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

SUMMARY OF APPLICATION IN PLAIN LANGUAGE FOR TPDES OR TLAP PERMIT APPLICATIONS

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.

South Central Water Company (CN602602179) proposes to operate Alvin 350 Wastewater Treatment Plant (RN112197520), an activated sludge processing plant. The facility will be located at 2,200 Ft South of the intersection between County Road 172 and County Road 511, in Alvin, Brazoria County, Texas 77511. This permit is to authorize the discharge of treated domestic wastewater to a volume not to exceed an average flow of 600,000 gallons per day.

Discharges from the facility are expected to contain free available chlorine, total residual chlorine, total suspended solids, oil and grease, total iron, pH differences, and temperature differences. Domestic wastewater will be treated by an activated sludge processing plant consisting of the following treatment units: bar screens, aeration basins, digester basins, clarifiers, a lift station, and chlorine contact basins.

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.

Compañía de Agua Central del Sur (CN602602179) propone operar Planta de tratamiento de aguas residuales Alvin 350 (RN112197520), una Planta de procesamiento de lodos activados. La instalación estará ubicada en 2,200 pies al sur de la intersección entre County Road 172 y County Road 511, en Alvin, Condado de Brazoria, Texas 77511. Este permiso es para autorizar la descarga de aguas residuales domésticas tratadas a un volumen que no exceda un flujo promedio de 600,000 galones por día.

Se espera que las descargas de la instalación contengan cloro libre disponible, cloro residual total, sólidos suspendidos totales, aceite y grasa, hierro total, diferencias de pH y diferencias de temperatura. Aguas residuales domésticas. está tratado por Una planta de procesamiento de lodos activados que consta de las siguientes unidades de tratamiento: cribas de barras, cuencas de aireación, cuencas de digestores, clarificadores, una estación de bombeo y cuencas de contacto con cloro.

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

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

PROPOSED PERMIT NO. WQ0016791001

APPLICATION. South Central Water Company, P.O. Box 570177, Houston, Texas 77257, has applied to the Texas Commission on Environmental Quality (TCEQ) for proposed Texas Pollutant Discharge Elimination System (TPDES) Permit No. WQ0016791001 (EPA I.D. No. TX0147761) to authorize the discharge of treated wastewater at a volume not to exceed a daily average flow of 600,000 gallons per day. The domestic wastewater treatment facility will be located approximately 2,200 feet southeast of the intersection of County Road 172 and County Road 511, near the city of Alvin, in Brazoria County, Texas 77511. The discharge route will be from the plant site to an unnamed ditch; thence to Brazoria County Drainage Ditch No. 5; thence to Chocolate Bayou Above Tidal. TCEQ received this application on April 17, 2025. The permit application will be available for viewing and copying at Alvin – Brazoria County Library, Reference Section, 105 South Gordon Street, Alvin, 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=-95.33088,29.325356&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.**

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 South Central Water Company at the address stated above or by calling Mr. Jerry Ince, P.E., Senior Client Manager/Ward, Getz & Associates, LLC, at 832-344-6604.

Issuance Date: May 12, 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

PERMISO PROPUESTO NO. WQ0016791001

SOLICITUD. South Central Water Company, P.O. Box 570177, Houston, Texas 77257, ha solicitado a la Comisión de Calidad Ambiental del Estado de Texas (TCEQ) para el propuesto Permiso No. WQ0016791001 (EPA I.D. No. TX 0147761) 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 600,000 galones por día. La planta estará ubicada aproximadamente 2,200 pies al sureste de la intersección de County Road 172 y County Road 511, cerca de la ciudad de Alvin, en el condado de Brazoria, Texas 77511. La ruta de descarga será desde el sitio de la planta hasta una zanja no nombrada; de ahí al Drenaje del Condado de Brazoria No. 5; y de ahí al Chocolate Bayou por encima de la marea.. La TCEQ recibió esta solicitud el 17 de abril de 2025. La solicitud para el permiso estará disponible para leerla y copiarla en Alvin – Biblioteca del Condado de Brazoria, Sección de Referencia, 105 South Gordon Street, Alvin, Texas antes de la fecha en que se publique este aviso en el periódico antes de la fecha de publicación de este aviso en el periódico. 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=-95.33088,29.325356&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.**

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

solicitudes en un condado especifico. Si desea que se agrega su nombre en una de las listas designe cual lista(s) y envía por correo su pedido a la Oficina del Secretario Principal de la TCEQ.

INFORMACIÓN DISPONIBLE EN LÍNEA. Para detalles sobre el estado de la solicitud, favor de visitar la Base de Datos Integrada de los Comisionados en www.tceq.texas.gov/goto/cid. Para buscar en la base de datos, utilizar el número de permiso para esta solicitud que aparece en la parte superior de este aviso.

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

También se puede obtener información adicional del South Central Water Company a la dirección indicada arriba o llamando a Sr. Jerry Ince, P.E., Gerente Senior de Clientes/Ward, Getz & Associates, LLC al 832-344-6604.

Fecha de emisión: 12 de mayo de 2025

May 6, 2025

Abesha Michael
Applications Review and Processing Team (MC148)
Water Quality Division
Texas Commission on Environmental Quality

RE: Application for Proposed Permit No.: WQ0016791001 (EPA I.D. No. TX0147761)
Applicant Name: South Central Water Company (CN602602179)
Site Name: Alvin 350 WWTP (RN112197520)
Type of Application: New
Response to Notice of Deficiency (NOD)

VIA EMAIL

Dear Abesha,

We received the Notice of Deficiency (NOD), dated April 16, 2025, to the application for the above referenced permit. Please see the following answer s

Comment No. 1: Thank you for the electronic copy of a proposed permit application. We need the paper copy (hardcopy) of one original and two copies of the application with original signature page. Please mail the hardcopy of the whole application.

Response No. 1: The TCEQ package was mailed to TCEQ on 4/17/2025 with one original and two copies of the application. Please see the attached USPS Tracking Information.

Comment No. 2: Section III, item 24 on page 2 of the Core Data Form (CDF): The name of the county is indicated as Bastrop. However, per the facility description on item 25 and the coordinates on items 27 and 28 of the CDF, and Section 10, item B on page 8 of the application, the facility is located under Brazoria County not Bastrop. Please confirm the name of the county and submit an updated page.

Response No. 2: Please see the revised core data form attached.

Comment No. 3: Section 9, item D on page 7 of the Administrative Report: The owner of the land where the treatment facility is listed as Mr. Doug Bailey. If Mr. Doug Bailey is not the owner of land and South Central Water Company is the owner, please submit a revised page indicating the owner of the land which is the applicant.

Response No. 3: Please see the revised page 7 of the Administrative Report indicating the owner of the land is South Central Water Company.

Comment No. 4: Section 14, Signature page: Thank you for submitting the signature page. However, the signature is not valid because the date signed February 27, 2025, and the date notarized February 28, 2025, are different. The notary is required to witness the signature; therefore, the dates should be the same. Please submit a new original notarized signature page.

Response No. 4: Please see the revised copy of the signature page attached. We are waiting to receive original from the client and then we will mail the original copy.

Comment No. 5: Section 1, Item C, Affected Landowner Information, on page 12 on the administration report. Thank you for the mailing labels. Please email the labels in Microsoft Word Format with the response to this letter. Please use the mailing labels in Avery 5160 label format (3 columns across, 10 columns down). To ensure we can use the media to print labels, they must be evenly spaced, so that each address prints on one label. Please remove if there is any additional information included the list, and no punctuation.

Response No. 5: Please see the attached word document of the affected landowner labels.

Comment No. 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.

APPLICATION. South Central Water Company, P.O. Box 570177, Houston, Texas 77257, has applied to the Texas Commission on Environmental Quality (TCEQ) for proposed Texas Pollutant Discharge Elimination System (TPDES) Permit No. WQ0016791001 (EPA I.D. No. TX0147761) to authorize the discharge of treated wastewater at a volume not to exceed a daily average flow of 600,000 gallons per day. The domestic wastewater treatment facility will be located approximately 2,200 feet southeast of the intersection of County Road 172 and County Road 511, near the city of Alvin, in Brazoria County, Texas 78612. The discharge route will be from the plant site to the Gulf Coast Water Authority (GCWA) Ditch; thence to Brazoria County Brunner Ditch; thence to Chocolate Bayou Above Tidal. (pending RWA confirmation). TCEQ received this application on April 17, 2025. The permit application will be available for viewing and copying at Alvin – Brazoria County Library, Reference Section, 105 South Gordon, Alvin, 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=-95.33088,29.325356&level=18

Further information may also be obtained from South Central Water Company at the address stated above or by calling Mr. Jerry Ince, P.E., Senior Client Manager/Ward, Getz & Associates, LLC, at 832-344-6604.

Response No. 6: The highlighted portions in the above NORI indicate the location of the requested changes. There are no further errors besides what is listed below which will ultimately be updated.

a. **"confiramton" to "confirmation"**
b. **"LLP" to "LLC". Please update due to recent changes in the company.**

Comment No. 7: The application indicates that the 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.

Response No. 7: Please see the attached Microsoft Word Document of the translated Spanish NORI. All changes made in the English NORI above have been addressed in this version.

If you have any questions or require any further information, please don't hesitate to contact me at aanderson@wga-llc.com or by phone at 346-771-5311.

Sincerely,

Audrey Anderson
Project Engineer
Phone: 346-771-5311
Email: aanderson@wga-llc.com
Ward, Getz & Associates

Enclosure(s)

Cc: Mr. Jerry Ince, Senior Client Manager, Ward, Getz & Associates, LLC, 2500 Tanglewilde, Suite 120, Houston, Texas 77063 (jince@wga-llc.com).

TCEQ Use Only

TCEQ Core Data Form

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

SECTION I: General Information

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

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

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

2. Customer Reference Number *(if issued)*	Follow this link to search for CN or RN numbers in Central Registry**	3. Regulated Entity Reference Number *(if issued)*
CN 602602179		RN

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:*

South Central Water Company

7. TX SOS/CPA Filing Number	8. TX State Tax ID (11 digits)	9. Federal Tax ID (9 digits)	10. DUNS Number *(if applicable)*
0161296200	17606670101	N/A	N/A

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 ☐ Other:
☐ Occupational Licensee ☐ Responsible Party ☐ VCP/BSA Applicant

15. Mailing Address:							
	P.O. Box 570177						
	City	Houston	State	TX	ZIP	77257	ZIP + 4

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

18. Telephone Number	19. Extension or Code	20. Fax Number *(if applicable)*
(713) 783-6611		( ) -

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.)*

Alvin 350 Wastewater Treatment Plant

23. Street Address of the Regulated Entity:								
(No PO Boxes)	**City**	Alvin	**State**	TX	**ZIP**	77511	**ZIP + 4**	
24. County	Brazoria							

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

25. Description to Physical Location:	2,200 Ft South of the intersection between County Road 172 and County Road 511 in Brazoria County, Texas				
26. Nearest City			**State**	**Nearest ZIP Code**	
Alvin			TX	77511	

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

27. Latitude (N) In Decimal:	29.325356		**28. Longitude (W) In Decimal:**	95.330886		
Degrees	Minutes	Seconds	Degrees	Minutes	Seconds	
29°	19'	31.28"	95°	19'	51.19"	

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.)*

Wastewater Utilities

34. Mailing Address:	**P.O. Box 570177**							
	City	**Houston**	**State**	**TX**	**ZIP**	**77257**	**ZIP + 4**	
35. E-Mail Address:	**Doug@Southcentralww.com**							

36. Telephone Number	**37. Extension or Code**	**38. Fax Number** *(if applicable)*
(713) 783-6611		( ) -

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:
	Pending			

SECTION IV: Preparer Information

40. Name:	Audrey Anderson	**41. Title:**	Project Engineer
42. Telephone Number	**43. Ext./Code**	**44. Fax Number**	**45. E-Mail Address**
(346) 771-5311		( ) -	AAnderson@wga-llp.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:	South Central Water Company	**Job Title:**	President
Name *(In Print)*:	Doug Bailey	**Phone:**	(713) 783- **6611**
Signature:		**Date:**	2-27-25

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. Summary of Application in Plain Language Template

Complete the F. Summary of Application in Plain Language Template (TCEQ Form 20972), also known as the plain language summary or PLS, and include as an attachment.

Attachment: Appendix B

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: Appendix C

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** N/A

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):

Alvin 350 Wastewater Treatment Plant

C. Owner of treatment facility: South Central Water Company

Ownership of Facility: ☐ Public ☒ Private ☐ Both ☐ Federal

D. Owner of land where treatment facility is or will be:

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

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

Organization Name: South Central Water Company

Mailing Address: P.O. Box 570177 City, State, Zip Code: Houston, TX 77257

Phone No.: 713-783-6611 E-mail Address: Doug@Southcentralww.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

Section 14. Signature Page (Instructions Page 34)

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

Permit Number: WQ0016791001

Applicant: South Central Water Company

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): Doug Baily

Signatory title: President

Signature: _____ Date: 4-24-25

(Use blue ink)

Subscribed and Sworn to before me by the said _____

on this April day of 24th, 20 25.

My commission expires on the 22 day of April, 20 27.

TRINA FOLEY
My Notary ID # 131983781
Expires April 22, 2027

_____
Notary Public

[SEAL]

Harris
County, Texas

MILLER KRISTIN & SPENCER GOINS
8907 COUNTY RD 511
ROSHARON TX 77583-7245

MILLER KRISTIN & SPENCER GOINS
8907 COUNTY RD 511
ROSHARON TX 77583-7245

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MILLER KRISTIN & SPENCER GOINS
8907 COUNTY RD 511
ROSHARON TX 77583-7245

GARNDER DEBRA
9302 COUNTY ROAD 172
ROSHARON TX 77583-7264

GARNDER DEBRA
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GARNDER DEBRA
9302 COUNTY ROAD 172
ROSHARON TX 77583-7264

FISHER LARRY ALLEN & JUDITH KARREN
PO BOX 1107
ROSHARON TX 77583-1107

FISHER LARRY ALLEN & JUDITH KARREN
PO BOX 1107
ROSHARON TX 77583-1107

FISHER LARRY ALLEN & JUDITH KARREN
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FISHER LARRY ALLEN & JUDITH KARREN
PO BOX 1107
ROSHARON TX 77583-1107

HUL BRAIN NARITH & HONUG
1745 SILVER BEND DR
DICKINSON TX 77539-8384

HUL BRAIN NARITH & HONUG
1745 SILVER BEND DR
DICKINSON TX 77539-8384

HUL BRAIN NARITH & HONUG
1745 SILVER BEND DR
DICKINSON TX 77539-8384

GLASS MARTHA H
2511 COPPER FIELDS DR ROSHARON TX 77583-3273

GLASS MARTHA H
2511 COPPER FIELDS DR ROSHARON TX 77583-3273

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RICE JOHNNY DAVID
8815 COUNTY RD 511
ROSHARON TX 77583-3273

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8815 COUNTY RD 511
ROSHARON TX 77583-3273

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8815 COUNTY RD 511
ROSHARON TX 77583-3273

RICE JOHNNY DAVID
8815 COUNTY RD 511
ROSHARON TX 77583-3273

WEISS SUSAN M ANTHONY P JR
9008 COUNTY ROAD 172
ROSHARON TX 77583-7350

WEISS SUSAN M ANTHONY P JR
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ROSHARON TX 77583-7350

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WEISS SUSAN M ANTHONY P JR
9008 COUNTY ROAD 172
ROSHARON TX 77583-7350

TOMLINSON MICHAEL A
7730 COUNTY ROAD 172
ALVIN TX 77511-4085

EL RANCHO RV RESORT LLC
1463 COUNTY ROAD 149
ALVIN TX 77511

EL RANCHO RV RESORT LLC
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ALVIN TX 77511

EL RANCHO RV RESORT LLC
1463 COUNTY ROAD 149
ALVIN TX 77511

EL RANCHO RV RESORT LLC
1463 COUNTY ROAD 149
ALVIN TX 77511

LOZANO CLAUDIA
2718 CYPRESS WOOD LN MANVEL
TX 77578-2040

LOZANO CLAUDIA
2718 CYPRESS WOOD LN MANVEL
TX 77578-2040

LOZANO CLAUDIA
2718 CYPRESS WOOD LN MANVEL
TX 77578-2040

LOZANO CLAUDIA
2718 CYPRESS WOOD LN MANVEL
TX 77578-2040

STEPHENS ROY LEE & MOLLY E
8001 COUNTY ROAD 172
ALVIN TX 77511-6259

STEPHENS ROY LEE & MOLLY E
8001 COUNTY ROAD 172
ALVIN TX 77511-6259

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8001 COUNTY ROAD 172
ALVIN TX 77511-6259

ORIHUELA JOEL M
7965 COUNTY ROAD 172
ALVIN TX 77511-6207

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HALEWYN DEAN
130 COUNTY ROAD 932
ALVIN TX 77511-8012

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ALVIN TX 77511-8012

HALEWYN DEAN
130 COUNTY ROAD 932
ALVIN TX 77511-8012

PETRO-HUNT LLC
2101 CEDAR SPRINGS RD
STE 600
DALLAS TX 75201-1591

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DALLAS TX 75201-1591

PETRO-HUNT LLC
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DALLAS TX 75201-1591

PETRO-HUNT LLC
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STE 600
DALLAS TX 75201-1591

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ADAMS D DURWOOD
1523 BLUE WATER DR
FREEPORT TX 77541-9654

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FREEPORT TX 77541-9654

ADAMS VAN V ESTATE
5203 COUNTY ROAD 182
ALVIN TX 77511-6323

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ALVIN TX 77511-6323

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ALVIN TX 77511-6323

ADAMS VAN V ESTATE
5203 COUNTY ROAD 182
ALVIN TX 77511-6323

ADAMS LINN L
5415 COUNTY ROAD 182
ALVIN TX 77511-8356

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ADAMS LINN L
5415 COUNTY ROAD 182
ALVIN TX 77511-8356

HIGHLAND MANAGEMENT INC
700 MILAM ST
HOUSTON TX 77002-2806

HIGHLAND MANAGEMENT INC
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HOUSTON TX 77002-2806

HIGHLAND MANAGEMENT INC
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HOUSTON TX 77002-2806

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HIGHLAND MANAGEMENT INC
700 MILAM ST
HOUSTON TX 77002-2806

FORGY LEANN W & MICHAEL C
PO BOX 1178
ALVIN TX 77512-1178

FORGY LEANN W & MICHAEL C
PO BOX 1178
ALVIN TX 77512-1178

FORGY LEANN W & MICHAEL C
PO BOX 1178
ALVIN TX 77512-1178

FORGY LEANN W & MICHAEL C
PO BOX 1178
ALVIN TX 77512-1178

SURGENER TROY A & CAMERON W
LANGFORD
9100 PILGRAM CIR
ROSHARON TX 77583-4822

SURGENER TROY A & CAMERON W
LANGFORD
9100 PILGRAM CIR
ROSHARON TX 77583-4822

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ROSHARON TX 77583-4822

SURGENER TROY A & CAMERON W
LANGFORD
9100 PILGRAM CIR
ROSHARON TX 77583-4822

STRENGTH AMANDA ANN
1819 OAK CLUSTER CIR PEARLAND
TX 77581-6170

STRENGTH AMANDA ANN
1819 OAK CLUSTER CIR PEARLAND
TX 77581-6170

STRENGTH AMANDA ANN
1819 OAK CLUSTER CIR PEARLAND
TX 77581-6170

STRENGTH AMANDA ANN
1819 OAK CLUSTER CIR PEARLAND
TX 77581-6170

LUCAS JACOB ROY & HALEY
BETHANY HOLDER
2250 COUNTY ROAD 206
ALVIN TX 77511-6654

LUCAS JACOB ROY & HALEY
BETHANY HOLDER
2250 COUNTY ROAD 206
ALVIN TX 77511-6654

LUCAS JACOB ROY & HALEY
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2250 COUNTY ROAD 206
ALVIN TX 77511-6654

LUCAS JACOB ROY & HALEY
BETHANY HOLDER
2250 COUNTY ROAD 206
ALVIN TX 77511-6654

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

PERMISO PROPUESTO NO. WQ00

SOLICITUD. South Central Water Company, P.O. Box 570177, Houston , Texas 77257, ha solicitado a la Comisión de Calidad Ambiental del Estado de Texas (TCEQ) para el propuesto Permiso No. WQ0016791001 (EPA I.D. No. TX 0147761) 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 *600,000* galones por día. La planta estará ubicada aproximadamente 2,200 pies al sureste de la intersección de County Road 172 y County Road 511, cerca de la ciudad de Alvin, en el condado de Brazoria, Texas 78612. La ruta de descarga estará del sitio de la planta a la zanja de la Autoridad del Agua de la Costa del Golfo (GCWA); de allí a la zanja Brunner del condado de Brazoria; de allí a Chocolate Bayou Above Tidal. La TCEQ recibió esta solicitud el 17 de abril de 2025. La solicitud para el permiso estará disponible para leerla y copiarla en Alvin – Biblioteca del Condado de Brazoria, Sección de Referencia, 105 South Gordon, Alvin, Texas antes de la fecha en que se publique este aviso en el periódico antes de la fecha de publicación de este aviso en el periódico. 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=-95.33088,29.325356&level=18.

[Include the following non-italicized sentence if the facility is located in the Coastal Management Program boundary. The Coastal Management Program boundary is the area along the Texas Coast of the Gulf of México as depicted on the map in 31 TAC §503.1 and includes part or all of the following counties: Cameron, Willacy, Kenedy, Kleberg, Nueces, San Patricio, Aransas, Refugio, Calhoun, Victoria, Jackson, Matagorda, Brazoria, Galveston, Harris, Chambers, Jefferson y Orange.] El Director Ejecutivo de la TCEQ ha revisado esta medida para ver si está de acuerdo con los objetivos y las regulaciones del Programa de Administración Costero de Texas (CMP) de acuerdo con las regulaciones del Consejo Coordinador de la Costa (CCC) y ha determinado que la acción es conforme con las metas y regulaciones pertinentes del CMP.

AVISO DE IDIOMA ALTERNATIVO. El aviso de idioma alternativo en español está disponible en https://www.tceq.texas.gov/permitting/wastewater/pending-permits/tpdes-applications.

AVISO ADICIONAL. El Director Ejecutivo de la TCEQ ha determinado que la solicitud es

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

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

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

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

Después del cierre de todos los períodos de comentarios y de petición que aplican, el Director Ejecutivo enviará la solicitud y cualquier petición para reconsideración o para una audiencia de caso impugnado a los Comisionados de la TCEQ para su consideración durante una reunión programada de la Comisión.

La Comisión sólo puede conceder una solicitud de una audiencia de caso impugnado sobre los temas que el solicitante haya presentado en sus comentarios oportunos que no fueron retirados posteriormente. **Si se concede una audiencia, el tema de la audiencia estará limitado a cuestiones de hecho en disputa o cuestiones mixtas de hecho y de derecho relacionadas a intereses pertinentes y materiales de calidad del agua que se hayan presentado durante el período de comentarios.**

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

INFORMACIÓN DISPONIBLE EN LÍNEA. Para detalles sobre el estado de la solicitud, favor de visitar la Base de Datos Integrada de los Comisionados en www.tceq.texas.gov/goto/cid. Para buscar en la base de datos, utilizar el número de permiso para esta solicitud que aparece en la parte superior de este aviso.

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

También se puede obtener información adicional del South Central Water Company a la dirección indicada arriba o llamando a Sr. Jerry Ince, P.E., Gerente Senior de Clientes/Ward, Getz & Associates, LLC al 832-344-6604.

Fecha de emisión: *[Date notice issued]*

Outlook

A shipment from Maren Evans is on its way

From no-reply@pb.com <no-reply@pb.com>
Date Thu 4/17/2025 12:11 PM
To Cecilia Chen <cchen@wga-llp.com>

View tracking details

[%%view_email_url%%]view as webpage

pitney bowes

Your package is on its way

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Tracking number:	9402809105156130655617
Estimated Delivery:	April 19, 2025
Carrier:	USPS
Memo:	AAnderson - 40003-018
Service:	Priority Mail®
Delivery address	TCEQ WATER QUALITY DIVISION APPLICATION REVIEW AND PROCESSING MC148 PO BOX 13087 AUSTIN, TX 78711-3087 US
Signature Required	Yes

Learn more about sending solutions available from Pitney Bowes

April 14, 2025

Texas Commission on Environmental Quality
Water Quality Division
Applications Review and Processing Team (MC148)
P.O. Box 13087
Austin, Texas 78711-3087

Re: South Central Water Company (CN602602179)
Alvin 350 Wastewater Treatment Plant (RN-PENDING)
TPDES Permit Application NEW
PERMIT NO. WQ00-PENDING

Water Quality Division:

Ward, Getz, and Associates, LLP is submitting a complete Texas Pollutant Discharge Elimination System (TPDES) Permit Application for the proposed Alvin 350 Wastewater Treatment Plant on behalf of South Central Water Company. Please find attached one (1) original and two (2) copies of the TPDES permit application. An electronic copy has been uploaded to TCEQ's FTP Server and sent to WQDeCopy@tceq.texas.gov.

The permit application fee was paid via check and mailed to the TCEQ Financial Administration Division. Please see the attached copy of the [electronic voucher/check].

If you have any questions, or require any additional information, please contact Audrey Anderson at 346-771-5311, or by email at aanderson@wga-llp.com.

Sincerely,

Audrey Anderson
Project Engineer
Ward, Getz & Associates, LLP

April 14, 2025

Texas Commission on Environmental Quality
Financial Administration Division
Cashier's Office, MC-214
P.O. Box 13088
Austin, Texas 78711-3088

Re: South Central Water Company (CN602602179)
Alvin 350 Wastewater Treatment Plant (RN-PENDING)
TPDES Permit Application NEW
PERMIT NO. WQ00-PENDING

Water Quality Division:

Ward, Getz, and Associates, LLP is submitting a complete Texas Pollutant Discharge Elimination System (TPDES) Permit Application for the new Alvin 350 Wastewater Treatment Plant on behalf of South Central Water Company. Please find enclosed one (1) check in the amount of **$1650.00** for the TPDES permit application fee.

If you have any questions, or require any additional information, please contact Audrey Anderson at 346-771-5311, or by email at aanderson@wga-llp.com.

Sincerely,

Audrey Anderson
Project Engineer
Ward, Getz & Associates, LLP

TCEQ APPLICATION FOR TPDES PERMIT
NEW

FOR

ALVIN 350 WWTP

IN

Brazoria County, Texas

ON BEHALF OF

SOUTH CENTRAL WATER COMPANY

BY

WARD, GETZ & ASSOCIATES, PLLC
TEXAS REGISTERED ENGINEERING FIRM F-9756
2500 Tanglewilde, Suite 120
Houston, TX 77063
713.789.1900

APRIL 2025

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

DOMESTIC WASTEWATER PERMIT APPLICATION CHECKLIST

Complete and submit this checklist with the application.

APPLICANT NAME: South Central Water Company

PERMIT NUMBER (If new, leave blank): WQ00Click to enter text.

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	☐	☐
Summary of Application (PLS)	☒	☐	Flow Diagram	☐	☐
Public Involvement Plan Form	☒	☐	Site Drawing	☐	☐
Technical Report 1.0	☒	☐	Original Photographs	☐	☐
Technical Report 1.1	☒	☐	Design Calculations	☐	☐
Worksheet 2.0	☐	☐	Solids Management Plan	☐	☐
Worksheet 2.1	☐	☐	Water Balance	☐	☐
Worksheet 3.0	☐	☐			
Worksheet 3.1	☐	☐			
Worksheet 3.2	☐	☐			
Worksheet 3.3	☐	☐			
Worksheet 4.0	☐	☐			
Worksheet 5.0	☐	☐			
Worksheet 6.0	☐	☐			
Worksheet 7.0	☐	☐			

For TCEQ Use Only

Segment Number _____County _____
Expiration Date _____Region_____
Permit Number _____

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

DOMESTIC WASTEWATER PERMIT APPLICATION ADMINISTRATIVE REPORT 1.0

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

Section 1. Application Fees (Instructions Page 26)

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

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

Minor Amendment (for any flow) $150.00 ☐

Payment Information:

Mailed Check/Money Order Number: 5428

Check/Money Order Amount: $1,650.00

Name Printed on Check: South Central Water Company

EPAY Voucher Number: Click to enter text.

Copy of Payment Voucher enclosed? Yes ☐

Section 2. Type of Application (Instructions Page 26)

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

☐ Publicly Owned Domestic Wastewater

☒ Privately-Owned Domestic Wastewater

☐ Conventional Water Treatment

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

☐ Active ☒ Inactive

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

☒ TPDES Permit

☐ TLAP

☐ TPDES Permit with TLAP component

☐ Subsurface Area Drip Dispersal System (SADDS)

d. Check the box next to the appropriate application type

☒ New

☐ Major Amendment *with* Renewal

☐ Major Amendment *without* Renewal

☐ Renewal without changes

☐ Minor Amendment *with* Renewal

☐ Minor Amendment *without* Renewal

☐ Minor Modification of permit

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

f. For existing permits:

Permit Number: WQ00 N/A

EPA I.D. (TPDES only): TX N/A

Expiration Date: N/A

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?

South Central Water Company

(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: 602602179

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

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

Title: President Credential: N/A

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

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

N/A

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

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

CN: N/A

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

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

Title: N/A Credential: N/A

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

C. Core Data Form

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

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: Ince, Jerry

Title: Senior Client Manager Credential: P.E.

Organization Name: Ward, Getz & Associates, LLP

Mailing Address: 2500 Tanglewilde St, Suite 120 City, State, Zip Code: Houston, TX 77063

Phone No.: 832-344-6604 E-mail Address: jince@wga-llp.com

Check one or both: ☐ Administrative Contact ☒ Technical Contact

B. Prefix: Ms. Last Name, First Name: Anderson, Audrey

Title: Project Engineer Credential: Click to enter text.

Organization Name: Ward, Getz & Associates, LLP

Mailing Address: 2500 Tanglewilde St., Suite 120 City, State, Zip Code: Houston, TX 77063

Phone No.: 346-771-5311 E-mail Address: aanderson@wga-llp.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: Ince, Jerry

Title: Senior Client Manager Credential: P.E.

Organization Name: Ward, Getz & Associates, LLP

Mailing Address: 2500 Tanglewilde St., Suite 120 City, State, Zip Code: Houston, TX 77063

Phone No.: 346-771-5311 E-mail Address: aanderson@wga-llp.com

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

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

Organization Name: Click to enter text.

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

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

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: Bailey, Doug

Title: President Credential: Click to enter text.

Organization Name: South Central Water Company

Mailing Address: P.O. Box 570177 City, State, Zip Code: Houston, Texas 77257

Phone No.: 713-783-6611 E-mail Address: Doug@southcentralww.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: Bailey, Doug

Title: President Credential: Click to enter text.

Organization Name: South Central Water Company

Mailing Address: P.O. Box 570177 City, State, Zip Code: Houston, Texas 77257

Phone No.: 713-783-6611 E-mail Address: Doug@southcentralww.com

Section 8. Public Notice Information (Instructions Page 27)

A. Individual Publishing the Notices

Prefix: Ms. Last Name, First Name: Anderson, Audrey

Title: Project Engineer Credential: Click to enter text.

Organization Name: Ward, Getz & Associates, LLP

Mailing Address: 2500 Tanglewilde St., Suite 120 City, State, Zip Code: Houston, TX 77063

Phone No.: 346-771-5311 E-mail Address: aanderson@wga-llp.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: Ince, Jerry

Title: Senior Client Manager Credential: P.E.

Organization Name: Ward, Getz & Associates, LLP

Mailing Address: 2500 Tanglewilde St., Suite 120 City, State, Zip Code: Houston, TX 77063

Phone No.: 832-344-6604 E-mail Address: jince@wga-llp.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: Alvin – Brazoria County Library

Location within the building: Reference Section

Physical Address of Building: 105 South Gordon

City: Alvin County: Brazoria

Contact (Last Name, First Name): Carolynn Waites

Phone No.: 281-388-4300 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. Summary of Application in Plain Language Template

Complete the F. Summary of Application in Plain Language Template (TCEQ Form 20972), also known as the plain language summary or PLS, and include as an attachment.

Attachment: **Appendix B**

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: **Appendix C**

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** N/A

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):

Alvin 350 Wastewater Treatment Plant

C. Owner of treatment facility: South Central Water Company

Ownership of Facility: ☐ Public ☒ Private ☐ Both ☐ Federal

D. Owner of land where treatment facility is or will be:

Prefix: MR. Last Name, First Name: Bailey, Doug

Title: President Credential: Click to enter text.

Organization Name: South Central Water Company

Mailing Address: P.O. Box 570177 City, State, Zip Code: Houston, TX 77257

Phone No.: 713-783-6611 E-mail Address: Doug@Southcentralww.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:

2,200 Ft South of the intersection between County Road 172 and County Road 511 near Alvin, Texas in Brazoria County

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:

Discharge outfalls into the Gulf Coast Water Authority (GCWA) Ditch Hallowin Lateral 1, thence to Brazoria County Brunner Ditch (105-00-00), thence to Classified Segment Chocolate Bayou Above Tidal (Segment ID 1108) of the San Jacinto-Brazos Coastal Basin

City nearest the outfall(s): Alvin

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

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

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: Click to enter text.

Section 14. Signature Page (Instructions Page 34)

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

Permit Number: Click to enter text.

Applicant: South Central Water Company

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): Doug Bailey

Signatory title: President

Signature: _____ Date: 2-27-25

(Use blue ink)

Subscribed and Sworn to before me by the said DOUG BAILEY

on this February day of 28, 20 25.

My commission expires on the 22 day of April, 20 27.

TRINA FOLEY
My Notary ID # 131983781
Expires April 22, 2027

Notary Public *[SEAL]*

Harris

County, Texas

DOMESTIC WASTEWATER PERMIT APPLICATION ADMINISTRATIVE REPORT 1.0

The following information is required for new and amendment applications.

Section 1. Affected Landowner Information (Instructions Page 36)

A. Indicate by a check mark that the landowners map or drawing, with scale, includes the following information, as applicable:

- ☒ The applicant's property boundaries
- ☒ The facility site boundaries within the applicant's property boundaries
- ☒ The distance the buffer zone falls into adjacent properties and the property boundaries of the landowners located within the buffer zone
- ☒ The property boundaries of all landowners surrounding the applicant's property (Note: if the application is a major amendment for a lignite mine, the map must include the property boundaries of all landowners adjacent to the new facility (ponds).)
- ☒ The point(s) of discharge and highlighted discharge route(s) clearly shown for one mile downstream
- ☒ The property boundaries of the landowners located on both sides of the discharge route for one full stream mile downstream of the point of discharge
- ☐ The property boundaries of the landowners along the watercourse for a one-half mile radius from the point of discharge if the point of discharge is into a lake, bay, estuary, or affected by tides
- ☐ The boundaries of the effluent disposal site (for example, irrigation area or subsurface drainfield site) and all evaporation/holding ponds within the applicant's property
- ☒ The property boundaries of all landowners surrounding the effluent disposal site
- ☒ The boundaries of the sludge land application site (for land application of sewage sludge for beneficial use) and the property boundaries of landowners surrounding the applicant's property boundaries where the sewage sludge land application site is located
- ☐ The property boundaries of landowners within one-half mile in all directions from the applicant's property boundaries where the sewage sludge disposal site (for example, sludge surface disposal site or sludge monofill) is located

B. ☒ Indicate by a check mark that a separate list with the landowners' names and mailing addresses cross-referenced to the landowner's map has been provided.

C. ☒ Indicate by a check mark that the landowners list has also been provided as mailing labels in electronic format (Avery 5160).

D. Provide the source of the landowners' names and mailing addresses: Brazoria County Appraisal District

E. As required by *Texas Water Code § 5.115*, is any permanent school fund land affected by this application?

☐ Yes ☒ No

If **yes**, provide the location and foreseeable impacts and effects this application has on the land(s):

N/A

Section 2. Original Photographs (Instructions Page 38)

Provide original ground level photographs. Indicate with checkmarks that the following information is provided.

☒ At least one original photograph of the new or expanded treatment unit location

☒ At least two photographs of the existing/proposed point of discharge and as much area downstream (photo 1) and upstream (photo 2) as can be captured. If the discharge is to an open water body (e.g., lake, bay), the point of discharge should be in the right or left edge of each photograph showing the open water and with as much area on each respective side of the discharge as can be captured.

☒ At least one photograph of the existing/proposed effluent disposal site

☒ A plot plan or map showing the location and direction of each photograph

Section 3. Buffer Zone Map (Instructions Page 38)

A. Buffer zone map. Provide a buffer zone map on 8.5 x 11-inch paper with all of the following information. The applicant's property line and the buffer zone line may be distinguished by using dashes or symbols and appropriate labels.

- The applicant's property boundary;
- The required buffer zone; and
- Each treatment unit; and
- The distance from each treatment unit to the property boundaries.

B. Buffer zone compliance method. Indicate how the buffer zone requirements will be met. Check all that apply.

☒ Ownership

☐ Restrictive easement

☐ Nuisance odor control

☐ Variance

C. Unsuitable site characteristics. Does the facility comply with the requirements regarding unsuitable site characteristic found in 30 TAC § 309.13(a) through (d)?

☒ Yes ☐ No

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: Appendix F

WATER QUALITY PERMIT

PAYMENT SUBMITTAL FORM

Use this form to submit the Application Fee, if the mailing the payment.

- Complete items 1 through 5 below.
- Staple the check or money order in the space provided at the bottom of this document.
- **Do Not mail this form with the application form.**
- Do not mail this form to the same address as the application.
- Do not submit a copy of the application with this form as it could cause duplicate permit entries.

Mail this form and the check or money order to:

BY REGULAR U.S. MAIL

Texas Commission on Environmental Quality
Financial Administration Division
Cashier's Office, MC-214
P.O. Box 13088
Austin, Texas 78711-3088

BY OVERNIGHT/EXPRESS MAIL

Texas Commission on Environmental Quality
Financial Administration Division
Cashier's Office, MC-214
12100 Park 35 Circle
Austin, Texas 78753

Fee Code: WQP **Waste Permit No:** Pending

1. Check or Money Order Number: 5428
2. Check or Money Order Amount: $1,650.00
3. Date of Check or Money Order: 3/12/2025
4. Name on Check or Money Order: South Central Water Company
5. APPLICATION INFORMATION

   Name of Project or Site: Alvin 350 Wastewater Treatment Plant

   Physical Address of Project or Site: 2,200 Feet south of the intersection between County Road 172 and County Road 511 in the City of Alvin, Brazoria County, Texas

   If the check is for more than one application, attach a list which includes the name of each Project or Site (RE) and Physical Address, exactly as provided on the application.

Staple Check or Money Order in This Space

ATTACHMENT 1

INDIVIDUAL INFORMATION

Section 1. Individual Information (Instructions Page 41)

Complete this attachment if the facility applicant or co-applicant is an individual. Make additional copies of this attachment if both are individuals.

Prefix (Mr., Ms., Miss): N/A

Full legal name (Last Name, First Name, Middle Initial): N/A

Driver's License or State Identification Number: N/A

Date of Birth: N/A

Mailing Address: N/A

City, State, and Zip Code: N/A

Phone Number: N/A Fax Number: N/A

E-mail Address: N/A

CN: N/A

For Commission Use Only:
Customer Number:
Regulated Entity Number:
Permit Number:

DOMESTIC WASTEWATER PERMIT APPLICATION CHECKLIST OF COMMON DEFICIENCIES

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

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

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

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

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

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

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

Things to Know:

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

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

Electronic Application Submittal ☒ Yes
(See application submittal requirements on page 23 of the instructions.)

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)

Summary of Application (in Plain Language) ☒ Yes

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

DOMESTIC WASTEWATER PERMIT APPLICATION TECHNICAL REPORT 1.0

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

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

Section 1. Permitted or Proposed Flows (Instructions Page 42)

A. Existing/Interim I Phase

Design Flow (MGD): 0.10

2-Hr Peak Flow (MGD): 0.40

Estimated construction start date: September 2026

Estimated waste disposal start date: May 2027

B. Interim II Phase

Design Flow (MGD): 0.35

2-Hr Peak Flow (MGD): 1.40

Estimated construction start date: January 2029

Estimated waste disposal start date: September 2029

C. Final Phase

Design Flow (MGD): 0.60

2-Hr Peak Flow (MGD): 2.40

Estimated construction start date: June 2032

Estimated waste disposal start date: March 2033

D. Current Operating Phase

Provide the startup date of the facility: N/A

Section 2. Treatment Process (Instructions Page 42)

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.**

Appendix I

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)
Appendix J		

C. Process Flow Diagram

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

Attachment: **Appendix K**

Section 3. Site Information and Drawing (Instructions Page 43)

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

- Latitude: 29.324267
- Longitude: -95.330122

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: **Appendix L**

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

The proposed wastewater treatment plant will serve a proposed subdivision with Phase I consisting of 400 single family homes, Phase II will serve 800 total single family residences, Phase III will consist of 1,700 single family residences.

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
N/A		Choose an item.	
		Choose an item.	
		Choose an item.	
		Choose an item.	

Section 4. Unbuilt Phases (Instructions Page 44)

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

☐ Yes ☒ No

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

☐ Yes ☐ No

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

N/A

Section 5. Closure Plans (Instructions Page 44)

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 44)

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

A. Summary transmittal

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

☐ Yes ☒ No

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

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

N/A

B. Buffer zones

Have the buffer zone requirements been met?

☒ Yes ☐ No

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

N/A

C. Other actions required by the current permit

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

☐ Yes ☒ No

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

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:

Click to enter text.

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

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

☐ Yes ☐ No

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

Click to enter text.

5. ***Zero stormwater discharge***

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

☐ Yes ☐ No

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

Click to enter text.

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

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

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

☐ Yes ☐ No

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

intend to divert stormwater to the treatment plant headworks and indirectly discharge it to water in the state.

Click to enter text.

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

F. Discharges to the Lake Houston Watershed

Does the facility discharge in the Lake Houston watershed?

☐ Yes ☒ No

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

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

1. Acceptance of sludge from other WWTPs

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

☐ Yes ☒ No

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

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

Click to enter text.

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

2. Acceptance of septic waste

Is the facility accepting or will it accept septic waste?

☐ Yes ☒ No

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

☐ Yes ☐ No

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

☐ Yes ☐ No

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

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 49)

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					
Total Suspended Solids, mg/l					
Ammonia Nitrogen, mg/l					
Nitrate Nitrogen, mg/l					
Total Kjeldahl Nitrogen, mg/l					
Sulfate, mg/l					
Chloride, mg/l					
Total Phosphorus, mg/l					
pH, standard units					
Dissolved Oxygen*, mg/l					
Chlorine Residual, mg/l					
E.coli (CFU/100ml) freshwater					
Entercocci (CFU/100ml) saltwater					
Total Dissolved Solids, mg/l					
Electrical Conductivity, µmohs/cm, †					
Oil & Grease, mg/l					
Alkalinity ($CaCO_3$)*, mg/l					

*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 49)

Facility Operator Name: TBD

Facility Operator's License Classification and Level: TBD

Facility Operator's License Number: TBD

Section 9. Sludge and Biosolids Management and Disposal (Instructions Page 50)

A. WWTP's Sewage Sludge or 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 Sewage Sludge or 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. Sewage Sludge or Biosolids Management

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

permit will authorize all sewage sludge or 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	Choose an item.	Choose an item.		Choose an item.	Choose an item.
Choose an item.	Choose an item.	Choose an item.		Choose an item.	Choose an item.
Choose an item.	Choose an item.	Choose an item.		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: Wastewater Residuals Management - Austin Wastewater Processing Facility

TCEQ permit or registration number: MSW 2384

County where disposal site is located: Travis

E. Transportation method

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

Name of the hauler: Wastewater Residuals Management

Hauler registration number: 2370a

Sludge is transported as a:

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

Section 10. Permit Authorization for Sewage Sludge Disposal (Instructions Page 52)

A. Beneficial use authorization

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

☐ Yes ☒ No

If yes, are you requesting to continue this authorization to land apply biosolids 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 Biosolids	☐ Yes	☒ No
Sludge Surface Disposal or Sludge Monofill	☐ Yes	☒ No
Temporary storage in sludge lagoons	☐ Yes	☒ No

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

☐ Yes ☐ No

Section 11. Sewage Sludge Lagoons (Instructions Page 53)

Does this facility include sewage sludge lagoons?

☐ Yes ☒ No

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

A. Location information

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

- Original General Highway (County) Map:

  Attachment: Click to enter text.
- USDA Natural Resources Conservation Service Soil Map:

  Attachment: Click to enter text.
- Federal Emergency Management Map:

  Attachment: Click to enter text.
- Site map:

  Attachment: Click to enter text.

Discuss in a description if any of the following exist within the lagoon area. Check all that apply.

☐ Overlap a designated 100-year frequency flood plain

☐ Soils with flooding classification

☐ Overlap an unstable area

☐ Wetlands

☐ Located less than 60 meters from a fault

☐ None of the above

Attachment: Click to enter text.

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

Click to enter text.

B. Temporary storage information

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

Nitrate Nitrogen, mg/kg: Click to enter text.

Total Kjeldahl Nitrogen, mg/kg: Click to enter text.

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

Phosphorus, mg/kg: Click to enter text.

Potassium, mg/kg: Click to enter text.

pH, standard units: Click to enter text.

Ammonia Nitrogen mg/kg: Click to enter text.

Arsenic: Click to enter text.

Cadmium: Click to enter text.

Chromium: Click to enter text.

Copper: Click to enter text.

Lead: Click to enter text.

Mercury: Click to enter text.

Molybdenum: Click to enter text.

Nickel: Click to enter text.

Selenium: Click to enter text.

Zinc: Click to enter text.

Total PCBs: Click to enter text.

Provide the following information:

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

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

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

C. Liner information

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

☐ Yes ☐ No

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

Click to enter text.

D. Site development plan

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

Click to enter text.

Attach the following documents to the application.

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

  Attachment: Click to enter text.
- Copy of the closure plan

  Attachment: Click to enter text.
- Copy of deed recordation for the site

  Attachment: Click to enter text.
- Size of the sludge lagoon(s) in surface acres and capacity in cubic feet and gallons

  Attachment: Click to enter text.
- Description of the method of controlling infiltration of groundwater and surface water from entering the site

  Attachment: Click to enter text.
- Procedures to prevent the occurrence of nuisance conditions

  Attachment: Click to enter text.

E. Groundwater monitoring

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

☐ Yes ☐ No

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

Attachment: Click to enter text.

Section 12. Authorizations/Compliance/Enforcement (Instructions Page 54)

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 55)

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: Doug Bailey

Title: President

Signature: _____

Date: 2-27-25

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 56)

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.

The Developer that has the land under contract is interested in putting in a development for approximately 1,700 single family homes. Per the TCEQ rules, using 250 GPD per LUE, this development will require 425,000 GPD. The Developer plans to start construction in the fall of 2026. Their first phase consists of 400 homes, which would be handled by the first requested phase. The second phase of the development is for 800 homes, and he anticipates construction starting on that at the beginning of 2029. The final and third phase of the development is for the 500 homes and that phase should break ground in the summer of 2032. There are also two nearby properties that are interested in using some capacity in our plant. One property could be developed into approximately 250 homes and the other one could be approximately 450 homes. These two properties account for the additional capacity requested in phase 3.

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: N/A

If yes, attach correspondence from the city.

Attachment: N/A

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: N/A

2. *Utility CCN areas*

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

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

☐ 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: **Appendix M**

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: **Appendix M**

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 58)

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	Ph I – 0.1 MGD Ph II – 0.35 MGD Ph III – 0.60 MGD	Ph I – 300 mg/l Ph II – 300 mg/l Ph III – 300 mg/l
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	Ph I – 0.1 MGD Ph II – 0.35 MGD Ph III – 0.60 MGD	Ph I – 300 mg/l Ph II – 300 mg/l Ph III – 300 mg/l
AVERAGE BOD_5 from all sources		

Section 3. Proposed Effluent Quality and Disinfection (Instructions Page 58)

A. Existing/Interim I Phase Design Effluent Quality

Biochemical Oxygen Demand (5-day), mg/l: 10

Total Suspended Solids, mg/l: 15

Ammonia Nitrogen, mg/l: 2

Total Phosphorus, mg/l: N/A

Dissolved Oxygen, mg/l: N/A

Other: Click to enter text.

B. Interim II Phase Design Effluent Quality

Biochemical Oxygen Demand (5-day), mg/l: 10

Total Suspended Solids, mg/l: 15

Ammonia Nitrogen, mg/l: 2

Total Phosphorus, mg/l: N/A

Dissolved Oxygen, mg/l: N/A

Other: Click to enter text.

C. Final Phase Design Effluent Quality

Biochemical Oxygen Demand (5-day), mg/l: 10

Total Suspended Solids, mg/l: 15

Ammonia Nitrogen, mg/l: 2

Total Phosphorus, mg/l: N/A

Dissolved Oxygen, mg/l: N/A

Other: Click to enter text.

D. Disinfection Method

Identify the proposed method of disinfection.

☒ Chlorine: 8 mg/l after 20 minutes detention time at peak flow

Dechlorination process: N/A

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

☐ Other: Click to enter text.

Section 4. Design Calculations (Instructions Page 58)

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

Attachment: **Appendix N**

Section 5. Facility Site (Instructions Page 59)

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.

Flood Insurance Rate Map No. 48039C0280K

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: N/A

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: **Appendix O**

Section 6. Permit Authorization for Sewage Sludge Disposal (Instructions Page 59)

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)**: N/A

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)**: N/A

Section 7. Sewage Sludge Solids Management Plan (Instructions Page 60)

Attach a solids management plan to the application.

Attachment: Appendix P

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.

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 63)

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 63)

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 63)

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 63)

Name of the immediate receiving waters: Brazoria County DD5 Unnamed Ditch

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.

Brazoria County DD5 – Brunner Ditch and Chocolate Bayou

D. Downstream characteristics

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

☐ Yes ☒ No

If yes, discuss how.

Click to enter text.

E. Normal dry weather characteristics

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

Generally dry in dry weather conditions

Date and time of observation: 3/5/2025

Was the water body influenced by stormwater runoff during observations?

☒ Yes ☐ No

Section 5. General Characteristics of the Waterbody (Instructions Page 65)

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: Storm Runoff

C. Waterbody aesthetics

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

- ☐ Wilderness: outstanding natural beauty; usually wooded or unpastured area; water clarity exceptional
- ☒ Natural Area: trees and/or native vegetation; some development evident (from fields, pastures, dwellings); water clarity discolored
- ☐ Common Setting: not offensive; developed but uncluttered; water may be colored or turbid
- ☐ Offensive: stream does not enhance aesthetics; cluttered; highly developed; dumping areas; water discolored

DOMESTIC WASTEWATER PERMIT APPLICATION WORKSHEET 2.1: STREAM PHYSICAL CHARACTERISTICS

Required for new applications, major facilities, and applications adding an outfall.

Worksheet 2.1 is not required for discharges to intermittent streams or discharges directly to (or within 300 feet of) a classified segment.

Section 1. General Information (Instructions Page 65)

Date of study: N/A Time of study: N/A

Stream name: N/A

Location: N/A

Type of stream upstream of existing discharge or downstream of proposed discharge (check one).

☐ Perennial ☐ Intermittent with perennial pools

Section 2. Data Collection (Instructions Page 65)

Number of stream bends that are well defined: Click to enter text.

Number of stream bends that are moderately defined: Click to enter text.

Number of stream bends that are poorly defined: Click to enter text.

Number of riffles: Click to enter text.

Evidence of flow fluctuations (check one):

☐ Minor ☐ moderate ☐ severe

Indicate the observed stream uses and if there is evidence of flow fluctuations or channel obstruction/modification.

Click to enter text.

Stream transects

In the table below, provide the following information for each transect downstream of the existing or proposed discharges. Use a separate row for each transect.

Table 2.1(1) - Stream Transect Records

Stream type at transect Select riffle, run, glide, or pool. See Instructions, Definitions section.	**Transect location**	**Water surface width (ft)**	**Stream depths (ft)** at 4 to 10 points along each transect from the channel bed to the water surface. Separate the measurements with commas.
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.			

Section 3. Summarize Measurements (Instructions Page 65)

Streambed slope of entire reach, from USGS map in feet/feet: Click to enter text.

Approximate drainage area above the most downstream transect (from USGS map or county highway map, in square miles): Click to enter text.

Length of stream evaluated, in feet: Click to enter text.

Number of lateral transects made: Click to enter text.

Average stream width, in feet: Click to enter text.

Average stream depth, in feet: Click to enter text.

Average stream velocity, in feet/second: Click to enter text.

Instantaneous stream flow, in cubic feet/second: Click to enter text.

Indicate flow measurement method (type of meter, floating chip timed over a fixed distance, etc.): Click to enter text.

Size of pools (large, small, moderate, none): Click to enter text.

Maximum pool depth, in feet: Click to enter text.

DOMESTIC WASTEWATER PERMIT APPLICATION WORKSHEET 3.0: LAND DISPOSAL OF EFFLUENT

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

Section 1. Type of Disposal System (Instructions Page 67)

Identify the method of land disposal:

- ☐ Surface application
- ☐ Irrigation
- ☐ Drip irrigation system
- ☐ Evaporation
- ☐ Subsurface application
- ☐ Subsurface soils absorption
- ☐ Subsurface area drip dispersal system
- ☐ Evapotranspiration beds
- ☐ Other (describe in detail): Click to enter text.

NOTE: All applicants without authorization or proposing new/amended subsurface disposal MUST complete and submit Worksheet 7.0.

For existing authorizations, provide Registration Number: Click to enter text.

Section 2. Land Application Site(s) (Instructions Page 67)

In table 3.0(1), provide the requested information for the land application sites. Include the agricultural or cover crop type (wheat, cotton, alfalfa, bermuda grass, native grasses, etc.), land use (golf course, hayland, pastureland, park, row crop, etc.), irrigation area, amount of effluent applied, and whether or not the public has access to the area. Specify the amount of land area and the amount of effluent that will be allotted to each agricultural or cover crop, if more than one crop will be used.

Table 3.0(1) – Land Application Site Crops

Crop Type & Land Use	Irrigation Area (acres)	Effluent Application (GPD)	Public Access? Y/N

Section 3. Storage and Evaporation Lagoons/Ponds (Instructions Page 67)

Table 3.0(2) – Storage and Evaporation Ponds

Pond Number	Surface Area (acres)	Storage Volume (acre-feet)	Dimensions	Liner Type

Attach a copy of a liner certification that was prepared, signed, and sealed by a Texas licensed professional engineer for each pond.

Attachment: Click to enter text.

Section 4. Flood and Runoff Protection (Instructions Page 67)

Is the land application site within the 100-year frequency flood level?

☐ Yes ☐ No

If yes, describe how the site will be protected from inundation.

Click to enter text.

Provide the source used to determine the 100-year frequency flood level:

Click to enter text.

Provide a description of tailwater controls and rainfall run-on controls used for the land application site.

Click to enter text.

Section 5. Annual Cropping Plan (Instructions Page 67)

Attach an Annual Cropping Plan which includes a discussion of each of the following items. If not applicable, provide a detailed explanation indicating why. **Attachment**: Click to enter text.

- Soils map with crops
- Cool and warm season plant species
- Crop yield goals
- Crop growing season
- Crop nutrient requirements
- Additional fertilizer requirements
- Minimum/maximum harvest height (for grass crops)
- Supplemental watering requirements
- Crop salt tolerances
- Harvesting method/number of harvests
- Justification for not removing existing vegetation to be irrigated

Section 6. Well and Map Information (Instructions Page 68)

Attach a USGS map with the following information shown and labeled. If not applicable, provide a detailed explanation indicating why. **Attachment**: Click to enter text.

- The boundaries of the land application site(s)
- Waste disposal or treatment facility site(s)
- On-site buildings
- Buffer zones
- Effluent storage and tailwater control facilities
- All water wells within 1-mile radius of the disposal site or property boundaries
- All springs and seeps onsite and within 500 feet of the property boundaries
- All surface waters in the state onsite and within 500 feet of the property boundaries
- All faults and sinkholes onsite and within 500 feet of the property

List and cross reference all water wells located within a half-mile radius of the disposal site or property boundaries shown on the USGS map in the following table. Attach additional pages as necessary to include all of the wells.

Table 3.0(3) – Water Well Data

Well ID	Well Use	Producing? Y/N	Open, cased, capped, or plugged?	Proposed Best Management Practice
			Choose an item.	
			Choose an item.	
			Choose an item.	
			Choose an item.	
			Choose an item.	

If water quality data or well log information is available please include the information in an attachment listed by Well ID.

Attachment: Click to enter text.

Section 7. Groundwater Quality (Instructions Page 68)

Attach a Groundwater Quality Technical Report which assesses the impact of the wastewater disposal system on groundwater. This report shall include an evaluation of the water wells (including the information in the well table provided in Item 6. above), the wastewater application rate, and pond liners. Indicate by a check mark that this report is provided.

Attachment: Click to enter text.

Are groundwater monitoring wells available onsite? ☐ Yes ☐ No

Do you plan to install ground water monitoring wells or lysimeters around the land application site? ☐ Yes ☐ No

If yes, provide the proposed location of the monitoring wells or lysimeters on a site map.

Attachment: Click to enter text.

Section 8. Soil Map and Soil Analyses (Instructions Page 69)

A. Soil map

Attach a USDA Soil Survey map that shows the area to be used for effluent disposal.

Attachment: Click to enter text.

B. Soil analyses

Attach the laboratory results sheets from the soil analyses. **Note**: for renewal applications, the current annual soil analyses required by the permit are acceptable as long as the test date is less than one year prior to the submission of the application.

Attachment: Click to enter text.

List all USDA designated soil series on the proposed land application site. Attach additional pages as necessary.

Table 3.0(4) – Soil Data

Soil Series	Depth from Surface	Permeability	Available Water Capacity	Curve Number

Section 9. Effluent Monitoring Data (Instructions Page 70)

Is the facility in operation?

☐ Yes ☐ No

If no, this section is not applicable and the worksheet is complete.

If yes, provide the effluent monitoring data for the parameters regulated in the existing permit. If a parameter is not regulated in the existing permit, enter N/A.

Table 3.0(5) – Effluent Monitoring Data

Date	30 Day Avg Flow MGD	BOD5 mg/l	TSS mg/l	pH	Chlorine Residual mg/l	Acres irrigated

Provide a discussion of all persistent excursions above the permitted limits and any corrective actions taken.

Click to enter text.

DOMESTIC WASTEWATER PERMIT APPLICATION WORKSHEET 3.1: SURFACE LAND DISPOSAL OF EFFLUENT

The following is required for new and major amendment permit applications. Renewal and minor amendment permit applications may be asked for this worksheet on a case by case basis.

Section 1. Surface Disposal (Instructions Page 71)

Complete the item that applies for the method of disposal being used.

A. Irrigation

Area under irrigation, in acres: Click to enter text.

Design application frequency:

hours/day Click to enter text. **And** days/week Click to enter text.

Land grade (slope):

average percent (%): Click to enter text.

maximum percent (%): Click to enter text.

Design application rate in acre-feet/acre/year: Click to enter text.

Design total nitrogen loading rate, in lbs N/acre/year: Click to enter text.

Soil conductivity (mmhos/cm): Click to enter text.

Method of application: Click to enter text.

Attach a separate engineering report with the water balance and storage volume calculations, method of application, irrigation efficiency, and nitrogen balance.

Attachment: Click to enter text.

B. Evaporation ponds

Daily average effluent flow into ponds, in gallons per day: Click to enter text.

Attach a separate engineering report with the water balance and storage volume calculations.

Attachment: Click to enter text.

C. Evapotranspiration beds

Number of beds: Click to enter text.

Area of bed(s), in acres: Click to enter text.

Depth of bed(s), in feet: Click to enter text.

Void ratio of soil in the beds: Click to enter text.

Storage volume within the beds, in acre-feet: Click to enter text.

Attach a separate engineering report with the water balance and storage volume calculations, and a description of the lining.

Attachment: Click to enter text.

D. Overland flow

Area used for application, in acres: Click to enter text.

Slopes for application area, percent (%): Click to enter text.

Design application rate, in gpm/foot of slope width: Click to enter text.

Slope length, in feet: Click to enter text.

Design BOD_5 loading rate, in lbs BOD_5/acre/day: Click to enter text.

Design application frequency:

hours/day: Click to enter text. **And** days/week: Click to enter text.

Attach a separate engineering report with the method of application and design requirements according to *30 TAC Chapter 217*.

Attachment: Click to enter text.

Section 2. Edwards Aquifer (Instructions Page 72)

Is the facility subject to *30 TAC Chapter 213*, Edwards Aquifer Rules?

☐ Yes ☒ No

If **yes**, is the facility located on the Edwards Aquifer Recharge Zone?

☐ Yes ☐ No

If yes, attach a geological report addressing potential recharge features.

Attachment: Click to enter text.

DOMESTIC WASTEWATER PERMIT APPLICATION WORKSHEET 3.2: SURFACE LAND DISPOSAL OF EFFLUENT

The following **is required** for **new and major amendment** permit applications. Renewal and minor amendments applicants may be asked for the worksheet on a case by case basis.

NOTE: All applicants proposing new/amended subsurface disposal MUST complete and submit Worksheet 7.0. This worksheet applies to any subsurface disposal system that **does not meet** the definition of a subsurface area drip dispersal system as defined in *30 TAC Chapter 222, Subsurface Area Drip Dispersal System.*

Section 1. Subsurface Application (Instructions Page 73)

Identify the type of system:

- ☐ Conventional Gravity Drainfield, Beds, or Trenches (new systems must be less than 5,000 GPD)
- ☐ Low Pressure Dosing
- ☐ Other, specify: Click to enter text.

Application area, in acres: Click to enter text.

Area of drainfield, in square feet: Click to enter text.

Application rate, in gal/square foot/day: Click to enter text.

Depth to groundwater, in feet: Click to enter text.

Area of trench, in square feet: Click to enter text.

Dosing duration per area, in hours: Click to enter text.

Number of beds: Click to enter text.

Dosing amount per area, in inches/day: Click to enter text.

Infiltration rate, in inches/hour: Click to enter text.

Storage volume, in gallons: Click to enter text.

Area of bed(s), in square feet: Click to enter text.

Soil Classification: Click to enter text.

Attach a separate engineering report with the information required in *30 TAC § 309.20,* excluding the requirements of *§* 309.20 b(3)(A) and (B) design analysis which may be asked for on a case by case basis. Include a description of the schedule of dosing basin rotation.

Attachment: Click to enter text.

Section 2. Edwards Aquifer (Instructions Page 73)

Is the subsurface system over the Edwards Aquifer Recharge Zone as mapped by TCEQ?

☐ Yes ☐ No

Is the subsurface system over the Edwards Aquifer Transition Zone as mapped by TCEQ?

☐ Yes ☐ No

If yes to either question, the subsurface system may be prohibited by *30 TAC §213.8*. Please call the Municipal Permits Team, at 512-239-4671, to schedule a pre-application meeting.

DOMESTIC WASTEWATER PERMIT APPLICATION WORKSHEET 3.3: SUBSURFACE AREA DRIP DISPERSAL (SADDS) LAND DISPOSAL OF EFFLUENT

The following **is required** for **new and major amendment** subsurface area drip dispersal system permit applications. Renewal and minor amendments applicants may be asked for the worksheet on a case by case basis.

NOTE: All applicants proposing new/amended subsurface disposal MUST complete and submit Worksheet 7.0. This worksheet applies to any subsurface disposal system that **meets** the definition of a subsurface area drip dispersal system as defined in *30 TAC Chapter 222, Subsurface Area Drip Dispersal System.*

Section 1. Administrative Information (Instructions Page 74)

A. Provide the legal name of all corporations or other business entities managed, owned, or otherwise closely related to the owner of the treatment facility:

B. Click to enter text. Is the owner of the land where the treatment facility is located the same as the owner of the treatment facility?

☐ Yes ☐ No

If **no**, provide the legal name of all corporations or other business entities managed, owned, or otherwise closely related to the owner of the land where the treatment facility is located.

Click to enter text.

C. Owner of the subsurface area drip dispersal system: Click to enter text.

D. Is the owner of the subsurface area drip dispersal system the same as the owner of the wastewater treatment facility or the site where the wastewater treatment facility is located?

☐ Yes ☐ No

If **no**, identify the names of all corporations or other business entities managed, owned, or otherwise closely related to the entity identified in Item 1.C.

Click to enter text.

E. Owner of the land where the subsurface area drip dispersal system is located: Click to enter text.

F. Is the owner of the land where the subsurface area drip dispersal system is located the same as owner of the wastewater treatment facility, the site where the wastewater treatment facility is located, or the owner of the subsurface area drip dispersal system?

☐ Yes ☐ No

If **no**, identify the name of all corporations or other business entities managed, owned, or otherwise closely related to the entity identified in item 1.E.

Click to enter text.

Section 2. Subsurface Area Drip Dispersal System (Instructions Page 74)

A. Type of system

☐ Subsurface Drip Irrigation

☐ Surface Drip Irrigation

☐ Other, specify: Click to enter text.

B. Irrigation operations

Application area, in acres: Click to enter text.

Infiltration Rate, in inches/hour: Click to enter text.

Average slope of the application area, percent (%): Click to enter text.

Maximum slope of the application area, percent (%): Click to enter text.

Storage volume, in gallons: Click to enter text.

Major soil series: Click to enter text.

Depth to groundwater, in feet: Click to enter text.

C. Application rate

Is the facility located **west** of the boundary shown in *30 TAC § 222.83* **and** also using a vegetative cover of non-native grasses over seeded with cool season grasses during the winter months (October-March)?

☐ Yes ☐ No

If yes, then the facility may propose a hydraulic application rate not to exceed 0.1 gal/square foot/day.

Is the facility located **east** of the boundary shown in *30 TAC § 222.83* **or** in any part of the state when the vegetative cover is any crop other than non-native grasses?

☐ Yes ☐ No

If **yes**, the facility must use the formula in *30 TAC §222.83* to calculate the maximum hydraulic application rate.

Do you plan to submit an alternative method to calculate the hydraulic application rate for approval by the executive director?

☐ Yes ☐ No

Hydraulic application rate, in gal/square foot/day: Click to enter text.

Nitrogen application rate, in lbs/gal/day: Click to enter text.

D. Dosing information

Number of doses per day: Click to enter text.

Dosing duration per area, in hours: Click to enter text.

Rest period between doses, in hours: Click to enter text.

Dosing amount per area, in inches/day: Click to enter text.

Number of zones: Click to enter text.

Does the proposed subsurface drip irrigation system use tree vegetative cover as a crop?

☐ Yes ☐ No

If **yes**, provide a vegetation survey by a certified arborist. Please call the Water Quality Assessment Team at (512) 239-4671 to schedule a pre-application meeting.

Attachment: Click to enter text.

Section 3. Required Plans (Instructions Page 74)

A. Recharge feature plan

Attach a Recharge Feature Plan with all information required in *30 TAC §222.79*.

Attachment: Click to enter text.

B. Soil evaluation

Attach a Soil Evaluation with all information required in *30 TAC §222.73*.

Attachment: Click to enter text.

C. Site preparation plan

Attach a Site Preparation Plan with all information required in *30 TAC §222.75*.

Attachment: Click to enter text.

D. Soil sampling/testing

Attach soil sampling and testing that includes all information required in *30 TAC §222.157*.

Attachment: Click to enter text.

Section 4. Floodway Designation (Instructions Page 75)

A. Site location

Is the existing/proposed land application site within a designated floodway?

☐ Yes ☐ No

B. Flood map

Attach either the FEMA flood map or alternate information used to determine the floodway.

Attachment: Click to enter text.

Section 5. Surface Waters in the State (Instructions Page 75)

A. Buffer Map

Attach a map showing appropriate buffers on surface waters in the state, water wells, and springs/seeps.

Attachment: Click to enter text.

B. Buffer variance request

Do you plan to request a buffer variance from water wells or waters in the state?

☐ Yes ☐ No

If yes, then attach the additional information required in *30 TAC § 222.81(c).*

Attachment: Click to enter text.

Section 6. Edwards Aquifer (Instructions Page 75)

A. Is the SADDS located over the Edwards Aquifer Recharge Zone as mapped by TCEQ?

☐ Yes ☐ No

B. Is the SADDS located over the Edwards Aquifer Transition Zone as mapped by TCEQ?

☐ Yes ☐ No

If yes to either question, then the SADDS may be prohibited by *30 TAC §213.8*. Please call the Municipal Permits Team at 512-239-4671 to schedule a pre-application meeting.

DOMESTIC WASTEWATER PERMIT APPLICATION WORKSHEET 4.0: POLLUTANT ANALYSIS REQUIREMENTS

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

This worksheet is not required minor amendments without renewal.

Section 1. Toxic Pollutants (Instructions Page 76)

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

Grab ☐ Composite ☐

Date and time sample(s) collected: Click to enter text.

Table 4.0(1) – Toxics Analysis

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

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

Pollutant	AVG Effluent Conc. (µg/l)	MAX Effluent Conc. (µg/l)	Number of Samples	MAL (µg/l)
Endosulfan II (beta)				0.02
Endosulfan Sulfate				0.1
Endrin				0.02
Epichlorohydrin				---
Ethylbenzene				10
Ethylene Glycol				---
Fluoride				500
Guthion				0.1
Heptachlor				0.01
Heptachlor Epoxide				0.01
Hexachlorobenzene				5
Hexachlorobutadiene				10
Hexachlorocyclohexane (alpha)				0.05
Hexachlorocyclohexane (beta)				0.05
gamma-Hexachlorocyclohexane (Lindane)				0.05
Hexachlorocyclopentadiene				10
Hexachloroethane				20
Hexachlorophene				10
4,4'-Isopropylidenediphenol				1
Lead				0.5
Malathion				0.1
Mercury				0.005
Methoxychlor				2
Methyl Ethyl Ketone				50
Methyl tert-butyl ether				---
Mirex				0.02
Nickel				2
Nitrate-Nitrogen				100
Nitrobenzene				10
N-Nitrosodiethylamine				20
N-Nitroso-di-n-Butylamine				20
Nonylphenol				333

Pollutant	AVG Effluent Conc. (µg/l)	MAX Effluent Conc. (µg/l)	Number of Samples	MAL (µg/l)
Parathion (ethyl)				0.1
Pentachlorobenzene				20
Pentachlorophenol				5
Phenanthrene				10
Polychlorinated Biphenyls (PCB's) **(*3)**				0.2
Pyridine				20
Selenium				5
Silver				0.5
1,2,4,5-Tetrachlorobenzene				20
1,1,2,2-Tetrachloroethane				10
Tetrachloroethylene				10
Thallium				0.5
Toluene				10
Toxaphene				0.3
2,4,5-TP (Silvex)				0.3
Tributyltin (see instructions for explanation)				0.01
1,1,1-Trichloroethane				10
1,1,2-Trichloroethane				10
Trichloroethylene				10
2,4,5-Trichlorophenol				50
TTHM (Total Trihalomethanes)				10
Vinyl Chloride				10
Zinc				5

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

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

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

Section 2. Priority Pollutants

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

Grab ☐ Composite ☐

Date and time sample(s) collected: Click to enter text.

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

Pollutant	**AVG Effluent Conc. (µg/l)**	**MAX Effluent Conc. (µg/l)**	**Number of Samples**	**MAL (µg/l)**
Antimony				5
Arsenic				0.5
Beryllium				0.5
Cadmium				1
Chromium (Total)				3
Chromium (Hex)				3
Chromium (Tri) **(*1)**				N/A
Copper				2
Lead				0.5
Mercury				0.005
Nickel				2
Selenium				5
Silver				0.5
Thallium				0.5
Zinc				5
Cyanide **(*2)**				10
Phenols, Total				10

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

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

Table 4.0(2)B – Volatile Compounds

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

Table 4.0(2)C – Acid Compounds

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

Table 4.0(2)D – Base/Neutral Compounds

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

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

Table 4.0(2)E - Pesticides

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

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

Section 3. Dioxin/Furan Compounds

A. Indicate which of the following compounds from may be present in the influent from a contributing industrial user or significant industrial user. Check all that apply.

☐ 2,4,5-trichlorophenoxy acetic acid

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

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

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

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

Common Name Erbon, CASRN 136-25-4

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

Common Name Ronnel, CASRN 299-84-3

☐ 2,4,5-trichlorophenol

Common Name TCP, CASRN 95-95-4

☐ hexachlorophene

Common Name HCP, CASRN 70-30-4

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

Click to enter text.

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

☐ Yes ☐ No

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

Click to enter text.

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

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

Grab ☐ Composite ☐

Date and time sample(s) collected: Click to enter text.

Table 4.0(2)F – Dioxin/Furan Compounds

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

DOMESTIC WASTEWATER PERMIT APPLICATION WORKSHEET 5.0: TOXICITY TESTING REQUIREMENTS

The following **is required** for facilities with a current operating design flow of**1.0 MGD or greater**, with an EPA-approved **pretreatment** program (or those required to have one under 40 CFR Part 403), or are required to perform Whole Effluent Toxicity testing. See Page 86 of the instructions for further details.

This worksheet is not required minor amendments without renewal.

Section 1. Required Tests

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

7-day Chronic: Click to enter text.

48-hour Acute: Click to enter text.

Section 2. Toxicity Reduction Evaluations (TREs)

Has this facility completed a TRE in the past four and a half years? Or is the facility currently performing a TRE?

☐ Yes ☐ No

If yes, describe the progress to date, if applicable, in identifying and confirming the toxicant.

Click to enter text.

Section 3. Summary of WET Tests

If the required biomonitoring test information has not been previously submitted via both the Discharge Monitoring Reports (DMRs) and the Table 1 (as found in the permit), provide a summary of the testing results for all valid and invalid tests performed over the past four and one-half years. Make additional copies of this table as needed.

Table 5.0(1) Summary of WET Tests

Test Date	Test Species	NOEC Survival	NOEC Sub-lethal

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 87)

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: Click to enter text.

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

Significant IUs – non-categorical:

Number of IUs: Click to enter text.

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

Other IUs:

Number of IUs: Click to enter text.

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

B. Treatment plant interference

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

☐ Yes ☐ No

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

Click to enter text.

C. Treatment plant pass through

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

☐ Yes ☐ No

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

Click to enter text.

D. Pretreatment program

Does your POTW have an approved pretreatment program?

☐ Yes ☐ No

If yes, complete Section 2 only of this Worksheet.

Is your POTW required to develop an approved pretreatment program?

☐ Yes ☐ No

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

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

Section 2. POTWs with Approved Programs or Those Required to Develop a Program (Instructions Page 87)

A. Substantial modifications

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

☐ Yes ☐ No

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

Click to enter text.

B. Non-substantial modifications

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

☐ Yes ☐ No

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

Click to enter text.

C. Effluent parameters above the MAL

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

Table 6.0(1) – Parameters Above the MAL

Pollutant	Concentration	MAL	Units	Date

D. Industrial user interruptions

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

☐ Yes ☐ No

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

Click to enter text.

Section 3. Significant Industrial User (SIU) Information and Categorical Industrial User (CIU) (Instructions Page 88)

A. General information

Company Name: Click to enter text.

SIC Code: Click to enter text.

Contact name: Click to enter text.

Address: Click to enter text.

City, State, and Zip Code: Click to enter text.

Telephone number: Click to enter text.

Email address: Click to enter text.

B. Process information

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

Click to enter text.

C. Product and service information

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

Click to enter text.

D. Flow rate information

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

Process Wastewater:

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

Discharge Type: ☐ Continuous ☐ Batch ☐ Intermittent

Non-Process Wastewater:

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

Discharge Type: ☐ Continuous ☐ Batch ☐ Intermittent

E. Pretreatment standards

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

☐ Yes ☐ No

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

☐ Yes ☐ No

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

Category: Subcategories: Click to enter text.

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

Category: Click to enter text.

Subcategories: Click to enter text.

Category: Click to enter text.

Subcategories: Click to enter text.

Category: Click to enter text.

Subcategories: Click to enter text.

Category: Click to enter text.

Subcategories: Click to enter text.

F. Industrial user interruptions

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

☐ Yes ☐ No

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

Click to enter text.

WORKSHEET 7.0

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

CLASS V INJECTION WELL INVENTORY/AUTHORIZATION FORM

Submit the completed form to:

TCEQ
IUC Permits Team
Radioactive Materials Division
MC-233
PO Box 13087
Austin, Texas 78711-3087
512-239-6466

For TCEQ Use Only
Reg. No._____
Date Received_____
Date Authorized_____

Section 1. General Information (Instructions Page 90)

1. TCEQ Program Area

Program Area (PST, VCP, IHW, etc.): Click to enter text.

Program ID: Click to enter text.

Contact Name: Click to enter text.

Phone Number: Click to enter text.

2. Agent/Consultant Contact Information

Contact Name: Click to enter text.

Address: Click to enter text.

City, State, and Zip Code: Click to enter text.

Phone Number: Click to enter text.

3. Owner/Operator Contact Information

☐ Owner ☐ Operator

Owner/Operator Name: Click to enter text.

Contact Name: Click to enter text.

Address: Click to enter text.

City, State, and Zip Code: Click to enter text.

Phone Number: Click to enter text.

4. Facility Contact Information

Facility Name: Click to enter text.

Address: Click to enter text.

City, State, and Zip Code: Click to enter text.

Location description (if no address is available): Click to enter text.

Facility Contact Person: Click to enter text.

Phone Number: Click to enter text.

5. **Latitude and Longitude, in degrees-minutes-seconds**

Latitude: Click to enter text.

Longitude: Click to enter text.

Method of determination (GPS, TOPO, etc.): Click to enter text.

Attach topographic quadrangle map as attachment A.

6. **Well Information**

Type of Well Construction, select one:

- ☐ Vertical Injection
- ☐ Subsurface Fluid Distribution System
- ☐ Infiltration Gallery
- ☐ Temporary Injection Points
- ☐ Other, Specify: Click to enter text.

Number of Injection Wells: Click to enter text.

7. **Purpose**

Detailed Description regarding purpose of Injection System:

Click to enter text.

Attach a Site Map as Attachment B (Attach the Approved Remediation Plan, if appropriate.)

8. **Water Well Driller/Installer**

Water Well Driller/Installer Name: Click to enter text.

City, State, and Zip Code: Click to enter text.

Phone Number: Click to enter text.

License Number: Click to enter text.

Section 2. Proposed Down Hole Design

Attach a diagram signed and sealed by a licensed engineer as Attachment C.

Table 7.0(1) – Down Hole Design Table

Name of String	Size	Setting Depth	Sacks Cement/Grout – Slurry Volume – Top of Cement	Hole Size	Weight (lbs/ft) PVC/Steel
Casing					
Tubing					
Screen					

Section 3. Proposed Trench System, Subsurface Fluid Distribution System, or Infiltration Gallery

Attach a diagram signed and sealed by a licensed engineer as Attachment D.

System(s) Dimensions: Click to enter text.

System(s) Construction: Click to enter text.

Section 4. Site Hydrogeological and Injection Zone Data

1. Name of Contaminated Aquifer: Click to enter text.

2. Receiving Formation Name of Injection Zone: Click to enter text.

3. Well/Trench Total Depth: Click to enter text.

4. Surface Elevation: Click to enter text.

5. Depth to Ground Water: Click to enter text.

6. Injection Zone Depth: Click to enter text.

7. Injection Zone vertically isolated geologically? ☐ Yes ☐ No

Impervious Strata between Injection Zone and nearest Underground Source of Drinking Water:

Name: Click to enter text.

Thickness: Click to enter text.

8. Provide a list of contaminants and the levels (ppm) in contaminated aquifer

Attach as Attachment E.

9. Horizontal and Vertical extent of contamination and injection plume

Attach as Attachment F.

10. Formation (Injection Zone) Water Chemistry (Background levels) TDS, etc.

Attach as Attachment G.

11. Injection Fluid Chemistry in PPM at point of injection

Attach as Attachment H.

12. Lowest Known Depth of Ground Water with < 10,000 PPM TDS: Click to enter text.

13. Maximum injection Rate/Volume/Pressure: Click to enter text.

14. Water wells within 1/4 mile radius (attach map as Attachment I): Click to enter text.

15. Injection wells within 1/4 mile radius (attach map as Attachment J): Click to enter text.

16. Monitor wells within 1/4 mile radius (attach drillers logs and map as Attachment K): Click to enter text.

17. Sampling frequency: Click to enter text.

18. Known hazardous components in injection fluid: Click to enter text.

Section 5. Site History

1. Type of Facility: Click to enter text.
2. Contamination Dates: Click to enter text.
3. Original Contamination (VOCs, TPH, BTEX, etc.) and Concentrations (attach as Attachment L): Click to enter text.
4. Previous Remediation (attach results of any previous remediation as attachment M): Click to enter text.

NOTE: Authorization Form should be completed in detail and authorization given by the TCEQ before construction, operation, and/or conversion can begin. Attach additional pages as necessary.

Class V Injection Well Designations

5A07 Heat Pump/AC return (IW used for groundwater to heat and/or cool buildings)
5A19 Industrial Cooling Water Return Flow (IW used to cool industrial process equipment)
5B22 Salt Water Intrusion Barrier (IW used to inject fluids to prevent the intrusion of salt water into an aquifer)
5D02 Storm Water Drainage (IW designed for the disposal of rain water)
5D04 Industrial Stormwater Drainage Wells (IW designed for the disposal of rain water associated with industrial facilities)
5F01 Agricultural Drainage (IW that receive agricultural runoff)
5R21 Aquifer Recharge (IW used to inject fluids to recharge an aquifer)
5S23 Subsidence Control Wells (IW used to control land subsidence caused by ground water withdrawal)
5W09 Untreated Sewage
5W10 Large Capacity Cesspools (Cesspools that are designed for 5,000 gpd or greater)
5W11 Large Capacity Septic systems (Septic systems designed for 5,000 gpd or greater)
5W12 WTTP disposal
5W20 Industrial Process Waste Disposal Wells
5W31 Septic System (Well Disposal method)
5W32 Septic System Drainfield Disposal
5X13 Mine Backfill (IW used to control subsidence, dispose of mining byproducts, and/or fill sections of a mine)
5X25 Experimental Wells (Pilot Test) (IW used to test new technologies or tracer dye studies)
5X26 Aquifer Remediation (IW used to clean up, treat, or prevent contamination of a USDW)
5X27 Other Wells
5X28 Motor Vehicle Waste Disposal Wells (IW used to dispose of waste from a motor vehicle site - These are currently banned)
5X29 Abandoned Drinking Water Wells (waste disposal)

Appendices

Appendix A

Core Data Form

Appendix B

Plain Language Summary

Appendix C

Public Involvement Plan

Appendix D

Original Photographs

Appendix E

Buffer Zone Map

Appendix F

SPIF Form & SPIF USGS Map

Appendix G

Original USGS Map

Appendix H

Landowners Map and Cross-Referenced List

Appendix I

Treatment Process Description

Appendix J

Treatment Unit Descriptions

Appendix K

Flow Diagram

Appendix L

Site Drawing

Appendix M

CCN Service Request

Appendix N

Design Calculations

Appendix O

Wind Rose

Appendix P

Solids Management Plan

Appendix A

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

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 602602179		RN

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:*

South Central Water Company

7. TX SOS/CPA Filing Number	8. TX State Tax ID (11 digits)	9. Federal Tax ID (9 digits)	10. DUNS Number *(if applicable)*
0161296200	17606670101	N/A	N/A

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 ☐ Other:
☐ Occupational Licensee ☐ Responsible Party ☐ VCP/BSA Applicant

15. Mailing Address:								
	P.O. Box 570177							
	City	Houston	**State**	TX	**ZIP**	77257	**ZIP + 4**	

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

18. Telephone Number	19. Extension or Code	20. Fax Number *(if applicable)*
(713) 783-6611		( ) -

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.)*

Alvin 350 Wastewater Treatment Plant

23. Street Address of the Regulated Entity:								
(No PO Boxes)	**City**		**State**	TX	**ZIP**	78612	**ZIP + 4**	
24. County	Bastrop							

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

25. Description to Physical Location:	2,200 Ft South of the intersection between County Road 172 and County Road 511 in Brazoria County, Texas				
26. Nearest City			**State**		**Nearest ZIP Code**
Alvin			TX		78612

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

27. Latitude (N) In Decimal:	29.325356		**28. Longitude (W) In Decimal:**	95.330886	
Degrees	Minutes	Seconds	Degrees	Minutes	Seconds
29°	19'	31.28"	95°	19'	51.19"

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.)*

Wastewater Utilities

34. Mailing Address:	**P.O. Box 570177**							
	City	**Houston**	**State**	**TX**	**ZIP**	**77257**	**ZIP + 4**	
35. E-Mail Address:	**Doug@Southcentralww.com**							

36. Telephone Number	**37. Extension or Code**	**38. Fax Number** *(if applicable)*
(713) 783-6611		( ) -

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:
	Pending			

SECTION IV: Preparer Information

40. Name:	Audrey Anderson	**41. Title:**	Project Engineer

42. Telephone Number	**43. Ext./Code**	**44. Fax Number**	**45. E-Mail Address**
(346) 771-5311		( ) -	AAnderson@wga-llp.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:	South Central Water Company	**Job Title:**	President	
Name *(In Print)*:	Doug Bailey		**Phone:**	(713) 783- **6611**
Signature:			**Date:**	2-27-25

Appendix B

Plain Language Summary

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

SUMMARY OF APPLICATION IN PLAIN LANGUAGE FOR TPDES OR TLAP PERMIT APPLICATIONS

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.

South Central Water Company (CN602602179) proposes to operate Alvin 350 Wastewater Treatment Plant (RN112197520), an activated sludge processing plant. The facility will be located at 2,200 Ft South of the intersection between County Road 172 and County Road 511, in Alvin, Brazoria County, Texas 77511. This permit is to authorize the discharge of treated domestic wastewater to a volume not to exceed an average flow of 600,000 gallons per day.

Discharges from the facility are expected to contain free available chlorine, total residual chlorine, total suspended solids, oil and grease, total iron, pH differences, and temperature differences. Domestic wastewater will be treated by an activated sludge processing plant consisting of the following treatment units: bar screens, aeration basins, digester basins, clarifiers, a lift station, and chlorine contact basins.

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.

Compañía de Agua Central del Sur (CN602602179) propone operar Planta de tratamiento de aguas residuales Alvin 350 (RN112197520RN), una Planta de procesamiento de lodos activados. La instalación estará ubicada en 2,200 pies al sur de la intersección entre County Road 172 y County Road 511, en Alvin, Condado de Brazoria, Texas 77511. Este permiso es para autorizar la descarga de aguas residuales domésticas tratadas a un volumen que no exceda un flujo promedio de 600,000 galones por día.

Se espera que las descargas de la instalación contengan cloro libre disponible, cloro residual total, sólidos suspendidos totales, aceite y grasa, hierro total, diferencias de pH y diferencias de temperatura. Aguas residuales domésticas. está tratado por Una planta de procesamiento de lodos activados que consta de las siguientes unidades de tratamiento: cribas de barras, cuencas de aireación, cuencas de digestores, clarificadores, una estación de bombeo y cuencas de contacto con cloro.

Appendix C

Public Involvement Plan

Texas Commission on Environmental Quality

Public Involvement Plan Form for Permit and Registration Applications

The Public Involvement Plan is intended to provide applicants and the agency with information about how public outreach will be accomplished for certain types of applications in certain geographical areas of the state. It is intended to apply to new activities; major changes at existing plants, facilities, and processes; and to activities which are likely to have significant interest from the public. This preliminary screening is designed to identify applications that will benefit from an initial assessment of the need for enhanced public outreach.

All applicable sections of this form should be completed and submitted with the permit or registration application. For instructions on how to complete this form, see TCEQ-20960-inst.

Section 1. Preliminary Screening

☒ New Permit or Registration Application

☐ New Activity – modification, registration, amendment, facility, etc. (see instructions)

If neither of the above boxes are checked, completion of the form is not required and does not need to be submitted.

Section 2. Secondary Screening

☒ Requires public notice,

☐ Considered to have significant public interest, **and**

☐ Located within any of the following geographical locations:

- Austin
- Dallas
- Fort Worth
- Houston
- San Antonio
- West Texas
- Texas Panhandle
- Along the Texas/Mexico Border
- Other geographical locations should be decided on a case-by-case basis

If all the above boxes are not checked, a Public Involvement Plan is not necessary. Stop after Section 2 and submit the form.

☒ Public Involvement Plan not applicable to this application. Provide **brief** explanation.

Not located within the listed geographical areas

Section 3. Application Information

Type of Application (check all that apply):

Air ☐ Initial ☐ Federal ☐ Amendment ☐ Standard Permit ☐ Title V

Waste ☐ Municipal Solid Waste ☐ Industrial and Hazardous Waste ☐ Scrap Tire
☐ Radioactive Material Licensing ☐ Underground Injection Control

Water Quality

☐ Texas Pollutant Discharge Elimination System (TPDES)

- ☐ Texas Land Application Permit (TLAP)
- ☐ State Only Concentrated Animal Feeding Operation (CAFO)
- ☐ Water Treatment Plant Residuals Disposal Permit

☐ Class B Biosolids Land Application Permit

☐ Domestic Septage Land Application Registration

Water Rights New Permit

☐ New Appropriation of Water

☐ New or existing reservoir

Amendment to an Existing Water Right

☐ Add a New Appropriation of Water

☐ Add a New or Existing Reservoir

☐ Major Amendment that could affect other water rights or the environment

Section 4. Plain Language Summary

Provide a brief description of planned activities.

Section 5. Community and Demographic Information

Community information can be found using EPA's EJ Screen, U.S. Census Bureau information, or generally available demographic tools.

Information gathered in this section can assist with the determination of whether alternative language notice is necessary. Please provide the following information.

(City)

(County)

(Census Tract)
Please indicate which of these three is the level used for gathering the following information.

☐ City ☐ County ☐ Census Tract

(a) Percent of people over 25 years of age who at least graduated from high school

(b) Per capita income for population near the specified location

(c) Percent of minority population and percent of population by race within the specified location

(d) Percent of Linguistically Isolated Households by language within the specified location

(e) Languages commonly spoken in area by percentage

(f) Community and/or Stakeholder Groups

(g) Historic public interest or involvement

Section 6. Planned Public Outreach Activities

(a) Is this application subject to the public participation requirements of Title 30 Texas Administrative Code (30 TAC) Chapter 39?

☐ Yes ☐ No

(b) If yes, do you intend at this time to provide public outreach other than what is required by rule?

☐ Yes ☐ No

If Yes, please describe.

If you answered "yes" that this application is subject to 30 TAC Chapter 39, answering the remaining questions in Section 6 is not required.

(c) Will you provide notice of this application in alternative languages?

☐ Yes ☐ No

Please refer to Section 5. If more than 5% of the population potentially affected by your application is Limited English Proficient, then you are required to provide notice in the alternative language.

If yes, how will you provide notice in alternative languages?

☐ Publish in alternative language newspaper

☐ Posted on Commissioner's Integrated Database Website

☐ Mailed by TCEQ's Office of the Chief Clerk

☐ Other (specify)

(d) Is there an opportunity for some type of public meeting, including after notice?

☐ Yes ☐ No

(e) If a public meeting is held, will a translator be provided if requested?

☐ Yes ☐ No

(f) Hard copies of the application will be available at the following (check all that apply):

☐ TCEQ Regional Office ☐ TCEQ Central Office

☐ Public Place (specify)

Section 7. Voluntary Submittal

For applicants voluntarily providing this Public Involvement Plan, who are not subject to formal public participation requirements.

Will you provide notice of this application, including notice in alternative languages?

☐ Yes ☐ No

What types of notice will be provided?

☐ Publish in alternative language newspaper

☐ Posted on Commissioner's Integrated Database Website

☐ Mailed by TCEQ's Office of the Chief Clerk

☐ Other (specify)

Appendix D

Original Photographs

FLOOD PLAIN NOTE:

THIS SUBJECT TRACT LIES WITHIN UNSHADED ZONE "X" (AREAS DETERMINED TO BE OUTSIDE THE 500-YEAR FLOODPLAIN) ON THE FLOOD INSURANCE MAP FOR BRAZORIA COUNTY, TEXAS AND UNINCORPORATED AREAS, MAP NO. 48039C0280K DATED DECEMBER 30, 2020.

SHEET NOTES:

LEGEND

PHASE I

PHASE II

PHASE III

ABBREVIATIONS

C	CLARIFIER
AB	AERATION BASIN
D	DIGESTER
CCB	CHLORINE CONTACT BASIN
HW	HEADWORKS
LS	LIFT STATION

WGA

TEXAS REGISTERED ENGINEERING FIRM F-9756

2500 Tanglewilde, Suite 120
Houston, Texas 77063
713.789.1900

4526 Research Forest, Suite 360
The Woodlands, Texas 77381
713.789.1900

ALVIN 350 WASTEWATER TREATMENT PLANT

ORIGINAL PHOTO MAP

DRAWING SCALE:

WGA PROJECT NAME: ALVIN 350 WWTP
WGA PROJECT No: 40003-018-00

ORIGINAL PHOTOGRAPH NO. 1
UPSTREAM

ALVIN 350 WASTEWATER TREATMENT PLANT

DATE

JOB NO.

DRAWN BY:

WGA

TEXAS REGISTERED ENGINEERING FIRM F-9756

2500 Tanglewild, Suite 120
Houston, Texas 77063
713.789.1900

4526 Research Forest, Suite 360
The Woodlands, Texas 77381
713.789.1900

APPENDIX D

Drawing: Z:\40000 WATER RESOURCES_ENG Stds\TPDES Permit Applications\Appendix Templates for D-E-L.dwg Last Plotted: Fri Nov 22, 2024 - 10:44am By: aanderson

ORIGINAL PHOTOGRAPH NO. 2
DOWNSTREAM

ALVIN 350 WASTEWATER TREATMENT PLANT

DATE

JOB NO.

DRAWN BY:

WGA

TEXAS REGISTERED ENGINEERING FIRM F-9756

2500 Tanglewild, Suite 120
Houston, Texas 77063
713.789.1900

4526 Research Forest, Suite 360
The Woodlands, Texas 77381
713.789.1900

APPENDIX D

ORIGINAL PHOTOGRAPH NO. 2
WWTP LOCATION

ALVIN 350 WASTEWATER TREATMENT PLANT

DATE

JOB NO.

DRAWN BY:

WGA

TEXAS REGISTERED ENGINEERING FIRM F-9756

2500 Tanglewild, Suite 120
Houston, Texas 77063
713.789.1900

4526 Research Forest, Suite 360
The Woodlands, Texas 77381
713.789.1900

APPENDIX D

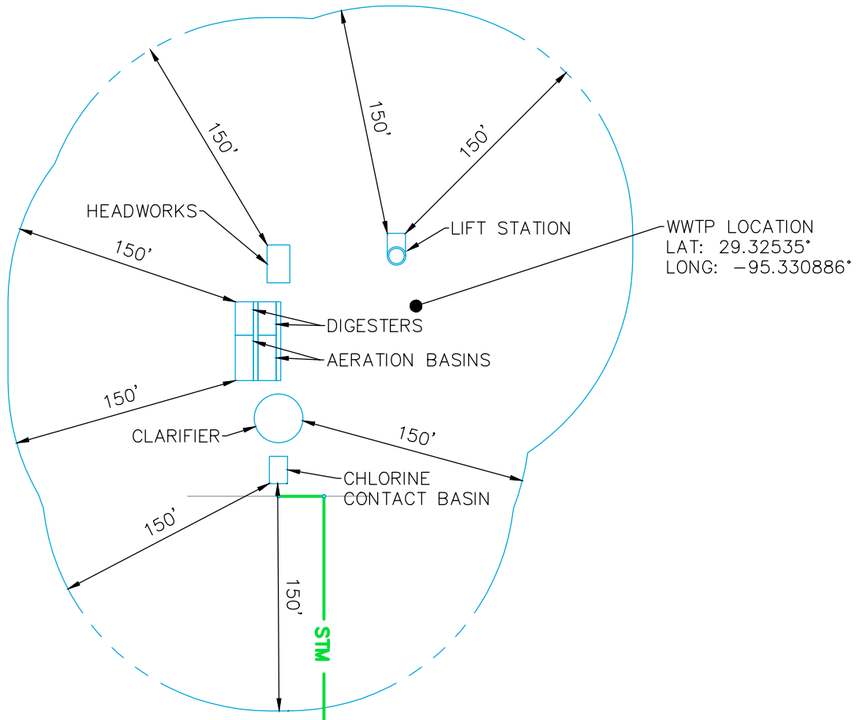
Drawing: Z:\40000 WATER RESOURCES_ENG Stds\TPDES Permit Applications\Appendix Templates for D-E-L.dwg Last Plotted: Fri Nov 22, 2024 - 10:44am By: aanderson

Appendix E

Buffer Zone Map

BRAZORIA COUNTY DD5 105-02-00

APPLICANT PROPERTY BOUNDARY



APPLICANT PROPERTY BOUNDARY

BRAZORIA COUNTY DD5 UNNAMED DITCH

DISCHARGE POINT
LAT: 29.324267°
LONG: -95.330122°

FLOOD PLAIN NOTE:
THIS SUBJECT TRACT LIES WITHIN UNSHADED ZONE "X" (AREAS DETERMINED TO BE OUTSIDE THE 500-YEAR FLOODPLAIN) ON THE FLOOD INSURANCE MAP FOR BRAZORIA COUNTY, TEXAS AND UNINCORPORATED AREAS, MAP NO. 48039C0280K DATED DECEMBER 30, 2020.

N

0 100 200

SCALE: 1" = 100'

WGA PROJECT NAME: ALVIN 350 WWTP
WGA PROJECT No: 40003-018-00

TEXAS REGISTERED ENGINEERING FIRM F-9756

2500 Tanglewilde, Suite 120
Houston, Texas 77063
713.789.1900

4526 Research Forest, Suite 360
The Woodlands, Texas 77381
713.789.1900

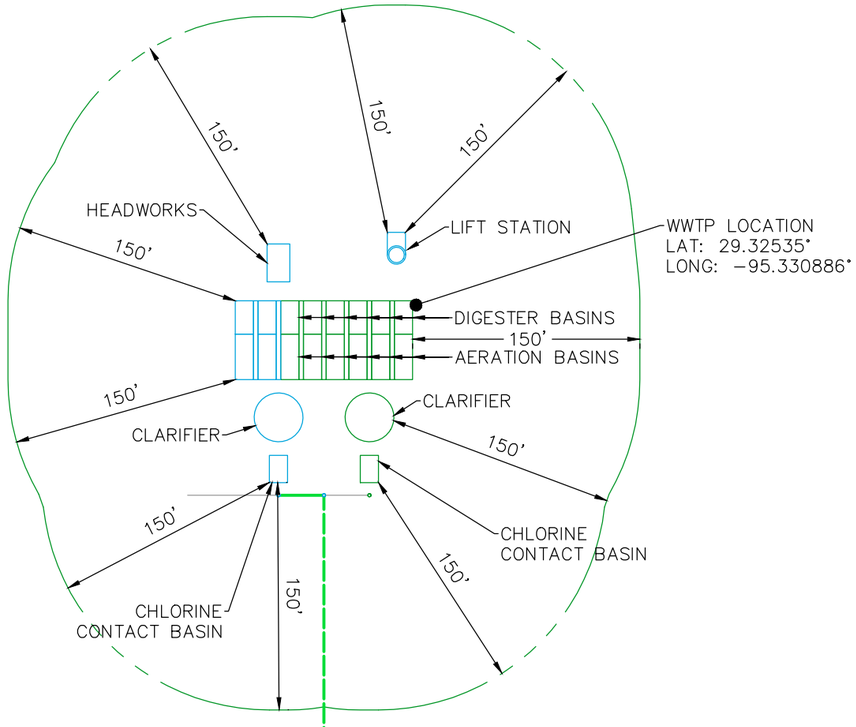
ALVIN 350 WASTEWATER TREATMENT PLANT

BUFFER ZONE PH I

DRAWING SCALE:

BRAZORIA COUNTY DD5 105-02-00

APPLICANT PROPERTY BOUNDARY



APPLICANT PROPERTY BOUNDARY

BRAZORIA COUNTY DD5 UNNAMED DITCH

DISCHARGE POINT
LAT: 29.324267°
LONG: -95.330122°

FLOOD PLAIN NOTE:
THIS SUBJECT TRACT LIES WITHIN UNSHADED ZONE "X" (AREAS DETERMINED TO BE OUTSIDE THE 500-YEAR FLOODPLAIN) ON THE FLOOD INSURANCE MAP FOR BRAZORIA COUNTY, TEXAS AND UNINCORPORATED AREAS, MAP NO. 48039C0280K DATED DECEMBER 30, 2020.

N

0 100 200

SCALE: 1" = 100'

WGA PROJECT NAME: ALVIN 350 WWTP
WGA PROJECT No: 40003-018-00

TEXAS REGISTERED ENGINEERING FIRM F-9756

2500 Tanglewilde, Suite 120
Houston, Texas 77063
713.789.1900

4526 Research Forest, Suite 360
The Woodlands, Texas 77381
713.789.1900

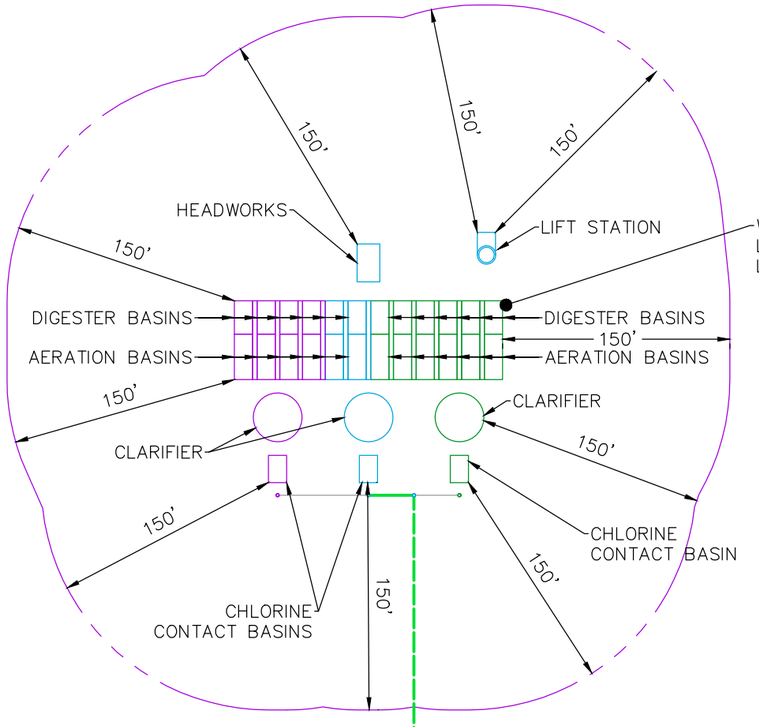
ALVIN 350 WASTEWATER TREATMENT PLANT

BUFFER ZONE PH II

DRAWING SCALE:

BRAZORIA COUNTY DD5 105-02-00

APPLICANT PROPERTY BOUNDARY



APPLICANT PROPERTY BOUNDARY

BRAZORIA COUNTY DD5 UNNAMED DITCH

DISCHARGE POINT
LAT: 29.324267°
LONG: -95.330122°

FLOOD PLAIN NOTE:
THIS SUBJECT TRACT LIES WITHIN UNSHADED ZONE "X" (AREAS DETERMINED TO BE OUTSIDE THE 500-YEAR FLOODPLAIN) ON THE FLOOD INSURANCE MAP FOR BRAZORIA COUNTY, TEXAS AND UNINCORPORATED AREAS, MAP NO. 48039C0280K DATED DECEMBER 30, 2020.

N

0 100 200

SCALE: 1" = 100'

TEXAS REGISTERED ENGINEERING FIRM F-9756

2500 Tanglewilde, Suite 120
Houston, Texas 77063
713.789.1900

4526 Research Forest, Suite 360
The Woodlands, Texas 77381
713.789.1900

ALVIN 350 WASTEWATER TREATMENT PLANT

BUFFER ZONE PH III

DRAWING SCALE:

WGA PROJECT NAME: ALVIN 350 WWTP
WGA PROJECT No: 40003-018-00

Appendix F

SPIF Form & SPIF USGS Map

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: South Central Water Company

   Permit No. WQ00 Pending EPA ID No. TX Pending

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

   2,200 Feet south of the intersection between County Road 172 and County Road 511 in the City of Alvin, Brazoria County, Texas

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: Doug Bailey

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

Title: President

Mailing Address: PO Box 570177

City, State, Zip Code: Houston, Texas 77257

Phone No.: 713-783-6611 Ext.: Click here to enter text. Fax No.: Click here to enter text.

E-mail Address: Doug@soutcentralww.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.

The effluent discharges into an unnamed ditch where it will travel for 1175-ft before oufalling into Brazoria County Drainage District 5 Brunner Ditch from a Culvert.

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):

Proposed Wastewater treatment plant including underground piping, utilities, varying depths between 0 and 20-ft below ground.

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

Property is considered irrigated crop land. Property has no existing structures

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. No existing buildings

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

Irrigated crop land.

U.S. DEPARTMENT OF THE INTERIOR
U.S. GEOLOGICAL SURVEY

The National Map
OnDemand Topo

7.5-MINUTE TOPO QUADRANGLE
Custom Extent
7.5-MINUTE TOPO

-95.3915° 29.3882° — -95.2666° 29.3882° — 29.2630° — 29.2630°

3-MILE RADIUS

1-MILE RADIUS

APPLICANT PROPERTY BOUNDARY

WWTP SITE
LAT: 29.324567°
LONG: -95.330122°

DISCHARGE POINT
LAT: 29.324267°
LONG: -95.330122°

ONE-MILE DOWNSTREAM

THREE-MILES DOWNSTREAM

ALVIN

Songbird Ranch Airport

J-D Ranch Airport

Toy Airpark

Minard Pegasus Airport

Garrett Farms Airport

Garrett Ranch Airport

Liverpool

Dingle Lake No. 2

Dingle Lake No. 1

Garrett Lakes

Garrett Lake

Chocolate Bayou

Austin Bayou

Bell Lateral

South Texas Water Company Canal

Corner Bayou

CO RD 699
CO RD 60
CO RD 171
CO RD 574
ROSS RD
AMY LN
CO RD 665
FM 1462 RD
LIVE OAK DR
GOLDS OAK LN
CO RD 893
CO RD 1845
S COUNTRY DR
CO RD 1871
CO RD 438
KESTER RD
CO RD 435
PARKER SCHOOL RD
PURSLEY LN
RUWE LN
CO RD 442
LOST RANCH RD
LOOKOUT LN
CO RD 1371C
SOAKBEND DR
PARKER SAWMILL RD
BAY CIR
CO RD 569
SONIA LN
SELIGA LN
SONGBIRD DR
AUGUSTA LN
SAVANNAH PLANTATION DR
STRATFORD HALL DR
PEBBLE HILL LN
CO RD 577
MAPLWST
BUFFIN RD
CO RD 1-2
PINE TREE TRL
CAMP MOHAWK
CO RD 133
OAKWANDA DR
CO RD 1871
BAYOU TIMBER DR
FM 1937
TIMBERWILDE DR
CO RD 765
CO RD 1450
CO RD 1954
CO RD 133
CO RD 1956
CO RD 455
LIVERPOOL
CO RD 14
AVE B
AVE C
AVE F
AVE G
AVE H
CO RD 171
SAN ANTONIO ST
15TH ST
PETERS RD
NELMS RD
CO RD 223
DANBURY LIVERPOOL RD
CO RD 33
CO RD 47
CO RD 49
CO RD 45
LAKE RD
CO RD 1847
CO RD 2410
IRONWOOD LN

68 69 70 71 72 73 74 75 76 77 78 79 80
2 680 000m E
2 790 000m E
32 530 000m N
32 400 000m N
49 48 47 46 45 44 43 42 41 40
53 52 51 50 49 48 47 46 45 44 43 42 41

Produced by the United States Geological Survey
North American Datum of 1983 (NAD83)
World Geodetic System of 1984 (WGS84). Projection and
1 000-meter grid:Universal Transverse Mercator, Zone 15R

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Learn About The National Map: https://nationalmap.gov

MN
GN
2°6'
37 MILS
1°8'
20 MILS
UTM GRID AND 2021 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET

U.S. National Grid
100,000 - m Square ID
TN
Grid Zone Designation
15R

SCALE 1:24 000

1 0.5 0 KILOMETERS 1 2
1000 500 0 METERS 1000 2000
1 0.5 0 1
MILES
1000 0 1000 2000 3000 4000 5000 6000 7000 8000 9000 10000
FEET

CONTOUR INTERVAL 5 FEET
NORTH AMERICAN VERTICAL DATUM OF 1988
CONTOUR SMOOTHNESS = Medium

TEXAS

QUADRANGLE LOCATION

Juliff	Manvel
Rosharon	Liverpool

ADJOINING QUADRANGLES

ROAD CLASSIFICATION

Expressway	Local Connector
Secondary Hwy	Local Road
Ramp	4WD
Interstate Route	US Route
State Route	

7.5-MINUTE TOPO, TX
2025

Appendix G

Original USGS Map

U.S. DEPARTMENT OF THE INTERIOR
U.S. GEOLOGICAL SURVEY

The National Map
OnDemand Topo

7.5-MINUTE TOPO QUADRANGLE
Custom Extent
7.5-MINUTE TOPO

-95.3915° 29.3882° — -95.2666° 29.3882° — 29.2630° — 29.2630°

3-MILE RADIUS

1-MILE RADIUS

APPLICANT PROPERTY BOUNDARY

WWTP SITE
LAT: 29.324567°
LONG: -95.330122°

DISCHARGE POINT
LAT: 29.324267°
LONG: -95.330122°

ONE-MILE DOWNSTREAM

THREE-MILES DOWNSTREAM

ALVIN

Songbird Ranch Airport

J-D Ranch Airport

Toy Airpark

Minard Pegasus Airport

Garrett Farms Airport

Garrett Ranch Airport

Liverpool

Dingle Lake No. 2

Dingle Lake No. 1

Garrett Lakes

Garrett Lake

Chocolate Bayou

Austin Bayou

Bell Lateral

South Texas Water Company Canal

Corner Bayou

CO RD 699
CO RD 60
CO RD 171
CO RD 574
ROSS RD
AMY LN
CO RD 665
FM 1462 RD
LIVE OAK DR
GOLDS OAK LN
CO RD 893
CO RD 1845
S COUNTRY DR
CO RD 1871
CO RD 438
KESTER RD
CO RD 435
PARKER SCHOOL RD
PURSLEY LN
RUWE LN
CO RD 442
LOST RANCH RD
LOOKOUT LN
CO RD 1371C
SOAKBEND DR
PARKER SAWMILL RD
BAY CIR
CO RD 569
SONIA LN
SELIGA LN
SONGBIRD DR
AUGUSTA LN
SAVANNAH PLANTATION DR
STRATFORD HALL DR
PEBBLE HILL LN
CO RD 577
MAPLWST
BUFFIN RD
CO RD 1-2
PINE TREE TRL
CAMP MOHAWK
CO RD 133
OAKWANDA DR
CO RD 1871
BAYOU TIMBER DR
FM 1937
TIMBERWILDE DR
CO RD 765
CO RD 1450
CO RD 1954
CO RD 133
CO RD 1956
CO RD 455
LIVERPOOL
CO RD 14
AVE B
AVE C
AVE F
AVE G
AVE H
CO RD 171
SAN ANTONIO ST
15TH ST
PETERS RD
NELMS RD
CO RD 223
DANBURY LIVERPOOL RD
CO RD 33
CO RD 47
CO RD 49
CO RD 45
LAKE RD
CO RD 1847
CO RD 2410
IRONWOOD LN

68 69 70 71 72 73 74 75 76 77 78 79 80
2 680 000m E
2 790 000m E
32 530 000m N
32 400 000m N
49 48 47 46 45 44 43 42 41 40
53 52 51 50 49 48 47 46 45 44 43 42 41

Produced by the United States Geological Survey
North American Datum of 1983 (NAD83)
World Geodetic System of 1984 (WGS84). Projection and
1 000-meter grid:Universal Transverse Mercator, Zone 15R

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MILES
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CONTOUR INTERVAL 5 FEET
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TEXAS

QUADRANGLE LOCATION

Juliff	Manvel
Rosharon	Liverpool

ADJOINING QUADRANGLES

ROAD CLASSIFICATION

Expressway	Local Connector
Secondary Hwy	Local Road
Ramp	4WD
Interstate Route	US Route
State Route	

7.5-MINUTE TOPO, TX
2025

Appendix H

Landowners Map and Cross-Referenced List

Unnamed Stream
Bell Lateral
Unnamed Stream
Bell Lateral
Unnamed Stream
Unnamed Stream
Unnamed Stream
Chocolate Bayou
Unnamed Stream
Unnamed Stream
Brazoria County Brunner Ditch
Unnamed Stream
Unnamed Stream
Unnamed Stream
Unnamed Stream
Unnamed Stream
Unnamed Stream
Unnamed Stream
Unnamed Stream
Unnamed Stream
Unnamed Stream
Unnamed Stream
Unnamed Stream
Unnamed Stream
Unnamed Stream
Unnamed Stream
Unnamed Stream
Unnamed Stream
Unnamed Stream
Unnamed Stream
Brazoria County Brunner Ditch

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37

ONE MILE DOWN STREAM

Legend

- One Mile Downstream
- Outfall
- Affected Streams
- Streams
- Applicant Boundary
- Affected Parcels
- WWTP 150 ft. Buffer
- WWTP

N

0 2000

Feet

Affected Landowners
Alvin WWTP

WGA

WARD, GETZ & ASSOCIATES, PLLC
TEXAS REGISTERED ENGINEERING FIRM F-9756

AFFECTED LANDOWNERS REFERENCE LIST

REF NO.	OWNER	OWNERS MAILING ADDRESS	PHYSICAL ADDRESS
1	MILLER KRISTIN & SPENCER GOINS	8907 COUNTY ROAD 511 ROSHARON, TX 77583-7245	8907 COUNTY ROAD 511 ROSHARON, TX 77583
2	MILLER KRISTIN & SPENCER GOINS	8907 COUNTY ROAD 511 ROSHARON, TX 77583-7245	8907 COUNTY ROAD 511 ROSHARON, TX 77583
3	GARDNER DEBRA	9302 COUNTY ROAD 172 ROSHARON, TX 77583-7264	9302 COUNTY ROAD 172 ROSHARON, TX 77583
4	GARDNER DEBRA	9302 COUNTY ROAD 172 ROSHARON, TX 77583-7264	9302 COUNTY ROAD 172 ROSHARON, TX 77583
5	FISHER LARRY ALLEN & JUDITH KAREN	PO BOX 1107 ROSHARON, TX 77583-1107	9218 COUNTY ROAD 172 ROSHARON, TX 77583
6	HUL BRIAN NARITH & HONUG	1745 SILVER BEND DR DICKINSON, TX 77539-8384	9206 COUNTY ROAD 172 ROSHARON, TX 77583
7	GLASS MARTHA H	2511 COPPER FIELDS DR ROSHARON, TX 77583-3273	9102 COUNTY ROAD 172 ROSHARON, TX 77583
8	GLASS MARTHA H	2511 COPPER FIELDS DR ROSHARON, TX 77583-3273	9102 COUNTY ROAD 172 ROSHARON, TX 77583
9	GLASS MARTHA H	2511 COPPER FIELDS DR ROSHARON, TX 77583-3273	9102 COUNTY ROAD 172 ROSHARON, TX 77583
10	RICE JOHNNY DAVID	8815 COUNTY ROAD 511 ROSHARON, TX 77583-7207	8815 COUNTY ROAD 511 ROSHARON, TX 77583
11	WEISS SUSAN M & ANTHONY P JR	9008 COUNTY ROAD 172 ROSHARON, TX 77583-7350	9008 COUNTY ROAD 172 ROSHARON, TX 77583
12	TOMLINSON MICHAEL A	7730 COUNTY ROAD 172 ALVIN, TX 77511-4085	COUNTY ROAD 172 ROSHARON, TX 77583
13	EL RANCHO RV RESORT LLC	1463 COUNTY ROAD 149 ALVIN, TX 77511	COUNTY ROAD 172 ROSHARON, TX 77583
14	LOZANO CLAUDIA	2718 CYPRESS WOOD LN MANVEL, TX 77578-2040	COUNTY ROAD 172 ROSHARON, TX 77583
15	STEPHENS ROY LEE & MOLLY E	8001 COUNTY ROAD 172 ALVIN, TX 77511-6259	COUNTY ROAD 172 ROSHARON, TX 77583
16	STEPHENS ROY LEE & MOLLY E	8001 COUNTY ROAD 172 ALVIN, TX 77511-6259	8001 COUNTY ROAD 172 ALVIN, TX 77511-6259
17	ORIHUELA JOEL M	7965 COUNTY ROAD 172 ALVIN, TX 77511-6207	COUNTY ROAD 172
18	HALEWYN DEAN	130 COUNTY ROAD 932 ALVIN, TX 77511-8012	COUNTY ROAD 172 ROSHARON, TX 77583
19	PETRO-HUNT LLC	2101 CEDAR SPRINGS RD STE 600 DALLAS, TX 75201-1591	COUNTY ROAD 192 ROSHARON, TX 77583
20	REDDY MALLADI S	21 IVY BEND LN SUGAR LAND, TX 77479	HIGHWAY 35 ROSHARON, TX 77583
21	REDDY MALLADI S	21 IVY BEND LN SUGAR LAND, TX 77479	HIGHWAY 35 ROSHARON, TX 77583
22	REDDY MALLADI S	21 IVY BEND LN SUGAR LAND, TX 77479	HIGHWAY 35 ROSHARON, TX 77583
23	ADAMS D DURWOOD	1523 BLUE WATER DR FREEPORT, TX 77541-9654	8934 COUNTY ROAD 511 ROSHARON, TX 77583
24	ADAMS D DURWOOD	1523 BLUE WATER DR FREEPORT, TX 77541-9654	HIGHWAY 35 ROSHARON, TX 77583
25	ADAMS D DURWOOD	1523 BLUE WATER DR FREEPORT, TX 77541-9654	HIGHWAY 35 OFF OF
26	ADAMS D DURWOOD	1523 BLUE WATER DR FREEPORT, TX 77541-9654	HIGHWAY 35 OFF OF
27	ADAMS D DURWOOD	1523 BLUE WATER DR FREEPORT, TX 77541-9654	HIGHWAY 35 ROSHARON, TX 77583
28	ADAMS VAN V ESTATE	5203 COUNTY ROAD 182 ALVIN, TX 77511-6323	HIGHWAY 35 ROSHARON, TX 77583
29	ADAMS LINN L	5415 COUNTY ROAD 182 ALVIN, TX 77511-8356	HIGHWAY 35
30	ADAMS LINN L	5415 COUNTY ROAD 182 ALVIN, TX 77511-6323	HIGHWAY 35 ROSHARON, TX 77583
31	HIGHLAND MANAGEMENT INC	700 MILAM ST HOUSTON, TX 77002-2806	COUNTY ROAD 511 ROSHARON, TX 77583
32	HIGHLAND MANAGEMENT INC	700 MILAM ST HOUSTON, TX 77002-2806	ROSHARON, TX 77583
33	HIGHLAND MANAGEMENT INC	700 MILAM ST HOUSTON, TX 77002-2806	COUNTY ROAD 511 ROSHARON, TX 77583
34	FORGY LEANN W & MICHAEL C	PO BOX 1178 ALVIN, TX 77512-1178	8934 COUNTY ROAD 511 ROSHARON, TX 77583
35	SURGENER TROY A & CAMERON W LANGFORD	9100 PILGRAM CIR ROSHARON, TX 77583-4822	COUNTY ROAD 172 ROSHARON, TX 77583
36	STRENGTH AMANDA ANN	1819 OAK CLUSTER CIR PEARLAND, TX 77581-6170	COUNTY ROAD 172 TX 77511
37	LUCAS JACOB ROY & HALEY BETHANY HOLDER	2250 COUNTY ROAD 206 ALVIN, TX 77511-6654	COUNTY ROAD 172 ROSHARON, TX 77583

MILLER KRISTIN & SPENCER GOINS
8907 COUNTY RD 511
ROSHARON TX 77583-7245

MILLER KRISTIN & SPENCER GOINS
8907 COUNTY RD 511
ROSHARON TX 77583-7245

MILLER KRISTIN & SPENCER GOINS
8907 COUNTY RD 511
ROSHARON TX 77583-7245

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8907 COUNTY RD 511
ROSHARON TX 77583-7245

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8907 COUNTY RD 511
ROSHARON TX 77583-7245

MILLER KRISTIN & SPENCER GOINS
8907 COUNTY RD 511
ROSHARON TX 77583-7245

GARNDER DEBRA
9302 COUNTY ROAD 172
ROSHARON TX 77583-7264

GARNDER DEBRA
9302 COUNTY ROAD 172
ROSHARON TX 77583-7264

GARNDER DEBRA
9302 COUNTY ROAD 172
ROSHARON TX 77583-7264

GARNDER DEBRA
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ROSHARON TX 77583-7264

GARNDER DEBRA
9302 COUNTY ROAD 172
ROSHARON TX 77583-7264

FISHER LARRY ALLEN & JUDITH KARREN
PO BOX 1107
ROSHARON TX 77583-1107

FISHER LARRY ALLEN & JUDITH KARREN
PO BOX 1107
ROSHARON TX 77583-1107

FISHER LARRY ALLEN & JUDITH KARREN
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PO BOX 1107
ROSHARON TX 77583-1107

FISHER LARRY ALLEN & JUDITH KARREN
PO BOX 1107
ROSHARON TX 77583-1107

HUL BRAIN NARITH & HONUG
1745 SILVER BEND DR
DICKINSON TX 77539-8384

HUL BRAIN NARITH & HONUG
1745 SILVER BEND DR
DICKINSON TX 77539-8384

HUL BRAIN NARITH & HONUG
1745 SILVER BEND DR
DICKINSON TX 77539-8384

GLASS MARTHA H
2511 COPPER FIELDS DR
ROSHARON TX 77583-3273

GLASS MARTHA H
2511 COPPER FIELDS DR
ROSHARON TX 77583-3273

GLASS MARTHA H
2511 COPPER FIELDS DR
ROSHARON TX 77583-3273

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GLASS MARTHA H
2511 COPPER FIELDS DR
ROSHARON TX 77583-3273

RICE JOHNNY DAVID
8815 COUNTY RD 511
ROSHARON TX 77583-3273

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8815 COUNTY RD 511
ROSHARON TX 77583-3273

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8815 COUNTY RD 511
ROSHARON TX 77583-3273

RICE JOHNNY DAVID
8815 COUNTY RD 511
ROSHARON TX 77583-3273

WEISS SUSAN M ANTHONY P JR
9008 COUNTY ROAD 172
ROSHARON TX 77583-7350

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9008 COUNTY ROAD 172
ROSHARON TX 77583-7350

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9008 COUNTY ROAD 172
ROSHARON TX 77583-7350

WEISS SUSAN M ANTHONY P JR
9008 COUNTY ROAD 172
ROSHARON TX 77583-7350

TOMLINSON MICHAEL A
7730 COUNTY ROAD 172
ALVIN TX 77511-4085

EL RANCHO RV RESORT LLC
1463 COUNTY ROAD 149
ALVIN TX 77511

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ALVIN TX 77511

EL RANCHO RV RESORT LLC
1463 COUNTY ROAD 149
ALVIN TX 77511

EL RANCHO RV RESORT LLC
1463 COUNTY ROAD 149
ALVIN TX 77511

LOZANO CLAUDIA
2718 CYPRESS WOOD LN
MANVEL TX 77578-2040

LOZANO CLAUDIA
2718 CYPRESS WOOD LN
MANVEL TX 77578-2040

LOZANO CLAUDIA
2718 CYPRESS WOOD LN
MANVEL TX 77578-2040

LOZANO CLAUDIA
2718 CYPRESS WOOD LN
MANVEL TX 77578-2040

STEPHENS ROY LEE & MOLLY E
8001 COUNTY ROAD 172
ALVIN TX 77511-6259

STEPHENS ROY LEE & MOLLY E
8001 COUNTY ROAD 172
ALVIN TX 77511-6259

STEPHENS ROY LEE & MOLLY E
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ALVIN TX 77511-6259

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ALVIN TX 77511-6259

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8001 COUNTY ROAD 172
ALVIN TX 77511-6259

STEPHENS ROY LEE & MOLLY E
8001 COUNTY ROAD 172
ALVIN TX 77511-6259

ORIHUELA JOEL M
7965 COUNTY ROAD 172
ALVIN TX 77511-6207

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ALVIN TX 77511-6207

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7965 COUNTY ROAD 172
ALVIN TX 77511-6207

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7965 COUNTY ROAD 172
ALVIN TX 77511-6207

HALEWYN DEAN
130 COUNTY ROAD 932
ALVIN TX 77511-8012

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ALVIN TX 77511-8012

HALEWYN DEAN
130 COUNTY ROAD 932
ALVIN TX 77511-8012

PETRO-HUNT LLC
2101 CEDAR SPRINGS RD
STE 600
DALLAS TX 75201-1591

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STE 600
DALLAS TX 75201-1591

PETRO-HUNT LLC
2101 CEDAR SPRINGS RD
STE 600
DALLAS TX 75201-1591

PETRO-HUNT LLC
2101 CEDAR SPRINGS RD
STE 600
DALLAS TX 75201-1591

REDDY MALLADI S
21 IVY BEND LN
SUGAR LAND TX 77479

REDDY MALLADI S
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SUGAR LAND TX 77479

ADAMS D DURWOOD
1523 BLUE WATER DR
FREEPORT TX 77541-9654

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FREEPORT TX 77541-9654

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FREEPORT TX 77541-9654

ADAMS D DURWOOD
1523 BLUE WATER DR
FREEPORT TX 77541-9654

ADAMS VAN V ESTATE
5203 COUNTY ROAD 182
ALVIN TX 77511-6323

ADAMS VAN V ESTATE
5203 COUNTY ROAD 182
ALVIN TX 77511-6323

ADAMS VAN V ESTATE
5203 COUNTY ROAD 182
ALVIN TX 77511-6323

ADAMS VAN V ESTATE
5203 COUNTY ROAD 182
ALVIN TX 77511-6323

ADAMS LINN L
5415 COUNTY ROAD 182
ALVIN TX 77511-8356

ADAMS LINN L
5415 COUNTY ROAD 182
ALVIN TX 77511-8356

ADAMS LINN L
5415 COUNTY ROAD 182
ALVIN TX 77511-8356

ADAMS LINN L
5415 COUNTY ROAD 182
ALVIN TX 77511-8356

ADAMS LINN L
5415 COUNTY ROAD 182
ALVIN TX 77511-8356

ADAMS LINN L
5415 COUNTY ROAD 182
ALVIN TX 77511-8356

ADAMS LINN L
5415 COUNTY ROAD 182
ALVIN TX 77511-8356

HIGHLAND MANAGEMENT INC
700 MILAM ST
HOUSTON TX 77002-2806

HIGHLAND MANAGEMENT INC
700 MILAM ST
HOUSTON TX 77002-2806

HIGHLAND MANAGEMENT INC
700 MILAM ST
HOUSTON TX 77002-2806

HIGHLAND MANAGEMENT INC
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HOUSTON TX 77002-2806

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HIGHLAND MANAGEMENT INC
700 MILAM ST
HOUSTON TX 77002-2806

HIGHLAND MANAGEMENT INC
700 MILAM ST
HOUSTON TX 77002-2806

FORGY LEANN W & MICHAEL C
PO BOX 1178
ALVIN TX 77512-1178

FORGY LEANN W & MICHAEL C
PO BOX 1178
ALVIN TX 77512-1178

FORGY LEANN W & MICHAEL C
PO BOX 1178
ALVIN TX 77512-1178

FORGY LEANN W & MICHAEL C
PO BOX 1178
ALVIN TX 77512-1178

SURGENER TROY A & CAMERON W LANGFORD
9100 PILGRAM CIR
ROSHARON TX 77583-4822

SURGENER TROY A & CAMERON W LANGFORD
9100 PILGRAM CIR
ROSHARON TX 77583-4822

SURGENER TROY A & CAMERON W LANGFORD
9100 PILGRAM CIR
ROSHARON TX 77583-4822

SURGENER TROY A & CAMERON W LANGFORD
9100 PILGRAM CIR
ROSHARON TX 77583-4822

STRENGTH AMANDA ANN
1819 OAK CLUSTER CIR
PEARLAND TX 77581-6170

STRENGTH AMANDA ANN
1819 OAK CLUSTER CIR
PEARLAND TX 77581-6170

STRENGTH AMANDA ANN
1819 OAK CLUSTER CIR
PEARLAND TX 77581-6170

STRENGTH AMANDA ANN
1819 OAK CLUSTER CIR
PEARLAND TX 77581-6170

LUCAS JACOB ROY & HALEY BETHANY HOLDER
2250 COUNTY ROAD 206
ALVIN TX 77511-6654

LUCAS JACOB ROY & HALEY BETHANY HOLDER
2250 COUNTY ROAD 206
ALVIN TX 77511-6654

LUCAS JACOB ROY & HALEY BETHANY HOLDER
2250 COUNTY ROAD 206
ALVIN TX 77511-6654

LUCAS JACOB ROY & HALEY BETHANY HOLDER
2250 COUNTY ROAD 206
ALVIN TX 77511-6654

Appendix I

Treatment Process Description

Treatment Process Description

Phase I:
Interim Phase I will have the capacity to serve an average daily flow of 0.1 MGD and a 2-hr peak flow of 278 GPM. The activated sludge processing plant will utilize an onsite lift station to pump raw influent from the proposed development to the elevated headworks consisting of two (2) manual bar screens. Weir plates in the headworks flow splitting structure will evenly split the screened influent and then gravity flow into each of the two (2) aeration basins. From the aeration basins, mixed liquor will be conveyed into the clarifier. The settled effluent will be returned to the aerated activated sludge basins or wasted to the two (2) aerated digester basins. The supernatant from the clarifier will flow over the v-notch weir, into the effluent drop box, and into one (1) aerated chlorine contact basin where flow will be conveyed through baffle walls to facilitate mixing and maintain a minimum contact time of 20-min. Disinfected effluent is then conveyed to the v-notch weir and drop box where it will gravity flow into the sampling manhole where effluent constituents will be sampled and tested. From the sampling manhole, disinfected effluent will gravity flow to the outfall into an unnamed Brazoria County Drainage District 5 Ditch.

Phase II:
Interim Phase II will have the capacity to serve an average daily flow of 0.35 MGD and a 2-hr peak flow of 972.22 GPM. The activated sludge processing plant will utilize an onsite lift station to pump raw influent from the development to the elevated headworks consisting of two (2) manual bar screens. Weir plates in the headworks flow splitting structure will evenly split the screened influent and then gravity flow into each of the eight (8) aeration basins. From the aeration basins, mixed liquor will be conveyed into two (2) clarifiers. The settled effluent will be returned to the aerated activated sludge basins or wasted to the eight (8) aerated digester basins. The supernatant from the clarifiers will flow over the v-notch weir, into the effluent drop box, and into the two (2) aerated chlorine contact basins where flow will be conveyed through baffle walls to facilitate mixing and maintain a minimum contact time of 20-min. Disinfected effluent is then conveyed to the v-notch weir and drop box where it will gravity flow into the sampling manhole where effluent constituents will be sampled and tested for each basin. From each of the two (2) sampling manholes, disinfected effluent will gravity flow to a common manhole to combine flows from each chlorine contact basin before outfalling into an unnamed Brazoria County Drainage District 5 Ditch.

Phase III:
Interim Phase III will have the capacity to serve an average daily flow of 0.60 MGD and a 2-hr peak flow of 1,667 GPM. The activated sludge processing plant will utilize an onsite lift station to pump raw influent from the development to the elevated headworks consisting of two (2) manual bar screens. Weir plates in the headworks flow splitting structure will evenly split the screened influent and then gravity flow into each of the twelve (12) aeration basins. From the aeration basins, mixed liquor will be conveyed into three (3) clarifiers. The settled effluent will be returned to the aerated activated sludge basins or wasted to the twelve (12) aerated digester basins. The supernatant from the clarifiers will flow over the v-notch weir, into the effluent drop box, and into the three (3) aerated chlorine contact basins where flow

will be conveyed through baffle walls to facilitate mixing and maintain a minimum contact time of 20-min. Disinfected effluent is then conveyed to the v-notch weir and drop box where it will gravity flow into the sampling manhole where effluent constituents will be sampled and tested for each basin. From each of the three (3) sampling manholes, disinfected effluent will gravity flow to a common manhole to combine flows from each chlorine contact basin before out falling into an unnamed Brazoria County Drainage District 5 Ditch.

Appendix J

Treatment Unit Descriptions

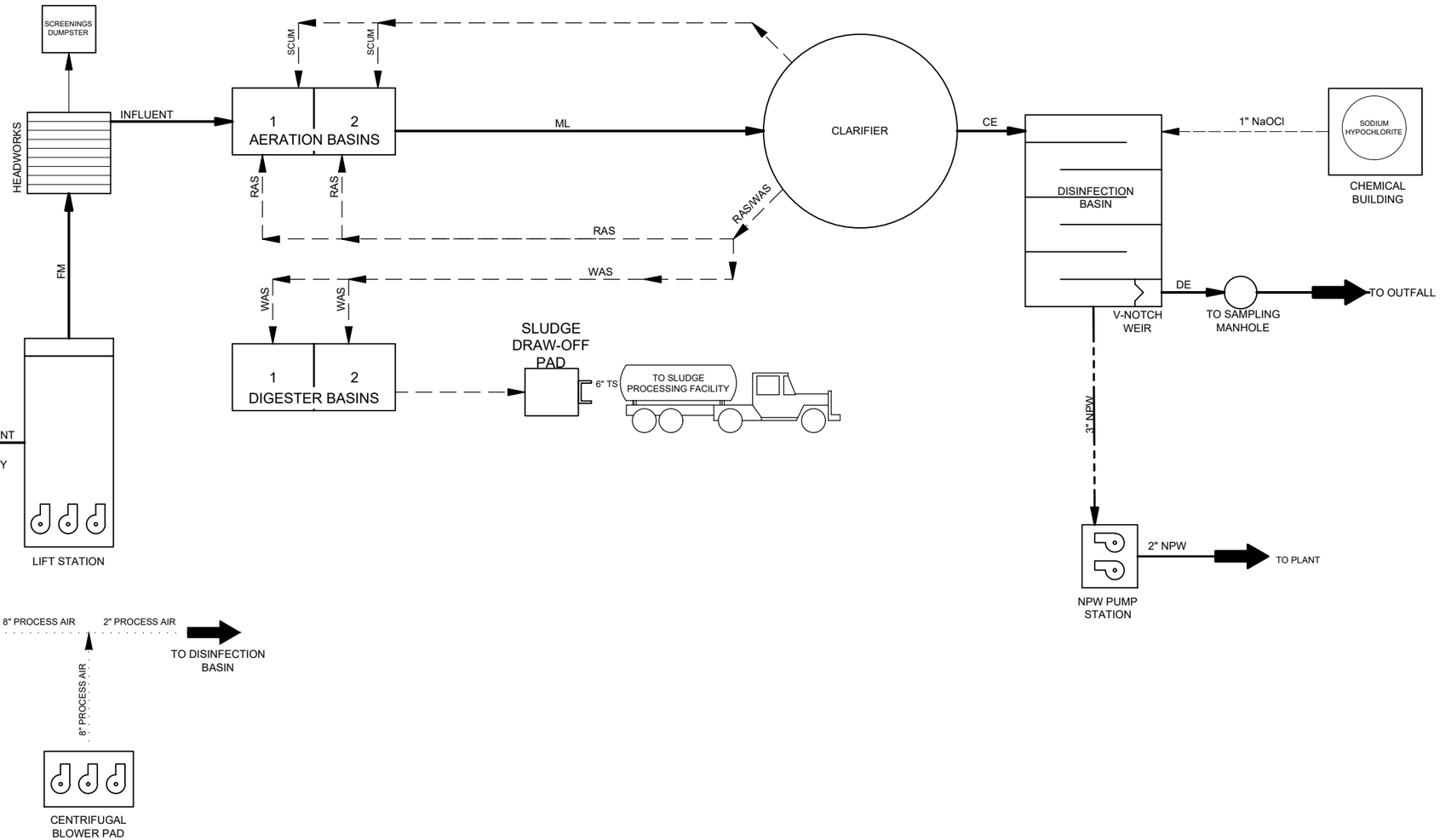
Phase I				
Treatment Unit	*L x W x D x SWD*	*Total Volume (ft³)*		
Aeration Basin 1	30'x12'x12'x10.3'	3,641		
Aeration Basin 2	30'x12'x12'x10.3'	3,641		
Total Ph I Aeration Volume		**7,283**		
Digester Basin 1	22'x12'x12'x10.5'	2,772		
Digester Basin 2	22'x12'x12'x10.5'	2,772		
Total Ph I Digester Volume		**5,544**		
Chlorine Contact Basin 1	18'x12'x12'x9.5'	1,520		
Total Ph I Disinfection Basin Volume		**1,520**		
Treatment Unit	*Diameter (ft)*	*Surface Area (ft²)*	*SWD (ft)*	*Total Volume (ft³)*
Clarifier 1	34	907.9	10.0	9079.2
	Total Ph I Clarifier Surface Area	**907.9**	**Total Ph I Clarifier Volume**	**9079.2**

Phase II				
Treatment Unit	*L x W x D x SWD*	*Total Volume (ft³)*		
Aeration Basin 1	30'x12'x12'x10.3'	3,641		
Aeration Basin 2	30'x12'x12'x10.3'	3,641		
Aeration Basin 3	30'x12'x12'x10.3'	3,641		
Aeration Basin 4	30'x12'x12'x10.3'	3,641		
Aeration Basin 5	30'x12'x12'x10.3'	3,641		
Aeration Basin 6	30'x12'x12'x10.3'	3,641		
Aeration Basin 7	30'x12'x12'x10.3'	3,641		
Aeration Basin 8	30'x12'x12'x10.3'	3,641		
Total Ph II Aeration Volume		**29,128**		
Digester Basin 1	22'x12'x12'x10.5'	2,772		
Digester Basin 2	22'x12'x12'x10.5'	2,772		
Digester Basin 3	22'x12'x12'x10.5'	2,772		
Digester Basin 4	22'x12'x12'x10.5'	2,772		
Digester Basin 5	22'x12'x12'x10.5'	2,772		
Digester Basin 6	22'x12'x12'x10.5'	2,772		
Digester Basin 7	22'x12'x12'x10.5'	2,772		
Digester Basin 8	22'x12'x12'x10.5'	2,772		
Total Ph II Digester Volume		**22,176**		
Chlorine Contact Basin 1	18'x12'x12'x9'	1,520		
Chlorine Contact Basin 2	18'x12'x12'x9'	1,520		
Total Ph II Disinfection Basin Volume		**3,040**		
Treatment Unit	*Diameter (ft)*	*Surface Area (ft²)*	*SWD (ft)*	*Total Volume (ft³)*
Clarifier 1	34	907.9	10.0	9,079.2
Clarifier 2	34	907.9	10.0	9,079.2
	Total Ph II Clarifier Surface Area	**1,815.8**	**Total Ph II Clarifier Volume**	**18,158.4**

Phase III				
Treatment Unit	*L x W x D x SWD*	*Total Volume (ft³)*		
Aeration Basin 1	30'x12'x12'x10.3'	3,641		
Aeration Basin 2	30'x12'x12'x10.3'	3,641		
Aeration Basin 3	30'x12'x12'x10.3'	3,641		
Aeration Basin 4	30'x12'x12'x10.3'	3,641		
Aeration Basin 5	30'x12'x12'x10.3'	3,641		
Aeration Basin 6	30'x12'x12'x10.3'	3,641		
Aeration Basin 7	30'x12'x12'x10.3'	3,641		
Aeration Basin 8	30'x12'x12'x10.3'	3,641		
Aeration Basin 9	30'x12'x12'x10.3'	3,641		
Aeration Basin 10	30'x12'x12'x10.3'	3,641		
Aeration Basin 11	30'x12'x12'x10.3'	3,641		
Aeration Basin 12	30'x12'x12'x10.3'	3,641		
Total Ph III Aeration Volume		**43,692**		
Digester Basin 1	22'x12'x12'x10.5'	2,772		
Digester Basin 2	22'x12'x12'x10.5'	2,772		
Digester Basin 3	22'x12'x12'x10.5'	2,772		
Digester Basin 4	22'x12'x12'x10.5'	2,772		
Digester Basin 5	22'x12'x12'x10.5'	2,772		
Digester Basin 6	22'x12'x12'x10.5'	2,772		
Digester Basin 7	22'x12'x12'x10.5'	2,772		
Digester Basin 8	22'x12'x12'x10.5'	2,772		
Digester Basin 9	22'x12'x12'x10.5'	2,772		
Digester Basin 10	22'x12'x12'x10.5'	2,772		
Digester Basin 11	22'x12'x12'x10.5'	2,772		
Digester Basin 12	22'x12'x12'x10.5'	2,772		
Total Ph III Digester Volume		**33,264**		
Chlorine Contact Basin 1	18'x12'x12'x9'	1,944		
Chlorine Contact Basin 2	18'x12'x12'x9'	1,944		
Chlorine Contact Basin 2	18'x12'x12'x9'	1,944		
Total Ph III Disinfection Basin Volume		**5,832**		
Treatment Unit	*Diameter (ft)*	*Surface Area (ft²)*	*SWD (ft)*	*Total Volume (ft³)*
Clarifier 1	34	907.9	10.0	9,079.2
Clarifier 2	34	907.9	10.0	9,079.2
Clarifier 3	34	907.9	10.0	9,079.2
	Total Ph III Clarifier Surface Area	**2,723.7**	**Total Ph III Clarifier Volume**	**27,237.6**

Appendix K

Flow Diagram



LEGEND

- MAIN PROCESSES
- SECONDARY PROCESSES
- PROCESS AIR
- NON-POTABLE WATER
- CHEMICAL LINES

WGA PROJECT NAME: ALVIN 350 WWTP
WGA PROJECT No: 40003-018-00

TEXAS REGISTERED ENGINEERING FIRM F-9756

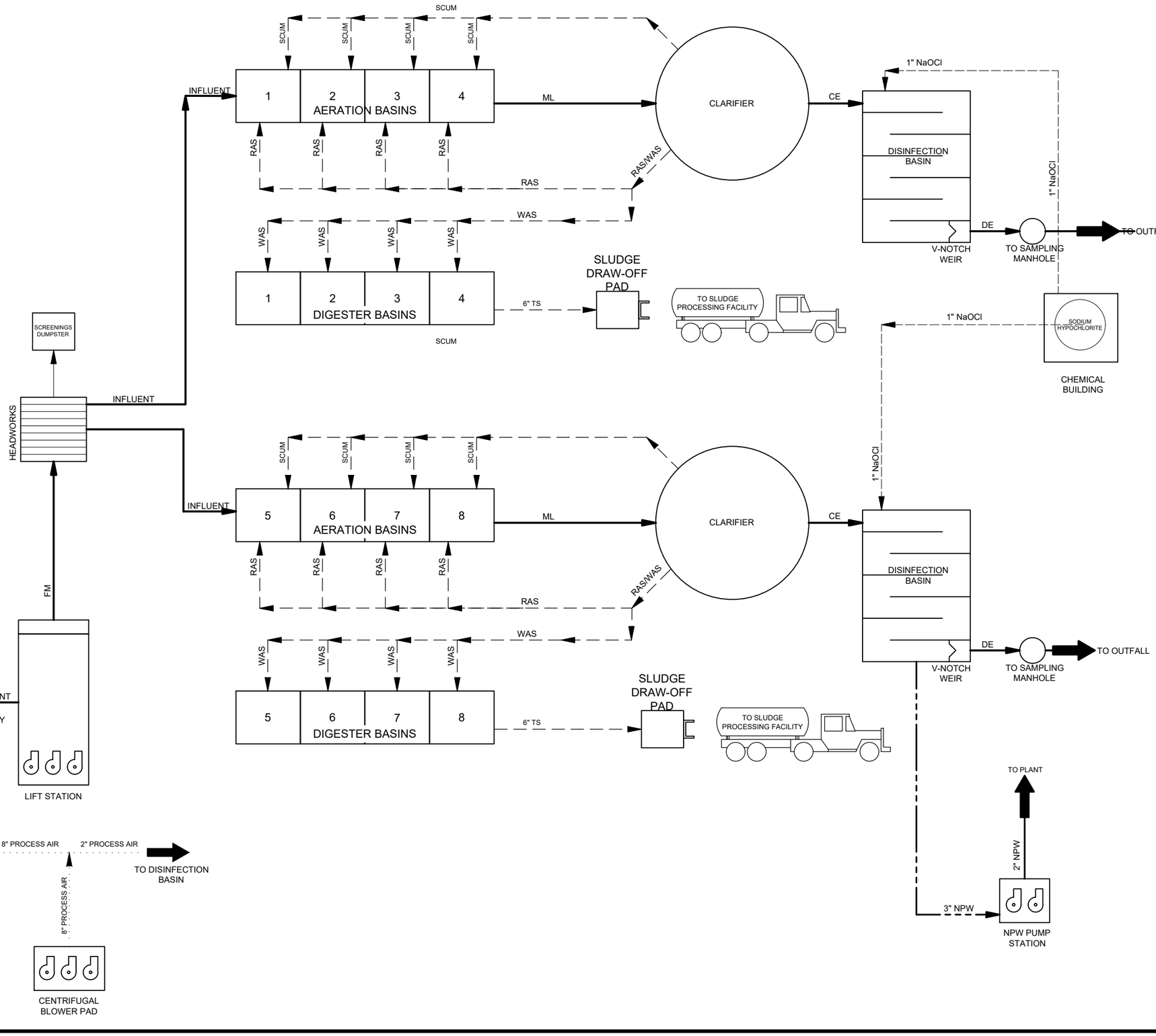
2500 Tanglewilde, Suite 120
Houston, Texas 77063
713.789.1900

4526 Research Forest, Suite 360
The Woodlands, Texas 77381
713.789.1900

ALVIN 350 WASTEWATER TREATMENT PLANT

PROCESS FLOW DIAGRAM PH I

DRAWING SCALE:



LEGEND

- MAIN PROCESSES
- SECONDARY PROCESSES
- PROCESS AIR
- NON-POTABLE WATER
- CHEMICAL LINES

WGA PROJECT NAME: ALVIN 350 WWTP
WGA PROJECT No: 40003-018-00

WGA

TEXAS REGISTERED ENGINEERING FIRM F-9756

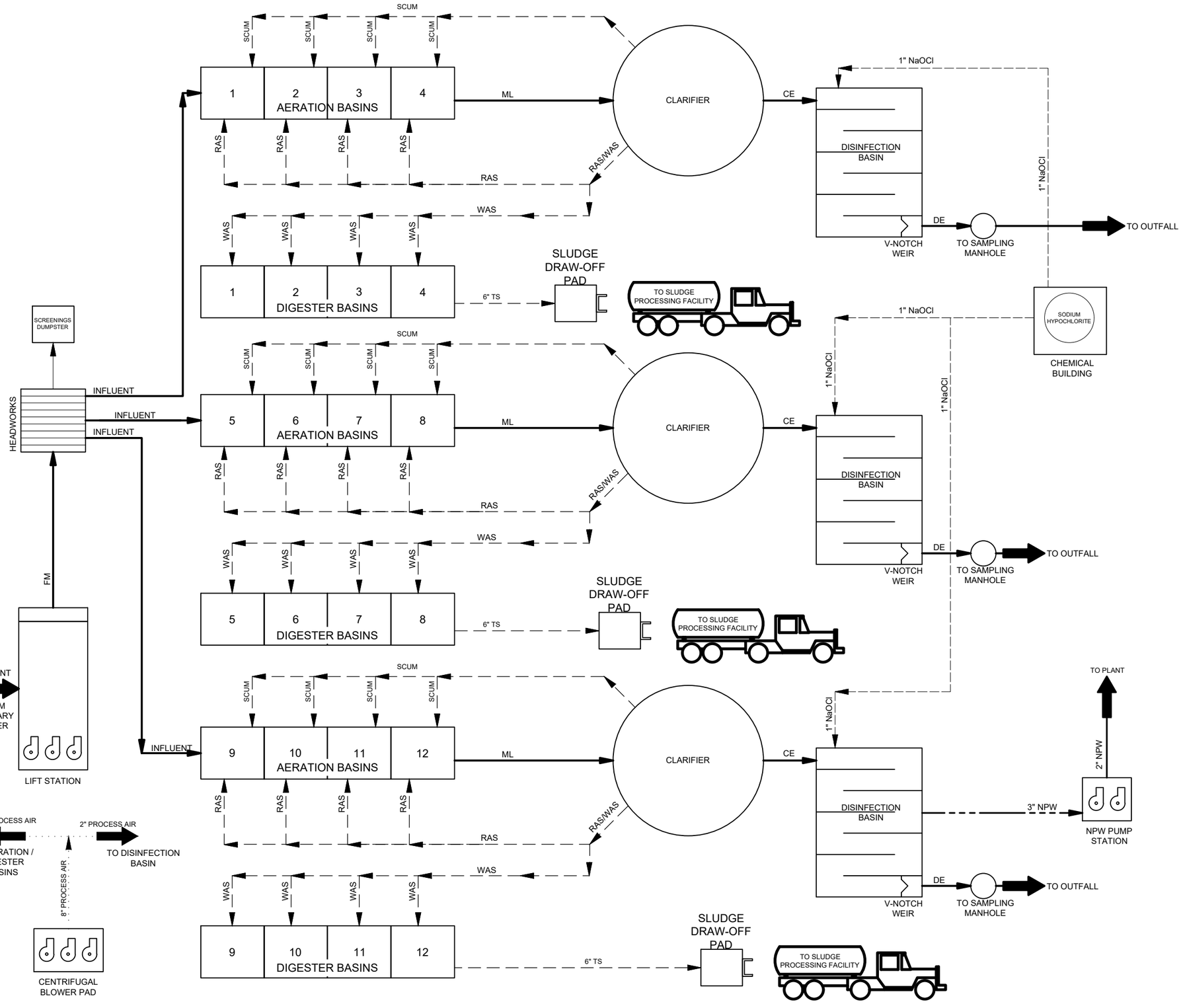
2500 Tanglewilde, Suite 120
Houston, Texas 77063
713.789.1900

4526 Research Forest, Suite 360
The Woodlands, Texas 77381
713.789.1900

ALVIN 350 WASTEWATER TREATMENT PLANT

PROCESS FLOW DIAGRAM PH II

DRAWING SCALE:



LEGEND

- MAIN PROCESSES
- SECONDARY PROCESSES
- PROCESS AIR
- NON-POTABLE WATER
- CHEMICAL LINES

WGA PROJECT NAME: ALVIN 350 WWTP
WGA PROJECT No: 40003-018-00

WGA

TEXAS REGISTERED ENGINEERING FIRM F-9756

2500 Tanglewilde, Suite 120
Houston, Texas 77063
713.789.1900

4526 Research Forest, Suite 360
The Woodlands, Texas 77381
713.789.1900

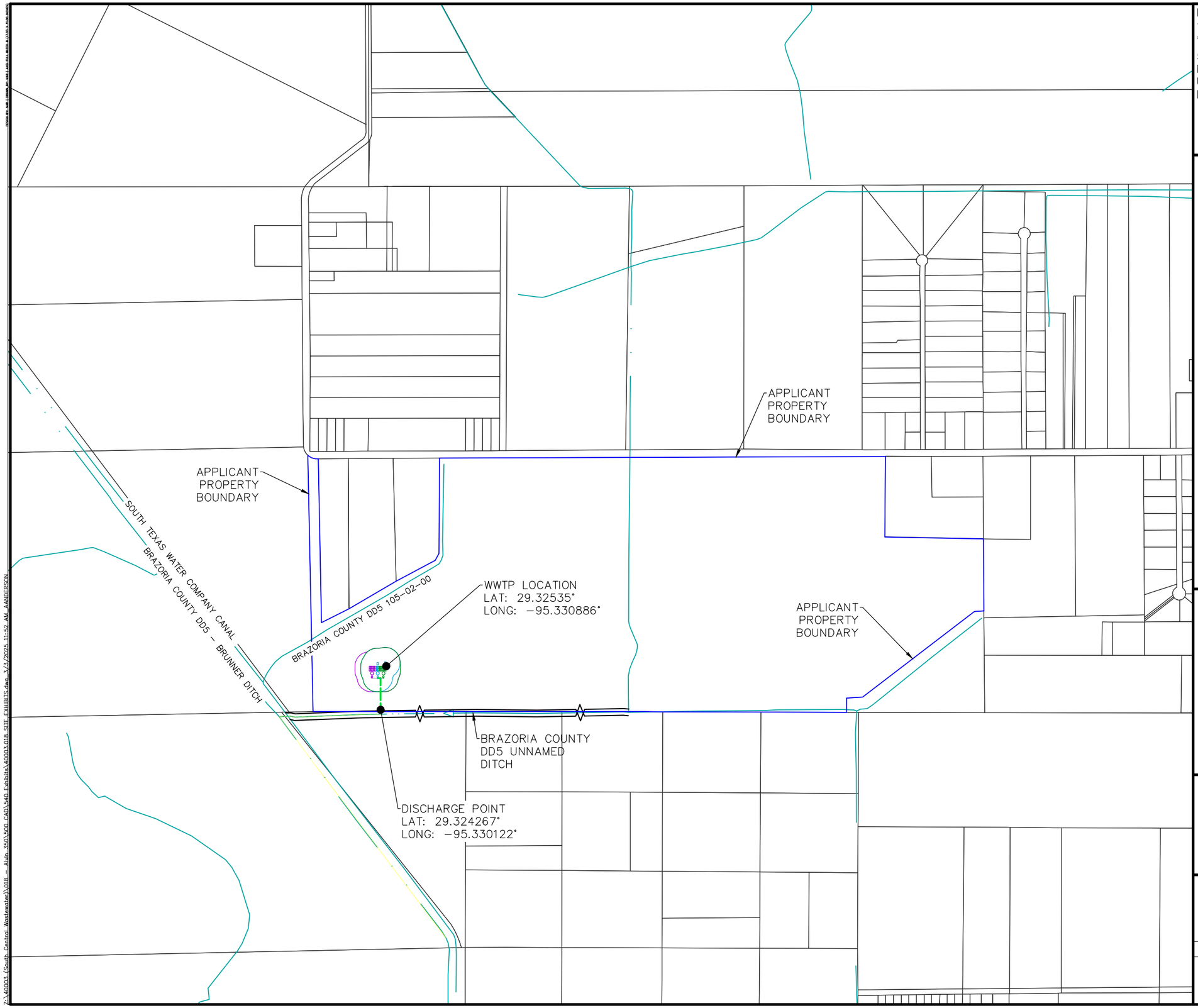
ALVIN 350 WASTEWATER TREATMENT PLANT

PROCESS FLOW DIAGRAM PH III

DRAWING SCALE:

Appendix L

Site Drawing



FLOOD PLAIN NOTE:
THIS SUBJECT TRACT LIES WITHIN UNSHADED ZONE "X" (AREAS DETERMINED TO BE OUTSIDE THE 500–YEAR FLOODPLAIN) ON THE FLOOD INSURANCE MAP FOR BRAZORIA COUNTY, TEXAS AND UNINCORPORATED AREAS, MAP NO. 48039C0280K DATED DECEMBER 30, 2020.

N

0 1000 2000

SCALE: 1" = 1000'

LEGEND

PHASE I

PHASE II

PHASE III

ABBREVIATIONS

C	CLARIFIER
AB	AERATION BASIN
D	DIGESTER
CCB	CHLORINE CONTACT BASIN
HW	HEADWORKS
LS	LIFT STATION

TEXAS REGISTERED ENGINEERING FIRM F-9756

2500 Tanglewilde, Suite 120
Houston, Texas 77063
713.789.1900

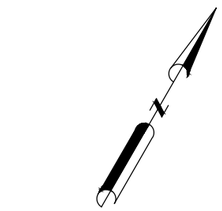
4526 Research Forest, Suite 360
The Woodlands, Texas 77381
713.789.1900

ALVIN 350 WASTEWATER TREATMENT PLANT

OVERALL SITE PLAN

DRAWING SCALE:

WGA PROJECT NAME: ALVIN 350 WWTP
WGA PROJECT No: 40003-018-00



0 250 500

SCALE: 1" = 250'

APPLICANT PROPERTY BOUNDARY

BRAZORIA COUNTY DD5 105-02-00

APPLICANT PROPERTY BOUNDARY

BRAZORIA COUNTY DD5 - BRUNNER DITCH

SOUTH TEXAS WATER COMPANY CANAL

WWTP LOCATION
LAT: 29.32535°
LONG: -95.330886°

BRAZORIA COUNTY DD5 UNNAMED DITCH

APPLICANT PROPERTY BOUNDARY

DISCHARGE POINT
LAT: 29.324267°
LONG: -95.330122°

FLOOD PLAIN NOTE:

THIS SUBJECT TRACT LIES WITHIN UNSHADED ZONE "X" (AREAS DETERMINED TO BE OUTSIDE THE 500-YEAR FLOODPLAIN) ON THE FLOOD INSURANCE MAP FOR BRAZORIA COUNTY, TEXAS AND UNINCORPORATED AREAS, MAP NO. 48039C0280K DATED DECEMBER 30, 2020.

SHEET NOTES:

LEGEND

PHASE I

PHASE II

PHASE III

ABBREVIATIONS

C	CLARIFIER
AB	AERATION BASIN
D	DIGESTER
CCB	CHLORINE CONTACT BASIN
HW	HEADWORKS
LS	LIFT STATION

WGA

TEXAS REGISTERED ENGINEERING FIRM F-9756

2500 Tanglewilde, Suite 120
Houston, Texas 77063
713.789.1900

4526 Research Forest, Suite 360
The Woodlands, Texas 77381
713.789.1900

ALVIN 350 WASTEWATER TREATMENT PLANT

SITE PLAN

DRAWING SCALE:

WGA PROJECT NAME: ALVIN 350 WWTP
WGA PROJECT No: 40003-018-00

Appendix M

WWTP Regionalization - Service Request Letters

LETTER OF TRANSMITTAL

2500 Tanglewilde, Suite 120

Houston, Texas 77063

☐	Regular USPS	☐	FedEx	☐	Courier from WGA	☐	End of Day
☒	Certified USPS	☐	Overnight	☐	Courier to WGA	☐	Expedited

Date: 3/3/2025

Project No: 40003-018-00

To:

HARRISON WILLIAMS

SAVANNAH PLANTATION UTILITY COMPANY, INC.

P.O. BOX 690521
HOUSTON, TX 77269

Attn:

Phone Number:
346-771-5311

Email Address: aanderson@wga-llp.com

Delivery Instructions:

Re: South Central Water Company – Request for Service – Application for New TPDES Permit

Quantity	Description
1	Request for Service Letter

Audrey Anderson, Project Engineer
Ward, Getz & Associates, PLLC

March 3, 2025

Harrison Williams
Savannah Plantation Utility Company, Inc
P.O. Box 690521
Houston, Texas 77269

SUBJECT: South Central Water Company (CN602602179)
Alvin 350 Wastewater Treatment Plant
Application for New TPDES Permit

Greetings TCEQ Wastewater Discharge Permit Holder,

South Central Water Company (602602179) is preparing an application for a new Texas Pollutant Discharge Elimination System (TPDES) wastewater discharge permit. This wastewater treatment facility will serve a proposed subdivision which will consist of an ultimate buildout of 2,400 single family residences. We are in the process of applying for an authorized flow of 0.100 million gallons per day (MGD) in Phase I. Ultimate Phase III will require a capacity of 0.600 MGD.

We are required to contact all existing TPDES permittees within a three-mile radius of the proposed service area of the Alvin 350 WWTP location to request service. Do you have the capacity and are you willing to provide service for the requested 0.100 MGD? If you do not have the current capacity, but are willing to expand your facility to provide service, will you be able to provide service within the needed time frame? If you are willing to provide service, please provide the estimated costs and service rates in a written response.

Please provide a response indicating if 0.10 MGD of wastewater treatment capacity in your facility is available and, if so, under what terms. A written reply on a copy of this letter will be adequate. You may email your response to aanderson@wga-llp.com. Please feel free to call me at 346-771-5311.

Thank you for your participation in these efforts.

Sincerely,

Audrey Anderson
Project Engineer
Ward, Getz & Associates, LLP

Date of Reply: _____

Does Savannah Plantation Utility Company have the capacity available to accommodate 0.100 MGD (circle one)? YES or NO

If existing facilities are not adequate, is an expansion feasible? YES or NO

If yes to EITHER question, please provide in writing the terms for service.

Name and Title: _____

Signature: _____ Date: _____

Outlook

A shipment from Maren Evans is on its way

From no-reply@pb.com <no-reply@pb.com>
Date Mon 3/3/2025 12:50 PM
To Audrey Anderson <aanderson@wga-llp.com>

Pitney Bowes PitneyShip™ Portfolio

Pitney Bowes

Shipment Created - USPS2220865973303623

This shipment has been sent using PitneyShip™ Portfolio

TRACKING NUMBER	ESTIMATED DELIVERY
USPS 9414809898643068061422	

AAnderson - 40003-018-00

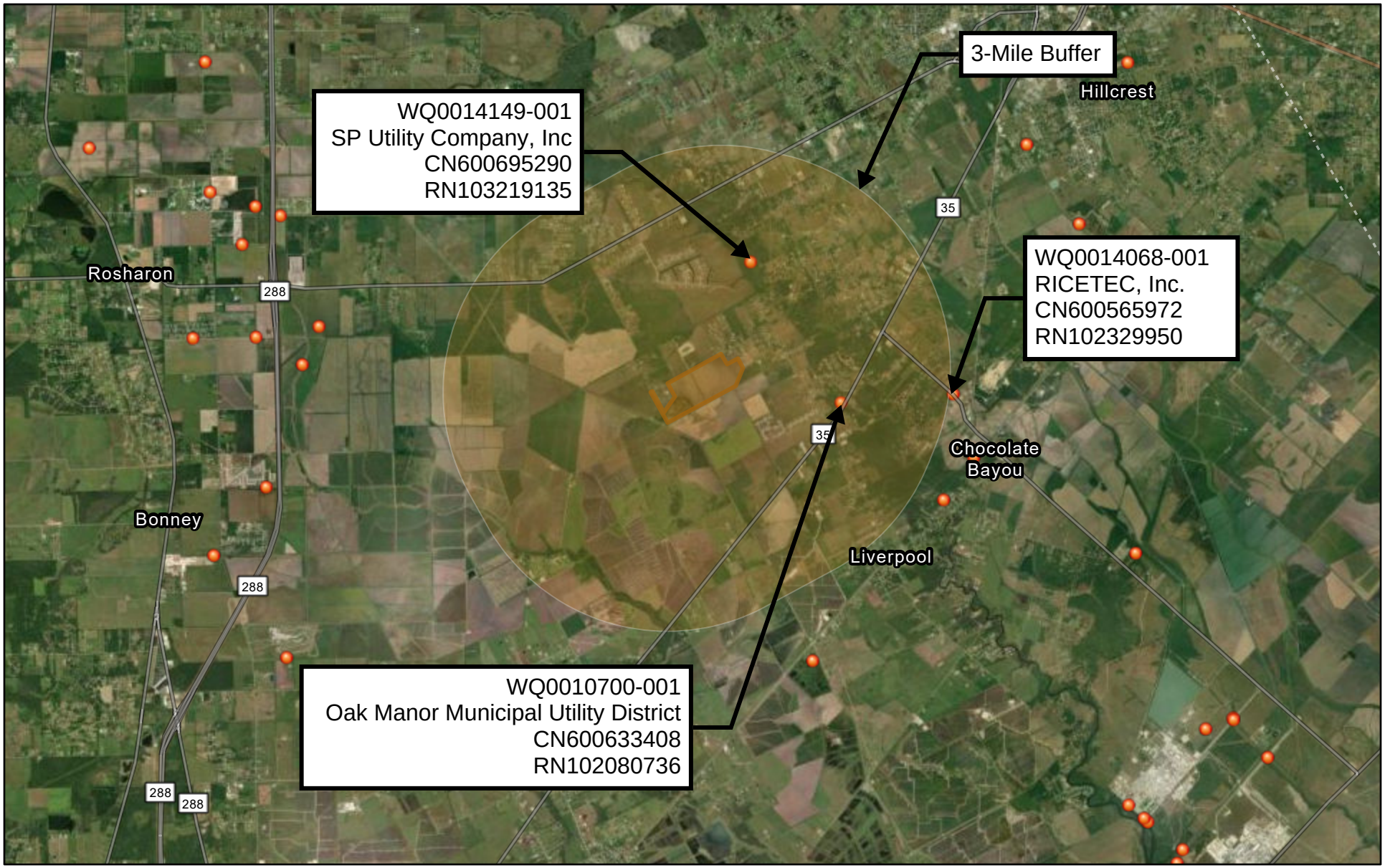
Shipped on	2025-03-03
Carrier	USPS
Ship To	HARRISON WILLIAMS SAVANNAH PLANTATION UTILITY COMPANY PO BOX 690521 HOUSTON, TX, 77269-0521 US
Service	First-Class Mail®
Signature Required	Yes

For more information, click on the tracking number above.

It may take 12-24 hours before tracking information is available.

Pitney Bowes

Wastewater Outfalls in Texas (TCEQ) Custom Print



2/13/2025, 3:31:00 PM

Wastewater Outfalls

1:144,448

0 1 2 4 mi

0 1.75 3.5 7 km

City of Alvin, Texas Parks & Wildlife, CONANP, Esri, TomTom, Garmin, Foursquare, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA,

Web AppBuilder for ArcGIS

TCEQ | Earthstar Geographics | City of Alvin, Texas Parks & Wildlife, CONANP, Esri, TomTom, Garmin, Foursquare, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, USDA, USFWS |

LETTER OF TRANSMITTAL

2500 Tanglewilde, Suite 120

Houston, Texas 77063

☐	Regular USPS	☐	FedEx	☐	Courier from WGA	☐	End of Day
☒	Certified USPS	☐	Overnight	☐	Courier to WGA	☐	Expedited

Date: 3/3/2025

Project No: 40003-018-00

To:

MICHAEL D. LARSEN, P.E., PRESIDENT

OAK MANOR MUNICIPAL UTILITY DISTRICT

95 OAK TRAIL
ALVIN, TX 77511

Attn:

Phone Number:
346-771-5311

Email Address: aanderson@wga-llp.com

Delivery Instructions:

Re: South Central Water Company – Request for Service – Application for New TPDES Permit

Quantity	Description
1	Request for Service Letter

Audrey Anderson, Project Engineer
Ward, Getz & Associates, PLLC

March 3, 2025

Michael D. Larsen, P.E., President
Oak Manor Municipal Utility District
95 Oak Trail
Alvin, Texas 77511

SUBJECT: South Central Water Company (CN602602179)
Alvin 350 Wastewater Treatment Plant
Application for New TPDES Permit

Greetings TCEQ Wastewater Discharge Permit Holder,

South Central Water Company (602602179) is preparing an application for a new Texas Pollutant Discharge Elimination System (TPDES) wastewater discharge permit. This wastewater treatment facility will serve a proposed subdivision which will consist of an ultimate buildout of 2,400 single family residences. We are in the process of applying for an authorized flow of 0.100 million gallons per day (MGD) in Phase I. Ultimate Phase III will require a capacity of 0.600 MGD.

We are required to contact all existing TPDES permittees within a three-mile radius of the proposed service area of the Alvin 350 WWTP location to request service. Do you have the capacity and are you willing to provide service for the requested 0.100 MGD? If you do not have the current capacity, but are willing to expand your facility to provide service, will you be able to provide service within the needed time frame? If you are willing to provide service, please provide the estimated costs and service rates in a written response.

Please provide a response indicating if 0.10 MGD of wastewater treatment capacity in your facility is available and, if so, under what terms. A written reply on a copy of this letter will be adequate. You may email your response to aanderson@wga-llp.com. Please feel free to call me at 346-771-5311.

Thank you for your participation in these efforts.

Sincerely,

Audrey Anderson
Project Engineer
Ward, Getz & Associates, LLP

Date of Reply: _____

Does Oak Manor Municipal Utility District have the capacity available to accommodate 0.100 MGD (circle one)? YES or NO

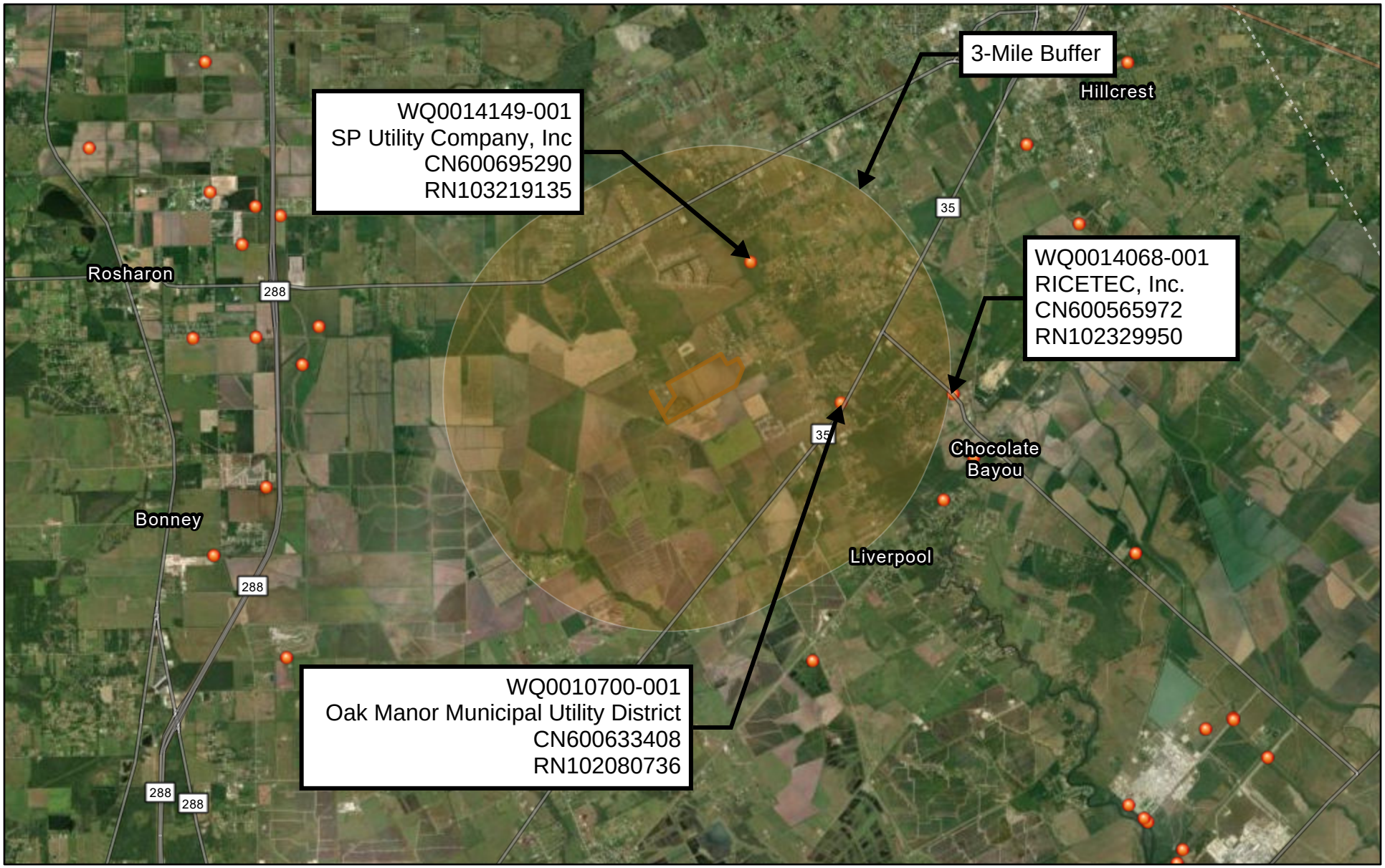
If existing facilities are not adequate, is an expansion feasible? YES or NO

If yes to EITHER question, please provide in writing the terms for service.

Name and Title: _____

Signature: _____ Date: _____

Wastewater Outfalls in Texas (TCEQ) Custom Print



2/13/2025, 3:31:00 PM

Wastewater Outfalls

1:144,448

0 1 2 4 mi

0 1.75 3.5 7 km

City of Alvin, Texas Parks & Wildlife, CONANP, Esri, TomTom, Garmin, Foursquare, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA,

Web AppBuilder for ArcGIS

TCEQ | Earthstar Geographics | City of Alvin, Texas Parks & Wildlife, CONANP, Esri, TomTom, Garmin, Foursquare, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, USDA, USFWS |

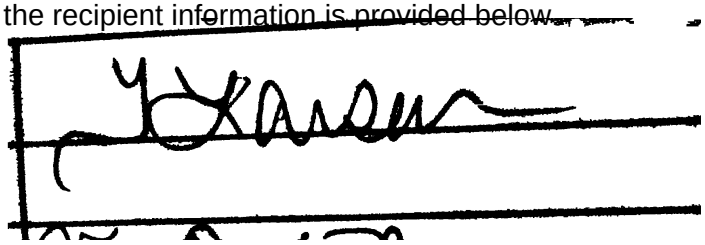
UNITED STATES POSTAL SERVICE

Date Produced: 03/19/2025

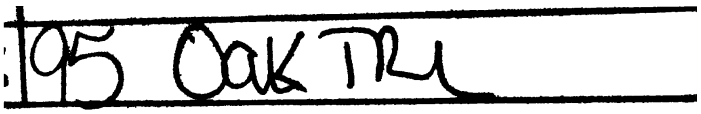
Pitney Bowes:

The following is the delivery information for Certified Mail™/RRE item number 9414 8098 9864 3068 0618 80. Our records indicate that this item was delivered on 03/18/2025 at 11:55 a.m. in ALVIN, TX 77511. The scanned image of the recipient information is provided below.

Signature of Recipient :



Address of Recipient :



Thank you for selecting the Postal Service for your mailing needs. If you require additional assistance, please contact your local post office or Postal Service representative.

Sincerely,
United States Postal Service

The customer reference number shown below is not validated or endorsed by the United States Postal Service. It is solely for customer use.

Customer Reference Number: AAnderson - 40003-018-00

Outlook

Request for Service Letter for South Central Water Company

From Michael Larsen <mdlarsen86@gmail.com>
Date Thu 4/10/2025 6:16 PM
To Audrey Anderson <aanderson@wga-llp.com>
Cc Michael Helfrich <mhelfrich@lja.com>; Chris Richardson <Chris@srlegal.com>

Dear Ms. Anderson,
I received your letter dated Mar 3, 2025. Would it be possible for you to send it to me electronically? Can I respond with an email? If not, I will fill out your form and mail it to you.
The answer is we do not have the capacity for 0.1 MGD additional load. Expansion is not feasible either.
I apologize for my delayed response.

Best Regards,

Michael D. Larsen, PE
President
Oak Manor Municipal Utilities District

281 460-5729

LETTER OF TRANSMITTAL

2500 Tanglewilde, Suite 120

Houston, Texas 77063

☐	Regular USPS	☐	FedEx	☐	Courier from WGA	☐	End of Day
☒	Certified USPS	☐	Overnight	☐	Courier to WGA	☐	Expedited

Date: 3/3/2025

Project No: 40003-018-00

To:

ANDREW MARTINEZ, SAFETY & FACILITIES MANAGER

RICETEC, INC.

P.O. BOX 1305
ALVIN, TX 77512

Attn:

Phone Number:
346-771-5311

Email Address: aanderson@wga-llp.com

Delivery Instructions:

Re: South Central Water Company – Request for Service – Application for New TPDES Permit

Quantity	Description
1	Request for Service Letter

Audrey Anderson, Project Engineer
Ward, Getz & Associates, PLLC

March 3, 2025

Andrew Martinez, Safety & Facilities Manager
Ricetec, Inc.
P.O. Box 1305
Alvin, Texas 77512

SUBJECT: South Central Water Company (CN602602179)
Alvin 350 Wastewater Treatment Plant
Application for New TPDES Permit

Greetings TCEQ Wastewater Discharge Permit Holder,

South Central Water Company (602602179) is preparing an application for a new Texas Pollutant Discharge Elimination System (TPDES) wastewater discharge permit. This wastewater treatment facility will serve a proposed subdivision which will consist of an ultimate buildout of 2,400 single family residences. We are in the process of applying for an authorized flow of 0.100 million gallons per day (MGD) in Phase I. Ultimate Phase III will require a capacity of 0.600 MGD.

We are required to contact all existing TPDES permittees within a three-mile radius of the proposed service area of the Alvin 350 WWTP location to request service. Do you have the capacity and are you willing to provide service for the requested 0.100 MGD? If you do not have the current capacity, but are willing to expand your facility to provide service, will you be able to provide service within the needed time frame? If you are willing to provide service, please provide the estimated costs and service rates in a written response.

Please provide a response indicating if 0.10 MGD of wastewater treatment capacity in your facility is available and, if so, under what terms. A written reply on a copy of this letter will be adequate. You may email your response to aanderson@wga-llp.com. Please feel free to call me at 346-771-5311.

Thank you for your participation in these efforts.

Sincerely,

Audrey Anderson
Project Engineer
Ward, Getz & Associates, LLP

Date of Reply: _____

Does Ricetec, Inc have the capacity available to accommodate 0.100 MGD (circle one)?

YES or NO

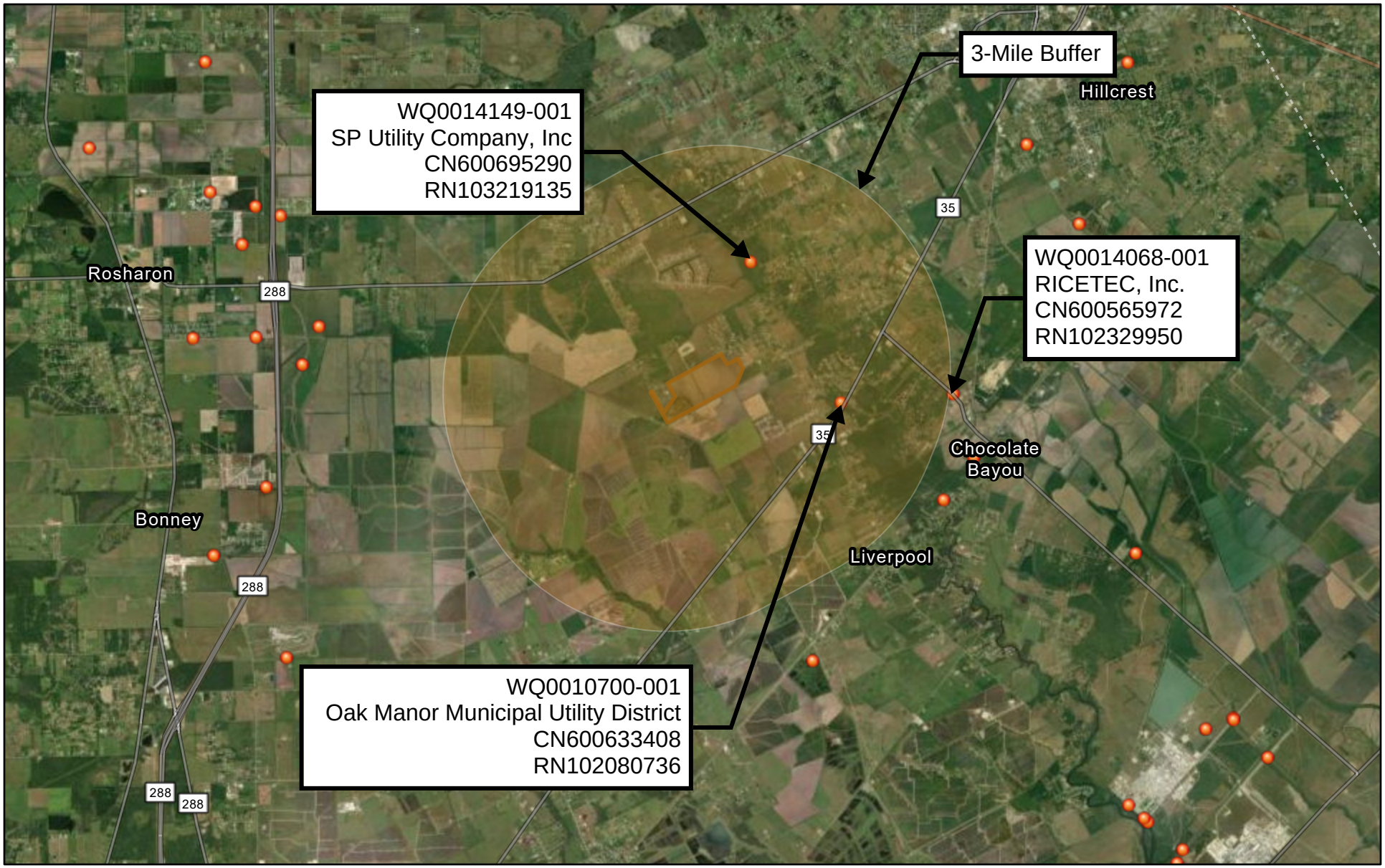
If existing facilities are not adequate, is an expansion feasible? YES or NO

If yes to EITHER question, please provide in writing the terms for service.

Name and Title: _____

Signature: _____ Date: _____

Wastewater Outfalls in Texas (TCEQ) Custom Print



2/13/2025, 3:31:00 PM

Wastewater Outfalls

1:144,448

0 1 2 4 mi

0 1.75 3.5 7 km

City of Alvin, Texas Parks & Wildlife, CONANP, Esri, TomTom, Garmin, Foursquare, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA,

Web AppBuilder for ArcGIS

TCEQ | Earthstar Geographics | City of Alvin, Texas Parks & Wildlife, CONANP, Esri, TomTom, Garmin, Foursquare, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, USDA, USFWS |

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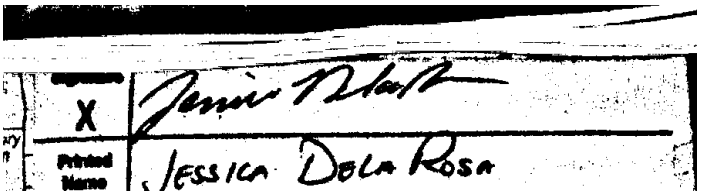

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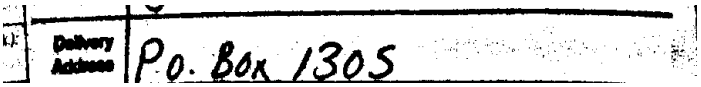

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Appendix N

Design Calculations

PROJECT NAME:	Alvin 350 WWTP Ph I	**DATE:**	4/16/2025
CLIENT:	South Central Wastewater	**BY:**	AA
PROJECT NUMBER:	40003-018	**QC:**	ENW

WASTEWATER AND PLANT CHARACTERIZATION

PHASE I

Flow Rates

Annual Average			0.10	MGD	69	GPM	0.16	CFS
Peak Month	Factor	1.5	0.15	MGD	104	GPM	0.23	CFS
Peak 2-Hour	Factor	4	0.40	MGD	278	GPM	0.62	CFS
Min. Month	Factor	0.5	0.05	MGD	35	GPM	0.08	CFS

Raw Wastewater Concentrations

	Avg.	2-Hour Peak	Peak Month	Min. Month		
BOD (total)	300	100	250	200	mg/L	Assumed
BOD (soluble)	180				mg/L	
TSS	300				mg/L	
VSS	240				mg/L	
TKN	50				mg/L	
NH3-N	40				mg/L	
TP					mg/L	

Effluent Requirements

BOD	10	mg/L
TSS	15	mg/L
NH3-N	2	mg/L
TP		mg/L
DO		mg/L

Select Treatment Processes from the List

Preliminary Treatment	Coarse Screening
Primary Treatment	None
Biological Treatment	Conventional Activated Sludge w/ Nitrification, @ Min.
Solids Treatment	Aerobic Digestion + Dewatering

ACTIVATED SLUDGE DESIGN

WASTEWATER CHARACTERISTICS		
INFLUENT MASS LOADING		
BOD5 (AVG)	250.2	lbs/day
BOD5 (2-HR PEAK)	333.6	lbs/day
BOD5 (PEAK MONTH)	312.8	lbs/day
BOD5 (MIN MONTH)	83.4	lbs/day
TSS	250.2	lbs/day
NH_3	33.4	lbs/day
TKN	41.7	lbs/day
EFFLUENT COMPOSITION (ASSUMED FOR CONSERVATIVE DESIGN)		
BOD5	10.0	mg/L
TSS	15.0	mg/L
NH_3	3.0	mg/L
TKN	0.0	mg/L

AERATION BASIN		
Conventional Activated Sludge w/ Nitrification, @ Min. Temp > 15°C		
Description	**Value**	**Unit**
AERATION BASIN CALCULATIONS - TCEQ TRADITIONAL DESIGN - TCEQ 217, SUBCHAPTER F		
Aeration Basin Maximum Organic Loading	35.0	lbs/day/1000 ft^3
Minimum Number of Basins (For Flow < 0.4 MGD)	2.0	EA
BOD Removal Credit for Preliminary and Primary Treatment (Optional)	0%	
Total Peak BOD Loading (Based on Design Flow)	250	lbs/day
Total Aeration Basin Volume Required	7,149	ft^3

AERATION BASIN SIZING		
Proposed Number of Basins	2.0	
Side Water Depth of Basins	10.3	ft
Freeboard	1.5	ft
Total Depth of Basin	12.0	ft
Diffuser Submergence	9.8	ft
Required Volume of Each Aeration Basin	3,574	ft^3
Surface Area of Each Basin	346	ft^2
Width to Length Ratio (1:X)	2.5	
Required Width of Each Basin	12.0	ft
Required Length of Each Basin	30	ft
Proposed Volume of Each Aeration Basin	3,641	ft^3
Proposed Total Aeration Basin Volume	7,283	ft^3

PHASE I - 0.1 MGD

WASTEWATER CHARACTERISTICS		
Description	**Value**	**Unit**
Influent BOD_5	300.0	mg/L
Influent TSS	300.0	mg/L
Influent NH_3	40.0	mg/L
Daily Flow (Q_{AVE})	100,000.0	gpd
Daily Flow (Q_{AVE})	69.4	gpm
Daily Flow (Q_{AVE})	0.155	cfs
2-hr Peak Flow (Q_{PK})	400,000	gpd
2-hr Peak Flow (Q_{PK})	277.8	gpm
2-hr Peak Flow (Q_{PK})	0.620	cfs
NH_3	33.4	lbs/day
BOD_5	250.8	lbs/day
TSS	250.8	lbs/day

Description
Conventional Activated Sludge w/ Nitrification, @ Min. Temp > 15°C

SECONDARY CLARIFIER		
Description	**Value**	**Unit**
Number of Clarifiers	1.0	Ea
Average Flow Per Clarifier	0.10	MGD
Peak Flow Per Clarifier	0.40	MGD
Clarifier Shape (Round, Octagonal, Square)	Round	
Design Weir Shape (Round, Segmented)	Round	
Design Number of Segments (Leave Blank If Designed Round)		

SURFACE AREA DESIGN - TCEQ 217.154 (c)(1)		
TCEQ Max Surface Loading (Q_{AVG}) TCEQ 317.4 (d)(5)	700	gal/day/ft^2
TCEQ Max Surface Loading (Q_{PK}) TCEQ 217.154 (c)(1)	1,200	gal/day/ft^2
Design Diameter	**34.0**	ft
Surface Area Required at Peak Flow Per Clarifier	333.3	ft^2
Surface Area Required for All Clarifiers at Peak Flow	333.3	ft^2
Proposed Surface Area Per Clarifier	907.9	ft^2
Total Proposed Surface Area for All Clarifiers	907.9	ft^2
Actual Design Surface Loading at Design Flow (Q_{AVE})	110.1	gal/day/ft^2
Actual Design Surface Loading at Peak Flow (Q_{PK})	440.6	gal/day/ft^2

SIDE WATER DEPTH - TCEQ 217.152 (g)		
Side Water Depth For Clarifier Surface Area Greater Than 300 sqft.	10	ft
Side Water Depth For Clarifier Surface Area Equal To Or Less Than 300 sqft.	8	ft
Controlling Minimum Depth Requirement	10.0	ft
Proposed Clarifier Side Water Depth (Not Total Depth)	**10.0**	ft
Design Floor Slope (1:X)	12.0	
Design Cone Depth (Including 1:12, sloped bottom)	1.4	ft
Free Board (Minimum 1 feet)	1.0	ft
Total Depth of Clarifier	12.417	ft
Design Total Depth of Clarifier	**12.5**	ft

PHASE I - 0.1 MGD

WASTEWATER CHARACTERISTICS		
Description	**Value**	**Unit**
HYDRAULIC DETENTION TIME - TCEQ 217.154 (c)(1)		
TCEQ Min Detention Time (Q_{AVE})	2.6	hours
TCEQ Min Detention Time (Q_{PK})	1.8	hours
Flow per Clarifier for Hydraulic Detention Time @ Design Flow (w/ Recycle)	0.10	MGD
Flow per Clarifier for Hydraulic Detention Time @ Peak Flow (w/ Recycle)	0.40	MGD
Required Treatment Volume At Design Flow for Each Clarifier	1,448.3	ft^3
Required Treatment Volume At Peak Flow for Each Clarifier	4,010.7	ft^3
Proposed Treatment Volume for Each Clarifier	9,079.2	ft^3
Actual Hydraulic Detention Time at Design Flow	16.3	hours
Actual Hydraulic Detention Time at Peak Flow	4.1	hours
SOLIDS LOADING RATE - TCEQ 317.4 (d)(5)		
Totals Solids to Clarifier	10,008.0	lbs/day
Proposed Surface Area of Clarifier	907.9	ft^2
Loading Rate of Solids to Clarifier	11.0	$lbs/day/ft^2$
TCEQ Maximum Loading Rate	50.0	$lbs/day/ft^2$
EFFLUENT WEIR DESIGN - TCEQ 217.152 (d)		
Weir loading (For Plants with Design Flows 1.0 MGD or less)	20,000	gal/day/ft
Weir loading (For Plants with Design Flows Over 1.0 MGD)	30,000	gal/day/ft
Controlling Weir Loading Criteria	20,000.0	gal/day/ft
Total Length of Weir Required Per Clarifier @ Peak Flow	20.0	ft
Total Length of Weir Required For All Clarifiers @ Peak Flow	20.0	ft
Proposed Weir Distance from Wall	1.0	ft
Diameter of Effluent Weir	32.0	ft
Design Weir Length Per Clarifier	100.5	ft
Total Design Weir Length	100.5	ft
Actual Surface Area Loading @ Peak Flow	3,978.9	$gal/day/ft^2$
Actual Surface Area Loading @ Average Flow	994.7	$gal/day/ft^2$
TORQUE RATINGS OF DRIVES AND RAKES		
Resistive Force of Secondary Sludge (W)	6.0	lb/ft
Running Torque (Wr^2)	1,734.0	ft-lbs
RETURN ACTIVATED SLUDGE FLOW RATES - TCEQ 217.152 (j)		
Lower Limit Underflow Rate - TCEQ 217.152(j)	200	gpd/ft^2
Minimum RAS Flow Rate (per clarifier)	126.1	gpm
Upper Limit Underflow Rate - TCEQ 217.152(j)	400	gpd/ft^2
Maximum RAS Flow Rate (per clarifier)	252.2	gpm
Combined Upper Limit RAS Underflow Rate for Plant	252.2	gpm
STILLING WELL DESIGN		
Maximum Stilling Well Velocity (@ Peak Flow) TCEQ 217.152 (a)(4)	0.15	ft/sec
Peak Flow For Individual Clarifier	0.40	MGD
Total Area Required	4.1	ft^2
Diameter of Each Stilling Well	6.0	ft
Area of Each Stilling Well	28.3	ft^2

TCEQ DESIGN CRITERIA (CHAPTER 317.5 (B))		
Minimum Detention Time	15.0	days
Volume Requirement	20.0	ft^3/lb BOD_5/day
Aeration Requirement	30.0	scfm/1000 ft^3
If Mechanical Aeration is Used	1.5	HP/1000 ft^3
TCEQ DESIGN CRITERIA (CHAPTER 217, SUBCHAPTER J)		
Minimum Temperature	15.0	deg C
Required Minimum Detention Time	60.0	days
Minimum Volatile Solids Loading Rate	100.0	lb/1000 ft^3/day
Maximum Volatile Solids Loading Rate	200.0	lb/1000 ft^3/day
Aeration Requirement	20.0	SCFM/1000 ft^3

NOTE: Aerobic digester has to be sized for average day flow

Biodegradable Volatile Solids in WAS	0.7	lb VS/BOD removed
Destruction	0.3	lb VS/BOD removed
Note: Typical minimum Solids Retention Time (SRT) maintained in WWTPs is 8 days. Secondary		
Influent Solids	250	lbs/day
Digested Solids Production	198	lbs/day
Average Digested Solids Production	224	lbs/day
Total Sludge Production, lbs/day	224	lbs/day
Assumed Average Dig. Conc., mg/l	15,000.0	mg/l
Total Sludge to Aerobic Digester	1,790.00	gal/d
Volume Required Based on Min. Detention Time @ 60 Days	14,358.29	ft^3
Volume Required Based on Min. Detention Time @ 15 Days	3,589.57	ft^3

CHECK IF CHAPTER 217 VOLATILE SOLIDS LOADING RATE REQUIREMENTS CAN BE MET

Volatile Suspended Solids Loading	175	lbs/day
Volatile Solids Loading Rate for 60 Days Storage Volume	0.00073	lb/1000 ft^3
Volatile Solids Loading Rate	**ERROR!**	

Note: It is not possible to meet both the min. required detention time and min. required VS solids loading rate requirements without significant thickening before the sludge is stabilized in the digester. Hence, it is prudent to just meet the required min. detention time alone. Also, if the sludge is to be disposed of in a landfill, sludge stabilization will not be required and a full detention time is not necessary. When a full detention time is not provided, the basin will not be a true aerobic digester; instead, it will be reconfigured as a sludge holding tank.

SLUDGE HOLDING TANK DESIGN		
Number of Basins	2.0	Ea
Freeboard	1.5	ft
Side Water Depth	10.5	ft
Total Required Depth	12.0	ft
Actual Tank Depth	12.0	ft
Width	12.0	ft
Length	22.0	ft
Design Volume	5,544	ft^3
DESIGN CHECK		
Detention Time	23.17	days
Design Volume to Loading Ratio	22.16	ft^3/lb BOD_5/day

WASTEWATER CHARACTERISTICS		
Design Flow Rate (Average Daily Flow)	0.10	MGD
Design Flow Rate (2-Hour Peak Flow)	0.40	MGD

CHLORINE CONTACT CHAMBER		
Description	**Value**	**Unit**
TCEQ Min Detention Time (Q_{PK}) (TCEQ217.281(b)(1)	20.0	min
TCEQ Required Minimum Volume	742.7	ft^3
TCEQ Required Minimum Volume	5,555.6	gal

Chlorine Contact Basin Sizing (Excluding Chlorine Mixing Chamber)		
Design Number of Trains	1.0	
Design Side Water Depth at Peak Flow	9.5	ft
Design Width of Basin	12.0	ft
Design Channel Width	2.0	ft
Design Channel Length (Assumes 40:1 L:W ratio per TCEQ 217.281(a)(2))	80.0	ft
Number of Partition	8.0	ea
DESIGN LENGTH OF BASIN	18.0	ft
PROPOSED VOLUME	1,520.0	ft^3
ACTUAL CCB VOLUME	2,052.0	ft^3
Actual Detention Time at Peak Flow	55.3	min
ACTUAL CHANNEL LENGTH	108.0	ft

SODIUM HYPOCHLORITE DOSAGE CALCULATIONS

WASTEWATER CHARACTERISTICS		
Design Flow Rate (Average Daily Flow)	0.10	MGD
Design Flow Rate (2-Hour Peak Flow)	0.40	MGD
SODIUM HYPOCHLORITE DOSAGE		
Chlorine Dosage Rate (Table K.1, TCEQ 217.272 (B))	12.5	mg/l
Concentration of NaOCl	12.5%	
Specific Gravity of NaOCl	1.17	
Calculated Chlorine Dosage Rate @ Design Flow Eq. K.1 TCEQ 217.272 (a)	10.4	lbs/day
Calculated Chlorine Dosage Rate @ Peak Flow Eq. K.1 TCEQ 217.272 (a)	41.7	lbs/day
NaOCl Required @ Design Flow	83.4	lbs/day
NaOCl Required @ Peak Flow	333.6	lbs/day
Volume of NaOCl requied @ Design Flow	8.5	gpd
Volume of NaOCl requied @ Peak Flow	34.2	gpd

Note: TCEQ 217.280(d)(1)(A) and (B). For NaOCl conc >10%, 15 days of storage based on avg. daily consumption. For NaOCl conc <10%, 30 days of storage based on avg daily consumption

Storage Volume of NaOCl (15 Days)	**128.2**	**gal**
Number of Storage Tanks	1	Ea
SODIUM HYPOCHLORITE PUMP DESIGN		
Metering Pump Design Flow (Eq. K.4)	0.1	gph
Minimum Number of Chemical Pumps	2.0	Ea

PROJECT NAME:	Alvin 350 WWTP Ph II	**DATE:**	4/16/2025
CLIENT:	South Central Wastewater	**BY:**	AA
PROJECT NUMBER:	40003-018	**QC:**	ENW

WASTEWATER AND PLANT CHARACTERIZATION

PHASE II

Flow Rates

Annual Average			0.35	MGD	243	GPM	0.54	CFS
Peak Month	Factor	1.5	0.53	MGD	365	GPM	0.81	CFS
Peak 2-Hour	Factor	4	1.40	MGD	972	GPM	2.17	CFS
Min. Month	Factor	0.5	0.18	MGD	122	GPM	0.27	CFS

Raw Wastewater Concentrations

	Avg.	2-Hour Peak	Peak Month	Min. Month		
BOD (total)	300	100	250	200	mg/L	Assumed
BOD (soluble)	180				mg/L	
TSS	300				mg/L	
VSS	240				mg/L	
TKN	50				mg/L	
NH3-N	40				mg/L	
TP					mg/L	

Effluent Requirements

BOD	10	mg/L
TSS	15	mg/L
NH3-N	2	mg/L
TP		mg/L
DO		mg/L

Select Treatment Processes from the List

Preliminary Treatment	Coarse Screening
Primary Treatment	None
Biological Treatment	Conventional Activated Sludge w/ Nitrification, @ Min.
Solids Treatment	Aerobic Digestion + Dewatering

ACTIVATED SLUDGE DESIGN

WASTEWATER CHARACTERISTICS		
INFLUENT MASS LOADING		
BOD5 (AVG)	875.7	lbs/day
BOD5 (2-HR PEAK)	1,167.6	lbs/day
BOD5 (PEAK MONTH)	1,094.6	lbs/day
BOD5 (MIN MONTH)	291.9	lbs/day
TSS	875.7	lbs/day
NH_3	116.8	lbs/day
TKN	146.0	lbs/day
EFFLUENT COMPOSITION (ASSUMED FOR CONSERVATIVE DESIGN)		
BOD5	10.0	mg/L
TSS	15.0	mg/L
PHASE II	3.0	mg/L
TKN	0.0	mg/L

AERATION BASIN		
Conventional Activated Sludge w/ Nitrification, @ Min. Temp > 15°C		
Description	**Value**	**Unit**
AERATION BASIN CALCULATIONS - TCEQ TRADITIONAL DESIGN - TCEQ 217, SUBCHAPTER F		
Aeration Basin Maximum Organic Loading	35.0	lbs/day/1000 ft^3
Minimum Number of Basins (For Flow < 0.4 MGD)	2.0	EA
BOD Removal Credit for Preliminary and Primary Treatment (Optional)	0%	
Total Peak BOD Loading (Based on Design Flow)	876	lbs/day
Total Aeration Basin Volume Required	25,020	ft^3

AERATION BASIN SIZING		
Proposed Number of Basins	8.0	
Side Water Depth of Basins	10.3	ft
Freeboard	1.5	ft
Total Depth of Basin	12.0	ft
Diffuser Submergence	9.8	ft
Required Volume of Each Aeration Basin	3,128	ft^3
Surface Area of Each Basin	303	ft^2
Width to Length Ratio (1:X)	2.5	
Required Width of Each Basin	12.0	ft
Required Length of Each Basin	30	ft
Proposed Volume of Each Aeration Basin	3,641	ft^3
Proposed Total Aeration Basin Volume	29,131	ft^3

PHASE II - 0.350 MGD

WASTEWATER CHARACTERISTICS		
Description	**Value**	**Unit**
Influent BOD_5	300.0	mg/L
Influent TSS	300.0	mg/L
Influent NH_3	40.0	mg/L
Daily Flow (Q_{AVE})	350,000.0	gpd
Daily Flow (Q_{AVE})	243.1	gpm
Daily Flow (Q_{AVE})	0.543	cfs
2-hr Peak Flow (Q_{PK})	1,400,000	gpd
2-hr Peak Flow (Q_{PK})	972.2	gpm
2-hr Peak Flow (Q_{PK})	2.170	cfs
NH_3	117.0	lbs/day
PHASE II	877.8	lbs/day
TSS	877.8	lbs/day

Description
Conventional Activated Sludge w/ Nitrification, @ Min. Temp > 15°C

SECONDARY CLARIFIER		
Description	**Value**	**Unit**
Number of Clarifiers	2.0	Ea
Average Flow Per Clarifier	0.175	MGD
Peak Flow Per Clarifier	0.70	MGD
Clarifier Shape (Round, Octagonal, Square)	Round	
Design Weir Shape (Round, Segmented)	Round	
Design Number of Segments (Leave Blank If Designed Round)		

SURFACE AREA DESIGN - TCEQ 217.154 (c)(1)		
TCEQ Max Surface Loading (Q_{AVG}) TCEQ 317.4 (d)(5)	700	gal/day/ft^2
TCEQ Max Surface Loading (Q_{PK}) TCEQ 217.154 (c)(1)	1,200	gal/day/ft^2
Design Diameter	**34.0**	ft
Surface Area Required at Peak Flow Per Clarifier	583.3	ft^2
Surface Area Required for All Clarifiers at Peak Flow	1,166.7	ft^2
Proposed Surface Area Per Clarifier	907.9	ft^2
Total Proposed Surface Area for All Clarifiers	1,815.8	ft^2
Actual Design Surface Loading at Design Flow (Q_{AVE})	192.7	gal/day/ft^2
Actual Design Surface Loading at Peak Flow (Q_{PK})	771.0	gal/day/ft^2

SIDE WATER DEPTH - TCEQ 217.152 (g)		
Side Water Depth For Clarifier Surface Area Greater Than 300 sqft.	10	ft
Side Water Depth For Clarifier Surface Area Equal To Or Less Than 300 sqft.	8	ft
Controlling Minimum Depth Requirement	10.0	ft
Proposed Clarifier Side Water Depth (Not Total Depth)	**10.0**	ft
Design Floor Slope (1:X)	12.0	
Design Cone Depth (Including 1:12, sloped bottom)	1.4	ft
Free Board (Minimum 1 feet)	1.0	ft
Total Depth of Clarifier	12.417	ft
Design Total Depth of Clarifier	**12.5**	ft

PHASE II - 0.350 MGD

WASTEWATER CHARACTERISTICS		
Description	**Value**	**Unit**
HYDRAULIC DETENTION TIME - TCEQ 217.154 (c)(1)		
TCEQ Min Detention Time (Q_{AVE})	2.6	hours
TCEQ Min Detention Time (Q_{PK})	1.8	hours
Flow per Clarifier for Hydraulic Detention Time @ Design Flow (w/ Recycle)	0.18	MGD
Flow per Clarifier for Hydraulic Detention Time @ Peak Flow (w/ Recycle)	0.70	MGD
Required Treatment Volume At Design Flow for Each Clarifier	2,534.5	ft^3
Required Treatment Volume At Peak Flow for Each Clarifier	7,018.7	ft^3
Proposed Treatment Volume for Each Clarifier	9,079.2	ft^3
Actual Hydraulic Detention Time at Design Flow	9.3	hours
Actual Hydraulic Detention Time at Peak Flow	2.3	hours

SOLIDS LOADING RATE - TCEQ 317.4 (d)(5)		
Totals Solids to Clarifier	17,514.0	lbs/day
Proposed Surface Area of Clarifier	907.9	ft^2
Loading Rate of Solids to Clarifier	19.3	$lbs/day/ft^2$
TCEQ Maximum Loading Rate	50.0	$lbs/day/ft^2$

EFFLUENT WEIR DESIGN - TCEQ 217.152 (d)		
Weir loading (For Plants with Design Flows 1.0 MGD or less)	20,000	gal/day/ft
Weir loading (For Plants with Design Flows Over 1.0 MGD)	30,000	gal/day/ft
Controlling Weir Loading Criteria	20,000.0	gal/day/ft
Total Length of Weir Required Per Clarifier @ Peak Flow	35.0	ft
Total Length of Weir Required For All Clarifiers @ Peak Flow	70.0	ft
Proposed Weir Distance from Wall	1.0	ft
Diameter of Effluent Weir	32.0	ft
Design Weir Length Per Clarifier	100.5	ft
Total Design Weir Length	201.1	ft
Actual Surface Area Loading @ Peak Flow	6,963.0	$gal/day/ft^2$
Actual Surface Area Loading @ Average Flow	1,740.8	$gal/day/ft^2$

TORQUE RATINGS OF DRIVES AND RAKES		
Resistive Force of Secondary Sludge (W)	6.0	lb/ft
Running Torque (Wr^2)	1,734.0	ft-lbs

RETURN ACTIVATED SLUDGE FLOW RATES - TCEQ 217.152 (j)		
Lower Limit Underflow Rate - TCEQ 217.152(j)	200	gpd/ft^2
Minimum RAS Flow Rate (per clarifier)	126.1	gpm
Upper Limit Underflow Rate - TCEQ 217.152(j)	400	gpd/ft^2
Maximum RAS Flow Rate (per clarifier)	252.2	gpm
Combined Upper Limit RAS Underflow Rate for Plant	504.4	gpm

STILLING WELL DESIGN		
Maximum Stilling Well Velocity (@ Peak Flow) TCEQ 217.152 (a)(4)	0.15	ft/sec
Peak Flow For Individual Clarifier	0.70	MGD
Total Area Required	7.2	ft^2
Diameter of Each Stilling Well	6.0	ft
Area of Each Stilling Well	28.3	ft^2

PHASE II - 0.350 MGD

TCEQ DESIGN CRITERIA (CHAPTER 317.5 (B))		
Minimum Detention Time	15.0	days
Volume Requirement	20.0	ft^3/lb BOD_5/day
Aeration Requirement	30.0	scfm/1000 ft^3
If Mechanical Aeration is Used	1.5	HP/1000 ft^3
TCEQ DESIGN CRITERIA (CHAPTER 217, SUBCHAPTER J)		
Minimum Temperature	15.0	deg C
Required Minimum Detention Time	60.0	days
Minimum Volatile Solids Loading Rate	100.0	lb/1000 ft^3/day
Maximum Volatile Solids Loading Rate	200.0	lb/1000 ft^3/day
Aeration Requirement	20.0	SCFM/1000 ft^3

NOTE: Aerobic digester has to be sized for average day flow

PHASE II	0.7	lb VS/BOD removed
Destruction	0.3	lb VS/BOD removed
Note: Typical minimum Solids Retention Time (SRT) maintained in WWTPs is 8 days. Secondary		
Influent Solids	876	lbs/day
Digested Solids Production	692	lbs/day
Average Digested Solids Production	784	lbs/day
Total Sludge Production, lbs/day	784	lbs/day
Assumed Average Dig. Conc., mg/l	15,000.0	mg/l
Total Sludge to Aerobic Digester	6,265.00	gal/d
Volume Required Based on Min. Detention Time @ 60 Days	50,254.01	ft^3
Volume Required Based on Min. Detention Time @ 15 Days	12,563.50	ft^3

CHECK IF CHAPTER 217 VOLATILE SOLIDS LOADING RATE REQUIREMENTS CAN BE MET

Volatile Suspended Solids Loading	613	lbs/day
Volatile Solids Loading Rate for 60 Days Storage Volume	0.00073	lb/1000 ft^3
Volatile Solids Loading Rate	**ERROR!**	

Note: It is not possible to meet both the min. required detention time and min. required VS solids loading rate requirements without significant thickening before the sludge is stabilized in the digester. Hence, it is prudent to just meet the required min. detention time alone. Also, if the sludge is to be disposed of in a landfill, sludge stabilization will not be required and a full detention time is not necessary. When a full dettention time is not provided, the basin will not be a true aerobic digester; instead, it will be reconfigured as a sludge holding tank.

SLUDGE HOLDING TANK DESIGN		
Number of Basins	8.0	Ea
Freeboard	1.5	ft
Side Water Depth	10.5	ft
Total Required Depth	12.0	ft
Actual Tank Depth	12.0	ft
Width	12.0	ft
Length	22.0	ft
Design Volume	22,176	ft^3
DESIGN CHECK		
Detention Time	26.48	days
Design Volume to Loading Ratio	25.32	ft^3/lb BOD_5/day

WASTEWATER CHARACTERISTICS		
Design Flow Rate (Average Daily Flow)	0.35	MGD
Design Flow Rate (2-Hour Peak Flow)	1.40	MGD

CHLORINE CONTACT CHAMBER		
Description	**Value**	**Unit**
TCEQ Min Detention Time (Q_{PK}) (TCEQ217.281(b)(1)	20.0	min
TCEQ Required Minimum Volume	2,599.5	ft^3
TCEQ Required Minimum Volume	19,444.4	gal

Chlorine Contact Basin Sizing (Excluding Chlorine Mixing Chamber)		
Design Number of Trains	2.0	
Design Side Water Depth at Peak Flow	9.5	ft
PHASE II	12.0	ft
Design Channel Width	2.0	ft
Design Channel Length (Assumes 40:1 L:W ratio per TCEQ 217.281(a)(2))	80.0	ft
Number of Partition	8.0	ea
DESIGN LENGTH OF BASIN	18.0	ft
PROPOSED VOLUME	3,040.0	ft^3
ACTUAL CCB VOLUME	4,104.0	ft^3
Actual Detention Time at Peak Flow	31.6	min
ACTUAL CHANNEL LENGTH	108.0	ft

SODIUM HYPOCHLORITE DOSAGE CALCULATIONS		
WASTEWATER CHARACTERISTICS		
Design Flow Rate (Average Daily Flow)	0.35	MGD
Design Flow Rate (2-Hour Peak Flow)	1.40	MGD
SODIUM HYPOCHLORITE DOSAGE		
Chlorine Dosage Rate (Table K.1, TCEQ 217.272 (B))	12.5	mg/l
Concentration of NaOCl	12.5%	
Specific Gravity of NaOCl	1.17	
Calculated Chlorine Dosage Rate @ Design Flow Eq. K.1 TCEQ 217.272 (a)	36.5	lbs/day
Calculated Chlorine Dosage Rate @ Peak Flow Eq. K.1 TCEQ 217.272 (a)	146.0	lbs/day
NaOCl Required @ Design Flow	291.9	lbs/day
NaOCl Required @ Peak Flow	1,167.6	lbs/day
Volume of NaOCl requied @ Design Flow	29.9	gpd
Volume of NaOCl requied @ Peak Flow	119.7	gpd

Note: TCEQ 217.280(d)(1)(A) and (B). For NaOCl conc >10%, 15 days of storage based on avg. daily consumption. For NaOCl conc <10%, 30 days of storage based on avg daily consumption

Storage Volume of NaOCl (15 Days)	**448.7**	**gal**
Number of Storage Tanks	1	Ea
SODIUM HYPOCHLORITE PUMP DESIGN		
Metering Pump Design Flow (Eq. K.4)	0.1	gph
Minimum Number of Chemical Pumps	2.0	Ea

PROJECT NAME:	Alvin 350 WWTP Ph III	**DATE:**	4/16/2025
CLIENT:	South Central Wastewater	**BY:**	AA
PROJECT NUMBER:	40003-018	**QC:**	ENW

WASTEWATER AND PLANT CHARACTERIZATION

PHASE III

Flow Rates

Annual Average			0.60	MGD	417	GPM	0.93	CFS
Peak Month	Factor	1.5	0.90	MGD	625	GPM	1.40	CFS
Peak 2-Hour	Factor	4	2.40	MGD	1,667	GPM	3.72	CFS
Min. Month	Factor	0.5	0.30	MGD	208	GPM	0.47	CFS

Raw Wastewater Concentrations

	Avg.	2-Hour Peak	Peak Month	Min. Month		
BOD (total)	300	100	250	200	mg/L	Assumed
BOD (soluble)	180				mg/L	
TSS	300				mg/L	
VSS	240				mg/L	
TKN	50				mg/L	
NH3-N	40				mg/L	
TP					mg/L	

Effluent Requirements

BOD	10	mg/L
TSS	15	mg/L
NH3-N	2	mg/L
TP		mg/L
DO		mg/L

Select Treatment Processes from the List

Preliminary Treatment	Coarse Screening
Primary Treatment	None
Biological Treatment	Conventional Activated Sludge w/ Nitrification, @ Min.
Solids Treatment	Aerobic Digestion + Dewatering

ACTIVATED SLUDGE DESIGN

WASTEWATER CHARACTERISTICS		
INFLUENT MASS LOADING		
BOD5 (AVG)	1,501.2	lbs/day
BOD5 (2-HR PEAK)	2,001.6	lbs/day
BOD5 (PEAK MONTH)	1,876.5	lbs/day
BOD5 (MIN MONTH)	500.4	lbs/day
TSS	1,501.2	lbs/day
NH_3	200.2	lbs/day
TKN	250.2	lbs/day
EFFLUENT COMPOSITION (ASSUMED FOR CONSERVATIVE DESIGN)		
BOD5	10.0	mg/L
TSS	15.0	mg/L
NH_3	3.0	mg/L
TKN	0.0	mg/L

AERATION BASIN		
Conventional Activated Sludge w/ Nitrification, @ Min. Temp > 15°C		
Description	**Value**	**Unit**
AERATION BASIN CALCULATIONS - TCEQ TRADITIONAL DESIGN - TCEQ 217, SUBCHAPTER F		
Aeration Basin Maximum Organic Loading	35.0	lbs/day/1000 ft^3
Minimum Number of Basins (For Flow < 0.4 MGD)	2.0	EA
BOD Removal Credit for Preliminary and Primary Treatment (Optional)	0%	
Total Peak BOD Loading (Based on Design Flow)	1,501	lbs/day
Total Aeration Basin Volume Required	42,891	ft^3

AERATION BASIN SIZING		
Proposed Number of Basins	12.0	
Side Water Depth of Basins	10.3	ft
Freeboard	1.5	ft
Total Depth of Basin	12.0	ft
Diffuser Submergence	9.8	ft
Required Volume of Each Aeration Basin	3,574	ft^3
Surface Area of Each Basin	346	ft^2
Width to Length Ratio (1:X)	2.5	
Required Width of Each Basin	12.0	ft
Required Length of Each Basin	30	ft
Proposed Volume of Each Aeration Basin	3,641	ft^3
Proposed Total Aeration Basin Volume	43,696	ft^3

SECONDARY CLARIFIERS

WASTEWATER CHARACTERISTICS		
Description	**Value**	**Unit**
Influent BOD_5	300.0	mg/L
Influent TSS	300.0	mg/L
Influent NH_3	40.0	mg/L
Daily Flow (Q_{AVE})	600,000.0	gpd
Daily Flow (Q_{AVE})	416.7	gpm
Daily Flow (Q_{AVE})	0.930	cfs
2-hr Peak Flow (Q_{PK})	2,400,000	gpd
2-hr Peak Flow (Q_{PK})	1,666.7	gpm
2-hr Peak Flow (Q_{PK})	3.720	cfs
NH_3	200.6	lbs/day
BOD_5	1,504.8	lbs/day
TSS	1,504.8	lbs/day

Description		
Conventional Activated Sludge w/ Nitrification, @ Min. Temp > 15°C		
SECONDARY CLARIFIER		
Description	**Value**	**Unit**
Number of Clarifiers	3.0	Ea
Average Flow Per Clarifier	0.20	MGD
Peak Flow Per Clarifier	0.80	MGD
Clarifier Shape (Round, Octagonal, Square)	Round	
Design Weir Shape (Round, Segmented)	Round	
Design Number of Segments (Leave Blank If Designed Round)		

SURFACE AREA DESIGN - TCEQ 217.154 (c)(1)		
TCEQ Max Surface Loading (Q_{AVG}) TCEQ 317.4 (d)(5)	700	gal/day/ft^2
TCEQ Max Surface Loading (Q_{PK}) TCEQ 217.154 (c)(1)	1,200	gal/day/ft^2
Design Diameter	**34.0**	ft
Surface Area Required at Peak Flow Per Clarifier	666.7	ft^2
Surface Area Required for All Clarifiers at Peak Flow	2,000.0	ft^2
Proposed Surface Area Per Clarifier	907.9	ft^2
Total Proposed Surface Area for All Clarifiers	2,723.8	ft^2
Actual Design Surface Loading at Design Flow (Q_{AVE})	220.3	gal/day/ft^2
Actual Design Surface Loading at Peak Flow (Q_{PK})	881.1	gal/day/ft^2

SIDE WATER DEPTH - TCEQ 217.152 (g)		
Side Water Depth For Clarifier Surface Area Greater Than 300 sqft.	10	ft
Side Water Depth For Clarifier Surface Area Equal To Or Less Than 300 sqft.	8	ft
Controlling Minimum Depth Requirement	10.0	ft
Proposed Clarifier Side Water Depth (Not Total Depth)	**10.0**	ft
Design Floor Slope (1:X)	12.0	
Design Cone Depth (Including 1:12, sloped bottom)	1.4	ft
Free Board (Minimum 1 feet)	1.0	ft
Total Depth of Clarifier	12.417	ft
Design Total Depth of Clarifier	**12.5**	ft

SECONDARY CLARIFIERS

WASTEWATER CHARACTERISTICS

Description	Value	Unit
HYDRAULIC DETENTION TIME - TCEQ 217.154 (c)(1)		
TCEQ Min Detention Time (Q_{AVE})	2.6	hours
TCEQ Min Detention Time (Q_{PK})	1.8	hours
Flow per Clarifier for Hydraulic Detention Time @ Design Flow (w/ Recycle)	0.20	MGD
Flow per Clarifier for Hydraulic Detention Time @ Peak Flow (w/ Recycle)	0.80	MGD
Required Treatment Volume At Design Flow for Each Clarifier	2,896.6	ft^3
Required Treatment Volume At Peak Flow for Each Clarifier	8,021.4	ft^3
Proposed Treatment Volume for Each Clarifier	9,079.2	ft^3
Actual Hydraulic Detention Time at Design Flow	8.1	hours
Actual Hydraulic Detention Time at Peak Flow	2.0	hours
SOLIDS LOADING RATE - TCEQ 317.4 (d)(5)		
Totals Solids to Clarifier	20,016.0	lbs/day
Proposed Surface Area of Clarifier	907.9	ft^2
Loading Rate of Solids to Clarifier	22.0	$lbs/day/ft^2$
TCEQ Maximum Loading Rate	50.0	$lbs/day/ft^2$
EFFLUENT WEIR DESIGN - TCEQ 217.152 (d)		
Weir loading (For Plants with Design Flows 1.0 MGD or less)	20,000	gal/day/ft
Weir loading (For Plants with Design Flows Over 1.0 MGD)	30,000	gal/day/ft
Controlling Weir Loading Criteria	20,000.0	gal/day/ft
Total Length of Weir Required Per Clarifier @ Peak Flow	40.0	ft
Total Length of Weir Required For All Clarifiers @ Peak Flow	120.0	ft
Proposed Weir Distance from Wall	1.0	ft
Diameter of Effluent Weir	32.0	ft
Design Weir Length Per Clarifier	100.5	ft
Total Design Weir Length	301.6	ft
Actual Surface Area Loading @ Peak Flow	7,957.7	$gal/day/ft^2$
Actual Surface Area Loading @ Average Flow	1,989.4	$gal/day/ft^2$
TORQUE RATINGS OF DRIVES AND RAKES		
Resistive Force of Secondary Sludge (W)	6.0	lb/ft
Running Torque (Wr^2)	1,734.0	ft-lbs
RETURN ACTIVATED SLUDGE FLOW RATES - TCEQ 217.152 (j)		
Lower Limit Underflow Rate - TCEQ 217.152(j)	200	gpd/ft^2
Minimum RAS Flow Rate (per clarifier)	126.1	gpm
Upper Limit Underflow Rate - TCEQ 217.152(j)	400	gpd/ft^2
Maximum RAS Flow Rate (per clarifier)	252.2	gpm
Combined Upper Limit RAS Underflow Rate for Plant	756.6	gpm
STILLING WELL DESIGN		
Maximum Stilling Well Velocity (@ Peak Flow) TCEQ 217.152 (a)(4)	0.15	ft/sec
Peak Flow For Individual Clarifier	0.80	MGD
Total Area Required	8.3	ft^2
Diameter of Each Stilling Well	6.0	ft
Area of Each Stilling Well	28.3	ft^2

AEROBIC DIGESTER		
TCEQ DESIGN CRITERIA (CHAPTER 317.5 (B))		
Minimum Detention Time	15.0	days
Volume Requirement	20.0	ft^3/lb BOD_5/day
Aeration Requirement	30.0	scfm/1000 ft^3
If Mechanical Aeration is Used	1.5	HP/1000 ft^3
TCEQ DESIGN CRITERIA (CHAPTER 217, SUBCHAPTER J)		
Minimum Temperature	15.0	deg C
Required Minimum Detention Time	60.0	days
Minimum Volatile Solids Loading Rate	100.0	lb/1000 ft^3/day
Maximum Volatile Solids Loading Rate	200.0	lb/1000 ft^3/day
Aeration Requirement	20.0	SCFM/1000 ft^3
NOTE: Aerobic digester has to be sized for average day flow		
Biodegradable Volatile Solids in WAS	0.7	lb VS/BOD removed
Destruction	0.3	lb VS/BOD removed
Note: Typical minimum Solids Retention Time (SRT) maintained in WWTPs is 8 days. Secondary		
Influent Solids	1,501	lbs/day
Digested Solids Production	1,186	lbs/day
Average Digested Solids Production	1,344	lbs/day
Total Sludge Production, lbs/day	1,344	lbs/day
Assumed Average Dig. Conc., mg/l	15,000.0	mg/l
Total Sludge to Aerobic Digester	10,740.00	gal/d
Volume Required Based on Min. Detention Time @ 60 Days	86,149.73	ft^3
Volume Required Based on Min. Detention Time @ 15 Days	21,537.43	ft^3
CHECK IF CHAPTER 217 VOLATILE SOLIDS LOADING RATE REQUIREMENTS CAN BE MET		
Volatile Suspended Solids Loading	1,051	lbs/day
Volatile Solids Loading Rate for 60 Days Storage Volume	0.00073	lb/1000 ft^3
Volatile Solids Loading Rate	**ERROR!**	
Note: It is not possible to meet both the min. required detention time and min. required VS solids loading rate requirements without significant thickening before the sludge is stabilized in the digester. Hence, it is prudent to just meet the required min. detention time alone. Also, if the sludge is to be disposed of in a landfill, sludge stabilization will not be required and a full detention time is not necessary. When a full dettention time is not provided, the basin will not be a true aerobic digester; instead, it will be reconfigured as a sludge holding tank.		
SLUDGE HOLDING TANK DESIGN		
Number of Basins	12.0	Ea
Freeboard	1.5	ft
Side Water Depth	10.5	ft
Total Required Depth	12.0	ft
Actual Tank Depth	12.0	ft
Width	12.0	ft
Length	22.0	ft
Design Volume	33,264	ft^3
DESIGN CHECK		
Detention Time	23.17	days
Design Volume to Loading Ratio	22.16	ft^3/lb BOD_5/day

WASTEWATER CHARACTERISTICS		
Design Flow Rate (Average Daily Flow)	0.60	MGD
Design Flow Rate (2-Hour Peak Flow)	2.40	MGD

CHLORINE CONTACT CHAMBER		
Description	**Value**	**Unit**
TCEQ Min Detention Time (Q_{PK}) (TCEQ217.281(b)(1)	20.0	min
TCEQ Required Minimum Volume	4,456.3	ft^3
TCEQ Required Minimum Volume	33,333.3	gal

Chlorine Contact Basin Sizing (Excluding Chlorine Mixing Chamber)		
Design Number of Trains	3.0	
Design Side Water Depth at Peak Flow	9.5	ft
Design Width of Basin	12.0	ft
Design Channel Width	2.0	ft
Design Channel Length (Assumes 40:1 L:W ratio per TCEQ 217.281(a)(2))	80.0	ft
Number of Partition	8.0	ea
DESIGN LENGTH OF BASIN	18.0	ft
PROPOSED VOLUME	4,560.0	ft^3
ACTUAL CCB VOLUME	6,156.0	ft^3
Actual Detention Time at Peak Flow	27.6	min
ACTUAL CHANNEL LENGTH	108.0	ft

PHASE III - 0.600 MGD

SODIUM HYPOCHLORITE DOSAGE CALCULATIONS		
WASTEWATER CHARACTERISTICS		
Design Flow Rate (Average Daily Flow)	0.60	MGD
Design Flow Rate (2-Hour Peak Flow)	2.40	MGD
SODIUM HYPOCHLORITE DOSAGE		
Chlorine Dosage Rate (Table K.1, TCEQ 217.272 (B))	12.5	mg/l
Concentration of NaOCl	12.5%	
Specific Gravity of NaOCl	1.17	
Calculated Chlorine Dosage Rate @ Design Flow Eq. K.1 TCEQ 217.272 (a)	62.6	lbs/day
Calculated Chlorine Dosage Rate @ Peak Flow Eq. K.1 TCEQ 217.272 (a)	250.2	lbs/day
NaOCl Required @ Design Flow	500.4	lbs/day
NaOCl Required @ Peak Flow	2,001.6	lbs/day
Volume of NaOCl requied @ Design Flow	51.3	gpd
Volume of NaOCl requied @ Peak Flow	205.1	gpd

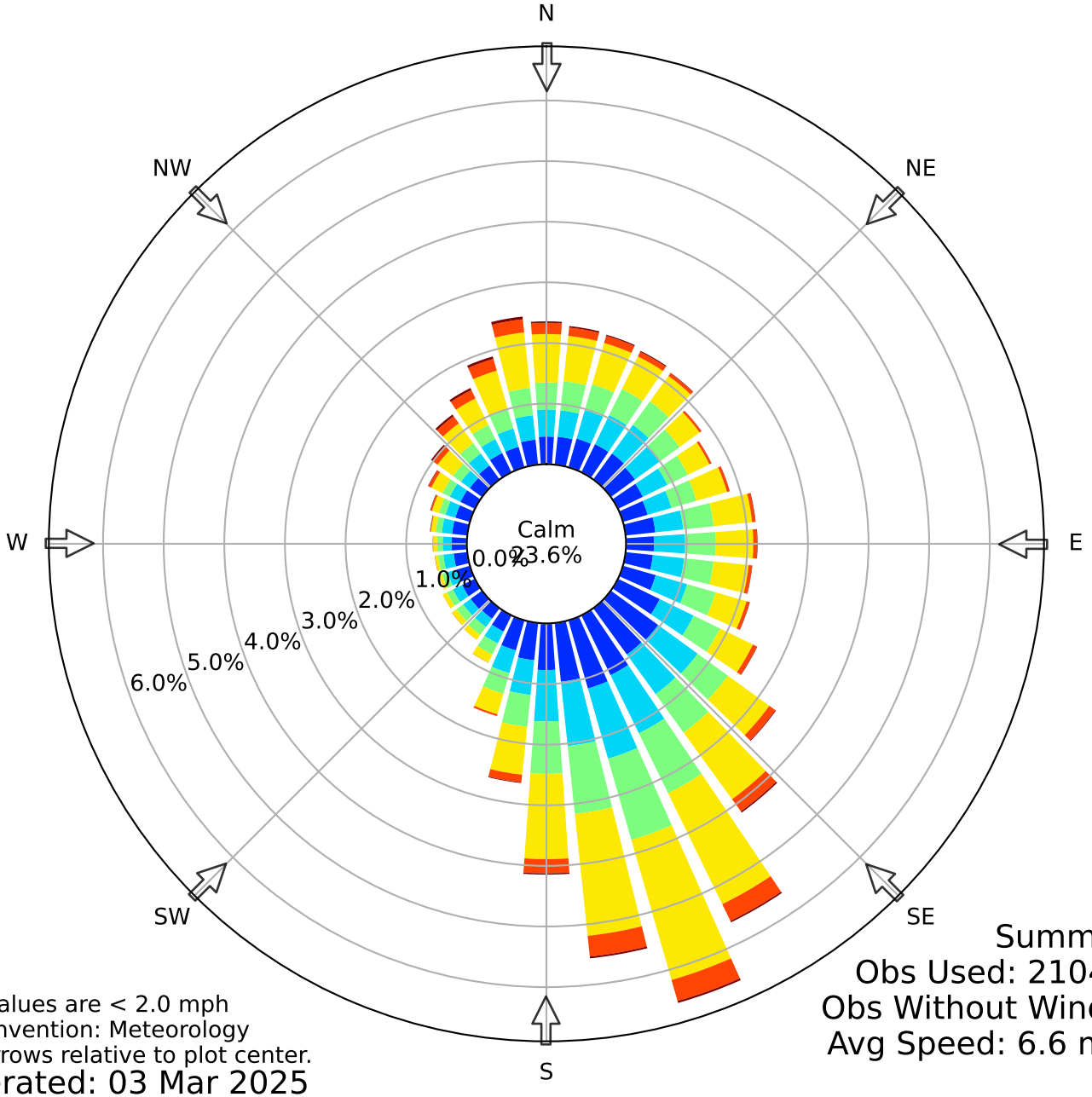
Note: TCEQ 217.280(d)(1)(A) and (B). For NaOCl conc >10%, 15 days of storage based on avg. daily consumption. For NaOCl conc <10%, 30 days of storage based on avg daily consumption

Storage Volume of NaOCl (15 Days)	**769.2**	**gal**
Number of Storage Tanks	1	Ea
SODIUM HYPOCHLORITE PUMP DESIGN		
Metering Pump Design Flow (Eq. K.4)	0.1	gph
Minimum Number of Chemical Pumps	2.0	Ea

Appendix O

Wind Rose

Windrose Plot for [LVJ] Pearland Regional
Obs Between: 01 Nov 1998 01:53 AM - 30 Sep 2024 11:53 PM America/Chicago



Summary
Obs Used: 210420
Obs Without Wind: 0
Avg Speed: 6.6 mph

Calm values are < 2.0 mph
Bar Convention: Meteorology
Flow arrows relative to plot center.
Generated: 03 Mar 2025

Wind Speed [mph]
2 - 4.9 | 5 - 6.9 | 7 - 9.9 | 10 - 14.9 | 15 - 19.9 | 20+

Appendix P

Solids Management Plan

WGA	PROJECT NAME:	ALVIN 350 WWTP
	WGA PROJECT NO:	40003-018

SLUDGE MANAGEMENT PLAN PH I - 0.1 MGD

I.PARAMETERS

% CAPACITIES	100%	75%	50%	25%
AVG. FLOW (MGD)	0.100	0.075	0.0375	0.009

CBOD5 REMOVAL		
Influent Concentration	300	mg/l
Effluent Concentration	0	mg/l
Net Removal	300	mg/l

DIGESTER VOLUME		
	Vol. (cu. ft.)	Vol. (Gal)
Digester No. 1	2,772	20,735
Digester No. 2	2,772	20,735
Total	**5,544**	**41,469**

II. DAILY SLUDGE PRODUCTIONS

CAPACITY	100%	75%	50%	25%
BOD REMOVED (LBS)	250	188	125	63
DRY SLUDGE PRODUCED[1] (LBS)	79	59	39	20
WET SLUDGE PRODUCED[2](LBS)	3,941	2,955	1,970	985
VOL WET SLUDGE PRODUCED (GPD)	473	354	236	118
REMOVAL SCHEDULE (DAYS)	87	117	175	351

(1) Assuming 0.315 lbs of dry sludge produced per pound of BOD5 removed

(2) Assuming 2% Solids

Sludge will be removed from digester when digester is full of thickened solids. Sludge will be removed by a registered transporter and hauled to a permitted disposal site.

At 100% Capacity, sludge shall be removed from basins every 87 days

WGA

PROJECT NAME: ALVIN 350 WWTP
WGA PROJECT NO: 40003-018

SLUDGE MANAGEMENT PLAN PH II - 0.35 MGD

I.PARAMETERS

% CAPACITIES	100%	75%	50%	25%
AVG. FLOW (MGD)	0.350	0.2625	0.13125	0.033

CBOD5 REMOVAL		
Influent Concentration	300	mg/l
Effluent Concentration	0	mg/l
Net Removal	300	mg/l

DIGESTER VOLUME		
	Vol. (cu. ft.)	Vol. (Gal)
Digester No. 1	2,772	20,735
Digester No. 2	2,772	20,735
Digester No. 3	2,772	20,735
Digester No. 4	2,772	20,735
Digester No. 5	2,772	20,735
Digester No. 6	2,772	20,735
Digester No. 7	2,772	20,735
Digester No. 8	2,772	20,735
Total	**22,176**	**165,876**

II. DAILY SLUDGE PRODUCTIONS

CAPACITY	100%	75%	50%	25%
BOD REMOVED (LBS)	876	657	438	219
DRY SLUDGE PRODUCED[1] (LBS)	276	207	138	69
WET SLUDGE PRODUCED[2](LBS)	13,792	10,344	6,896	3,448
VOL WET SLUDGE PRODUCED (GPD)	1654	1240	827	413
REMOVAL SCHEDULE (DAYS)	100	133	200	401

(1) Assuming 0.315 lbs of dry sludge produced per pound of BOD5 removed

(2) Assuming 2% Solids

Sludge will be removed from digester when digester is full of thickened solids. Sludge will be removed by a registered transporter and hauled to a permitted disposal site.

At 100% Capacity, sludge shall be removed from basins every 100 days

WGA

PROJECT NAME: ALVIN 350 WWTP
WGA PROJECT NO: 40003-018

SLUDGE MANAGEMENT PLAN PH III - 0.6 MGD

I.PARAMETERS

% CAPACITIES	100%	75%	50%	25%
AVG. FLOW (MGD)	0.600	0.45	0.225	0.056

CBOD5 REMOVAL		
Influent Concentration	300	mg/l
Effluent Concentration	0	mg/l
Net Removal	300	mg/l

DIGESTER VOLUME		
	Vol. (cu. ft.)	Vol. (Gal)
Digester No. 1	4,851	36,285
Digester No. 2	4,851	36,285
Digester No. 3	4,851	36,285
Digester No. 4	4,851	36,285
Digester No. 5	4,851	36,285
Digester No. 6	4,851	36,285
Digester No. 7	4,851	36,285
Digester No. 8	4,851	36,285
Digester No. 9	4,851	36,285
Digester No. 10	4,851	36,285
Digester No. 11	4,851	36,285
Digester No. 12	4,851	36,285
Total	**58,212**	**435,426**

II. DAILY SLUDGE PRODUCTIONS

CAPACITY	100%	75%	50%	25%
BOD REMOVED (LBS)	1501	1126	751	375
DRY SLUDGE PRODUCED[1] (LBS)	473	355	236	118
WET SLUDGE PRODUCED[2](LBS)	23,644	17,733	11,822	5,911
VOL WET SLUDGE PRODUCED (GPD)	2835	2126	1418	709
REMOVAL SCHEDULE (DAYS)	153	204	307	614

(1) Assuming 0.315 lbs of dry sludge produced per pound of BOD5 removed

(2) Assuming 2% Solids

Sludge will be removed from digester when digester is full of thickened solids. Sludge will be removed by a registered transporter and hauled to a permitted disposal site.

At 100% Capacity, sludge shall be removed from basins every 153 days