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

Summary of Application (in plain language) Template and Instructions for Texas Pollutant Discharge Elimination System (TPDES) and Texas Land Application (TLAP) Permit Applications

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

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

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

ENGLISH TEMPLATE FOR TPDES or TLAP NEW/RENEWAL/AMENDMENT APPLICATIONS
Enter 'INDUSTRIAL' or 'DOMESTIC' here 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.

Laguna Madre Water District (CN 600647952) operates Laguna Vista Wastewater Plant (RN102077930), an Activated sludge process plant.. The facility is located at 30448 Holly Beach Rd, in Laguna Vista , Cameron County, Texas 78578. Renewal of the existing permit that authorizes the discharge of treated domestic wastewater at a daily flow not to exceed 0.65 million gallons per day (MGD).. *<<For TLAP applications include the following sentence, otherwise delete:>>* This permit will not authorize a discharge of pollutants into water in the state.

Discharges from the facility are expected to contain treated effluent. Domestic wastewater is treated by domestic wastewater making its way through one of two bar screens into an oxidation ditch, through one of two clarifiers from which waste is directed to digester, six drying beds and two chlorine contact chambers..

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

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

Summary of Application (in plain language) Template and Instructions for Texas Pollutant Discharge Elimination System (TPDES) and Texas Land Application (TLAP) Permit Applications

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

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

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

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

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

Laguna Madre Water District (CN600647952) operates Isla Blanca Wastewater Treatment Facility (RN101607588), a activated sludge process plant . The facility is located at 1004 Channel View Loop, in South Padre Island, Cameron County, Texas 78597. Renewal of the existing permit authorizing the discharge of treated domestic wastewater not to exceed 2.6 million gallons per day. (MGD).

Discharges from the facility are expected to contain treated effluent. Domestic wastewater is treated by the inflow for this plant entering through one ten and one twelve-inch parallel force mains from lift station No.19, located on the southwest corner of Isla Grand Beach Resort at 500 Padre Blvd. All three force mains pump into the plant just upstream of the bar screen in the influent channel. Large debris in the influent is manually removed from the bar

screen. The wastewater then flows to the aeration basins. Biological treatment takes place in the aeration basins. After the aeration basins, the mixed liquor is transferred to the three final settling basins (clarifiers) where the effluent is separated from the solids/sludge. This solids/sludge contains mostly microorganisms, and part of it is returned to the aeration basin thus providing more microorganisms to continue the activated sludge process. The effluent from the clarifiers now flows to each of the chlorine contact chambers. Clarifiers 1 &2 flow through chlorine contact chamber No. 1, while Clarifier 3 flows through chlorine contact chamber No. 2. The chambers provide a minimum of 20 minutes detention time based on peak flow. The flow signal is used to flow pace chlorination chamber where sulfur dioxide is injected to remove any remaining chlorine residual. Another broad crested weir is used to measure total flow out of the plant and to automatically pace sulfur dioxide addition. After dichlorination, the effluent is aerated in the post aeration basin to ensure a minimum dissolved oxygen concentration of 4.0 mg/l. The effluent is then discharged through a 30-inch pipe to the outfall. The facility has a standby generator to provide energy for the entire plant during a power outage, thus capable of meeting discharge permit parameters under any unexpected outage event. The dry sludge removed from the drying beds or belt press is disposed of by TCEQ registered hauler at a sludge monofil located adjacent to the Port Isabel Wastewater Treatment Facility. .

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

AGUAS RESIDUALES DOMESTICAS **/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.

Laguna Madre Water District (CN600647952) opera Planta de Tratamiento de Aguas Residuales de Isla Blanca RN101607588, un planta de proceso de lodos activados. La instalación está ubicada en 1004 Channel View Loop,, en South Padre Island, Condado de Cameron, Texas 78597. Renovación del permiso existente que autoriza la descarga de aguas residuales domesticas tratadas que no excedan los 2.6 millones de gallones por día. (MGD). *<<Para las solicitudes de TLAP incluya la siguiente oración, de lo contrario, elimine:>>* Este permiso no autorizará una descarga de contaminantes en el agua en el estado.

Se espera que las descargas de la instalación contengan efluente tratado. Aguas residuales domesticas. está tratado por , El flujo de entrada para esta planta ingresa a través de una tubería principal de fuerza paralela de estación de bombeo No. 19, ubicada en la esquina suroeste de la Isla Grand Beach Resort en 500 Padre Blvd. Las Dos tuberías de fuerza bombean a la planta justo aguas arriba de la pantalla de barra en el canal de entrada. Los residuos grandes en el afluente se eliminan manualmente de la pantalla de la barra. A continuación, las aguas residuales fluyen hacia las balsas de aireación. El tratamiento biológico se lleva a cabo en las cuencas de aireación. Después de las balsas de aireación, el licor mezclado se transfiere a las tres cuencas de decantación finales (calificadores) donde se separa el efluente de los sólidos/lodos. Estos solidos/lodos contienen en su mayoría microorganismos, y parte de ellos se devuelven a la balsa de aireación, proporcionando así más microorganismos para continuar el proceso de lodos activados. El efluente de los clarificadores ahora fluye a cada una de las cámaras de contacto con el cloro. Los clarificadores 1 y 2 fluyen a través de la cámara de contacto de cloro número 1, mientras que el clarificador numero 3 fluye a través de la cámara de contacto de cloro número 2. Las cámaras proporcionan un tiempo detención de 20 minutos en función del caudal máximo. La señal de flujo se utiliza para fluir a ritmo de la cámara de cloración donde se inyecta dióxido de azufre para eliminar cualquier residuo de cloro restante. Otro vertedero de cresta ancha se utiliza para medir el flujo total fuera de la planta y para marcar automáticamente el ritmo de la adición de dióxido de azufre. Después de la dicloration, el efluente se airea en la cuenca de post-aireacion para garantizar una concentración mínima de oxígeno disuelto de 4.0 mg/l. Luengo, el efluente se descarga a través de una tubería de 30 pulgadas hasta el desagüe. La instalación cuento con un generador de reserva para durante un corte de energía, por lo que es capaz de cumplir con los parámetros del permiso de descarga ante cualquier evento de corte inesperado. Los lodos secos retirados de los lechos de secado o de la prensa de cinta son eliminados por un transportista registrado por TCEQ en un monofilamento de lodos ubicado junto a la instalación de tratamiento de aguas residuales de Port Isabel. .

INSTRUCTIONS

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

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

Example 1: Industrial Wastewater TPDES Application (ENGLISH)

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

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

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

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

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

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

Example 2: Domestic Wastewater TPDES Renewal application

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

The City of Texas (CN000000000) operates the City of Texas wastewater treatment plant (RN000000000), an activated sludge process plant operated in the complete mix mode. The facility is located at 123 Texas Street, near the City of More Texas, Texas County, Texas 71234.

This application is for a renewal to discharge at an annual average flow of 1,200,000 gallons per day of treated domestic wastewater via Outfalls 001 and 002.

Discharges from the facility are expected to contain five-day carbonaceous biochemical oxygen demand ($CBOD_5$), total suspended solids (TSS), ammonia nitrogen (NH_3-N), and *Escherichia coli*. Additional potential pollutants are included in the Domestic Technical Report 1.0, Section 7. Pollutant Analysis of Treated Effluent and Domestic Worksheet 4.0 in the permit application package. Domestic wastewater is treated by an activated sludge process plant and the treatment units include a bar screen, a grit chamber, aeration basins, final clarifiers, sludge digesters, a belt filter press, chlorine contact chambers and a dechlorination chamber.

Example 3: Domestic Wastewater TPDES New Application

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

The City of Texas (CN000000000) proposes to operate the City of Texas wastewater treatment plant (RN000000000), an activated sludge process plant operated in the extended aeration mode. The facility will be located at 123 Texas Street, in the City of More Texas, Texas County, Texas 71234.

This application is for a new application to discharge at a daily average flow of 200,000 gallons per day of treated domestic wastewater.

Discharges from the facility are expected to contain five-day carbonaceous biochemical oxygen demand ($CBOD_5$), total suspended solids (TSS), ammonia nitrogen (NH_3-N), and *Escherichia coli*. Additional potential pollutants are included in the Domestic Technical Report 1.0, Section 7. Pollutant Analysis of Treated Effluent in the permit application package. Domestic wastewater will be treated by an activated sludge process plant and the treatment units will include a bar screen, a grit chamber, aeration basins, final clarifiers, sludge digesters, a belt filter press, chlorine contact chambers and a dechlorination chamber.

Example 4: Domestic Wastewater TLAP Renewal application

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

of the permit application.

The City of Texas (CN000000000) operates the City of Texas wastewater treatment plant (RN000000000), an activated sludge process plant operated in the complete mix mode. The facility is located at 123 Texas Street, near the City of More Texas, Texas County, Texas 71234.

This application is for a renewal to dispose a daily average flow not to exceed 76,500 gallons per day of treated domestic wastewater via public access subsurface drip irrigation system with a minimum area of 32 acres. This permit will not authorize a discharge of pollutants into water in the state.

Land application of domestic wastewater from the facility are expected to contain five-day biochemical oxygen demand (BOD_5), total suspended solids (TSS), and *Escherichia coli*. Additional potential pollutants are included in the Domestic Technical Report 1.0, Section 7. Pollutant Analysis of Treated Effluent in the permit application package. Domestic wastewater is treated by an activated sludge process plant and the treatment units include a bar screen, an equalization basin, an aeration basin, a final clarifier, an aerobic sludge digester, tertiary filters, and a chlorine contact chamber. In addition, the facility includes a temporary storage that equals to at least three days of the daily average flow.

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

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

PERMIT NO. WQ0014069001

APPLICATION. Laguna Madre Water District, 105 Port Road, Port Isabel, Texas 78578, has applied to the Texas Commission on Environmental Quality (TCEQ) to renew Texas Pollutant Discharge Elimination System (TPDES) Permit No. WQ0014069001 (EPA I.D. No. TX0117072) to authorize the discharge of treated wastewater at a volume not to exceed a daily average flow of 650,000 gallons per day. The domestic wastewater treatment facility is located at 30448 Holly Beach Road, in the city of Laguna Vista, in Cameron County, Texas 78578. The discharge route is from the plant site to Cameron County FWSD Reservoir 1(formely City of Port Isabel Reservoir); thence to the Lower Laguna Madre. TCEQ received this application on January 23, 2025. The permit application will be available for viewing and copying at Laguna Vista Wastewater Treatment Facility, 33048 Holly Beach Road, Laguna Vista, in Cameron County, Texas prior to the date this notice is published in the newspaper. The application, including any updates, and associated notices are available electronically at the following webpage: https://www.tceq.texas.gov/permitting/wastewater/pending-permits/tpdes-applications. This link to an electronic map of the site or facility's general location is provided as a public courtesy and not part of the application or notice. For the exact location, refer to the application.
https://gisweb.tceq.texas.gov/LocationMapper/?marker=-97.315,26.117777&level=18

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

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

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

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

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

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

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

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

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

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

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

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

Further information may also be obtained from Laguna Madre Water District at the address stated above or by calling Mr. Carlos Galvan, CPM, General Manager, at 956-943-2626.

Issuance Date: February 14, 2025

Comisión de Calidad Ambiental del Estado de Texas

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

PERMISO NO. WQ0014069001

SOLICITUD. Laguna Madre Water District 105 Port Road Port Isabel Texas ha solicitado a la Comisión de Calidad Ambiental del Estado de Texas (TCEQ) para renovar el Permiso No. WQ0014069001 (EPA I.D. No. TX 0117072) 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 650.000 gallones por día. La planta está ubicada 30488 Holly Beach Road en el Condado de Cameron, Texas La ruta de descarga es desde el sitio de la planta hasta el embalse FWSD 1 del condado de Cameron (anteriormente embalse de la ciudad de Port Isabel); de allí a la Laguna Madre Inferior.La TCEQ recibió esta solicitud el Enero 23, 2025 La solicitud de permiso estará disponible para ver y copiar en la Planta de Tratamiento de Aguas Residuales de Laguna Vista, 33048 Holly Beach Road, Laguna Vista, en el condado de Cameron, Texas, antes de la fecha en que se publique este aviso en el periódico. La solicitud, incluidas las actualizaciones, y los avisos asociados están disponibles electrónicamente en la siguiente página web: https://www.tceq.texas.gov/permitting/wastewater/pending-permits/tpdes-applications . Este enlace a un mapa electrónico de la ubicación general del sitio o instalación se proporciona como una cortesía pública y no forma parte de la solicitud o aviso. Para conocer la ubicación exacta, consulte la aplicación. https://gisweb.tceq.texas.gov/LocationMapper/?marker=-97.315,26.117777&level=18

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

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

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

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

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

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

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

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

También se puede obtener más información del Distrito de Agua de Laguna Madre en la dirección indicada anteriormente o llamando al Sr. Carlos Galván, CPM, Gerente General, al 956-943-2626.

Fecha de emission: 14 de febrero de 2025

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

January 23, 2025

Re: Confirmation of Submission of the Renewal without changes for Public Domestic Wastewater Authorization.

Dear Applicant:

This is an acknowledgement that you have successfully completed Renewal without changes for the Public Domestic Wastewater authorization.

ER Account Number: ER084378
Application Reference Number: 743545
Authorization Number: WQ0014069001
Site Name: Laguna Vista WWTP
Regulated Entity: RN102077930 - Laguna Vista WWTP
Customer(s): CN600647952 - Laguna Madre Water District

Please be aware that TCEQ staff may contact your designated contact for any additional information.

If you have any questions, you may contact the Applications Review and Processing Team by email at WQ-ARPTeam@tceq.texas.gov or by telephone at (512) 239-4671.

Sincerely,
Applications Review and Processing Team
Water Quality Division

Texas Commission on Environmental Quality

Update Domestic or Industrial Individual Permit

WQ0014069001

Site Information (Regulated Entity)

What is the name of the site to be authorized?	LAGUNA VISTA WWTP
Does the site have a physical address?	Yes
Physical Address	
Number and Street	30448 HOLLY BEACH RD
City	LAGUNA VISTA
State	TX
ZIP	78578
County	CAMERON
Latitude (N) (##.######)	26.117777
Longitude (W) (-###.######)	-97.315
Primary SIC Code	4952
Secondary SIC Code	
Primary NAICS Code	221320
Secondary NAICS Code	
Regulated Entity Site Information	
What is the Regulated Entity's Number (RN)?	RN102077930
What is the name of the Regulated Entity (RE)?	LAGUNA VISTA WWTP
Does the RE site have a physical address?	No
Physical Address	
Because there is no physical address, describe how to locate this site:	CAMERON COUNTY
City	LAGUNA VISTA
State	TX
ZIP	78578
County	CAMERON
Latitude (N) (##.######)	31.5166
Longitude (W) (-###.######)	-98.13
Facility NAICS Code	
What is the primary business of this entity?	DOMESTIC

Laguna -Customer (Applicant) Information (Owner)

How is this applicant associated with this site?	Owner
What is the applicant's Customer Number (CN)?	CN600647952
Type of Customer	Other Government
Full legal name of the applicant:	
Legal Name	Laguna Madre Water District
Texas SOS Filing Number	
Federal Tax ID	746003590
State Franchise Tax ID	
State Sales Tax ID	
Local Tax ID	

DUNS Number	47662788
Number of Employees	0-20
Independently Owned and Operated?	
I certify that the full legal name of the entity applying for this permit has been provided and is legally authorized to do business in Texas.	Yes
Responsible Authority Contact	
Organization Name	Laguna Madre Water District
Prefix	MR
First	Santiago
Middle	
Last	Ochoa
Suffix	IV
Credentials	CPM
Title	Wastewater Superintendent
Responsible Authority Mailing Address	
Enter new address or copy one from list:	Site Physical Address
Address Type	Domestic
Mailing Address (include Suite or Bldg. here, if applicable)	105 PORT RD
Routing (such as Mail Code, Dept., or Attn:)	
City	PORT ISABEL
State	TX
ZIP	78578
Phone (###-###-####)	9569432626
Extension	
Alternate Phone (###-###-####)	
Fax (###-###-####)	
E-mail	Cgalvan@lmwd.org

Billing Contact

Responsible contact for receiving billing statements:	
Select the permittee that is responsible for payment of the annual fee.	CN600647952, Laguna Madre Water District
Organization Name	LAGUNA MADRE WATER DISTRICT
Prefix	
First	
Middle	
Last	
Suffix	
Credentials	
Title	
Enter new address or copy one from list:	
Mailing Address	
Address Type	Domestic
Mailing Address (include Suite or Bldg. here, if applicable)	105 PORT RD
Routing (such as Mail Code, Dept., or Attn:)	
City	PORT ISABEL
State	TX
ZIP	78578

Phone (###-###-####)	9569432626
Extension	103
Alternate Phone (###-###-####)	
Fax (###-###-####)	
E-mail	tochoa@lmwd.org

Application Contact

Person TCEQ should contact for questions about this application:	
Same as another contact?	
Organization Name	LAGUNA MADRE WATER DISTRICT
Prefix	MR
First	Mark
Middle	Anthony
Last	Garza
Suffix	
Credentials	
Title	Wastewater Plant Manager
Enter new address or copy one from list:	
Mailing Address	
Address Type	Domestic
Mailing Address (include Suite or Bldg. here, if applicable)	105 PORT RD
Routing (such as Mail Code, Dept., or Attn:)	
City	PORT ISABEL
State	TX
ZIP	78578
Phone (###-###-####)	9569432626
Extension	600
Alternate Phone (###-###-####)	
Fax (###-###-####)	9569436827
E-mail	mgarza@lmwd.org

Technical Contact

Person TCEQ should contact for questions about this application:	
Same as another contact?	Application Contact
Organization Name	LAGUNA MADRE WATER DISTRICT
Prefix	MR
First	Mark
Middle	Anthony
Last	Garza
Suffix	
Credentials	
Title	Wastewater Plant Manager
Enter new address or copy one from list:	
Mailing Address	
Address Type	Domestic
Mailing Address (include Suite or Bldg. here, if applicable)	105 PORT RD
Routing (such as Mail Code, Dept., or Attn:)	

City	PORT ISABEL
State	TX
ZIP	78578
Phone (###-###-####)	9569432626
Extension	600
Alternate Phone (###-###-####)	
Fax (###-###-####)	9569436827
E-mail	mgarza@lmwd.org

DMR Contact

Person responsible for submitting Discharge Monitoring Report Forms:

Same as another contact?	Application Contact
Organization Name	LAGUNA MADRE WATER DISTRICT
Prefix	MR
First	Mark
Middle	Anthony
Last	Garza
Suffix	
Credentials	
Title	Wastewater Plant Manager
Enter new address or copy one from list:	

Mailing Address:

Address Type	Domestic
Mailing Address (include Suite or Bldg. here, if applicable)	105 PORT RD
Routing (such as Mail Code, Dept., or Attn:)	
City	PORT ISABEL
State	TX
ZIP	78578
Phone (###-###-####)	9569432626
Extension	600
Alternate Phone (###-###-####)	
Fax (###-###-####)	9569436827
E-mail	mgarza@lmwd.org

Section 1# Permit Contact

Permit Contact#: 1

Person TCEQ should contact throughout the permit term.

1) Same as another contact?	Billing Contact
2) Organization Name	LAGUNA MADRE WATER DISTRICT
3) Prefix	MR
4) First	Santiago
5) Middle	
6) Last	Ochoa
7) Suffix	IV
8) Credentials	
9) Title	Superintendent of Wastewater

Mailing Address

10) Enter new address or copy one from list	
11) Address Type	Domestic
11.1) Mailing Address (include Suite or Bldg. here, if applicable)	105 PORT RD
11.2) Routing (such as Mail Code, Dept., or Attn:)	
11.3) City	PORT ISABEL
11.4) State	TX
11.5) ZIP	78578
12) Phone (###-###-####)	9569432626
13) Extension	103
14) Alternate Phone (###-###-####)	
15) Fax (###-###-####)	
16) E-mail	tochoa@lmwd.org

Owner Information

Owner of Treatment Facility

1) Prefix	MR
2) First and Last Name	Laguna Madre Water District
3) Organization Name	Laguna Madre Water District
4) Mailing Address	105 Port Road
5) City	Port Isabel
6) State	TX
7) Zip Code	78578
8) Phone (###-###-####)	9569432626
9) Extension	
10) Email	tochoa@lmwd.org
11) What is ownership of the treatment facility?	Public

Owner of Land (where treatment facility is or will be)

12) Prefix	
13) First and Last Name	Laguna Madre Water District
14) Organization Name	Laguna Madre Water District
15) Mailing Address	105 Port Road
16) City	Port Isabel
17) State	TX
18) Zip Code	78578
19) Phone (###-###-####)	9569432626
20) Extension	103
21) Email	tochoa@lmwd.org
22) Is the landowner the same person as the facility owner or co-applicant?	Yes

General Information Renewal-Amendment

1) Current authorization expiration date:	08/17/2025
2) Current Facility operational status:	Active
3) Is the facility located on or does the treated effluent cross American Indian Land?	No
4) What is the application type that you are seeking?	Renewal without changes

5) Current Authorization type:	Public Domestic Wastewater
5.1) What is the proposed total flow in MGD discharged at the facility?	0.65
5.2) Select the applicable fee	>= .50 & < 1.0 MGD - Renewal - $1,615
6) What is the classification for your authorization?	TPDES
6.1) What is the EPA Identification Number?	TX0117072
6.2) Is the wastewater treatment facility location in the existing permit accurate?	Yes
6.3) Are the point(s) of discharge and the discharge route(s) in the existing permit correct?	Yes
6.4) City nearest the outfall(s):	Laguna Vista
6.5) County where the outfalls are located:	CAMERON
6.6) Is or will the treated wastewater discharge to a city, county, or state highway right-of-way, or a flood control district drainage ditch?	No
6.7) Is the daily average discharge at your facility of 5 MGD or more?	No
7) Did any person formerly employed by the TCEQ represent your company and get paid for service regarding this application?	No

Public Notice Information

Individual Publishing the Notices	
1) Prefix	
2) First and Last Name	Enrique Samaniego
3) Credential	
4) Title	Purchasing Agent
5) Organization Name	Laguna Madre Water District
6) Mailing Address	105 PORT RD
7) Address Line 2	
8) City	PORT ISABEL
9) State	TX
10) Zip Code	78578
11) Phone (###-###-####)	9569432626
12) Extension	312
13) Fax (###-###-####)	
14) Email	esamaniego@lmwd.org
Contact person to be listed in the Notices	
15) Prefix	
16) First and Last Name	Carlos J Galvan Jr
17) Credential	CPM
18) Title	General Manager
19) Organization Name	Laguna Madre Water District
20) Phone (###-###-####)	9569432626
21) Fax (###-###-####)	
22) Email	cgalvan@lmwd.org
Bilingual Notice Requirements	
23) 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
23.1) Are the students who attend either the elementary school or the middle school enrolled in a bilingual education program at that school?	Yes
23.2) Do the students at these schools attend a bilingual education program at another location?	No

23.3) 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)?	No
23.4) Which language is required by the bilingual program?	Spanish

Section 1# Public Viewing Information

County#: 1

1) County	CAMERON
2) Public building name	Laguna Vista Wastewater Treatment Facility
3) Location within the building	
4) Physical Address of Building	33048 Holly Beach Road
5) City	Laguna Vista
6) Contact Name	
7) Phone (###-###-####)	9569432626
8) Extension	110
9) Is the location open to the public?	Yes

Plain Language

1) Plain Language

[File Properties]

File Name	LANG_SUMMARY OF APPLICATION 2025.pdf
Hash	25357F0D499B7D0B39BC4523C6851C75431AB0114D09074CF59AF4AC66726F1C
MIME-Type	application/pdf

Supplemental Permit Information Form

1) Supplemental Permit Information Form (SPIF)

[File Properties]

File Name	SPIF_MAP.pdf
Hash	231F41ADE3253E314D6ED6B1491BF59C18410862DC96BD842ED3822E2F060203
MIME-Type	application/pdf

[File Properties]

File Name	SPIF_SPIF.pdf
Hash	2AB53B4988FAFAB4F2E81D78B5407FCFDAB544769BDCFF5050DACFE5670424AA
MIME-Type	application/pdf

Domestic Attachments

1) Attach an 8.5"x11", reproduced portion of the most current and original USGS Topographic Quadrangle Map(s) that meets the 1:24,000 scale.

[File Properties]

File Name	MAP_MAP.pdf
Hash	231F41ADE3253E314D6ED6B1491BF59C18410862DC96BD842ED3822E2F060203
MIME-Type	application/pdf

2) I confirm that all required sections of Technical Report 1.0 are complete and will be included in the Technical Attachment.	Yes
2.1) I confirm that Worksheet 2.0 (Receiving Waters) is complete and included in the Technical Attachment.	Yes
2.2) Are you planning to include Worksheet 2.1 (Stream Physical Characteristics) in the Technical Attachment?	No
2.3) Are you planning to include Worksheet 4.0 (Pollutant Analyses Requirements) in the Technical Attachment?	Yes
2.4) Are you planning to include Worksheet 5.0 (Toxicity Testing Requirements) in the Technical Attachment?	No
2.5) I confirm that Worksheet 6.0 (Industrial Waste Contribution) is complete and included in the Technical Attachment.	Yes
2.6) Are you planning to include Worksheet 7.0 (Class V Injection Well Inventory/Authorization Form) in the Technical Attachment?	No

2.7) Technical Attachment

[File Properties]

File Name	TECH_Technical report.docx
Hash	8D46B8CE817C3A4C7E01B9A7F49BE3E63502504D10DF743A41CD3F7AFCEB5A6D
MIME-Type	application/vnd.openxmlformats-officedocument.wordprocessingml.document

3) Buffer Zone Map

[File Properties]

File Name	BUFF_ZM_BUFFER ZONE MAP.pdf
Hash	A120507924CF7C2F04BD5CFD54786E1004BAF4158C852F6E854128A935A60D45
MIME-Type	application/pdf

4) Flow Diagram

[File Properties]

File Name	FLDIA_LVSTP SITE FLOW DIAGRAM.pdf
Hash	58215333EEE8C1A027F03CAE83EAEDB2C606316396AC57798F8E4E90E8DD4516
MIME-Type	application/pdf

[File Properties]

File Name	FLDIA_TREATMENT PROCESS DESCRIPTION.pdf
Hash	34EC84F0B2D48DC6D70AAC01FDE396E9BCE1A3F913747EF86AAD3C857C32901C
MIME-Type	application/pdf

5) Site Drawing

[File Properties]

File Name	SITEDR_SITE PLAN.pdf
Hash	D6A7838AFC6FFA9BB1AF57EE89A496763B9FBDE11343D075F7BEB5846CCE6AD5
MIME-Type	application/pdf

6) Design Calculations

[File Properties]

File Name	DES_CAL_LVSTP Design Data.pdf
Hash	D574D9CEE168257543528AA33AD6CEB22527C8576341BDDF81038371F959EB41
MIME-Type	application/pdf

7) Solids Management Plan

8) Water Balance

[File Properties]

File Name	WB_LVSTP Reuse Approval Letter.pdf
Hash	F66C1AF5872D42F6C01110463F2ABD466FDB46ECE0351290BBAC8CFE194860B9
MIME-Type	application/pdf

[File Properties]

File Name	WB_Water Balance info.pdf
Hash	C53B5A72086981A773742892C03CE37FD67D56B8D1DD991797B81CF8B28727F2
MIME-Type	application/pdf

9) Other Attachments

Certification

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

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.

1. I am Santiago Ochoa IV, the owner of the STEERS account ER103816.
2. I have the authority to sign this data on behalf of the applicant named above.
3. I have personally examined the foregoing and am familiar with its content and the content of any attachments, and based upon my personal knowledge and/or inquiry of any individual responsible for information contained herein, that this information is true, accurate, and complete.
4. I further certify that I have not violated any term in my TCEQ STEERS participation agreement and that I have no reason to believe that the confidentiality or use of my password has been compromised at any time.
5. I understand that use of my password constitutes an electronic signature legally equivalent to my written signature.
6. I also understand that the attestations of fact contained herein pertain to the implementation, oversight and enforcement of a state and/or federal environmental program and must be true and complete to the best of my knowledge.
7. I am aware that criminal penalties may be imposed for statements or omissions that I know or have reason to believe are untrue or misleading.
8. I am knowingly and intentionally signing Update Domestic or Industrial Individual Permit WQ0014069001.
9. My signature indicates that I am in agreement with the information on this form, and authorize its submittal to the TCEQ.

OWNER Signature: Santiago Ochoa IV OWNER

Customer Number:	CN600647952
Legal Name:	Laguna Madre Water District
Account Number:	ER103816
Signature IP Address:	71.40.220.250
Signature Date:	2025-01-23
Signature Hash:	4FE1DE1C475D5EC9CA0618E2AADF266C3B6129D11ED68DABFAB9F8F083B99496
Form Hash Code at time of Signature:	E0A7E45724D660FE8FCCD60BEDD5A99BF2471456A437D76151F081736672E29F

Fee Payment

Transaction by:	The application fee payment transaction was made by ER103816/Santiago Ochoa IV
Paid by:	The application fee was paid by ARNOLDO MARTINEZ JR
Fee Amount:	$1600.00
Paid Date:	The application fee was paid on 2025-01-23
Transaction/Voucher number:	The transaction number is 582EA000646116 and the voucher number is 743477

Submission

Reference Number:	The application reference number is 743545
Submitted by:	The application was submitted by ER084378/Mark A Garza
Submitted Timestamp:	The application was submitted on 2025-01-23 at 15:55:37 CST
Submitted From:	The application was submitted from IP address 71.40.220.250
Confirmation Number:	The confirmation number is 621675
Steers Version:	The STEERS version is 6.85
Permit Number:	The permit number is WQ0014069001

Additional Information

Application Creator: This account was created by Mark A Garza

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

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

Summary of Application (in plain language) Template and Instructions for Texas Pollutant Discharge Elimination System (TPDES) and Texas Land Application (TLAP) Permit Applications

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

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

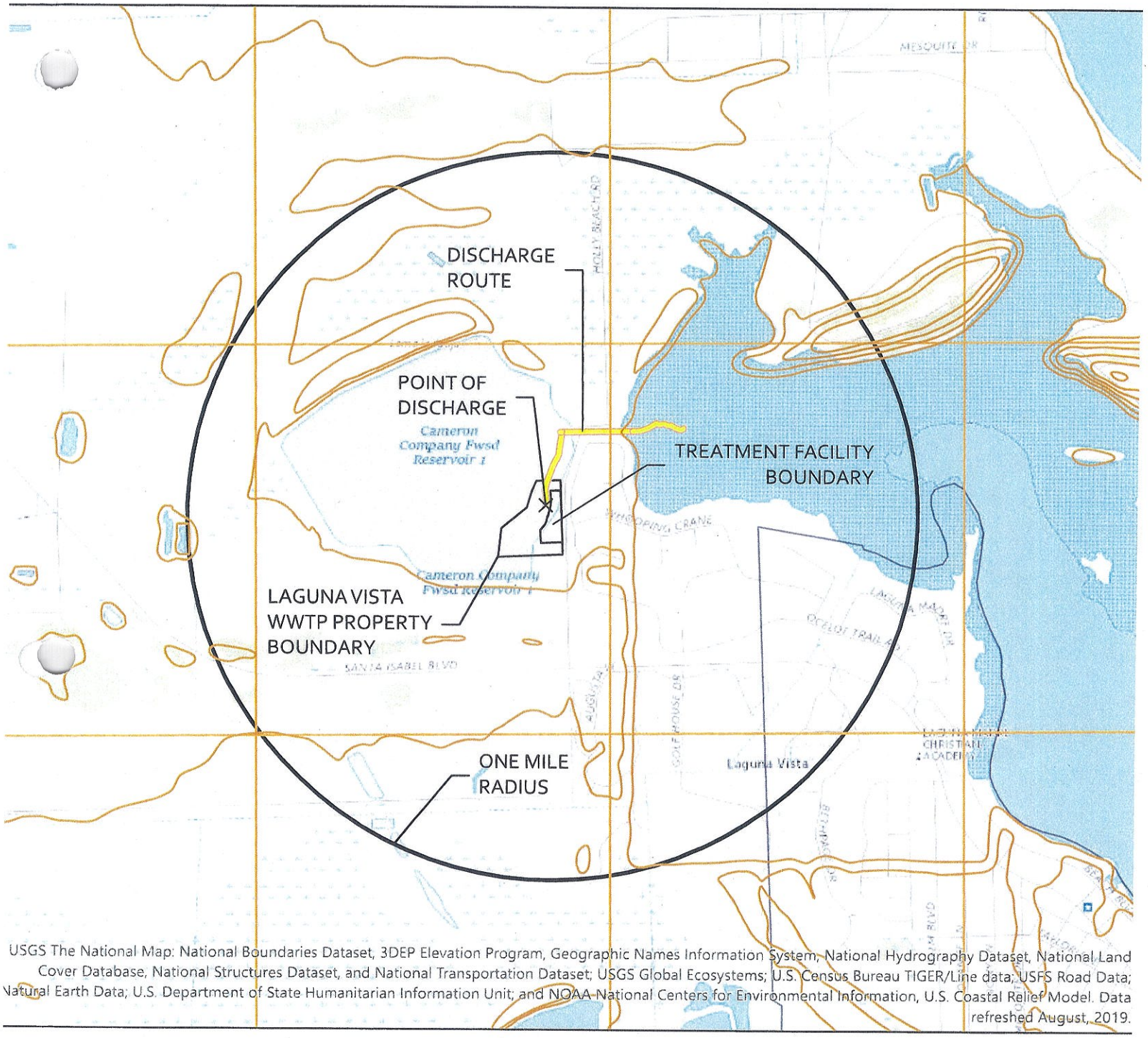
If you are subject to the alternative language notice requirements in 30 TAC Section 39.426, **you must provide a translated copy of the completed plain language summary in the appropriate alternative language as part of your application package**. For your convenience, a Spanish template has been provided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

ENGLISH TEMPLATE FOR TPDES or TLAP NEW/RENEWAL/AMENDMENT APPLICATIONS
Enter 'INDUSTRIAL' or 'DOMESTIC' here 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.

Laguna Madre Water District (CN 600647952) operates Laguna Vista Wastewater Plant (RN102077930), an Activated sludge process plant.. The facility is located at 30448 Holly Beach Rd, in Laguna Vista , Cameron County, Texas 78578. Renewal of the existing permit that authorizes the discharge of treated domestic wastewater at a daily flow not to exceed 0.65 million gallons per day (MGD).. *<<For TLAP applications include the following sentence, otherwise delete:>>* This permit will not authorize a discharge of pollutants into water in the state.

Discharges from the facility are expected to contain treated effluent. Domestic wastewater is treated by domestic wastewater making its way through one of two bar screens into an oxidation ditch, through one of two clarifiers from which waste is directed to digester, six drying beds and two chlorine contact chambers..

The National Map
US Topo



USGS The National Map: National Boundaries Dataset, 3DEP Elevation Program, Geographic Names Information System, National Hydrography Dataset, National Land Cover Database, National Structures Dataset, and National Transportation Dataset; USGS Global Ecosystems; U.S. Census Bureau TIGER/Line data; USFS Road Data; Natural Earth Data; U.S. Department of State Humanitarian Information Unit; and NOAA National Centers for Environmental Information, U.S. Coastal Relief Model. Data refreshed August, 2019.

SCALE 1:24 000

1 0.5 0 1 2
KILOMETERS

1 0.5 0 1
MILES

2,000 1,000 0 2,000 4,000 6,000 8,000 10,000
FEET

CONTOUR INTERVAL 5 FEET
NORTH AMERICAN VERTICAL DATUM OF 1988
This map was produced to conform with the
National Geospatial Program US Topo Product Standard, 2011.

Madre Water District
S Permit No. WQ0014069001
hment "A"

ATTACHMENT A

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: LAGUNA MADRE WATER DISTRICT

   Permit No. WQ00 014069001 EPA ID No. TX 0117072

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

   30448 HOLLY BEACH ROAD LAGUNA VISTA TX 78578 Located approximately 2000 feet North of FM road 510 and approximately 2.4 miles northwest of the intersection of FM road 510 and State Highway 100 in CAMERON COUNTY Texas 78578.

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: Mark A Garza

Credential (P.E, P.G., Ph.D., etc.): Wastewater Class A License

Title: Wastewater Plant Manager

Mailing Address: 105 Port Road

City, State, Zip Code: Port Isabel, Tx 78578

Phone No.: 956-943-2626- Ext.: 610 Fax No.: 956-943-6827

E-mail Address: mgarza@lmwd.org

2. List the county in which the facility is located: Cameron
3. If the property is publicly owned and the owner is different than the permittee/applicant, please list the owner of the property.

Not Applicable

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.

Wastewater treatment plant effluent discharges into channel within 150.02-acre discharge easement located on Cameron County FWSD #1 reservoir; thence across reservoir's spillway; thence through cross- culvert under holly beach road into open channel within 50-ft. wide utility easement' thence to the Lower Laguna Madre in segment no. 2491 of the bay and estuaries (laguna Vista Code).

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):

No construction is proposed with this permit renewal.

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

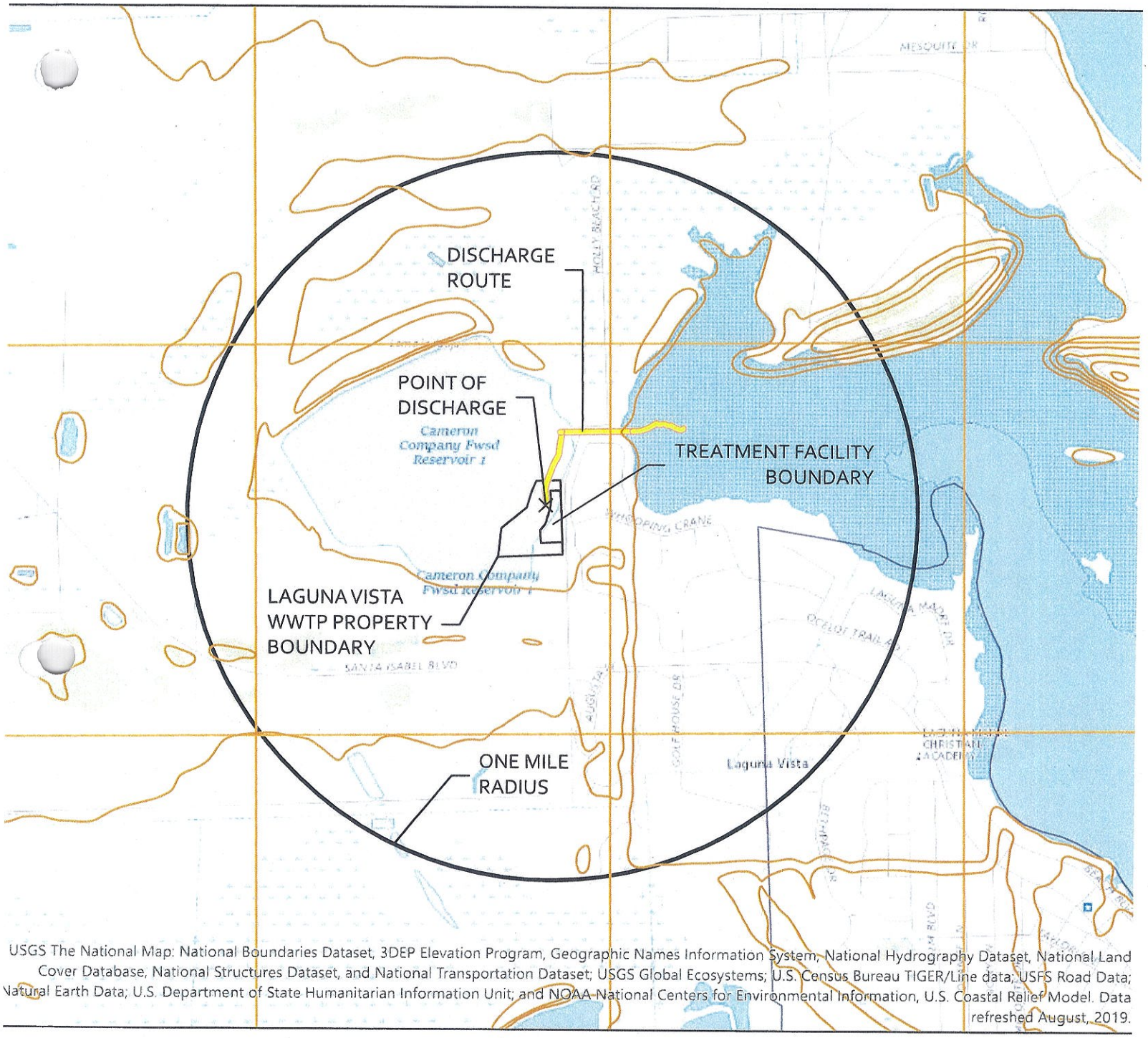
Existing structures will remain in place and in operation. Remainder of site is covered with native grasses/bush that is mowed during regular ground maintenance activity.

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:

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

The National Map
US Topo



USGS The National Map: National Boundaries Dataset, 3DEP Elevation Program, Geographic Names Information System, National Hydrography Dataset, National Land Cover Database, National Structures Dataset, and National Transportation Dataset; USGS Global Ecosystems; U.S. Census Bureau TIGER/Line data; USFS Road Data; Natural Earth Data; U.S. Department of State Humanitarian Information Unit; and NOAA National Centers for Environmental Information, U.S. Coastal Relief Model. Data refreshed August, 2019.

SCALE 1:24 000

1 0.5 0 1 2
KILOMETERS

1 0.5 0 1
MILES

2,000 1,000 0 2,000 4,000 6,000 8,000 10,000
FEET

CONTOUR INTERVAL 5 FEET
NORTH AMERICAN VERTICAL DATUM OF 1988
This map was produced to conform with the
National Geospatial Program US Topo Product Standard, 2011.

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

DOMESTIC WASTEWATER PERMIT APPLICATION TECHNICAL REPORT 1.0

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

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

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

A. Existing/Interim I Phase

Design Flow (MGD): 0.65

2-Hr Peak Flow (MGD): 2.6

Estimated construction start date: N/A

Estimated waste disposal start date: N/A

B. Interim II Phase

Design Flow (MGD): N/A

2-Hr Peak Flow (MGD): N/A

Estimated construction start date: N/A

Estimated waste disposal start date: N/A

C. Final Phase

Design Flow (MGD): N/A

2-Hr Peak Flow (MGD): N/A

Estimated construction start date: N/A

Estimated waste disposal start date: N/A

D. Current Operating Phase

Provide the startup date of the facility: May 2005

Section 2. Treatment Process (Instructions Page 43)

A. Current Operating Phase

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

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

See attachment TR-1.0(2)(A)

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)
Preliminary treatment- bar screen	2	57'' X 39'' X 4'
Aeration Basin-Oxidation Ditch	1	120 ft X 80 ft X 9 ft
Secondary Clarification- Clarifiers	2	46.00 ft diameter X 12.00 ft
Aerobic Digestion-Air basin No.1	1	44.00 ft X 22.0 ft X 14.00 ft
Chlorination for disinfection	2	22.00 ft X 11.00 ft X 10.00 ft
Dewatering – sludge drying beds	6	85 ft X 27 ft X 2 ft

C. Process Flow Diagram

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

Attachment: 2.c.process flow Diagram

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

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

- Latitude: 26.118428 N
- Longitude: 97.315216 W

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: Site Drawing

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

Land within Laguna Madre Water District boundaries including Town of Laguna Vista with option to direct Laguna Heights, Cameron County Texas, including Port Isabel High School and Junior High to wastewater treatment facility.

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
Town of Laguna Vista	LMWD	**Publicly Owned**	3,869
		Choose an item.	
		Choose an item.	
		Choose an item.	

Section 4. Unbuilt Phases (Instructions Page 45)

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

☐ Yes ☒ No

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

☐ Yes ☐ No

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

Click to enter text.

Section 5. Closure Plans (Instructions Page 45)

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

☐ Yes ☒ No

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

☐ Yes ☐ No

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

Click to enter text.

Section 6. Permit Specific Requirements (Instructions Page 45)

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

A. Summary transmittal

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

☒ Yes ☐ No

If yes, provide the date(s) of approval for each phase: May 2, 2005

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*.

Item 7. Modification to the spillway results in discharge from reservoir to Laguna Vista cove portion of the Laguna Madre on a regular basis. Samples are taken twice weekly and submitted on a monthly basis to the standards implementation team (MC-150).

D. Grit and grease treatment

1. Acceptance of grit and grease waste

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

☐ Yes ☒ No

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

2. Grit and grease processing

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

Click to enter text.

3. Grit disposal

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

☐ Yes ☐ No

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

Describe the method of grit disposal.

Click to enter text.

4. *Grease and decanted liquid disposal*

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

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

Click to enter text.

E. Stormwater management

1. *Applicability*

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

☐ Yes ☒ No

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

☐ Yes ☒ No

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

2. *MSGP coverage*

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

☐ Yes ☐ No

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

TXR05 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.

Click to enter text.

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

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

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

☐ Yes ☒ No

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

Click to enter text.

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

Is the facility in operation?

☒ Yes ☐ No

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

If yes, provide effluent analysis data for the listed pollutants. ***Wastewater treatment facilities*** complete Table 1.0(2). **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	4.07	2.00	1	Grab	12/12/24 9:00:00
Total Suspended Solids, mg/l	6.06	2.82	1	Grab	12/12/24 9:00:00
Ammonia Nitrogen, mg/l	<0.020	0.020	1	Grab	12/12/24 9:00:00
Nitrate Nitrogen, mg/l	36.5	.100	1	Grab	12/12/24 9:00:00
Total Kjeldahl Nitrogen, mg/l	0.285	0.050	7	Grab	12/12/24 9:00:00
Sulfate, mg/l	1570	150	1	Grab	12/12/24 9:00:00
Chloride, mg/l	5290	150	1	Grab	12/12/24 9:00:00
Total Phosphorus, mg/l	2.48	0.150	1	Grab	12/12/24 9:00:00
pH, standard units	7.15	7.15	0	On site	12/12/24 9:00:00
Dissolved Oxygen*, mg/l	7.7	7.7	0	On site	12/12/24 9:00:00
Chlorine Residual, mg/l	2.4	3.6	1	On site	December 2024
E.coli (CFU/100ml) freshwater	0	0	2	On site	12/18/24 11 :30 :00
Entercocci (CFU/100ml) saltwater	N/A	N/A	N/A	N/A	N/A
Total Dissolved Solids, mg/l	8260	100	1	Grab	12/12/24 9:00:00
Electrical Conductivity, µmohs/cm, †	12800	12800	1	Grab	12/12/24 9:00:00
Oil & Grease, mg/l	<4.21	4.21	1	Grab	12/12/24 9:00:00
Alkalinity ($CaCO_3$)*, mg/l	72.4	1.00	1	Grab	12/12/24 9:00:00

*TPDES permits only
†TLAP permits only

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

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

Section 8. Facility Operator (Instructions Page 50)

Facility Operator Name: Mark A. Garza

Facility Operator's License Classification and Level: Class A Wastewater Treatment Operator

Facility Operator's License Number: WW0029914

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

A. WWTP's Biosolids Management Facility Type

Check all that apply. See instructions for guidance

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

B. WWTP's Biosolids Treatment Process

Check all that apply. See instructions for guidance.

- ☒ Aerobic Digestion
- ☒ Air Drying (or sludge drying beds)
- ☐ Lower Temperature Composting
- ☐ Lime Stabilization
- ☐ Higher Temperature Composting
- ☐ Heat Drying
- ☐ Thermophilic Aerobic Digestion
- ☐ Beta Ray Irradiation

- ☐ Gamma Ray Irradiation
- ☐ Pasteurization
- ☐ Preliminary Operation (e.g. grinding, de-gritting, blending)
- ☐ Thickening (e.g. gravity thickening, centrifugation, filter press, vacuum filter)
- ☐ Sludge Lagoon
- ☐ Temporary Storage (< 2 years)
- ☐ Long Term Storage (>= 2 years)
- ☐ Methane or Biogas Recovery
- ☐ Other Treatment Process: Click to enter text.

C. Biosolids Management

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

Biosolids Management

Management Practice	Handler or Preparer Type	Bulk or Bag Container	Amount (dry metric tons)	Pathogen Reduction Options	Vector Attraction Reduction Option
Other	Off-site Third-Party Handler or Preparer	Bulk		Class B: PSRP Air Drying	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): Click to enter text.

D. Disposal site

Disposal site name: Port Isabel Wastewater Treatment Facility

TCEQ permit or registration number: WQ0010350001

County where disposal site is located: Cameron

E. Transportation method

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

Name of the hauler: Denali

Hauler registration number: 24979

Sludge is transported as a:

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

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

A. Beneficial use authorization

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

☐ Yes ☒ No

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

☐ Yes ☐ No

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

☐ Yes ☐ No

B. Sludge processing authorization

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

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

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

☐ Yes ☐ No

Section 11. Sewage Sludge Lagoons (Instructions Page 53)

Does this facility include sewage sludge lagoons?

☐ Yes ☒ No

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

A. Location information

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

- Original General Highway (County) Map:

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

  Attachment: Click to enter text.

- Federal Emergency Management Map:

  Attachment: Click to enter text.

- Site map:

  Attachment: Click to enter text.

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

- ☐ Overlap a designated 100-year frequency flood plain
- ☐ Soils with flooding classification
- ☐ Overlap an unstable area
- ☐ Wetlands
- ☐ Located less than 60 meters from a fault
- ☐ None of the above

Attachment: Click to enter text.

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

Click to enter text.

B. Temporary storage information

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

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

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

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

Phosphorus, mg/kg: Click to enter text.

Potassium, mg/kg: Click to enter text.

pH, standard units: Click to enter text.

Ammonia Nitrogen mg/kg: Click to enter text.

Arsenic: Click to enter text.

Cadmium: Click to enter text.

Chromium: Click to enter text.

Copper: Click to enter text.

Lead: Click to enter text.

Mercury: Click to enter text.

Molybdenum: Click to enter text.

Nickel: Click to enter text.

Selenium: Click to enter text.

Zinc: Click to enter text.

Total PCBs: Click to enter text.

Provide the following information:

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

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

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

C. Liner information

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

☐ Yes ☐ No

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

Click to enter text.

D. Site development plan

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

Click to enter text.

Attach the following documents to the application.

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

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

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

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

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

  Attachment: Click to enter text.

- Procedures to prevent the occurrence of nuisance conditions

  Attachment: Click to enter text.

E. Groundwater monitoring

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

☐ Yes ☐ No

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

Attachment: Click to enter text.

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

A. Additional authorizations

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

☒ Yes ☐ No

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

Reuse authorization No. R14069-001 - type 1 Reclaimed water is to be used to fill to golf course (off – Channel) Lakes to irrigate the golf course.

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:

Click to enter text.

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

A. RCRA hazardous wastes

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

☐ Yes ☒ No

B. Remediation activity wastewater

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

☐ Yes ☒ No

C. Details about wastes received

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

Attachment: Click to enter text.

Section 14. Laboratory Accreditation (Instructions Page 56)

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

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

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

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

CERTIFICATION:

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

Printed Name: Scott Friedman

Title: Chairman

Signature: _____

Date: _____

DOMESTIC WASTEWATER PERMIT APPLICATION TECHNICAL REPORT 1.1

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

Section 1. Justification for Permit (Instructions Page 57)

A. Justification of permit need

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

Click to enter text.

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: Click to enter text.

If yes, attach correspondence from the city.

Attachment: Click to enter text.

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

Attachment: Click to enter text.

2. *Utility CCN areas*

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

☐ Yes ☐ No

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

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: Click to enter text.

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

Attachment: Click to enter text.

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

Attachment: Click to enter text.

Section 2. Proposed Organic Loading (Instructions Page 59)

Is this facility in operation?

☒ Yes ☐ No

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

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

A. Current organic loading

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

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

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

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

Click to enter text.

B. Proposed organic loading

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

Table 1.1(1) – Design Organic Loading

Source	Total Average Flow (MGD)	Influent BOD5 Concentration (mg/l)
Municipality		
Subdivision		
Trailer park – transient		
Mobile home park		
School with cafeteria and showers		
School with cafeteria, no showers		
Recreational park, overnight use		
Recreational park, day use		
Office building or factory		
Motel		
Restaurant		
Hospital		
Nursing home		
Other		
TOTAL FLOW from all sources		
AVERAGE BOD_5 from all sources		

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

A. Existing/Interim I Phase Design Effluent Quality

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

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

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

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

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

Other: Click to enter text.

B. Interim II Phase Design Effluent Quality

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

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

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

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

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

Other: Click to enter text.

C. Final Phase Design Effluent Quality

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

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

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

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

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

Other: Click to enter text.

D. Disinfection Method

Identify the proposed method of disinfection.

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

Dechlorination process: Click to enter text.

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

☐ Other: Click to enter text.

Section 4. Design Calculations (Instructions Page 59)

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

Attachment: Click to enter text.

Section 5. Facility Site (Instructions Page 60)

A. 100-year floodplain

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

☐ Yes ☐ No

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

Click to enter text.

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

Click to enter text.

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

☐ Yes ☐ No

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

☐ Yes ☐ No

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

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

B. Wind rose

Attach a wind rose: Click to enter text.

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

A. Beneficial use authorization

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

☐ Yes ☐ No

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

B. Sludge processing authorization

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

☐ Sludge Composting

☐ Marketing and Distribution of sludge

☐ Sludge Surface Disposal or Sludge Monofill

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

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

Attach a solids management plan to the application.

Attachment: Click to enter text.

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 64)

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

☐ Yes ☒ No

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

Owner of the drinking water supply: Click to enter text.

Distance and direction to the intake: Click to enter text.

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

Attachment: Click to enter text.

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

Does the facility discharge into tidally affected waters?

☒ Yes ☐ No

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

A. Receiving water outfall

Width of the receiving water at the outfall, in feet: Approximately 3,150 feet

B. Oyster waters

Are there oyster waters in the vicinity of the discharge?

☐ Yes ☒ No

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

Click to enter text.

C. Sea grasses

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

☐ Yes ☒ No

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

Click to enter text.

Section 3. Classified Segments (Instructions Page 64)

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

☐ Yes ☒ No

If yes, this Worksheet is complete.

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

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

Name of the immediate receiving waters: City of Port Isabel Reservoir

A. Receiving water type

Identify the appropriate description of the receiving waters.

☐ Stream

☐ Freshwater Swamp or Marsh

☒ Lake or Pond

Surface area, in acres: 218

Average depth of the entire water body, in feet: 0-0.5 Feet

Average depth of water body within a 500-foot radius of discharge point, in feet: 0.5 Feet

☐ 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.

None

D. Downstream characteristics

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

☐ Yes ☒ No

If yes, discuss how.

Click to enter text.

E. Normal dry weather characteristics

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

Reservoir has minimal depth; Soil is saturated by discharge of treated effluent and stormwater runoff. Shallow, man-made channel in sandy soil is now in place for a distance of about 1,145 Feet within existing reservoir to direct flow from outfall to spillway. Existing, 35 Ft wide man-made channel remains in place from spillway to Laguna Vista cove portion of the Laguna Madre.

Date and time of observation: 01/02/25 at 1:45 pm

Was the water body influenced by stormwater runoff during observations?

☒ Yes ☐ No

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

A. Upstream influences

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

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

B. Waterbody uses

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

- ☒ Livestock watering
- ☐ Irrigation withdrawal
- ☐ Fishing
- ☐ Domestic water supply
- ☐ Park activities
- ☐ Contact recreation
- ☐ Non-contact recreation
- ☐ Navigation
- ☐ Industrial water supply
- ☐ Other(s), specify: Click to enter text.

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 66)

Date of study: Click to enter text. Time of study: Click to enter text.

Stream name: Click to enter text.

Location: Click to enter text.

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 66)

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 66)

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 68)

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 68)

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 68)

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 68)

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 68)

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 69)

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 69)

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 70)

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 71)

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 72)

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 73)

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 74)

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 74)

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 75)

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 75)

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 75)

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 76)

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 76)

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 76)

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 78)

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

Grab ☒ Composite ☐

Date and time sample(s) collected: 12/12/24 at 9:00:00

Table 4.0(1) – Toxics Analysis

Pollutant	AVG Effluent Conc. (µg/l)	MAX Effluent Conc. (µg/l)	Number of Samples	MAL (µg/l)
Acrylonitrile	<0.0020	0.0020	1	50
Aldrin	<0.00000972	0.00000972	1	0.01
Aluminum	0.0239	0.0239	1	2.5
Anthracene	<0.000962	0.000962	1	10
Antimony	0.00168	0.00168	1	5
Arsenic	0.00782	0.00782	1	0.5
Barium	0.0474	0.0474	1	3
Benzene	<0.0010	0.0010	1	10
Benzidine	<0.00144	0.00144	1	50
Benzo(a)anthracene	<0.000962	0.000962	1	5
Benzo(a)pyrene	<0.000962	0.000962	1	5
Bis(2-chloroethyl)ether	<0.000962	0.000962	1	10
Bis(2-ethylhexyl)phthalate	<0.00722	0.00722	1	10
Bromodichloromethane	<0.0010	0.0010	1	10
Bromoform	0.2080	0.2080	1	10
Cadmium	<0.0005	0.0005	1	1
Carbon Tetrachloride	<0.0010	0.0010	1	2
Carbaryl	<0.00243	0.00243	1	5
Chlordane*	<0.000194	0.000194	1	0.2
Chlorobenzene	<0.0010	0.0010	1	10

Pollutant	AVG Effluent Conc. (µg/l)	MAX Effluent Conc. (µg/l)	Number of Samples	MAL (µg/l)
Chlorodibromomethane	0.00799	0.00799	1	10
Chloroform	<0.0010	0.0010	1	10
Chlorpyrifos	<0.0000486	0.0000486	1	0.05
Chromium (Total)	<0.001	0.001	1	3
Chromium (Tri) **(*1)**	<0.003	0.003	1	N/A
Chromium (Hex)	<0.0030	0.0030	1	3
Copper	0.0185	0.00155	1	2
Chrysene	<0.000962	0.000962	1	5
p-Chloro-m-Cresol	<0.000962	0.000962	1	10
4,6-Dinitro-o-Cresol	<0.00962	0.00962	1	50
p-Cresol	<0.0077	0.0077	1	10
Cyanide **(*2)**	0.0126	0.00005	1	10
4,4'- DDD	<0.00000972	0.00000972	1	0.1
4,4'- DDE	<0.00000972	0.00000972	1	0.1
4,4'- DDT	<0.00000972	0.00000972	1	0.02
2,4-D	<0.000545	0.000545	1	0.7
Demeton (O and S)	<0.0000486	0.0000486	1	0.20
Diazinon	<0.0000486	0.0000486	1	0.5/0.1
1,2-Dibromoethane	<0.0010	0.0010	1	10
m-Dichlorobenzene	<0.0010	0.0010	1	10
o-Dichlorobenzene	<0.0010	0.0010	1	10
p-Dichlorobenzene	<0.0010	0.0010	1	10
3,3'-Dichlorobenzidine	<0.00192	0.00192	1	5
1,2-Dichloroethane	<0.0010	0.0010	1	10
1,1-Dichloroethylene	<0.0010	0.0010	1	10
Dichloromethane	<0.0020	0.0020	1	20
1,2-Dichloropropane	<0.0011	0.0011	1	10
1,3-Dichloropropene	<0.0010	0.0010	1	10
Dicofol	<0.0000486	0.0000486	1	1
Dieldrin	<0.00000972	0.00000972	1	0.02
2,4-Dimethylphenol	<0.000962	0.000962	1	10
Di-n-Butyl Phthalate	<0.00722	0.00722	1	10
Diuron	<0.0000437	0.0000437	1	0.09

Pollutant	AVG Effluent Conc. (µg/l)	MAX Effluent Conc. (µg/l)	Number of Samples	MAL (µg/l)
Endosulfan I (alpha)	<0.00000972	0.00000972	1	0.01
Endosulfan II (beta)	<0.00000972	0.00000972	1	0.02
Endosulfan Sulfate	<0.00000972	0.00000972	1	0.1
Endrin	<0.00000972	0.00000972	1	0.02
Ethylbenzene	<0.0010	0.0010	1	10
Fluoride	<0.500	0.500	1	500
Guthion	<0.0000486	0.0000486	1	0.1
Heptachlor	<0.00000972	0.00000972	1	0.01
Heptachlor Epoxide	<0.00000972	0.00000972	1	0.01
Hexachlorobenzene	<0.000962	0.000962	1	5
Hexachlorobutadiene	<0.000991	0.000991	1	10
Hexachlorocyclohexane (alpha)	<0.00000972	0.00000972	1	0.05
Hexachlorocyclohexane (beta)	<0.00000972	0.00000972	1	0.05
gamma-Hexachlorocyclohexane (Lindane)	<0.00000972	0.00000972	1	0.05
Hexachlorocyclopentadiene	<0.000962	0.000962	1	10
Hexachloroethane	<0.00192	0.00192	1	20
Hexachlorophene	<0.00242	0.00242	1	10
Lead	<0.0005	0.0005	1	0.5
Malathion	<0.0000486	0.0000486	1	0.1
Mercury	<0.00000426	0.0000426	1	0.005
Methoxychlor	<0.00000972	0.00000972	1	2
Methyl Ethyl Ketone	<0.0100	0.0100	1	50
Mirex	<0.00000972	0.00000972	1	0.02
Nickel	0.00619	0.00619	1	2
Nitrate-Nitrogen	36.5	36.5	1	100
Nitrobenzene	<0.000962	0.000962	1	10
N-Nitrosodiethylamine	<0.000962	0.000962	1	20
N-Nitroso-di-n-Butylamine	<0.000962	0.000962	1	20
Nonylphenol	<0.0323	0.0323	1	333
Parathion (ethyl)	<0.0000486	0.0000486	1	0.1
Pentachlorobenzene	<0.000962	0.000962	1	20
Pentachlorophenol	<0.00481	0.00481	1	5

Pollutant	AVG Effluent Conc. (µg/l)	MAX Effluent Conc. (µg/l)	Number of Samples	MAL (µg/l)
Phenanthrene	<0.000962	0.000962	1	10
Polychlorinated Biphenyls (PCB's) **(*3)**	N/A	N/A		0.2
Pyridine	<0.0013	0.0013	1	20
Selenium	<0.002	0.002	1	5
Silver	<0.0002	0.0002	1	0.5
1,2,4,5-Tetrachlorobenzene	<0.000991	0.000991	1	20
1,1,2,2-Tetrachloroethane	<0.0020	0.0020	1	10
Tetrachloroethylene	<0.0010	0.0010	1	10
Thallium	0.0011	0.0005	1	0.5
Toluene	<0.0010	0.0010	1	10
Toxaphene	<0.000194	0.000194	1	0.3
2,4,5-TP (Silvex)	<0.0000003	0.0000003	1	0.3
Tributyltin (see instructions for explanation)	<0.00000674	0.00000674	1	0.01
1,1,1-Trichloroethane	<0.0010	0.0010	1	10
1,1,2-Trichloroethane	<0.0020	0.0020	1	10
Trichloroethylene	<0.0010	0.0010	1	10
2,4,5-Trichlorophenol	<0.00481	0.00481	1	50
TTHM (Total Trihalomethanes)	0.21599	0.002	1	10
Vinyl Chloride	<0.00104	0.00104	1	10
Zinc	0.0332	0.005	1	5

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

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

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

Section 2. Priority Pollutants

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

Grab ☒ Composite ☐

Date and time sample(s) collected: 12/12/24 9:00:00

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	0.00168	0.001	1	5
Arsenic	0.00782	0.0005	1	0.5
Beryllium	<0.0005	0.0005	1	0.5
Cadmium	<0.0005	0.0005	1	1
Chromium (Total)	<0.001	0.001	1	3
Chromium (Hex)	<0.0030	0.0030	1	3
Chromium (Tri) **(*1)**	<0.003	0.003	1	N/A
Copper	0.0185	0.0185	1	2
Lead	<0.0005	0.0005	1	0.5
Mercury	<0.00000426	0.00000426	1	0.005
Nickel	0.00619	0.001	1	2
Selenium	<0.002	0.002	1	5
Silver	<0.0002	0.0002	1	0.5
Thallium	0.0011	0.0011	1	0.5
Zinc	0.0332	0.005	1	5
Cyanide **(*2)**	0.00126	0.005	1<	10
Phenols, Total	0.024	0.005	1	10

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

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

Table 4.0(2)B – Volatile Compounds

Pollutant	AVG Effluent Conc. (µg/l)	MAX Effluent Conc. (µg/l)	Number of Samples	MAL (µg/l)
Acrolein	<0.0040	0.0040	1	50
Acrylonitrile	<0.0020	0.0020	1	50
Benzene	<0.0010	0.0010	1	10
Bromoform	0.2080	0.0020	1	10
Carbon Tetrachloride	<0.0010	0.0010	1	2
Chlorobenzene	<0.0010	0.0010	1	10
Chlorodibromomethane	0.00799	0.0010	1	10
Chloroethane	<0.0050	0.0050	1	50
2-Chloroethylvinyl Ether	<0.0050	0.0050	1	10
Chloroform	<0.0010	0.0010	1	10
Dichlorobromomethane [Bromodichloromethane]	<0.0010	0.0010	1	10
1,1-Dichloroethane	<0.0010	0.0010	1	10
1,2-Dichloroethane	<0.0010	0.0010	1	10
1,1-Dichloroethylene	<0.0010	0.0010	1	10
1,2-Dichloropropane	<0.00101	0.00101	1	10
1,3-Dichloropropylene [1,3-Dichloropropene]	<0.0010	0.0010	1	10
1,2-Trans-Dichloroethylene	<0.0010	0.0010	1	10
Ethylbenzene	<0.0010	0.0010	1	10
Methyl Bromide	<0.00101	0.00101	1	50
Methyl Chloride	<0.0010	0.0010	1	50
Methylene Chloride	<0.0010	0.0010	1	20
1,1,2,2-Tetrachloroethane	<0.0020	0.0020	1	10
Tetrachloroethylene	<0.0010	0.0010	1	10
Toluene	<0.0010	0.0010	1	10
1,1,1-Trichloroethane	<0.0010	0.0010	1	10
1,1,2-Trichloroethane	<0.0020	0.0020	1	10
Trichloroethylene	<0.0010	0.0010	1	10
Vinyl Chloride	<0.00104	0.00104	1	10

Table 4.0(2)C – Acid Compounds

Pollutant	AVG Effluent Conc. (µg/l)	MAX Effluent Conc. (µg/l)	Number of Samples	MAL (µg/l)
2-Chlorophenol	<0.000962	0.000962	1	10
2,4-Dichlorophenol	<0.000962	0.000962	1	10
2,4-Dimethylphenol	<0.000962	0.000962	1	10
4,6-Dinitro-o-Cresol	<0.000962	0.000962	1	50
2,4-Dinitrophenol	<0.00192	0.00192	1	50
2-Nitrophenol	<0.000962	0.000962	1	20
4-Nitrophenol	<0.000962	0.000962	1	50
P-Chloro-m-Cresol	<0.000962	0.000962	1	10
Pentalchlorophenol	<0.00481	0.00481	1	5
Phenol	<0.000962	0.000962	1	10
2,4,6-Trichlorophenol	<0.00192	0.00192	1	10

Table 4.0(2)D – Base/Neutral Compounds

Pollutant	AVG Effluent Conc. (µg/l)	MAX Effluent Conc. (µg/l)	Number of Samples	MAL (µg/l)
Acenaphthene	<0.000962	0.000962	1	10
Acenaphthylene	<0.000962	0.000962	1	10
Anthracene	<0.000962	0.000962	1	10
Benzidine	<0.00144	0.00144	1	50
Benzo(a)Anthracene	<0.000962	0.000962	1	5
Benzo(a)Pyrene	<0.000962	0.000962	1	5
3,4-Benzofluoranthene	<0.000962	0.000962	1	10
Benzo(ghi)Perylene	<0.000962	0.000962	1	20
Benzo(k)Fluoranthene	<0.000962	0.000962	1	5
Bis(2-Chloroethoxy)Methane	<0.000962	0.000962	1	10
Bis(2-Chloroethyl)Ether	<0.000962	0.000962	1	10
Bis(2-Chloroisopropyl)Ether	<0.000962	0.000962	1	10
Bis(2-Ethylhexyl)Phthalate	<0.00722	0.00722	1	10
4-Bromophenyl Phenyl Ether	<0.000962	0.000962	1	10
Butyl benzyl Phthalate	<0.00722	0.00722	1	10
2-Chloronaphthalene	<0.000962	0.000962	1	10
4-Chlorophenyl phenyl ether	<0.000962	0.000962	1	10
Chrysene	<0.000962	0.000962	1	5
Dibenzo(a,h)Anthracene	<0.000962	0.000962	1	5
1,2-(o)Dichlorobenzene	<0.00481	0.00481	1	10
1,3-(m)Dichlorobenzene	<0.00481	0.00481	1	10
1,4-(p)Dichlorobenzene	<0.00481	0.00481	1	10
3,3-Dichlorobenzidine	<0.00192	0.00192	1	5
Diethyl Phthalate	<0.00549	0.00549	1	10
Dimethyl Phthalate	<0.00462	0.00462	1	10
Di-n-Butyl Phthalate	<0.00722	0.00722	1	10
2,4-Dinitrotoluene	<0.00192	0.00192	1	10
2,6-Dinitrotoluene	<0.00192	0.00192	1	10
Di-n-Octyl Phthalate	<0.00192	0.00192	1	10
1,2-Diphenylhydrazine (as Azo-benzene)	<0.000962	0.000962	1	20
Fluoranthene	<0.000962	0.000962	1	10

Pollutant	AVG Effluent Conc. (µg/l)	MAX Effluent Conc. (µg/l)	Number of Samples	MAL (µg/l)
Fluorene	<0.000962	0.000962	1	10
Hexachlorobenzene	<0.000962	0.000962	1	5
Hexachlorobutadiene	<0.000991	0.000991	1	10
Hexachlorocyclo-pentadiene	<0.000962	0.000962	1	10
Hexachloroethane	<0.00192	0.00192	1	20
Indeno(1,2,3-cd)pyrene	<0.000962	0.000962	1	5
Isophorone	<0.000962	0.000962	1	10
Naphthalene	<0.000962	0.000962	1	10
Nitrobenzene	<0.000962	0.000962	1	10
N-Nitrosodimethylamine	<0.000962	0.000962	1	50
N-Nitrosodi-n-Propylamine	<0.000962	0.000962	1	20
N-Nitrosodiphenylamine	<0.000962	0.000962	1	20
Phenanthrene	<0.000962	0.000962	1	10
Pyrene	<0.000962	0.000962	1	10
1,2,4-Trichlorobenzene	<0.000962	0.000962	1	10

Table 4.0(2)E – Pesticides

Pollutant	AVG Effluent Conc. (µg/l)	MAX Effluent Conc. (µg/l)	Number of Samples	MAL (µg/l)
Aldrin	<0.00000972	0.00000972	1	0.01
alpha-BHC (Hexachlorocyclohexane)	<0.00000972	0.00000972	1	0.05
beta-BHC (Hexachlorocyclohexane)	<0.00000972	0.00000972	1	0.05
gamma-BHC (Hexachlorocyclohexane)	<0.00000972	0.00000972	1	0.05
delta-BHC (Hexachlorocyclohexane)	<0.00000972	0.00000972	1	0.05
Chlordane	<0.000194	0.000194	1	0.2
4,4-DDT	<0.00000972	0.00000972	1	0.02
4,4-DDE	<0.00000972	0.00000972	1	0.1
4,4,-DDD	<0.00000972	0.00000972	1	0.1
Dieldrin	<0.00000972	0.00000972	1	0.02
Endosulfan I (alpha)	<0.00000972	0.00000972	1	0.01
Endosulfan II (beta)	<0.00000972	0.00000972	1	0.02
Endosulfan Sulfate	<0.00000972	0.00000972	1	0.1
Endrin	<0.00000972	0.00000972	1	0.02
Endrin Aldehyde	<0.00000972	0.00000972	1	0.1
Heptachlor	<0.00000972	0.00000972	1	0.01
Heptachlor Epoxide	<0.00000972	0.00000972	1	0.01
PCB-1242	<0.000194	0.000194	1	0.2
PCB-1254	<0.000194	0.000194	1	0.2
PCB-1221	<0.000194	0.000194	1	0.2
PCB-1232	<0.000194	0.000194	1	0.2
PCB-1248	<0.000194	0.000194	1	0.2
PCB-1260	<0.000194	0.000194	1	0.2
PCB-1016	<0.000196	0.000196	1	0.2
Toxaphene	<0.000194	0.000194	1	0.3

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

Section 3. Dioxin/Furan Compounds

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

☐ 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	N/A	N/A	N/A	N/A	10
1,2,3,7,8 PeCDD	0.5	N/A	N/A	N/A	N/A	50
2,3,7,8 HxCDDs	0.1	N/A	N/A	N/A	N/A	50
1,2,3,4,6,7,8 HpCDD	0.01	N/A	N/A	N/A	N/A	50
2,3,7,8 TCDF	0.1	N/A	N/A	N/A	N/A	10
1,2,3,7,8 PeCDF	0.05	N/A	N/A	N/A	N/A	50
2,3,4,7,8 PeCDF	0.5	N/A	N/A	N/A	N/A	50
2,3,7,8 HxCDFs	0.1	N/A	N/A	N/A	N/A	50
2,3,4,7,8 HpCDFs	0.01	N/A	N/A	N/A	N/A	50
OCDD	0.0003	N/A	N/A	N/A	N/A	100
OCDF	0.0003	N/A	N/A	N/A	N/A	100
PCB 77	0.0001	N/A	N/A	N/A	N/A	0.5
PCB 81	0.0003	N/A	N/A	N/A	N/A	0.5
PCB 126	0.1	N/A	N/A	N/A	N/A	0.5
PCB 169	0.03	N/A	N/A	N/A	N/A	0.5
Total		N/A	N/A	N/A	N/A	

DOMESTIC WASTEWATER PERMIT APPLICATION WORKSHEET 5.0: TOXICITY TESTING REQUIREMENTS

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

This worksheet is not required minor amendments without renewal.

Section 1. Required Tests (Instructions Page 88)

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

7-day Chronic: 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 89)

A. Industrial users (IUs)

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

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

Categorical IUs:

Number of IUs: 0

Average Daily Flows, in MGD: 0

Significant IUs – non-categorical:

Number of IUs: 0

Average Daily Flows, in MGD: 0

Other IUs:

Number of IUs: 0

Average Daily Flows, in MGD: 0

B. Treatment plant interference

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

☐ Yes ☒ No

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

Click to enter text.

C. Treatment plant pass through

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

☐ Yes ☒ No

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

Click to enter text.

D. Pretreatment program

Does your POTW have an approved pretreatment program?

☐ Yes ☒ No

If yes, complete Section 2 only of this Worksheet.

Is your POTW required to develop an approved pretreatment program?

☐ Yes ☐ No

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

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

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

A. Substantial modifications

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

☐ Yes ☐ No

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

Click to enter text.

B. Non-substantial modifications

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

☐ Yes ☒ No

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

Click to enter text.

C. Effluent parameters above the MAL

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

Table 6.0(1) – Parameters Above the MAL

Pollutant	Concentration	MAL	Units	Date

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 90)

A. General information

Company Name: Click to enter text.

SIC Code: Click to enter text.

Contact name: Click to enter text.

Address: Click to enter text.

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

Telephone number: Click to enter text.

Email address: Click to enter text.

B. Process information

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

Click to enter text.

C. Product and service information

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

Click to enter text.

D. Flow rate information

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

Process Wastewater:

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

Discharge Type: ☐ Continuous ☐ Batch ☐ Intermittent

Non-Process Wastewater:

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

Discharge Type: ☐ Continuous ☐ Batch ☐ Intermittent

E. Pretreatment standards

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

☐ Yes ☐ No

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

☐ Yes ☐ No

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

Category: Subcategories: Click to enter text.

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

Category: Click to enter text.

Subcategories: Click to enter text.

Category: Click to enter text.

Subcategories: Click to enter text.

Category: Click to enter text.

Subcategories: Click to enter text.

Category: Click to enter text.

Subcategories: Click to enter text.

F. Industrial user interruptions

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

☐ Yes ☐ No

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

Click to enter text.

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 92)

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)

LV STP

DESIGN DATA

INFLUENT PARAMETERS

WET WEATHER PARAMETERS		
30 Day - Average Wet Weather Flow	(mgd)	0.65
Peaking Factor		3.00
Two-Hour Peak Flow	(mgd)	1.95
Average BOD5	(mg/L)	200.00
Average TSS	(mg/L)	200.00
Average BOD5 Loading	(lbs/day)	1084.20
Average TSS Loading	(lbs/day)	1084.20
EFFLUENT PARAMETERS		
Maximum Average BOD5	(mg/L)	10.00
Maximum Average TSS	(mg/L)	15.00
Minimum Dissolved Oxygen	(mg/L)	4.00

AERATION BASIN DESIGN

AERATION BASIN		
Length	(ft)	120.00
Width	(ft)	80.00
Side Water Depth	(ft)	9.00
Volume Available	(cu. ft.)	86400.00
	(gallons)	646,272
Proposed Design Organic Loading	(lb BOD5/day/1000 cf)	12.55
State required Organic loading	(lb BOD5/day/1000 cf)	45.00
AERATION REQUIREMENTS		
Design Organic Loading	(lbs/day)	1084.20
State Air Criteria	(lb O2 required/lb BOD5	1.20
lb O2 required for BOD5	(lbs/day)	1301.04
STATE CRITERIA AIR REQM'TS	**(lbs/day)**	**1301.04**
State Coarse Bubble O2 Transfer Factor Req'mt		0.65
Clean Water Transfer Efficiency (Manufacturer)	#NAME?	10.00%
Wastewater transfer efficiency	(%)	6.50%
State Criteria for Air Requirements	(cu. ft/minute)	805.80
STATE CRITERIA AIR REQM'TS	**(cu. ft/minute)**	**805.80**

CLARIFIER DESIGN

Two-Hour Peak Flow	(mgd)	1.95
Proposed Number of Clarifiers		2.00
Proposed Diameter for each Clarifier	(ft)	46.00
Proposed Surface Area per Clarifier at Peak Flow	(sq. ft.)	1661.91
Proposed Surface Loading at Peak Flow	(gpd/sq. ft.)	586.68
State req'd Max Surface loading at Peak flow	(gpd/sq. ft.)	800.00
Proposed Surface Loading at Design Flow	(gpd/sq. ft.)	195.56
State req'd Max Surface loading at Design flow	(gpd/sq. ft.)	600.00
Proposed Side Water Depth	(ft)	12.00
Total Proposed Surface Area	(sq. ft.)	3323.81
Total Clarifier Volume	(cu. ft.)	39885.75
	(gallons)	298345.44
State required Detention Time at Peak Flow	(hours)	1.50
Actual Detention Time at Peak Flow	(hours)	3.67
State required Detention Time at Design Flow	(hours)	3.00
Actual Detention Time at Design Flow	(hours)	11.02

RETURN ACTIVATED SLUDGE UNDERFLOW RATE

Under Flow Rate	(gpd/sq. ft. of clarifier)	400.00
RAS Flow for each Clarifier	(gpd)	1329525.12
	(gpm)	923.28
Proposed Maximum RAS Flow per Clarifier	(gpm)	780.00

AEROBIC DIGESTERS VOLUME

AEROBIC DIGESTER BASIN NO. 1		
Length of Basin	(ft)	44.00
Width of Basin	(ft)	22.00
Side Water Depth	(ft)	14.00
Volume of Basin	(cu. ft.)	13552.00
	(gallons)	101368.96
Total Digestion Volume Proposed	(cu. ft.)	13552.00
	(gallons)	101368.96
SLUDGE PRODUCTION		
Influent BOD Loading	(lbs/day)	1084.20
Effluent BOD Loading	(lbs/day)	54.21
BOD Removed from Process (Sr)	(lbs/day)	1029.99
Design SRT (Om)	(Days)	8.00
Design MLSS	(mg/L)	4200.00
Aeration Volume Available	(mg)	0.101
Gross Yield Coefficient (Y)	(mg VSS/mg BOD)	0.60
Decay Coefficient (Kd)	(day-1)	0.060
Biological Solids Production(lbs VSS/day)	[Px=Y*Sr/(1+(Kd*Om)	417.56
% Non-Volatile SS from influent SS(INV)	(%)	45%
Non-Volatile SS into Process (INV)	(lbs/day)	487.89
Effluent SS (Et)	(lbs/day)	81.32
Waste Activated Sludge Production (WASt)	(lbs/day)	824.14
Solids Yield (y)	(lbs TSS/lbs BOD)	0.80
Total Solids Production	(lbs of TSS)	6593.11
Solids Allowed in Aeration Basin	(lbs of TSS)	3550.75
Percent of VSS in Sludge Produced	(%)	80.00%
Percent Destruction of VSS	(%)	38.00%
Sludge Produced for Dewatering	(lbs/day)	573.60
Solids % Concentration in Digesters	(%)	2.00%
Sludge Retention Time in Digesters	(Days)	29

AEROBIC DIGESTERS AIR REQUIREMENTS

State Criteria air requirements for Digesters	(scfm/1000 cu. ft.)	30.00
State Criteria air required for Digesters	**(scfm)**	**406.56**

CHLORINATION CONTACT TIME REQUIREMENTS

Peak Flow Through Chamber	(mgd)	1.95
Proposed No. of Chambers		2.00
Proposed Length of Each Chamber	(ft)	22.00
Proposed Width of Each Camber	(ft)	11.00
Proposed Surface Water Depth	(ft)	10.00
Proposed Total Chlorine Contact Volume		4840.00
	(gallons)	36203.20
State required Contact Time at Peak Flow	(minutes)	20
Proposed Contact Time at Peak Flow	(minutes)	27
Proposed Volume for Chlorination	(gallons)	36203.20
	(cu. ft.)	4840.00

CHLORINATION AIR REQUIREMENTS

DO level required before discharge	(mg/L)	4.00
lbs of O2 required in Chlorination chamber (AOR)	(lbs/day)	65.05
State Coarse Bubble O2 Transfer Factor Req'mt		0.65
Clean Water Transfer Efficiency	#NAME?	10.00%
Wastewater transfer efficiency	(%)	6.50%
AIR REQUIREMENTS FOR CHLORINATION	**(cu. ft/minute)**	**40.29**

CHLORINATOR CAPACITY REQUIREMENTS

Peak Flow	mgd	1.95
Chlorine Dosage	mg/L	10.00
Chlorinator Capacity Required at Peak Flow	lbs/day	162.63
Proposed Number of Chlorinator Feeders		2.00
Capacity fo each Chlorine Feeder	lbs/day	500.00

AIR LIFT PUMPS AIR REQUIREMENTS

Number of 6" airlift pumps		2.00
Number of 10" airlift pumps		1.00
Air requirements per 6" airlift pump	(scfm)	25.00
Air requirements per 10" airlift pump	(scfm)	100.00
Air requirements for all 6" airlift pumps	(scfm)	50.00
Air requirements for all 10" airlift pumps	(scfm)	100.00
Total air requirements for airlift pumps	(scfm)	150.00

TOTAL AIR REQUIREMENTS

AERATION REQUIREMENTS	(SCFM)	805.80
DIGESTION REQUIREMENTS	(SCFM)	406.56
CHLORINATION REQUIREMENTS	(SCFM)	40.29
AIR LIFT PUMPS REQUIREMENTS	(SCFM)	150.00
TOTAL AIR REQUIREMENTS	(SCFM)	1402.65

NOTE: AIR IS SUPPLIED BY TWO (2) BLOWERS RATED EACH AT A DESIGN FLOW OF 2000 SCFM AT 6.8 PSIG WITH 40 H.P. MOTORS. ONE (1) BLOWER WILL DELIVER 2000 SCFM WHILE THE OTHER IS ON STAND BY.

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

October 30, 2012

Mr. David H. Flinn, P.E.
Ferris & Flinn, LLC.
1405 North Stuart Place Road
Harlingen, Texas 78552

Re: Laguna Madre Water District
Reuse Authorization No. R14069-001
Cameron County
CN600647952, RN102077930

Dear Mr. Flinn:

The Texas Commission on Environmental Quality (TCEQ) has completed its review of the application for the above referenced authorization. The authorization allows the reuse of Type I wastewater effluent from the wastewater treatment facility.

We granted your request that liner requirements for the storage lagoons do not have permeability limits. The variance was granted because of the location of the lagoons in relation to the coast and that the effluent routed to the lagoons is Type I.

Thank you for your cooperation during this review process. If you have any questions, please contact Louis C. Herrin, III of my staff at louis.herrin@tceq.texas.gov or (512) 239-4552.

Sincerely,

Chris Linendoll, E.I.T., Manager
Wastewater Permitting Section
Water Quality Division

CL/LCH/sp

I. General Requirements

A. No producer or provider may transfer reclaimed water to a user without first notifying the commission.

B. Reuse of untreated wastewater is prohibited.

C. Food crops that may be consumed raw by humans must not be spray irrigated. Food crops including orchard crops that will be substantially processed prior to human consumption may be spray irrigated. Other types of irrigation that avoid contact of reclaimed water with edible portions of food crops are acceptable.

D. There must be no nuisance conditions resulting from the distribution, the use, or storage of reclaimed water.

E. Reclaimed water must not be used in a way that degrades groundwater quality to a degree adversely affecting its actual or potential uses.

F. Reclaimed water stored in ponds must be prevented from discharging into waters in the state, except for discharges directly resulting from rainfall events or in accordance with a permit issued by the commission. All other discharges are unauthorized.

G. If an overflow of a holding pond occurs causing discharge into or adjacent to water in the state, the user or provider, as appropriate, shall report the noncompliance. A written submission of pertinent information must be provided to the TCEQ Region 15 office in Harlingen and to the TCEQ Enforcement Division (MC-149) in Austin, within five (5) working days after becoming aware of the overflow. The submission must contain:

1. a description of the noncompliance and its cause;
2. the potential danger to human health or safety, or the environment;
3. the period of noncompliance, including exact dates and times;
4. if the noncompliance has not been corrected, the anticipated time it is expected to continue; and
5. steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance, and to mitigate its adverse effects.

H. Unless otherwise provided in this authorization, there must be no off-site discharge, either airborne or surface runoff of reclaimed water from the user's property except to a wastewater treatment collection system or wastewater treatment facility unless the reclaimed water user applies for and obtains a permit from the commission that authorizes discharge of the water.

I. All reclaimed water piping must be separated from potable water piping when trenched by a distance of at least nine feet for Type II effluent and four feet For Type I. All buried pipe must be manufactured in purple, painted purple, taped with purple metallic tape or bagged in purple. All exposed piping, hose bibs and faucets must be painted purple, designed to prevent connection to a standard water hose, and stenciled with a warning reading "NON-POTABLE WATER."

J. The design of any new distribution system that will convey reclaimed water to a user requires the approval of the executive director. Materials must be submitted to the executive director in accordance with the Texas Engineering Practice Act (Article 3271a, Vernon's Annotated Texas Statutes). The plans and specifications for any new

the requirement of 30 TAC §290.44(e)(4)(B), Water Line Installation—crossing lines, must be followed with the reclaimed water line substituted for the water line.

P. Reclaimed water pipes must meet the following requirements:

1. Lines that transport reclaimed water under pressure must be sized according to acceptable engineering practices for the needs of the reclaimed water users.
2. Reclaimed water force mains must have an expected life of at least as long as that of the associated lift station and must be suitable for the reclaimed water being pumped and operating pressure to which it will be subjected.
3. Pipes must be identified in the technical specifications with appropriate American Society for Testing and Materials, American National Standard Institute, or American Water Works Association standard numbers for both quality control (dimensions, tolerance, and installation such as bedding or backfill).
4. Pipes and fittings must have a minimum working pressure rating of 150 pounds per square inch.
5. Final plans and specifications must describe required pressure testing for all installed reclaimed water force mains.
6. Minimum test pressure must be 1.5 times the maximum design pressure. Allowable leakage rates must be determined as described in 30 TAC §217.97, Pressure Sewer Systems.
7. Gravity flow reclaimed water lines must meet the requirements of 30 TAC Chapter 217, Subchapter C, Conventional Collection Systems. The provider shall prevent high velocity scouring and maintain adequate fluid velocity to prevent the deposition of solids in the lines.

Q. All exposed piping and piping within a building must be either purple pipe or painted purple. All exposed piping should be stenciled in white with a warning reading "NON-POTABLE WATER". All exposed or buried reclaimed water piping constructed at a wastewater treatment facility is exempt from the color-coding requirement of this section.

R. When applicable, in accordance with 30 TAC Chapter 217, Design Criteria for Domestic Wastewater Systems, the design of the distribution systems that will convey reclaimed water to a user must be submitted to the executive director and must receive an approval before the distribution system may be constructed. The design of the distribution systems must meet the criteria of 30 TAC Chapter 217, Design Criteria for Domestic Wastewater Systems. When a municipality is the plan review authority for certain sewer systems that transport primarily domestic waste, in lieu of the commission, design submittal will not be subject to submittal to the commission and instead must be approved by the municipality.

S. All ground level and elevated storage tanks must be designed, installed, and constructed in accordance with current AWWA standards with reference to materials to be used and construction practices to be followed, except for health-based standards strictly related to potable water storage and contact practices, where appropriately less restrictive standards may be applied.

a. Irrigation: golf courses,

b. Maintenance of any off channel water bodies.

2. The following conditions apply to Type I use of reclaimed water. At a minimum, the reclaimed water producer shall transfer only reclaimed water of the following quality as described for Type I reclaimed water use. Type I reclaimed water on a 30-day average must have a quality of no more than:

Table 1. Type I Quality Requirements

Parameter	Limit	Limit Type
Turbidity	3 NTUs	30-day average
$CBOD_5$	5 mg/l	30-day average
Enterococci	4/100 ml	30-day geometric mean (MPN or CFU)
Enterococci	9/100 ml	maximum single grab sample (MPN or CFU)

D. Test Procedures

1. Test procedures for the analysis of pollutants must comply with procedures specified in 30 TAC §§319.11 - 319.12. Measurements, tests, and calculations must accurately represent the reclaimed water.

2. All laboratory tests submitted to demonstrate compliance with this authorization must meet the requirements of 30 TAC Chapter 25, *Environmental Testing Laboratory Accreditation and Certification.*

IV. Sampling and Analysis

A. The reclaimed water producer shall sample the reclaimed water prior to distribution to the entity that first received the reclaimed water after it leaves the wastewater treatment facility (provider or user) to assure that the water quality meets the standard for the contracted use.

B. Analytical methods must be in compliance with 30 TAC Chapter 319, *Monitoring and Reporting.*

C. The minimum sampling and analysis frequency for Type I reclaimed water is twice per week when reclaimed water is being produced and shall be reported as outfall 800.

D. The monitoring must be done after the final treatment unit.

E. The records of the monitoring must be kept on a monthly basis and be available at the facility site for inspection by representatives of the Commission for at least five years.

V. Record Keeping and Reporting

A. The reclaimed water provider and user shall maintain records on site for a period of at least five years.

B. The producer shall maintain the following records:

1. copies of notifications made to the commission concerning reclaimed water projects;

2. as applicable, copies of contracts with each reclaimed water user (this requirement

a. sample and analyze the reclaimed water and report the analyses in accordance with Section IV, Sampling and Analysis, and Section V, Recordkeeping and Reporting; and

b. notify the executive director in writing within five (5) days after obtaining knowledge of reclaimed water use not authorized by the executive director.

2. The reclaimed water provider shall:

a. ensure construction of reclaimed water distribution systems in accordance with 30 TAC Chapter 217, Design of Domestic Wastewater Systems, and in accordance with approved plans and specifications;

b. transfer reclaimed water of at least the minimum quality required by this authorization at the point of delivery to the user;

c. notify the executive director in writing within five (5) days after obtaining knowledge of reclaimed water use not authorized by the executive director; and

d. not be found in violation of this chapter for the misuse of the reclaimed water by the user if transfer of such water is shut off promptly upon knowledge of misuse regardless of contract provisions.

3. The reclaimed water user shall:

a. use the reclaimed water in accordance with this authorization; and

b. maintain and provide records as required by Section V, Record Keeping and Reporting.

IX. Enforcement

If the producer, provider, or user fail to comply with the terms of this authorization, the executive director may take enforcement action provided by the Texas Water Code §26.019 and §26.0136.

X. Standard Provisions

A. This authorization is granted in accordance with the rules and orders of the commission and the laws of the state of Texas.

B. Acceptance of this authorization constitutes an acknowledgment and agreement that the producer, provider and user will comply with all the terms, provisions, conditions, limitations and restrictions embodied in this authorization and with the rules and other orders of the commission and the laws of the state of Texas. Agreement is a condition precedent to the granting of this authorization.

CLOTH MEDIA FILTER

PART 1 - GENERAL

1.01 DESCRIPTION

A. The Contractor shall furnish all labor, materials, tools and equipment required to furnish and install One (1) filter provided in a stainless steel tank as specified herein. Filters shall use cloth media to provide filtration of wastewater containing incoming solids from a secondary treatment process followed by or incorporating clarification. The filter shall be capable of handling a design flow of 0.30 MGD at a maximum filtration rate of 2.2 gpm/ft^2 of filter surface area. The filter shall also be able to pass the peak flow of 0.375 MGD at a maximum filtration rate of 2.75 gpm/ft^2.

B. The filter shall provide a minimum submerged filter surface area of 24 ft^2 as provided by four (4) individual filter elements, each containing two (2) cloth media panels or two (2) Cloth disk assemblies with each disk assembly comprised of six (6) individual segments. Filtering Elements shall be fixed in place or utilize rotating disks.

C. Design total backwash water volume required shall not exceed 5% of the design influent flow.

D. Each stainless steel filter tank shall be designed to withstand with a prudent safety factor all stresses that may occur during fabrication, erection, intermittent, or continuous 24 hour per day operation. The equipment and controls shall be as a complete package to ensure coordination and compatibility. Each filter unit shall be shipped fully assembled, plumbed and wired from the factory.

E. The filter equipment shall be as manufactured by Fluidyne Corporation or Aqua-Aerobic Systems, Inc.

1.02 RELATED WORK SPECIFIED ELSEWHERE

A.	YARD PIPING AND VALVES	Division 2
B.	CONCRETE	Division 3
C.	STEEL MATERIAL	Division 5
D.	FINISHES	Division 9
E.	CONTROLS	Division 13
F.	PIPING AND VALVES	Division 15

1.03 REFERENCES

A.	ASTM A-36	American Society for Testing and Materials - Structural Steel Specifications
B.	ASTM A-48	American Society for Testing and Materials - Cast Iron Specifications

1.06 OPERATION AND MAINTENANCE MANUALS

A. Operation, maintenance and installation manuals shall be provided by the equipment manufacturer as part of shipment of major filter equipment. The manual shall be contained on a CD-ROM and provide easy access to all included documents. Materials included shall conform to TCEQ or EPA Standards for O&M manuals and shall be for the specific equipment provided.

B. As a minimum each manual shall contain:
1. General arrangement drawings, detail drawings, and erection drawings.
2. Cut sheets for all items of equipment purchased from other manufacturers.
3. Installation and maintenance instructions for the specific equipment including the erection sequence, maintenance items, and trouble-shooting check points and complete lubrication procedures.
4. Pneumatic Piping and/or Wiring diagrams for all controls.
5. A recommended sequence of operations.
6. A list of the manufacturer's recommended spare parts. The list shall include: wear items, long delivery items and all items convenient for stocking as optional replacement items.

1.07 DELIVERY

A. Fabricated assemblies shall be shop assembled and shipped complete.

B. All equipment shall be installed immediately upon receipt from the manufacturer or stored in strict conformance with storage recommendations provided by the manufacturer.

1.08 PERFORMANCE REQUIREMENTS

A. The filter system (Fluidyne Model F110424 or Aqua Disk Model ADFSP-54X2E-PC) shall be capable of meeting the following performance requirements:

1.	Average Flowrate, MGD*	0.300	MGD
2.	Peak Flowrate, MGD*	0.375	MGD
3.	Average Influent TSS*	20	mg/l
4.	Average Effluent TSS*	5	mg/l
5.	Influent Turbidity	10	NTU
6.	Effluent Turbidity	3	NTU
7.	Number of filter units	One (1)	
8.	Number of media elements per filter	Four (4) or Six (6)	
9.	Submerged cloth surface area (minimum)	96 ft^2	

* Should influent characteristics fall outside stated limits, all performance criteria or guarantees shall be deemed to have been met. Average concentration based on a 24 hr composite sample.

PART 2 - PRODUCTS

2.01 GENERAL

A. Each filter shall be delivered as a complete package and include 100% stainless steel tankage, influent flanged connection, influent distribution channel, influent valves with pneumatic or electric operators, common effluent collection channel, effluent flanged connection, backwash discharge piping with flanged connection, backwash control valves with pneumatic or electric operators, control panel, level monitors, backwash pump and motors, drive assembly, gauges and associated wiring and conduits specific to the filter.

Element frame shall be held in place with simple clamps which can be loosened by hand. No tools or dewatering of the system shall be required to loosen or remove media elements or frames from the filter tankage.

F. Media element support frames shall include, integral to the internal structure, an air scour drop pipe and air release header for proper backwash function. Air header shall be easily removable along with the element frame for inspection and cleaning without discontinuing or diverting flow to the remaining online filter elements.

G. Systems that require flow to be diverted or discontinued for routine maintenance or element inspection shall require additional filters or means to store flow during inspection and media replacement.

2.04 INFLUENT DISTRIBUTION CHANNEL

A. An influent distribution header shall be provided, as an integral part of the interior of the tank, for the purpose of equally distributing the influent flow.

2.05 INFLUENT/BACKWASH DISCHARGE CHANNELS:

A. An individual channel for each filter element shall be integrated into the tank structure. Each channel will be isolated from other channels and contain flanged connection(s) for the influent/ backwash piping connection(s).

2.06 EFFLUENT CONTROL WEIR BOX

A. An effluent control box, complete with a stainless steel weir, shall be provided as an integral part of the tank, for the purpose of regulating the effluent flow and main tank water level.

2.07 PROTECTIVE COATINGS

A. All fabricated steel shall be type 304 Stainless Steel or other non-corrosive material and shall not require painting. Valve bodies and operators shall be painted with the valve manufacturer's standard coating.

2.08 PIPING

A. Influent drop pipes shall be fabricated from 304 Stainless Steel and include 125# flanges on all connections points to the tankage and equipment valves.

B. Backwash collection manifold shall be fabricated from 304 Stainless Steel and include 125# flanges on all connection points to the tankage and equipment valves.

C. All piping integral to the filter shall be factory installed and tested for leakage and proper fit prior to shipment. Piping to and from filter connection points shall be by the installing contractor and conform with applicable divisions of this specification.

2.09 OPERATION

A. A programmable controller shall be pre-programmed with the interlocks and sequence logic necessary to control all filter components during all filtering and backwash operations.

B. During automatic operation, the backwash cycle is started by the high level sensor, manual pushbutton, or pre-set timer through the controller.

C. Once initiated, the influent and backwash valves are operated in sequence allowing each filter panel to be backwashed successively.

~~AQUA DISK UNIT:~~ N/A

FILTER DISK TANK

Each tank assembly shall be 316 stainless steel. Entire tank construction shall have a minimum thickness of 10 gauge. Each tank shall be provided with an integral solids waste collection manifold. Each tank drain shall be provided with a manually operated brass ball valve. Valve shall be provided loose for installation by the installing contractor.

STAINLESS STEEL

Interior: Commercial sandblast (SSPC-SP6), painted with Devthane 379 Aliphatic Urethane Enamel (color "clear") 1 coat 2-3 mils DFT on the top 2 foot only. Exterior: Commercial sandblast (SSPC-SP6), painted with Devthane 379 Aliphatic Urethane Enamel (color "clear") 1 coat 2-3 mils DFT over the entire exterior.

DRIVE ASSEMBLY

Each filter shall include an adjustable drive assembly with a gearbox, nylon drive sprocket, acetal drive chain with 304 stainless steel link pins, and a 304 stainless steel chain guard. The gearbox shall be parallel in-line helical type, AGMA Class 1 with a 1/2 HP drive motor rated for 460 volt, 3 phase, 60 Hz. Gear reducer shall be Nord or approved equal. Drive motor shall be Nord, Weg, Baldor, or approved equal.

To reduce energy demand, the drive assembly shall rotate the disks only during backwash. Systems requiring constantly rotating disks during filtration will not be acceptable. Belt drive systems or systems with multiple drive units per filter will not be acceptable.

CENTERTUBE ASSEMBLY

Each centertube assembly shall include a minimum 3/16" thick 304 stainless steel centertube weldment, driven sprocket, wheel assemblies, 304 stainless steel disk segment rods, and frame and cloth assemblies. Each centertube assembly shall also include a Viton v-ring effluent port seal. The driven sprocket shall be multi segment made of UHMW polyethylene. All fasteners shall be stainless steel.

FILTER CLOTH ASSEMBLIES

Each basin shall include two (2) cloth disk assemblies. Each cloth disk assembly shall be comprised of six (6) individual segments, each consisting of a cloth media sock supported by an injection molded polypropylene co-polymer frame with corrosion resistant assembly hardware. Cloth/frame assemblies shall be constructed such that each segment is easily removable from the centertube, without special tools, to allow for removal and replacement of the cloth at the point of installation. Systems requiring special tools and/or the return of media segments to the factory for replacement will not be considered.

Cloths shall be of fiber pile construction having a nominal filtration rating of 10 microns. Granular media and screens having structured identical openings shall not be allowed. The pile cloth shall be free chlorine resistant cloth. Pile cloth media with nylon material of construction is not free chlorine resistant and shall not be acceptable. The cloth media shall have an active filter depth of 3 to 5 mm to provide additional collisions between solids particles and the media within the media depth, resulting in capture of solids across a broader particle range. The cloth depth shall also provide storage of captured solids, reducing backwash volumes while maintaining an operational headloss. Woven mesh or microscreen type media with no filtration depth are not acceptable.

Each filter unit shall have a total of 107.6 square feet of minimum effective submerged filtration area. Each cloth disk assembly shall have a minimum of 53.8 square feet of effective submerged filtration area. Effective submerged filtration area is defined as only the portion of the disk that is submerged during filtration. Any disk area that is not submerged shall not be considered as effective area. Each disk shall be divided into no more than six (6) segments and shall be easily removable for service.

Each filter shall include one (1), 2" solids waste valve. Valve shall be 3 piece, grooved end, ASTM A351 Grade CF8M stainless steel body, 316 stainless steel ball and stem, fullport, "installed with" painted cast iron Victaulic couplings, with a 115 volt, single phase, 60 Hz, open / close service electric actuator. Valve / actuator combination shall be TCI / RCI (RCI, a division of Rotork), Nibco, or equal. Valve actuator shall include a compartment heater and limit switch feedback to the microprocessor in both the open and closed positions.

Each filter shall include a solids waste removal system in the floor of the filter tank. The manifold shall be designed to siphon settled solids waste for discharge through the backwash/waste pump. The operation of the solids waste removal system shall be automatic with user adjustable intervals and duration through the operator interface. Filters that are designed without a solids waste removal system will not be acceptable.

INDIVIDUAL FILTER ISOLATION

Each filter shall include isolation upstream provided by the installing contractor.

PRESSURE TRANSMITTER

Furnish one IFM Effector PX series pressure transmitter unit constructed of stainless steel for each filter. Unit shall monitor the water level in the filter tank. Transmitter shall utilize a ceramic sensing element. Transmitter output shall be a 4-20 mA signal over a 0-100" liquid range. Electrical connection shall be 2-wire, loop powered through a cable comprised of 22 AWG conductors. Transmitter shall be flush mounted to the tank wall.

FLOAT SWITCH

A float switch shall be furnished to indicate emerging overflow level. The float switch shall be Anchor Scientific Model GSI 40NONC or approved equal. The float shall contain a non-mercury switch, chemical resistant polypropylene casing hermetically sealed and a PVC #18 AWG three conductor cable. Switch rating shall be minimum 4.5 amps non-inductive at 120 Vac.

VACUUM TRANSMITTER

The vacuum transmitter shall have stainless steel wetted parts and provide a 4-20 mA signal over a range of 1 standard atmosphere to full vacuum. Transmitter shall be an IFM Effector PX series or approved equal.

CONTROL SYSTEM

The automatic and manual controls for operation of the AquaDisk® system shall be furnished fully assembled, wired and pre-programmed in a NEMA 4X 316ss (14 gauge) wall rated and UL certified control enclosure. Enclosure shall include a seamless foam-in-place gasket to ensure watertight and dust-tight seal. An internal 3-point latch and 316SS padlocking Powerglide handle shall be provided. Enclosures shall be unpainted, with a smooth brushed finish. Enclosure shall include a painted white mild steel (12 gauge) sub-panel mounted with collar studs. Manufacturer shall be Hoffman or approved equal. Control panel shall be mounted to the unit.

All control panel wire shall be 16 AWG multi-strand machine tool wire (MTW) minimum, with PVC insulation.

Wiring inside the control panel shall be run in PVC wiring duct rated for continuous temperatures up to 122°F. Devices mounted in the enclosure door shall have wires run in spiral wrap to avoid pinch points when opening and closing the door.

Control components mounted internal and external to the enclosure shall be mounted with stainless steel hardware and clearly labeled with a plastic identification nametag. The tag shall be white with black lettering.

CONTROL RELAYS

UL listed control relays for general control purposes shall be supplied with a pilot light to indicate when the coil is in an energized state. The relay socket shall be panel or DIN rail mounted inside the enclosure. The relays shall provide the following ratings: 120VAC coil, 10A contact rating (thermal), 250 VAC insulation rating, 5 million mechanical life cycles and an operating temperature of -22°F to 131°F. Relays shall be Allen Bradley 700-HK, Square D, or approved equal.

GROUND FAULT DUPLEX RECEPTACLE

A UL listed ground fault circuit interrupter (GFCI) duplex receptacle shall be provided within the panel for instrument (e.g. programming terminal, modem, etc.) use only. The receptacle shall be protected with a 5 Amp circuit breaker. The receptacle shall carry a 20A / 125VAC rating. The electro-mechanical circuit interrupter shall be double-pole and trip free (GFCI protection and shall not be overridden by holding reset button). Built-in transient suppression shall protect GFCI's internal circuitry from voltage transients. Receptacle shall be Hubbell DRUBGFI20 or approved equal.

HIGH FREQUENCY NOISE FILTER

A UL listed active tracking filter shall be provided to protect the PLC and HMI power feeds from high-frequency noise and low-energy transients. It shall be designed for a single phase input voltage of 120/240VAC operating at 47 – 63 Hz. The unit shall reduce normal mode transients to plus or minus 2 volts, provide surge capacity of 45,000 amps and protect in all modes (Line to neutral, line to ground and neutral to ground). The noise filter shall be an Islatrol IC+ or approved equal.

24 VOLT DC POWER SUPPLY

A UL listed, industrial grade, compact power supply shall be supplied to provide 24 VDC power to such rated components. The power supply shall be DIN rail mounted and functional with 120 or 230 VAC (single and three phase) incoming control power. The power supply shall have a green LED which shall be illuminated when output voltage is "OK". The unit shall provide for internally fused input connections and operate in a temperature range between 14°F and 158°F. The power supply shall be an Allen-Bradley 1606 or approved equal.

OPERATOR DEVICES

UL listed operator devices (pushbutton and selector switches) shall be mounted through the control enclosure door for manual operation of the filter system. Transformer type pilot lights and illuminated pushbuttons shall be provided for indication of an operation status. Color coding shall be applied as required and is as follows:

Amber - Alarm active, caution
Green - Valve open, motor running
Red - Valve closed
White -Information

All operator devices shall be 30.5mm style, NEMA 4X rated, oil and water tight with finger safe guards located on the contact blocks to prevent accidental contact with wire connections. Operator device function shall be identified with an engraved white gravoply nameplate with black letters. Operator devices shall be Allen-Bradley 800H, Square D, or approved equal.

PROGRAMMABLE LOGIC CONTROLLER

Automatic operation of the Filter shall be controlled through a programmable logic controller (PLC) mounted inside the main control panel. The PLC components shall consist of a panel mounted controller with integral power supply and base I/O (20 DI, 12 DO, 4 AI, 2AO), and expansion discrete/analog I/O modules as required. Each controller has two serial ports with DF1/DH485/Modbus RTU/DNP3/ASCII protocol support and a built-in Ethernet port to which supports Ethernet/IP peer-to-peer messaging. The controller is also has embedded web server functionality. All input and output points supplied (including unused) shall be wired to terminal blocks. Processor design characteristics shall include: 10K user program/10K user data memory size, 0.7 ms/K typical scan time, real-time clock, battery backed RAM and an operating temperature range between -4°F and 140°F. The PLC processor shall be an Allen-Bradley MicroLogix 1400.

PART 3 - EXECUTION

3.01 GENERAL

A. The filters shall be installed in accordance with the system manufacturer's recommendations as approved by the Engineer.

B. Interconnecting piping, electrical connections, access stairways, walkways, rating and handrails shall be provided by the installing contractor as detailed on the drawings and specifications. Winterization such as piping insulation or heat tracing/heat tape shall also be provided by the contractor as specified.

C. Filter manufacturer shall provide adequate crating and protection for the filter and components for shipping to the project site. Contractor shall inspect crating and packaging for signs of damage during shipping and report any damage to the filter manufacturer prior to uncrating or removing damaged packaging. Failure to notify equipment supplier of crate or delivered damage may nullify equipment warranty.

D. Lifting and installation instructions shall be provided to the contractor as part of equipment delivery.

3.02 SERVICE

A. The filter equipment manufacturer shall provide a factory trained field service representative to inspect the installation and supervise the initial operation of the filter equipment. In addition, the field service representative shall instruct the owner's personnel in the proper operation and maintenance of the filter equipment and provide process assistance. As a minimum, the field service representative must be available for 3 days of service in 1 trip.

B. The field service representative shall submit to the Engineer a written report stating that the filter system has been checked and is suitable for operation.

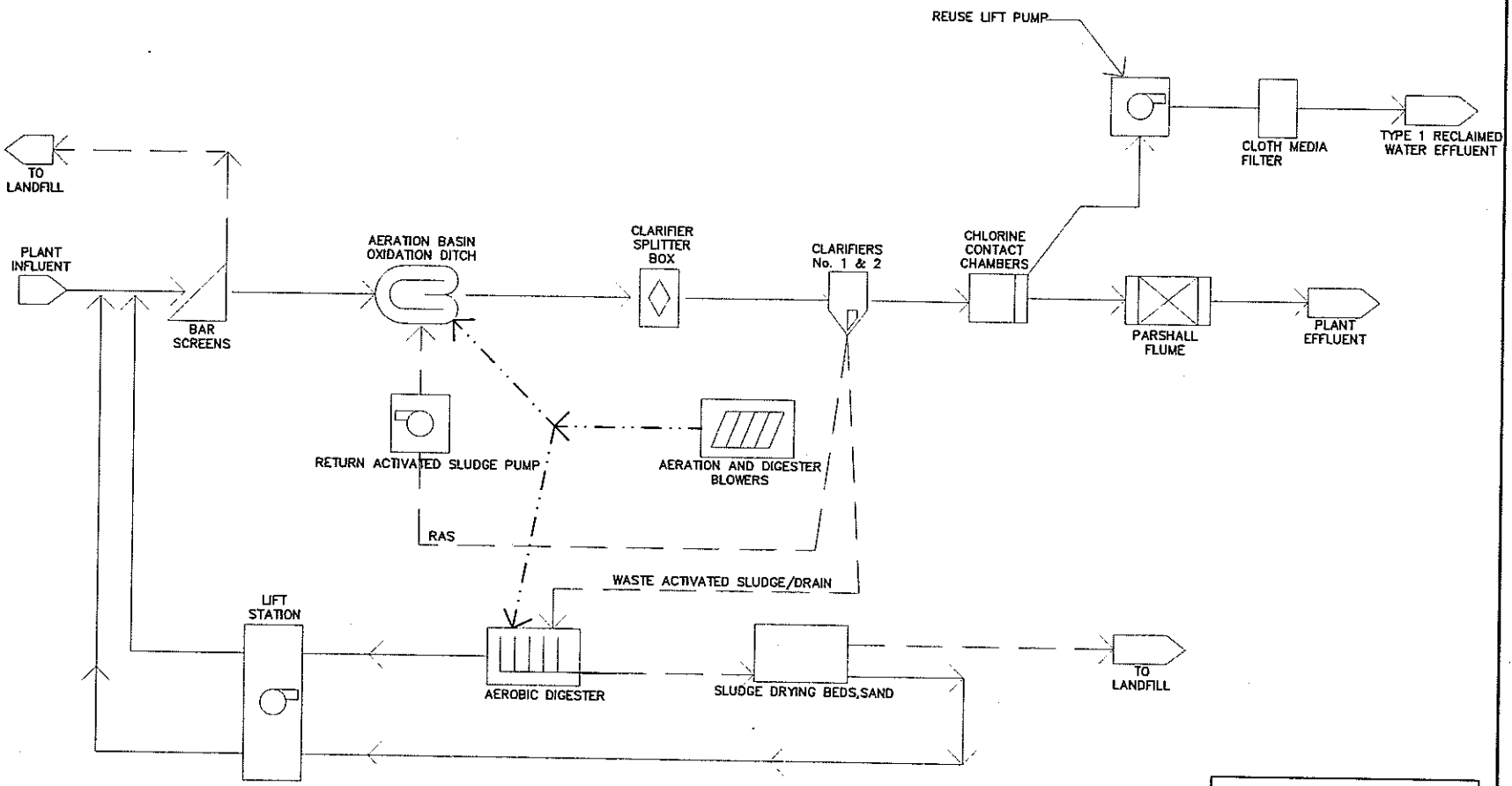
PART 4 – WARRANTY

4.01 GENERAL

A. The equipment shall materially conform to the description in this specification and contract documentation and shall be free from defects in material and workmanship. Warranty periods are 18 months from shipment or 12 months from beneficial use, whichever occurs first.

END OF SECTION 13200

LAGUNA VISTA WWTP FLOW DIAGRAM



	Sheet 1 of 1 Date 10-14-2019	LAGUNA MADRE WATER DISTRICT LAGUNA VISTA WASTEWATER TREATMENT PLANT FLOW DIAGRAM

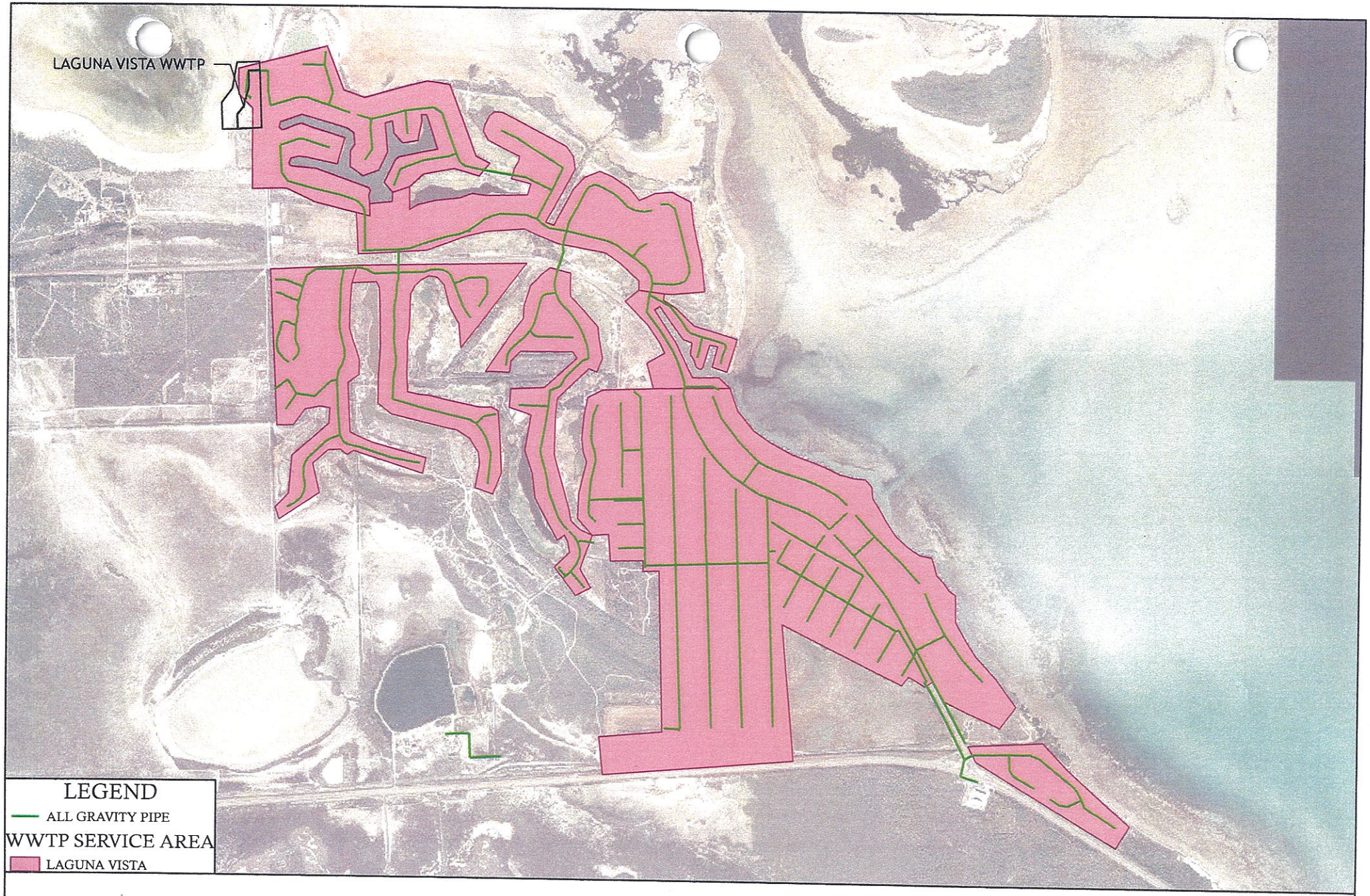
LAGUNA MADRE
105 Port Road
Port Isabel, Texas 78578

Attachment TR-1.0 (2)(A)
Laguna Madre Water District
Laguna Vista Wastewater Treatment Facility
Treatment Process Description

The Laguna Vista Wastewater Treatment Facility is an activated sludge process plant operated in extended aeration mode (Oxidation ditch). Treatment units include a bar screen, influent/effluent measuring devices, aeration basin with surface aerators, clarifiers, scum removal, return sludge pumps, drying beds, chlorine contact chamber, chlorination facility, a cloth media filter, and a standby power system. The original facility construction was completed in May 2005. In July 2013, the District completed Reuse Improvements via Reuse Authorization No. 1214069-001 and began delivery of Type I Reclaimed Water to South Padre Island Golf Community. Only a partial amount of flow is diverted to the cloth media, and the wastewater treatment facility continues to operate as follows:

Raw wastewater enters the plant's headworks through a 12" force main into a manually cleaned bar screen having a 30 degree slope and openings not more than ¾ of an inch; a means of measuring effluent flow is provided for this facility; the flow then goes into the aeration basin (oxidation ditch), the basin has a hydraulic detention time of 20 hours based on design flow, two rotors are provided each capable of supplying the required oxygenation capacity maintaining a minimum velocity of 1.0 fps with one rotor out of service, the mechanical aerators are designed to maintain a minimum dissolved oxygen concentration of 2.0 mg/l and provide sufficient mixing; the flow is then split into two 46-feet diameter center feed scraper type clarifiers, scum baffles and means for collection of the scum are provided, the scum collected is discharged back to the head of the plant; the sludge pumps and piping for the return activated sludge (RAS) are designed to provide variable underflow rates of 200 to 400 gpd/sq. ft and returned to the head of the plant; part of the RAS is sent for digestion, the sludge stabilization is accomplished by the extended aeration process with solids retention time of 26 days, the stabilized sludge is drawn directly to any of the 6 sludge drying beds; the clear supernatant from the clarifiers flows into the chlorine contact chamber with a minimum 20 minute detention time, two chlorinators provide the desired amount of chlorine continuously to disinfect effluent; the treated effluent is discharged to the Cameron Company Fwsd Reservoir 1 (formerly identified as City of Port Isabel reservoir); thence to the Laguna Madre in Segment No. 2491 of the bays and estuaries; the dry sludge removed from the drying beds is disposed of by a TCEQ registered hauler land applying the sludge in a TCEQ registered site. The facility has a standby generator to provide energy for the entire plant during a power outage, thus capable of meeting discharge permit parameters under any unexpected outage event.

For the Use of Type I Reclaimed Water, a lift pump has been installed in the existing chlorine contact chamber, followed by a 6 inch force main to a cloth media filter. From the cloth media filter, effluent is gravity fed to an existing 17.5 acre lake and an existing 5.5 acre lake via a 10-inch PVC gravity sewer, painted purple. The lift pump and cloth media filter are controlled by SCADA and a float at the existing inlet box of a South Padre Island Golf Community lake.



LAGUNA MADRE WATER DISTRICT

Laguna Madre Water District
Laguna Vista Service Area and Site Plan
Attachment 3: Laguna Vista Site Plan

N

N.T.S.

LAGUNA MADRE WATER DISTRICT

February 3, 2025

Francesca Findlay
Application Review and Processing Team (MC148)
Water Quality Division
Water Commission of Environmental Quality

Re: Laguna Madre Water District
Laguna Vista Wastewater Treatment Faciity, Domestic Wastewater Permit Application
WQ0014069001, TX 0117072

Enclosed please find one (1) original and two (2) copies of the complete response to the letter dated January 29, 2025.
I have read the portion of the NORI with relevant information to my application and have concluded that there are no errors or omissions.

Please feel free to contact me if you have any questions, or require any additional information.

Sincerely,

Mark A Garza
Wastewater Plant Manager
Laguna Madre Water District

Comisión de Calidad Ambiental del Estado de Texas

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

PERMISO NO. WQ0014069001

SOLICITUD. Laguna Madre Water District 105 Port Road Port Isabel Texas ha solicitado a la Comisión de Calidad Ambiental del Estado de Texas (TCEQ) para renovar el Permiso No. WQ0014069001 (EPA I.D. No. TX 0117072) 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 650.000 millones de galones por día. La planta está ubicada 30488 Holly Beach Rd. en el Condado de Cameron Texas. La ruta de descarga es del sitio de la planta a Embalse FWSD del condado de Camero 1(embalse de la ciudad de Port Isabel). La TCEQ recibió esta solicitud el Enero 23, 2025. La solicitud para el permiso estará disponible para leerla y copiarla en 105 Port Road Port Isabel Texas 78578 de la fecha de publicación de este aviso en el periódico. Este enlace a un mapa electrónico de la ubicación general del sitio o de la instalación es proporcionado como una cortesía y no es parte de la solicitud o del aviso. Para la ubicación exacta, consulte la solicitud.
https://gisweb.tceq.texas.gov/LocationMapper/?marker=-97.315,26.117777&level=18

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

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

OPORTUNIDAD DE UNA AUDIENCIA ADMINISTRATIVA DE LO CONTENCIOSO. Después del plazo para presentar comentarios públicos, el director ejecutivo considerará todos los comentarios apropiados y preparará una respuesta a todos los comentarios públicos

esenciales, pertinentes, o significativos. **A menos que la solicitud haya sido referida directamente a una audiencia administrativa de lo contencioso, la respuesta a los comentarios y la decisión del director ejecutivo sobre la solicitud serán enviados por correo a todos los que presentaron un comentario público y a las personas que están en la lista para recibir avisos sobre esta solicitud. Si se reciben comentarios, el aviso también proveerá instrucciones para pedir una reconsideración de la decisión del director ejecutivo y para pedir una audiencia administrativa de lo contencioso.** Una audiencia administrativa de lo contencioso es un procedimiento legal similar a un procedimiento legal civil en un tribunal de distrito del estado.

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

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

LISTA DE CORREO. Si somete comentarios públicos, un pedido para una audiencia administrativa de lo contencioso o una reconsideración de la decisión del director ejecutivo, la Oficina del secretario Principal enviará por correo los avisos públicos en relación con la solicitud. Además, puede pedir que la TCEQ ponga su nombre en una o más de las listas 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.

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 Laguna Madre Water Disrtict a la dirección indicada arriba o llamando a Mark A Garza al 956-943-2626 Ex 610.

Fecha de emission: Enero 23, 2025

Francesca Findlay

From: Mark Garza <mgarza@lmwd.org>
Sent: Wednesday, February 5, 2025 8:33 AM
To: Francesca Findlay
Subject: RE: WQ0014069001 Laguna Madre Water District
Attachments: Municipal Discharge Renewal Spanish NORI.docx

Let me know if this works.

LAGUNA MADRE WATER DISTRICT

Mark A. Garza Sr.
Wastewater Plants Manager
242 Woody's Lane | Port Isabel, TX 78578
M (956) 572-0395
O (956) 943-2626 Ext. 610
mgarza@lmwd.org

From: Francesca Findlay <Francesca.Findlay@tceq.texas.gov>
Sent: Tuesday, February 4, 2025 4:57 PM
To: Mark Garza <mgarza@lmwd.org>
Subject: RE: WQ0014069001 Laguna Madre Water District

Good afternoon,

Thank you for the response, please provide the Spanish Nori in a Word document. I have attached the template for you to return to me. Please let me know if have any questions.

Thank you,

Francesca Findlay
License & Permit Specialist
ARP Team | Water Quality Division
512-239-2441
Texas Commission on Environmental Quality

From: Mark Garza <mgarza@lmwd.org>
Sent: Tuesday, February 4, 2025 1:55 PM
To: Francesca Findlay <Francesca.Findlay@tceq.texas.gov>
Subject: RE: WQ0014069001 Laguna Madre Water District

Good Afternoon Francesca,

I have enclosed the information you requested, please let me know if this is correct.

Best regards,

Mark A. Garza Sr.
Wastewater Plants Manager
242 Woody's Lane | Port Isabel, TX 78578
M (956) 572-0395
O (956) 943-2626 Ext. 610
mgarza@lmwd.org

From: Francesca Findlay <Francesca.Findlay@tceq.texas.gov>
Sent: Wednesday, January 29, 2025 9:21 AM
To: Mark Garza <mgarza@lmwd.org>
Subject: FW: WQ0014069001 Laguna Madre Water District

Dear Mr. Garza:

The attached Notice of Deficiency letter sent on January 29, 2025, requesting additional information needed to declare the application administratively complete. Please send the complete response to my attention February 12, 2025.

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