or four sets of mailing labels were provided.
- ☐ Source of landowners' info was provided.
- ☐ Provided response regarding permanent school fund land. Check GLO on contact sheet for Yes.

### SUPPLEMENTAL PERMIT INFORMATION FORM (SPIF)

- ☐ SPIF is provided and complete/information matches application (TPDES only).
- ☐ SPIF Map is included or confirm USGS map is sufficient.

### TECHNICAL REPORT – MUNICIPAL/DOMESTIC APPLICATIONS

- ☐ **Minor Amendment *without* Renewal.** Review not required. Just make sure report is provided.

#### THE FOLLOWING ITEMS APPLY TO ALL APPLICATIONS:

- ☐ Technical Report 1.0, Section 1 – The permitted or proposed design flow is indicated. Flow for Final Phase is used to determine application fee and in the notice.
  - ☐ If flow indicated is greater than permitted, a major amendment is required.
  - ☐ If flow amount is less than permitted amount, confirm with applicant they want to reduce the flow.

- ☐ The permit authorizes irrigation/evaporation/subsurface disposal method (**Check current permit "Other Requirements" to see if authorized**) or if proposed, the information has been addressed in the technical report. Verify the acreage. If the acreage has changed from what is currently permitted, a major amendment is required.

The applicable worksheets must be completed:

- ☐ Worksheet 3.0 - required for land disposal of effluent
- ☐ Worksheet 3.1 - required for land disposal (new and major amendment only)
- ☐ Worksheet 3.2 - required for subsurface land disposal (new and major amendment only)
- ☐ Worksheet 3.3 - required for subsurface area drip dispersal systems (SADDs) (new and major amendment); may be required for renewal on a case-by-case basis.

- ☐ SADDs Applications: Compliance history items must be completed for SADDs disposal. When the application is administratively complete, a copy of the application and a transmittal letter must be sent to the State Department of Health Services. See the folder titled "SADDs" (under the Individual Permit Review folder) for a template of the letter.
- ☐ Worksheet 7.0 - required for SADD applications (new and major amendment only) - We do not review the form; we just make sure that it is submitted. If it is not submitted, request it in a NOD.

- ☐ Sludge disposal and/or land application is authorized in the permit on property owned or under applicant's control. (**Check current permit "Sludge Provisions" to see if authorized**)

- ☐ If facility is beneficially applying class B sludge on the same site as the facility, the applicant must submit the Beneficial Land Use of Sewage Sludge (Class B) Permit Application - Form No. 10451 (See Class B Sludge Permit checklist). The applicant must also submit the appropriate sludge application fee.
- ☐ If authorization is for sludge processing, storage, disposal, composting, marketing and distribution of sludge, sludge surface disposal, or sludge monofill or for temporary storage in sludge lagoons, the applicant must submit the Domestic Wastewater Permit Application: Sewage Sludge Technical Report - Form No. 10056.

Check for:

- ☐ required signatures (if applicable)
- ☐ site acreage
- ☐ application area acreage
- ☐ site boundaries shown on USGS map

Notes: If the applicant is disposing or land applying sludge on land owned or under their control, but it is not authorized in their permit or by any other TCEQ authorization, a major amendment is required.

If the application is for a new permit or major amendment, then verify the appropriate affected landowner requirements are met.

**WHEN APPLICATION IS NOT ADMINISTRATIVELY COMPLETE:**

- ☐ Complete NOD. See NOD Notes SOP.

**WHEN APPLICATION IS ADMINISTRATIVELY COMPLETE:**

**NORI not required for minor amendment.** Complete the Routing and Contact (list "n/a" for item about person responsible for publication of the notice) Blue sheets only.

- ☐ Complete NORI package. See NORI Notes SOP.
- ☐ Prepare SPIF forms (only for TPDES permits)
- ☐ checked application type
  - ☐ entered county name
  - ☐ entered administrative completeness date
  - ☐ ensured permit number is on form
  - ☐ \*check agency receiving SPIF
    - ☐ **Minor amendments** - ALL agencies **BUT** Texas Historical Commission and Army Corps of Engineers
    - ☐ **Renewals** - All agencies **BUT** Texas Historical Commission
    - ☐ **New and Major Amendments** - All agencies
  - ☐ check that the segment number (if known) is entered in receiving water body information.
  - ☐ On the accompanying map, delineate the discharge route in such a way that copies will reflect the highlighted discharge route.

**\*NOTE:** Copy of SPIFs not required for Houston - US Fish and Wildlife and Galveston-US Army Corps of Engineers. Reference SPIF Routing Sheet.

## **Admin Complete PARIS Entry and Other Reminders**

### **WQ Folder - Application Search**

#### **Application Summary Tab**

- ☐ Verify application Summary and Details. Update as needed.

#### **Admin Review Tab**

- ☐ Admin Review Begin Date
- ☐ Admin Complete Date
- ☐ All NOD Sent, Response Received, Response Complete Dates
- ☐ SPIF Required (Yes/No)
- ☐ NORI Required (Yes/No)

#### **Public Participation Tab -**

- ☐ NORI - Date notice is filed with CCO
- ☐ Public Notice Details - Notice Contact Information

### **CR Folder - RE Search**

**AI Detail Screen** - Verify AI Details and Physical Address. Update as needed.

**View Contact List** - Enter or Update Contact Information for these roles:

- ☐ Owner
- ☐ Applicant
- ☐ Technical
- ☐ Billing
- ☐ MER (TLAP only)
- ☐ Remove CN affiliation for MER contact (TLAP and TPDES)

#### **View EPA ID from AI List**

- ☐ View Customer List and verify CN is affiliated to EPA ID or add affiliation.

### **OTHER**

- ☐ Copy notice (and labels for New and Major Amendments), to H:\EVERYONEWQ\Water Quality App Team\Notice of Receipts
- ☐ Copy NORI and PLS to H:\EVERYONEWQ\WQD Notices
- ☐ Copy contact sheet to H:\EVERYONEWQ\Blue Contact Sheets
- ☐ SADDs - Send letter and copy of complete application to Dept. of Health Services
- ☐ Email TXDOT if discharge is to a state highway right-of-way or roadside ditch

# TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

## SUPPLEMENTAL PERMIT INFORMATION FORM (SPIF)

### FOR AGENCIES REVIEWING DOMESTIC TPDES WASTEWATER PERMIT APPLICATIONS

**TCEQ USE ONLY:**Application type: ☒ Renewal ☐ Major Amendment ☐ Minor Amendment ☐ NewCounty: Harris Segment Number: 1017Admin Complete Date: 2-7-2024

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)

The SPIF must be completed as a separate document. The TCEQ will mail a copy of the SPIF to each agency as required by the TCEQ agreement with EPA. If any of the items are not completely addressed or further information is needed, you will be contacted to provide the information before the permit is issued. Each item must be completely addressed.

**Do not refer to a response of any item in the permit application form.** Each attachment must be provided with this form separately from the administrative report of the application. The application will not be declared administratively complete without this form being completed in its entirety including all attachments.

The following applies to all applications:

1. Permittee: City of Houston

Permit No. WQ00 10495076EPA ID No. TX 0063011

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

5423 Mangum Road, in the City of Houston, Harris County, Texas 77091

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, Houston Public Works

Mailing Address: 10500 Bellaire Boulevard

City, State, Zip Code: Houston, Texas 77072

Phone No.: 832-395-5771 Ext.: Click here to enter text Fax No.: 832-395-5838

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 Cole Creek, thence to White Oak Bayou Above Tidal in Segment No. 1017 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).

N/A 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.

- ☐ 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

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

N/A

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

Existing disturbances, vegetation, and land use are those typical of a wastewater treatment facility.

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

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

[Click here to enter text.](#)

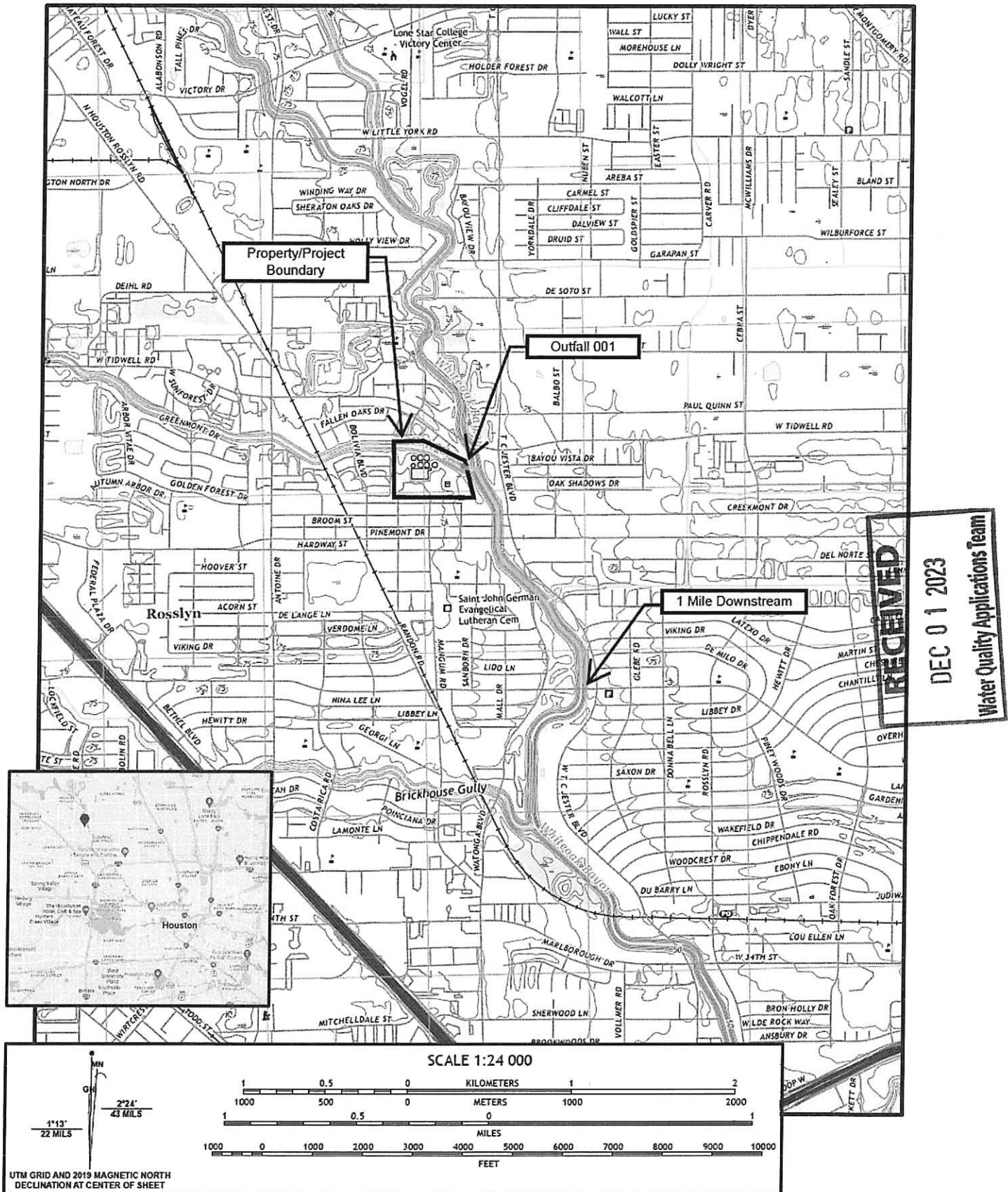
9. Provide a brief history of the property, and name of the architect/builder, if known.

[Click here to enter text.](#)



# Vicinity Map and Edited USGS Map

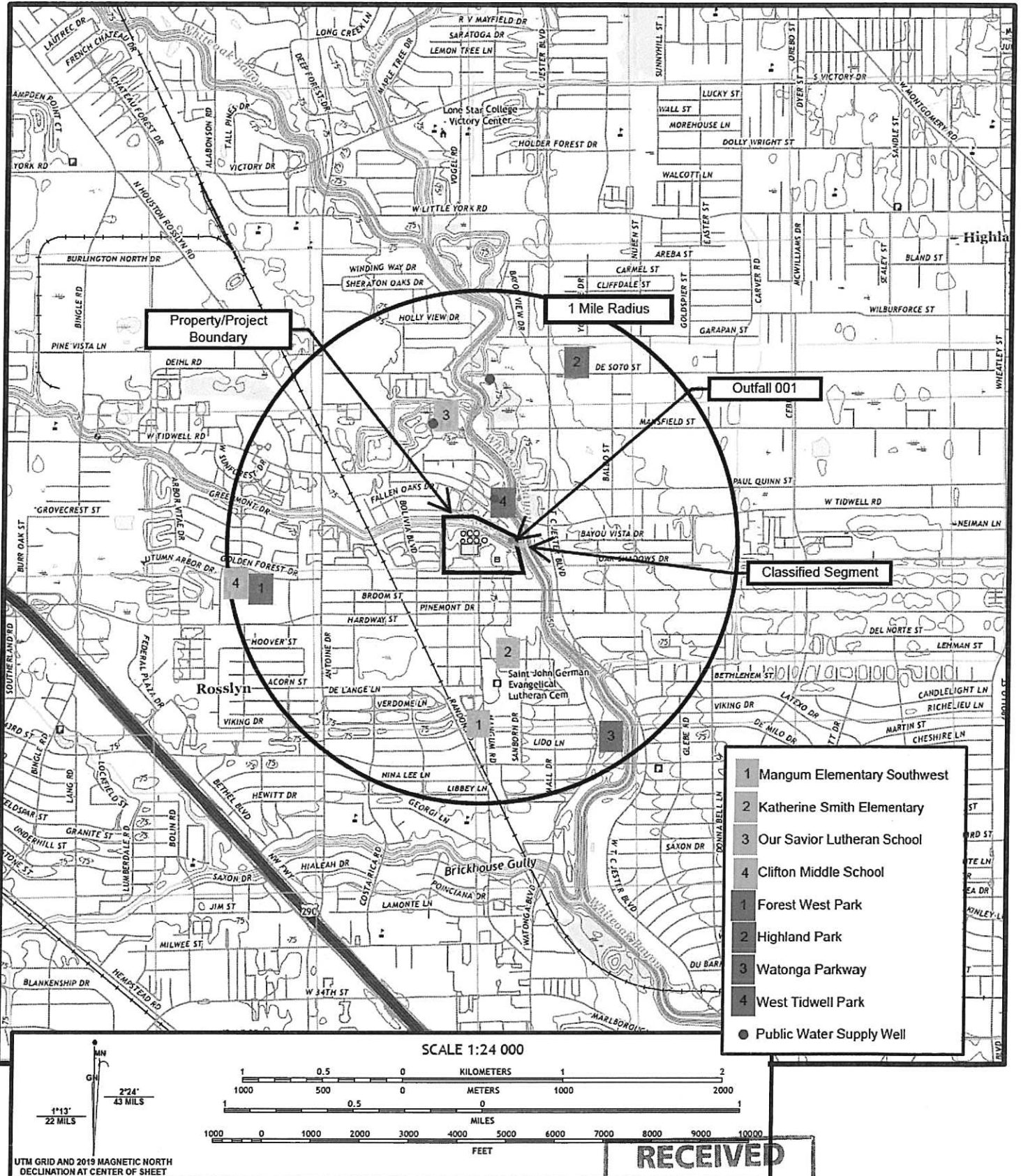
Reproduced Portion of 7.5-minute USGS Quadrangle Map – Houston Heights, TX



10/20/2023

# USGS Map

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



10/25/2023

## Francesca Findlay

---

**From:** Samarneh, Walid - HPW <Walid.Samarneh@houstontx.gov>  
**Sent:** Wednesday, February 7, 2024 4:39 PM  
**To:** Francesca Findlay  
**Subject:** RE: NORI Information for Permit No. WQ0010495076 City of Houston

**Name:** Heather Maloney  
**Title:** Environmental Investigator V  
**Address:** 10500 Bellaire Blvd.  
Houston, TX 77072  
**Phone:** 832-395-5756

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:** Francesca Findlay <Francesca.Findlay@tceq.texas.gov>  
**Sent:** Wednesday, February 7, 2024 3:53 PM  
**To:** Samarneh, Walid - HPW <Walid.Samarneh@houstontx.gov>  
**Subject:** RE: NORI Information for Permit No. WQ0010495076 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.]

Could you please give me all of Heather Maloney information. I need her phone number the address and her title. I need to update the contact information.

Thank you,

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



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

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

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**From:** Samarneh, Walid - HPW <Walid.Samarneh@houstontx.gov>  
**Sent:** Wednesday, February 7, 2024 3:41 PM

**To:** Francesca Findlay <[Francesca.Findlay@tceq.texas.gov](mailto:Francesca.Findlay@tceq.texas.gov)>  
**Cc:** Maloney, Heather - HPW <[Heather.Maloney@houstontx.gov](mailto:Heather.Maloney@houstontx.gov)>; B'Smith, Rebecca - HPW <[Rebecca.BSmith@houstontx.gov](mailto:Rebecca.BSmith@houstontx.gov)>  
**Subject:** RE: NORI Information for Permit No. WQ0010495076 City of Houston

Hello Francesca,

I would like to inform you that Carol LaBreche has retired effective 1/5/2024. Please remove her from your contacts and add Heather Maloney and Rebecca B'Smith copied on this email for future emails. We appreciate your help.

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:** Francesca Findlay <[Francesca.Findlay@tceq.texas.gov](mailto:Francesca.Findlay@tceq.texas.gov)>  
**Sent:** Wednesday, February 7, 2024 3:27 PM  
**To:** [Carol.LaBreche@houstontx.gov](mailto:Carol.LaBreche@houstontx.gov)  
**Cc:** Samarneh, Walid - HPW <[Walid.Samarneh@houstontx.gov](mailto:Walid.Samarneh@houstontx.gov)>  
**Subject:** FW: NORI Information for Permit No. WQ0010495076 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.]

No. WQ0010495076

Applicants are required to publish the Notice of Receipt of Application and Intent to Obtain a Water Quality Permit within 30 days of the application being declared administratively complete.

Attached is:

- ☐ Letter of Declaration of Administrative Completeness
- ☐ Instructions of Public Notice
- ☐ Notice of Receipt of Application and Intent to Obtain a Water Quality Permit
- ☐ Affidavit of Publication
- ☐ Public Notice Verification Form
- Spanish Nori

Thank you,

Francesca Findlay  
License & Permit Specialist  
ARP Team | Water Quality Division

512-239-2441

Texas Commission on Environmental Quality



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

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



December 15, 2023

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

Subject: Northwest Wastewater Treatment Facility  
Application to Renew TCEQ Permit Number: WQ0010495076, CN600128995, RN101610665  
Notice of Deficiency Letter dated December 13, 2023

Dear Ms. Findlay,

A Notice of Deficiency letter outlining items that must be addressed before the above-referenced application can be declared administratively complete was received on December 13, 2023. Please accept the following responses.

1. Core Data Form, Section II, items 27-28
  - a. Both the instructions and the core data form indicate these fields are only required if a street address is not provided. The facility's street address is provided in field 23. A revised core data form is not provided.
2. Core Data Form, Section III, item 26
  - a. Both the instructions and the core data form indicate this field is only required if a street address is not provided. The facility's street address is provided in field 23. A revised core data form is not provided.
3. Please make the following revisions to the portion of the Notice of Receipt of Application and Intent to Obtain a Water Quality Permit (NORI).
  - a. "...volume not to exceed a-daily an annual average flow of..."
  - b. "...available for viewing and copying at the City of Houston, Houston Public Works, Wastewater Operations Building, 10500 Bellaire..."
  - c. "...stated above or by calling Ms. Carol La Breche, P.E., at..."
4. Spanish NORI is attached with the above correction.

Please contact me or Heather Maloney at 832-395-5756 or [heather.maloney@houstontx.gov](mailto:heather.maloney@houstontx.gov) with any questions.

Sincerely,

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

Attachment(s): Spanish NORI

CL:hm

W:\Facility Records\Northwest076\Permits\Applications\2023Renewal\AdminReview\NW\_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. WQ0010495076**

**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. WQ0010495076 (EPA I.D. No. TX0063011) 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 planta de tratamiento de aguas residuales domésticas está ubicada en 5423 Mangum Road, Houston, en el Condado de Harris, Texas 77091. La ruta de descarga es del sitio de la planta al riachuelo Cole Creek; de allí al pantano Whiteoak Bayou por encima de la marea. La TCEQ recibió esta solicitud en Diciembre 1, 2023. La solicitud para el permiso está disponible para leerla y copiarla en la Ciudad de Houston, Trabajos Públicos de Houston, Operaciones de Wastewater edificio, 10500 Bellaire Boulevard, Houston, 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=-95.463055,29.844722&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