

This file contains the following documents:

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



Este archivo contiene los siguientes documentos:

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

TCEQ

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

PLAIN LANGUAGE SUMMARY FOR TPDES OR TLAP PERMIT APPLICATIONS

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

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

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

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

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

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

North Texas Municipal Water District (CN601365448) proposes to operate Sister Grove Regional Water Resource Recovery Facility (RN110409067), a domestic wastewater treatment plant. The facility will be located at 3360 FM 2933, in McKinney, Collin County, Texas 75071. This application if for a renewal to discharge 64,000,000 gallons per day of treated effluent.

Discharges from the facility are expected to contain Carbonaceous Biochemical Oxygen Demand (CBOD), Total Suspended Solids (TSS), Ammonia Nitrogen, and *E. coli*. Additional potential pollutants are included in the Domestic Technical Reports 1.0, Section 7 Pollutant Analysis of Treated Effluent and Domestic Worksheet 4.0 in the permit application. Domestic wastewater will be treated by an activated sludge plant consisting of mechanical fine screens, vortex grit removal chambers, primary clarifiers, conventional activated sludge basins, secondary clarifiers, tertiary filters, ultraviolet light disinfection. Sludge from the primary and secondary clarifiers is blended and pumped to centrifuges for dewatering. Dewatered solids are disposed in the NTMWD 121 Regional Disposal Facility.

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

AGUAS RESIDUALES DOMÉSTICAS /AGUAS PLUVIALES

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

North Texas Municipal Water District (CN601365448) propone operar Sister Grove Regional Water Resource Recovery Facility (RN110409067), una planta de tratamiento de aguas residuales domésticas. La instalación estará ubicada en 3360 FM 2933, en McKinney, Condado de Collin, Texas 75071. Esta solicitud es para una renovación para descargar 64,000,000 de galones por día de efluente tratado.

Se espera que las descargas de la instalación contengan demanda bioquímica de oxígeno carbonoso (CBOD), sólidos suspendidos totales (TSS), nitrógeno amoniacal y E. coli. Se incluyen contaminantes potenciales adicionales en los Informes Técnicos Nacionales 1.0, Sección 7 Análisis de Contaminantes del Efluente Tratado y la Hoja de Trabajo Doméstico 4.0 en la solicitud de permiso.. Aguas residuales domésticas. estará tratado por una planta de lodos activados compuesta por cribas mecánicas finas, cámaras de desarenación vortex, clarificadores primarios, balsas de lodos activados convencionales, clarificadores secundarios, filtros terciarios y desinfección con luz ultravioleta. El lodo de los clarificadores primario y secundario se mezcla y se bombea a centrífugas para su deshidratación. Los sólidos deshidratados se eliminan en la instalación de eliminación regional NTMWD 121.

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY



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

PERMIT NO. WQ0015693001

APPLICATION. North Texas Municipal Water District, P.O. Box 2408, Wylie, Texas 75098, has applied to the Texas Commission on Environmental Quality (TCEQ) to renew Texas Pollutant Discharge Elimination System (TPDES) Permit No. WQ0015693001 (EPA I.D. No. TX0138584) to authorize the discharge of treated wastewater at a volume not to exceed an annual average flow of 64,000,000 gallons per day. The domestic wastewater treatment facility is located at 3360 Farm-to-Market Road 2933, in the city of McKinney, in Collin County, Texas 75071 . The discharge route is from the plant site to Stiff Creek; thence to Sister Grove Creek; thence to Lavon Lake. TCEQ received this application on September 12, 2024. The permit application will be available for viewing and copying at Roy & Helen Hall Memorial Library, 101 East Hunt Street, McKinney, in Collin 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=-96.559722,33.228888&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 countywide 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 North Texas Municipal Water District at the address stated above or by calling Mr. Jerry Allen, Permitting Manager, at 469-626-4634.

Issuance Date: October 7, 2024

Comisión de Calidad Ambiental del Estado de Texas



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

PERMISO NO. WQ0015693001

SOLICITUD. North Texas Municipal Water District, P.O. Box 2408, Wylie, Texas 75098 ha solicitado a la Comisión de Calidad Ambiental del Estado de Texas (TCEQ) para renovar el Permiso No. WQ0015693001 (EPA I.D. No. TX0138584) 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 64,000,000 galones por día. La planta está ubicada 3360 Farm-to-Market Road 2933, McKinney, en el Condado de Collin, Texas. La ruta de descarga es del sitio de la planta hasta Stiff Creek; de allí a Sister Grove Creek; de allí al lago Lavon. La TCEQ recibió esta solicitud el 12 de septiembre de 2024. La solicitud para el permiso estará disponible para leerla y copiarla en Biblioteca Pública Roy & Helen Hall Memorial, 101 East Hunt Street, McKinney, en el condado de Collin, Texas antes de la fecha de publicación de este aviso en el periódico. Este enlace a un mapa electrónico de la ubicación general del sitio o de la instalación es proporcionado como una cortesía y no es parte de la solicitud o del aviso. Para la ubicación exacta, consulte la solicitud. https://gisweb.tceq.texas.gov/LocationMapper/?marker=-96.559722,33,228888&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 específico. Si desea que se agrega su nombre en una de las listas designe cual lista(s) y envia por correo su pedido a la Oficina del Secretario Principal de la TCEQ.

CONTACTOS E INFORMACIÓN A LA AGENCIA. Todos los comentarios públicos y solicitudes deben ser presentadas electrónicamente vía

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

También se puede obtener información adicional del North Texas Municipal Water Districta la dirección indicada arriba o llamando a Jerry Allen al 469-626-4634.

Fecha de emission: 07 de octubre de 2024

Texas Commission on Environmental Quality



NOTICE OF APPLICATION AND PRELIMINARY DECISION FOR TPDES PERMIT FOR MUNICIPAL WASTEWATER

RENEWAL

PERMIT NO. WQ0015693001

APPLICATION AND PRELIMINARY DECISION. North Texas Municipal Water District, P.O. Box 2408, Wylie, Texas 75098, has applied to the Texas Commission on Environmental Quality (TCEQ) for a renewal of Texas Pollutant Discharge Elimination System (TPDES) Permit No. WQ0015693001, which authorizes the discharge of treated domestic wastewater at an annual average flow not to exceed 64,000,000 gallons per day. TCEQ received this application on September 12, 2024.

The facility will be located at 3360 Farm-to-Market Road 2933, in the City of McKinney, Collin County, Texas 75071. The treated effluent will be discharged to Stiff Creek, thence to Sister Grove Creek, thence to Lavon Lake in Segment No. 0821 of the Trinity River Basin. The unclassified receiving water uses are limited aquatic life use for Stiff Creek and high aquatic life use for Sister Grove Creek. The designated uses for Segment No. 0821 are primary contact recreation, public water supply, and high aquatic life use. This link to an electronic map of the site or facility's general location is provided as a public courtesy and is not part of the application or notice. For the exact location, refer to the application.

https://gisweb.tceq.texas.gov/LocationMapper/?marker=-96.559722,33.228888&level=18

The TCEQ Executive Director has completed the technical review of the application and prepared a draft permit. The draft permit, if approved, would establish the conditions under which the facility must operate. The Executive Director has made a preliminary decision that this permit, if issued, meets all statutory and regulatory requirements. The permit application, Executive Director's preliminary decision, and draft permit are available for viewing and copying at John & Judy Gay Library, 6861 W. Eldorado Pkwy, McKinney, in Collin County, Texas. 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.

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

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

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

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

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

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

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

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

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

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

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

Further information may also be obtained from North Texas Municipal Water District at the address stated above or by calling Mr. Jerry Allen, Permitting Manager, at 469-626-4634.

Issuance Date: October 6, 2025

Comisión De Calidad Ambiental Del Estado De Texas



AVISO DE LA SOLICITUD Y DECISIÓN PRELIMINAR PARA EL PERMISO DEL SISTEMA DE ELIMINACION DE DESCARGAS DE CONTAMINANTES DE TEXAS (TPDES) PARA AGUAS RESIDUALES MUNICIPALES

RENOVACIÓN

PERMISO NO. WQ0015693001

SOLICITUD Y DECISIÓN PRELIMINAR. North Texas Municipal Water District, P.O. Box 2408, Wylie, Texas 75098, ha solicitado a la Comisión de Calidad Ambiental del Estado de Texas (TCEQ) una renovación para autorizar permiso No. WQ0015693001 del Sistema de Eliminación de Descargas de Contaminantes de Texas (TPDES), que autoriza la descarga de aguas residuales domésticas tratadas con un caudal promedio anual que no supere los 64 000 000 de galones por día. La TCEQ recibió esta solicitud el 12 de septiembre de 2024.

La planta está ubicada en 3360 Farm-to-Market Road 2933, en la ciudad de McKinney, en el Condado de Collin, Texas. El efluente tratado es descargado al Stiff Creek, de allí en Sister Grove Creek y de allí en Lavon Lake en el Segmento No. 0821 de la Cuenca del Río Trinity. Los usos no clasificados de las aguas receptoras son limitados usos de la vida acuática para Stiff Creek y el uso elevado de vida acuática para Sister Grove Creek. Los usos designados para el Segmento No. 0821 son recreación de contacto primario, suministro público de agua y uso intensivo de vida acuática.

El Director Ejecutivo de la TCEQ ha completado la revisión técnica de la solicitud y ha preparado un borrador del permiso. El borrador del permiso, si es aprobado, establecería las condiciones bajo las cuales la instalación debe operar. El Director Ejecutivo ha tomado una decisión preliminar que si este permiso es emitido, cumple con todos los requisitos normativos y legales. La solicitud del permiso, la decisión preliminar del Director Ejecutivo y el borrador del permiso están disponibles para leer y copiar en la Biblioteca John & Judy Gay, 6861 W. Eldorado Pkwy, McKinney, en el condado de Collin, Texas. La solicitud (cualquier actualización

y aviso inclusive) está disponible electrónicamente en la siguiente página web: https://www.tceq.texas.gov/permitting/wastewater/pending-permits/tpdes-applications. Este enlace a un mapa electrónico de la ubicación general del sitio o de la instalación es proporcionado como una cortesía y no es parte de la solicitud o del aviso. Para la ubicación exacta, consulte la solicitud. https://gisweb.tceq.texas.gov/LocationMapper/?marker=-96.559722,33.228888&level=18

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

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 para descargar aguas residuales sin proveer una oportunidad de una audiencia administrativa de lo contencioso.

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

LISTA DE CORREO. Si somete comentarios públicos, un pedido para una audiencia administrativa de lo contencioso o una reconsideración de la decisión del Director Ejecutivo, la Oficina del Secretario Principal enviará por correo los avisos públicos en relación con la solicitud. 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 específico. 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.

Todos los comentarios escritos del público y los pedidos una reunión deben ser presentados durante los 30 días después de la publicación del aviso a la Oficina del Secretario Principal, MC 105, TCEQ, P.O. Box 13087, Austin, TX 78711-3087 or por el internet a www.tceq.texas.gov/about/comments.html. Tenga en cuenta que cualquier información personal que usted proporcione, incluyendo su nombre, número de teléfono, dirección de correo electrónico y dirección física pasarán a formar parte del registro público de la Agencia.

CONTACTOS E INFORMACIÓN DE LA AGENCIA. Los comentarios y solicitudes públicas deben enviarse electrónicamente a https://www14.tceq.texas.gov/epic/eComment/, o por escrito a Texas Commission on Environmental Quality, Office of the Chief Clerk, MC-105, P.O. Box 13087, Austin, Texas 78711-3087. Cualquier información personal que envíe a al TCEQ pasará a formar parte del registro de la agencia; esto incluye las direcciones de correo electrónico. Para obtener más información sobre esta solicitud de permiso o el proceso de permisos, llame al Programa de Educación Pública de la TCEQ, sin cargo, al 1-800-687-4040 o visite su sitio web en www.tceq.texas.gov/goto/pep. Si desea información en español, puede llamar al 1-800-687-4040.

También se puede obtener información adicional del North Texas Municipal Water Districta la dirección indicada arriba o llamando a Mr. Jerry Allen, Permitting Manager al 469-626-4634.

Fecha de emission: el 6 de octubre de 2025



Regional. Reliable. Everyday.

September 11, 2024

Executive Director
Applications Review and Processing Team (MC-148)
Texas Commission on Environmental Quality
12100 Park 35 Circle
Austin. Texas 78753

Via Fed Ex Tracking No. 817192651097 and TCEQ FTP Server

Re: Domestic Wastewater Permit Application

Applicant Name: North Texas Municipal Water District (CN601365448)

Permit Number: WQ0015693001 (EPA I.D. No. TX0138584)

Site Name: Sister Grove RWRRF (RN110409067)

Type of Application: Renewal

Dear Sir/Madam:

Enclosed are one original and three copies of the TCEQ Domestic Wastewater Permit Application of the Texas Pollutant Discharge Elimination System Permit No. WQ0015693001 for Sister Grove Regional Water Resource Recovery Facility (RWRRF), which is owned and operated by the North Texas Municipal Water District. The permit application was also submitted electronically via TCEQ's file transfer protocol server at <a href="https://www.wqueenstance.com/wqueenstance.co

Payment of the application fee was submitted under separate cover on September 9, 2024, and a copy of the ePay Voucher Receipt is included in the application.

Thank you for considering this request. If you need any additional information, please contact me at (469) 626-4634.

Sincerely.

Jerry Allen

Permitting Manager

JA/vb

Enclosures:

xc: Hunter Stephens, NTMWD

Morgan Dadgostar, NTMWD

R.J. Muraski, NTMWD

Lauren Kalisek, Lloyd Gosselink Rochelle & Townsend, P.C



SISTER GROVE REGIONAL WATER RESOURCE RECOVERY FACILITY

2024 Domestic Wastewater Permit Application For Permit Renewal

TABLE OF CONTENTS

CONTENTS	TAB NUMBER
Administrative Report 1.0	1
Checklist of Common Deficiencies	······································
Technical Report 1.0	3
Worksheet 2.0 Receiving Waters	4
Worksheet 2.1 Stream Physical Characteristics	5
Worksheet 4.0 Pollutant Analyses Requirements	6
Worksheet 6.0 Industrial Waste Contribution	7
Attachment 1 ePay Voucher Receipt	8
Attachment 2 Core Data Form	
Attachment 3 Plain Language Summary	10
Attachment 4 USGS Topographic Map	11
Attachment 5 Treatment Process Description	12
Attachment 6 Treatment Units	
Attachment 7 Process Flow Diagram	
Attachment 8 Site Drawing	15
Attachment 9 Summary Transmittal Letter	16
Attachment 10 Sewage Sludge Solids Management Plan	17
Attachment 11 Worksheet 6.0 – Section 3 Attachment	18
Attachment 12 Supplemental Permit Information Form (SPIF)	19

THE COMMISSION OF THE PROPERTY OF THE PROPERTY

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

DOMESTIC WASTEWATER PERMIT APPLICATION CHECKLIST

Complete and submit this checklist with the application.

APPLICANT NAME: <u>NORTH TEXAS MUNICIPAL WATER DISTRIC</u>
--

PERMIT NUMBER (If new, leave blank): WQ00 15693001

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

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

For TCEQ Use Only	
Segment Number	County
Expiration Date	Region
Permit Number	

TAB 1

COMMISSION OF THE PROPERTY OF

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

DOMESTIC WASTEWATER PERMIT APPLICATION ADMINISTRATIVE REPORT 1.0

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

Section 1. Application Fees (Instructions Page 26)

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

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

Minor Amendment (for any flow) \$150.00 □

Payment Information

Mailed Check/Money Order Number: N/A

Check/Money Order Amount: N/A

Name Printed on Check: $\underline{N/A}$

EPAY Voucher Number: <u>720508/720509 – SEE ATTACHMENT 1</u>

Copy of Payment Voucher enclosed? Yes \boxtimes

Section 2. Type of Application (Instructions Page 26)

a.	Che	ck the box next to the appropriate authorization type.
	\boxtimes	Publicly-Owned Domestic Wastewater
		Privately-Owned Domestic Wastewater
		Conventional Wastewater Treatment

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

c.	c. Check the box next to the appropriate permit type.							
	\boxtimes	TPDES Permit						
		TLAP						
		TPDES Permit with TLAP component						
		Subsurface Area Drip Dispersal System (SAD	DS)					
d.	Che	eck the box next to the appropriate application	ı typ	e				
		New						
		Major Amendment <u>with</u> Renewal		Minor Amendment with Renewal				
		Major Amendment <u>without</u> Renewal		Minor Amendment without Renewal				
	\boxtimes	Renewal without changes		Minor Modification of permit				
e.	For	amendments or modifications, describe the p	ropo	sed changes: <u>N/A</u>				
f.	. For existing permits:							
	Peri	mit Number: WQ00 <u>15693001</u>						
	EPA	I.D. (TPDES only): TX <u>0138584</u>						
	Exp	iration Date: <u>MARCH 11, 2025</u>						

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

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

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

NORTH TEXAS MUNICIPAL WATER DISTRICT

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

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

CN: 601365448

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

Prefix: MS. Last Name, First Name: COVINGTON, JENNAFER

Title: EXECUTIVE DIRECTOR/GENERAL MANAGER Credential: P.E.

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

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

N/A

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

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

CN: N/A

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

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

Title: N/A Credential: N/A

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

C. Core Data Form

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

Section 4. Application Contact Information (Instructions Page 27)

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

A. Prefix: MR. Last Name, First Name: ALLEN, JERRY

Title: PERMITTING MANAGER Credential: N/A

Organization Name: NORTH TEXAS MUNICIPAL WATER DISTRICT

Mailing Address: P.O. BOX 2408 City, State, Zip Code: WYLIE, TEXAS, 75098

Phone No.: 469-626-4634 E-mail Address: JALLEN@NTMWD.COM

Check one or both:

Administrative Contact

Technical Contact

B. Prefix: MS. Last Name, First Name: BURNS, SARAH

Title: <u>PERMIT COORDINATOR</u> Credential: <u>N/A</u>

Organization Name: NORTH TEXAS MUNICIPAL WATER DISTRICT

Mailing Address: P.O. BOX 2408 City, State, Zip Code: WYLIE, TEXAS 75098

Phone No.: 469-626-4632 E-mail Address: SBURNS@NTMWD.COM

Check one or both: Administrative Contact Machine Technical Contact

Section 5. Permit Contact Information (Instructions Page 27)

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

A. Prefix: MR. Last Name, First Name: ALLEN, JERRY

Title: <u>PERMITTING MANAGER</u> Credential: <u>N/A</u>

Organization Name: NORTH TEXAS MUNICIPAL WATER DISTRICT

Mailing Address: P.O. BOX 2408 City, State, Zip Code: WYLIE, TEXAS 75098

Phone No.: 469-626-4634 E-mail Address: JALLEN@NTMWD.COM

B. Prefix: MS. Last Name, First Name: BURNS, SARAH

Title: <u>PERMIT COORDINATOR</u> Credential: <u>N/A</u>

Organization Name: NORTH TEXAS MUNICIPAL WATER DISTRICT

Mailing Address: P.O. BOX 2408 City, State, Zip Code: WYLIE, TEXAS, 75098

Phone No.: <u>469-626-4632</u> E-mail Address: <u>SBURNS@NTMWD.COM</u>

Section 6. Billing Contact Information (Instructions Page 27)

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

Prefix: MR. Last Name, First Name: STEPHENS, HUNTER

Title: <u>ASSISTANT DEPUTY- WASTEWATER</u> Credential: <u>N/A</u> Organization Name: NORTH TEXAS MUNICIPAL WATER DISTRICT

Mailing Address: P.O. BOX 2408 City, State, Zip Code: WYLIE, TEXAS, 75098

Phone No.: <u>469-626-4921</u> E-mail Address: <u>HSTEPHENS@NTMWD.COM</u>

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

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

Prefix: MR. Last Name, First Name: STEPHENS, HUNTER

Title: <u>ASSISTANT DEPUTY - WASTEWATER</u> Credential: <u>N/A</u>
Organization Name: NORTH TEXAS MUNICIPAL WATER DISTRICT

Mailing Address: P.O. BOX 2408 City, State, Zip Code: WYLIE, TEXAS, 75098

Phone No.: <u>469-626-4921</u> E-mail Address: <u>HSTEPHENS@NTMWD.COM</u>

Section 8. Public Notice Information (Instructions Page 27)

A. Individual Publishing the Notices

Prefix: MR. Last Name, First Name: ALLEN, JERRY

Title: PERMITTING MANAGER Credential: N/A

Organization Name: NORTH TEXAS MUNICIPAL WATER DISTRICT

Mailing Address: P.O. BOX 2408 City, State, Zip Code: WYLIE, TEXAS, 75098

Phone No.: 469-626-4634 E-mail Address: JALLEN@NTMWD.COM

В.	Method Package	U	Notice o	f Receipt and Intent to Obtain a Water Quality Permit
	Indicate	by a check ma	ırk the pr	referred method for receiving the first notice and instructions
	⊠ E-n	nail Address		
	□ Fax			
	□ Reg	gular Mail		
C.		, permit to be l	listed in t	the Notices
	Prefix: 1	_		Last Name, First Name: <u>ALLEN, JERRY</u>
	_	— ERMITTING MA	NAGER	
	·			XAS MUNCIPAL WATER DISTRICT
	_	Address: <u>P.O. I</u>		
	Ü	 No.: <u>469-626-46</u> :	-	E-mail Address: <u>JALLEN@NTMWD.COM</u>
D.		Viewing Inforn		
	If the fa		is located	d in more than one county, a public viewing place for each
	Public b	uilding name:	ROY & HI	ELEN HALL MEMORIAL PUBLIC LIBRARY
	Location	n within the bu	ilding: <u>N</u>	<u>/A</u>
	Physical	l Address of Bu	ıilding: <u>10</u>	D1 E. HUNT ST.
		CKINNEY		County: <u>COLLIN</u>
	Contact	(Last Name, Fi	rst Name): <u>VEAL, ED</u>
	Phone N	Vo.: <u>972-547-73</u> 4	<u> 4</u> Ext.: <u>N</u>	<u>/A</u>
E.	Bilingua	al Notice Requ	irements	
		ormation is re cation, and ren	_	r new, major amendment, minor amendment or minor lications.
	be need		nstructio	is only used to determine if alternative language notices will ns on publishing the alternative language notices will be in
		he following in		ordinator at the nearest elementary and middle schools and n to determine whether an alternative language notices are
				gram required by the Texas Education Code at the elementary the facility or proposed facility?
		⊠ Yes	□ No	
	If no belo		f an alter	native language notice is not required; skip to Section 9

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

No

 \boxtimes

Yes

3.	Do the location	students at n?	these	schools	attend	a bilingua	ıl educa	tion pro	ogram a	t another
		Yes	\boxtimes	No						
4.		the school b out of this i							ogram l	out the school has
		Yes	\boxtimes	No						
5.		nswer is yes d. Which lar								tive language are <u>I</u>
Pla	ain Lang	uage Summ	ary T	emplat	e					
Co	mplete	the Plain Lar	nguag	e Summ	ary (TC	EQ Form 2	20972) a	and inclu	ude as a	ın attachment.
At	tachmei	nt: <u>ATTACHN</u>	<u>MENT</u>	<mark>3</mark>						
Pu	blic Inv	olvement Pl	lan Fo	rm						
	-								_	plication for a
ne	w perm	it or major a	amen	dment t	o a peri	mit and in	clude a	s an atta	achmen	t.
At	tachmei	nt: <u>N/A</u>								
ct:	ion 9.	Dogulat	od E	ntity	and De	rmittod	l Cito	Inforn	nation	(Instructions
CU	ion 9.	Page 29		muty (anu r		i site .	11110111	llativii	(IIISH uchons
			regula	ited by	ГСЕQ, р	rovide the	Regula	ited Enti	ity Num	ber (RN) issued to
		TCEQ's Cen currently res				//www15.	tceq.tex	as.gov/	crpub/	to determine if
Na	me of p	roject or site	e (the	name k	nown by	the com	nunity	where lo	ocated):	
SIS	STER GR	OVE REGIO	NAL V	ATER F	RESOUR	CE RECOV	ERY FA	CILITY		
Ov	vner of t	reatment fa	cility:	NORTH	TEXAS	MUNICIPA	AL WAT	ER DIST	RICT	
Ov	vnership	of Facility:	\boxtimes	Public		Private		Both		Federal
Ov	vner of l	and where t	reatm	ent faci	lity is o	will be:				
Pre	efix: <u>N/A</u>	<u>\</u>		La	ıst Nam	e, First Na	me: <u>N/</u> /	<u>1</u>		
Tit	le: <u>N/A</u>			Cı	redentia	l: <u>N/A</u>				
Or	ganizati	on Name: <u>N</u>	ORTH	TEXAS	MUNICI	PAL WATI	ER DIST	RICT		
Ma	ailing Ad	ldress: <u>P.O. I</u>	3OX 2	<u> 408</u>		City, State	e, Zip C	ode: <u>WY</u>	LIE, TE	XAS, 75098
Ph	one No.:	972-442-540	<u> 25</u>	E	-mail A	ddress: <u>N/</u>	<u>A</u>			
		owner is not or deed rec		_			•	or co-a	pplican	t, attach a lease
	Attach	ment: <u>N/A</u>								

F.

G.

B.

C.

D.

	Prefix: <u>N/A</u>	Last Name, First Name: <u>N/A</u>
	Title: <u>N/A</u>	Credential: <u>N/A</u>
	Organization Name: <u>N/A</u>	
	Mailing Address: <u>N/A</u>	City, State, Zip Code: <u>N/A</u>
	Phone No.: <u>N/A</u>	E-mail Address: <u>N/A</u>
	If the landowner is not the same agreement or deed recorded eas	e person as the facility owner or co-applicant, attach a lease ement. See instructions.
	Attachment: <u>N/A</u>	
F.	Owner sewage sludge disposal s property owned or controlled by	ite (if authorization is requested for sludge disposal on the applicant)::
	Prefix: <u>N/A</u>	Last Name, First Name: <u>N/A</u>
	Title: <u>N/A</u>	Credential: <u>N/A</u>
	Organization Name: <u>N/A</u>	
	Mailing Address: <u>N/A</u>	City, State, Zip Code: <u>N/A</u>
	Phone No.: <u>N/A</u>	E-mail Address: <u>N/A</u>
	If the landowner is not the same agreement or deed recorded eas	e person as the facility owner or co-applicant, attach a lease ement. See instructions.
	Attachment: <u>N/A</u>	
Se	ection 10. TPDES Dischar	ge Information (Instructions Page 31)
A.	Is the wastewater treatment faci	lity location in the existing permit accurate?
	⊠ Yes □ No	
		on, please give an accurate description:
	N/A	
B.	Are the point(s) of discharge and	d the discharge route(s) in the existing permit correct?
	⊠ Yes □ No	
	If no or a new or amendment r	. 1
	point of discharge and the discharge TAC Chapter 307:	permit application, provide an accurate description of the large route to the nearest classified segment as defined in 30
	point of discharge and the disch	
	point of discharge and the discharge TAC Chapter 307:	
	point of discharge and the discharge TAC Chapter 307:	large route to the nearest classified segment as defined in 30
	point of discharge and the dis	ceton
C.	point of discharge and the discharge TAC Chapter 307: N/A City nearest the outfall(s): PRING County in which the outfalls(s) i	CETON s/are located: COLLIN discharge to a city, county, or state highway right-of-way, or

E. Owner of effluent disposal site:

B. City C. Cour N/A E. For runce Section A. Is the B. If the	Authorization granted
B. City C. Cour N/A E. For runce Section A. Is the B. If the	the approval letter upon receipt.
D. For an am disc. Section A. For an am disc. If no disp. N/A B. City. C. Cour. D. For an am disc. Section A. Is the an am disc.	attachment: N/A
Section A. For find disputation of the control of	
A. For dispose N/A B. City C. Cour D. For N/A E. For runce Section A. Is the B. If the	all applications involving an average daily discharge of 5 MGD or more, provide the es of all counties located within 100 statute miles downstream of the point(s) of harge: COLLIN, ROCKWALL, DALLAS, KAUFMAN, ELLIS, HENDERSON, NAVARRO
A. For dispose N/A B. City C. Cour D. For N/A E. For runce Section A. Is the B. If the	n 11. TLAP Disposal Information (Instructions Page 32)
If no disp N/A B. City C. Cour D. For N/A E. For runc Sectio A. Is the B. If the	
B. City C. Cour D. For N/A E. For runc Sectio A. Is th	ΓLAPs, is the location of the effluent disposal site in the existing permit accurate?
B. City C. Cour D. For N/A E. For runc Sectio A. Is th	l Yes □ No
B. City C. Cour D. For N/A E. For runc Sectio A. Is th	o, or a new or amendment permit application , provide an accurate description of the osal site location:
C. Cour D. For N/A E. For runc Section A. Is the B. If the	
C. Cour D. For N/A E. For runc Section A. Is the B. If the	
D. For N/A E. For runce Section A. Is the B. If the	nearest the disposal site: <u>N/A</u>
E. For rund Section A. Is the B. If the	nty in which the disposal site is located: <u>N/A</u>
E. For runce Section A. Is the section B. If the	TLAPs, describe the routing of effluent from the treatment facility to the disposal site:
Section A. Is the B. If the	A .
Section A. Is the B. If the	
Section A. Is the B. If the	ΓLAPs, please identify the nearest watercourse to the disposal site to which rainfall
A. Is the B. If the	off might flow if not contained: N/A
A. Is the B. If the	
B. If th	
	n 12. Miscellaneous Information (Instructions Page 32)
sewa	n 12. Miscellaneous Information (Instructions Page 32)
	n 12. Miscellaneous Information (Instructions Page 32) e facility located on or does the treated effluent cross American Indian Land?
	n 12. Miscellaneous Information (Instructions Page 32) e facility located on or does the treated effluent cross American Indian Land? Yes No e existing permit contains an onsite sludge disposal authorization, is the location of the
N/A	n 12. Miscellaneous Information (Instructions Page 32) e facility located on or does the treated effluent cross American Indian Land? Yes No e existing permit contains an onsite sludge disposal authorization, is the location of the age sludge disposal site in the existing permit accurate?
	n 12. Miscellaneous Information (Instructions Page 32) e facility located on or does the treated effluent cross American Indian Land? Yes No e existing permit contains an onsite sludge disposal authorization, is the location of

C	Did any person formerly employed by the TCEQ represent your company and get paid for		
service regarding this application?			
	□ Yes ⊠ No		
	If yes, list each person formerly employed by the TCEQ who represented your company and was paid for service regarding the application: $\underline{\rm N/A}$		
D.	Do you owe any fees to the TCEQ?		
	□ Yes ⊠ No		
	If yes , provide the following information:		
	Account number: <u>N/A</u>		
	Amount past due: <u>N/A</u>		
E.	Do you owe any penalties to the TCEQ?		
	□ Yes ⊠ No		
	If yes , please provide the following information:		
	Enforcement order number: <u>N/A</u>		
	Amount past due: <u>N/A</u>		
Se	ection 13. Attachments (Instructions Page 33)		
Inc	dicate which attachments are included with the Administrative Report. Check all that apply:		
	Lease agreement or deed recorded easement, if the land where the treatment facility is located or the effluent disposal site are not owned by the applicant or co-applicant.		
\boxtimes	Original full-size USGS Topographic Map with the following information:		
	 Applicant's property boundary Treatment facility boundary Labeled point of discharge for each discharge point (TPDES only) Highlighted discharge route for each discharge point (TPDES only) Onsite sewage sludge disposal site (if applicable) Effluent disposal site boundaries (TLAP only) New and future construction (if applicable) 1 mile radius information 3 miles downstream information (TPDES only) All ponds. 		
	Attachment 1 for Individuals as co-applicants		
	Other Attachments. Please specify: <u>Attachment 1 – EPAY Voucher Receipt; Attachment 2 – Coreta Form; Attachment 3 – Plain Language Summary; Attachment 12 – Supplemental Permit Information (SPIF)</u>		

Section 14. Signature Page (Instructions Page 34)

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

Permit Number: WQ0015693001

Applicant: NORTH TEXAS MUNICIPAL WATER DISTRICT

Signatory name (typed or printed): JENNAFER P. COVINGTON

Certification:

County, Texas

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

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

Signatory title: EXECUTIVE DIRECTOR/GENERAL MANAGER
Signature: Jung Court Date: 9/9/2024 (Use blue ink)
Subscribed and Sworn to before me by the said Tennafir P Covington
on this day of September, 20 24.
on this day of September, 20 44. My commission expires on the 39 th day of June, 20 36.
Notary Public SHAWNNA HELMBERGER Notary Public, State of Texas Comm. Expires 06-29-2026 Notary ID 131626980 [SEAL]
Collin

DOMESTIC WASTEWATER PERMIT APPLICATION SUPPLEMENTAL PERMIT INFORMATION FORM (SPIF)

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

Attachment: **ATTACHMENT 12**

TAB 2

DOMESTIC WASTEWATER PERMIT APPLICATION CHECKLIST OF COMMON DEFICIENCIES

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

application until the items below have been addressed.				
Core Data Form (TCEQ Form No. 10400) (Required for all application types. Must be completed in its entirety of Note: Form may be signed by applicant representative.)	and s	igned.		Yes
Correct and Current Industrial Wastewater Permit Application Form (TCEQ Form Nos. 10053 and 10054. Version dated 6/25/2018 or late			\boxtimes	Yes
Water Quality Permit Payment Submittal Form (Page 19) (Original payment sent to TCEQ Revenue Section. See instructions for	r mai	iling ad	⊠ dress	Yes
7.5 Minute USGS Quadrangle Topographic Map Attached (Full-size map if seeking "New" permit. 8 ½ x 11 acceptable for Renewals and Amendments)				Yes
Current/Non-Expired, Executed Lease Agreement or Easement	\boxtimes	N/A		Yes
Landowners Map (See instructions for landowner requirements)	\boxtimes	N/A		Yes
 Things to Know: All the items shown on the map must be labeled. The applicant's complete property boundaries must be deboundaries of contiguous property owned by the applicant. The applicant cannot be its own adjacent landowner. You landowners immediately adjacent to their property, regar from the actual facility. If the applicant's property is adjacent to a road, creek, or on the opposite side must be identified. Although the proapplicant's property boundary, they are considered poten If the adjacent road is a divided highway as identified on map, the applicant does not have to identify the landowner the highway. 	nt. mus dless strea perti tially the U	t identi of how m, the es are i affecto JSGS to	fy th v far lande not a ed lar pogra	e they are owners djacent to idowners. aphic
Landowners Cross Reference List (See instructions for landowner requirements)	\boxtimes	N/A		Yes
Landowners Labels or USB Drive attached (See instructions for landowner requirements)	\boxtimes	N/A		Yes
Original signature per 30 TAC § 305.44 - Blue Ink Preferred			\boxtimes	Yes

a copy of signature authority/delegation letter must be attached)

Plain Language Summary

(If signature page is not signed by an elected official or principle executive officer,

Yes

TAB 3

THE TONMENTAL OUR

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): <u>16 MGD</u> 2-Hr Peak Flow (MGD): <u>64 MGD</u>

Estimated construction start date: <u>January 2021</u> Estimated waste disposal start date: <u>August 2025</u>

B. Interim II Phase

Design Flow (MGD): Int. II Phase 32 MGD/Int. III Phase 48 MGD

2-Hr Peak Flow (MGD): Int. II Phase 128 MGD/Int. III Phase 192 MGD

Estimated construction start date: <u>Int. II Phase March 2025/ Int. III Phase October 2028</u>
Estimated waste disposal start date: Int. II Phase February 2028/ Int. III Phase October 2031

C. Final Phase

Design Flow (MGD): <u>64 MGD</u> 2-Hr Peak Flow (MGD): <u>256 MGD</u>

Estimated construction start date: <u>November 2033</u>
Estimated waste disposal start date: <u>November 2036</u>

D. Current Operating Phase

Provide the startup date of the facility: August 2025

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 5

SEE ATTACHMENT 5		

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)
SEE ATTACHMENT 6		

C. Process Flow Diagram

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

Attachment: <u>ATTACHMENT 7</u>

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

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

• Latitude: <u>33° 13' 39" N</u>

• Longitude: 96° 29' 40" W

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

Latitude: N/ALongitude: 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: <u>ATTACHMENT 8</u>

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

The area planned to be served during Interim I Phase under typical daily operations includes portions of the cities of Anna, Melissa, Prosper, and McKinney. In the Interim II phase, the cities of Allen and Fairview will also be served. The secondary service area is the area that Sister Grove RWRRF may offload to optimize system operations within the Upper East Fork Interceptor System, which includes the cities of Allen, Fairview, Lucas, Parker, Plano, Princeton, and portions of Frisco, McKinney and Richardson.

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
North McKinney Transfer Force Main	NTMWD	Publicly Owned	160000
Anna Collection System	City of Anna	Publicly Owned	27823 (City's Pop)
McKinney Collection System	City of McKinney	Publicly Owned	214871 (City's Pop)
Melissa Collection System	City of Melissa	Publicly Owned	24087 (City's Pop)
Prosper Collection System	City of Prosper	Publicly Owned	42598 (City's Pop)

Section 4. Unbuilt Phases (Instructions Page 45)

⊠ Yes □ No	
If yes , does the existing permit contain a phase that has not been constructed within fivears of being authorized by the TCEQ?	ve
⊠ 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.	<u>,</u>

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

The plant is currently under construction. Growth in Collin County is expected to increase to about 2.2 million residents over the next 20 years, therefore, unbuilt phases are still necessary to serve the projected population. The area growth is so significant that it is necessary to begin construction of Interim II phase in approximately March 2025 before construction of Interim I phase is complete in approximately August 2025.

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.
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: March 11, 2020
Provide information, including dates, on any actions taken to meet a <i>requirement or provision</i> pertaining to the submission of a summary transmittal letter. Provide a copy of an approval letter from the TCEQ, if applicable.
SEE ATTACHMENT 9
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.

The buffer zone requirement is met by ownership and the use of restrictive covenants with adjacent properties.
Other actions required by the current permit
Does the <i>Other Requirements</i> or <i>Special Provisions</i> 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.
If yes, provide information below on the status of any actions taken to meet the conditions of an <i>Other Requirement</i> or <i>Special Provision</i> .
The plant is currently being built. The applicant will submit effluent analytical results for 120 days from the start-up of the facility as specified in Other Requirement 1. The permittee has completed Other Requirement 3 by employing the wastewater operator included in Section 8 of this technical report. The applicant has submitted a summary transmittal letter prior to construction of the Interim I phase, which was approved October 13, 2020 (See Attachment 9) in accordance with Other Requirement 9. Construction for Interim II, III, and Final phase treatment facilities has not begun at this time.
Grit and grease treatment
1. Acceptance of grit and grease waste
Does the facility have a grit and/or grease processing facility onsite that treats and decants or accepts transported loads of grit and grease waste that are discharged directly to the wastewater treatment plant prior to any treatment?
□ Yes ⊠ No
If No, stop here and continue with Subsection E. Stormwater Management.
2. Grit and grease processing
Describe below how the grit and grease waste is treated at the facility. In your description, include how and where the grit and grease is introduced to the treatment works and how it is separated or processed. Provide a flow diagram showing how grit and grease is processed at the facility.
N <u>/A</u>
3. Grit disposal

C.

D.

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

		□ Yes □ No
		If No , contact the TCEQ Municipal Solid Waste team at 512-239-2335. Note: A registration or permit is required for grit disposal. Grit shall not be combined with treatment plant sludge. See the instruction booklet for additional information on grit disposal requirements and restrictions.
		Describe the method of grit disposal.
		N <u>/A</u>
	4.	Grease and decanted liquid disposal
		Note: A registration or permit is required for grease disposal. Grease shall not be combined with treatment plant sludge. For more information, contact the TCEQ Municipal Solid Waste team at 512-239-2335.
		Describe how the decant and grease are treated and disposed of after grit separation.
		N <u>/A</u>
Е.	Sto	ormwater management
E.		ormwater management Applicability
E.		
E.		Applicability
E.		Applicability Does the facility have a design flow of 1.0 MGD or greater in any phase?
E.		 Applicability Does the facility have a design flow of 1.0 MGD or greater in any phase? ✓ Yes □ No
E.		Applicability Does the facility have a design flow of 1.0 MGD or greater in any phase?
E.	1.	Applicability Does the facility have a design flow of 1.0 MGD or greater in any phase?
E.	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.
E.	1.	Applicability Does the facility have a design flow of 1.0 MGD or greater in any phase?
E.	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. 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?
E.	1.	Applicability Does the facility have a design flow of 1.0 MGD or greater in any phase?
E.	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. 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:

	Alternatively, do you intend to apply for a conditional exclusion from permitting based TXR050000 (Multi Sector General Permit) Part II B.2 or TXR050000 (Multi Sector General Permit) Part V, Sector T 3(b)?
	□ Yes ⊠ No
	If yes, please explain below then proceed to Subsection F, Other Wastes Received:
	N/A
4.	Existing coverage in individual permit
	Is your stormwater discharge currently permitted through this individual TPDES or TLAP permit?
	□ Yes ⊠ No
	If yes , provide a description of stormwater runoff management practices at the site that are authorized in the wastewater permit then skip to Subsection F, Other Wastes Received.
	N/A
5.	Zero stormwater discharge
).	Do you intend to have no discharge of stormwater via use of evaporation or other
	means?
	□ Yes ⊠ No
	If yes, explain below then skip to Subsection F. Other Wastes Received.
	N/A
	Note: If there is a potential to discharge any stormwater to surface water in the state as the result of any storm event, then permit coverage is required under the MSGP or an individual discharge permit. This requirement applies to all areas of facilities with treatment plants or systems that treat, store, recycle, or reclaim domestic sewage, wastewater or sewage sludge (including dedicated lands for sewage sludge disposal
	located within the onsite property boundaries) that meet the applicability criteria of

6. Request for coverage in individual permit

3. Conditional exclusion

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

above. You have the option of obtaining coverage under the MSGP for direct discharges, (recommended), or obtaining coverage under this individual permit.

		□ Yes ⊠ No
		If yes, provide a description of stormwater runoff management practices at the site for which you are requesting authorization in this individual wastewater permit and describe whether you intend to comingle this discharge with your treated effluent or discharge it via a separate dedicated stormwater outfall. Please also indicate if you intend to divert stormwater to the treatment plant headworks and indirectly discharge it to water in the state.
		N/A
		Note: Direct stormwater discharges to waters in the state authorized through this individual permit will require the development and implementation of a stormwater pollution prevention plan (SWPPP) and will be subject to additional monitoring and reporting requirements. Indirect discharges of stormwater via headworks recycling will require compliance with all individual permit requirements including 2-hour peak flow limitations. All stormwater discharge authorization requests will require additional information during the technical review of your application.
F.	Dis	scharges to the Lake Houston Watershed
	Do	es the facility discharge in the Lake Houston watershed?
		□ Yes ⊠ No
	If y <u>N/</u>	res, attach a Sewage Sludge Solids Management Plan. See Example 5 in the instructions. $\underline{\mathbf{A}}$
G.	Otl	ner 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?
		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.
		The facility anticipates accepting sludge in approximately 2031. About 135,000 gallons of sludge will be accepted per month. The sludge is estimated to contain 7000 mg/L BOD $_5$ concentration. The facility has a 157 mg/L CBOD $_5$ design concentration for the influent from the collection system.
		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

 \boxtimes

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.
The facility anticipates accepting septic waste in approximately 2031. About 67,500 gallons of septic waste will be accepted per month. The septic waste is estimated to contain 7000 mg/L \underline{BOD}_5 concentration. The facility has a 157 mg/L \underline{CBOD}_5 design concentration for the influent from the collection system.
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.
The facility anticipates accepting portable toilet waste in approximately 2031. About 59,000 gallons of portable toilet waste will be accepted per month. The waste is estimated to contain 8000 mg/L BOD_5 concentration. The facility has 157 mg/L $CBOD_5$ concentration for the influent from the collection system. Portable toilet companies generate the waste.
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). *Water 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.

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

Pollutant	Average Conc.	Max Conc.	No. of Samples	Sample Type	Sample Date/Time
CBOD ₅ , mg/l	N/A	N/A	N/A	N/A	N/A
Total Suspended Solids, mg/l	N/A	N/A	N/A	N/A	N/A
Ammonia Nitrogen, mg/l	N/A	N/A	N/A	N/A	N/A
Nitrate Nitrogen, mg/l	N/A	N/A	N/A	N/A	N/A
Total Kjeldahl Nitrogen, mg/l	N/A	N/A	N/A	N/A	N/A
Sulfate, mg/l	N/A	N/A	N/A	N/A	N/A
Chloride, mg/l	N/A	N/A	N/A	N/A	N/A
Total Phosphorus, 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
Dissolved Oxygen*, mg/l	N/A	N/A	N/A	N/A	N/A
Chlorine Residual, mg/l	N/A	N/A	N/A	N/A	N/A
<i>E.coli</i> (CFU/100ml) freshwater	N/A	N/A	N/A	N/A	N/A
Entercocci (CFU/100ml) saltwater	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
Electrical Conductivity, µmohs/cm, †	N/A	N/A	N/A	N/A	N/A
Oil & Grease, 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

^{*}TPDES 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

[†]TLAP permits only

Section 8. Facility Operator (Instructions Page 50)

Facility Operator Name: Michael Brogdon

B.

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

Facility Operator's License Number: WW0004105

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

A. WWTP's Biosolids Management Facility Type

Che	ck all that apply. See instructions for guidance
\boxtimes	Design flow>= 1 MGD
\boxtimes	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)
ww	TP's Biosolids Treatment Process
Che	ck 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)
\boxtimes	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

Outer frequirement freezes, 1472			Other	Treatment	Process:	N	/A
----------------------------------	--	--	-------	-----------	----------	---	----

C. Biosolids Management

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

Biosolids Management

Management Practice	Handler or Preparer Type	Bulk or Bag Container	Amount (dry metric tons)	Pathogen Reduction Options	Vector Attraction Reduction Option
Disposal in Landfill	On-Site Owner or Operator	Choose an item.	Not Discharging	Choose an item.	Choose an item.
Choose an item.	Choose an item.	Choose an item.		Choose an item.	Choose an item.
Choose an item.	Choose an item.	Choose an item.		Choose an item.	Choose an item.

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

D. Disposal site

Disposal site name: NTMWD 121 Regional Disposal Facility

TCEQ permit or registration number: MSW No. 2294

County where disposal site is located: Collin

E. Transportation method

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

Name of the hauler: NTMWD

Hauler registration number: 22488

Sludge is transported as a:

Liquid \square semi-liquid \square semi-solid \square solid \boxtimes

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?

	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.	3. Sludge processing authorization						
	Does the existing permit include authorization for a storage or disposal options?	an	y of the	follow	ving sludge processing,		
	Sludge Composting		Yes		No		
	Marketing and Distribution of sludge		Yes	\boxtimes	No		
	Sludge Surface Disposal or Sludge Monofill		Yes		No		
	Temporary storage in sludge lagoons		Yes	\boxtimes	No		
	If yes to any of the above sludge options and the agauthorization, is the completed Domestic Wastewa Technical Report (TCEQ Form No. 10056) attached Yes No	ite	r Permit	Appl	ication: Sewage Sludge		
			-1	_	- 2)		
	Section 11. Sewage Sludge Lagoons (Instr	'U(ctions	Page	2 53)		
Do	Does this facility include sewage sludge lagoons?						
T 0	☐ Yes ☒ No		1. 0		10		
lf '	f yes, complete the remainder of this section. If no, pr	OC.	eed to Se	ection	12.		
Α.	A. Location information The following maps are required to be submitted as	s p	art of th	e app	lication. For each map,		
	provide the Attachment Number.						
	 Original General Highway (County) Map: Attachment: N/A 						
	 USDA Natural Resources Conservation Services 	ce :	Soil Map	:			
	Attachment: N/A		•				
	Federal Emergency Management Map:						
	Attachment: <u>N/A</u>						
	• Site map:						
	Attachment: <u>N/A</u>						
	Discuss in a description if any of the following exis apply.	t v	vithin th	e lago	on area. Check all that		
	Overlap a designated 100-year frequency flo	00	d plain				
	\square Soils with flooding classification						
	□ Overlap an unstable area						
	□ Wetlands						

	Located less than 60 meters from a fault
	None of the above
Att	tachment: N/A
_	ortion of the lagoon(s) is located within the 100-year frequency flood plain, provide otective measures to be utilized including type and size of protective structures:
N/A	

B. Temporary storage information

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

Nitrate Nitrogen, mg/kg: N/A

Total Kjeldahl Nitrogen, mg/kg: <u>N/A</u>

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

Phosphorus, mg/kg: <u>N/A</u>

Potassium, mg/kg: <u>N/A</u>

pH, standard units: N/A

Ammonia Nitrogen mg/kg: N/A

Arsenic: N/A

Cadmium: <u>N/A</u>

Chromium: N/A

Copper: <u>N/A</u>

Lead: N/A

Mercury: N/A

Molybdenum: N/A

Nickel: N/A

Selenium: <u>N/A</u>

Zinc: <u>N/A</u>

Total PCBs: N/A

Provide the following information:

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

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

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

C. Liner information

	Does the active/proposed sludge lagoon(s) have a liner with a maximum hydraulic conductivity of $1x10^{-7}$ cm/sec?
	□ Yes □ No
	If yes, describe the liner below. Please note that a liner is required.
	N/A
D.	Site development plan
	Provide a detailed description of the methods used to deposit sludge in the lagoon(s):
	N/A
	Attach the following documents to the application.
	 Plan view and cross-section of the sludge lagoon(s)
	Attachment: N/A
	Copy of the closure plan
	Attachment: N/A
	 Copy of deed recordation for the site
	Attachment: <u>N/A</u>
	• Size of the sludge lagoon(s) in surface acres and capacity in cubic feet and gallons
	Attachment: <u>N/A</u>
	 Description of the method of controlling infiltration of groundwater and surface water from entering the site
	Attachment: <u>N/A</u>
	 Procedures to prevent the occurrence of nuisance conditions
	Attachment: N/A
E.	Groundwater monitoring
	Is groundwater monitoring currently conducted at this site, or are any wells available for groundwater monitoring, or are groundwater monitoring data otherwise available for the sludge lagoon(s)?
	□ Yes □ No

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

Attachment: N/A

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

Page 55)	
A. Additional authorizations	
Does the permittee have additional authorizations for this facility, such as reuse authorization, sludge permit, etc?	
□ Yes ⊠ No	
If yes, provide the TCEQ authorization number and description of the authorization:	
N/A	
B. Permittee enforcement status	
Is the permittee currently under enforcement for this facility?	
□ Yes ⊠ No	
Is the permittee required to meet an implementation schedule for compliance or enforcement?	
□ Yes ⊠ No	
If yes to either question, provide a brief summary of the enforcement, the implementate schedule, and the current status:	ion
N/A	

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

A. RCRA hazardous wastes

Has the facility received in the past three years, does it currently receive, or will it receive RCRA hazardous waste? $\square \quad \text{Yes} \quad \boxtimes \quad \text{No}$

B. Remediation activity wastewater

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

□ Yes ⊠ No

C. Details about wastes received

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

Attachment: N/A

Section 14. Laboratory Accreditation (Instructions Page 56)

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

- The laboratory is an in-house laboratory and is:
 - o periodically inspected by the TCEQ; or
 - o located in another state and is accredited or inspected by that state; or
 - o 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: <u>JENNAFER P. COVINGTON</u>
Title: Executive Director/General Manager

Signature:

Date: _

TAB 4

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: $\underline{N/A}$
Distance and direction to the intake: N/A
Attach a USGS map that identifies the location of the intake.
Attachment: N/A
Section 2. Discharge into Tidally Affected Waters (Instructions Page 64)
Does the facility discharge into tidally affected waters?
□ Yes ⊠ No
If no , proceed to Section 3. If yes , complete the remainder of this section. If no, proceed to Section 3.
A. Receiving water outfall
Width of the receiving water at the outfall, in feet: $\underline{N/A}$
B. Oyster waters
Are there oyster waters in the vicinity of the discharge?
□ Yes □ No
If yes, provide the distance and direction from outfall(s).
N/A
C. Sea grasses
Are there any sea grasses within the vicinity of the point of discharge?
□ Yes □ No
If yes, provide the distance and direction from the outfall(s).
N/A

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: Stiff Creek A. Receiving water type Identify the appropriate description of the receiving waters. \boxtimes Stream Freshwater Swamp or Marsh Lake or Pond Surface area, in acres: N/A Average depth of the entire water body, in feet: N/AAverage depth of water body within a 500-foot radius of discharge point, in feet: Man-made Channel or Ditch Open Bay Tidal Stream, Bayou, or Marsh Other, specify: N/A **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 \boxtimes Personal observation Other, specify: Click to enter text.

Classified Segments (Instructions Page 64)

Section 3.

C.	. Downstream perennial confluences						
		e names of all perennial streams tha tream of the discharge point.	ıt joii	n the receiving water within three miles			
	None.						
D.	Downs	tream characteristics					
		receiving water characteristics charge (e.g., natural or man-made dams		rithin three miles downstream of the ids, reservoirs, etc.)?			
	\boxtimes	Yes □ No					
	If yes,	discuss how.					
	downs until a Creek.		been harge				
E.	Norma	l dry weather characteristics					
	Provide general observations of the water body during normal dry weather conditions.						
		was dry with no pools observed. Creek bare steep and partially stabilized with to					
	Date ar	nd time of observation: <u>9/21/2023</u>	2:30	PM			
		e water body influenced by stormwa	ater 1	runoff during observations?			
		Yes 🗵 No					
Se	ection	5. General Characteristics Page 66)	s of	the Waterbody (Instructions			
Α.	Upstre	am influences					
	Is the i			ne discharge or proposed discharge site at apply.			
		Oil field activities		Urban runoff			
		Upstream discharges	\boxtimes	Agricultural runoff			
	\boxtimes	Septic tanks		Other(s), specify: <u>N/A</u>			

B. Waterbody uses Observed or evidences of the following uses. Check all that apply. Livestock watering Contact recreation Irrigation withdrawal Non-contact recreation **Fishing Navigation** Domestic water supply Industrial water supply Park activities Other(s), specify: N/A 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

TAB 5

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: 4/17/2024 Time of study: 08:00 AM

Stream name: Stiff Creek

Location: Collin county 4 miles north of Princeton near the intersection of CR 463 and Elizabeth Lane

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: 12

Number of stream bends that are moderately defined: 3

Number of stream bends that are poorly defined: 2

Number of riffles: 5

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.

Stiff Creek consists of numerous fallen tree logs and tree branches throughout the entire reach. There are multiple log jams and trash items that are causing flow fluctuations throughout the length of the reach. Banks are very steep and muddy. Both banks contain an abundance of vegetation, overhanging trees and exposed tree roots. Observed several trees that were close to falling into the creek. A portion of the right bank near the outfall has been reinforced with concrete. A barbed wire fence is hanging over the creek near the left bank at T4. No stream uses were observed.

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)	at 4 to 10 points along each transect from the channel bed to the water surface. Separate the measurements with commas.
run	33°13'39.00"N 96°29'40.49"W	12.5	0.35, 0.8, 1.2, 0.9, 0.5
run	33°13'36.94"N 96°29'35.92"W	14.0	1.0, 1.7, 2.0, 1.8, 1.1
run	33°13'33.85"N 96°29'34.18"W	9.75	0.5, 0.9, 1.2, 1.2, 0.8
run	33°13'29.69"N 96°29'31.07"W	15.0	0.6, 1.2, 1.7, 1.6, 0.9
run	33°13'27.05"N 96°29'29.20"W	13.5	0.8, 1.4, 2.0, 2.3, 1.9
run	33°13'23.73"N 96°29'26.19"W	14.0	2.8, 3.1, 3.1, 2.9, 1.4
Choose an item.			

Section 3. Summarize Measurements (Instructions Page 66)

Streambed slope of entire reach, from USGS map in feet/feet: 0.006

Approximate drainage area above the most downstream transect (from USGS map or county highway map, in square miles): <u>8.49</u>

Length of stream evaluated, in feet: 2,640

Number of lateral transects made: $\underline{6}$ Average stream width, in feet: $\underline{13.125}$ Average stream depth, in feet: $\underline{1.455}$

Average stream velocity, in feet/second: <u>0.47</u>

Instantaneous stream flow, in cubic feet/second: 6.9882

Indicate flow measurement method (type of meter, floating chip timed over a fixed distance, etc.): FlowTracker2

Size of pools (large, small, moderate, none): None

Maximum pool depth, in feet: $\underline{N/A}$

TAB 6

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: N/A – Plant is not operational yet

Table 4.0(1) - Toxics Analysis

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

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

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

Pollutant	AVG Effluent Conc. (µg/l)	MAX Effluent Conc. (µg/l)	Number of Samples	MAL (μg/l)
Polychlorinated Biphenyls (PCB's) (*3)	N/A	N/A	N/A	0.2
Pyridine	N/A	N/A	N/A	20
Selenium	N/A	N/A	N/A	5
Silver	N/A	N/A	N/A	0.5
1,2,4,5-Tetrachlorobenzene	N/A	N/A	N/A	20
1,1,2,2-Tetrachloroethane	N/A	N/A	N/A	10
Tetrachloroethylene	N/A	N/A	N/A	10
Thallium	N/A	N/A	N/A	0.5
Toluene	N/A	N/A	N/A	10
Toxaphene	N/A	N/A	N/A	0.3
2,4,5-TP (Silvex)	N/A	N/A	N/A	0.3
Tributyltin (see instructions for explanation)	N/A	N/A	N/A	0.01
1,1,1-Trichloroethane	N/A	N/A	N/A	10
1,1,2-Trichloroethane	N/A	N/A	N/A	10
Trichloroethylene	N/A	N/A	N/A	10
2,4,5-Trichlorophenol	N/A	N/A	N/A	50
TTHM (Total Trihalomethanes)	N/A	N/A	N/A	10
Vinyl Chloride	N/A	N/A	N/A	10
Zinc	N/A	N/A	N/A	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: N/A- Plant is not operational yet

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	N/A	N/A	N/A	5
Arsenic	N/A	N/A	N/A	0.5
Beryllium	N/A	N/A	N/A	0.5
Cadmium	N/A	N/A	N/A	1
Chromium (Total)	N/A	N/A	N/A	3
Chromium (Hex)	N/A	N/A	N/A	3
Chromium (Tri) (*1)	N/A	N/A	N/A	N/A
Copper	N/A	N/A	N/A	2
Lead	N/A	N/A	N/A	0.5
Mercury	N/A	N/A	N/A	0.005
Nickel	N/A	N/A	N/A	2
Selenium	N/A	N/A	N/A	5
Silver	N/A	N/A	N/A	0.5
Thallium	N/A	N/A	N/A	0.5
Zinc	N/A	N/A	N/A	5
Cyanide (*2)	N/A	N/A	N/A	10
Phenols, Total	N/A	N/A	N/A	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	N/A	N/A	N/A	50
Acrylonitrile	N/A	N/A	N/A	50
Benzene	N/A	N/A	N/A	10
Bromoform	N/A	N/A	N/A	10
Carbon Tetrachloride	N/A	N/A	N/A	2
Chlorobenzene	N/A	N/A	N/A	10
Chlorodibromomethane	N/A	N/A	N/A	10
Chloroethane	N/A	N/A	N/A	50
2-Chloroethylvinyl Ether	N/A	N/A	N/A	10
Chloroform	N/A	N/A	N/A	10
Dichlorobromomethane [Bromodichloromethane]	N/A	N/A	N/A	10
1,1-Dichloroethane	N/A	N/A	N/A	10
1,2-Dichloroethane	N/A	N/A	N/A	10
1,1-Dichloroethylene	N/A	N/A	N/A	10
1,2-Dichloropropane	N/A	N/A	N/A	10
1,3-Dichloropropylene	N/A	N/A	N/A	10
[1,3-Dichloropropene]				
1,2-Trans-Dichloroethylene	N/A	N/A	N/A	10
Ethylbenzene	N/A	N/A	N/A	10
Methyl Bromide	N/A	N/A	N/A	50
Methyl Chloride	N/A	N/A	N/A	50
Methylene Chloride	N/A	N/A	N/A	20
1,1,2,2-Tetrachloroethane	N/A	N/A	N/A	10
Tetrachloroethylene	N/A	N/A	N/A	10
Toluene	N/A	N/A	N/A	10
1,1,1-Trichloroethane	N/A	N/A	N/A	10
1,1,2-Trichloroethane	N/A	N/A	N/A	10
Trichloroethylene	N/A	N/A	N/A	10
Vinyl Chloride	N/A	N/A	N/A	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	N/A	N/A	N/A	10
2,4-Dichlorophenol	N/A	N/A	N/A	10
2,4-Dimethylphenol	N/A	N/A	N/A	10
4,6-Dinitro-o-Cresol	N/A	N/A	N/A	50
2,4-Dinitrophenol	N/A	N/A	N/A	50
2-Nitrophenol	N/A	N/A	N/A	20
4-Nitrophenol	N/A	N/A	N/A	50
P-Chloro-m-Cresol	N/A	N/A	N/A	10
Pentalchlorophenol	N/A	N/A	N/A	5
Phenol	N/A	N/A	N/A	10
2,4,6-Trichlorophenol	N/A	N/A	N/A	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	N/A	N/A	N/A	10
Acenaphthylene	N/A	N/A	N/A	10
Anthracene	N/A	N/A	N/A	10
Benzidine	N/A	N/A	N/A	50
Benzo(a)Anthracene	N/A	N/A	N/A	5
Benzo(a)Pyrene	N/A	N/A	N/A	5
3,4-Benzofluoranthene	N/A	N/A	N/A	10
Benzo(ghi)Perylene	N/A	N/A	N/A	20
Benzo(k)Fluoranthene	N/A	N/A	N/A	5
Bis(2-Chloroethoxy)Methane	N/A	N/A	N/A	10
Bis(2-Chloroethyl)Ether	N/A	N/A	N/A	10
Bis(2-Chloroisopropyl)Ether	N/A	N/A	N/A	10
Bis(2-Ethylhexyl)Phthalate	N/A	N/A	N/A	10
4-Bromophenyl Phenyl Ether	N/A	N/A	N/A	10
Butyl benzyl Phthalate	N/A	N/A	N/A	10
2-Chloronaphthalene	N/A	N/A	N/A	10
4-Chlorophenyl phenyl ether	N/A	N/A	N/A	10
Chrysene	N/A	N/A	N/A	5
Dibenzo(a,h)Anthracene	N/A	N/A	N/A	5
1,2-(o)Dichlorobenzene	N/A	N/A	N/A	10
1,3-(m)Dichlorobenzene	N/A	N/A	N/A	10
1,4-(p)Dichlorobenzene	N/A	N/A	N/A	10
3,3-Dichlorobenzidine	N/A	N/A	N/A	5
Diethyl Phthalate	N/A	N/A	N/A	10
Dimethyl Phthalate	N/A	N/A	N/A	10
Di-n-Butyl Phthalate	N/A	N/A	N/A	10
2,4-Dinitrotoluene	N/A	N/A	N/A	10
2,6-Dinitrotoluene	N/A	N/A	N/A	10
Di-n-Octyl Phthalate	N/A	N/A	N/A	10
1,2-Diphenylhydrazine (as Azobenzene)	N/A	N/A	N/A	20
Fluoranthene	N/A	N/A	N/A	10

Pollutant	AVG Effluent Conc. (µg/l)	MAX Effluent Conc. (µg/l)	Number of Samples	MAL (μg/l)
Fluorene	N/A	N/A	N/A	10
Hexachlorobenzene	N/A	N/A	N/A	5
Hexachlorobutadiene	N/A	N/A	N/A	10
Hexachlorocyclo-pentadiene	N/A	N/A	N/A	10
Hexachloroethane	N/A	N/A	N/A	20
Indeno(1,2,3-cd)pyrene	N/A	N/A	N/A	5
Isophorone	N/A	N/A	N/A	10
Naphthalene	N/A	N/A	N/A	10
Nitrobenzene	N/A	N/A	N/A	10
N-Nitrosodimethylamine	N/A	N/A	N/A	50
N-Nitrosodi-n-Propylamine	N/A	N/A	N/A	20
N-Nitrosodiphenylamine	N/A	N/A	N/A	20
Phenanthrene	N/A	N/A	N/A	10
Pyrene	N/A	N/A	N/A	10
1,2,4-Trichlorobenzene	N/A	N/A	N/A	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	N/A	N/A	N/A	0.01
alpha-BHC (Hexachlorocyclohexane)	N/A	N/A	N/A	0.05
beta-BHC (Hexachlorocyclohexane)	N/A	N/A	N/A	0.05
gamma-BHC (Hexachlorocyclohexane)	N/A	N/A	N/A	0.05
delta-BHC (Hexachlorocyclohexane)	N/A	N/A	N/A	0.05
Chlordane	N/A	N/A	N/A	0.2
4,4-DDT	N/A	N/A	N/A	0.02
4,4-DDE	N/A	N/A	N/A	0.1
4,4,-DDD	N/A	N/A	N/A	0.1
Dieldrin	N/A	N/A	N/A	0.02
Endosulfan I (alpha)	N/A	N/A	N/A	0.01
Endosulfan II (beta)	N/A	N/A	N/A	0.02
Endosulfan Sulfate	N/A	N/A	N/A	0.1
Endrin	N/A	N/A	N/A	0.02
Endrin Aldehyde	N/A	N/A	N/A	0.1
Heptachlor	N/A	N/A	N/A	0.01
Heptachlor Epoxide	N/A	N/A	N/A	0.01
PCB-1242	N/A	N/A	N/A	0.2
PCB-1254	N/A	N/A	N/A	0.2
PCB-1221	N/A	N/A	N/A	0.2
PCB-1232	N/A	N/A	N/A	0.2
PCB-1248	N/A	N/A	N/A	0.2
PCB-1260	N/A	N/A	N/A	0.2
PCB-1016	N/A	N/A	N/A	0.2
Toxaphene	N/A	N/A	N/A	0.3

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

Section 3. Dioxin/Furan Compounds

Α.		te which of the following compounds from may be present in the influent from a buting 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
		ch compound identified, provide a brief description of the conditions of its/their ace at the facility.
	N/A	
В.	-	u know or have any reason to believe that 2,3,7,8 Tetrachlorodibenzo-P-Dioxin o) or any congeners of TCDD may be present in your effluent?
В.	(TCDI	o) or any congeners of TCDD may be present in your effluent? Yes ☑ No
В.	(TCDI	o) or any congeners of TCDD may be present in your effluent?
В.	(TCDI	o) or any congeners of TCDD may be present in your effluent? Yes ☑ No
В.	(TCDI	o) or any congeners of TCDD may be present in your effluent? Yes ☑ No
В.	(TCDI	o) or any congeners of TCDD may be present in your effluent? Yes ☑ No

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: N/A

Table 4.0(2)F - Dioxin/Furan Compounds

Compound	Toxic Equivalenc y 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 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: 8

Average Daily Flows, in MGD: <u>0.26</u>

Significant IUs - non-categorical:

Number of IUs: 6

Average Daily Flows, in MGD: <u>0.36</u>

Other IUs:

Number of IUs: 3 (Zero Discharge)

Average Daily Flows, in MGD: o (Process Wastewater)

B. Treatment plant interference

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

□ Yes ⊠ No

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

N/A – Plant is being constructed.

	in the past three years, has your POTW experienced pass through (see instructions)?
	□ Yes ⊠ No
	If yes , identify the dates, duration, a description of the pollutants passing through the treatment plant, and probable cause(s) and possible source(s) of each pass through event. Include the names of the IUs that may have caused pass through.
	N/A – Plant is being constructed.
D.	Pretreatment program
	Does your POTW have an approved pretreatment program?
	□ Yes ⊠ No <u>See Attachment 11</u>
	If yes, complete Section 2 only of this Worksheet.
	Is your POTW required to develop an approved pretreatment program?
	⊠ Yes □ No <u>See Attachment 11</u>
If y	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.
Se	ection 2. POTWs with Approved Programs or Those Required to Develop a Program (Instructions Page 90)
Α.	Substantial modifications
	Have there been any substantial modifications to the approved pretreatment program
	that have not been submitted to the TCEQ for approval according to 40 CFR §403.18?
	□ Yes ⊠ No
	If yes , identify the modifications that have not been submitted to TCEQ, including the purpose of the modification.
	N/A

C. Treatment plant pass through

B. Non-substar	ntial 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											
□ Yes												
	If yes, identify all non-substantial modifications that have not been submitted to TCEQ, including the purpose of the modification.											
N/A												
-	ameters above the MAL											
	 list all parameters me during the last three year 											
J		is. Subline un	attacimient ii nees	cooury.								
Pollutant	Concentration	MAL	Units	Date								
N/A	N/A	N/A	N/A	N/A								
N/A	N/A	N/A	N/A	N/A								
N/A	N/A	N/A	N/A	N/A								
N/A	N/A	N/A	N/A	N/A								
N/A	N/A	N/A	N/A	N/A								
N/A	N/A	N/A	N/A	N/A								
IV/A	IV/A	IV/A	IN/ A	IV/A								
D. Industrial us	ser interruptions											
•	CIU, or other IU caused s or pass throughs) at yo			_								
□ Yes	⊠ No		,									
	ify the industry, describe	e each episodo	e. including dates.	duration, description								
	ems, and probable pollut		,	, 1								
N/A												

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

A. General information

	Company Name: <u>See Attachment 11</u>
	SIC Code: N/A
	Contact name: <u>N/A</u>
	Address: <u>N/A</u>
	City, State, and Zip Code: <u>N/A</u>
	Telephone number: <u>N/A</u>
	Email address: <u>N/A</u>
В.	Process information
	Describe the industrial processes or other activities that affect or contribute to the SIU(s) or CIU(s) discharge (i.e., process and non-process wastewater).
	N/A
C.	Product and service information
C.	Product and service information Provide a description of the principal product(s) or services performed.
C.	
C.	Provide a description of the principal product(s) or services performed.
C.	Provide a description of the principal product(s) or services performed.
C.	Provide a description of the principal product(s) or services performed.
C.	Provide a description of the principal product(s) or services performed.
C.	Provide a description of the principal product(s) or services performed.
	Provide a description of the principal product(s) or services performed. N/A
	Provide a description of the principal product(s) or services performed. N/A Flow rate information
	Provide a description of the principal product(s) or services performed. N/A Flow rate information See the Instructions for definitions of "process" and "non-process wastewater."
	Provide a description of the principal product(s) or services performed. N/A Flow rate information See the Instructions for definitions of "process" and "non-process wastewater." Process Wastewater:
	Provide a description of the principal product(s) or services performed. N/A Flow rate information See the Instructions for definitions of "process" and "non-process wastewater." Process Wastewater: Discharge, in gallons/day: N/A
	Provide a description of the principal product(s) or services performed. N/A Flow rate information See the Instructions for definitions of "process" and "non-process wastewater." Process Wastewater: Discharge, in gallons/day: N/A Discharge Type: Continuous Batch Intermittent
	Provide a description of the principal product(s) or services performed. N/A Flow rate information See the Instructions for definitions of "process" and "non-process wastewater." Process Wastewater: Discharge, in gallons/day: N/A Discharge Type: Continuous Batch Intermittent Non-Process Wastewater:
	Provide a description of the principal product(s) or services performed. N/A Flow rate information See the Instructions for definitions of "process" and "non-process wastewater." Process Wastewater: Discharge, in gallons/day: N/A Discharge Type: □ Continuous □ Batch □ Intermittent Non-Process Wastewater: Discharge, in gallons/day: N/A
	Provide a description of the principal product(s) or services performed. N/A Flow rate information See the Instructions for definitions of "process" and "non-process wastewater." Process Wastewater: Discharge, in gallons/day: N/A Discharge Type: Continuous Batch Intermittent Non-Process Wastewater:

E.	Pretreatment standards
	Is the SIU or CIU subject to technically based local limits as defined in the <i>i</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: <u>N/A</u>
	Click or tap here to enter text. <u>N/A</u>
	Category: <u>N/A</u>
	Subcategories: <u>N/A</u>
	Category: <u>N/A</u>
	Subcategories: <u>N/A</u>
	Category: <u>N/A</u>
	Subcategories: <u>N/A</u>
	Category: <u>N/A</u>
	Subcategories: <u>N/A</u>
F.	Industrial user interruptions
	Has the SIU or CIU caused or contributed to any problems (e.g., interferences, pass through, odors, corrosion, blockages) at your POTW in the past three years?
	□ Yes □ No
	If yes , identify the SIU, describe each episode, including dates, duration, description of problems, and probable pollutants.
	N/A

ATTACHMENT 1 EPAY VOUCHER RECEIPT

Shopping Cart

Select Fee

Search Transactions

Sign Out

Print this voucher for your records. If you are sending the TCEQ hardcopy documents related to this payment, include a copy of this voucher.

Transaction Information

Voucher Number: 720508

Trace Number: 582EA000624676

Date: 09/09/2024 03:03 PM

Payment Method: CC - Authorization 0000096594

Voucher Amount: \$2,000.00

Fee Type: WW PERMIT - FACILITY WITH FLOW >= 1.0 MGD - RENEWAL

ePay Actor: AMANDA GAFFANEY **Actor Email:** agaffaney@ntmwd.com

IP: 209.116.250.114

Payment Contact Information

Name: AMANDA GAFFANEY

Company: NORTH TEXAS MUNICIPAL WATER DISTRIC

Address: PO BOX 2408, WYLIE, TX 75098

Phone: 469-626-4936

Site Information

RN: RN102012119

Site Name: SISTER GROVE REGIONAL WATER RESOURCE RECOVERY FACILITY

Site Address: 3360 FM 2933, MCKINNEY, TX 75071

Site Location: LOCATED 1 MILE EAST OF INTERSECTION OF CR336 & FM2933 IN COLLIN COUNTY

Customer Information

Customer Name: MORGAN DADGOSTAR

Customer Address: PO BOX 2408, WYLIE, TX 75098

Other Information

Program Area ID: WQ0015693001

Comments: Program Area ID is current Permit Number WQ0015693001.

Close

Site Help | Disclaimer | Web Policies | Accessibility | Our Compact with Texans | TCEQ Homeland Security | Contact Us Statewide Links: Texas.gov | Texas Homeland Security | TRAIL Statewide Archive | Texas Veterans Portal

© 2002-2024 Texas Commission on Environmental Quality

Shopping Cart

Select Fee

Search Transactions

Sign Out

Print this voucher for your records. If you are sending the TCEQ hardcopy documents related to this payment, include a copy of this voucher.

Transaction Information

Voucher Number: 720509

Trace Number: 582EA000624676

Date: 09/09/2024 03:03 PM

Payment Method: CC - Authorization 0000096594

Voucher Amount: \$15.00

Fee Type: 30 TAC 305.53B WQ RENEWAL NOTIFICATION FEE

ePay Actor: AMANDA GAFFANEY **Actor Email:** agaffaney@ntmwd.com

IP: 209.116.250.114

Payment Contact Information

Name: AMANDA GAFFANEY

Company: NORTH TEXAS MUNICIPAL WATER DISTRIC

Address: PO BOX 2408, WYLIE, TX 75098

Phone: 469-626-4936



Site Help | Disclaimer | Web Policies | Accessibility | Our Compact with Texans | TCEQ Homeland Security | Contact Us Statewide Links: Texas.gov | Texas Homeland Security | TRAIL Statewide Archive | Texas Veterans Portal

@ 2002-2024 Texas Commission on Environmental Quality

ATTACHMENT 2 CORE DATA FORM



TCEQ Core Data Form

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

SECTION I: General Information

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

☐ New Pern	nit, Registra	tion or Authorization	(Core Data F	orm should be s	submitted	with th	ne progi	ram app	lication.)			
Renewal (Core Data Form should be submitted with the renewal form)							Other					
2. Customer Reference Number (if issued) Follow this link to for CN or RN num												ssued)
CN 601365448 <u>Central Regi</u>							RN 1	10409	067			
SECTIO	V II:	Customer	Infor	mation	1	_						
4. General Cu	istomer In	formation	5. Effective	ve Date for Cu	ıstomer	Inform	nation	Update	s (mm/dd/y	ууу)		9/9/200241
☐ New Custor☐ Change in Lo		Uverifiable with the Te	-	tomer Informat				•	gulated Enti	ty Owne	ership	
		bmitted here may oller of Public Accou	-	automaticali	ly based	on who	at is cu	urrent	and active	with th	e Texas Secr	etary of State
6. Customer	Legal Nam	e (If an individual, pri	nt last name	first: eg: Doe, J	lohn)			<u>If new</u>	Customer, e	nter pre	evious Custom	er below:
NORTH TEXAS	MUNICIPAL	WATER DISTRICT						N/A				
7. TX SOS/CP	A Filing N	umber	8. TX Stat	e Tax ID (11 d	igits)		9. Federal Tax ID 10. DUNS Number (if			Number (if		
N/A			N/A					(9 digits)		applicable)		
								N/A			N/A	
11. Type of C	ustomer:	☐ Corpora	tion				Individual Partnership: General Lin			eral 🔲 Limited		
Government: [City 🔲 (County 🔲 Federal 🔲	Local Sta	ate 🛛 Other			Sole Pr	roprieto	rship	Otl	ner:	
12. Number	of Employ	ees						13. lr	dependen	tly Ow	ned and Ope	erated?
□ 0-20 □ I	21-100] 101-250 251-	500 🛚 50	01 and higher				⊠ Ye	s [☐ No		
14. Customer	r Role (Pro	posed or Actual) – as i	t relates to ti	he Regulated Er	ntity listed	d on this	s form.	Please c	heck one of	the follo	wing	
Owner Occupation	al Licensee	Operator Responsible Pa		Owner & Opera VCP/BSA App					Other:			
15. Mailing	NORTH T	EXAS MUNICIPAL WAT	ER DISTRICT									
	P.O. BOX	2408										
Address:	City	WYLIE		State	TX	Z	ZIP	75098	}		ZIP + 4	
16. Country I	Mailing Inf	formation (if outside	USA)	•		17. E-N	Mail Ac	dress	if applicable	·)		
N/A						JCOVING	GTON@	WMTMQ	D.COM			
18. Telephon	e Number			19. Extension	on or Coo	de			20. Fax N	ımber	(if applicable)	

TCEQ-10400 (11/22) Page 1 of 3

(972) 442-5405	() -

SECTION III: Regulated Entity Information

21. General Regulated Entity Information (If 'New Regulated Entity" is selected, a new permit application is also required.)										
☐ New Regulated Entity ☐ Update to Regulated Entity Name ☐ Update to Regulated Entity Information										
The Regulated Entity Name submitted may be updated, in order to meet TCEQ Core Data Standards (removal of organizational endings such as Inc, LP, or LLC).										
22. Regulated Entity Nam	ie (Enter nam	ne of the site whe	re the re	egulated action	is taking pla	ce.)				
SISTER GROVE REGIONAL WATER RESOURCE RECOVERY FACILITY										
23. Street Address of the Regulated Entity:										
(No PO Boxes)	City	MCKINNEY		State	ТХ	ZIP	7507	1	ZIP + 4	0
24 County	COLLIN									
24. County	COLLIN									
		If no Stre	et Add	lress is provid	ed, fields 2	5-28 are r	equired	•		
25. Description to										
Physical Location:										
26. Nearest City							State		Nea	rest ZIP Code
Latitude/Longitude are re used to supply coordinate	-	-	-			ata Stand	ards. (G	eocoding of th	ne Physical .	Address may be
27. Latitude (N) In Decima	al:	33.22889			28. Lo	ongitude (W) In D	ecimal:	96.55972	2
Degrees	Minutes		Secon	ds	Degre			National Land		
33					Degre	es		Minutes		Seconds
29. Primary SIC Code 30. Seco		13		44	Degre	es 96		Winutes 33		Seconds 35
29. Primary SIC Code	30.	13 Secondary SIC	Code	44	31. Primar	96	ode	33	ndary NAIC	35
(4 digits)			Code	44		96 y NAICS C	ode	33	-	35
-		Secondary SIC	Code	44	31. Primar	96 y NAICS C	ode	33 32. Seco	-	35
(4 digits)	(4 d	Secondary SIC			31. Primar (5 or 6 digit	96 y NAICS C s)	ode	33. Seco	-	35
(4 digits) 4952	N/A Susiness of t	Secondary SIC			31. Primar (5 or 6 digit	96 y NAICS C s)	ode	33. Seco	-	35
(4 digits) 4952 33. What is the Primary B DOMESTIC WASTEWATER TRE	(4 d	Secondary SIC	0o not re	epeat the SIC or	31. Primar (5 or 6 digit	96 y NAICS C s)	ode	33. Seco	-	35
(4 digits) 4952 33. What is the Primary B DOMESTIC WASTEWATER TRE	(4 d	Secondary SIC	0o not re	epeat the SIC or	31. Primar (5 or 6 digit	96 y NAICS C s)	ode	33. Seco	-	35
(4 digits) 4952 33. What is the Primary B DOMESTIC WASTEWATER TRE	(4 d N/A Business of t EATMENT NORTH TE	Secondary SIC	0o not re	epeat the SIC or	31. Primar (5 or 6 digit	96 y NAICS C s)	ode 7509	33. Seco (5 or 6 dig	-	35
(4 digits) 4952 33. What is the Primary B DOMESTIC WASTEWATER TRE 34. Mailing Address:	N/A Business of t EATMENT NORTH TE P.O. BOX 2 City	Secondary SIC ligits) this entity? (E XAS MUNICIPAL 408 WYLIE	Oo not re	epeat the SIC or DISTRICT State	31. Primar (5 or 6 digit 22132 NAICS descri	96 y NAICS C s) iption.)		33. Seco (5 or 6 dig	gits)	35 S Code
(4 digits) 4952 33. What is the Primary B DOMESTIC WASTEWATER TRE 34. Mailing Address: 35. E-Mail Address:	N/A Business of t EATMENT NORTH TE P.O. BOX 2 City	Secondary SIC ligits) this entity? (E XAS MUNICIPAL	WATER	epeat the SIC or DISTRICT State	31. Primar (5 or 6 digit 22132 NAICS descri	96 y NAICS C s) iption.)	7509	33. Seco (5 or 6 dig	gits) ZIP + 4	35 S Code
(4 digits) 4952 33. What is the Primary B DOMESTIC WASTEWATER TRE 34. Mailing Address:	N/A Business of t EATMENT NORTH TE P.O. BOX 2 City	Secondary SIC ligits) this entity? (E XAS MUNICIPAL 408 WYLIE	WATER	epeat the SIC or DISTRICT State OM Extension or (31. Primar (5 or 6 digit 22132 NAICS descri	96 y NAICS C s) iption.)	7509	33. Seco (5 or 6 dig	gits) ZIP + 4	35 S Code

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

TCEQ-10400 (11/22) Page 2 of 3

Dam Safety		Districts	Edwards Aquifer		Emissions Inventory Air		Industrial Hazardous Waste
☐ Municipal S	Solid Wasto	☐ New Source	OSSF			Petroleum Storage Tank	☐ PWS
Municipal 3	Solid Waste	Review Air				Petroleum Storage Tarik	LI PW3
Sludge		Storm Water	☐ Title V Air		Tires		Used Oil
☐ Voluntary Cleanup		◯ Wastewater	☐ Wastewater Agricul	ture	☐ Water Rights		Other:
		WQ0015693001					
SECTIO	V IV: Pr	eparer Inf	<u>ormation</u>				
40. Name:	JERRY ALLEN			41. Title:	1	PERMITTING MANAGER	
42. Telephone Number		43. Ext./Code	44. Fax Number	45. E-Ma		Address	
(469) 626-4634		N/A	(N/A) -	JALLEN@	®NTN	/IWD.COM	

SECTION V: Authorized Signature

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

Company:	NORTH TEXAS MUNICIPAL WATER DISTRICT	PERMITTII	NG MANAGER					
Name (In Print):	JERRY ALLEN			Phone:	(469) 626- 4634			
Signature:	Jerry/the			Date:	9/9/2024			

TCEQ-10400 (11/22) Page 3 of 3

ATTACHMENT 3 PLAIN LANGUAGE SUMMARY

TCEQ

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

PLAIN LANGUAGE SUMMARY FOR TPDES OR TLAP PERMIT APPLICATIONS

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

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

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

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

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

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

North Texas Municipal Water District (CN601365448) proposes to operate Sister Grove Regional Water Resource Recovery Facility (RN110409067), a domestic wastewater treatment plant. The facility will be located at 3360 FM 2933, in McKinney, Collin County, Texas 75071. This application if for a renewal to discharge 64,000,000 gallons per day of treated effluent.

Discharges from the facility are expected to contain Carbonaceous Biochemical Oxygen Demand (CBOD), Total Suspended Solids (TSS), Ammonia Nitrogen, and *E. coli*. Additional potential pollutants are included in the Domestic Technical Reports 1.0, Section 7 Pollutant Analysis of Treated Effluent and Domestic Worksheet 4.0 in the permit application. Domestic wastewater will be treated by an activated sludge plant consisting of mechanical fine screens, vortex grit removal chambers, primary clarifiers, conventional activated sludge basins, secondary clarifiers, tertiary filters, ultraviolet light disinfection. Sludge from the primary and secondary clarifiers is blended and pumped to centrifuges for dewatering. Dewatered solids are disposed in the NTMWD 121 Regional Disposal Facility.

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

AGUAS RESIDUALES DOMÉSTICAS /AGUAS PLUVIALES

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

North Texas Municipal Water District (CN601365448) propone operar Sister Grove Regional Water Resource Recovery Facility (RN110409067), una planta de tratamiento de aguas residuales domésticas. La instalación estará ubicada en 3360 FM 2933, en McKinney, Condado de Collin, Texas 75071. Esta solicitud es para una renovación para descargar 64,000,000 de galones por día de efluente tratado.

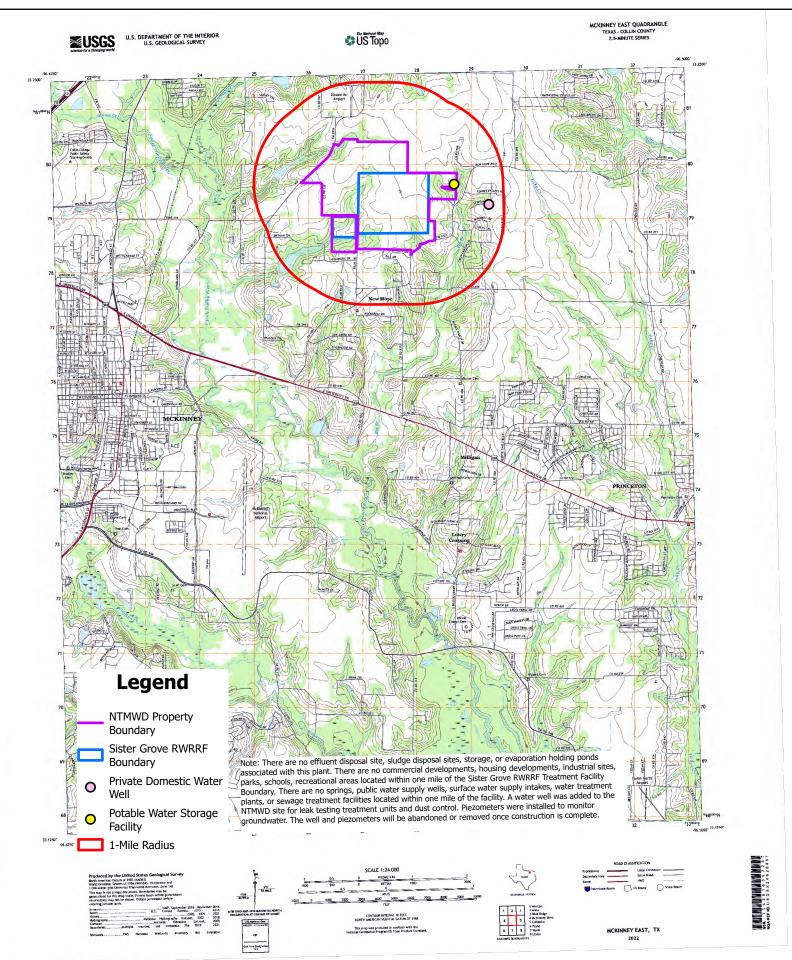
Se espera que las descargas de la instalación contengan demanda bioquímica de oxígeno carbonoso (CBOD), sólidos suspendidos totales (TSS), nitrógeno amoniacal y E. coli. Se incluyen contaminantes potenciales adicionales en los Informes Técnicos Nacionales 1.0, Sección 7 Análisis de Contaminantes del Efluente Tratado y la Hoja de Trabajo Doméstico 4.0 en la solicitud de permiso.. Aguas residuales domésticas. estará tratado por una planta de lodos activados compuesta por cribas mecánicas finas, cámaras de desarenación vortex, clarificadores primarios, balsas de lodos activados convencionales, clarificadores secundarios, filtros terciarios y desinfección con luz ultravioleta. El lodo de los clarificadores primario y secundario se mezcla y se bombea a centrífugas para su deshidratación. Los sólidos deshidratados se eliminan en la instalación de eliminación regional NTMWD 121.

ATTACHMENT 4 USGS TOPOGRAPHIC MAP



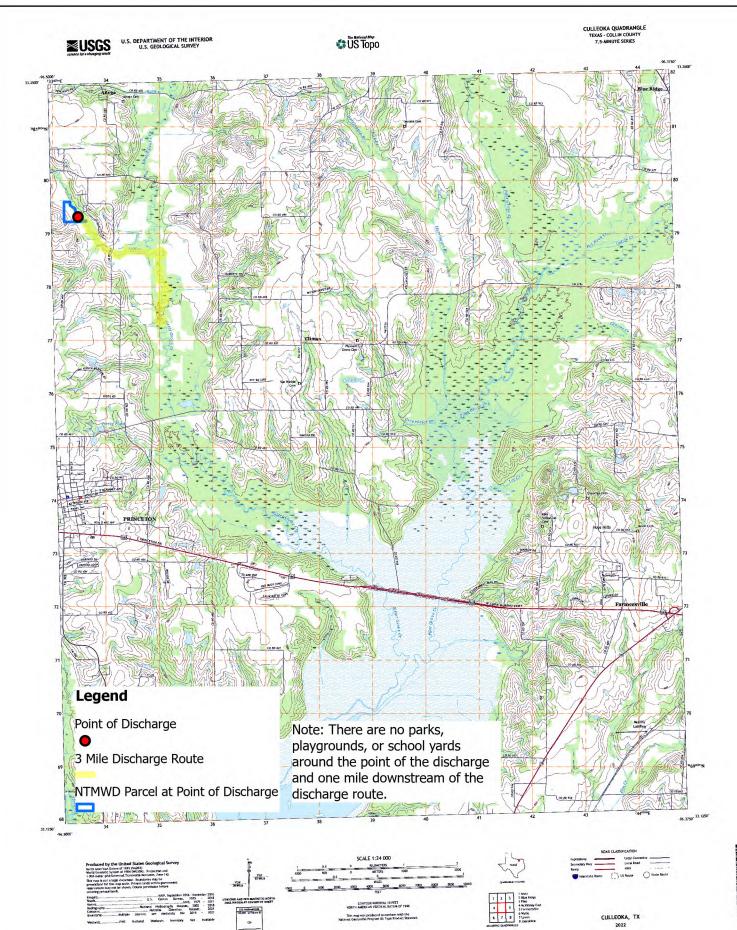
Sister Grove Regional Water Resource Recovery Facility USGS Topographic Map





Sister Grove Regional Water Resource Recovery Facility USGS Topographic Map





ATTACHMENT 5 TREATMENT PROCESS DESCRIPTION

Treatment Process Description for Sister Grove RWRRF

Influent flows are distributed through 3/5/8/10* mechanical fine screens and 2/4/6/8* vortex grit removal chambers. Following grit removal, flows are processed through 2/4/6/8* primary clarifiers. Flows then enter 2/4/6/8* conventional activated sludge basins operating in a plug flow mode in a biological nutrient removal (BNR) configuration with nutrient removal of phosphorus and nitrification of ammonia. 2/2/2/2* Ferric Sulfate Storage Tanks feed to the secondary clarifier splitter box as a back up to the biological phosphorus removal process. Basin effluent flows then enter 2/4/6/8* secondary clarifiers. Secondary effluent flows to 6/12/18/24* tertiary filters then to ultraviolet disinfection through 3/5/8/10* channels before discharging to Stiff Creek. Following grit removal, peak flows will be diverted to 3/3/4/4* aerated peak flow storage basins, until they can be returned to the head of the facility for continued processing.

Sludge from the secondary clarifiers, stored in 1/1/2/2* aerated WAS storage tank(s), and sludge from the primary clarifiers stored in 1/1/2/2* thickened primary sludge storage tank(s) are pumped to 1/1/2/2* blend tank(s) where they are mixed. The mixed sludge is then pumped to 3/3/5/5* dewatering centrifuges. Dewatered solids are disposed in the NTMWD 121 Regional Disposal facility. The supernatant stream from the dewatering process is pumped to the headworks for processing through the plant.

*Number of treatment units in Interim Phase I/Interim Phase II /Interim Phase III /Final Phase

ATTACHMENT 6 TREATMENT UNITS

Table 1.0(1) Treatment Units

Interim I Phase – 16 MGD

(* - Note that the number of units for Phases II, III and IV are cumulative)

Treatment Unit Type	Number of Units	Dimensions/Capacity
Mechanical Fine Screens	3	2 duty, 1 standby, 32 MGD each
Vortex Grit Removal	2	2 duty, 8 MGD Average each, 32 MGD Peak each
Chambers		
Aerated Peak Flow Storage	3	32 MG total volume
Basin		
Primary Clarifier	2	130-ft diameter, 16-ft sidewater depth, 1.6 MG each
Biological Nutrient Removal	2	4.7 MG each
Activated Sludge Basins		
Secondary Clarifier	2	145-ft diameter, 17.5-ft sidewater depth, 2.16 MG each
Back Up Phosphorus Removal	2	10,000 gal each
(Ferric Sulfate) Storage Tanks		10,000 gat each
Tertiary Filter	6	5 duty, 1 standby, 48 MGD total
UV Disinfection Channels	3	2 duty, 1 standby, 24 MGD Peak each
Aerated WAS Storage Tank	1	100-ft diameter, 22-ft depth, 1.3 MG
Thickened Primary Sludge	1	85-ft diameter, 20.5-ft depth, 870,000 gal
Storage Tank		
Blend Tank	1	25-ft diameter, 19.6-ft depth, 72,000 gal
Dewatering Centrifuge	3	2 duty, 1 standby, 3000 dry lbs/hr each

Interim II Phase - 32 MGD*

Treatment Unit Type	Number of Units	Dimensions/Capacity
Mechanical Fine Screens	5	4 duty, 1 standby, 32 MGD each
Vortex Grit Removal	4	4 duty, 8 MGD Average each, 32 MGD Peak each
Chambers		
Aerated Peak Flow Storage	3	32 MG total volume
Basin		
Primary Clarifier	4	130-ft diameter, 16-ft sidewater depth, 1.6 MG each
Biological Nutrient Removal	4	4.7 MG each
Activated Sludge Basins		
Secondary Clarifier	4	145-ft diameter, 17.5-ft sidewater depth, 2.16 MG each
Back Up Phosphorus Removal	2	10,000 gal each
(Ferric Sulfate) Storage Tanks		
Tertiary Filter	12	10 duty, 2 standby, 96 MGD total
UV Disinfection Channels	5	4 duty, 1 standby, 24 MGD Peak each
Aerated WAS Storage Tank	1	100-ft diameter, 22-ft depth, 1.3 MG
Thickened Primary Sludge	1	85-ft diameter, 20.5-ft depth, 870,000 gal
Storage Tank		
Blend Tank	1	25-ft diameter, 19.6-ft depth, 72,000 gal
Dewatering Centrifuge	3	2 duty, 1 standby, 3000 dry lbs/hr each

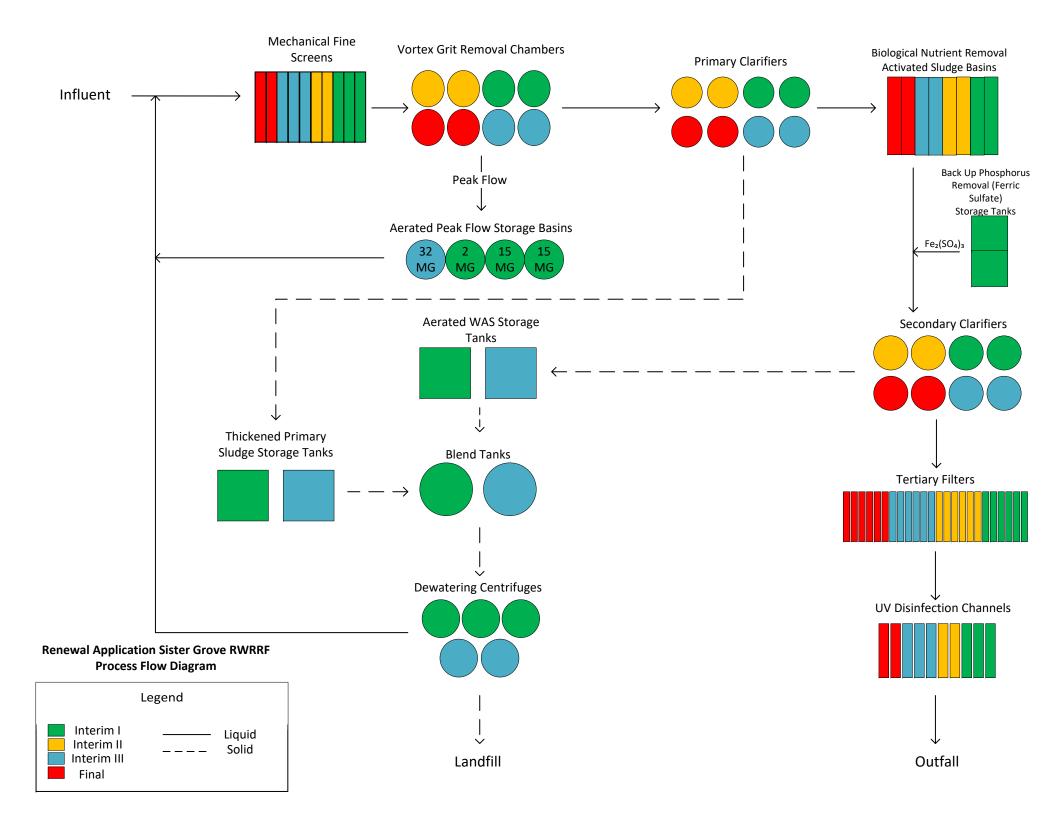
Interim III Phase - 48 MGD*

Treatment Unit Type	Number of Units	Dimensions
Mechanical Fine Screens	8	6 duty, 2 standby, 32 MGD each
Vortex Grit Removal	6	6 duty, 8 MGD Average each, 32 MGD Peak each
Chambers		
Aerated Peak Flow Storage	4	64 MG total volume
Basin		
Primary Clarifier	6	130-ft diameter, 16-ft sidewater depth, 1.6 MG each
Biological Nutrient Removal	6	4.7 MG each
Activated Sludge Basins		
Secondary Clarifier	6	145-ft diameter, 17.5-ft sidewater depth, 2.16 MG each
Back Up Phosphorus Removal	2	10,000 gal each
(Ferric Sulfate) Storage Tanks	2	10,000 gat each
Tertiary Filter	18	15 duty, 3 standby, 144 MGD total
UV Disinfection Channels	8	6 duty, 2 standby, 24 MGD Peak each
Aerated WAS Storage Tank	2	100-ft diameter, 22-ft depth, 1.3 MG each
Thickened Primary Sludge	2	85-ft diameter, 20.5-ft depth, 870,000 gal each
Storage Tank		
Blend Tank	2	25-ft diameter, 19.6-ft depth, 72,000 gal each
Dewatering Centrifuge	5	4 duty, 1 standby, 3000 dry lbs/hr each

Final Phase – 64 MGD*

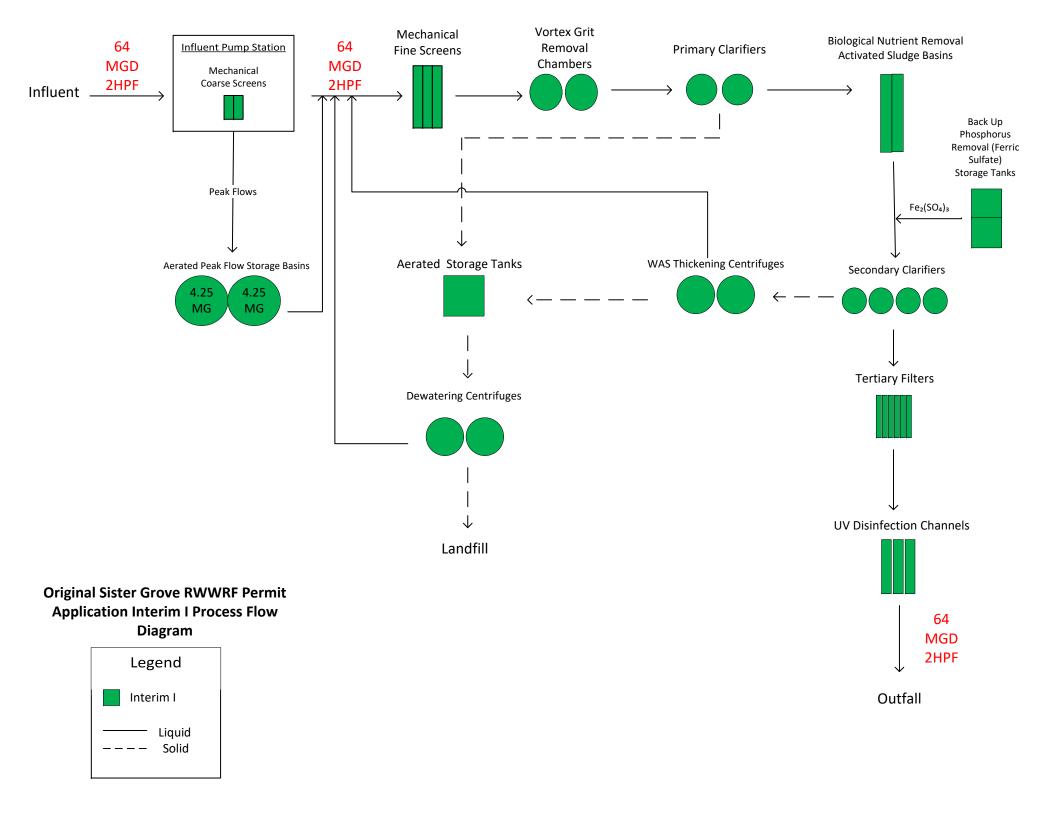
Treatment Unit Type	Number of Units	Dimensions
Mechanical Fine Screens	10	8 duty, 2 standby, 32 MGD each
Vortex Grit Removal	8	8 duty, 8 MGD Average each, 32 MGD Peak each
Chambers		
Aerated Peak Flow Storage	4	64 MG total volume
Basin		
Primary Clarifier	8	130-ft diameter, 16-ft sidewater depth, 1.6 MG each
Biological Nutrient Removal	8	4.7 MG each
Activated Sludge Basins		
Secondary Clarifier	8	145-ft diameter, 17.5-ft sidewater depth, 2.16 MG each
Back Up Phosphorus Removal	2	10,000 gal each
(Ferric Sulfate) Storage Tanks		
Tertiary Filter	24	20 duty, 4 standby, 144 MGD total
UV Disinfection Channels	10	8 duty, 2 standby, 24 MGD Peak each
Aerated WAS Storage Tank	2	100-ft diameter, 22-ft depth, 1.3 MG each
Thickened Primary Sludge	2	85-ft diameter, 20.5-ft depth, 870,000 gal each
Storage Tank		
Blend Tank	2	25-ft diameter, 19.6-ft depth, 72,000 gal each
Dewatering Centrifuge	5	4 duty, 1 standby, 3000 dry lbs/hr each

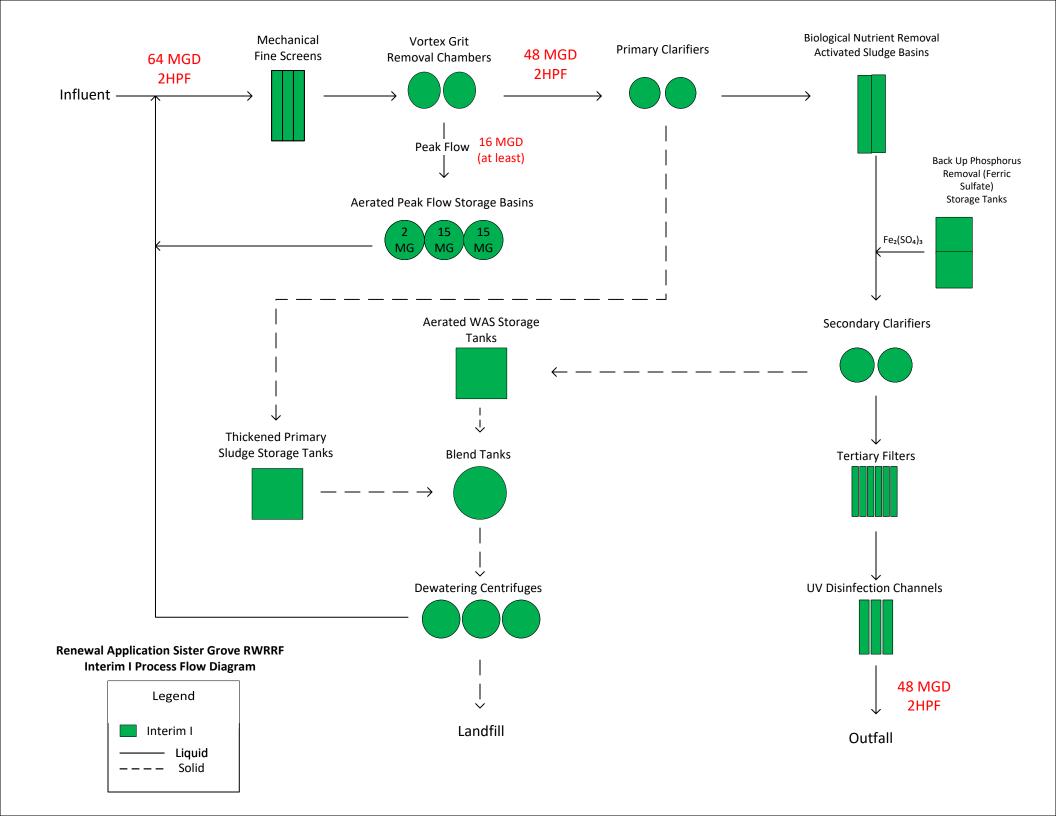
ATTACHMENT 7 PROCESS FLOW DIAGRAM



Comparison of Sister Grove RWRRF Original Application Treatment Process to Renewal Treatment Process

North Texas Municipal Water District wishes to note design changes that have occurred since the submission of the original permit application for Sister Grove RWRRF. The design has been changed for the Interim I and II Phases. Interim I Phase began construction January 2021 and is expected to be discharging effluent by August 2025. While Interim II Phase will begin construction approximately March 2025 and expected to begin discharging effluent by February 2028. In summary, mechanical coarse screens have been removed and peak flow will no longer be diverted to the peak flow basins after the mechanical screens. Now peak flow will be diverted to peak flow basins after Mechanical Fine Screens and Vortex Grit Removal Chambers. The number and sizes of the peak flow basins have changed so that Interim I Phase has changed from 8.5 MG to 32 MG of total peak flow storage, and Interim II Phase has changed from 17 MG to 32 MG of total peak flow storage. The 2-Hour Peak Flow (2HPF) design of the Primary Clarifiers, BNR Activated Sludge Basins, Secondary Clarifiers, Tertiary Filters, and UV Disinfection Channels for Interim I and II Phases changed. For example, Interim I Phase 2HPF design for effluent discharged from the oufall changed from the 64 MGD in the original plant design to 48 MGD in the current plant design. In the sludge process, WAS thickening centrifuges have been removed from the plant design, sludge processes following primary and secondary clarification have been detailed in the new treatment process and thickened primary sludge storage tanks have been added into the design. The aforementioned design changes of Interim I Phase have been depicted in the following pages, in which the Process flow diagram of the original permit application is compared to the respective documents submitted with this renewal application. The 2HPF design value is also provided within the facility.





TAB 15

ATTACHMENT 8 SITE DRAWING

Area Served by the Sister Grove Regional Water Resource Recovery Facility

The Sister Grove Regional Water Resource Recovery Facility (RWRRF) will be one of three facilities that treat wastewater received from the Upper East Fork Interceptor System (UEFIS). The communities currently served by the **UEFIS** are:

Allen McKinney
Anna Parker
Fairview Plano
Frisco Princeton
Lucas Prosper
Melissa Richardson

The conveyance of UEFIS is flexible, so flows can be transferred among the facilities to manage Annual Average Daily Flow (AADF) and peak flows at the facilities. The **Primary Service Area** is that area planned to be served by the Sister Grove RWRRF under typical daily operations, which include:

Portion of Anna Portion of Prosper
Portion of Melissa Portion of McKinney

The **Secondary Service Area** is that area of the UEFIS that the Sister Grove RWRRF can offload to optimize system operations, which include:

Allen Parker
Fairview Plano
Portions of Frisco Princeton

Lucas Portion of Richardson

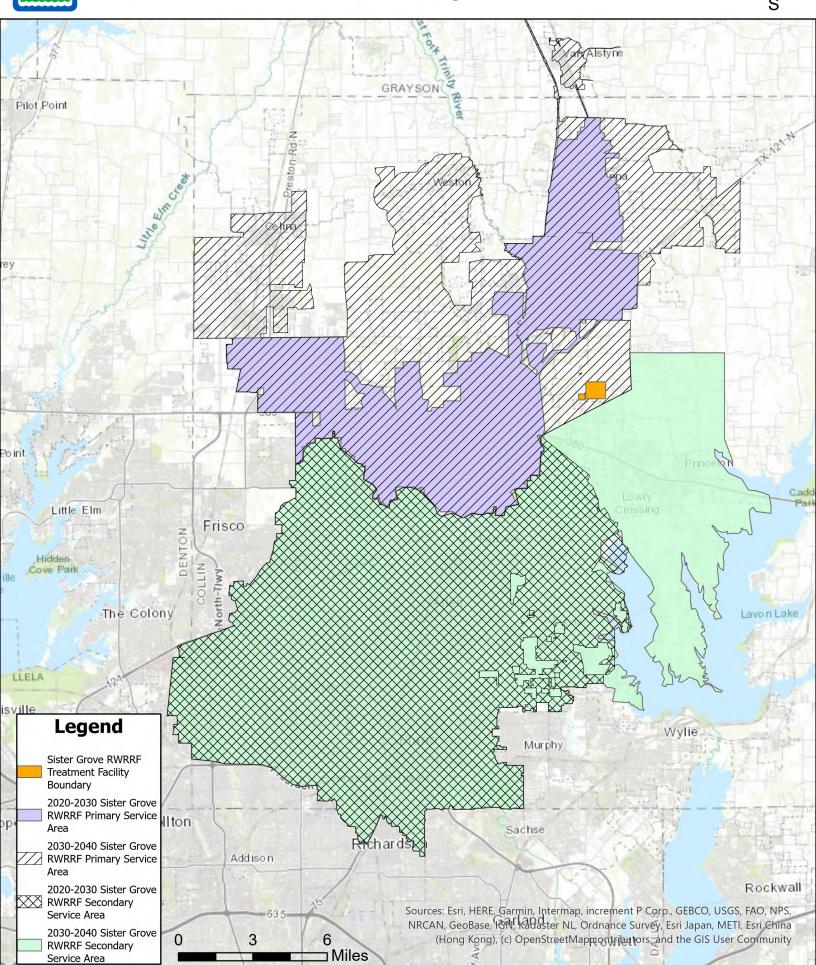
Portion of McKinney



Sister Grove RWRRF

Site Drawing





TAB 16

ATTACHMENT 9 SUMMARY TRANSMITTAL LETTER

Jon Niermann, *Chairman*. Emily Lindley, *Commissioner*Bobby Janecka, *Commissioner*Toby Baker, *Executive Director*



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

October 13, 2020

Samir S. Mathur, P.E. CDM Smith, Inc. 12400 Coit Road, Suite 400 Dallas, TX 75251

Re:

North Texas Municipal Water District

Sister Grove Regional Waste Resource Recovery Facility Phase I Facilities

Permit No. WQ0015693-001 WWPR Log No. 0520/080 CN601365448, RN110409067

Collin County

Dear Mr. Mathur:

On May 20, 2020, TCEQ received the project summary transmittal letter dated May 17, 2020 for a project to design and build an Interim Phase 1 regional wastewater plant for the North Texas Municipal Water District in Collin County, Texas. The project will construct the Sister Grove Water Resource Recovery facility. The plant is regulated by Water Quality permit WQ0015693001 which provides the flow limits and maximum effluent concentration limits as shown below for the interim phase I.

,	Average Daily Flow (MGD)	Peak Daily Flow (MGD)
Flow	16.0	64.0
Eff	Juent Concentration	Limits
Constituent		mg/l
$CBOD_5$	April – September	5
	October- March	10
TSS		5
NH ₃ -N	April – September	1.3
11113 11	October – March	3.0
Total P		Report
E. Coli		126 cfu/100 ml
Minimum Di	ssolved Oxygen	6.0

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

P.O. Box 13087 • Austin, Texas 78711-3087 • 512-239-1000 • tceq.texas.gov

Samir S. Mathur, P.E. Page 2 October 13, 2020

The design of the approved interim phase I Sister Grove plant includes the following units:

- Preliminary Treatment
 - o Fine Screening
 - 3 Mechanical step screens, 2 duty, 1 standby
 - 10' x 4' x 8' channel
 - 12 stacked trays per screen
 - o 3 Screenings waster/compactors; 2 duty, 1 standby
 - o Grit separator- 2 stacked trays, 12' diameter trays
 - o 1 Screenings/grit conveyors
 - o Disposal containers
- Primary Treatment
 - o 2 primary clarifiers
 - 130' diameter
 - 16' side water depth
 - Ferric sulfate addition-PH adjustment, coagulation, phosphorus removal
- Secondary Treatment
 - o Aerations Basins #1 and #2
 - Each aeration basin comprised of
 - Bio-selector basins SX1A, SX1B, SX2, SX3
 - Anaerobic Zones AN1, AN2, AN3
 - Oxic Zones- OX1- OX8
 - Bio-selector Basins
 - SX1A 42,412 gals.
 - o Detention time ADF = 0.22 hrs., PDF= 0.1 hrs.
 - o 1-1 hp vertical shaft mixer
 - SX1B 54,193 gals.
 - o Detention time ADF= 0.22 hrs., PDF = 0.1 hrs.
 - o 1-1 hp vertical shaft mixer
 - SX2 103,673 gals.
 - o Detention time ADF= 0.24 hrs., PDF = 0.10 hrs.
 - o 1-1 hp vertical shaft mixer
 - SX3 207,346 gals.
 - o Detention time ADF = 0.48 hrs., PDF 0.21 hrs.
 - o 11 hp vertical shaft mixer
 - Anaerobic Zones
 - AN1 and AN2 zones
 - o Volume 172,788 gals. each
 - o Detention time ADF = 0.40 hrs., PDF= 0.17 hrs.
 - o 1-5 hp vertical shaft mixer
 - AN3 zone
 - o Volume 155.509 gals.
 - o Detention time ADF = 0.36 hrs., PDF= 0.16 hrs.
 - o 1-5 hp vertical shaft mixer
 - Oxic Zones Ox1-Ox8; each zone 135.5' x 22' x 21' SWD
 - Vol. each zone 468,255 gals.; Total per basin vol.= 3,745,800 gals.
 - Detention time ADF = 8.64 hrs., PDF= 3.75 hrs.
 - Flexible membrane fine bubble diffusers

Samir S. Mathur, P.E. Page 3 October 13, 2020

- o 2 Secondary Clarifiers
 - 145' diameter
 - 17' side water depth
- Tertiary Filtration
 - o 10-micron filters
 - o Designed at 6.5 MGD/ft²
- Peak flow basins
 - o 3 basins
 - o 32 million gallons volume
 - o 5 surface aerators
 - o 20 water cannons
 - o 3 drain pumps (2 duty, 1 standby, 125 hp, 3900 gpm capacity)
- Ultraviolet disinfection
 - Peak design flow rate 48 MGD
 - o 3 channels (2 duty,1 standby)
 - o 64 lamps per channel
 - 4 banks per channel,
 - 1 module/bank,
 - 16 lamps/module
- Ferric sulfate storage
 - o 2-10,000 gallons storage tanks
 - o 4 feed pumps (3 duty, 1 standby); 130 gph
- Separate odor control for the headworks, primary and solids handling areas
 - o Bio-trickling filter headworks and primary treatment areas
 - o Dual stage chemical scrubber-solids handling area
- Non-potable water system
 - o 2 low flow water pumps; capacity 500 gpm
 - Chlorination feed system 2 peristaltic feed pumps 1 duty, 1 standby; capacity 10 gph)
- Aeration blowers
 - o 3 single stage integrally gear centrifugal; 2 duty, 1 standby
 - o 11,0000 scfm capacity each blower
 - o 800 hp
- Biosolids Processing
 - o 1 storage tank, 85 ft. diameter, 20.5 working depth, 870,000 gal. working vol.
 - o 2 transfer pumps, 520 gpm each
 - o 1 WAS storage tank, 100' diameter, 22' working depth, 1,300,000 working vol.
 - o 2 WAS transfer pumps, 690 gpm capacity
 - 2 WAS tank blowers, 4,200 SCFM capacity, 300 hp
 - o 5 Centrifugal feed pumps, 3 duty, 1standby, 1 shelf
 - o 1 Blend Tank, 25' diameter, 19.6 working depth, 72,000 gal. working vol.
 - o Polymer storage
 - o Various polymer feed and mixing pumps
 - o 4 centrifuges; 3 duty, 1 standby
 - o 1 cake storage silo

Samir S. Mathur, P.E. Page 4 October 13, 2020

- RAS/WAS/Scum pumps from secondary clarifiers
 - o RAS-3 5,600 gpm centrifugal pumps, 2 duty, 1 standby
 - o WAS- 2 200 gpm centrifugal pumps, 1 duty, 1 standby
 - o Scum- 3 100 gpm centrifugal pumps, 2 duty, 1 standby

The submitted project summary transmittal letter contained two requests for variances of 30 TAC Chapter 217 requirements.

- The first requested variance is to 30 TAC 217.129(c)(5) which requires weir loading of a primary clarifier not to exceed 30,000 gpd per linear foot of weir length for a wastewater plant with a design flow greater than 1.0 million gallons per day.
- The second requested variance is for 30 TAC Chapter 217.152(d)(5); applicable to secondary clarifiers and states that for a wastewater treatment facility with a design flow equal to or greater than 1.0 million gallons per day, the clarifier weir loading must not be exceed 30,000 gallons per day at the peak flow per linear foot of weir length.

The Engineer is proposing weir loading rates for primary and secondary clarifiers at the peak flow of 61,150 gpd/ft and 55,000 gpd/ft respectively. The primary and secondary clarifiers for this project are being constructed with a greater side water depth than what is stated in 30 TAC Chapter 217. Deeper clarifiers will provide a greater detention time. Also, the addition on the ferric sulfate to the primary clarifier will provide some additional coagulation and flocculation along with assisting with phosphorus removal. Since the treatment plant design is incorporating primary clarification this will aid in removing solids before the aeration basins and less what is passed to the secondary clarifiers. Given that both the primary and secondary clarifiers will have additional depth and detention time, ferric sulfate will be introduced to the primary and that the plant design is employing primary clarification TCEQ is conditionally approving the two requested variances for exceeding the weir loading rates for both the primary and secondary clarifiers. The conditions on the approval of the requested variances are:

- The design should incorporate the use of peak flow basins on the front end of the treatment process to alleviate the flow magnitude on the weirs of the different clarifiers.
- If issues arise from this increased loading TCEQ is reserving the right to require a double weir in either or both the primary and secondary clarifiers. TCEQ understands and wants to convey to the engineer and facility owner and operator that if a double weir is needed that this will undoubtedly require additional cleaning on a regular basis.

The TCEQ review of the submitted summary transmittal letter, plans and specifications along with the approval of the requested variances seems to indicate the plant design relayed provides general adherence to at leas the minimum requirements of 30 TAC Chapter 217: Design Criteria for Wastewater Systems. Given the result of the TCEQ review this project is conditionally approved for completion. The conditions of this project approval are:

- If this project is a design build project regular progress reports should be submitted to TCEQ to show that progress is being made to completion
- If any process unit(s) listed in this approval letter is/are omitted from the built system which was outlined in the reviewed design documents an updated design submittal should be made to allow TCEQ to review the project to ensure that the updated plant can provide adequate treatment for flow and organic matter as required in the existing permit.

Samir S. Mathur, P.E. Page 5 October 13, 2020

- The screenings should be kept in a closed contained to eliminate and issues with odors
- If the disinfection system can not obtain the required destruction an alternative method of disinfection must be sought and an update to the current wastewater permit be made.
- The peak flow basins should be used as needed to ensure uniform flow is attained through the ultraviolet disinfection system
- If process unit sizes are altered from what was approved as part of the reviewed design an updated submittal is required to be submitted to TCEQ to review.
- The final treatment plant must incorporate the uses of an effluent weir and staff gauge as a secondary flow measurement.

You must keep certain materials on file for the life of the project and provide them to TCEQ upon request. These materials include an engineering report, test results, a summary transmittal letter, and the final version of the project plans and specifications. These materials shall be prepared and sealed by a Professional Engineer licensed in the State of Texas and must show substantial compliance with Chapter 217. All plans and specifications must conform to any waste discharge requirements authorized in a permit by the TCEQ. Certain specific items which shall be addressed in the engineering report are discussed in §217.10. Additionally, the engineering report must include all constants, graphs, equations, and calculations needed to show substantial compliance with Chapter 217.

If in the future, additional variances from the Chapter 217 requirements are desired for the project, each variance must be requested in writing by the design engineer. Then, the TCEQ will consider granting a written approval to the variance from the rules for the specific project and the specific circumstances.

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

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

Samir S. Mathur, P.E. Page 6 October 13, 2020

If you have any questions, or if we can be of any further assistance, please call me at (512) 239-1372.

Paul A. Brochi, P.E.

Wastewater Permits Section (MC 148)

Water Quality Division

Texas Commission on Environmental Quality

PAB/tc



12400 Coft Rd, Sufte 400 Dallas, Texas 75251 Phone: 214 346-2800

May 17, 2020

Mr. Louis C. Herrin III, P.E. TCEQ - MC 148 P. O. Box 13087 Austin, Texas 78711-3087

Re: Chapter 217.6 Summary Transmittal Letter

Subj: Permittee: North Texas Municipal Water District

Permit Number: WQ0015693001

Project Name: Sister Grove Regional Water Resource Recovery Facility

Phase 1 Facilities

County: Collin

Grant No.: Not applicable

Dear Mr. Herrin:

The purpose of this letter is to provide the Texas Commission on Environmental Quality (TCEQ) with the information necessary to comply with the requirements of §217.6(d) of the TCEQ's rules entitled, "DESIGN CRITERIA FOR DOMESTIC WASTEWATER SYSTEMS." The necessary information includes:

1. Name and address of Engineering Firm:

CDM Smith, Inc. 12400 Coit Rd, Suite 400 Dallas, TX 75251

2. Design Engineer:

Samir S. Mathur, P.E. Phone: 214-346-2830

Email: mathurss@cdmsmith.com

- 3. Name of County Where the Project Will be Located: Collin County
- 4. Identifying Name for the Project:

Sister Grove Regional Water Resource Recovery Facility Phase 1 Facilities



Mr. Louis C. Herrin III, P.E. TCEQ - MC 148 Page 2



5. Name of Entities which propose to own, operate, and maintain the project through its useful life:

North Texas Municipal Water District 505 East Brown Street Wylie, TX 75098 Program Manager: Donna Long, P.E.

- 6. The plans and specifications which describe the project identified in this letter are in substantial compliance with all the requirements of Chapter 217, with the exception of the variance described below.
- 7. Any variances noted in this letter will not threaten public health or the environment, based on the best professional judgment of the professional engineer who prepared the engineering report and project plans and specifications for this project.
- 8. Project Description and Scope:
 - a. This project includes construction of facilities for Phase 1 of the proposed Sister Grove Regional Water Resource Recovery Facility (RWRRF). The initial phase (Phase 1) would include facilities for treatment of an average daily flow of 16 million gallons per day (mgd). A future second expansion, Phase 2, is planned to expand treatment capacity to 32 mgd for continued growth. Further, future expansions of the Sister Grove RWRRF would be in increments of approximately 16 mgd, up to an ultimate long-term average daily flow treatment capacity of 64 mgd. Details of the process units, including the size and capacities, are listed on Sheets G-22 and G23 of the drawings.
 - b. Phase 1 of the Sister Grove RWRRF shall include the following facilities:

Liquid Treatment Facilities

- Preliminary treatment facilities, consisting of a plant headworks facility providing fine screening and grit removal of raw influent wastewater flows, sized to handle projected Phase 1 and, with future additional equipment, Phase 2 peak flows.
- Primary treatment process facilities consisting of primary clarifiers, scum pumping, and sludge pumping, sized for projected Phase 1 flows, with accommodations for interconnection to additional adjacent structures and equipment for Phase 2 flows.
- Activated sludge secondary treatment process facilities consisting of aeration basins, aeration blowers, secondary clarifiers, scum pumping, and sludge pumping, sized for projected Phase 1 flows, with accommodations for interconnection to additional adjacent structures and equipment for Phase 2 flows. Aeration basins are sized and configured to provide biological phosphorus removal.
- Ferric sulfate chemical storage and feed facilities for additional phosphorus removal, if required, of Phase 1 and 2 flows.



- Tertiary filtration units, consisting of cloth media filters, sized for projected Phase 1 flows, with accommodations for interconnection to additional adjacent structures and equipment for Phase 2 flows.
- Disinfection, consisting of ultraviolet (UV) light contact units, sized for projected Phase 1 flows, with accommodations for interconnection to additional adjacent structures and equipment for Phase 2 flows.
- Peak flow basin for temporary storage of peak flows, sized to handled projected Phase 2 peak flows.
- Effluent flow measurement using a parshall flume and effluent sampling facility.

Solids Treatment Facilities

- Primary and waste activated sludge storage tanks and blend tank, with mixing equipment, for temporary storage and blending of biosolids prior to dewatering and off-site disposal, sized for projected Phase 2 flows.
- Sludge dewatering facility, consisting of centrifuges, polymer storage and supply facilities, conveyors, and a cake storage silo, sized for projected Phase 2 flows, with accommodations for interconnection to additional adjacent structures and equipment for flows beyond Phase 2.

Additional Support Facilities

- Non-potable water (NPW) pumping and distribution system.
- Potable water distribution for drinking and fire protection water uses.
- Drain pump station for receiving return flow from the peak flow basins, flow from facility process tanks when drained for maintenance and cleaning, and sanitary flows.
- Odor treatment units for collection and control of odorous air from preliminary treatment, primary treatment, and the sludge tanks and dewatering facility.
- Miscellaneous electrical buildings to house electrical power supply facilities for adjacent treatment process areas.
- Operations/plant administration building.
- Storage building.
- Utility electrical power service entrance building.
- Standby electrical generator to operate all critical wastewater treatment system units during power outages.



- Interconnecting yard piping, site roads, grading, fencing, lighting, site boundary berms, and tree plantings.
- c. A site plan for the proposed facility is shown on Sheet C-YA-6 of the drawings.
- d. Two variances are requested as described below. No innovative or non-conforming technologies are proposed.

Section §217.129(c)(5), applicable to Primary Clarifiers, states:

Weir loading must not exceed 30,000 gallons per day at peak flow per linear foot of weir length for a wastewater treatment facility with a design flow greater than 1.0 million gallons per day.

Section §217.152(d)(5), applicable to Secondary Clarifiers, states:

For a wastewater treatment facility with a design flow equal to or greater than 1.0 million gallons per day, the clarifier effluent weir loading must not exceed 30,000 gallons per day at the peak flow per linear foot of weir length.

The weir loading rate at peak flow for the proposed primary clarifiers is 61,150 gpd/linear foot and for the proposed secondary clarifiers is 55,000 gpd/linear foot. A variance is requested for the weir loading rate for these clarifiers.

e. Reasons for proposed variance:

Based on operational data from plants and industry practices, CDM Smith has concluded that clarifier performance is primarily driven by surface overflow rate, and that weir overflow rate does not impact the performance of the clarifiers. CDM Smith routinely designs clarifiers in Texas that exceed the weir loading rate required by Chapter 217 and have not seen any problems in performance. In order for this design to meet the weir loading rate requirements, the length of the weirs would have to be doubled, which would increase the potential of algae growth and lead to long-term maintenance. Based on these reasons, we request that TCEQ allow the variance to the weir loading rate for the primary and secondary clarifiers.

Please note that based on discussion with Mr. Louis Herrin on April 24, 2020, we are submitting only selected drawings from the design package. If you would like to review the remaining drawings or the specifications, please let me know and we will send them to you.

If you have any questions regarding this project, please contact the undersigned at Phone: 214-346-2830; Email: mathurss@cdmsmith.com.

Mr. Louis C. Herrin III, P.E. TCEQ - MC 148 Page 5



Very truly yours,

Samue & Mathies

Samir S. Mathur, P.E. Design Manager CDM Smith, Inc.

cc: Mr. Brent Candler, TCEQ Region 4 Water Section Manager

Ms. Donna Long, P.E., North Texas Municipal Water District

TAB 17

ATTACHMENT 10 SEWAGE SLUDGE SOLIDS MANAGEMENT PLAN

Sister Grove

Regional Water Resource Recovery Facility Sewage Sludge Solids Management Plan

The permit application for the Sister Grove Regional Water Resource Recovery Facility (RWRRF) includes four phases Interim I Phase - 16 MGD, Interim II Phase - 32 MGD, Interim III Phase - 48 MGD, and Final Phase - 64 MGD for which the design data for the sewage sludge solids (solids) treatment units are summarized for each phase in the following tables.

Table of Sewage Sludge Solids Treatment Units

Treatment Unit Type	Number of	Dimensions (L x W x D)
	Units*	
Aerated Storage Tanks	1/2/3/4	81' x 40' x 15'
Centrifuges	2/3/4/5	30" diam. w/ 220 gpm loading
(WAS Thickening)		
Centrifuges	2/2/3/3	30" diam. w/ 120 gpm loading
(Sludge Dewatering)		
Sludge Container	At least	26,000 pound containers
(hauled by truck)	2/2/3/3	

^{*}Interim Phase I / Interim Phase II / Interim Phase III / Final Phase

The amount of solids possibly generated at design flow and at 75%, 50% and 25% of design flow of the RWRRF was determined for each phase and presented in the following table. The table specifically includes the possible primary sludge, waste activated sludge (WAS), thickened WAS and dewatered sludge solids generated at the various flows during each phase. Also included in the table, the number of truckloads of solids expected to be generated per week was determined assuming a truckload of dewatered solids is a 26,000 pound container. The table provides the possible quantity of solids to be removed from the process and schedule for removal of solids designed to maintain an appropriate solids inventory. Solids are processed and handled regularly, as

required to maintain the RWRRF. An electronic system is used to monitor and document solids generated and disposed.

Table of Sewage Sludge Solids Generated

Interim I Phase Solid Loads					
% of Design Flow 25% 50% 75% 100%					
Annual Average Flow (mgd)	4	8	12	16	
MM Design Flow (mgd)	5.4	10.8	16.2	21.6	
Primary Sludge		-			
Flowrate (gpd)	15,500	31,000	46,500	62,000	
%TS			3		
Solids (lbs/day)	3,875	7,750	11,625	15,500	
WAS					
Flowrate (gpd)	39,000	78,000	117,000	156,000	
%TS			0.91		
Solids (lbs/day)	3,000	6,000	9,000	12,000	
Thickened WAS					
Flowrate (gpd)	6,000	12,000	18,000	24,000	
%TS			6		
Solids (Ibs/day)	3,000	6,000	9,000	12,000	
Dewatered Solids					
%TS 20					
Solids (lbs/day)	6875	13750	20625	27500	
Truckloads/Week	9	19	28	37	

	Interim II Pha	se Solid Loads		
% of Design Flow	25%	50%	75%	100%
Annual Average Flow (mgd)	8	16	24	32
MM Design Flow (mgd)	10.8	21.6	32.4	43.2
Primary Sludge				
Flowrate (gpd)	31,000	62,000	93,000	124,000
%TS		3		
Solids (lbs/day)	7,750	15,500	23,250	31,000
WAS				
Flowrate (gpd)	78,000	156,000	234,000	312,000
%TS		0.91		
Solids (lbs/day)	6,000	12,000	18,000	24,000
Thickened WAS				
Flowrate (gpd)	12,000	24,000	36,000	48,000
%TS		6		
Solids (lbs/day)	6,000	12,000	18,000	24,000
Dewatered Solids				
%TS		20		
Solids (lbs/day)	13,750	27,500	41,250	55,000
Truckloads/Week	19	37	56	74
	Interim III Pha	se Solid Loads		
% of Design Flow	25%	50%	75%	100%
Annual Average Flow (mgd)	12	24	36	48
MM Design Flow (mgd)	16.2	32.4	48.6	64.8
Primary Sludge				
Flowrate (gpd)	46,500	93,000	139,500	186,000
%TS		3		
Solids (Ibs/day)	11,625	23,250	34,875	46,500
WAS				
Flowrate (gpd)	117,000	234,000	351,000	468,000
%TS		0.91		
Solids (lbs/day)	9,000	18,000	27,000	36,000
Thickened WAS				
Flowrate (gpd)	18,000	36,000	54,000	72,000
%TS		6		
- 1: 1 (4) (1) 3	9,000	18,000	27,000	36,000
Solids (lbs/day)	3,000			
Dewatered Solids	3,000			
	3,000	20		
Dewatered Solids	20,625		61,875	82,500

Page 3 of 4 Sister Grove Regional WRRF May 2018 Domestic Wastewater Permit Application

Final Phase Solid Loads				
% of Design Flow	25%	50%	75%	100%
Annual Average Flow (mgd)	16	32	48	64
MM Design Flow (mgd)	21.6	43.2	64.8	86.4
Primary Sludge				
Flowrate (gpd)	62,000	124,000	186,000	248,000
%TS		3		
Solids (Ibs/day)	15,500	31,000	46,500	62,000
WAS				
Flowrate (gpd)	156,000	312,000	468,000	624,000
%TS		0.91		
Solids (lbs/day)	12,000	24,000	36,000	48,000
Thickened WAS				
Flowrate (gpd)	24,000	48,000	72,000	96,000
%TS		6		
Solids (lbs/day)	12,000	24,000	36,000	48,000
Dewatered Solids				
%TS		20		
Solids (lbs/day)	27,500	55,000	82,500	110,000
Truckloads/Week	37	74	111	148

The sewage sludge solids management approach consists of pumping solids from the primary clarifiers to 1/2/3/4* aerated sludge storage tank as the solids are generated. The solids from the secondary clarifiers are managed to maintain a mixed liquor suspended solids of about 3,000 mg/L. WAS from the secondary clarifiers is thickened by 2/3/4/5* centrifuges (WAS thickening) prior to being sent to 1/2/3/4* aerated storage tanks where it is mixed with the solids pumped from the primary clarifiers. The aerated storage tanks allows for three days of thickened WAS and primary sludge storage; mixed solids are then pumped to 2/2/3/3* centrifuges (sludge dewatering) for dewatering. The concentrate streams from both WAS thickening and sludge dewatering centrifuges are recycled back to the headworks. Dewatered solids are conveyed to truck containers capable of 26,000 pounds. Dewatered solids are hauled by NTMWD trucks (Hauler Registration No. 22488) for disposal at NTMWD 121 Regional Disposal Facility (MSW Permit No. 2294).

^{*}Number of treatment units in Interim Phase I / Interim Phase II / Interim Phase III / Final Phase

TAB 18

ATTACHMENT 11 WORKSHEET 6.0 – SECTION 3 ATTACHMENT

In Lieu of Section 3 of Worksheet 6.0

Once Sister Grove WWTP is operational, it will receive a portion of the wastewater flow from NTMWD's Upper East Fork Interceptor System (UEFIS) that currently goes to the Wilson Creek Regional Wastewater Treatment Plant. The Member Cities served by the UEFIS are Allen, Frisco, McKinney, Plano, Princeton, Prosper, and Richardson. The Customer Cities served by the UEFIS are Anna, Fairview, Lucas, Melissa, and Parker.

The Wilson Creek Regional WWTP Approved Pretreatment Program includes the permitted SIUs located in the Cities of Allen, McKinney, and Melissa. The Rowlett Creek Regional WWTP Approved Pretreatment Program includes the permitted significant industrial users (SIUs) located in the Cities of Plano and Richardson. The Stewart Creek and Panther Creek Approved Pretreatment Program includes the permitted SIUs in the City of Frisco. Additionally, no industries that meet the definition of SIU were identified in the city of Anna, Fairview, Lucas, Parker, Princeton, and Prosper.

The information requested in Worksheet 6.0 of this application is the same information submitted annually to the TCEQ per the requirements of the pretreatment program in the Wilson Creek Regional WWTP TPDES Permits. This information has been summarized in the following table, which consolidates the industrial users that will contribute flow to Sister Grove RWRRF, including the location of the SIU, the type of business, category, SIC Code and annual average daily flow for each.

Permitted Significant Industrial Users

Allen	Type of Business	CIU/SIU	SIC CODE	AVG FLOW GPD
Formulife, LLC	Pharmaceutical	40 CFR 439.47	5199	2,500
Intelligent Epitaxy Technology	Semiconductor	40 CFR 469.18	3674	950
Photronics Texas Allen, Inc.	Metal Finisher	40 CFR 433.17	3861	30,000
Reaction Technology Epi, LLC	Semiconductor	40 CFR 469.18	3674	66,000
Strike Photonics LLC	Semiconductor	40 CFR 469.18	3674	No Discharge Yet

McKinney	Type of Business	CIU/SIU	SIC CODE	AVG FLOW GPD
Aramark Cleanroom Services, Inc.	Laundry	SIU	7218	48,000
Blount Fine Foods Corporation	Food manufacturing	SIU	2036	175,000
Encore Wire Corporation	Wire/Copper	40 CFR 464.26	3351/3357	45,000
ILS Gummies, LLC	Nutritional Supplements	40 CFR 439.47	2833	36,000
Leon's Texas Cuisine, L.P.	Food manufacturing	SIU	2036	31,000
Metro Linen Service	Laundry	SIU	7213	88,000
Raytheon Company	Metal Finisher	40 CFR 433.17	3812	80,000
Simpson Strong Tie Company, Inc.	Metal Finisher	SIU	3469/3479	3,065
Statlab Medical Products, LLC	Medical Products	SIU	2835	10,600
Watson & Chalin Mfg, Inc.	Truck axles	Zero discharger	3714	0
Wistron Greentech (Texas) Corp.	Precious Metal Recycle	40 CFR 421.260 zero discharger	4953	0

Melissa	Type of Business	CIU/SIU	SIC CODE	AVG FLOW GPD
Melissa Renewables, LLC	Landfill Gas Recovery	Zero discharger	4922	0

TAB 19

ATTACHMENT 12 SUPPLEMENTAL PERMIT INFORMATION FORM (SPIF)

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY SUPPLEMENTAL PERMIT INFORMATION FORM (SPIF)

FOR AGENCIES REVIEWING DOMESTIC OR INDUSTRIAL TPDES WASTEWATER PERMIT APPLICATIONS

TCEQ USE ONLY:	
Application type:RenewalMajor Amen	idment Minor Amendment New
County:S	
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 o	only. (Instructions, Page 53)
Complete this form as a separate document. TCEQ our agreement with EPA. If any of the items are no is needed, we will contact you to provide the inforeach item completely.	t completely addressed or further information
Do not refer to your response to any item in the attachment for this form separately from the Adm application will not be declared administratively completed in its entirety including all attachments may be directed to the Water Quality Division's Apemail at	

Provide the name, address, phone and fax number of an individual that can be contacted to answer specific questions about the property.
Profix (Mr. Mc. Micc): Mr

Prefix (Mr., Ms., Miss): <u>Mr.</u>

First and Last Name: <u>Jerry Allen</u>

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

Title: <u>Permitting Manager</u>

Mailing Address: P.O. Box 2408

City, State, Zip Code: Wylie, Texas, 75098

Phone No.: <u>469-626-4634</u> Ext.: <u>N/A</u> Fax No.: <u>N/A</u>

E-mail Address: jallen@ntmwd.com

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

	please list the owner of the property.					
N/A						

4. Provide a description of the effluent discharge route. The discharge route must follow the flow of effluent from the point of discharge to the nearest major watercourse (from the point of discharge to a classified segment as defined in 30 TAC Chapter 307). If known, please identify the classified segment number.

<u>Effluent is discharged from the plant outfall to Stiff Creek, thence to Sister Grove Creek, thence to Lavon Lake in Segment No. 0821 of the Trinity River Basin.</u>

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.

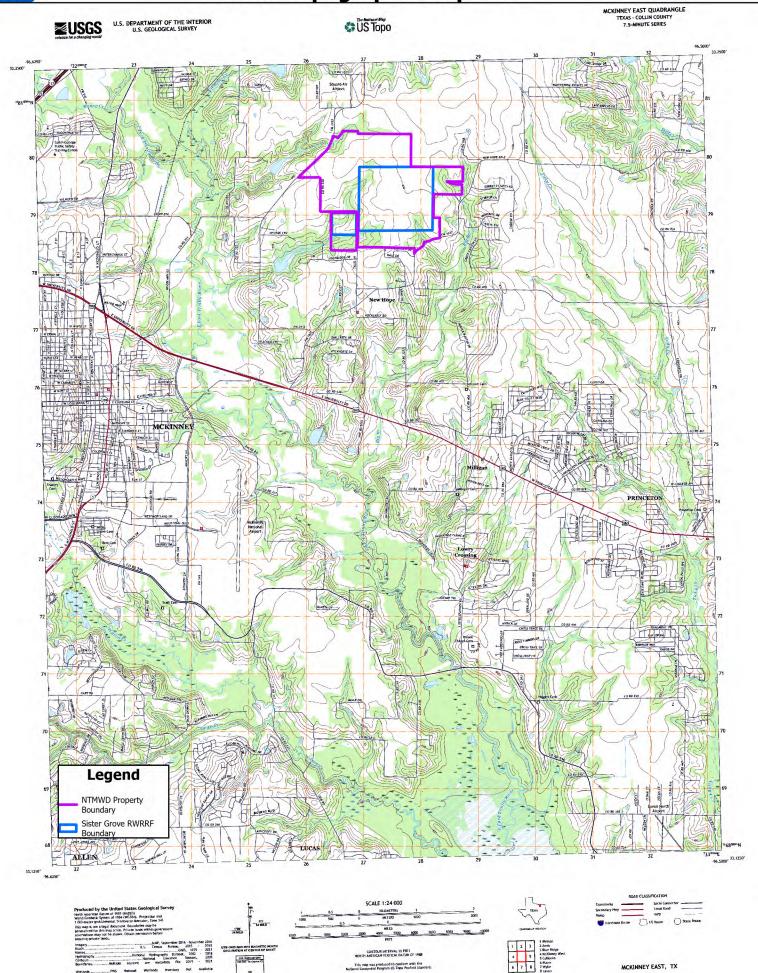
- Proposed access roads, utility lines, construction easements
- ☐ Visual effects that could damage or detract from a historic property's integrity
- ☑ Vibration effects during construction or as a result of project design
- Additional phases of development that are planned for the future
- ☐ Sealing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

	□ Disturbance of vegetation or wetlands	
1.	List proposed construction impact (surface acres to be impacted, depth of excavation, seal of caves, or other karst features):	
	About 330 acres will be impacted during construction, and the depth of excavation will b about 30 feet deep. No cave or karst features involved	<u>e</u>
2.	Describe existing disturbances, vegetation, and land use:	
	The construction will be on land that is normally plowed, cultivated and mowed. The property has been used for either pasture for livestock grazing or utilized as crop land.	
	HE FOLLOWING ITEMS APPLY ONLY TO APPLICATIONS FOR NEW TPDES PERMITS AND MAJOMENDMENTS TO TPDES PERMITS)R
3.	List construction dates of all buildings and structures on the property:	
	N/A	
4.	Provide a brief history of the property, and name of the architect/builder, if known.	
	N/A	



Sister Grove Regional Water Resource Recovery Facility USGS Topographic Map - SPIF

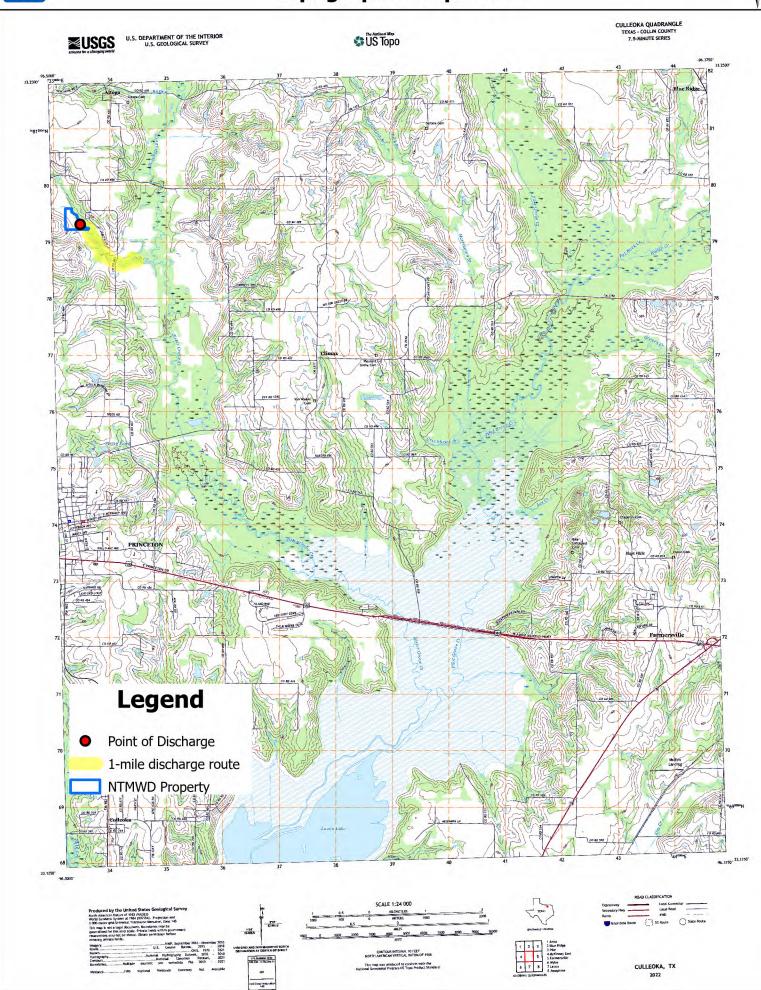






Sister Grove Regional Water Resource Recovery Facility USGS Topographic Map - SPIF





Candice Calhoun

From: Jerry Allen <jallen@NTMWD.COM>
Sent: Wednesday, September 18, 2024 2:42 PM

To: Candice Calhoun

Cc: Sarah Burns; Brandon Maldonado

Subject: RE: Application to Renew Permit NO. WQ0015693001 - Notice of Deficiency Letter **Attachments:** 2024-09-18 Municipal Discharge Renewal Spanish NORI.docx; 2024-09-18 to TCEQ re

NTMWD Response to Sister Grove RWRRF NOD SIGNED.pdf

Follow Up Flag: Follow up Flag Status: Flagged

Caution: This email may contain suspicious content. Please take care when clicking links or opening attachments. When in doubt, contact the TCEQ Help Desk.

Candice,

Our response to the NOD is attached. Please let me know if you have any questions or need more information.

Thank you,

JERRY ALLEN Permitting Manager

North Texas Municipal Water District O: 469-626-4634 | C: 214-212-6153

OPEN RECORDS NOTICE: This email and responses may be subject to the Texas Public Information Act and may be disclosed to the public upon request. Please respond accordingly.

From: Candice Calhoun < Candice. Calhoun@tceq.texas.gov>

Sent: Tuesday, September 17, 2024 2:11 PM **To:** Jerry Allen <jallen@NTMWD.COM>

Cc: Sarah Burns <sburns@NTMWD.COM>; Brandon Maldonado <Brandon.Maldonado@tceq.texas.gov> **Subject:** [EXTERNAL] FW: Application to Renew Permit NO. WQ0015693001 - Notice of Deficiency Letter

Importance: High

WARNING: This email is from an external source. Do not click links or open attachments without positive sender verification of purpose. Never enter username, password or sensitive information on linked pages from this email.

If you are unsure about the message, please forward to itsupport@ntmwd.com for assistance.

Mr. Allen,

My apologies, I mistyped your email. Please see the attached NOD and original email below.



Regional. Reliable. Everyday.

September 18, 2024

Candice Calhoun

VIA ELECTRONIC MAIL

Applications Review and Processing Team (MC148) candice.calhoun@tceq.texas.gov Water Quality Division
Texas Commission of Environmental Quality
P.O. Box 13087
Austin, Texas 78711-3087

Re: Response to TCEQ Notice of Deficiency

Applicant Name: North Texas Municipal Water District (CN601365448)

Permit Number: WQ0015693001 (EPA I.D. No. TX0138584)

Site Name: Sister Grove RWRRF (RN110409067)
Type of Application: Renewal without Changes

Dear Ms. Calhoun:

This letter is submitted regarding the above-referenced TPDES Domestic Wastewater Permit Application ("Application") associated with the North Texas Municipal Water District's ("NTMWD's") Sister Grove Regional Water Resource Recovery Facility ("Sister Grove RWRRF") in response to items noted in the September 17, 2024, letter to Jerry Allen transmitting the notice of deficiencies for the application. NTMWD offers the following comments for your consideration:

Request 1 (USGS Topographic Map with point(s) of discharge and highlighted discharge route of 3 miles downstream)

Response: A copy of the USGS topographic map with the requested information is provided as a PDF as requested in the Notice of Deficiency letter. Additionally, this map was submitted in "Attachment 4" of the physically mailed Application and page 81 of the electronic Application submitted via FTP on September 11, 2024. The point of discharge at Sister Grove RWRRF is located such that two USGS topographic maps were needed: one to show the facility and property boundaries and one to show the point of discharge. The USGS topographic map depicting the point of discharge was located on the page following the USGS topographic map depicting the facility and property boundaries.

Request 2 (Verify information for the Notice of Receipt of Application and Intent to Obtain a Water Quality Permit):

Regional Service Through Unity...Meeting Our Region's Needs Today and Tomorrow

Mr. Erwin Madrid May 31, 2024 Page **2**

Response:

NTMWD has reviewed the portion of the NORI provided in the NOD and we have no edits. NTMWD believes this request is not a deficiency and should be regarded as a "Request for Information."

Request 3 (New rule requirements under Title 30 TAC Chapter 39 relating to public notices – Translated Spanish NORI):

Response:

Response:

A translated Spanish NORI is provided as a Microsoft Word Document as requested in the Notice of Deficiency letter.

NTWMD received notice on April 28, 2022, via email of new rule requirements in 30 TAC 39 regarding public notices to meet requirements in Title VI of the Civil Rights Act. This email stated that the applicant must provide a translated NORI with their approval of the draft NORI in order for the application to be declared administratively complete. There is no language in 30 TAC 39, the Instructions for Completing Domestic Wastewater Permit Applications (TCEQ-10053), or the email from April 28, 2022, that states the translated NORI must be provided with the application before receiving the draft NORI in order for the application be declared administratively complete. Since the draft NORI is provided by TCEQ after the application is received, NTMWD does not have the ability to submit the required translation of the draft NORI with the application in order for it to be declared administratively complete. NTMWD believes this request should be regarded as a "Request for Information" and not a "Notice of Deficiency" and therefore request the "Notice of Deficiency" be changed to a "Request for Information".

Should you have any questions or need additional information please contact me at iallen@ntmwd.com or 469-626-4634.

Sincerely

Jerry Aller

Permitting Manager

JA/vb

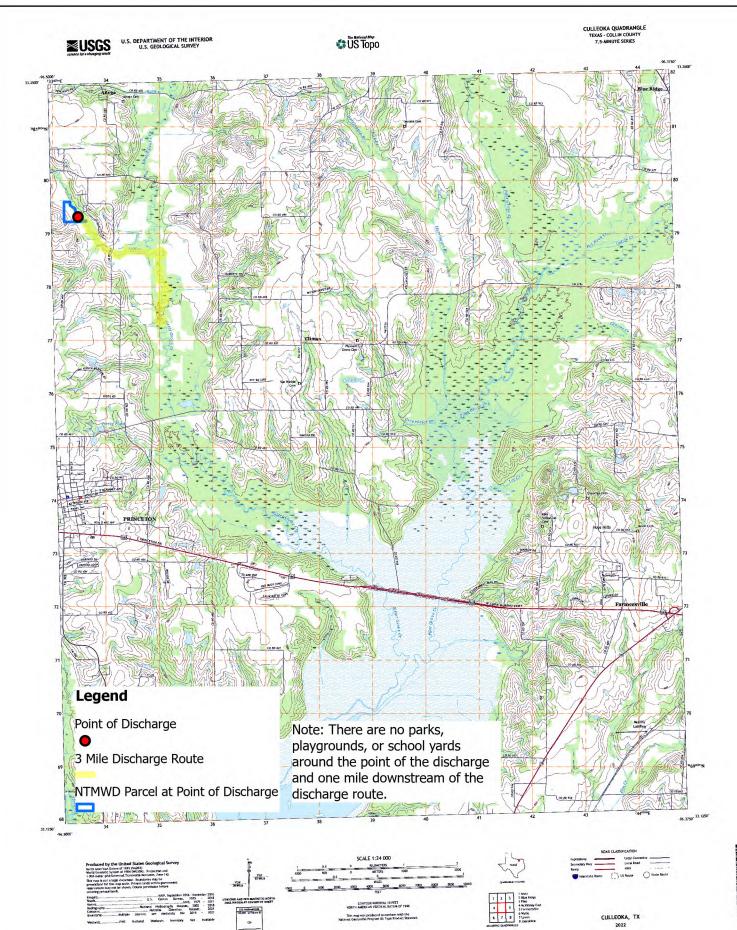
Enclosures

cc: Hunter Stephens, NTMWD Morgan Dadgostar, NTMWD R.J. Muraski, NTMWD

Lauren Kalisek, Lloyd Gosselink Rochelle & Townsend, P.C. Lora Naismith, Lloyd Gosselink Rochelle & Townsend, P.C.

Sister Grove Regional Water Resource Recovery Facility USGS Topographic Map







TPDES PERMIT NO.
WQ0015693001
[For TCEQ office use only - EPA I.D.
No. TX0138584]

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

PERMIT TO DISCHARGE WASTES

under provisions of Section 402 of the Clean Water Act and Chapter 26 of the Texas Water Code

North Texas Municipal Water District

whose mailing address is

P.O. Box 2408 Wylie, Texas 75098

is authorized to treat and discharge wastes from the Sister Grove Regional Water Resource Recovery Facility, SIC Code 4952

located one mile east of the intersection of County Road 336 and Farm-to-Market Road 2933 in Collin County, Texas 75071

to Stiff Creek, thence to Sister Grove Creek, thence to Lavon Lake in Segment No. 0821 of the Trinity River Basin

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

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

ISSUED DATE: March 11,2020

For the Commission

INTERIM I EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

Outfall Number 001

1. During the period beginning upon the date of issuance and lasting through the completion of expansion to the 32 million gallons per day (MGD) facility, the permittee is authorized to discharge subject to the following effluent limitations:

The annual average flow of effluent shall not exceed 16 MGD, nor shall the average discharge during any two-hour period (2-hour peak) exceed 44,444 gallons per minute (gpm)

Effluent Characteristic		Discharge Limitations	imitations		Min. Self-Monit	Min. Self-Monitoring Requirements
	Daily Avg	7-day Avg Daily Max	Daily Max	Single Grab	Report Daily	Report Daily Avg. & Daily Max.
	mg/l (lbs/day)	mg/l	mg/l	mg/l	Measurement Frequency	Sample Type
Flow, MGD	Report	N/A	Report	N/A	Continuous	Totalizing Meter
Carbonaceous Biochemical Oxygen Demand (5-day) April-September	5 (667)	10	20	30	One/dav	Composite
October - March	10 (1,334)	15	25	35	One/day	Composite
Total Suspended Solids	5 (667)	10	20	30	One/day	Composite
Ammonia Nitrogen April – September	1.3 (173)	က	9	10	One/day	Composite
October - March	3 (400)	9	10	15	One/day	Composite
Total Phosphorus*	Report (Report)	N/A	N/A	N/A	One/day	Composite
$E.\ coli,$ CFU or MPN/100 ml	126	N/A	399	N/A	Daily	Grab

phosphorus. The rolling annual mass loading shall be calculated each month by dropping the oldest month's mass loading data from the past twelve-months and adding the most recent month's mass loading data. The total monthly and rolling annual mass *The daily mass loadings calculated for each day of the month shall be summed to determine the total pounds of total phosphorus discharged during the calendar month. The annual mass loading for the discharge shall not exceed 53,576 pounds per year for total oadings shall be reported on a monthly basis.

2. The permittee shall utilize an Ultraviolet Light (UV) system for disinfection purposes. An equivalent method of disinfection may be substituted only with prior approval of the Executive Director.

- 3. The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units and shall be monitored once per day by grab sample.
- 4. There shall be no discharge of floating solids or visible foam in other than trace amounts and no discharge of visible oil
- 5. Effluent monitoring samples shall be taken at the following location(s): Following the final treatment unit.
- 6. The effluent shall contain a minimum dissolved oxygen of 6.0 mg/l and shall be monitored once per day by grab sample. Samples for dissolved oxygen may be collected at the plant site following the final treatment unit unless samples are collected at the outfall. If samples are collected at the outfall, only the samples collected at the outfall shall be reported.
- 7. The annual average flow and maximum 2-hour peak flow shall be reported monthly.

INTERIM II EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

Outfall Number 001

1. During the period beginning upon the completion of the expansion to the 32 million gallons per day (MGD) facility and lasting through the completion of the expansion to the 48 MGD facility, the permittee is authorized to discharge subject to the following effluent limitations:

The annual average flow of effluent shall not exceed 32 MGD, nor shall the average discharge during any two-hour period (2-hour peak) exceed 88,888 gallons per minute (gpm).

Effluent Characteristic		Discharge Limitations	imitations		Min. Self-Monit	Min. Self-Monitoring Requirements
	Daily Avg	7-day Avg	Daily Max	Single Grab	Report Daily	Report Daily Avg. & Daily Max.
	mg/l (lbs/day)	mg/l	mg/l	mg/l	Measurement Frequency	Sample Type
Flow, MGD	Report	N/A	Report	N/A	Continuous	Totalizing Meter
Carbonaceous Biochemical Oxygen Demand (5-day)	(1 004)	Ç	Ç	Ç	0.00/200	ommonite.
April – September October - March	3 (1,334 <i>)</i> 10 (2,669)	10 15	25 25	3. S.	One/day	Composite
Total Suspended Solids	5 (1,334)	01	20	30	One/day	Composite
Ammonia Nitrogen April – September	1.7 (454)	က	9	10	One/day	Composite
October - March	3 (801)	9	10	15	One/day	Composite
Total Phosphorus*	Report (Report)	N/A	N/A	N/A	One/day	Composite
$E.\ coli, CFU\ or\ MPN/100\ ml$	126	N/A	399	N/A	Daily	Grab

phosphorus discharged during the calendar month. The annual mass loading for the discharge shall not exceed 50,654 pounds per year for total phosphorus. The rolling annual mass loading shall be calculated each month by dropping the oldest month's mass loading data from the past twelve-months and adding the most recent month's mass loading data. The total monthly and * The daily mass loadings calculated for each day of the month shall be summed to determine the total pounds of total rolling annual mass loadings shall be reported on a monthly basis.

^{2.} The permittee shall utilize an Ultraviolet Light (UV) system for disinfection purposes. An equivalent method of disinfection may be substituted only with prior approval of the Executive Director.

- 3. The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units and shall be monitored once per day by grab sample.
- 4. There shall be no discharge of floating solids or visible foam in other than trace amounts and no discharge of visible oil.
- 5. Effluent monitoring samples shall be taken at the following location(s): Following the final treatment unit.
- 6. The effluent shall contain a minimum dissolved oxygen of 6.0 mg/l and shall be monitored once per day by grab sample. Samples for dissolved oxygen may be collected at the plant site following the final treatment unit unless samples are collected at the outfall. If samples are collected at the outfall, only the samples collected at the outfall shall be reported.
- 7. The annual average flow and maximum 2-hour peak flow shall be reported monthly.

INTERIM III EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

Outfall Number 001

1. During the period beginning upon the completion of the expansion to the 48 million gallons per day (MGD) facility and lasting through the completion of the expansion to the 64 MGD facility, the permittee is authorized to discharge subject to the following effluent limitations:

The annual average flow of effluent shall not exceed 48 MGD, nor shall the average discharge during any two-hour period (2-hour peak) exceed 133,333 gpm.

Effluent Characteristic		Discharge Limitations	imitations		Min. Self-Monitoring Requirements	Requirements
	Daily Avg mg/l (lbs/day)	7-day Avg mg/l	Daily Max mg/l	Single Grab mg/l	Report Daily Avg. & Daily Max. Measurement Frequency Sample Type	Daily Max. Sample Type
Flow, MGD	Report	N/A	Report	N/A	Continuous	Totalizing Meter
Carbonaceous Biochemical Oxygen Demand (5-day) April – September October - March	5 (2,002) 10 (4,003)	10 15	20 25	30 35	One/day One/day	Composite Composite
Total Suspended Solids	5(2,002)	10	20	30	One/day	Composite
Ammonia Nitrogen April - September October - March Total Phosphorus*	1.5 (600) 2 (801) Report (Report)	3 5 N/A	6 10 N/A	10 15 N/A	One/day One/day One/day	Composite Composite Composite
$E.\ coli, { m CFU}\ { m or}\ { m MPN/100}\ { m ml}$	126	N/A	399	N/A	Daily	Grab

phosphorus discharged during the calendar month. The annual mass loading for the discharge shall not exceed 49,679 pounds mass loading data from the past twelve-months and adding the most recent month's mass loading data. The total monthly and per year for total phosphorus. The rolling annual mass loading shall be calculated each month by dropping the oldest month's * The daily mass loadings calculated for each day of the month shall be summed to determine the total pounds of total rolling annual mass loadings shall be reported on a monthly basis.

Page 2d

^{2.} The permittee shall utilize an Ultraviolet Light (UV) system for disinfection purposes. An equivalent method of disinfection may be substituted only with prior approval of the Executive Director.

- 3. The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units and shall be monitored once per day by grab sample.
- 4. There shall be no discharge of floating solids or visible foam in other than trace amounts and no discharge of visible oil.
- 5. Effluent monitoring samples shall be taken at the following location(s): Following the final treatment unit.
- dissolved oxygen may be collected at the plant site following the final treatment unit unless samples are collected at the outfall. If samples 6. The effluent shall contain a minimum dissolved oxygen of 6.0 mg/l and shall be monitored once per day by grab sample. Samples for are collected at the outfall, only the samples collected at the outfall shall be reported.
- 7. The annual average flow and maximum 2-hour peak flow shall be reported monthly.

FINAL EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

Outfall Number 001

1. During the period beginning upon the completion of the expansion to the 64 million gallons per day (MGD) facility and lasting through the date of expiration, the permittee is authorized to discharge subject to the following effluent limitations:

The annual average flow of effluent shall not exceed 64 MGD, nor shall the average discharge during any two-hour period (2-hour peak) exceed 177,777 gpm.

Requirements	Daily Max. Sample Type	Totalizing Meter	Composite Composite	Composite	Composite Composite Composite	Grab
Min. Self-Monitoring Requirements	Report Daily Avg. & Daily Max. Measurement Frequency Sample '	Continuous	One/day One/day	One/day	One/day One/day One/day	Daily
	Single Grab mg/l	N/A	30 35	30	10 15 N/A	N/A
imitations	Daily Max mg/l	Report	20 25	20	6 10 N/A	399
Discharge Limitations	7-day Avg mg/l	N/A	10 15	10	3 5 N/A	N/A
	Daily Avg mg/l (lbs/day)	Report	5 (2,669) 10 (5,338)	5 (2,669)	1.2 (641) 2 (1,068) Report (Report)	126
Effluent Characteristic		Flow, MGD	Carbonaceous Biochemical Oxygen Demand (5-day) April-September October - March	Total Suspended Solids	Ammonia Nitrogen April - September October - March Total Phosphorus*	$E.\ coli,\ CFU\ or\ MPN/100\ ml$

discharged during the calendar month. The annual mass cap for the discharge shall not exceed 48,706 pounds per year for total phosphorus. The annual rolling mass cap shall be calculated each month by dropping the oldest month's mass loading data from the past twelve-month series and adding the most recent month's mass loading data. Both the total monthly and rolling mass cap *The daily mass loadings calculated for each day of the month shall be summed to determine the total pounds of total phosphorus shall be reported on a monthly basis. 2. The permittee shall utilize an Ultraviolet Light (UV) system for disinfection purposes. An equivalent method of disinfection may be substituted only with prior approval of the Executive Director.

- 3. The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units and shall be monitored once per day by grab sample.
- 4. There shall be no discharge of floating solids or visible foam in other than trace amounts and no discharge of visible oil.
- 5. Effluent monitoring samples shall be taken at the following location(s): Following the final treatment unit.
- dissolved oxygen may be collected at the plant site following the final treatment unit unless samples are collected at the outfall. If samples 6. The effluent shall contain a minimum dissolved oxygen of 6.0 mg/l and shall be monitored once per day by grab sample. Samples for are collected at the outfall, only the samples collected at the outfall shall be reported.
- 7. The annual average flow and maximum 2-hour peak flow shall be reported monthly.

DEFINITIONS AND STANDARD PERMIT CONDITIONS

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

1. Flow Measurements

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

2. Concentration Measurements

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

- ii. For all other wastewater treatment plants When four samples are not available in a calendar month, the arithmetic average (weighted by flow) of all values taken during the month shall be utilized as the daily average concentration.
- b. 7-day average concentration the arithmetic average of all effluent samples, composite or grab as required by this permit, within a period of one calendar week, Sunday through Saturday.
- c. Daily maximum concentration the maximum concentration measured on a single day, by the sample type specified in the permit, within a period of one calendar month.
- d. Daily discharge the discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling. For pollutants with limitations expressed in terms of mass, the daily discharge is calculated as the total mass of the pollutant discharged over the sampling day. For pollutants with limitations expressed in other units of measurement, the daily discharge is calculated as the average measurement of the pollutant over the sampling day.
 - The daily discharge determination of concentration made using a composite sample shall be the concentration of the composite sample. When grab samples are used, the daily discharge determination of concentration shall be the arithmetic average (weighted by flow value) of all samples collected during that day.
- e. Bacteria concentration (*E. coli* or Enterococci) Colony Forming Units (CFU) or Most Probable Number (MPN) of bacteria per 100 milliliters effluent. The daily average bacteria concentration is a geometric mean of the values for the effluent samples collected in a calendar month. The geometric mean shall be determined by calculating the nth root of the product of all measurements made in a calendar month, where n equals the number of measurements made; or, computed as the antilogarithm of the arithmetic mean of the logarithms of all measurements made in a calendar month. For any measurement of bacteria equaling zero, a substituted value of one shall be made for input into either computation method. If specified, the 7-day average for bacteria is the geometric mean of the values for all effluent samples collected during a calendar week.
- f. Daily average loading (lbs/day) the arithmetic average of all daily discharge loading calculations during a period of one calendar month. These calculations must be made for each day of the month that a parameter is analyzed. The daily discharge, in terms of mass (lbs/day), is calculated as (Flow, MGD x Concentration, mg/l x 8.34).
- g. Daily maximum loading (lbs/day) the highest daily discharge, in terms of mass (lbs/day), within a period of one calendar month.

3. Sample Type

a. Composite sample - For domestic wastewater, a composite sample is a sample made up of a minimum of three effluent portions collected in a continuous 24-hour period or during the period of daily discharge if less than 24 hours, and combined in volumes proportional to flow, and collected at the intervals required by 30 TAC § 319.9 (a). For industrial wastewater, a composite sample is a sample made up of a minimum of three effluent portions collected in a continuous 24-hour period or during the period of daily discharge if less than 24 hours, and combined in volumes proportional to flow, and collected at the intervals required by 30 TAC § 319.9 (b).

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

MONITORING AND REPORTING REQUIREMENTS

1. Self-Reporting

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

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

2. Test Procedures

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

3. Records of Results

- a. Monitoring samples and measurements shall be taken at times and in a manner so as to be representative of the monitored activity.
- b. Except for records of monitoring information required by this permit related to the permittee's sewage sludge use and disposal activities, which shall be retained for a period

of at least five years (or longer as required by 40 CFR Part 503), monitoring and reporting records, including strip charts and records of calibration and maintenance, copies of all records required by this permit, records of all data used to complete the application for this permit, and the certification required by 40 CFR § 264.73(b)(9) shall be retained at the facility site, or shall be readily available for review by a TCEQ representative for a period of three years from the date of the record or sample, measurement, report, application or certification. This period shall be extended at the request of the Executive Director.

- c. Records of monitoring activities shall include the following:
 - i. date, time and place of sample or measurement;
 - ii. identity of individual who collected the sample or made the measurement.
 - iii. date and time of analysis;
 - iv. identity of the individual and laboratory who performed the analysis;
 - v. the technique or method of analysis; and
 - vi. the results of the analysis or measurement and quality assurance/quality control records.

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

4. Additional Monitoring by Permittee

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

5. Calibration of Instruments

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

6. Compliance Schedule Reports

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of the permit shall be submitted no later than 14 days following each schedule date to the Regional Office and the Compliance Monitoring Team of the Enforcement Division (MC 224).

7. Noncompliance Notification

- a. In accordance with 30 TAC § 305.125(9) any noncompliance which may endanger human health or safety, or the environment shall be reported by the permittee to the TCEQ. Except as allowed by 30 TAC § 305.132, report of such information shall be provided orally or by facsimile transmission (FAX) to the Regional Office within 24 hours of becoming aware of the noncompliance. A written submission of such information shall also be provided by the permittee to the Regional Office and the Compliance Monitoring Team of the Enforcement Division (MC 224) within five working days of becoming aware of the noncompliance. For Publicly Owned Treatment Works (POTWs), effective September 1, 2020, the permittee must submit the written report for unauthorized discharges and unanticipated bypasses that exceed any effluent limit in the permit using the online electronic reporting system available through the TCEQ website unless the permittee requests and obtains an electronic reporting waiver. The written submission shall contain a description of the noncompliance and its cause; the potential danger to human health or safety, or the environment; the period of noncompliance, including exact dates and times; if the noncompliance has not been corrected, the time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance, and to mitigate its adverse effects.
- b. The following violations shall be reported under Monitoring and Reporting Requirement 7.a.:
 - i. Unauthorized discharges as defined in Permit Condition 2(g).
 - ii. Any unanticipated bypass that exceeds any effluent limitation in the permit.
 - iii. Violation of a permitted maximum daily discharge limitation for pollutants listed specifically in the Other Requirements section of an Industrial TPDES permit.
- c. In addition to the above, any effluent violation which deviates from the permitted effluent limitation by more than 40% shall be reported by the permittee in writing to the Regional Office and the Compliance Monitoring Team of the Enforcement Division (MC 224) within 5 working days of becoming aware of the noncompliance.
- d. Any noncompliance other than that specified in this section, or any required information not submitted or submitted incorrectly, shall be reported to the Compliance Monitoring Team of the Enforcement Division (MC 224) as promptly as possible. For effluent limitation violations, noncompliances shall be reported on the approved self-report form.
- 8. In accordance with the procedures described in 30 TAC §§ 35.301 35.303 (relating to Water Quality Emergency and Temporary Orders) if the permittee knows in advance of the need for a bypass, it shall submit prior notice by applying for such authorization.
- 9. Changes in Discharges of Toxic Substances
 - All existing manufacturing, commercial, mining, and silvicultural permittees shall notify the Regional Office, orally or by facsimile transmission within 24 hours, and both the Regional Office and the Compliance Monitoring Team of the Enforcement Division (MC 224) in writing within five (5) working days, after becoming aware of or having reason to believe:
 - a. That any activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant listed at 40 CFR Part 122, Appendix D,

Tables II and III (excluding Total Phenols) which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":

- i. One hundred micrograms per liter (100 μg/L);
- ii. Two hundred micrograms per liter (200 μ g/L) for acrolein and acrylonitrile; five hundred micrograms per liter (500 μ g/L) for 2,4-dinitrophenol and for 2-methyl-4,6-dinitrophenol; and one milligram per liter (1 mg/L) for antimony;
- iii. Five (5) times the maximum concentration value reported for that pollutant in the permit application; or
- iv. The level established by the TCEQ.
- b. That any activity has occurred or will occur which would result in any discharge, on a nonroutine or infrequent basis, of a toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":
 - i. Five hundred micrograms per liter (500 μ g/L);
 - ii. One milligram per liter (1 mg/L) for antimony;
 - iii. Ten (10) times the maximum concentration value reported for that pollutant in the permit application; or
 - iv. The level established by the TCEO.

10. Signatories to Reports

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

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

PERMIT CONDITIONS

1. General

a. When the permittee becomes aware that it failed to submit any relevant facts in a permit

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

2. Compliance

- a. Acceptance of the permit by the person to whom it is issued constitutes acknowledgment and agreement that such person will comply with all the terms and conditions embodied in the permit, and the rules and other orders of the Commission.
- b. The permittee has a duty to comply with all conditions of the permit. Failure to comply with any permit condition constitutes a violation of the permit and the Texas Water Code or the Texas Health and Safety Code, and is grounds for enforcement action, for permit amendment, revocation, or suspension, or for denial of a permit renewal application or an application for a permit for another facility.
- c. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit.
- d. The permittee shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal or other permit violation that has a reasonable likelihood of adversely affecting human health or the environment.
- e. Authorization from the Commission is required before beginning any change in the permitted facility or activity that may result in noncompliance with any permit requirements.
- f. A permit may be amended, suspended and reissued, or revoked for cause in accordance with 30 TAC §§ 305.62 and 305.66 and TWC§ 7.302. The filing of a request by the permittee for a permit amendment, suspension and reissuance, or termination, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition.
- g. There shall be no unauthorized discharge of wastewater or any other waste. For the

- purpose of this permit, an unauthorized discharge is considered to be any discharge of wastewater into or adjacent to water in the state at any location not permitted as an outfall or otherwise defined in the Other Requirements section of this permit.
- h. In accordance with 30 TAC § 305.535(a), the permittee may allow any bypass to occur from a TPDES permitted facility which does not cause permitted effluent limitations to be exceeded or an unauthorized discharge to occur, but only if the bypass is also for essential maintenance to assure efficient operation.
- i. The permittee is subject to administrative, civil, and criminal penalties, as applicable, under TWC §§ 7.051 7.075 (relating to Administrative Penalties), 7.101 7.111 (relating to Civil Penalties), and 7.141 7.202 (relating to Criminal Offenses and Penalties) for violations including, but not limited to, negligently or knowingly violating the federal CWA §§ 301, 302, 306, 307, 308, 318, or 405, or any condition or limitation implementing any sections in a permit issued under the CWA § 402, or any requirement imposed in a pretreatment program approved under the CWA §§ 402 (a)(3) or 402 (b)(8).

3. Inspections and Entry

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

4. Permit Amendment and/or Renewal

- a. The permittee shall give notice to the Executive Director as soon as possible of any planned physical alterations or additions to the permitted facility if such alterations or additions would require a permit amendment or result in a violation of permit requirements. Notice shall also be required under this paragraph when:
 - i. The alteration or addition to a permitted facility may meet one of the criteria for

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

5. Permit Transfer

a. Prior to any transfer of this permit, Commission approval must be obtained. The Commission shall be notified in writing of any change in control or ownership of

facilities authorized by this permit. Such notification should be sent to the Applications Review and Processing Team (MC 148) of the Water Quality Division.

b. A permit may be transferred only according to the provisions of 30 TAC § 305.64 (relating to Transfer of Permits) and 30 TAC § 50.133 (relating to Executive Director Action on Application or WQMP update).

6. Relationship to Hazardous Waste Activities

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

7. Relationship to Water Rights

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

8. Property Rights

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

9. Permit Enforceability

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

10. Relationship to Permit Application

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

11. Notice of Bankruptcy

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

b. This notification must indicate:

- i. the name of the permittee and the permit number(s);
- ii. the bankruptcy court in which the petition for bankruptcy was filed; and

iv. the date of filing of the petition.

OPERATIONAL REQUIREMENTS

- 1. The permittee shall at all times ensure that the facility and all of its systems of collection, treatment, and disposal are properly operated and maintained. This includes, but is not limited to, the regular, periodic examination of wastewater solids within the treatment plant by the operator in order to maintain an appropriate quantity and quality of solids inventory as described in the various operator training manuals and according to accepted industry standards for process control. Process control, maintenance, and operations records shall be retained at the facility site, or shall be readily available for review by a TCEQ representative, for a period of three years.
- 2. Upon request by the Executive Director, the permittee shall take appropriate samples and provide proper analysis in order to demonstrate compliance with Commission rules. Unless otherwise specified in this permit or otherwise ordered by the Commission, the permittee shall comply with all applicable provisions of 30 TAC Chapter 312 concerning sewage sludge use and disposal and 30 TAC §§ 319.21 319.29 concerning the discharge of certain hazardous metals.
- 3. Domestic wastewater treatment facilities shall comply with the following provisions:
 - a. The permittee shall notify the Municipal Permits Team, Wastewater Permitting Section (MC 148) of the Water Quality Division, in writing, of any facility expansion at least 90 days prior to conducting such activity.
 - b. The permittee shall submit a closure plan for review and approval to the Municipal Permits Team, Wastewater Permitting Section (MC 148) of the Water Quality Division, for any closure activity at least 90 days prior to conducting such activity. Closure is the act of permanently taking a waste management unit or treatment facility out of service and includes the permanent removal from service of any pit, tank, pond, lagoon, surface impoundment and/or other treatment unit regulated by this permit.
- 4. The permittee is responsible for installing prior to plant start-up, and subsequently maintaining, adequate safeguards to prevent the discharge of untreated or inadequately treated wastes during electrical power failures by means of alternate power sources, standby generators, and/or retention of inadequately treated wastewater.
- 5. Unless otherwise specified, the permittee shall provide a readily accessible sampling point and, where applicable, an effluent flow measuring device or other acceptable means by which effluent flow may be determined.
- 6. The permittee shall remit an annual water quality fee to the Commission as required by 30 TAC Chapter 21. Failure to pay the fee may result in revocation of this permit under TWC § 7.302(b)(6).

7. Documentation

For all written notifications to the Commission required of the permittee by this permit, the permittee shall keep and make available a copy of each such notification under the same conditions as self-monitoring data are required to be kept and made available. Except for

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

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

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

- b. The plans and specifications for domestic sewage collection and treatment works associated with any domestic permit must be approved by the Commission and failure to secure approval before commencing construction of such works or making a discharge is a violation of this permit and each day is an additional violation until approval has been secured.
- c. Permits for domestic wastewater treatment plants are granted subject to the policy of the Commission to encourage the development of area-wide waste collection, treatment, and disposal systems. The Commission reserves the right to amend any domestic wastewater permit in accordance with applicable procedural requirements to require the system covered by this permit to be integrated into an area-wide system, should such be developed; to require the delivery of the wastes authorized to be collected in, treated by or discharged from said system, to such area-wide system; or to amend this permit in any other particular to effectuate the Commission's policy. Such amendments may be

made when the changes required are advisable for water quality control purposes and are feasible on the basis of waste treatment technology, engineering, financial, and related considerations existing at the time the changes are required, exclusive of the loss of investment in or revenues from any then existing or proposed waste collection, treatment or disposal system.

- Domestic wastewater treatment plants shall be operated and maintained by sewage plant operators holding a valid certificate of competency at the required level as defined in 30 TAC Chapter 30.
- 10. For Publicly Owned Treatment Works (POTWs), the 30-day average (or monthly average) percent removal for BOD and TSS shall not be less than 85%, unless otherwise authorized by this permit.
- 11. Facilities that generate industrial solid waste as defined in 30 TAC § 335.1 shall comply with these provisions:
 - a. Any solid waste, as defined in 30 TAC § 335.1 (including but not limited to such wastes as garbage, refuse, sludge from a waste treatment, water supply treatment plant or air pollution control facility, discarded materials, discarded materials to be recycled, whether the waste is solid, liquid, or semisolid), generated by the permittee during the management and treatment of wastewater, must be managed in accordance with all applicable provisions of 30 TAC Chapter 335, relating to Industrial Solid Waste Management.
 - b. Industrial wastewater that is being collected, accumulated, stored, or processed before discharge through any final discharge outfall, specified by this permit, is considered to be industrial solid waste until the wastewater passes through the actual point source discharge and must be managed in accordance with all applicable provisions of 30 TAC Chapter 335.
 - c. The permittee shall provide written notification, pursuant to the requirements of 30 TAC § 335.8(b)(1), to the Corrective Action Section (MC 221) of the Remediation Division informing the Commission of any closure activity involving an Industrial Solid Waste Management Unit, at least 90 days prior to conducting such an activity.
 - d. Construction of any industrial solid waste management unit requires the prior written notification of the proposed activity to the Registration and Reporting Section (MC 129) of the Permitting and Registration Support Division. No person shall dispose of industrial solid waste, including sludge or other solids from wastewater treatment processes, prior to fulfilling the deed recordation requirements of 30 TAC § 335.5.
 - e. The term "industrial solid waste management unit" means a landfill, surface impoundment, waste-pile, industrial furnace, incinerator, cement kiln, injection well, container, drum, salt dome waste containment cavern, or any other structure vessel, appurtenance, or other improvement on land used to manage industrial solid waste.
 - f. The permittee shall keep management records for all sludge (or other waste) removed from any wastewater treatment process. These records shall fulfill all applicable requirements of 30 TAC § 335 and must include the following, as it pertains to wastewater treatment and discharge:

- i. Volume of waste and date(s) generated from treatment process;
- ii. Volume of waste disposed of on-site or shipped off-site;
- iii. Date(s) of disposal;
- iv. Identity of hauler or transporter;
- v. Location of disposal site; and
- vi. Method of final disposal.

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

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

TCEQ Revision 08/2008

SLUDGE PROVISIONS

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

SECTION I. REQUIREMENTS APPLYING TO ALL SEWAGE SLUDGE LAND APPLICATION

A. General Requirements

- 1. The permittee shall handle and dispose of sewage sludge in accordance with 30 TAC § 312 and all other applicable state and federal regulations in a manner that protects public health and the environment from any reasonably anticipated adverse effects due to any toxic pollutants that may be present in the sludge.
- 2. In all cases, if the person (permit holder) who prepares the sewage sludge supplies the sewage sludge to another person for land application use or to the owner or lease holder of the land, the permit holder shall provide necessary information to the parties who receive the sludge to assure compliance with these regulations.
- 3. The permittee shall give 180 days prior notice to the Executive Director in care of the Wastewater Permitting Section (MC 148) of the Water Quality Division of any change planned in the sewage sludge disposal practice.

B. Testing Requirements

1. Sewage sludge shall be tested annually in accordance with the method specified in both 40 CFR Part 261, Appendix II and 40 CFR Part 268, Appendix I [Toxicity Characteristic Leaching Procedure (TCLP)] or other method that receives the prior approval of the TCEQ for the contaminants listed in 40 CFR Part 261.24, Table 1. Sewage sludge failing this test shall be managed according to RCRA standards for generators of hazardous waste, and the waste's disposition must be in accordance with all applicable requirements for hazardous waste processing, storage, or disposal. Following failure of any TCLP test, the management or disposal of sewage sludge at a facility other than an authorized hazardous waste processing, storage, or disposal facility shall be prohibited until such time as the permittee can demonstrate the sewage sludge no longer exhibits the hazardous waste toxicity characteristics (as demonstrated by the results of the TCLP tests). A written report shall be provided to both the TCEQ Registration and Reporting Section (MC 129) of the Permitting and Registration Support Division and the Regional Director (MC Region 4) within seven (7) days after failing the TCLP Test.

The report shall contain test results, certification that unauthorized waste management has stopped and a summary of alternative disposal plans that comply with RCRA standards for the management of hazardous waste. The report shall be addressed to: Director, Permitting and Registration Support Division (MC 129), Texas Commission on Environmental Quality, P.O. Box 13087, Austin, Texas 78711-3087. In addition, the permittee shall prepare an annual report on the results of all sludge toxicity testing. This annual report shall be submitted to the TCEQ Regional Office (MC Region 4) and the Compliance Monitoring Team (MC 224) of the Enforcement Division by September 30th of each year. Effective September 1, 2020, the permittee must submit this annual report using the online electronic reporting system available through the TCEQ website unless the permittee requests and obtains an electronic reporting waiver.

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

TABLE 1

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

^{*} Dry weight basis

3. Pathogen Control

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

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

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

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

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

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

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

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

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

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

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

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

sewage sludge.

Alternative 1

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

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

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

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

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

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

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

In addition to the Alternatives 1-3, the following site restrictions must be met if Class B sludge is land applied:

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

- vii. Public access to land with a high potential for public exposure shall be restricted for 1 year after application of sewage sludge.
- viii. Public access to land with a low potential for public exposure shall be restricted for 30 days after application of sewage sludge.
- ix. Land application of sludge shall be in accordance with the buffer zone requirements found in 30 TAC § 312.44.

4. Vector Attraction Reduction Requirements

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

- <u>Alternative 1</u> The mass of volatile solids in the sewage sludge shall be reduced by a minimum of 38%.
- Alternative 2 If Alternative 1 cannot be met for an anaerobically digested sludge, demonstration can be made by digesting a portion of the previously digested sludge anaerobically in the laboratory in a bench-scale unit for 40 additional days at a temperature between 30° and 37° Celsius. Volatile solids must be reduced by less than 17% to demonstrate compliance.
- Alternative 3 If Alternative 1 cannot be met for an aerobically digested sludge, demonstration can be made by digesting a portion of the previously digested sludge with percent solids of two percent or less aerobically in the laboratory in a bench-scale unit for 30 additional days at 20° Celsius. Volatile solids must be reduced by less than 15% to demonstrate compliance.
- Alternative 4 The specific oxygen uptake rate (SOUR) for sewage sludge treated in an aerobic process shall be equal to or less than 1.5 milligrams of oxygen per hour per gram of total solids (dry weight basis) at a temperature of 20° Celsius.
- Alternative 5 Sewage sludge shall be treated in an aerobic process for 14 days or longer. During that time, the temperature of the sewage sludge shall be higher than 40° Celsius and the average temperature of the sewage sludge shall be higher than 45° Celsius.
- Alternative 6 The pH of sewage sludge shall be raised to 12 or higher by alkali addition and, without the addition of more alkali shall remain at 12 or higher for two hours and then remain at a pH of 11.5 or higher for an additional 22 hours at the time the sewage sludge is prepared for sale or given away in a bag or other container.
- Alternative 7 The percent solids of sewage sludge that does not contain unstabilized solids generated in a primary wastewater treatment process shall be equal to or greater than 75% based on the moisture content and total solids prior to mixing with other materials. Unstabilized solids are

defined as organic materials in sewage sludge that have not been treated in either an aerobic or anaerobic treatment process.

Alternative 8 -

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

Alternative 9 -

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

Alternative 10-

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

C. Monitoring Requirements

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

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

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

(*) The amount of bulk sewage sludge applied to the land (dry wt. basis).

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

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

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

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

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

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

A. Pollutant Limits

Table 2

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

Table 3

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

B. Pathogen Control

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

C. Management Practices

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

D. Notification Requirements

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

E. Record keeping Requirements

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

the facility site and/or shall be readily available for review by a TCEQ representative for a period of <u>five years</u>. If the permittee supplies the sludge to another person who land applies the sludge, the permittee shall notify the land applier of the requirements for record keeping found in 30 TAC § 312.47 for persons who land apply.

- 1. The concentration (mg/kg) in the sludge of each pollutant listed in Table 3 above and the applicable pollutant concentration criteria (mg/kg), or the applicable cumulative pollutant loading rate and the applicable cumulative pollutant loading rate limit (lbs/ac) listed in Table 2 above.
- 2. A description of how the pathogen reduction requirements are met (including site restrictions for Class AB and Class B sludge, if applicable).
- 3. A description of how the vector attraction reduction requirements are met.
- 4. A description of how the management practices listed above in Section II.C are being met.
- 5. The following certification statement:
 - "I certify, under penalty of law, that the applicable pathogen requirements in 30 TAC § 312.82(a) or (b) and the vector attraction reduction requirements in 30 TAC § 312.83(b) have been met for each site on which bulk sewage sludge is applied. This determination has been made under my direction and supervision in accordance with the system designed to ensure that qualified personnel properly gather and evaluate the information used to determine that the management practices have been met. I am aware that there are significant penalties for false certification including fine and imprisonment."
- 6. The recommended agronomic loading rate from the references listed in Section II.C.3. above, as well as the actual agronomic loading rate shall be retained. The person who applies bulk sewage sludge or a sewage sludge material shall develop the following information and shall retain the information at the facility site and/or shall be readily available for review by a TCEQ representative <u>indefinitely</u>. If the permittee supplies the sludge to another person who land applies the sludge, the permittee shall notify the land applier of the requirements for record keeping found in 30 TAC § 312.47 for persons who land apply:
 - a. A certification statement that all applicable requirements (specifically listed) have been met, and that the permittee understands that there are significant penalties for false certification including fine and imprisonment. See 30 TAC § 312.47(a)(4)(A)(ii) or 30 TAC § 312.47(a)(5)(A)(ii), as applicable, and to the permittee's specific sludge treatment activities.
 - b. The location, by street address, and specific latitude and longitude, of each site on which sludge is applied.
 - c. The number of acres in each site on which bulk sludge is applied.
 - d. The date and time sludge is applied to each site.

- e. The cumulative amount of each pollutant in pounds/acre listed in Table 2 applied to each site.
- f. The total amount of sludge applied to each site in dry tons.

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

F. Reporting Requirements

The permittee shall report annually to the TCEQ Regional Office (MC Region 4) and Compliance Monitoring Team (MC 224) of the Enforcement Division, by September 30th of each year the following information. Effective September 1, 2020, the permittee must submit this annual report using the online electronic reporting system available through the TCEQ website unless the permittee requests and obtains an electronic reporting waiver.

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

- 14. Identify each of the analytic methods used by the facility to analyze enteric viruses, fecal coliforms, helminth ova, *Salmonella* sp., and other regulated parameters.
- 15. Vector attraction reduction alternative used as listed in Section I.B.4.
- 16. Amount of sludge transported in dry tons/year.
- 17. The certification statement listed in either 30 TAC § 312.47(a)(4)(A)(ii) or 30 TAC § 312.47(a)(5)(A)(ii) as applicable to the permittee's sludge treatment activities, shall be attached to the annual reporting form.
- 18. When the amount of any pollutant applied to the land exceeds 90% of the cumulative pollutant loading rate for that pollutant, as described in Table 2, the permittee shall report the following information as an attachment to the annual reporting form.
 - a. The location, by street address, and specific latitude and longitude.
 - b. The number of acres in each site on which bulk sewage sludge is applied.
 - c. The date and time bulk sewage sludge is applied to each site.
 - d. The cumulative amount of each pollutant (i.e., pounds/acre) listed in Table 2 in the bulk sewage sludge applied to each site.
 - e. The amount of sewage sludge (i.e., dry tons) applied to each site.

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

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

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

Following failure of any TCLP test, the management or disposal of sewage sludge at a facility other than an authorized hazardous waste processing, storage, or disposal facility shall be prohibited until such time as the permittee can demonstrate the sewage sludge no longer exhibits the hazardous waste toxicity characteristics (as demonstrated by the results of the TCLP tests). A written report shall be provided to both the TCEQ Registration and Reporting Section (MC 129) of the Permitting and Registration Support Division and the Regional Director (MC Region 4) of the appropriate TCEQ field office within 7 days after failing the TCLP Test.

The report shall contain test results, certification that unauthorized waste management has stopped and a summary of alternative disposal plans that comply with RCRA standards for the management of hazardous waste. The report shall be addressed to: Director, Permitting and Registration Support Division (MC 129), Texas Commission on Environmental Quality, P. O. Box 13087, Austin, Texas 78711-3087. In addition, the permittee shall prepare an annual report on the results of all sludge toxicity testing. This annual report shall be submitted to the TCEQ Regional Office (MC Region 4) and the Compliance Monitoring Team (MC 224) of the Enforcement Division by September 30 of each year.

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

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

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

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

G. Reporting Requirements

The permittee shall report annually to the TCEQ Regional Office (MC Region 4) and Compliance Monitoring Team (MC 224) of the Enforcement Division by September 30th of each year the following information. Effective September 1, 2020, the permittee must submit this annual report using the online electronic reporting system available through the TCEQ website unless the permittee requests and obtains an electronic reporting waiver.

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

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

SECTION IV. REQUIREMENTS APPLYING TO SLUDGE TRANSPORTED TO ANOTHER FACILITY FOR FURTHER PROCESSING

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

A. General Requirements

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

B. Record Keeping Requirements

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

C. Reporting Requirements

The permittee shall report the following information annually to the TCEQ Regional Office (MC Region 4) and Compliance Monitoring Team (MC 224) of the Enforcement Division, by September 30th of each year. Effective September 1, 2020, the permittee must submit this annual report using the online electronic reporting system available through the TCEQ website unless the permittee requests and obtains an electronic reporting waiver.

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

TCEQ Revision 01/2016

OTHER REQUIREMENTS

- Within 120 days from the start-up of the facility, the permittee shall complete Attachment A with the analytical results for Outfall 001. The completed tables with the results of these analysis and laboratory reports shall be submitted to the Municipal Permits Team, Wastewater Permitting Section MC 148, TCEQ Water Quality Division. Based on a technical review of the submitted analytical results, an amendment may be initiated by TCEQ staff to include additional effluent limitations and/or monitoring requirements. Test methods utilized to complete the tables shall be according to the test procedures specified in the Definitions and Standard Permit Conditions section of this permit and sensitive enough to detect the parameters listed in Attachment A at the minimum analytical level (MAL).
- 2. Monitoring and reporting requirements according to 30 TAC §§ 319.1-319.11 and any additional effluent reporting requirements contained in this permit are suspended from the effective date of the permit until plant startup or discharge from the facility described by this permit, whichever occurs first. The permittee shall provide written notice to the TCEQ Regional Office (MC Region 4) and the Applications Review and Processing Team (MC 148) of the Water Quality Division at least forty-five days prior to plant startup or anticipated discharge, whichever occurs first, and prior to completion of each additional phase on Notification of Completion Form 20007.
- 3. The permittee shall employ or contract with one or more licensed wastewater treatment facility operators or wastewater system operations companies holding a valid license or registration according to the requirements of 30 TAC Chapter 30, Occupational Licenses and Registrations, and, in particular, 30 TAC Chapter 30, Subchapter J, Wastewater Operators and Operations Companies.
 - This Category A facility must be operated by a chief operator or an operator holding a Category A license or higher. The facility must be operated a minimum of five days per week by the licensed chief operator or an operator holding the required level of license or higher. The licensed chief operator or operator holding the required level of license or higher must be available by telephone or pager seven days per week. Where shift operation of the wastewater treatment facility is necessary, each shift that does not have the on-site supervision of the licensed chief operator must be supervised by an operator in charge who is licensed not less than one level below the category for the facility.
- 4. The facility is not located in the Coastal Management Program boundary.
- 5. There is no mixing zone established for this discharge to an intermittent stream with perennial pools. Chronic toxic criteria apply at the point of discharge.
- 6. The permittee shall comply with the requirements of 30 TAC § 309.13(a) through (d). In addition, by ownership of the required buffer zone area and the use of restrictive covenants with adjacent properties as described in correspondence from the permittee dated October 4, 2018, the permittee shall comply with the requirements of 30 TAC § 309.13(e) (See Attachment B).
- 7. The permittee shall provide facilities for the protection of its wastewater treatment facility from a 100-year flood.
- 8. In accordance with 30 TAC § 319.9, a permittee that has at least twelve months of

uninterrupted compliance with its bacteria limit may notify the commission in writing of its compliance and request a less frequent measurement schedule. To request a less frequent schedule, the permittee shall submit a written request to the TCEO Wastewater Permitting Section (MC 148) for each phase that includes a different monitoring frequency. The request must contain all of the reported bacteria values (Daily Avg. and Daily Max/Single Grab) for the twelve consecutive months immediately prior to the request. If the Executive Director finds that a less frequent measurement schedule is protective of human health and the environment, the permittee may be given a less frequent measurement schedule. For this permit, daily may be reduced to 5/week in all phases of the permit. A violation of any bacteria limit by a facility that has been granted a less frequent measurement schedule will require the permittee to return to the standard frequency schedule and submit written notice to the TCEQ Wastewater Permitting Section (MC 148). The permittee may not apply for another reduction in measurement frequency for at least 24 months from the date of the last violation. The Executive Director may establish a more frequent measurement schedule if necessary to protect human health or the environment.

9. Prior to construction of the Interim I, Interim II, Interim III, and Final phase treatment facilities, the permittee shall submit to the TCEQ Wastewater Permitting Section (MC 148) a summary transmittal letter in accordance with the requirements in 30 TAC § 217.6(d). If requested by the Wastewater Permitting Section, the permittee shall submit plans, specifications, and a final engineering design report which comply with 30 TAC Chapter 217, Design Criteria for Domestic Wastewater Systems. The permittee shall clearly show how the treatment system will meet the effluent limitations required on Pages 2-2g of this permit. A copy of the summary transmittal letter shall be available at the plant site for inspection by authorized representatives of the TCEQ.

CONTRIBUTING INDUSTRIES AND PRETREATMENT REQUIREMENTS

- 1. The following pollutants may not be introduced into the treatment facility:
 - a. Pollutants which create a fire or explosion hazard in the publicly owned treatment works (POTW), including, but not limited to, wastestreams with a closed cup flashpoint of less than 140 degrees Fahrenheit (60 degrees Celsius) using the test methods specified in 40 CFR §261.21;
 - b. Pollutants which will cause corrosive structural damage to the POTW, but in no case shall there be discharges with pH lower than 5.0 standard units, unless the works are specifically designed to accommodate such discharges;
 - c. Solid or viscous pollutants in amounts which will cause obstruction to the flow in the POTW, resulting in interference;
 - d. Any pollutant, including oxygen demanding pollutants (BOD, etc.), released in a discharge at a flow rate and/or pollutant concentration which will cause interference with the POTW;
 - e. Heat in amounts which will inhibit biological activity in the POTW resulting in interference, but in no case shall there be heat in such quantities that the temperature at the POTW treatment plant exceeds 104 degrees Fahrenheit (40 degrees Celsius) unless the Executive Director, upon request of the POTW, approves the alternate temperature limit;
 - f. Petroleum oil, nonbiodegradable cutting oil, or products of mineral oil origin in amounts that will cause interference or pass through;
 - g. Pollutants which result in the presence of toxic gases, vapors, or fumes within the POTW in a quantity that may cause acute worker health and safety problems; and
 - h. Any trucked or hauled pollutants, except at discharge points designated by the POTW.
 - 2. The permittee shall comply with the pretreatment requirements in 40 CFR Part 403, as amended, and as specified in the following schedule of compliance. The permittee is required to develop a pretreatment program; the final complete submission is due two (2) months from the date the permittee receives notification from the TCEQ Pretreatment Team (MC148) of the Water Quality Division indicating completion of the permittee's Activity Nos. 1-6. (See Activity No. 7)

The permittee has submitted a substantial modification to its approved pretreatment program to the TCEQ on February 25, 2011, as required by the NTMWD – Wilson Creek WWTP's TPDES Permit No. WQ0012446001, issued on February 26, 2010, in order to combine all of the permittee's currently approved pretreatment programs into the one pretreatment program: Buffalo Creek, Stewart Creek West, Floyd Branch, South Mesquite Creek, Rowlett Creek, Wilson Creek, and Wylie. The combined pretreatment program will also include the developing pretreatment program from the Sabine Creek WWTP. The substantial modification includes the redevelopment of the technically-based local limits (TBLLs) for all of the permittee's wastewater treatment plants within

the service areas of the TPDES combined pretreatment program (WQ0010221001, WQ0010363001, WQ0010384001, WQ0012047001, WQ0010257001, WQ0012446001, WQ0014008001, WQ0014216001, WQ0014245001, and WQ0014469001), revisions to the Legal Authority, Enforcement Response Plan, and Standard Operating Procedures for each customer city for the combined pretreatment program. The narrative components portion of the submittal were replaced on November 9, 2011. The Executive Director is currently reviewing this substantial modification/new combined program submission. Substantial modifications will be approved in accordance with 40 CFR §403.18, and the modification will become effective upon approval by the Executive Director in accordance with §403.18.

- a. If the permittee does not complete any of the activities according to the following schedule, the permittee shall submit a letter signed by the permittee [according to 40 CFR §122.41(k)] to the TCEQ Pretreatment Team (MC 148) of the Water Quality Division within 14 days of the activity due date, including, at a minimum, the date on which the required activity will be submitted, the reason for the delay, and the steps taken to return to the established schedule. The permittee may request one 60-day extension of the due date for Activity Nos. 1 and 7. These requests for extensions shall be made in writing to the Executive Director, care of the Pretreatment Team (MC 148), no later than 14 days prior to the due date. The Executive Director may grant an extension of the deadlines of Activity Nos. 1 and 7 submitted pursuant to these permit requirements, upon a written and substantiated showing of good cause. The determination of what constitutes good cause rests solely with the Executive Director. Extensions are not effective until the permittee receives written approval from the Executive Director.
- b. If after review of the submission, the Executive Director determines that the submission does not comply with the applicable requirements of 40 CFR §§403.8 and 403.9, the Executive Director will notify the permittee in writing. The notification will identify any defects in the submission and advise the permittee of the means by which the permittee can comply with the applicable requirements of 40 CFR §§403.8 and 403.9. In such a case, revised information will be necessary for the Executive Director to make a determination on whether to approve or deny the permittee's submission.
- c. A new pretreatment program will proceed through the approval process in accordance with 40 CFR §§403.9 and 403.11 [rev. Federal Register/Vol. 70/No. 198/Friday, October 14, 2005/Rules and Regulations, pages 60134-60798]. The submission will become effective upon approval by the Executive Director in accordance with 40 CFR §403.11. Upon approval of a pretreatment program by the Executive Director, this permit will be modified or amended to incorporate that pretreatment program.
- d. The permittee may develop and submit a complete pretreatment program at any time before the deadline established in Activity No. 7.
- e. The permittee may apply for authority to revise categorical pretreatment standards to reflect POTW removal of pollutants in accordance with the requirements of 40 CFR §403.7 [rev. 10/14/05] at any time.
- f. The permittee shall require any indirect discharger to the treatment works to

- comply with the reporting requirements of Sections 204(b), 307, and 308 of the Clean Water Act, including any requirements established under 40 CFR Part 403.
- g. The permittee shall provide adequate written notification to the Executive Director, care of the Pretreatment Team (MC148) of the Water Quality Division, within 30 days subsequent to the permittee's knowledge of the following:
 - (1) Any new introduction of pollutants into the treatment works from an indirect discharger which would be subject to Sections 301 and 306 of the Clean Water Act if it were directly discharging those pollutants; and
 - (2) Any substantial change in the volume or character of pollutants being introduced into the treatment works.

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

Revised April 2019

ACTIVITY NUMBER

ACTIVITY

DATE

Submissions required by the Activity Nos. 2-6 listed below shall be made to the TCEQ Pretreatment Team (MC 148) of the Water Quality Division. Initially, Activity Nos. 3, 4, 5, and 6 should be submitted in draft form.

1.

Submit an industrial user (IU) survey which consists of a qualitative analysis of pollutants being contributed by IUs in its entire municipal system (including all treatment plants). In accordance with 40 Code of Federal Regulations (CFR) §\$403.8(f)(2)(i)-(ii) and 403.12(i)(1), the IUs should be asked to provide, the names, addresses, contact person, and information on the type and approximate quantity of pollutants discharged into the system. For guidance on the procedures see the U.S. Environmental Protection Agency's Guidance Manual for POTW Pretreatment Program Development, October 1983, Chapter 2 and Appendix H. This information may be derived from knowledge of the facility's process and should not require any sampling at the source.

2 months from the issued date of the permit

The IU survey must identify significant industrial users (SIUs), including those categorical industrial users (CIUs) subject to categorical pretreatment standards under 40 CFR Chapter I, Subchapter N, and specifying the citations, categories, and subcategories from the 40 CFR which are applicable to such CIUs. The permittee should submit the information in tabular form, using the example table format provided.

The TCEQ Pretreatment Team will notify the permittee regarding the results of the IU survey, and whether the permittee will be required to continue the program development beyond Activity No. 1. If pretreatment program development is necessary, the permittee will be required to continue the program development upon receiving notification from the TCEQ.

If notified that a TPDES pretreatment program is not necessary, the permittee will submit an update of its IU survey with Worksheet 6.0 of the Domestic Technical Report, as part of the TCEQ Domestic Wastewater Permit Application, when next reapplying for this TPDES permit. The IU survey must include documented changes in industrial flow and/or characteristics of existing industries and any new contributing industries.

ACTIVITY NUMBER ACTIVITY

DATE

2.

Submit a sampling plan describing the monitoring to take place at the influent and effluent (and other points, as applicable) of each wastewater treatment plant to be covered under the TPDES pretreatment program, domestic/commercial background, and sewage sludge for the technically based local limits (TBLLs) development.

Submit the analytical results and related quality assurance/quality control (QA/QC) information of an influent pollutant scan of a 24-hour composite sample to determine all pollutants being contributed to the system. The type of scan to be performed is the initial priority pollutant scan of the 126 pollutants from 40 CFR Part 122, Appendix D, Tables II and III plus any other additional pollutants designated in the TCEQ Texas Surface Water Quality Standards, 30 TAC Chapter 307. Submit information derived from Items (a) and (b) in this section below.

All sampling, analyses, and method detection limits must be performed in accordance with 40 CFR Part 136, as amended; as approved by the EPA through the application for alternate test procedures; or as suggested in Tables E-1 and E-2 of the *Procedures to Implement the Texas Surface Water Quality Standards* (February 2018), as amended and adopted by the TCEQ. This initial pollutant scan will be used by the permittee for developing the TBLLs as specified in Activity No. 5.

- (a) Using the qualitative information supplied by the IUs in Activity No. 1, and the quantitative information collected in the initial pollutant scan, the permittee shall determine which IUs may be discharging pollutants of concern which may affect the operation of the POTW(s) or pass through untreated.
- (b) Sampling and analyses shall be completed to quantify the pollutants of concern discharged by the IUs identified in the investigation of (a) above.

3 months from the effective date of notification to continue pretreatment program development

ACTIVITY NUMBER	ACTIVITY	DATE
3.	Submit a design of a sampling, inspection, permitting, reporting, and data management program which will implement the requirements of 40 CFR §§403.8 and 403.12, including all proposed forms. The permittee is required to design the program in order to inspect and sample the effluent from each SIU at least once per year, except as specified in 40 CFR §403.8(f)(2)(v).	5 months from the effective date of notification to continue pretreatment program development
	The permittee shall design the program in order to control through permit, order, or similar means, the contribution to the POTW by each IU to ensure compliance with applicable pretreatment standards and requirements. In the case of SIUs (identified as significant under 40 CFR §403.3(v)), this control shall be achieved through individual or general control mechanisms, in accordance with 40 CFR §403.8(f)(1)(iii).	
4.	Submit a description of the financial programs, revenue sources, equipment, staffing, and organizational chart of those positions which will be employed to implement the pretreatment program (as required by 40 CFR §§403.8(f)(3) and 403.9(b)(3) and (b)(4)).	6 months from the effective date of notification to continue pretreatment program development

ACTIVITY NUMBER	ACTIVITY	DATE
5.	Submit a complete TBLLs submission as required by 40 CFR §§403.5(c) and 403.8(f)(4). The technical development of the TBLLs should be developed in accordance with the EPA's Local Limits Development Guidance, July 2004, and EPA Region 6's Technically Based Local Limits Development Guidance, October 12, 1993. Include the results of a current Texas Toxicity Modeling Program (TexTox) report for each wastewater treatment plant. This report must be run subsequent to the effective date of the TCEQ notification to continue TPDES pretreatment program development.	9 months from the effective date of notification to continue pretreatment program development
	The technical development must demonstrate that the TBLLs attain the Texas Surface Water Quality Standards [30 TAC Chapter 307] in water in the state and are adequate to prevent pass through of pollutants, inhibition of or interference with the treatment facility, worker health and safety problems, and sludge contamination. This submission must include the TBLLs certification statement signed by the permittee [according to 40 CFR §122.41(k)].	

ACTIVITY NUMBER	ACTIVITY	DATE
6.	The POTW is required to apply and enforce the pretreatment standards and requirements established by §§307(b) and (c), and 402(b)(8) and (9) of the Clean Water Act and any regulations implementing those sections, including 40 CFR §403.9(b). Submit the following:	10 months from the effective date of notification to continue pretreatment
	(a) a statement from the City Solicitor, a city official acting in a comparable capacity, or the city's independent counsel, that the POTW has the adequate authority to carry out the program;	program development
	(b) a copy of any statute, ordinance, regulation, contract, agreement, or other authority that will be relied on by the POTW to administer the program;	
	(c) a statement reflecting the endorsement of or approval by the local boards or bodies responsible for supervising and/or funding the program;	
	(d) additional documents and agreements required in multi- jurisdictional situations for administration of the program; and	
	(e) an enforcement response plan (ERP) that shall contain detailed procedures indicating how the POTW will investigate and respond to instances of IU noncompliance. The ERP, enforcement response guide (ERG), and other documents and forms shall, at a minimum, contain the aspects defined in 40 CFR §403.8(f)(5).	
7.	Upon notification by the TCEQ Pretreatment Team of a completeness determination of the submitted program in accordance with 40 CFR §403.9, the permittee is required to submit an official request to the Executive Director care of the Pretreatment Team (MC148) of the Water Quality Division for program approval, including four (4) copies (three (3) bound and one (1) unbound) of the program deemed by the Executive Director to be complete.	The Executive Director will notify the permittee of the due date of Activity No. 7 with the notification of completion of the permittee's Activity
Pavicad April o	Submit a complete pretreatment program as required by 40 CFR §403.9. The complete pretreatment program shall include the final compilation of all previously submitted pretreatment program activities as amended and supplemented (<i>e.g.</i> Activity Nos. 1-6).	Nos. 1 – 6 for the Sister Grove Regional Water Resource Recovery Facility and the new combined NTMWD pretreatment program substantial modification.

Revised April 2019

TABLE A: INDUSTRIAL USER SURVEY RESULTS SUMMARY TABLE

Comp any Name	any	SIC Co de	Descriptio n of Business Activities/ Manufact uring	n of Business Activities/ Manufact uring	Busin ess Addre ss	Water Usage/ Wastew ater Flow (GPD)	wastewa public	ecify the ty ter dischar ly owned tr vorks (POT y with a che	ged to the eatment W)	Respo nse Receiv ed (Y or N)	Classifica tion SIU / CIU
		Processes	ses		Zero Discha rge To POTW	Domesti c Wastew ater Only	Process Wastew ater Dischar ge				
	(1)	(2)		(3)				(4)	(5)		
·											
,											
					-						

- (1) Provide the Standard Industrial Classification (SIC) Codes for the company. If the company has multiple SIC codes, please provide them all.
- (2) Provide a brief description of the company's business and/or manufacturing process.
- (3) Provide water usage data or process wastewater flow data in gallons per day (gpd). When measured data is not available, provide an estimate.
- (4) Specify whether or not the company responded to the industrial user survey conducted by the POTW. If the company did not respond, please explain what follow-up action occurred.
- (5) Specify whether the company is a significant industrial user (SIU 40 CFR §403.3) or a categorical industrial user (CIU 40 CFR Parts 405 to 471). If the company is a CIU, then include the exact categorical citation, for example 40 CFR §433.15 for Metal Finishing Point Source category pretreatment standards for existing sources.

BIOMONITORING REQUIREMENTS

CHRONIC BIOMONITORING REQUIREMENTS: FRESHWATER

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

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

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

- c. The permittee shall use five effluent dilution concentrations and a control in each toxicity test. These effluent dilution concentrations are 32%, 42%, 56%, 75%, and 100% effluent. The critical dilution, defined as 100% effluent, is the effluent concentration representative of the proportion of effluent in the receiving water during critical low flow or critical mixing conditions.
- d. This permit may be amended to require a WET limit, a chemical-specific effluent limit, a best management practice, or other appropriate actions to address toxicity. The permittee may be required to conduct a toxicity reduction evaluation (TRE) after multiple toxic events.
- e. Testing Frequency Reduction
 - 1) If none of the first four consecutive quarterly tests demonstrates significant toxicity, the permittee may submit this information in writing

- and, upon approval, reduce the testing frequency to once per six months for the invertebrate test species and once per year for the vertebrate test species.
- 2) If one or more of the first four consecutive quarterly tests demonstrates significant toxicity, the permittee shall continue quarterly testing for that species until this permit is reissued. If a testing frequency reduction had been previously granted and a subsequent test demonstrates significant toxicity, the permittee shall resume a quarterly testing frequency for that species until this permit is reissued.

2. Required Toxicity Testing Conditions

- a. Test Acceptance The permittee shall repeat any toxicity test, including the control and all effluent dilutions, which fail to meet the following criteria:
 - 1) a control mean survival of 80% or greater;
 - a control mean number of water flea neonates per surviving adult of 15 or greater;
 - a control mean dry weight of surviving fathead minnow larvae of 0.25 mg or greater;
 - a control coefficient of variation percent (CV%) of 40 or less in between replicates for the young of surviving females in the water flea test; and the growth and survival endpoints in the fathead minnow test;
 - a critical dilution CV% of 40 or less for young of surviving females in the water flea test; and the growth and survival endpoints for the fathead minnow test, unless statistically significant toxicity is demonstrated at the critical dilution, in which case the test shall be considered valid;
 - 6) a percent minimum significant difference of 47 or less for water flea reproduction; and
 - 7) a PMSD of 30 or less for fathead minnow growth.

b. Statistical Interpretation

- 1) For the water flea survival and reproduction test, the statistical analyses used to determine the inhibition concentration of effluent that would cause a 25% reduction (IC25) in survival or mean young per female shall be as described in the methods manual referenced in Part 1.b.
- 2) For the fathead minnow larval survival and growth tests, the statistical analyses used to determine the IC25 in survival or growth shall be as described in the methods manual referenced in Part 1.b.
- 3) The permittee is responsible for reviewing test concentration-response relationships to ensure that calculated test-results are interpreted and

reported correctly. The document entitled "Method Guidance and Recommendation for Whole Effluent Toxicity (WET) Testing (40 CFR Part 136)" (EPA 821-B-00-004) provides guidance on determining the validity of test results.

- 4) Most point estimates are derived from a mathematical model that assumes a continuous dose-response relationship. For any test result that demonstrates a non-continuous (threshold) response, or a non-monotonic dose-response relationship, the IC25 should be determined based on the method guidance manual referenced in Item 3.
- Pursuant to the responsibility assigned to the permittee in Part 2.b.3), test results that demonstrate a non-monotonic dose-response relationship may be submitted, prior to the due date, for technical review of test validity and acceptability. The method guidance manual referenced in Item 3 will be used as the basis, along with best professional judgement, for making a determination of test validity and acceptability.

c. Dilution Water

- Dilution water used in the toxicity tests shall be the receiving water collected at a point upstream of the discharge as close as possible to the discharge point but unaffected by the discharge. Where the toxicity tests are conducted on effluent discharges to receiving waters that are classified as intermittent streams, or where the toxicity tests are conducted on effluent discharges where no receiving water is available due to zero flow conditions, the permittee shall:
 - a) substitute a synthetic dilution water that has a pH, hardness, and alkalinity similar to that of the closest downstream perennial water unaffected by the discharge; or
 - b) use the closest downstream perennial water unaffected by the discharge.
- Where the receiving water proves unsatisfactory as a result of pre-existing instream toxicity (i.e. fails to fulfill the test acceptance criteria of Part 2.a.), the permittee may substitute synthetic dilution water for the receiving water in all subsequent tests provided the unacceptable receiving water test met the following stipulations:
 - a) a synthetic lab water control was performed (in addition to the receiving water control) which fulfilled the test acceptance requirements of Part 2.a;
 - b) the test indicating receiving water toxicity was carried out to completion (i.e., 7 days);
 - c) the permittee submitted all test results indicating receiving water toxicity with the reports and information required in Part 3.

3) The synthetic dilution water shall consist of standard, moderately hard, reconstituted water. Upon approval, the permittee may substitute other appropriate dilution water with chemical and physical characteristics similar to that of the receiving water.

d. Samples and Composites

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

3. Reporting

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

- a. The permittee shall prepare a full report of the results of all tests conducted in accordance with the manual referenced in Part 1.b. for every valid and invalid toxicity test initiated whether carried to completion or not.
- b. The permittee shall routinely report the results of each biomonitoring test on the Table 1 forms provided with this permit.
 - 1) Annual biomonitoring test results are due on or before January 20th for biomonitoring conducted during the previous 12-month period.

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

4. Persistent Toxicity

The requirements of this Part apply only when a test demonstrates a significant effect at the critical dilution. A significant effect is defined as an IC25 of a specified endpoint (survival, growth, or reproduction) less than the critical dilution. Significant lethality is defined as a survival IC25 less than the critical dilution. Similarly, significant sublethality is defined as a growth or reproduction IC25 less than the critical dilution.

a. The permittee shall conduct a total of 2 additional tests (retests) for any species that demonstrates a significant effect (lethal or sublethal) at the critical dilution.

- The two retests shall be conducted monthly during the next two consecutive months. The permittee shall not substitute either of the two retests in lieu of routine toxicity testing. All reports shall be submitted within 20 days of test completion. Test completion is defined as the last day of the test.
- b. If the retests are performed due to a demonstration of significant lethality, and one or both of the two retests specified in Part 4.a. demonstrates significant lethality, the permittee shall initiate the TRE requirements as specified in Part 5. The provisions of Part 4.a. are suspended upon completion of the two retests and submittal of the TRE action plan and schedule defined in Part 5.
 - If neither test demonstrates significant lethality and the permittee is testing under the reduced testing frequency provision of Part 1.e., the permittee shall return to a quarterly testing frequency for that species.
- c. If the two retests are performed due to a demonstration of significant sublethality, and one or both of the two retests specified in Part 4.a. demonstrates significant lethality, the permittee shall again perform two retests as stipulated in Part 4.a.
- d. If the two retests are performed due to a demonstration of significant sublethality, and neither test demonstrates significant lethality, the permittee shall continue testing at the quarterly frequency.
- e. Regardless of whether retesting for lethal or sublethal effects, or a combination of the two, no more than one retest per month is required for a species.

5. Toxicity Reduction Evaluation

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

characterization analyses, the permittee shall perform multiple characterizations and follow the procedures specified in the document entitled "Toxicity Identification Evaluation: Characterization of Chronically Toxic Effluents, Phase I" (EPA/600/6-91/005F) or alternate procedures. The permittee shall perform multiple identifications and follow the methods specified in the documents entitled "Methods for Aquatic Toxicity Identification Evaluations, Phase II Toxicity Identification Procedures for Samples Exhibiting Acute and Chronic Toxicity" (EPA/600/R-92/080) and "Methods for Aquatic Toxicity Identification Evaluations: Phase III Toxicity Confirmation Procedures for Samples Exhibiting Acute and Chronic Toxicity" (EPA/600/R-92/081). All characterization, identification, and confirmation tests shall be conducted in an orderly and logical progression;

- Sampling Plan The TRE action plan should describe sampling locations, methods, holding times, chain of custody, and preservation techniques. The effluent sample volume collected for all tests shall be adequate to perform the toxicity characterization/identification/confirmation procedures and chemical-specific analyses when the toxicity tests show significant lethality. Where the permittee has identified or suspects a specific pollutant and source of effluent toxicity, the permittee shall conduct, concurrent with toxicity testing, chemical-specific analyses for the identified and suspected pollutant and source of effluent toxicity;
- 3) Quality Assurance Plan The TRE action plan should address record keeping and data evaluation, calibration and standardization, baseline tests, system blanks, controls, duplicates, spikes, toxicity persistence in the samples, randomization, reference toxicant control charts, and mechanisms to detect artifactual toxicity; and
- 4) Project Organization The TRE action plan should describe the project staff, project manager, consulting engineering services (where applicable), consulting analytical and toxicological services, etc.
- c. Within 30 days of submittal of the TRE action plan and schedule, the permittee shall implement the TRE.
- d. The permittee shall submit quarterly TRE activities reports concerning the progress of the TRE. The quarterly reports are due on or before April 20th, July 20th, October 20th, and January 20th. The report shall detail information regarding the TRE activities including:
 - results and interpretation of any chemical-specific analyses for the identified and suspected pollutant performed during the quarter;
 - 2) results and interpretation of any characterization, identification, and confirmation tests performed during the quarter;
 - any data and substantiating documentation which identifies the pollutant(s) and source of effluent toxicity;

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

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

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

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

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

TABLE 1 (SHEET 1 OF 4)

BIOMONITORING REPORTING

CERIODAPHNIA DUBIA SURVIVAL AND REPRODUCTION

		Date	Time	Date Time	
Dates and Times Composites	No. 1	FROM:		TO:	
Collected	No. 2	FROM:		TO:	
	No. 3	FROM:		TO:	
Test initiated:			am/pm		_date
Dilution water used:		Receiving wate	er	_ Synthetic Dilution water	
NU	MBER	OF YOUNG PROD	UCED PER A	DULT AT END OF TEST	

		Percent effluent									
REP	0%	32%	42%	56%	75%	100%					
A											
В											
С											
D											
Е											
F											
G											
Н											
I											
J											
Survival Mean											
Total Mean											
CV%*											

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

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

TABLE 1 (SHEET 2 OF 4)

CERIODAPHNIA DUBIA SURVIVAL AND REPRODUCTION TEST

PERCENT SURVIVAL

		Percent effluent						
Time of Reading	0%	32%	42%	56%	75%	100%		
24h								
48h								
End of Test								

1.	Is the IC25 for reproduction less than the critical dilution (100%)? YES NO
2. NO	Is the IC25 for survival less than the critical dilution (100%)? YES
3⋅	Enter percent effluent corresponding to each IC25 below:
	IC25 survival =%
	IC25 reproduction =%

TABLE 1 (SHEET 3 OF 4)

BIOMONITORING REPORTING

FATHEAD MINNOW LARVAE GROWTH AND SURVIVAL

Dates and Times	No. 1	FROM:		TO:	Date	Time
Composites Collected		FROM:				
		FROM:				
Test initiated:						date
Dilution water used:		Receiving wat	er	Synthetic d	lilution v	vater

FATHEAD MINNOW GROWTH DATA

Effluent Concentration	Avera	ge Dry We	Mean Dry	CV%*			
	A	В	С	D	E	Weight	
0%							
32%							
42%							
56%							
75%							
100%							

^{*} Coefficient of Variation = standard deviation x 100/mean

TABLE 1 (SHEET 4 OF 4)

BIOMONITORING REPORTING

FATHEAD MINNOW GROWTH AND SURVIVAL TEST

FATHEAD MINNOW SURVIVAL DATA

Effluent	Percei	nt Surviv	al in repl	icate cha	Mean percent survival			CV%*	
Concentration	A	В	С	D	E	24h	48h	7 day	
0%									
32%									
42%									
56%									
75%									
100%									

^{*} Coefficient of Variation = standard deviation x 100/mean

1.	Is the IC25 for growth less than the critical dilution (100%)?	YES	NO
2. NO	Is the IC25 for survival less than the critical dilution (100%)?	YES	
3.	Enter percent effluent corresponding to each IC25 below:		
	IC25 survival =%		
	IC25 growth = %		

24-HOUR ACUTE BIOMONITORING REQUIREMENTS: FRESHWATER

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

1. Scope, Frequency, and Methodology

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

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

- c. In addition to an appropriate control, a 100% effluent concentration shall be used in the toxicity tests. Except as discussed in item 2.b., the control and dilution water shall consist of standard, synthetic, moderately hard, reconstituted water.
- d. This permit may be amended to require a WET limit, a Best Management Practice (BMP), Chemical-Specific (CS) limits, or other appropriate actions to address toxicity. The permittee may be required to conduct a Toxicity Reduction Evaluation after multiple toxic events.
- e. As the dilution series specified in the Chronic Biomonitoring Requirements includes a 100% effluent concentration, the results from those tests may fulfill the requirements of this Section; any tests performed in the proper time interval may be substituted. Compliance will be evaluated as specified in item a. The 50% survival in 100% effluent for a 24-hour period standard applies to all tests utilizing a 100% effluent dilution, regardless of whether the results are submitted to comply with the minimum testing frequency defined in item b.

2. Required Toxicity Testing Conditions

- a. Test Acceptance The permittee shall repeat any toxicity test, including the control, if the control fails to meet a mean survival equal to or greater than 90%.
- b. Dilution Water In accordance with item 1.c., the control and dilution water shall normally consist of standard, synthetic, moderately hard, reconstituted water. If the permittee utilizes the results of a chronic test to satisfy the requirements in item 1.e., the permittee may use the receiving water or dilution water that meets the requirements of item 2.a as the control and dilution water.

c. Samples and Composites

- 1) The permittee shall collect one composite sample from Outfall 001.
- 2) The permittee shall collect the composite samples such that the sample is representative of any periodic episode of chlorination, biocide usage, or other potentially toxic substance being discharged.
- 3) The permittee shall initiate the toxicity tests within 36 hours after collection of the last portion of the composite sample. The samples shall be maintained at a temperature of o-6 degrees Centigrade during collection, shipping, and storage.
- 4) If Outfall 001 ceases discharging during the collection of the effluent composite sample, the requirements for the minimum number of effluent portions are waived. However, the permittee must have collected a composite sample volume sufficient for completion of the required test. The abbreviated sample collection, duration, and methodology must be documented in the full report.
- 5) The effluent sample shall not be dechlorinated after sample collection.

3. Reporting

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

- a. The permittee shall prepare a full report of the results of all tests conducted pursuant to this permit in accordance with the manual referenced in Part 1.b. for every valid and invalid toxicity test initiated.
- b. The permittee shall routinely report the results of each biomonitoring test on the Table 2 forms provided with this permit.
 - Semiannual biomonitoring test results are due on or before July 20th and January 20th for biomonitoring conducted during the previous 6-month period.
 - 2) Quarterly biomonitoring test results are due on or before April 20th, July 20th, October 20th, and January 20th for biomonitoring conducted during

the previous calendar quarter.

- c. Enter the following codes for the appropriate parameters for valid tests only:
 - 1) For the water flea, Parameter TIE3D, enter a "0" if the mean survival at 24 hours is greater than 50% in the 100% effluent dilution; if the mean survival is less than or equal to 50%, enter "1."
 - 2) For the fathead minnow, Parameter TIE6C, enter a "0" if the mean survival at 24 hours is greater than 50% in the 100% effluent dilution; if the mean survival is less than or equal to 50%, enter "1."
- d. Enter the following codes for retests only:
 - 1) For retest number 1, Parameter 22415, enter a "0" if the mean survival at 24 hours is greater than 50% in the 100% effluent dilution; if the mean survival is less than or equal to 50%, enter "1."
 - 2) For retest number 2, Parameter 22416, enter a "0" if the mean survival at 24 hours is greater than 50% in the 100% effluent dilution; if the mean survival is less than or equal to 50%, enter "1."

4. Persistent Mortality

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

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

5. <u>Toxicity Reduction Evaluation</u>

- a. Within 45 days of the retest that demonstrates significant lethality, the permittee shall submit a general outline for initiating a TRE. The outline shall include, but not be limited to, a description of project personnel, a schedule for obtaining consultants (if needed), a discussion of influent and effluent data available for review, a sampling and analytical schedule, and a proposed TRE initiation date.
- b. Within 90 days of the retest that demonstrates significant lethality, the permittee shall submit a TRE action plan and schedule for conducting a TRE. The plan shall specify the approach and methodology to be used in performing the TRE. A TRE

is a step-wise investigation combining toxicity testing with physical and chemical analysis to determine actions necessary to eliminate or reduce effluent toxicity to a level not effecting significant lethality at the critical dilution. The TRE action plan shall lead to the successful elimination of significant lethality for both test species defined in Part 1.b. At a minimum, the TRE action plan shall include the following:

- 1) Specific Activities – The TRE action plan shall specify the approach the permittee intends to utilize in conducting the TRE, including toxicity characterizations, identifications, confirmations, source evaluations, treatability studies, and alternative approaches. When conducting characterization analyses, the permittee shall perform multiple characterizations and follow the procedures specified in the document entitled "Methods for Aquatic Toxicity Identification Evaluations: Phase I Toxicity Characterization Procedures" (EPA/600/6-91/003) or alternate procedures. The permittee shall perform multiple identifications and follow the methods specified in the documents entitled "Methods for Aquatic Toxicity Identification Evaluations: Phase II Toxicity Identification Procedures for Samples Exhibiting Acute and Chronic Toxicity" (EPA/600/R-92/080) and "Methods for Aquatic Toxicity Identification Evaluations: Phase III Toxicity Confirmation Procedures for Samples Exhibiting Acute and Chronic Toxicity" (EPA/600/R-92/081). All characterization, identification, and confirmation tests shall be conducted in an orderly and logical progression;
- 2) Sampling Plan The TRE action plan should describe sampling locations, methods, holding times, chain of custody, and preservation techniques. The effluent sample volume collected for all tests shall be adequate to perform the toxicity characterization/identification/confirmation procedures, and chemical-specific analyses when the toxicity tests show significant lethality. Where the permittee has identified or suspects a specific pollutant and source of effluent toxicity, the permittee shall conduct, concurrent with toxicity testing, chemical-specific analyses for the identified and suspected pollutant and source of effluent toxicity;
- 3) Quality Assurance Plan The TRE action plan should address record keeping and data evaluation, calibration and standardization, baseline tests, system blanks, controls, duplicates, spikes, toxicity persistence in the samples, randomization, reference toxicant control charts, and mechanisms to detect artifactual toxicity; and
- 4) Project Organization The TRE action plan should describe the project staff, manager, consulting engineering services (where applicable), consulting analytical and toxicological services, etc.
- c. Within 30 days of submittal of the TRE action plan and schedule, the permittee shall implement the TRE.
- d. The permittee shall submit quarterly TRE activities reports concerning the progress of the TRE. The quarterly TRE activities reports are due on or before April 20th, July 20th, October 20th, and January 20th. The report shall detail

information regarding the TRE activities including:

- 1) results and interpretation of any chemical-specific analyses for the identified and suspected pollutant performed during the quarter;
- 2) results and interpretation of any characterization, identification, and confirmation tests performed during the quarter;
- any data and substantiating documentation that identifies the pollutant and source of effluent toxicity;
- 4) results of any studies/evaluations concerning the treatability of the facility's effluent toxicity;
- 5) any data that identifies effluent toxicity control mechanisms that will reduce effluent toxicity to the level necessary to eliminate significant lethality; and
- 6) any changes to the initial TRE plan and schedule that are believed necessary as a result of the TRE findings.
- e. During the TRE, the permittee shall perform, at a minimum, quarterly testing using the more sensitive species. Testing for the less sensitive species shall continue at the frequency specified in Part 1.b.
- f. If the effluent ceases to effect significant lethality, i.e., there is a cessation of lethality, the permittee may end the TRE. A cessation of lethality is defined as no significant lethality for a period of 12 consecutive weeks with at least weekly testing. At the end of the 12 weeks, the permittee shall submit a statement of intent to cease the TRE and may then resume the testing frequency specified in Part 1.b.

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

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

g. The permittee shall complete the TRE and submit a final report on the TRE activities no later than 18 months from the last test day of the retest that

demonstrates significant lethality. The permittee may petition the Executive Director (in writing) for an extension of the 18-month limit. However, to warrant an extension the permittee must have demonstrated due diligence in its pursuit of the toxicity identification evaluation/TRE and must prove that circumstances beyond its control stalled the toxicity identification evaluation/TRE. The report shall specify the control mechanism that will, when implemented, reduce effluent toxicity as specified in item 5.h. The report will also specify a corrective action schedule for implementing the selected control mechanism.

h. Within 3 years of the last day of the test confirming toxicity, the permittee shall comply with 30 TAC § 307.6I(2)(B), which requires greater than 50% survival of the test organism in 100% effluent at the end of 24-hours. The permittee may petition the Executive Director (in writing) for an extension of the 3-year limit. However, to warrant an extension the permittee must have demonstrated due diligence in its pursuit of the toxicity identification evaluation/TRE and must prove that circumstances beyond its control stalled the toxicity identification evaluation/TRE.

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

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

TABLE 2 (SHEET 1 OF 2)

WATER FLEA SURVIVAL

GENERAL INFORMATION

	Time	Date
Composite Sample Collected		
Test Initiated		

PERCENT SURVIVAL

Time	Dan	Percent effluent					
Time	Rep	о%	6%	13%	25%	50%	100%
	A	,					
	В						
o ah	С						
24h	D		,		-		
	Е						
	MEAN						

Enter percent effluent corresponding to the LC50 below	Enter	percent effluent	corresponding	to the	LC50	belov
--	-------	------------------	---------------	--------	------	-------

24 hour LC50 = _____% effluent

TABLE 2 (SHEET 2 OF 2)

FATHEAD MINNOW SURVIVAL

GENERAL INFORMATION

	Time	Date
Composite Sample Collected		
Test Initiated		

PERCENT SURVIVAL

Time	Pon	Percent effluent						
Time	Rep	0%	6%	13%	25%	50%	100%	
	A							
	В							
o 4h	С	:						
24h	D							
	E							
	MEAN					_		

Enter :	percent	effluent	corresp	onding	to the	LC50	below:

24 hour LC50 = _____% effluent

North Texas Municipal Water District

DOMESTIC WORKSHEET 4.0

POLLUTANT ANALYSES REQUIREMENTS*

Section 1. Toxic Pollutants

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

Grab \square Composite \square

Date and time sample(s) collected:

Table 4.0(1) - Toxics Analysis

Pollutant	Able 4.0(1) – Toxics AVG Effluent Conc. (µg/l)	MAX Effluent Conc. (μg/l)	Number of Samples	MAL (μg/l)
Acrylonitrile				50
Aldrin				0.01
Aluminum				2.5
Anthracene				10
Antimony				5
Arsenic				0.5
Barium				3
Benzene				10
Benzidine				50
Benzo(a)anthracene				5
Benzo(a)pyrene				5
Bis(2-chloroethyl)ether				10
Bis(2-ethylhexyl)phthalate				10
Bromodichloromethane				10
Bromoform				10
Cadmium			_	1
Carbon Tetrachloride				2

TCEQ-10054 (6/1/2017)

Domestic Wastewater Permit Application, Technical Reports

Page 1 of 13

WQ0015693001

North Texas Municipal Water District

Pollutant	AVG Effluent Conc. (µg/l)	MAX Effluent Conc. (μg/l)	Number of Samples	MAL (μg/l)
Carbaryl		Si Oi >		5
Chlordane*				0.2
Chlorobenzene				10
Chlorodibromomethane				10
Chloroform				10
Chlorpyrifos				0.05
Chromium (Total)				3
Chromium (Tri) (*1)				N/A
Chromium (Hex)				3
Copper				2
Chrysene				5
p-Chloro-m-Cresol				10
4,6-Dinitro-o-Cresol				50
p-Cresol				10
Cyanide (*2)				10
4,4'- DDD				0.1
4,4'- DDE				0.1
4,4'- DDT				0.02
2,4-D				0.7
Demeton (O and S)				0.20
Diazinon				0.5/0.1
1,2-Dibromoethane				10
m-Dichlorobenzene				10
o-Dichlorobenzene				10

WQ0015693001

North Texas Municipal Water District

Pollutant	AVG Effluent Conc. (µg/l)	MAX Effluent Conc. (μg/l)	Number of Samples	MAL (μg/l)
p-Dichlorobenzene				10
3,3'-Dichlorobenzidine				5
1,2-Dichloroethane				10
1,1-Dichloroethylene				10
Dichloromethane				20
1,2-Dichloropropane				10
1,3-Dichloropropene				10
Dicofol				1
Dieldrin				0.02
2,4-Dimethylphenol				10
Di-n-Butyl Phthalate				10
Diuron				0.09
Endosulfan I (alpha)				0.01
Endosulfan II (beta)				0.02
Endosulfan Sulfate				0.1
Endrin			,	0.02
Ethylbenzene				10
Fluoride				500
Guthion				0.1
Heptachlor				0.01
Heptachlor Epoxide				0.01
Hexachlorobenzene				5
Hexachlorobutadiene				10
Hexachlorocyclohexane (alpha)				0.05

TCEQ-10054 (6/1/2017)

Domestic Wastewater Permit Application, Technical Reports

WQ0015693001

North Texas Municipal Water District

Pollutant	AVG Effluent Conc. (μg/l)	MAX Effluent Conc. (μg/l)	Number of Samples	MAL (μg/l)
Hexachlorocyclohexane (beta)		N O		0.05
gamma-Hexachlorocyclohexane				0.05
(Lindane)				
Hexachlorocyclopentadiene				10
Hexachloroethane				20
Hexachlorophene				10
Lead				0.5
Malathion				0.1
Mercury				0.005
Methoxychlor				2
Methyl Ethyl Ketone				50
Mirex				0.02
Nickel				2
Nitrate-Nitrogen		,		100
Nitrobenzene				10
N-Nitrosodiethylamine				20
N-Nitroso-di-n-Butylamine				20
Nonylphenol				333
Parathion (ethyl)				0.1
Pentachlorobenzene				20
Pentachlorophenol				5
Phenanthrene				10
Polychlorinated Biphenyls (PCB's) (*3)				0.2
Pyridine				20

WQ0015693001

North Texas Municipal Water District

Pollutant	AVG Effluent Conc. (µg/l)	MAX Effluent Conc. (μg/l)	Number of Samples	MAL (μg/l)
Selenium				5
Silver				0.5
1,2,4,5-Tetrachlorobenzene				20
1,1,2,2-Tetrachloroethane				10
Tetrachloroethylene				10
Thallium				0.5
Toluene				10
Toxaphene				0.3
2,4,5-TP (Silvex)				0.3
Tributyltin (see instructions for explanation)				0.01
1,1,1-Trichloroethane				10
1,1,2-Trichloroethane				10
Trichloroethylene				10
2,4,5-Trichlorophenol				50
TTHM (Total Trihalomethanes)				10
Vinyl Chloride				10
Zinc				5

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

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

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

WQ0015693001

North Texas Municipal Water District

Section 2. Priority Pollutants

For pollutants identified in Tables 4.0(2)A-E, indicate type of sample. Grab \Box Composite \Box Date and time sample(s) collected:

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

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

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

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

WQ0015693001

North Texas Municipal Water District

Table 4.0(2)B – Volatile Compounds

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

WQ0015693001

North Texas Municipal Water District

Table 4.0(2)C - Acid Compounds

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

WQ0015693001

North Texas Municipal Water District

Table 4.0(2)D – Base/Neutral Compounds

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

WQ0015693001

North Texas Municipal Water District

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

WQ0015693001

North Texas Municipal Water District

Table 4.0(2)E – Pesticides

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

WQ0015693001

North Texas Municipal Water District

Section 3. Dioxin/Furan Compounds

A.	Are any of the following compounds used by a contributing industrial user or significant industrial user that is part of the collection system for the facility that you have reason to believe are present in the influent to the WWTP?
	Yes \square No \square If yes , identify which compound(s) are potentially sent to the facility.
	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
	o,o-dimethyl o-(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.
В.	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.
 If	you responded yes to either Subsection A or B, complete Table 4.0(2)F.

TCEQ-10054 (6/1/2017)

WQ0015693001

North Texas Municipal Water District

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

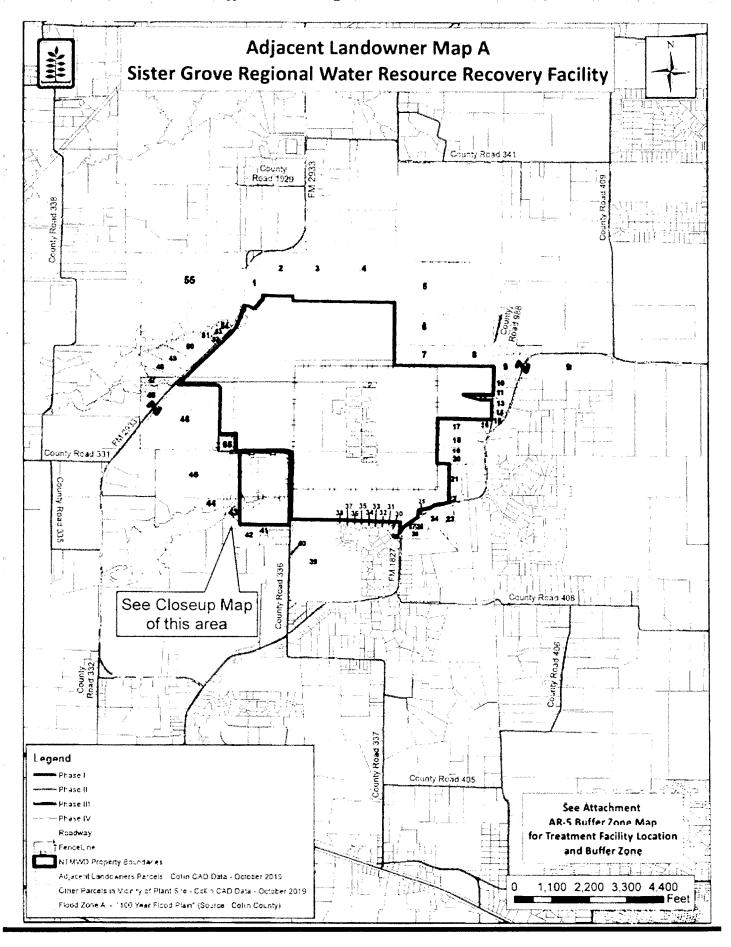
Grab 🗆

Composite \Box

Date and time sample(s) collected:

TABLE 4.0(2)F - DIOXIN/FURAN COMPOUNDS

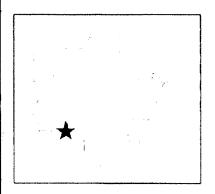
Compound	Toxic Equivalency Factors	Wastewater Concentration (ppq)	Wastewater Equivalents (ppq)	Sludge Concentration (ppt)	Sludge Equivalents (ppt)	MAL (ppq)
2,3,7,8 TCDD	1					10
1,2,3,7,8 PeCDD	0.5					50
2,3,7,8 HxCDDs	0.1					50
1,2,3,4,6,7,8 HpCDD	0.01					50
2,3,7,8 TCDF	0.1					10
1,2,3,7,8 PeCDF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



Close-up of SW Corner of NTMWD Sister Grove Property







KATYEM LLC

Plant Site Property

13.54 leek

GRAVEL DONNA MARIE &

> WHEELER PATRICE

Legend

Property Boundary

Landowner Parcels Touching Site Boundary - Collin CAD Data October 2019

Other Parcels in Vicinity Around Property

0 5 10 15 20 Fee

FACT SHEET AND EXECUTIVE DIRECTOR'S PRELIMINARY DECISION

For draft Texas Pollutant Discharge Elimination System (TPDES) Permit No. WQ0015693001, EPA I.D. No. TX0138584, to discharge to water in the state.

Issuing Office: Texas Commission on Environmental Quality

P.O. Box 13087

Austin, Texas 78711-3087

Applicant: North Texas Municipal Water District

P.O. Box 2408 Wylie, Texas 75098

Prepared By: Abdur Rahim

Municipal Permits Team

Wastewater Permitting Section (MC 148)

Water Quality Division

(512) 239-0504

Date: June 2, 2025

Permit Action: Renewal

1. EXECUTIVE DIRECTOR RECOMMENDATION

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

2. APPLICANT ACTIVITY

The applicant has applied to the Texas Commission on Environmental Quality (TCEQ) for a renewal of the existing permit that authorizes the discharge of treated domestic wastewater at an annual average flow not to exceed 16 million gallons per day (MGD) in the Interim I phase, an annual average flow not to exceed 32 MGD in the Interim II phase, an annual average flow not to exceed 48 MGD in the Interim III phase, and an annual average flow not to exceed 64 MGD in the Final phase. The proposed wastewater treatment facility will serve the North Texas Municipal Water District service area, which includes various communities in the northeastern portion of the Dallas metropolitan area.

3. FACILITY AND DISCHARGE LOCATION

The plant site is located at 3360 Farm-to-Market Road 2933, in the City of McKinney, Collin County, Texas 75071.

Outfall Location:

Outfall Number	Latitude	Longitude	
001	33.227511 N	96.494442 W	

The treated effluent will be discharged to Stiff Creek, thence to Sister Grove Creek, thence to Lavon Lake in Segment No. 0821 of the Trinity River Basin. The unclassified receiving water uses are limited aquatic life use for Stiff Creek and high aquatic life use for Sister Grove Creek. The designated uses for Segment No. 0821 are primary contact recreation, public water supply, and high aquatic life use.

4. TREATMENT PROCESS DESCRIPTION AND SEWAGE SLUDGE DISPOSAL

The Sister Grove Regional Water Resource Recovery Facility will be a conventional activated sludge plant operating in plug flow mode in a biological nutrient removal (BNR) configuration with nutrient removal of phosphorus and nitrification of ammonia. Treatment units in the Interim I phase will include three mechanical fine screens, two vortex grit removal chambers, two primary clarifiers, three aerated peak flow storage basins, two ferric sulfate storage tanks, two BNR activated sludge basins, two secondary clarifiers, six tertiary filters, three dewatering centrifuges, one aerated waste activated sludge (WAS) storage tank, one thickened primary sludge storage tank, one blend tank, and three ultraviolet light (UV) disinfection channels. Treatment units in the Interim II phase will include five mechanical fine screens, four vortex grit removal chambers, four primary clarifiers, three aerated peak flow storage basins, two ferric sulfate storage tanks, four BNR activated sludge basins, four secondary clarifiers, twelve tertiary filters, three dewatering centrifuges, one aerated WAS storage tank, one thickened primary sludge storage tank, and five UV disinfection channels. Treatment units in the Interim III phase will include four aerated peak flow storage basins, eight mechanical fine screens, six vortex grit removal chambers, six primary clarifiers, six BNR activated sludge basins, two ferric sulfate storage tanks, six secondary clarifiers, eighteen tertiary filters, five dewatering centrifuges, two aerated WAS storage tanks, two thickened primary sludge storage tanks, two blend tanks, and eight UV disinfection channels. Treatment units in the Final phase will include four aerated peak flow storage basins, ten mechanical fine screens, eight vortex grit removal chambers, eight primary clarifiers, eight BNR activated sludge basins, two ferric sulfate storage tanks, eight secondary clarifiers, twenty-four tertiary filters, five dewatering centrifuges, two aerated WAS storage tanks, two thickened primary sludge storage tanks, two blend tanks, and ten UV disinfection channels. The facility has not been constructed.

Sludge generated from the treatment facility will be hauled by a registered transporter and disposed of at a TCEQ-permitted landfill, 121 Regional Disposal Facility, Permit No. 2294, in Collin County. The draft permit also authorizes the disposal of sludge at a TCEQ-authorized land application site, co-disposal landfill, wastewater treatment facility, or facility that further processes sludge.

5. INDUSTRIAL WASTE CONTRIBUTION

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

6. SUMMARY OF SELF-REPORTED EFFLUENT ANALYSES

Self-reporting data is not available since the facility is not in operation.

7. DRAFT PERMIT CONDITIONS AND MONITORING REQUIREMENTS

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

A. INTERIM I PHASE EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

The annual average flow of effluent shall not exceed 16 MGD, nor shall the average discharge during any two-hour period (2-hour peak) exceed 44,444 gallons per minute (gpm).

<u>Parameter</u>	<u>30-Day</u>	Average	7-Day	<u>Daily</u> Mayimum
	mg/l	<u>lbs/day</u>	<u>Average</u> <u>mg/l</u>	<u>Maximum</u> <u>mg/l</u>
$CBOD_5$				
April-September	5	667	10	20
October-March	10	1,334	15	25
TSS	5	667	10	20
NH_3 - N				
April–September	1.3	173	3	6
October–March	3	400	6	10
Total Phosphorus*	Report	Report	N/A	N/A
DO (minimum)	6.0	N/A	N/A	N/A
E. coli, CFU or MPN	126	N/A	N/A	399
per 100 ml			•	

^{*} The daily mass loadings calculated for each day of the month shall be summed to determine the total pounds of total phosphorus discharged during the calendar month. The annual mass loading for the discharge shall not exceed 53,576 pounds per year for total phosphorus. The rolling annual mass loading shall be calculated each month by dropping the oldest month's mass loading data from the past twelvemonths and adding the most recent month's mass loading data. The total monthly and rolling annual mass loadings shall be reported on a monthly basis.

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

The permittee shall utilize an Ultraviolet Light (UV) system for disinfection purposes. An equivalent method of disinfection may be substituted only with prior approval of the Executive Director.

<u>Parameter</u>	Monitoring Requirement
Flow, MGD	Continuous
$CBOD_5$	One/day
TSS	One/day
NH ₃ -N	One/day
Total P	One/day
DO	One/day
E. coli	Daily

B. INTERIM II PHASE EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

The annual average flow of effluent shall not exceed 32 MGD, nor shall the average discharge during any two-hour period (2-hour peak) exceed 88,888 gpm.

<u>Parameter</u>	<u>30-Day</u>	<u>Average</u>	<u>7-Day</u>	<u>Daily</u>
			<u>Average</u>	<u>Maximum</u>
	<u>mg/l</u>	<u>lbs/day</u>	<u>mg/l</u>	<u>mg/l</u>
$CBOD_5$				
April-September	5	1,334	10	20
October-March	10	2,669	15	25
TSS	5	1,334	10	20
NH_3 - N				
April–September	1.7	454	3	6
October–March	3	801	6	10
Total Phosphorus*	Report	Report	N/A	N/A
DO (minimum)	6.0	N/A	N/A	N/A
E. coli, CFU or MPN	126	N/A	N/A	399
per 100 ml				

^{*} The daily mass loadings calculated for each day of the month shall be summed to determine the total pounds of total phosphorus discharged during the calendar month. The annual mass loading for the discharge shall not exceed 50,654 pounds per year for total phosphorus. The rolling annual mass loading shall be calculated each month by dropping the oldest month's mass loading data from the past twelvemonths and adding the most recent month's mass loading data. The total monthly and rolling annual mass loadings shall be reported on a monthly basis.

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

The permittee shall utilize an Ultraviolet Light (UV) system for disinfection purposes. An equivalent method of disinfection may be substituted only with prior approval of the Executive Director.

<u>Parameter</u>	Monitoring Requirement
Flow, MGD	Continuous
$CBOD_5$	One/day
TSS	One/day
NH ₃ -N	One/day
Total Phosphorus	One/day
DO	One/day
E. coli	Daily

C. INTERIM III PHASE EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

The annual average flow of effluent shall not exceed 48 MGD, nor shall the

average discharge during any two-hour period (2-hour peak) exceed 133,333 gpm.

<u>Parameter</u>	30-Day Average		7-Day	<u>Daily</u>
	mg/l	lbs/day	<u>Average</u> <u>mg/l</u>	<u>Maximum</u> <u>mg/l</u>
$CBOD_5$				
April-September	5	2,002	10	20
October-March	10	4,003	15	25
TSS	5	2,002	10	20
NH_3 - N				
April–September	1.5	600	3	6
October–March	2	801	5	10
Total Phosphorus*	Report	Report	N/A	N/A
DO (minimum)	6.0	N/A	N/A	N/A
E. coli, CFU or	126	N/A	N/A	399
MPN/100 ml		•	•	- 2 2

^{*} The daily mass loadings calculated for each day of the month shall be summed to determine the total pounds of total phosphorus discharged during the calendar month. The annual mass loading for the discharge shall not exceed 49,679 pounds per year for total phosphorus. The rolling annual mass loading shall be calculated each month by dropping the oldest month's mass loading data from the past twelvemonths and adding the most recent month's mass loading data. The total monthly and rolling annual mass loadings shall be reported on a monthly basis.

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

The permittee shall utilize an Ultraviolet Light (UV) system for disinfection purposes. An equivalent method of disinfection may be substituted only with prior approval of the Executive Director.

<u>Parameter</u>	Monitoring Requirement
Flow, MGD	Continuous
$CBOD_5$	One/day
TSS	One/day
NH ₃ -N	One/day
Total Phosphorus	One/day
DO	One/day
E. coli	Daily

D. FINAL PHASE EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

The annual average flow of effluent shall not exceed 64 MGD, nor shall the average discharge during any two-hour period (2-hour peak) exceed 177,777 gpm.

<u>Parameter</u>	<u> 30-Day Average</u>	<u>7-Day</u>	<u>Daily</u>
		<u>Average</u>	<u>Maximum</u>

	mg/l	<u>lbs/day</u>	mg/l	mg/l
$CBOD_5$	<u>.</u>		-	
April-September	5	2,669	10	20
October - March	10	5,338	15	25
TSS	5	2,669	10	20
NH_3 -N				
April–September	1.2	641	3	6
October–March	2	1,068	5	10
Total Phosphorus*	Report	Report	N/A	N/A
DO (minimum)	6.0	N/A	N/A	N/A
E. coli, CFU or	126	N/A	N/A	399
MPN/100 ml				

^{*} The daily mass loadings calculated for each day of the month shall be summed to determine the total pounds of total phosphorus discharged during the calendar month. The annual mass loading for the discharge shall not exceed 48,706 pounds per year for total phosphorus. The annual rolling mass loading shall be calculated each month by dropping the oldest month's mass loading data from the past twelvemonth series and adding the most recent month's mass loading data. Both the total monthly and rolling annual mass loading shall be reported on a monthly basis.

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

The permittee shall utilize an Ultraviolet Light (UV) system for disinfection purposes. An equivalent method of disinfection may be substituted only with prior approval of the Executive Director.

<u>Parameter</u>	Monitoring Requirement
Flow, MGD	Continuous
$CBOD_5$	One/day
TSS	One/day
NH ₃ -N	One/day
Total Phosphorus	One/day
DO	One/day
E. coli	Daily

E. SEWAGE SLUDGE REQUIREMENTS

The draft permit includes Sludge Provisions according to the requirements of 30 TAC Chapter 312, Sludge Use, Disposal, and Transportation. Sludge generated from the treatment facility will be hauled by a registered transporter and disposed of at a TCEQ-permitted landfill, 121 Regional Disposal Facility, Permit No. 2294, in Collin County. The draft permit also authorizes the disposal of sludge at a TCEQ-authorized land application site, co-disposal landfill, wastewater treatment facility, or facility that further processes sludge.

F. PRETREATMENT REQUIREMENTS

Permit requirements for pretreatment are based on TPDES regulations contained

in 30 TAC Chapter 305 which references 40 Code of Federal Regulations (CFR) Part 403, "General Pretreatment Regulations for Existing and New Sources of Pollution." [rev. Federal Register/ Vol. 70/ No. 198/ Friday, October 14, 2005/ Rules and Regulations, pages 60134-60798]. The permit includes specific requirements that establish responsibilities of local government, industry, and the public to implement the standards to control pollutants which pass through or interfere with treatment processes in publicly owned treatment works (POTWs) or which may contaminate the sewage sludge. This permit has appropriate pretreatment language for a facility of this size and complexity.

The Executive Director previously required the permittee to conduct an industrial user survey, as Activity No. 1, to determine if a full pretreatment program must be developed to ensure the quality of its sewage sludge and to prevent interference and pass through. The permittee submitted Activity No. 1 for an initial industrial user survey on October 5, 2006. The Executive Director reviewed this submission and determined that the permittee is required to continue development of a new pretreatment program. The requirement was included in the TPDES permit issued on June 27, 2008. The permittee submitted Activity Nos. 2-6 on February 25, 2011, November 7, 2011, and December 19, 2016. A new pretreatment program will proceed through the approval process in accordance with 40 CFR §§403.9 and 403.11 [rev. Federal Register/Vol.70/No. 198/Friday, October 14, 2005/Rules and Regulations, pages 60134-60798]. The submission will become effective upon approval by the Executive Director in accordance with 40 CFR §403.11.

The permittee has submitted a substantial modification to their approved pretreatment program to the TCEQ on February 25, 2011, as required by the NTMWD - Wilson Creek Regional WWTP's TPDES Permit No. WQ0012446001, issued February 26, 2010, in order to combine all of the permittee's current approved pretreatment programs into one pretreatment program: Buffalo Creek, Stewart Creek West, Floyd Branch Regional, South Mesquite Creek Regional, Rowlett Creek Regional, Wilson Creek Regional, Panther Creek, and Muddy Creek, (TPDES Permit Nos. WQ0012047001, WQ0014008001, WQ0010257001, WQ0010221001, WQ0010363001, WQ0012446001, WQ0014245001, and WQ0014216001). The combined pretreatment program will also include the developing pretreatment programs from the Sabine Creek WWTP (TPDES Permit No. WQ0014469001) and the Sister Grove Regional Water Resource Recovery Facility (TPDES Permit No. WQ0015693001). The substantial modification amended on November 7, 2011, includes the redevelopment of the technically based local limits (TBLLs) for all WWTPs currently under the approved program, and revisions to the Legal Authority, Enforcement Response Plan, and Standard Operating Procedures (including forms) for each customer city for the combined pretreatment program. The Executive Director is currently reviewing this substantial modification for the new combined program.

This substantial modification/new combined program documentation submitted by the permittee is currently under review by the TCEQ. Substantial modifications will be approved in accordance with 40 CFR §403.18, and the modification will become effective upon approval by the Executive Director in accordance with 40 CFR §403.18.

G. WHOLE EFFLUENT TOXICITY (BIOMONITORING) REQUIREMENTS

- (1) The draft permit includes 7 Day chronic freshwater biomonitoring requirements as follows. The permit requires five dilutions in addition to the control (0% effluent) to be used in the toxicity tests. These additional effluent concentrations shall be 32%, 42%, 56%, 75%, and 100%. The low-flow effluent concentration (critical dilution) is defined as 100% effluent. The critical dilution is in accordance with the "Aquatic Life Criteria" section of the "Water Quality Based Effluent Limitations/Conditions" section.
 - (a) Chronic static renewal survival and reproduction test using the water flea (*Ceriodaphnia dubia*). The frequency of the testing is once per quarter for at least the first year of testing, after which the permittee may apply for a testing frequency reduction.
 - (b) Chronic static renewal 7-day larval survival and growth test using the fathead minnow (*Pimephales promelas*). The frequency of the testing is once per quarter for at least the first year of testing, after which the permittee may apply for a testing frequency reduction.
- (2) The draft permit includes the following minimum 24-hour acute freshwater biomonitoring requirements at a frequency of once per six months:
 - (a) Acute 24-hour static toxicity test using the water flea (*Daphnia pulex* or *Ceriodaphnia dubia*).
 - (b) Acute 24-hour static toxicity test using the fathead minnow (*Pimephales promelas*).

H. BUFFER ZONE REQUIREMENTS

The permittee has submitted sufficient evidence of legal restrictions prohibiting residential structures within the part of the buffer zone not owned by the permittee, in accordance with 30 TAC § 309.13(e)(3). The permittee shall also comply with the requirements of 30 TAC § 309.13(a) through (d). See Attachment A.

I. SUMMARY OF CHANGES FROM APPLICATION

None.

J. SUMMARY OF CHANGES FROM EXISTING PERMIT

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

For Publicly Owned Treatment Works (POTWs), effective December 21, 2025, the permittee must submit the written report for unauthorized discharges and

unanticipated bypasses that exceed any effluent limit in the permit using the online electronic reporting system available through the TCEQ website unless the permittee requests and obtains an electronic reporting waiver.

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

The facility's location description in the existing permit has been updated to state: located at 3360 Farm-to-Market Road 2933, in the City of McKinney, Collin County, Texas 75071.

The pretreatment language has been updated from the current permit. The pretreatment requirements will continue until permit expiration. Please see specific details in the Pretreatment Requirements Section of the fact sheet.

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

8. DRAFT PERMIT RATIONALE

A. TECHNOLOGY-BASED EFFLUENT LIMITATIONS/CONDITIONS

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

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

B. WATER QUALITY SUMMARY AND COASTAL MANAGEMENT PLAN

(1) WATER QUALITY SUMMARY

The treated effluent will be discharged to Stiff Creek, thence to Sister Grove Creek, thence to Lavon Lake in Segment No. 0821 of the Trinity River Basin. The unclassified receiving water uses are limited aquatic life use for Stiff Creek and high aquatic life use for Sister Grove Creek. The designated uses for Segment No. 0821 are primary contact recreation, public water supply, and high aquatic life use. The effluent limitations in the draft permit will maintain and protect the existing instream uses. All determinations are preliminary and subject to additional review and/or revisions.

The discharge from this permit action is not expected to have an effect on any federal endangered or threatened aquatic or aquatic-dependent species or proposed species or their critical habitat. This determination is based on the United States Fish and Wildlife Service's (USFWS's) biological opinion on the State of Texas authorization of the TPDES

(September 14, 1998; October 21, 1998, update). To make this determination for TPDES permits, TCEQ and EPA only considered aquatic or aquatic-dependent species occurring in watersheds of critical concern or high priority as listed in Appendix A of the USFWS biological opinion. The determination is subject to reevaluation due to subsequent updates or amendments to the biological opinion. The permit does not require EPA review with respect to the presence of endangered or threatened species.

Segment No. 0821 is not currently listed on the State's inventory of impaired and threatened waters (the 2022 CWA § 303(d) list).

The effluent limitations and conditions in the draft permit comply with EPA-approved portions of the 2018 Texas Surface Water Quality Standards (TSWQS), 30 TAC §§ 307.1 - 307.10, effective March 1, 2018; 2014 TSWQS, effective March 6, 2014; 2010 TSWQS, effective July 22, 2010; and 2000 TSWQS, effective July 26, 2000.

(2) CONVENTIONAL PARAMETERS

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

The effluent limitations in the draft permit have been reviewed for consistency with the WQMP. The proposed effluent limitations are not contained in the approved WQMP. However, these limits will be included in the next WQMP update.

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

(3) COASTAL MANAGEMENT PLAN

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

C. WATER QUALITY-BASED EFFLUENT LIMITATIONS/CONDITIONS

(1) GENERAL COMMENTS

The Texas Surface Water Quality Standards (30 TAC Chapter 307) state that surface waters will not be toxic to man, or to terrestrial or aquatic life. The methodology outlined in the "Procedures to Implement the Texas Surface Water Quality Standards, June 2010" is designed to ensure compliance with 30 TAC Chapter 307. Specifically, the methodology is designed to ensure that no source will be allowed to discharge any wastewater that: (1) results in instream aquatic toxicity; (2) causes a

violation of an applicable narrative or numerical state water quality standard; (3) results in the endangerment of a drinking water supply; or (4) results in aquatic bioaccumulation that threatens human health.

(2) AQUATIC LIFE CRITERIA

(a) SCREENING

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

There is no mixing zone for this discharge directly to an intermittent stream with perennial pools; acute and chronic freshwater criteria apply at the end of pipe. The following critical effluent percentages are being used:

Acute Effluent % 100% Chronic Effluent % 100%

Waste load allocations (WLAs) are calculated using the above estimated effluent percentages, criteria outlined in the Texas Surface Water Quality Standards, and partitioning coefficients for metals (when appropriate and designated in the implementation procedures). The WLA is the end-ofpipe effluent concentration that can be discharged when, after mixing in the receiving stream, instream numerical criteria will not be exceeded. From the WLA, a long-term average (LTA) is calculated using a log normal probability distribution, a given coefficient of variation (0.6), and a 90th percentile confidence level. The LTA is the long-term average effluent concentration for which the WLA will never be exceeded using a selected percentile confidence level. The lower of the two LTAs (acute and chronic) is used to calculate a daily average and daily maximum effluent limitation for the protection of aquatic life using the same statistical considerations with the 99th percentile confidence level and a standard number of monthly effluent samples collected (12). Assumptions used in deriving the effluent limitations include segment values for hardness, chlorides, pH, and total suspended solids (TSS) according to the segmentspecific values contained in the TCEQ guidance document "Procedures to Implement the Texas Surface Water Quality Standards, June 2010." The segment values are 114 mg/l for hardness (as calcium carbonate), 10 mg/l chlorides, 7.8 standard units for pH, and 6.4 mg/l for TSS. For additional details on the calculation of water quality-based effluent limitations, refer to the TCEQ guidance document.

TCEQ practice for determining significant potential is to compare the reported analytical data against percentages of the calculated daily average water quality-based effluent limitation. Permit limitations are required when analytical data reported in the application exceeds 85% of the calculated daily average water quality-based effluent limitation. Monitoring and reporting is required when analytical data reported in the application exceeds 70% of the calculated daily average water quality-based effluent limitation. See Attachment A of this Fact Sheet.

(b) PERMIT ACTION

No analytical data is available for screening against water quality-based effluent limitations because the facility is not in operation.

(3) AQUATIC ORGANISM BIOACCUMULATION CRITERIA

(a) SCREENING

For discharge to Sister Grove Creek

Water quality-based effluent limitations for the protection of human health are calculated using criteria for the consumption of freshwater fish tissue and drinking water found in Table 2 of the Texas Surface Water Quality Standards (30 TAC Chapter 307). Freshwater fish tissue bioaccumulation and drinking water criteria are applied at the edge of the human health mixing zone. The human health mixing zone for this discharge is identical to the aquatic life mixing zone. TCEQ uses the mass balance equation to estimate dilution at the edge of the human health mixing zone during average flow conditions. The estimated dilution at the edge of the human health mixing zone is calculated using the permitted flow of 64 MGD and the harmonic mean flow of 0.1 cfs for Sister Grove Creek. The following critical effluent percentage is being used:

Human Health Effluent %: 99.90%

For discharge to Stiff Creek

Water quality-based effluent limitations for the protection of human health are calculated using criteria for the consumption of freshwater fish tissue found in Table 2 of the Texas Surface Water Quality Standards (30 TAC Chapter 307). The discharge point is to an intermittent stream with perennial pools or to an intermittent stream within 3 miles upstream of an intermittent stream with perennial pools. Human health screening using incidental freshwater fish tissue criteria (= 10 X freshwater fish tissue criteria) is applicable due to the perennial pools that support incidental freshwater fisheries. TCEQ uses the mass balance equation to estimate dilution in the intermittent stream with perennial pools during average flow conditions. The estimated dilution for human health protection is calculated using the final permitted flow of 64 MGD and the harmonic mean flow of 0.1 cfs for Stiff Creek. The following effluent percentage is being used:

Human Health Effluent % 99.90%

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

value being calculated.

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

(b) PERMIT ACTION

No analytical data is available for screening against water quality-based effluent limitations because the facility is not in operation.

(4) DRINKING WATER SUPPLY PROTECTION

(a) SCREENING

Water Quality Segment No. 0821, which receives the discharge from this facility, is designated as a public water supply. The discharge point is located at a distance greater than three miles from the classified segment. Screening reported analytical data of the effluent against water quality-based effluent limitations calculated for the protection of a drinking water supply is not applicable due to the distance between the discharge point and the classified segment.

(b) PERMIT ACTION

No analytical data is available for screening against water quality-based effluent limitations because the facility is not in operation.

(5) WHOLE EFFLUENT TOXICITY (BIOMONITORING) CRITERIA

(a) SCREENING

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

The applicant is not currently monitoring whole effluent toxicity because the facility has not been constructed.

(b) PERMIT ACTION

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

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

No analytical data is available because the facility is not in operation.

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

(a) SCREENING

The applicant is not currently monitoring whole effluent toxicity because the facility has not been constructed.

(b) PERMIT ACTION

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

9. WATER QUALITY VARIANCE REQUESTS

No variance requests have been received.

10. PROCEDURES FOR FINAL DECISION

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

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

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

After the public comment deadline, the Executive Director prepares a response to all significant public comments on the application, or the draft permit raised during the public comment period. The Chief Clerk then mails the Executive Director's response to comments and final decision to people who have filed comments, requested a contested case hearing, or requested to be on the mailing list. This notice provides that if a person

is not satisfied with the Executive Director's response and decision, they can request a contested case hearing or file a request to reconsider the Executive Director's decision within 30 days after the notice is mailed.

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

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

For additional information about this application, contact Abdur Rahim at (512) 239-0504.

11. ADMINISTRATIVE RECORD

The following items were considered in developing the draft permit:

A. PERMIT(S)

TPDES Permit No. WO0015693001 issued on March 11, 2020.

B. APPLICATION

Application received on September 12, 2024, and additional information received on September 18, 2024.

C. MEMORANDA

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

D. MISCELLANEOUS

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

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

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

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

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

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

Attachment A: Calculated Water Quality Based Effluent Limitations

TEXTOX MENU #3 - PERENNIAL STREAM OR RIVER

HUMAN HEALTH ONLY

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

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

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

PERMIT INFORMATION

Permittee Name:

TPDES Permit No.:

Outfall No.:

Prepared by:

Date:

North Texas Municipal Utility District

WQ0015693001

O01

Abdur Rahim

June 2, 2025

DISCHARGE INFORMATION

Receiving Waterbody:

Segment No.:

O821

TSS (mg/L):

Effluent Flow for Human Health (MGD):

Harmonic Mean Flow (cfs):

Effluent for Human Health:

Seffluent for Human Health:

Harmonic Mean Flow (cfs):

FISH

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

Stream/River Metal	Intercept (b)	Slope (m)	Partition Coefficient (Kp)	Dissolved Fraction (Cd/Ct)	Source	Water Effect Ratio (WER)	Source
Aluminum	N/A	N/A	N/A	1.00	Assumed	1.00	Assumed
Arsenic	5.68	-0.73	123449.30	0.559		1.00	Assumed
Cadmium	6.60	-1.13	488671.07	0.242		1.00	Assumed
Chromium (total)	6.52	-0.93	589186.28	0.210		1.00	Assumed
Chromium (trivalent)	6.52	-0.93	589186.28	0.210		1.00	Assumed
Chromium (hexavalent)	N/A	N/A	N/A	1.00	Assumed	1.00	Assumed
Copper	6.02	-0.74	265110.43	0.371		1.00	Assumed
Lead	6.45	-0.80	638345.82	0.197		1.00	Assumed
Mercury	N/A	N/A	N/A	1.00	Assumed	1.00	Assumed
Nickel	5.69	-0.57	170011.15	0.479		1.00	Assumed
Selenium	N/A	N/A	N/A	1.00	Assumed	1.00	Assumed
Silver	6.38	-1.03	354515.01	0.306		1.00	Assumed
Zinc	6.10	-0.70	343300.17	0.313		1.00	Assumed

HUMAN HEALTH

CALCULATE DAILY AVERAGE AND DAILY MAXIMUM EFFLUENT LIMITATIONS:

	Water and Fish Criterion	Fish Only Criterion	WLAh	LTAh	Daily Avg.	Daily Max.
Parameter	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(μg/L)
Acrylonitrile	1.0	115	115	107	157	332
Aldrin	1.146E-05	1.147E-05	0.0000115	0.0000107	0.0000157	0.0000332
Anthracene	1109	1317	1318	1226	1802	3812
Antimony	6	1071	1072	997	1465	3100
Arsenic	10	N/A	N/A	N/A	N/A	N/A
Barium	2000	N/A	N/A	N/A	N/A	N/A
Benzene	5	581	582	541	795	1682
Benzidine	0.0015	0.107	0.107	0.0995	0.146	0.309
Benzo(a)anthracene	0.024	0.025	0.0250	0.0233	0.0342	0.0724

Benzo(a)pyrene	0.0025	0.0025	0.00250	0.00233	0.00342	0.00724
Bis(chloromethyl)ether	0.0024	0.2745	0.275	0.256	0.376	0.796
Bis(2-chloroethyl)ether	0.60	42.83	42.9	39.9	58.6	124
Bis(2-ethylhexyl) phthalate [Di(2-ethylhexyl) phthalate]	6	7.55	7.56	7.03	10.3	21.8
Bromodichloromethane [Dichlorobromomethane]	10.2	275	275	256	376	796
Bromoform [Tribromomethane]	66.9	1060	1061	987	1450	3069
Cadmium	5	N/A	N/A	N/A	N/A	N/A
Carbon Tetrachloride	4.5	46	46.0	42.8	62.9	133
Chlordane	0.0025	0.0025	0.00250	0.00233	0.00342	0.00724
Chlorobenzene	100	2737	2740	2548	3745	7924
Chlorodibromomethane [Dibromochloromethane]	7.5	183	183	170	249	528
Chloroform [Trichloromethane]	70	7697	7705	7166	10534	22286
Chromium (hexavalent)	62	502	503	468	687	1455
Chrysene	2.45	2.52	2.52	2.34	3.43	7.27
Cresols [Methylphenols]	1041	9301	9310	8658	12727	26926
Cyanide (free)	200	N/A	N/A	N/A	N/A	N/A
4,4'-DDD	0.002	0.002	0.00200	0.00186	0.00273	0.00578
4,4'-DDE	0.00013	0.00013	0.000130	0.000121	0.000177	0.000376
4,4'-DDT	0.0004	0.0004	0.000400	0.000372	0.000546	0.00115
2,4'-D	70	N/A	N/A	N/A	N/A	N/A
Danitol [Fenpropathrin]	262	473	473	440	646	1368
1,2-Dibromoethane [Ethylene Dibromide]	0.17	4.24	4.24	3.94	5.79	12.2
m-Dichlorobenzene [1,3-Dichlorobenzene]	322	595	596	554	814	1722
o-Dichlorobenzene [1,2-Dichlorobenzene]	600	3299	3302	3071	4514	9550
p-Dichlorobenzene [1,4-Dichlorobenzene]	75	N/A	N/A	N/A	N/A	N/A
3,3'-Dichlorobenzidine	0.79	2.24	2.24	2.08	3.05	6.46
1,2-Dichloroethane	5	364	364	339	498	1054
1,1-Dichloroethylene [1,1-Dichloroethene]	7	55114	55170	51308	75422	159567
Dichloromethane [Methylene Chloride]	5	13333	13346	12412	18245	38601
1,2-Dichloropropane	5	259	259	241	354	749
1,3-Dichloropropene [1,3-Dichloropropylene]	2.8	119	119	111	163	345
Dicofol [Kelthane]	0.30	0.30	0.300	0.279	0.410	0.867
Dieldrin	2.0E-05	2.0E-05	0.0000200	0.0000186	0.0000273	0.0000578
2,4-Dimethylphenol	444	8436	8445	7854	11545	24425
Di-n-Butyl Phthalate	88.9	92.4	92.5	86.0	126	267
Dioxins/Furans [TCDD Equivalents]	7.80E-08	7.97E-08	7.98E-08	7.42E-08	1.09E-07	2.30E-07
Endrin	0.02	0.02	0.0200	0.0186	0.0273	0.0578
Epichlorohydrin	53.5	2013	2015	1874	2754	5828
Ethylbenzene	700	1867	1869	1738	2554	5405
Ethyl Glycol	46744	1.68E+07	16816966	15639778	22990473	48639709
Fluoride	4000	N/A	N/A	N/A	N/A	N/A
Heptachlor	8.0E-05	0.0001	0.000100	0.0000930	0.000136	0.000289
Heptachlor Epoxide	0.00029	0.00029	0.000290	0.000270	0.000396	0.000839
Hexachlorobenzene	0.00068	0.00068	0.000681	0.000633	0.000930	0.00196
Hexachlorobutadiene	0.21	0.22	0.220	0.205	0.301	0.637
Hexachlorocyclohexane (alpha)	0.0078	0.0084	0.00841	0.00782	0.0114	0.0243
Hexachlorocyclohexane (beta)	0.15	0.26	0.260	0.242	0.355	0.752
Hexachlorocyclohexane (gamma) [Lindane]	0.2	0.341	0.341	0.317	0.465	0.985
Hexachlorocyclopentadiene	10.7	11.6	11.6	10.8	15.8	33.5
Hexachloroethane	1.84	2.33	2.33	2.17	3.18	6.74
Hexachlorophene	2.05	2.90	2.90	2.70	3.96	8.39
4,4'-Isopropylidenediphenol [Bisphenol A]	1092	15982	15998	14878	21870	46270
Lead	1.15	3.83	19.5	18.1	26.6	56.2
Mercury	0.0122	0.0122	0.0122	0.0113	0.0166	0.0351
Methoxychlor	2.92	3.0	3.00	2.79	4.10	8.67
Methyl Ethyl Ketone	13865	9.92E+05	993002	923492	1357533	2872060
Methyl tert-butyl ether [MTBE]	15	10482	10493	9758	14344	30347
Nickel	332	1140	2383	2216	3257	6891
Nitrate-Nitrogen (as Total Nitrogen)	10000	N/A	N/A	N/A	N/A	N/A
Nitrobenzene	45.7	1873	1875	1744	2563	5423
N-Nitrosodiethylamine	0.0037	2.1	2.10	1.95	2.86	6.06

N-Nitroso-di- <i>n</i> -Butylamine	0.119	4.2	4.20	3.91	5.74	12.1
Pentachlorobenzene	0.348	0.355	0.355	0.330	0.485	1.02
Pentachlorophenol	0.22	0.29	0.290	0.270	0.396	0.839
Polychlorinated Biphenyls [PCBs]	6.4E-04	6.4E-04	0.000641	0.000596	0.000876	0.00185
Pyridine	23	947	948	882	1296	2743
Selenium	50	N/A	N/A	N/A	N/A	N/A
1,2,4,5-Tetrachlorobenzene	0.23	0.24	0.240	0.223	0.327	0.693
1,1,2,2-Tetrachloroethane	1.64	26.35	26.4	24.6	36.1	76.5
Tetrachloroethylene [Tetrachloroethylene]	5	280	280	260	382	808
Thallium	0.12	0.23	0.230	0.214	0.314	0.665
Toluene	1000	N/A	N/A	N/A	N/A	N/A
Toxaphene	0.011	0.011	0.0110	0.0102	0.0149	0.0317
2,4,5-TP [Silvex]	50	369	369	343	504	1066
1,1,1-Trichloroethane	200	784354	785146	730186	1073373	2270878
1,1,2-Trichloroethane	5	166	166	154	226	478
Trichloroethylene [Trichloroethene]	5	71.9	72.0	67.0	98.4	208
2,4,5-Trichlorophenol	1039	1867	1869	1738	2554	5405
TTHM [Sum of Total Trihalomethanes]	80	N/A	N/A	N/A	N/A	N/A
Vinyl Chloride	0.23	16.5	16.5	15.3	22.4	47.5

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

	70% of	85% of
Human Health	Daily Avg.	Daily Avg.
Parameter	(μg/L)	(μg/L)
Acrylonitrile	109	133
Aldrin	0.0000109	0.0000133
Anthracene	1261	1531
Antimony	1025	1245
Arsenic	N/A	N/A
Barium	N/A	N/A
Benzene	556	675
Benzidine	0.102	0.124
Benzo(a)anthracene	0.0239	0.0290
Benzo(a)pyrene	0.00239	0.00290
Bis(chloromethyl)ether	0.263	0.319
Bis(2-chloroethyl)ether	41.0	49.8
Bis(2-ethylhexyl) phthalate [Di(2-ethylhexyl) phthalate]	7.21	8.75
Bromodichloromethane [Dichlorobromomethane]	263	319
Bromoform [Tribromomethane]	1015	1232
Cadmium	N/A	N/A
Carbon Tetrachloride	44.0	53.4
Chlordane	0.00239	0.00290
Chlorobenzene	2621	3183
Chlorodibromomethane [Dibromochloromethane]	174	211
Chloroform [Trichloromethane]	7373	8953
Chromium (hexavalent)	480	583
Chrysene	2.40	2.91
Cresols [Methylphenols]	8908	10817
Cyanide (free)	N/A	N/A
4,4'-DDD	0.00191	0.00232
4,4'-DDE	0.000123	0.000150
4,4'-DDT	0.000382	0.000464
2,4'-D	N/A	N/A
Danitol [Fenpropathrin]	452	549
1,2-Dibromoethane [Ethylene Dibromide]	4.05	4.92
<i>m</i> -Dichlorobenzene [1,3-Dichlorobenzene]	569	691
o-Dichlorobenzene [1,2-Dichlorobenzene]	3159	3836
p-Dichlorobenzene [1,4-Dichlorobenzene]	N/A	N/A
3,3'-Dichlorobenzidine	2.13	2.59
1.2-Dichloroethane	348	423

1,1-Dichloroethylene [1,1-Dichloroethene]	52795	64108
Dichloromethane [Methylene Chloride]	12771	15508
1,2-Dichloropropane	247	300
1,3-Dichloropropene [1,3-Dichloropropylene]	114	138
Dicofol [Kelthane]	0.287	0.348
Dieldrin	0.0000191	0.0000232
2,4-Dimethylphenol	8081	9813
Di- <i>n</i> -Butyl Phthalate	88.2	107
Dioxins/Furans [TCDD Equivalents]	7.63E-08	9.26E-08
Endrin	0.0191	0.0232
Epichlorohydrin	1927	2340
Ethylbenzene	1787	2170
•	16093331	19541902
Ethyl Glycol		
Fluoride	N/A	N/A
Heptachlor	0.0000952	0.000115
Heptachlor Epoxide	0.000277	0.000336
Hexachlorobenzene	0.000651	0.000790
Hexachlorobutadiene	0.210	0.255
Hexachlorocyclohexane (alpha)	0.00798	0.00969
Hexachlorocyclohexane (beta)	0.248	0.301
Hexachlorocyclohexane (gamma) [Lindane]	0.325	0.395
Hexachlorocyclopentadiene	11.0	13.4
Hexachloroethane	2.22	2.70
Hexachlorophene	2.77	3.36
4,4'-Isopropylidenediphenol [Bisphenol A]	15309	18589
Lead	18.6	22.6
Mercury	0.0116	0.0141
Methoxychlor	2.87	3.48
Methyl Ethyl Ketone	950273	1153903
Methyl tert-butyl ether [MTBE]	10040	12192
Nickel	2279	2768
Nitrate-Nitrogen (as Total Nitrogen)	N/A	N/A
Nitrobenzene	1794	2178
N-Nitrosodiethylamine	2.00	2.43
N-Nitroso-di- <i>n</i> -Butylamine	4.01	4.87
Pentachlorobenzene	0.339	0.412
Pentachlorophenol	0.277	0.336
Polychlorinated Biphenyls [PCBs]	0.000613	0.000744
Pyridine	907	1101
Selenium	N/A	N/A
1,2,4,5-Tetrachlorobenzene	0.228	0.277
1,1,2,2-Tetrachloroethane	25.2	30.6
Tetrachloroethylene [Tetrachloroethylene]	267	324
Thallium	0.219	0.266
Toluene	N/A	N/A
Toxaphene	0.0104	0.0126
2,4,5-TP [Silvex]	352	428
1,1,1-Trichloroethane	751361	912367
1,1,2-Trichloroethane	158	192
Trichloroethylene [Trichloroethene]	68.8	83.6
2,4,5-Trichlorophenol	1787	2170
TTHM [Sum of Total Trihalomethanes]	N/A	N/A
Vinyl Chloride		
viriyi ciliotiue	15.6	19.0

TEXTOX MENU #7 - INTERMITTENT STREAM WITH PERENNIAL POOLS

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

Table 1, 2014 Texas Surface Water Quality Standards (30 TAC 307) for Freshwater Aquatic Life Table 2, 2018 Texas Surface Water Quality Standards for Human Health, Incidental Fishery "Procedures to Implement the Texas Surface Water Quality Standards," TCEQ, June 2010

PERMIT INFORMATION

Permittee Name:	North Texas Municipal Utility District
TPDES Permit No.:	WQ0015693001
Outfall No.:	001
Prepared by:	Abdur Rahim
Date:	June 2, 2025

DISCHARGE INFORMATION

Intermittent Receiving Waterbody:	Stiff Creek	
Segment No.:	821	
TSS (mg/L):	6.4	
pH (Standard Units):	7.8	
Hardness (mg/L as CaCO₃):	114	
Chloride (mg/L):	100	
Effluent Flow for Aquatic Life (MGD):	64	
Critical Low Flow [7Q2] (cfs):	0	
% Effluent for Chronic Aquatic Life:	100	
% Effluent for Acute Aquatic Life:	100	
Effluent Flow for Human Health (MGD):	64	
Harmonic Mean Flow (cfs):	0.1	
% Effluent for Human Health:	99.899	

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

Stream/River Metal	Intercept (b)	Slope (m)	Partition Coefficient (Kp)	Dissolved Fraction (Cd/Ct)	Source	Water Effect Ratio (WER)	Source
Aluminum	N/A	N/A	N/A	1.00	Assumed	1.00	Assumed
Arsenic	5.68	-0.73	123449.30	0.559		1.00	Assumed
Cadmium	6.60	-1.13	488671.07	0.242		1.00	Assumed
Chromium (total)	6.52	-0.93	589186.28	0.210		1.00	Assumed
Chromium (trivalent)	6.52	-0.93	589186.28	0.210		1.00	Assumed
Chromium (hexavalent)	N/A	N/A	N/A	1.00	Assumed	1.00	Assumed
Copper	6.02	-0.74	265110.43	0.371		1.00	Assumed
Lead	6.45	-0.80	638345.82	0.197		1.00	Assumed
Mercury	N/A	N/A	N/A	1.00	Assumed	1.00	Assumed
Nickel	5.69	-0.57	170011.15	0.479		1.00	Assumed
Selenium	N/A	N/A	N/A	1.00	Assumed	1.00	Assumed
Silver	6.38	-1.03	354515.01	0.306		1.00	Assumed
Zinc	6.10	-0.70	343300.17	0.313	•	1.00	Assumed

AQUATIC LIFE

CALCULATE DAILY AVERAGE AND DAILY MAXIMUM EFFLUENT LIMITATIONS:

		FW						
	FW Acute	Chronic					Daily	Daily
	Criterion	Criterion	WLAa	WLAc	LTAa	LTAc	Avg.	Max.
Parameter	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(μg/L)
Aldrin	3.0	N/A	3.00	N/A	1.72	N/A	2.52	5.34
Aluminum	991	N/A	991	N/A	568	N/A	834	1765
Arsenic	340	150	609	269	349	207	303	643
Cadmium	9.7	0.269	40.2	1.11	23.1	0.856	1.25	2.66
Carbaryl	2.0	N/A	2.00	N/A	1.15	N/A	1.68	3.56

Chlordane	2.4	0.004	2.40	0.00400	1.38	0.00308	0.00452	0.00957
Chlorpyrifos	0.083	0.041	0.0830	0.0410	0.0476	0.0316	0.0464	0.0981
Chromium (+3)	634	83	3026	394	1734	303	445	942
Chromium (+6)	15.7	10.6	15.7	10.6	9.00	8.16	11.9	25.3
Copper	16.1	10.6	43.3	28.6	24.8	22.0	32.3	68.3
Cyanide (free)	45.8	10.7	45.8	10.7	26.2	8.24	12.1	25.6
						0.00077		
4,4'-DDT	1.1	0.001	1.10	0.00100	0.630	0	0.00113	0.00239
Demeton	N/A	0.1	N/A	0.100	N/A	0.0770	0.113	0.239
Diazinon	0.17	0.17	0.170	0.170	0.0974	0.131	0.143	0.302
Dicofol	59.3	19.8	59.3	19.8	34.0	15.2	22.4	47.4
Dieldrin	0.24	0.002	0.240	0.00200	0.138	0.00154	0.00226	0.00478
Diuron	210	70	210	70.0	120	53.9	79.2	167
Endosulfan I (alpha)	0.22	0.056	0.220	0.0560	0.126	0.0431	0.0633	0.134
Endosulfan II (beta)	0.22	0.056	0.220	0.0560	0.126	0.0431	0.0633	0.134
Endosulfan sulfate	0.22	0.056	0.220	0.0560	0.126	0.0431	0.0633	0.134
Endrin	0.086	0.002	0.0860	0.00200	0.0493	0.00154	0.00226	0.00478
Guthion	N/A	0.01	N/A	0.0100	N/A	0.00770	0.0113	0.0239
Heptachlor	0.52	0.004	0.520	0.00400	0.298	0.00308	0.00452	0.00957
Hexachlorocyclohexane (Lindane)	1.126	0.08	1.13	0.0800	0.645	0.0616	0.0905	0.191
Lead	74	2.90	379	14.8	217	11.4	16.7	35.3
Malathion	N/A	0.01	N/A	0.0100	N/A	0.00770	0.0113	0.0239
Mercury	2.4	1.3	2.40	1.30	1.38	1.00	1.47	3.11
Methoxychlor	N/A	0.03	N/A	0.0300	N/A	0.0231	0.0339	0.0718
						0.00077		
Mirex	N/A	0.001	N/A	0.00100	N/A	0	0.00113	0.00239
Nickel	523	58.1	1092	121	626	93.4	137	290
Nonylphenol	28	6.6	28.0	6.60	16.0	5.08	7.47	15.8
Parathion (ethyl)	0.065	0.013	0.0650	0.0130	0.0372	0.0100	0.0147	0.0311
Pentachlorophenol	19.5	15.0	19.5	15.0	11.2	11.5	16.4	34.7
Phenanthrene	30	30	30.0	30.0	17.2	23.1	25.2	53.4
Polychlorinated Biphenyls (PCBs)	2.0	0.014	2.00	0.0140	1.15	0.0108	0.0158	0.0335
Selenium	20	5	20.0	5.00	11.5	3.85	5.65	11.9
Silver	0.8	N/A	21.7	N/A	12.4	N/A	18.2	38.6
						0.00015	0.00022	0.00047
Toxaphene	0.78	0.0002	0.780	0.000200	0.447	4	6	8
Tributyltin (TBT)	0.13	0.024	0.130	0.0240	0.0745	0.0185	0.0271	0.0574
2,4,5 Trichlorophenol	136	64	136	64.0	77.9	49.3	72.4	153
Zinc	131	132	419	422	240	325	352	746

HUMAN HEALTH (APPLIES FOR INCIDENTAL FRESHWATER FISH TISSUE)

CALCULATE DAILY AVERAGE AND DAILY MAXIMUM EFFLUENT LIMITATIONS:

	Incidental Fish				Daily
	Criterion	WLAh	LTAh	Daily Avg.	Max.
Parameter	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(μg/L)
Acrylonitrile	1150	1151	1071	1573	3329
Aldrin	1.147E-04	0.000115	0.000107	0.000156	0.000332
Anthracene	13170	13183	12260	18022	38130
Antimony	10710	10721	9970	14656	31007
Arsenic	N/A	N/A	N/A	N/A	N/A
Barium	N/A	N/A	N/A	N/A	N/A
Benzene	5810	5816	5409	7950	16821
Benzidine	1.07	1.07	0.996	1.46	3.09
Benzo(a)anthracene	0.25	0.250	0.233	0.342	0.723
Benzo(a)pyrene	0.025	0.0250	0.0233	0.0342	0.0723
Bis(chloromethyl)ether	2.745	2.75	2.56	3.75	7.94
Bis(2-chloroethyl)ether	428.3	429	399	586	1240
Bis(2-ethylhexyl) phthalate [Di(2-ethylhexyl)					
phthalate]	75.5	75.6	70.3	103	218
Bromodichloromethane [Dichlorobromomethane]	2750	2753	2560	3763	7961

Bromoform [Tribromomethane]	10600	10611	9868	14505	30689
Cadmium	N/A	N/A	N/A	N/A	N/A
Carbon Tetrachloride	460	460	428	629	1331
Chlordane	0.025	0.0250	0.0233	0.0342	0.0723
Chlorobenzene	27370	27398	25480	37455	79242
Chlorodibromomethane [Dibromochloromethane]	1830	1832	1704	2504	5298
Chloroform [Trichloromethane]	76970	77048	71654	105331	222845
Chromium (hexavalent)	5020	5025	4673	6869	14534
Chrysene	25.2	25.2	23.5	34.4	72.9
Cresols [Methylphenols]	93010	93104	86587	127282	269284
Cyanide (free)	N/A	N/A	N/A	N/A	N/A
4,4'-DDD	0.02	0.0200	0.0186	0.0273	0.0579
4,4'-DDE	0.0013	0.00130	0.00121	0.00177	0.00376
4,4'-DDT	0.004	0.00400	0.00372	0.00547	0.0115
2,4'-D	N/A	N/A	N/A	N/A	N/A
Danitol [Fenpropathrin]	4730	4735	4403	6472	13694
1,2-Dibromoethane [Ethylene Dibromide]	42.4	42.4	39.5	58.0	122
<i>m</i> -Dichlorobenzene [1,3-Dichlorobenzene]	5950	5956	5539	8142	17226
o-Dichlorobenzene [1,2-Dichlorobenzene]	32990	33023	30712	45146	95513
<i>p</i> -Dichlorobenzene [1,4-Dichlorobenzene]	N/A	N/A	N/A	N/A	N/A
3,3'-Dichlorobenzidine	22.4	22.4	20.9	30.6	64.8
1,2-Dichloroethane	3640	3644	3389	4981	10538
1,1-Dichloroethylene [1,1-Dichloroethene]	551140	551697	513078	754224	1595672
Dichloromethane [Methylene Chloride]	133330	133465	124122	182459	386019
1,2-Dichloropropane	2590	2593	2411	3544	7498
1,3-Dichloropropene [1,3-Dichloropropylene]	1190	1191	1108	1628	3445
Dicofol [Kelthane]	3	3.00	2.79	4.10	8.68
Dieldrin	2.0E-04	0.000200	0.000186	0.000273	0.000579
2,4-Dimethylphenol	84360	84445	78534	115445	244240
Di-n-Butyl Phthalate	924	925	860	1264	2675
Dioxins/Furans [TCDD Equivalents]	7.97E-07	7.98E-07	7.42E-07	0.0000011	0.0000023
Endrin	0.2	0.200	0.186	0.273	0.579
Epichlorohydrin	20130	20150	18740	27547	58280
Ethylbenzene	18670	18689	17381	25549	54053
		16816965	15639778	22990474	48639710
Ethylene Glycol	1.68E+08	9	3	0	4
Fluoride	N/A	N/A	N/A	N/A	N/A
Heptachlor	0.001	0.00100	0.000931	0.00136	0.00289
Heptachlor Epoxide	0.0029	0.00290	0.00270	0.00396	0.00839
Hexachlorobenzene	0.0068	0.00681	0.00633	0.00930	0.0196
Hexachlorobutadiene	2.2	2.20	2.05	3.01	6.36
Hexachlorocyclohexane (alpha)	0.084	0.0841	0.0782	0.114	0.243
Hexachlorocyclohexane (beta)	2.6	2.60	2.42	3.55	7.52
Hexachlorocyclohexane (gamma) [Lindane]	3.41	3.41	3.17	4.66	9.87
Hexachlorocyclopentadiene	116	116	108	158	335
Hexachloroethane	23.3	23.3	21.7	31.8	67.4
Hexachlorophene	29	29.0	27.0	39.6	83.9
4,4'-Isopropylidenediphenol [Bisphenol A]	159820	159981	148783	218710	462714
Lead	38.3	195	181	266	563
Mercury	0.122	0.122	0.114	0.166	0.353
Methoxychlor	30	30.0	27.9	41.0	86.8
Methyl Ethyl Ketone	9.92E+06	9930018	9234917	13575327	28720590
Methyl tert-butyl ether [MTBE]	104820	104926	97581	143444	303477
Nickel	11400	23828	22160	32575	68917
Nitrate-Nitrogen (as Total Nitrogen)	N/A	N/A	N/A	N/A	N/A
Nitrobenzene	18730	18749	17436	25631	54227
N-Nitrosodiethylamine	21	21.0	19.5	28.7	60.7
N-Nitroso-di- <i>n</i> -Butylamine	42	42.0	39.1	57.4	121
Pentachlorobenzene	3.55	3.55	3.30	4.85	10.2
Pentachlorophenol	2.9	2.90	2.70	3.96	8.39
Polychlorinated Biphenyls [PCBs]	6.40E-03	0.00641	0.00596	0.00875	0.0185

Pyridine	9470	9480	8816	12959	27417
Selenium	N/A	N/A	N/A	N/A	N/A
1,2,4,5-Tetrachlorobenzene	2.4	2.40	2.23	3.28	6.94
1,1,2,2-Tetrachloroethane	263.5	264	245	360	762
Tetrachloroethylene [Tetrachloroethylene]	2800	2803	2607	3831	8106
Thallium	2.3	2.30	2.14	3.14	6.65
Toluene	N/A	N/A	N/A	N/A	N/A
Toxaphene	0.11	0.110	0.102	0.150	0.318
2,4,5-TP [Silvex]	3690	3694	3435	5049	10683
1,1,1-Trichloroethane	7843540	7851461	7301859	10733732	22708780
1,1,2-Trichloroethane	1660	1662	1545	2271	4806
Trichloroethylene [Trichloroethene]	719	720	669	983	2081
2,4,5-Trichlorophenol	18670	18689	17381	25549	54053
TTHM [Sum of Total Trihalomethanes]	N/A	N/A	N/A	N/A	N/A
Vinyl Chloride	165	165	154	225	477

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

	70% of	85% of
Aquatic Life	Daily Avg.	Daily Avg.
Parameter	(μg/L)	(μg/L)
Aldrin	1.76	2.14
Aluminum	584	709
Arsenic	212	258
Cadmium	0.881	1.06
Carbaryl	1.17	1.43
Chlordane	0.00316	0.00384
Chlorpyrifos	0.0324	0.0394
Chromium (+3)	311	378
Chromium (+6)	8.39	10.1
Copper	22.6	27.4
Cyanide (free)	8.47	10.2
4,4'-DDT	0.000792	0.000962
Demeton	0.0792	0.0962
Diazinon	0.100	0.121
Dicofol	15.6	19.0
Dieldrin	0.00158	0.00192
Diuron	55.4	67.3
Endosulfan (alpha)	0.0443	0.0538
Endosulfan (beta)	0.0443	0.0538
Endosulfan sulfate	0.0443	0.0538
Endrin	0.00158	0.00192
Guthion	0.00792	0.00962
Heptachlor	0.00316	0.00384
Hexachlorocyclohexane (Lindane)	0.0633	0.0769
Lead	11.6	14.1
Malathion	0.00792	0.00962
Mercury	1.03	1.25
Methoxychlor	0.0237	0.0288
Mirex	0.000792	0.000962
Nickel	96.1	116
Nonylphenol	5.22	6.34
Parathion (ethyl)	0.0103	0.0125
Pentachlorophenol	11.4	13.9
Phenanthrene	17.6	21.4
Polychlorinated Biphenyls (PCBs)	0.0110	0.0134
Selenium	3.96	4.81
Silver	12.7	15.5
Toxaphene	0.000158	0.000192
Tributyltin (TBT)	0.0190	0.0230
2,4,5 Trichlorophenol	50.7	61.5

Zinc	246	299
	70% of	85% of
Human Health	Daily Avg.	Daily Avg.
Parameter Ann Indian	(μg/L)	(μg/L)
Acrylonitrile	1101	1337
Aldrin	0.000109	0.000133
Anthracene	12616	15319
Antimony	10259	12457
Arsenic	N/A	N/A
Barium	N/A	N/A
Benzene	5565	6758
Benzidine	1.02	1.24
Benzo(a)anthracene	0.239	0.290
Benzo(a)pyrene	0.0239	0.0290
Bis(chloromethyl)ether Bis(2-chloroethyl)ether	2.62	3.19 498
Bis(2-ethylhexyl) phthalate [Di(2-ethylhexyl)	410	498
phthalate]	72.3	87.8
Bromodichloromethane [Dichlorobromomethane]	2634	3198
Bromoform [Tribromomethane]	10154	12330
Cadmium	N/A	N/A
Carbon Tetrachloride	440	535
Chlordane	0.0239	0.0290
Chlorobenzene	26218	31837
Chlorodibromomethane [Dibromochloromethane]	1753	2128
Chloroform [Trichloromethane]	73732	89532
Chromium (hexavalent)	4808	5839
Chrysene	24.1	29.3
Cresols [Methylphenols]	89097	108190
Cyanide (free)	N/A	N/A
4,4'-DDD	0.0191	0.0232
4,4'-DDE	0.00124	0.00151
1,4'-DDT	0.00383	0.00465
2,4'-D	N/A	N/A
Danitol [Fenpropathrin]	4531	5501
1,2-Dibromoethane [Ethylene Dibromide]	40.6	49.3
m-Dichlorobenzene [1,3-Dichlorobenzene]	5699	6921
o-Dichlorobenzene [1,2-Dichlorobenzene]	31602	38374
p-Dichlorobenzene [1,4-Dichlorobenzene]	N/A	N/A
3,3'-Dichlorobenzidine	21.4	26.0
1,2-Dichloroethane	3486	4234
1,1-Dichloroethylene [1,1-Dichloroethene]	527957	641090
Dichloromethane [Methylene Chloride]	127721	155090
1,2-Dichloropropane	2481	3012
1,3-Dichloropropene [1,3-Dichloropropylene]	1139	1384
Dicofol [Kelthane]	2.87	3.48
Dieldrin	0.000191	0.000232
2,4-Dimethylphenol	80811	98128
Di- <i>n</i> -Butyl Phthalate	885	1074
Dioxins/Furans [TCDD Equivalents]	7.63E-07	9.27E-07
Endrin	0.191	0.232
Epichlorohydrin	19283	23415
Ethylbenzene	17884	21717
·	16093331	19541902
Ethylene Glycol	8	9
Fluoride	N/A	N/A
Heptachlor	0.000957	0.00116
Heptachlor Epoxide	0.00277	0.00337
Hexachlorobenzene	0.00651	0.00790
Hexachlorobutadiene	2.10	2.55

Hexachlorocyclohexane (beta) 2.49 3.02 Hexachlorocyclohexane (gamma) [Lindane] 3.26 3.96 Hexachlorocyclopentadiene 111 134 Hexachloroethane 22.3 27.1 Hexachlorophene 27.7 33.7 4,4'-Isopropylidenediphenol [Bisphenol A] 153097 185903 Lead 186 226 Mercury 0.116 0.144 Methoxychlor 28.7 34.8 Methyl Ethyl Ketone 9502729 11539028 Methyl tert-butyl ether [MTBE] 100410 121927 Nickel 22802 27688 Nitrate-Nitrogen (as Total Nitrogen) N/A N/A Nitrobenzene 17942 21786
Hexachlorocyclopentadiene 111 134 Hexachloroethane 22.3 27.1 Hexachlorophene 27.7 33.7 4,4'-Isopropylidenediphenol [Bisphenol A] 153097 185903 Lead 186 226 Mercury 0.116 0.144 Methoxychlor 28.7 34.8 Methyl Ethyl Ketone 9502729 11539028 Methyl tert-butyl ether [MTBE] 100410 121927 Nickel 22802 27689 Nitrate-Nitrogen (as Total Nitrogen) N/A N/A Nitrobenzene 17942 21786
Hexachloroethane 22.3 27.1 Hexachlorophene 27.7 33.7 4,4'-Isopropylidenediphenol [Bisphenol A] 153097 185903 Lead 186 226 Mercury 0.116 0.141 Methoxychlor 28.7 34.8 Methyl Ethyl Ketone 9502729 11539028 Methyl tert-butyl ether [MTBE] 100410 121927 Nickel 22802 27689 Nitrate-Nitrogen (as Total Nitrogen) N/A N/A Nitrobenzene 17942 21786
Hexachlorophene 27.7 33.7 4,4'-Isopropylidenediphenol [Bisphenol A] 153097 185903 Lead 186 226 Mercury 0.116 0.144 Methoxychlor 28.7 34.8 Methyl Ethyl Ketone 9502729 11539028 Methyl tert-butyl ether [MTBE] 100410 121927 Nickel 22802 27689 Nitrate-Nitrogen (as Total Nitrogen) N/A N/A Nitrobenzene 17942 21786
4,4'-Isopropylidenediphenol [Bisphenol A] 153097 185903 Lead 186 226 Mercury 0.116 0.141 Methoxychlor 28.7 34.8 Methyl Ethyl Ketone 9502729 11539028 Methyl tert-butyl ether [MTBE] 100410 121927 Nickel 22802 27689 Nitrate-Nitrogen (as Total Nitrogen) N/A N/A Nitrobenzene 17942 21786
Lead 186 226 Mercury 0.116 0.141 Methoxychlor 28.7 34.8 Methyl Ethyl Ketone 9502729 11539028 Methyl tert-butyl ether [MTBE] 100410 121927 Nickel 22802 27689 Nitrate-Nitrogen (as Total Nitrogen) N/A N/A Nitrobenzene 17942 21786
Mercury 0.116 0.141 Methoxychlor 28.7 34.8 Methyl Ethyl Ketone 9502729 11539028 Methyl tert-butyl ether [MTBE] 100410 121927 Nickel 22802 27689 Nitrate-Nitrogen (as Total Nitrogen) N/A N/A Nitrobenzene 17942 21786
Methoxychlor 28.7 34.8 Methyl Ethyl Ketone 9502729 11539028 Methyl tert-butyl ether [MTBE] 100410 121927 Nickel 22802 27689 Nitrate-Nitrogen (as Total Nitrogen) N/A N/A Nitrobenzene 17942 21786
Methyl Ethyl Ketone 9502729 11539028 Methyl tert-butyl ether [MTBE] 100410 121927 Nickel 22802 27689 Nitrate-Nitrogen (as Total Nitrogen) N/A N/A Nitrobenzene 17942 21786
Methyl tert-butyl ether [MTBE] 100410 121927 Nickel 22802 27689 Nitrate-Nitrogen (as Total Nitrogen) N/A N/A Nitrobenzene 17942 21786
Nickel 22802 27685 Nitrate-Nitrogen (as Total Nitrogen) N/A N/A Nitrobenzene 17942 21786
Nitrate-Nitrogen (as Total Nitrogen)N/AN/ANitrobenzene1794221786
Nitrobenzene 17942 21786
N-Nitrosodiethylamine 20.1 24.4
N-Nitroso-di- <i>n</i> -Butylamine 40.2 48.8
Pentachlorobenzene 3.40 4.12
Pentachlorophenol 2.77 3.37
Polychlorinated Biphenyls [PCBs] 0.00613 0.00744
Pyridine 9071 11015
Selenium N/A N/A
1,2,4,5-Tetrachlorobenzene 2.29 2.79
1,1,2,2-Tetrachloroethane 252 306
Tetrachloroethylene [Tetrachloroethylene] 2682 3256
Thallium 2.20 2.67
Toluene N/A N/A
Toxaphene 0.105 0.127
2,4,5-TP [Silvex] 3534 4292
1,1,1-Trichloroethane 7513612 9123672
1,1,2-Trichloroethane 1590 1930
Trichloroethylene [Trichloroethene] 688 836
2,4,5-Trichlorophenol 17884 21717
TTHM [Sum of Total Trihalomethanes] N/A N/A
Vinyl Chloride 158 191