Administrative Package Cover Page

This file contains the following documents:

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

Portada de Paquete Administrativo

Este archivo contiene los siguientes documentos:

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

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

NOTICE OF RECEIPT OF APPLICATION AND RENEWAL

PERMIT NO. WQ0010495079

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. WQ0010495079 (EPA I.D. No. TX0035009) to authorize the discharge of treated wastewater at a volume not to exceed an annual average flow of 15,200,000 gallons per day. The domestic wastewater treatment facility is located at 9610 Kingspoint Road, in the city of Houston, in Harris County, Texas 77075. The discharge route is from the plant site to Harris County Flood Control District ditch. TCEQ received this application on October 17, 2024. The permit application will be available for viewing and copying at Houston Public Works Wastewater Operations Building, Library, 10500 Bellaire Boulevard, Houston, in Harris County, Texas prior to the date this notice is published in the newspaper. The application, including any updates, and associated notices are available electronically at the following webpage: https://www.tceq.texas.gov/permitting/wastewater/pending-permits/tpdes-applications. This link to an electronic map of the site or facility's general location is provided as a public courtesy and not part of the application or notice. For the exact location, refer to the application. https://gisweb.tceq.texas.gov/LocationMapper/?marker=-95.238055,29.603333&level=18

ALTERNATIVE LANGUAGE NOTICE. Alternative language notice in Spanish is available at: https://www.tceq.texas.gov/permitting/wastewater/pending-permits/tpdes-applications. El aviso de idioma alternativo en español está disponible en https://www.tceq.texas.gov/permitting/wastewater/pending-permits/tpdes-applications.

ADDITIONAL NOTICE. TCEQ's Executive Director has determined the application is administratively complete and will conduct a technical review of the application. After technical review of the application is complete, the Executive Director may prepare a draft permit and will issue a preliminary decision on the application. **Notice of the Application and Preliminary Decision will be published and mailed to those who are on the county-wide mailing list and to those who are on the mailing list for this application. That notice will contain the deadline for submitting public comments.**

PUBLIC COMMENT / PUBLIC MEETING. You may submit public comments or request a public meeting on this application. The purpose of a public meeting is to provide the opportunity to submit comments or to ask questions about the application. TCEQ will hold a public meeting if the Executive Director determines that there is a significant degree of public

interest in the application or if requested by a local legislator. A public meeting is not a contested case hearing.

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

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

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

The Commission may only grant a request for a contested case hearing on issues the requestor submitted in their timely comments that were not subsequently withdrawn. **If a hearing is granted, the subject of a hearing will be limited to disputed issues of fact or mixed questions of fact and law relating to relevant and material water quality concerns submitted during the comment period.**

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

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

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

AGENCY CONTACTS AND INFORMATION. All public comments and requests must be submitted either electronically at **https://www14.tceq.texas.gov/epic/eComment/**, or in writing to the Texas Commission on Environmental Quality, Office of the Chief Clerk, MC-105, P.O. Box 13087, Austin, Texas 78711-3087. Please be aware that any contact information you provide, including your name, phone number, email address and physical address will become part of the agency's public record. For more information about this permit application or the permitting process, please call the TCEQ Public Education Program, Toll Free, at 1-800-687-4040 or visit their website at www.tceq.texas.gov/goto/pep. Si desea información en Español, puede llamar al 1-800-687-4040.

Further information may also be obtained from City of Houston at the address stated above or by calling Ms. Heather Maloney, Environmental Investigator V, at 832-395-5756.

Issuance Date: November 7, 2024

Comisión de Calidad Ambiental del Estado de Texas

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

PERMISO NO. WQ0010495079

SOLICITUD. 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. WQ0010495079 (EPA I.D. No. TX0035009) cuál autoriza la descarga de malgaste agua tratados domésticos en un flujo promedio anual que no sobrepasa 15,200,000 galones por día. La planta de tratamiento de aguas residuales domésticas está ubicada en 9610 Kingspoint Road, Ciudad de Houston, Condado de Harris, Texas 77075. La ruta de descarga es desde el sitio de la planta a una zanja del Distrito de Medidas para Controlar las Inundaciones del Condado Harris (HCFCD) A120-00-00. La TCEQ recibió esta solicitud en 17 de octubre de 2024. La solicitud para el permiso estará disponible para leerla y copiarla en el Trabajos Públicos de Houston Operaciones de Wastewater Edificio, Biblioteca, 10500 Bellaire Boulevard, Houston, Condado de Harris, Texas antes de la fecha de publicación de este aviso en el periódico. La solicitud, incluidas las actualizaciones, y los avisos asociados están disponibles electrónicamente en la siguiente página web:
https://www.tceq.texas.gov/permitting/wastewater/pending-permits/tpdes-applications
Este enlace a un mapa electrónico de la ubicación general del sitio o de la instalación es proporcionado como una cortesía y no es parte de la solicitud o del aviso. Para la ubicación exacta, consulte la solicitud.
https://gisweb.tceq.texas.gov/LocationMapper/?marker=-95.238055,29.603333&level=18

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

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

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

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

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

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

designe cual lista(s) y envia por correo su pedido a la Oficina del Secretario Principal de la TCEQ.

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

También se puede obtener información adicional del La Ciudad de Houston a la dirección indicada arriba o llamando a Sra. Heather Maloney, Investigadora Ambiental V, al (832) 395-5756.

Fecha de emission: 7 de noviembre de 2024

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

PLAIN LANGUAGE SUMMARY FOR TPDES OR TLAP PERMIT APPLICATIONS

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

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

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

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

ENGLISH TEMPLATE FOR TPDES or TLAP NEW/RENEWAL/AMENDMENT APPLICATIONS DOMESTIC WASTEWATER/STORMWATER

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

City of Houston (CN600128995) operates the Southeast Wastewater Treatment Facility (RN101610459), an activated sludge wastewater treatment facility. The facility is located at 9610 Kingspoint Road, in Houston, Harris County, Texas 77075. This application is for a renewal to discharge an annual average flow of 15,200,000 gallons per day of treated domestic wastewater via Outfall 001.

Discharges from the facility are expected to contain five-day carbonaceous biochemical oxygen demand ($CBOD_5$), total suspended solids (TSS), ammonia-nitrogen (NH_3-N), and *Escherichia coli* (*E. coli*). Additional potential pollutants are included in the permit application package in Domestic Technical Report 1.0, Section 7 – Pollutant Analysis of Treated Effluent and Domestic Worksheet 4.0. Domestic wastewater is treated by an activated sludge process plant. Treatment units include bar screens for preliminary treatment, aeration basins for biological treatment, secondary clarifiers for solids settling, effluent filters for effluent polishing, and chlorine contact basins for disinfection. Solids from the facility are stabilized

in aerobic digesters, thickened in a gravity thickener, and dewatered on a belt press before being hauled to a landfill for disposal.

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

AGUAS RESIDUALES DOMÉSTICAS **/AGUAS PLUVIALES**

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

La Ciudad de Houston (CN600128995) opera la instalación de tratamiento de aguas residuales Southeast Wastewater Treatment Facility (RN101610459), un lodos activados – aireación prolongada instalación de tratamiento de aguas residuales. La instalación está ubicada en 9610 Kingspoint Road, en Houston, Condado de Harris, Texas 77075. Esta solicitud es para la renovación para descargar un flujo medio annual de 15.200.000 galones por día de aguas residuales domesticas tratadas por el emisario 001.

Se espera que las descargas de la instalación contengan demanda bioquímica de oxígeno carbónico ($CBOD_5$), sólidos suspendidos totales (TSS), nitrógeno amoniacal (NH_3-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 residuals domesticas está tratado por una planta de proceso de lodos activados. Las unidades de tratamiento incluyen pantalla de barra para tratamiento preliminar, cuencas de aireación y canales para tratamiento biológico, clarificadores secundario para la sedimentación de sólidos, filtros de efluentes para pulido de efluentes y cuenca de contacto con el cloro para la desinfección. Sólidos de la instalación se estabilizan en un digestor aeróbico, se espesan en un espesador por gravedad y deshidratan en una prensa de cinta antes de ser transportados a un vertedero para su eliminación.

Application to Renew TPDES Permit Number WQ0010495079

Southeast Wastewater Treatment Facility

Prepared Summer 2024

Section 14. Signature Page (Instructions Page 34)

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

Permit Number: WQ0010495079

Applicant: City of Houston

Certification:

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

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

Signatory name (typed or printed): Randall V. Macchi

Signatory title: Chief Operating Officer, Houston Public Works

Signature: _____ Date: 10/15/2024
(Use blue ink)

Subscribed and Sworn to before me by the said Randall V. Macchi
on this 15th day of October, 20 24.
My commission expires on the 25th day of July, 20 26.

Geraldine W. Blake
Notary Public

[SEAL]

Harris
County, Texas

GERALDINE W BLAKE
Notary ID #131656536
My Commission Expires
July 25, 2026

Section 14. Laboratory Accreditation (Instructions Page 56)

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

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

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

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

CERTIFICATION:

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

Printed Name: Randall V. Macchi

Title: Chief Operating Officer, Houston Public Works

Signature: _____

Date: 10/15/2024

☐ Dam Safety	☐ Districts	☐ Edwards Aquifer	☐ Emissions Inventory Air	☐ Industrial Hazardous Waste
☐ Municipal Solid Waste	☐ New Source Review Air	☐ OSSF	☐ Petroleum Storage Tank	☐ PWS
☐ Sludge	☒ Storm Water	☐ Title V Air	☐ Tires	☐ Used Oil
	TXR05FF89			
☐ Voluntary Cleanup	☒ Wastewater	☐ Wastewater Agriculture	☐ Water Rights	☒ Other: Reclaimed water
	WQ0010495079			R10495079

SECTION IV: Preparer Information

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

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

SECTION V: Authorized Signature

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

Company:	City of Houston, Houston Public Works	Job Title:	Chief Operating Officer, Houston Public Works
Name *(In Print)*:	Randall V. Macchi	Phone:	(832) 395- 2936
Signature:		Date:	10/15/2024

Application to Renew TPDES Permit Number WQ0010495079
Southeast Wastewater Treatment Facility

Permit Application Forms

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

Attachments

1	Copy of Application Fee Check	Administrative Report 1.0, Section 1
2	Core Data Form	Administrative Report 1.0, Section 3.C.
3	Plain Language Summary	Administrative Report 1.0, Section 8.F.
4	USGS Map	Administrative Report 1.0, Section 13
5	Supplemental Permit Information Form	SPIF
6	Treatment Process Description	Technical Report 1.0, Section 2.A.
7	Treatment Units	Technical Report 1.0, Section 2.B.
8	Process Flow Diagram	Technical Report 1.0, Section 2.C.
9	Site Drawing	Technical Report 1.0, Section 3
10	Summary Transmittal Letter and TCEQ Approval Letter	Technical Report 1.0, Section 6.A.
11	Buffer Zone Map	Technical Report 1.0, Section 6.B.
12	Solids Management Plan	Technical Report 1.0, Section 5.G.1.
13	Laboratory Test Reports and COCs	Technical Report 1.0, Section 7, Table 1.0(2) Worksheet 4.0, Section 1 Worksheet 4.0, Section 2
14	Facility Operators	Technical Report 1.0, Section 8
15	WET Test Reports	Worksheet 5.0, Section 1 Worksheet 5.0, Section 3

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

DOMESTIC WASTEWATER PERMIT APPLICATION CHECKLIST

Complete and submit this checklist with the application.

APPLICANT NAME: City of Houston

PERMIT NUMBER (If new, leave blank): WQ00 10495079

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

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

For TCEQ Use Only

Segment Number _____County _____
Expiration Date _____Region_____
Permit Number _____

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

DOMESTIC WASTEWATER PERMIT APPLICATION ADMINISTRATIVE REPORT 1.0

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

Section 1. Application Fees (Instructions Page 26)

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

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

Minor Amendment (for any flow) $150.00 ☐

Payment Information: **Attachment 1**

Mailed — Check/Money Order Number: 21094552

Check/Money Order Amount: $2015

Name Printed on Check: City of Houston

EPAY — Voucher Number: Click to enter text.

Copy of Payment Voucher enclosed? Yes ☐

Section 2. Type of Application (Instructions Page 26)

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

☒ Publicly-Owned Domestic Wastewater

☐ Privately-Owned Domestic Wastewater

☐ Conventional Wastewater Treatment

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

☒ Active ☐ Inactive

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

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

d. Check the box next to the appropriate application type

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

e. For amendments or modifications, describe the proposed changes: N/A

f. For existing permits:

Permit Number: WQ00 10495079

EPA I.D. (TPDES only): TX 0035009

Expiration Date: April 29, 2025

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

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

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

City of Houston

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

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

CN: 600128995

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

Prefix: Mr. Last Name, First Name: Macchi, Randall V.

Title: Chief Operating Officer, Houston Public Works Credential: N/A

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

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

N/A

(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: N/A

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: N/A Last Name, First Name: N/A

Title: N/A Credential: N/A

Provide a brief description of the need for a co-permittee: N/A

C. Core Data Form

Complete the Core Data Form for each customer and include as an attachment. If the customer type selected on the Core Data Form is **Individual**, complete **Attachment 1** of Administrative Report 1.0. **Attachment 2**

Section 4. Application Contact Information (Instructions Page 27)

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

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

Title: Managing Engineer Credential: P.E.

Organization Name: City of Houston

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

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

Check one or both: ☒ Administrative Contact ☒ Technical Contact

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

Title: Environmental Investigator V Credential: N/A

Organization Name: City of Houston

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

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

Check one or both: ☒ Administrative Contact ☒ Technical Contact

Section 5. Permit Contact Information (Instructions Page 27)

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

A. Prefix: Mr. Last Name, First Name: Macchi, Randall V.

Title: Chief Operating Officer, Houston Public Works Credential: N/A

Organization Name: City of Houston

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

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

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

Title: Mayor Credential: N/A

Organization Name: City of Houston

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

Phone No.: 713-837-0311 E-mail Address: mayor@houstontx.gov

Section 6. Billing Contact Information (Instructions Page 27)

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

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

Title: Managing Engineer Credential: P.E.

Organization Name: City of Houston

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

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

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

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

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

Title: Managing Engineer Credential: P.E.

Organization Name: City of Houston

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

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

Section 8. Public Notice Information (Instructions Page 27)

A. Individual Publishing the Notices

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

Title: Environmental Investigator V Credential: N/A

Organization Name: City of Houston

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

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

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

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

☒ E-mail Address

☐ Fax

☒ Regular Mail

C. Contact permit to be listed in the Notices

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

Title: Environmental Investigator V Credential: N/A

Organization Name: City of Houston

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

Phone No.: 832-395-5756 E-mail Address: heather.maloney@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 (Last Name, First Name): Maloney, Heather

Phone No.: 832-395-5756 Ext.: N/A

E. Bilingual Notice Requirements

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

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

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

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

   ☒ Yes ☐ No

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

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

   ☒ Yes ☐ No

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

   ☐ Yes ☒ No

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

   ☐ Yes ☒ No

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

F. Plain Language Summary Template

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

Attachment: 3

G. Public Involvement Plan Form

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

Attachment: N/A

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

A. If the site is currently regulated by TCEQ, provide the Regulated Entity Number (RN) issued to this site. **RN** 101610459

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):

Southeast 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: N/A Last Name, First Name: N/A

Title: N/A Credential: N/A

Organization 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: N/A

E. Owner of effluent disposal site:

Prefix: N/A Last Name, First Name: N/A

Title: N/A Credential: N/A

Organization Name: N/A

Mailing Address: N/A City, State, Zip Code: N/A

Phone No.: N/A E-mail Address: N/A

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

Attachment: N/A

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

Prefix: N/A Last Name, First Name: N/A

Title: N/A Credential: N/A

Organization Name: N/A

Mailing Address: N/A City, State, Zip Code: N/A

Phone No.: N/A E-mail Address: N/A

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

Attachment: N/A

Section 10. TPDES Discharge Information (Instructions Page 31)

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

☒ Yes ☐ No

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

N/A

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:

N/A

City nearest the outfall(s): Houston

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

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

☒ Yes ☐ No

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

☒ Authorization granted ☐ Authorization pending

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

Attachment: Click to enter text.

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

N/A

Section 11. TLAP Disposal Information (Instructions Page 32)

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

☐ Yes ☐ No

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

Click to enter text.

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

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

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

Click to enter text.

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

Section 12. Miscellaneous Information (Instructions Page 32)

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

☐ Yes ☒ No

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

☐ Yes ☐ No ☒ Not Applicable

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

N/A

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: N/A

D. Do you owe any fees to the TCEQ?

☐ Yes ☒ No

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

Account number: N/A

Amount past due: N/A

E. Do you owe any penalties to the TCEQ?

☐ Yes ☒ No

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

Enforcement order number: N/A

Amount past due: N/A

Section 13. Attachments (Instructions Page 33)

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

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

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

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

☐ Attachment 1 for Individuals as co-applicants

☒ Other Attachments. Please specify: See Table of Contents

Section 14. Signature Page (Instructions Page 34)

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

Permit Number: WQ0010495079

Applicant: City of Houston

Certification:

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

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

Signatory name (typed or printed): Randall V. Macchi

Signatory title: Chief Operating Officer, Houston Public Works

Signature:_____ Date:_____

(Use blue ink)

Subscribed and Sworn to before me by the said_____

on this_____ day of_____, 20_____.

My commission expires on the_____ day of_____, 20_____.

_____

Notary Public *[SEAL]*

_____

County, Texas

DOMESTIC WASTEWATER PERMIT APPLICATION

SUPPLEMENTAL PERMIT INFORMATION FORM (SPIF)

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

Attachment: 5

DOMESTIC WASTEWATER PERMIT APPLICATION CHECKLIST OF COMMON DEFICIENCIES

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

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

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

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

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

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

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

Things to Know:

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

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

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

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

Plain Language Summary ☒ Yes

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

DOMESTIC WASTEWATER PERMIT APPLICATION TECHNICAL REPORT 1.0

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

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

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

A. Existing/Interim I Phase

Design Flow (MGD): 5.33

2-Hr Peak Flow (MGD): 32.3

Estimated construction start date: N/A

Estimated waste disposal start date: N/A

B. Interim II Phase

Design Flow (MGD): 10.2

2-Hr Peak Flow (MGD): 51.7

Estimated construction start date: currently ongoing

Estimated waste disposal start date: May 2025

C. Final Phase

Design Flow (MGD): 15.2

2-Hr Peak Flow (MGD): 76

Estimated construction start date: July 2024

Estimated waste disposal start date: January 2027

D. Current Operating Phase

Provide the startup date of the facility: Constructed in 1972. Last major expansion 1986.

Section 2. Treatment Process (Instructions Page 43)

A. Current Operating Phase

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

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

Attachment 6

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 7		

C. Process Flow Diagram

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

Attachment: **8**

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

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

- Latitude: 29.603359
- Longitude: -95.236192

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

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

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

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

Attachment: **9**

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

Southeast WWTF Service Area. The facility serves the southeast area of the City of Houston. The Interim II phase will serve the current service area plus the Sagemont WWTF service area. The Final phase will serve the Interim II phase service area plus the Easthaven WWTF service area.

Collection System Information **for wastewater TPDES permits only**: Provide information for each **uniquely owned** collection system, existing and new, served by this facility, including satellite collection systems. **Please see the instructions for a detailed explanation and examples.**

Collection System Information

Collection System Name	Owner Name	Owner Type	Population Served
Southeast WWTF Service Area	City of Houston	Public	6124
Kirkmont MUD	Kirkmont MUD	Public	2283

Section 4. Unbuilt Phases (Instructions Page 45)

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

☒ Yes ☐ No

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

☐ Yes ☒ No

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

N/A

Section 5. Closure Plans (Instructions Page 45)

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

☐ Yes ☒ No

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

☐ Yes ☐ No

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

N/A

Section 6. Permit Specific Requirements (Instructions Page 45)

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

A. Summary transmittal

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

☒ Yes ☐ No

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

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**.

A summary transmittal letter dated April 20, 2020 was approved by letter dated July 20, 2020. **Attachment 10**.

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.

Attachment 11

C. Other actions required by the current permit

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

☒ Yes ☐ No

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

Other Requirements No. 7 – Sludge disposal records are maintained as required.
Other Requirements No. 8 – Summary transmittal letter for the Final phase has not been submitted.
Other Requirements No. 10 – Completion of the Interim II phase has not been completed. A notification of completion form has not been submitted.
Other Requirements No. 11 – Flow has not been diverted from the Sagemont WWTF or the Easthaven WWTF. Closure plans have not been submitted.

D. Grit and grease treatment

1. *Acceptance of grit and grease waste*

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

☐ Yes ☒ No

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

2. *Grit and grease processing* N/A

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.

3. *Grit disposal* N/A

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

☐ Yes ☐ No

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

Describe the method of grit disposal.

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

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

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

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:

TXR05FF89 or TXRNE

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:

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.

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.

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.

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

F. Discharges to the Lake Houston Watershed

Does the facility discharge in the Lake Houston watershed?

☐ Yes ☒ No

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

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

1. *Acceptance of sludge from other WWTPs*

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

☒ Yes ☐ No

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

Attachment 12

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

The facility has accepted sludge from the City's Sagemont WWTF (WQ0010495075) via sludge pipeline since at least 2004. During the 2022-2023 sludge reporting year, Southeast WWTF accepted approximately 2,698,500 gallons of sludge from Sagemont WWTF monthly. The BOD concentration of incoming sludge is not regularly tested. However, the BOD concentration in the sludge is the expected concentration from a WWTF. The design influent BOD is 200 mg/L.

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

2. *Acceptance of septic waste*

Is the facility accepting or will it accept septic waste?

☐ Yes ☒ No

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

☐ Yes ☐ No

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

☐ Yes ☐ No

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

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

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

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

☐ Yes ☒ No

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

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

Is the facility in operation?

☒ Yes ☐ No

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

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

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

Table1.0(2) – Pollutant Analysis for Wastewater Treatment Facilities **Attachment 13**

Pollutant	Average Conc.	Max Conc.	No. of Samples	Sample Type	Sample Date/Time
$CBOD_5$, mg/l	4.42	4.42	1	Comp	7/19/24 8:00am
Total Suspended Solids, mg/l	8.8	8.8	1	Comp	7/19/24 8:00am
Ammonia Nitrogen, mg/l	<0.05	<0.05	1	Comp	7/19/24 8:00am
Nitrate Nitrogen, mg/l	9.99	9.99	1	Comp	7/19/24 8:00am
Total Kjeldahl Nitrogen, mg/l	1.13	1.13	1	Comp	7/19/24 8:00am
Sulfate, mg/l	80.7	80.7	1	Comp	7/19/24 8:00am
Chloride, mg/l	73.9	73.9	1	Comp	7/19/24 8:00am
Total Phosphorus, mg/l	0.255	0.255	1	Comp	7/19/24 8:00am
pH, standard units	7.65	7.65	1	Grab	7/19/24 8:01am
Dissolved Oxygen*, mg/l	5.13	5.13	1	Grab	7/19/24 8:01am
Chlorine Residual, mg/l	<0.100	<0.100	1	Grab	7/19/24 8:01am
E.coli (CFU/100ml) freshwater	<1	<1	1	Grab	7/19/24 8:01am
Entercocci (CFU/100ml) saltwater	N/A				
Total Dissolved Solids, mg/l	458	458	1	Comp	7/19/24 8:00am
Electrical Conductivity, µmohs/cm, †	N/A				
Oil & Grease, mg/l	<1.55	<1.55	1	Grab	7/26/24 9:41am
Alkalinity ($CaCO_3$)*, mg/l	123	123	1	Comp	7/19/24 8:00am

*TPDES permits only
†TLAP permits only

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

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

Section 8. Facility Operator (Instructions Page 50)

Facility Operator Name: **Attachment 14**

Facility Operator's License Classification and Level:

Facility Operator's License Number:

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

A. WWTP's Biosolids Management Facility Type

Check all that apply. See instructions for guidance

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

B. WWTP's Biosolids Treatment Process

Check all that apply. See instructions for guidance.

- ☒ Aerobic Digestion
- ☐ Air Drying (or sludge drying beds)
- ☐ Lower Temperature Composting
- ☐ Lime Stabilization
- ☐ Higher Temperature Composting
- ☐ Heat Drying
- ☐ Thermophilic Aerobic Digestion
- ☐ Beta Ray Irradiation
- ☐ Gamma Ray Irradiation
- ☐ Pasteurization
- ☐ Preliminary Operation (e.g. grinding, de-gritting, blending)
- ☒ Thickening (e.g. gravity thickening, centrifugation, filter press, vacuum filter)
- ☐ Sludge Lagoon
- ☐ Temporary Storage (< 2 years)
- ☐ Long Term Storage (>= 2 years)
- ☐ Methane or Biogas Recovery
- ☐ Other Treatment Process:

C. Biosolids Management

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

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

Biosolids Management

Management Practice	Handler or Preparer Type	Bulk or Bag Container	Amount (dry metric tons)	Pathogen Reduction Options	Vector Attraction Reduction Option
Disposal in Landfill	On-Site Owner or Operator	N/A	651.91	N/A	N/A

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

D. Disposal site

Disposal site name: Blue Ridge Landfill (or other permitted landfill)

TCEQ permit or registration number: 1505A

County where disposal site is located: Fort Bend

E. Transportation method

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

Name of the hauler: FCC Environmental

Hauler registration number: 24903

Sludge is transported as a:

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

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

A. Beneficial use authorization

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

☐ Yes ☒ No

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

☐ Yes ☐ No

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

☐ Yes ☐ No

B. Sludge processing authorization

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

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

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

☐ Yes ☐ No

Section 11. Sewage Sludge Lagoons (Instructions Page 53)

Does this facility include sewage sludge lagoons?

☐ Yes ☒ No

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

A. Location information N/A

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:
- USDA Natural Resources Conservation Service Soil Map:

  Attachment:
- Federal Emergency Management Map:

  Attachment:
- Site map:

  Attachment:

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:

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:

B. Temporary storage information N/A

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:

Total Kjeldahl Nitrogen, mg/kg:

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

Phosphorus, mg/kg:

Potassium, mg/kg:

pH, standard units:

Ammonia Nitrogen mg/kg:

Arsenic:

Cadmium:

Chromium:

Copper:

Lead:

Mercury:

Molybdenum:

Nickel:

Selenium:

Zinc:

Total PCBs:

Provide the following information:

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

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

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

C. Liner information N/A

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

☐ Yes ☐ No

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

D. Site development plan N/A

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

Attach the following documents to the application.

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

  Attachment:
- Copy of the closure plan

  Attachment:
- Copy of deed recordation for the site

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

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

  Attachment:
- Procedures to prevent the occurrence of nuisance conditions

  Attachment:

E. Groundwater monitoring N/A

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:

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

A. Additional authorizations

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

☒ Yes ☐ No

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

Reclaimed water authorization R10495079
Stormwater MSGP TXR05FF89

B. Permittee enforcement status

Is the permittee currently under enforcement for this facility?

☐ Yes ☒ No

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

☒ Yes ☐ No

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

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

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

A. RCRA hazardous wastes

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

☐ Yes ☒ No

B. Remediation activity wastewater

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

☐ Yes ☒ No

C. Details about wastes received N/A

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

Attachment:

Section 14. Laboratory Accreditation (Instructions Page 56)

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

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

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

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

CERTIFICATION:

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

Printed Name: Randall V. Macchi

Title: Chief Operating Officer, Houston Public Works

Signature: _____

Date: _____

DOMESTIC WASTEWATER PERMIT APPLICATION WORKSHEET 2.0: RECEIVING WATERS

The following information is required for all TPDES permit applications.

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

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

☐ Yes ☒ No

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

Owner of the drinking water supply:

Distance and direction to the intake:

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

Attachment:

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

Does the facility discharge into tidally affected waters?

☐ Yes ☒ No

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

A. Receiving water outfall N/A

Width of the receiving water at the outfall, in feet:

B. Oyster waters N/A

Are there oyster waters in the vicinity of the discharge?

☐ Yes ☐ No

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

C. Sea grasses N/A

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).

Section 3. Classified Segments (Instructions Page 64)

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

☐ Yes ☒ No

If yes, this Worksheet is complete.

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

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

Name of the immediate receiving waters: Harris County Flood Control District (HCFCD) Ditch A120-00-00

A. Receiving water type

Identify the appropriate description of the receiving waters.

☐ Stream

☐ Freshwater Swamp or Marsh

☐ Lake or Pond

Surface area, in acres:

Average depth of the entire water body, in feet:

Average depth of water body within a 500-foot radius of discharge point, in feet:

☒ Man-made Channel or Ditch

☐ Open Bay

☐ Tidal Stream, Bayou, or Marsh

☐ Other, specify:

B. Flow characteristics

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

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

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

☒ Perennial - normally flowing

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

☐ USGS flow records

☐ Historical observation by adjacent landowners

☐ Personal observation

☒ Other, specify: USGS Topographic Map

C. Downstream perennial confluences

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

None

D. Downstream characteristics

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

☐ Yes ☒ No

If yes, discuss how.

N/A

E. Normal dry weather characteristics

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

Low flow upstream and downstream of Outfall 001. Receiving stream turbid upstream and downstream of Outfall 001. No wildlife observed.

Date and time of observation: October 4, 2024 at 8:36 am

Was the water body influenced by stormwater runoff during observations?

☐ Yes ☒ No

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

A. Upstream influences

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

☐ Oil field activities ☒ Urban runoff

☐ Upstream discharges ☐ Agricultural runoff

☐ Septic tanks

☐ Other(s), specify:

B. Waterbody uses

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

☐ Livestock watering

☐ Irrigation withdrawal

☐ Fishing

☐ Domestic water supply

☐ Park activities

☐ Contact recreation

☐ Non-contact recreation

☐ Navigation

☐ Industrial water supply

☒ Other(s), specify: stormwater conveyance

C. Waterbody aesthetics

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

☐ Wilderness: outstanding natural beauty; usually wooded or unpastured area; water clarity exceptional

☐ Natural Area: trees and/or native vegetation; some development evident (from fields, pastures, dwellings); water clarity discolored

☒ Common Setting: not offensive; developed but uncluttered; water may be colored or turbid

☐ Offensive: stream does not enhance aesthetics; cluttered; highly developed; dumping areas; water discolored

DOMESTIC WASTEWATER PERMIT APPLICATION WORKSHEET 4.0: POLLUTANT ANALYSIS REQUIREMENTS

The following **is required** for facilities with a permitted or proposed flow of **1.0 MGD or greater**, facilities with an approved **pretreatment** program, or facilities classified as a **major** facility. See instructions for further details.

This worksheet is not required minor amendments without renewal.

Section 1. Toxic Pollutants (Instructions Page 78)

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

Grab ☐ Composite ☒ **Attachment 13**

Date and time sample(s) collected: 7/19/24 8:00am

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	23.8	23.8	1	2.5
Anthracene	<10	<10	1	10
Antimony	<5	<5	1	5
Arsenic	0.92	0.92	1	0.5
Barium	86.3	86.3	1	3
Benzene	<10	<10	1	10
Benzidine	<50	<50	1	50
Benzo(a)anthracene	<5	<5	1	5
Benzo(a)pyrene	<5	<5	1	5
Bis(2-chloroethyl)ether	<10	<10	1	10
Bis(2-ethylhexyl)phthalate	<10	<10	1	10
Bromodichloromethane	21.4	21.4	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

Pollutant	AVG Effluent Conc. (µg/l)	MAX Effluent Conc. (µg/l)	Number of Samples	MAL (µg/l)
Chloroform	57	57	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	4.92	4.92	1	2
Chrysene	<5	<5	1	5
p-Chloro-m-Cresol	<10	<10	1	10
4,6-Dinitro-o-Cresol	<50	<50	1	50
p-Cresol	<10	<10	1	10
Cyanide **(*2)**	<10	<10	1	10
4,4'- DDD	<0.1	<0.1	1	0.1
4,4'- DDE	<0.1	<0.1	1	0.1
4,4'- DDT	<0.02	<0.02	1	0.02
2,4-D	<0.7	<0.7	1	0.7
Demeton (O and S)	<0.2	<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
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

Pollutant	AVG Effluent Conc. (µg/l)	MAX Effluent Conc. (µg/l)	Number of Samples	MAL (µg/l)
Endosulfan II (beta)	<0.02	<0.02	1	0.02
Endosulfan Sulfate	<0.1	<0.1	1	0.1
Endrin	<0.02	<0.02	1	0.02
Ethylbenzene	<10	<10	1	10
Fluoride	<500	<500	1	500
Guthion	<0.1	<0.1	1	0.1
Heptachlor	<0.01	<0.01	1	0.01
Heptachlor Epoxide	<0.01	<0.01	1	0.01
Hexachlorobenzene	<5	<5	1	5
Hexachlorobutadiene	<10	<10	1	10
Hexachlorocyclohexane (alpha)	<0.05	<0.05	1	0.05
Hexachlorocyclohexane (beta)	<0.05	<0.05	1	0.05
gamma-Hexachlorocyclohexane (Lindane)	<0.05	<0.05	1	0.05
Hexachlorocyclopentadiene	<10	<10	1	10
Hexachloroethane	<20	<20	1	20
Hexachlorophene	<10	<10	1	10
Lead	<0.5	<0.5	1	0.5
Malathion	<0.1	<0.1	1	0.1
Mercury	<0.005	<0.005	1	0.005
Methoxychlor	<2	<2	1	2
Methyl Ethyl Ketone	<50	<50	1	50
Mirex	<0.02	<0.02	1	0.02
Nickel	2.96	2.96	1	2
Nitrate-Nitrogen	9990	9990	1	100
Nitrobenzene	<10	<10	1	10
N-Nitrosodiethylamine	<20	<20	1	20
N-Nitroso-di-n-Butylamine	<20	<20	1	20
Nonylphenol	<333	<333	1	333
Parathion (ethyl)	<0.1	<0.1	1	0.1
Pentachlorobenzene	<20	<20	1	20
Pentachlorophenol	<5	<5	1	5
Phenanthrene	<10	<10	1	10

Pollutant	AVG Effluent Conc. (µg/l)	MAX Effluent Conc. (µg/l)	Number of Samples	MAL (µg/l)
Polychlorinated Biphenyls (PCB's) **(*3)**	<0.2	<0.2	1	0.2
Pyridine	<20	<20	1	20
Selenium	<5	<5	1	5
Silver	<0.5	<0.5	1	0.5
1,2,4,5-Tetrachlorobenzene	<20	<20	1	20
1,1,2,2-Tetrachloroethane	<10	<10	1	10
Tetrachloroethylene	<10	<10	1	10
Thallium	<0.5	<0.5	1	0.5
Toluene	<10	<10	1	10
Toxaphene	<0.3	<0.3	1	0.3
2,4,5-TP (Silvex)	<0.3	<0.3	1	0.3
Tributyltin (see instructions for explanation)	N/A	N/A	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	35.7	35.7	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 ☒ **Attachment 13**

Date and time sample(s) collected: 7/19/24 8:00am

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

Pollutant	**AVG Effluent Conc. (µg/l)**	**MAX Effluent Conc. (µg/l)**	**Number of Samples**	**MAL (µg/l)**
Antimony	<5	<5	1	5
Arsenic	0.92	0.92	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	4.92	4.92	1	2
Lead	<0.5	<0.5	1	0.5
Mercury	<0.005	<0.005	1	0.005
Nickel	2.96	2.96	1	2
Selenium	<5	<5	1	5
Silver	<0.5	<0.5	1	0.5
Thallium	<0.5	<0.5	1	0.5
Zinc	35.7	35.7	1	5
Cyanide **(*2)**	<10	<10	1	10
Phenols, Total	<10	<10	1	10

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

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

Table 4.0(2)B – Volatile Compounds

Pollutant	AVG Effluent Conc. (µg/l)	MAX Effluent Conc. (µg/l)	Number of Samples	MAL (µg/l)
Acrolein	<50	<50	1	50
Acrylonitrile	<50	<50	1	50
Benzene	<10	<10	1	10
Bromoform	<10	<10	1	10
Carbon Tetrachloride	<2	<2	1	2
Chlorobenzene	<10	<10	1	10
Chlorodibromomethane	<10	<10	1	10
Chloroethane	<50	<50	1	50
2-Chloroethylvinyl Ether	<10	<10	1	10
Chloroform	57	57	1	10
Dichlorobromomethane [Bromodichloromethane]	21.4	21.4	1	10
1,1-Dichloroethane	<10	<10	1	10
1,2-Dichloroethane	<10	<10	1	10
1,1-Dichloroethylene	<10	<10	1	10
1,2-Dichloropropane	<10	<10	1	10
1,3-Dichloropropylene [1,3-Dichloropropene]	<10	<10	1	10
1,2-Trans-Dichloroethylene	<10	<10	1	10
Ethylbenzene	<10	<10	1	10
Methyl Bromide	<50	<50	1	50
Methyl Chloride	<50	<50	1	50
Methylene Chloride	<20	<20	1	20
1,1,2,2-Tetrachloroethane	<10	<10	1	10
Tetrachloroethylene	<10	<10	1	10
Toluene	<10	<10	1	10
1,1,1-Trichloroethane	<10	<10	1	10
1,1,2-Trichloroethane	<10	<10	1	10
Trichloroethylene	<10	<10	1	10
Vinyl Chloride	<10	<10	1	10

Table 4.0(2)C – Acid Compounds

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

Table 4.0(2)D – Base/Neutral Compounds

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

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

Table 4.0(2)E - Pesticides

Pollutant	AVG Effluent Conc. (µg/l)	MAX Effluent Conc. (µg/l)	Number of Samples	MAL (µg/l)
Aldrin	<0.01	<0.01	1	0.01
alpha-BHC (Hexachlorocyclohexane)	<0.05	<0.05	1	0.05
beta-BHC (Hexachlorocyclohexane)	<0.05	<0.05	1	0.05
gamma-BHC (Hexachlorocyclohexane)	<0.05	<0.05	1	0.05
delta-BHC (Hexachlorocyclohexane)	<0.05	<0.05	1	0.05
Chlordane	<0.2	<0.2	1	0.2
4,4-DDT	<0.02	<0.02	1	0.02
4,4-DDE	<0.1	<0.1	1	0.1
4,4,-DDD	<0.1	<0.1	1	0.1
Dieldrin	<0.02	<0.02	1	0.02
Endosulfan I (alpha)	<0.01	<0.01	1	0.01
Endosulfan II (beta)	<0.02	<0.02	1	0.02
Endosulfan Sulfate	<0.1	<0.1	1	0.1
Endrin	<0.02	<0.02	1	0.02
Endrin Aldehyde	<0.1	<0.1	1	0.1
Heptachlor	<0.01	<0.01	1	0.01
Heptachlor Epoxide	<0.01	<0.01	1	0.01
PCB-1242	<0.2	<0.2	1	0.2
PCB-1254	<0.2	<0.2	1	0.2
PCB-1221	<0.2	<0.2	1	0.2
PCB-1232	<0.2	<0.2	1	0.2
PCB-1248	<0.2	<0.2	1	0.2
PCB-1260	<0.2	<0.2	1	0.2
PCB-1016	<0.2	<0.2	1	0.2
Toxaphene	<0.3	<0.3	1	0.3

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

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. **N/A**

☐ 2,4,5-trichlorophenoxy acetic acid

Common Name 2,4,5-T, CASRN 93-76-5

☐ 2-(2,4,5-trichlorophenoxy) propanoic acid

Common Name Silvex or 2,4,5-TP, CASRN 93-72-1

☐ 2-(2,4,5-trichlorophenoxy) ethyl 2,2-dichloropropionate

Common Name Erbon, CASRN 136-25-4

☐ 0,0-dimethyl 0-(2,4,5-trichlorophenyl) phosphorothioate

Common Name Ronnel, CASRN 299-84-3

☐ 2,4,5-trichlorophenol

Common Name TCP, CASRN 95-95-4

☐ hexachlorophene

Common Name HCP, CASRN 70-30-4

For each compound identified, provide a brief description of the conditions of its/their presence at the facility.

N/A

B. Do you know or have any reason to believe that 2,3,7,8 Tetrachlorodibenzo-P-Dioxin (TCDD) or any congeners of TCDD may be present in your effluent? **N/A**

☐ Yes ☐ No

If **yes**, provide a brief description of the conditions for its presence.

C. If any of the compounds in Subsection A **or** B are present, complete Table 4.0(2)F. **N/A**

For pollutants identified in Table 4.0(2)F, indicate the type of sample.

Grab ☐ Composite ☐

Date and time sample(s) collected:

Table 4.0(2)F – Dioxin/Furan Compounds

Compound	Toxic Equivalency Factors	Wastewater Concentration (ppq)	Wastewater Equivalents (ppq)	Sludge Concentration (ppt)	Sludge Equivalents (ppt)	MAL (ppq)
2,3,7,8 TCDD	1					10
1,2,3,7,8 PeCDD	0.5					50
2,3,7,8 HxCDDs	0.1					50
1,2,3,4,6,7,8 HpCDD	0.01					50
2,3,7,8 TCDF	0.1					10
1,2,3,7,8 PeCDF	0.05					50
2,3,4,7,8 PeCDF	0.5					50
2,3,7,8 HxCDFs	0.1					50
2,3,4,7,8 HpCDFs	0.01					50
OCDD	0.0003					100
OCDF	0.0003					100
PCB 77	0.0001					0.5
PCB 81	0.0003					0.5
PCB 126	0.1					0.5
PCB 169	0.03					0.5
Total						

DOMESTIC WASTEWATER PERMIT APPLICATION WORKSHEET 5.0: TOXICITY TESTING REQUIREMENTS

The following **is required** for facilities with a current operating design flow of**1.0 MGD or greater**, with an EPA-approved **pretreatment** program (or those required to have one under 40 CFR Part 403), or are required to perform Whole Effluent Toxicity testing. See instructions for further details.

This worksheet is not required minor amendments without renewal.

Section 1. Required Tests (Instructions Page 88)

Indicate the number of 7-day chronic or 48-hour acute Whole Effluent Toxicity (WET) tests performed in the four and one-half years prior to submission of the application.

7-day Chronic: **Attachment 15**

48-hour Acute:

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.

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 15			

DOMESTIC WASTEWATER PERMIT APPLICATION WORKSHEET 6.0: INDUSTRIAL WASTE CONTRIBUTION

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

Section 1. All POTWs (Instructions Page 89)

A. Industrial users (IUs)

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

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

Categorical IUs:

Number of IUs: 0

Average Daily Flows, in MGD: 0

Significant IUs – non-categorical:

Number of IUs: 0

Average Daily Flows, in MGD: 0

Other IUs:

Number of IUs: 1

Average Daily Flows, in MGD: 0.005289

B. Treatment plant interference

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

☐ Yes ☒ No

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

N/A

C. Treatment plant pass through

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

☐ Yes ☒ No

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

N/A

D. Pretreatment program

Does your POTW have an approved pretreatment program?

☒ Yes ☐ No

If yes, complete Section 2 only of this Worksheet.

Is your POTW required to develop an approved pretreatment program?

☒ Yes ☐ No

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

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

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

A. Substantial modifications

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

☐ Yes ☒ No

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

N/A

B. Non-substantial modifications

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

☐ Yes ☒ No

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

N/A

C. Effluent parameters above the MAL

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

Table 3.0(1) – Parameters Above the MAL

Pollutant	Concentration	MAL	Units	Date
Nitrate-nitrogen	9990	100	ug/L	7/19/2024
Bromodichloromethane	21.4	10	ug/L	7/18/2024
Chloroform	57	10	ug/L	7/18/2024
Total Trihalomethanes	83.5	10	ug/L	7/18/2024

D. Industrial user interruptions

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

☐ Yes ☒ No

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

N/A

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

A. General information N/A

Company Name:

SIC Code:

Contact name:

Address:

City, State, and Zip Code:

Telephone number:

Email address:

B. Process information N/A

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 N/A

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

D. Flow rate information N/A

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

Process Wastewater:

Discharge, in gallons/day:

Discharge Type: ☐ Continuous ☐ Batch ☐ Intermittent

Non-Process Wastewater:

Discharge, in gallons/day:

Discharge Type: ☐ Continuous ☐ Batch ☐ Intermittent

E. Pretreatment standards N/A

Is the SIU or CIU subject to technically based local limits as defined in the *i*nstructions?

☐ Yes ☐ No

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

☐ Yes ☐ No

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

Category: Subcategories:

Category:

Subcategories:

Category:

Subcategories:

Category:

Subcategories:

Category:

Subcategories:

F. Industrial user interruptions N/A

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.

Attachment 1

Copy of Application Fee Check

Administrative Report 1.0, Section 1

CITY OF HOUSTON

Date: 08/07/2024 Vendor No.115380 Warrant No. 21094552

Department	Invoice No.	Vendor Document #	Amount
	1901128861	WQ0010495079	2,015.00
		Total:	2,015.00

For information about this payment please visit the **City Controller's** web site
HTTP://www.houstontx.gov/controller/vendorliaison.html

FOLD FOLD

HPW-Finance

FOLD FOLD

VERIFY THE AUTHENTICITY OF THIS MULTI-TONE SECURITY DOCUMENT.

CITY OF HOUSTON, TEXAS
VOID 180 DAYS FROM DATE OF ISSUE
32-61/1110

Warrant No. 21094552

Issue Date	Amount
08/07/2024	$ 2,015.00

*** TWO THOUSAND FIFTEEN USD***

Pay to the Order of: TEXAS COMMISSION ON ENVIRONMENTAL QUALITY MC-165 PO Box 13087 AUSTIN TX 78711

JP Morgan Chase Bank, N.A., Dallas, TX 75201

MAYOR

CITY CONTROLLER
VOID Unless Signed

[redacted]

Attachment 2

Core Data Form

Administrative Report 1.0, Section 3.C.

TCEQ Use Only

TCEQ Core Data Form

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

SECTION I: General Information

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

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

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

2. Customer Reference Number *(if issued)*	Follow this link to search for CN or RN numbers in Central Registry**	**3. Regulated Entity Reference Number** *(if issued)*
CN 600128995		**RN 101610459**

SECTION II: Customer Information

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

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

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

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

City of Houston

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

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

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

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

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

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

15. Mailing Address:

10500 Bellaire Boulevard

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

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

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

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

SECTION III: Regulated Entity Information

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

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

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

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

Southeast Wastewater Treatment Facility

23. Street Address of the Regulated Entity: ***(No PO Boxes)***	9610 Kingspoint Road							
	City	Houston	**State**	TX	**ZIP**	77075	**ZIP + 4**	
24. County	Harris							

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

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

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

27. Latitude (N) In Decimal:	29.604267		**28. Longitude (W) In Decimal:**	-95.237590	
Degrees	Minutes	Seconds	Degrees	Minutes	Seconds

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

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

This facility treats domestic wastewater

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

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

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

☐ Dam Safety	☐ Districts	☐ Edwards Aquifer	☐ Emissions Inventory Air	☐ Industrial Hazardous Waste
☐ Municipal Solid Waste	☐ New Source Review Air	☐ OSSF	☐ Petroleum Storage Tank	☐ PWS
☐ Sludge	☒ Storm Water	☐ Title V Air	☐ Tires	☐ Used Oil
	TXR05FF89			
☐ Voluntary Cleanup	☒ Wastewater	☐ Wastewater Agriculture	☐ Water Rights	☒ Other: Reclaimed water
	WQ0010495079			R10495079

SECTION IV: Preparer Information

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

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

SECTION V: Authorized Signature

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

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

Attachment 3

Plain Language Summary

Administrative Report 1.0, Section 8.F.

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

PLAIN LANGUAGE SUMMARY FOR TPDES OR TLAP PERMIT APPLICATIONS

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

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

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

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

ENGLISH TEMPLATE FOR TPDES or TLAP NEW/RENEWAL/AMENDMENT APPLICATIONS DOMESTIC WASTEWATER/STORMWATER

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

City of Houston (CN600128995) operates the Southeast Wastewater Treatment Facility (RN101610459), an activated sludge wastewater treatment facility. The facility is located at 9610 Kingspoint Road, in Houston, Harris County, Texas 77075. This application is for a renewal to discharge an annual average flow of 15,200,000 gallons per day of treated domestic wastewater via Outfall 001.

Discharges from the facility are expected to contain five-day carbonaceous biochemical oxygen demand ($CBOD_5$), total suspended solids (TSS), ammonia-nitrogen (NH_3-N), and *Escherichia coli* (*E. coli*). Additional potential pollutants are included in the permit application package in Domestic Technical Report 1.0, Section 7 – Pollutant Analysis of Treated Effluent and Domestic Worksheet 4.0. Domestic wastewater is treated by an activated sludge process plant. Treatment units include bar screens for preliminary treatment, aeration basins for biological treatment, secondary clarifiers for solids settling, effluent filters for effluent polishing, and chlorine contact basins for disinfection. Solids from the facility are stabilized

in aerobic digesters, thickened in a gravity thickener, and dewatered on a belt press before being hauled to a landfill for disposal.

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

AGUAS RESIDUALES DOMÉSTICAS **/AGUAS PLUVIALES**

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

La Ciudad de Houston (CN600128995) opera la instalación de tratamiento de aguas residuales Southeast Wastewater Treatment Facility (RN101610459), un lodos activados – aireación prolongada instalación de tratamiento de aguas residuales. La instalación está ubicada en 9610 Kingspoint Road, en Houston, Condado de Harris, Texas 77075. Esta solicitud es para la renovación para descargar un flujo medio annual de 15.200.000 galones por día de aguas residuales domesticas tratadas por el emisario 001.

Se espera que las descargas de la instalación contengan demanda bioquímica de oxígeno carbónico ($CBOD_5$), sólidos suspendidos totales (TSS), nitrógeno amoniacal (NH_3-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 residuals domesticas está tratado por una planta de proceso de lodos activados. Las unidades de tratamiento incluyen pantalla de barra para tratamiento preliminar, cuencas de aireación y canales para tratamiento biológico, clarificadores secundario para la sedimentación de sólidos, filtros de efluentes para pulido de efluentes y cuenca de contacto con el cloro para la desinfección. Sólidos de la instalación se estabilizan en un digestor aeróbico, se espesan en un espesador por gravedad y deshidratan en una prensa de cinta antes de ser transportados a un vertedero para su eliminación.

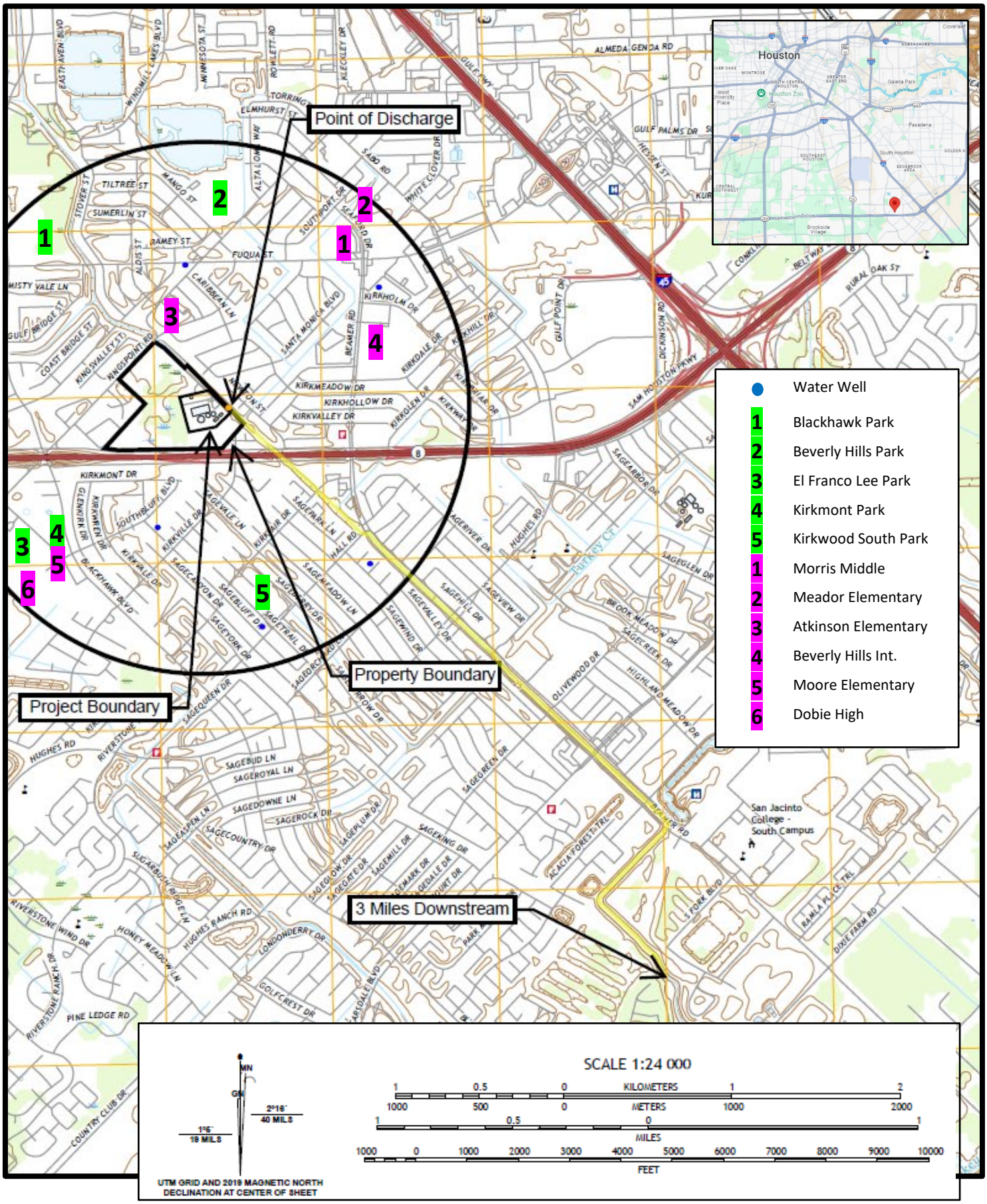
Attachment 4

USGS Map

Administrative Report 1.0, Section 13

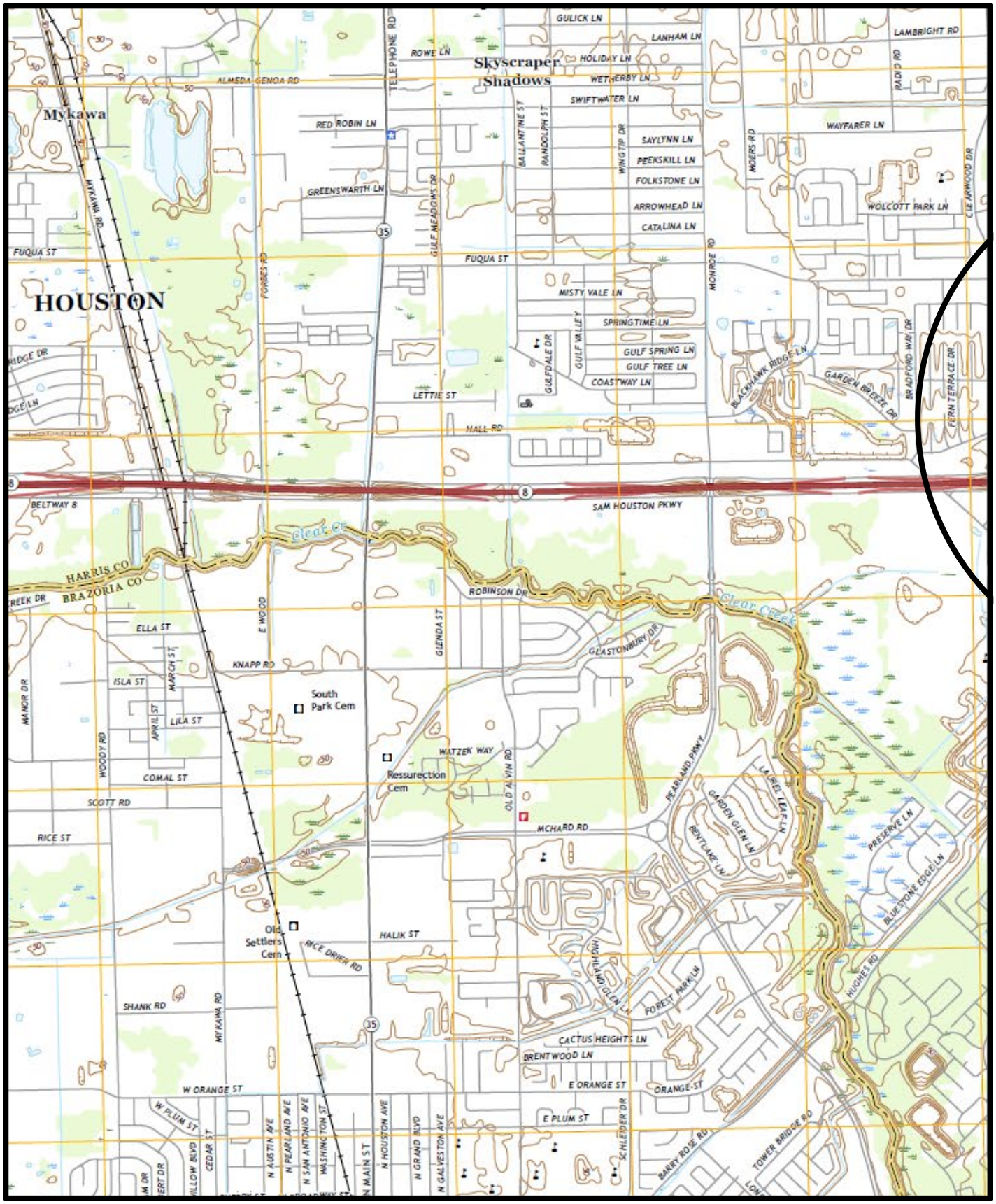
USGS Map

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



USGS Map

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



9/10/2024

Attachment 5

Supplemental Permit Information Form

SPIF

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

SUPPLEMENTAL PERMIT INFORMATION FORM (SPIF)

FOR AGENCIES REVIEWING DOMESTIC OR INDUSTRIAL TPDES WASTEWATER PERMIT APPLICATIONS

TCEQ USE ONLY:

Application type: ____Renewal ____Major Amendment ____Minor Amendment ____New

County: _____ Segment Number: _____

Admin Complete Date: _____

Agency Receiving SPIF:

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

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

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

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

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

The following applies to all applications:

1. Permittee: City of Houston

   Permit No. WQ00 10495079 EPA ID No. TX 0035009

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

   9610 Kingspoint Road, Houston, Harris County, Texas 77075

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.

To Harris County Flood Control District (HCFCD) ditch A120-00-00, thence to Clear Creek Above Tidal in Segment No. 1102 of the San Jacinto-Brazos Coastal Basin

5. Please provide a separate 7.5-minute USGS quadrangle map with the project boundaries plotted and a general location map showing the project area. Please highlight the discharge route from the point of discharge for a distance of one mile downstream. (This map is required in addition to the map in the administrative report).

Provide original photographs of any structures 50 years or older on the property. **N/A**

Does your project involve any of the following? Check all that apply.

☐ Proposed access roads, utility lines, construction easements

☐ Visual effects that could damage or detract from a historic property's integrity

☒ Vibration effects during construction or as a result of project design

☒ Additional phases of development that are planned for the future

☐ Sealing caves, fractures, sinkholes, other karst features

☐ Disturbance of vegetation or wetlands

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

The current and proposed construction for the Interim II and Final Phases are expected to disturb approximately 1 acre of existing cleared land each, with excavation for concrete foundations of no more than 10 foot depth.

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

Existing disturbances, vegetation, and land use are those typical of wastewater treatment facilities.

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

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

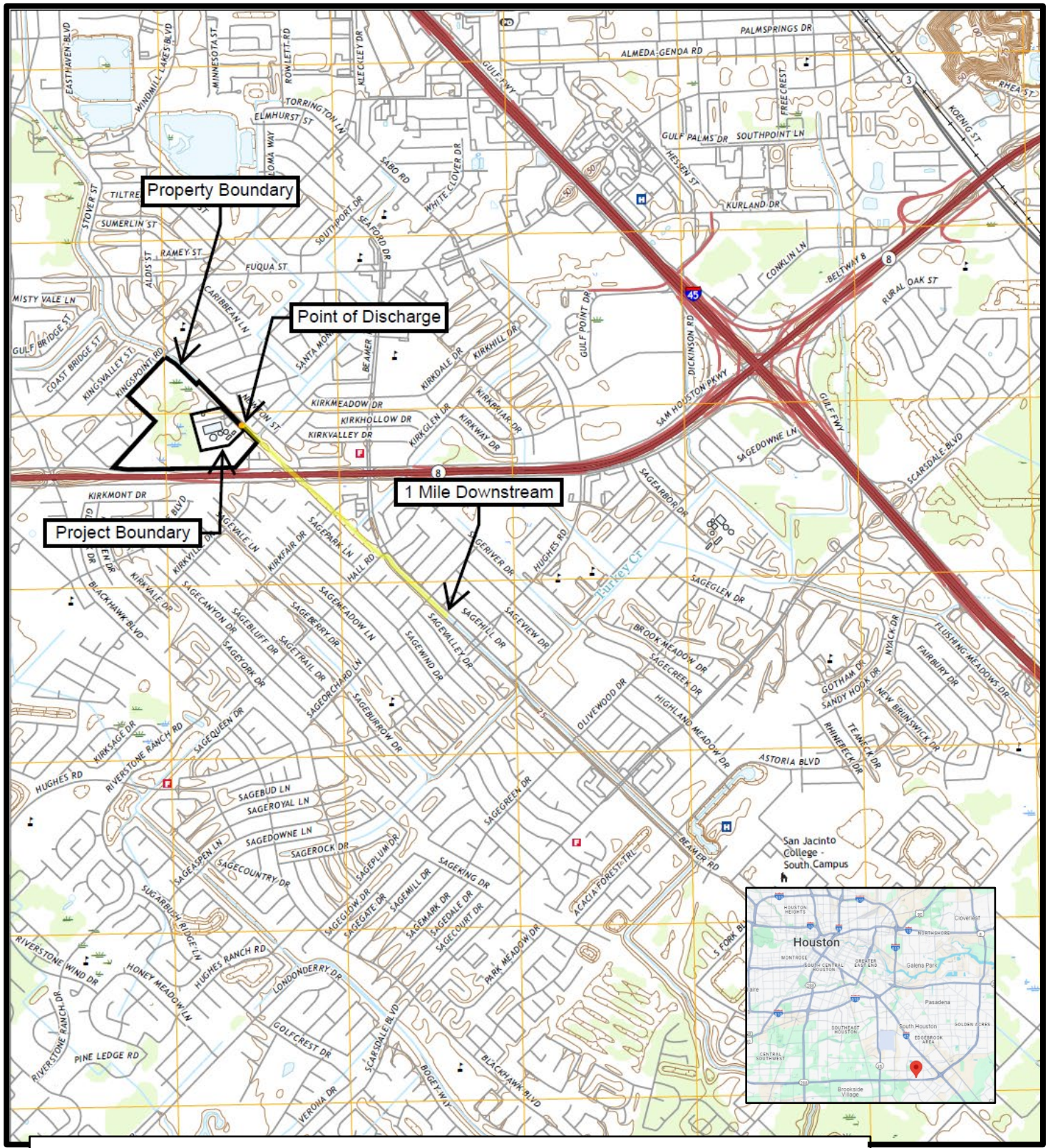
N/A

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

N/A

Vicinity Map and Edited USGS Map

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



9/10/2024

Attachment 6

Treatment Process Description

Technical Report 1.0, Section 2.A.

CITY OF HOUSTON
SOUTHEAST WWTF
TPDES PERMIT RENEWAL

TREATMENT PROCESS DESCRIPTION

EXISTING/INTERIM I PHASE

Influent flow passes through a bar screen, followed by biological treatment using activated sludge (biological nitrification-combined and activated sludge-complete mix), followed by secondary clarification, effluent filters, chlorination, dechlorination, and discharge to the receiving stream. Sludge is treated by aerobic digestion, followed by a thickener, and dewatering using a belt filter press. Processed sludge is hauled by a registered transporter to a permitted landfill.

INTERIM II PHASE

The same treatment process will be used for the Interim II phase as is described in the Existing/Interim I Phase above. Additional treatment units will be added to increase treatment capacity.

FINAL PHASE

The same treatment process will be used for the Final phase as is described in the Existing/Interim I and Interim II Phases above. Additional treatment units will be added to increase treatment capacity.

Attachment 7

Treatment Units

Technical Report 1.0, Section 2.B.

CITY OF HOUSTON
SOUTHEAST WWTF
TPDES PERMIT RENEWAL

TREATMENT UNITS

EXISTING/INTERIM I PHASE

Unit	Quantity	Dimensions
Bar Screen	2	
Influent Channel	1	15' x 165' x 20'
Mixed Channel	1	15' x 165' x 20'
RAS Channel	1	15' x 275' x 10'
Aeration Basin	5	15' x 110' x 30'
Clarifier	2	12' SWD x 135' Diameter
Clarifier	2	12' SWD x 90' Diameter
Effluent Filters	2	84' x 16'
Chlorine Contact Basin (parallel operation)	4	17.5' x 60' x 10'
Chlorine Contact Basin (influent channel)	1	17.5' x 43.5' x 10'
Chlorine Contact Basin (effluent channel)	1	17.5' x 43.5' x 14'
Sludge Thickener	1	2370 sq ft
Sludge Digester	6	15' x 110' x 30'
Belt Filter Press	1	

INTERIM II PHASE

Unit	Quantity	Dimensions
Bar Screen	2	
Influent Channel	2	15' x 165' x 20'
Mixed Channel	2	15' x 165' x 20'
RAS Channel	1	15' x 275' x 10'
Aeration Basin	11	15' x 110' x 30'
Clarifier	3	12' SWD x 135' Diameter
Clarifier	2	12' SWD x 90' Diameter
Effluent Filters	2	84' x 16'
Chlorine Contact Basin (parallel operation)	5	17.5' x 60' x 10'
Chlorine Contact Basin (influent channel)	1	17.5' x 43.5' x 10'
Chlorine Contact Basin (effluent channel)	1	17.5' x 43.5' x 14'
Sludge Thickener	1	2370 sq ft
Sludge Digester	6	15' x 110' x 30'
Belt Filter Press	2	

FINAL PHASE

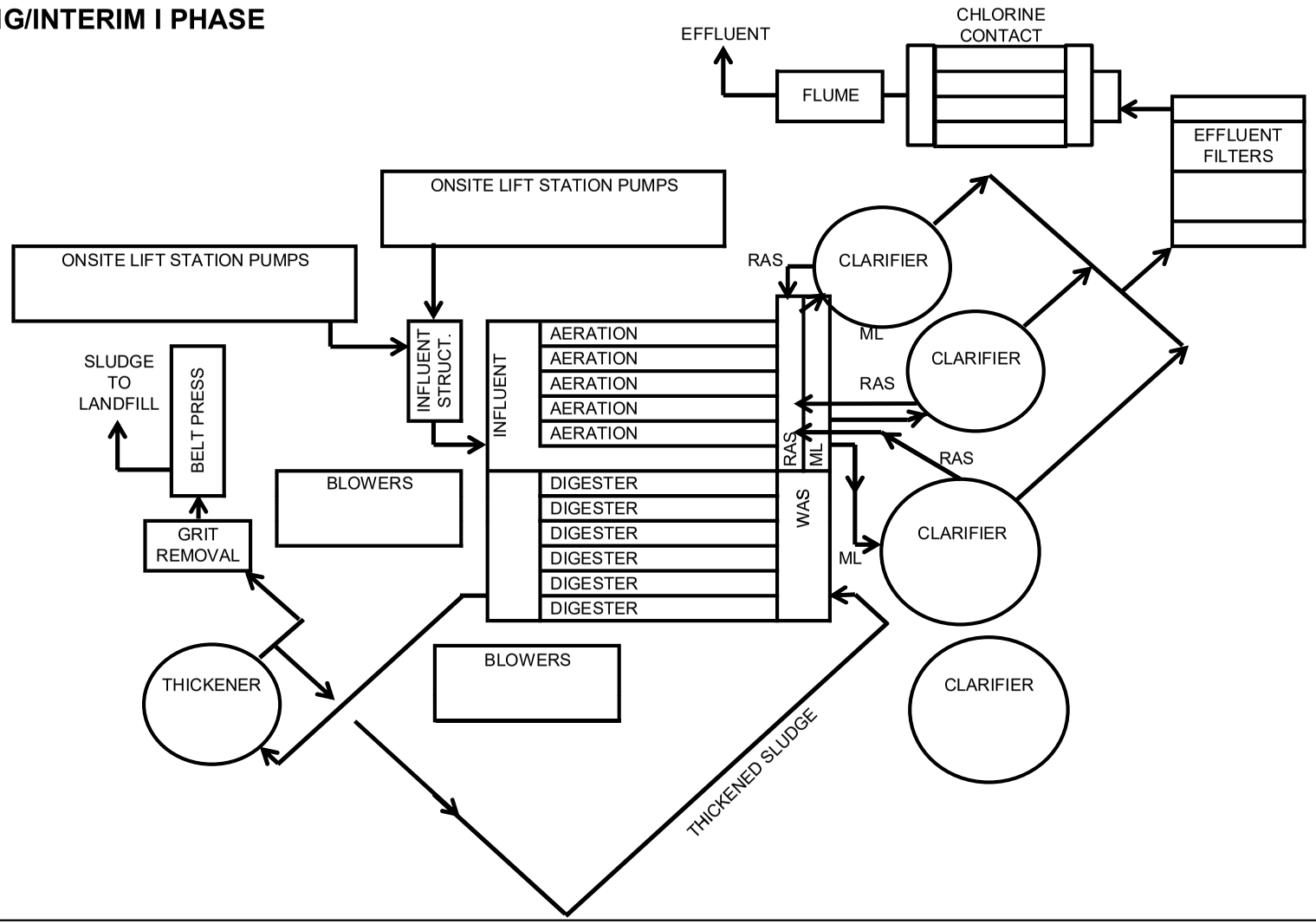
Unit	Quantity	Dimensions
Bar Screen	3	
Influent Channel	3	15' x 165' x 20'
Mixed Channel	3	15' x 165' x 20'
RAS Channel	1	15' x 275' x 10'
Aeration Basin	15	15' x 110' x 30'
Clarifier	4	12' SWD x 135' Diameter
Clarifier	2	12' SWD x 90' Diameter
Effluent Filters	2	84' x 16'
Chlorine Contact Basin (parallel operation)	8	17.5' x 60' x 10'
Chlorine Contact Basin (influent channel)	1	17.5' x 43.5' x 10'
Chlorine Contact Basin (effluent channel)	1	17.5' x 43.5' x 14'
Sludge Thickener	1	2370 sq ft
Sludge Digester	10	15' x 110' x 30'
Belt Filter Press	3	

Attachment 8

Process Flow Diagram

Technical Report 1.0, Section 2.C.

EXISTING/INTERIM I PHASE



SOUTHEAST WWTP - PROCESS FLOW DIAGRAM

PLANT LOCATION

9610 KINGSPOINT
HOUSTON, TX 77075

QUADRANT	SOUTHWEST
KEY MAP NUMBER	570K

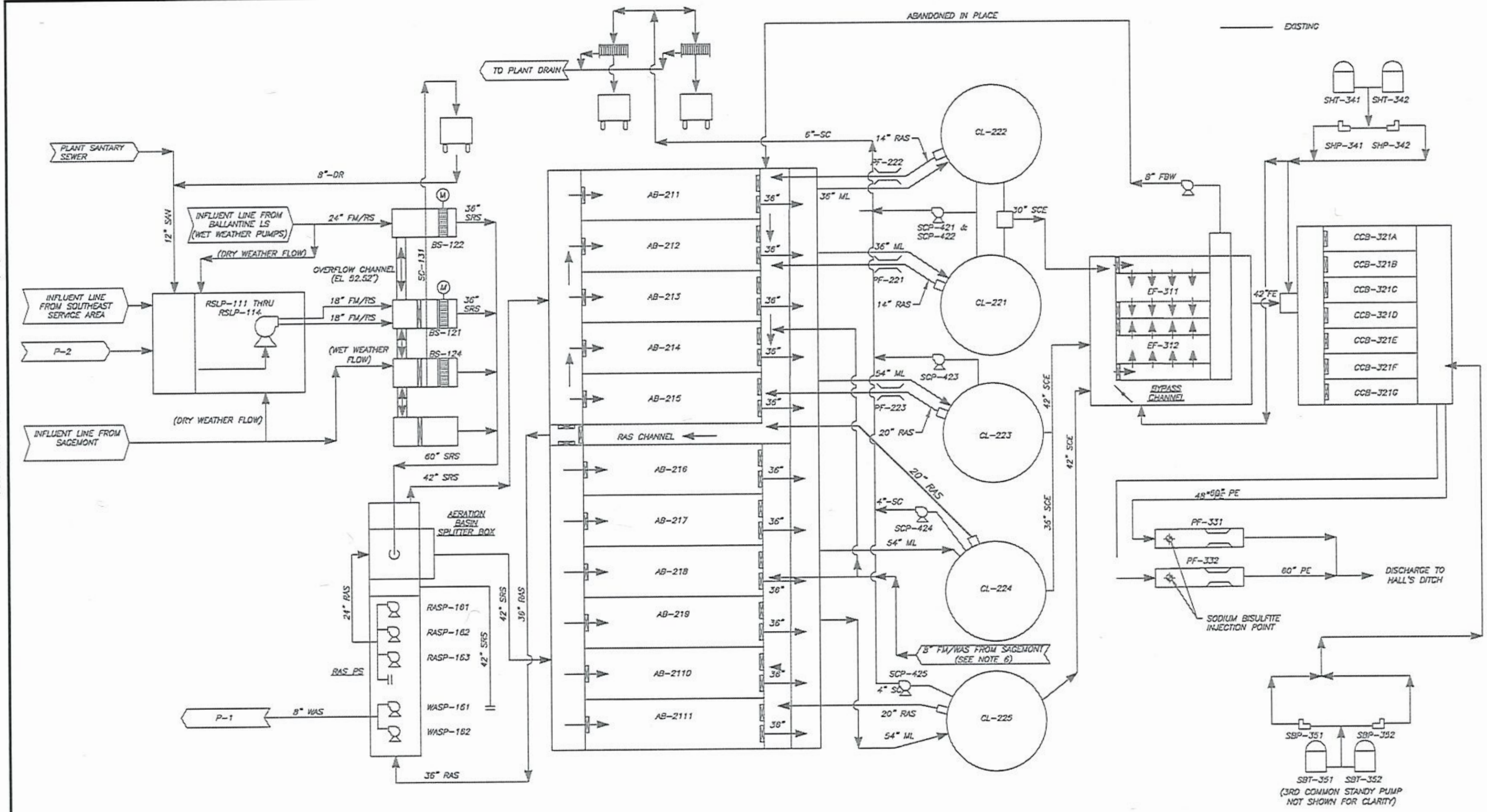
OVERALL PLANT CAPACITY (MGD)

	FIRM	TOTAL
LIFT STATION	53.21	62.29
	AVG.	2 HR PEAK
PLANT	6.8	26.4
PERMITTED FLOW LIMITS	5.33	32.3

UNIT PROCESS CAPACITY (MGD)

	DESIGN	2 HR PEAK
AERATION SYSTEM	6.8	NA
SECONDARY CLARIFIERS	16.2	32.4
DISINFECTION	NA	26.4

confirmed 08/2024



NOTES:

1. PROCESS FLOW DIAGRAM IS GENERAL IN REPRESENTATION OF UNIT PROCESS. REFER TO MECHANICAL PROCESS AND INSTRUMENTATION DIAGRAMS FOR ADDITIONAL DETAIL.
2. AERATION PIPING NOT SHOWN FOR CLARITY.
3. EXISTING AEROBIC DIGESTERS CONVERTED TO AERATION BASINS.
4. EXISTING EFFLUENT FILTERS TO BE ABANDONED IN PLACE.

WARNING
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

CDM Smith
11490 Westheimer Road, Suite 700
Houston, TX 77077
Tel: (713) 423-7300
TBPE Firm Registration No. F-3043

CITY OF HOUSTON
WBS NO. R-000265-0148-3
SOUTHEAST WASTEWATER TREATMENT PLANT
EXPANSION – INTERIM II PHASE
PROJECT NO. 8138-248306

FIGURE ES-3
INTERIM II PHASE
PROCESS FLOW DIAGRAM I
JULY 2020

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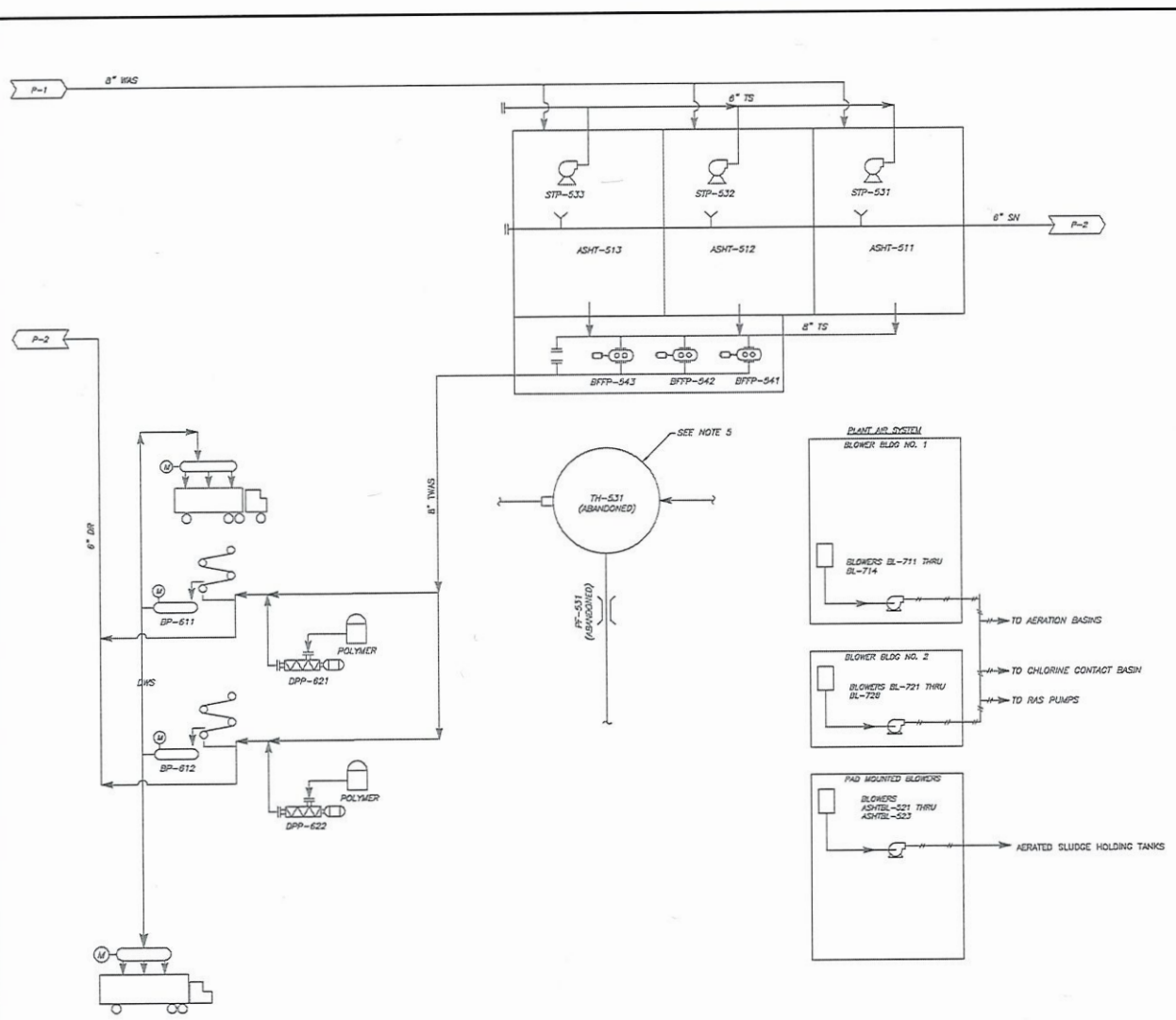

NOTES:

1. PROCESS FLOW DIAGRAM IS GENERAL IN REPRESENTATION OF UNIT PROCESS. REFER TO MECHANICAL PROCESS AND INSTRUMENTATION DIAGRAMS FOR ADDITIONAL DETAIL.
2. AERATION PIPING NOT SHOWN FOR CLARITY.
3. EXISTING AEROBIC DIGESTERS CONVERTED TO AERATION BASINS.
4. EXISTING EFFLUENT FILTERS TO BE ABANDONED IN PLACE.
5. EXISTING THICKENER TO BE ABANDONED IN PLACE.
6. EXISTING BLOWER BUILDING 1 TO BE DEMOISHED.

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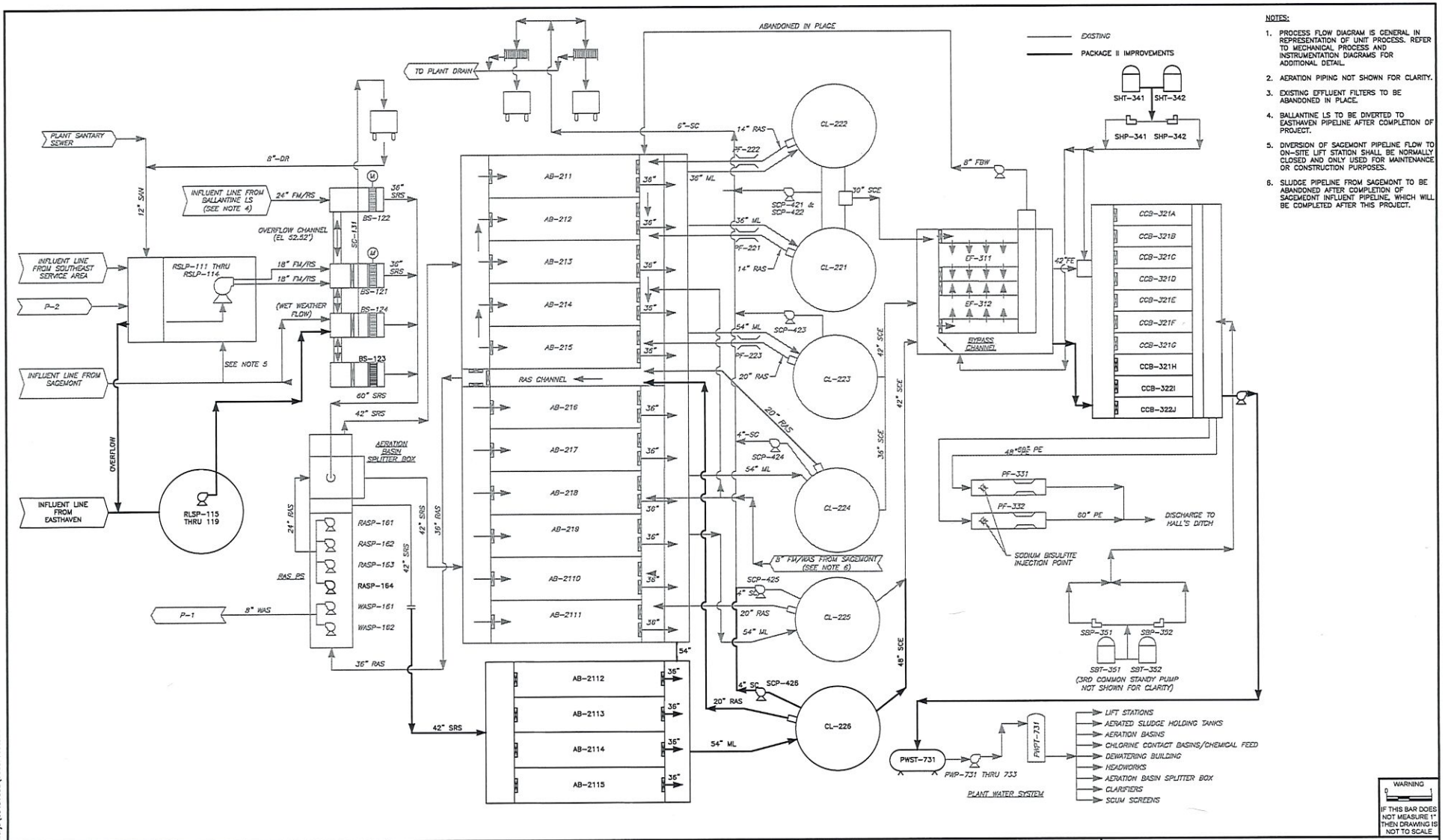
Houston, TX 77077
Tel: (713) 423-7300
TBPE Firm Registration No. F-3043

CITY OF HOUSTON
WBS NO. R-000265-0148-3
SOUTHEAST WASTEWATER TREATMENT PLANT EXPANSION – INTERIM II PHASE
PROJECT NO. 8138-248306

FIGURE ES-4
INTERIM II PHASE
PROCESS FLOW DIAGRAM II
JULY 2020



NOTES:

1. PROCESS FLOW DIAGRAM IS GENERAL IN REPRESENTATION OF UNIT PROCESS. REFER TO MECHANICAL PROCESS AND INSTRUMENTATION DIAGRAMS FOR ADDITIONAL DETAIL.
2. AERATION PIPING NOT SHOWN FOR CLARITY.
3. EXISTING EFFLUENT FILTERS TO BE ABANDONED IN PLACE.
4. BALLANTINE LS TO BE DIVERTED TO EASTHAVEN PIPELINE AFTER COMPLETION OF PROJECT.
5. DIVERSION OF SAGEMONT PIPELINE FLOW TO ON-SITE LIFT STATION SHALL BE NORMALLY CLOSED AND ONLY USED FOR MAINTENANCE OR CONSTRUCTION PURPOSES.
6. SLUDGE PIPELINE FROM SAGEMONT TO BE ABANDONED AFTER COMPLETION OF SAGEMEONT INFLUENT PIPELINE, WHICH WILL BE COMPLETED AFTER THIS PROJECT.

WARNING
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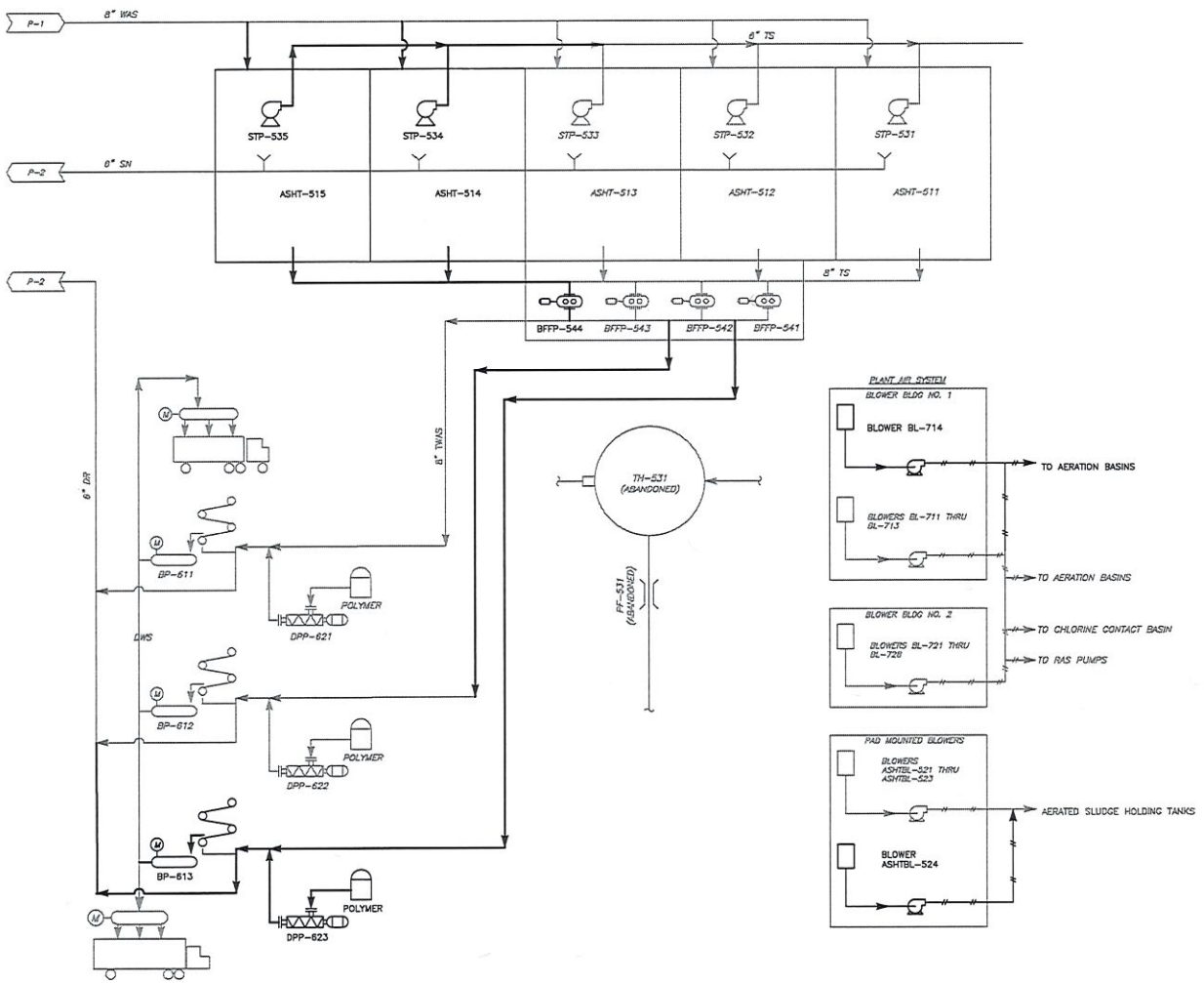
CDM Smith
11490 Westheimer Road, Suite 700
Houston, TX 77077
Tel: (713) 423-7300
TBPE Firm Registration No. F-3043

CITY OF HOUSTON
WBS NO. R-000265-0148-3
SOUTHEAST WASTEWATER TREATMENT PLANT EXPANSION – FINAL PHASE
PROJECT NO. 8138-248306

FIGURE ES-6
FINAL PHASE
PROCESS FLOW DIAGRAM I
JULY 2020



EXISTING

PACKAGE II IMPROVEMENTS

NOTES:

1. PROCESS FLOW DIAGRAM IS GENERAL IN REPRESENTATION OF UNIT PROCESS. REFER TO MECHANICAL PROCESS AND INSTRUMENTATION DIAGRAMS FOR ADDITIONAL DETAIL.
2. AERATION PIPING NOT SHOWN FOR CLARITY.

WARNING
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IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

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CDM Smith
11490 Westheimer Road, Suite 700
Houston, TX 77077
Tel: (713) 423-7300
TBPE Firm Registration No. F-3043

CITY OF HOUSTON
WBS NO. R-000265-0148-3

SOUTHEAST WASTEWATER TREATMENT PLANT
EXPANSION – FINAL PHASE

PROJECT NO. 8138-248306

FIGURE ES-7

FINAL PHASE PROCESS FLOW DIAGRAM II

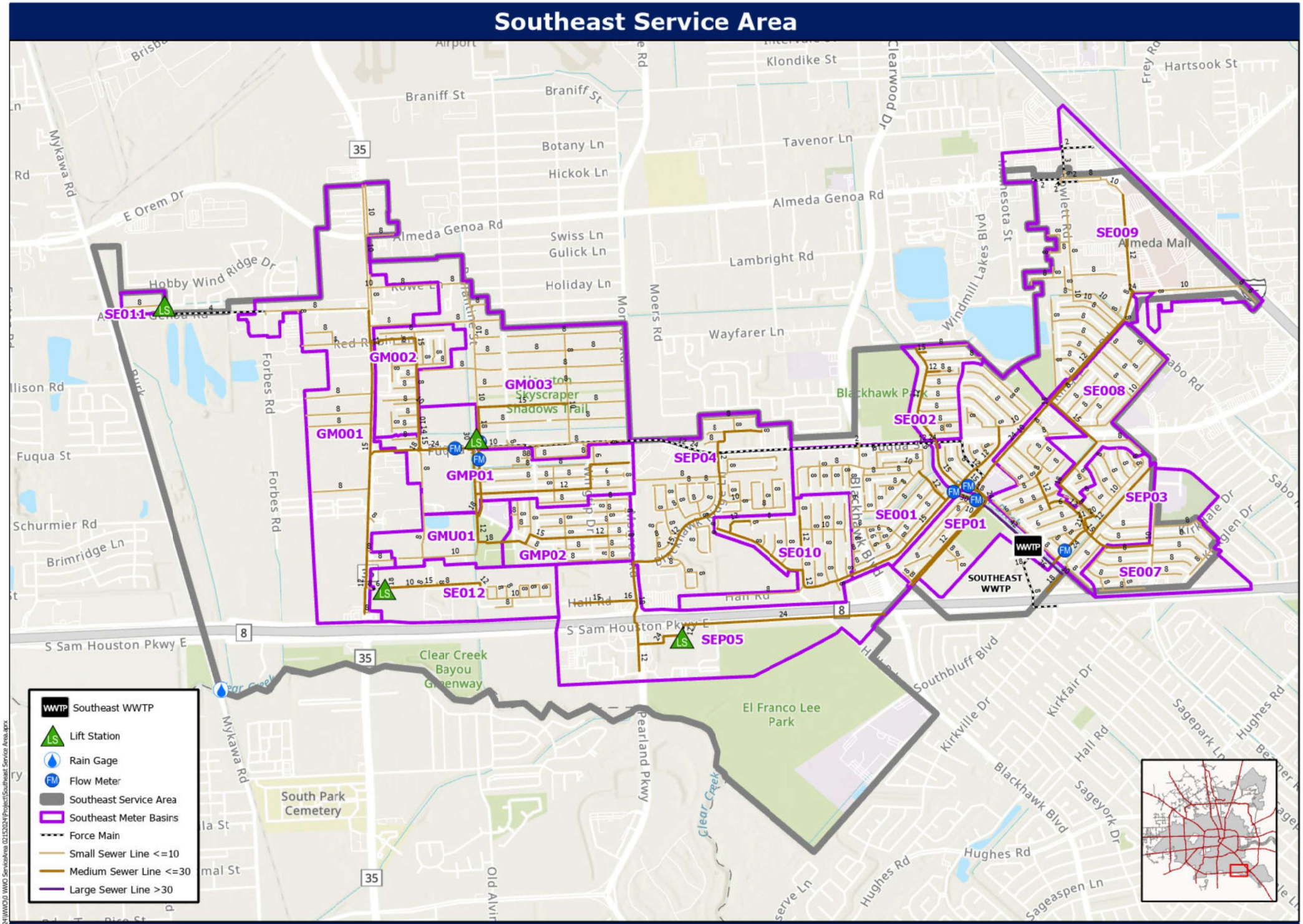
JULY 2020

Attachment 9

Site Drawing

Technical Report 1.0, Section 3

Southeast Service Area



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

0 0.3 0.5 1 Miles

N

HOUSTON PUBLIC WORKS

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10.02.2024

Attachment 10

Summary Transmittal Letter and TCEQ Approval Letter

Technical Report 1.0, Section 6.A.

11490 Westheimer Rd.., Suite 700
Houston, Texas 77077
tel: 713-423-7300
fax: 713-840-0173

April 20, 2020

Mr. Louis C. Herrin III, P.E.
Sr. Engineer, Technical Support/Wastewater Permitting Section
Texas Commission on Environmental Quality - MC 148
P.O. Box 13087
Austin, Texas 78711-3087

Permittee: City of Houston, Texas
Permit No.: TPDES Permit No. WQ0010495079
Project Name: Southeast Wastewater Treatment Plant Improvements – Package I
County: Harris County, Texas

Subject: Chapter 217.6 Summary Transmittal Letter

Dear Mr. Herrin:

The purpose of this letter is to provide the Texas Commission on Environmental Quality (TCEQ) with the information necessary to comply with the requirements of §217.6 of the TCEQ's rules entitled, "Design Criteria for Wastewater Systems." The necessary information includes:

- Project: Southeast WWTP Improvements/Expansion - Package 1
  City of Houston WBS No.: R-000265-0126-3
  TPDES Permit No. WQ0010495079
  9610 Kingspoint Rd.
  Houston, TX 77075
  Harris County

- Engineering Firm: CDM Smith Inc. (TPBE Firm Registration F-3043)
  11490 Westheimer Rd., Suite 700
  Houston, Texas 77077
  Design Engineer: Mr. Christopher K. Varnon, P.E. (PE# 97453)
  Phone: (713) 423-7313

- Owner: City of Houston
  Attn: Mr. Gauher Khan, P.E.

- Scope:

A. The project is generally an expansion of capacity from 5.33 MGD ADF to 10.2 MGD ADF. Water is pumped to the headworks from both on and off-site lift stations. No modifications are required to the onsite lift station as part of this project. The existing headworks includes two mechanically raked bar screen channels. A new manually raked bar screen bypass channel will be added as part of this project and a new channel will be added so that a mechanically raked bar screen can be installed in a future project. Screened flow will be distributed to the aeration basins from a new splitter structure, to be added with this project, where return sludge will be combined with raw influent from the headworks. The aeration basins are conventional activated sludge basins with coarse bubble diffusers and will consist of five existing basins and six basins that will be converted from aerobic digesters as part of this project. Flow from all eleven aeration basins combine into a single effluent channel from which flow is distributed to secondary clarifiers (four existing and one new 135-fot diameter clarifier to be added as part of this project). Secondary effluent combines into the chlorine contact channel influent box where sodium hypochlorite is injected and mixed. Flow is distributed through an inlet channel to the parallel chlorine contact channels (four existing and three new channels to be added as part of this project) and recombined in an effluent channel. Sodium bisulfite is injected upstream of two parshall flumes (one existing and one to be added as part of this project) used for flow measurement, after which flow is combined into a single new outfall pipe, to replace the existing outfall pipe as part of this project. Sludge is wasted to new aerated sludge holding tanks, to be constructed in this project and replace the existing aerobic digesters, which employ fill/decant thickening. Thickened sludge will be dewatered using two existing belt filter presses. A new blower building will be constructed to supplement aeration air provided by one of two existing blower buildings to remain in service. The other blower building will be demolished to make room for the new splitter structure. Two new electrical buildings will be constructed as part of this project, one to house new main incoming electrical service and switchgear to handle the expanded electrical load, and one to feed power to new equipment in the clarifier area as well as replace distribution equipment for existing loads in this area.

B. A list of the scope of modifications for each process area is included below:

    a. Headworks (modifications to existing structure):

        i. Demolition of existing scum screen and replacement with new static scum screens, separate from Headworks.

        ii. Construction of new bypass flow channel and manually raked bar screen to handle future peak flow.

iii. Construction of new bar screen channel for a future mechanically raked bar screen to supplement capacity of two existing mechanically raked channels.

b. Splitter (new structure)

i. New hydraulic flow split to three chambers, one to existing aeration basins, one to existing digesters to be converted to aeration basins, and one to future aeration basins.

ii. RAS transfer pump station to take gravity flow of RAS from existing RAS channel and pump upstream of flow slit weirs to mix with incoming flow from headworks. Pump station to include WAS pumps to transfer waste sludge to new aerobic sludge holding tanks.

c. Aeration Basins (modifications to existing structure):

i. Existing six aerobic digesters (common wall to existing aeration basins) to be converted to aeration basins.

ii. New aeration air distribution header along north side of combined aeration basin structure to allow connection from new blower building.

iii. New effluent gates in existing digesters to be converted to aeration basins.

iv. Minor modifications to structure to modify flow path.

v. Demolition of existing WAS pump and sludge transfer pumps (to thickener) and relocation of transfer pumps (between basins) to new aerated sludge holding tanks.

d. Existing Blower Building No. 1 (demolished structure)

i. Demolition of existing blower building with four positive displacement blowers to make room for new splitter structure.

e. New Blower Building No. 1 (new structure)

i. Pre-engineered metal building to house three new medium voltage, single-stage, integrally geared centrifugal blowers to supplement aeration air to expanded aeration basins.

ii. Electrical room to house motor starters for new blowers.

f. New Secondary Clarifier (new structure)

i. Spiral blade 135-foot diameter secondary clarifier, matching size of two larger existing clarifiers.

ii. Double-disk scum pump to pump scum to new static scum screens

iii. RAS pump station to transfer return sludge from the new clarifier to existing RAS channel.

iv. Drain pump station to allow for dewatering of clarifier.

g. Clarifier Electrical Building (new structure)

i. New precast concrete electrical building to house motor starters for new clarifier and associated equipment as well as relocated motor starters for existing clarifiers and associated equipment.

h. Effluent Filter Structure (modifications to existing structure)

i. Demolition of filter equipment no longer in service.

i. Chlorine Contact Basins (modifications toexisting structure)

i. Construction of three new channels to supplement four existing channels.

ii. Addition of vertical shaft mixer for chemical mixing to replace induction mixers no longer in service.

iii. Addition of sodium bisulfite feed pump to existing pump building to allow pumped flow to two injection points upstream of two parshall flumes.

j. Parshall Flume and Outfall Structure (new structure)

i. Construct new Parshall Flume structure to operate in parallel to existing flume.

ii. New 60-inch outfall pipe to replace the existing 48-in outfall pipe.

k. Aerated Sludge Holding Tanks (new structure)

i. New aerated sludge holding tanks to replace aerobic digesters converted to aeration basins.

ii. New belt press feed pumps to feed existing belt presses

iii. New positive displacement aerated sludge holding tank blowers

- There are no innovative or nonconforming technologies which are proposed as part of this project.
- The plans and specifications which describe the project identified in this letter were prepared to be in compliance with the requirements of Chapter 217 except for the two items described below:

    1. 217.153(b)(1): The proposed aeration basin freeboard will be approximately 10" at worst case flow conditions with a clarifier out of service and approximately 15" freeboard under average flow conditions. Record drawings indicate the design freeboard at the aeration basins was previously 15" at peak flow with all clarifiers in service, so this is a continuation of a prior design basis and a variance of the Chapter 217 requirement of 18" freeboard at peak flow.

    2. 217.190(a)(1): While the permitted BOD5 and TSS limits are 5 mg/L and 12 mg/L, the proposed plan does not include effluent filters. The existing travelling bridge filters have been out of service and in a state of disrepair for over 10 years and the City has maintained a long record of permit compliance at this facility. The City is proposing to retain the existing effluent filter structure at its current location if future effluent filtration is required. As well, the clarifiers are conservatively designed for surface area, depth, and volume for suspended solids removal. See attached clarifier sizing calculations.

Based on my best professional judgment, I Christopher Varnon, P.E. certify that the requested variances from Chapter 217 will not threaten public health or the environment.

If you have any questions regarding this project, please contact me at (713) 423-7313 or VarnonCK@cdmsmith.com.

Sincerely

Christopher K. Varnon, P.E.
Project Manager
CDM Smith Inc.
TBPE Firm Registration No. F-3043

cc: Mr. Stephen Smith, TCEQ Regional Office Water Program Manager
Mr. Gauher Khan, P.E., City of Houston, Supervising Engineer, Capital Projects
CDM Smith Project File No. 8138-236521

Attachments: Proposed Site Plan
Clarifier Calculations

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

July 20, 2020

Christopher K. Varnon, P.E.
CDM Smith, Inc.
11490 Westheimer Road, Suite 700
Houston, TX 77077

Re: City of Houston
Southeast Wastewater Treatment Plant Improvements - Package I
Permit No. WQ0010495-079
WWPR Log No. 0420/049
CN600128995, RN101610459
Harris County

Dear Mr. Varnon:

Texas Commission on Environmental Quality (TCEQ) received the summary transmittal letter dated April 20, 2020, and your subsequent submittal of the plans, specifications, and the engineering report for the City of Houston Southeast Wastewater Treatment Plant (WWTP) Improvements – Package I project.

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

The project proposes an expansion of the capacity of the plant from 5.33 MGD to 10.2 MGD (2-hr peak flow of 51.7 MGD). The City of Houston Southeast WWTP is regulated by TPDES Permit No. WQ00104955079, which allows an annual average flow of 5.33 MGD and a 2-hr peak flow of 22,431 gallons per minute (GPM). The permitted effluent limits are 5 mg/L of CBOD5, 12 mg/L of TSS, and 2 mg/L of Ammonia Nitrogen. A list of the scope of the proposed modifications is included below:

- Headworks (modifications to existing structure)
  - Construction of new bypass flow channel and manually raked bar screen
  - Construction of new bar screen channel for a future mechanically raked bar screen to supplement capacity of two existing raked channels
- Splitter (new structure)
  - New hydraulic flow split to three chambers, one to the existing aeration basins, one to existing digesters to be converted to aeration basins, and one to future aeration basins
  - RAS transfer pumps station to take gravity flow of RAS and pump upstream of flow slit weirs to mix with incoming flow from headworks. Pump station to include WAS pumps to transfer sludge to new aerobic sludge holding tanks

- Aeration Basins (modifications to existing structure). The five existing aeration basins are conventional activated sludge basins with coarse bubble diffusers
    - Six existing aerobic digesters to be converted to aeration basins. Total volume of aeration basins (five existing aeration basins and six converted aerobic digesters) will be 498,300 cu ft.
- Existing Blower Building No. 1 (demolished structure)
    - Demolition of existing blower building with four positive displacement blowers to make room for new splitter structure
- New Blower Building No. 1 (new structure)
    - Pre-engineered metal building to house three new medium voltage, single stage, integrally geared centrifugal blowers to supplement aeration air to expanded aeration basins
    - Electrical room to house motor starters for new blowers
- New Secondary Clarifier (new structure). There are four existing clarifiers: two 90-ft diameter clarifiers (total surface area of 12,717 ft2) and two 135-ft diameter clarifiers (total surface area of 28, 612 ft2). Total surface area of four existing clarifiers is 41,329 ft2.
    - Construction of a new spiral blade 135-ft diameter secondary clarifier (surface area of 14,307 ft2), matching size of two larger existing clarifiers
- Clarifier Electrical Building (new structure)
    - Construction of a new concrete electrical building to house motors starters for new clarifier and associated equipment
- Effluent Filter Structure (modifications to existing structure)
    - Demolition of filter equipment no longer in service
- Chlorine Contact Basins
    - Construction of three new channels to supplement four existing channels. Total volume of seven chlorine contact channels (4 existing and 3 new) will be 104,994 cu ft.
- Parshall Flume and Outfall Structure
    - Construct new Parshall Flume Structure to operate in parallel to existing flume
    - New 60-inch outfall pipe to replace the existing 48-inch outfall pipe
- Aerated Sludge Holding Tanks (new structure)
    - Construction of three new sludge holding tanks (total volume of 135,000 cu ft) to replace aerobic digesters converted to aeration basins
    - New belt press feed pumps to feed two existing belt presses
    - New positive displacement aerated sludge holding tank blowers

The summary transmittal letter also contained the following variance requests:

1. A request for variance from Section 217.153(b)(1) was submitted to allow a proposed aeration basin freeboard of approximately 10" at worst case flow conditions with a clarifier out of service and approximately 15" freeboard under average flow conditions. Section 217.153(b)(1) requires that an aeration basin must have a minimum freeboard of 18" at peak flow. The engineer states that record drawings indicate the design freeboard at the aeration basins was previously 15" at peak flow with all clarifiers in service

The engineer indicates this is a continuation of a prior design basis and a variance of the Chapter 217 requirement of 18" freeboard at peak flow.

2. A request for variance from Section 217.190(a)(1) was submitted to allow that effluent filters are not included as part of these proposed plant improvements. Section 217.190(a)(1) states that a wastewater treatment facility that requires tertiary effluent limitations must use filtration as a unit of operation to supplement suspended solids removal. Tertiary effluent limits are any limits less than or equal to five mg/L for BOD5 or TSS. The plant's current effluent limitations for CBOD5 and TSS are 5 mg/L and 12 mg/L, respectively. The reason of the request for variance provided by the engineer is that the existing travelling bridge filters have been out of service and in a state of despair for over 10 years and the City has maintained a long record of permit compliance at this facility. The engineer also indicates that the City is proposing to retain the existing effluent filter structure at its current location if future effluent filtration is required. The engineer also indicates that the clarifiers are conservatively designed for surface area, depth, and volume for suspended solids removal.

TCEQ review of the submitted information seems to indicate that the project, as detailed in the submitted documents, meets at least the minimum requirements of 30 TAC Chapter 217: Design Criteria for Wastewater Systems. Based on the results of the TCEQ review, this project is conditionally approved for construction. **The condition is that a permit amendment is sought prior to construction of the WWTP expansion, to increase the permitted annual average flow of 5.33 MGD to the proposed annual average flow of 10.2 MGD**. In addition, TCEQ is granting variance No. 1 and conditionally granting variance No. 2. The condition for granting variance No. 2 is if the Owner fails to meet the permitted BOD5 effluent limit, they must use filtration as a unit of operation to supplement suspended solids removal as established in §217.190(a)(1).

You must keep certain materials on file for the life of the project and provide them to TCEQ upon request. These materials include an engineering report, test results, a summary transmittal letter, and the final version of the project plans and specifications. These materials shall be prepared and sealed by a Professional Engineer licensed in the State of Texas and must show substantial compliance with Chapter 217. All plans and specifications must conform to any waste discharge requirements authorized in a permit by the TCEQ. Certain specific items which shall be addressed in the engineering report are discussed in §217.6(d). Additionally, the engineering report must include all constants, graphs, equations, and calculations needed to show substantial compliance with Chapter 217. The items which shall be included in the summary transmittal letter are addressed in §217.6(d)(1)-(9).

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

Please be reminded of 30 TAC §217.7(a) of the rules which states, "Approval given by the executive director or other authorized review authority does not relieve an owner of any liability or responsibility with respect to designing, constructing, or operating a collection system or treatment facility in accordance with applicable commission rules and the associated wastewater permit".

If you have any questions, or if we can be of any further assistance, please call me at (512) 239-4924.

Sincerely,

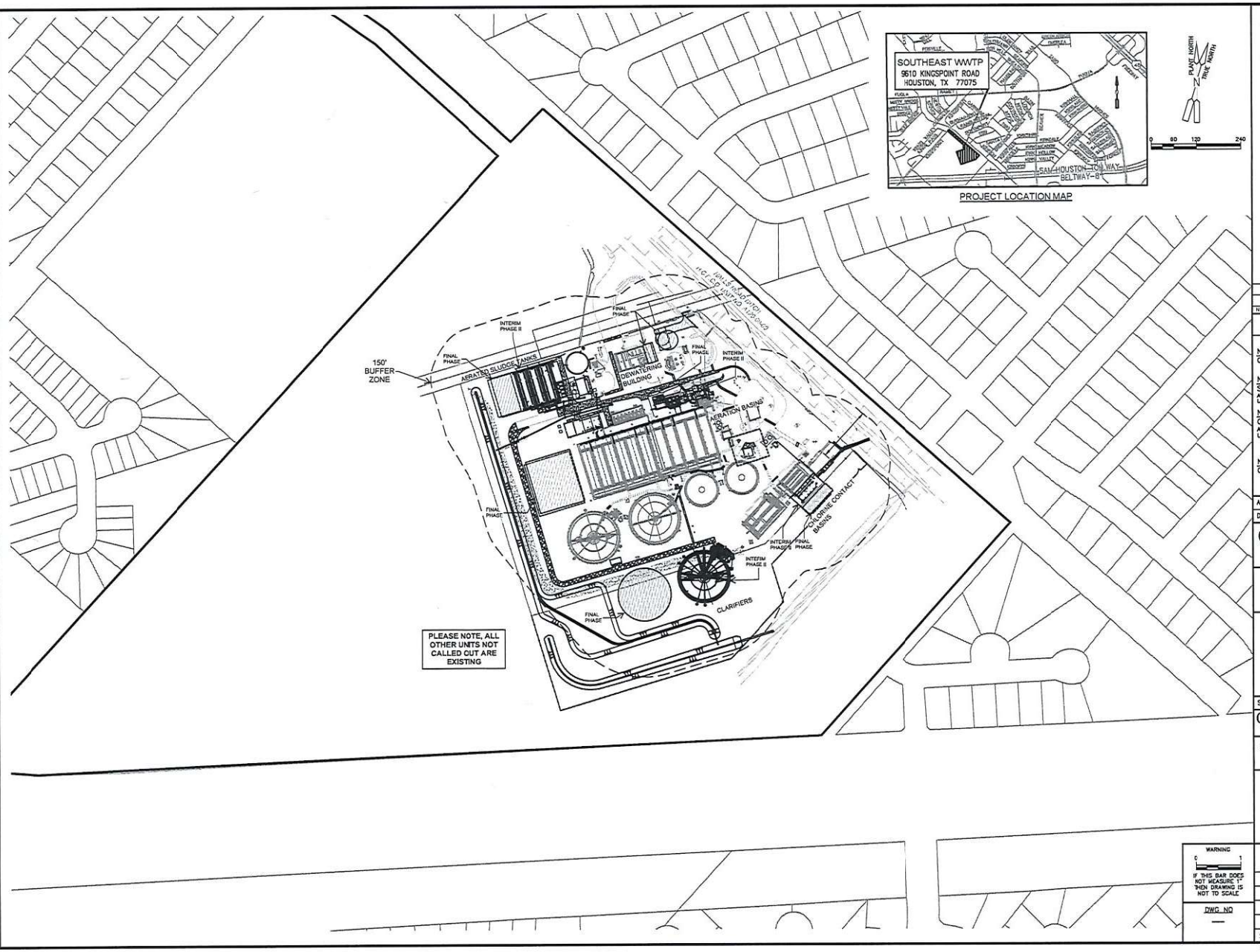
Balt[illegible]ar Lucero-Ramirez, P.E.
Wastewater Permits Section (MC 148)
Water Quality Division
Texas Commission on Environmental Quality

cc: TCEQ, Region 12 Office

Attachment 11

Buffer Zone Map

Technical Report 1.0, Section 6.B.



LEGEND

PROPERTY BOUNDARY

150' BUFFER ZONE FROM OPEN TREATMENT STRUCTURES (FOR BOTH INTERIM II PHASE AND FINAL PHASE IMPROVEMENTS)

No.	Date	Revisions	App.

PRIVATE UTILITY LINES SHOWN

N/A
CENTER POINT/GAS

N/A
SBC CO. VALID FOR ONE YEAR
APPROVED ONLY FOR UNDERGROUND CONDUIT FACILITIES UNLESS NOTED.

N/A
CENTER POINT/ELECTRIC
APPROVED ONLY FOR CROSSING UNDERGROUND DUCTLINES UNLESS NOTED. VALID AT TIME OF REVIEW ONLY.

N/A
CABLE COMPANY

APPROVED: RG	DATE: APRIL 2020
DESIGNED BY: PCD	DRAWN BY: SSH

CDM Smith
11490 Westheimer Road, Suite 700
Houston, TX 77077
Tel: (713) 423-7300
TBPE Firm Registration No. F-3043

SURVEYED BY: KUO ASSOCIATES FB NO. P-6155

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

SOUTHEAST WASTEWATER TREATMENT PLANT IMPROVEMENTS/EXPANSION – PACKAGE 1

BUFFER ZONE MAP

WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DWG. NO —

WBS NO.
R-000265-0126-4

DRAWING SCALE
1"=120'

CITY OF HOUSTON PM
CAUHER KHAN, P.E.

SHEET NO. OF

ISSUED FOR CONSTRUCTION/PERMIT

PW-EXT_8138-236521
DWG: C:\cdmsmith\fletcherjb\v0459747\G-14.DWG USER: fletcherJB
DATE: Dec 09, 2020 7:28am XREFS:R-SITE IMPROV RSEWWTPSITE R-PROP YP1 R-EABP01 ABSBPL002 RFCCDCP002 R-MBBP01 AWP001BB ASHTPL002 R-MASHTP01 AWP001EL SSTPL002 R-MSSSP01 R-MSBSP01 SCPL002 Topo-19101 CEP002

Attachment 12

Solids Management Plan

Technical Report 1.0, Section 5.G.1.

SEWAGE SLUDGE SOLIDS MANAGEMENT PLAN
Southeast WWTP – Existing Phase
City of Houston, Texas

INTRODUCTION

The Southeast Wastewater Treatment Plant is an activated sludge plant with a capacity of 5.33 million gallons per day (MGD). The City of Houston has the option to send sludge from another of its wastewater treatment plants to this plant for treatment and disposal if needed.

Primary treatment consists of coarse screening. Secondary treatment is complete mix activated sludge with nitrification and final clarification. Chlorination is used for disinfection. The solids handling process consists of sludge stabilization and solids reduction in an aerobic digester. Unit sizes and capacities are summarized in Attachment 10 of this application.

SOLIDS REMOVAL PROCESS

The solids removal process starts with removal of suspended solids from the secondary treatment units. Mixed liquor suspended solids from the aeration basins with a concentration of 2,500 – 3,500 milligrams per liter (mg/L) are settled to the bottom of the final clarifier and collected into a hopper by a mechanical scraper. The collected solids (sludge) have a concentration of approximately 1.0% solids by weight.

SOLIDS PRODUCTION

Design Considerations:

- Influent BOD_5 = 200 mg/L
- Design Flow = 5.33 MGD

Assumptions

- One pound of solids is produced by one pound of influent BOD_5

Calculations

(1) BOD_5 Loading to Plant

5.33 MGD x 200 mg/L x 8.34 = 8,890 lbs BOD_5/day

(2) Solids Production

8,890 lbs. BOD_5/day x 1 lb Solid/1 lb BOD_5 = 8,890 lbs/day

SOLIDS GENERATION SUMMARY

% Design Flow	Flow (MGD)	Solids Production (lbs/day)
25	1.33	2,218
50	2.67	4,454
75	4.00	6,672
100	5.33	8,890

SOLIDS DISPOSAL METHOD

Waste activated sludge is dewatered using a belt filter press. The filtrate is then hauled by FCC Environmental Services, and land-applied at one of the Texas Commission on Environmental Quality (TCEQ) permitted land application sites identified herein. Estimates of the hauled sludge dry weight are made based on the volume of sludge removed at a percent solids concentration. Records are kept of the date and dry weight of each haul.

LAND APPLICATION SITES

Land Application Site Name	Land Owner/Company	TCEQ Permit #	Site Location	County/State
Hendrson Farm	Henderson Partners LTD	WQ0004460000	4 miles east of FM 1410 & TX HWY 61	Liberty/TX
Kaechele Ranch	Kaechele Ranch LP	WQ0004441000	7518 FM 1093, East Bernard, TX 77435 (FM 1093 to FM 3013, 4.5 miles of Eagle Lake)	Austin/TX
Look Ranch	Barbera Look Taylor	WQ0004462000	5 miles NW of Hempstead (NE of HWY 290 Crossing of the Brazos River)	Waller/TX

The following pages are the preliminary sludge management plan for Interim Phase II and Final Phase created by the design engineer.

Prepared by: Andrew Kowalkowski, EIT
Checked by: Chris Varnon, P.E

PRELIMINARY SLUDGE MANAGEMENT PLAN

Southeast WWTP - Interim II Phase
City of Houston, Texas

Initial Phase

Flow	10.2	MGD
Influent BOD	139.2	mg/L
Effleunt BOD	5	mg/L
Net removal	134.2	mg/L
Average MLSS	3500	mg/L

	100% Flow	75% Flow	50% Flow	25% Flow
Pounds BOD5/ day removed	11,423	8,568	5,712	2,856
Pounds of dry sludge produced per day [1]	10,281	7,711	5,141	2,570
Pounds of wet sludge produced per day [2]	514,052	385,539	257,026	128,513
Volume of wet sludge produced per day (gal)	61,637	46,228	30,818	15,409
Pounds of dewatered sludge produced per week [3]	449,795	337,346	224,898	112,449

	100% Flow	75% Flow	50% Flow	25% Flow
Belt press operating hours / week[4]	48.0	36.0	24.0	12.0
Sludge removal trucks / week[5]	10.2	7.7	5.1	2.6

[1] Assuming 0.90 lbs of dry sludge produced per pound of CBOD5 removed and no destruction in aerated sludge holding tanks
[2] Assuming 2.0% solids
[3] Assuming 16.0% solids
[4] Assuming 1500 lbs dry sludge / hour; hours are cumulative for two presses
[5] Assuming removal trucks have 22 wet ton capacity trailers

Sludge Disposal
Sludge produced will be trucked and disposed in a TCEQ Registered Landfill.

Note:
$CBOD_5$ Removal - Raw Sewage Characteristics for Design Purposes

Prepared by: Andrew Kowalkowski, EIT
Checked by: Chris Varnon, P.E

PRELIMINARY SLUDGE MANAGEMENT PLAN
Southeast WWTP - Final Phase
City of Houston, Texas

Final Phase

Flow	15.2	MGD
Influent BOD	139.7	mg/L
Effleunt BOD	5	mg/L
Net removal	134.7	mg/L
Average MLSS	3500	mg/L

	100% Flow	75% Flow	50% Flow	25% Flow
Pounds BOD5/ day removed	17,086	12,815	8,543	4,272
Pounds of dry sludge produced per day [1]	15,378	11,533	7,689	3,844
Pounds of wet sludge produced per day [2]	768,892	576,669	384,446	192,223
Volume of wet sludge produced per day (gal)	92,193	69,145	46,097	23,048
Pounds of dewatered sludge produced per week [3]	672,780	504,585	336,390	168,195

	100% Flow	75% Flow	50% Flow	25% Flow
Belt press operating hours / week[4]	71.8	53.8	35.9	17.9
Sludge removal trucks / week[5]	15.3	11.5	7.6	3.8

[1] Assuming 0.90 lbs of dry sludge produced per pound of CBOD5 removed and no destruction in aerated sludge holding tanks
[2] Assuming 2.0% solids
[3] Assuming 16.0% solids
[4] Assuming 1500 lbs dry sludge / hour; hours are cumulative for three presses
[5] Assuming removal trucks have 22 wet ton capacity trailers

Sludge Disposal
Sludge produced will be trucked and disposed in a TCEQ Registered Landfill.

Note:
$CBOD_5$ Removal - Raw Sewage Characteristics for Design Purposes

Attachment 13

Laboratory Test Reports and COCs

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

August 30, 2024

Report # 073921
Revision # 0

ANALYTICAL REPORT

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

Regulatory Compliance

Southeast
9610 Kingspoint Rd

Houston, TX 77075

Project Site: Southeast Pollutants

Enclosed are the results of analyses for samples received by the laboratory on 7/19/2024.
If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Brandon Grimm
Division Manager

Southeast	Project: SE Full Scan + Permit		
9610 Kingspoint Rd	Project Number: 10495-079		
Houston, TX 77075	Project Manager: Regulatory Compliance	**Reported:**	09/10/2024 13:09

PDFFileStart [TOCPAGEMARKER] PDFFileEnd

HOUSTON PUBLIC WORKS

Southeast	Project: SE Full Scan + Permit		
9610 Kingspoint Rd	Project Number: 10495-079		
Houston, TX 77075	Project Manager: Regulatory Compliance	**Reported:**	09/10/2024 13:09

Samples in this Report

Lab ID	Sample	Alias	Matrix	Date Sampled	Date Received
24G0773-01	SP 2_CompMan	Southeast Effluent	Water	07/18/2024 21:55	07/19/2024 10:15
24G0773-02	SP 2_Comp	Southeast Effluent	Water	07/19/2024 08:00	07/19/2024 10:15
24G0773-03	SP 2_Grab	Southeast Effluent	Water	07/19/2024 08:01	07/19/2024 10:15
24G0773-04	Field Blank	Field Blank SE	Water	07/18/2024 11:19	07/19/2024 10:15

HOUSTON PUBLIC WORKS

Southeast 9610 Kingspoint Rd Houston, TX 77075	Project: SE Full Scan + Permit Project Number: 10495-079 Project Manager: Regulatory Compliance	**Reported:** 09/10/2024 13:09

Sample Results

Sample: SP 2_CompMan Southeast Effluent

24G0773-01 (Water)

Date Collected: 7/18/2024 21:55
Date Received: 7/19/2024 10:15

Analyte	Result	Qual	DL	RL	Units	Date Prepared	Date Analyzed	Analyst Initials	Method
Total Metals									
Mercury	**0.755**		0.0928	0.500	ng/L	07/29/2024 13:40	07/30/2024 13:50	HZ	EPA 1631E
Volatile Organics									
1,1,1-Trichloroethane	ND		0.805	5.00	ug/L	07/22/2024 08:19	07/22/2024 11:23	SRB	EPA 624.1
1,1,2,2-Tetrachloroethane	ND		0.857	5.00	ug/L	07/22/2024 08:19	07/22/2024 11:23	SRB	EPA 624.1
1,1,2-Trichloroethane	ND		0.748	5.00	ug/L	07/22/2024 08:19	07/22/2024 11:23	SRB	EPA 624.1
1,1-Dichloroethane	ND		0.299	5.00	ug/L	07/22/2024 08:19	07/22/2024 11:23	SRB	EPA 624.1
1,1-Dichloroethene	ND		0.340	5.00	ug/L	07/22/2024 08:19	07/22/2024 11:23	SRB	EPA 624.1
1,2-Dibromoethane	ND		0.530	5.00	ug/L	07/22/2024 08:19	07/22/2024 11:23	SRB	EPA 624.1
1,2-Dichlorobenzene	ND		0.999	5.00	ug/L	07/22/2024 08:19	07/22/2024 11:23	SRB	EPA 624.1
1,2-Dichloroethane	ND		0.393	5.00	ug/L	07/22/2024 08:19	07/22/2024 11:23	SRB	EPA 624.1
1,2-Dichloropropane	ND		0.545	5.00	ug/L	07/22/2024 08:19	07/22/2024 11:23	SRB	EPA 624.1
1,3-Dichlorobenzene	ND		1.00	5.00	ug/L	07/22/2024 08:19	07/22/2024 11:23	SRB	EPA 624.1
1,4-Dichlorobenzene	ND		1.14	5.00	ug/L	07/22/2024 08:19	07/22/2024 11:23	SRB	EPA 624.1
2-Butanone	ND		4.25	10.0	ug/L	07/22/2024 08:19	07/22/2024 11:23	SRB	EPA 624.1
2-Chloroethyl vinyl ether	ND		1.63	5.00	ug/L	07/22/2024 08:19	07/22/2024 11:23	SRB	EPA 624.1
Acrolein	ND		3.45	5.00	ug/L	07/22/2024 08:19	07/22/2024 11:23	SRB	EPA 624.1
Acrylonitrile	ND		1.71	5.00	ug/L	07/22/2024 08:19	07/22/2024 11:23	SRB	EPA 624.1
Benzene	ND		0.577	5.00	ug/L	07/22/2024 08:19	07/22/2024 11:23	SRB	EPA 624.1
Bromodichloromethane	**21.4**		0.745	5.00	ug/L	07/22/2024 08:19	07/22/2024 11:23	SRB	EPA 624.1
Bromoform	ND		1.42	5.00	ug/L	07/22/2024 08:19	07/22/2024 11:23	SRB	EPA 624.1
Bromomethane	ND		3.05	5.00	ug/L	07/22/2024 08:19	07/22/2024 11:23	SRB	EPA 624.1
Carbon Disulfide	ND		0.773	5.00	ug/L	07/22/2024 08:19	07/22/2024 11:23	SRB	EPA 624.1
Carbon Tetrachloride	ND		1.49	5.00	ug/L	07/22/2024 08:19	07/22/2024 11:23	SRB	EPA 624.1
Chlorobenzene	ND		0.640	5.00	ug/L	07/22/2024 08:19	07/22/2024 11:23	SRB	EPA 624.1
Chloroethane	ND		0.692	5.00	ug/L	07/22/2024 08:19	07/22/2024 11:23	SRB	EPA 624.1
Chloroform	**57.0**		0.557	4.00	ug/L	07/22/2024 08:19	07/22/2024 11:23	SRB	EPA 624.1
chloromethane	ND		0.497	5.00	ug/L	07/22/2024 08:19	07/22/2024 11:23	SRB	EPA 624.1
cis-1,2-Dichloroethene	ND		0.341	5.00	ug/L	07/22/2024 08:19	07/22/2024 11:23	SRB	EPA 624.1
cis-1,3-Dichloropropene	ND		0.953	5.00	ug/L	07/22/2024 08:19	07/22/2024 11:23	SRB	EPA 624.1
Dibromochloromethane	**5.10**		1.34	5.00	ug/L	07/22/2024 08:19	07/22/2024 11:23	SRB	EPA 624.1
Epichlorohydrin	ND		8.07	25.0	ug/L	07/22/2024 08:19	07/22/2024 11:23	SRB	EPA 624.1
Ethylbenzene	ND		0.582	5.00	ug/L	07/22/2024 08:19	07/22/2024 11:23	SRB	EPA 624.1
m+p-Xylene	ND		1.22	10.0	ug/L	07/22/2024 08:19	07/22/2024 11:23	SRB	EPA 624.1
Methylene Chloride	ND		0.632	5.00	ug/L	07/22/2024 08:19	07/22/2024 11:23	SRB	EPA 624.1
Methyl-tert-butyl ether (MTBE)	ND		0.639	5.00	ug/L	07/22/2024 08:19	07/22/2024 11:23	SRB	EPA 624.1
o-Xylene	ND		0.503	5.00	ug/L	07/22/2024 08:19	07/22/2024 11:23	SRB	EPA 624.1
Styrene	ND		0.716	5.00	ug/L	07/22/2024 08:19	07/22/2024 11:23	SRB	EPA 624.1
Tetrachloroethene	ND		0.748	5.00	ug/L	07/22/2024 08:19	07/22/2024 11:23	SRB	EPA 624.1
Toluene	ND		0.468	5.00	ug/L	07/22/2024 08:19	07/22/2024 11:23	SRB	EPA 624.1

Sample Results
(Continued)

Sample: SP 2_CompMan (Continued)Southeast Effluent
24G0773-01 (Water)

Date Collected: 7/18/2024 21:55
Date Received: 7/19/2024 10:15

Analyte	Result	Qual	DL	RL	Units	Date Prepared	Date Analyzed	Analyst Initials	Method
Volatile Organics (Continued)									
trans-1,2-Dichloroethene	ND		0.389	4.00	ug/L	07/22/2024 08:19	07/22/2024 11:23	SRB	EPA 624.1
trans-1,3-Dichloropropene	ND		1.37	5.00	ug/L	07/22/2024 08:19	07/22/2024 11:23	SRB	EPA 624.1
Trichloroethene	ND		0.815	5.00	ug/L	07/22/2024 08:19	07/22/2024 11:23	SRB	EPA 624.1
Vinyl acetate	ND		2.26	5.00	ug/L	07/22/2024 08:19	07/22/2024 11:23	SRB	EPA 624.1
Vinyl chloride	ND		1.70	5.00	ug/L	07/22/2024 08:19	07/22/2024 11:23	SRB	EPA 624.1
Xylenes, Total	ND		1.22	5.00	ug/L	07/22/2024 08:19	07/22/2024 11:23	SRB	EPA 624.1
Total Trihalomethanes	**83.5**		1.34	5.00	ug/L	07/22/2024 08:19	07/22/2024 11:23	SRB	EPA 624.1
1,3-Dichloropropene, Total	ND		1.37	5.00	ug/L	07/22/2024 08:19	07/22/2024 11:23	SRB	EPA 624.1
Wet Chemistry									
Cyanide, Amenable	**4.08**		0.946	2.00	ug/L	07/19/2024 09:45	07/19/2024 13:29	SBL	OIA 1677
Cyanide, Total	**3.44**	J	3.14	10.0	ug/L	07/19/2024 09:45	07/19/2024 13:29	SBL	ASTM D7511

Sample Results
(Continued)

Sample: SP 2_Comp Southeast Effluent
24G0773-02 (Water)

Date Collected: 7/19/2024 8:00
Date Received: 7/19/2024 10:15

Analyte	Result	Qual	DL	RL	Units	Date Prepared	Date Analyzed	Analyst Initials	Method
Total Metals									
Phosphorous, Total	**255**		31.6	250	ug/L	07/31/2024 09:16	08/01/2024 10:35	HZ	EPA 200.7
Semivolatile Organics									
Chlorpyrifos (2)	ND		0.00905	0.251	ug/L	07/24/2024 07:49	07/25/2024 13:55	RD	EPA 1657
Demeton-o (2)	ND		0.0191	0.251	ug/L	07/24/2024 07:49	07/25/2024 13:55	RD	EPA 1657
Demeton-s (2)	ND		0.0161	0.251	ug/L	07/24/2024 07:49	07/25/2024 13:55	RD	EPA 1657
Diazinon (2)	ND		0.0131	0.251	ug/L	07/24/2024 07:49	07/25/2024 13:55	RD	EPA 1657
ethyl-Parathion (2)	ND		0.0121	0.251	ug/L	07/24/2024 07:49	07/25/2024 13:55	RD	EPA 1657
Malathion (2)	ND		0.0121	0.251	ug/L	07/24/2024 07:49	07/25/2024 13:55	RD	EPA 1657
methyl Azinphos (Guthion) (2)	ND		0.0151	0.251	ug/L	07/24/2024 07:49	07/25/2024 13:55	RD	EPA 1657
4,4'-DDD	ND		0.00388	0.0254	ug/L	07/23/2024 09:24	07/24/2024 14:39	SRB	EPA 608.3
4,4'-DDE	ND		0.00155	0.00508	ug/L	07/23/2024 09:24	07/24/2024 14:39	SRB	EPA 608.3
4,4'-DDT	ND		0.00517	0.0254	ug/L	07/23/2024 09:24	07/24/2024 14:39	SRB	EPA 608.3
Aldrin	ND		0.00155	0.00508	ug/L	07/23/2024 09:24	07/24/2024 14:39	SRB	EPA 608.3
Alpha-BHC	ND		0.00121	0.00508	ug/L	07/23/2024 09:24	07/24/2024 14:39	SRB	EPA 608.3
Beta-BHC	ND		0.00242	0.00508	ug/L	07/23/2024 09:24	07/24/2024 14:39	SRB	EPA 608.3
Chlordane	ND		0.0437	0.203	ug/L	07/23/2024 09:24	07/24/2024 14:39	SRB	EPA 608.3
Delta-BHC	ND		0.00171	0.00508	ug/L	07/23/2024 09:24	07/24/2024 14:39	SRB	EPA 608.3
Dicofol	ND		0.0119	0.0508	ug/L	07/23/2024 09:24	07/24/2024 14:39	SRB	EPA 608.3
Dieldrin	ND		0.00184	0.00508	ug/L	07/23/2024 09:24	07/24/2024 14:39	SRB	EPA 608.3
Endosulfan I	ND		0.00121	0.00508	ug/L	07/23/2024 09:24	07/24/2024 14:39	SRB	EPA 608.3
Endosulfan II	ND		0.00341	0.0254	ug/L	07/23/2024 09:24	07/24/2024 14:39	SRB	EPA 608.3
Endosulfan Sulfate	ND		0.00429	0.0254	ug/L	07/23/2024 09:24	07/24/2024 14:39	SRB	EPA 608.3
Endrin	ND		0.0133	0.0254	ug/L	07/23/2024 09:24	07/24/2024 14:39	SRB	EPA 608.3
Endrin-Aldehyde	ND		0.00220	0.00508	ug/L	07/23/2024 09:24	07/24/2024 14:39	SRB	EPA 608.3
Gamma-BHC	ND		0.00121	0.00508	ug/L	07/23/2024 09:24	07/24/2024 14:39	SRB	EPA 608.3
Heptachlor	ND		0.00220	0.00508	ug/L	07/23/2024 09:24	07/24/2024 14:39	SRB	EPA 608.3
Heptachlor epoxide	ND		0.00155	0.00508	ug/L	07/23/2024 09:24	07/24/2024 14:39	SRB	EPA 608.3
Methoxychlor	ND		0.00251	0.00508	ug/L	07/23/2024 09:24	07/24/2024 14:39	SRB	EPA 608.3
Mirex	ND		0.00155	0.00508	ug/L	07/23/2024 09:24	07/24/2024 14:39	SRB	EPA 608.3
PCB-1016	ND		0.0774	0.203	ug/L	07/23/2024 09:24	07/24/2024 14:39	SRB	EPA 608.3
PCB-1221	ND		0.0121	0.203	ug/L	07/23/2024 09:24	07/24/2024 14:39	SRB	EPA 608.3
PCB-1232	ND		0.122	0.203	ug/L	07/23/2024 09:24	07/24/2024 14:39	SRB	EPA 608.3
PCB-1242	ND		0.118	0.203	ug/L	07/23/2024 09:24	07/24/2024 14:39	SRB	EPA 608.3
PCB-1248	ND		0.0948	0.203	ug/L	07/23/2024 09:24	07/24/2024 14:39	SRB	EPA 608.3
PCB-1254	ND		0.0743	0.203	ug/L	07/23/2024 09:24	07/24/2024 14:39	SRB	EPA 608.3
PCB-1260	ND		0.164	0.203	ug/L	07/23/2024 09:24	07/24/2024 14:39	SRB	EPA 608.3
Toxaphene	ND		0.103	0.203	ug/L	07/23/2024 09:24	07/24/2024 14:39	SRB	EPA 608.3
Polychlorinated biphenyls, Total	ND		0.0743	0.203	ug/L	07/23/2024 09:24	07/24/2024 14:39	SRB	EPA 608.3
1,2,4,5-Tetrachlorobenzene	ND		1.04	5.05	ug/L	07/22/2024 08:07	08/01/2024 12:17	SRB	EPA 625.1

Sample Results
(Continued)

Sample: SP 2_Comp (Continued)Southeast Effluent
24G0773-02 (Water)

Date Collected: 7/19/2024 8:00
Date Received: 7/19/2024 10:15

Semivolatile Organics (Continued)

Analyte	Result	Qual	DL	RL	Units	Date Prepared	Date Analyzed	Analyst Initials	Method
1,2,4-Trichlorobenzene	ND		0.854	5.05	ug/L	07/22/2024 08:07	08/01/2024 12:17	SRB	EPA 625.1
2,4,5-Trichlorophenol	ND		1.57	5.05	ug/L	07/22/2024 08:07	08/01/2024 12:17	SRB	EPA 625.1
2,4,6-Trichlorophenol	ND		1.07	5.05	ug/L	07/22/2024 08:07	08/01/2024 12:17	SRB	EPA 625.1
2,4-Dichlorophenol	ND		0.960	5.05	ug/L	07/22/2024 08:07	08/01/2024 12:17	SRB	EPA 625.1
2,4-Dimethylphenol	ND		0.531	5.05	ug/L	07/22/2024 08:07	08/01/2024 12:17	SRB	EPA 625.1
2,4-Dinitrophenol	ND		4.78	20.2	ug/L	07/22/2024 08:07	08/01/2024 12:17	SRB	EPA 625.1
2,4-Dinitrotoluene	ND		0.825	5.05	ug/L	07/22/2024 08:07	08/01/2024 12:17	SRB	EPA 625.1
2,6-Dinitrotoluene	ND		0.910	5.05	ug/L	07/22/2024 08:07	08/01/2024 12:17	SRB	EPA 625.1
2-Chloronaphthalene	ND		0.949	5.05	ug/L	07/22/2024 08:07	08/01/2024 12:17	SRB	EPA 625.1
2-Chlorophenol	ND		0.757	5.05	ug/L	07/22/2024 08:07	08/01/2024 12:17	SRB	EPA 625.1
2-Methylphenol	ND		5.19	10.1	ug/L	07/22/2024 08:07	08/01/2024 12:17	SRB	EPA 625.1
2-Nitrophenol	ND		0.585	5.05	ug/L	07/22/2024 08:07	08/01/2024 12:17	SRB	EPA 625.1
3,3'-Dichlorobenzidine	ND		6.09	20.2	ug/L	07/22/2024 08:07	08/01/2024 12:17	SRB	EPA 625.1
4,6-Dinitro-2-methylphenol	ND		4.93	20.2	ug/L	07/22/2024 08:07	08/01/2024 12:17	SRB	EPA 625.1
4-Bromophenyl phenyl ether	ND		0.919	5.05	ug/L	07/22/2024 08:07	08/01/2024 12:17	SRB	EPA 625.1
4-Chloro-3-methylphenol	ND		0.402	5.05	ug/L	07/22/2024 08:07	08/01/2024 12:17	SRB	EPA 625.1
4-Chlorophenyl phenyl Ether	ND		1.05	5.05	ug/L	07/22/2024 08:07	08/01/2024 12:17	SRB	EPA 625.1
4-Methylphenol	ND		0.529	5.05	ug/L	07/22/2024 08:07	08/01/2024 12:17	SRB	EPA 625.1
4-Nitrophenol	ND		2.39	5.05	ug/L	07/22/2024 08:07	08/01/2024 12:17	SRB	EPA 625.1
Acenaphthene	ND		0.711	5.05	ug/L	07/22/2024 08:07	08/01/2024 12:17	SRB	EPA 625.1
Acenaphthylene	ND		0.749	5.05	ug/L	07/22/2024 08:07	08/01/2024 12:17	SRB	EPA 625.1
Aniline	ND		1.27	5.05	ug/L	07/22/2024 08:07	08/01/2024 12:17	SRB	EPA 625.1
Anthracene	ND		1.02	5.05	ug/L	07/22/2024 08:07	08/01/2024 12:17	SRB	EPA 625.1
Azobenzene	ND		0.797	5.05	ug/L	07/22/2024 08:07	08/01/2024 12:17	SRB	EPA 625.1
Benzidine	ND		20.4	101	ug/L	07/22/2024 08:07	08/01/2024 12:17	SRB	EPA 625.1
Benzo(a)pyrene	ND		1.98	5.05	ug/L	07/22/2024 08:07	08/01/2024 12:17	SRB	EPA 625.1
Benzo(b)fluoranthene	ND		1.77	5.05	ug/L	07/22/2024 08:07	08/01/2024 12:17	SRB	EPA 625.1
Benzo(k)Fluoranthene	ND		1.98	5.05	ug/L	07/22/2024 08:07	08/01/2024 12:17	SRB	EPA 625.1
Benzo(g,h,i)perylene	ND		1.70	5.05	ug/L	07/22/2024 08:07	08/01/2024 12:17	SRB	EPA 625.1
Benzo[a]anthracene	ND		1.43	5.05	ug/L	07/22/2024 08:07	08/01/2024 12:17	SRB	EPA 625.1
Bis(2-chloroethoxy) methane	ND		0.386	5.05	ug/L	07/22/2024 08:07	08/01/2024 12:17	SRB	EPA 625.1
Bis(2-chloroethyl) ether	ND		1.34	5.05	ug/L	07/22/2024 08:07	08/01/2024 12:17	SRB	EPA 625.1
Bis(2-chloroisopropyl) ether	ND		0.437	5.05	ug/L	07/22/2024 08:07	08/01/2024 12:17	SRB	EPA 625.1
Bis(2-ethylhexyl) phthalate	ND		1.32	5.05	ug/L	07/22/2024 08:07	08/01/2024 12:17	SRB	EPA 625.1
Butyl benzyl phthalate	ND		0.897	5.05	ug/L	07/22/2024 08:07	08/01/2024 12:17	SRB	EPA 625.1
Carbazole	ND		0.927	5.05	ug/L	07/22/2024 08:07	08/01/2024 12:17	SRB	EPA 625.1
Chrysene	ND		1.16	5.05	ug/L	07/22/2024 08:07	08/01/2024 12:17	SRB	EPA 625.1
Dibenzo(a,h)anthracene	ND		1.91	5.05	ug/L	07/22/2024 08:07	08/01/2024 12:17	SRB	EPA 625.1
Diethyl phthalate	ND		0.674	5.05	ug/L	07/22/2024 08:07	08/01/2024 12:17	SRB	EPA 625.1
Dimethyl phthalate	ND		0.646	2.53	ug/L	07/22/2024 08:07	08/01/2024 12:17	SRB	EPA 625.1

Sample Results
(Continued)

Sample: SP 2_Comp (Continued)Southeast Effluent
24G0773-02 (Water)

Date Collected: 7/19/2024 8:00
Date Received: 7/19/2024 10:15

Analyte	Result	Qual	DL	RL	Units	Date Prepared	Date Analyzed	Analyst Initials	Method
Semivolatile Organics (Continued)									
Di-n-butyl phthalate	ND		1.24	5.05	ug/L	07/22/2024 08:07	08/01/2024 12:17	SRB	EPA 625.1
Di-n-octyl phthalate	ND		1.10	5.05	ug/L	07/22/2024 08:07	08/01/2024 12:17	SRB	EPA 625.1
Fluoranthene	ND		1.04	5.05	ug/L	07/22/2024 08:07	08/01/2024 12:17	SRB	EPA 625.1
Fluorene	ND		0.803	5.05	ug/L	07/22/2024 08:07	08/01/2024 12:17	SRB	EPA 625.1
Hexachlorobenzene	ND		1.19	5.05	ug/L	07/22/2024 08:07	08/01/2024 12:17	SRB	EPA 625.1
Hexachlorobutadiene	ND		0.731	2.53	ug/L	07/22/2024 08:07	08/01/2024 12:17	SRB	EPA 625.1
Hexachlorocyclopentadiene	ND		0.802	5.05	ug/L	07/22/2024 08:07	08/01/2024 12:17	SRB	EPA 625.1
Hexachloroethane	ND		1.40	2.53	ug/L	07/22/2024 08:07	08/01/2024 12:17	SRB	EPA 625.1
Indeno(1,2,3-cd)pyrene	ND		2.09	5.05	ug/L	07/22/2024 08:07	08/01/2024 12:17	SRB	EPA 625.1
Isophorone	ND		0.298	5.05	ug/L	07/22/2024 08:07	08/01/2024 12:17	SRB	EPA 625.1
Naphthalene	ND		0.501	2.53	ug/L	07/22/2024 08:07	08/01/2024 12:17	SRB	EPA 625.1
n-Decane	ND		0.614	5.05	ug/L	07/22/2024 08:07	08/01/2024 12:17	SRB	EPA 625.1
Nitrobenzene	ND		0.570	5.05	ug/L	07/22/2024 08:07	08/01/2024 12:17	SRB	EPA 625.1
N-Nitosodi-n-butylamine	ND		0.994	5.05	ug/L	07/22/2024 08:07	08/01/2024 12:17	SRB	EPA 625.1
N-Nitrosodiethylamine	ND		0.515	5.05	ug/L	07/22/2024 08:07	08/01/2024 12:17	SRB	EPA 625.1
N-Nitrosodimethylamine	ND		0.731	5.05	ug/L	07/22/2024 08:07	08/01/2024 12:17	SRB	EPA 625.1
N-Nitrosodi-n-propylamine	ND		0.507	5.05	ug/L	07/22/2024 08:07	08/01/2024 12:17	SRB	EPA 625.1
N-Nitrosodiphenylamine	ND		0.713	5.05	ug/L	07/22/2024 08:07	08/01/2024 12:17	SRB	EPA 625.1
n-Octadecane	ND		1.71	5.05	ug/L	07/22/2024 08:07	08/01/2024 12:17	SRB	EPA 625.1
Pentachlorobenzene	ND		1.12	5.05	ug/L	07/22/2024 08:07	08/01/2024 12:17	SRB	EPA 625.1
Pentachlorophenol	ND		3.30	5.05	ug/L	07/22/2024 08:07	08/01/2024 12:17	SRB	EPA 625.1
Phenanthrene	ND		0.678	5.05	ug/L	07/22/2024 08:07	08/01/2024 12:17	SRB	EPA 625.1
Phenol	ND		1.13	2.53	ug/L	07/22/2024 08:07	08/01/2024 12:17	SRB	EPA 625.1
Pyrene	ND		0.973	5.05	ug/L	07/22/2024 08:07	08/01/2024 12:17	SRB	EPA 625.1
Pyridine	ND		0.886	5.05	ug/L	07/22/2024 08:07	08/01/2024 12:17	SRB	EPA 625.1
3-Methylphenol	ND		0.317	5.05	ug/L	07/22/2024 08:07	08/01/2024 12:17	SRB	EPA 625.1
Wet Chemistry									
Total Alkalinity as CaCO3	**123**		20.0	20.0	mg/L	07/26/2024 11:46	07/26/2024 11:46	KEN	SM 2320 B
Total Suspended Solids	**8.8**		2.0	2.0	mg/L	07/19/2024 11:04	07/22/2024 10:30	RNH	SM 2540 D
Ammonia as N	ND		0.0204	0.0500	mg/L	07/19/2024 11:26	07/19/2024 11:26	SMS/BVC	EPA 350.1
Total Kjeldahl Nitrogen	**1.13**		0.209	0.500	mg/L	07/31/2024 10:00	08/01/2024 03:30	VP	SM 4500-NH3 D
Biochemical Oxygen Demand, Carbonaceous	**4.42**		0.200	1.36	mg/L	07/19/2024 09:30	07/24/2024 09:56	MVP	SM 5210 B

Sample Results
(Continued)

Sample: SP 2_Comp Southeast Effluent
24G0773-02 (Water)

Date Collected: 7/19/2024 8:00
Date Received: 7/19/2024 10:15

Analyte	Result	Qual	DL	RL	Units	Date Prepared	Date Analyzed	Analyst Initials	Method
Wet Chemistry									
Total Dissolved Solids (Reshot)	**458**		5.0	5.0	mg/L	07/24/2024 13:00	07/25/2024 10:55	KEN	SM 2540 C

Sample Results
(Continued)

Sample: SP 2_Grab Southeast Effluent
24G0773-03 (Water)

Date Collected: 7/19/2024 8:01
Date Received: 7/19/2024 10:15

Analyte	Result	Qual	DL	RL	Units	Date Prepared	Date Analyzed	Analyst Initials	Method
Wet Chemistry									
Chlorine, total residual	ND		0.100	0.100	mg/L	07/19/2024 08:01	07/19/2024 08:01	CSF	SM 4500-Cl D
Microbiology									
E.coli	ND		1	1	MPN/100mL	07/19/2024 10:49	07/20/2024 10:49	KEN	Colilert
Field									
Temperature, Celsius	**28.4**		0.00	0.100	°C	07/19/2024 08:01	07/19/2024 08:01	CSF	EPA 170.1
Oxygen, dissolved	**5.13**		1.00	1.00	mg/L	07/19/2024 08:01	07/19/2024 08:01	CSF	SM 4500-O G
pH	**7.65**		0.0100	2.00	SU	07/19/2024 08:01	07/19/2024 08:01	CSF	SM 4500-H+ B

Sample Results
(Continued)

Sample: Field Blank Field Blank SE
24G0773-04 (Water)

Date Collected: 7/18/2024 11:19
Date Received: 7/19/2024 10:15

Analyte	Result	Qual	DL	RL	Units	Date Prepared	Date Analyzed	Analyst Initials	Method
Total Metals									
Mercury	ND		0.0928	0.500	ng/L	07/29/2024 13:40	07/30/2024 15:00	HZ	EPA 1631E

Quality Control

Total Metals

Analyte	Result	Qual	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: B24G427 - EPA 1631E										
Blank (B24G427-BLK1)					Prepared: 07/29/24 13:40		Analyzed: 07/30/24 13:10			
Mercury	ND		0.500	ng/L						
Blank (B24G427-BLK2)					Prepared: 07/29/24 13:40		Analyzed: 07/30/24 14:30			
Mercury	ND		0.500	ng/L						
Blank (B24G427-BLK3)					Prepared: 07/29/24 13:40		Analyzed: 07/30/24 15:30			
Mercury	ND		0.500	ng/L						
LCS (B24G427-BS1)					Prepared: 07/29/24 13:40		Analyzed: 07/30/24 12:50			
Mercury	5.18		0.500	ng/L	5.00		104	77-123		
LCS (B24G427-BS2)					Prepared: 07/29/24 13:40		Analyzed: 07/30/24 14:20			
Mercury	5.27		0.500	ng/L	5.00		105	77-123		
LCS (B24G427-BS3)					Prepared: 07/29/24 13:40		Analyzed: 07/30/24 15:40			
Mercury	5.32		0.500	ng/L	5.00		106	77-123		
Matrix Spike (B24G427-MS1)	**Source: 24G0771-03**				Prepared: 07/29/24 13:40		Analyzed: 07/30/24 13:30			
Mercury	6.21		0.500	ng/L	5.00	1.61	92.0	71-125		
Matrix Spike Dup (B24G427-MSD1)	**Source: 24G0771-03**				Prepared: 07/29/24 13:40		Analyzed: 07/30/24 13:40			
Mercury	6.30		0.500	ng/L	5.00	1.61	93.8	71-125	1.47	24
Batch: B24G460 - EPA 200.7										
Blank (B24G460-BLK1)					Prepared: 07/31/24 09:16		Analyzed: 08/01/24 10:14			
Phosphorous, Total	ND		250	ug/L						

Quality Control
(Continued)

Total Metals (Continued)

Analyte	Result	Qual	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: B24G460 - EPA 200.7 (Continued)										
LCS (B24G460-BS1)					Prepared: 07/31/24 09:16	Analyzed: 08/01/24 10:12				
Phosphorous, Total	1950		250	ug/L	2000		97.6	85-115		
Duplicate (B24G460-DUP1)	**Source: 24G0773-02**				Prepared: 07/31/24 09:16	Analyzed: 08/01/24 10:38				
Phosphorous, Total	237	J	250	ug/L		255			7.31	20
Matrix Spike (B24G460-MS1)	**Source: 24G0773-02**				Prepared: 07/31/24 09:16	Analyzed: 08/01/24 10:40				
Phosphorous, Total	2490		250	ug/L	2000	255	112	70-130		
Matrix Spike Dup (B24G460-MSD1)	**Source: 24G0773-02**				Prepared: 07/31/24 09:16	Analyzed: 08/01/24 10:43				
Phosphorous, Total	2480		250	ug/L	2000	255	111	70-130	0.732	20

Quality Control
(Continued)

Semivolatile Organics

Analyte	Result	Qual	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: B24G242 - EPA 625.1_SPE										
Blank (B24G242-BLK1)				Prepared: 07/22/24 08:07 Analyzed: 08/01/24 09:03						
1,2,4,5-Tetrachlorobenzene	ND		5.00	ug/L						
1,2,4-Trichlorobenzene	ND		5.00	ug/L						
2,4,5-Trichlorophenol	ND		5.00	ug/L						
2,4,6-Trichlorophenol	ND		5.00	ug/L						
2,4-Dichlorophenol	ND		5.00	ug/L						
2,4-Dimethylphenol	ND		5.00	ug/L						
2,4-Dinitrophenol	ND		20.0	ug/L						
2,4-Dinitrotoluene	ND		5.00	ug/L						
2,6-Dinitrotoluene	ND		5.00	ug/L						
2-Chloronaphthalene	ND		5.00	ug/L						
2-Chlorophenol	ND		5.00	ug/L						
2-Methylphenol	ND		10.0	ug/L						
2-Nitrophenol	ND		5.00	ug/L						
3,3'-Dichlorobenzidine	ND		20.0	ug/L						
4,6-Dinitro-2-methylphenol	ND		20.0	ug/L						
4-Bromophenyl phenyl ether	ND		5.00	ug/L						
4-Chloro-3-methylphenol	ND		5.00	ug/L						
4-Chlorophenyl phenyl Ether	ND		5.00	ug/L						
4-Methylphenol	ND		5.00	ug/L						
4-Nitrophenol	ND		5.00	ug/L						
Acenaphthene	ND		5.00	ug/L						
Acenaphthylene	ND		5.00	ug/L						
Aniline	ND		5.00	ug/L						
Anthracene	ND		5.00	ug/L						
Azobenzene	ND		5.00	ug/L						
Benzidine	ND		100	ug/L						
Benzo(a)pyrene	ND		5.00	ug/L						
Benzo(b)fluoranthene	ND		5.00	ug/L						
Benzo(k)Fluoranthene	ND		5.00	ug/L						
Benzo(g,h,i)perylene	ND		5.00	ug/L						
Benzo[a]anthracene	ND		5.00	ug/L						
Bis(2-chloroethoxy) methane	ND		5.00	ug/L						
Bis(2-chloroethyl) ether	ND		5.00	ug/L						
Bis(2-chloroisopropyl) ether	ND		5.00	ug/L						
Bis(2-ethylhexyl) phthalate	ND		5.00	ug/L						
Butyl benzyl phthalate	ND		5.00	ug/L						
Carbazole	ND		5.00	ug/L						
Chrysene	ND		5.00	ug/L						
Dibenzo(a,h)anthracene	ND		5.00	ug/L						
Diethyl phthalate	ND		5.00	ug/L						
Dimethyl phthalate	ND		2.50	ug/L						
Di-n-butyl phthalate	ND		5.00	ug/L						
Di-n-octyl phthalate	ND		5.00	ug/L						
Fluoranthene	ND		5.00	ug/L						
Fluorene	ND		5.00	ug/L						
Hexachlorobenzene	ND		5.00	ug/L						
Hexachlorobutadiene	ND		2.50	ug/L						

Quality Control
(Continued)

Semivolatile Organics (Continued)

Analyte	Result	Qual	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: B24G242 - EPA 625.1_SPE (Continued)										
Blank (B24G242-BLK1)					Prepared: 07/22/24 08:07 Analyzed: 08/01/24 09:03					
Hexachlorocyclopentadiene	ND		5.00	ug/L						
Hexachloroethane	ND		2.50	ug/L						
Indeno(1,2,3-cd)pyrene	ND		5.00	ug/L						
Isophorone	ND		5.00	ug/L						
Naphthalene	ND		2.50	ug/L						
n-Decane	ND		5.00	ug/L						
Nitrobenzene	ND		5.00	ug/L						
N-Nitosodi-n-butylamine	ND		5.00	ug/L						
N-Nitrosodiethylamine	ND		5.00	ug/L						
N-Nitrosodimethylamine	ND		5.00	ug/L						
N-Nitrosodi-n-propylamine	ND		5.00	ug/L						
N-Nitrosodiphenylamine	ND		5.00	ug/L						
n-Octadecane	ND		5.00	ug/L						
Pentachlorobenzene	ND		5.00	ug/L						
Pentachlorophenol	ND		5.00	ug/L						
Phenanthrene	ND		5.00	ug/L						
Phenol	ND		2.50	ug/L						
Pyrene	ND		5.00	ug/L						
Pyridine	ND		5.00	ug/L						
3-Methylphenol	ND		5.00	ug/L						
LCS (B24G242-BS1)					Prepared: 07/22/24 08:07 Analyzed: 08/01/24 09:31					
1,2,4-Trichlorobenzene	10.0		5.00	ug/L	20.0		50.2	44-142		
2,4,5-Trichlorophenol	11.2		5.00	ug/L	20.0		56.0	1-140		
2,4,6-Trichlorophenol	11.0		5.00	ug/L	20.0		54.9	37-144		
2,4-Dichlorophenol	10.8		5.00	ug/L	20.0		54.0	39-135		
2,4-Dimethylphenol	8.52		5.00	ug/L	20.0		42.6	32-120		
2,4-Dinitrophenol	14.0	J	20.0	ug/L	20.0		70.2	1-191		
2,4-Dinitrotoluene	13.0		5.00	ug/L	20.0		65.0	39-139		
2,6-Dinitrotoluene	12.2		5.00	ug/L	20.0		61.2	50-158		
2-Chloronaphthalene	12.0		5.00	ug/L	20.0		60.2	20-120		
2-Chlorophenol	10.8		5.00	ug/L	20.0		54.0	23-134		
2-Methylphenol	11.3		10.0	ug/L	20.0		56.4	1-140		
2-Nitrophenol	10.8		5.00	ug/L	20.0		54.2	29-182		
3,3'-Dichlorobenzidine	22.5		20.0	ug/L	40.0		56.1	1-262		
4,6-Dinitro-2-methylphenol	17.3	J	20.0	ug/L	20.0		86.6	1-181		
4-Bromophenyl phenyl ether	12.7		5.00	ug/L	20.0		63.4	53-127		
4-Chloro-3-methylphenol	11.4		5.00	ug/L	20.0		56.9	22-147		
4-Chlorophenyl phenyl Ether	11.9		5.00	ug/L	20.0		59.5	25-158		
4-Methylphenol	5.01		5.00	ug/L	10.0		50.1	1-140		
4-Nitrophenol	16.5		5.00	ug/L	20.0		82.5	1-132		
Acenaphthene	12.0		5.00	ug/L	20.0		60.2	47-145		
Acenaphthylene	12.7		5.00	ug/L	20.0		63.4	33-145		
Aniline	8.77		5.00	ug/L	20.0		43.8	1-140		
Anthracene	14.4		5.00	ug/L	20.0		71.9	27-133		
Azobenzene	14.3		5.00	ug/L	20.0		71.4	1-140		
Benzidine	ND	BS Org	100	ug/L	40.0			1-140		

Quality Control
(Continued)

Semivolatile Organics (Continued)

Analyte	Result	Qual	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: B24G242 - EPA 625.1_SPE (Continued)										
LCS (B24G242-BS1)			Prepared: 07/22/24 08:07 Analyzed: 08/01/24 09:31							
Benzo(a)pyrene	16.9		5.00	ug/L	20.0		84.6	17-163		
Benzo(b)fluoranthene	16.1		5.00	ug/L	20.0		80.7	24-159		
Benzo(k)Fluoranthene	17.2		5.00	ug/L	20.0		86.1	11-162		
Benzo(g,h,i)perylene	16.5		5.00	ug/L	20.0		82.7	1-219		
Benzo[a]anthracene	16.1		5.00	ug/L	20.0		80.7	33-143		
Bis(2-chloroethoxy) methane	12.0		5.00	ug/L	20.0		60.0	33-184		
Bis(2-chloroethyl) ether	11.3		5.00	ug/L	20.0		56.3	12-158		
Bis(2-chloroisopropyl) ether	13.3		5.00	ug/L	20.0		66.5	36-166		
Bis(2-ethylhexyl) phthalate	15.1		5.00	ug/L	20.0		75.6	8-158		
Butyl benzyl phthalate	16.2		5.00	ug/L	20.0		81.0	1-152		
Carbazole	16.3		5.00	ug/L	20.0		81.4	1-140		
Chrysene	17.1		5.00	ug/L	20.0		85.4	17-168		
Dibenzo(a,h)anthracene	17.5		5.00	ug/L	20.0		87.5	1-227		
Diethyl phthalate	13.0		5.00	ug/L	20.0		65.1	1-120		
Dimethyl phthalate	12.3		2.50	ug/L	20.0		61.4	1-120		
Di-n-butyl phthalate	16.0		5.00	ug/L	20.0		79.8	1-120		
Di-n-octyl phthalate	14.6		5.00	ug/L	20.0		72.8	4-146		
Fluoranthene	16.3		5.00	ug/L	20.0		81.7	26-137		
Fluorene	12.5		5.00	ug/L	20.0		62.6	59-121		
Hexachlorobenzene	12.8		5.00	ug/L	20.0		63.8	1-152		
Hexachlorobutadiene	8.53		2.50	ug/L	20.0		42.6	24-120		
Hexachlorocyclopentadiene	2.33	J	5.00	ug/L	20.0		11.7	1-140		
Hexachloroethane	8.34		2.50	ug/L	20.0		41.7	40-120		
Indeno(1,2,3-cd)pyrene	16.8		5.00	ug/L	20.0		83.9	1-171		
Isophorone	14.5		5.00	ug/L	20.0		72.4	21-196		
Naphthalene	11.4		2.50	ug/L	20.0		57.2	21-133		
n-Decane	5.56		5.00	ug/L	20.0		27.8	1-140		
Nitrobenzene	12.5		5.00	ug/L	20.0		62.5	35-140		
N-Nitosodi-n-butylamine	14.0		5.00	ug/L	20.0		70.1	1-140		
N-Nitrosodiethylamine	12.6		5.00	ug/L	20.0		62.8	1-140		
N-Nitrosodimethylamine	6.11		5.00	ug/L	20.0		30.6	1-140		
N-Nitrosodi-n-propylamine	11.5		5.00	ug/L	20.0		57.7	1-230		
N-Nitrosodiphenylamine	13.8		5.00	ug/L	20.0		68.9	1-140		
n-Octadecane	19.3		5.00	ug/L	20.0		96.3	1-140		
Pentachlorobenzene	11.9		5.00	ug/L	20.0		59.3	1-140		
Pentachlorophenol	15.6		5.00	ug/L	20.0		77.8	14-176		
Phenanthrene	13.9		5.00	ug/L	20.0		69.6	54-120		
Phenol	10.4		2.50	ug/L	20.0		52.1	5-120		
Pyrene	16.5		5.00	ug/L	20.0		82.4	52-120		
Pyridine	5.37		5.00	ug/L	20.0		26.9	1-140		
3-Methylphenol	5.00		5.00	ug/L	10.0		50.0	1-140		

Quality Control
(Continued)

Semivolatile Organics (Continued)

Analyte	Result	Qual	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: B24G242 - EPA 625.1_SPE (Continued)										
Matrix Spike (B24G242-MS1)	**Source: 24G0771-04**		Prepared: 07/22/24 08:07			Analyzed: 08/01/24 10:26				
1,2,4-Trichlorobenzene	28.0		10.0	ug/L	40.0	ND	70.0	44-142		
2,4,5-Trichlorophenol	28.0		10.0	ug/L	40.0	ND	70.0	1-140		
2,4,6-Trichlorophenol	27.4		10.0	ug/L	40.0	ND	68.6	37-144		
2,4-Dichlorophenol	29.0		10.0	ug/L	40.0	ND	72.6	39-135		
2,4-Dimethylphenol	22.5		10.0	ug/L	40.0	ND	56.2	32-120		
2,4-Dinitrophenol	39.3	J	40.0	ug/L	40.0	ND	98.3	1-191		
2,4-Dinitrotoluene	28.4		10.0	ug/L	40.0	ND	71.0	39-139		
2,6-Dinitrotoluene	29.2		10.0	ug/L	40.0	ND	73.0	50-158		
2-Chloronaphthalene	28.3		10.0	ug/L	40.0	ND	70.8	20-120		
2-Chlorophenol	27.1		10.0	ug/L	40.0	ND	67.7	23-134		
2-Methylphenol	26.8		20.0	ug/L	40.0	ND	67.0	1-140		
2-Nitrophenol	31.1		10.0	ug/L	40.0	ND	77.6	29-182		
3,3'-Dichlorobenzidine	14.7	J	40.0	ug/L		ND		1-262		
4,6-Dinitro-2-methylphenol	36.9	J	40.0	ug/L	40.0	ND	92.3	1-181		
4-Bromophenyl phenyl ether	29.0		10.0	ug/L	40.0	ND	72.4	53-127		
4-Chloro-3-methylphenol	29.8		10.0	ug/L	40.0	ND	74.5	22-147		
4-Chlorophenyl phenyl Ether	28.6		10.0	ug/L	40.0	ND	71.4	25-158		
4-Methylphenol	12.5		10.0	ug/L	20.0	ND	62.3	1-140		
4-Nitrophenol	34.9		10.0	ug/L	40.0	ND	87.3	1-132		
Acenaphthene	30.4		10.0	ug/L	40.0	ND	75.9	47-145		
Acenaphthylene	30.2		10.0	ug/L	40.0	ND	75.6	33-145		
Aniline	17.5		10.0	ug/L	40.0	ND	43.7	1-140		
Anthracene	30.1		10.0	ug/L	40.0	ND	75.2	27-133		
Azobenzene	31.8		10.0	ug/L	40.0	ND	79.4	1-140		
Benzidine	ND	BS Org	200	ug/L		ND		1-140		
Benzo(a)pyrene	35.1		10.0	ug/L	40.0	ND	87.8	17-163		
Benzo(b)fluoranthene	33.9		10.0	ug/L	40.0	ND	84.7	24-159		
Benzo(k)Fluoranthene	34.9		10.0	ug/L	40.0	ND	87.3	11-162		
Benzo(g,h,i)perylene	38.6		10.0	ug/L	40.0	ND	96.5	1-219		
Benzo[a]anthracene	33.1		10.0	ug/L	40.0	ND	82.8	33-143		
Bis(2-chloroethoxy) methane	31.8		10.0	ug/L	40.0	ND	79.4	33-184		
Bis(2-chloroethyl) ether	30.1		10.0	ug/L	40.0	ND	75.4	12-158		
Bis(2-chloroisopropyl) ether	32.9		10.0	ug/L	40.0	ND	82.4	36-166		
Bis(2-ethylhexyl) phthalate	31.1		10.0	ug/L	40.0	ND	77.6	8-158		
Butyl benzyl phthalate	32.3		10.0	ug/L	40.0	ND	80.8	1-152		
Carbazole	31.8		10.0	ug/L	40.0	ND	79.4	1-140		
Chrysene	36.0		10.0	ug/L	40.0	ND	90.1	17-168		
Dibenzo(a,h)anthracene	39.1		10.0	ug/L	40.0	ND	97.8	1-227		
Diethyl phthalate	29.8		10.0	ug/L	40.0	ND	74.5	1-120		
Dimethyl phthalate	29.2		5.00	ug/L	40.0	ND	72.9	1-120		
Di-n-butyl phthalate	32.4		10.0	ug/L	40.0	ND	80.9	1-120		
Di-n-octyl phthalate	29.4		10.0	ug/L	40.0	ND	73.5	4-146		
Fluoranthene	31.6		10.0	ug/L	40.0	ND	79.1	26-137		
Fluorene	30.5		10.0	ug/L	40.0	ND	76.3	59-121		
Hexachlorobenzene	29.2		10.0	ug/L	40.0	ND	73.0	1-152		
Hexachlorobutadiene	25.3		5.00	ug/L	40.0	ND	63.2	24-120		
Hexachlorocyclopentadiene	4.42	J	10.0	ug/L	40.0	ND	11.1	1-140		

Quality Control
(Continued)

Semivolatile Organics (Continued)

Analyte	Result	Qual	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: B24G242 - EPA 625.1_SPE (Continued)										
Matrix Spike (B24G242-MS1)	**Source: 24G0771-04**		Prepared: 07/22/24 08:07			Analyzed: 08/01/24 10:26				
Hexachloroethane	24.0		5.00	ug/L	40.0	ND	60.0	40-120		
Indeno(1,2,3-cd)pyrene	37.3		10.0	ug/L	40.0	ND	93.3	1-171		
Isophorone	33.5		10.0	ug/L	40.0	ND	83.7	21-196		
Naphthalene	30.2		5.00	ug/L	40.0	ND	75.5	21-133		
n-Decane	15.9		10.0	ug/L	40.0	ND	39.8	1-140		
Nitrobenzene	32.1		10.0	ug/L	40.0	ND	80.3	35-180		
N-Nitosodi-n-butylamine	35.7		10.0	ug/L	40.0	ND	89.4	1-140		
N-Nitrosodiethylamine	32.4		10.0	ug/L	40.0	ND	81.0	1-140		
N-Nitrosodimethylamine	17.6		10.0	ug/L	40.0	ND	44.1	1-140		
N-Nitrosodi-n-propylamine	28.1		10.0	ug/L	40.0	ND	70.2	1-230		
N-Nitrosodiphenylamine	29.0		10.0	ug/L	40.0	ND	72.6	1-140		
n-Octadecane	40.6		10.0	ug/L	40.0	ND	102	1-140		
Pentachlorobenzene	28.5		10.0	ug/L	40.0	ND	71.3	1-140		
Pentachlorophenol	37.4		10.0	ug/L	40.0	ND	93.4	14-176		
Phenanthrene	30.5		10.0	ug/L	40.0	ND	76.3	54-120		
Phenol	23.7		5.00	ug/L	40.0	ND	59.1	5-120		
Pyrene	33.8		10.0	ug/L	40.0	ND	84.6	52-120		
Pyridine	13.8		10.0	ug/L	40.0	ND	34.5	1-140		
3-Methylphenol	12.5		10.0	ug/L	20.0	ND	62.3	1-140		
Matrix Spike Dup (B24G242-MSD1)	**Source: 24G0771-04**		Prepared: 07/22/24 08:07			Analyzed: 08/01/24 10:54				
1,2,4-Trichlorobenzene	25.0		10.0	ug/L	40.0	ND	62.4	44-142	11.6	50
2,4,5-Trichlorophenol	25.7		10.0	ug/L	40.0	ND	64.3	1-140	8.49	50
2,4,6-Trichlorophenol	24.7		10.0	ug/L	40.0	ND	61.8	37-144	10.4	58
2,4-Dichlorophenol	25.9		10.0	ug/L	40.0	ND	64.8	39-135	11.4	50
2,4-Dimethylphenol	19.8		10.0	ug/L	40.0	ND	49.4	32-120	12.9	58
2,4-Dinitrophenol	29.0	J	40.0	ug/L	40.0	ND	72.5	1-191	30.2	132
2,4-Dinitrotoluene	26.0		10.0	ug/L	40.0	ND	64.9	39-139	8.94	42
2,6-Dinitrotoluene	27.3		10.0	ug/L	40.0	ND	68.3	50-158	6.63	48
2-Chloronaphthalene	25.8		10.0	ug/L	40.0	ND	64.4	20-120	9.50	24
2-Chlorophenol	24.8		10.0	ug/L	40.0	ND	61.9	23-134	8.89	61
2-Methylphenol	23.5		20.0	ug/L	40.0	ND	58.9	1-140	12.9	50
2-Nitrophenol	27.9		10.0	ug/L	40.0	ND	69.7	29-182	10.7	55
3,3'-Dichlorobenzidine	26.0	R, J	40.0	ug/L		ND		1-262	55.7	50
4,6-Dinitro-2-methylphenol	32.5	J	40.0	ug/L	40.0	ND	81.3	1-181	12.6	203
4-Bromophenyl phenyl ether	26.1		10.0	ug/L	40.0	ND	65.3	53-127	10.3	50
4-Chloro-3-methylphenol	26.4		10.0	ug/L	40.0	ND	66.0	22-147	12.1	73
4-Chlorophenyl phenyl Ether	24.7		10.0	ug/L	40.0	ND	61.7	25-158	14.6	61
4-Methylphenol	11.2		10.0	ug/L	20.0	ND	56.2	1-140	10.4	50
4-Nitrophenol	26.4		10.0	ug/L	40.0	ND	66.0	1-132	27.8	131
Acenaphthene	27.4		10.0	ug/L	40.0	ND	68.4	47-145	10.5	48
Acenaphthylene	26.1		10.0	ug/L	40.0	ND	65.2	33-145	14.8	74
Aniline	17.2		10.0	ug/L	40.0	ND	43.1	1-140	1.55	50
Anthracene	28.1		10.0	ug/L	40.0	ND	70.4	27-133	6.67	50
Azobenzene	29.2		10.0	ug/L	40.0	ND	73.0	1-140	8.46	50
Benzidine	ND	BS Org	200	ug/L		ND		1-140		50
Benzo(a)pyrene	31.3		10.0	ug/L	40.0	ND	78.2	17-163	11.5	72

Quality Control
(Continued)

Semivolatile Organics (Continued)

Analyte	Result	Qual	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: B24G242 - EPA 625.1_SPE (Continued)										
Matrix Spike Dup (B24G242-MSD1)	**Source: 24G0771-04**		Prepared: 07/22/24 08:07			Analyzed: 08/01/24 10:54				
Benzo(b)fluoranthene	29.7		10.0	ug/L	40.0	ND	74.3	24-159	13.1	71
Benzo(k)Fluoranthene	31.0		10.0	ug/L	40.0	ND	77.5	11-162	11.9	63
Benzo(g,h,i)perylene	36.3		10.0	ug/L	40.0	ND	90.8	1-219	6.08	97
Benzo[a]anthracene	28.2		10.0	ug/L	40.0	ND	70.5	33-143	16.1	53
Bis(2-chloroethoxy) methane	28.3		10.0	ug/L	40.0	ND	70.7	33-184	11.6	54
Bis(2-chloroethyl) ether	26.9		10.0	ug/L	40.0	ND	67.3	12-158	11.3	50
Bis(2-chloroisopropyl) ether	28.7		10.0	ug/L	40.0	ND	71.8	36-166	13.7	76
Bis(2-ethylhexyl) phthalate	28.1		10.0	ug/L	40.0	ND	70.3	8-158	9.98	82
Butyl benzyl phthalate	27.6		10.0	ug/L	40.0	ND	69.0	1-152	15.7	60
Carbazole	28.7		10.0	ug/L	40.0	ND	71.7	1-140	10.2	50
Chrysene	31.1		10.0	ug/L	40.0	ND	77.8	17-168	14.6	87
Dibenzo(a,h)anthracene	36.4		10.0	ug/L	40.0	ND	90.9	1-227	7.28	126
Diethyl phthalate	26.5		10.0	ug/L	40.0	ND	66.1	1-120	11.9	100
Dimethyl phthalate	26.7		5.00	ug/L	40.0	ND	66.8	1-120	8.71	183
Di-n-butyl phthalate	28.9		10.0	ug/L	40.0	ND	72.2	1-120	11.3	47
Di-n-octyl phthalate	25.8		10.0	ug/L	40.0	ND	64.6	4-146	12.9	69
Fluoranthene	29.1		10.0	ug/L	40.0	ND	72.7	26-137	8.39	66
Fluorene	26.2		10.0	ug/L	40.0	ND	65.4	59-121	15.3	38
Hexachlorobenzene	27.3		10.0	ug/L	40.0	ND	68.3	1-152	6.63	55
Hexachlorobutadiene	22.4		5.00	ug/L	40.0	ND	56.0	24-120	12.1	62
Hexachlorocyclopentadiene	ND	BS Org	10.0	ug/L	40.0	ND		1-140		50
Hexachloroethane	21.4		5.00	ug/L	40.0	ND	53.4	40-120	11.7	52
Indeno(1,2,3-cd)pyrene	34.7		10.0	ug/L	40.0	ND	86.8	1-171	7.16	99
Isophorone	30.0		10.0	ug/L	40.0	ND	75.0	21-196	11.0	93
Naphthalene	27.7		5.00	ug/L	40.0	ND	69.1	21-133	8.85	65
n-Decane	14.6		10.0	ug/L	40.0	ND	36.4	1-140	8.91	50
Nitrobenzene	28.6		10.0	ug/L	40.0	ND	71.6	35-180	11.4	50
N-Nitosodi-n-butylamine	31.4		10.0	ug/L	40.0	ND	78.4	1-140	13.1	50
N-Nitrosodiethylamine	29.4		10.0	ug/L	40.0	ND	73.5	1-140	9.64	50
N-Nitrosodimethylamine	16.5		10.0	ug/L	40.0	ND	41.3	1-140	6.45	50
N-Nitrosodi-n-propylamine	25.2		10.0	ug/L	40.0	ND	62.9	1-230	10.9	87
N-Nitrosodiphenylamine	26.8		10.0	ug/L	40.0	ND	67.1	1-140	7.89	50
n-Octadecane	35.1		10.0	ug/L	40.0	ND	87.7	1-140	14.6	50
Pentachlorobenzene	26.9		10.0	ug/L	40.0	ND	67.2	1-140	5.93	50
Pentachlorophenol	29.8		10.0	ug/L	40.0	ND	74.5	14-176	22.5	86
Phenanthrene	27.9		10.0	ug/L	40.0	ND	69.7	54-120	9.11	39
Phenol	21.5		5.00	ug/L	40.0	ND	53.7	5-120	9.62	64
Pyrene	28.6		10.0	ug/L	40.0	ND	71.6	52-120	16.6	49
Pyridine	13.7		10.0	ug/L	40.0	ND	34.4	1-140	0.424	50
3-Methylphenol	11.2		10.0	ug/L	20.0	ND	56.2	1-140	10.4	50

Quality Control
(Continued)

Semivolatile Organics (Continued)

Analyte	Result	Qual	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: B24G259 - EPA 608.3										
Blank (B24G259-BLK1)			Prepared: 07/23/24 09:24 Analyzed: 07/24/24 12:37							
4,4'-DDD	ND		0.0250	ug/L						
4,4'-DDE	ND		0.00500	ug/L						
4,4'-DDT	ND		0.0250	ug/L						
Aldrin	ND		0.00500	ug/L						
Alpha-BHC	ND		0.00500	ug/L						
Beta-BHC	ND		0.00500	ug/L						
Chlordane	ND		0.200	ug/L						
Delta-BHC	ND		0.00500	ug/L						
Dicofol	ND		0.0500	ug/L						
Dieldrin	ND		0.00500	ug/L						
Endosulfan I	ND		0.00500	ug/L						
Endosulfan II	ND		0.0250	ug/L						
Endosulfan Sulfate	ND		0.0250	ug/L						
Endrin	ND		0.0250	ug/L						
Endrin-Aldehyde	ND		0.00500	ug/L						
Gamma-BHC	ND		0.00500	ug/L						
Heptachlor	ND		0.00500	ug/L						
Heptachlor epoxide	ND		0.00500	ug/L						
Methoxychlor	ND		0.00500	ug/L						
Mirex	ND		0.00500	ug/L						
PCB-1016	ND		0.200	ug/L						
PCB-1221	ND		0.200	ug/L						
PCB-1232	ND		0.200	ug/L						
PCB-1242	ND		0.200	ug/L						
PCB-1248	ND		0.200	ug/L						
PCB-1254	ND		0.200	ug/L						
PCB-1260	ND		0.200	ug/L						
Toxaphene	ND		0.200	ug/L						
Polychlorinated biphenyls, Total	ND		0.200	ug/L						

Quality Control
(Continued)

Semivolatile Organics (Continued)

Analyte	Result	Qual	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: B24G259 - EPA 608.3 (Continued)										
LCS (B24G259-BS1)				Prepared: 07/23/24 09:24		Analyzed: 07/24/24 12:52				
4,4'-DDD	0.0360		0.0250	ug/L	0.0500		72.0	31-141		
4,4'-DDE	0.0300		0.00500	ug/L	0.0500		60.0	30-145		
4,4'-DDT	0.0350		0.0250	ug/L	0.0500		70.0	25-160		
Aldrin	0.0330		0.00500	ug/L	0.0500		66.0	42-140		
Alpha-BHC	0.0360		0.00500	ug/L	0.0500		72.0	37-140		
Beta-BHC	0.0430		0.00500	ug/L	0.0500		86.0	17-147		
Delta-BHC	0.0380		0.00500	ug/L	0.0500		76.0	34-140		
Dicofol (2)	0.262		0.0500	ug/L	0.500		52.4	50-150		
Dieldrin	0.0440		0.00500	ug/L	0.0500		88.0	36-146		
Endosulfan I	0.0280		0.00500	ug/L	0.0500		56.0	45-153		
Endosulfan II	0.0170	J	0.0250	ug/L	0.0500		34.0	0-202		
Endosulfan Sulfate	0.0390		0.0250	ug/L	0.0500		78.0	50-150		
Endrin	0.0440		0.0250	ug/L	0.0500		88.0	30-147		
Endrin-Aldehyde	0.0400		0.00500	ug/L	0.0500		80.0	50-150		
Gamma-BHC	0.0410		0.00500	ug/L	0.0500		82.0	32-140		
Heptachlor	0.0350		0.00500	ug/L	0.0500		70.0	19-140		
Heptachlor epoxide	0.0410		0.00500	ug/L	0.0500		82.0	37-142		
Methoxychlor	0.0660		0.00500	ug/L	0.0500		132	26-144		
Mirex	0.0290		0.00500	ug/L	0.0500		58.0	50-150		
PCB-1221	ND		0.200	ug/L				15-178		
LCS (B24G259-BS2)				Prepared: 07/23/24 09:24		Analyzed: 07/24/24 13:07				
PCB-1016	0.657		0.200	ug/L	1.00		65.7	50-140		
PCB-1260	0.593		0.200	ug/L	1.00		59.3	8-140		
Matrix Spike (B24G259-MS1)	**Source: 24G0771-04**			Prepared: 07/23/24 09:24		Analyzed: 07/24/24 13:38				
4,4'-DDD	0.0880		0.0500	ug/L	0.100	ND	88.0	31-141		
4,4'-DDE	0.0980		0.0100	ug/L	0.100	ND	98.0	30-145		
4,4'-DDT	0.0880		0.0500	ug/L	0.100	ND	88.0	25-160		
Aldrin	0.134		0.0100	ug/L	0.100	ND	134	42-140		
Alpha-BHC	0.0700		0.0100	ug/L	0.100	ND	70.0	37-140		
Beta-BHC	0.134		0.0100	ug/L	0.100	ND	134	17-147		
Delta-BHC	0.108		0.0100	ug/L	0.100	ND	108	34-140		
Dicofol	1.48		0.100	ug/L	1.00	ND	148	50-150		
Dieldrin	0.114		0.0100	ug/L	0.100	ND	114	36-146		
Endosulfan I	0.0960		0.0100	ug/L	0.100	ND	96.0	45-153		
Endosulfan II	0.110		0.0500	ug/L	0.100	ND	110	0-202		
Endosulfan Sulfate	0.0800		0.0500	ug/L	0.100	ND	80.0	50-150		
Endrin	0.0980		0.0500	ug/L	0.100	ND	98.0	30-147		
Endrin-Aldehyde	0.0880		0.0100	ug/L	0.100	ND	88.0	50-150		
Gamma-BHC	0.106		0.0100	ug/L	0.100	ND	106	32-140		
Heptachlor	0.0860		0.0100	ug/L	0.100	ND	86.0	19-140		
Heptachlor epoxide (2)	0.130		0.0100	ug/L	0.100	ND	130	37-142		
Methoxychlor	0.0980		0.0100	ug/L	0.100	ND	98.0	26-144		
Mirex	0.140		0.0100	ug/L	0.100	ND	140	50-150		

Quality Control
(Continued)

Semivolatile Organics (Continued)

Analyte	Result	Qual	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: B24G259 - EPA 608.3 (Continued)										
Matrix Spike Dup (B24G259-MSD1)	**Source: 24G0771-04**				Prepared: 07/23/24 09:24		Analyzed: 07/24/24 13:53			
4,4'-DDD	0.0940		0.0500	ug/L	0.100	ND	94.0	31-141	6.59	39
4,4'-DDE	0.102		0.0100	ug/L	0.100	ND	102	30-145	4.00	35
4,4'-DDT	0.0960		0.0500	ug/L	0.100	ND	96.0	25-160	8.70	42
Aldrin (2)	0.0480		0.0100	ug/L	0.100	ND	48.0	42-140	4.26	35
Alpha-BHC	0.0680		0.0100	ug/L	0.100	ND	68.0	37-140	2.90	36
Beta-BHC	0.140		0.0100	ug/L	0.100	ND	140	17-147	4.38	44
Delta-BHC	0.110		0.0100	ug/L	0.100	ND	110	34-140	1.83	43
Dicofol	1.48		0.100	ug/L	1.00	ND	148	50-150	0.270	50
Dieldrin	0.116		0.0100	ug/L	0.100	ND	116	36-146	1.74	49
Endosulfan I	0.0980		0.0100	ug/L	0.100	ND	98.0	45-153	2.06	28
Endosulfan II	0.116		0.0500	ug/L	0.100	ND	116	0-202	5.31	53
Endosulfan Sulfate	0.0860		0.0500	ug/L	0.100	ND	86.0	50-150	7.23	50
Endrin	0.100		0.0500	ug/L	0.100	ND	100	30-147	2.02	48
Endrin-Aldehyde	0.0880		0.0100	ug/L	0.100	ND	88.0	50-150	0.00	50
Gamma-BHC	0.0920		0.0100	ug/L	0.100	ND	92.0	32-140	14.1	39
Heptachlor	0.0880		0.0100	ug/L	0.100	ND	88.0	19-140	2.30	52
Heptachlor epoxide (2)	0.138		0.0100	ug/L	0.100	ND	138	37-142	5.97	26
Methoxychlor	0.122		0.0100	ug/L	0.100	ND	122	26-144	21.8	38
Mirex	0.122		0.0100	ug/L	0.100	ND	122	50-150	13.7	50

Analyte	Result	RL	Units
Batch: B24G327 - EPA 1657			
Blank (B24G327-BLK1)	Prepared: 07/24/24 07:49	Analyzed: 07/25/24 11:47	
Chlorpyrifos (2)	ND	0.250	ug/L
Demeton-o (2)	ND	0.250	ug/L
Demeton-s (2)	ND	0.250	ug/L
Diazinon (2)	ND	0.250	ug/L
ethyl-Parathion (2)	ND	0.250	ug/L
Malathion (2)	ND	0.250	ug/L
methyl Azinphos (Guthion) (2)	ND	0.250	ug/L

Quality Control
(Continued)

Semivolatile Organics (Continued)

Analyte	Result	Qual	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: B24G327 - EPA 1657 (Continued)										
LCS (B24G327-BS1)					Prepared: 07/24/24 07:49		Analyzed: 07/25/24 12:09			
Chlorpyrifos (2)	0.925		0.250	ug/L	1.00		92.5	48-150		
Demeton-o (2)	0.515		0.250	ug/L	1.00		51.5	16-150		
Demeton-s (2)	0.640		0.250	ug/L	1.00		64.0	16-150		
Diazinon (2)	0.995		0.250	ug/L	1.00		99.5	50-150		
ethyl-Parathion (2)	0.940		0.250	ug/L	1.00		94.0	50-150		
Malathion	0.525		0.250	ug/L	1.00		52.5	50-150		
methyl Azinphos (Guthion) (2)	0.780		0.250	ug/L	1.00		78.0	37-150		
Matrix Spike (B24G327-MS1)	**Source: 24G0771-04**				Prepared: 07/24/24 07:49		Analyzed: 07/25/24 12:30			
Chlorpyrifos (2)	1.68		0.500	ug/L	2.00	ND	84.0	25-150		
Demeton-o (2)	0.440	MS1, J	0.500	ug/L	2.00	ND	22.0	25-150		
Demeton-s (2)	1.06		0.500	ug/L	2.00	ND	53.0	25-150		
Diazinon (2)	2.20		0.500	ug/L	2.00	ND	110	25-150		
ethyl-Parathion (2)	1.65		0.500	ug/L	2.00	ND	82.5	25-150		
Malathion (2)	1.65		0.500	ug/L	2.00	ND	82.5	25-150		
methyl Azinphos (Guthion) (2)	1.80		0.500	ug/L	2.00	ND	90.0	25-150		
Matrix Spike Dup (B24G327-MSD1)	**Source: 24G0771-04**				Prepared: 07/24/24 07:49		Analyzed: 07/25/24 12:51			
Chlorpyrifos (2)	1.73		0.500	ug/L	2.00	ND	86.5	25-150	2.93	200
Demeton-o	0.490	MS1, J	0.500	ug/L	2.00	ND	24.5	25-150	13.0	200
Demeton-s (2)	1.16		0.500	ug/L	2.00	ND	58.0	25-150	9.01	200
Diazinon (2)	2.17		0.500	ug/L	2.00	ND	108	25-150	1.37	200
ethyl-Parathion (2)	1.75		0.500	ug/L	2.00	ND	87.5	25-150	5.88	200
Malathion (2)	1.74		0.500	ug/L	2.00	ND	87.0	25-150	5.31	200
methyl Azinphos (Guthion) (2)	2.19		0.500	ug/L	2.00	ND	110	25-150	19.5	200

Quality Control
(Continued)

Volatile Organics

Analyte	Result	Qual	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: B24G284 - EPA 624.1										
Blank (B24G284-BLK1)			Prepared: 07/22/24 08:19 Analyzed: 07/22/24 09:01							
1,1,1-Trichloroethane	ND		5.00	ug/L						
1,1,2,2-Tetrachloroethane	ND		5.00	ug/L						
1,1,2-Trichloroethane	ND		5.00	ug/L						
1,1-Dichloroethane	ND		5.00	ug/L						
1,1-Dichloroethene	ND		5.00	ug/L						
1,2-Dibromoethane	ND		5.00	ug/L						
1,2-Dichlorobenzene	ND		5.00	ug/L						
1,2-Dichloroethane	ND		5.00	ug/L						
1,2-Dichloropropane	ND		5.00	ug/L						
1,3-Dichlorobenzene	ND		5.00	ug/L						
1,4-Dichlorobenzene	ND		5.00	ug/L						
2-Butanone	ND		10.0	ug/L						
2-Chloroethyl vinyl ether	ND		5.00	ug/L						
Acrolein	ND		5.00	ug/L						
Acrylonitrile	ND		5.00	ug/L						
Benzene	ND		5.00	ug/L						
Bromodichloromethane	ND		5.00	ug/L						
Bromoform	ND		5.00	ug/L						
Bromomethane	ND		5.00	ug/L						
Carbon Disulfide	ND		5.00	ug/L						
Carbon Tetrachloride	ND		5.00	ug/L						
Chlorobenzene	ND		5.00	ug/L						
Chloroethane	ND		5.00	ug/L						
Chloroform	ND		4.00	ug/L						
chloromethane	ND		5.00	ug/L						
cis-1,2-Dichloroethene	ND		5.00	ug/L						
cis-1,3-Dichloropropene	ND		5.00	ug/L						
Dibromochloromethane	ND		5.00	ug/L						
Epichlorohydrin	ND		25.0	ug/L						
Ethylbenzene	ND		5.00	ug/L						
m+p-Xylene	ND		10.0	ug/L						
Methylene Chloride	ND		5.00	ug/L						
Methyl-tert-butyl ether (MTBE)	ND		5.00	ug/L						
o-Xylene	ND		5.00	ug/L						
Styrene	ND		5.00	ug/L						
Tetrachloroethene	ND		5.00	ug/L						
Toluene	ND		5.00	ug/L						
trans-1,2-Dichloroethene	ND		4.00	ug/L						
trans-1,3-Dichloropropene	ND		5.00	ug/L						
Trichloroethene	ND		5.00	ug/L						
Vinyl acetate	ND		5.00	ug/L						
Vinyl chloride	ND		5.00	ug/L						
Xylenes, Total	ND		5.00	ug/L						
Total Trihalomethanes	ND		5.00	ug/L						
1,3-Dichloropropene, Total	ND		5.00	ug/L						

Quality Control
(Continued)

Volatile Organics (Continued)

Analyte	Result	Qual	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: B24G284 - EPA 624.1 (Continued)										
Matrix Spike (B24G284-MS1)	**Source: 24G0771-03**			Prepared: 07/22/24 08:19		Analyzed: 07/22/24 10:01				
1,1,1-Trichloroethane	17.9			ug/L	20.0	0.00	89.4	52-162		
1,1,2,2-Tetrachloroethane	19.7			ug/L	20.0	0.00	98.4	46-157		
1,1,2-Trichloroethane	19.1			ug/L	20.0	0.00	95.6	52-150		
1,1-Dichloroethane	17.8			ug/L	20.0	0.00	89.2	59-155		
1,1-Dichloroethene	17.2			ug/L	20.0	0.00	85.8	0-234		
1,2-Dibromoethane	18.3			ug/L	20.0	0.00	91.4	60-140		
1,2-Dichlorobenzene	21.0			ug/L	20.0	0.00	105	18-190		
1,2-Dichloroethane	18.0			ug/L	20.0	0.00	89.9	49-155		
1,2-Dichloropropane	18.8			ug/L	20.0	0.00	94.0	0-210		
1,3-Dichlorobenzene	21.6			ug/L	20.0	0.00	108	59-156		
1,4-Dichlorobenzene	21.6			ug/L	20.0	0.00	108	18-190		
2-Butanone	33.3			ug/L	40.0	0.00	83.3	60-140		
2-Chloroethyl vinyl ether	17.1			ug/L	20.0	0.00	85.7	0-305		
Acrolein	0.770	MS1		ug/L	20.0	0.00	3.85	40-160		
Acrylonitrile	17.9			ug/L	20.0	0.00	89.4	40-160		
Benzene	18.0			ug/L	20.0	0.00	89.9	37-151		
Bromodichloromethane	30.6			ug/L	20.0	9.95	103	35-155		
Bromoform	19.3			ug/L	20.0	0.00	96.4	45-169		
Bromomethane	16.7			ug/L	20.0	0.00	83.6	0-242		
Carbon Disulfide	17.4			ug/L	20.0	0.00	87.2	60-140		
Carbon Tetrachloride	17.9			ug/L	20.0	0.00	89.4	70-140		
Chlorobenzene	19.6			ug/L	20.0	0.00	98.2	37-160		
Chloroethane	16.0			ug/L	20.0	0.00	80.2	14-230		
Chloroform	46.2			ug/L	20.0	26.4	98.8	51-138		
chloromethane	16.3			ug/L	20.0	0.00	81.7	0-273		
cis-1,2-Dichloroethene	18.2			ug/L	20.0	0.00	90.9	60-140		
cis-1,3-Dichloropropene	19.3			ug/L	20.0	0.00	96.5	0-227		
Dibromochloromethane	22.4			ug/L	20.0	2.34	100	53-149		
Epichlorohydrin	89.1			ug/L	100	0.00	89.1	70-130		
Ethylbenzene	19.7			ug/L	20.0	0.00	98.4	37-162		
m+p-Xylene	40.0			ug/L	40.0	0.00	100	60-140		
Methylene Chloride	15.5			ug/L	20.0	0.00	77.6	0-221		
Methyl-tert-butyl ether (MTBE)	16.2			ug/L	20.0	0.00	81.0	70-130		
o-Xylene	19.9			ug/L	20.0	0.00	99.7	60-140		
Styrene	20.4			ug/L	20.0	0.00	102	60-140		
Tetrachloroethene	19.1			ug/L	20.0	0.00	95.3	64-148		
Toluene	19.2			ug/L	20.0	0.00	95.8	47-150		
trans-1,2-Dichloroethene	17.7			ug/L	20.0	0.00	88.6	54-156		
trans-1,3-Dichloropropene	19.3			ug/L	20.0	0.00	96.6	17-183		
Trichloroethene	18.1			ug/L	20.0	0.00	90.4	70-157		
Vinyl acetate	16.5			ug/L	20.0	0.00	82.6	60-140		
Vinyl chloride	17.0			ug/L	20.0	0.00	85.2	0-251		

Quality Control
(Continued)

Volatile Organics (Continued)

Analyte	Result	Qual	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: B24G284 - EPA 624.1 (Continued)										
Matrix Spike Dup (B24G284-MSD1)	**Source: 24G0771-03**			Prepared: 07/22/24 08:19		Analyzed: 07/22/24 10:28				
1,1,1-Trichloroethane	18.1			ug/L	20.0	0.00	90.6	52-162	1.39	36
1,1,2,2-Tetrachloroethane	20.2			ug/L	20.0	0.00	101	46-157	2.46	61
1,1,2-Trichloroethane	19.3			ug/L	20.0	0.00	96.6	52-150	1.04	45
1,1-Dichloroethane	17.8			ug/L	20.0	0.00	88.9	59-155	0.393	40
1,1-Dichloroethene	17.1			ug/L	20.0	0.00	85.7	0-234	0.0583	32
1,2-Dibromoethane	18.4			ug/L	20.0	0.00	91.9	60-140	0.491	20
1,2-Dichlorobenzene	21.1			ug/L	20.0	0.00	105	18-190	0.380	57
1,2-Dichloroethane	18.2			ug/L	20.0	0.00	90.8	49-155	0.941	49
1,2-Dichloropropane	18.9			ug/L	20.0	0.00	94.4	0-210	0.531	55
1,3-Dichlorobenzene	21.4			ug/L	20.0	0.00	107	59-156	0.977	43
1,4-Dichlorobenzene	21.4			ug/L	20.0	0.00	107	18-190	0.979	57
2-Butanone	34.7			ug/L	40.0	0.00	86.8	60-140	4.14	20
2-Chloroethyl vinyl ether	17.5			ug/L	20.0	0.00	87.3	0-305	1.85	71
Acrolein	0.820	MS1		ug/L	20.0	0.00	4.10	40-160		60
Acrylonitrile	18.5			ug/L	20.0	0.00	92.6	40-160	3.57	60
Benzene	17.6			ug/L	20.0	0.00	87.9	37-151	2.25	61
Bromodichloromethane	30.2			ug/L	20.0	9.95	101	35-155	1.55	56
Bromoform	19.6			ug/L	20.0	0.00	97.8	45-169	1.44	42
Bromomethane	25.1			ug/L	20.0	0.00	126	0-242	40.1	61
Carbon Disulfide	17.3			ug/L	20.0	0.00	86.3	60-140	1.09	20
Carbon Tetrachloride	17.9			ug/L	20.0	0.00	89.4	70-140	0.00	41
Chlorobenzene	19.6			ug/L	20.0	0.00	98.0	37-160	0.306	53
Chloroethane	15.7			ug/L	20.0	0.00	78.4	14-230	2.27	78
Chloroform	46.0			ug/L	20.0	26.4	98.3	51-138	0.217	54
chloromethane	15.9			ug/L	20.0	0.00	79.4	0-273	2.86	60
cis-1,2-Dichloroethene	17.9			ug/L	20.0	0.00	89.5	60-140	1.55	20
cis-1,3-Dichloropropene	18.9			ug/L	20.0	0.00	94.7	0-227	1.88	58
Dibromochloromethane	22.5			ug/L	20.0	2.34	101	53-149	0.668	50
Epichlorohydrin	101			ug/L	100	0.00	101	70-130	12.1	20
Ethylbenzene	20.0			ug/L	20.0	0.00	100	37-162	1.56	63
m+p-Xylene	40.1			ug/L	40.0	0.00	100	60-140	0.274	20
Methylene Chloride	15.6			ug/L	20.0	0.00	78.0	0-221	0.450	28
Methyl-tert-butyl ether (MTBE)	16.2			ug/L	20.0	0.00	81.2	70-130	0.247	20
o-Xylene	20.2			ug/L	20.0	0.00	101	60-140	1.30	20
Styrene	20.7			ug/L	20.0	0.00	103	60-140	1.17	20
Tetrachloroethene	18.8			ug/L	20.0	0.00	94.2	64-148	1.21	39
Toluene	19.1			ug/L	20.0	0.00	95.3	47-150	0.471	41
trans-1,2-Dichloroethene	17.4			ug/L	20.0	0.00	86.8	54-156	2.05	45
trans-1,3-Dichloropropene	19.3			ug/L	20.0	0.00	96.4	17-183	0.104	86
Trichloroethene	18.0			ug/L	20.0	0.00	90.2	70-157	0.332	48
Vinyl acetate	17.3			ug/L	20.0	0.00	86.6	60-140	4.67	20
Vinyl chloride	17.0			ug/L	20.0	0.00	85.1	0-251	0.117	66

Quality Control
(Continued)

Wet Chemistry

Analyte	Result	Qual	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: B24G236 - OIA 1677										
Blank (B24G236-BLK1)				Prepared: 07/19/24 09:45 Analyzed: 07/19/24 11:58						
Cyanide, Amenable	ND		2.00	ug/L						
Cyanide, Total	ND		10.0	ug/L						
LCS (B24G236-BS1)				Prepared: 07/19/24 09:45 Analyzed: 07/19/24 12:03						
Cyanide, Total	43.8			ug/L	40.0		110	84-116		
Cyanide, Amenable	23.5			ug/L	20.0		118	82-132		
LCS Dup (B24G236-BSD1)				Prepared: 07/19/24 09:45 Analyzed: 07/19/24 12:09						
Cyanide, Amenable	24.0			ug/L	20.0		120	82-132	1.94	200
Cyanide, Total	44.8			ug/L	40.0		112	84-116	2.25	200
Duplicate (B24G236-DUP1)	**Source: 24G0756-02**			Prepared: 07/19/24 09:45 Analyzed: 07/19/24 12:41						
Cyanide, Amenable	ND		2.00	ug/L		ND				15
Cyanide, Total	ND		10.0	ug/L		ND				47
Matrix Spike (B24G236-MS1)	**Source: 24G0756-02**			Prepared: 07/19/24 09:45 Analyzed: 07/19/24 12:46						
Cyanide, Amenable	21.8		2.00	ug/L	20.0	ND	109	82-130		
Cyanide, Total	22.0		10.0	ug/L	20.0	ND	110	64-136		
Batch: B24G249 - SM 5210 B										
Blank (B24G249-BLK1)				Prepared: 07/19/24 07:30 Analyzed: 07/24/24 09:10						
Biochemical Oxygen Demand, Carbonaceous	ND		2.00	mg/L						
LCS (B24G249-BS1)				Prepared: 07/19/24 07:30 Analyzed: 07/24/24 09:13						
Biochemical Oxygen Demand, Carbonaceous	199		100	mg/L	198		100	85-115		

Quality Control
(Continued)

Wet Chemistry (Continued)

Analyte	Result	Qual	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: B24G249 - SM 5210 B (Continued)										
Duplicate (B24G249-DUP1)	**Source: 24G0740-01**			Prepared: 07/19/24 07:30		Analyzed: 07/24/24 09:15				
Biochemical Oxygen Demand, Carbonaceous	113		60.0	mg/L		107			5.44	30
Duplicate (B24G249-DUP2)	**Source: 24G0744-01**			Prepared: 07/19/24 07:30		Analyzed: 07/24/24 09:31				
Biochemical Oxygen Demand, Carbonaceous	118		75.0	mg/L		117			0.959	30
Batch: B24G257 - EPA 350.1										
Blank (B24G257-BLK1)				Prepared: 07/19/24 10:40		Analyzed: 07/19/24 10:40				
Ammonia as N	ND		0.0500	mg/L						
LCS (B24G257-BS1)				Prepared: 07/19/24 10:42		Analyzed: 07/19/24 10:42				
Ammonia as N	0.973			mg/L	1.00		97.3	90-110		
Matrix Spike (B24G257-MS1)	**Source: 24G0717-02R**			Prepared: 07/19/24 10:53		Analyzed: 07/19/24 10:53				
Ammonia as N	1.12		0.0500	mg/L	1.00	0.153	96.8	90-110		
Matrix Spike (B24G257-MS2)	**Source: 24G0735-02R**			Prepared: 07/19/24 11:14		Analyzed: 07/19/24 11:14				
Ammonia as N	1.03		0.0500	mg/L	1.00	0.0284	99.7	90-110		
Matrix Spike Dup (B24G257-MSD1)	**Source: 24G0717-02R**			Prepared: 07/19/24 10:56		Analyzed: 07/19/24 10:56				
Ammonia as N	1.14		0.0500	mg/L	1.00	0.153	98.2	90-110	1.25	10
Matrix Spike Dup (B24G257-MSD2)	**Source: 24G0735-02R**			Prepared: 07/19/24 11:17		Analyzed: 07/19/24 11:17				
Ammonia as N	1.04		0.0500	mg/L	1.00	0.0284	102	90-110	1.71	10
Batch: B24G265 - SM 2540 D, E										
Blank (B24G265-BLK1)				Prepared: 07/19/24 11:04		Analyzed: 07/22/24 10:30				
Total Suspended Solids	ND		2.0	mg/L						

Quality Control
(Continued)

Wet Chemistry (Continued)

Analyte	Result	Qual	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: B24G265 - SM 2540 D, E (Continued)										
LCS (B24G265-BS1)				Prepared: 07/19/24 11:04	Analyzed: 07/22/24 10:30					
Total Suspended Solids	20.0		2.0	mg/L	20.3		98.5	85-115		
Duplicate (B24G265-DUP1)	**Source: 24G0768-01**			Prepared: 07/19/24 11:04	Analyzed: 07/22/24 10:30					
Total Suspended Solids	360		100	mg/L		355			1.40	10
Duplicate (B24G265-DUP2)	**Source: 24G0838-01**			Prepared: 07/19/24 11:04	Analyzed: 07/22/24 10:30					
Total Suspended Solids	268		80.0	mg/L		244			9.38	10
Batch: B24G298 - SM 2540 C										
Blank (B24G298-BLK1)				Prepared: 07/23/24 13:23	Analyzed: 07/24/24 11:03					
Total Dissolved Solids	ND		5.0	mg/L						
LCS (B24G298-BS1)				Prepared: 07/23/24 13:23	Analyzed: 07/24/24 11:03					
Total Dissolved Solids	151			mg/L	150		101	85-115		
Reference (B24G298-SRM1)				Prepared: 07/23/24 13:23	Analyzed: 07/24/24 11:03					
Total Dissolved Solids	28.0			mg/L	25.0		112	0-200		
Batch: B24G333 - SM 2540 C										
Blank (B24G333-BLK1)				Prepared: 07/24/24 13:00	Analyzed: 07/25/24 10:55					
Total Dissolved Solids	ND		5.0	mg/L						
LCS (B24G333-BS1)				Prepared: 07/24/24 13:00	Analyzed: 07/25/24 10:55					
Total Dissolved Solids	154			mg/L	150		103	85-115		

Quality Control
(Continued)

Wet Chemistry (Continued)

Analyte	Result	Qual	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: B24G333 - SM 2540 C (Continued)										
Duplicate (B24G333-DUP1)	**Source: 24G0773-02R**		Prepared: 07/24/24 13:00			Analyzed: 07/25/24 10:55				
Total Dissolved Solids	452		5.0	mg/L		458			1.32	10
Batch: B24G382 - SM 2320										
Blank (B24G382-BLK1)			Prepared: 07/26/24 11:37			Analyzed: 07/26/24 11:37				
Total Alkalinity as CaCO3	ND		20.0	mg/L						
Blank (B24G382-BLK2)			Prepared: 07/26/24 12:06			Analyzed: 07/26/24 12:06				
Total Alkalinity as CaCO3	ND		20.0	mg/L						
LCS (B24G382-BS1)			Prepared: 07/26/24 11:31			Analyzed: 07/26/24 11:31				
Total Alkalinity as CaCO3	151			mg/L	150		101	90-110		
LCS (B24G382-BS2)			Prepared: 07/26/24 12:00			Analyzed: 07/26/24 12:00				
Total Alkalinity as CaCO3	151			mg/L	150		101	90-110		
Duplicate (B24G382-DUP1)	**Source: 24G0773-02**		Prepared: 07/26/24 11:53			Analyzed: 07/26/24 11:53				
Total Alkalinity as CaCO3	123		20.0	mg/L		123			0.162	10
Reference (B24G382-SRM1)			Prepared: 07/26/24 11:40			Analyzed: 07/26/24 11:40				
Total Alkalinity as CaCO3	52.0			mg/L	50.0		104	0-200		
Batch: B24G476 - SM 4500-N ORG B										
Blank (B24G476-BLK1)			Prepared: 07/31/24 10:00			Analyzed: 08/01/24 03:30				
Total Kjeldahl Nitrogen	ND		0.500	mg/L						

Quality Control
(Continued)

Wet Chemistry (Continued)

Analyte	Result	Qual	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: B24G476 - SM 4500-N ORG B (Continued)										
LCS (B24G476-BS1)					Prepared: 07/31/24 10:00		Analyzed: 08/01/24 03:30			
Total Kjeldahl Nitrogen	2.82		0.500	mg/L	3.00		94.0	85-115		
Duplicate (B24G476-DUP1)	**Source: 24G0773-02**				Prepared: 07/31/24 10:00		Analyzed: 08/01/24 03:30			
Total Kjeldahl Nitrogen	1.06		0.500	mg/L		1.13			6.39	20
Matrix Spike (B24G476-MS1)	**Source: 24G0773-02**				Prepared: 07/31/24 10:00		Analyzed: 08/01/24 03:30			
Total Kjeldahl Nitrogen	3.96		0.500	mg/L	3.00	1.13	94.3	70-130		
Reference (B24G476-SRM1)					Prepared: 07/31/24 10:00		Analyzed: 08/01/24 03:30			
Total Kjeldahl Nitrogen	2.88			mg/L	3.00		96.0	90-110		

Quality Control
(Continued)

Microbiology

Analyte	Result	Qual	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: B24G267 - Colilert										
Blank (B24G267-BLK1)			Prepared: 07/19/24 10:49			Analyzed: 07/20/24 10:49				
E.coli	ND		1	MPN/100mL						
Duplicate (B24G267-DUP1)	**Source: 24G0791-02**		Prepared: 07/19/24 10:49			Analyzed: 07/20/24 10:49				
E.coli	ND		1	MPN/100mL		ND				50
Duplicate (B24G267-DUP2)	**Source: 24G0795-02**		Prepared: 07/19/24 10:49			Analyzed: 07/20/24 10:49				
E.coli	1		1	MPN/100mL		ND				50

Notes and Definitions

Item	Definition
BS Org	Blank Spike recovered outside of acceptance criteria for the selected compounds. These compounds have been identified as poor performing compounds for this method. Data have been reported.
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.
R	The RPD was outside of acceptance criteria due to possible matrix interference. All other QC criteria was met, therefore data have been reported.
Dry	Sample results reported on a dry weight basis.
ND	Analyte NOT DETECTED at or above the reporting limit.
DL	Detection Limit
RL	Reporting Limit

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

24G0773

Company Name:	Southeast Pollutant Monitoring
Address:	9610 Kingspoint Rd Houston, TX 77075
Permit Number:	10495-079

Sampler: Aaron Hernandez Cresencio Fonseca

IWS Sample Reason

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

SE Full Scan + Permit

Composite Info		
Sample ID:	24G0773-01	24G0773-02
Split Samples:	Yes No	Yes (No)
Number of bottles:	1 2 3 4 5 __	1 2 3 4 5 15
Sample Volume:	mL	800 mL
Sample Interval:	min	Flow min
Autosampler secured/locked:	Yes No N/A	(Yes) No N/A
Comp Temp(°C)		4.3

Field Test Traceability Info	
TRC ID:	0804E10981
Temperature ID:	TLG191D0032
pH Measured By:	Paper (Meter)
pH ID:	T311761022
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
24G0773-01	25	CMan	W	SP 2_CompMan	0618 7/18/24	21:55 7/19/24 AH	(1) 1 L Amber Glass, PTFE Lined Cap, NaOH to pH >10 Cool <6°C, NaOH to pH >10, NaAsO2 if TRC present (3)	Cyanide OIA 1677 + [A] Cyanide D7511 [A]		
							(16) 40 mL Glass, PTFE lined septum Cool <6°C 4 40mL GLASS, PTFE, septum (cool <6°C)	Mercury 1631E Δ [B] VOA 624.1 [N]		
							(8) 40 mL Glass, PTFE lined septum, HCl to pH <2 Cool <6°C, HCl to pH <2	VOA 624.1 Δ [N]		
24G0773-02	15	C	W	SP 2_Comp	0800 7/18/24	0800 7/19/24	(1) 1 Gallon Plastic Cool <6°C	TSS 2540 D [N]		
							(9) 1 L Amber Glass, PTFE Lined Cap, 0.008% Na2S2O3 Cool <6°C, 0.008% Na2S2O3	Pesticides 1657 [D] Pesticides 608.3 [G] BNA 625.1 [J]		
							(2) 1 L PE Cool <6°C	CBOD 5210 B [M] TDS 2540 C [P] Alkalinity 2320 B [P]		
							(3) 500 mL PE, H2SO4 to pH <2 Cool <6°C, H2SO4 to pH <2	NH3 as N 350.1 [O] TKN 4500-NH3 D [Q] Phosphorus 200.7 [R]		

Δ 0618, 1119, 16:15, 21:55 collected as a 4 part grab
+ 0618, 1119, 16:15, 21:55 collected as a 4 part grab

Relinquished by: (Signature)	Date/Time	Location	Received by: (Signature)	Date/Time	Location
	7/19/24 - 1015			7/19/24 - 1015	COT
Relinquished by: (Signature)	Date/Time	Location	Received by: (Signature)	Date/Time	Location

Laboratory Analysis Report

Total Number of Pages: 37

Job ID : 24072008

10100 East Freeway, Suite 100, Houston, TX 77029 tel: 713-453-6060, fax: 713-453-6091, http://www.ablabs.com

Client Project Name :

Report To :	Client Name:	Houston, City of	P.O.#.:	
	Attn:	James Nguyen	Sample Collected By:	Aaron Hernandez
	Client Address:	10500 Bellaire Blvd.	Date Collected:	07/19/24
	City, State, Zip:	Houston, Texas, 77072		

Client Sample ID	Matrix	A&B Sample ID
5347962	Water	24072008.09
5347982	Water	24072008.11
5347992	Water	24072008.13

This analysis was subcontracted to :
SPL Kilgore Corporation, 2600 Dudley Rd.
Kilgore, Texas, 75662

Released By: Amanda Shute
Title: Project Manager
Date: 08/15/2024

I am the laboratory manager, or his/her designee, and I am responsible for the release of this data package. This laboratory data package has been reviewed and is complete and technically compliant with the requirements of the methods used, except where noted in the attached exception reports. I affirm, to the best of my knowledge that all problems/anomalies observed by this laboratory (and if applicable, any and all laboratories subcontracted through this laboratory) that might affect the quality of the data, have been identified in the Laboratory Review Checklist, and that no information or data have been knowingly withheld that would affect the quality of the data.

ab-q210-0321

Date Received : 07/19/2024 15:50

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

Project
1111551

ABL2-G

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

Printed 08/15/2024
7:34

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Email: Kilgore.ProjectManagement@spllabs.com

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

1

SAMPLE CROSS REFERENCE

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Printed 8/15/2024 Page 1 of 1
ww

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

Sample	Sample ID	Taken	Time	Received
2318611	*5347992*	07/19/2024	08:00:00	07/23/2024

Bottle 01 Client Supplied Amber Glass
Bottle 02 Client Supplied Amber Glass
Bottle 03 Prepared Bottle: 2 mL Autosampler Vial (Batch 1130472) Volume: 5.00000 mL <== Derived from 01 (1001 ml)

Method	Bottle	PrepSet	Preparation	QcGroup	Analytical
EPA 604.1	03	1130472	07/26/2024	1131079	07/29/2024

Email: Kilgore.ProjectManagement@spllabs.com

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

SPL The Science of Sure

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Project
1111551

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

Printed: 08/15/2024

RESULTS

Sample Results

2318611 **5347992** Received: 07/23/2024

Non-Potable Water Collected by: Client A & B Labs PO: 53063/24072008
Taken: 07/19/2024 08:00:00

EPA 604.1 Prepared: 1130472 07/26/2024 13:00:00 Analyzed 1131079 07/29/2024 22:14:00 BRU

	Parameter	Results	Units	RL	Flags	CAS	Bottle
z	**Hexachlorophene**	**<0.0025**	**mg/L**	0.0025		**70-30-4**	03

Sample Preparation

2318611 **5347992** Received: 07/23/2024

53063/24072008

07/19/2024

Prepared: 07/23/2024 13:06:40 Calculated 07/23/2024 13:06:40 CAL

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

EPA 604.1 Prepared: 1130472 07/26/2024 13:00:00 Analyzed 1130472 07/26/2024 13:00:00 CRS

Hexachlorophene Extraction	**5/1001**	**ml**	01

EPA 604.1 Prepared: 1130472 07/26/2024 13:00:00 Analyzed 1131079 07/29/2024 22:14:00 BRU

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

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

SPL
The Science of Sure

ABL2-G

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

Project
1111551

Printed: 08/15/2024

Qualifiers:

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

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

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

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

Tracey W Varvel, MS, Quality Manager

QUALITY CONTROL

ABL2-G

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

Project
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Printed 08/15/2024

Analytical Set 1131079 — EPA 604.1

Blank

Parameter	*PrepSet*	*Reading*	*MDL*	*MQL*	*Units*	*File*
Hexachlorophene	1130472	ND	0.890	2.50	ug/L	126611168

CCV

Parameter	*Reading*	*Known*	*Units*	*Recover%*	*Limits%*	*File*
Hexachlorophene	5610	5000	ug/L	112	70.0 - 130	126611167
Hexachlorophene	5590	5000	ug/L	112	70.0 - 130	126611171
Hexachlorophene	5550	5000	ug/L	111	70.0 - 130	126611175
Hexachlorophene	5610	5000	ug/L	112	70.0 - 130	126611178
Hexachlorophene	5530	5000	ug/L	111	70.0 - 130	126611181

LCS Dup

Parameter	*PrepSet*	*LCS*	*LCSD*	*Known*	*Limits%*	*LCS%*	*LCSD%*	*Units*	*RPD*	*Limit%*
Hexachlorophene	1130472	38.4	41.1	50.0	25.5 - 145	76.8	82.2	ug/L	6.79	50.0

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

Blank - Method Blank (reagent water or other blank matrices that contains all reagents except standard(s) and is processed simultaneously with and under the same conditions as samples; carried through preparation and analytical procedures exactly like a sample; monitors); CCV - Continuing Calibration Verification (same standard used to prepare the curve; typically a mid-range concentration; verifies the continued validity of the calibration curve); LCS Dup - Laboratory Control Sample Duplicate (replicate LCS; analyzed when there is insufficient sample for duplicate or MSD; quantifies accuracy and precision.)

Email: Kilgore.ProjectManagement@spllabs.com

1111551 CoC Print Group 001 of 001

Subcontract Laboratory Chain-of-Custody

A & B Labs	Send To:	Report To:	Turnaround Time:
10100 East Freeway	Company: SPL Kilgore Corporation	Company: A&B Labs	Standard: 5-7 BD
Suite 100	Address: 2600 Dudley Road	Address: 10100 East Frwy Suite 100	WATCH HOLDING TIME
Houston, TX 77029	City: Kilgore, TX 75663	Houston, TX 77029	Report - Std TAT
713-453-6060	Contact: Skeeter Ludwig	Contact: Alisha Hughes/Amanda Shute	PO# 53063 / 24072008
713-453-6091 fax	Phone: 903-984-0551	Phone: 713-453-6060 xt 127	Quote:
info@ablabs.com	Email: skeeter@ana-lab.com	Email: reports@ablabs.com	
		CC:	

PLEASE EMAIL INVOICE TO: ACCOUNTSPAYABLE@ABLABS.COM

Use only "Sample ID/Name" on final report. Lab #s given are for bottle identification purposes only. SHORT HOLD EXTRACTION - PLEASE WATCH HOLD TIME! SEND MDL REPORT

Lab #	Item	Sample ID / Name	Collection Date	Collection Time	Comp	Grab	Matrix	# of Containers	Container Types	Hexachlorophene					Container Type / Preservatives / Remarks:
24072008.13	1	5347992	7/19/2024	8:00	X		W			X					Hexachlorophene: 10 ug/L
2318611	2														
	3														
	4	Send a separate SubCOC per sample													
	5														
	6														
	7														
	8														
	9														
	10														

Remarks: The following are the required detection limits:

Matrix: WW-Wastewater W-Water DW-Drinking Water S-Soil SD-Solid L-Liquid SL-Sludge O-Oil A-Air Bag Can-Air Canister B-OVM Badge T-Tube
Preservatives: C-Cool/Ice H-HCl N-Nitric Acid S-Sulfuric Acid OH-NaOH T-Sodium Thiosulfate O- Other (specify)_____
Containers: VOA-40 ml vial A-amber 1 liter G-glass 1 liter 4oz or 8oz - 4/8 ounce glass P-Plastic

RETURN COOLERS via FedEx Ground 137195887 or Lonestar Ground 70081 Yes or No Initial:_____

Relinquished By:	Date	Time	Received By:	Date	Time
Meg Coffey FED EX	7/22/24	1605	FED EX		
FED EX	7/23/24	1045	Andy Owens - SPL, Inc.	7/23/24	1045

ab-s004-0309

Industrial Wastewater Service

Analysis Request and Chain of Custody

Company Name: **Southeast**
9638 Grenadier Dr, Houston, TX

Location: **EFFLUENT**

Sample No. **5347992** Permit No. **5023** Outfall: **2** Scheduled Date: 7/19/202

Sample Type: COMP 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: 08 :00	Split Sample: ____ Yes ✓ No	Time: ____ : ____	pH: ____ . ____
End: 0800	# of Bottles: 1 2 3 4 5 7	Date: ____ / ____ / ____	☐ Paper, Lot # ____
Begin Date: 7/18/24	Sample Volume: 800 ml	TRC ____, Lot #84032C	☐ Meter, S/N ____
End Date: 7/19/24	Sample Interval: Flow min.	Temperature ____ °C, S/N ____	

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

Comments:

*	Bottle #	Tests/Method	Analysis Requested	Sample Size/Container	Preservation	# of containers
13AB	5347992-001	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
	5347992-002	Chromium, Trivalent (Cr3) (CALCULATE)				0
13C	5347992-003	Chromium, Hexavalent (Cr+6) (218.6 or 3500 Cr-B)		500 mL HDPE, LDPE-Lined cap	Cool <6°C, (NH4)2SO4 buffer, NaOH to pH 9.3-9.7	1
13DE	5347992-006	Hexachlorophene (EPA 604.1)		1 L Amber Glass, PTFE lined cap	Cool <6°C	2
13F	5347992-007	Metals POTW Effluent (EPA 200.8)		500 mL HDPE, LDPE-lined cap	Cool <6°C, HNO3 to pH <2	1
13G	5347992-008	Chloride, Sulfate (EPA 300.0); Fluoride (EPA 300.0); Nitrate-Nitrogen (EPA 300.0)		1 L Polyethylene	Cool <6°C	1
	LIMS Comments					

CHAIN OF CUSTODY

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

Seals Intact: ____ **Yes** ✓ **No** 568 IR Thermometer S/N # 27910254 ____ S/N # 29650075 ____ Temp 1.7 °C Initial JF

pH Strip Manufacturer: ____ Lot #: ____ Initial: ____ JR7

Relinquished By: [signature] Date: 7/19/24 Time: 11.36

Received By: [signature] Date: 07/19/24 Time: 11.36

Relinquished By: [signature] Date: 07/19/24 Time: 13.32

Received By: [signature] Date: 7/19/24 Time: 13.32

Relinquished By: [signature] Received By: [signature] Date: 7/19/24 Time: 15.50

* Deliverd to Lab if Box is Checked

Industrial Wastewater Service

Analysis Request and Chain of Custody

Company Name: **Southeast**
9638 Grenadier Dr, Houston, TX

Location: **EFFLUENT**

Sample No. **5347992** Permit No. **5023** Outfall: **2** Scheduled Date: 7/19/2024

Sample Type: CMAN AH Sample Matrix: Liquid

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

COMPOSITE TIME/DATE:	SAMPLE DETAILS:	GRAB TIME/DATE:	FIELD TESTS:
Begin: 06:18	Temp: ___	Time: ___:___	pH: ___.___
End: 21:55	Split Sample: ___ Yes ✓ No	Date: / /	☐ Paper, Lot #___
Begin Date: 7/18/24	# of Bottles: (1) 2 3 4 5 ___	TRC ___, Lot #84032C	☐ Meter, S/N ___
End Date: 7/18/24	Sample Volume: 250 ml	Temperature ___ °C, S/N ___	
	Sample Interval: 300 min.		

Autosampler Secured/Locked? ___Yes ___ No ✓ NA **Sampler (Print):** Aaron Hernandez, Crescencio Fonseca

Comments: 06:18, 11:19, 10:15, 21:55 / Collected as a 4 part grab

Analysis Requested

*	Bottle #	Tests/Method	Sample Size/Container	Preservation	# of containers
14A	5347992-009	Phenol, Total (EPA 420.1)	1 L Amber Glass, PTFE lined cap	Cool <6°C, H2SO4 to pH <2	1
	LIMS Comments:				

CHAIN OF CUSTODY

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

Seals Intact: ___Yes ✓ No 568 IR Thermometer S/N # 27910254 ___ S/N # 29650075 ___ Temp 1.7 °C Initial JRZ

pH Strip Manufacturer: ___ Lot #: ___ Initial: ___

Relinquished By: [signature] Date: 7/19/24 Time: 11:30

Received By: [signature] Date: 07/19/24 Time: 11:30

Relinquished By: [signature] Date: 07/19/24 Time: 13:32

Received By: [signature] Date: 7/19/24 Time: 13:32

Relinquished By: [signature] Received By: [signature] Date: 7/19/24 Time: 15:50

* Deliverd to Lab if Box is Checked

Sample Condition Checklist

A&B JobID : **24072008**	Date Received : **07/19/2024**	Time Received : **3:50PM**
Client Name : **Houston, City of**		
Temperature : **1.7**	Sample pH : **<2 Metals, Phenol**	
Thermometer ID : **IR7**	pH Paper ID : **234223**	
Perservative :	Lot# :	

	Check Points	Yes	No	N/A
1.	**Cooler Seal present and signed.**		X	
2.	**Sample(s) in a cooler.**	X		
3.	**If yes, ice in cooler.**	X		
4.	**Sample(s) received with chain-of-custody.**	X		
5.	**C-O-C signed and dated.**	X		
6.	**Sample(s) received with signed sample custody seal.**		X	
7.	**Sample containers arrived intact. (If No comment)**	X		
8.	**Matrix:** Water ☑ Soil ☐ Liquid ☐ Sludge ☐ Solid ☐ Cassette ☐ Tube ☐ Bulk ☐ Badge ☐ Food ☐ Other ☐			
9.	**Samples were received in appropriate container(s)**	X		
10.	**Sample(s) were received with Proper preservative**	X		
11.	**All samples were tagged or labeled.**	X		
12.	**Sample ID labels match C-O-C ID's.**	X		
13.	**Bottle count on C-O-C matches bottles found.**	X		
14.	**Sample volume is sufficient for analyses requested.**	X		
15.	**Samples were received with in the hold time.**	X		
16.	**VOA vials completely filled.**			X
17.	**Sample accepted.**	X		
18.	**Has client been contacted about sub-out**	X		

Comments : Include actions taken to resolve discrepancies/problem:

COC shows Liquid, received water. ~MC 07/19/2024

Brought by : JReeves

Received by : MClotfelter

Check in by/date : MClotfelter / 07/19/2024

ab-s005-1123

LABORATORY TEST RESULTS

Job ID : 24072830

Date 8/2/2024

Client Name: Houston, City of

Attn: James Nguyen

Project Name:

Client Sample ID:	5348231	Job Sample ID:	24072830.23
Date Collected:	07/26/24	Sample Matrix	Water
Time Collected:	09:41	% Moisture	
Other Information:			

Test Method	Parameter/Test Description	Result	Units	DF	SDL	SQL	Reg Limit	Q	Date Time	Analyst
EPA 1664B										
	Oil & Grease	<1.55	mg/L	1.11	1.55	2.78		U	07/29/24 07:31	SG

ab-q212-0321

[1]-Parameter is not accredited.

[2]-Parameter not available for accreditation.

Industrial Wastewater Service

Analysis Request and Chain of Custody

Company Name: **Southeast**
9638 Grenadier Dr, Houston, TX

Location: **EFFLUENT**

Sample No. **5348231** Permit No. **5023** Outfall: **2** Scheduled Date: 7/26/2024

Sample Type: Grab ✓ Sample Matrix: Liquid

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

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

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

GRAB TIME/DATE:
Time: 9:41
Date: 07/26/24
TRC _____, Lot #84032C
Temperature _____ °C, S/N _____

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

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

Comments:

*	Bottle #	Analysis Requested: Tests/Method	Sample Size/Container	Preservation	# of containers
	5348231-001	Oil and Grease (Total) / HEM (EPA 1664)	1 L Amber Glass, PTFE lined cap	Cool <6°C, H2SO4 to pH <2	1
	LIMS Comments				

23A

CHAIN OF CUSTODY

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

Seals Intact: ____ **Yes** ____ **No** 568 IR Thermometer S/N # 27910254 ___ S/N # 29650075 ___ Temp 1.7 °C Initial PG
IR 7

pH Strip Manufacturer: _____ Lot #: _____ Initial: _____

Relinquished By: _____ Date: 07/26/24 Time: 13.30

Received By: _____ Date: 07/26/24 Time: 13.30

Relinquished By: _____ Date: 07/26/24 Time: 15.40

Received By: _____ Date: 07/26/24 Time: 15.40

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

* Deliverd to Lab if Box is Checked

IR7 1.7c ~~EM~~

LABORATORY TEST RESULTS

Job ID : 24072008

Date 7/29/2024

Client Name: Houston, City of

Attn: James Nguyen

Project Name:

Client Sample ID: 5347992
Date Collected: 07/19/24
Time Collected: 08:00
Other Information:

Job Sample ID: 24072008.13
Sample Matrix Water
% Moisture

Test Method	Parameter/Test Description	Result	Units	DF	SDL	SQL	Reg Limit	Q	Date Time	Analyst
EPA 300.0	Anions									
	Fluoride	0.286	mg/L	1.00	0.02	0.100			07/22/24 15:38	KPE
	Chloride	73.9	mg/L	10.00	0.180	1.00			07/22/24 16:05	KPE
	Nitrate-N	9.99	mg/L	10.00	0.07	1.00		H1	07/22/24 16:05	KPE
	Sulfate	80.7	mg/L	10.00	0.100	1.00			07/22/24 16:05	KPE
SM 3500Cr B										
	Chromium, Hexavalent	<0.0005	mg/L	1	0.0005	0.00100		U	07/19/24 16:45	JCA
SM 3500Cr B										
	Chromium, Trivalent[2]	<0.0005	mg/L	1	0.0005	0.00100		U	07/26/24 08:00	KL
EPA 200.8	Metals by ICP/MS									
	Aluminum	0.0238	mg/L	1	0.00046	0.00100			07/23/24 18:29	YWZ
	Antimony	0.00085	mg/L	1	0.00020	0.00050			07/23/24 18:29	YWZ
	Arsenic	0.00092	mg/L	1	0.00002	0.00025			07/23/24 18:29	YWZ
	Barium	0.0863	mg/L	1	0.00009	0.00050			07/23/24 18:29	YWZ
	Beryllium	<0.00002	mg/L	1	0.00002	0.00025		U	07/23/24 18:29	YWZ
	Cadmium	0.00006	mg/L	1	0.00005	0.00025		J	07/23/24 18:29	YWZ
	Chromium	0.00032	mg/L	1	0.00004	0.00025			07/23/24 18:29	YWZ
	Copper	0.00492	mg/L	1	0.00005	0.00050			07/23/24 18:29	YWZ
	Lead	0.00021	mg/L	1	0.00004	0.00025		J	07/23/24 18:29	YWZ
	Nickel	0.00296	mg/L	1	0.00008	0.00025			07/23/24 18:29	YWZ
	Selenium	0.00117	mg/L	1	0.00021	0.00100			07/23/24 18:29	YWZ
	Silver	<0.00005	mg/L	1	0.00005	0.00050		U	07/27/24 03:21	YWZ
	Thallium	0.00008	mg/L	1	0.00002	0.00025		J	07/23/24 18:29	YWZ
	Vanadium	0.00326	mg/L	1	0.00002	0.00025			07/23/24 18:29	YWZ
	Zinc	0.0357	mg/L	1	0.00071	0.00200			07/23/24 18:29	YWZ
ASTM D7065-11										
	Bisphenol A[2]	<5.00	ug/L	1.00		5.00		U	07/22/24 21:03	GM
	Nonylphenol[1]	<5.00	ug/L	1.00	5.00	5.00		U	07/22/24 21:03	GM

LABORATORY TEST RESULTS

Job ID : 24072008

Date 7/29/2024

Client Name: Houston, City of

Attn: James Nguyen

Project Name:

Client Sample ID: 5347992
Date Collected: 07/18/24
Time Collected: 21:55
Other Information:

Job Sample ID: 24072008.14
Sample Matrix Water
% Moisture

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	07/19/24 16:25	SKC

ab-q212-0321

[1]-Parameter is not accredited.
[2]-Parameter not available for accreditation.

Industrial Wastewater Service

Analysis Request and Chain of Custody

Company Name: **Southeast**
9638 Grenadier Dr, Houston, TX

Location: **EFFLUENT**

Sample No. **5347992** Permit No. **5023** Outfall: **2** Scheduled Date: 7/19/202

Sample Type: COMP Sample Matrix: Liquid

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

COMPOSITE TIME/DATE:
Begin: 08:00
End: 0800
Begin Date: 7/18/24
End Date: 7/19/24

SAMPLE DETAILS: Temp: ___
Split Sample: ___ Yes ✓ No
# of Bottles: 1 2 3 4 5 7
Sample Volume: 800 ml
Sample Interval: Flow min.

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

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

Autosampler Secured/Locked? ✓ Yes ___ No ___ NA **Sampler (Print):** Crescencio Fonseca

Comments:

*	Bottle #	Tests/Method — Analysis Requested	Sample Size/Container	Preservation	# of containers
13AB	5347992-001	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
	5347992-002	Chromium, Trivalent (Cr3) (CALCULATE)			0
13C	5347992-003	Chromium, Hexavalent (Cr+6) (218.6 or 3500 Cr-B)	500 mL HDPE, LDPE-Lined cap	Cool <6°C, (NH4)2SO4 buffer, NaOH to pH 9.3-9.7	1
13DE	5347992-006	Hexachlorophene (EPA 604.1)	1 L Amber Glass, PTFE lined cap	Cool <6°C	2
13F	5347992-007	Metals POTW Effluent (EPA 200.8)	500 mL HDPE, LDPE-lined cap	Cool <6°C, HNO3 to pH <2	1
13G	5347992-008	Chloride, Sulfate (EPA 300.0); Fluoride (EPA 300.0); Nitrate-Nitrogen (EPA 300.0)	1 L Polyethylene	Cool <6°C	1
	LIMS Comments				

CHAIN OF CUSTODY

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

Seals Intact: ___ Yes ✓ No 568 IR Thermometer S/N # 27910254 ___ S/N # 29650075 ___ Temp 1.7 °C Initial JZ

pH Strip Manufacturer: ___ Lot #: ___ Initial: ___ JZ7

Relinquished By: [signature] Date: 7/19/24 Time: 11.36

Received By: [signature] Date: 7/19/24 Time: 11.36

Relinquished By: [signature] Date: 7/19/24 Time: 13.32

Received By: [signature] Date: 7/19/24 Time: 13.32

Relinquished By: [signature] Received By: [signature] Date: 7/19/24 Time: 15.50

* Deliverd to Lab if Box is Checked

Industrial Wastewater Service

Analysis Request and Chain of Custody

Company Name: **Southeast**
9638 Grenadier Dr, Houston, TX

Location: **EFFLUENT**

Sample No. **5347992** Permit No. **5023** Outfall: **2** Scheduled Date: 7/19/2024

Sample Type: CMAN AH Sample Matrix: Liquid

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

COMPOSITE TIME/DATE:
Begin: 06:18
End: 21:55
Begin Date: 7/18/24
End Date: 7/18/24

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

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

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

Autosampler Secured/Locked? ___ Yes ___ No ✓ NA **Sampler (Print):** Aaron Hernandez, Crescencio Fonseca

Comments: 06:18, 11:19, 16:15, 21:55 / collected as a 4part grab

*	Bottle #	Tests/Method	Analysis Requested	Sample Size/Container	Preservation	# of containers
14A	5347992-009	Phenol, Total (EPA 420.1)		1 L Amber Glass, PTFE lined cap	Cool <6°C, H2SO4 to pH <2	1
	LIMS Comments:					

CHAIN OF CUSTODY

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

Seals Intact: ___ Yes ✓ No 568 IR Thermometer S/N # 27910254 ___ S/N # 29650075 ___ Temp 1.7 °C Initial JRZ

pH Strip Manufacturer: ___ Lot #: ___ Initial: ___

Relinquished By: [signature] Date: 7/19/24 Time: 11:30

Received By: [signature] Date: 07/19/24 Time: 11:30

Relinquished By: [signature] Date: 07/19/24 Time: 13:32

Received By: [signature] Date: 7/19/24 Time: 13:32

Relinquished By: [signature] Received By: [signature] Date: 7/19/24 Time: 15:50

* Deliverd to Lab if Box is Checked

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: James Nguyen
City of Houston
10500 Bellaire Blvd
Houston, Texas 77072

Generated 8/1/2024 1:00:09 PM

JOB DESCRIPTION

5347992 Southeast Effluent
5023_2

JOB NUMBER

860-78648-1

Eurofins Houston
4145 Greenbriar Dr
Stafford TX 77477

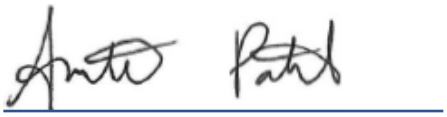
See page two for job notes and contact information.

Job Notes

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

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

Authorization



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Authorized for release by
Anita Patel, Project Manager
Anita.Patel@et.eurofinsus.com
(832)776-2275

Table of Contents

Definitions/Glossary

Client: City of Houston
Project/Site: 5347992 Southeast Effluent

Job ID: 860-78648-1
SDG: 5023_2

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job ID: 860-78648-1 — Eurofins Houston

Job Narrative
860-78648-1

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

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

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

Receipt
The samples were received on 7/22/2024 9:00 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 2.6°C.

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

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

Detection Summary

Client: City of Houston
Project/Site: 5347992 Southeast Effluent

Job ID: 860-78648-1
SDG: 5023_2

Client Sample ID: 5347992-004 — Lab Sample ID: 860-78648-1

No Detections.

Client Sample ID: 5347992-005 — Lab Sample ID: 860-78648-2

No Detections.

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: City of Houston
Project/Site: 5347992 Southeast Effluent

Job ID: 860-78648-1
SDG: 5023_2

Client Sample ID: 5347992-004

Lab Sample ID: 860-78648-1

Date Collected: 07/19/24 08:00
Matrix: Water
Date Received: 07/22/24 09:00

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		07/23/24 14:20	07/30/24 03:03	1
Diuron	<0.0514		0.0900	0.0514	ug/L		07/23/24 14:20	07/30/24 03:03	1

Client Sample ID: 5347992-005

Lab Sample ID: 860-78648-2

Date Collected: 07/19/24 08:00
Matrix: Water
Date Received: 07/22/24 09:00

Method: EPA-01 615 - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-D	<0.0000541		0.000201	0.0000541	mg/L		07/23/24 14:57	07/24/24 21:51	1
2,4,5-TP	<0.0000424		0.000201	0.0000424	mg/L		07/23/24 14:57	07/24/24 21:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4-Dichlorophenylacetic acid	*71*		*45 - 150*	*07/23/24 14:57*	*07/24/24 21:51*	*1*

Surrogate Summary

Client: City of Houston
Project/Site: 5347992 Southeast Effluent

Job ID: 860-78648-1
SDG: 5023_2

Method: 615 - Herbicides (GC)

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)							
		DCPAA1							
Lab Sample ID	Client Sample ID	(45-150)							
860-78648-2	5347992-005	71							
LCS 860-177125/2-A	Lab Control Sample	120							
LCSD 860-177125/3-A	Lab Control Sample Dup	111							
MB 860-177125/1-A	Method Blank	92							

Surrogate Legend

DCPAA = 2,4-Dichlorophenylacetic acid

Method: 615 - Herbicides (GC)

Lab Sample ID: MB 860-177125/1-A
Matrix: Water
Analysis Batch: 177240

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 177125

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-D	<0.0000539		0.000200	0.0000539	mg/L		07/23/24 14:57	07/24/24 14:05	1
2,4,5-TP	<0.0000422		0.000200	0.0000422	mg/L		07/23/24 14:57	07/24/24 14:05	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4-Dichlorophenylacetic acid	*92*		*45 - 150*	*07/23/24 14:57*	*07/24/24 14:05*	*1*

Lab Sample ID: LCS 860-177125/2-A
Matrix: Water
Analysis Batch: 177240

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 177125

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
2,4-D			0.00200	0.001678		mg/L		84	55 - 145		
2,4,5-TP			0.00200	0.001944		mg/L		97	55 - 140		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4-Dichlorophenylacetic acid	*120*		*45 - 150*

Lab Sample ID: LCSD 860-177125/3-A
Matrix: Water
Analysis Batch: 177240

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 177125

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
2,4-D			0.00200	0.001668		mg/L		83	55 - 145	1	25
2,4,5-TP			0.00200	0.001881		mg/L		94	55 - 140	3	25

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2,4-Dichlorophenylacetic acid	*111*		*45 - 150*

Method: 632 - Carbamate and Urea Pesticides (HPLC)

Lab Sample ID: MB 860-177119/1-A
Matrix: Water
Analysis Batch: 178757

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 177119

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbaryl	<1.85		5.00	1.85	ug/L		07/23/24 14:20	07/30/24 00:19	1
Diuron	<0.0514		0.0900	0.0514	ug/L		07/23/24 14:20	07/30/24 00:19	1

Lab Sample ID: LCS 860-177119/2-A
Matrix: Water
Analysis Batch: 178757

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 177119

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Carbaryl			100	94.94		ug/L		95	70 - 130		
Diuron			2.00	1.836		ug/L		92	70 - 130		

Method: 632 - Carbamate and Urea Pesticides (HPLC) (Continued)

Lab Sample ID: LCSD 860-177119/3-A
Matrix: Water
Analysis Batch: 178757

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 177119

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Carbaryl			100	91.73		ug/L		92	70 - 130	3	20
Diuron			2.00	1.814		ug/L		91	70 - 130	1	20

QC Association Summary

Client: City of Houston
Project/Site: 5347992 Southeast Effluent

Job ID: 860-78648-1
SDG: 5023_2

GC Semi VOA

Prep Batch: 177125

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
860-78648-2	5347992-005	Total/NA	Water	3511	
MB 860-177125/1-A	Method Blank	Total/NA	Water	3511	
LCS 860-177125/2-A	Lab Control Sample	Total/NA	Water	3511	
LCSD 860-177125/3-A	Lab Control Sample Dup	Total/NA	Water	3511	

Analysis Batch: 177240

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
860-78648-2	5347992-005	Total/NA	Water	615	177125
MB 860-177125/1-A	Method Blank	Total/NA	Water	615	177125
LCS 860-177125/2-A	Lab Control Sample	Total/NA	Water	615	177125
LCSD 860-177125/3-A	Lab Control Sample Dup	Total/NA	Water	615	177125

HPLC/IC

Prep Batch: 177119

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
860-78648-1	5347992-004	Total/NA	Water	CWA_Prep	
MB 860-177119/1-A	Method Blank	Total/NA	Water	CWA_Prep	
LCS 860-177119/2-A	Lab Control Sample	Total/NA	Water	CWA_Prep	
LCSD 860-177119/3-A	Lab Control Sample Dup	Total/NA	Water	CWA_Prep	

Analysis Batch: 178757

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
860-78648-1	5347992-004	Total/NA	Water	632	177119
MB 860-177119/1-A	Method Blank	Total/NA	Water	632	177119
LCS 860-177119/2-A	Lab Control Sample	Total/NA	Water	632	177119
LCSD 860-177119/3-A	Lab Control Sample Dup	Total/NA	Water	632	177119

Lab Chronicle

Client: City of Houston
Job ID: 860-78648-1
Project/Site: 5347992 Southeast Effluent
SDG: 5023_2

Client Sample ID: 5347992-004
Lab Sample ID: 860-78648-1

Date Collected: 07/19/24 08:00
Matrix: Water
Date Received: 07/22/24 09:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	CWA_Prep			1000 mL	10 mL	177119	07/23/24 14:20	DR	EET HOU
Total/NA	Analysis	632		1			178757	07/30/24 03:03	YG	EET HOU

Client Sample ID: 5347992-005
Lab Sample ID: 860-78648-2

Date Collected: 07/19/24 08:00
Matrix: Water
Date Received: 07/22/24 09:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3511			49.8 mL	4 mL	177125	07/23/24 14:57	BH	EET HOU
Total/NA	Analysis	615		1			177240	07/24/24 21:51	WP	EET HOU

Laboratory References:

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

Accreditation/Certification Summary

Client: City of Houston
Project/Site: 5347992 Southeast Effluent

Job ID: 860-78648-1
SDG: 5023_2

Laboratory: Eurofins Houston

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704215	06-30-25

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

Analysis Method	Prep Method	Matrix	Analyte
632	CWA_Prep	Water	Diuron

Method Summary

Client: City of Houston
Project/Site: 5347992 Southeast Effluent

Job ID: 860-78648-1
SDG: 5023_2

Method	Method Description	Protocol	Laboratory
615	Herbicides (GC)	EPA-01	EET HOU
632	Carbamate and Urea Pesticides (HPLC)	EPA-01	EET HOU
3511	Microextraction of Organic Compounds	SW846	EET HOU
CWA_Prep	Liquid-Liquid Extraction (Separatory Funnel)	EPA	EET HOU

Protocol References:

EPA = US Environmental Protection Agency

EPA-01 = "Methods For The Determination Of Nonconventional Pesticides In Municipal And Industrial Wastewater", EPA/821/R/92/002, April 1992.

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

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

Sample Summary

Client: City of Houston
Project/Site: 5347992 Southeast Effluent

Job ID: 860-78648-1
SDG: 5023_2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
860-78648-1	5347992-004	Water	07/19/24 08:00	07/22/24 09:00
860-78648-2	5347992-005	Water	07/19/24 08:00	07/22/24 09:00

Industrial Wastewater Service

CF

Analysis Request and Chain of Custody

Company Name **Southeast**
9638 Grenadier Dr, Houston, TX

Location **EFFLUENT**

Sample No **5347992** Permit No **5023** Outfall **2** Scheduled Date 7/19/202

Sample Type COMP Sample Matrix: Liquid

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

COMPOSITE TIME/DATE	SAMPLE DETAILS	GRAB TIME/DATE	FIELD TESTS
Begin 08.00	Temp ____ Split Sample ____ Yes ✓ No	Time ____	pH ____
End 08.00	# of Bottles 1 2 3 4 5 7	Date ____	☐ Paper Lot # ____
Begin Date 7/18/24	Sample Volume FT300 CF 7/19/24 ml	TRC ____, Lot #84032C	☐ Meter S/N ____
End Date 7/19/24	Sample Interval Flow min	Temperature ____ °C S/N ____	

Autosampler Secured/Locked? ____ Yes ____ No ✓ NA **Sampler (Print)** Crescencio Fonseca

Comments

*	Bottle #	Tests/Method	Analysis Requested	Sample Size/Container	Preservation	# of containers
	5347992-004	Carbaryl (EPA 632) Diuron (EPA 632)		1 L Amber Glass PTFE lined cap	Cool <6°C	2
	5347992-005	Herbicides (EPA 615 or SM 6640B)		1 L Amber Glass PTFE lined cap	Cool <6°C	2
	LIMS Comments					

CHAIN OF CUSTODY

Temp: 2.4 IR ID HOU-368
C/F +0.2
Corrected Temp: 2.6

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

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

pH Strip Manufacturer ____ Lot #: ____ Initial ____

Relinquished By: [signature] Date 7/19/24 Time 11.36

Received By: [signature] Date 07/19/24 Time 11.36

Relinquished By: [signature] Date 07/22/24 Time 8.30

Received By: [signature] Date 7/22/24 Time 08.30

Relinquished By: [signature] 7/22/24 0900 Received By: YCRS Date 7/22/24 Time 09.00

* Deliverd to Lab if Box is Checked

860-78648 Chain of Custody

Login Sample Receipt Checklist

Client: City of Houston

Job Number: 860-78648-1
SDG Number: 5023_2

Login Number: 78648
List Number: 1
Creator: Rubio, Yuri

List Source: Eurofins Houston

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

Attachment 14

Facility Operators

Technical Report 1.0, Section 8

TPDES Permit Number 10495-079
Southeast

Facility Operations Chain-of-Command

		License Class	License Number	Expiration
Deputy Assistant Director:	Arturo Carillo			
Operations Manager:	LeAndrea Scott	A	WW0012577	8/21/2027
Assistant Operations Manager:	Thomas Alikah	A	WW0000797	12/29/2024
Operations Section Chief:	Felicia Ward	A	WW0059038	1/18/2027
Plant Operator Supervisor:	Charles Jackson	B	WW0040749	10/25/2025
Tech II:				
Tech I:	Russell Hebert	C	WW0061526	11/20/2024

Attachment 15

WET Test Reports

Worksheet 5.0, Section 1
Worksheet 5.0, Section 3

Summary of WET Tests

Southeast
10495-079 TX0035009

Test Initiation Date	Species	Lethal Endpoint	Sublethal Endpoint
3/24/2020	*Ceriodaphnia dubia*	99	99
3/24/2020	*Pimephales promelas*	99	99
6/23/2020	*Ceriodaphnia dubia*	>99	>99
6/23/2020	*Pimephales promelas*	>99	>99
9/29/2020	*Ceriodaphnia dubia*	>100	>100
9/29/2020	*Pimephales promelas*	>100	>100
12/1/2020	*Ceriodaphnia dubia*	>100	>100
12/1/2020	*Pimephales promelas*	>100	>100
3/30/2021	*Ceriodaphnia dubia*	>100	65.46
3/30/2021	*Pimephales promelas*	>100	>100
4/27/2021	*Ceriodaphnia dubia*	>100	>100
5/12/2021	*Ceriodaphnia dubia*	>100	>100
6/8/2021	*Ceriodaphnia dubia*	>100	>100
9/8/2021	*Ceriodaphnia dubia*	>100	>100
12/7/2021	*Ceriodaphnia dubia*	>100	>100
3/15/2022	*Ceriodaphnia dubia*	>100	>100
3/15/2022	*Pimephales promelas*	>100	>100
6/7/2022	*Ceriodaphnia dubia*	>100	>100
6/7/2022	*Pimephales promelas*	>100	>100
9/13/2022	*Ceriodaphnia dubia*	>100	>100
9/13/2022	*Pimephales promelas*	>100	>100
12/6/2022	*Ceriodaphnia dubia*	>100	>100
12/6/2022	*Pimephales promelas*	>100	>100
3/21/2023	*Ceriodaphnia dubia*	>100	>100
3/21/2023	*Pimephales promelas*	>100	>100
6/27/2023	*Ceriodaphnia dubia*	>100	>100
9/26/2023	*Ceriodaphnia dubia*	>100	>100
12/12/2023	*Ceriodaphnia dubia*	>100	>100
3/26/2024	*Ceriodaphnia dubia*	>100	>100
3/26/2024	*Pimephales promelas*	>100	>100

Test Initiation Date	Species	Lethal Endpoint	Sublethal Endpoint
6/25/2024	*Ceriodaphnia dubia*	>100	>100

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☐ Dam Safety	☐ Districts	☐ Edwards Aquifer	☐ Emissions Inventory Air	☐ Industrial Hazardous Waste
☐ Municipal Solid Waste	☐ New Source Review Air	☐ OSSF	☐ Petroleum Storage Tank	☐ PWS
☐ Sludge	☒ Storm Water	☐ Title V Air	☐ Tires	☐ Used Oil
	TXR05FF89			
☐ Voluntary Cleanup	☒ Wastewater	☐ Wastewater Agriculture	☐ Water Rights	☒ Other: Reclaimed water
	WQ0010495079			R10495079

SECTION IV: Preparer Information

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

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

SECTION V: Authorized Signature

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

Company:	City of Houston, Houston Public Works	Job Title:	Chief Operating Officer, Houston Public Works
Name *(In Print)*:	Randall V. Macchi	Phone:	(832) 395- 2936
Signature:		Date:	10/15/2024

HOUSTON
PUBLIC WORKS

October 31, 2024

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

Subject: Southeast Wastewater Treatment Facility
Application to Renew TCEQ Permit Number: WQ0010495079, CN600128995, RN101610459
Notice of Deficiency Letter dated October 22, 2024

Dear Ms. Trevino,

A Notice of Deficiency letter outlining items that must be addressed before the above-referenced application can be declared administratively complete was received on October 22, 2024. Please accept the following responses.

1. Core Data Form, Section V
    a. The original signature was submitted with the application. A copy of the signature page is attached.
2. 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. "...at a volume not to exceed an annual average flow of..."
    b. "...calling Mr. Heather Maloney, Environmental Investigator V,..."
3. Spanish NORI is attached with the above corrections.

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

Sincerely,

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

Attachment(s): Copy of Core Date Form, Section V
Spanish NORI

W:\Facility Records\Southeast079\Permits\Applications\2024Renewal\AdminReview\SE_NODResponse.docx

Rainee Trevino

From: Maloney, Heather - HPW <Heather.Maloney@houstontx.gov>
Sent: Thursday, October 31, 2024 11:30 AM
To: Rainee Trevino
Cc: Samarneh, Walid - HPW; Fragassi, Arielle - HPW
Subject: RE: Application to Renew Permit No. WQ0010495079- Notice of Deficiency Letter
Attachments: SE_NODResponse.pdf; SE_NORI_Spanish.docx; SE_CoreDataFormSignature.pdf

Categories: NOD Response Review

Good morning Rainee,

Please find our response to the NOD dated October 22, 2024 attached herein.

Thank you,
Heather

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

From: Rainee Trevino <Rainee.Trevino@tceq.texas.gov>
Sent: Tuesday, October 22, 2024 9:59 AM
To: Samarneh, Walid - HPW <Walid.Samarneh@houstontx.gov>
Cc: Maloney, Heather - HPW <Heather.Maloney@houstontx.gov>
Subject: Application to Renew Permit No. WQ0010495079- Notice of Deficiency Letter

Dear Mr. Samarneh,

The attached Notice of Deficiency letter sent on October 22, 2024, requests additional information needed to declare the application administratively complete. Please send the complete response to my attention by November 5, 2024.

Best Regards,

Rainee Trevino
Water Quality Division | ARP Team
Texas Commission on Environmental Quality
512-239-4324


TEXAS COMMISSION ON
ENVIRONMENTAL QUALITY