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

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.

Lazy River Improvement District (CN600792113) operates Lazy River Improvement District Wastewater Treatment Plant (RN101516193), a wastewater treatment plant. The facility is located at 830 Glenn Hollow Drive, in Conroe, Montgomery County, Texas 77385. This application is for a minor amendment and renewal to discharge at an annual average flow of 70,000 gallons per day of treated domestic wastewater via the discharge route from the plant site to a ditch named Trade Center Drive/College Park Ditch, thence to the west fork of the San Jacinto River in Segment No. 1004 of the San Jacinto River Basin.

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), Nitrate Nitrogen (NO_3-N), Total Kjeldahl Nitrogen (TKN), Sulfate (SO_4), Chloride (Cl^-), total Phosphorus (P_4), pH, Dissolved Oxygen (O_2), Chloride Residual (Cl_2), *Escherichia coli*, Total Dissolved Solids (TDS), Electrical Conductivity, and Alkalinity ($CaCO_3$). Domestic wastewater is treated by an

activated sludge process plant and the treatment units include a manual bar screen, aeration basins, clarifiers, aerobic digesters, a chlorine contact chamber, and sludge drying beds.

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.

Lazy River Improvement District (CN600792113) opera la Planta de Tratamiento de Augas Residuales de Lazy River Improvement District (RN101516193), una planta de tratamiento de aguas residuales. La instalación está ubicada en 830 Glen Hollow Drive, en Conroe, Condado de Montgomery, Texas 77385. Esta solicitud es para una enmienda menor y renovación para descargar flujo promedio anual de 70,000 galones por día de aguas residuales domésticas tratadas a través de la ruta de descarga desde el sitio de la planta hacia una zanja denominada Trade Center Drive/College Park Ditch, y de ahí al ramal oeste del rio San Jacinto en el Segmento No. 1004 de la Cuenca del Rio San Jacinto.

Se espera que las descargas de la instalación contengan Demanda Bioquímica de Oxigeno Carbonoso de cinco días (DBO5), Solidos Suspendidos Totales (SST), Nitrógeno Amoniacal (NH3-N), Nitrógeno Nitrato (NO3-N), Nitrógeno Kjeldahl Total (NKT), Sulfato (SO4), Cloruro (Cl-), Fosforo Total (P4), pH, Oxígeno Disuelto (O2), Cloruro Residual (Cl2), Escherichia Coli (E. Coli), Solidos Disueltos Totales (SDT), Conductividad Eléctrica y Alcalinidad (CaCO3). Las aguas residuales domésticas son tratadas por un proceso de lodos activados, y las unidades de tratamiento incluyen una rejilla manual, tanques de aireación, clarificadores, digestores aeróbicos, una cámara de contacto de cloro y lechos de secado de lodos.

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

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

PERMIT NO. WQ0011820001

APPLICATION. Lazy River Improvement District, 2727 Allen Parkway, Suite 1100, Houston, Texas 77019, has applied to the Texas Commission on Environmental Quality (TCEQ) to renew Texas Pollutant Discharge Elimination System (TPDES) Permit No. WQ0011820001 (EPA I.D. No. TX0069256) to authorize the discharge of treated wastewater at a volume not to exceed a daily average flow of 70,000 gallons per day. The domestic wastewater treatment facility is located at 830 Glen Hollow Drive, near the city of Conroe, in Montgomery County, Texas 77385. The discharge route is from the plant site to an unnamed tributary; thence to West Fork San Jacinto River. TCEQ received this application on March 10, 2025. The permit application will be available for viewing and copying at Montgomery County Public Library, 104 Interstate 45 North, Conroe, in Montgomery 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=-95.437222,30.226944&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 Lazy River Improvement District at the address stated above or by calling Mr. Timothy Hardin, P.E., Vice President/Langford Engineering, Inc., at 713-461-3530.

Issuance Date: March 24, 2025

Comisión de Calidad Ambiental del Estado de Texas

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

PERMISO NO. WQ0011820001

SOLICITUD. Lazy River Improvement District 2727 Allen Parkway, Suite 1100, Houston, Texas 77019, ha solicitado a la Comisión de Calidad Ambiental del Estado de Texas (TCEQ) para renovar el Permiso No. WQ0011820001 (EPA I.D. No. TX0069256) del Sistema de Eliminación de Descargas de Contaminantes de Texas (TPDES) para autorizar la descarga de aguas residuales tratadas en un volumen que no sobrepasa un flujo promedio diario de 70,000 galones por día. La planta está ubicada 830 Glen Hollow Drive, en la ciudad de Conroe, en el Condado de Montgomery, Texas. La ruta de descarga es del sitio de la planta a un afluente sin nombre, de ahí a la bifurcación oeste del Rio de San Jacinto. TCEQ recibió esta solicitud el día 10 de Marzo del 2025. La solicitud para el permiso está disponible para leerla y copiarla en la Biblioteca Publica del Condado de Montgomery, 104 Interstate 45 North, Conroe, Texas. La solicitud (cualquier actualización y aviso inclusive) está disponible 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=-95.437222,30.226944&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 DE LA TCEQ. Todos los comentarios escritos del público y los para pedidos una reunión deben ser presentados a la Oficina del Secretario Principal, MC 105, TCEQ, P.O. Box 13087, Austin, TX 78711-3087 o por el internet at www.tceq.texas.gov/about/comments.html. 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. Si necesita más información en Español sobre esta solicitud para un permiso o el proceso del permiso, por favor llame a El Programa de Educación Pública de la TCEQ, sin cobro, al 1-800-687-4040. La información general sobre la TCEQ puede ser encontrada en nuestro sitio de la red: www.tceq.texas.gov.

También se puede obtener información adicional de Lazy River Improvement District a la dirección indicada arriba o llamando a Timothy Hardin, P.E., Langford Engineering, Inc. Al (713)-461-3530.

Fecha de emisión 24 de marzo de 2025

LANGFORD ENGINEERING INC.
Consulting Engineers

TBPE No F-449

March 5, 2025

Certified Mail-Return Receipt Requested

Ms. Deba Dutta
Applications Review and Processing Team (MC – 148)
Texas Commission on Environmental Quality
12100 Park 35 Circle
Austin, Texas 78753

Subject: Lazy River Improvement District
TPDES WQ0011820001 Domestic Wastewater
Permit Renewal Application
LEI Job No. 327-003-102

Dear Applications Review & Processing Team:

The purpose of this letter is to provide the Texas Commission on Environmental Quality (TCEQ) with the original and two (2) copies of the subject permit renewal/minor amendment application. A copy of the payment voucher (No. 754349 & 754350) in the amount of five hundred and fifteen dollars ($515.00) has been enclosed.

If there are any questions or further information needed, please contact Khiem Hoang, EIT at (713) 461-3530 or khiem.h@langfordeng.com.

Sincerely,

LANGFORD ENGINEERING, INC.

Khiem X. Hoang, E.I.T.
Project Engineer

Enclosures

cc: Lori G. Aylett – Smith Murdaugh Little & Bonham, LLP (with Attachment)
Josh Rowe – Water District Management (Letter Only)

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

APPLICATION AND INTENT TO OBTAIN WATER QUALITY PERMIT RENEWAL

PERMIT NO. WQ0011820001

Applicant: Lazy River Improvement District

March 2025

Harris County, Texas

Langford Engineering, Inc.
Firm Registration No. F-449

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

DOMESTIC WASTEWATER PERMIT APPLICATION CHECKLIST

Complete and submit this checklist with the application.

APPLICANT NAME: Lazy River Improvement District

PERMIT NUMBER (If new, leave blank): WQ00 WQ0011820001

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 _____

PAYMENT VOUCHER

TCEQ ePay Receipt

Transaction Information

Trace Number:	582EA000656294
Date:	02/28/2025 08:13 AM
Payment Method:	CC - Authorization 000009882Z
ePay Actor:	KHIEM HOANG
TCEQ Amount:	$515.00
Texas.gov Price::	$526.84*

* This service is provided by Texas.gov, the official website of Texas. The price of this service includes funds that support the ongoing operations and enhancements of Texas.gov, which is provided by a third party in partnership with the State.

Payment Contact Information

Name:	KHIEM HOANG
Company:	LANGFORD ENGINEERING INC
Address:	1080 W SAM HOUSTON N STE 200, HOUSTON, TX 77043
Phone:	713-461-3530

Cart Items

Voucher	Fee Description	AR Number	Amount
754349	WW PERMIT - FACILITY WITH FLOW >= .05 & < .10 MGD - RENEWAL		$500.00
754350	30 TAC 305.53B WQ RENEWAL NOTIFICATION FEE		$15.00
		TCEQ Amount:	**$515.00**

TCEQ ePay Voucher Receipt

Transaction Information

Voucher Number:	754349
Trace Number:	582EA000656294
Date:	02/28/2025 08:13 AM
Payment Method:	CC - Authorization 000009882Z
Voucher Amount:	$500.00
Fee Type:	WW PERMIT - FACILITY WITH FLOW >= .05 & < .10 MGD - RENEWAL
ePay Actor:	KHIEM HOANG

Payment Contact Information

Name:	KHIEM HOANG
Company:	LANGFORD ENGINEERING INC
Address:	1080 W SAM HOUSTON N STE 200, HOUSTON, TX 77043
Phone:	713-461-3530

Site Information

Site Name:	LAZY RIVER IMPROVEMENT DISTRICT WASTEWATER TREATMENT PLANT
Site Address:	821 GLEN HOLLOW DRIVE, CONROE, TX 77385
Site Location:	APPROX 1.25 MILES WEST OF I-45 APPROX 1.25 MILES NORTH OF HIGHWAY

Customer Information

Customer Name:	LAZY RIVER IMPROVEMENT DISTRICT
Customer Address:	2727 ALLEN PARKWAY SUITE 1100, HOUSTON, TX 77019 2191

Other Information

Program Area ID:	0011820001

TCEQ ePay Voucher Receipt

Transaction Information

Voucher Number:	754350
Trace Number:	582EA000656294
Date:	02/28/2025 08:13 AM
Payment Method:	CC - Authorization 000009882Z
Voucher Amount:	$15.00
Fee Type:	30 TAC 305.53B WQ RENEWAL NOTIFICATION FEE
ePay Actor:	KHIEM HOANG

Payment Contact Information

Name:	KHIEM HOANG
Company:	LANGFORD ENGINEERING INC
Address:	1080 W SAM HOUSTON N STE 200, HOUSTON, TX 77043
Phone:	713-461-3530

ADMINISTRATIVE REPORT 1.0

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

DOMESTIC WASTEWATER PERMIT APPLICATION ADMINISTRATIVE REPORT 1.0

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

Section 1. Application Fees (Instructions Page 26)

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

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

Minor Amendment (for any flow) $150.00 ☒

Payment Information:

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

Check/Money Order Amount: Click to enter text.

Name Printed on Check: Click to enter text.

EPAY Voucher Number: 754349 & 754350

Copy of Payment Voucher enclosed? Yes ☒

Section 2. Type of Application (Instructions Page 26)

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

☒ Publicly-Owned Domestic Wastewater

☐ Privately-Owned Domestic Wastewater

☐ Conventional Wastewater Treatment

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

☒ Active ☐ Inactive

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

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

d. Check the box next to the appropriate application type

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

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

f. For existing permits:

Permit Number: WQ00 11820001

EPA I.D. (TPDES only): TX 0069256

Expiration Date: October 8, 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?

Lazy River Improvement District

(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: 600792113

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: Edwards, Michael

Title: President Board of Directors Credential: Click to enter text.

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

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

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 A – TCEQ Core Data Form

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: Hardin, Timothy

Title: Vice President Credential: P.E.

Organization Name: Langford Engineering, Inc.

Mailing Address: 1080 W. Sam Houston Pkwy N., Suite 200 City, State, Zip Code: Houston, TX 77043

Phone No.: 713-461-3530 E-mail Address: tim.h@langfordeng.com

Check one or both: ☒ Administrative Contact ☒ Technical Contact

B. Prefix: Mr. Last Name, First Name: Hong, Anthony

Title: Engineering Associate Credential: Click to enter text.

Organization Name: Langford Engineering, Inc.

Mailing Address: 1080 W. Sam Houston Pkwy N., Suite 200 City, State, Zip Code: Houston, TX 77043

Phone No.: 713-461-3530 E-mail Address: Anthony.h@langfordeng.com

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: Hardin, Timothy

Title: Vice President Credential: P.E.

Organization Name: Langford Engineering, Inc

Mailing Address: 1080 W. Sam Houston Pkwy N., Suite 200 City, State, Zip Code: Houston, TX 77043

Phone No.: 713-461-3530 E-mail Address: 713-932-7505

B. Prefix: Mr. Last Name, First Name: Michael Edwards

Title: President Board of Directors Credential: Click to enter text.

Organization Name: Lazy River Improvement District

Mailing Address: 2727 Allen Pkwy, Suite 1100 City, State, Zip Code: Houston, TX 77019

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

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: Edwards, Michael

Title: President Board of Directors Credential: Click to enter text.

Organization Name: Lazy River Improvement District

Mailing Address: 2727 Allen Pkwy, Suite 1100 City, State, Zip Code: Houston, TX 77019

Phone No.: 713-652-6500 E-mail Address: laylett@smithmur.com

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

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

Prefix: Mr. Last Name, First Name: Rowe, Josh

Title: Operator Credential: Click to enter text.

Organization Name: Water District Management Co., Inc.

Mailing Address: 17707 Old Louetta City, State, Zip Code: Houston, TX 77070

Phone No.: 281-376-8802 E-mail Address: josh@wdmtexas.com

Section 8. Public Notice Information (Instructions Page 27)

A. Individual Publishing the Notices

Prefix: Mr. Last Name, First Name: Hong, Anthony

Title: Engineering Associate Credential: Click to enter text.

Organization Name: Langford Engineering, Inc

Mailing Address: 1080 W. Sam Houston Pkwy N., Suite 200 City, State, Zip Code: Houston, TX 77043

Phone No.: 713-461-3530 E-mail Address: **Anthony.h@langfordeng.com**

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

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

☒ E-mail Address

☐ Fax

☒ Regular Mail

C. Contact permit to be listed in the Notices

Prefix: Mr. Last Name, First Name: Hardin, Timothy

Title: Vice President Credential: P.E.

Organization Name: Langford Engineering, Inc.

Mailing Address: 1080 W. Sam Houston Pkwy N., Suite 200 City, State, Zip Code: Houston, TX 77043

Phone No.: 713-461-3530 E-mail Address: Click to enter text.

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: Montgomery County Public Library

Location within the building: Reference Work Room

Physical Address of Building: 104 Interstate 45 North

City: Conroe County: Montgomery

Contact (Last Name, First Name): Hunt, Kelly

Phone No.: 936-539-7814 Ext.: Click to enter text.

E. Bilingual Notice Requirements

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

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

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

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

   ☒ Yes ☐ No

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

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

   ☒ Yes ☐ No

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

   ☒ Yes ☐ No

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

   ☐ Yes ☒ No

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

F. Plain Language Summary Template

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

Attachment: Attachment C – Plain Language Summary

G. Public Involvement Plan Form

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

Attachment: Not Applicable

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** 101516193

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):

Lazy River Improvement District Wastewater Treatment Plant

C. Owner of treatment facility: Lazy River Improvement District

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: **Lazy River Improvement District**

Mailing Address: 2727 Allen Pkwy, Suite 1100 City, State, Zip Code: Houston, TX 77019

Phone No.: 713-652-6500 E-mail Address: Laylett@smithmur.com

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): Conroe

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

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

☐ Yes ☒ No

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

☐ Authorization granted ☐ Authorization pending

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

Attachment: N/A

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

Section 11. TLAP Disposal Information (Instructions Page 32)

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

☐ Yes ☐ No ☒ N/A

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

N/A

B. City nearest the disposal site: N/A

C. County in which the disposal site is located: N/A

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

N/A

E. For **TLAPs**, please identify the nearest watercourse to the disposal site to which rainfall runoff might flow if not contained: N/A

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:

- 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: SPIF 7.5-Minute USGS Quadrangle Map, SPIF Location Map

List of Attachments

Attachment	Content	Application Item No
A.	TCEQ Core Data Form	Admin. 1.0, item 3.c
B.	7.5-Minute USGS Quadrangle Map	Admin.1.0, Item 13.d
C.	Plain Language Summary	Admin.1.0, Item 8.f
D.	Schematic Flow Diagrams	Tech. 1.0, Item 2.c
E.	Site Drawing	Tech. 1.0, Item 3
F.	Solids Management Plan	Tech. 1.0, Item 6.f
G.	Laboratory Testing Results	Tech. 1.0, Item 7
H.	Permitted Sludge Processing Facility Letter	Tech. 1.0, Item 9.d
I.	Design Calculations	Tech. 1.1, Item 4
J.	Supplemental Permit Information Form	SPIF
K.	Proposed Buffer Zone Easement Exhibit	Tech. 1.0, Item 6.b

Section 14. Signature Page (Instructions Page 34)

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

Permit Number: WQ0011820001

Applicant: Lazy River Improvement District

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): Michael Edwards

Signatory title: President Board of Directors

Signature: Michael D Edwards Date: 11/5/2024

(Use blue ink)

Subscribed and Sworn to before me by the said President Board of Directors

on this 5th day of November, 20 24.

My commission expires on the 17th day of April, 20 28.

Notary Public

CHRISTIANE G. TREVINO
Notary Public, State of Texas
Comm. Expires 04-17-2028
Notary ID 134856164

[SEAL]

Harris

County, Texas

DOMESTIC WASTEWATER PERMIT APPLICATION

SUPPLEMENTAL PERMIT INFORMATION FORM (SPIF)

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

Attachment: Attachment J – Supplemental Permit Information Form

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 ☒ N/A ☐ 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.)
APPLICATION FEE PAID VIA EPAY (TRACE NO. 582EA000656294)

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

TECHNICAL REPORT 1.0

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): 0.10

2-Hr Peak Flow (MGD): 0.37

Estimated construction start date: Click to enter text.

Estimated waste disposal start date: Click to enter text.

B. Interim II Phase

Design Flow (MGD):

2-Hr Peak Flow (MGD):

Estimated construction start date: Click to enter text.

Estimated waste disposal start date: Click to enter text.

C. Final Phase

Design Flow (MGD): 0.07

2-Hr Peak Flow (MGD): 0.259

Estimated construction start date: October 2025

Estimated waste disposal start date: October 2026

D. Current Operating Phase

Provide the startup date of the facility: January 1977

Section 2. Treatment Process (Instructions Page 43)

A. Current Operating Phase

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

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

The existing treatment process operates in a conventional activated sludge mode. Treatment units include headworks with a manually-cleaned bar screen, two concentric treatment units consisting of aeration basins, clarifiers, digesters, a chlorine contact basin and sludge drying beds. The proposed treatment process operates in a conventional activated sludge mode. Treatment units include headworks with a manually-cleaned bar screen, two trains of aeration basins, clarifiers, digesters, a chlorine contact basin and sludge drying beds. The treatment process remains unchanged.

B. Treatment Units

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

Table 1.0(1) - Treatment Units

Treatment Unit Type	Number of Units	Dimensions (L x W x D)
Bar Screen (Existing)	2	2' x 2' x 4"
Bar Screen (Proposed)	1	2' x 2' x 4"
Clarifier (Existing)	2	16' Diameter x 12' Depth
Clarifier (Proposed)	2	26' Diameter x 12' Depth
Aeration Basin (Existing)	2	40' x 5' x 12'
Aeration Basin (Proposed)	2	20' x 10' x 12'
Chlorine Contact Basin (Existing)	2	10' x 4.75' x 12'
Chlorine Contact Basin (Proposed)	1	15' x 5' x 10'
Aerobic Digester (Existing)	2	16' x 5' x 12'
Aerobic Digester (Proposed)	2	24' x 8' x 12.5'
Sludge Drying Beds (Existing)	4	20' x 40' x 2'
Sludge Drying Beds (Proposed)	4	20' x 40' x 2'

C. Process Flow Diagram

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

Attachment: Attachment D – Schematic Flow Diagrams

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

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

- Latitude: -95.436786
- Longitude: 30.226410

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

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

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

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

Attachment: Attachment E – Site Drawing

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

Forrest Hills Residential Subdivision

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
Lazy River Improvement District	**Lazy River Improvement District**	**Publicly Owned**	648
		Choose an item.	
		Choose an item.	
		Choose an item.	

Section 4. Unbuilt Phases (Instructions Page 45)

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

☒ Yes ☐ No

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

☒ Yes ☐ No

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

Lazy River Improvement District wastewater treatment plant is currently operating in the Interim I Phase (0.1 MGD) under the current permit. Based on historical flows, average daily flows are significantly lower than the permitted discharge. The proposed improvements will be sized for a lower average daily flow of the plant. Historical flows allow for amending the permitted discharge from 0.1 MGD to 0.07 MGD. Therefore, the Final Phase (0.07 MGD) is proposed to serve the District.

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: Interim I Phase - January 1977

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**.

Approval letter for Interim I Phase is not available. Plans and specifications for Final Phase have not been submitted to TCEQ yet.

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.

Interim I Phase (RENEWAL) - The existing WWTP that has been in operation since 1977. Although, the Utility District does not own the neighboring property, there is an existing wooded area in the proximity of the WWTP that serves as a natural buffer zone. There are no existing dwellings within 150' of the existing plant, nor are there any plans for same of which the applicant is aware. Thus, the applicant requests approval of the RENEWAL (Interim I Phase) Phase. Since this permit application includes a minor amendment (with renewal), the applicant is hereby requesting a variance of the buffer zone easement requirement as it applies to Interim I Phase. Final Phase (MINOR PERMIT AMENDMENT) – The applicant is requesting approval of the Final Permit Phase subject to the proposed buffer zone easements (See Attachment K - Proposed Buffer Zone Easement Exhibit). The applicant is in the process of obtaining these proposed buffer zone easements and expects to have them in place prior to commencing discharges associated with the Final Phase of this permit.

C. Other actions required by the current permit

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

☐ Yes ☒ No

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

N/A

D. Grit and grease treatment

1. Acceptance of grit and grease waste

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

☐ Yes ☒ No

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

2. Grit and grease processing

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

N/A

3. Grit disposal

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

☐ Yes ☐ No

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

Describe the method of grit disposal.

N/A

4. Grease and decanted liquid disposal

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

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

N/A

E. Stormwater management

1. Applicability

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

☐ Yes ☒ No

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

☐ Yes ☒ No

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

2. MSGP coverage

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

☐ Yes ☒ No

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

TXR05 Click to enter text. or TXRNE Click to enter text.

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

☐ Yes ☒ No

3. Conditional exclusion

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

☐ Yes ☒ No

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

N/A

4. Existing coverage in individual permit

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

☐ Yes ☒ No

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

N/A

5. Zero stormwater discharge

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

☐ Yes ☒ No

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

N/A

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

6. Request for coverage in individual permit

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

☐ Yes ☒ No

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

N/A

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

F. Discharges to the Lake Houston Watershed

Does the facility discharge in the Lake Houston watershed?

☒ Yes ☐ No

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

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

1. Acceptance of sludge from other WWTPs

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

☐ Yes ☒ No

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

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

N/A

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

2. Acceptance of septic waste

Is the facility accepting or will it accept septic waste?

☐ Yes ☒ No

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

☐ Yes ☐ No

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

☐ Yes ☐ No

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

N/A

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

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

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

☐ Yes ☒ No

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

N/A

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

Is the facility in operation?

☒ Yes ☐ No

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

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

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

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

Pollutant	Average Conc.	Max Conc.	No. of Samples	Sample Type	Sample Date/Time
$CBOD_5$, mg/l	<2.0	2.0	1	Grab	10-18-24/0807
Total Suspended Solids, mg/l	9.2	9.2	1	Grab	10-18-24/1347
Ammonia Nitrogen, mg/l	3.4	3.4	1	Grab	10-23-24/1322
Nitrate Nitrogen, mg/l	16.7	16.7	1	Grab	10-17-24/1903
Total Kjeldahl Nitrogen, mg/l	4.2	4.2	1	Grab	11-01-24/0910
Sulfate, mg/l	27.5	27.5	1	Grab	10-17-24/1903
Chloride, mg/l	66.8	66.8	1	Grab	10-17-24/1903
Total Phosphorus, mg/l	2.35	2.35	1	Grab	10-24-24/1429
pH, standard units	7.2	7.2	1	Grab	10-17-24/1000
Dissolved Oxygen*, mg/l	7.1	7.1	1	Grab	10-17-24/1000

Chlorine Residual, mg/l	4.0	4.0	1	Grab	10-17-24/1215
E.coli (CFU/100ml) freshwater	<1	1	1	Grab	10-31-24/1432
Entercocci (CFU/100ml) saltwater	N/A	N/A	N/A	N/A	N/A
Total Dissolved Solids, mg/l	390	10.0	1	Grab	10-18-24/1800
Electrical Conductivity, µmohs/cm, †	790	790	1	Grab	10-21-24/0648
Oil & Grease, mg/l	N/A	N/A	N/A	N/A	N/A
Alkalinity ($CaCO_3$)*, mg/l	200	200	1	Grab	10-21-24/1100

*TPDES permits only
†TLAP permits only

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

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

Section 8. Facility Operator (Instructions Page 50)

Facility Operator Name: Kelvin Manning

Facility Operator's License Classification and Level: Wastewater Treatment Operator C

Facility Operator's License Number: WW0066663

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

A. WWTP's Biosolids Management Facility Type

Check all that apply. See instructions for guidance

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

B. WWTP's Biosolids Treatment Process

Check all that apply. See instructions for guidance.

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

C. Biosolids Management

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

Biosolids Management

Management Practice	Handler or Preparer Type	Bulk or Bag Container	Amount (dry metric tons)	Pathogen Reduction Options	Vector Attraction Reduction Option
Other	Off-site Third-Party Handler or Preparer	Bulk	3 metric tons	Class B: PSRP Air Drying	Option 10. Incorporate within 6 hrs
Choose an item.	Choose an item.	Choose an item.		Choose an item.	Choose an item.
Choose an item.	Choose an item.	Choose an item.		Choose an item.	Choose an item.

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

D. Disposal site

Disposal site name: Mount Houston Road MUD

TCEQ permit or registration number: WQ0011154001

County where disposal site is located: Harris

E. Transportation method

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

Name of the hauler: Magna Flow Environmental, Inc.

Hauler registration number: 21484

Sludge is transported as a:

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

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

A. Beneficial use authorization

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

☐ Yes ☒ No

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

☐ Yes ☐ No

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

☐ Yes ☐ No

B. Sludge processing authorization

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

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

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

☐ Yes ☐ No

Section 11. Sewage Sludge Lagoons (Instructions Page 53)

Does this facility include sewage sludge lagoons?

☐ Yes ☒ No

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

A. Location information

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

- Original General Highway (County) Map:

  Attachment: N/A
- USDA Natural Resources Conservation Service Soil Map:

  Attachment: N/A
- Federal Emergency Management Map:

  Attachment: N/A
- Site map:

  Attachment: N/A

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: N/A

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

N/A

B. Temporary storage information

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

Nitrate Nitrogen, mg/kg: N/A

Total Kjeldahl Nitrogen, mg/kg: N/A

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

Phosphorus, mg/kg: N/A

Potassium, mg/kg: N/A

pH, standard units: N/A

Ammonia Nitrogen mg/kg: N/A

Arsenic: N/A

Cadmium: N/A

Chromium: N/A

Copper: N/A

Lead: N/A

Mercury: N/A

Molybdenum: N/A

Nickel: N/A

Selenium: N/A

Zinc: N/A

Total PCBs: N/A

Provide the following information:

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

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

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

C. Liner information

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

☐ Yes ☐ No

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

N/A

D. Site development plan

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

N/A

Attach the following documents to the application.

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

  Attachment: N/A
- Copy of the closure plan

  Attachment: N/A
- Copy of deed recordation for the site

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

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

  Attachment: N/A
- Procedures to prevent the occurrence of nuisance conditions

  Attachment: N/A

E. Groundwater monitoring

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

☐ Yes ☐ No

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

Attachment: N/A

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:

N/A

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:

N/A

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

A. RCRA hazardous wastes

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

☐ Yes ☒ No

B. Remediation activity wastewater

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

☐ Yes ☒ No

C. Details about wastes received

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

Attachment: N/A

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: Dustin Roberts

Title: Compliance Manager

Signature: Dustin Roberts

Date: 11/18/2024

WORKSHEET 1.1

DOMESTIC WASTEWATER PERMIT APPLICATION TECHNICAL REPORT 1.1

The following information is required for new and amendment major applications.

Section 1. Justification for Permit (Instructions Page 57)

A. Justification of permit need

Provide a detailed discussion regarding the need for any phase(s) not currently permitted. Failure to provide sufficient justification may result in the Executive Director recommending denial of the proposed phase(s) or permit.

Lazy River Improvement District wastewater treatment plant is currently operating in the Interim I Phase (0.1 MGD) under the current permit. Based on historical flows, average daily flows are significantly lower than the permitted discharge. The proposed improvements will be sized for a lower average daily flow of the plant. Historical flows allow for amending the permitted discharge from 0.1 MGD to 0.07 MGD. Therefore, the Final Phase (0.07 MGD) is proposed to serve the District.

B. Regionalization of facilities

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

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

1. ***Municipally incorporated areas***

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

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

   ☐ Yes ☐ No ☐ Not Applicable

   If yes, within the city limits of:

   If yes, attach correspondence from the city.

   Attachment: Click to enter text.

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

   Attachment: Click to enter text.

2. ***Utility CCN areas***

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

   ☐ Yes ☐ No

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

   Attachment: Click to enter text.

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

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

   ☐ Yes ☐ No

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

   Attachment: N/A

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

If yes, attach proof of mailing a request for service to each facility and collection system, the letters requesting service, and correspondence from each facility and collection system.

Attachment: Click to enter text.

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

Attachment: Click to enter text.

Section 2. Proposed Organic Loading (Instructions Page 59)

Is this facility in operation?

☐ Yes ☐ No

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

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

A. Current organic loading

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

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

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

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

Click to enter text.

B. Proposed organic loading

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

Table 1.1(1) – Design Organic Loading

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

Source	Total Average Flow (MGD)	Influent BOD5 Concentration (mg/l)
AVERAGE BOD_5 from all sources		

Section 3. Proposed Effluent Quality and Disinfection (Instructions Page 59)

A. Existing/Interim I Phase Design Effluent Quality

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

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

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

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

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

Other: Click to enter text.

B. Interim II Phase Design Effluent Quality

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

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

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

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

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

Other: Click to enter text.

C. Final Phase Design Effluent Quality

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

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

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

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

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

Other: Click to enter text.

D. Disinfection Method

Identify the proposed method of disinfection.

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

Dechlorination process: Click to enter text.

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

☐ Other: Click to enter text.

Section 4. Design Calculations (Instructions Page 59)

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

Attachment: Attachment I – Design Calculations

Section 5. Facility Site (Instructions Page 60)

A. 100-year floodplain

Will the proposed facilities be located above the 100-year frequency flood level?

☐ Yes ☐ No

If no, describe measures used to protect the facility during a flood event. Include a site map showing the location of the treatment plant within the 100-year frequency flood level. If applicable, provide the size and types of protective structures.

Click to enter text.

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

Click to enter text.

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

☐ Yes ☐ No

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

☐ Yes ☐ No

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

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

B. Wind rose

Attach a wind rose: Click to enter text.

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

A. Beneficial use authorization

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

☐ Yes ☐ No

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

B. Sludge processing authorization

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

☐ Sludge Composting

☐ Marketing and Distribution of sludge

☐ Sludge Surface Disposal or Sludge Monofill

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

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

Attach a solids management plan to the application.

Attachment: Attachment F – Solids Management Plan

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

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

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

WORKSHEET 2.0

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: N/A

Distance and direction to the intake: N/A

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

Attachment: N/A

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

Does the facility discharge into tidally affected waters?

☐ Yes ☒ No

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

A. Receiving water outfall

Width of the receiving water at the outfall, in feet: N/A

B. Oyster waters

Are there oyster waters in the vicinity of the discharge?

☐ Yes ☒ No

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

N/A

C. Sea grasses

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

☐ Yes ☒ No

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

N/A

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: Harpers Horsepen Branch

A. Receiving water type

Identify the appropriate description of the receiving waters.

☐ Stream

☐ Freshwater Swamp or Marsh

☐ Lake or Pond

Surface area, in acres: Click to enter text.

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

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

☒ Man-made Channel or Ditch

☐ Open Bay

☐ Tidal Stream, Bayou, or Marsh

☐ Other, specify: Click to enter text.

B. Flow characteristics

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

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

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

☐ Perennial - normally flowing

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

☐ USGS flow records

☐ Historical observation by adjacent landowners

☒ Personal observation

☐ Other, specify: Click to enter text.

C. Downstream perennial confluences

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

West Fork of the San Jacinto River

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.

The flow increases and is more consistent in the West Fork of the San Jacinto River

E. Normal dry weather characteristics

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

Creek width varies, 27-ft wide at the discharge point. Grass and vegetation on both sides of creek. Clear and slow water flow.

Date and time of observation: Friday, September 20, 2024 at 9:45 AM

Was the water body influenced by stormwater runoff during observations?

☐ Yes ☒ No

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

A. Upstream influences

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

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

B. Waterbody uses

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

- ☐ Livestock watering
- ☐ Irrigation withdrawal
- ☐ Fishing
- ☐ Domestic water supply
- ☐ Park activities
- ☐ Contact recreation
- ☐ Non-contact recreation
- ☐ Navigation
- ☐ Industrial water supply
- ☒ Other(s), specify: Urban Storm Water

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

WORKSHEET 6.0

DOMESTIC WASTEWATER PERMIT APPLICATION WORKSHEET 6.0: INDUSTRIAL WASTE CONTRIBUTION

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

Section 1. All POTWs (Instructions Page 89)

A. Industrial users (IUs)

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

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

Categorical IUs:

Number of IUs: 0

Average Daily Flows, in MGD: 0

Significant IUs – non-categorical:

Number of IUs: 0

Average Daily Flows, in MGD: 0

Other IUs:

Number of IUs: 0

Average Daily Flows, in MGD: 0

B. Treatment plant interference

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

☐ Yes ☒ No

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

N/A

C. Treatment plant pass through

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

☐ Yes ☒ No

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

N/A

D. Pretreatment program

Does your POTW have an approved pretreatment program?

☐ Yes ☒ No

If yes, complete Section 2 only of this Worksheet.

Is your POTW required to develop an approved pretreatment program?

☐ Yes ☐ No

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

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

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

A. Substantial modifications

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

☐ Yes ☒ No

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

N/A

B. Non-substantial modifications

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

☐ Yes ☒ No

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

N/A

C. Effluent parameters above the MAL

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

Table 6.0(1) – Parameters Above the MAL

Pollutant	Concentration	MAL	Units	Date

D. Industrial user interruptions

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

☐ Yes ☒ No

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

N/A

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

A. General information

Company Name: N/A

SIC Code: N/A

Contact name: N/A

Address: N/A

City, State, and Zip Code: N/A

Telephone number: N/A

Email address: N/A

B. Process information

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

N/A

C. Product and service information

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

N/A

D. Flow rate information

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

Process Wastewater:

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

Discharge Type: ☐ Continuous ☐ Batch ☐ Intermittent

Non-Process Wastewater:

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

Discharge Type: ☐ Continuous ☐ Batch ☐ Intermittent

E. Pretreatment standards

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

☐ Yes ☐ No

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

☐ Yes ☐ No

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

Category: Subcategories: Click to enter text.

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

Category: Click to enter text.

Subcategories: Click to enter text.

Category: Click to enter text.

Subcategories: Click to enter text.

Category: Click to enter text.

Subcategories: Click to enter text.

Category: Click to enter text.

Subcategories: Click to enter text.

F. Industrial user interruptions

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

☐ Yes ☐ No

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

N/A

LIST OF ATTACHMENTS

Lazy River Improvement District

Domestic Wastewater Permit Minor & Renewal Application

WQ0011820001

List of Attachments

Attachment	Content	Application Item No.
A.	TCEQ Core Data Form	Admin. 1.0, item 3.c
B.	7.5-Minute USGS Quadrangle Map	Admin. 1.0, Item 13.d
C.	Plain Language Summary	Admin. 1.0, Item 8.f
D.	Schematic Flow Diagrams	Tech. 1.0, Item 2.c
E.	Site Drawing	Tech. 1.0, Item 3
F.	Solids Management Plan	Tech. 1.0, Item 6.f
G.	Laboratory Testing Results	Tech. 1.0, Item 7
H.	Permitted Sludge Processing Facility Letter	Tech. 1.0, Item 9.d
I.	Design Calculations	Tech. 1.1, Item 4
J.	Supplemental Permit Information Form	SPIF
K.	Proposed Buffer Zone Easement Exhibit	Tech. 1.0, Item 6.b

ATTACHMENT A
Administrative Report 1.0

Item 3.c

TCEQ CORE DATA FORM

TCEQ Use Only

TCEQ Core Data Form

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

SECTION I: General Information

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

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

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

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 600792113		**RN 101516193**

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:*

Lazy River Improvement District

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

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: 2727 Allen Pkwy, Suite 1100

City	Houston	**State**	TX	**ZIP**	77019	**ZIP + 4**	2191

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

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

(713) 652-6500		( ) -

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.)*

23. Street Address of the Regulated Entity: ***(No PO Boxes)***	830 Glen Hollow Drive							
	City	Conroe	**State**	TX	**ZIP**	77385	**ZIP + 4**	7716
24. County	Montgomery							

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

25. Description to Physical Location:	Approximately 1.25 miles west of Highway I-45; approximately 1.25 miles north of Highway 242, in Montgomery County, Texas.

26. Nearest City	**State**	**Nearest ZIP Code**
Conroe	TX	77385

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

27. Latitude (N) In Decimal:			**28. Longitude (W) In Decimal:**		
Degrees	Minutes	Seconds	Degrees	Minutes	Seconds
30°	13'	37.05"	-95°	26'	13.7"

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			

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

34. Mailing Address:	**2727 Allen Pkwy, Suite 1100**							
	City	**Houston**	**State**	**TX**	**ZIP**	**77019**	**ZIP + 4**	**2191**
35. E-Mail Address:	**laylett@smithmur.com**							

36. Telephone Number	**37. Extension or Code**	**38. Fax Number** *(if applicable)*
(713) 652-6500		( ) -

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

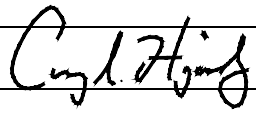
☐ Dam Safety	☐ Districts	☐ Edwards Aquifer	☐ Emissions Inventory Air	☐ Industrial Hazardous Waste
☐ Municipal Solid Waste	☐ New Source Review Air	☐ OSSF	☐ Petroleum Storage Tank	☐ PWS
☐ Sludge	☐ Storm Water	☐ Title V Air	☐ Tires	☐ Used Oil
☐ Voluntary Cleanup	☐ Wastewater	☐ Wastewater Agriculture	☐ Water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

SECTION IV: Preparer Information

40. Name:	Anthony Hong	**41. Title:**	Engineering Associate
42. Telephone Number	**43. Ext./Code**	**44. Fax Number**	**45. E-Mail Address**
(713 **)** 461-3530		**( ) -**	Anthony.H@langfordeng.com

SECTION V: Authorized Signature

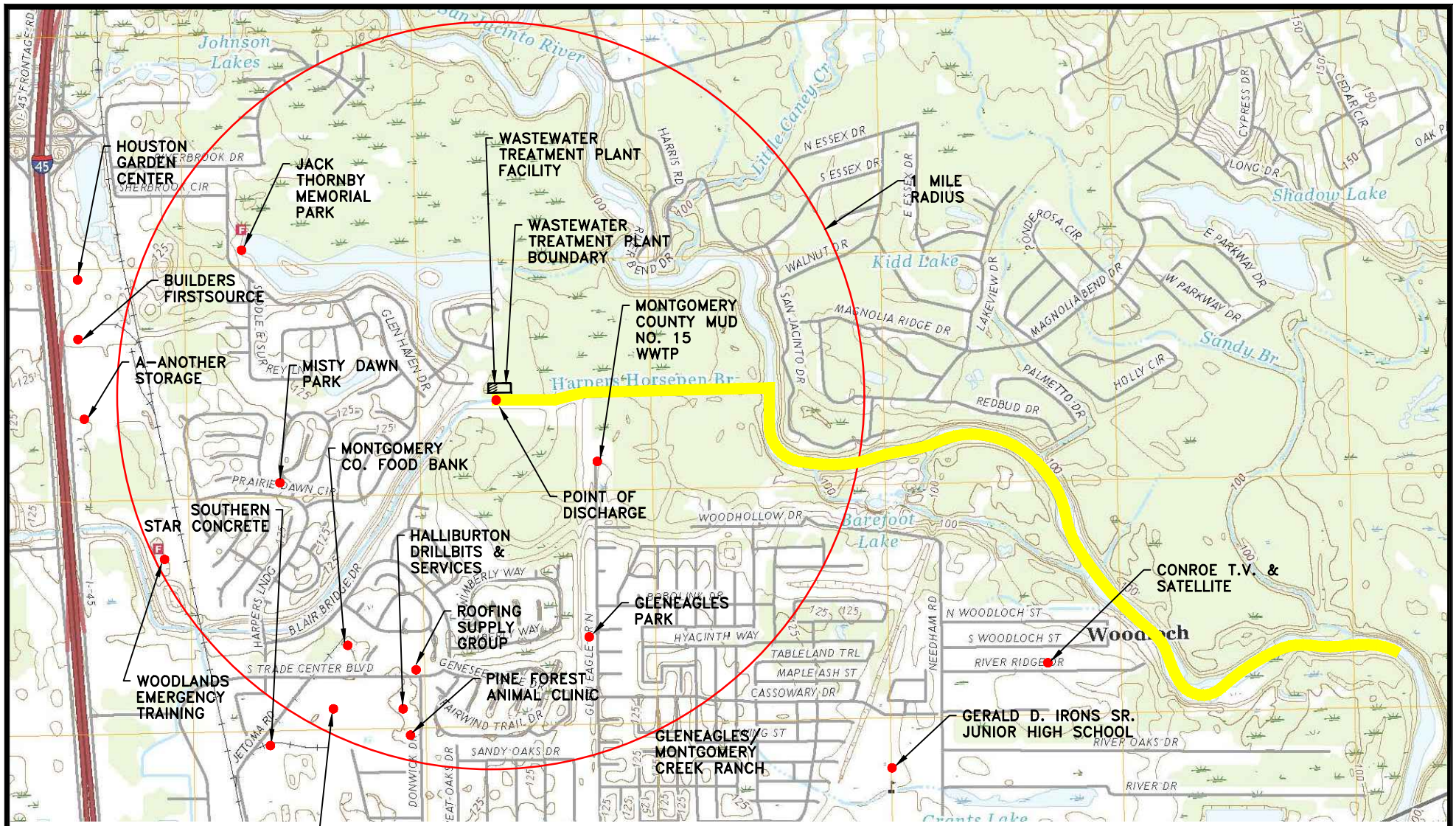
46. By my signature below, I certify, to the best of my knowledge, that the information provided in this form is true and complete, and that I have signature authority to submit this form on behalf of the entity specified in Section II, Field 6 and/or as required for the updates to the ID numbers identified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

Company:	Langford Engineering Inc.	**Job Title:**	Senior Project Manager
Name *(In Print):*	Craig A. Hajovsky, P.E.	**Phone:**	**(** 713 **)** 461- **3530**
Signature:		**Date:**	3/5/2025

ATTACHMENT B
Administrative Report 1.0
Item 13.d
7.5-MINUTE USGS

QUADRANGLE MAP

E:\Current Proj\327003101 – 2020 TPDES Discharge Permit Renewal\Exhibits\Admin. 1.0 Item 13.D.dwg Oct 16, 2019–9:43am stevenc



MONTGOMERY COUNTY
LAZY RIVER IMPROVEMENT DISTRICT
T.P.D.E.S. WQ0011820001
U.S.G.S. MAP TAMINA, TX

0 0.5 1
MILES

0 1000 2000 3000 4000 5000
FEET

SCALE: 1:24000

SHEET 1 OF 1

TREATMENT FACILITY

PROPERTY BOUNDARY

ATTACHMENT C
Administrative Report 1.0

Item 8.f

PLAIN LANGUAGE SUMMARY

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

PLAIN LANGUAGE SUMMARY FOR TPDES OR TLAP PERMIT APPLICATIONS

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

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

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

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

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

Lazy River Improvement District (CN600792113) operates Lazy River Improvement District Wastewater Treatment Plant (RN101516193), a wastewater treatment plant. The facility is located at 830 Glenn Hollow Drive, in Conroe, Montgomery County, Texas 77385. This application is for a minor amendment and renewal to discharge at an annual average flow of 70,000 gallons per day of treated domestic wastewater via the discharge route from the plant site to a ditch named Trade Center Drive/College Park Ditch, thence to the west fork of the San Jacinto River in Segment No. 1004 of the San Jacinto River Basin.

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), Nitrate Nitrogen (NO_3-N), Total Kjeldahl Nitrogen (TKN), Sulfate (SO_4), Chloride (Cl^-), total Phosphorus (P_4), pH, Dissolved Oxygen (O_2), Chloride Residual (Cl_2), *Escherichia coli*, Total Dissolved Solids (TDS), Electrical Conductivity, and Alkalinity ($CaCO_3$). Domestic wastewater is treated by an

activated sludge process plant and the treatment units include a manual bar screen, aeration basins, clarifiers, aerobic digesters, a chlorine contact chamber, and sludge drying beds.

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.

Lazy River Improvement District (CN600792113) opera la Planta de Tratamiento de Augas Residuales de Lazy River Improvement District (RN101516193), una planta de tratamiento de aguas residuales. La instalación está ubicada en 830 Glen Hollow Drive, en Conroe, Condado de Montgomery, Texas 77385. Esta solicitud es para una enmienda menor y renovación para descargar flujo promedio anual de 70,000 galones por día de aguas residuales domésticas tratadas a través de la ruta de descarga desde el sitio de la planta hacia una zanja denominada Trade Center Drive/College Park Ditch, y de ahí al ramal oeste del rio San Jacinto en el Segmento No. 1004 de la Cuenca del Rio San Jacinto.

Se espera que las descargas de la instalación contengan Demanda Bioquímica de Oxigeno Carbonoso de cinco días (DBO5), Solidos Suspendidos Totales (SST), Nitrógeno Amoniacal (NH3-N), Nitrógeno Nitrato (NO3-N), Nitrógeno Kjeldahl Total (NKT), Sulfato (SO4), Cloruro (Cl-), Fosforo Total (P4), pH, Oxígeno Disuelto (O2), Cloruro Residual (Cl2), Escherichia Coli (E. Coli), Solidos Disueltos Totales (SDT), Conductividad Eléctrica y Alcalinidad (CaCO3). Las aguas residuales domésticas son tratadas por un proceso de lodos activados, y las unidades de tratamiento incluyen una rejilla manual, tanques de aireación, clarificadores, digestores aeróbicos, una cámara de contacto de cloro y lechos de secado de lodos.

INSTRUCTIONS

1. Enter the name of applicant in this section. The applicant name should match the name associated with the customer number.
2. Enter the Customer Number in this section. Each Individual or Organization is issued a unique 11-digit identification number called a CN (e.g. CN123456789).
3. Choose “operates” in this section for existing facility applications or choose “proposes to operate” for new facility applications.
4. Enter the name of the facility in this section. The facility name should match the name associated with the regulated entity number.
5. Enter the Regulated Entity number in this section. Each site location is issued a unique 11-digit identification number called an RN (e.g. RN123456789).
6. Choose the appropriate article (a or an) to complete the sentence.
7. Enter a description of the facility in this section. For example: steam electric generating facility, nitrogenous fertilizer manufacturing facility, etc.
8. Choose “is” for an existing facility or “will be” for a new facility.
9. Enter the location of the facility in this section.
10. Enter the City nearest the facility in this section.
11. Enter the County nearest the facility in this section.
12. Enter the zip code for the facility address in this section.
13. Enter a summary of the application request in this section. For example: renewal to discharge 25,000 gallons per day of treated domestic wastewater, new application to discharge process wastewater and stormwater on an intermittent and flow-variable basis, or major amendment to reduce monitoring frequency for pH, etc. If more than one outfall is included in the application, provide applicable information for each individual outfall.
14. List all pollutants expected in the discharge from this facility in this section. If applicable, refer to the pollutants from any federal numeric effluent limitations that apply to your facility.
15. Enter the discharge types from your facility in this section (e.g., stormwater, process wastewater, once through cooling water, etc.)
16. Choose the appropriate verb tense to complete the sentence.
17. Enter a description of the wastewater treatment used at your facility. Include a description of each process, starting with initial treatment and finishing with the outfall/point of disposal. Use additional lines for individual discharge types if necessary.

Questions or comments concerning this form may be directed to the Water Quality Division’s Application Review and Processing Team by email at WQ-ARPTeam@tceq.texas.gov or by phone at (512) 239-4671.

Example

Individual Industrial Wastewater Application

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

ABC Corporation (CN600000000) operates the Starr Power Station (RN10000000000), a two-unit gas-fired electric generating facility. Unit 1 has a generating capacity of 393 megawatts (MWs) and Unit 2 has a generating capacity of 528 MWs. The facility is located at 1356 Starr Street, near the City of Austin, Travis County, Texas 78753.

This application is for a renewal to discharge 870,000,000 gallons per day of once through cooling water, auxiliary cooling water, and also authorizes the following waste streams monitored inside the facility (internal outfalls) before it is mixed with the other wastewaters authorized for discharge via main Outfall 001, referred to as “previously monitored effluents” (low-volume wastewater, metal-cleaning waste, and stormwater (from diked oil storage area yards and storm drains)) via Outfall 001. Low-volume waste sources, metal-cleaning waste, and stormwater drains on a continuous and flow-variable basis via internal Outfall 101.

The discharge of once through cooling water via Outfall 001 and low-volume waste and metal-cleaning waste via Outfall 101 from this facility is subject to federal effluent limitation guidelines at 40 CFR Part 423. The pollutants expected from these discharges based on 40 CFR Part 423 are: free available chlorine, total residual chlorine, total suspended solids, oil and grease, total iron, total copper, and pH. Temperature is also expected from these discharges. Additional potential pollutants are included in the Industrial Wastewater Application Technical Report, Worksheet 2.0.

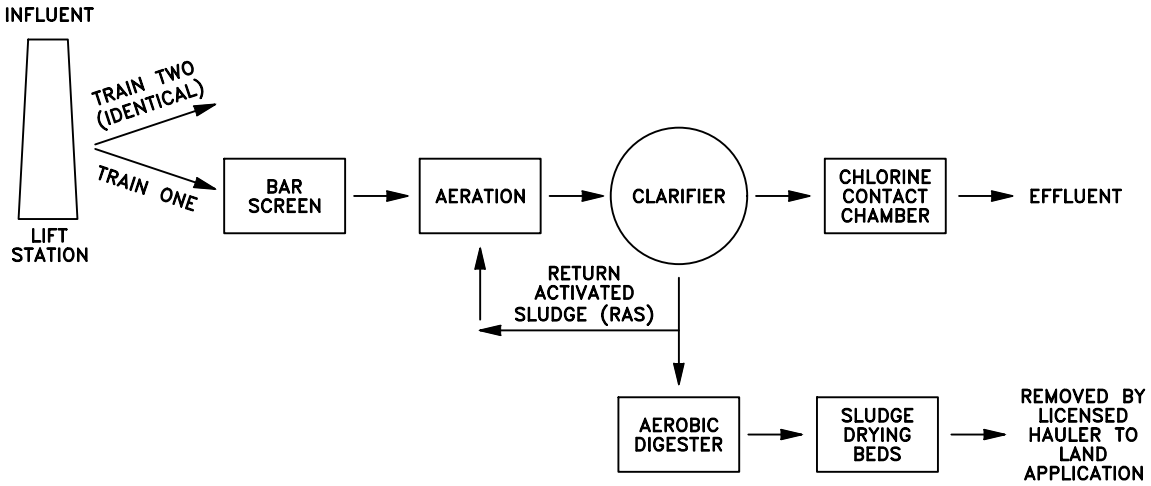
Cooling water and boiler make-up water are supplied by Lake Starr Reservoir. The City of Austin municipal water plant (CN600000000, PWS 00000) supplies the facility’s potable water and serves as an alternate source of boiler make-up water. Water from the Lake Starr Reservoir is withdrawn at the intake structure and treated with sodium hypochlorite to prevent biofouling and sodium bromide as a chlorine enhancer to improve efficacy and then passed through condensers and auxiliary equipment on a once-through basis to cool equipment and condense exhaust steam.

Low-volume wastewater from blowdown of boiler Units 1 and 2 and metal-cleaning wastes receive no treatment prior to discharge via Outfall 101. Plant floor and equipment drains and stormwater runoff from diked oil storage areas, yards, and storm drains are routed through an oil and water separator prior to discharge via Outfall 101. Domestic wastewater, blowdown, and backwash water from the service water filter, clarifier, and sand filter are routed to the Starr Creek Domestic Sewage Treatment Plant, TPDES Permit No. WQ0010000001, for treatment and disposal. Metal-cleaning waste from equipment cleaning is generally disposed of off-site.

ATTACHMENT D
Technical Report 1.0

Item 2.c

SCHEMATIC FLOW DIAGRAMS

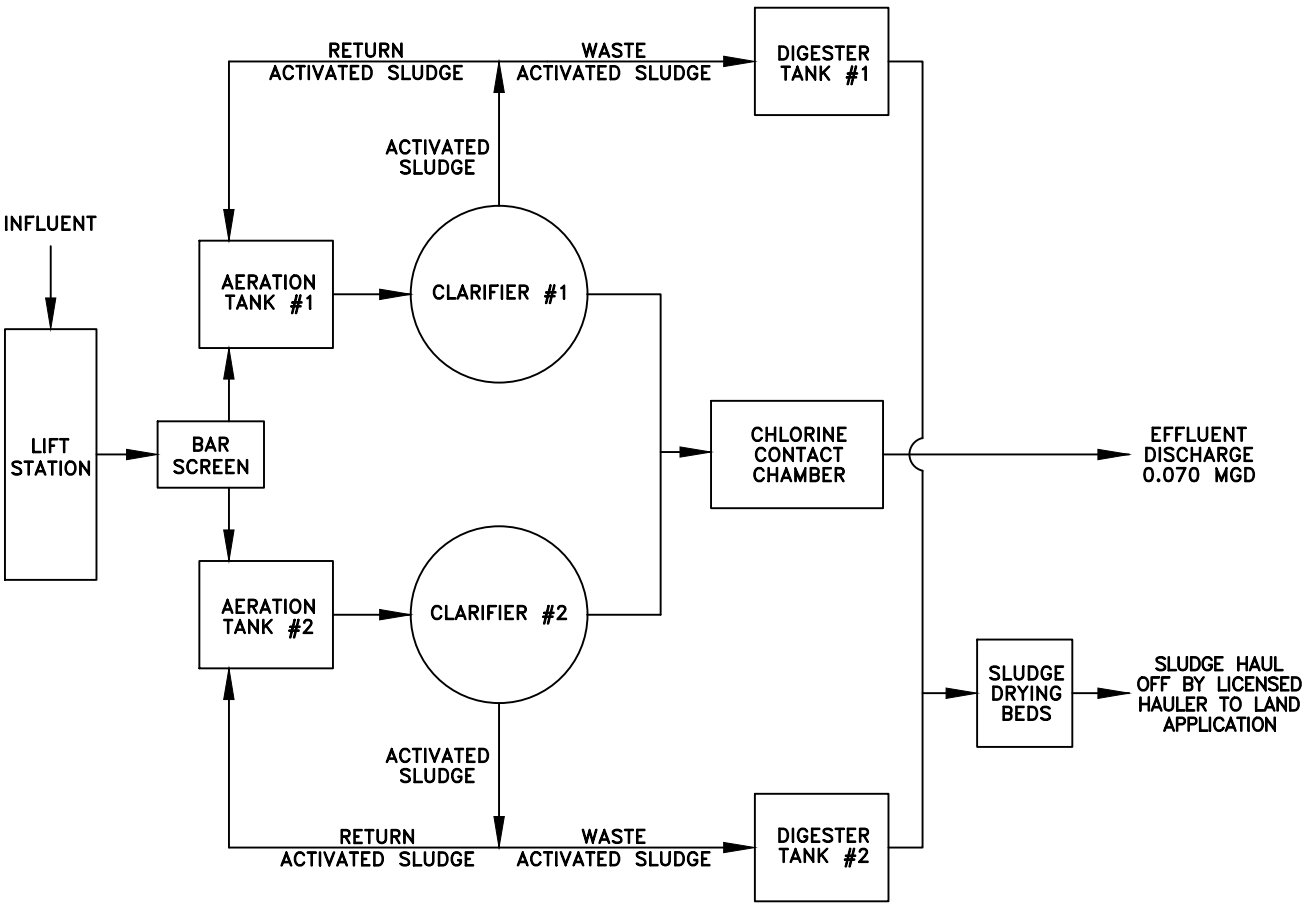


LAZY RIVER I.D.

TECHNICAL REPORT 1.0
ITEM 2.C
EXISTING PHASE
0.10 MGD SCHEMATIC FLOW DIAGRAM

LANGFORD ENGINEERING INC. Consulting Engineers
1080 W. Sam Houston Pkwy N. Ste 200
Houston, Texas 77043-6014
Ph. 713-461-9660 Fax 713-932-7606
TBPE FIRM 6449

DESIGN : K.X.H.	JOB NO. 327-003 CONT. NO. 102
DRAWN : S.M.C.	DATE : MARCH 2025
CHECKED : T.B.H.	SCALE : VERT. N/A HORIZ.
APPROVED : C.A.H.	SHEET NO. 1 OF 2



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LAZY RIVER I.D.

TECHNICAL REPORT 1.0
ITEM 2.C
PROPOSED FINAL PHASE
0.07 M.G.D. SCHEMATIC FLOW DIAGRAM

LANGFORD ENGINEERING INC.
Consulting Engineers
1080 W. Sam Houston Pkwy N. Ste 200
Houston, Texas 77043-6094
Ph. 713-461-3530 Fax 713-932-7505
TBPE FIRM #449

DESIGN : K.X.H.	JOB NO. 327-003 CONT. NO. 102
DRAWN : S.M.C.	DATE : MARCH 2025
CHECKED : T.B.H.	SCALE : VERT. N/A HORIZ.
APPROVED : C.A.H.	SHEET NO. 2 OF 2

ATTACHMENT E
Technical Report 1.0
Item 3

SITE DRAWING

WASTEWATER TREATMENT PLANT SERVICE AREA

EHLERS RD.

HARRIS RD.

RIVER BEND DR.

LEXINGTON CT.

RIVERBROOK DR.

SHERBROOK CIR.

BROOK HOLLOW DRIVE

SHADY GLEN LN.

HILL BROOK LN.

GLEN ROCK LN.

SADDLE AND SURRY LN.

BROOK HOLLOW DR.

GLEN HAVEN DR.

GLENMORA CT.

BUTLERS CT.

CHARNOCK LN.

BROOK HAVEN

FOREST RD.

BROOK FOREST

GLEN FOREST

GLEN HOLLOW DR.

W.W.T.P. FACILITY

W.W.T.P. PROPERTY

HARPER'S HORSEPEN BRANCH

0 1 2 3 4 5 6
GRAPHIC SCALE X 100'

LEGEND:

LAKE/POND

LAZY RIVER ID DISTRICT BOUNDARY

TPDES WQ0010905-001
LAZY RIVER IMPROVEMENT DISTRICT
SITE DRAWING

LANGFORD ENGINEERING INC.
Consulting Engineers
1080 W. Sam Houston Pkwy N. Ste 200
Houston, Texas 77043-5014
Ph. 713-461-9550 Fax 713-932-7505
TBPE FIRM 9449

DESIGN : J.L.	JOB NO. 327-003	CONT. NO. 102
DRAWN : S.C.C.	DATE : OCTOBER 2024	
CHECKED : T.B.H.	SCALE : VERT. 1"=700'	HORIZ.
APPROVED : T.B.H.	SHEET NO. 1 OF 1	

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ATTACHMENT F
Technical Report 1.0
Item 6.f

SOLIDS MANAGEMENT PLAN

Lazy River Improvement District

Domestic Technical Report 1.0; Item 6.F

Solids Management Plan

Permit Phase	**Existing/Interim I**
Average Flow (mgd)	0.100
Influent Concentration (mg/L)	250

Dimensions and Capacities of Aerobic Digester	2 Units
Digester Length (ft)	16.5
Digester Width (ft)	4.75
Digester (Liquid) Depth (ft)	12.0
Digester Volume (c.f.)	1,881
Digest Volume (gal)	14,072

Note 1: Assumes 0.35 pounds of dry sludge produced per pound of $CBOD_5$ removed, at average temperature.

Note 2: Assumes 2.0% solids.

Note 3: Aeration Basin MLSS operating range of 2,500 mg/L to 3,500 mg/L.

Note 4: Sludge solids will be stabilized in the digesters and transferred to the sludge drying beds. Supernatant will be decanted from the digesters and returned to the WWTP headworks. Waste activated sludge is pumped from the clarifiers and aeration basins to the digesters. Returned activated sludge is pumped from the digesters to the clarifiers or reareation basins. A registered sludge hauler will remove and haul sludge to a permitted sludge treatment facility.

Solids Generated	**100% Flow**	**75% Flow**	**50% Flow**	**25% Flow**
Pounds BOD_5/day Removed	209	156	104	52
Pounds of Dry Sludge Produced per day (see Note 1)	73	55	36	18
Pounds of Wet Sludge Produced per day (see Note 2)	3649	2737	1824	912
Volume of Wet Sludge per day (gal)	438	328	219	109

Removal Schedule (Days)	**100% Flow**	**75% Flow**	**50% Flow**	**25% Flow**
Days between sludge removal	83	110	165	329

Lazy River Improvement District

Domestic Technical Report 1.0; Item 6.F

Solids Management Plan

Permit Phase	**Proposed/Final**
Average Flow (mgd)	0.070
Influent Concentration (mg/L)	250

Dimensions and Capacities of Aerobic Digester	2 Units
Digester Length (ft)	24
Digester Width (ft)	8.0
Digester (Liquid) Depth (ft)	12.5
Digester Volume (c.f.)	4,800
Digest Volume (gal)	35,909

Note 1: Assumes 0.35 pounds of dry sludge produced per pound of $CBOD_5$ removed, at average temperature.

Note 2: Assumes 2.0% solids.

Note 3: Aeration Basin MLSS operating range of 2,500 mg/L to 3,500 mg/L.

Note 4: Sludge solids will be stabilized in the digesters and transferred to the sludge drying beds. Supernatant will be decanted from the digesters and returned to the WWTP headworks. Waste activated sludge is pumped from the clarifiers and aeration basins to the digesters. Returned activated sludge is pumped from the digesters to the clarifiers or reareation basins. A registered sludge hauler will remove and haul sludge to a permitted sludge treatment facility.

Solids Generated	**100% Flow**	**75% Flow**	**50% Flow**	**25% Flow**
Pounds BOD_5/day Removed	146	109	73	36
Pounds of Dry Sludge Produced per day (see Note 1)	51	38	26	13
Pounds of Wet Sludge Produced per day (see Note 2)	2554	1916	1277	639
Volume of Wet Sludge per day (gal)	306	230	153	77

Removal Schedule (Days)	**100% Flow**	**75% Flow**	**50% Flow**	**25% Flow**
Days between sludge removal	83	110	165	329

ATTACHMENT G
Technical Report 1.0

Item 7

LABORATORY TESTING RESULTS

EASTEX
ENVIRONMENTAL LABS INC.

P.O. Box 1089 Coldspring Tx 77331
Website: eastexlabs.com
Email: eastexlab@eastex.net
Tel: 936 653 3249

NELAP ACCREDITED TNI LABORATORY

Lazy River
Water District Management
P.O. Box 579
Spring, TX 77383

LABORATORY ANALYTICAL REPORT

Project: Lazy River Permit Renewal

Sample Site:	Efluent Short PR	Sample Number:		Collector:	KM
Sample Type:	Grab	**4411315-01**		Sampled:	10/17/2024 10:00
Sample Matrix:	Water			Received:	10/17/2024 11:40
Client Matrix:	Water				

Analyte	Result	Reporting Limit	Units	Nelac Status	Batch	Analyzed	Analyst	Method	Notes
DO	7.1		mg/L	N	B4J2599	10/17/2024 10:00	TAS	SM 4500 O G	
pH	7.2		std unit	N	B4J2599	10/17/2024 10:00	TAS	SM 4500 H + B	
Alkalinity	200	20.0	mg CaCO3/L	A	B4J2649	10/21/2024 11:00	JAA	SM 2320 B	
Ammonia as N	3.4	0.1	mg/L	A	B4J2815	10/23/2024 13:22	TMH	SM 4500 NH3 G	12
CBOD 5	<2.0	2.0	mg/L	A	B4J2677	10/18/2024 08:07	MJP	SM 5210 B	1, 13
Chloride	66.8	5.0	mg/L	A	B4J2608	10/17/2024 19:03	OCR	EPA 300.0	
Conductivity	790	10.0	µmhos/cm @25C	A	B4J2861	10/21/2024 06:48	ARB	SM 2510 B	
Nitrate as N	16.7	0.05	mg/L	A	B4J2608	10/17/2024 19:03	OCR	EPA 300.0	
Sulfate	27.5	4.0	mg/L	A	B4J2608	10/17/2024 19:03	OCR	EPA 300.0	
TDS	390	10.0	mg/L	A	B4J2846	10/18/2024 18:00	ARB	SM 2540 C	
TKN	4.2	1.0	mg/L	A	B4J3898	11/01/2024 09:10	CNS	EPA 351.2	
Total Phosphorus	2.35	0.0600	mg/L	A	B4J3414	10/24/2024 14:29	TAK	EPA 200.7	
TSS	9.2	1.0	mg/L	A	B4J2662	10/18/2024 13:47	SEJ	SM 2540 D	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Alkalinity titrated to pH 4.5 endpoint.

*NELAC Status: A=Accredited, N=Accreditation not offered, O=Not Accredited, P=Approved

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NELAP ACCREDITED TNI LABORATORY

Lazy River
Water District Management
P.O. Box 579
Spring, TX 77383

EPA 300.0 - Quality Control

Eastex Environmental Laboratory - Coldspring

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B4J2608 - No Prep										
Blank (B4J2608-BLK1)				Prepared & Analyzed: 10/17/24						
Chloride	ND	5.0	mg/L							
Nitrate as N	ND	0.05	mg/L							
Sulfate	ND	4.0	mg/L							
LCS (B4J2608-BS1)				Prepared & Analyzed: 10/17/24						
Chloride	25.9		mg/L	25.0		104	90-110			
Nitrate as N	1.6321		mg/L	1.50		109	90-110			
Sulfate	20.0		mg/L	20.0		99.9	90-110			
Matrix Spike (B4J2608-MS1)	**Source: 4411315-01**			Prepared & Analyzed: 10/17/24						
Chloride	185	5.0	mg/L	125	66.8	94.5	80-120			
Nitrate as N	24.2516	0.05	mg/L	7.50	16.7321	100	80-120			
Sulfate	124	4.0	mg/L	100	27.5	96.3	80-120			
Matrix Spike Dup (B4J2608-MSD1)	**Source: 4411315-01**			Prepared & Analyzed: 10/17/24						
Chloride	182	5.0	mg/L	125	66.8	92.4	80-120	1.46	20	
Nitrate as N	23.878	0.05	mg/L	7.50	16.7321	95.3	80-120	1.55	20	
Sulfate	122	4.0	mg/L	100	27.5	94.6	80-120	1.40	20	
Batch B4J2649 - No Prep										
Blank (B4J2649-BLK1)				Prepared & Analyzed: 10/21/24						
Alkalinity	ND	20.0	mg CaCO3/L							
LCS (B4J2649-BS1)				Prepared & Analyzed: 10/21/24						
Alkalinity	60.0		mg CaCO3/L	50.0		120	80-120			
Duplicate (B4J2649-DUP1)	**Source: 4411315-01**			Prepared & Analyzed: 10/21/24						
Alkalinity	200	20.0	mg CaCO3/L		200			0.00	20	

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Alkalinity titrated to pH 4.5 endpoint.

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ENVIRONMENTAL LABS INC.

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NELAP ACCREDITED TNI LABORATORY

Lazy River
Water District Management
P.O. Box 579
Spring, TX 77383

SM 2540 D - Quality Control

Eastex Environmental Laboratory - Coldspring

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B4J2662 - No Prep										
Blank (B4J2662-BLK1)				Prepared & Analyzed: 10/18/24						
TSS	ND	1.0	mg/L							
Duplicate (B4J2662-DUP1)	**Source: 4421581-01**			Prepared & Analyzed: 10/18/24						
TSS	188	1.0	mg/L		182			3.24	10	
Batch B4J2677 - No Prep										
Blank (B4J2677-BLK1)				Prepared & Analyzed: 10/18/24						
CBOD 5	1.32	2.0	mg/L							1
LCS (B4J2677-BS1)				Prepared & Analyzed: 10/18/24						
CBOD 5	148		mg/L	198		74.8	84.59-115.402			1, 13
Duplicate (B4J2677-DUP1)	**Source: 4411315-01**			Prepared & Analyzed: 10/18/24						
CBOD 5	0.810	2.0	mg/L		0.690			16.0	30	1, 13
Batch B4J2815 - No Prep										
Blank (B4J2815-BLK1)				Prepared & Analyzed: 10/23/24						
Ammonia as N	ND	0.1	mg/L							12
LCS (B4J2815-BS1)				Prepared & Analyzed: 10/23/24						
Ammonia as N	1.94		mg/L	2.00		97.2	90-110			12
Matrix Spike (B4J2815-MS1)	**Source: 4421166-01**			Prepared & Analyzed: 10/23/24						
Ammonia as N	2.4	0.1	mg/L	2.50	0.3	83.9	80-120			12
Matrix Spike Dup (B4J2815-MSD1)	**Source: 4421166-01**			Prepared & Analyzed: 10/23/24						
Ammonia as N	2.5	0.1	mg/L	2.50	0.3	85.7	80-120	1.79	20	12

Alkalinity titrated to pH 4.5 endpoint.

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Lazy River
Water District Management
P.O. Box 579
Spring, TX 77383

SM 2540 C - Quality Control

Eastex Environmental Laboratory - Coldspring

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B4J2846 - No Prep										
Blank (B4J2846-BLK1)				Prepared & Analyzed: 10/18/24						
TDS	ND	10.0	mg/L							
LCS (B4J2846-BS1)				Prepared & Analyzed: 10/18/24						
TDS	280		mg/L	300		93.3	80-120			
Duplicate (B4J2846-DUP1)	**Source: 4411315-01**			Prepared & Analyzed: 10/18/24						
TDS	380	10.0	mg/L		390			2.60	10	
Batch B4J2861 - No Prep										
Blank (B4J2861-BLK1)				Prepared & Analyzed: 10/21/24						
Conductivity	ND	10.0	µmhos/cm @25C							
LCS (B4J2861-BS1)				Prepared & Analyzed: 10/21/24						
Conductivity	1000		µmhos/cm @25C	1000		100	80-120			
Duplicate (B4J2861-DUP1)	**Source: 4411315-01**			Prepared & Analyzed: 10/21/24						
Conductivity	790	10.0	µmhos/cm @25C		790			0.00	20	
Batch B4J3414 - EPA 200.7										
Blank (B4J3414-BLK1)				Prepared: 10/23/24 Analyzed: 10/24/24						
Total Phosphorus	ND	0.0600	mg/L							
LCS (B4J3414-BS1)				Prepared: 10/23/24 Analyzed: 10/24/24						
Total Phosphorus	2.34	0.0600	mg/L	2.52		93.0	85-115			
Matrix Spike (B4J3414-MS1)	**Source: 4411315-01**			Prepared: 10/23/24 Analyzed: 10/24/24						
Total Phosphorus	4.84	0.0600	mg/L	2.52	2.35	98.6	70-130			
Matrix Spike Dup (B4J3414-MSD1)	**Source: 4411315-01**			Prepared: 10/23/24 Analyzed: 10/24/24						
Total Phosphorus	4.80	0.0600	mg/L	2.52	2.35	97.1	70-130	0.816	20	

Alkalinity titrated to pH 4.5 endpoint.

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Lazy River
Water District Management
P.O. Box 579
Spring, TX 77383

EPA 351.2 - Quality Control

Eastex Environmental Laboratory - Coldspring

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B4J3898 - No Prep										
Blank (B4J3898-BLK1)				Prepared: 10/30/24 Analyzed: 11/01/24						
TKN	ND	1.0	mg/L							
LCS (B4J3898-BS1)				Prepared: 10/30/24 Analyzed: 11/01/24						
TKN	10.6		mg/L	10.0		106	90-110			
Matrix Spike (B4J3898-MS1)	**Source: 4421354-01**			Prepared: 10/30/24 Analyzed: 11/01/24						
TKN	10.7	1.0	mg/L	10.0	1.24	94.7	80-120			
Matrix Spike Dup (B4J3898-MSD1)	**Source: 4421354-01**			Prepared: 10/30/24 Analyzed: 11/01/24						
TKN	10.3	1.0	mg/L	10.0	1.24	91.0	80-120	3.56	20	

Mark Bourgeois, Special Projects Manager

Qualifiers

13	LCS associated with sample batch outside of acceptance limits.
12	CCV associated with sample batch did not meet acceptance criteria.
1	Dilution water blank > 0.20 mg/L DO uptake.

Alkalinity titrated to pH 4.5 endpoint.

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White Copy-Follows Samples
Yellow Copy-Laboratory
Pink Copy-Client Copy

REPORT TO:

Company: WDM
Address:
Attn:
Phone#:
Email:
P.O. #:
Sampler's Name (print): Kelly Manning
Sampler's Signature: Kelly Manning
Project Name: LAZY RIVER

INVOICE TO:

Company:
Address: SAME
Attn:
Phone#:

Remarks:

INSTRUCTIONS:

C or G: C= Composite G= Grab
Matrix: DW=Drinking Water WW=Wastewater SO=Soil/Sludge OT= Other
Container Size: 1=Gallon 2=1/2 Gallon 3=Quart/Liter 4=500mL 5=250mL 6=125mL (4oz) 7=60mL (2 oz) 8= 40mL Vial 9=Other
Type: P= Plastic G= Glass T= Teflon S= Sterile
Preservatives: C=Chilled S=Sulfuric Acid N=Nitric Acid B=Base/Caustic Z= Zn Acetate ST=Sodium Thiosulfate H=HCL O= Other

Work Order ID	Sample ID	Date	Time	Matrix	Field Data: C or G	DO	pH	Cl2	Flow	Temp	Containers: #	Size	Type	Pres
4411315	SHORT PR	10/17/24	1000		G			0.040						
	TKN as N	"	"		"				"					✓
	TP	"	"		"				"					✓
	CBOD 5	"	"		"				"					
	TSS	"	"		"				"					
	NH3	"	"		"				"					✓
	ALK	"	"		"				"					

ANALYSIS REQUESTED: SULFATE, CHLORIDES, ALK, TKN, TP, CBOD 5, TSS, NH3, ALK

Relinquished By: Kelly Manning — Received By: [signature] — Date 10/17/24 — Time 1030 — Received Iced: YES / NO
Relinquished By: — Received By: — Date — Time — Received Iced: YES / NO
Relinquished By: [signature] — Received By and/or Checked In By: [signature] — Date 10/17/2024 — Time 1140 — Received Iced: YES / NO

LAB USE ONLY

Sample Condition Acceptable: YES / NO — Date — Time
Alternate Check In:
Temp °C: 1.8 — *Therm ID: 15 — Logged In By: CT — Date 10.17.24 — Time 1359

*Thermometer has 0.0 factor and recorded temperature is actual temperature

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Email: eastexlab@eastex.net
Tel: 936 653 3249

NELAP ACCREDITED TNI LABORATORY

Lazy River
Water District Management
P.O. Box 579
Spring, TX 77383

LABORATORY ANALYTICAL REPORT

Project: Lazy River Permit Renewal

Sample Site:	Efluent Short PR	Sample Number:		Collector:	MDG
Sample Type:	Grab	**4441727-01**		Sampled:	10/31/2024 12:15
Sample Matrix:	Water			Received:	10/31/2024 13:17
Client Matrix:	Water				

Analyte	Result	Reporting Limit	Units	Nelac Status	Batch	Analyzed	Analyst	Method	Notes
Chlorine	4	0.1	mg/L	N	B4K1051	10/31/2024 12:15	MDG	SM 4500 Cl F	
E coli IDEXX	<1	1	mpn/100ml	A	B4K0145	10/31/2024 14:32	MEB	Colilert 18	

Colilert 18 - Quality Control

Eastex Environmental Laboratory - Coldspring

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B4K0145 - No Prep Micro										
Blank (B4K0145-BLK1)				Prepared & Analyzed: 10/31/24						
E coli IDEXX	ND	1	mpn/100ml							
Duplicate (B4K0145-DUP1)		**Source: 4441160-01**		Prepared & Analyzed: 10/31/24						
E coli IDEXX	ND	2	mpn/100ml		ND				200	

Mark Bourgeois, Special Projects Manager

Qualifiers

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Yellow Copy-Laboratory
Pink Copy-Client Copy

REPORT TO:

Company: WDNR
Address: On file
Attn:
Phone#:
Email:
P.O. #:
Sampler's Name (print): Matthew Darcy
Sampler's Signature: Matthew Darcy
Project Name: Lazy River P.R.

INVOICE TO:

Company:
Address: SAME
Attn:
Phone#:

Remarks:

INSTRUCTIONS:

C or G: C= Composite G= Grab
Matrix: DW=Drinking Water WW=Wastewater SO=Soil/Sludge OT= Other
Container Size: 1=Gallon 2=1/2 Gallon 3=Quart/Liter 4=500mL 5=250mL 6=125mL (4oz) 7=60mL (2 oz) 8= 40mL Vial 9=Other
Type: P= Plastic G= Glass T= Teflon S= Sterile
Preservatives: C=Chilled S=Sulfuric Acid N=Nitric Acid B=Base/Caustic Z= Zn Acetate ST=Sodium Thiosulfate H=HCL O= Other

ANALYSIS REQUESTED: Cl2

Work Order ID	Sample ID	Date	Time	Matrix	Field Data: C or G	DO	pH	Cl2	Flow	Temp	Containers: #	Size	Type	Pres
~~444315~~	eff	10/31	1215	WW	G			4.0			1	6	P	C
444727	permit Renewal													

Relinquished By:
Received By:
Date
Time
Received Iced: YES / NO

Relinquished By:
Received By:
Date
Time
Received Iced: YES / NO

Relinquished By: Matthew Darcy
Received By and/or Checked in By: [illegible]
Date 10-31-24
Time 1317
Received Iced: YES / NO

LAB USE ONLY
Sample Condition Acceptable: YES / NO
Alternate Check In:
Date
Time
Temp °C: 9.2
*Therm ID: 15
Logged In By: CT
Date 10-31-24
Time 1353

*Thermometer has 0.0 factor and recorded temperature is actual temperature

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ENVIRONMENTAL LABS INC.

P.O. Box 1089 Coldspring Tx 77331
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Email: eastexlab@eastex.net
Tel: 936 653 3249

NELAP ACCREDITED TNI LABORATORY

Lazy River
Water District Management
P.O. Box 579
Spring, TX 77383

LABORATORY ANALYTICAL REPORT

Project: Lazy River Permit Renewal

Sample Site:	Effluent Short PR	Sample Number:		Collector:	CES
Sample Type:	Grab	**4452551-01**		Sampled:	11/07/2024 8:30
Sample Matrix:	Water			Received:	11/07/2024 14:20
Client Matrix:	Water				

Analyte	Result	Reporting Limit	Units	Nelac Status	Batch	Analyzed	Analyst	Method	Notes
DO	6.8		mg/L	N	B4K1050	11/07/2024 08:30	CES	SM 4500 O G	

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

Mark Bourgeois, Special Projects Manager

Qualifiers

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www.eastexlabs.com

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Yellow Copy-Laboratory
Pink Copy-Client Copy

REPORT TO:

Company: WDMC
Address:
Attn:
Phone#:
Email:
P.O. #:
Sampler's Name (print): Christopher Sydner
Sampler's Signature:
Project Name: Lazy River PR

INVOICE TO:

Company:
Address: SAME
Attn:
Phone#:

Remarks:

INSTRUCTIONS:

C or G: C= Composite G= Grab
Matrix: DW=Drinking Water WW=Wastewater SO=Soil/Sludge OT= Other
Container Size: 1=Gallon 2=1/2 Gallon 3=Quart/Liter 4=500mL 5=250mL 6=125mL (4oz) 7=60mL (2 oz) 8= 40mL Vial 9=Other
Type: P= Plastic G= Glass T= Teflon S= Sterile
Preservatives: C=Chilled S=Sulfuric Acid N=Nitric Acid B=Base/Caustic Z= Zn Acetate ST=Sodium Thiosulfate H=HCL O= Other

Work Order ID	Sample ID	Date	Time	Matrix	Field Data: C or G	DO	pH	Cl2	Flow	Temp	Containers: #	Size	Type	Pres	ANALYSIS REQUESTED: DO for PR
445 2551	Eff PR	11-7	830	WW	G	6.8									X

Relinquished By: | Received By: | Date | Time | Received Iced: YES / NO
Relinquished By: | Received By: | Date | Time | Received Iced: YES / NO
Relinquished By: Sydner | Received By and/or Checked in By: | Date 11-7-24 | Time 1420 | Received Iced: (YES) / NO

LAB USE ONLY Sample Condition Acceptable: (YES) / NO
Alternate Check In: Date Time

Temp °C	*Therm ID	Logged In By:	Date	Time
1.2	15		11-7-24	1746

*Thermometer has 0.0 factor and recorded temperature is actual temperature

ATTACHMENT H
Technical Report 1.0
Item 9.d
PERMITTED SLUDGE PROCESSING FACILITY LETTER

Plant: Lazy River 11/18/2024
TCEQ Permit:

To Whom It May Concern:

Mount Houston Road Municipal Utility District, owner of a Waste Water Treatment Plant (Permit #WQ0011154001) located approximately 1.3 miles northwest of the intersection of State Highway 249 and Veterans Memorial Drive, Houston, Texas, and Magna Flow Environmental, owner of the Processing Permit (Permit #WQ0005023000)

Magna Flow Environmental and Mount Houston Road Municipal Utility District have entered into a contractual agreement, where Magna Flow Environmental (T.C.E.Q. Transporter Permit # 21484) will dewater sewage sludge from other waste treatment plants at the Mount Houston Road Municipal Utility District treatment plant. Dewatered Sludge will then be disposed of at a T.C.E.Q. permitted disposal site.
Mount Houston Road Municipal Utility District has the capacity to accept sludge from the above mentioned plant.

Magna Flow Environmental agrees to accept and be responsible for the sludge dewatered at the plant. We will maintain responsibility for the life of the permit.

Mark Ivy
President
M. Marlon Ivy & Associates
Operator for MTH MUD

Jerry McCurtain
Vice President
Magna Flow Environmental

ATTACHMENT I
Technical Report 1.1
Item 4

DESIGN CALCULATIONS

PERMIT PHASE – 0.070 MGD

I. SUMMARY – Re-rating/Amendment

Per 30 TAC 217.34 (1) (D) – *"For a wastewater treatment facility that will not be affected by future growth, the design flow for a re-rating or alteration must be calculated using the wastewater treatment facility's average daily flow plus one standard deviation."*

Based on the available Operator's Reports for the last 5-years, the average daily flow in the plant has been: 0.029 MGD, with a standard deviation of 0.0016 MGD. The mean of the peak daily flows for each month in the last five years is 0.048 MGD, with a standard deviation of 0.020 MGD. The mean of the peak flows plus one standard deviation equals: 0.068 MGD. Therefore, it is recommended that the discharge permit of the plant be amended/re-rated to 0.070 MGD.

The proposed modification of the WWTP is to convert the old plants into clarifiers; and construct new aeration, digester, and chlorine contact chambers to serve the District. The design flow limits will be 0.070 MGD for maximum average daily flow, and 200 gpm for the 2-hour peak flow. The rest of the design limits will be those stated on the Plant's current permit. All planned phases of this facility will be suspended growth activated sludge process operating in the single step nitrification mode. Proposed treatment units include a channel mounted bar screen, two (2) aeration basins, two (2) clarifiers, two (2) aerobic digester basins, and one (1) chlorine contact basin.

II. WASTEWATER TREATMENT PLANT DESIGN

A. DESIGN CRITERIA

i. <u>Proposed Effluent Limits:</u>

From the current TPDES Permit,

a.	$CBOD_5$	=	10	mg/l (daily average)
b.	TSS	=	15	mg/l
c.	NH_3-N	=	3	mg/l
d.	*E. Coli*	=	63	colonies per 100 ml
e.	Cl	=	1.0 – 4.0	mg/l
f.	pH	=	6.0 – 9.0	standard units
g.	DO	≥	6	mg/l

ii. Process Criteria: The process criteria are taken from 30 TAC §217, Design Criteria for Domestic Wastewater Systems.

a. Maximum Aeration Basin Organic Loading (lb BOD_5/day/1,000 ft^3)	=	35
b. Minimum Oxygen Required for BOD_5 Removal (lb O_2/lb BOD_5)	=	2.2
c. Maximum Clarifier Surface Loading at Peak Flow (gal/day/ ft^2)	=	1,200
d. Maximum Clarifier Surface Loading at Design Flow (gal/day/ ft^2)	=	1,000
e. Minimum Clarifier Detention Time (hours)	=	1.8
f. Maximum Clarifier Weir Loading at Peak Flow (gal/day/ft)	=	20,000
g. Minimum Chlorine Contact Detention Time at Peak Flow (minutes)	=	20
h. Mixing Zones		
Length-to-width ration:	=	40:1
or,		
G (sec^{-1}) (velocity gradient)	≥	500
i. Mean Cell Residence Time in Aerobic Digester (days)	=	28*
j. Minimum Air Required for Digester (scfm/1,000 ft^3)	=	20
k. Return Sludge Pumping Range (gpd/ ft^2)	=	200 – 400

*28-day Solids Retention Time (SRT) instead of 48-day SRT based on the EPA publication "*Control of Pathogens and Vector Attraction in Sewage Sludge*".

B. TREATMENT FACILITIES

i. Permitted Flow.

a. Average (Design) = 70,000 gpd $=$ 48.6 gpm

$\approx$ 50 gpm

b. Peak (2-hour) = 200 gpm $=$ 288,800 gpd

ii. Organic Loadings.

a. BOD_5 = (0.070 MGD)(8.34 lb/gal)(250 mg/L) = $146\ \frac{\text{lb} - BOD_5}{\text{day}}$

b. TSS = (0.070 MGD)(8.34 lb/gal)(250 mg/L) = $146\ \frac{\text{lb} - \text{TSS}}{\text{day}}$

c. $NH_3 - N$ = (0.070 MGD)(8.34 lb/gal)(40 mg/L) = $24\ \frac{\text{lb} - NH_3 - N}{\text{day}}$

iii. Process Equipment.

a. Screening. The proposed influent channel and manual bar screen have a minimum hydraulic capacity of 200 gpm for the 2-hr peak flow.

b. Aeration Basin. The proposed plant modifications include two (2) aeration basins.

Maximum Aeration Basin Organic Loading (Per 30 TAC 217)

(lb BOD_5/day/1,000 ft^3) = 35

i. Total Required Volume (Per 30 TAC 217)

(0.070 MGD)(8.34$\frac{\text{lb}}{\text{L}}$)(250 mg/L)/(35 lb BOD_5/1000ft^3) = 4,170 ft^3

ii. Total Existing Volume = 3,010 ft^3

iii. Actual Existing Organic Loading

(146 lb BOD_5/day)/(3,010 ft^3/1,000ft^3) = 48.5 lb-BOD_5/ day/1,000 ft^3

iv. Proposed Volume

(L: 20 ft)(W: 10 ft)(D: 12 ft)(2-units) = 4,800 ft^3

v. Proposed Organic Loading

(146 lb BOD_5/day)/(4,800 ft^3/1,000ft^3) = 30.4 lb-BOD_5/ day/1,000 ft^3

c. Secondary Clarifier. The plant includes two (2) existing 26-foot diameter treatment units. Each of these treatment units contains a 16-foot diameter clarifier. The two treatment units will be gutted and converted into clarifiers as part of the project.

i. Clarifier Surface Area

Required Surface Area @ Peak Flow

$(288{,}800 \text{ gpd})/(1{,}200 \text{ gpd/ft}^2)$ = 241 ft^2

Existing Surface Area

$(\pi/4)(16 \text{ ft})^2$(2-units) = 402 ft^2

Proposed Surface Area

$(\pi/4)(26 \text{ ft})^2$(2-units) = 1062 ft^2

ii. Maximum Clarifier Surface Loading (30 TAC 217)

@ Design Flow (gal/day/ ft^2) = 1,000 gpd/ft^2

@ Peak Flow (gal/day/ft^2) = 1,200 gpd/ft^2

Existing Surface Loading

1. @ Design Flow

$(70{,}000 \text{ gpd})/(402 \text{ ft}^2)$ = 174 gpd/ft^2

2. @ Peak Flow

$(288{,}800 \text{ gpd})/(402 \text{ ft}^2)$ = 719 gpd/ft^2

Proposed Surface Loading

3. @ Design Flow

$(70{,}000 \text{ gpd})/(1062 \text{ ft}^2)$ = 66 gpd/ft^2

4. @ Peak Flow

$(288{,}800 \text{ gpd})/(1062 \text{ ft}^2)$ = 272 gpd/ft^2

iii. Clarifier Weir Length

Existing Weir Length

$(\pi)(16 \text{ ft} - 2 \text{ ft})(2 \text{ units})$ = 88 ft

Proposed Weir Length

$(\pi)(26 \text{ ft} - 2 \text{ ft})(2 \text{ units})$ = 150 ft

iv. Maximum Clarifier Weir Loading @ Peak Flow

(Per 30 TAC 217)	=	20,000 gpd/ft
Existing Weir Loading @ Peak Flow		
(288,800 gpd)/(88 ft)	=	3,280 gpd/ft
Proposed Weir Loading @ Peak Flow		
(288,800 gpd)/(150 ft)	=	1,925 gpd/ft

v. Minimum Clarifier Detention Time @ Peak Flow

(Per 30 TAC 217)	=	20 minutes
Existing Hydraulic Detention Time @ Peak Flow		
$(402\ ft^2)(11.6\ ft)/(288{,}800\ gpd/24/7.48\frac{gal}{ft^3})$	=	2.89 hours
	=	174 minutes
Proposed Hydraulic Detention Time @ Peak Flow		
$(1062\ ft^2)(11.6\ ft)/(288{,}800\ gpd/24/7.48)$	=	7.66 hours
	=	459 minutes

d. Aerobic Digester.

The plant's two treatment units each have an aerobic digester with 970 cubic feet of volume. These will be removed, and new digesters are proposed to meet the District's demand.

Assumptions:

- One (1) pound of solids produced per pound of BOD_5 applied;
- solids are 70% volatile organics;
- 30% of the volatiles are destroyed during digestion;
- 15,000 mg/l MLSS concentration exists in the digester on average.

i. Digester Sizing

1. Solids Production

   (146 lb BOD_5/day)/(lb solids/ lb BOD_5) = 146 lb solids/day

2. Digested Solids Production

   (146 lb solids/day)(1 – (0.30)(0.70)) = 116 lb solids/day

3. Average Solids in Digester

   (146 lb solids/day + 116 lb solids/day)/2 = 131 lb solids/day

4. Total Solids in Digester for 28-day SRT[1]

   (131 lb solids/day)(28 days) = 3,668 lb solids

5. Required Volume[2]

$$\frac{(3{,}668\ \text{lb solids})(10^6 \frac{\text{mg,w}}{\text{L}_\text{W}})}{(8.34 \frac{\text{lb}_\text{W}}{\text{gal,w}})(7.48 \frac{\text{gal,w}}{\text{ft}^3})(15{,}000 \frac{\text{mg,w}}{\text{L,w}} \text{MLSS})} = 3{,}920\ \text{ft}^3$$

   Existing Total Volume

   (79.24 ft^2)(12.25 ft)(2-units) = 1,942 ft^3

   Proposed Volume of Basins

   (24 ft)(8 ft)(12.5 ft)(2-units) = 4,800 ft^3

[1] 28-day Solids Retention Time (SRT) utilized instead of 48-day SRT for use of a two-stage digester per EPA publication: *"Control of Pathogens and Vector Attraction in Sewage Sludge"*

[2] The subscript '*w*' represents wastewater here. The standard properties of water are assumed for wastewater.

e. Chlorine Contact Basin.

30 TAC 217.281 – (A) "Mixing zone within a chlorine contact basin must not be considered as part of the volume needed for disinfection." (B) "A Chlorine Contact Basin must provide a minimum contact time of 20 minutes at the peak flow."

	Required Detention Time at Peak Flow		
	(Per 30 TAC 217)	=	20 minutes
i.	Minimum Required Volume of Disinfection Chamber at Peak Flow		
	(200 gpm)(20 min)/(7.48 gal/ft^3)	=	535 ft^3
ii.	Existing Volume		
	(47.97 ft^2)(10.17 ft)(2-units)	=	976 ft^3
iii.	Actual Detention Time at Peak Flow		
	(976 ft^3)/((200 gpm)/(7.48 gal/ft^3))	=	36 minutes
iv.	Proposed Volume of Disinfection Chamber		
	(15 ft)(5 ft)(10 ft)	=	750 ft^3
v.	Proposed Detention Time at Peak Flow		
	(750 ft^3)/((200 gpm)/(7.48 gal/ft^3))	=	28 minutes
vi.	Mixing Requirements – Chamber Sizing		
	Required Velocity Gradient G (sec^{-1})	=	500

$$G_t = \sqrt{\frac{P}{\mu_{20}\forall}} = \sqrt{\frac{P/\forall}{\mu_{20}}} \quad \xrightarrow{yields} \quad P/\forall = \left(G_t{}^2\right) * \mu_{20}$$

where,

G_t , is the velocity gradient in the turbulent (mixing zone);
P , is the power required for the mixing;
$\forall$, is the volume required of the mixing zone; and,
μ_{20} , is the dynamic viscosity of water at 20°C (68°F)

Thus, for this system, the following power to volume ratio is required:

$$P/\forall = (500^2) * 0.001002 = 250.5$$

It can be found that for a **100 ft^3 mixing zone** approximately 0.95 HP is required. Thus, a **1.5 HP mixing pump** is recommended for this size.

The proposed dimensions of the mixing chamber are:

L: 2, W: 5 ft, D: 10 ft.

f. Air Requirements.

i. Aeration Basin (Coarse Bubble Aeration)[3]

a. BOD_5 Air Required

$$\frac{(146 \text{ lb } BOD_5/\text{day})(2.2 \text{ lb } O_2/\text{ lb } BOD_5)(1.56)}{(0.075)(0.65)(0.23 \text{ lb } O_2/\text{ lb Air})(0.075 \frac{\text{lb Air}}{\text{ft}^3})(1{,}440 \frac{\text{min}}{\text{day}})} = 413 \text{ scfm}$$

b. NH_3-N Air Required

$$\frac{(33 \text{ lb } NH_3N/\text{day})(4.3 \text{ lb}O_2/\text{lb } NH_3N)(1.56)}{(0.075)(0.65)(0.23 \text{ lb } O_2/\text{ lb Air})(0.075 \frac{\text{lb Air}}{\text{ft}^3})(1{,}440 \frac{\text{min}}{\text{day}})} = 133 \text{ scfm}$$

ii. Aerobic Digester

a. Existing

(1,942 ft^3)(20 scfm/1000 ft^3) = 38.8 scfm

b. Proposed

(4,800 ft^3)(20 scfm/1000 ft^3) = 96.0 scfm

iii. Chlorine Contact Basin

a. Existing

(976 ft^3)(20 scfm/1000 ft^3) = 19.5 scfm

b. Proposed

(750 ft^3)(20 scfm/1000 ft^3) = 15.0 scfm

iv. Air Lift Pumps = 400 scfm

v. Total Air Requirements (scfm) = 1057 scfm

g. Blower Capacities.

i. Required Blower Capacity for Proposed Improvements with Largest Unit out of Service

(2)(individual blower capacity) = 1057 scfm

ii. Proposed Blower Capacity

3-750 scfm blowers, including 1-backup per 30 TAC 217

(750 scfm)(2-units) = 1500 scfm

[3] 30 TAC 217.155(b)(2)(C & D). Cine Bubble Diffuser is assumed, with a CWTE of 0.75%/ft and diffuser submergence of 10 feet (9 feet minimum for 0.10 MGD plant).

h. Chlorination Equipment.

i.	Chlorine Dosage Rate	=	8 mg/L
ii.	Chlorine Feed Rate @ Design Flow		
	$(0.070\ \text{MGD})(8.34\ \frac{\text{lb}}{\text{gal}})(8\ \frac{\text{mg}}{\text{L}})$	=	4.67 lbs/day
iii.	Required Chlorine Feed Rate @ Peak Flow		
	$(0.2888\ \text{MGD})(8.34\ \frac{\text{lb}}{\text{gal}})(8\ \frac{\text{mg}}{\text{L}})$	=	19.27 lbs/day
iv.	Proposed Chlorine Dosage Capacity		
	(2 – 150-lb Cylinders)(30°F)(1 lb/°F/day)	=	40 lbs/day

2-150-lb cylinder(s) are required for treatment. An additional cylinder will be kept on site at all times to comply with 30 TAC §217 Requirements.

Design Features to Prevent Bypasses or Overflows

a) Excessive Inflow or Infiltration (I&I)

- **Design Consideration:** The system will incorporate an effective inflow and infiltration reduction program, including proper sealing of sewer lines and manholes. The influent on-site lift station is designed with the capacity to pump peak flow with the largest pump out of service. The facility hydraulic features will be designed to allow 2-hour peak flow without exceeding minimum freeboard requirements. The design will account for a stormwater surcharge factor to accommodate potential increases in flow during heavy rain events
- **Preventive Measures:** Use of sewer line grouting and manhole sealing techniques to minimize groundwater and surface water infiltration.

b) Power Failure

- **Design Consideration:** To ensure continuous operation during power outages, the facility will be equipped with an auxiliary power source. Emergency power will be provided by a 200-kW Caterpillar portable generator (CAT XQ200), which is capable of handling full plant load. The quick connect system allows the operator to quickly switch between utility power and backup generator. Fuel Storage will be sufficient for at least 48 hours of operation under peak demand conditions.
- **Power System Reliability Calculation:** The power system will be sized based on the maximum power demand of the plant, considering peak load, auxiliary units, and critical equipment.

  Plant Peak Load = Maximum Plant Load × Safety Factor (typically 1.5)

  - Aeration Basin typically consumes between 0.3 to 0.5 kWh per 1,000 gallons of wastewater treated. For a plant with a capacity of 70,000 GPD, energy consumption could be calculated as:

    70,000 gallons/day × 0.4 kWh/1,000 gallons x (2) units = 56 kWh/day

  - Digester typically consumes 0.2 to 0.4 kWh per 1,000 gallons of wastewater treated. For a plant with a capacity of 70,000 GPD, energy consumption could be calculated as:

    70,000 gallons/day × 0.3 kWh/1,000 gallons x (2) units = 42 kWh/day

  - Clarifier typically consumes 0.1 to 0.2 kWh per 1,000 gallons of wastewater treated. For a plant with a capacity of 70,000 GPD, energy consumption could be calculated as:

    70,000 gallons/day × 0.15 kWh/1,000 gallons x (2) units = 21 kWh/day

  - Chlorine Contact Basin typically consumes 0.1 kWh per 1,000 gallons of wastewater treated. For a plant with a capacity of 70,000 GPD, energy consumption could be calculated as:

    70,000 gallons/day × 0.1 kWh/1,000 gallons x (2) units = 14 kWh/day

Therefore, Daily Power Consumption = 56 + 42 + 21 +14 = **133 kWh/day**

➔ Plant Peak Load = 133 kWh/day x 1.5 = 199.5 kWh/day

Conclusion: a 200-kW Caterpillar portable generator will have sufficient capacity to power the wastewater treatment plant in the event of power failure.

c) Equipment Malfunction

- **Design Consideration:** The design will include **redundant units** to minimize the impact of equipment failure.
- **Preventive Measures:**
    - **Spare parts and regular maintenance schedules** will be implemented.
    - **Alarm systems** will be integrated into the control panels to notify operators of malfunctions.

d) Facility Unit Maintenance and Repair

- **Design Consideration:** The plant will be designed with the flexibility to allow for maintenance and repairs without affecting overall treatment. On-site lift station submersible pumps sized to meet peak flow capacity with the largest pump out of service. High wet well level will result in an alarm condition. Isolated sections of the plant will be provided so that maintenance can be carried out without shutting down the entire system. Each aeration basin, digester, clarifier will be capable of continuous operation. Flexible piping and valves will be incorporated to allow for the isolation and repair of specific units while keeping the rest of the system operational. Maintenance tasks and equipment will be scheduled to minimize downtime.

e) Other Potential Causes (e.g., Operator Error or Natural Events)

- **Overflow Holding Tanks**: In cases where treatment processes cannot keep up with inflows, overflow holding tanks will temporarily store wastewater until normal treatment resumes.
- **Alarms and Remote Monitoring:** The system will include alarms triggered by flow surges, high water levels, or equipment malfunctions, with remote monitoring capability to alert operators.
- **Operational Training**: Operators will be trained in emergency response procedures, including bypass procedures in case of unforeseen events.

ATTACHMENT J

SUPPLEMENTTAL 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: Lazy River Improvement District

   Permit No. WQ00 11820001 EPA ID No. TX 0069256

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

   830 Glen Hollow Drive, Conroe, Montgomery County, Texas 77385.

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: Timothy Hardin

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

Title: Vice President

Mailing Address: 1080 W Sam Houston Pkwy N., Suite 200

City, State, Zip Code: Houston, TX 77043

Phone No.: (713) 461-3530 Ext.: Click here to enter text Fax No.: Click here to enter text

E-mail Address: tim.h@langfordeng.com

2. List the county in which the facility is located: Click here to enter text
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.

Discharge into a ditch named Trade Center Drive/College Park Ditch, thence to the west fork of the San Jacinto River in Segment No. 1004 of the San Jacinto River Basin.

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

Provide original photographs of any structures 50 years or older on the property.

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

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

☐ Disturbance of vegetation or wetlands

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

N/A

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

N/A

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

ATTACHMENT K
Technical Report 1.0
Item 6.b
PROPOSED BUFFER ZONE EASEMENT EXHIBIT

LOT 50

LOT 54

GLEN HOLLOW DRIVE

GLEN HOLLOW COURT

LOT 55

RIVERBROOK COMMUNITY
IMPROVEMENT ASSOCIATION
CALLED 75.765 ACRES

GLEN FOREST DRIVE

FOREST HILLS
GREEN (REPLAT)
M.C.C.F. #254096

LOT 21

LOT 20

LOT 19

LOT 17 &
LOT 18

25'

30'

45°

30'

AREA 4:
PROP TEMPORARY
ACCESS EASEMENT
(APPROX. 0.028 AC)

HOUSTON # 1 HOME & LAND BUYERS LLC
CALLED 346.960 ACRES
M.C.C.F. #2024094983

45°

30'

Exist. 12' Wide Crushed Limestone Access Road

Exist 20' Roadway Esmt.
M.C.C.F. #7736626
Vol. 1021 Pg. 64

AREA 1:
PROP 30' WIDE
TEMPORARY
ACCESS EASEMENT
(APPROX. 0.523 AC)

LOT 16

TRACT ONE
RIVERBROOK COMMUNITY
IMPROVEMENT ASSOCIATION
CALLED 5.394 ACRES

Exist 20' Roadway Esmt.
M.C.C.F. #7736626
Vol. 1021 Pg. 64

30'

Property
Line

AREA 3:
PROP 150' BUFFER ZONE
(APPROX. 0.103 AC)

LOT 12

LOT 11

LOT 13

AREA 2:
PROP 150' BUFFER ZONE
(APPROX. 0.922 AC)

150'R

150'

LOT 9 &
LOT 10

BROOK HOLLOW
DRIVE

60'

Property
Line

LAZY RIVER ID WWTP
CALLED 1.033 ACRES
M.C.C.F. #7736624

Property
Line

Property
Line

Exist. Wastewater
Treatment Plant Facility

LOT 6

LOT 7

LOT 8

WOODLANDS LAND DEVELOPMENT CO.
CALLED 84.478 ACRES

TRADE CENTER DRIVE/COLLEGE PARK DITCH

0 1 2 3 4 5 10
GRAPHIC SCALE X 10'

LAZY RIVER
IMPROVEMENT DISTRICT

TWDB WASTEWATER TREATMENT
PLANT IMPROVEMENTS

PROPOSED EASEMENTS

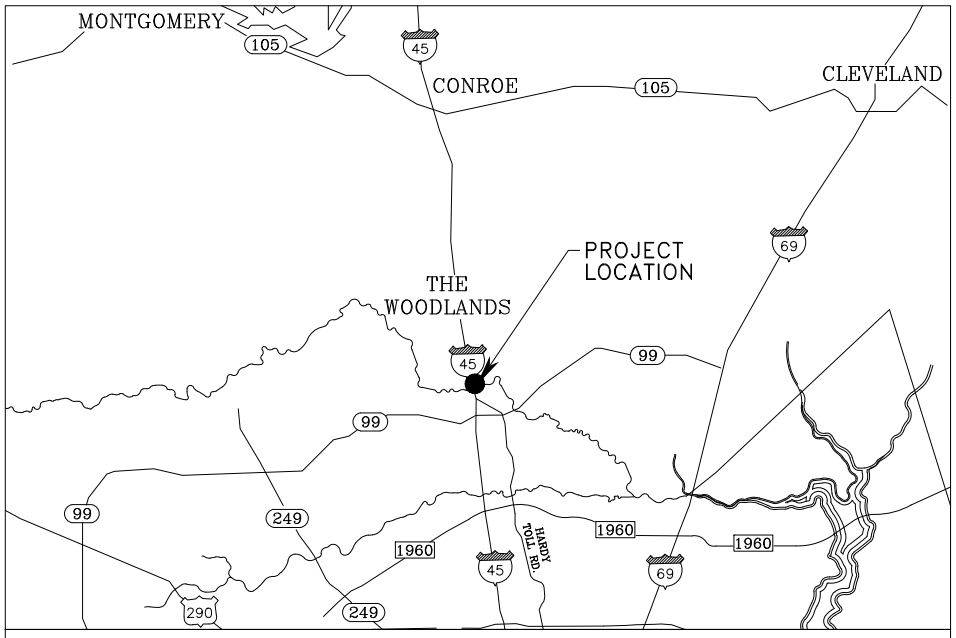
LANGFORD ENGINEERING INC.
Consulting Engineers
1080 W. Sam Houston Pkwy N. Ste 200
Houston, Texas 77043-5014
Ph. 713-461-3530 Fax 713-932-7505
TBPE FIRM #449

DESIGN : C.A.H.	JOB NO. : 327-007 CONT. NO. : 1
DRAWN : S.M.C.	DATE : NOVEMBER 2024
CHECKED : T.B.H.	SCALE : 1"=50'
APPROVED : C.A.H.	SHEET NO. 01 OF 01

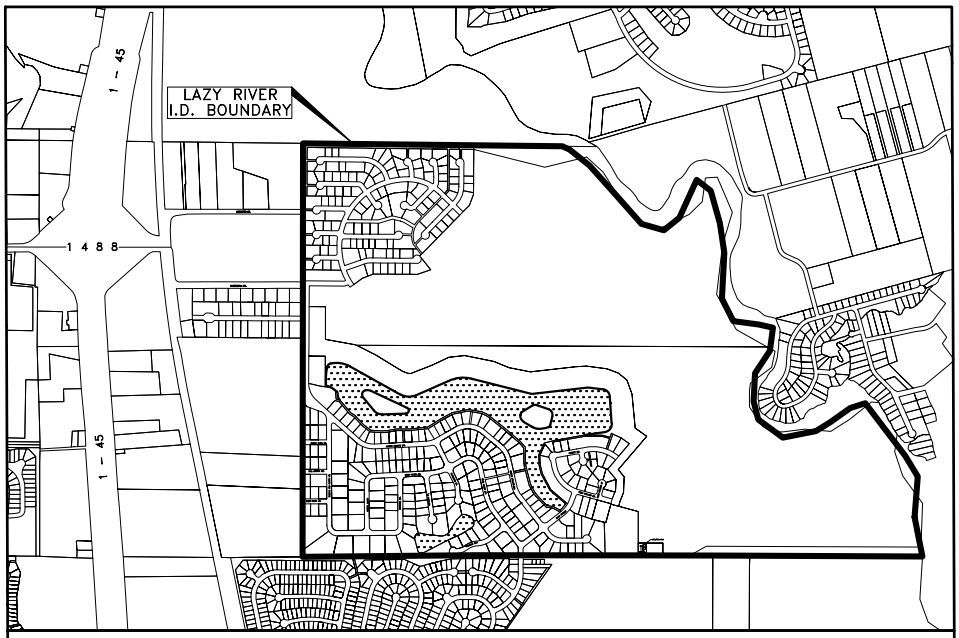
E:\Current Proj\327007001 - WWTP Improvements 2023 TWDB Project\Exhibits\Proposed Easement Exhibit\WWTP Easement Exhibit.dwg Nov 13, 2024-10:30am stevenc

SPIF

LOCATION MAP



LOCATION MAP



VICINITY MAP

LAZY RIVER IMPROVEMENT DISTRICT
T.P.D.E.S. WQ0011820001

LOCATION & VICINITY MAP

LANGFORD ENGINEERING INC.
Consulting Engineers

1080 W. Sam Houston Pkwy N. Ste 200
Houston, Texas 77043-5014
Ph. 713-461-3530 Fax 713-932-7505

TBPE FIRM #449

DESIGN : S.M.C.	JOB NO. 327-003 CONT. NO.
DRAWN : S.C.C.	DATE : OCTOBER 2019
CHECKED : J.O.R.	SCALE : VERT. HORIZ. N.T.S.
APPROVED : T.B.H.	SHEET NO. 1 OF 1

E:\Current Proj\327003101 - 2020 TPDES Discharge Permit Renewal\Exhibits\Location and Vicinity Map.dwg Oct 02, 2019-3:41pm Shane.C

SPIF

7.5 – Minute USGS Quadrangle Map

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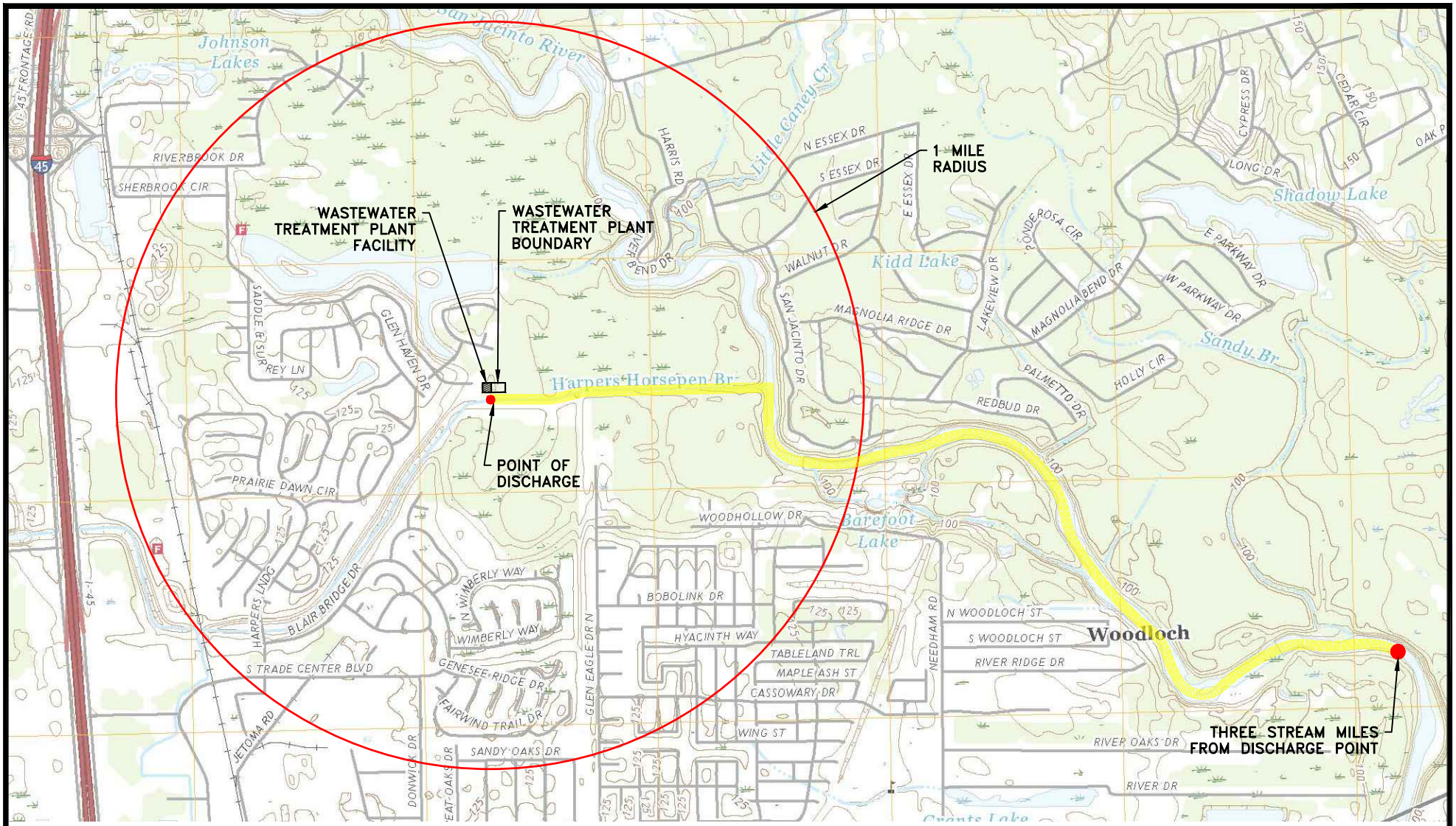


MONTGOMERY COUNTY
LAZY RIVER IMPROVEMENT DISTRICT
T.P.D.E.S. WQ0011820001
SUPPLEMENTAL PERMIT INFORMATION ITEM
U.S.G.S. MAP TAMINA, TX

TREATMENT FACILITY

PROPERTY BOUNDARY

0 0.5 1
MILES

0 1000 2000 3000 4000 5000
FEET

SCALE: 1:24000

SHEET 1 OF 1

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. WQ0011820001

SOLICITUD. Lazy River Improvement District 2727 Allen Parkway, Suite 1100, Houston, Texas 77019, ha solicitado a la Comisión de Calidad Ambiental del Estado de Texas (TCEQ) para renovar el Permiso No. WQ0011820001 (EPA I.D. No. TX0069256) del Sistema de Eliminación de Descargas de Contaminantes de Texas (TPDES) para autorizar la descarga de aguas residuales tratadas en un volumen que no sobrepasa un flujo promedio diario de 70,000 galones por día. La planta está ubicada 830 Glen Hollow Drive, South, en la ciudad de Conroe, en el Condado de Montgomery, Texas. La ruta de descarga es del sitio de la planta a un afluente sin nombre, de ahí a la bifurcación oeste del Rio de San Jacinto, en el Segmento No. 1004 de la cuenca del Rio San Jacinto. La TCEQ recibió esta solicitud el día 10 de Marzo del 2025. La solicitud para el permiso está disponible para leerla y copiarla en la Biblioteca Publica del Condado de Montgomery – Sede Central, 104 Interstate 45 North, Conroe, Texas. La solicitud (cualquier actualización y aviso inclusive) está disponible 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://tceq.maps.arcgis.com/apps/webappviewer/index.html?id=db5bac44afbc468bbddd360f8168250f&marker=-95.437222%2C30.226944&level=12

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 DE LA TCEQ. Todos los comentarios escritos del público y los para pedidos una reunión deben ser presentados a la Oficina del Secretario Principal, MC 105, TCEQ, P.O. Box 13087, Austin, TX 78711-3087 o por el internet at www.tceq.texas.gov/about/comments.html. 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. Si necesita más información en Español sobre esta solicitud para un permiso o el proceso del permiso, por favor llame a El Programa de Educación Pública de la TCEQ, sin cobro, al 1-800-687-4040. La información general sobre la TCEQ puede ser encontrada en nuestro sitio de la red: www.tceq.texas.gov.

También se puede obtener información adicional de Lazy River Improvement District a la dirección indicada arriba o llamando a Timothy Hardin, P.E., Langford Engineering, Inc. Al (713)-461-3530.

Fecha de emisión 03/10/2025

TBPE No F-449

March 19, 2025

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

Subject: Lazy River Improvement District
TPDES WQ0011820001 Domestic Wastewater
Permit Renewal & Minor Amendment Application
LEI Job No. 327-003-102

Dear Applications Review & Processing Team:

Enclosed are the original copy of the subject permit application, Notice of Receipt of Application and Intent to Obtain (NORI in Spanish). The revisions have been made, per the Notice of Deficiency (dated March 13, 2025):

1. Administrative Report 1.0, Section 2, item E: Proposed changes have been included.
2. Administrative Report 1.0, Section 5, item A: Email address has been provided.
3. Administrative Report 1.0, Section 5, item B: Phone number and email address have been provided.
4. Administrative Report 1.0, Section 8, item C: Email address has been provided.
5. Core Data Form, Section III, items 27-28: Latitude and Longitude have been provided.
6. Our office has added a comment to the NORI (English), regarding the permitted daily average flow.
7. NORI (Spanish) has been provided.

If there are any questions or further information needed, please contact Khiem X. Hoang at (713) 461-3530 or khiem.h@langfordeng.com

Sincerely,

LANGFORD ENGINEERING, INC.

Khiem X. Hoang, E.I.T.
Project Engineer

Enclosures

cc: Lori G. Aylett – Smith Murdaugh Little & Bonham, LLP (With Attachment)
Josh Rowe – Water District Management (Cover Letter Only)

LANGFORD ENGINEERING INC.
Consulting Engineers

TBPE No F-449

March 5, 2025

Certified Mail-Return Receipt Requested

Ms. Deba Dutta
Applications Review and Processing Team (MC – 148)
Texas Commission on Environmental Quality
12100 Park 35 Circle
Austin, Texas 78753

Subject: Lazy River Improvement District
TPDES WQ0011820001 Domestic Wastewater
Permit Renewal Application
LEI Job No. 327-003-102

Dear Applications Review & Processing Team:

The purpose of this letter is to provide the Texas Commission on Environmental Quality (TCEQ) with the original and two (2) copies of the subject permit renewal/minor amendment application. A copy of the payment voucher (No. 754349 & 754350) in the amount of five hundred and fifteen dollars ($515.00) has been enclosed.

If there are any questions or further information needed, please contact Khiem Hoang, EIT at (713) 461-3530 or khiem.h@langfordeng.com.

Sincerely,

LANGFORD ENGINEERING, INC.

Khiem X. Hoang, E.I.T.
Project Engineer

Enclosures

cc: Lori G. Aylett – Smith Murdaugh Little & Bonham, LLP (with Attachment)
Josh Rowe – Water District Management (Letter Only)

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

APPLICATION AND INTENT TO OBTAIN WATER QUALITY PERMIT RENEWAL

PERMIT NO. WQ0011820001

Applicant: Lazy River Improvement District

March 2025

Harris County, Texas

Langford Engineering, Inc.
Firm Registration No. F-449

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

DOMESTIC WASTEWATER PERMIT APPLICATION CHECKLIST

Complete and submit this checklist with the application.

APPLICANT NAME: Lazy River Improvement District

PERMIT NUMBER (If new, leave blank): WQ00 WQ0011820001

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 _____

PAYMENT VOUCHER

TCEQ ePay Receipt

Transaction Information

Trace Number:	582EA000656294
Date:	02/28/2025 08:13 AM
Payment Method:	CC - Authorization 000009882Z
ePay Actor:	KHIEM HOANG
TCEQ Amount:	$515.00
Texas.gov Price::	$526.84*

* This service is provided by Texas.gov, the official website of Texas. The price of this service includes funds that support the ongoing operations and enhancements of Texas.gov, which is provided by a third party in partnership with the State.

Payment Contact Information

Name:	KHIEM HOANG
Company:	LANGFORD ENGINEERING INC
Address:	1080 W SAM HOUSTON N STE 200, HOUSTON, TX 77043
Phone:	713-461-3530

Cart Items

Voucher	Fee Description	AR Number	Amount
754349	WW PERMIT - FACILITY WITH FLOW >= .05 & < .10 MGD - RENEWAL		$500.00
754350	30 TAC 305.53B WQ RENEWAL NOTIFICATION FEE		$15.00
		TCEQ Amount:	**$515.00**

TCEQ ePay Voucher Receipt

Transaction Information

Voucher Number:	754349
Trace Number:	582EA000656294
Date:	02/28/2025 08:13 AM
Payment Method:	CC - Authorization 000009882Z
Voucher Amount:	$500.00
Fee Type:	WW PERMIT - FACILITY WITH FLOW >= .05 & < .10 MGD - RENEWAL
ePay Actor:	KHIEM HOANG

Payment Contact Information

Name:	KHIEM HOANG
Company:	LANGFORD ENGINEERING INC
Address:	1080 W SAM HOUSTON N STE 200, HOUSTON, TX 77043
Phone:	713-461-3530

Site Information

Site Name:	LAZY RIVER IMPROVEMENT DISTRICT WASTEWATER TREATMENT PLANT
Site Address:	821 GLEN HOLLOW DRIVE, CONROE, TX 77385
Site Location:	APPROX 1.25 MILES WEST OF I-45 APPROX 1.25 MILES NORTH OF HIGHWAY

Customer Information

Customer Name:	LAZY RIVER IMPROVEMENT DISTRICT
Customer Address:	2727 ALLEN PARKWAY SUITE 1100, HOUSTON, TX 77019 2191

Other Information

Program Area ID:	0011820001

TCEQ ePay Voucher Receipt

Transaction Information

Voucher Number:	754350
Trace Number:	582EA000656294
Date:	02/28/2025 08:13 AM
Payment Method:	CC - Authorization 000009882Z
Voucher Amount:	$15.00
Fee Type:	30 TAC 305.53B WQ RENEWAL NOTIFICATION FEE
ePay Actor:	KHIEM HOANG

Payment Contact Information

Name:	KHIEM HOANG
Company:	LANGFORD ENGINEERING INC
Address:	1080 W SAM HOUSTON N STE 200, HOUSTON, TX 77043
Phone:	713-461-3530

ADMINISTRATIVE REPORT 1.0

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

DOMESTIC WASTEWATER PERMIT APPLICATION ADMINISTRATIVE REPORT 1.0

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

Section 1. Application Fees (Instructions Page 26)

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

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

Minor Amendment (for any flow) $150.00 ☒

Payment Information:

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

Check/Money Order Amount: Click to enter text.

Name Printed on Check: Click to enter text.

EPAY Voucher Number: 754349 & 754350

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: Convert two existing treatment units into clarifiers. Construct new aeration basins and aerobic digesters and provide new aeration equipment. Construct new chlorine contact tank and new chlorine storage and feed system. Rehabilitate the on-site lift station. Provide new electrical including motor control centers. Site improvements, including yard piping and pavement. The existing permit authorizes a final phase with an average daily flow of 0.1 MGD and a 2-hour peak flow of 0.37 MGD. The purpose of this minor permit amendment is to revise the final phase by reducing the permitted average daily flow to 0.07 MGD and the 2-hour peak flow to 0.259 MGD.

f. For existing permits:

Permit Number: WQ00 11820001

EPA I.D. (TPDES only): TX 0069256

Expiration Date: October 8, 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?

Lazy River Improvement District

(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: 600792113

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: Edwards, Michael

Title: President Board of Directors Credential: Click to enter text.

B. Co-applicant information. Complete this section only if another person or entity is required

to apply as a co-permittee.

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

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 A – TCEQ Core Data Form

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: Hardin, Timothy

Title: Vice President Credential: P.E.

Organization Name: Langford Engineering, Inc.

Mailing Address: 1080 W. Sam Houston Pkwy N., Suite 200 City, State, Zip Code: Houston, TX 77043

Phone No.: 713-461-3530 E-mail Address: tim.h@langfordeng.com

Check one or both: ☒ Administrative Contact ☒ Technical Contact

B. Prefix: Mr. Last Name, First Name: Hong, Anthony

Title: Engineering Associate Credential: Click to enter text.

Organization Name: Langford Engineering, Inc.

Mailing Address: 1080 W. Sam Houston Pkwy N., Suite 200 City, State, Zip Code: Houston, TX 77043

Phone No.: 713-461-3530 E-mail Address: Anthony.h@langfordeng.com

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: Hardin, Timothy

Title: Vice President Credential: P.E.

Organization Name: Langford Engineering, Inc

Mailing Address: 1080 W. Sam Houston Pkwy N., Suite 200 City, State, Zip Code: Houston, TX 77043

Phone No.: 713-461-3530 E-mail Address: tim.h@langfordeng.com

B. Prefix: Mr. Last Name, First Name: Michael Edwards

Title: President Board of Directors Credential: Click to enter text.

Organization Name: Lazy River Improvement District

Mailing Address: 2727 Allen Pkwy, Suite 1100 City, State, Zip Code: Houston, TX 77019

Phone No.: 713-652-6500 E-mail Address: Laylett@smithmur.com

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: Edwards, Michael

Title: President Board of Directors Credential: Click to enter text.

Organization Name: Lazy River Improvement District

Mailing Address: 2727 Allen Pkwy, Suite 1100 City, State, Zip Code: Houston, TX 77019

Phone No.: 713-652-6500 E-mail Address: laylett@smithmur.com

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

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

Prefix: Mr. Last Name, First Name: Rowe, Josh

Title: Operator Credential: Click to enter text.

Organization Name: Water District Management Co., Inc.

Mailing Address: 17707 Old Louetta City, State, Zip Code: Houston, TX 77070

Phone No.: 281-376-8802 E-mail Address: josh@wdmtexas.com

Section 8. Public Notice Information (Instructions Page 27)

A. Individual Publishing the Notices

Prefix: Mr. Last Name, First Name: Hong, Anthony

Title: Engineering Associate Credential: Click to enter text.

Organization Name: Langford Engineering, Inc

Mailing Address: 1080 W. Sam Houston Pkwy N., Suite 200 City, State, Zip Code: Houston, TX 77043

Phone No.: 713-461-3530 E-mail Address: Anthony.h@langfordeng.com

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

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

☒ E-mail Address

☐ Fax

☒ Regular Mail

C. Contact permit to be listed in the Notices

Prefix: Mr. Last Name, First Name: Hardin, Timothy

Title: Vice President Credential: P.E.

Organization Name: Langford Engineering, Inc.

Mailing Address: 1080 W. Sam Houston Pkwy N., Suite 200 City, State, Zip Code: Houston, TX 77043

Phone No.: 713-461-3530 E-mail Address: tim.h@langfordeng.com

D. Public Viewing Information

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

Public building name: Montgomery County Public Library

Location within the building: Reference Work Room

Physical Address of Building: 104 Interstate 45 North

City: Conroe County: Montgomery

Contact (Last Name, First Name): Hunt, Kelly

Phone No.: 936-539-7814 Ext.: Click to enter text.

E. Bilingual Notice Requirements

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

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

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

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

   ☒ Yes ☐ No

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

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

   ☒ Yes ☐ No

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

   ☒ Yes ☐ No

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

   ☐ Yes ☒ No

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

F. Plain Language Summary Template

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

Attachment: Attachment C – Plain Language Summary

G. Public Involvement Plan Form

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

Attachment: Not Applicable

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** 101516193

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):

Lazy River Improvement District Wastewater Treatment Plant

C. Owner of treatment facility: Lazy River Improvement District

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: **Lazy River Improvement District**

Mailing Address: 2727 Allen Pkwy, Suite 1100 City, State, Zip Code: Houston, TX 77019

Phone No.: 713-652-6500 E-mail Address: Laylett@smithmur.com

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): Conroe

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

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

☐ Yes ☒ No

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

☐ Authorization granted ☐ Authorization pending

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

Attachment: N/A

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

Section 11. TLAP Disposal Information (Instructions Page 32)

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

☐ Yes ☐ No ☒ N/A

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

N/A

B. City nearest the disposal site: N/A

C. County in which the disposal site is located: N/A

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

N/A

E. For **TLAPs**, please identify the nearest watercourse to the disposal site to which rainfall runoff might flow if not contained: N/A

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:

- 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: SPIF 7.5-Minute USGS Quadrangle Map, SPIF Location Map

List of Attachments

Attachment	Content	Application Item No
A.	TCEQ Core Data Form	Admin. 1.0, item 3.c
B.	7.5-Minute USGS Quadrangle Map	Admin.1.0, Item 13.d
C.	Plain Language Summary	Admin.1.0, Item 8.f
D.	Schematic Flow Diagrams	Tech. 1.0, Item 2.c
E.	Site Drawing	Tech. 1.0, Item 3
F.	Solids Management Plan	Tech. 1.0, Item 6.f
G.	Laboratory Testing Results	Tech. 1.0, Item 7
H.	Permitted Sludge Processing Facility Letter	Tech. 1.0, Item 9.d
I.	Design Calculations	Tech. 1.1, Item 4
J.	Supplemental Permit Information Form	SPIF
K.	Proposed Buffer Zone Easement Exhibit	Tech. 1.0, Item 6.b

Section 14. Signature Page (Instructions Page 34)

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

Permit Number: WQ0011820001

Applicant: Lazy River Improvement District

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): Michael Edwards

Signatory title: President Board of Directors

Signature: Michael D Edwards Date: 11/5/2024

(Use blue ink)

Subscribed and Sworn to before me by the said President Board of Directors

on this 5th day of November, 20 24.

My commission expires on the 17th day of April, 20 28.

Notary Public

CHRISTIANE G. TREVINO
Notary Public, State of Texas
Comm. Expires 04-17-2028
Notary ID 134856164

[SEAL]

Harris

County, Texas

DOMESTIC WASTEWATER PERMIT APPLICATION

SUPPLEMENTAL PERMIT INFORMATION FORM (SPIF)

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

Attachment: Attachment J – Supplemental Permit Information Form

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 ☒ N/A ☐ 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.)
APPLICATION FEE PAID VIA EPAY (TRACE NO. 582EA000656294)

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

TECHNICAL REPORT 1.0

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): 0.10

2-Hr Peak Flow (MGD): 0.37

Estimated construction start date: Click to enter text.

Estimated waste disposal start date: Click to enter text.

B. Interim II Phase

Design Flow (MGD):

2-Hr Peak Flow (MGD):

Estimated construction start date: Click to enter text.

Estimated waste disposal start date: Click to enter text.

C. Final Phase

Design Flow (MGD): 0.07

2-Hr Peak Flow (MGD): 0.259

Estimated construction start date: October 2025

Estimated waste disposal start date: October 2026

D. Current Operating Phase

Provide the startup date of the facility: January 1977

Section 2. Treatment Process (Instructions Page 43)

A. Current Operating Phase

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

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

The existing treatment process operates in a conventional activated sludge mode. Treatment units include headworks with a manually-cleaned bar screen, two concentric treatment units consisting of aeration basins, clarifiers, digesters, a chlorine contact basin and sludge drying beds. The proposed treatment process operates in a conventional activated sludge mode. Treatment units include headworks with a manually-cleaned bar screen, two trains of aeration basins, clarifiers, digesters, a chlorine contact basin and sludge drying beds. The treatment process remains unchanged.

B. Treatment Units

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

Table 1.0(1) - Treatment Units

Treatment Unit Type	Number of Units	Dimensions (L x W x D)
Bar Screen (Existing)	2	2' x 2' x 4"
Bar Screen (Proposed)	1	2' x 2' x 4"
Clarifier (Existing)	2	16' Diameter x 12' Depth
Clarifier (Proposed)	2	26' Diameter x 12' Depth
Aeration Basin (Existing)	2	40' x 5' x 12'
Aeration Basin (Proposed)	2	20' x 10' x 12'
Chlorine Contact Basin (Existing)	2	10' x 4.75' x 12'
Chlorine Contact Basin (Proposed)	1	15' x 5' x 10'
Aerobic Digester (Existing)	2	16' x 5' x 12'
Aerobic Digester (Proposed)	2	24' x 8' x 12.5'
Sludge Drying Beds (Existing)	4	20' x 40' x 2'
Sludge Drying Beds (Proposed)	4	20' x 40' x 2'

C. Process Flow Diagram

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

Attachment: Attachment D – Schematic Flow Diagrams

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

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

- Latitude: -95.436786
- Longitude: 30.226410

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

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

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

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

Attachment: Attachment E – Site Drawing

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

Forrest Hills Residential Subdivision

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
Lazy River Improvement District	**Lazy River Improvement District**	**Publicly Owned**	648
		Choose an item.	
		Choose an item.	
		Choose an item.	

Section 4. Unbuilt Phases (Instructions Page 45)

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

☒ Yes ☐ No

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

☒ Yes ☐ No

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

Lazy River Improvement District wastewater treatment plant is currently operating in the Interim I Phase (0.1 MGD) under the current permit. Based on historical flows, average daily flows are significantly lower than the permitted discharge. The proposed improvements will be sized for a lower average daily flow of the plant. Historical flows allow for amending the permitted discharge from 0.1 MGD to 0.07 MGD. Therefore, the Final Phase (0.07 MGD) is proposed to serve the District.

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: Interim I Phase - January 1977

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**.

Approval letter for Interim I Phase is not available. Plans and specifications for Final Phase have not been submitted to TCEQ yet.

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.

Interim I Phase (RENEWAL) - The existing WWTP that has been in operation since 1977. Although, the Utility District does not own the neighboring property, there is an existing wooded area in the proximity of the WWTP that serves as a natural buffer zone. There are no existing dwellings within 150' of the existing plant, nor are there any plans for same of which the applicant is aware. Thus, the applicant requests approval of the RENEWAL (Interim I Phase) Phase. Since this permit application includes a minor amendment (with renewal), the applicant is hereby requesting a variance of the buffer zone easement requirement as it applies to Interim I Phase. Final Phase (MINOR PERMIT AMENDMENT) – The applicant is requesting approval of the Final Permit Phase subject to the proposed buffer zone easements (See Attachment K - Proposed Buffer Zone Easement Exhibit). The applicant is in the process of obtaining these proposed buffer zone easements and expects to have them in place prior to commencing discharges associated with the Final Phase of this permit.

C. Other actions required by the current permit

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

☐ Yes ☒ No

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

N/A

D. Grit and grease treatment

1. Acceptance of grit and grease waste

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

☐ Yes ☒ No

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

2. Grit and grease processing

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

N/A

3. Grit disposal

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

☐ Yes ☐ No

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

Describe the method of grit disposal.

N/A

4. Grease and decanted liquid disposal

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

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

N/A

E. Stormwater management

1. Applicability

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

☐ Yes ☒ No

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

☐ Yes ☒ No

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

2. MSGP coverage

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

☐ Yes ☒ No

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

TXR05 Click to enter text. or TXRNE Click to enter text.

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

☐ Yes ☒ No

3. Conditional exclusion

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

☐ Yes ☒ No

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

N/A

4. Existing coverage in individual permit

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

☐ Yes ☒ No

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

N/A

5. Zero stormwater discharge

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

☐ Yes ☒ No

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

N/A

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

6. Request for coverage in individual permit

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

☐ Yes ☒ No

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

N/A

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

F. Discharges to the Lake Houston Watershed

Does the facility discharge in the Lake Houston watershed?

☒ Yes ☐ No

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

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

1. Acceptance of sludge from other WWTPs

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

☐ Yes ☒ No

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

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

N/A

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

2. Acceptance of septic waste

Is the facility accepting or will it accept septic waste?

☐ Yes ☒ No

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

☐ Yes ☐ No

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

☐ Yes ☐ No

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

N/A

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

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

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

☐ Yes ☒ No

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

N/A

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

Is the facility in operation?

☒ Yes ☐ No

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

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

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

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

Pollutant	Average Conc.	Max Conc.	No. of Samples	Sample Type	Sample Date/Time
$CBOD_5$, mg/l	<2.0	2.0	1	Grab	10-18-24/0807
Total Suspended Solids, mg/l	9.2	9.2	1	Grab	10-18-24/1347
Ammonia Nitrogen, mg/l	3.4	3.4	1	Grab	10-23-24/1322
Nitrate Nitrogen, mg/l	16.7	16.7	1	Grab	10-17-24/1903
Total Kjeldahl Nitrogen, mg/l	4.2	4.2	1	Grab	11-01-24/0910
Sulfate, mg/l	27.5	27.5	1	Grab	10-17-24/1903
Chloride, mg/l	66.8	66.8	1	Grab	10-17-24/1903
Total Phosphorus, mg/l	2.35	2.35	1	Grab	10-24-24/1429
pH, standard units	7.2	7.2	1	Grab	10-17-24/1000
Dissolved Oxygen*, mg/l	7.1	7.1	1	Grab	10-17-24/1000

Chlorine Residual, mg/l	4.0	4.0	1	Grab	10-17-24/1215
E.coli (CFU/100ml) freshwater	<1	1	1	Grab	10-31-24/1432
Entercocci (CFU/100ml) saltwater	N/A	N/A	N/A	N/A	N/A
Total Dissolved Solids, mg/l	390	10.0	1	Grab	10-18-24/1800
Electrical Conductivity, µmohs/cm, †	790	790	1	Grab	10-21-24/0648
Oil & Grease, mg/l	N/A	N/A	N/A	N/A	N/A
Alkalinity ($CaCO_3$)*, mg/l	200	200	1	Grab	10-21-24/1100

*TPDES permits only
†TLAP permits only

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

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

Section 8. Facility Operator (Instructions Page 50)

Facility Operator Name: Kelvin Manning

Facility Operator's License Classification and Level: Wastewater Treatment Operator C

Facility Operator's License Number: WW0066663

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

A. WWTP's Biosolids Management Facility Type

Check all that apply. See instructions for guidance

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

B. WWTP's Biosolids Treatment Process

Check all that apply. See instructions for guidance.

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

C. Biosolids Management

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

Biosolids Management

Management Practice	Handler or Preparer Type	Bulk or Bag Container	Amount (dry metric tons)	Pathogen Reduction Options	Vector Attraction Reduction Option
Other	Off-site Third-Party Handler or Preparer	Bulk	3 metric tons	Class B: PSRP Air Drying	Option 10. Incorporate within 6 hrs
Choose an item.	Choose an item.	Choose an item.		Choose an item.	Choose an item.
Choose an item.	Choose an item.	Choose an item.		Choose an item.	Choose an item.

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

D. Disposal site

Disposal site name: Mount Houston Road MUD

TCEQ permit or registration number: WQ0011154001

County where disposal site is located: Harris

E. Transportation method

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

Name of the hauler: Magna Flow Environmental, Inc.

Hauler registration number: 21484

Sludge is transported as a:

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

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

A. Beneficial use authorization

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

☐ Yes ☒ No

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

☐ Yes ☐ No

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

☐ Yes ☐ No

B. Sludge processing authorization

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

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

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

☐ Yes ☐ No

Section 11. Sewage Sludge Lagoons (Instructions Page 53)

Does this facility include sewage sludge lagoons?

☐ Yes ☒ No

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

A. Location information

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

- Original General Highway (County) Map:

  Attachment: N/A
- USDA Natural Resources Conservation Service Soil Map:

  Attachment: N/A
- Federal Emergency Management Map:

  Attachment: N/A
- Site map:

  Attachment: N/A

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: N/A

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

N/A

B. Temporary storage information

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

Nitrate Nitrogen, mg/kg: N/A

Total Kjeldahl Nitrogen, mg/kg: N/A

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

Phosphorus, mg/kg: N/A

Potassium, mg/kg: N/A

pH, standard units: N/A

Ammonia Nitrogen mg/kg: N/A

Arsenic: N/A

Cadmium: N/A

Chromium: N/A

Copper: N/A

Lead: N/A

Mercury: N/A

Molybdenum: N/A

Nickel: N/A

Selenium: N/A

Zinc: N/A

Total PCBs: N/A

Provide the following information:

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

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

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

C. Liner information

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

☐ Yes ☐ No

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

N/A

D. Site development plan

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

N/A

Attach the following documents to the application.

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

  Attachment: N/A
- Copy of the closure plan

  Attachment: N/A
- Copy of deed recordation for the site

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

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

  Attachment: N/A
- Procedures to prevent the occurrence of nuisance conditions

  Attachment: N/A

E. Groundwater monitoring

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

☐ Yes ☐ No

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

Attachment: N/A

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:

N/A

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:

N/A

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

A. RCRA hazardous wastes

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

☐ Yes ☒ No

B. Remediation activity wastewater

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

☐ Yes ☒ No

C. Details about wastes received

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

Attachment: N/A

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: Dustin Roberts

Title: Compliance Manager

Signature: Dustin Roberts

Date: 11/18/2024

WORKSHEET 1.1

DOMESTIC WASTEWATER PERMIT APPLICATION TECHNICAL REPORT 1.1

The following information is required for new and amendment major applications.

Section 1. Justification for Permit (Instructions Page 57)

A. Justification of permit need

Provide a detailed discussion regarding the need for any phase(s) not currently permitted. Failure to provide sufficient justification may result in the Executive Director recommending denial of the proposed phase(s) or permit.

Lazy River Improvement District wastewater treatment plant is currently operating in the Interim I Phase (0.1 MGD) under the current permit. Based on historical flows, average daily flows are significantly lower than the permitted discharge. The proposed improvements will be sized for a lower average daily flow of the plant. Historical flows allow for amending the permitted discharge from 0.1 MGD to 0.07 MGD. Therefore, the Final Phase (0.07 MGD) is proposed to serve the District.

B. Regionalization of facilities

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

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

1. ***Municipally incorporated areas***

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

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

   ☐ Yes ☐ No ☐ Not Applicable

   If yes, within the city limits of:

   If yes, attach correspondence from the city.

   Attachment: Click to enter text.

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

   Attachment: Click to enter text.

2. ***Utility CCN areas***

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

   ☐ Yes ☐ No

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

   Attachment: Click to enter text.

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

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

   ☐ Yes ☐ No

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

   Attachment: N/A

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

If yes, attach proof of mailing a request for service to each facility and collection system, the letters requesting service, and correspondence from each facility and collection system.

Attachment: Click to enter text.

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

Attachment: Click to enter text.

Section 2. Proposed Organic Loading (Instructions Page 59)

Is this facility in operation?

☐ Yes ☐ No

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

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

A. Current organic loading

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

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

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

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

Click to enter text.

B. Proposed organic loading

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

Table 1.1(1) – Design Organic Loading

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

Source	Total Average Flow (MGD)	Influent BOD5 Concentration (mg/l)
AVERAGE BOD_5 from all sources		

Section 3. Proposed Effluent Quality and Disinfection (Instructions Page 59)

A. Existing/Interim I Phase Design Effluent Quality

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

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

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

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

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

Other: Click to enter text.

B. Interim II Phase Design Effluent Quality

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

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

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

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

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

Other: Click to enter text.

C. Final Phase Design Effluent Quality

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

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

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

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

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

Other: Click to enter text.

D. Disinfection Method

Identify the proposed method of disinfection.

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

Dechlorination process: Click to enter text.

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

☐ Other: Click to enter text.

Section 4. Design Calculations (Instructions Page 59)

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

Attachment: Attachment I – Design Calculations

Section 5. Facility Site (Instructions Page 60)

A. 100-year floodplain

Will the proposed facilities be located above the 100-year frequency flood level?

☐ Yes ☐ No

If no, describe measures used to protect the facility during a flood event. Include a site map showing the location of the treatment plant within the 100-year frequency flood level. If applicable, provide the size and types of protective structures.

Click to enter text.

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

Click to enter text.

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

☐ Yes ☐ No

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

☐ Yes ☐ No

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

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

B. Wind rose

Attach a wind rose: Click to enter text.

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

A. Beneficial use authorization

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

☐ Yes ☐ No

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

B. Sludge processing authorization

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

☐ Sludge Composting

☐ Marketing and Distribution of sludge

☐ Sludge Surface Disposal or Sludge Monofill

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

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

Attach a solids management plan to the application.

Attachment: Attachment F – Solids Management Plan

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

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

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

WORKSHEET 2.0

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: N/A

Distance and direction to the intake: N/A

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

Attachment: N/A

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

Does the facility discharge into tidally affected waters?

☐ Yes ☒ No

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

A. Receiving water outfall

Width of the receiving water at the outfall, in feet: N/A

B. Oyster waters

Are there oyster waters in the vicinity of the discharge?

☐ Yes ☒ No

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

N/A

C. Sea grasses

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

☐ Yes ☒ No

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

N/A

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: Harpers Horsepen Branch

A. Receiving water type

Identify the appropriate description of the receiving waters.

☐ Stream

☐ Freshwater Swamp or Marsh

☐ Lake or Pond

Surface area, in acres: Click to enter text.

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

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

☒ Man-made Channel or Ditch

☐ Open Bay

☐ Tidal Stream, Bayou, or Marsh

☐ Other, specify: Click to enter text.

B. Flow characteristics

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

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

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

☐ Perennial - normally flowing

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

☐ USGS flow records

☐ Historical observation by adjacent landowners

☒ Personal observation

☐ Other, specify: Click to enter text.

C. Downstream perennial confluences

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

West Fork of the San Jacinto River

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.

The flow increases and is more consistent in the West Fork of the San Jacinto River

E. Normal dry weather characteristics

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

Creek width varies, 27-ft wide at the discharge point. Grass and vegetation on both sides of creek. Clear and slow water flow.

Date and time of observation: Friday, September 20, 2024 at 9:45 AM

Was the water body influenced by stormwater runoff during observations?

☐ Yes ☒ No

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

A. Upstream influences

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

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

B. Waterbody uses

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

- ☐ Livestock watering
- ☐ Irrigation withdrawal
- ☐ Fishing
- ☐ Domestic water supply
- ☐ Park activities
- ☐ Contact recreation
- ☐ Non-contact recreation
- ☐ Navigation
- ☐ Industrial water supply
- ☒ Other(s), specify: Urban Storm Water

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

WORKSHEET 6.0

DOMESTIC WASTEWATER PERMIT APPLICATION WORKSHEET 6.0: INDUSTRIAL WASTE CONTRIBUTION

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

Section 1. All POTWs (Instructions Page 89)

A. Industrial users (IUs)

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

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

Categorical IUs:

Number of IUs: 0

Average Daily Flows, in MGD: 0

Significant IUs – non-categorical:

Number of IUs: 0

Average Daily Flows, in MGD: 0

Other IUs:

Number of IUs: 0

Average Daily Flows, in MGD: 0

B. Treatment plant interference

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

☐ Yes ☒ No

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

N/A

C. Treatment plant pass through

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

☐ Yes ☒ No

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

N/A

D. Pretreatment program

Does your POTW have an approved pretreatment program?

☐ Yes ☒ No

If yes, complete Section 2 only of this Worksheet.

Is your POTW required to develop an approved pretreatment program?

☐ Yes ☐ No

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

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

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

A. Substantial modifications

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

☐ Yes ☒ No

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

N/A

B. Non-substantial modifications

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

☐ Yes ☒ No

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

N/A

C. Effluent parameters above the MAL

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

Table 6.0(1) – Parameters Above the MAL

Pollutant	Concentration	MAL	Units	Date

D. Industrial user interruptions

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

☐ Yes ☒ No

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

N/A

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

A. General information

Company Name: N/A

SIC Code: N/A

Contact name: N/A

Address: N/A

City, State, and Zip Code: N/A

Telephone number: N/A

Email address: N/A

B. Process information

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

N/A

C. Product and service information

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

N/A

D. Flow rate information

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

Process Wastewater:

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

Discharge Type: ☐ Continuous ☐ Batch ☐ Intermittent

Non-Process Wastewater:

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

Discharge Type: ☐ Continuous ☐ Batch ☐ Intermittent

E. Pretreatment standards

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

☐ Yes ☐ No

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

☐ Yes ☐ No

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

Category: Subcategories: Click to enter text.

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

Category: Click to enter text.

Subcategories: Click to enter text.

Category: Click to enter text.

Subcategories: Click to enter text.

Category: Click to enter text.

Subcategories: Click to enter text.

Category: Click to enter text.

Subcategories: Click to enter text.

F. Industrial user interruptions

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

☐ Yes ☐ No

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

N/A

LIST OF ATTACHMENTS

Lazy River Improvement District

Domestic Wastewater Permit Minor & Renewal Application

WQ0011820001

List of Attachments

Attachment	Content	Application Item No.
A.	TCEQ Core Data Form	Admin. 1.0, item 3.c
B.	7.5-Minute USGS Quadrangle Map	Admin. 1.0, Item 13.d
C.	Plain Language Summary	Admin. 1.0, Item 8.f
D.	Schematic Flow Diagrams	Tech. 1.0, Item 2.c
E.	Site Drawing	Tech. 1.0, Item 3
F.	Solids Management Plan	Tech. 1.0, Item 6.f
G.	Laboratory Testing Results	Tech. 1.0, Item 7
H.	Permitted Sludge Processing Facility Letter	Tech. 1.0, Item 9.d
I.	Design Calculations	Tech. 1.1, Item 4
J.	Supplemental Permit Information Form	SPIF
K.	Proposed Buffer Zone Easement Exhibit	Tech. 1.0, Item 6.b

ATTACHMENT A
Administrative Report 1.0

Item 3.c

TCEQ CORE DATA FORM

TCEQ Use Only

TCEQ Core Data Form

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

SECTION I: General Information

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

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

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

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 600792113		**RN 101516193**

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:*

Lazy River Improvement District

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

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: 2727 Allen Pkwy, Suite 1100

City	Houston	**State**	TX	**ZIP**	77019	**ZIP + 4**	2191

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

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

(713) 652-6500		( ) -

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.)*

23. Street Address of the Regulated Entity: ***(No PO Boxes)***	830 Glen Hollow Drive							
	City	Conroe	**State**	TX	**ZIP**	77385	**ZIP + 4**	7716
24. County	Montgomery							

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

25. Description to Physical Location:	Approximately 1.25 miles west of Highway I-45; approximately 1.25 miles north of Highway 242, in Montgomery County, Texas.				
26. Nearest City			**State**	**Nearest ZIP Code**	
Conroe			TX	77385	

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:	30.226958		**28. Longitude (W) In Decimal:**	-95.437139	
Degrees	Minutes	Seconds	Degrees	Minutes	Seconds
30°	13'	37.05"	-95°	26'	13.7"

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			

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

34. Mailing Address:	**2727 Allen Pkwy, Suite 1100**							
	City	**Houston**	**State**	**TX**	**ZIP**	**77019**	**ZIP + 4**	**2191**
35. E-Mail Address:	**laylett@smithmur.com**							

36. Telephone Number	**37. Extension or Code**	**38. Fax Number** *(if applicable)*
(713) 652-6500		( ) -

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

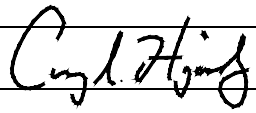
☐ Dam Safety	☐ Districts	☐ Edwards Aquifer	☐ Emissions Inventory Air	☐ Industrial Hazardous Waste
☐ Municipal Solid Waste	☐ New Source Review Air	☐ OSSF	☐ Petroleum Storage Tank	☐ PWS
☐ Sludge	☐ Storm Water	☐ Title V Air	☐ Tires	☐ Used Oil
☐ Voluntary Cleanup	☐ Wastewater	☐ Wastewater Agriculture	☐ Water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

SECTION IV: Preparer Information

40. Name:	Anthony Hong	**41. Title:**	Engineering Associate
42. Telephone Number	**43. Ext./Code**	**44. Fax Number**	**45. E-Mail Address**
(713 **)** 461-3530		**( ) -**	Anthony.H@langfordeng.com

SECTION V: Authorized Signature

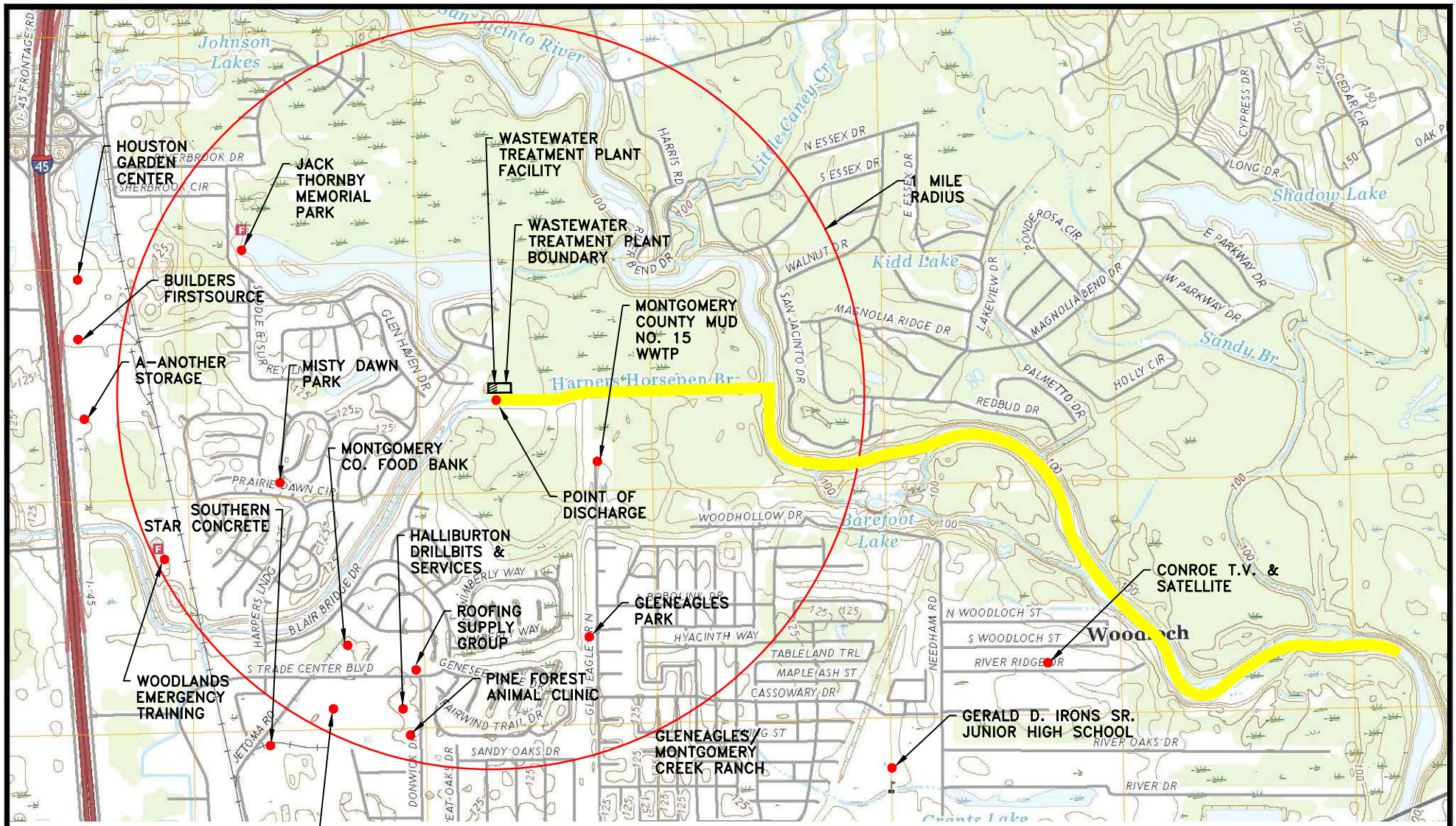
46. By my signature below, I certify, to the best of my knowledge, that the information provided in this form is true and complete, and that I have signature authority to submit this form on behalf of the entity specified in Section II, Field 6 and/or as required for the updates to the ID numbers identified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

Company:	Langford Engineering Inc.	**Job Title:**	Senior Project Manager
Name *(In Print):*	Craig A. Hajovsky, P.E.	**Phone:**	**(** 713 **)** 461- **3530**
Signature:		**Date:**	3/5/2025

ATTACHMENT B
Administrative Report 1.0
Item 13.d
7.5-MINUTE USGS

QUADRANGLE MAP

E:\Current Proj\327003101 – 2020 TPDES Discharge Permit Renewal\Exhibits\Admin. 1.0 Item 13.D.dwg Oct 16, 2019–9:43am stevenc



MONTGOMERY COUNTY
LAZY RIVER IMPROVEMENT DISTRICT
T.P.D.E.S. WQ0011820001
U.S.G.S. MAP TAMINA, TX

0 0.5 1
MILES

0 1000 2000 3000 4000 5000
FEET

SCALE: 1:24000

SHEET 1 OF 1

TREATMENT FACILITY

PROPERTY BOUNDARY

ATTACHMENT C
Administrative Report 1.0

Item 8.f

PLAIN LANGUAGE SUMMARY

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

PLAIN LANGUAGE SUMMARY FOR TPDES OR TLAP PERMIT APPLICATIONS

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

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

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

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

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

Lazy River Improvement District (CN600792113) operates Lazy River Improvement District Wastewater Treatment Plant (RN101516193), a wastewater treatment plant. The facility is located at 830 Glenn Hollow Drive, in Conroe, Montgomery County, Texas 77385. This application is for a minor amendment and renewal to discharge at an annual average flow of 70,000 gallons per day of treated domestic wastewater via the discharge route from the plant site to a ditch named Trade Center Drive/College Park Ditch, thence to the west fork of the San Jacinto River in Segment No. 1004 of the San Jacinto River Basin.

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), Nitrate Nitrogen (NO_3-N), Total Kjeldahl Nitrogen (TKN), Sulfate (SO_4), Chloride (Cl^-), total Phosphorus (P_4), pH, Dissolved Oxygen (O_2), Chloride Residual (Cl_2), *Escherichia coli*, Total Dissolved Solids (TDS), Electrical Conductivity, and Alkalinity ($CaCO_3$). Domestic wastewater is treated by an

activated sludge process plant and the treatment units include a manual bar screen, aeration basins, clarifiers, aerobic digesters, a chlorine contact chamber, and sludge drying beds.

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.

Lazy River Improvement District (CN600792113) opera la Planta de Tratamiento de Augas Residuales de Lazy River Improvement District (RN101516193), una planta de tratamiento de aguas residuales. La instalación está ubicada en 830 Glen Hollow Drive, en Conroe, Condado de Montgomery, Texas 77385. Esta solicitud es para una enmienda menor y renovación para descargar flujo promedio anual de 70,000 galones por día de aguas residuales domésticas tratadas a través de la ruta de descarga desde el sitio de la planta hacia una zanja denominada Trade Center Drive/College Park Ditch, y de ahí al ramal oeste del rio San Jacinto en el Segmento No. 1004 de la Cuenca del Rio San Jacinto.

Se espera que las descargas de la instalación contengan Demanda Bioquímica de Oxigeno Carbonoso de cinco días (DBO5), Solidos Suspendidos Totales (SST), Nitrógeno Amoniacal (NH3-N), Nitrógeno Nitrato (NO3-N), Nitrógeno Kjeldahl Total (NKT), Sulfato (SO4), Cloruro (Cl-), Fosforo Total (P4), pH, Oxígeno Disuelto (O2), Cloruro Residual (Cl2), Escherichia Coli (E. Coli), Solidos Disueltos Totales (SDT), Conductividad Eléctrica y Alcalinidad (CaCO3). Las aguas residuales domésticas son tratadas por un proceso de lodos activados, y las unidades de tratamiento incluyen una rejilla manual, tanques de aireación, clarificadores, digestores aeróbicos, una cámara de contacto de cloro y lechos de secado de lodos.

INSTRUCTIONS

1. Enter the name of applicant in this section. The applicant name should match the name associated with the customer number.
2. Enter the Customer Number in this section. Each Individual or Organization is issued a unique 11-digit identification number called a CN (e.g. CN123456789).
3. Choose “operates” in this section for existing facility applications or choose “proposes to operate” for new facility applications.
4. Enter the name of the facility in this section. The facility name should match the name associated with the regulated entity number.
5. Enter the Regulated Entity number in this section. Each site location is issued a unique 11-digit identification number called an RN (e.g. RN123456789).
6. Choose the appropriate article (a or an) to complete the sentence.
7. Enter a description of the facility in this section. For example: steam electric generating facility, nitrogenous fertilizer manufacturing facility, etc.
8. Choose “is” for an existing facility or “will be” for a new facility.
9. Enter the location of the facility in this section.
10. Enter the City nearest the facility in this section.
11. Enter the County nearest the facility in this section.
12. Enter the zip code for the facility address in this section.
13. Enter a summary of the application request in this section. For example: renewal to discharge 25,000 gallons per day of treated domestic wastewater, new application to discharge process wastewater and stormwater on an intermittent and flow-variable basis, or major amendment to reduce monitoring frequency for pH, etc. If more than one outfall is included in the application, provide applicable information for each individual outfall.
14. List all pollutants expected in the discharge from this facility in this section. If applicable, refer to the pollutants from any federal numeric effluent limitations that apply to your facility.
15. Enter the discharge types from your facility in this section (e.g., stormwater, process wastewater, once through cooling water, etc.)
16. Choose the appropriate verb tense to complete the sentence.
17. Enter a description of the wastewater treatment used at your facility. Include a description of each process, starting with initial treatment and finishing with the outfall/point of disposal. Use additional lines for individual discharge types if necessary.

Questions or comments concerning this form may be directed to the Water Quality Division’s Application Review and Processing Team by email at WQ-ARPTeam@tceq.texas.gov or by phone at (512) 239-4671.

Example

Individual Industrial Wastewater Application

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

ABC Corporation (CN600000000) operates the Starr Power Station (RN10000000000), a two-unit gas-fired electric generating facility. Unit 1 has a generating capacity of 393 megawatts (MWs) and Unit 2 has a generating capacity of 528 MWs. The facility is located at 1356 Starr Street, near the City of Austin, Travis County, Texas 78753.

This application is for a renewal to discharge 870,000,000 gallons per day of once through cooling water, auxiliary cooling water, and also authorizes the following waste streams monitored inside the facility (internal outfalls) before it is mixed with the other wastewaters authorized for discharge via main Outfall 001, referred to as “previously monitored effluents” (low-volume wastewater, metal-cleaning waste, and stormwater (from diked oil storage area yards and storm drains)) via Outfall 001. Low-volume waste sources, metal-cleaning waste, and stormwater drains on a continuous and flow-variable basis via internal Outfall 101.

The discharge of once through cooling water via Outfall 001 and low-volume waste and metal-cleaning waste via Outfall 101 from this facility is subject to federal effluent limitation guidelines at 40 CFR Part 423. The pollutants expected from these discharges based on 40 CFR Part 423 are: free available chlorine, total residual chlorine, total suspended solids, oil and grease, total iron, total copper, and pH. Temperature is also expected from these discharges. Additional potential pollutants are included in the Industrial Wastewater Application Technical Report, Worksheet 2.0.

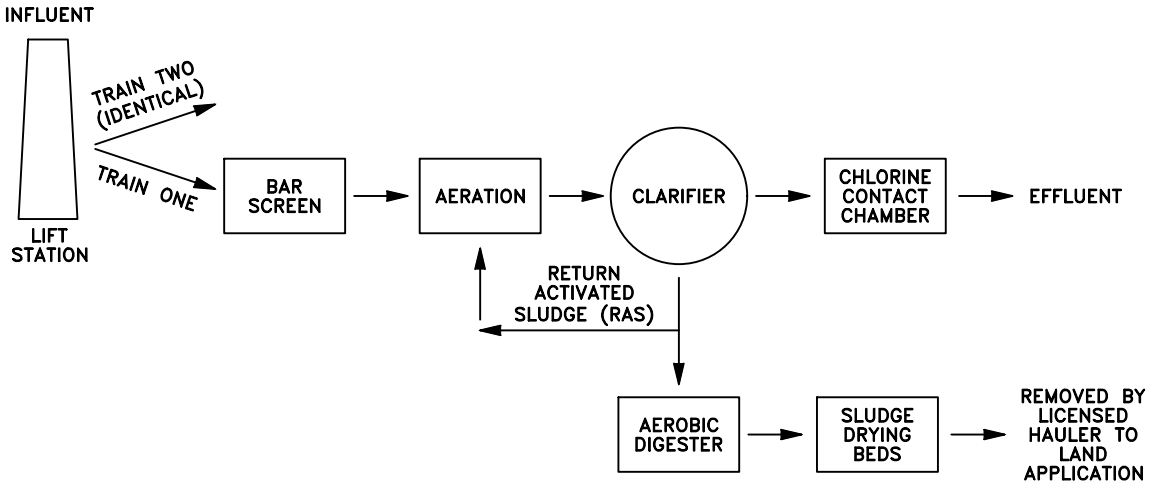
Cooling water and boiler make-up water are supplied by Lake Starr Reservoir. The City of Austin municipal water plant (CN600000000, PWS 00000) supplies the facility’s potable water and serves as an alternate source of boiler make-up water. Water from the Lake Starr Reservoir is withdrawn at the intake structure and treated with sodium hypochlorite to prevent biofouling and sodium bromide as a chlorine enhancer to improve efficacy and then passed through condensers and auxiliary equipment on a once-through basis to cool equipment and condense exhaust steam.

Low-volume wastewater from blowdown of boiler Units 1 and 2 and metal-cleaning wastes receive no treatment prior to discharge via Outfall 101. Plant floor and equipment drains and stormwater runoff from diked oil storage areas, yards, and storm drains are routed through an oil and water separator prior to discharge via Outfall 101. Domestic wastewater, blowdown, and backwash water from the service water filter, clarifier, and sand filter are routed to the Starr Creek Domestic Sewage Treatment Plant, TPDES Permit No. WQ0010000001, for treatment and disposal. Metal-cleaning waste from equipment cleaning is generally disposed of off-site.

ATTACHMENT D
Technical Report 1.0

Item 2.c

SCHEMATIC FLOW DIAGRAMS

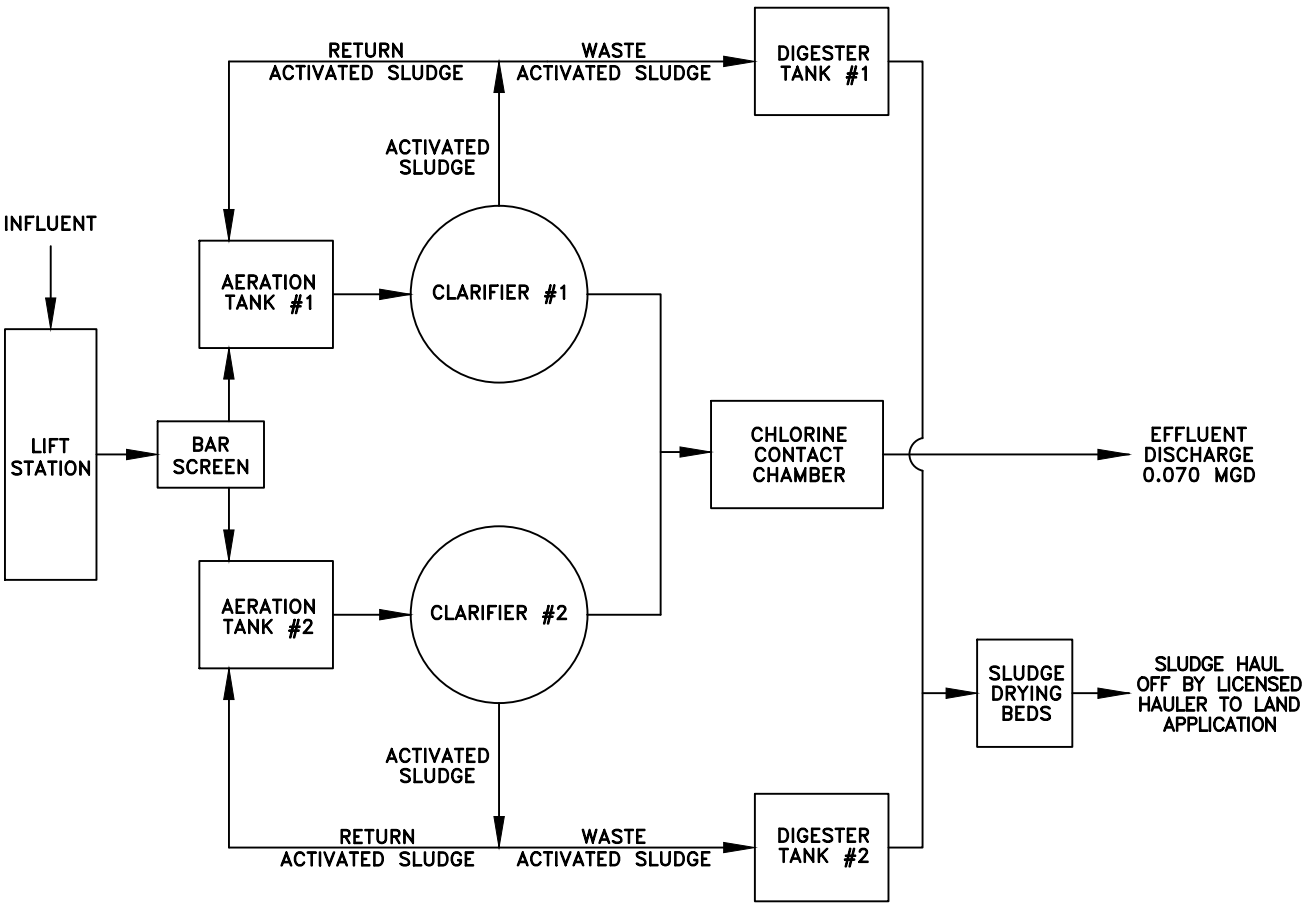


LAZY RIVER I.D.

TECHNICAL REPORT 1.0
ITEM 2.C
EXISTING PHASE
0.10 MGD SCHEMATIC FLOW DIAGRAM

LANGFORD ENGINEERING INC. Consulting Engineers
1080 W. Sam Houston Pkwy N. Ste 200
Houston, Texas 77043-6014
Ph. 713-461-9660 Fax 713-932-7606
TBPE FIRM 6449

DESIGN : K.X.H.	JOB NO. 327-003 CONT. NO. 102
DRAWN : S.M.C.	DATE : MARCH 2025
CHECKED : T.B.H.	SCALE : VERT. N/A HORIZ.
APPROVED : C.A.H.	SHEET NO. 1 OF 2



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LAZY RIVER I.D.

TECHNICAL REPORT 1.0
ITEM 2.C
PROPOSED FINAL PHASE
0.07 M.G.D. SCHEMATIC FLOW DIAGRAM

LANGFORD ENGINEERING INC.
Consulting Engineers
1080 W. Sam Houston Pkwy N. Ste 200
Houston, Texas 77043-6094
Ph. 713-461-3530 Fax 713-932-7505
TBPE FIRM #449

DESIGN : K.X.H.	JOB NO. 327-003 CONT. NO. 102
DRAWN : S.M.C.	DATE : MARCH 2025
CHECKED : T.B.H.	SCALE : VERT. N/A HORIZ.
APPROVED : C.A.H.	SHEET NO. 2 OF 2

ATTACHMENT E
Technical Report 1.0
Item 3

SITE DRAWING

WASTEWATER TREATMENT PLANT SERVICE AREA

EHLERS RD.

HARRIS RD.

RIVER BEND DR.

LEXINGTON CT.

RIVERBROOK DR.

SHERBROOK CIR.

BROOK HOLLOW DRIVE

SHADY GLEN LN.

HILL BROOK LN.

GLEN ROCK LN.

SADDLE AND SURRY LN.

BROOK HOLLOW DR.

GLEN HAVEN DR.

GLENMORA CT.

BUTLERS CT.

CHARNOCK LN.

BROOK HAVEN

FOREST RD.

BROOK FOREST

GLEN FOREST

GLEN HOLLOW DR.

W.W.T.P. FACILITY

W.W.T.P. PROPERTY

HARPER'S HORSEPEN BRANCH

0 1 2 3 4 5 6
GRAPHIC SCALE X 100'

LEGEND:

LAKE/POND

LAZY RIVER ID DISTRICT BOUNDARY

TPDES WQ0010905-001
LAZY RIVER IMPROVEMENT DISTRICT
SITE DRAWING

LANGFORD ENGINEERING INC.
Consulting Engineers
1080 W. Sam Houston Pkwy N. Ste 200
Houston, Texas 77043-5014
Ph. 713-461-9550 Fax 713-932-7505
TBPE FIRM 9449

DESIGN : J.L.	JOB NO. 327-003	CONT. NO. 102
DRAWN : S.C.C.	DATE : OCTOBER 2024	
CHECKED : T.B.H.	SCALE : VERT. 1"=700'	HORIZ.
APPROVED : T.B.H.	SHEET NO. 1 OF 1	

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ATTACHMENT F
Technical Report 1.0
Item 6.f

SOLIDS MANAGEMENT PLAN

Lazy River Improvement District

Domestic Technical Report 1.0; Item 6.F

Solids Management Plan

Permit Phase	**Existing/Interim I**
Average Flow (mgd)	0.100
Influent Concentration (mg/L)	250

Dimensions and Capacities of Aerobic Digester	2 Units
Digester Length (ft)	16.5
Digester Width (ft)	4.75
Digester (Liquid) Depth (ft)	12.0
Digester Volume (c.f.)	1,881
Digest Volume (gal)	14,072

Note 1: Assumes 0.35 pounds of dry sludge produced per pound of $CBOD_5$ removed, at average temperature.

Note 2: Assumes 2.0% solids.

Note 3: Aeration Basin MLSS operating range of 2,500 mg/L to 3,500 mg/L.

Note 4: Sludge solids will be stabilized in the digesters and transferred to the sludge drying beds. Supernatant will be decanted from the digesters and returned to the WWTP headworks. Waste activated sludge is pumped from the clarifiers and aeration basins to the digesters. Returned activated sludge is pumped from the digesters to the clarifiers or reareation basins. A registered sludge hauler will remove and haul sludge to a permitted sludge treatment facility.

Solids Generated	**100% Flow**	**75% Flow**	**50% Flow**	**25% Flow**
Pounds BOD_5/day Removed	209	156	104	52
Pounds of Dry Sludge Produced per day (see Note 1)	73	55	36	18
Pounds of Wet Sludge Produced per day (see Note 2)	3649	2737	1824	912
Volume of Wet Sludge per day (gal)	438	328	219	109

Removal Schedule (Days)	**100% Flow**	**75% Flow**	**50% Flow**	**25% Flow**
Days between sludge removal	83	110	165	329

Lazy River Improvement District

Domestic Technical Report 1.0; Item 6.F

Solids Management Plan

Permit Phase	**Proposed/Final**
Average Flow (mgd)	0.070
Influent Concentration (mg/L)	250

Dimensions and Capacities of Aerobic Digester	2 Units
Digester Length (ft)	24
Digester Width (ft)	8.0
Digester (Liquid) Depth (ft)	12.5
Digester Volume (c.f.)	4,800
Digest Volume (gal)	35,909

Note 1: Assumes 0.35 pounds of dry sludge produced per pound of $CBOD_5$ removed, at average temperature.

Note 2: Assumes 2.0% solids.

Note 3: Aeration Basin MLSS operating range of 2,500 mg/L to 3,500 mg/L.

Note 4: Sludge solids will be stabilized in the digesters and transferred to the sludge drying beds. Supernatant will be decanted from the digesters and returned to the WWTP headworks. Waste activated sludge is pumped from the clarifiers and aeration basins to the digesters. Returned activated sludge is pumped from the digesters to the clarifiers or reareation basins. A registered sludge hauler will remove and haul sludge to a permitted sludge treatment facility.

Solids Generated	**100% Flow**	**75% Flow**	**50% Flow**	**25% Flow**
Pounds BOD_5/day Removed	146	109	73	36
Pounds of Dry Sludge Produced per day (see Note 1)	51	38	26	13
Pounds of Wet Sludge Produced per day (see Note 2)	2554	1916	1277	639
Volume of Wet Sludge per day (gal)	306	230	153	77

Removal Schedule (Days)	**100% Flow**	**75% Flow**	**50% Flow**	**25% Flow**
Days between sludge removal	83	110	165	329

ATTACHMENT G
Technical Report 1.0

Item 7

LABORATORY TESTING RESULTS

EASTEX
ENVIRONMENTAL LABS INC.

P.O. Box 1089 Coldspring Tx 77331
Website: eastexlabs.com
Email: eastexlab@eastex.net
Tel: 936 653 3249

NELAP ACCREDITED TNI LABORATORY

Lazy River
Water District Management
P.O. Box 579
Spring, TX 77383

LABORATORY ANALYTICAL REPORT

Project: Lazy River Permit Renewal

Sample Site:	Efluent Short PR	Sample Number:		Collector:	KM
Sample Type:	Grab	**4411315-01**		Sampled:	10/17/2024 10:00
Sample Matrix:	Water			Received:	10/17/2024 11:40
Client Matrix:	Water				

Analyte	Result	Reporting Limit	Units	Nelac Status	Batch	Analyzed	Analyst	Method	Notes
DO	7.1		mg/L	N	B4J2599	10/17/2024 10:00	TAS	SM 4500 O G	
pH	7.2		std unit	N	B4J2599	10/17/2024 10:00	TAS	SM 4500 H + B	
Alkalinity	200	20.0	mg CaCO3/L	A	B4J2649	10/21/2024 11:00	JAA	SM 2320 B	
Ammonia as N	3.4	0.1	mg/L	A	B4J2815	10/23/2024 13:22	TMH	SM 4500 NH3 G	12
CBOD 5	<2.0	2.0	mg/L	A	B4J2677	10/18/2024 08:07	MJP	SM 5210 B	1, 13
Chloride	66.8	5.0	mg/L	A	B4J2608	10/17/2024 19:03	OCR	EPA 300.0	
Conductivity	790	10.0	µmhos/cm @25C	A	B4J2861	10/21/2024 06:48	ARB	SM 2510 B	
Nitrate as N	16.7	0.05	mg/L	A	B4J2608	10/17/2024 19:03	OCR	EPA 300.0	
Sulfate	27.5	4.0	mg/L	A	B4J2608	10/17/2024 19:03	OCR	EPA 300.0	
TDS	390	10.0	mg/L	A	B4J2846	10/18/2024 18:00	ARB	SM 2540 C	
TKN	4.2	1.0	mg/L	A	B4J3898	11/01/2024 09:10	CNS	EPA 351.2	
Total Phosphorus	2.35	0.0600	mg/L	A	B4J3414	10/24/2024 14:29	TAK	EPA 200.7	
TSS	9.2	1.0	mg/L	A	B4J2662	10/18/2024 13:47	SEJ	SM 2540 D	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Alkalinity titrated to pH 4.5 endpoint.

*NELAC Status: A=Accredited, N=Accreditation not offered, O=Not Accredited, P=Approved

EASTEX
ENVIRONMENTAL LABS INC.

P.O. Box 1089 Coldspring Tx 77331
Website: eastexlabs.com
Email: eastexlab@eastex.net
Tel: 936 653 3249

NELAP ACCREDITED TNI LABORATORY

Lazy River
Water District Management
P.O. Box 579
Spring, TX 77383

EPA 300.0 - Quality Control

Eastex Environmental Laboratory - Coldspring

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B4J2608 - No Prep										
Blank (B4J2608-BLK1)				Prepared & Analyzed: 10/17/24						
Chloride	ND	5.0	mg/L							
Nitrate as N	ND	0.05	mg/L							
Sulfate	ND	4.0	mg/L							
LCS (B4J2608-BS1)				Prepared & Analyzed: 10/17/24						
Chloride	25.9		mg/L	25.0		104	90-110			
Nitrate as N	1.6321		mg/L	1.50		109	90-110			
Sulfate	20.0		mg/L	20.0		99.9	90-110			
Matrix Spike (B4J2608-MS1)	**Source: 4411315-01**			Prepared & Analyzed: 10/17/24						
Chloride	185	5.0	mg/L	125	66.8	94.5	80-120			
Nitrate as N	24.2516	0.05	mg/L	7.50	16.7321	100	80-120			
Sulfate	124	4.0	mg/L	100	27.5	96.3	80-120			
Matrix Spike Dup (B4J2608-MSD1)	**Source: 4411315-01**			Prepared & Analyzed: 10/17/24						
Chloride	182	5.0	mg/L	125	66.8	92.4	80-120	1.46	20	
Nitrate as N	23.878	0.05	mg/L	7.50	16.7321	95.3	80-120	1.55	20	
Sulfate	122	4.0	mg/L	100	27.5	94.6	80-120	1.40	20	
Batch B4J2649 - No Prep										
Blank (B4J2649-BLK1)				Prepared & Analyzed: 10/21/24						
Alkalinity	ND	20.0	mg CaCO3/L							
LCS (B4J2649-BS1)				Prepared & Analyzed: 10/21/24						
Alkalinity	60.0		mg CaCO3/L	50.0		120	80-120			
Duplicate (B4J2649-DUP1)	**Source: 4411315-01**			Prepared & Analyzed: 10/21/24						
Alkalinity	200	20.0	mg CaCO3/L		200			0.00	20	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Alkalinity titrated to pH 4.5 endpoint.

*NELAC Status: A=Accredited, N=Accreditation not offered, O=Not Accredited, P=Approved

EASTEX
ENVIRONMENTAL LABS INC.

P.O. Box 1089 Coldspring Tx 77331
Website: eastexlabs.com
Email: eastexlab@eastex.net
Tel: 936 653 3249

NELAP ACCREDITED TNI LABORATORY

Lazy River
Water District Management
P.O. Box 579
Spring, TX 77383

SM 2540 D - Quality Control

Eastex Environmental Laboratory - Coldspring

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B4J2662 - No Prep										
Blank (B4J2662-BLK1)				Prepared & Analyzed: 10/18/24						
TSS	ND	1.0	mg/L							
Duplicate (B4J2662-DUP1)	**Source: 4421581-01**			Prepared & Analyzed: 10/18/24						
TSS	188	1.0	mg/L		182			3.24	10	
Batch B4J2677 - No Prep										
Blank (B4J2677-BLK1)				Prepared & Analyzed: 10/18/24						
CBOD 5	1.32	2.0	mg/L							1
LCS (B4J2677-BS1)				Prepared & Analyzed: 10/18/24						
CBOD 5	148		mg/L	198		74.8	84.59-115.402			1, 13
Duplicate (B4J2677-DUP1)	**Source: 4411315-01**			Prepared & Analyzed: 10/18/24						
CBOD 5	0.810	2.0	mg/L		0.690			16.0	30	1, 13
Batch B4J2815 - No Prep										
Blank (B4J2815-BLK1)				Prepared & Analyzed: 10/23/24						
Ammonia as N	ND	0.1	mg/L							12
LCS (B4J2815-BS1)				Prepared & Analyzed: 10/23/24						
Ammonia as N	1.94		mg/L	2.00		97.2	90-110			12
Matrix Spike (B4J2815-MS1)	**Source: 4421166-01**			Prepared & Analyzed: 10/23/24						
Ammonia as N	2.4	0.1	mg/L	2.50	0.3	83.9	80-120			12
Matrix Spike Dup (B4J2815-MSD1)	**Source: 4421166-01**			Prepared & Analyzed: 10/23/24						
Ammonia as N	2.5	0.1	mg/L	2.50	0.3	85.7	80-120	1.79	20	12

Alkalinity titrated to pH 4.5 endpoint.

*NELAC Status: A=Accredited, N=Accreditation not offered, O=Not Accredited, P=Approved

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Website: eastexlabs.com
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Tel: 936 653 3249

NELAP ACCREDITED TNI LABORATORY

Lazy River
Water District Management
P.O. Box 579
Spring, TX 77383

SM 2540 C - Quality Control

Eastex Environmental Laboratory - Coldspring

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B4J2846 - No Prep										
Blank (B4J2846-BLK1)				Prepared & Analyzed: 10/18/24						
TDS	ND	10.0	mg/L							
LCS (B4J2846-BS1)				Prepared & Analyzed: 10/18/24						
TDS	280		mg/L	300		93.3	80-120			
Duplicate (B4J2846-DUP1)	**Source: 4411315-01**			Prepared & Analyzed: 10/18/24						
TDS	380	10.0	mg/L		390			2.60	10	
Batch B4J2861 - No Prep										
Blank (B4J2861-BLK1)				Prepared & Analyzed: 10/21/24						
Conductivity	ND	10.0	µmhos/cm @25C							
LCS (B4J2861-BS1)				Prepared & Analyzed: 10/21/24						
Conductivity	1000		µmhos/cm @25C	1000		100	80-120			
Duplicate (B4J2861-DUP1)	**Source: 4411315-01**			Prepared & Analyzed: 10/21/24						
Conductivity	790	10.0	µmhos/cm @25C		790			0.00	20	
Batch B4J3414 - EPA 200.7										
Blank (B4J3414-BLK1)				Prepared: 10/23/24 Analyzed: 10/24/24						
Total Phosphorus	ND	0.0600	mg/L							
LCS (B4J3414-BS1)				Prepared: 10/23/24 Analyzed: 10/24/24						
Total Phosphorus	2.34	0.0600	mg/L	2.52		93.0	85-115			
Matrix Spike (B4J3414-MS1)	**Source: 4411315-01**			Prepared: 10/23/24 Analyzed: 10/24/24						
Total Phosphorus	4.84	0.0600	mg/L	2.52	2.35	98.6	70-130			
Matrix Spike Dup (B4J3414-MSD1)	**Source: 4411315-01**			Prepared: 10/23/24 Analyzed: 10/24/24						
Total Phosphorus	4.80	0.0600	mg/L	2.52	2.35	97.1	70-130	0.816	20	

Alkalinity titrated to pH 4.5 endpoint.

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Water District Management
P.O. Box 579
Spring, TX 77383

EPA 351.2 - Quality Control

Eastex Environmental Laboratory - Coldspring

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B4J3898 - No Prep										
Blank (B4J3898-BLK1)				Prepared: 10/30/24 Analyzed: 11/01/24						
TKN	ND	1.0	mg/L							
LCS (B4J3898-BS1)				Prepared: 10/30/24 Analyzed: 11/01/24						
TKN	10.6		mg/L	10.0		106	90-110			
Matrix Spike (B4J3898-MS1)	**Source: 4421354-01**			Prepared: 10/30/24 Analyzed: 11/01/24						
TKN	10.7	1.0	mg/L	10.0	1.24	94.7	80-120			
Matrix Spike Dup (B4J3898-MSD1)	**Source: 4421354-01**			Prepared: 10/30/24 Analyzed: 11/01/24						
TKN	10.3	1.0	mg/L	10.0	1.24	91.0	80-120	3.56	20	

Mark Bourgeois, Special Projects Manager

Qualifiers

13	LCS associated with sample batch outside of acceptance limits.
12	CCV associated with sample batch did not meet acceptance criteria.
1	Dilution water blank > 0.20 mg/L DO uptake.

Alkalinity titrated to pH 4.5 endpoint.

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Yellow Copy-Laboratory
Pink Copy-Client Copy

REPORT TO:

Company: WDM
Address:
Attn:
Phone#:
Email:
P.O. #:
Sampler's Name (print): Kelly Manning
Sampler's Signature: Kelly Manning
Project Name: LAZY RIVER

INVOICE TO:

Company:
Address: SAME
Attn:
Phone#:

Remarks:

INSTRUCTIONS:

C or G: C= Composite G= Grab
Matrix: DW=Drinking Water WW=Wastewater SO=Soil/Sludge OT= Other
Container Size: 1=Gallon 2=1/2 Gallon 3=Quart/Liter 4=500mL 5=250mL 6=125mL (4oz) 7=60mL (2 oz) 8= 40mL Vial 9=Other
Type: P= Plastic G= Glass T= Teflon S= Sterile
Preservatives: C=Chilled S=Sulfuric Acid N=Nitric Acid B=Base/Caustic Z= Zn Acetate ST=Sodium Thiosulfate H=HCL O= Other

Work Order ID	Sample ID	Date	Time	Matrix	Field Data: C or G	DO	pH	Cl2	Flow	Temp	Containers: #	Size	Type	Pres
4411315	SHORT PR	10/17/24	1000		G			0.040						
	TKN as N	"	"		"				"					✓
	TP	"	"		"				"					✓
	CBOD 5	"	"		"				"					
	TSS	"	"		"				"					
	NH3	"	"		"				"					✓
	ALK	"	"		"				"					

ANALYSIS REQUESTED: SULFATE, CHLORIDES, ALK, TKN, TP, CBOD 5, TSS, NH3, ALK

Relinquished By: Kelly Manning — Received By: [signature] — Date 10/17/24 — Time 1030 — Received Iced: YES / NO
Relinquished By: — Received By: — Date — Time — Received Iced: YES / NO
Relinquished By: [signature] — Received By and/or Checked In By: [signature] — Date 10/17/2024 — Time 1140 — Received Iced: YES / NO

LAB USE ONLY

Sample Condition Acceptable: YES / NO — Date — Time
Alternate Check In:
Temp °C: 1.8 — *Therm ID: 15 — Logged In By: CT — Date 10.17.24 — Time 1359

*Thermometer has 0.0 factor and recorded temperature is actual temperature

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Tel: 936 653 3249

NELAP ACCREDITED TNI LABORATORY

Lazy River
Water District Management
P.O. Box 579
Spring, TX 77383

LABORATORY ANALYTICAL REPORT

Project: Lazy River Permit Renewal

Sample Site:	Efluent Short PR	Sample Number:		Collector:	MDG
Sample Type:	Grab	**4441727-01**		Sampled:	10/31/2024 12:15
Sample Matrix:	Water			Received:	10/31/2024 13:17
Client Matrix:	Water				

Analyte	Result	Reporting Limit	Units	Nelac Status	Batch	Analyzed	Analyst	Method	Notes
Chlorine	4	0.1	mg/L	N	B4K1051	10/31/2024 12:15	MDG	SM 4500 Cl F	
E coli IDEXX	<1	1	mpn/100ml	A	B4K0145	10/31/2024 14:32	MEB	Colilert 18	

Colilert 18 - Quality Control

Eastex Environmental Laboratory - Coldspring

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B4K0145 - No Prep Micro										
Blank (B4K0145-BLK1)				Prepared & Analyzed: 10/31/24						
E coli IDEXX	ND	1	mpn/100ml							
Duplicate (B4K0145-DUP1)		**Source: 4441160-01**		Prepared & Analyzed: 10/31/24						
E coli IDEXX	ND	2	mpn/100ml		ND				200	

Mark Bourgeois, Special Projects Manager

Qualifiers

The results in this report apply to the samples analyzed in accordance with the chain of custody document
This analytical report must be reproduced in its entirety. *Alkalinity titrated to pH 4.5 endpoint*

*NELAC Status: A=Accredited, N=Accreditation not offered, O=Not Accredited, P=Approved

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Yellow Copy-Laboratory
Pink Copy-Client Copy

REPORT TO:

Company: WDNR
Address: On file
Attn:
Phone#:
Email:
P.O. #:
Sampler's Name (print): Matthew Darcy
Sampler's Signature: Matthew Darcy
Project Name: Lazy River P.R.

INVOICE TO:

Company:
Address: SAME
Attn:
Phone#:

Remarks:

INSTRUCTIONS:

C or G: C= Composite G= Grab
Matrix: DW=Drinking Water WW=Wastewater SO=Soil/Sludge OT= Other
Container Size: 1=Gallon 2=1/2 Gallon 3=Quart/Liter 4=500mL 5=250mL 6=125mL (4oz) 7=60mL (2 oz) 8= 40mL Vial 9=Other
Type: P= Plastic G= Glass T= Teflon S= Sterile
Preservatives: C=Chilled S=Sulfuric Acid N=Nitric Acid B=Base/Caustic Z= Zn Acetate ST=Sodium Thiosulfate H=HCL O= Other

ANALYSIS REQUESTED: Cl2

Work Order ID	Sample ID	Date	Time	Matrix	Field Data: C or G	DO	pH	Cl2	Flow	Temp	Containers: #	Size	Type	Pres
~~444315~~	eff	10/31	1215	WW	G			4.0			1	6	P	C
444727	permit Renewal													

Relinquished By:
Received By:
Date
Time
Received Iced: YES / NO

Relinquished By:
Received By:
Date
Time
Received Iced: YES / NO

Relinquished By: Matthew Darcy
Received By and/or Checked in By: [illegible]
Date 10-31-24
Time 1317
Received Iced: YES / NO

LAB USE ONLY
Sample Condition Acceptable: YES / NO
Alternate Check In:
Date
Time
Temp °C: 9.2
*Therm ID: 15
Logged In By: CT
Date 10-31-24
Time 1353

*Thermometer has 0.0 factor and recorded temperature is actual temperature

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Tel: 936 653 3249

NELAP ACCREDITED TNI LABORATORY

Lazy River
Water District Management
P.O. Box 579
Spring, TX 77383

LABORATORY ANALYTICAL REPORT

Project: Lazy River Permit Renewal

Sample Site:	Effluent Short PR	Sample Number:		Collector:	CES
Sample Type:	Grab	**4452551-01**		Sampled:	11/07/2024 8:30
Sample Matrix:	Water			Received:	11/07/2024 14:20
Client Matrix:	Water				

Analyte	Result	Reporting Limit	Units	Nelac Status	Batch	Analyzed	Analyst	Method	Notes
DO	6.8		mg/L	N	B4K1050	11/07/2024 08:30	CES	SM 4500 O G	

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

Mark Bourgeois, Special Projects Manager

Qualifiers

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Pink Copy-Client Copy

REPORT TO:

Company: WDMC
Address:
Attn:
Phone#:
Email:
P.O. #:
Sampler's Name (print): Christopher Sydner
Sampler's Signature:
Project Name: Lazy River PR

INVOICE TO:

Company:
Address: SAME
Attn:
Phone#:

Remarks:

INSTRUCTIONS:

C or G: C= Composite G= Grab
Matrix: DW=Drinking Water WW=Wastewater SO=Soil/Sludge OT= Other
Container Size: 1=Gallon 2=1/2 Gallon 3=Quart/Liter 4=500mL 5=250mL 6=125mL (4oz) 7=60mL (2 oz) 8= 40mL Vial 9=Other
Type: P= Plastic G= Glass T= Teflon S= Sterile
Preservatives: C=Chilled S=Sulfuric Acid N=Nitric Acid B=Base/Caustic Z= Zn Acetate ST=Sodium Thiosulfate H=HCL O= Other

Work Order ID	Sample ID	Date	Time	Matrix	Field Data: C or G	DO	pH	Cl2	Flow	Temp	Containers: #	Size	Type	Pres	ANALYSIS REQUESTED: DO for PR
445 2551	Eff PR	11-7	830	WW	G	6.8									X

Relinquished By: | Received By: | Date | Time | Received Iced: YES / NO
Relinquished By: | Received By: | Date | Time | Received Iced: YES / NO
Relinquished By: Sydner | Received By and/or Checked in By: | Date 11-7-24 | Time 1420 | Received Iced: (YES) / NO

LAB USE ONLY Sample Condition Acceptable: (YES) / NO
Alternate Check In: Date Time

Temp °C	*Therm ID	Logged In By:	Date	Time
1.2	15		11-7-24	1746

*Thermometer has 0.0 factor and recorded temperature is actual temperature

ATTACHMENT H
Technical Report 1.0
Item 9.d
PERMITTED SLUDGE PROCESSING FACILITY LETTER

Plant: Lazy River 11/18/2024
TCEQ Permit:

To Whom It May Concern:

Mount Houston Road Municipal Utility District, owner of a Waste Water Treatment Plant (Permit #WQ0011154001) located approximately 1.3 miles northwest of the intersection of State Highway 249 and Veterans Memorial Drive, Houston, Texas, and Magna Flow Environmental, owner of the Processing Permit (Permit #WQ0005023000)

Magna Flow Environmental and Mount Houston Road Municipal Utility District have entered into a contractual agreement, where Magna Flow Environmental (T.C.E.Q. Transporter Permit # 21484) will dewater sewage sludge from other waste treatment plants at the Mount Houston Road Municipal Utility District treatment plant. Dewatered Sludge will then be disposed of at a T.C.E.Q. permitted disposal site.
Mount Houston Road Municipal Utility District has the capacity to accept sludge from the above mentioned plant.

Magna Flow Environmental agrees to accept and be responsible for the sludge dewatered at the plant. We will maintain responsibility for the life of the permit.

Mark Ivy
President
M. Marlon Ivy & Associates
Operator for MTH MUD

Jerry McCurtain
Vice President
Magna Flow Environmental

ATTACHMENT I
Technical Report 1.1
Item 4

DESIGN CALCULATIONS

PERMIT PHASE – 0.070 MGD

I. SUMMARY – Re-rating/Amendment

Per 30 TAC 217.34 (1) (D) – *"For a wastewater treatment facility that will not be affected by future growth, the design flow for a re-rating or alteration must be calculated using the wastewater treatment facility's average daily flow plus one standard deviation."*

Based on the available Operator's Reports for the last 5-years, the average daily flow in the plant has been: 0.029 MGD, with a standard deviation of 0.0016 MGD. The mean of the peak daily flows for each month in the last five years is 0.048 MGD, with a standard deviation of 0.020 MGD. The mean of the peak flows plus one standard deviation equals: 0.068 MGD. Therefore, it is recommended that the discharge permit of the plant be amended/re-rated to 0.070 MGD.

The proposed modification of the WWTP is to convert the old plants into clarifiers; and construct new aeration, digester, and chlorine contact chambers to serve the District. The design flow limits will be 0.070 MGD for maximum average daily flow, and 200 gpm for the 2-hour peak flow. The rest of the design limits will be those stated on the Plant's current permit. All planned phases of this facility will be suspended growth activated sludge process operating in the single step nitrification mode. Proposed treatment units include a channel mounted bar screen, two (2) aeration basins, two (2) clarifiers, two (2) aerobic digester basins, and one (1) chlorine contact basin.

II. WASTEWATER TREATMENT PLANT DESIGN

A. DESIGN CRITERIA

i. <u>Proposed Effluent Limits:</u>

From the current TPDES Permit,

a.	$CBOD_5$	=	10	mg/l (daily average)
b.	TSS	=	15	mg/l
c.	NH_3-N	=	3	mg/l
d.	*E. Coli*	=	63	colonies per 100 ml
e.	Cl	=	1.0 – 4.0	mg/l
f.	pH	=	6.0 – 9.0	standard units
g.	DO	≥	6	mg/l

ii. Process Criteria: The process criteria are taken from 30 TAC §217, Design Criteria for Domestic Wastewater Systems.

a. Maximum Aeration Basin Organic Loading (lb BOD_5/day/1,000 ft^3)	=	35
b. Minimum Oxygen Required for BOD_5 Removal (lb O_2/lb BOD_5)	=	2.2
c. Maximum Clarifier Surface Loading at Peak Flow (gal/day/ ft^2)	=	1,200
d. Maximum Clarifier Surface Loading at Design Flow (gal/day/ ft^2)	=	1,000
e. Minimum Clarifier Detention Time (hours)	=	1.8
f. Maximum Clarifier Weir Loading at Peak Flow (gal/day/ft)	=	20,000
g. Minimum Chlorine Contact Detention Time at Peak Flow (minutes)	=	20
h. Mixing Zones		
Length-to-width ration:	=	40:1
or,		
G (sec^{-1}) (velocity gradient)	≥	500
i. Mean Cell Residence Time in Aerobic Digester (days)	=	28*
j. Minimum Air Required for Digester (scfm/1,000 ft^3)	=	20
k. Return Sludge Pumping Range (gpd/ ft^2)	=	200 – 400

*28-day Solids Retention Time (SRT) instead of 48-day SRT based on the EPA publication "*Control of Pathogens and Vector Attraction in Sewage Sludge*".

B. TREATMENT FACILITIES

i. Permitted Flow.

a. Average (Design) = 70,000 gpd $=$ 48.6 gpm

$\approx$ 50 gpm

b. Peak (2-hour) = 200 gpm $=$ 288,800 gpd

ii. Organic Loadings.

a. BOD_5 = (0.070 MGD)(8.34 lb/gal)(250 mg/L) = $146\ \frac{\text{lb} - BOD_5}{\text{day}}$

b. TSS = (0.070 MGD)(8.34 lb/gal)(250 mg/L) = $146\ \frac{\text{lb} - \text{TSS}}{\text{day}}$

c. $NH_3 - N$ = (0.070 MGD)(8.34 lb/gal)(40 mg/L) = $24\ \frac{\text{lb} - NH_3 - N}{\text{day}}$

iii. Process Equipment.

a. Screening. The proposed influent channel and manual bar screen have a minimum hydraulic capacity of 200 gpm for the 2-hr peak flow.

b. Aeration Basin. The proposed plant modifications include two (2) aeration basins.

Maximum Aeration Basin Organic Loading (Per 30 TAC 217)

(lb BOD_5/day/1,000 ft^3) = 35

i. Total Required Volume (Per 30 TAC 217)

(0.070 MGD)(8.34$\frac{\text{lb}}{\text{L}}$)(250 mg/L)/(35 lb BOD_5/1000ft^3) = 4,170 ft^3

ii. Total Existing Volume = 3,010 ft^3

iii. Actual Existing Organic Loading

(146 lb BOD_5/day)/(3,010 ft^3/1,000ft^3) = 48.5 lb-BOD_5/ day/1,000 ft^3

iv. Proposed Volume

(L: 20 ft)(W: 10 ft)(D: 12 ft)(2-units) = 4,800 ft^3

v. Proposed Organic Loading

(146 lb BOD_5/day)/(4,800 ft^3/1,000ft^3) = 30.4 lb-BOD_5/ day/1,000 ft^3

c. Secondary Clarifier. The plant includes two (2) existing 26-foot diameter treatment units. Each of these treatment units contains a 16-foot diameter clarifier. The two treatment units will be gutted and converted into clarifiers as part of the project.

i. Clarifier Surface Area

Required Surface Area @ Peak Flow

$(288{,}800 \text{ gpd})/(1{,}200 \text{ gpd/ft}^2)$ = 241 ft^2

Existing Surface Area

$(\pi/4)(16 \text{ ft})^2$(2-units) = 402 ft^2

Proposed Surface Area

$(\pi/4)(26 \text{ ft})^2$(2-units) = 1062 ft^2

ii. Maximum Clarifier Surface Loading (30 TAC 217)

@ Design Flow (gal/day/ ft^2) = 1,000 gpd/ft^2

@ Peak Flow (gal/day/ft^2) = 1,200 gpd/ft^2

Existing Surface Loading

1. @ Design Flow

$(70{,}000 \text{ gpd})/(402 \text{ ft}^2)$ = 174 gpd/ft^2

2. @ Peak Flow

$(288{,}800 \text{ gpd})/(402 \text{ ft}^2)$ = 719 gpd/ft^2

Proposed Surface Loading

3. @ Design Flow

$(70{,}000 \text{ gpd})/(1062 \text{ ft}^2)$ = 66 gpd/ft^2

4. @ Peak Flow

$(288{,}800 \text{ gpd})/(1062 \text{ ft}^2)$ = 272 gpd/ft^2

iii. Clarifier Weir Length

Existing Weir Length

$(\pi)(16 \text{ ft} - 2 \text{ ft})(2 \text{ units})$ = 88 ft

Proposed Weir Length

$(\pi)(26 \text{ ft} - 2 \text{ ft})(2 \text{ units})$ = 150 ft

iv. Maximum Clarifier Weir Loading @ Peak Flow

(Per 30 TAC 217)	=	20,000 gpd/ft
Existing Weir Loading @ Peak Flow		
(288,800 gpd)/(88 ft)	=	3,280 gpd/ft
Proposed Weir Loading @ Peak Flow		
(288,800 gpd)/(150 ft)	=	1,925 gpd/ft

v. Minimum Clarifier Detention Time @ Peak Flow

(Per 30 TAC 217)	=	20 minutes
Existing Hydraulic Detention Time @ Peak Flow		
$(402\ ft^2)(11.6\ ft)/(288{,}800\ gpd/24/7.48\frac{gal}{ft^3})$	=	2.89 hours
	=	174 minutes
Proposed Hydraulic Detention Time @ Peak Flow		
$(1062\ ft^2)(11.6\ ft)/(288{,}800\ gpd/24/7.48)$	=	7.66 hours
	=	459 minutes

d. Aerobic Digester.

The plant's two treatment units each have an aerobic digester with 970 cubic feet of volume. These will be removed, and new digesters are proposed to meet the District's demand.

Assumptions:

- One (1) pound of solids produced per pound of BOD_5 applied;
- solids are 70% volatile organics;
- 30% of the volatiles are destroyed during digestion;
- 15,000 mg/l MLSS concentration exists in the digester on average.

i. Digester Sizing

1. Solids Production

   (146 lb BOD_5/day)/(lb solids/ lb BOD_5) = 146 lb solids/day

2. Digested Solids Production

   (146 lb solids/day)(1 – (0.30)(0.70)) = 116 lb solids/day

3. Average Solids in Digester

   (146 lb solids/day + 116 lb solids/day)/2 = 131 lb solids/day

4. Total Solids in Digester for 28-day SRT[1]

   (131 lb solids/day)(28 days) = 3,668 lb solids

5. Required Volume[2]

$$\frac{(3{,}668\ \text{lb solids})(10^6 \frac{\text{mg,w}}{\text{L}_\text{W}})}{(8.34 \frac{\text{lb}_\text{W}}{\text{gal,w}})(7.48 \frac{\text{gal,w}}{\text{ft}^3})(15{,}000 \frac{\text{mg,w}}{\text{L,w}} \text{MLSS})} = 3{,}920\ \text{ft}^3$$

   Existing Total Volume

   (79.24 ft^2)(12.25 ft)(2-units) = 1,942 ft^3

   Proposed Volume of Basins

   (24 ft)(8 ft)(12.5 ft)(2-units) = 4,800 ft^3

[1] 28-day Solids Retention Time (SRT) utilized instead of 48-day SRT for use of a two-stage digester per EPA publication: *"Control of Pathogens and Vector Attraction in Sewage Sludge"*

[2] The subscript '*w*' represents wastewater here. The standard properties of water are assumed for wastewater.

e. Chlorine Contact Basin.

30 TAC 217.281 – (A) "Mixing zone within a chlorine contact basin must not be considered as part of the volume needed for disinfection." (B) "A Chlorine Contact Basin must provide a minimum contact time of 20 minutes at the peak flow."

	Required Detention Time at Peak Flow		
	(Per 30 TAC 217)	=	20 minutes
i.	Minimum Required Volume of Disinfection Chamber at Peak Flow		
	(200 gpm)(20 min)/(7.48 gal/ft^3)	=	535 ft^3
ii.	Existing Volume		
	(47.97 ft^2)(10.17 ft)(2-units)	=	976 ft^3
iii.	Actual Detention Time at Peak Flow		
	(976 ft^3)/((200 gpm)/(7.48 gal/ft^3))	=	36 minutes
iv.	Proposed Volume of Disinfection Chamber		
	(15 ft)(5 ft)(10 ft)	=	750 ft^3
v.	Proposed Detention Time at Peak Flow		
	(750 ft^3)/((200 gpm)/(7.48 gal/ft^3))	=	28 minutes
vi.	Mixing Requirements – Chamber Sizing		
	Required Velocity Gradient G (sec^{-1})	=	500

$$G_t = \sqrt{\frac{P}{\mu_{20}\forall}} = \sqrt{\frac{P/\forall}{\mu_{20}}} \quad \xrightarrow{yields} \quad P/\forall = \left(G_t{}^2\right) * \mu_{20}$$

where,

G_t , is the velocity gradient in the turbulent (mixing zone);
P , is the power required for the mixing;
$\forall$, is the volume required of the mixing zone; and,
μ_{20} , is the dynamic viscosity of water at 20°C (68°F)

Thus, for this system, the following power to volume ratio is required:

$$P/\forall = (500^2) * 0.001002 = 250.5$$

It can be found that for a **100 ft^3 mixing zone** approximately 0.95 HP is required. Thus, a **1.5 HP mixing pump** is recommended for this size.

The proposed dimensions of the mixing chamber are:

L: 2, W: 5 ft, D: 10 ft.

f. Air Requirements.

i. Aeration Basin (Coarse Bubble Aeration)[3]

a. BOD_5 Air Required

$$\frac{(146 \text{ lb } BOD_5/\text{day})(2.2 \text{ lb } O_2/\text{ lb } BOD_5)(1.56)}{(0.075)(0.65)(0.23 \text{ lb } O_2/\text{ lb Air})(0.075 \frac{\text{lb Air}}{\text{ft}^3})(1{,}440 \frac{\text{min}}{\text{day}})} = 413 \text{ scfm}$$

b. NH_3-N Air Required

$$\frac{(33 \text{ lb } NH_3N/\text{day})(4.3 \text{ lb}O_2/\text{lb } NH_3N)(1.56)}{(0.075)(0.65)(0.23 \text{ lb } O_2/\text{ lb Air})(0.075 \frac{\text{lb Air}}{\text{ft}^3})(1{,}440 \frac{\text{min}}{\text{day}})} = 133 \text{ scfm}$$

ii. Aerobic Digester

a. Existing

(1,942 ft^3)(20 scfm/1000 ft^3) = 38.8 scfm

b. Proposed

(4,800 ft^3)(20 scfm/1000 ft^3) = 96.0 scfm

iii. Chlorine Contact Basin

a. Existing

(976 ft^3)(20 scfm/1000 ft^3) = 19.5 scfm

b. Proposed

(750 ft^3)(20 scfm/1000 ft^3) = 15.0 scfm

iv. Air Lift Pumps = 400 scfm

v. Total Air Requirements (scfm) = 1057 scfm

g. Blower Capacities.

i. Required Blower Capacity for Proposed Improvements with Largest Unit out of Service

(2)(individual blower capacity) = 1057 scfm

ii. Proposed Blower Capacity

3-750 scfm blowers, including 1-backup per 30 TAC 217

(750 scfm)(2-units) = 1500 scfm

[3] 30 TAC 217.155(b)(2)(C & D). Cine Bubble Diffuser is assumed, with a CWTE of 0.75%/ft and diffuser submergence of 10 feet (9 feet minimum for 0.10 MGD plant).

h. Chlorination Equipment.

i.	Chlorine Dosage Rate	=	8 mg/L
ii.	Chlorine Feed Rate @ Design Flow		
	$(0.070\ \text{MGD})(8.34\ \frac{\text{lb}}{\text{gal}})(8\ \frac{\text{mg}}{\text{L}})$	=	4.67 lbs/day
iii.	Required Chlorine Feed Rate @ Peak Flow		
	$(0.2888\ \text{MGD})(8.34\ \frac{\text{lb}}{\text{gal}})(8\ \frac{\text{mg}}{\text{L}})$	=	19.27 lbs/day
iv.	Proposed Chlorine Dosage Capacity		
	(2 – 150-lb Cylinders)(30°F)(1 lb/°F/day)	=	40 lbs/day

2-150-lb cylinder(s) are required for treatment. An additional cylinder will be kept on site at all times to comply with 30 TAC §217 Requirements.

Design Features to Prevent Bypasses or Overflows

a) Excessive Inflow or Infiltration (I&I)

- **Design Consideration:** The system will incorporate an effective inflow and infiltration reduction program, including proper sealing of sewer lines and manholes. The influent on-site lift station is designed with the capacity to pump peak flow with the largest pump out of service. The facility hydraulic features will be designed to allow 2-hour peak flow without exceeding minimum freeboard requirements. The design will account for a stormwater surcharge factor to accommodate potential increases in flow during heavy rain events
- **Preventive Measures:** Use of sewer line grouting and manhole sealing techniques to minimize groundwater and surface water infiltration.

b) Power Failure

- **Design Consideration:** To ensure continuous operation during power outages, the facility will be equipped with an auxiliary power source. Emergency power will be provided by a 200-kW Caterpillar portable generator (CAT XQ200), which is capable of handling full plant load. The quick connect system allows the operator to quickly switch between utility power and backup generator. Fuel Storage will be sufficient for at least 48 hours of operation under peak demand conditions.
- **Power System Reliability Calculation:** The power system will be sized based on the maximum power demand of the plant, considering peak load, auxiliary units, and critical equipment.

  Plant Peak Load = Maximum Plant Load × Safety Factor (typically 1.5)

  - Aeration Basin typically consumes between 0.3 to 0.5 kWh per 1,000 gallons of wastewater treated. For a plant with a capacity of 70,000 GPD, energy consumption could be calculated as:

    70,000 gallons/day × 0.4 kWh/1,000 gallons x (2) units = 56 kWh/day

  - Digester typically consumes 0.2 to 0.4 kWh per 1,000 gallons of wastewater treated. For a plant with a capacity of 70,000 GPD, energy consumption could be calculated as:

    70,000 gallons/day × 0.3 kWh/1,000 gallons x (2) units = 42 kWh/day

  - Clarifier typically consumes 0.1 to 0.2 kWh per 1,000 gallons of wastewater treated. For a plant with a capacity of 70,000 GPD, energy consumption could be calculated as:

    70,000 gallons/day × 0.15 kWh/1,000 gallons x (2) units = 21 kWh/day

  - Chlorine Contact Basin typically consumes 0.1 kWh per 1,000 gallons of wastewater treated. For a plant with a capacity of 70,000 GPD, energy consumption could be calculated as:

    70,000 gallons/day × 0.1 kWh/1,000 gallons x (2) units = 14 kWh/day

Therefore, Daily Power Consumption = 56 + 42 + 21 +14 = **133 kWh/day**

➔ Plant Peak Load = 133 kWh/day x 1.5 = 199.5 kWh/day

Conclusion: a 200-kW Caterpillar portable generator will have sufficient capacity to power the wastewater treatment plant in the event of power failure.

c) Equipment Malfunction

- **Design Consideration:** The design will include **redundant units** to minimize the impact of equipment failure.
- **Preventive Measures:**
    - **Spare parts and regular maintenance schedules** will be implemented.
    - **Alarm systems** will be integrated into the control panels to notify operators of malfunctions.

d) Facility Unit Maintenance and Repair

- **Design Consideration:** The plant will be designed with the flexibility to allow for maintenance and repairs without affecting overall treatment. On-site lift station submersible pumps sized to meet peak flow capacity with the largest pump out of service. High wet well level will result in an alarm condition. Isolated sections of the plant will be provided so that maintenance can be carried out without shutting down the entire system. Each aeration basin, digester, clarifier will be capable of continuous operation. Flexible piping and valves will be incorporated to allow for the isolation and repair of specific units while keeping the rest of the system operational. Maintenance tasks and equipment will be scheduled to minimize downtime.

e) Other Potential Causes (e.g., Operator Error or Natural Events)

- **Overflow Holding Tanks**: In cases where treatment processes cannot keep up with inflows, overflow holding tanks will temporarily store wastewater until normal treatment resumes.
- **Alarms and Remote Monitoring:** The system will include alarms triggered by flow surges, high water levels, or equipment malfunctions, with remote monitoring capability to alert operators.
- **Operational Training**: Operators will be trained in emergency response procedures, including bypass procedures in case of unforeseen events.

ATTACHMENT J

SUPPLEMENTTAL 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: Lazy River Improvement District

   Permit No. WQ00 11820001 EPA ID No. TX 0069256

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

   830 Glen Hollow Drive, Conroe, Montgomery County, Texas 77385.

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: Timothy Hardin

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

Title: Vice President

Mailing Address: 1080 W Sam Houston Pkwy N., Suite 200

City, State, Zip Code: Houston, TX 77043

Phone No.: (713) 461-3530 Ext.: Click here to enter text Fax No.: Click here to enter text

E-mail Address: tim.h@langfordeng.com

2. List the county in which the facility is located: Click here to enter text
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.

Discharge into a ditch named Trade Center Drive/College Park Ditch, thence to the west fork of the San Jacinto River in Segment No. 1004 of the San Jacinto River Basin.

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

Provide original photographs of any structures 50 years or older on the property.

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

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

☐ Disturbance of vegetation or wetlands

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

N/A

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

N/A

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

ATTACHMENT K
Technical Report 1.0
Item 6.b
PROPOSED BUFFER ZONE EASEMENT EXHIBIT

LOT 50

LOT 54

GLEN HOLLOW DRIVE

GLEN HOLLOW COURT

LOT 55

RIVERBROOK COMMUNITY
IMPROVEMENT ASSOCIATION
CALLED 75.765 ACRES

GLEN FOREST DRIVE

FOREST HILLS
GREEN (REPLAT)
M.C.C.F. #254096

LOT 21

LOT 20

LOT 19

LOT 17 &
LOT 18

25'

30'

45°

30'

AREA 4:
PROP TEMPORARY
ACCESS EASEMENT
(APPROX. 0.028 AC)

HOUSTON # 1 HOME & LAND BUYERS LLC
CALLED 346.960 ACRES
M.C.C.F. #2024094983

45°

30'

Exist. 12' Wide Crushed Limestone Access Road

Exist 20' Roadway Esmt.
M.C.C.F. #7736626
Vol. 1021 Pg. 64

AREA 1:
PROP 30' WIDE
TEMPORARY
ACCESS EASEMENT
(APPROX. 0.523 AC)

LOT 16

TRACT ONE
RIVERBROOK COMMUNITY
IMPROVEMENT ASSOCIATION
CALLED 5.394 ACRES

Exist 20' Roadway Esmt.
M.C.C.F. #7736626
Vol. 1021 Pg. 64

30'

Property
Line

AREA 3:
PROP 150' BUFFER ZONE
(APPROX. 0.103 AC)

LOT 12

LOT 11

LOT 13

AREA 2:
PROP 150' BUFFER ZONE
(APPROX. 0.922 AC)

150'R

150'

LOT 9 &
LOT 10

BROOK HOLLOW
DRIVE

60'

Property
Line

LAZY RIVER ID WWTP
CALLED 1.033 ACRES
M.C.C.F. #7736624

Property
Line

Property
Line

Exist. Wastewater
Treatment Plant Facility

LOT 6

LOT 7

LOT 8

WOODLANDS LAND DEVELOPMENT CO.
CALLED 84.478 ACRES

TRADE CENTER DRIVE/COLLEGE PARK DITCH

0 1 2 3 4 5 10
GRAPHIC SCALE X 10'

LAZY RIVER
IMPROVEMENT DISTRICT

TWDB WASTEWATER TREATMENT
PLANT IMPROVEMENTS

PROPOSED EASEMENTS

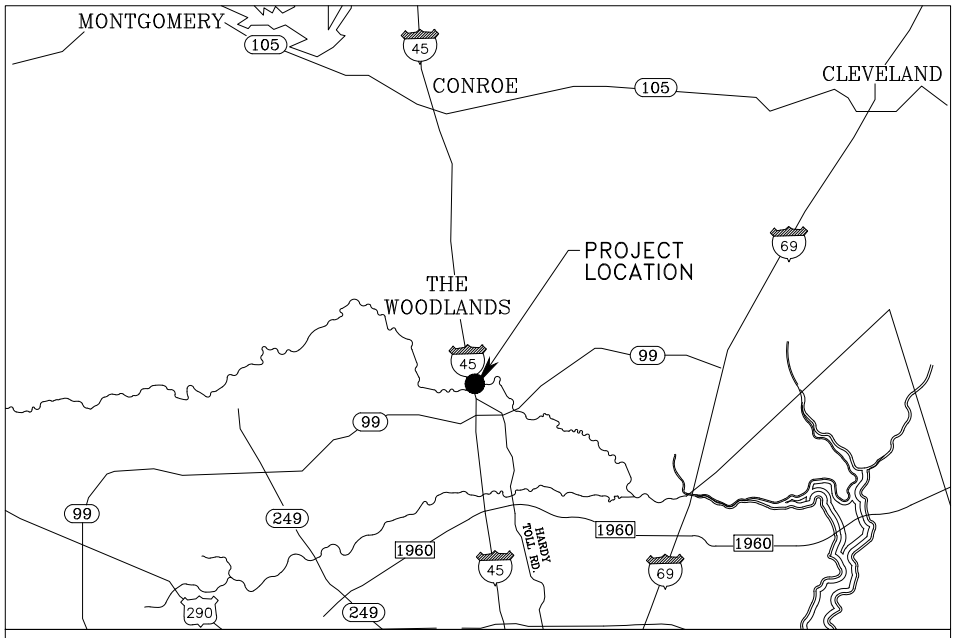
LANGFORD ENGINEERING INC.
Consulting Engineers
1080 W. Sam Houston Pkwy N. Ste 200
Houston, Texas 77043-5014
Ph. 713-461-3530 Fax 713-932-7505
TBPE FIRM #449

DESIGN : C.A.H.	JOB NO. : 327-007 CONT. NO. : 1
DRAWN : S.M.C.	DATE : NOVEMBER 2024
CHECKED : T.B.H.	SCALE : 1"=50'
APPROVED : C.A.H.	SHEET NO. 01 OF 01

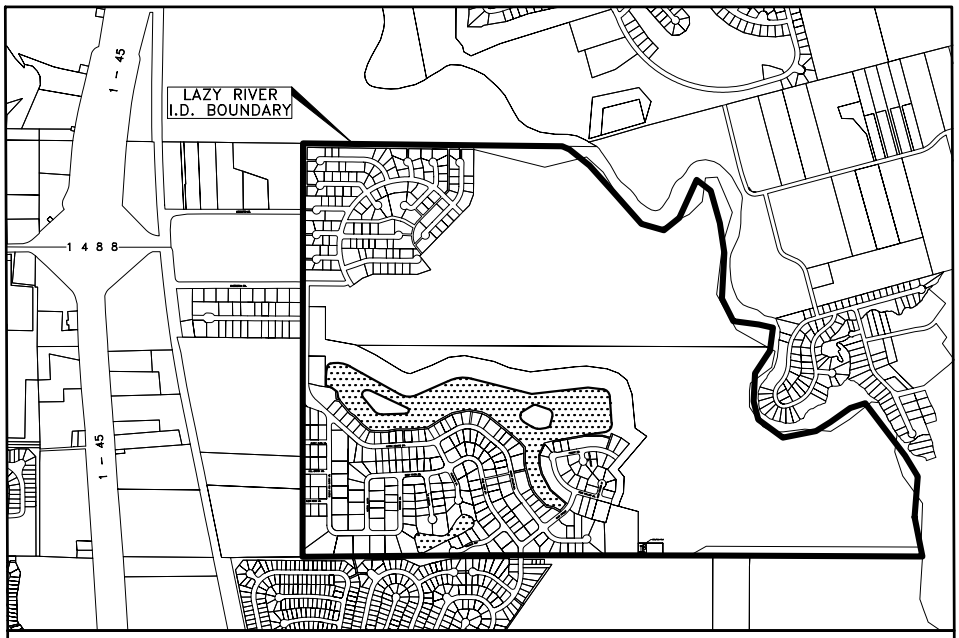
E:\Current Proj\327007001 - WWTP Improvements 2023 TWDB Project\Exhibits\Proposed Easement Exhibit\WWTP Easement Exhibit.dwg Nov 13, 2024-10:30am stevenc

SPIF

LOCATION MAP



LOCATION MAP



VICINITY MAP

LAZY RIVER IMPROVEMENT DISTRICT
T.P.D.E.S. WQ0011820001

LOCATION & VICINITY MAP

LANGFORD ENGINEERING INC.
Consulting Engineers

1080 W. Sam Houston Pkwy N. Ste 200
Houston, Texas 77043-5014
Ph. 713-461-3530 Fax 713-932-7505

TBPE FIRM #449

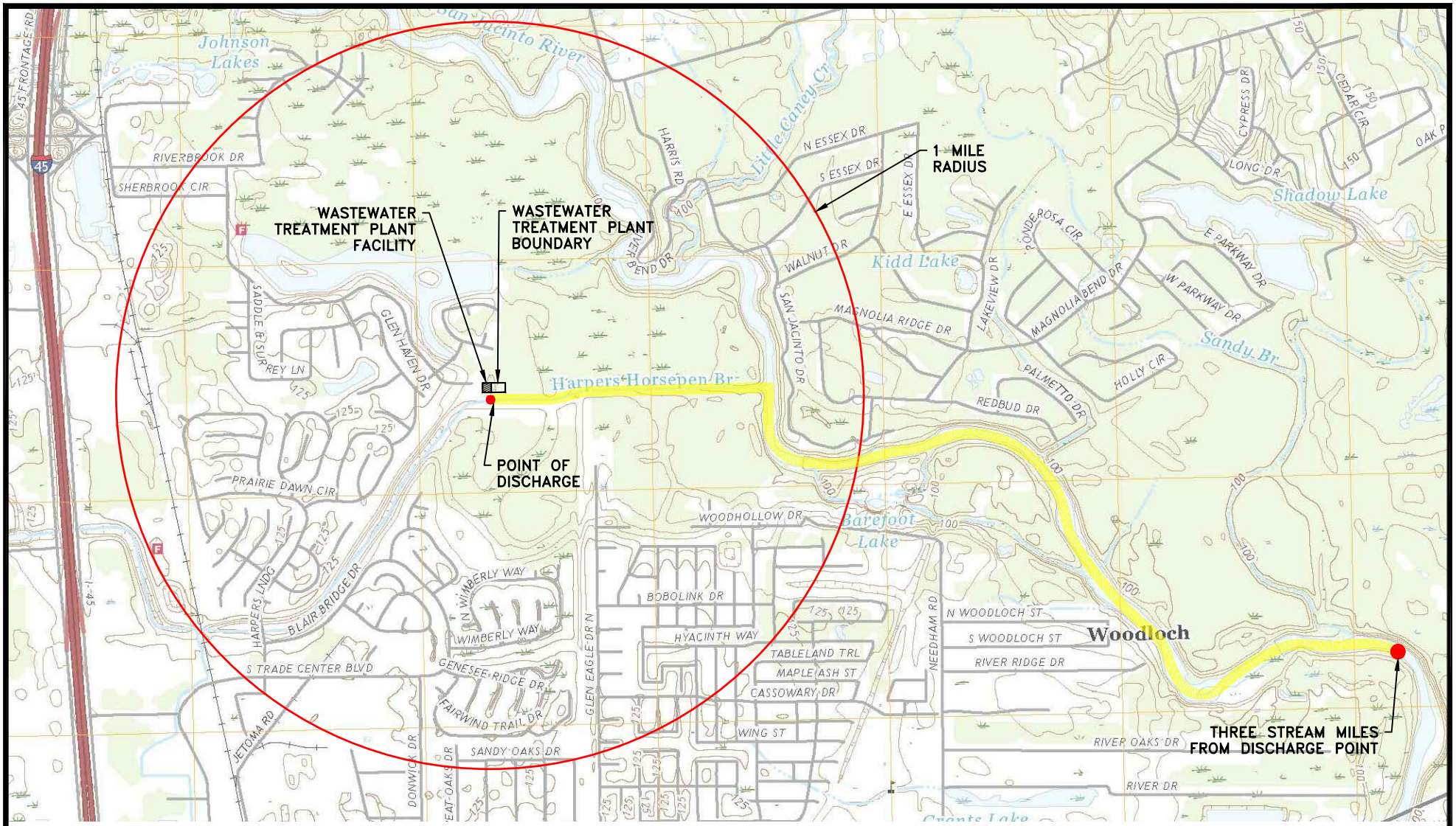
DESIGN : S.M.C.	JOB NO. 327-003 CONT. NO.
DRAWN : S.C.C.	DATE : OCTOBER 2019
CHECKED : J.O.R.	SCALE : VERT. HORIZ. N.T.S.
APPROVED : T.B.H.	SHEET NO. 1 OF 1

E:\Current Proj\327003101 - 2020 TPDES Discharge Permit Renewal\Exhibits\Location and Vicinity Map.dwg Oct 02, 2019-3:41pm Shane.C

SPIF

7.5 – Minute USGS Quadrangle Map

E:\Current Proj\327003101 – 2020 TPDES Discharge Permit Renewal\Exhibits\Spif Item.dwg Oct 02, 2019–3:47pm Shane.C



MONTGOMERY COUNTY
LAZY RIVER IMPROVEMENT DISTRICT
T.P.D.E.S. WQ0011820001
SUPPLEMENTAL PERMIT INFORMATION ITEM
U.S.G.S. MAP TAMINA, TX

TREATMENT FACILITY

PROPERTY BOUNDARY

0 0.5 1
MILES

0 1000 2000 3000 4000 5000
FEET

SCALE: 1:24000

SHEET 1 OF 1

Francesca Findlay

From: Khiem Hoang <Khiem.H@langfordeng.com>
Sent: Tuesday, March 18, 2025 6:11 PM
To: Francesca Findlay
Cc: Tim Hardin; Craig Hajovsky; Anthony Hong
Subject: RE: WQ0011820001 Lazy River Improvement District - Notice of Deficiency
Attachments: 327-003-102 2025 03 18 Permit Application_Final.pdf; 327-003-102 2025 03 18 NORI English.pdf; 327-003-102 2025 03 18 NORI Spanish.pdf; wq0011820001-nod1 (LEI Comments).pdf

Good evening Ms. Findlay,

Please see attached for your review and approval:

1. Complete permit application (dated March 18, 2025) with cover letter and revised pages.
2. NORI in English: comment – permitted average daily flow 70,000 GPD.
3. NORI in Spanish.

Please do not hesitate to contact me if you have any questions or any additional information required.

Thank you.

Khiem X. Hoang, EIT
Project Engineer

Langford Engineering, Inc.
1080 W Sam Houston Pkwy N, Suite 200
Houston, TX 77043
Tel (713) 461-3530; Fax (713) 932-7505
www.langfordeng.com
TBPE Firm No. 449

From: Tim Hardin <Tim.H@langfordeng.com>
Sent: Friday, March 14, 2025 7:52 AM
To: Khiem Hoang <Khiem.H@langfordeng.com>; Craig Hajovsky <craig.h@langfordeng.com>; Anthony Hong <Anthony.H@langfordeng.com>
Subject: FW: WQ0011820001 Lazy River Improvement District

Gentlemen,

FYI, please have these revisions ready for review (including NORI review & translation) by middle of next week so we can have the response sent on or before Friday, March 21.

Thank you,

-Tim

From: Francesca Findlay <Francesca.Findlay@tceq.texas.gov>
Sent: Thursday, March 13, 2025 5:09 PM
To: Tim Hardin <Tim.H@langfordeng.com>
Cc: Anthony Hong <Anthony.H@langfordeng.com>
Subject: FW: WQ0011820001 Lazy River Improvement District

Dear Mr. Hardin:

The attached Notice of Deficiency letter sent on March 13, 2025, requesting additional information needed to declare the application administratively complete. Please send the complete response to my attention March 28, 2025.

Thank you,

Francesca Findlay
License & Permit Specialist
ARP Team | Water Quality Division
512-239-2441
Texas Commission on Environmental Quality

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

March 13, 2025

Mr. Timothy Hardin, P.E.
Vice President
Langford Engineering, Inc.
1080 West Sam Houston Parkway North, Suite 200
Houston, Texas 77043

RE: Application to Renew, for Permit No.: WQ0011820001 (EPA I.D. No. TX0069256)
Applicant Name: Lazy River Improvement District (CN600792113)
Site Name: Lazy River Improvement District WWTP (RN101516193)
Type of Application: Renewal with changes

VIA EMAIL

Dear Mr. Hardin:

We have received the application for the above referenced permit, and it is currently under review. Your attention to the following item(s) are requested before we can declare the application administratively complete. Please submit responses to the following items via email.

1. Administrative Report 1.0, Section 2, item E: Please describe the proposed changes.

2. Administrative Report 1.0, Section 5, item A: Please provide and email address.

3. Administrative Report 1.0, Section 5, item B: Please provide a phone number and an email address.

4. Administrative Report 1.0, Section 8, item C: Please provide an email address.

5. Core Data Form, Section III, items 27-28: Please provide the Latitude and Longitude.

6. The following is a portion of the NORI which contains information relevant to your application. Please read it carefully and indicate if it contains any errors or omissions. The complete notice will be sent to you once the application is declared administratively complete.

70,000

APPLICATION. Lazy River Improvement District, 2727 Allen Parkway, Suite 1100, Houston, Texas 77019, has applied to the Texas Commission on Environmental Quality (TCEQ) to renew Texas Pollutant Discharge Elimination System (TPDES) Permit No. WQ0011820001 (EPA I.D. No. TX0069256) to authorize the discharge of treated wastewater at a volume not to exceed a daily average flow of 700,000 gallons per day. The domestic wastewater treatment facility is located at 830 Glen Hollow Drive, South, in the city of Conroe, in Montgomery County, Texas 77385. The discharge route is from the plant site to an unnamed tributary; thence to West Fork San Jacinto River. TCEQ received this application on March 10, 2025. The permit application will be available for viewing and copying at Montgomery County Public Library, 104 Interstate 45 North, Conroe, in Montgomery 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=-95.437222,30.226944&level=18

7. The application indicates that public notices in Spanish are required. After confirming the portion of the NORI above does not contain any errors or omissions, please use the attached template to translate the NORI into Spanish. Only the first and last paragraphs are unique to this application and require translation. Please provide the translated Spanish NORI in a Microsoft Word document.

Further information may also be obtained from Lazy River Improvement District at the address stated above or by calling Mr. Timothy Hardin, P.E., Vice President/Langford Engineering, Inc., at 713-461-3530.

Please submit the complete response, addressed to my attention by March 28, 2025. If you should have any questions, please do not hesitate to contact me by phone at (512) 239-2441 or by email at Francesca.Findlay@tceq.texas.gov

Sincerely,

Francesca Findlay

Application Review and Processing Team (MC148)

Water Quality Division

Texas Commission of Environmental Quality

ff

Enclosure(s)

cc: Mr. Anthony Hong, Engineering Associate, Langford Engineering, Inc., 1080 West Sam Houston Parkway North, Suite 200, Houston, Texas 77043

(713) 652-6500		( ) -

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.)*

23. Street Address of the Regulated Entity: ***(No PO Boxes)***	830 Glen Hollow Drive							
	City	Conroe	**State**	TX	**ZIP**	77385	**ZIP + 4**	7716
24. County	Montgomery							

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

25. Description to Physical Location:	Approximately 1.25 miles west of Highway I-45; approximately 1.25 miles north of Highway 242, in Montgomery County, Texas.				
26. Nearest City			**State**	**Nearest ZIP Code**	
Conroe			TX	77385	

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

27. Latitude (N) In Decimal:			**28. Longitude (W) In Decimal:**		
Degrees	Minutes	Seconds	Degrees	Minutes	Seconds
30°	13'	37.05"	-95°	26'	13.7"

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			

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

34. Mailing Address:	**2727 Allen Pkwy, Suite 1100**							
	City	**Houston**	**State**	**TX**	**ZIP**	**77019**	**ZIP + 4**	**2191**
35. E-Mail Address:	**laylett@smithmur.com**							

36. Telephone Number	**37. Extension or Code**	**38. Fax Number** *(if applicable)*
(713) 652-6500		( ) -

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

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

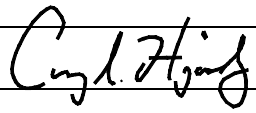
SECTION IV: Preparer Information

40. Name:	Anthony Hong	**41. Title:**	Engineering Associate

42. Telephone Number	**43. Ext./Code**	**44. Fax Number**	**45. E-Mail Address**
(713 **)** 461-3530		**( ) -**	Anthony.H@langfordeng.com

SECTION V: Authorized Signature

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

Company:	Langford Engineering Inc.	**Job Title:**	Senior Project Manager
Name *(In Print):*	Craig A. Hajovsky, P.E.	**Phone:**	**(** 713 **)** 461- **3530**
Signature:		**Date:**	3/5/2025

Location Mapper Version 4.2 User Guide Boundary Mapper

-95.439 30.228 Degrees

Francesca Findlay

From: Tim Hardin <Tim.H@langfordeng.com>
Sent: Monday, March 24, 2025 2:46 PM
To: Craig Hajovsky; Francesca Findlay
Cc: Anthony Hong; Khiem Hoang
Subject: RE: WQ0011820001 Lazy River Improvement District

Follow Up Flag: Follow up
Flag Status: Flagged

Correction below...

-Tim

From: Craig Hajovsky <craig.h@langfordeng.com>
Sent: Monday, March 24, 2025 2:37 PM
To: Francesca.Findlay@tceq.texas.gov
Cc: Tim Hardin <Tim.H@langfordeng.com>; Anthony Hong <Anthony.H@langfordeng.com>; Khiem Hoang <Khiem.H@langfordeng.com>
Subject: RE: WQ0011820001 Lazy River Improvement District

Ms. Findlay,

The address for Lazy River Improvement District WQ0011820001 is: 830 Glen Hollow Drive, Conroe Texas 77385
This is per Montgomery County 911 addressing. Please let us know if there is anything else. Thank you.

Craig A. Hajovsky, P.E.
Project Manager
LANGFORD ENGINEERING INC.

From: Francesca Findlay <Francesca.Findlay@tceq.texas.gov>
Sent: Monday, March 24, 2025 1:41 PM
To: Tim Hardin <Tim.H@langfordeng.com>
Cc: Anthony Hong <Anthony.H@langfordeng.com>
Subject: WQ0011820001 Lazy River Improvement District

Good afternoon,

I am in the process of admin completing your application, while reviewing your renewal I have noticed that we have two different addresses for the plant site property. Please verify which address you would like us to use.
The address on the application is: 830 Gen Hollow Drive, Conroe Texas 77385
The address we have on file is: 200 Glen Hollow Drive, Conroe Texas 77385

Please let me know if you have any questions.

Thank you,

Francesca Findlay
License & Permit Specialist
ARP Team | Water Quality Division
512-239-2441
Texas Commission on Environmental Quality

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