

## 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

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

The City of Bryan (dba as Bryan Texas Utilities) (CN600373310) operates the Roland C. Dansby Steam Electric Station (RN101611556), an electric power generation facility. Units 1-3 have a combined generating capacity of 210 megawatts (MW). The facility is located at 8181 Mumford Road, in Bryan, Brazos County, Texas 77807.

The application requests a permit amendment to remove the daily average and daily maximum concentration limits for aluminum from Outfall 003 based on the cooling water intake exemption at 30 TAC 307.8(d). Water from Lake Bryan is used for non-contact cooling water in the turbine condenser. Groundwater is used for makeup water for Lake Bryan. Outfall 003 returns once-through cooling water to Lake Bryan at a maximum monthly average flow rate of 78 million gallons per day. Treatment chemicals are used in the cooling water system.

The discharge of once-through cooling water via Outfall 003 is subject to federal effluent limitation guidelines at 40 CFR 423. Discharges from the facility are expected to contain free available oxidants, total residual chlorine, total suspended solids, oil and grease, total dissolved solids, and metals. Additional potential pollutants were listed in Worksheet 2 of the 2022 permit renewal application.

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

#### AGUAS RESIDUALES INDUSTRIALES /AGUAS PLUVIALES

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

La ciudad de Bryan (que opera bajo el nombre comercial Bryan Texas Utilities) (CN600373310) opera la central eléctrica Roland C. Dansby Steam Electric Station (RN101611556), una instalación de generación de energía eléctrica. Las unidades 1-3 tienen una capacidad de generación combinada de 210 megavatios (MW). La instalación está situada en 8181 Mumford Road, en Bryan, Condado de Brazos, Texas 77807.

La solicitud solicita una modificación del permiso para eliminar los límites de concentración media diaria y máxima diaria de aluminio del Outfall 003, basándose en la exención para la toma de agua de refrigeración prevista en 30 TAC 307.8(d). El agua del lago Bryan se utiliza como agua de refrigeración sin contacto en el condensador de la turbina. El agua subterránea se utiliza como agua de reposición para el lago Bryan. El Outfall 003 devuelve el agua de refrigeración de un solo paso al lago Bryan a un caudal medio mensual máximo de 78 millones de galones al día. Se utilizan productos químicos de tratamiento en el sistema de agua de refrigeración.

El vertido de agua de refrigeración de un solo paso a través del Outfall 003 está sujeto a las directrices federales de limitación de efluentes del 40 CFR 423. Se espera que los vertidos de la instalación contengan oxidantes libres disponibles, cloro residual total, sólidos suspendidos totales, aceites y grasas, sólidos disueltos totales y metales. En la Worksheet 2 de la solicitud de renovación del permiso de 2022 se enumeraron otros contaminantes potenciales.

# **TEXAS COMMISSION ON ENVIRONMENTAL QUALITY**



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

#### PERMIT NO. WQ0002117000

**APPLICATION.** City of Bryan, P.O. Box 1000, Bryan, Texas 77805, which owns a natural gas fired power plant facility, has applied to the Texas Commission on Environmental Quality (TCEQ) to amend Texas Pollutant Discharge Elimination System (TPDES) Permit No. WO0002117000 (EPA I.D. No. TX0073954) to authorize the removal of daily average and daily maximum concentration limits for aluminum from Outfall 003. The facility is located at 8181 Mumford Road, near the city of Bryan, in Brazos County, Texas 77807. The discharge route is from the plant site via Outfalls 001 and 002 to a drainage ditch, thence to Elm Creek, thence to Peach Creek, thence to Campbells Creek, thence to Little Brazos River, thence to the Brazos River Above Navasota River; via Outfall 003 to Lake Bryan, thence through and inground pipe, thence to an unnamed tributary, thence to Thompsons Creek, thence to the Brazos River Above Navasota River. TCEQ received this application on May 2, 2025. The permit application will be available for viewing and copying at Clara B Mounce Public Library, 201 East 26th Street, Bryan, 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/pendingpermits/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=-96.466111,30.713333&level=18

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

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.

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 <a href="www.tceq.texas.gov/goto/cid">www.tceq.texas.gov/goto/cid</a>. 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 <a href="https://www14.tceq.texas.gov/epic/eComment/">https://www14.tceq.texas.gov/epic/eComment/</a>, 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 <a href="www.tceq.texas.gov/goto/pep">www.tceq.texas.gov/goto/pep</a>. Si desea información en Español, puede llamar al 1-800-687-4040.

Further information may also be obtained from the City of Bryan at the address stated above or by calling Mr. Wes Williams, Executive Director - QSE & Power Generation, at 979-821-5944.

Issuance Date: June 4, 2025

# Comisión de Calidad Ambiental del Estado de Texas



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

#### PERMISO NO. WQ0002117000

**SOLICITUD.** City of Bryan, P.O. Box 1000, Bryan, Texas 77805, propietaria de una central eléctrica de gas natural, ha solicitado a la Comisión de Calidad Ambiental de Texas (TCEQ) para modificar el Permiso No. WO0002117000 (EPA I.D. No. TX0073954) del Sistema de Eliminación de Descargas de Contaminantes de Texas (TPDES) para autorizar la eliminación de los límites de concentración media diaria y máxima diaria de aluminio del Outfall 003. La planta está ubicada en 8181 Mumford Road, cerca de la ciudad de Bryan, en el Condado de Brazos, Texas 77807. La ruta de descarga es del sitio de la planta de los Outfalls 001 y 002 a una zanja de drenaje, de ahí a Elm Creek, de ahí a Peach Creek, de ahí a Campbells Creek, de ahí al río Little Brazos, de ahí al río Brazos por debajo del lago Whitney, y del Outfall 003 al lago Bryan, de ahí a través de una tubería enterrada, de ahí a un afluente sin nombre, de ahí a Thompson Creek, de ahí al río Brazos or encima del río Navasota. La TCEQ recibió esta solicitud el 2 de mayo de 2025. La solicitud para el permiso estará disponible para leerla y copiarla en la biblioteca pública Clara B. Mounce, en 201 East 26th Street, Bryan, Texas antes de la fecha de publicación de este aviso en el periódico. La solicitud (cualquier actualización y aviso inclusive) está disponible electrónicamente en la siguiente página web: https://www.tceq.texas.gov/permitting/wastewater/pending-permits/tpdes-applications. Este enlace a un mapa electrónico de la ubicación general del sitio o de la instalación es proporcionado como una cortesía y no es parte de la solicitud o del aviso. Para la ubicación exacta, consulte la solicitud.

https://gisweb.tceq.texas.gov/LocationMapper/?marker=-96.466111,30.713333&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.

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

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

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

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

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

solicitante indicado por nombre y número del permiso específico y/o (2) la lista de correo de todas las solicitudes en un condado específico. Si desea que se agrega su nombre en una de las listas designe cual lista(s) y envía por correo su pedido a la Oficina del Secretario Principal de la TCEO.

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

CONTACTOS E INFORMACIÓN A LA AGENCIA. Todos los comentarios públicos y solicitudes deben ser presentadas electrónicamente vía <a href="http://www14.tceq.texas.gov/epic/eComment/o">http://www14.tceq.texas.gov/epic/eComment/o</a> 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 City of Bryan a la dirección indicada arriba o llamando a Sr. Wes Williams, Executive Director – QSE & Power Generation, al 979-821-5944.

Fecha de emisión: 4 de junio de 2025

## TEXAS COMMISSION ON ENVIRONMENTAL QUALITY



# NOTICE OF APPLICATION AND PRELIMINARY DECISION FOR TPDES PERMIT FOR INDUSTRIAL WASTEWATER

#### **AMENDMENT**

PERMIT NO. WQ0002117000

APPLICATION AND PRELIMINARY DECISION. City of Bryan, P.O. Box 1000, Bryan, Texas 77805, which operates Roland C. Dansby Steam Electric Station, a natural gas fired power plant facility, has applied to the Texas Commission on Environmental Quality (TCEQ) for a major amendment without renewal of Texas Pollutant Discharge Elimination System (TPDES) Permit No. WQ0002117000 to request removal of the daily average and daily maximum concentration limits for total aluminum from Outfall 003. The draft permit authorizes the discharge of cooling tower blowdown, low volume waste, and storm water from the storm sewer system on an intermittent and flow-variable basis via Outfall 001; low volume waste, storm water, and effluent from the roof drain system on an intermittent and flow-variable basis via Outfall 002; and once through cooling water at a daily average flow not to exceed 78,000000 gallons per day via Outfall 003. The TCEQ received this application on May 2, 2025.

The facility is located at 8181 Mumford Road, near the City of Bryan, Brazos County, Texas 77807. 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. <a href="https://gisweb.tceq.texas.gov/LocationMapper/?marker=-96.455308,30.723982&level=18">https://gisweb.tceq.texas.gov/LocationMapper/?marker=-96.455308,30.723982&level=18</a>

The effluent is discharged via Outfalls 001 and 002 to a drainage ditch, thence to Elm Creek, thence to Peach Creek, thence to Campbells Creek, thence to the Little Brazos River, thence to the Brazos River Above Navasota River; and via Outfall 003 to Lake Bryan, thence through an inground pipe, thence to an unnamed tributary, thence to Thompson Creek, thence to Brazos River Above Navasota River in Segment No. 1242 of the Brazos River Basin. The unclassified receiving water uses are high aquatic life use for Lake Bryan, intermediate aquatic life use for Thompson Creek, limited aquatic life use for the unnamed tributary, and minimal aquatic life use for the drainage ditch, Elm Creek, and Peach Creek. The designated uses for Segment No. 1242 are primary contact recreation, public water supply, and high aquatic life use.

In accordance with Title 30 Texas Administrative Code Section 307.5 and TCEQ's *Procedures to Implement the Texas Surface Water Quality Standards* (June 2010), an antidegradation review of the receiving waters was performed. A Tier 1 antidegradation review has preliminarily determined that existing water quality uses will not be impaired by this permit action. Numerical and narrative criteria to protect existing uses will be maintained. A Tier 2 review has preliminarily determined that no significant degradation of water quality is expected in Lake Bryan and Thompson Creek, which has been identified as having high and intermediate aquatic life use. Existing uses will be maintained and protected. The preliminary determination can be reexamined and may be modified if new information is received.

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 Clara B Mounce Public Library, 201 East 26<sup>th</sup> Street, Bryan, Texas. The application, including any updates, and associated notices are available electronically at the following webpage: <a href="https://www.tceq.texas.gov/permitting/wastewater/pending-permits/tpdes-applications">https://www.tceq.texas.gov/permitting/wastewater/pending-permits/tpdes-applications</a>

**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.

**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 written or oral comment or to ask questions about the application. Generally, the 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 public comments, the Executive Director will consider the comments and prepare a response to all relevant and material, or significant public comments. The response to comments, along with the Executive Director's decision on the application, will be mailed to everyone who submitted public comments or who requested to be on a 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.

**EXECUTIVE DIRECTOR ACTION.** The Executive Director may issue final approval of the application unless a timely contested case hearing request or a timely 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 requests 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 added to: (1) the permanent list for a specific applicant name and permit number; and (2) the mailing list for a specific county. If you wish to be placed on the permanent and 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, TCEQ, P.O. Box 13087, Austin, TX 78711-3087 or electronically at <a href="https://www.tceq.texas.gov/goto/comment/">https://www.tceq.texas.gov/goto/comment/</a> 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 <a href="https://www.tceq.texas.gov/goto/cid/">https://www.tceq.texas.gov/goto/cid/</a>. 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 <a href="https://www.tceq.texas.gov/goto/comment/">https://www.tceq.texas.gov/goto/comment/</a> 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 <a href="https://www.tceq.texas.gov/agency/decisions/participation/permitting-participation">https://www.tceq.texas.gov/agency/decisions/participation/permitting-participation</a>. Si desea información en Español, puede llamar al 1-800-687-4040.

Further information may also be obtained from City of Bryan at the address stated above or by calling Mr. Wes Williams, Executive Director - QSE & Power Generation, at 979-821-5944.

Issued: September 25, 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 INDUSTRIALES

#### **MODIFICACIÓN**

#### PERMISO NO. WQ0002117000

**SOLICITUD Y DECISIÓN PRELIMINAR.** Ciudad de Bryan, P.O. Box 1000, Bryan, Texas 77805, que opera la Roland C. Dansby Steam Electric Station, una planta de energía alimentada con gas natural, ha solicitado a la Comisión de Calidad Ambiental del Estado de Texas (TCEQ) una modificación principal sin renovación del Permiso del Sistema de Eliminación de Descargas de Contaminantes de Texas (TPDES) Permiso no. WQ0002117000 para autorizar la eliminación de los limites de concentración promedio diario y máximo diario de aluminio total del Outfall 003. El borrador de permiso autoriza la descarga de aguas de purga de torres de enfriamiento, desechos de bajo volumen y aguas pluviales del sistema de alcantarillado pluvial de manera intermiente y con caudal variable a través del Outfall 001; desechos de bajo volumen, aguas pluviales y efluentes del sistema de drenaje del techo de manera intermitente y con caudal variable a través del Outfall 002; y una vez agua de enfriamiento a un caudal promedio diario que no exceda los 78,000,000 galones por día a través del Outfall 003. La TCEQ recibió esta solicitud el 2 de mayo de 2025.

La planta está ubicada en 8181 Mumford Road, cerca de la ciudad de Bryan, en el Condado de Brazos, Texas 77807. 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=-96.455308,30.723982&level=18

El efluente es descargado a través de los Outfalls 001 y 002 a una zanja de drenaje, de allí a Elm Creek, de allí a Peach Creek, de allí a Campbells Creek, de allí al río Little Brazos, de allí al río Brazos por encima del río Navasota; y a través del Outfall 003 al lago Bryan, de allí a través de una tubería subterránea, de allí a un afluente sin nombre, de allí a Thompsons Creek, de allí al río Brazos por encima del río Navasota en el Segmento no. 1242 de la cuenca del río Brazos. Los usos no clasificados de las aguas receptoras son uso elevado de la vida acúatica para el lago Bryan, uso intermedio de la vida acúatica para Thompson Creek, uso limitado de la vida acúatica para el afluente sin nombre y uso mínimo de la vida aqúatica para le zanja de drenaje y Elm Creek y Peach Creek. Los usos designados para el Segmento No. 1242 son recreación de contacto primario, abastecimiento de agua potable y uso elevado de la vida acuática.

De acuerdo con la 30 TAC §307.5 y los procedimientos de implementación de la TCEQ (Enero 2010) para las Normas de Calidad de Aguas Superficiales en Texas, fue realizada una revisión de la antidegradación de las aguas recibidas. Una revisión de antidegradación del Nivel 1 ha determinado preliminarmente que los usos de la calidad del agua existente no serán perjudicados por la acción de este permiso. Se mantendrá un criterio narrativo y numérico para proteger los usos existentes. Una revisión del Nivel 2 ha determinado preliminarmente que no se espera ninguna degradación significativa en el lago Bryan y Thompson Creek el cual se ha identificado que tiene usos alto y intermedio de la vida acuática. Los usos existentes serán mantenidos y protegidos. La determinación preliminar puede ser reexaminada y puede ser modificada, si se recibe alguna información nueva.

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 Clara B. Mounce Public Library, en 201 East 26th Street, Bryan, Texas. La solicitud, cualquier actualización y aviso inclusive, está disponible electrónicamente en la siguiente página web: <a href="https://www.tceq.texas.gov/permitting/wastewater/pending-permits/tpdes-applications.">https://www.tceq.texas.gov/permitting/wastewater/pending-permits/tpdes-applications.</a>

**AVISO DE IDIOMA ALTERNATIVO.** El aviso de idioma alternativo en español está disponible en <a href="https://www.tceq.texas.gov/permitting/wastewater/pending-permitts/tpdes-applications">https://www.tceq.texas.gov/permitting/wastewater/pending-permitts/tpdes-applications</a>

**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 comentario escrito u oral o hacer preguntas acerca de la solicitud. Generalmente, 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.

**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 en la dirección que figura a continuación.

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 <a href="https://www.tceq.texas.gov/goto/comment">https://www.tceq.texas.gov/goto/comment</a>.

**INFORMACIÓN DISPONIBLE EN LÍNEA.** Para obtener detalles sobre el estado de la solicitud, visite la Base de Datos Integrada de los Comisionados en <a href="https://www.tceq.texas.gov/goto/cid/">https://www.tceq.texas.gov/goto/cid/</a>. Busque en la base de datos el número de permiso de esta solicitud, que se encuentra en la parte superior de este aviso.

**CONTACTOS E INFORMACIÓN DE LA AGENCIA.** Los comentarios y solicitudes públicas deben enviarse electrónicamente a <u>tceq.texas.gov/goto/comment/</u> 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

https://www.tceq.texas.gov/agency/decisions/participation/permitting-participation. Si desea información en español, puede llamar al 1-800-687-4040.

También se puede obtener información adicional de la ciudad de Bryan a la dirección indicada arriba o llamando a Sr. Wes Williams, Executive Director – QSE & Power Generation al 979-821-5944.

Fecha de emisión el 25 de septiembre de 2025

Brooke T. Paup, *Chairwoman*Bobby Janecka, *Commissioner*Catarina R. Gonzales, *Commissioner*Kelly Keel, *Executive Director* 



# TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

May 2, 2025

Re: Confirmation of Submission of the Major Amendment without Renewal for Industrial Wastewater Authorization.

Dear Applicant:

This is an acknowledgement that you have successfully completed Major Amendment without Renewal for the Industrial Wastewater authorization.

ER Account Number: ER044373

Application Reference Number: 775346 Authorization Number: WQ0002117000

Site Name: Roland C Dansby Ses

Regulated Entity: RN101611556 - Roland C Dansby Ses

Customer(s): CN600373310 - City of Bryan

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

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

Sincerely, Applications Review and Processing Team Water Quality Division

#### **Texas Commission on Environmental Quality**

# Update Domestic or Industrial Individual Permit WQ0002117000

# Site Information (Regulated Entity)

What is the name of the site to be authorized? ROLAND C DANSBY SES

Does the site have a physical address?

**Physical Address** 

Number and Street 8181 MUMFORD RD

City BRYAN

State TX

ZIP 77807

County BRAZOS

Dia Lee

Latitude (N) (##.#####) 30.713333

Longitude (W) (-###.#####) -96.466111

Primary SIC Code 4911

Secondary SIC Code

Primary NAICS Code 221119

Secondary NAICS Code

**Regulated Entity Site Information** 

What is the Regulated Entity's Number (RN)? RN101611556

What is the name of the Regulated Entity (RE)?

ROLAND C DANSBY SES

Does the RE site have a physical address?

**Physical Address** 

Number and Street 8181 MUMFORD RD

City BRYAN

State TX

ZIP 77807

County BRAZOS

Latitude (N) (##.####) 30.713365

Longitude (W) (-###.#####) -96.46602

Facility NAICS Code

What is the primary business of this entity?

# City of-Customer (Applicant) Information (Owner)

Alternate Phone (###-###-###)

How is this applicant associated with this site? Owner CN600373310 What is the applicant's Customer Number (CN)? Type of Customer City Government Full legal name of the applicant: Legal Name City of Bryan Texas SOS Filing Number Federal Tax ID 746000441 State Franchise Tax ID State Sales Tax ID Local Tax ID **DUNS Number** 79390779 Number of Employees 501+ Independently Owned and Operated? I certify that the full legal name of the entity applying for this permit has been provided and is Yes legally authorized to do business in Texas. **Responsible Authority Contact** Organization Name City of Bryan Prefix MR First **GARY** Middle Last **MILLER** Suffix Credentials Title **BTU - GENERAL MANAGER Responsible Authority Mailing Address** Enter new address or copy one from list: Address Type Domestic Mailing Address (include Suite or Bldg. here, if applicable) PO BOX 1000 Routing (such as Mail Code, Dept., or Attn:) City **BRYAN** State TX ZIP 77805 Phone (###-###-###) 9798215621 Extension

Fax (###-###-###)

E-mail GMILLER@BTUTILITIES.COM

## **Billing Contact**

Responsible contact for receiving billing statements:

Select the permittee that is responsible for payment of the annual fee.

CN600373310, City of Bryan

Organization Name CITY OF BRYAN

Prefix MR

First WES

Middle

Last WILLIAMS

Suffix

Credentials

Title EXECUTIVE DIRECTOR - QSE & POWER

**GENERATION** 

Enter new address or copy one from list:

**Mailing Address** 

Address Type Domestic

Mailing Address (include Suite or Bldg. here, if applicable)

PO BOX 1000

Routing (such as Mail Code, Dept., or Attn:)

City BRYAN

State TX

ZIP 77805

Phone (###-####) 9798215944

Extension

Alternate Phone (###-###-####)

Fax (###-###-####)

E-mail WESWILLIAMS@BTUTILITIES.COM

# **Application Contact**

#### Person TCEQ should contact for questions about this application:

Same as another contact?

Organization Name CITY OF BRYAN

Prefix MR

First WES

Middle

Last WILLIAMS

Suffix

Credentials

Title EXECUTIVE DIRECTOR - QSE & POWER

**GENERATION** 

Enter new address or copy one from list:

**Mailing Address** 

Address Type Domestic

Mailing Address (include Suite or Bldg. here, if applicable) PO BOX 1000

Routing (such as Mail Code, Dept., or Attn:)

City BRYAN

State TX

ZIP 77805

Phone (###-###) 9798215787

Extension

Alternate Phone (###-###-####)

Fax (###-####)

E-mail WESWILLIAMS@BTUTILITIES.COM

#### **Technical Contact**

#### Person TCEQ should contact for questions about this application:

Same as another contact?

Application Contact

Organization Name CITY OF BRYAN

Prefix MR

First WES

Middle

Last WILLIAMS

Suffix

Credentials

Title EXECUTIVE DIRECTOR - OSE & POWER

**GENERATION** 

Enter new address or copy one from list:

**Mailing Address** 

Address Type Domestic

Mailing Address (include Suite or Bldg. here, if applicable)

PO BOX 1000

Routing (such as Mail Code, Dept., or Attn:)

City BRYAN

State TX

ZIP 77805

Phone (###-###) 9798215787

Extension

Alternate Phone (###-###-####)

Fax (###-###-###)

E-mail WESWILLIAMS@BTUTILITIES.COM

#### **DMR Contact**

Person responsible for submitting Discharge Monitoring Report Forms:

Same as another contact?

Application Contact

Organization Name CITY OF BRYAN

Prefix MR

First WES

Middle

Last WILLIAMS

Suffix

Credentials

Title EXECUTIVE DIRECTOR - QSE & POWER

GENERATION

Enter new address or copy one from list:

**Mailing Address:** 

Address Type Domestic

Mailing Address (include Suite or Bldg. here, if applicable) PO BOX 1000

Routing (such as Mail Code, Dept., or Attn:)

City BRYAN

State TX

ZIP 77805

Phone (###-###) 9798215787

Extension

Alternate Phone (###-###-###)

Fax (###-###-###)

E-mail WESWILLIAMS@BTUTILITIES.COM

#### Section 1# Permit Contact

#### Permit Contact#: 1

Person TCEQ should contact throughout the permit term.

1) Same as another contact?

2) Organization Name CITY OF BRYAN

3) Prefix MR

4) First WES

5) Middle

6) Last WILLIAMS

7) Suffix

9) Title EXECUTIVE DIRECTOR - QSE & POWER

**Application Contact** 

GENERATION

**Mailing Address** 

8) Credentials

10) Enter new address or copy one from list

11) Address Type Domestic

11.1) Mailing Address (include Suite or Bldg. here, if applicable) PO BOX 1000

11.2) Routing (such as Mail Code, Dept., or Attn:)

11.3) City BRYAN

11.4) State TX

11.5) ZIP 77805

12) Phone (###-###+##) 9798215944

13) Extension

14) Alternate Phone (###-###-###)

15) Fax (###-###-###)

16) E-mail WESWILLIAMS@BTUTILITIES.COM

#### Section 2# Permit Contact

#### Permit Contact#: 2

Person TCEQ should contact throughout the permit term.

1) Same as another contact?

2) Organization Name CITY OF BRYAN

3) Prefix MR

4) First NICK

5) Middle

6) Last COOK 7) Suffix 8) Credentials 9) Title **DIVISION MGR POWER GENERATION Mailing Address** 10) Enter new address or copy one from list **Application Contact** Domestic 11) Address Type 11.1) Mailing Address (include Suite or Bldg. here, if applicable) PO BOX 1000 11.2) Routing (such as Mail Code, Dept., or Attn:) 11.3) City **BRYAN** 11.4) State TX 11.5) ZIP 77805 12) Phone (###-###-###) 9798215787 13) Extension 14) Alternate Phone (###-###-###) 15) Fax (###-###-###) 16) E-mail NCOOK@BTUTILITIES.COM **Owner Information Owner of Treatment Facility** 1) Prefix 2) First and Last Name 3) Organization Name CITY OF BRYAN 4) Mailing Address PO BOX 1000 5) City **BRYAN** 6) State TX 77805 7) Zip Code 8) Phone (###-###-###) 9798215944 9) Extension 10) Email WESWILLIAMS@BTUTILITIES.COM 11) What is ownership of the treatment facility? Public Owner of Land (where treatment facility is or will be) 12) Prefix

CITY OF BRYAN

PO BOX 1000

13) First and Last Name14) Organization Name

15) Mailing Address

16) City **BRYAN** TX 17) State 18) Zip Code 77805 19) Phone (###-###-###) 9798215944 20) Extension 21) Email WESWILLIAMS@BTUTILITIES.COM 22) Is the landowner the same person as the facility owner or co-applicant? Yes General Information Renewal-Amendment 06/29/2028 1) Current authorization expiration date: 2) Current Facility operational status: Active 3) Is the facility located on or does the treated effluent cross American Indian Land? No 4) What is the application type that you are seeking? Major Amendment without Renewal 4.1) Describe the proposed changes: Remove daily average and daily maximum concentration limits for aluminum from Outfall 003 based on the cooling water intake exemption at 30 TAC307.8d. 5) Current Authorization type: **Industrial Wastewater** 5.1) What is your EPA facility classification? Major 5.1.1) Select the applicable fee Major Amendment - \$2,050 6) What is the classification for your authorization? **TPDES** 6.1) What is the EPA Identification Number? TX0073954 Yes 6.2) Is the wastewater treatment facility location in the existing permit accurate? 6.3) Are the point(s) of discharge and the discharge route(s) in the existing permit correct? Yes **BRYAN** 6.4) City nearest the outfall(s): 6.5) County where the outfalls are located: **BRAZOS** 6.6) Is or will the treated wastewater discharge to a city, county, or state highway right-of-way, or Yes a flood control district drainage ditch? 6.6.1) What is your right-of-way authorization status? **Authorization Granted** 6.7) Is the daily average discharge at your facility of 5 MGD or more? No 7) Did any person formerly employed by the TCEQ represent your company and get paid for No service regarding this application? **Public Notice Information Individual Publishing the Notices** 1) Prefix MR

2) First and Last Name **WES WILLIAMS** 3) Credential 4) Title **EXECUTIVE DIRECTOR - QSE & POWER GENERATION** 5) Organization Name CITY OF BRYAN PO BOX 1000 6) Mailing Address 7) Address Line 2 8) City **BRYAN** 9) State TX 10) Zip Code 77805 11) Phone (###-###-###) 9798215944 12) Extension 13) Fax (###-###-###) 14) Email WESWILLIAMS@STUTILITIES.COM Contact person to be listed in the Notices 15) Prefix MR 16) First and Last Name **WES WILLIAMS** 17) Credential 18) Title **EXECUTIVE DIRECTOR - QSE & POWER GENERATION** 19) Organization Name CITY OF BRYAN 20) Phone (###-###-###) 9798215944 21) Fax (###-###-###) 22) Email WESWILLIAMS@BTUTILITIES.COM **Bilingual Notice Requirements** 23) Is a bilingual education program required by the Texas Education Code at the elementary or Yes middle school nearest to the facility or proposed facility? 23.1) Are the students who attend either the elementary school or the middle school enrolled in Yes a bilingual education program at that school? 23.2) Do the students at these schools attend a bilingual education program at another location? No 23.3) Would the school be required to provide a bilingual education program but the school has No waived out of this requirement under 19 TAC 89.1205(a)? 23.4) Which language is required by the bilingual program? **SPANISH** Section 1# Public Viewing Information County#: 1

**BRAZOS** 

1) County

2) Public building name CLARA B MOUNCE PUBLIC LIBRARY

3) Location within the building

4) Physical Address of Building 201 E 26TH ST

5) City BRYAN

6) Contact Name

7) Phone (###-###) 9792095000

8) Extension

9) Is the location open to the public?

# Plain Language

1) Plain Language

[File Properties]

File Name

LANG\_Attachment PLS-1 Plain Language Summary

WQ0002117000 2025.pdf

Hash B1763827346BEF1377050BBA134FA02031273B4D14176BDA7E3FCB38F7A5234F

MIME-Type application/pdf

# Supplemental Permit Information Form

1) Supplemental Permit Information Form (SPIF)

[File Properties]

File Name SPIF\_Attachment SPIF-1 WQ0002117000 Supplemental Permit

Information Form 2025.pdf

Hash 07C723E6E867ECA54FD72B99B179DE93A471803236E5275EE6BA4580B0953414

MIME-Type application/pdf

[File Properties]

File Name SPIF Attachment SPIF-2 BTU USGS Map Sorth 2025.pdf

Hash 6FCAE4439E27448C05EC576B16AC158790ECB40CB97038E767C50BC287F8D739

MIME-Type application/pdf

#### **Industrial Attachments**

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

[File Properties]

File Name Hash	MAP_Attachment A-2 USGS Map WQ0002117000 2025.pdf 22C15A61320900FD28ABFB3FAAF8C0B8D556A80E303CA87AF248B39173CDE5DC
MIME-Type	application/pdf
2) Copy of the proof of contact or approval letter for discharge to public ditch or [File Properties]	right-of-way.
File Name	DIS_WQ0002117000 Admin Report Item 11h.pdf
Hash	D95682786A2CDF3EDF2CB161FE6217F39832DAD6B5FF445CC4BD71AFD711ED67
MIME-Type	application/pdf
3) Public Involvement Plan (TCEQ Form 20960)	
[File Properties]	
File Name	PIP_Attachment PIP-1 Public Involvement Plan pg1 WQ0002117000 2025.pdf
Hash	7D5003CD4E63803685B24CBBD8BC62C4874E43B35533719CDA732962CACC4B32
MIME-Type	application/pdf
4) Administrative Report 1.1	
[File Properties]	
File Name	ARPT_BTU WQ0002117000 Administrative Report 1-1 2025.pdf
Hash	95F9C13BCD8BBC1E17B83EF7671241DB4FD70F920D07CC6FCAF181A75F1FF566
MIME-Type	application/pdf
5) I confirm that all required sections of Technical Report 1.0 are complete and the Technical Attachment.	will be included in Yes
5.1) I confirm that Worksheet 4.0 (Receiving Waters) is complete and included in Attachment.	n the Technical Yes
5.2) Are you planning to include Worksheet 4.1 (Waterbody Physical Characteric Technical Attachment?	stics) in the No
5.3) Are you planning to include Worksheet 6.0 (Industrial Waste Contribution) in Attachment?	n the Technical No
5.4) Are you planning to include Worksheet 7.0 (Stormwater Discharges Associated Industrial Activities) to the Technical Attachment?	ated with No
5.5) Are you planning to include Worksheet 8.0 (Aquaculture) in the Technical A	ttachment? No
5.6) Are you planning to include Worksheet 9.0 (Class V Injection Well Inventory in the Technical Attachment?	//Authorization) No
5.7) Are you planning to include Worksheet 10.0 (Quarries in the John Graves S in the Technical Attachment?	Scenic Riverway) No
5.8) Are you planning to include Worksheet 11.0 (Cooling Water System Informatechnical Attachment?	ation) in the No

5.9) Are you planning to include Worksheet 11.1 (Impingement Mortality) in the Technical No Attachment? 5.10) Are you planning to include Worksheet 11.2 (Source Water Biological Data) in the No Technical Attachment? 5.11) Are you planning to include Worksheet 11.3 (Entrainment) in the Technical Attachment? No 5.12) Technical Attachment [File Properties] File Name TECH\_WQ0002117000 BTU Technical Report 2025.pdf Hash F5340720A88442AF974124E5C2F07B966856B5F355229C01A5088C2AF5AD9229 MIME-Type application/pdf 6) Affected Landowners Map [File Properties] File Name LANDMP Attachment A-3-1 Landowner Map WQ0002117000 2025.pdf Hash 143E80140E19EC58E74451A48747CD685B3F449888E8D19866FC593C433E85EE MIME-Type application/pdf 7) Landowners Cross Reference List [File Properties] File Name LANDCRL Attachment A-3-2 Landowner List BTU WQ0002117000 2025.pdf Hash 8C8D97C2D6E875476B57F60A80549E3E5F6DD191CB7A951C5CC7CE3432E0CDA9 MIME-Type application/pdf 8) Landowner Avery Template [File Properties] File Name LANDAT Attachment A-3-3 Landowner Labels BTU WQ0002117000 2025.docx C2902690C1F95E8B891F8158A40ABF14928CF21CE47A689A74ADB19945E268C9 Hash MIME-Type application/vnd.openxmlformatsofficedocument.wordprocessingml.document 9) Flow Diagram [File Properties] File Name FLDIA Attachment T-2 BTU Water Flow Diagram.pdf Hash E3E5DDD31894D8A31D5B902D3B82DB94C9C14D90D60DBD0DFE63F63A210E8792 MIME-Type application/pdf

10) Site Drawing [File Properties] File Name SITEDR Attachment T-1 BTU Facility Maps.pdf Hash 77F9ABCDDC777D1E0994904D0B17EC2E3A722B4E6D43886688D0657DF964FBC0 MIME-Type application/pdf 11) Original Photographs [File Properties] File Name ORIGPH Attachment A-1 Outfall Photos WQ0002117000 BTU 2025.pdf Hash 73794DFDFB07B0B549FBB3572668F8726FD6588983581382C066FCEC74742C35 MIME-Type application/pdf 12) Design Calculations [File Properties] File Name DES CAL Attachment T-3 BTU Wastewater Flows by Outfall.pdf Hash CA85C186D62CC17082AD9B406417F94339E389DB5C6EB9EF2C182E483076760C MIME-Type application/pdf 13) Solids Management Plan 14) Water Balance [File Properties] File Name WB Attachment T-2 BTU Water Flow Diagram.pdf E3E5DDD31894D8A31D5B902D3B82DB94C9C14D90D60DBD0DFE63F63A210E8792 Hash MIME-Type application/pdf [File Properties] File Name WB Attachment T-3 BTU Wastewater Flows by Outfall.pdf Hash CA85C186D62CC17082AD9B406417F94339E389DB5C6EB9EF2C182E483076760C MIME-Type application/pdf 15) Other Attachments [File Properties] File Name OTHER Attachment T-4 WQ0002117000 BTU Intake Exemption Report 2025 pdf A0E4CE605D9C6209970771E88162BFE55C69F5DA241BA9C0EC13B312B2F269D8 Hash

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Contents 2025.pdf

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MIME-Type application/pdf

#### Certification

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

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

- 1. I am Gary D Miller, the owner of the STEERS account ER044373.
- 2. I have the authority to sign this data on behalf of the applicant named above.
- 3. I have personally examined the foregoing and am familiar with its content and the content of any attachments, and based upon my personal knowledge and/or inquiry of any individual responsible for information contained herein, that this information is true, accurate, and complete.
- 4. I further certify that I have not violated any term in my TCEQ STEERS participation agreement and that I have no reason to believe that the confidentiality or use of my password has been compromised at any time.
- 5. I understand that use of my password constitutes an electronic signature legally equivalent to my written signature.
- 6. I also understand that the attestations of fact contained herein pertain to the implementation, oversight and enforcement of a state and/or federal environmental program and must be true and complete to the best of my knowledge.
- 7. I am aware that criminal penalties may be imposed for statements or omissions that I know or have reason to believe are untrue or misleading.
- 8. I am knowingly and intentionally signing Update Domestic or Industrial Individual Permit WQ0002117000.
- 9. My signature indicates that I am in agreement with the information on this form, and authorize its submittal to the TCEQ.

OWNER Signat	ure: Gary D	Miller OWNER
--------------	-------------	--------------

Customer Number: CN600373310 Legal Name: City of Bryan Account Number: ER044373

Signature IP Address: 198.183.241.134

Signature Date: 2025-05-02

Signature Hash: 5933231CBE50ABE6197A8DC21FA24766DEF1C836BA77917FD60AB53D02FD0074 Form Hash Code at time of Signature: 77E6E819B676B13A5123E765BA357898350A33F9FF8EBE70B750357CA8FBC5E4

#### Fee Payment

Transaction by: The application fee payment transaction was made by

ER044373/Garv D Miller

Paid by: The application fee was paid by ANGELA M SAXBY

Fee Amount: \$2000.00 Paid Date:

Transaction/Voucher number:

The application fee was paid on 2025-05-02

The transaction number is 582EA000666439 and the voucher

number is 765073

# Submission

Reference Number:

Submitted by:

Submitted Timestamp:

Submitted From:

Confirmation Number:

Steers Version:

Permit Number:

The application reference number is 775346

The application was submitted by ER044373/Gary D Miller

The application was submitted on 2025-05-02 at 15:30:05 CDT

The application was submitted from IP address 198.183.241.134

The confirmation number is 650702

The STEERS version is 6.91

The permit number is WQ0002117000

#### Additional Information

Application Creator: This account was created by Dianna Kocurek

# INDUSTRIAL WASTEWATER PERMIT APPLICATION ADMINISTRATIVE REPORT 1.1

The following information is required for new and amendment applications.

## Item 1. Affected Landowner Information (Instructions, Page 35)

- a. Attach a landowner map or drawing, with scale, as applicable. Check the box next to each item to confirm it has been provided. ☑ The applicant's property boundaries. ☑ The facility site boundaries within the applicant's property boundaries. ☐ The distance the buffer zone falls into adjacent properties and the property boundaries of the landowners located within the buffer zone. ☑ The property boundaries of all landowners surrounding the applicant's property. (Note: if the application is a major amendment for a lignite mine, the map must include the property boundaries of all landowners adjacent to the new facility (ponds).) ☑ The point(s) of discharge and highlighted discharge route(s) clearly shown for one mile downstream. ☑ The property boundaries of the landowners located on both sides of the discharge route for one full stream mile downstream of the point of discharge. ☐ The property boundaries of the landowners along the watercourse for a one-half mile radius from the point of discharge if the point of discharge is into a lake, bay, estuary, or affected by tides. ☐ The boundaries of the effluent disposal site (e.g., irrigation area or subsurface drainfield site) and all evaporation/holding ponds within the applicant's property. ☐ The property boundaries of all landowners surrounding the applicant's property boundaries where the effluent disposal site is located. ☐ The boundaries of the sludge land application site (for land application of sewage sludge for beneficial use) and the property boundaries of landowners within one-quarter mile of the applicant's property boundaries where the sewage sludge land application site is located. ☐ The property boundaries of landowners within one-half mile in all directions from the applicant's property boundaries where the sewage sludge disposal site (e.g., sludge surface disposal site or sludge monofil) is located. Attachment: A-3-1 Landowner Map
- b. ⊠ that the landowners list has also been provided as mailing labels in electronic format
- (Avery 5160). Attachment: A-3-3 Landowner Labels

  Check this box to confirm a congrate list with the landowners' names and mailing
- c. Check this box to confirm a separate list with the landowners' names and mailing addresses cross-referenced to the landowner's map has been provided. Provide the source of the landowners' names and mailing addresses: <a href="https://example.com/Attachment A-3-2 Landowner List (Brazos County Appraisal District">Attachment A-3-2 Landowner List (Brazos County Appraisal District)</a>

this application? ☐ Yes ☒ No If yes, provide the location and foreseeable impacts and effects this application has on the land(s): N/A Item 2. Original Photographs (Instructions, Page 37) Provide original ground level photographs. Check the box next to each of the following items to indicate it is included. ☐ At least one original photograph of the new or expanded treatment unit location. At least two photographs of the existing/proposed point of discharge and as much area downstream (photo 1) and upstream (photo 2) as can be captured. If the discharge is to an open water body (e.g., lake, bay), the point of discharge should be in the right or left edge of each photograph showing the open water and with as much area on each respective side of the discharge as can be captured. ☐ At least one photograph of the existing/proposed effluent disposal site. A plot plan or map showing the location and direction of each photograph. Attachment: A-1 Outfall Photos

e. As required by Texas Water Code § 5.115, is any permanent school fund land affected by

# **ATTACHMENT T-4**

# ONCE-THROUGH COOLING WATER EXEMPTION FOR ALUMINUM DANSBY STEAM ELECTRIC STATION

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# ONCE-THROUGH COOLING WATER EXEMPTION FOR ALUMINUM DANSBY STEAM ELECTRIC STATION

# **O**VERVIEW

This report is an evaluation of a "once-through cooling water exemption" for aluminum for Outfall 003 at the Roland C. Dansby Steam Electric Station in Bryan, Texas (Dansby Power Plant). This evaluation follows the guidance in the TCEQ's Procedures to Implement the Texas Surface Water Quality Standards, RG-194, June 2010 (IP). The exemption is based on 30 TAC 307.8(d), which states that water-quality based effluent limits (WQBELs) for a pollutant are not required when the discharge of once-through cooling water does not measurably alter the pollutant concentration seen in the intake water. The IP contains guidelines on how this demonstration is made, which are discussed in more detail in the following sections.

# **FACILITY AND OUTFALL DESCRIPTION**

The Dansby facility is a natural gas-fired power plant located on the north side of Lake Bryan. The lake was built in 1973 to provide cooling water for the facility. The lake covers approximately 740 acres. Makeup water for lake evaporative losses is from rainfall/stormwater runoff and facility groundwater wells. Besides its use as cooling water for the power plant, the lake supports a reservoir ecosystem and fishery, with public park and access for boat and shoreline fishing. Primary sport fishes include largemouth bass, blue, catfish, and channel catfish; smaller species include bluegill and green sunfish.<sup>1</sup>

The City of Bryan (dba as Bryan Texas Utilities) (BTU) is the permittee for TPDES Permit No. WQ0002117000, which authorizes the discharges from the power plant. Water is withdrawn from Lake Bryan for non-contact cooling in the turbine condenser and then discharged back into Lake Bryan. In the facility's TPDES permit, Outfall 003 is designated as the cooling water discharge into Lake Bryan (Figure 1. USGS Map South). Figure 1 shows the discharge routes for all outfalls (001, 002, 003) and the recirculation path in the lake; only Outfall 003 discharges into Lake Bryan.

When the TPDES wastewater permit for the facility was renewed by the Texas Commission on Environmental Quality (TCEQ) on June 29, 2023, monitoring for total aluminum was added to Outfall 003, with water quality-based effluent limits (WQBELs) of 0.466 milligrams per liter (mg/L) (daily average) and 0.986 mg/L (daily maximum), to become effective three years after permit issuance.

Outfall 003 data for aluminum indicate that the discharge has the potential to be greater than the WQBELs, which are based on a default partition coefficient (dissolved to total metal fraction) of 1.0 set by the TCEQ. A partition coefficient of 1.0 assumes that all of the aluminum in the effluent is in the dissolved phase and is 100% bioavailable relative to toxicity effects. In actual wastewaters, the dissolved fraction is typically must lower. The TCEQ allows for an increase in the WQBELs with a site-specific partition coefficient. During November 2023 – July 2024, BTU had 28 samples of Outfall 003 analyzed for dissolved and total

<sup>&</sup>lt;sup>1</sup> "Lake Bryan 2022 Fisheries Management Survey Report," Texas Parks and Wildlife, Inland Fisheries Division, July 31, 2022.

aluminum and estimated a site-specific partition coefficient of 0.5; however, it was not considered sufficient to ensure compliance with site-specific WQBELs. Therefore, BTU decided to conduct the work needed to demonstrate the applicability of the once-through cooling water exemption.

## **DATA COLLECTION**

The IP guidelines for the once-through cooling water exemption requires a comparison of intake and outfall concentrations (aluminum in this case) and a review of sources of aluminum (aside from the intake water) that could contribute to levels in the outfall discharge.

#### INTAKE AND OUTFALL SAMPLING

Figure 2 shows an aerial view of the entire facility. Figure 3 is a more detailed view of the location of the intake structure and outfalls. The intake structure is located on the north shore of Lake Bryan. Outfall 003 is also located on the north shore but physically separated from the intake. This separation forces the condenser return water to travel generally counterclockwise through the lake back towards the intake structure, cooling along the way.

Photo 1 shows the intake structure located on the north shore of Lake Bryan. The intake structure consists of two bays, each containing one circulating water pump and one traveling water screen. Water passes through the traveling water screen, which removes floating foreign material. Water is pumped to the condenser through carbon steel piping where it passes through stainless steel tubes and discharges back to the lake. Samples of the intake water were collected in front of the intake structure, in front of the operating pump bay before the traveling water screen (Photo 2).

Samples of the Outfall 003 discharge were taken at the monitoring point (outlet waterbox) for the TPDES permit (Photo 3). The outlet waterbox is carbon steel.

The IP recommends at least 10 paired grab samples be collected of the intake water and outfall discharge, within an hour of each other during normal operating conditions. Ten paired samples were collected once a week during September – December 2024 except during an outage period in November.

# **DISCUSSION OF RESULTS**

#### SAMPLE ANALYSES

Samples of the intake water and Outfall 003 discharge were analyzed for total and dissolved aluminum, total and dissolved solids, temperature, pH, and conductivity. Aluminum was analyzed by Aqua-Tech Laboratories in Bryan, Texas.<sup>2</sup> Temperature, pH, total/dissolved solids, and conductivity were measured by the permittee, BTU. Results are summarized in Table 1. As expected, the data show little difference in characteristics between the intake water and the outfall discharge.

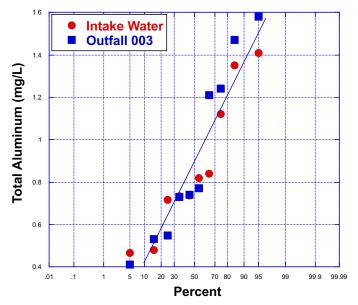
Aqua-Tech Laboratories Bryan Facility, 635 Phil Gramm Boulevard, Bryan, TX 77807 (TCEQ Lab ID T104704371, Accreditation Certificate ID TX-C24-00311)

Table 1. Intake Water and Outfall 003 Analyses

Table 1. Intake water and Outfall 003 Analyses								
Date	Time	рН	Conductivity	TDS	Temp	Aluminum total	Aluminum dissolved	TSS
		SU	μmho/cm	mg/L	°C	mg/L	mg/L	mg/L
	ı		,	ake Wa	ter			J
9/23/24	9:30	9.27	1788	872	26.2	0.479	0.241	11
9/30/24	9:37	9.22	1776	868	25.6	0.819	0.236	6
10/7/24	8:07	9.22	1827	901	24	0.716	0.193	8
10/14/24	7:30	9.3	1815	892	24.1	0.735	0.28	13
10/21/24	9:00	9.27	1820	901	20.6	0.841	0.28	7
10/28/24	1:00	9.28	1808	889	24.2	0.738	0.324	13
11/25/24	7:25	9.27	1851	914	18.7	1.41	0.238	20
12/2/24	9:25	9.24	1900	930	16.1	1.35	0.362	17
12/9/24	7:20	9.26	1854	913	15.4	1.12	0.61	17
12/16/24	7:30	9.2	1823	905	17.6	0.466	0.339	19
count		10	10	10	10	10	10	10
ave		9.25	1826	899	21.25	0.8674	0.3103	13.1
min		9.2	1776	868	15.4	0.466	0.193	6
max		9.3	1900	930	26.2	1.41	0.61	20
stdev		0.032	35	19	4.07	0.3272	0.1177	5.07
			O	utfall 00	)3			
9/23/24	9:30	9.25	1772	873	26.8	0.531	0.238	8
9/30/24	9:28	9.25	1766	869	25.4	0.729	0.225	10
10/7/24	8:14	9.24	1827	901	26.2	0.411	0.241	11
10/14/24	7:20	9.26	1809	899	24.5	0.549	0.375	13
10/21/24	9:00	9.27	1831	899	22.6	1.24	0.235	11
10/28/24	1:00	9.25	1808	885	24.1	0.773	0.3	14
11/25/24	7:30	9.24	1853	914	22.1	1.58	0.267	13
12/2/24	9:22	9.21	1893	933	18.5	1.47	0.345	19
12/9/24	7:25	9.25	1854	916	17.5	1.21	0.289	16
12/16/24	7:30	9.23	1831	902	18.1	0.741	0.245	16
count		10	10	10	10	10	10	10
ave		9.25	1824	899	22.58	0.9234	0.2760	13.1
min		9.21	1766	869	17.5	0.411	0.225	8
max		9.27	1893	933	26.8	1.58	0.375	19
stdev		0.016	38	20	3.46	0.4167	0.0509	3.28

#### COMPARISON OF INTAKE AND OUTFALL ALUMINUM

The IP suggests that the intake and outfall data be compared statistically to determine if there is a significant difference between the two data sets. A t-test for paired data was used. This test requires that the data be normally distributed. Probability plots of total aluminum in the intake water and Outfall 003 (Graph 1) show that both data sets appear to be normally distributed (generally following a straight line). Statistically tests (skewness, Kolmogorov-Smirnov, Shapiro-Wilk) indicated that each data set was normally distributed.



Graph 1. Probability Plots - Total Aluminum

The mean difference in total aluminum (outfall minus intake) in the paired samples was 0.056 mg/L. The results shown in Table 2 for a statistical test for difference in means for paired samples indicates there is no significant difference in means (that is, this difference is likely due to natural variability in the values). The 95% confidence interval on the mean difference is -0.094–0.206 mg/L. Because zero falls within this interval, it indicates there is no significant difference in means. Therefore, the total aluminum in Outfall 003 can be considered the same as the intake water.

**Table 2. Statistical Tests** 

t-Test: Paired Two Sample for Means		
	intake	003
Mean	0.8674	0.9234
Variance	0.1070	0.1736
Observations	10	10
Pearson Correlation	0.8686	
Hypothesized Mean Difference	0	
df	9	
t Stat	-0.8458	
P(T<=t) one-tail	0.2098	
t Critical one-tail	1.8331	
P(T<=t) two-tail	0.4196	
t Critical two-tail	2.2622	
difference in means	0.056	
standard deviation of differences	0.2094	
t-value (two-tailed, 95% confidence interval, df=9)	2.26	
standard error (stdev/sqrt(n))	0.0662	
95% UCL on mean (mean + t*stderr)	0.206	
95% LCL on mean (mean - t*stderr)	-0.094	
Is mean difference of zero within 95% CL?	yes	

#### **SOURCE INVESTIGATION**

Piping in contact with the intake and outfall is not aluminum-based. Condenser tubing is 304 stainless steel and condenser waterboxes are carbon steel. Discharge piping is carbon steel coated internally with a coal tar enamel. There is no known aluminum in the system.

Chemicals added to the cooling system between the intake and discharge back into lake are Wricochlor Max (sodium hypochlorite 12.5%), Bromide Plus (sodium bromide 40%), Zeesperse CD (calcium dispersant), and BIOD1 (biodispersant). The safety data sheets (SDSs) for these chemicals do not list any aluminum compounds.

Outfall 003 is authorized only for once-through cooling water. All other wastewaters, including blowdowns, low volume waste, and stormwater are discharged via Outfalls 001 and/or 002 and do not enter the lake.

### **CONCLUSION**

The total aluminum in the intake water is not measurably increased through its use as cooling water in the condensers as demonstrated by comparison of intake and outfall samples, as well as lack of any other significant sources of aluminum. This demonstration meets the requirements of 30 TAC 307.8(d), showing that WQBELs are not required for total aluminum at Outfall 003.

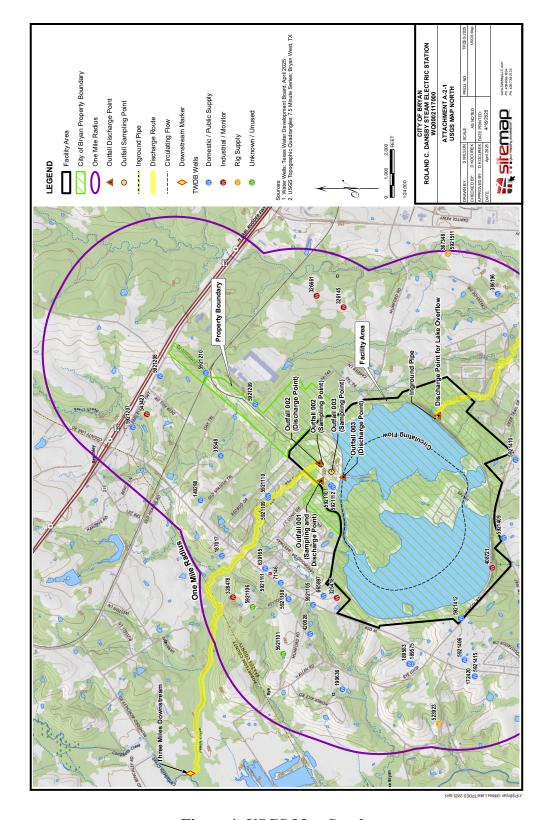
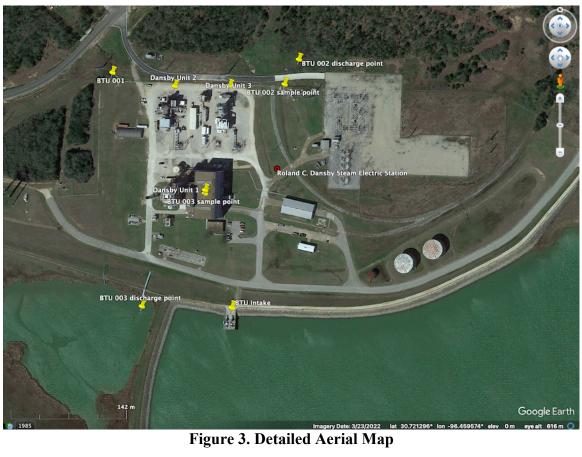


Figure 1. USGS Map South



Figure 2. Overall Aerial Map





**Photo 1. Intake Structure** 



**Photo 2. Intake Sample Point** 



Photo 3. Outfall 003 Sample Point

# City of Bryan

# Roland C. Dansby Steam Electric Station TPDES WQ0002117000 Amendment Application 2025

# **Application Contents**

Administrative Report 1.0

Administrative Report 1.1

Technical Report 1.0

Worksheet 1 Effluent Guidelines

Worksheet 4 Receiving Waters

Attachments		Cross-reference to Application Item		
SPIF-1	Supplemental Permit Information Form (SPIF)	AR		
SPIF-2	USGS Map South	SPIF-7		
PLS-1	Plain Language Summary	AR1.0-9.f		
PIP-1	Public Information Plan	AR1.0-9.g		
A-1	Outfall Photos	AR1.1-2		
A-2-1	USGS Map North	AR1.0-11.b		
A-2-2	USGS Map South	AR1.0-11.b		
A-3-1	Landowner Map	AR1.1-1.a		
A-3-2	Landowner List	AR1.1-1.c		
A-3-3	Landowner Mailing Labels	AR1.1-1.b		
T-1	Facility Maps	TR-1.d		
T-2	BTU Water Flow Diagram	TR-2.b		
T-3	Wastewater Flows by Outfall	TR-2.b, 4; W1-3		
T-4	Once-through Cooling Water Exemption for Aluminum	TR-13.a		

## Reference Key

AR1.x	Administrative Report
TR	Technical Report
SPIF	Supplemental Permit Information Form
W#	Worksheet #



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

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

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

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

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 INDUSTRAIL 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.

The City of Bryan (dba as Bryan Texas Utilities) (CN600373310) operates the Roland C. Dansby Steam Electric Station (RN101611556), an electric power generation facility. Units 1-3 have a combined generating capacity of 210 megawatts (MW). The facility is located at 8181 Mumford Road, in Bryan, Brazos County, Texas 77807.

The application requests a permit amendment to remove the daily average and daily maximum concentration limits for aluminum from Outfall 003 based on the cooling water intake exemption at 30 TAC 307.8(d). Water from Lake Bryan is used for non-contact cooling water in the turbine condenser. Groundwater is used for makeup water for Lake Bryan. Outfall 003 returns once-through cooling water to Lake Bryan at a maximum monthly average flow rate of 78 million gallons per day. Treatment chemicals are used in the cooling water system.

The discharge of once-through cooling water via Outfall 003 is subject to federal effluent limitation guidelines at 40 CFR 423. Discharges from the facility are expected to contain free available oxidants, total residual chlorine, total suspended solids, oil and grease, total dissolved solids, and metals. Additional potential pollutants were listed in Worksheet 2 of the 2022 permit renewal application.

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

#### AGUAS RESIDUALES INDUSTRIALES /AGUAS PLUVIALES

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

La ciudad de Bryan (que opera bajo el nombre comercial Bryan Texas Utilities) (CN600373310) opera la central eléctrica Roland C. Dansby Steam Electric Station (RN101611556), una instalación de generación de energía eléctrica. Las unidades 1-3 tienen una capacidad de generación combinada de 210 megavatios (MW). La instalación está situada en 8181 Mumford Road, en Bryan, Condado de Brazos, Texas 77807.

La solicitud solicita una modificación del permiso para eliminar los límites de concentración media diaria y máxima diaria de aluminio del Outfall 003, basándose en la exención para la toma de agua de refrigeración prevista en 30 TAC 307.8(d). El agua del lago Bryan se utiliza como agua de refrigeración sin contacto en el condensador de la turbina. El agua subterránea se utiliza como agua de reposición para el lago Bryan. El Outfall 003 devuelve el agua de refrigeración de un solo paso al lago Bryan a un caudal medio mensual máximo de 78 millones de galones al día. Se utilizan productos químicos de tratamiento en el sistema de agua de refrigeración.

El vertido de agua de refrigeración de un solo paso a través del Outfall 003 está sujeto a las directrices federales de limitación de efluentes del 40 CFR 423. Se espera que los vertidos de la instalación contengan oxidantes libres disponibles, cloro residual total, sólidos suspendidos totales, aceites y grasas, sólidos disueltos totales y metales. En la Worksheet 2 de la solicitud de renovación del permiso de 2022 se enumeraron otros contaminantes potenciales.



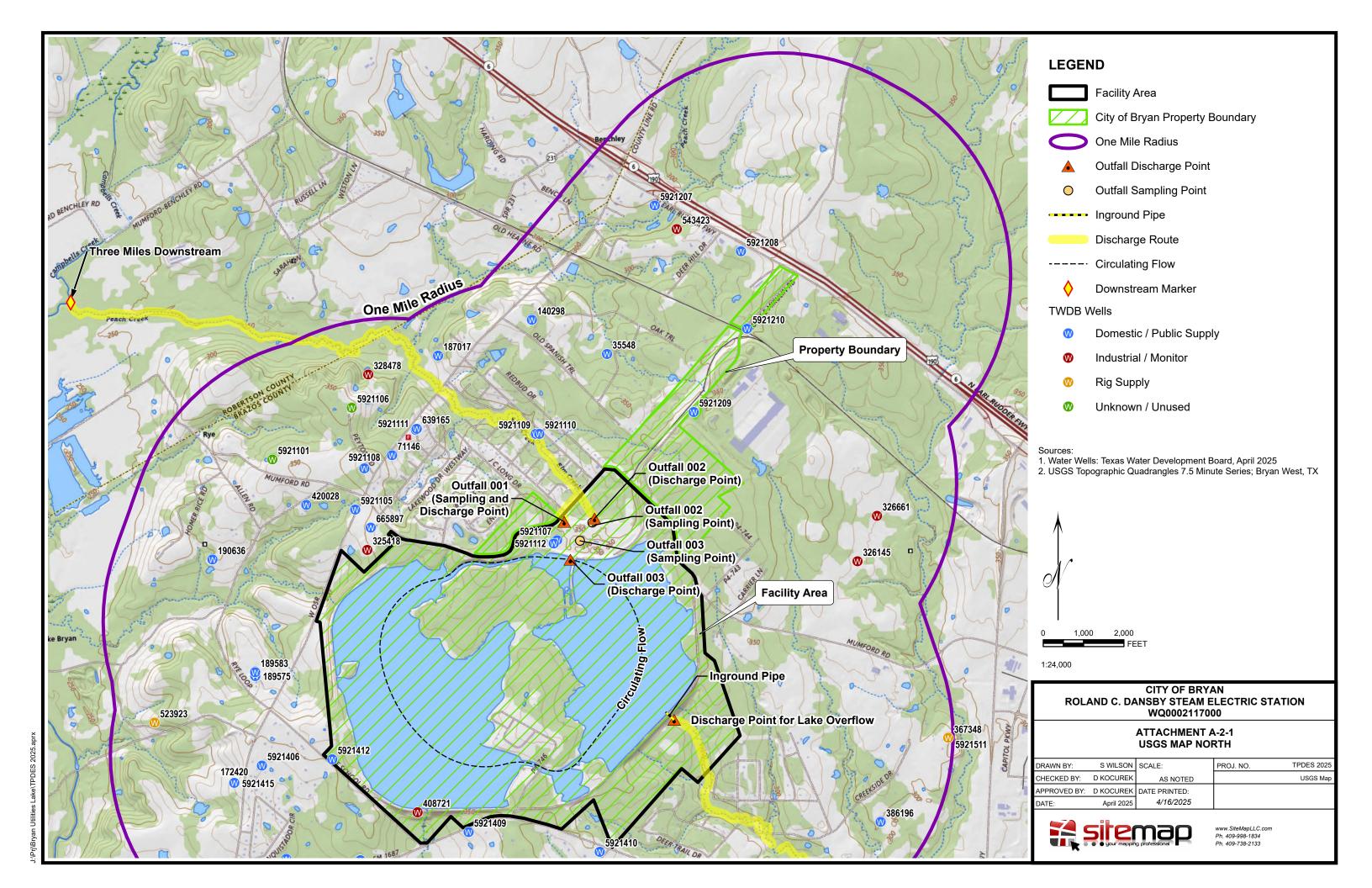
**Texas Commission on Environmental Quality** 

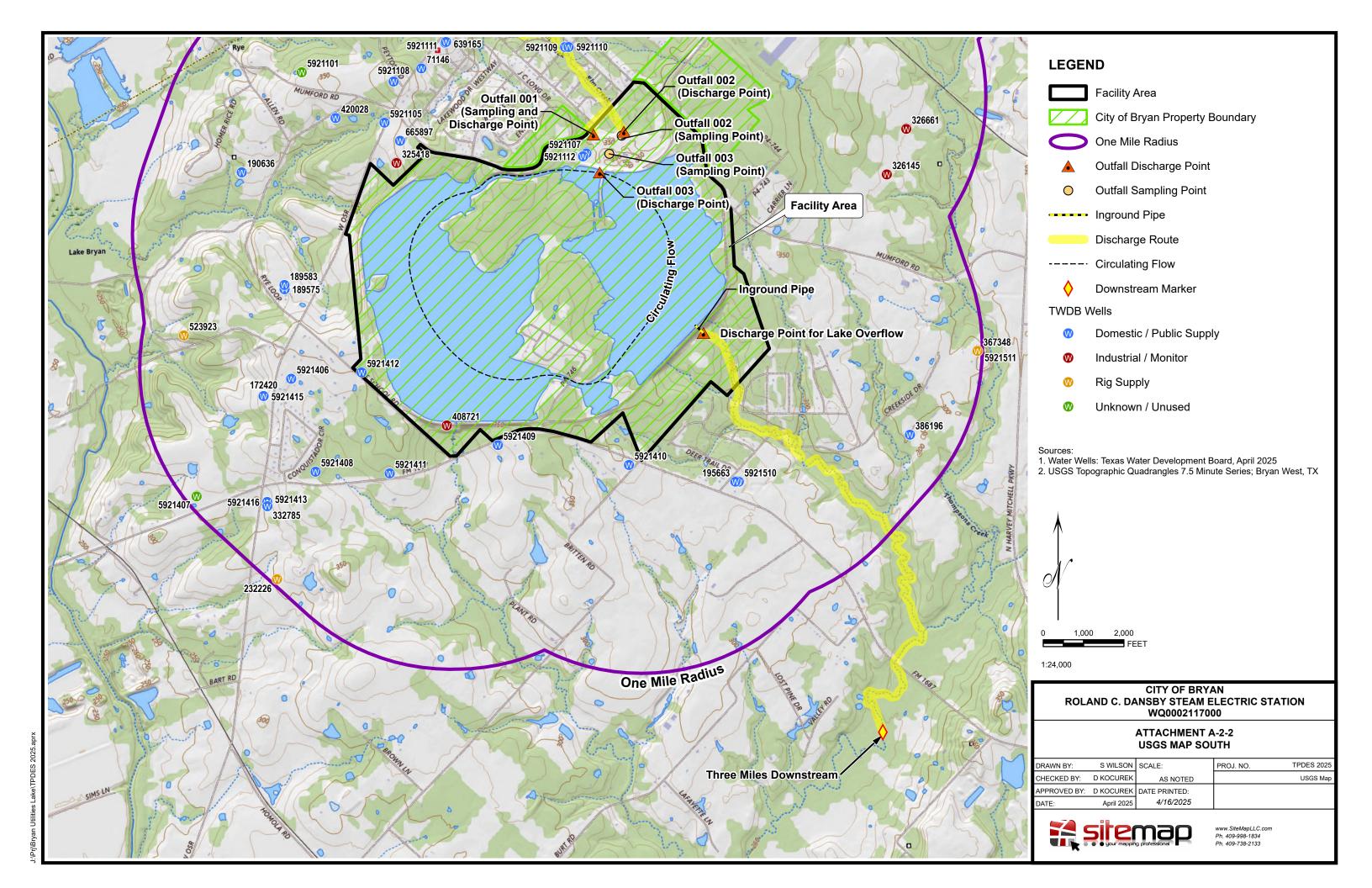
# Public Involvement Plan Form for Permit and Registration Applications

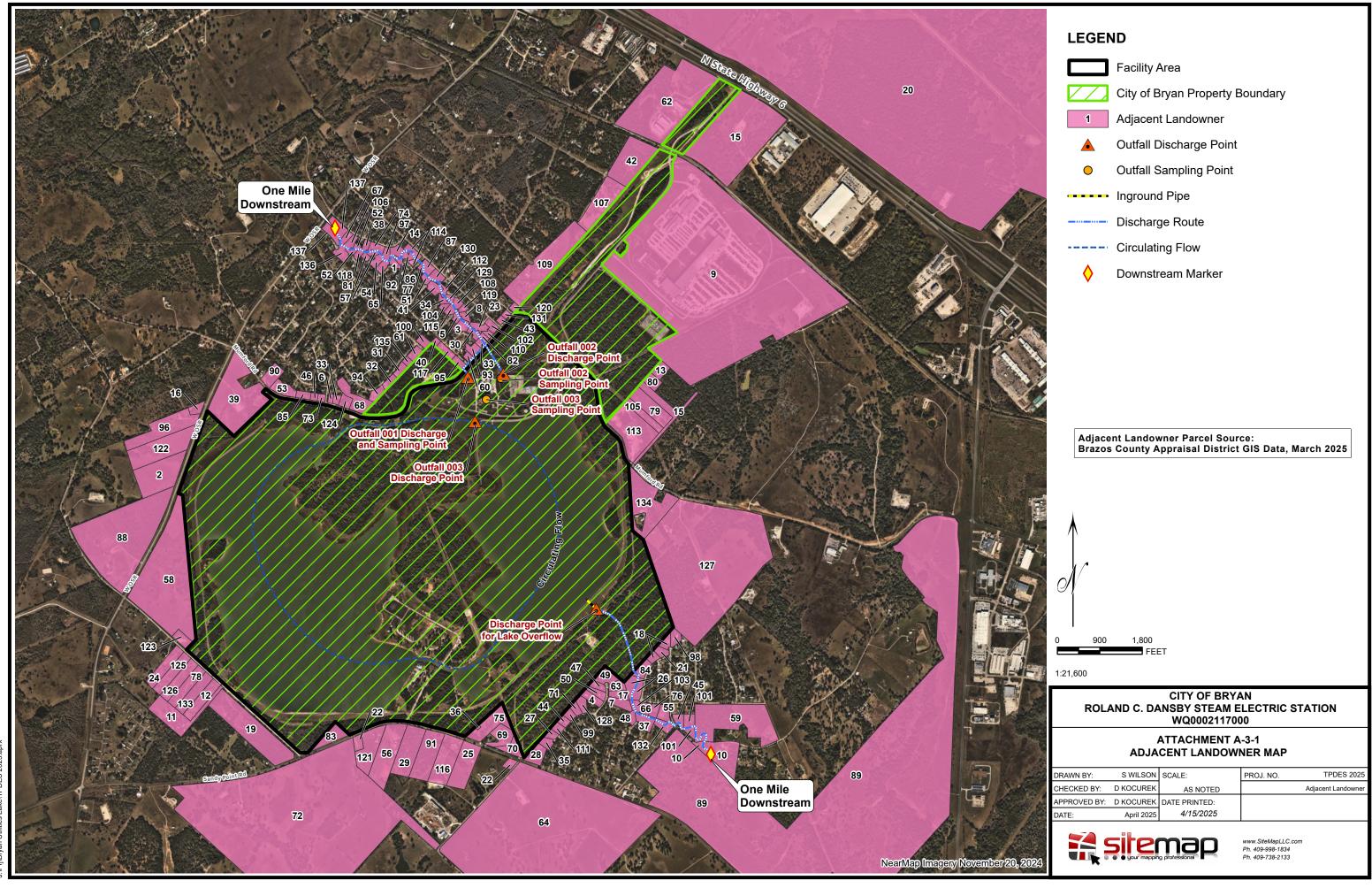
The Public Involvement Plan is intended to provide applicants and the agency with information about how public outreach will be accomplished for certain types of applications in certain geographical areas of the state. It is intended to apply to new activities; major changes at existing plants, facilities,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

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

Section 1. Preliminary Screening
New Permit or Registration Application  New Activity - modification, registration, amendment, facility, etc. (see instructions)
If neither of the above boxes are checked, completion of the form is not required and does not need to be submitted.
Section 2. Secondary Screening
Requires public notice,
Considered to have significant public interest, <u>and</u>
Located within any of the following geographical locations:
<ul> <li>Austin</li> <li>Dallas</li> <li>Fort Worth</li> <li>Houston</li> <li>San Antonio</li> <li>West Texas</li> <li>Texas Panhandle</li> <li>Along the Texas/Mexico Border</li> <li>Other geographical locations should be decided on a case-by-case basis</li> </ul>
If all the above boxes are not checked, a Public Involvement Plan is not necessary.  Stop after Section 2 and submit the form.
Public Involvement Plan not applicable to this application. Provide <b>brief</b> explanation.
The activity does not meet all three of the above criteria.







Pri/Br/s | Hilities | 2005

#### **ATTACHMENT A-3-2**

#### **Adjacent Landowners**

## Roland C. Dansby Steam Electric Station WQ0002117000

MAP ID	OWNER NAME	ADDRESS	CITY	STATE	ZIP CODE
1	ACEVEDO RAFAEL ALVAREZ & CARLA JESSICA ALVAREZ	2201 ELM CIR	BRYAN	TX	77807-5405
	ADAMS AMY AYERS	1529 GREENWOOD RD	WEATHERFORD	TX	76088-3809
	ANDERSON TIM & LIGA	4000 CASTLE AVE	BRYAN	TX	77808-5401
5	ANDERSON TIM & LISA AOQUI VERONICA VIANEEY CABADA	7697 DEER CROSSING DR 920 CLEAR LEAF DR TRLR 68	BRYAN BRYAN	TX TX	77807-8445 77803-3573
6	ARELLANO LORENZO B & MARY J	2757 BARNES RD	BRYAN	TX	77807-640
7	ARITA CRISTOBAL A & ANDREA LUNA	4001 WATONGA BLVD APT 3302	HOUSTON	TX	77092-534
8	AVILA EVERADO	2127 HOLLY CIR	BRYAN	TX	77807-8648
9	AXIS PIPE & TUBE INC	PO BOX 6780	BRYAN	TX	77805-6780
10	BARRON KRYSTLE D & JOSE ANTONIO	915 CREEKSIDE DR	BRYAN	TX	77807-811
11	BERNDT JAMES E & LORI ANDERSON	5377 RYE SCHOOL RD	BRYAN	TX	77807-523
	BLANKENSHIP JACKIE E & KATHY M	5405 RYE SCHOOL RD	BRYAN	TX	77807-523
	BRAGG SANDRA LUZA	118 FLEETWOOD DR	NEW BRAUNFELS	TX	78130-812
	BRAZOS COUNTY	PO BOX 914	BRYAN	TX	77806-091
	BRYAN CITY OF & BRAZOS COUNTY ECONOMIC DEV FOUNDATION INC	200 S TEXAS AVE STE 332	BRYAN	TX	77803-399
16	BURNS JERRY & LINDA CALDERON MARIA L & ANTONIO PATINO	3044 W OSR 7784 DEER CROSSING DR	BRYAN BRYAN	TX	77807-502
17 18	CALZADA DANIEL	820 SANDY OAKS DR	BRYAN	TX TX	77807-811 77807-841
19	CHARLOTTE D GINGRASSO REVOCABLE TRUST	1914 RUBEN DR	WAUKESHA	WI	53186-272
20	CIRCLE X LAND & CATTLE CO LTD	PO BOX 3403	BRYAN	TX	77805-340
21	CISNEROS OCTAVIO & SONIA	3770 SANDY POINT RD	BRYAN	TX	77807-711
22	COLLEGE STATION CITY OF	PO BOX 9973	COLLEGE STATION	TX	77842-797
23	CONDE FELICIANO & ELBA G	2127 PECAN CIR	BRYAN	TX	77807-8488
24	CRIPPS CHARLES & KRISTIE	801 DELLWOOD ST STE 100 PMB 136	BRYAN	TX	77802-535
25	CROSS EDDIE EARL & ANGELIA RENEEN	8103 SANDY POINT RD	BRYAN	TX	77807-819
	CURL PHILLIP M & CINDY L	1110 SANDY COVE DR	BRYAN	TX	77807-840
	DANIEL LARRY W	1100 MARKHAM LN		TX	77845-354
	DAVENPORT CATHY F	7747 SANDY POINT RD	BRYAN	TX	77807-843
	DAVIDSON JAMES M & JUDY	8181 SANDY POINT RD	BRYAN	TX	77807-819
	DEAN SANDRA ELAINE	2177 CHERRY BEND CIR	BRYAN	TX	77807-781
31	DELEON MARIA CONCEPCION	3010 ENLOE DR	BRYAN	TX	77807-541
32	DELEON ULISES A	3010 ENLOE DR	BRYAN	TX	77807-541
33	DELGADO ANGEL C	2488 BARNES RD	BRYAN	TX	77807-640
34	DIAZ OSCAR F	2187 SYCAMORE CIR 21396 PAGOSA CT	BRYAN	TX	77807-529
35 36	DUBUC NORMAN G ENTERGY TEXAS INC	PO BOX 61000	BOCA RATON NEW ORLEANS	FL LA	33486-140 70161-100
37	ESCALANTE SHERRY ELLEN	1209 DEER CROSSING CT	BRYAN	TX	77807-845
38	ESTRADA LORENZO & ANGELA	6261 DOGWOOD DR	BRYAN	TX	77807-343
	FAZZINO ANTHONY J ETAL	PO BOX 4694	BRYAN	TX	77805-469
	FLORES KATHERINE LYNN SANCHEZ & DOMINGO SANCHEZ	6201 MAGNOLIA DR	BRYAN	TX	77807-772
41	FLORES NOEL SANCHEZ & DELGADINA MENDOZA BENITEZ	213 QUAIL RUN	BUDA	TX	78610-498
42	FORSYTH RUSSELL H & KINGA	5760 OAK TRL	BRYAN	TX	77807-767
43	GALICIA ROBERT & YVONNE	8454 MUMFORD RD	BRYAN	TX	77807-240
44	GOMEZ AUGUSTINE	1440 DEER TRAIL CT	BRYAN	TX	77807-845
45	GOMEZ GLORIA	1021 SANDY OAKS DR	BRYAN	TX	7780
46	GONZALEZ JAIME RAMIREZ & ELVA A BARRON	2513 LAKEWOOD DR	BRYAN	TX	77807-548
47	GUTIERREZ DANIEL & ENRIQUE	7742 DEER CROSSING DR	BRYAN	TX	77807-811
48	GUTIERREZ DANIEL ET AL	7742 DEER CROSSING DR	BRYAN	TX	7780
49	GUTIERREZ ISIDRO	7742 DEER CROSSING DR	BRYAN	TX	77807-811
	HEITZMAN THOMAS JAY & SANDRA L	7773 DEER CROSSING DR	BRYAN	TX	77807-811
	HENTON RYDEL C	2180 PINE CIR	BRYAN BRYAN	TX TX	77807-520
	HERNANDEZ ENRIQUETA HERNANDEZ JOSE & JUANITA	2199 DARWIN AVE 9390 MUMFORD RD	BRYAN	TX	77803-226 77807-240
	HERRERA EDUARDO	2255 WILLOW CIR	BRYAN	TX	77807-240
	HERRERA JUVENTINO M & SONIA	7501 SANDY CREEK DR	BRYAN	TX	77807-844
56	HERRERA MARIA ALCALA	18 VISTA LN	COLLEGE STATION		77845-383
	HERRERA MIGUEL & CELIA	2252 WILLOW CIR	BRYAN	TX	77807-504
	HOLLER-TEMPLETON PROPERTIES LLC	7727 MALAC RD	SPRING	TX	77389-349
	HOUSLEY ELIZABETH WHITE & GARY ALLEN	910 CREEKSIDE DR	BRYAN	TX	77807-811
60	HOWARD MARGARET A	548 COUNTY ROAD 339	MILANO	TX	76556-250
	HUGHES JOEY J JR	5805 J C LONG DR	BRYAN	TX	77807-544
62	JEJ ACCOMMODATION LLC	3200 KENT ST	BRYAN	TX	77802-274
63	JIMENEZ ROBERTO CALDERON & LAURA F AVILA CORREA	7818 DEER CROSSING DR	BRYAN	TX	77807-811
64	JOHNSON D'ANNE ROCHELLE BRITTEN	4208 SERRANO CT	BRYAN	TX	77802-610
65	JOHNSON JULIUS ROBERT	2280 ELM CIR	BRYAN	TX	77807-540
66	JOHNSON TIARRA & DARIAN	7521 SANDY CREEK DR	BRYAN	TX	77807-844
	KING PARTY RENTALS LLC	6029 MOUNT HOPE	BRYAN	TX	77807-764
68	KIRTLEY MAGGIE LYNN	10021 REED RD	ALEXANDER	AR	72002-954
69	KOSLOSKY EDWARD LEE SR & MARTHA S	8082 SANDY POINT RD	BRYAN	TX	77807-819
70	KOSLOSKY PROPERTIES LLC	8064 SANDY POINT RD	BRYAN	TX	77807-819
71	KRC HELENE	1420 DEER TRAIL CT	BRYAN	TX	77807-845
72	LAMPO BONNIE C TRUST SAM LAMPO TRUSTEE	3305 FIDDLERS GRN	BRYAN	TX	77808-142
73 74	LEAL JOSE LUIS LEVRA SHARLOTTE S	PO BOX 6343 6215 DOGWOOD DR	BRYAN	TX	77805-634 77807-781
		PO BOX 1191	BRYAN	TX	
	LEWIS ERNEST A & SUE W LITTLEJOHN RORY E & TERRI D	7511 SANDY CREEK DR	BRYAN BRYAN	TX TX	77806-119 77807-844
	LOPEZ JESUS LUCIO	2165 MAPLE DR	BRYAN	TX	77807-644
	LUCAS RUSSELL B & SALLYE J	5383 RYE SCHOOL RD	BRYAN	TX	77807-549
	LUZA BARBARA SUE	7660 MUMFORD RD	BRYAN	TX	77807-323
	LUZA CHARLES J JR	3352 STAMPEDE DR	BRYAN	TX	77808-757
		2278 WILLOW CIR	BRYAN	TX	77807-504

## ATTACHMENT A-3-2

#### **Adjacent Landowners**

## Roland C. Dansby Steam Electric Station WQ0002117000

MAP ID	OWNER NAME	ADDRESS	СІТҮ	STATE	ZIP CODE
82	MAGALLANES MARITZA	8540 MUMFORD RD	BRYAN	TX	77807-7653
83	MARKS MINNIE	2026 KATHRYN DR	BRYAN	TX	77807-1524
84	MARKWARDT WILLIAM H & ELIZABETH M	1000 SANDY COVE DR	BRYAN	TX	77807-8406
85	MARTINEZ RAFAEL VELASCO & ROSA E VALADEZ	9252 MUMFORD RD	BRYAN	TX	77807-7654
86	MARTINEZ REFUGIO	3681 MEADOW LARK CIR	BRYAN	TX	77808-8559
87	MAURICIO BENJAMIN & MARIA LUCIA	6236 BENCHLEY DR	BRYAN	TX	77807-6412
88	MCCARTHY JOHN E REV	6225 E HIGHWAY 290	AUSTIN	TX	78723-1025
89	MCDOUGAL FAMILY 2003 LTD	4207 SERRANO CT	BRYAN	TX	77802-6101
90	MEDINA MARIO RIVERA	9440 MUMFORD RD	BRYAN	TX	77807-2403
91	MICHALAK CHESTER H & CYNDIE A	5670 PIPER LN	COLLEGE STATION	TX	77845-8079
92	MIRANDA RAUL & MARIA A	6089 MIMOSA CIR	BRYAN	TX	77807-8575
93	MISKIMEN MAXINE MYRTHE	8544 MUMFORD RD	BRYAN	TX	77807-7653
94	MOORE RICHARD HENRY JR	2890 ENLOE DR	BRYAN	TX	77807-5504
95	MORALES DOLORES GINA	5685 MAGNOLIA DR	BRYAN	TX	77807-7665
96	PAEZ MARIO E & IRMA ARELLNO	3060 W OSR	BRYAN	TX	77807-5024
97	PECINA-ARVIZU EDUARDO & SONIA PECINA	1400 N SIMS AVE	BRYAN	TX	77803-2744
98	PFROMM ROBIN M & DENNIS S	810 SANDY OAKS DR	BRYAN	TX	77807-8412
99	POTTER LUIN A SR LIVING TRUST	1430 DEER TRAIL CT	BRYAN	TX	77807-8453
100	PRUETT KELLY	5824 J C LONG DR	BRYAN	TX	77807-5446
	RANGEL-MARTINEZ LUIS A & CARMINA GOMEZ-RANGEL	7401 SANDY CREEK DR	BRYAN	TX	77807-8447
102	RANGEL JESUS MONTANEZ & ESTELA O MONTANEZ	5669 BENCHLEY DR	BRYAN	TX	77807-6421
103	RENCHER BEVERLY ANN (LIFE ESTATE)	1120 SANDY COVE DR	BRYAN	TX	77807-8408
104	RENFROE MARITZA CARVAJAL	2191 SYCAMORE CIR	BRYAN	TX	77807-5293
105	RICHARDS WILLIAM D CHRISTINA L & JIMMY D	7658 MUMFORD RD	BRYAN	TX	77807-7650
106	RICO ROBERTO E & PATRICIA	5765 REDBUD DR	BRYAN	TX	77807
107	ROBINSON JEFF & KAREN	5757 OAK TRL	BRYAN	TX	77807-7677
108	RODRIGUEZ CRISTO ANGEL DE DIOS CONTRERAS	5825 BENCHLEY DR	BRYAN	TX	77807-6419
109	RODRIGUEZ DIANE	1601 N SIMS AVE	BRYAN	TX	77803-1763
110	RODRIGUEZ EZEQUIEL	5825 BENCHLEY DR	BRYAN	TX	77807-6419
111	RODRIGUEZ JUAN & MARIA A REYNA	1454 DEER TRAIL CT	BRYAN	TX	77807-8453
112	RODRIGUEZ JUANA RODRIGUEZ & GUSTAVO ARREOLA SANCHEZ	4413 N TEXAS AVE TRLR 45	BRYAN	TX	77803-0255
113	ROMERO JUAN & STEPHANIE	2254 PLEASANT HILL RD	BRYAN	TX	77807-8154
114	SALAS FIDEL CRUZ	6052 MIMOSA CIR	BRYAN	TX	77807-8576
115	SALINAS JOE & CARMEN VICTORIA VASQUEZ	2182 REDWOOD CIR	BRYAN	TX	77807-5222
116	SALSGIVER DAVID & MARTHA & SHANNON PRESCOTT	8115 SANDY POINT RD	BRYAN	TX	77807-8195
117	SANCHEZ ROSALINA	5741 MAGNOLIA DR	BRYAN	TX	77807-7635
	SANCHEZ SALVADOR	9821 ARNOLD LN	BRYAN	TX	77808-9702
119	SANDOVAL ISAEL	2312 YOSEMITE DR	BRYAN	TX	77803-0748
120	SAUSEDA ROBERTO LEE	5650 REDBUD DR	BRYAN	TX	77807-5206
121	SCANLIN JEFFERY T	8303 SANDY POINT RD	BRYAN	TX	77807-8197
122	SCARPINATO FAMILY LIMITED PARTNERSHIP	1503 BENNETT ST	BRYAN	TX	77802-1228
123	SCHEURING DOUGLAS C & CHANTEL	311 TEE DR	BRYAN	TX	77801-3024
124	SCHOPPE MEGAN	8988 MUMFORD RD	BRYAN	TX	77807-2402
125	SHANNON LESTER M & MARY E REVOCABLE TRUST	5599 RYE SCHOOL RD	BRYAN	TX	77807-5235
126	SIKORSKI WILLIAM & SHARON	5575 RYE SCHOOL RD	BRYAN	TX	77807-5235
127	THE TERRELL & PENNY MILLER REVOCABLE TRUST	1511 TEXAS AVE S STE 204	COLLEGE STATION		77840-3303
128	THREADGILL JARED MICHAEL	1414 DEER TRAIL CT	BRYAN	TX	77807-8453
129	TORRES-DELGADO JORGE & ROSALINDA SANCHEZ GONZALEZ	508 KUBIN ST	BRYAN	TX	77803-3060
130	UNDINE TEXAS LLC	17681 TELGE RD	CYPRESS	TX	77429-7080
131	UNITED IN CHRIST CHURCH OF MUMFORD	500 W 24TH ST	BRYAN	TX	77803-2402
131	VEGA ROBERTO M & OLGA	1208 CREEKSIDE DR	BRYAN	TX	77803-2402
	WEBB MARK A & LESLIE J	5489 RYE SCHOOL RD	BRYAN	TX	77807-5236
	ZEMANEK CHARLES R & JOYCE A	7545 MUMFORD RD	BRYAN	TX	77807-7662
	ZEMANEK ELIZABETH	1909 W 28TH ST	BRYAN	TX	77803-2206
136	ZIMMERLE RODD	6340 CYPRESS CIR	BRYAN	TX	77807-7816
137	ZUCKERT MICHELLE DIANE & PAUL HARDING	6387 DOGWOOD DR	BRYAN	TX	77807-7821

4/15/25

ACEVEDO RAFAEL ALVAREZ & CARLA AGUIRRE JOSUE ANSELMO & EDITH ADAMS AMY AYERS **POSADAS SANCHEZ** JESSICA ALVAREZ 1529 GREENWOOD RD **2201 ELM CIR** 4000 CASTLE AVE WEATHERFORD TX 76088-3809 BRYAN TX 77807-5405 BRYAN TX 77808-5401 ANDERSON TIM & LISA AOQUI VERONICA VIANEEY CABADA ARELLANO LORENZO B & MARY J 7697 DEER CROSSING DR 920 CLEAR LEAF DR TRLR 68 2757 BARNES RD BRYAN TX 77807-8445 BRYAN TX 77803-3573 BRYAN TX 77807-6404 ARITA CRISTOBAL A & ANDREA LUNA **AVILA EVERADO AXIS PIPE & TUBE INC** 4001 WATONGA BLVD APT 3302 2127 HOLLY CIR PO BOX 6780 HOUSTON TX 77092-5347 BRYAN TX 77807-8648 BRYAN TX 77805-6780 BARRON KRYSTLE D & JOSE ANTONIO BERNDT JAMES E & LORI ANDERSON BLANKENSHIP JACKIE E & KATHY M 915 CREEKSIDE DR 5377 RYE SCHOOL RD 5405 RYE SCHOOL RD BRYAN TX 77807-8111 BRYAN TX 77807-5237 BRYAN TX 77807-5236 **BRYAN CITY OF & BRAZOS COUNTY BRAGG SANDRA LUZA BRAZOS COUNTY ECONOMIC DEV FOUNDATION INC** 118 FLEETWOOD DR PO BOX 914 200 S TEXAS AVE STE 332 NEW BRAUNFELS TX 78130-8125 BRYAN TX 77806-0914 BRYAN TX 77803-3999 CALDERON MARIA L & ANTONIO PATINO **BURNS JERRY & LINDA CALZADA DANIEL** 3044 W OSR 7784 DEER CROSSING DR 820 SANDY OAKS DR BRYAN TX 77807-5024 BRYAN TX 77807-8112 BRYAN TX 77807-8412 CHARLOTTE D GINGRASSO CIRCLE X LAND & CATTLE CO LTD CISNEROS OCTAVIO & SONIA **REVOCABLE TRUST** PO BOX 3403 3770 SANDY POINT RD 1914 RUBEN DR BRYAN TX 77805-3403 BRYAN TX 77807-7118 WAUKESHA WI 53186-2727 **COLLEGE STATION CITY OF** CONDE FELICIANO & ELBA G **CRIPPS CHARLES & KRISTIE** 801 DELLWOOD ST STE 100 PMB 136 PO BOX 9973 2127 PECAN CIR COLLEGE STATION TX 77842-7973 BRYAN TX 77807-8488 BRYAN TX 77802-5353 **CROSS EDDIE EARL & ANGELIA RENEEN** CURL PHILLIP M & CINDY L DANIEL LARRY W 8103 SANDY POINT RD 1110 SANDY COVE DR 1100 MARKHAM LN BRYAN TX 77807-8195 BRYAN TX 77807-8408 COLLEGE STATION TX 77845-3540 DAVENPORT CATHY F **DAVIDSON JAMES M & JUDY DEAN SANDRA ELAINE** 7747 SANDY POINT RD 8181 SANDY POINT RD 2177 CHERRY BEND CIR

BRYAN TX 77807-8195

BRYAN TX 77807-7813

BRYAN TX 77807-8432

DELEON MARIA CONCEPCION	DELEON ULISES A	DELGADO ANGEL C
3010 ENLOE DR	3010 ENLOE DR	2488 BARNES RD
BRYAN TX 77807-5410	BRYAN TX 77807-5410	BRYAN TX 77807-6400
DIAZ OSCAR F	DUBUC NORMAN G	ENTERGY TEXAS INC
2187 SYCAMORE CIR	21396 PAGOSA CT	PO BOX 61000
BRYAN TX 77807-5293	BOCA RATON FL 33486-1401	NEW ORLEANS LA 70161-1000
ESCALANTE SHERRY ELLEN	ESTRADA LORENZO & ANGELA	FAZZINO ANTHONY J ETAL
1209 DEER CROSSING CT	6261 DOGWOOD DR	PO BOX 4694
BRYAN TX 77807-8452	BRYAN TX 77807-7819	BRYAN TX 77805-4694
FLORES KATHERINE LYNN SANCHEZ & DOMINGO SANCHEZ	FLORES NOEL SANCHEZ & DELGADINA MENDOZA BENITEZ	FORSYTH RUSSELL H & KINGA 5760 OAK TRL
6201 MAGNOLIA DR	213 QUAIL RUN	BRYAN TX 77807-7672
BRYAN TX 77807-7726	BUDA TX 78610-4987	511711171710017012
GALICIA ROBERT & YVONNE	GOMEZ AUGUSTINE	GOMEZ GLORIA
8454 MUMFORD RD	1440 DEER TRAIL CT	1021 SANDY OAKS DR
BRYAN TX 77807-2400	BRYAN TX 77807-8453	BRYAN TX 77807
GONZALEZ JAIME RAMIREZ & ELVA A	GUTIERREZ DANIEL & ENRIQUE	GUTIERREZ DANIEL ET AL
BARRON	7742 DEER CROSSING DR	7742 DEER CROSSING DR
2513 LAKEWOOD DR	BRYAN TX 77807-8112	BRYAN TX 77807
BRYAN TX 77807-5484		
GUTIERREZ ISIDRO	HEITZMAN THOMAS JAY & SANDRA L	HENTON RYDEL C
7742 DEER CROSSING DR	7773 DEER CROSSING DR	2180 PINE CIR
BRYAN TX 77807-8112	BRYAN TX 77807-8113	BRYAN TX 77807-5200
HERNANDEZ ENRIQUETA	HERNANDEZ JOSE & JUANITA	HERRERA EDUARDO
2199 DARWIN AVE	9390 MUMFORD RD	2255 WILLOW CIR
BRYAN TX 77803-2267	BRYAN TX 77807-2401	BRYAN TX 77807-5045
HERRERA JUVENTINO M & SONIA	HERRERA MARIA ALCALA	HERRERA MIGUEL & CELIA
7501 SANDY CREEK DR	18 VISTA LN	2252 WILLOW CIR
BRYAN TX 77807-8449	COLLEGE STATION TX 77845-3834	BRYAN TX 77807-5044
HOLLER-TEMPLETON PROPERTIES LLC	HOUSLEY ELIZABETH WHITE & GARY	HOWARD MARGARET A
7727 MALAC RD	ALLEN	548 COUNTY ROAD 339
SPRING TX 77389-3496	910 CREEKSIDE DR	MILANO TX 76556-2501

BRYAN TX 77807-8110

JEJ ACCOMMODATION LLC JIMENEZ ROBERTO CALDERON & **HUGHES JOEY J JR** LAURA F AVILA CORREA 5805 J C LONG DR 3200 KENT ST 7818 DEER CROSSING DR BRYAN TX 77807-5447 BRYAN TX 77802-2745 BRYAN TX 77807-8114 JOHNSON D'ANNE ROCHELLE BRITTEN JOHNSON JULIUS ROBERT **JOHNSON TIARRA & DARIAN** 4208 SERRANO CT **2280 ELM CIR** 7521 SANDY CREEK DR BRYAN TX 77802-6101 BRYAN TX 77807-5404 BRYAN TX 77807-8449 KING PARTY RENTALS LLC KIRTLEY MAGGIE LYNN KOSLOSKY EDWARD LEE SR & MARTHA 6029 MOUNT HOPE 10021 REED RD 8082 SANDY POINT RD BRYAN TX 77807-7643 ALEXANDER AR 72002-9540 BRYAN TX 77807-8190 **KRC HELENE** LAMPO BONNIE C TRUST SAM LAMPO KOSLOSKY PROPERTIES LLC TRUSTEE 8064 SANDY POINT RD 1420 DEER TRAIL CT 3305 FIDDLERS GRN BRYAN TX 77807-8190 BRYAN TX 77807-8453 BRYAN TX 77808-1424 **LEAL JOSE LUIS** LEVRA SHARLOTTE S LEWIS ERNEST A & SUE W PO BOX 6343 6215 DOGWOOD DR PO BOX 1191 BRYAN TX 77805-6343 BRYAN TX 77807-7819 BRYAN TX 77806-1191 LITTLEJOHN RORY E & TERRI D LUCAS RUSSELL B & SALLYE J LOPEZ JESUS LUCIO 7511 SANDY CREEK DR 2165 MAPLE DR 5383 RYE SCHOOL RD BRYAN TX 77807-8449 BRYAN TX 77807-5499 BRYAN TX 77807-5237 LUZA BARBARA SUE LUZA CHARLES J JR MAGALLANES JUAN M & ANNA BELEN **CRUZ** 7660 MUMFORD RD 3352 STAMPEDE DR 2278 WILLOW CIR BRYAN TX 77807-7650 BRYAN TX 77808-7579 BRYAN TX 77807-5044 MAGALLANES MARITZA MARKS MINNIE MARKWARDT WILLIAM H & ELIZABETH M 8540 MUMFORD RD 2026 KATHRYN DR 1000 SANDY COVE DR BRYAN TX 77807-7653 BRYAN TX 77807-1524 BRYAN TX 77807-8406 MARTINEZ RAFAEL VELASCO & ROSA E MARTINEZ REFUGIO MAURICIO BENJAMIN & MARIA LUCIA **VALADEZ** 3681 MEADOW LARK CIR 6236 BENCHLEY DR

9252 MUMFORD RD BRYAN TX 77807-7654

MCCARTHY JOHN E REV

6225 E HIGHWAY 290

AUSTIN TX 78723-1025

BRYAN TX 77808-8559

BRYAN TX 77802-6101

MCDOUGAL FAMILY 2003 LTD 4207 SERRANO CT

MEDINA MARIO RIVERA 9440 MUMFORD RD BRYAN TX 77807-2403

BRYAN TX 77807-6412

MICHALAK CHESTER H & CYNDIE A MIRANDA RAUL & MARIA A MISKIMEN MAXINE MYRTHE 5670 PIPER LN 6089 MIMOSA CIR 8544 MUMFORD RD COLLEGE STATION TX 77845-8079 BRYAN TX 77807-8575 BRYAN TX 77807-7653 MOORE RICHARD HENRY JR MORALES DOLORES GINA PAEZ MARIO E & IRMA ARELLNO 2890 ENLOE DR 5685 MAGNOLIA DR 3060 W OSR BRYAN TX 77807-5504 BRYAN TX 77807-7665 BRYAN TX 77807-5024 PECINA-ARVIZU EDUARDO & SONIA PFROMM ROBIN M & DENNIS S POTTER LUIN A SR LIVING TRUST **PECINA** 810 SANDY OAKS DR 1430 DEER TRAIL CT 1400 N SIMS AVE BRYAN TX 77807-8412 BRYAN TX 77807-8453 BRYAN TX 77803-2744 RANGEL-MARTINEZ LUIS A & CARMINA RANGEL JESUS MONTANEZ & ESTELA O PRUETT KELLY **GOMEZ-RANGEL MONTANEZ** 5824 J C LONG DR 7401 SANDY CREEK DR 5669 BENCHLEY DR BRYAN TX 77807-5446 BRYAN TX 77807-8447 BRYAN TX 77807-6421 RENCHER BEVERLY ANN (LIFE ESTATE) RENFROE MARITZA CARVAJAL RICHARDS WILLIAM D CHRISTINA L & JIMMY D 1120 SANDY COVE DR 2191 SYCAMORE CIR 7658 MUMFORD RD BRYAN TX 77807-8408 BRYAN TX 77807-5293 BRYAN TX 77807-7650 RICO ROBERTO E & PATRICIA RODRIGUEZ CRISTO ANGEL DE DIOS **ROBINSON JEFF & KAREN CONTRERAS** 5765 REDBUD DR 5757 OAK TRL 5825 BENCHLEY DR BRYAN TX 77807 BRYAN TX 77807-7677 BRYAN TX 77807-6419 **RODRIGUEZ DIANE** RODRIGUEZ EZEQUIEL **RODRIGUEZ JUAN & MARIA A REYNA** 1601 N SIMS AVE 5825 BENCHLEY DR 1454 DEER TRAIL CT BRYAN TX 77803-1763 BRYAN TX 77807-6419 BRYAN TX 77807-8453 RODRIGUEZ JUANA RODRIGUEZ & **ROMERO JUAN & STEPHANIE** SALAS FIDEL CRUZ **GUSTAVO ARREOLA SANCHEZ** 2254 PLEASANT HILL RD 6052 MIMOSA CIR 4413 N TEXAS AVE TRLR 45 BRYAN TX 77807-8154 BRYAN TX 77807-8576 BRYAN TX 77803-0255 SALINAS JOE & CARMEN VICTORIA SALSGIVER DAVID & MARTHA & SANCHEZ ROSALINA **VASQUEZ** SHANNON PRESCOTT 5741 MAGNOLIA DR 2182 REDWOOD CIR 8115 SANDY POINT RD BRYAN TX 77807-7635 BRYAN TX 77807-8195 BRYAN TX 77807-5222 SANCHEZ SALVADOR SANDOVAL ISAEL SAUSEDA ROBERTO LEE 2312 YOSEMITE DR 5650 REDBUD DR 9821 ARNOLD LN

BRYAN TX 77803-0748

BRYAN TX 77807-5206

BRYAN TX 77808-9702

SCANLIN JEFFERY T 8303 SANDY POINT RD BRYAN TX 77807-8197 SCARPINATO FAMILY LIMITED PARTNERSHIP 1503 BENNETT ST BRYAN TX 77802-1228 SCHEURING DOUGLAS C & CHANTEL 311 TEE DR BRYAN TX 77801-3024

SCHOPPE MEGAN 8988 MUMFORD RD BRYAN TX 77807-2402 SHANNON LESTER M & MARY E REVOCABLE TRUST 5599 RYE SCHOOL RD BRYAN TX 77807-5235

SIKORSKI WILLIAM & SHARON 5575 RYE SCHOOL RD BRYAN TX 77807-5235

THE TERRELL & PENNY MILLER REVOCABLE TRUST 1511 TEXAS AVE S STE 204 COLLEGE STATION TX 77840-3303 THREADGILL JARED MICHAEL 1414 DEER TRAIL CT BRYAN TX 77807-8453 TORRES-DELGADO JORGE & ROSALINDA SANCHEZ GONZALEZ 508 KUBIN ST BRYAN TX 77803-3060

UNDINE TEXAS LLC 17681 TELGE RD CYPRESS TX 77429-7080 UNITED IN CHRIST CHURCH OF MUMFORD 500 W 24TH ST BRYAN TX 77803-2402 VEGA ROBERTO M & OLGA 1208 CREEKSIDE DR BRYAN TX 77807-8469

WEBB MARK A & LESLIE J 5489 RYE SCHOOL RD BRYAN TX 77807-5236 ZEMANEK CHARLES R & JOYCE A 7545 MUMFORD RD BRYAN TX 77807-7662

ZEMANEK ELIZABETH 1909 W 28TH ST BRYAN TX 77803-2206

ZIMMERLE RODD 6340 CYPRESS CIR BRYAN TX 77807-7816 ZUCKERT MICHELLE DIANE & PAUL HARDING 6387 DOGWOOD DR BRYAN TX 77807-7821

# ATTACHMENT A-1 Outfall Photos



Facility Aerial – Power Plant



**Outfall 003 Sample Point** 

# **Attachment SPIF-1**

# 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 Am	nendmentNew
County:	_ Segment Number:
Admin Complete Date:	_
Agency Receiving SPIF:	
Texas Historical Commission	U.S. Fish and Wildlife
Texas Parks and Wildlife Department	U.S. Army Corps of Engineers
This form applies to TPDES permit application	us only. (Instructions, Page 53)
	EQ will mail a copy to each agency as required by not completely addressed or further information formation before issuing the permit. Address
Do not refer to your response to any item in the attachment for this form separately from the Acapplication will not be declared administratively completed in its entirety including all attachmentary be directed to the Water Quality Division's email at	

# **Attachment SPIF-1**

3. Provide the name, address, phone and fax number of an individual that can be contacted to answer specific questions about the property.

Prefix (Mr., Ms., Miss): Mr.

First and Last Name: <u>Wes Williams</u> Credential (P.E, P.G., Ph.D., etc.): <u>N/A</u>

Title: Executive Director - QSE & Power Generation

Mailing Address: <u>City of Bryan (dba Bryan Texas Utilities)</u>, P.O. Box 1000

City, State, Zip Code: Bryan, TX 77805

Phone No.: <u>979-821-5944</u> Ext.: <u>N/A</u> Fax No.: <u>N/a</u> E-mail Address: weswilliams@btutilities.com

4. List the county in which the facility is located: <u>Brazos</u>

5. If the property is publicly owned and the owner is different than the permittee/applicant, please list the owner of the property.

N/A

6. 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>Via Outfalls 001 and 002 to a drainage ditch, thence to Elm Creek, thence to Peach Creek, thence to Campbells Creek, thence to the Little Brazos River, thence to the Brazos River Below Whitney Lake; and via Outfall 003 to Lake Bryan, thence through an inground pipe, thence to an unnamed tributary, thence to Thompson Creek, thence to Brazos River Above Navasota River in Segment No. 1242 of the Brazos River Basin.</u>

7. 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).

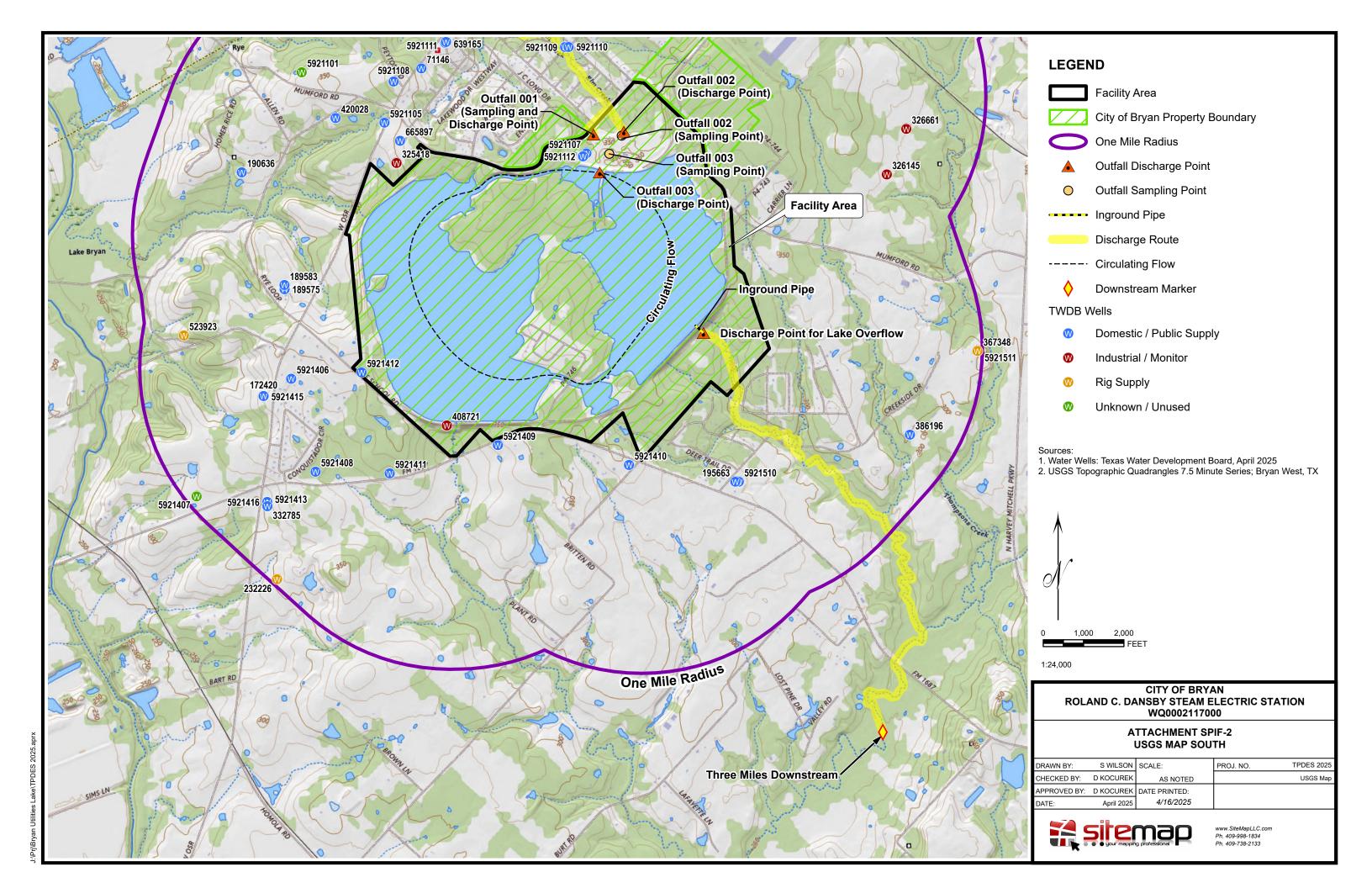
Attachment SPIF-2 USGS Map

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

N/A. Facility is less than 50 years old.

# **Attachment SPIF-1**

9.	Does your project involve any of the following? Check all that apply.
	N/A  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
10	List proposed construction impact (surface acres to be impacted, depth of excavation, sealing of caves, or other karst features):  N/A
11	<u> </u>
11	Describe existing disturbances, vegetation, and land use:  The facility is an existing electricity generation station.
AN	IE FOLLOWING ITEMS APPLY ONLY TO APPLICATIONS FOR NEW TPDES PERMITS AND MAJOR MENDMENTS TO TPDES PERMITS
1.	List construction dates of all buildings and structures on the property:  The facility began operating in 1978.
2.	Provide a brief history of the property, and name of the architect/builder, if known.
	N/A



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## TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

# INDUSTRIAL WASTEWATER PERMIT APPLICATION TECHNICAL REPORT 1.0

The following information **is required** for all applications for a TLAP or an individual TPDES discharge permit.

For **additional information** or clarification on the requested information, please refer to the <u>Instructions for Completing the Industrial Wastewater Permit Application</u><sup>1</sup> available on the TCEQ website. Please contact the Industrial Permits Team at 512-239-4671 with any questions about this form.

If more than one outfall is included in the application, provide applicable information for each individual outfall. **If an item does not apply to the facility, enter N/A** to indicate that the item has been considered. Include separate reports or additional sheets as **clearly cross-referenced attachments** and provide the attachment number in the space provided for the item the attachment addresses.

**NOTE:** This application is for an industrial wastewater permit only. Additional authorizations from the TCEQ Waste Permits Division or the TCEQ Air Permits Division may be needed.

# Item 1. Facility/Site Information (Instructions, Page 39)

a. Describe the general nature of the business and type(s) of industrial and commercial activities. Include all applicable SIC codes (up to 4).

The Roland C. Dansby Electric Station has one natural gas fired power plant (Dansby Unit 1 – 110 megawatts, MW) in which a boiler produces steam to drive the turbine generator to produce electricity. The facility also has two LM6000 Simple Cycle Combustion Turbine driven generators for power production (Dansby Unit 2 – 50 MW, Dansby Unit 3 – 50 MW).

Applicable SIC code is 4911 (Electric Services).

b. Describe all wastewater-generating processes at the facility.

The makeup water for the boiler is supplied by the plant groundwater well, as processed through demineralizing water trailers. Carbohydrazide and phosphate are used to control water pH. Boiler blowdown controls solids concentration in the boiler. Water from the facility's Lake Bryan (formerly Bryan Utilities Lake) is used for non-contact cooling in the turbine condenser. A cooling tower is used for non-contact bearing water cooling. The Dansby Unit 2 LM6000 Simple Cycle Combustion Turbine has a single non-contact cooling tower for chiller cooling and lube oil systems. The Dansby Unit 3 LM6000 Simple Cycle Combustion Turbine has 2 non-contact cooling towers, one for chiller cooling and another for lube oil systems. Dansby Units 2 and 3 are both peaking units that run intermittently and as such, their cooling tower blowdown is likewise intermittent.

https://www.tceq.texas.gov/permitting/wastewater/industrial/TPDES\_industrial\_wastewater\_steps.html

c. Provide a list of raw materials, major intermediates, and final products handled at the facility.

#### **Materials List**

Raw Materials	Intermediate Products	Final Products	
Natural gas	N/A	Electricity	

Attachment: N/A

- d. Attach a facility map (drawn to scale) with the following information:
  - Production areas, maintenance areas, materials-handling areas, waste-disposal areas, and water intake structures.
  - The location of each unit of the WWTP including the location of wastewater collection sumps, impoundments, outfalls, and sampling points, if significantly different from outfall locations.

	Attachment: T-1 Facility Maps
e.	Is this a new permit application for an existing facility? $\hfill \square  \text{Yes}  \boxtimes  \text{No}$
	If <b>yes</b> , provide background discussion: <u>N/A</u>
f.	Is/will the treatment facility/disposal site be located above the 100-year frequency flood level.
	⊠ Yes □ No
	List source(s) used to determine 100-year frequency flood plain: <u>Brazos County Engineer's Map</u>
	If <b>no</b> , provide the elevation of the 100-year frequency flood plain and describe what protective measures are used/proposed to prevent flooding (including tail water and rainfall run-on controls) of the treatment facility and disposal area: $\underline{\text{N/A}}$
	Attachment: N/A
g.	For <b>new</b> or <b>major amendment</b> permit applications, will any construction operations result in a discharge of fill material into a water in the state?
	$\square$ Yes $\boxtimes$ No $\square$ N/A (renewal only)
h.	If <b>yes</b> to Item 1.g, has the applicant applied for a USACE CWA Chapter 404 Dredge and Fill permit?
	□ Yes □ No
	If <b>yes</b> , provide the permit number: $N/A$
	If ${f no}$ , provide an approximate date of application submittal to the USACE: ${f N/A}$

# Item 2. Treatment System (Instructions, Page 40)

a. List any physical, chemical, or biological treatment process(es) used/proposed to treat wastewater at this facility. Include a description of each treatment process, starting with initial treatment and finishing with the outfall/point of disposal.

The facility has three oil/water separators. There is a 550-gallon unit on the north end of Dansby Unit 2 and a 650-gallon unit on the north end of Dansby Unit 3; both discharge treated water to the Outfall 001 system. The third unit is upstream of Outfall 002 and northeast of Dansby Unit 1.

b. Attach a flow schematic **with a water balance** showing all sources of water and wastewater flow into the facility, wastewater flow into and from each treatment unit, and wastewater flow to each outfall/point of disposal.

Attachment: T-2 BTU Water Flow Diagram

# Item 3. Impoundments (Instructions, Page 40)

Does the facility use or plan to use any wastewater impoundments (e.g., lagoons or ponds?)

□ Yes ⊠ No

If **no**, proceed to Item 4. If **yes**, complete **Item 3.a** for **existing** impoundments and **Items 3.a** - **3.e** for **new or proposed** impoundments. **NOTE:** See instructions, Pages 40-42, for additional information on the attachments required by Items 3.a - 3.e.

a. Complete the table with the following information for each existing, new, or proposed impoundment. Attach additional copies of the Impoundment Information table, if needed.

**Use Designation:** Indicate the use designation for each impoundment as Treatment (**T**), Disposal (**D**), Containment (**C**), or Evaporation (**E**).

Associated Outfall Number: Provide an outfall number if a discharge occurs or will occur.

**Liner Type:** Indicate the liner type as Compacted clay liner (C), In-situ clay liner (I), Synthetic/plastic/rubber liner (S), or Alternate liner (A). **NOTE:** See instructions for further detail on liner specifications. If an alternate liner (A) is selected, include an attachment that provides a description of the alternate liner and any additional technical information necessary for an evaluation.

**Leak Detection System:** If any leak detection systems are in place/planned, enter **Y** for yes. Otherwise, enter **N** for no.

**Groundwater Monitoring Wells and Data:** If groundwater monitoring wells are in place/planned, enter **Y** for yes. Otherwise, enter **N** for no. Attach any existing groundwater monitoring data.

**Dimensions:** Provide the dimensions, freeboard, surface area, storage capacity of the impoundments, and the maximum depth (not including freeboard). For impoundments with irregular shapes, submit surface area instead of length and width.

**Compliance with 40 CFR Part 257, Subpart D:** If the impoundment is required to be in compliance with 40 CFR Part 257, Subpart D, enter **Y** for yes. Otherwise, enter **N** for no.

**Date of Construction:** Enter the date construction of the impoundment commenced (mm/dd/yy).

#### **Impoundment Information**

Parameter	Pond #	Pond #	Pond #	Pond #
Use Designation: (T) (D) (C) or (E)				
Associated Outfall Number				
Liner Type (C) (I) (S) or (A)				
Alt. Liner Attachment Reference				

WQ0002117000

Parameter	Pond #	Pond #	Pond #	Pond #
Leak Detection System, Y/N				
Groundwater Monitoring Wells, Y/N				
Groundwater Monitoring Data				
Attachment				
Pond Bottom Located Above The				
Seasonal High-Water Table, Y/N				
Length (ft)				
Width (ft)				
Max Depth From Water Surface (ft),				
Not Including Freeboard				
Freeboard (ft)				
Surface Area (acres)				
Storage Capacity (gallons)				
40 CFR Part 257, Subpart D, Y/N				
Date of Construction				

Attachment: N/A

The following information (**Items 3.b – 3.e**) is required only for **new or proposed** impoundments.

b. For new or proposed impoundments, attach any available information on the following items. If attached, check **yes** in the appropriate box. Otherwise, check **no** or **not yet designed**.

1.	Line	er data				
		Yes		No		Not yet designed
2.	Leal	k detecti	on sy	stem or	grou	ndwater monitoring data
		Yes		No		Not yet designed
3.	Gro	undwate	r imj	pacts		
		Yes		No		Not yet designed
				-		he bottom of the pond is not above the seasonal high- vater-bearing zone.

Attachment: N/A

**For TLAP applications: Items 3.c - 3.e** are **not required**, continue to Item 4.

c. Attach a USGS map or a color copy of original quality and scale which accurately locates and identifies all known water supply wells and monitor wells within ½-mile of the impoundments.

Attachment: N/A

d. Attach copies of State Water Well Reports (e.g., driller's logs, completion data, etc.), and data on depths to groundwater for all known water supply wells including a description of how the depths to groundwater were obtained.

Attachment: N/A

e. Attach information pertaining to the groundwater, soils, geology, pond liner, etc. used to assess the potential for migration of wastes from the impoundments or the potential for contamination of groundwater or surface water.

Attachment: N/A

# Item 4. Outfall/Disposal Method Information (Instructions, Page 42)

Complete the following tables to describe the location and wastewater discharge or disposal operations for each outfall for discharge, and for each point of disposal for TLAP operations.

If there are more outfalls/points of disposal at the facility than the spaces provided, copies of pages 6 and/0r numbered accordingly (i.e., page 6a, 6b, etc.) may be used to provide information on the additional outfalls.

**For TLAP applications:** Indicate the disposal method and each individual irrigation area **I**, evaporation pond **E**, or subsurface drainage system **S** by providing the appropriate letter designation for the disposal method followed by a numerical designation for each disposal area in the space provided for **Outfall** number (e.g. **E1** for evaporation pond 1, **I2** for irrigation area No. 2, etc.).

#### **Outfall Longitude and Latitude**

Outfall No.	Latitude (Decimal Degrees)	Longitude (Decimal Degrees)
001 (sampling and discharge point)	30.722845	-96.461891
002 (sampling point)	30.722715	-96.459674
002 (discharge point)	30.722990	-96.459489
003 (sampling point)	30.721505	-96.460700
00 (discharge point)	30.720255	-96.461513

#### **Outfall Location Description**

Outfall No.	Location Description
001	Where the storm sewer system discharges to the drainage ditch
002	Where the storm sewer system discharges to the drainage ditch
003	Where the cooling water discharges to the cooling lake (formerly Bryan Utilities Lake)

#### Description of Sampling Point(s) (if different from Outfall location)

Outfall No.	Description of sampling point
001	Same as discharge point
002	Manhole inside property fence, prior to discharge to underground culvert
003	Sample tap on Unit 1 Condenser

#### Outfall Flow Information - Permitted and Proposed

Outfall No.	Permitted Daily Avg Flow (MGD)	Permitted Daily Max Flow (MGD)	Proposed Daily Avg Flow (MGD)	Proposed Daily Max Flow (MGD)	Anticipated Discharge Date (mm/dd/yy)
001	Intermittent and flow variable	Intermittent and flow variable	Intermittent and flow variable	Intermittent and flow variable	N/A
002	Intermittent and flow variable	Intermittent and flow variable	Intermittent and flow variable	Intermittent and flow variable	N/A
003	78	156	78	156	N/A

#### **Outfall Discharge - Method and Measurement**

Outfall No.	Pumped Discharge? Y/N	Gravity Discharge? Y/N	Type of Flow Measurement Device Used
001	N	Y	Estimate
002	N	Y	Estimate
003	Y	N	Pump capacity calculation

#### **Outfall Discharge - Flow Characteristics**

Outfall No.	Intermittent Discharge? Y/N		Seasonal Discharge? Y/N	Discharge Duration (hrs/day)	Discharge Duration (days/mo)	Discharge Duration (mo/yr)
001	Y	N	N	Variable	Variable	Variable
002	Y	N	N	Variable	Variable	Variable
003	Y	N	N	Variable	Variable	Variable

#### **Outfall Wastestream Contributions**

#### Outfall No. 001, 002, 003

Contributing Wastestream	Volume (MGD)	Percent (%) of Total Flow
See Attachment T-3 Wastewater Flows by		
Outfall.		

Attachment: N/A

# Item 5. Blowdown and Once-Through Cooling Water Discharges (Instructions, Page 43)

a	inaicate ii	tne	тасшту	currentiy	or	proposes	to:
---	-------------	-----	--------	-----------	----	----------	-----

$\boxtimes$	Yes $\square$	No	Use cooling towers that discharge blowdown or other wastestreams
$\boxtimes$	Yes $\square$	No	Use boilers that discharge blowdown or other wastestreams
$\boxtimes$	Yes $\square$	No	Discharge once-through cooling water

**NOTE:** If the facility uses or plans to use cooling towers or once-through cooling water, Item 12 **is required**.

b. If **yes** to any of the above, attach an SDS with the following information for each chemical additive.

- Manufacturers Product Identification Number
- Product use (e.g., biocide, fungicide, corrosion inhibitor, etc.)
- Chemical composition including CASRN for each ingredient
- Classify product as non-persistent, persistent, or bioaccumulative
- Product or active ingredient half-life
- Frequency of product use (e.g., 2 hours/day once every two weeks)
- Product toxicity data specific to fish and aquatic invertebrate organisms
- Concentration of whole product or active ingredient, as appropriate, in wastestream.

In addition to each SDS, attach a summary of the above information for each specific wastestream and the associated chemical additives. Specify which outfalls are affected.

Attachment: N/A. Not related to amendment request.

c. Cooling Towers and Boilers

If the facility currently or proposes to use cooling towers or boilers that discharge blowdown or other wastestreams to the outfall(s), complete the following table.

#### **Cooling Towers and Boilers**

Type of Unit	Number of Units	Daily Avg Blowdown (gallons/day)	Daily Max Blowdown (gallons/day)			
Cooling Towers						
Boilers						
N/A - Not related to amendment request.						

# Item 6. Stormwater Management (Instructions, Page 44)

Will any ex	xisting/	/proposed	outfalls	discharge	stormwater	' associate	ed with i	ndustrial	activities,
as defined	l at 40	CFR § 122	2.26(b)(14)	4), commii	ngled with a	ny other v	wastestr	eam?	

$\boxtimes$	Yes	No

If **yes**, briefly describe the industrial processes and activities that occur outdoors or in a manner which may result in exposure of the activities or materials to stormwater: N/A - not related to amendment request.

# Item 7. Domestic Sewage, Sewage Sludge, and Septage Management and Disposal (Instructions, Page 44)

*Domestic Sewage* - Waste and wastewater from humans or household operations that is discharged to a wastewater collection system or otherwise enters a treatment works.

	,
a.	Check the box next to the appropriate method of domestic sewage and domestic sewage sludge treatment or disposal. Complete Worksheet 5.0 or Item 7.b if directed to do so.
	Domestic sewage is routed (i.e., connected to or transported to) to a WWTP permitted to receive domestic sewage for treatment, disposal, or both. Complete Item 7.b.
	☐ Domestic sewage disposed of by an on-site septic tank and drainfield system. Complete Item 7.b.
	☐ Domestic and industrial treatment sludge ARE commingled prior to use or disposal.

W	O	O	N	N	2	1	1	7	N	n	n
	, ,	w	v	u	_	1	1	•	<b>₩</b>	v	w

	WQ00	0211700					
	☐ Industrial wastewater and domestic sewage are treated separately, and the respective sludge IS NOT commingled prior to sludge use or disposal. Complete Worksheet 5.0.						
	☐ Facility is a POTW. Complete Worksheet 5.0.						
	□ Domestic sewage is not generated on-site.						
	☑ Other (e.g., portable toilets), specify and Complete Item 7.b: <u>Domestic (sanitary wastewater is treated in an on-site aerobic treatment and disposal system.</u>	<u>')</u>					
b.	. Provide the name and TCEQ, NPDES, or TPDES Permit No. of the waste-disposal facility which receives the domestic sewage/septage. If hauled by motorized vehicle, provide the name and TCEQ Registration No. of the hauler.						
Do	Domestic Sewage Plant/Hauler Name						
_	Plant/Hauler Name Permit/Registration No.						
N	N/A - not related to amendment request.						
It	Item 8. Improvements or Compliance/Enforcement Requirements (Instructions, Page 45)						
a.	. Is the permittee currently required to meet any implementation schedule for compliance of enforcement?						
	□ Yes ⊠ No						
b.	b. Has the permittee completed or planned for any improvements or construction p $\square$ Yes $\boxtimes$ No	b. Has the permittee completed or planned for any improvements or construction projects? $\square$ Yes $\square$ No					
c.	c. If $yes$ to either 8.a $or$ 8.b, provide a brief summary of the requirements and a sta update: $N/A$	tus					
It	Item 9. Toxicity Testing (Instructions, Page 45)						
	Have any biological tests for acute or chronic toxicity been made on any of the disch on a receiving water in relation to the discharge within the last three years?	arges or					
	⊠ Yes □ No						
	If <b>yes</b> , identify the tests and describe their purposes: <u>Routine biomonitoring is conducted for Outfalls 001 and 003 as specified in the current TPDES permit.</u>						
	Additionally, attach a copy of all tests performed which <b>have not</b> been submitted to or EPA. <b>Attachment</b> : $N/A$	the TCEQ					
It	Item 10. Off-Site/Third Party Wastes (Instructions, Page	<b>45</b> )					
a.	disposal on-site via land application, or discharge via a permitted outfall?	facility,					
	□ Yes ⊠ No						
	If <b>yes</b> , provide responses to Items 10.b through 10.d below.						
	If <b>no</b> , proceed to Item 11.						

- b. Attach the following information to the application:
  - List of wastes received (including volumes, characterization, and capability with on-site wastes).
  - Identify the sources of wastes received (including the legal name and addresses of the generators).
  - Description of the relationship of waste source(s) with the facility's activities.

Attachment: N/A

c.	Is or will wastewater from another TCEQ, NPDES, or TPDES permitted facility commingled with this facility's wastewater after final treatment and prior to discharge via the final outfall/point of disposal?
	□ Yes □ No
	If <b>yes</b> , provide the name, address, and TCEQ, NPDES, or TPDES permit number of the contributing facility and a copy of any agreements or contracts relating to this activity.
	Attachment: N/A
d.	Is this facility a POTW that accepts/will accept process wastewater from any SIU and has/is required to have an approved pretreatment program under the NPDES/TPDES program?
	□ Yes □ No

If yes, Worksheet 6.0 of this application is required.

# Item 11. Radioactive Materials (Instructions, Page 46)

•			,	,	, <u>.</u>			,	
□ Yes	$\boxtimes$	No							
TC 41	C _ 11	4.1.1. 4		14		1	- C +1	- CC1 + C	

a. Are/will radioactive materials be mined, used, stored, or processed at this facility?

If **yes**, use the following table to provide the results of one analysis of the effluent for all radioactive materials that may be present. Provide results in pCi/L.

## Radioactive Materials Mined, Used, Stored, or Processed

Radioactive Material Name	Concentration (pCi/L)
N/A	

b.	Does the applicant or anyone at the facility have any knowledge or reason to believe that
	radioactive materials may be present in the discharge, including naturally occurring
	radioactive materials in the source waters or on the facility property?

□ Yes ⊠ No		Yes	$\boxtimes$	No
------------	--	-----	-------------	----

If **yes**, use the following table to provide the results of one analysis of the effluent for all radioactive materials that may be present. Provide results in pCi/L. Do not include information provided in response to Item 11.a.

#### Radioactive Materials Present in the Discharge

Radioactive Material Name	Concentration (pCi/L)		
N/A			

# Item 12. Cooling Water (Instructions, Page 46)

a. Does the facility use or propose to use water for cooling purposes?													
		⊠ Yes											
		□ No	No										
□ Decommissioned: <u>N/A</u>													
		□ To Be Decommissioned: <u>N/A</u>											
	If <b>y</b>	If <b>yes</b> , complete Items 12.b thru 12.f. If <b>no</b> , stop here.											
	If <b>c</b>	If <b>decommissioned</b> , provide the date operation ceased and stop here.											
	If to <b>be decommissioned</b> , provide the date operation is anticipated to cease and stop here.												
b.	Cooling water is/will be obtained from a groundwater source (e.g., on-site well).												
	⊠ Yes □ No												
	If <b>yes</b> , stop here. If <b>no</b> , continue.												
c.	Cooling Water Supplier												
	1. Provide the name of the owner(s) and operator(s) for the CWIS that supplies or will												
	supply water for cooling purposes to the facility.												
Co	olin	g Water In	ake	Struct	ture(s)	Owner	(s) an	ıd Operat	tor(s)				
C	WIS	ID											
О	wn	er											
O	per	ator											
2. Cooling water is/will be obtained from a Public Water Supplier (PWS)													
	□ No □ Yes; PWS No.: N/A												
		If <b>no</b> , con	tinu	ıe. If <b>y</b>		•		<del></del>	stratio	n No. and stop he	ere	<b>.</b> .	
	3	Cooling w											
3. Cooling water is/will be obtained from a reclaimed water source?  ☐ No ☐ Yes; Auth No.: N/A													
	If <b>no</b> , continue. If <b>yes</b> , provide the Reuse Authorization No. and stop here.												
	4. Cooling water is/will be obtained from an Independent Supplier												
	□ No □ Yes; AIF: N/A  If no proceed to Item 12 d. If was provide the actual intake flow of the Independent												
	If <b>no</b> , proceed to Item 12.d. If <b>yes</b> , provide the actual intake flow of the Independent Supplier's CWIS that is/will be used to provide water for cooling purposes and proceed.												
d.	316(b) General Criteria												
1. The CWIS(s) used to provide water for cooling purposes to the facility has or v										has or will have a			
	cumulative design intake flow of 2 MGD or greater.												
			Ye	es		No							

2. At least 25% of the total water withdrawn by the CWIS(s) is/will be us exclusively for cooling purposes on an annual average basis.	ed at the facility
□ Yes □ No	
3. The CWIS(s) withdraw(s)/propose(s) to withdraw water for cooling pu surface waters that meet the definition of Waters of the United States 122.2.	
□ Yes □ No. Explanation: <u>N/A</u>	
If <b>no</b> , provide an explanation of how the waterbody does not meet the Waters of the United States in 40 CFR § 122.2.	e definition of
If <b>yes</b> to all three questions in Item 12.d, the facility <b>meets</b> the minimum crt to the full requirements of Section 316(b) of the CWA. Proceed to <b>Item 12.f</b> .	iteria to be subject
If <b>no</b> to any of the questions in Item 12.d, the facility <b>does not meet</b> the min be subject to the full requirements of Section 316(b) of the CWA; however, a required based upon BPJ. Proceed to <b>Item 12.e</b> .	
<ul> <li>e. The facility does not meet the minimum requirements to be subject to the of Section 316(b) and uses/proposes to use cooling towers.</li> <li>Yes</li> <li>No</li> </ul>	ne fill requirements
	2 2 2 1 1 2 - +-
If <b>yes</b> , stop here. If <b>no</b> , complete Worksheet 11.0, Items 1.a, 1.b.1-3 and 6 allow for a determination based upon BPJ.	), 2.b.1, and 3.a to
f. Oil and Gas Exploration and Production	
1. The facility is subject to requirements at 40 CFR Part 435, Subparts A	or D.
□ Yes □ No	
If <b>yes</b> , continue. If <b>no</b> , skip to Item 12.g.	
2. The facility is an existing facility as defined at 40 CFR § 125.92(k) or existing facility as defined at 40 CFR § 125.92(u).	a new unit at an
□ Yes □ No	
If <b>yes</b> , complete Worksheet 11.0, Items 1.a, 1.b.1-3 and 6, 2.b.1, and 3 determination based upon BPJ. If <b>no</b> , skip to Item 12.g.3.	a to allow for a
g. Compliance Phase and Track Selection	
1. Phase I - New facility subject to 40 CFR Part 125, Subpart I	
□ Yes □ No	
If <b>yes</b> , check the box next to the compliance track selection, attach the information, and complete Worksheet 11.0, Items 2 and 3, and Worksheet 11.0, Items 2 and 3	
☐ Track I - AIF greater than 2 MGD, but less than 10 MGD	
• Attach information required by 40 CFR §§ 125.86(b)(2)-(4).	
☐ Track I - AIF greater than 10 MGD	
<ul> <li>Attach information required by 40 CFR § 125.86(b).</li> </ul>	

	WQ000211700 ☐ Track II
	_
	• Attach information required by 40 CFR § 125.86(c).
	Attachment: N/A
2.	Phase II – Existing facility subject to 40 CFR Part 125, Subpart J
	□ Yes □ No
	If <b>yes</b> , complete Worksheets 11.0 through 11.3, as applicable.
3.	Phase III - New facility subject to 40 CFR Part 125, Subpart N
	□ Yes □ No
	If <b>yes</b> , check the box next to the compliance track selection and provide the requested information.
	□ Track I – Fixed facility
	• Attach information required by 40 CFR § 125.136(b) and complete Worksheet 11.0, Items 2 and 3, and Worksheet 11.2.
	□ Track I – Not a fixed facility
	• Attach information required by 40 CFR § 125.136(b) and complete Worksheet 11.0, Item 2 (except CWIS latitude/longitude under Item 2.a).
	□ Track II - Fixed facility
	• Attach information required by 40 CFR § 125.136(c) and complete Worksheet 11.0, Items 2 and 3.

Attachment: N/A

## Item 13. Permit Change Requests (Instructions, Page 48)

This item is only applicable to existing permitted facilities.

a.	Is the facility requesting a <b>major amendment</b> of an existing permit?
	⊠ Yes □ No
	If <b>yes</b> , list each request individually and provide the following information: 1) detailed information regarding the scope of each request and 2) a justification for each request. Attach any supplemental information or additional data to support each request.
	BTU requests removal of the daily average and daily maximum concentration limits for aluminum from Outfall 003 based on the cooling water intake exemption at 30 TAC 307.8(d). BTU conducted the necessary steps for the exemption that are outlined in the TCEQ's Procedures to Implement the Texas Surface Water Quality Standards (RG-194, June 2010). A report of BTU's study was prepared (see Attachment T-4 Once-through Cooling Water Exemption for Aluminum). The report was reviewed by TCEQ staff (Peter Schaefer, Michael Pfeil) on March 26, 2025 and they agreed that the evaluation was sufficient to support removal of the aluminum limits.
h	Is the facility requesting any <b>minor amendments</b> to the permit?
υ.	☐ Yes ☑ No
	If <b>yes</b> , list and describe each change individually.
	N/A
c.	Is the facility requesting any <b>minor modifications</b> to the permit?
	☐ Yes ☒ No
	If <b>yes</b> , list and describe each change individually.
	<u>N/A</u>

# INDUSTRIAL WASTEWATER PERMIT APPLICATION WORKSHEET 1.0: EPA CATEGORICAL EFFLUENT GUIDELINES

This worksheet **is required** for all applications for TPDES permits for discharges of wastewaters subject to EPA categorical effluent limitation guidelines (ELGs).

### Item 1. Categorical Industries (Instructions, Page 53)

Is this facility subject to any 40 CFR categorical ELGs outlined on page 53 of the instruction	ns?
--	-----

⊠ Yes □ No

If **no**, this worksheet is not required. If **yes**, provide the appropriate information below.

#### 40 CFR Effluent Guideline

Industry	40 CFR Part
Steam Electric Power Generating	423

### Item 2. Production/Process Data (Instructions, Page 54)

**NOTE:** For all TPDES permit applications requesting individual permit coverage for discharges of oil and gas exploration and production wastewater (discharges into or adjacent to water in the state, falling under the Oil and Gas Extraction Effluent Guidelines – 40 CFR Part 435), see Worksheet 12.0, Item 2 instead.

#### a. Production Data

Provide appropriate data for effluent guidelines with production-based effluent limitations.

#### **Production Data**

Subcategory Actual Quantity/Day		Design Quantity/Day	Units	
N/A				

#### b. Organic Chemicals, Plastics, and Synthetic Fibers Manufacturing Data (40 CFR Part 414)

Provide each applicable subpart and the percent of total production. Provide data for metal-bearing and cyanide-bearing wastestreams, as required by 40 CFR Part 414, Appendices A and B.

#### **Percentage of Total Production**

Subcategory Percent of Tot		Appendix A and B -	Appendix A -	
Production		Metals	Cyanide	
N/A				

#### c. Refineries (40 CFR Part 419)

Provide the applicable subcategory and a brief justification.

	N/A		
ш			

# Item 3. Process/Non-Process Wastewater Flows (Instructions, Page 54)

Provide a breakdown of wastewater flow(s) generated by the facility, including both process and non-process wastewater flow(s). Specify which wastewater flows are to be authorized for discharge under this permit and the disposal practices for wastewater flows, excluding domestic, which are not to be authorized for discharge under this permit.

See Attachment T-3 Wastewater Flows by Outfall.

### Item 4. New Source Determination (Instructions, Page 54)

Provide a list of all wastewater-generating processes subject to EPA categorical ELGs, identify the appropriate guideline Part and Subpart, and provide the date the process/construction commenced.

#### **Wastewater Generating Processes Subject to Effluent Guidelines**

Process	EPA Guideline Part	EPA Guideline Subpart	Date Process/ Construction Commenced
Cooling tower blowdown	423	N/A	1978
Low volume wastes	423	N/A	1978
Once through cooling water	423	N/A	1978

# INDUSTRIAL WASTEWATER PERMIT APPLICATION WORKSHEET 4.0: RECEIVING WATERS

This worksheet **is required** for all TPDES permit applications.

# Item 1. Domestic Drinking Water Supply (Instructions, Page 80)

a.	There is a surface water intake for domestic drinking water supply located within 5 (five) miles downstream from the point/proposed point of discharge.
	□ Yes ⊠ No
	If <b>no</b> , stop here and proceed to Item 2. If <b>yes</b> , provide the following information:
	1. The legal name of the owner of the drinking water supply intake: $\underline{N/A}$
	2. The distance and direction from the outfall to the drinking water supply intake: $\underline{N/A}$
b.	Locate and identify the intake on the USGS 7.5-minute topographic map provided for Administrative Report 1.0.
	$\square$ Check this box to confirm the above requested information is provided.
It	em 2. Discharge Into Tidally Influenced Waters (Instructions, Page 80)
	the discharge is to tidally influenced waters, complete this section. Otherwise, proceed to m 3.
a.	Width of the receiving water at the outfall: $\underline{N/A}$ feet
b.	Are there oyster reefs in the vicinity of the discharge?
	□ Yes □ No
	If $yes$ , provide the distance and direction from the outfall(s) to the oyster reefs: $\underline{N/A}$
c.	Are there sea grasses within the vicinity of the point of discharge?
	□ Yes □ No
	If $yes$ , provide the distance and direction from the outfall(s) to the grasses: $\underline{N/A}$
Ite	em 3. Classified Segment (Instructions, Page 80)
Th	e discharge is/will be directly into (or within 300 feet of) a classified segment.
	□ Yes ⊠ No
If y	yes, stop here and do not complete Items 4 and 5 of this worksheet or Worksheet 4.1.
If 1	no, complete Items 4 and 5 and Worksheet 4.1 may be required.

# Item 4. Description of Immediate Receiving Waters (Instructions, Page 80)

- a. Name of the immediate receiving waters: <u>Unnamed drainage ditches (Outfalls 001 and 002)</u>, <u>Lake Bryan (formerly Bryan Utilities Lake) (Outfall 003)</u>
- b. Check the appropriate description of the immediate receiving waters:
  - □ Lake or Pond (Outfall 003)
    - Surface area (acres): <u>950</u>
    - Average depth of the entire water body (feet): 20
    - Average depth of water body within a 500-foot radius of the discharge point (feet): 40

	<u>40</u>
$\boxtimes$	Man-Made Channel or Ditch (Outfalls 001, 002)
	Stream or Creek
	Freshwater Swamp or Marsh
	Tidal Stream, Bayou, or Marsh
	Open Bay
	Other, specify: <u>N/A</u>

If **Man-Made Channel or Ditch** or **Stream or Creek** were selected above, provide responses to Items 4.c – 4.g below: (Outfalls 001 and 002)

c. For **existing discharges**, check the description below that best characterizes the area **upstream** of the discharge.

For **new discharges**, check the description below that best characterizes the area **downstream** of the discharge.

- ☐ Intermittent (dry for at least one week during most years)
- ☐ Intermittent with Perennial Pools (enduring pools containing habitat to maintain aquatic life uses)
- ☐ Perennial (normally flowing)

Check the source(s) of the information used to characterize the area upstream (existing discharge) or downstream (new discharge):

- □ USGS flow records
- □ personal observation
- ☐ historical observation by adjacent landowner(s)
- □ other, specify: <u>N/A</u>
- d. List the names of all perennial streams that join the receiving water within three miles downstream of the discharge point:  $\underline{N/A}$

e.	The	receiving water characteristics change with	in th	WQ0002117000 ree miles downstream of the discharge
С.	(e.g., natural or man-made dams, ponds, reservoirs, etc.).			
		□ Yes ⊠ No		
	If y	<b>es</b> , describe how: <u>N/A</u>		
f.	<u>dry.</u>	neral observations of the water body during The surrounding area is wooded.		<del></del>
		e and time of observation: <u>General observation</u> ections.	<u>ns m</u>	ade during routing outfall sampling and
g.	The	water body was influenced by stormwater	runo	ff during observations.
		□ Yes □ No		
	If y	es, describe how: <u>N/A</u>		
It	_	5. General Characteristics og 81)	of W	Vater Body (Instructions,
a.		he receiving water upstream of the existing uenced by any of the following (check all th		0 1 1
		oil field activities		urban runoff
		agricultural runoff		septic tanks
		upstream discharges		other, specify: <u>N/A</u>
b.	Use	s of water body observed or evidence of suc	ch us	es (check all that apply):
		livestock watering		industrial water supply
		non-contact recreation		irrigation withdrawal
		domestic water supply		navigation
		contact recreation		picnic/park activities
		fishing		other, specify: <u>N/A</u>
c.		cription which best describes the aesthetics a (check only one):	of t	he receiving water and the surrounding
		<b>Wilderness:</b> outstanding natural beauty; us clarity exceptional	sually	wooded or un-pastured area: water
	$\boxtimes$	<b>Natural Area:</b> trees or native vegetation co- fields, pastures, dwellings); water clarity d		
		<b>Common Setting:</b> not offensive, developed turbid	but	uncluttered; water may be colored or
		<b>Offensive:</b> stream does not enhance aesthe areas; water discolored	etics;	cluttered; highly developed; dumping

### **ATTACHMENT T-3. Wastewater Flows by Outfall**

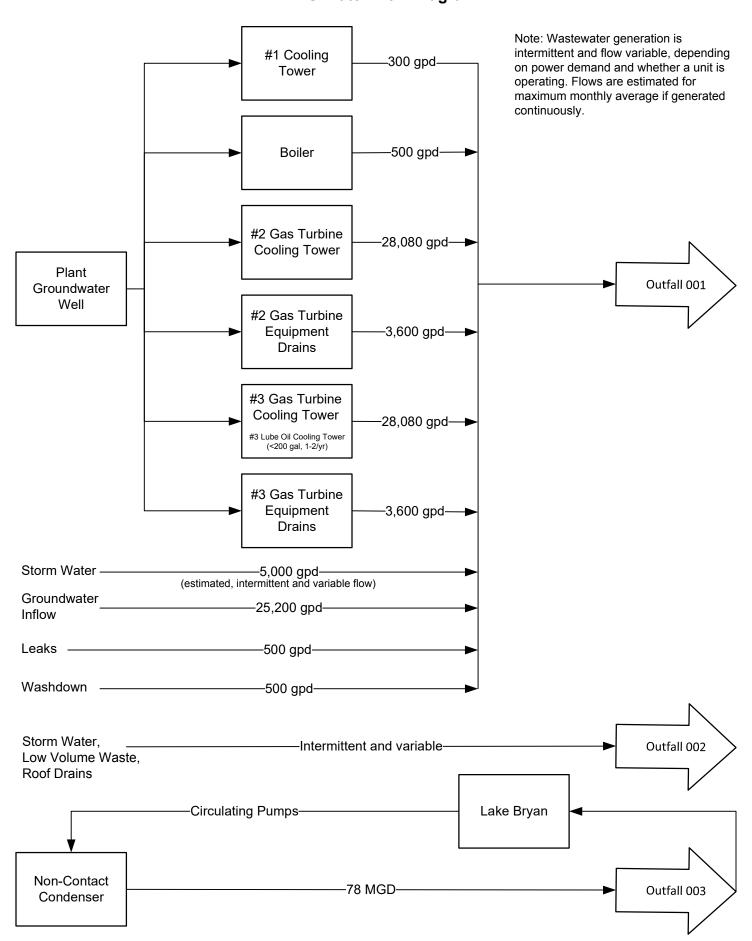
Outfall	Wastewater Sources	Monthly Average (MGD)	Flow % by Wastewater Source	Applicable Effluent Guideline (EGL)[1]	
	Cooling tower blowdown (total)	0.0565			
	#1 Cooling tower	0.0003			
	#2 Gas turbine cooling tower	0.0281	59.5%	40 CFR 423.12(b)(7)	
	#3 Gas turbine cooling tower	0.0281			
	#3 Lube oil cooling tower	[4]	]		
	Low volume waste (total)	0.0082		40 CFR 423.12(b)(3)	
001	Boiler blowdown	0.0005	]		
001	Washdown	0.0005	0.00/		
	Leaks	0.0005	8.6%		
	#2 Gas turbine equipment drains	0.0036			
	#3 Gas turbine equipment drains	0.0036			
	Storm water	0.005	5.3%	N/A	
	Ground water inflow	0.0252	26.6%	N/A	
	Outfall 001 Total	0.0949	100%		
	Storm water			N/A	
002	Low volume waste	Intermittent	t and variable	40 CFR 423.12(b)(3)	
002	Roof drain system			N/A	
	Outfall 002 Total [2]	0.0036	100%		
		78.0		40 CFR 423.12(b)(1)	
003	Once through cooling water		100%	40 CFR 423.12(b)(6)	
000				40 CFR 423.13(b)(1)	
	Outfall 003 Total [3]	78.0	100%	N/A	

#### Notes

- [1] 40 CFR 423 Steam Electric Generating
- [2] Outfall 002 flow is intermittent and flow variable due to storm water. Flow shown is maximum monthly average (Sep 2020 Aug 2022).
- [3] Outfall 003 flow is recycled through Bryan Utilities Lake.
- [4] Not blown down, drain/fill <200 gallons 1-2 times/year
- N/A Not applicable

c.	Is the location of the sewage sludge disposal site in the existing permit accurate?
	☐ Yes ☐ No or New Permit
	If no, or a new application, provide an accurate location description: $N/A$
d.	Are the point(s) of discharge in the existing permit correct?
	⊠ Yes □ No or New Permit
	If no, or a new application, provide an accurate location description: $\underline{N/A}$
e.	Are the discharge route(s) in the existing permit correct?
	⊠ Yes □ No or New Permit
	If no, or a new permit, provide an accurate description of the discharge route: $\underline{N/A}$
f.	City nearest the outfall(s): <u>Bryan, TX</u>
g.	County in which the outfalls(s) is/are located: <u>Brazos</u>
h.	Is or will the treated wastewater discharge to a city, county, or state highway right-of-way or a flood control district drainage ditch?  ☑ Yes □ No
	If yes, indicate by a check mark if: $\square$ Authorization granted $\square$ Authorization pending For new and amendment applications, attach copies of letters that show proof of contact and provide the approval letter upon receipt. Attachment: N/A. The outfalls have been
	discharging into a county road ditch since the facility began operation in 1977. For all applications involving an average daily discharge of 5 MGD or more, provide the names of all counties located within 100 statute miles downstream of the point(s) of discharge: N/A
i.	For TLAPs, is the location of the effluent disposal site in the existing permit accurate?
	$\square$ Yes No or New Permit $\square$ N/A
	If no, or a new application, provide an accurate location description: $N/A$
j.	City nearest the disposal site: $N/A$
k.	County in which the disposal site is located: $\underline{N/A}$
1.	For TLAPs, describe how effluent is/will be routed from the treatment facility to the disposal site: $\underline{\text{N/A}}$
m.	For TLAPs, identify the nearest watercourse to the disposal site to which rainfall runoff might flow if not contained: $\underline{N/A}$

## ATTACHMENT T-2 BTU Water Flow Diagram



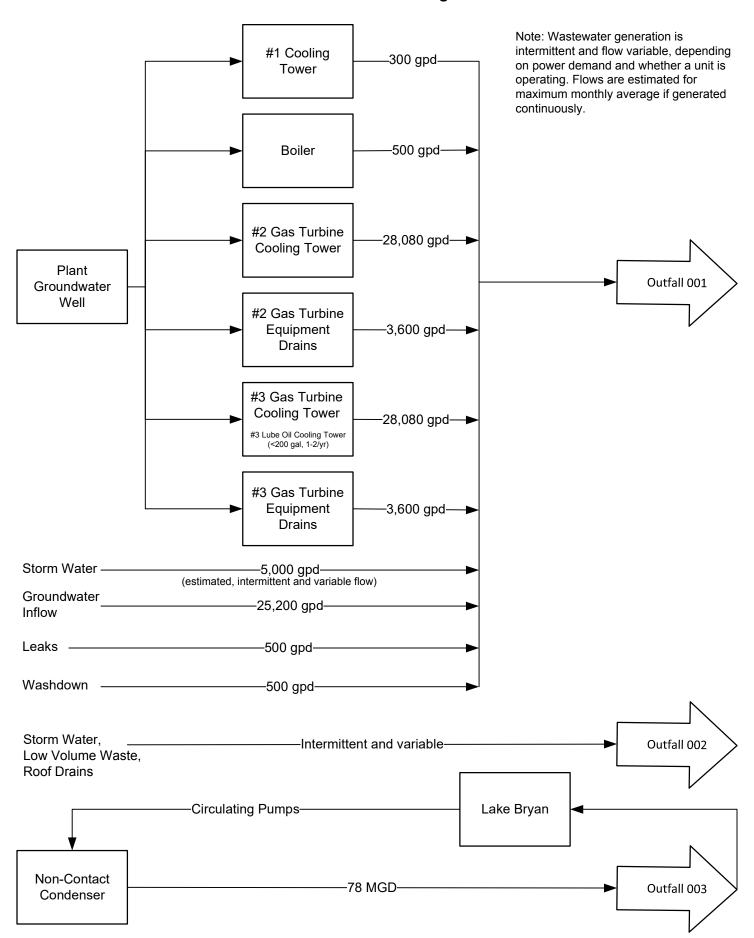
### **ATTACHMENT T-3. Wastewater Flows by Outfall**

Outfall	Wastewater Sources	Monthly Average (MGD)	Flow % by Wastewater Source	Applicable Effluent Guideline (EGL)[1]	
	Cooling tower blowdown (total)	0.0565			
	#1 Cooling tower	0.0003			
	#2 Gas turbine cooling tower	0.0281	59.5%	40 CFR 423.12(b)(7)	
	#3 Gas turbine cooling tower	0.0281			
	#3 Lube oil cooling tower	[4]	]		
	Low volume waste (total)	0.0082		40 CFR 423.12(b)(3)	
001	Boiler blowdown	0.0005	]		
001	Washdown	0.0005	0.00/		
	Leaks	0.0005	8.6%		
	#2 Gas turbine equipment drains	0.0036			
	#3 Gas turbine equipment drains	0.0036			
	Storm water	0.005	5.3%	N/A	
	Ground water inflow	0.0252	26.6%	N/A	
	Outfall 001 Total	0.0949	100%		
	Storm water			N/A	
002	Low volume waste	Intermittent	t and variable	40 CFR 423.12(b)(3)	
002	Roof drain system			N/A	
	Outfall 002 Total [2]	0.0036	100%		
		78.0		40 CFR 423.12(b)(1)	
003	Once through cooling water		100%	40 CFR 423.12(b)(6)	
000				40 CFR 423.13(b)(1)	
	Outfall 003 Total [3]	78.0	100%	N/A	

#### Notes

- [1] 40 CFR 423 Steam Electric Generating
- [2] Outfall 002 flow is intermittent and flow variable due to storm water. Flow shown is maximum monthly average (Sep 2020 Aug 2022).
- [3] Outfall 003 flow is recycled through Bryan Utilities Lake.
- [4] Not blown down, drain/fill <200 gallons 1-2 times/year
- N/A Not applicable

## ATTACHMENT T-2 BTU Water Flow Diagram



# ATTACHMENT T-1 Facility Maps



Facility Aerial Overview - Power Plant and Lake Bryan



Facility Aerial – Power Plant

#### **Abesha Michael**

From: Williams, Wesley <weswilliams@btutilities.com>

**Sent:** Thursday, May 22, 2025 10:05 AM

To: Abesha Michael

**Cc:** Cook, Nicholas; McKay, Cassey; Robinson, Kevin

**Subject:** RE: Application to Amend Permit No. WQ0002117000 - Notice of Deficiency Letter **Attachments:** BTU WQ0002117000 Spanish NORI 5-14-25.pdf; BTU TPDES Amendment Admin Report

pg9 5-14-25 update.pdf; BTU response to TPDES application review.pdf

Follow Up Flag: Follow up Flag Status: Flagged

Please see attached per the email below. Have a great day! Wes

Wes Williams | Executive Director
QSE Services / Power Marketing & Generation
Regulatory Compliance Officer
Bryan Texas Utilities
2611 North Earl Rudder Frwy
Bryan, Texas 77803
weswilliams@btutilities.com
979-821-5944

From: Abesha Michael < Abesha. Michael @tceq.texas.gov>

Sent: Friday, May 9, 2025 12:30 PM

To: Williams, Wesley <weswilliams@btutilities.com>

Subject: Application to Amend Permit No. WQ0002117000 - Notice of Deficiency Letter

Notice: EXTERNAL EMAIL! Phishing = #1 threat to Cyber Security. Is this a phishing email? - Look again!

Dear Mr. Williams:

The attached Notice of Deficiency letter sent on May 9, 2025, requests additional information needed to declare the application administratively complete. Please send the complete response to my attention by May 23, 2025.

Thank you,



Abesha H. Michael Applications Review & Processing Team Water Quality Division Support Section Water Quality Division, MC 148 PO Box 13087 Austin, Texas 78711 Phone: 0: 512-239-4912 Email: abesha.michael@tceq.texas.gov

How is our customer service? Fill out our online customer satisfaction survey at www.tceq.texas.gov/customersurvey



May 20, 2025

Ms. Abesha Michael
Water Quality Division (MC-148)
Applications Review and Processing Team
Texas Commission on Environmental Quality
P.O. Box 13087
Austin, Texas 78711-3087

Subject: City of Bryan dba Bryan Texas Utilities (CN600373310)

Roland C. Dansby Steam Electric Station (RN101611556)

Major Amendment TPDES Permit No. WQ0002117000 (EPA ID TX0073954)

Response to letter dated May 9, 2025

Dear Ms. Michael:

The City of Bryan (dba as Bryan Texas Utilities) is in receipt of your May 9, 2025 letter, which requested additional information for the TPDES amendment application for the Roland C. Dansby Steam Electric Station that was submitted on May 2, 2025. Below are responses to the requested information.

#### TCEQ Item 1

Item 6.7, General Information Renewal-Amendment, the daily average discharge is 5 MGD or more: This item was addressed as "No." However, as per the existing permit, a daily average flow is 78,000,000 gallons per day from Outfall 003. Please update and submit the name of each county or counties within 100 miles downstream of the point(s) of discharge is required. Please update this item.

#### Response to Item 1

This item was answered "no" because Outfall 003 discharges into Lake Bryan, which is a recirculating cooling water reservoir. The outfall discharge is continuously recirculated within the lake and the lake level is maintained by make-up water from a groundwater well. So, typically the only time there is an overflow from the lake to downstream waters (Thompson Creek, Brazos River) is when stormwater inflow is high.

If the TCEQ bases the question only on what is the permitted outfall discharge, then the answer to the item would be "yes" for Outfall 003. The counties that are along the discharge route within 100 miles from the outfall are Brazos, Burleson, Grimes, Washington, Waller, and Austin. An update to the relevant page from the application Administrative Report (pg. 9) is attached.

#### TCEQ Item 2

The following is a portion of the NORI, which contains information relevant to your application. Please read it carefully and indicate if it contains any errors or omissions. The complete notice will be sent to you once the application is declared administratively complete.

#### Response to Item 2

The text has been edited to correct the phone number for the application contact. The revised text (bold underline) is given below. A copy of the Spanish NORI, including this correction, is attached.

APPLICATION. City of Bryan...

Further information may also be obtained from City of Bryan at the address stated above or by calling Mr. Wes Williams, Executive Director – QSE & Power Generation, at 979-821-5944.

Please do not hesitate to contact me at 979-821-5944 or weswilliams@btutilities.com if you have any questions.

Sincerely,

Wes Williams

Executive Director - QSE & Power Generation

Bryan Texas Utilities

979-821-5944

weswilliams@btutilities.com

Enclosures

Administrative Report, updated pg. 9

Spanish NORI (Word format)

c.	Is the location of the sewage sludge disposal site in the existing permit accurate? $\square$ Yes $\square$ No or New Permit
	If no, or a new application, provide an accurate location description: $\underline{N/A}$
d.	Are the point(s) of discharge in the existing permit correct?  ☑ Yes □ No or New Permit
	If no, or a new application, provide an accurate location description: $N/A$
e.	Are the discharge route(s) in the existing permit correct? $\  \  \  \  \  \  \  \  \  \  \  \  \ $
f.	City nearest the outfall(s): <u>Bryan, TX</u>
g.	County in which the outfalls(s) is/are located: <u>Brazos</u>
h.	Is or will the treated wastewater discharge to a city, county, or state highway right-of-way or a flood control district drainage ditch?
	⊠ Yes □ No
	If yes, indicate by a check mark if: $\square$ Authorization granted $\square$ Authorization pending
	For new and amendment applications, attach copies of letters that show proof of contact and provide the approval letter upon receipt. Attachment: N/A. The outfalls have been discharging into a county road ditch since the facility began operation in 1977.
	For all applications involving an average daily discharge of 5 MGD or more, provide the names of all counties located within 100 statute miles downstream of the point(s) of discharge: <a href="mailto:Brazos">Brazos</a> , <a href="Burleson">Burleson</a> , <a href="Grinder">Grimes</a> , <a href="Washington">Washington</a> , <a href="Washington">Waller</a> , <a href="Austin">Austin</a>
i.	For TLAPs, is the location of the effluent disposal site in the existing permit accurate? $\Box$ Yes No or New Permit $\Box$ $\underline{N/A}$
	If no, or a new application, provide an accurate location description: $N/A$
j.	City nearest the disposal site: $N/A$
k.	County in which the disposal site is located: $\underline{N/A}$
1.	For TLAPs, describe how effluent is/will be routed from the treatment facility to the disposal site: $\underline{\text{N/A}}$
m.	For TLAPs, identify the nearest watercourse to the disposal site to which rainfall runoff might flow if not contained: $\underline{N/A}$

#### Comisión de Calidad Ambiental del Estado de Texas



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

PERMISO NO.	WO000
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**SOLICITUD.** City of Bryan, P.O. Box 1000, Bryan, Texas 77805, propietaria de una central eléctrica de gas natural, ha solicitado a la Comisión de Calidad Ambiental de Texas (TCEQ) para modificar el Permiso No. WQ0002117000 (EPA I.D. No. TX0073954) del Sistema de Eliminación de Descargas de Contaminantes de Texas (TPDES) para autorizar la eliminación de los límites de concentración media diaria y máxima diaria de aluminio del Outfall 003. La planta está ubicada en 8181 Mumford Road, cerca de la ciudad de Bryan, en el Condado de Brazos, Texas 77807. La ruta de descarga es del sitio de la planta de los Outfalls 001 y 002 a una zanja de drenaje, de ahí a Elm Creek, de ahí a Peach Creek, de ahí a Campbells Creek, de ahí al río Little Brazos, de ahí al río Brazos por debajo del lago Whitney, y del Outfall 003 al lago Bryan, de ahí a través de una tubería enterrada, de ahí a un afluente sin nombre, de ahí a Thompson Creek, de ahí al río Brazos or encima del río Navasota. La TCEQ recibió esta solicitud el 2 de mayo de 2025. La solicitud para el permiso estará disponible para leerla y copiarla en la biblioteca pública Clara B. Mounce, en 201 East 26th Street, Bryan, Texas antes de la fecha de publicación de este aviso en el periódico. La solicitud (cualquier actualización y aviso inclusive) está disponible electrónicamente en la siguiente página web:

\*\*\*\*\*\*\*.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.

\*\*\*\*\*\*gisweb.tceq.texas.gov/LocationMapper/?marker=-96.466111,30.713333&level=18

Include the following non-italicized sentence if the facility is located in the Coastal Management Program boundary and is an application for a major amendment which will increase the pollutant loads to coastal waters or would result in relocation of an outfall to a critical area, or a renewal with such a major amendment. The Coastal Management Program boundary is the area along the Texas Coast of the Gulf of México as depicted on the map in 31 TAC §503.1 and includes part or all of the following counties: Cameron, Willacy, Kenedy, Kleberg, Nueces, San Patricio, Aransas, Refugio, Calhoun, Victoria, Jackson, Matagorda, Brazoria, Galveston, Harris, Chambers, Jefferson y Orange. If the application is for amendment that does not meet the above description or a renewal without such a major amendment, do not include the sentence: El Director Ejecutivo de la TCEQ ha revisado esta medida para ver si está de acuerdo con los objetivos y las regulaciones del Programa de Administración Costero de Texas (CMP) de acuerdo con las regulaciones del Consejo Coordinador de la Costa (CCC) y ha determinado que la acción es conforme con las metas y regulaciones pertinentes del CMP.

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

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

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

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

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

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

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

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

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

solicitante indicado por nombre y número del permiso específico y/o (2) la lista de correo de todas las solicitudes en un condado específico. Si desea que se agrega su nombre en una de las listas designe cual lista(s) y envía por correo su pedido a la Oficina del Secretario Principal de la TCEQ.

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

CONTACTOS E INFORMACIÓN A LA AGENCIA. Todos los comentarios públicos y solicitudes deben ser presentadas electrónicamente vía \*\*\*\*\*\*\*\*\*14.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 City of Bryan a la dirección indicada arriba o llamando a Sr. Wes Williams, Executive Director – QSE & Power Generation, al 979-821-5944.

Fecha de emisión: [Date notice issued]



## 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 and 40 CFR Part 423

City of Bryan

whose mailing address is

P.O. Box 1000 Bryan, Texas 77805 TPDES PERMIT NO. WQ0002117000 [For TCEQ office use only -EPA I.D. No. TX0073954]

This major amendment replaces TPDES Permit No. WQ0002117000, issued on June 29, 2023.

is authorized to treat and discharge wastes from Roland C. Dansby Steam Electric Station, a natural gas fired power plant facility (SIC 4911)

located at 8181 Mumford Road, northwest of the City of Bryan, in Brazos County, Texas 77807

from the plant site via Outfalls 001 and 002 to a drainage ditch, thence to Elm Creek, thence to Peach Creek, thence to Campbells Creek, thence to the Little Brazos River, thence to the Brazos River Above Navasota River; and via Outfall 003 to Lake Bryan, thence through an inground pipe, thence to an unnamed tributary, thence to Thompson Creek, thence to the Brazos River Above Navasota River in Segment No. 1242 of the Brazos 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, June 29, 2028.

ISSUED DATE:

For the Commission	 	

#### EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

During the period beginning upon the date of permit issuance and lasting through the date of permit expiration, the permittee is authorized to discharge cooling tower blowdown, low volume waste 1, and stormwater from the storm sewer system subject to the following effluent limitations:

Volume: Intermittent and flow variable.

	Disc	charge Limitations	Minimum Self-Monitoring Requirements		
Effluent Characteristics	Daily Average	Daily Maximum	Single Grab	Report Daily Average and	Daily Maximum
	mg/L	mg/L	mg/L	Measurement Frequency	Sample Type
_			/ .		
Flow	Report, MGD	Report, MGD	N/A	1/day²	Estimate
Total Suspended Solids	30	100	100	1/week²	Grab
Oil and Grease	15	20	20	1/week²	Grab
Total Dissolved Solids	N/A	2,000	2,000	1/year	Grab
Total Iron	N/A	1.0	1.0	1/year	Grab
Total Copper 3	N/A	0.22	0.22	1/year	Grab
Total Copper 4	N/A	0.157	0.157	1/year	Grab
Temperature	N/A	95°F5	N/A	1/year	Instantaneous

- 2. The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units and shall be monitored 1/week 2 by grab sample.
- 3. There shall be no discharge of floating solids or visible foam in other than trace amounts and no discharge of visible oil.
- 4. Effluent monitoring samples shall be taken at the following location: At Outfall 001, where the storm sewer system discharges to the drainage ditch.

Page 2 of TPDES Permit No. WQ0002117000

City of Bryan

<sup>&</sup>lt;sup>1</sup> See Other Requirements No. 3.

<sup>&</sup>lt;sup>2</sup> When discharge occurs.

<sup>&</sup>lt;sup>3</sup> Effective beginning on date of June 29, 2023 and lasting for three years.

<sup>4</sup> Effective June 29, 2026 and lasting through the date of permit expiration. See Other Requirement No. 8.

<sup>&</sup>lt;sup>5</sup> Temperature measurements shall be obtained at a point immediately prior to wastewater discharge from plant property.

#### EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

During the period beginning upon the date of permit issuance and lasting through the date of permit expiration, the permittee is authorized to discharge low volume waste<sup>1</sup>, stormwater, and effluent from the roof drain system subject to the following effluent limitations:

Volume: Intermittent and flow variable.

	Disc	charge Limitations	Minimum Self-Monitoring Requirements		
Effluent Characteristics	Daily Average	Daily Maximum	Single Grab	Report Daily Average and	Daily Maximum
	mg/L	mg/L	mg/L	Measurement Frequency	Sample Type
Flow	Report, MGD	Report, MGD	N/A	1/day²	Estimate
Total Suspended Solids	30	100	100	1/week²	Grab
Oil and Grease	15	20	20	1/week²	Grab
Total Dissolved Solids	N/A	2,000	2,000	1/year	Grab
Total Iron	N/A	1.0	1.0	1/year	Grab
Total Copper 3	N/A	0.22	0.22	1/year	Grab
Total Copper 4	N/A	0.157	0.157	1/year	Grab
Temperature	N/A	95 °F5	N/A	1/year	Instantaneous

- 2. The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units and shall be monitored 1/week² by grab sample.
- 3. There shall be no discharge of floating solids or visible foam in other than trace amounts and no discharge of visible oil.
- 4. Effluent monitoring samples shall be taken at the following location: At Outfall 002, where the storm sewer system discharges to the drainage ditch.

Page 2a of TPDES Permit No. WQ0002117000

City of Bryan

<sup>&</sup>lt;sup>1</sup> See Other Requirements No. 3.

<sup>&</sup>lt;sup>2</sup> When discharge occurs.

<sup>&</sup>lt;sup>3</sup> Effective beginning on date of June 29, 2023 and lasting for three years. See Other Requirement No. 8.

<sup>4</sup> Effective June 29, 2026 and lasting through the date of permit expiration.

<sup>&</sup>lt;sup>5</sup> Temperature measurements shall be obtained at a point immediately prior to wastewater discharge from plant property.

1. During the period beginning upon the date of permit issuance and lasting through the date of permit expiration, the permittee is authorized to discharge once through cooling water subject to the following effluent limitations:

The daily average flow of effluent shall not exceed 78 million gallons per day (MGD). The daily maximum flow shall not exceed 156 MGD

	Discharge Limitations				Minimum Self-Monitoring Requirements		
Effluent Characteristics	Daily Average		Daily Maximum		Single Grab	Report Daily Average and	Daily Maximum
	lbs/day	mg/L	lbs/day	mg/L	mg/L	Measurement Frequency	Sample Type
Flow	78 M	IGD	156 N	MGD	N/A	1/day	Calculate <sup>1</sup>
Free Available Oxidants <sup>2</sup>	21.7	0.2	54.2	0.5	0.5	1/week	Grab
Temperature	Repo	rt °F	Repo	rt °F	N/A	1/day	In-situ
Total Aluminum 3	N/	Ά	Rep	ort	N/A	1/quarter	Grab

- 2. There shall be no discharge of floating solids or visible foam in other than trace amounts and no discharge of visible oil.
- 3. Effluent monitoring samples shall be taken at the following location: At Outfall 003, where cooling water discharges to the cooling lake (Bryan Utilities Lake).

Page 2b of TPDES Permit No. WQ0002117000

City of Bryan

<sup>&</sup>lt;sup>1</sup> Flow shall be determined by calculation based on the pump curve.

<sup>&</sup>lt;sup>2</sup> See Other Requirements No. 3.

<sup>&</sup>lt;sup>3</sup> See Other Requirements No.9. Monitoring requirement expires one month prior to permit expiration date.

#### 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 Texas Water Code §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 a 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 (Fecal coliform, *E. coli*, or Enterococci) the number of colonies 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 substitute 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  $\times$  Concentration, mg/L  $\times$  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(c).
- 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 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 Enforcement Division (MC 224), by the 20th day of the following month for each discharge that 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; TWC Chapters 26, 27, and 28; and THSC Chapter 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 Chapter 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 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 Enforcement Division (MC

#### 7. Noncompliance Notification

- a. In accordance with 30 TAC §305.125(9) any noncompliance that may endanger human health or safety, or the environment shall be reported by the permittee to the TCEQ. 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 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.
- In addition to the above, any effluent violation that deviates from the permitted effluent limitation by more than 40% shall be reported by the permittee in writing to the regional office and 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 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 Enforcement Division (MC 224) in writing within five (5) working days, after becoming aware of or having reason to believe:

That any activity has occurred or will occur that 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) that 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  $\mu g/L$ ); ii. two hundred micrograms per liter (200  $\mu g/L$ ) for acrolein and acrylonitrile; five hundred micrograms per liter (500  $\mu g/L$ ) 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

iv. the level established by the TCEQ.

application; or

- b. That any activity has occurred or will occur that would result in any discharge, on a nonroutine or infrequent basis, of a toxic pollutant that 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  $\mu$ 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 that would be subject to CWA §301 or §306 if it were directly discharging those pollutants;
  - 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:
  - c. for the purpose of this paragraph, adequate notice shall include information on:

i. the quality and quantity of effluent introduced into the POTW; andii. 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.
- 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 that 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 Texas Water Code §§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 Chapter 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 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 that are not described in the permit application or that 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 that 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 Texas Water Code 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,  $\S101(15)$ ) 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;
  ii. the permit number(s);
  iii. the bankruptcy court in which the petition for bankruptcy was filed; and
  iv. the date of filing of the petition.

#### **OPERATIONAL REQUIREMENTS**

- 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 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, 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 or upgrading of the domestic wastewater treatment 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 or collection facilities. In the case of a domestic wastewater treatment facility that 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 127) 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 Remediation 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 Chapter 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; andvi. 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 Chapter 335 do not apply, sludge and solid wastes, including tank cleaning and contaminated solids for disposal, shall be disposed of in accordance with THSC Code Chapter 361.

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## **OTHER REQUIREMENTS**

1. Violations of daily maximum limitations for the following pollutants shall be reported orally or by facsimile to TCEQ Region 9 within 24 hours from the time the permittee becomes aware of the violation, followed by a written report within five working days to TCEQ Region 9 and Compliance Monitoring Team (MC 224):

Pollutant	MAL <sup>1</sup> (mg/L)
Copper (Total)	0.002

Test methods used must be sensitive enough to demonstrate compliance with the permit effluent limitations. If an effluent limit for a pollutant is less than the MAL, then the test method for that pollutant must be sensitive enough to demonstrate compliance at the MAL. Permit compliance/noncompliance determinations will be based on the effluent limitations contained in this permit, with consideration given to the MAL for the pollutants specified above.

When an analysis of an effluent sample for a pollutant listed above indicates no detectable levels above the MAL and the test method detection level is as sensitive as the specified MAL, a value of zero shall be used for that measurement when making calculations for the self-reporting form. This applies to determinations of daily maximum concentration, calculations of loading and daily averages, and other reportable results.

When a reported value is zero based on this MAL provision, the permittee shall submit the following statement with the self-reporting form either as a separate attachment to the form or as a statement in the comments section of the form:

"The reported value(s) of zero for [list pollutant(s)] on the self-reporting form for [monitoring period date range] is based on the following conditions: (1) the analytical method used had a method detection level as sensitive as the MAL specified in the permit, and (2) the analytical results contained no detectable levels above the specified MAL."

When an analysis of an effluent sample for a pollutant indicates no detectable levels and the test method detection level is not as sensitive as the MAL specified in the permit, or an MAL is not specified in the permit for that pollutant, the level of detection achieved shall be used for that measurement when making calculations for the self-reporting form. A zero may not be used.

2. There shall be no discharge of polychlorinated biphenyl transformer fluid.

#### 3. DEFINITIONS

- A. The term blowdown means the minimum discharge of recirculating water for the purpose of discharging materials contained in the water, the further buildup of which would cause concentration in amounts exceeding limits established by best engineering practices.
- B. The term "free available chlorine" (or free available oxidants for intake water with bromides) shall mean the value obtained using any of the chlorine free available methods in Table IB in 40 CFR 136.3(a) where the method has the capability of measuring free available chlorine, or other methods approved by the permitting authority.

<sup>&</sup>lt;sup>1</sup> Minimum analytical level.

C. The term "total residual chlorine" (or total residual oxidants for intake water with bromides) shall mean the value obtained using any of the chlorine – total residual methods in Table IB in 40CFR 136.3(a) or other methods approved by the permitting authority.

Neither free available oxidants or total residual oxidants may be discharged from any unit for more than two hours in any one day and not more than one unit in any plant may discharge free available or total residual oxidants at any one time unless the permittee can demonstrate to the permitting Agency that the units in a particular location cannot operate at or below the limitations specified in this permit.

- D. The term "low volume waste sources" includes "utility waste waters" and "water treatment wastes". "Utility waste waters" include, but are not limited to: wet scrubber air pollution control systems, evaporator blowdown, boiler blowdown, laboratory and sampling streams, floor drainage, cooling tower basin cleaning wastes, and blowdown from recirculating house service water systems. "Water treatment wastes" include, but are not limited to: ion exchange water treatment system wastes, demineralizer backwash, cold lime water treatment wastes, reverse osmosis waste, and water treatment system filter backwash. Sanitary and air conditioning wastes are not included.
- E. The term metal cleaning waste means any wastewater resulting from cleaning (with or without chemical compounds) any metal process equipment including, but not limited to, boiler tube cleaning, boiler fireside cleaning, and air preheater cleaning.

There shall be no discharge of metal cleaning waste.

4. The 126 priority pollutants (Appendix A of Part 423) contained in chemicals added for cooling tower maintenance, except chromium and zinc, shall be limited in the discharge to "no detectable amount". If used, total chromium shall be limited to 0.2 mg/L maximum at any time and total zinc shall be limited to 1.0 mg/L at any time.

#### 5. MIXING ZONE DEFINITIONS

Outfalls 001 & 002: There is no mixing zone established for this discharge to an intermittent

stream. Acute toxic criteria apply at the point of discharge.

Outfall 003: Chronic toxic criteria apply at the edge of the chronic aquatic life mixing

zone. The mixing zone is defined as a volume within a radius of 100 feet from the point of discharge. The width of Lake Bryan at the point of discharge is approximately greater than or equal to 200 feet. The Zone of Initial Dilution (ZID) is defined as a volume within a radius of 25 feet from the point of discharge. The human health mixing zone is defined as a

volume within a radius of 200 feet from the point of discharge.

6. This permit does not authorize the discharge of domestic wastewater. All domestic wastewater must be disposed of in an approved manner, such as routing to an approved on-site septic tank and drainfield system or to an authorized third party for treatment and disposal.

### 7. COOLING WATER INTAKE STRUCTURE REQUIREMENTS

When in operation, the cooling water system must be operated and maintained as represented in the application for this permit. The permittee shall provide written notification to the TCEQ Industrial Permits Team (MC 148) and Region 9 Office of any changes in the method by which the facility obtains water for cooling purposes. This notification must be submitted 30 days prior to any such change and must include a description of the planned changes. The TCEQ may, upon

review of the notification, reopen the permit to include additional terms and conditions as necessary.

#### 8. SCHEDULE OF COMPLIANCE FOR WATER QUALITY BASED EFFLUENT LIMITS

The permittee shall comply with the following schedule of activities for the attainment of water quality-based final effluent limitations for total copper at Outfalls 001 and 002:

- a. Determine exceedance cause(s);
- b. Develop control options;
- c. Evaluate and select control mechanisms;
- d. Implement corrective action; and
- e. Attain final effluent limitations no later than three years from June 29, 2023.

The permittee shall submit quarterly progress reports in accordance with the following schedule. The requirement to submit quarterly progress reports expires three years from June 29, 2023.

### PROGRESS REPORT DATE

January 1 April 1 July 1 October 1

The quarterly progress reports must include a discussion of the interim requirements that have been completed at the time of the report and must address the progress towards attaining the water quality based final effluent limitations for total copper at Outfalls 001 and 002no later than three years from June 29, 2023.

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit must be submitted no later than 14 days following each schedule date. Any reports of noncompliance shall include the cause of noncompliance, any remedial actions taken, and the probability of meeting the next scheduled requirement.

All reports must be submitted to the TCEQ Region 9 Office and to the Compliance Monitoring Team (MC-224).

9. The permittee has provided the required statistical analysis for the once-through cooling water exemption and the exemption has been approved. Effluent limits based on water-quality criteria for total aluminum have been removed. Monitoring for total aluminum has been changed to a long-term monitoring requirement of once per quarter which no longer requires a daily average but just a daily maximum. This monitoring expires one month prior to the date of permit expiration.

# 48-HOUR ACUTE BIOMONITORING REQUIREMENTS: FRESHWATER

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

# 1. <u>Scope, Frequency, and Methodology</u>

- 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 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 "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 static renewal 48-hour definitive 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 in each dilution. This test shall be conducted once per quarter.
  - 2) Acute static renewal 48-hour definitive 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 in each dilution. This test shall be conducted once per quarter.

The permittee must perform and submit a valid test for each test species during the required reporting period for that species. A minimum of five replicates with eight organisms per replicate shall be used in the control and each dilution. A repeat test shall include the control and all effluent dilutions and use the appropriate number of organisms and replicates, as specified above. 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 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 lethal effects, 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 lethal effects, 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 lethal effects, the permittee shall resume a quarterly testing frequency for that species until this permit is reissued.

# 2. <u>Required Toxicity Testing Conditions</u>

- a. Test Acceptance The permittee shall repeat any toxicity test, including the control and all effluent dilutions, which fails to meet any of the following criteria:
  - 1) a control mean survival of 90% or greater; and
  - a coefficient of variation percent (CV%) of 40 or less for both the control and critical dilution. However, if significant lethality is demonstrated, a CV% greater than 40 shall not invalidate the test. The CV% requirement does not apply when significant lethality occurs.

# b. Statistical Interpretation

- 1) For the water flea and fathead minnow tests, the statistical analyses used to determine if there is a significant difference between the control and an effluent dilution shall be in accordance with the manual referenced in Part 1.b.
- 2) 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.
- If significant lethality is demonstrated (that is, there is a statistically significant difference in survival at the critical dilution when compared to the survival in the control), the conditions of test acceptability are met, and the survival of the test organisms are equal to or greater than 90% in the critical dilution and all dilutions below that, then the permittee shall report a survival No Observed Effect Concentration (NOEC) of not less than the critical dilution for the reporting requirements.
- The NOEC is defined as the greatest effluent dilution at which no significant lethality is demonstrated. The Lowest Observed Effect Concentration (LOEC) is defined as the lowest effluent dilution at which significant lethality is demonstrated. Significant lethality is defined as a statistically significant difference the survival of the test organism in a specified effluent dilution when compared to the survival of the test organism in the control.
- 5) The use of NOECs and LOECs assumes either a monotonic (continuous) concentration-response relationship or a threshold model of the concentration-response relationship. For any test result that demonstrates a non-monotonic (non-continuous) response, the NOEC should be determined based on the guidance manual referenced in Item 2.
- 6) Pursuant to the responsibility assigned to the permittee in Part 2.b.2), test results that demonstrate a non-monotonic (non-continuous) concentration-

- response relationship may be submitted, prior to the due date, for technical review. The guidance manual referenced in Item 2 will be used when making a determination of test acceptability.
- 7) TCEQ staff will review test results for consistency with rules, procedures, and permit requirements.

### c. Dilution Water

- Dilution water used in the toxicity tests must be the receiving water collected at a point upstream of the discharge point 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.
- 2) Where the receiving water proves unsatisfactory as a result of preexisting instream toxicity (i.e. fails to fulfill the test acceptance criteria 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; and
  - 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 two composite samples from Outfall 001. The second composite sample 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 the 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.

## 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 20th 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 TEM3D, enter a "1" if the NOEC for survival is less than the critical dilution; otherwise, enter a "0."
  - 2) For the water flea, Parameter TOM3D, report the NOEC for survival.
  - 3) For the water flea, Parameter TXM3D, report the LOEC for survival.
  - 4) For the fathead minnow, Parameter TEM6C, enter a "1" if the NOEC for survival is less than the critical dilution; otherwise, enter a "0."

- 5) For the fathead minnow, Parameter TOM6C, report the NOEC for survival.
- 6) For the fathead minnow, Parameter TXM6C, report the LOEC for survival.
- d. Enter the following codes for retests only:
  - 1) For retest number 1, Parameter 22415, enter a "1" if the NOEC for survival is less than the critical dilution; otherwise, enter a "0."
  - 2) For retest number 2, Parameter 22416, enter a "1" if the NOEC for survival is less than the critical dilution; otherwise, enter a "0."

# 4. <u>Persistent Toxicity</u>

The requirements of this part apply only when a toxicity test demonstrates significant lethality. Significant lethality was defined in Part 2.b.

- a. The permittee shall conduct a total of 2 additional tests (retests) for any species that demonstrates significant lethality. 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 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.
- c. 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.

### 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 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 "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;

- 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;
  - 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/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 2)

# WATER FLEA SURVIVAL

Dates and Times	No. 1	FROM:			Date TO:		
Composites Collected	No. 2	FROM:			TO:		
Геst initiated: Dilution water used:							
			PERCENT S	URVIVAL			
Time Rep				Percent	effluent		
Типс		0%	32%	42%	56%	75%	100%
A							
В							
24h C							
D							
E							
A							
В							
48h C							
D							
E							
Mean at test end							
CV%*							
*Coefficient of V	<sup>7</sup> ariatio	on = Stand	dard Deviatio	n x 100/m	nean		
Dunnett's Procedure or	Steel's	Many-Or	ne Rank Test	as approp	riate:		
Is the mean survival at 4	48 hou	rs signific	antly less tha	n the cont	rol survival?		
			%):				
Enter percent effluent c	orrespo	onding to	the NOEC be	elow:			
1) NOEC	surviva	al =	% eff	luent			

2) LOEC survival = \_\_\_\_\_% effluent

# TABLE 1 (SHEET 2 OF 2)

# FATHEAD MINNOW SURVIVAL

tes and Tim	es No	o. 1 FROM: _	Date	Time	TO:	ate Time		
mposites								
Test initiat	ed:			_am/pm			date	
Dilut	ion water us	ed:	Receiving	water _	Syntl	netic Dilutio	n water	
			PERCENT S	URVIVAI	Ĺ			
Time	Dom			Percer	nt effluent			
Time	кер	0%	32%	42%	56%	75%	100%	
	A							
	В							
24h	С							
	D							
	Е							
	A							
	В							
48h	С							
	D							
	E							
Mean at	test end							
* Coeff	icient of Var	iation = stan	dard deviatio	on x 100/1	mean			
nnett's Proc	edure or Ste	el's Many-Or	ne Rank Test	as approj	priate:			
Is the mean survival at 48 hours significantly less than the control survival?								
CR	ITICAL DIL	UTION (100	YES _	NC	)			
	mposites llected Test initiat Dilut Time  24h  48h  Mean at CV * Coeff nnett's Proceute mean sur	Test initiated:  Dilution water us  Time Rep  A B 24h C D E A B 48h C D E Mean at test end CV%*  * Coefficient of Var  nnett's Procedure or Stetche mean survival at 48 h	Test initiated:  Dilution water used:  Time Rep  A  B  24h  C  D  E  A  B  48h  C  D  E  Mean at test end  CV%*  * Coefficient of Variation = standard from the mean survival at 48 hours signification.	tes and Times mposites llected No. 2 FROM:	tes and Times mposites llected No. 2 FROM:	tes and Times mposites llected	Test initiated:	

Page 25

Enter percent effluent corresponding to the NOEC below:

1)

2)

NOEC survival = \_\_\_\_\_% effluent

LOEC survival = \_\_\_\_\_% effluent

### CHRONIC BIOMONITORING REQUIREMENTS: FRESHWATER

The provisions of this section apply to Outfall 003 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 should 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, unless the test was invalid due to the intake water (i.e., the control) being toxic (i.e., failing to meet acceptability criteria). In such case, the requirement to perform a valid test is waived for that reporting period only. 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 14%, 19%, 25%, 33%, and 44% effluent. The critical dilution, defined as 33% 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 will 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;
  - 2) a control mean number of water flea neonates per surviving adult of 15 or greater;
  - 3) 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 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 the young of surviving females in the water flea test; and the growth and survival endpoints for the fathead minnow test. However, if statistically significant lethal or nonlethal effects are exhibited at the critical dilution, a CV% greater than 40 shall not invalidate the test;
  - 6) a percent minimum significant difference of 47 or less for water flea reproduction; and
  - 7) a percent minimum significant difference of 30 or less for fathead minnow growth.

### b. Statistical Interpretation

- 1) For the water flea survival test, the statistical analyses used to determine if there is a significant difference between the control and an effluent dilution shall be the Fisher's exact test as described in the manual referenced in Part 1.b.
- 2) For the water flea reproduction test and the fathead minnow larval survival and growth tests, the statistical analyses used to determine if there is a significant difference between the control and an effluent dilution shall be in accordance with the manual referenced in Part 1.b.
- 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) If significant lethality is demonstrated (that is, there is a statistically significant

difference in survival at the critical dilution when compared to the survival in the control), the conditions of test acceptability are met, and the survival of the test organisms are equal to or greater than 80% in the critical dilution and all dilutions below that, then the permittee shall report a survival No Observed Effect Concentration (NOEC) of not less than the critical dilution for the reporting requirements.

- The NOEC is defined as the greatest effluent dilution at which no significant effect is demonstrated. The Lowest Observed Effect Concentration (LOEC) is defined as the lowest effluent dilution at which a significant effect is demonstrated. A significant effect is herein defined as a statistically significant difference between the survival, reproduction, or growth of the test organism in a specified effluent dilution when compared to the survival, reproduction, or growth of the test organism in the control.
- 6) The use of NOECs and LOECs assumes either a monotonic (continuous) concentration-response relationship or a threshold model of the concentration-response relationship. For any test result that demonstrates a non-monotonic (non-continuous) response, the NOEC should be determined based on the guidance manual referenced in Item 3.
- 7) Pursuant to the responsibility assigned to the permittee in Part 2.b.3), test results that demonstrate a non-monotonic (non-continuous) concentration-response relationship may be submitted, prior to the due date, for technical review. The guidance manual referenced in Item 3 will be used when making a determination of test acceptability.
- 8) TCEQ staff will review test results for consistency with rules, procedures, and permit requirements.

### c. Dilution Water

- 1) Dilution water used in the toxicity tests must be the lake water collected as close to the point of intake as possible and concurrently with the effluent sample.
- 2) Total dissolved solids (TDS) shall be measured and reported for each sample collected for the testing, both intake water and effluent.

### d. Samples and Composites

- 1) The permittee shall collect a minimum of three composite samples from Outfall 003. 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 003 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.

## 3. Reporting

All reports, tables, plans, summaries, and related correspondence required 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.
  - 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 20th 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 TLP3B, enter a "1" if the NOEC for survival is less than the critical dilution; otherwise, enter a "0."
  - 2) For the water flea, Parameter TOP3B, report the NOEC for survival.
  - 3) For the water flea, Parameter TXP3B, report the LOEC for survival.
  - 4) For the water flea, Parameter TWP3B, enter a "1" if the NOEC for reproduction is less than the critical dilution; otherwise, enter a "0."
  - 5) For the water flea, Parameter TPP3B, report the NOEC for reproduction.
  - 6) For the water flea, Parameter TYP3B, report the LOEC for reproduction.

- 7) For the fathead minnow, Parameter TLP6C, enter a "1" if the NOEC for survival is less than the critical dilution; otherwise, enter a "0."
- 8) For the fathead minnow, Parameter TOP6C, report the NOEC for survival.
- 9) For the fathead minnow, Parameter TXP6C, report the LOEC for survival.
- For the fathead minnow, Parameter TWP6C, enter a "1" if the NOEC for growth is less than the critical dilution; otherwise, enter a "0."
- 11) For the fathead minnow, Parameter TPP6C, report the NOEC for growth.
- 12) For the fathead minnow, Parameter TYP6C, report the LOEC for growth.
- d. Enter the following codes for retests only:
  - 1) For retest number 1, Parameter 22415, enter a "1" if the NOEC for survival is less than the critical dilution; otherwise, enter a "0."
  - 2) For retest number 2, Parameter 22416, enter a "1" if the NOEC for survival is less than the critical dilution; otherwise, enter a "0."

### 4. <u>Persistent Toxicity</u>

The requirements of this part apply only when a test demonstrates a significant effect at the critical dilution. Significant effect and significant lethality were defined in Part 2.b. Significant sublethality is defined as a statistically significant difference in growth/reproduction at the critical dilution when compared to the growth/reproduction of the test organism in the control.

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

- 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:
  - 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 which 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 which 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 herein 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 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 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.
- 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:		Receiv	ing Wat	er	Sy	nthetic l	Dilution Water	
NUMBER OF YOUNG PRODUCED PER ADULT AT END OF TEST								

	Percent effluent (%)								
REP	0%	14%	19%	25%	33%	44%			
A									
В									
С									
D									
E									
F									
G									
Н									
I									
J									
Survival Mean									
Total Maan									
CV%*									
PMSD		_	_	_					

<sup>\*</sup>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

1. Dunnett's Procedure or Steel's Many-One Rank Test or Wilcoxon Rank Sum Test (with Bonferroni adjustment) or t-test (with Bonferroni adjustment) as appropriate:

Is the mean number of young produced per adult significantly less than the number of young per adult in the control for the % effluent corresponding to significant nonlethal effects?

CRITICAL DILUTION (33%): \_\_\_\_\_ YES \_\_\_\_\_ NO

#### PERCENT SURVIVAL

	Percent effluent						
Time of Reading	0%	14%	19%	25%	33%	44%	
24h							
48h							
End of Test				_	_		

2. Fisher's Exact Test:

Is the mean survival at test end significantly less than the control survival for the % effluent corresponding to lethality?

CRITICAL DILUTION (33%): \_\_\_\_\_\_ YES \_\_\_\_\_ NO

- 3. Enter percent effluent corresponding to each NOEC/LOEC below:
  - a.) NOEC survival = \_\_\_\_\_\_ % effluent
  - b.) LOEC survival = \_\_\_\_\_\_ % effluent
  - c.) NOEC reproduction = \_\_\_\_\_ % effluent
  - d.) LOEC reproduction = \_\_\_\_\_% effluent

# TABLE 1 (SHEET 3 OF 4)

# BIOMONITORING REPORTING

# FATHEAD MINNOW LARVAE GROWTH AND SURVIVAL

Composites		No. 1	FROM			Tim			Date	Time	
		No. 2	FROM	[:				TO:			
		No. 3	FROM	[:				TO:			
Tes	t initiated:				an	n/pm					_date
Dilı	ution water used:	:	Re	eceiving V	Vater			Sy	ynthetic	Dilution W	ater
			FAT	HEAD M	INNC	)W Gl	ROWT	'H DA	ΛTΑ		
	Effluent		Av	erage Dry in rep				rams		Mean Dry	
	Concentration	on	A	В		С	D		E	Weight	CV%*
	0%										
	14%										
	19%										
	25%										
	33%										
	44%										
	PMSD										
1.	* Coefficient  Dunnett's Pr Bonferroni a  Is the mean of (growth) for	oceduro djustmo dry weig	e or Steel ent) or t- ght (grov	l's Many-C test (with vth) at 7 d	One F Bont lays s	Rank Terron	Γest or i adjust	Wilc stmer	nt) as ap han the	propriate: control's di	
		CRIT	ICAL DI	IJITION	(33	%).		YES	S	NO	

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# TABLE 1 (SHEET 4 OF 4)

### BIOMONITORING REPORTING

### FATHEAD MINNOW GROWTH AND SURVIVAL TEST

### FATHEAD MINNOW SURVIVAL DATA

Effluent	Percei	Percent Survival in replicate chambers					Mean percent survival		
Concentration	A	В	С	D	Е	24h	48h	7 day	CV%*
0%									
14%									
19%									
25%									
33%	_		_		-	_			_
44%									

<sup>\*</sup> Coefficient of Variation = standard deviation x 100/mean

2.	Dunnett's Procedure or Steel's Many-One Rank Test or Wilcoxon Rank Sum Test (with
	Bonferroni adjustment) or t-test (with Bonferroni adjustment) as appropriate:

Is the mean survival at 7 days significantly less (p=0.05) than the control survival for the % effluent corresponding to lethality?

CRITICAL DILUTION	(33%):	YES	NO
-------------------	--------	-----	----

a ) NOEC survival =	% effluent
3 1 NORU SHEVIVAL =	% emilient

### 24-HOUR ACUTE BIOMONITORING REQUIREMENTS: FRESHWATER

The provisions of this section apply to Outfalls 001 and 003 for whole effluent toxicity (WET) testing.

# 1. <u>Scope, Frequency, and Methodology</u>

- 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 § 307.6(e)(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.

For Outfall 001, 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. For Outfall 003, intake water should be used as the control and an invalid test due to the control being toxic need not be repeated.

- c. In addition to an appropriate control, a 100% effluent concentration shall be used in the toxicity tests for Outfall 001. 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, a chemical-specific limit, or other appropriate actions to address toxicity. The permittee may be required to conduct a toxicity reduction evaluation (TRE) after multiple toxic events.

### 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 Part 1.c., the control and dilution water shall consist of standard, synthetic, moderately hard, reconstituted water for Outfall 001. For Outfall 003, intake water should be used as the control.
- c. Samples and Composites

- 1) The permittee shall collect one composite sample from the outfall being sampled.
- 2) The permittee shall collect the composite sample such that the sample is 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 composite sample. The sample shall be maintained at a temperature of o-6 degrees Centigrade during collection, shipping, and storage.
- 4) If the outfall being sampled 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.

# 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.
  - 1) Semiannual biomonitoring test results are due on or before July 20<sup>th</sup> 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, and 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. <u>Persistent Mortality</u>

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 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 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:
  - 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;
- 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:
  - 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
  - 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 Part 5.h. The report shall 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 § 307.6(e)(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 § 307.6(e)(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 implementing 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

				Percent	t effluent		
Time	Rep	0%	6%	13%	25%	50%	100%
	A						
	В						
	C						
24h	D						
	E						
	MEAN*						

Enter percent effluent co	rresponding to	the LC50 below:
---------------------------	----------------	-----------------

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

Enter percent effluent corresponding t	o un	2 LU50	perow:
--	------	--------	--------

24 hour LC50 = \_\_\_\_\_% effluent

#### FACT SHEET AND EXECUTIVE DIRECTOR'S PRELIMINARY DECISION

For draft Texas Pollutant Discharge Elimination System (TPDES) Permit No. WQ0002117000, U.S. Environmental Protection Agency (EPA) ID No. TX0073954, to discharge to water in the state

Issuing Office: Texas Commission on Environmental Quality (TCEQ)

P.O. Box 13087

Austin, Texas 78711-3087

Applicant: City of Bryan

P.O. Box 1000 Bryan, Texas 77805

Prepared By: Thomas E. Starr

Wastewater Permitting Section

Water Quality Division

(512) 239-4570

Date: July 11, 2025

Permit Action: Major amendment without renewal to request removal of the daily average and

daily maximum concentration limits for total aluminum from Outfall 003

This is a major amendment without renewal. The Fact Sheet and Executive Director's Preliminary Decision (Fact Sheet) for the existing permit issued on June 29, 2023 is still applicable. Only those sections affected by the major amendment request are updated herein and are in bold.

### I. <u>EXECUTIVE DIRECTOR RECOMMENDATION</u>

The Executive Director has made a preliminary decision that this permit, if issued, meets all statutory and regulatory requirements. **The draft permit retains the current expiration date of June 29, 2028.** 

### II. APPLICANT ACTIVITY

The applicant currently operates Roland C. Dansby Steam Electric Station, a natural gas fired power plant facility.

### III. DISCHARGE LOCATION

As described in the application, the facility is located at 8181 Mumford Road, northwest of the City of Bryan, Brazos County, Texas 77807. Discharge is from the plant site via Outfalls 001 and 002 to a drainage ditch, thence to Elm Creek, thence to Peach Creek, thence to Campbells Creek, thence to the Little Brazos River, thence to the Brazos River Above Navasota River; and via Outfall 003 to Lake Bryan, thence through an inground pipe, thence to an unnamed tributary, thence to Thompson Creek, thence to the Brazos River Above Navasota River in Segment No. 1242 of the Brazos River Basin.

## IV. <u>RECEIVING STREAM USES</u>

The unclassified receiving water uses are high aquatic life use for Lake Bryan, intermediate aquatic life use for Thompson Creek, limited aquatic life use for the unnamed tributary, and minimal aquatic life use for the drainage ditch, Elm Creek, and Peach Creek. The designated uses

### FACT SHEET AND EXECUTIVE DIRECTOR'S PRELIMINARY DECISION

for Segment No. 1242 are primary contact recreation, public water supply, and high aquatic life use.

### V. STREAM STANDARDS

The general criteria and numerical criteria that make up the stream standards are provided in 30 TAC §§ 307.1 - 307.10.

### VI. DISCHARGE DESCRIPTION

The following is a quantitative description of the discharge described in the monthly effluent report data for the period **June 2020** through **May 2025**. The "average of daily average" values presented in the following table are the average of all daily average values for the reporting period for each pollutant. The "maximum of daily maximum" values presented in the following table are the individual maximum values for the reporting period for each pollutant. Flows are expressed in millions gallons per day (MGD). All pH values are expressed in standard units (SU).

### A. Flow

Outfall	Frequency	Average of Daily Average, MGD	Maximum of Daily Maximum, MGD
001	1/day	0.025	0.086
002	1/day	0.001	0.045
003	1/day	77.8	<b>78.0</b>

**B.** Temperature

Outfall	Average of Daily Average, °F	Maximum of Daily Maximum, °F
001	N/A	73
002	N/A	73
003	75	112

### C. Effluent Characteristics

		Average of Daily	Maximum of Daily
Outfall	Pollutant	Average,	Maximum,
		mg/L	mg/L
001	Total Suspended Solids (TSS)	3.41	84
	Oil and Grease	5.78	130
	Total Dissolved Solids (TDS)	N/A	780
	Total Iron	N/A	0.738
	Total Copper	N/A	0.025
	pH, SU	6.24 SU, minimum	8.11 SU
002	TSS	9.16	80
	Oil and Grease	5.28	16.2
	TDS	N/A	611
	Total Iron	N/A	0.513
	Total Copper	N/A	0.016
	рН	6.3 SU, minimum	8.9

### FACT SHEET AND EXECUTIVE DIRECTOR'S PRELIMINARY DECISION

### C. Effluent Characteristics

		Average	of Daily	Maximur	n of Daily
Outfall	Pollutant	Ave	rage	Maxi	mum
		lbs/day	mg/L	lbs/day	mg/L
003	Free Available Oxidants	0.08	0.041	0.36	0.44
	Total Aluminum	N/A	1.11	N/A	3.20

Effluent limit violations documented in the monthly effluent reports are summarized in the following table.

# **D. Effluent Limitation Violations**

Outfall	Dollutont (unita)	Month/	Daily A	Average	Daily M	aximum
Outfall	Pollutant (units)	Year	Limit	Reported	Limit	Reported
001	Oil and Grease	1/2023	15	30.04	20	130.2
		8/2023	ı	-		20.8
002	TSS	1/2023	30	45.5	-	-
		6/2024		36	-	-

The draft permit was not changed to address these effluent limit violations because of the infrequent nature of the exceedances.

# VII. <u>DRAFT EFFLUENT LIMITATIONS</u>

Effluent limitations are established in the draft permit as follows:

Outfall	Pollutant	Daily Average,	Daily Maximum,
Outian		mg/L	mg/L
001	Flow	Report, MGD	Report, MGD
	TSS	30	100
	Oil and Grease	15	20
	TDS	N/A	2,000
	Total Iron	N/A	1.0
	Total Copper (interim)	N/A	0.22
	Total Copper (final)	N/A	0.157
	Temperature	N/A	95 °F
	pН	6.0 SU, minimum	9.0 SU
002	Flow	Report, MGD	Report, MGD
	TSS	30	100
	Oil and Grease	15	20
	TDS	N/A	2,000
	Total Iron	N/A	1.0
	Total Copper (interim)	N/A	0.22
	Total Copper (final)	N/A	0.157
	Temperature	N/A	95 °F
	рН	6.0 SU, minimum	9.0 SU

Outfall	Pollutant	Daily Average		Daily Maximum	
		lbs/day	mg/L	lbs/day	mg/L
003	Flow	78 MGD		156 MGD	
	Free Available Oxidants	21.7	0.2	54.2	0.5

Outfall	Pollutant	Daily A	Average	Daily Maximum			
Outian	Ponutant	lbs/day	mg/L	lbs/day	mg/L		
003	Temperature	Report, °F		Report, °F Report, °F		ort, °F	
	Total Aluminum	N/A		N/A		Rej	port

#### **OUTFALL LOCATIONS**

Outfall	Latitude	Longitude
001	30.722845 N	96.461891 W
002	30.722990 N	96.459489 W
003	30.720255 N	96.461513 W

# VIII. <u>SUMMARY OF CHANGES FROM APPLICATION</u>

No changes were made from the application.

## IX. SUMMARY OF CHANGES FROM EXISTING PERMIT

The permittee requested the following amendments that the Executive Director recommends granting:

A once-through cooling water exemption for total aluminum is proposed to be granted based on the sample analyses provided meeting the requirements of 30 TAC 307.8(d) showing that water quality-based effluent limitations are not required for total aluminum at Outfall 003. The total aluminum limits have been removed from the draft permit as well as the Other Requirements which relate to total aluminum. A once per quarter monitoring requirement is placed in the draft permit to expire one month prior to the expiration of this permit.

The following additional changes have been made to the draft permit:

- 1. Pages 3-13 were updated (May 2021 version).
- 2. The address for the facility was updated to the zip code of 77807.
- 3. Other Requirement No. 8 was not carried forward as data for Outfall 002 was submitted March 15, 2024. Other Requirement No. 9 was renumbered No. 8 in the draft permit.
- 4. Other Requirements Nos. 1 and 8 were updated to remove aluminum.
- 5. Other Requirements No. 9 was added to reflect the approved once-through cooling water exemption.

# X. <u>DRAFT PERMIT RATIONALE</u>

The following section sets forth the statutory and regulatory requirements considered in preparing the draft permit. Also set forth are any calculations or other necessary explanations of the derivation of specific effluent limitations and conditions, including a citation to the applicable effluent limitation guidelines and water quality standards.

#### A. REASON FOR PERMIT ISSUANCE

The applicant applied to the TCEQ for a **major amendment without renewal to Permit No. WQ0002117000 to authorize removal of the daily average and daily maximum concentration limits for total aluminum from Outfall 003.**The existing permit authorizes the discharge of cooling tower blowdown, low volume waste, and storm water from the storm sewer system on an intermittent and flow-variable basis via Outfall 001; low volume waste, storm water, and effluent from the roof drain system on an intermittent and flow-variable basis via Outfall 002; and once through cooling water at a daily average flow not to exceed 78 million gallons per day via Outfall 003.

### B. <u>WATER QUALITY SUMMARY</u>

# **Discharge Routes**

The discharge route is via Outfalls 001 and 002 to a drainage ditch, thence to Elm Creek, thence to Peach Creek, thence to Campbells Creek, thence to the Little Brazos River, thence to the Brazos River Above Navasota River; and via Outfall 003 to Lake Bryan, thence through an inground pipe, thence to an unnamed tributary, thence to Thompson Creek, thence to the Brazos River Above Navasota River in Segment No. 1242 of the Brazos River Basin. The unclassified receiving water uses are high aquatic life use for Lake Bryan, intermediate aquatic life use for Thompson Creek, limited aquatic life use for the unnamed tributary, and minimal aquatic life use for the drainage ditch, Elm Creek, and Peach Creek. The designated uses for Segment No. 1242 are primary contact recreation, public water supply, and high aquatic life use. Effluent limitations and conditions established in the draft permit comply with state water quality standards and the applicable water quality management plan. The effluent limits in the draft permit will maintain and protect the existing instream uses. Additional discussion of the water quality aspects of the draft permit can be found at Section X.D. of this fact sheet.

#### **Antidegradation Review**

In accordance with 30 TAC § 307.5 and TCEQ's *Procedures to Implement the Texas Surface Water Quality Standards* (June 2010), an antidegradation review of the receiving waters was performed. A Tier 1 antidegradation review has preliminarily determined that existing water quality uses will not be impaired by this permit action. Numerical and narrative criteria to protect existing uses will be maintained. A Tier 2 review has preliminarily determined that no significant degradation of water quality is expected in Lake Bryan and Thompsons Creek, which has been identified as having high and intermediate aquatic life use. Existing uses will be maintained and protected. The preliminary determination can be reexamined and may be modified if new information is received.

# **Endangered Species Review**

The discharge from this permit 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) 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's 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.

#### **Impaired Water Bodies**

Segment No. 1242 is not currently listed on the state's inventory of impaired and threatened waters, the 2014 Clean Water Act Section 303(d) list. However, Campbells Creek (1242I) is currently listed for bacteria in water from the confluence with Little Brazos River upstream to the headwaters, one mi west of Old San Antonio Road (AU 1242I\_01). Thompsons Creek (1242D) an Appendix D perennial stream is also listed for bacteria from the confluence of the Brazos River upstream to the confluence of Still Creek in Brazos County (AU 1242D\_01). Additionally, Thompsons Creek (1242D) an Appendix D intermittent stream with perennial pools is listed for bacteria and depressed dissolved oxygen in water from the confluence of Still Creek upstream to the confluence of Thompson's Branch, north of FM 1687 (AU 1242D\_02). This application is for **amendment** of an existing authorization and will not represent an increase in the permitted levels of oxygen demanding constituents to Thompsons Creek (1242D).

Completed Total Maximum Daily Loads (TMDLs)
There are no completed TMDLs for Segment No. 1242.

### C. TECHNOLOGY-BASED EFFLUENT LIMITATIONS/CONDITIONS

#### 1. GENERAL COMMENTS

Regulations in Title 40 of the Code of Federal Regulations (40 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.

The draft permit authorizes the discharge of cooling tower blowdown, low volume waste, and stormwater on and intermittent and flow variable basis via Outfall 001; low volume waste, stormwater, and effluent from the roof drain on and intermittent and flow variable basis via Outfall 002; and once through cooling water at a daily average flow not to exceed 78 MGD via Outfall 003.

The discharge of cooling tower blowdown and low volume waste via Outfall 001, low volume waste via Outfall 002, and once through cooling water via Outfall 003 from this facility is subject to federal effluent limitation guidelines at 40 CFR Part 423. A new source determination was performed, and the discharge is not a new source as defined at 40 CFR §122.2. Therefore, new source performance standards (NSPS) are not required for this discharge.

The discharge of stormwater via Outfalls 001 and 002 is not subject to federal effluent limitation guidelines and any technology-based effluent limitations are based on best professional judgment.

The following wastes are generated and discharged at the Dansby Steam Electric Station: cooling tower blowdown, low volume waste (boiler blowdown, floor and yard drains, washdown water, and leaks), stormwater, sewage effluent, and once through cooling water. Make-up water for once through cooling operations is taken from Bryan Utilities Lake, which is supplemented with plant groundwater wells. Make-up water for other plant processes is taken

directly from plant groundwater wells. Low volume waste (floor drains) is routed to an oil/water separator prior to discharge via Outfall 002. All other wastes generated at this facility are not subject to treatment prior to discharge at Outfalls 001, 002, and 003. The sanitary wastewater package plant has been permanently removed and replaced with an on-site aerobic treatment and disposal system.

#### 2. CALCULATIONS

See Appendix A of this fact sheet for calculations and further discussion of technology-based effluent limitations proposed in the draft permit.

See Appendix D of the Fact Sheet for the technology-based effluent limits.

# 3. 316(B) COOLING WATER INTAKE STRUCTURES

#### a. SCREENING

The facility obtains water for cooling purposes from a groundwater well located on facility property. Groundwater is not considered waters of the United States (WOTUS), and the facility does not own and operate a cooling water intake structure which withdraws from a WOTUS or other waters that may be considered WOTUS. Obtaining from a groundwater source for cooling purposes does not constitute the use of a cooling water intake structure; therefore, the facility is not subject to Section 316(b) of the CWA or 40 CFR Part 125, Subpart J.

### b. PERMIT ACTION

The Other Requirement No. 7 has been added and requires the permittee to notify the TCEQ of any changes in the method by which cooling water is obtained. Upon receipt of such notification, the TCEQ may reopen the permit to include additional terms and conditions as necessary.

# D. <u>WATER QUALITY-BASED EFFLUENT LIMITATIONS/CONDITIONS</u>

#### 1. GENERAL COMMENTS

The Texas Surface Water Quality Standards found at 30 TAC Chapter 307 state that surface waters will not be toxic to man from ingestion of water, consumption of aquatic organisms, or contact with the skin, or to terrestrial or aquatic life. The methodology outlined in the TCEQ guidance document Procedures to Implement the Texas Surface Water Quality Standards (IPs) 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. Calculated water quality-based effluent limits can be found in Appendix B of this fact sheet.

TPDES permits contain technology-based effluent limits reflecting the best controls available. Where these technology-based permit limits do not protect water quality or the designated uses, additional water quality-based effluent limitations or conditions are included. State narrative and numerical water quality standards are used in conjunction with EPA criteria and other toxicity databases to determine the adequacy of technology-based permit limits and the need for additional water quality-based controls. A comparison of technology-based effluent limits and calculated water quality-based effluent limits can be found in Appendix D of this fact sheet.

#### 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).

# i) OUTFALLS 001 & 002

There is no mixing zone or zone of initial dilution (ZID) for this discharge directly to the drainage ditch, an intermittent stream; acute freshwater criteria apply at the end of pipe. Chronic freshwater criteria do not apply to discharges to intermittent streams where there is no perennial waterbody within three miles downstream from the point of discharge. The following critical effluent percentage is being used:

Acute Effluent %: 100%

#### ii) OUTFALL 003

Acute freshwater criteria are applied at the edge of the zone of initial dilution (ZID), and chronic freshwater criteria are applied at the edge of the aquatic life mixing zone. The ZID for this discharge is defined as volume within a radius of 25 feet from the point where the discharge enters Bryan Lake. The chronic aquatic life mixing zone for this discharge is defined as volume within a radius of 100 feet from the point where the discharge enters Bryan Lake. The human health mixing zone for this discharge is defined as volume within a radius of 200 feet from the point where the discharge enters Bryan Lake.

TCEQ uses the EPA horizontal jet plume model to estimate dilution at the edges of the ZID and aquatic life mixing zone for discharges greater than 10 MGD into lakes or reservoirs. General assumptions used in the horizontal jet plume model are a non-buoyant discharge, a submersed pipe, and no cross flow. Based on this analysis, the following critical effluent percentages are calculated based on the permitted daily average flow of 78 MGD:

Acute Effluent %

100% Chronic Effluent % 33%

General Screening Procedures

Wasteload 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-of-pipe effluent concentration that can be discharged when, after mixing in the receiving stream, the instream numerical criteria will not be exceeded.

From the WLA, a long-term average (LTA) is calculated using a lognormal probability distribution, a given coefficient of variation (0.6), and a 99th 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-specific values for TSS, pH, hardness, and chloride according to the IPs. The segment values are 11 mg/L for TSS, 7.7 standard units for pH, 221 mg/L for hardness (as calcium carbonate,  $CaCO_3$ ), and 179 mg/L for chloride. For additional details on the calculation of water quality-based effluent limitations, refer to the IPs.

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 equals or exceeds 85 percent of the calculated daily average water quality-based effluent limitation. Monitoring and reporting is required when analytical data reported in the application equals or exceeds 70 percent of the calculated daily average water quality-based effluent limitation.

#### b. PERMIT ACTION

Analytical data **(2022 application)** reported in the application for Outfall 001 was screened against calculated water quality-based effluent limitations for the protection of aquatic life. Reported analytical data does not exceed 70 percent of the calculated daily average water quality-based effluent limitation for aquatic life protection. No additional limits or monitoring and reporting requirements have been added to the draft permit for Outfall 001. The limits in the existing permit were compared to the calculated water quality-based effluent limits to determine whether the existing limits are still protective. As a result, daily maximum total copper effluent limitation at Outfall 001 has been made more stringent based screening for aquatic life protection. An interim three-year compliance period is included in the draft permit for total copper in accordance with 30 TAC §307.2(f). The interim compliance period will give the applicant time to identify the sources of total copper in the

wastewater and develop mitigation strategies or improve treatment to meet the proposed limits.

No analytical data was submitted **(2022 application)** for Outfall 002. A retest requirement, Other Requirement No. 8, is included in the draft permit for Outfall 002. The limits in the existing permit were compared to the calculated water quality-based effluent limits to determine whether the existing limits are still protective. As a result, daily maximum total copper effluent limitation at Outfall 002 has been made more stringent based screening for aquatic life protection. An interim three-year compliance period is included in the draft permit for total copper in accordance with 30 TAC §307.2(f). The interim compliance period will give the applicant time to identify the sources of total copper in the wastewater and develop mitigation strategies or improve treatment to meet the proposed limits.

Analytical data **(2022 application)** reported in the application for Outfall 003 was screened against calculated water quality-based effluent limitations for the protection of aquatic life. Reported analytical data for aluminum exceeds 85 percent of the calculated daily average water quality-based effluent limitation for aquatic life protection. Based on the screening, daily average and daily maximum effluent limitations for total aluminum have been added to the draft permit. An interim three-year compliance period is included in the draft permit for total aluminum in accordance with 30 TAC §307.2(f). The interim compliance period will give the applicant time to identify the sources of total aluminum in the wastewater and develop mitigation strategies or improve treatment to meet the proposed limits.

# 3. WHOLE EFFLUENT TOXICITY (BIOMONITORING) CRITERIA (48-HOUR ACUTE & CHRONIC)

#### a. SCREENING AND REASONABLE POTENTIAL ANALYSIS

The existing permit includes 48-hour and 24-hour acute freshwater biomonitoring testing for Outfall 001 and 24-hour acute and chronic freshwater biomonitoring requirements at Outfall 003.

In the past three years, for Outfall 001, the permittee has performed twelve 24-hour acute tests, with zero demonstrations of significant lethality (i.e., zero failures).

In the past three years, for Outfall 003, the permittee has performed twelve 24-hour acute tests, with zero demonstrations of significant lethality (i.e., zero failures).

A reasonable potential determination was performed in accordance with 40 CFR §122.44(d)(1)(ii) to determine whether the discharge will reasonably be expected to cause or contribute to an exceedance of a state water quality standard or criterion within that standard. Each test species is evaluated separately. The RP determination is based on representative data from the previous three years of chronic WET

testing. This determination was performed in accordance with the methodology outlined in the TCEQ letter to the EPA dated December 28, 2015, and approved by the EPA in a letter dated December 28, 2015.

With zero failures for Outfall 001, a determination of no RP was made. With zero failures for Outfall 003, a determination of no RP was made. All of the test results were used for this determination.

#### b. <u>PERMIT ACTION</u>

The provisions of this section apply to Outfalls 001 and 003.

Based on information contained in the permit application, the TCEQ has determined that there may be pollutants present in the effluent(s) that may have the potential to cause toxic conditions in the receiving stream.

Whole effluent toxicity testing (biomonitoring) is the most direct measure of potential toxicity, which 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 biomonitoring procedures stipulated as a condition of this permit are as follows:

#### i) Outfall 001

- (a) Acute static renewal 48-hour definitive toxicity tests using the water flea (*Ceriodaphnia dubia* or *Daphnia pulex*). The frequency of the testing shall be once per quarter.
- (b) Acute static renewal 48-hour definitive toxicity tests using fathead minnow (*Pimephales promelas*). The frequency of the testing shall be once per quarter.

Toxicity tests shall be performed in accordance with protocols described in *Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms*, Fifth Edition (EPA-821-R-02-012) or the latest revision. The stipulated 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.

#### ii) Outfall 003

(a) Chronic static renewal survival and reproduction test using the water flea (*Ceriodaphnia dubia*). The frequency of the testing shall be once per quarter.

(b) Chronic static renewal 7-day larval survival and growth test using the fathead minnow (*Pimephales promelas*). The frequency of testing shall be once per quarter.

Toxicity tests shall be performed in accordance with protocols described in *Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms*, Fourth Edition (EPA-821-R-02-013) or the latest revision. The stipulated 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, 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.

#### c. DILUTION SERIES

The permit requires five (5) 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% for Outfall 001 and 14%, 19%, 25%, 33%, and 44% for Outfall 003. The low-flow effluent concentration (critical dilution) is defined as 100% effluent for Outfall 001 and 33% for Outfall 003.

The dilution series outlined above was calculated using a 0.75 factor applied to the critical dilution. The critical dilution is the estimated effluent dilution at the edge of the aquatic life mixing zone, which is discussed in Section X.D.2.a. of this fact sheet.

# 4. AQUATIC ORGANISM TOXICITY CRITERIA (24-HOUR ACUTE)

#### a. SCREENING

The existing permit includes 24-hour acute freshwater biomonitoring requirements for Outfalls 001 and 003.

In the past three years, for Outfall 001, the permittee has performed twelve 24-hour acute tests, with zero demonstrations of significant lethality (i.e., zero failures).

In the past three years, for Outfall 003, the permittee has performed twelve 24-hour acute tests, with zero demonstrations of significant lethality (i.e., zero failures).

Minimum 24-hour acute freshwater biomonitoring requirements are proposed in the draft permit as outlined below.

#### b. PERMIT ACTION

Twenty-four-hour 100% acute biomonitoring tests are required at Outfalls 001 and 003 at a frequency of once per six months for the life of the permit.

The biomonitoring procedures stipulated as a condition of this permit are as follows:

- i) Acute 24-hour static toxicity test using the water flea (*Ceriodaphnia dubia* or *Daphnia pulex*). A minimum of five (5) replicates with eight (8) organisms per replicate shall be used for this test.
- ii) Acute 24-hour static toxicity test using the fathead minnow (*Pimephales promelas*). A minimum of five (5) replicates with eight (8) organisms per replicate shall be used for this test.

Toxicity tests shall be performed in accordance with protocols described in *Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms*, Fifth Edition (EPA-821-R-02-012) or the latest revision.

# 5. AQUATIC ORGANISM BIOACCUMULATION CRITERIA

# a. <u>SCREENING</u>

# i) OUTFALLS 001 & 002

The discharge point is located at a distance greater than three miles upstream of perennial waters. Human health screening is not applicable because of the distance between the discharge point and perennial waters that support fisheries.

# ii) OUTFALLS 003

Water quality-based effluent limitations for the protection of human health are calculated using criteria for the consumption of fish tissue found in Table 2 of the *Texas Surface Water Quality Standards* (30 TAC Chapter 307).

Fish tissue bioaccumulation criteria are applied at the edge of the human health mixing zone for discharges into lakes and reservoirs. The human health mixing zone for this discharge is defined as a volume within a radius of 200 feet from the point where the discharge enters Lake Bryan. TCEQ uses the EPA horizontal jet plume model to estimate dilution at the edge of the human health mixing zone for discharges greater than 10 MGD into lakes or reservoirs. General assumptions used in the horizontal jet plume model are a non-buoyant discharge, a submersed pipe, and no cross flow. Based on this analysis, the

following critical effluent percentage is calculated based on the permitted daily average flow of 78 MGD:

Human health Effluent %: 16%

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 percent and 85 percent of the calculated daily average water quality-based effluent limitation.

### b. <u>PERMIT ACTION</u>

Analytical data **(2022 application)** reported in the application was screened against calculated water quality-based effluent limitations for the protection of human health. Reported analytical data does not exceed 70 percent of the calculated daily average water quality-based effluent limitation for human health protection. No additional limits or monitoring and reporting requirements have been added to the draft permit.

#### 6. DRINKING WATER SUPPLY PROTECTION

#### a. <u>SCREENING</u>

Segment No. 1242, which receives the discharge from this facility, is not designated as a public water supply. 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.

#### b. PERMIT ACTION

None.

# 7. TOTAL DISSOLVED SOLIDS, CHLORIDE, AND SULFATE STANDARDS PROTECTION

#### a. <u>SCREENING</u>

Average concentrations of TDS, chloride, and sulfate reported in the application (2022 application) are all less than the respective criteria for Segment No. 1242; therefore, no further screening is necessary.

The average concentration of TDS in the effluent for Outfall 003 is greater than the segment criterion. Screening procedures and effluent limitations for TDS are calculated using the methodology in the *IPs* and criteria in the *Texas Surface Water Quality Standards* (30 TAC Chapter 307). Detailed calculations are presented in Appendix C.

#### b. PERMIT ACTION

Based on the screening, no effluent limitations are needed for TDS, chloride, or sulfate.

#### 8. PROTECTION OF pH STANDARDS

#### a. SCREENING

The existing permit includes pH limits of 6.0 – 9.0 standard units at Outfalls 001 and 002, which discharge into an unclassified water bodies. Consistent with the procedures for pH screening that were submitted to EPA with a letter dated May 28, 2014, and approved by EPA in a letter dated June 2, 2014, requiring a discharge to an unclassified water body to meet pH limits of 6.0 – 9.0 standard units reasonably ensures instream compliance with *Texas Surface Water Quality Standards* pH criteria.

#### b. <u>PERMIT ACTION</u>

The existing pH limits of 6.0 - 9.0 standard units are carried forward in the draft permit at Outfalls 001 and 002.

# 9. THERMAL STANDARDS PROTECTION

#### a. SCREENING

Technology-based effluent limits for temperature are based on best professional judgement.

#### b. PERMIT ACTION

Temperature limits are carried forward from the existing permit.

#### XI. PRETREATMENT REQUIREMENTS

This facility is not defined as a publicly owned treatment works. Pretreatment requirements are not proposed in the draft permit.

#### XII. VARIANCE REQUESTS

No variance requests have been received.

#### XIII. 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 reviewing 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 Thomas E. Starr at (512) 239-4570.

#### XIV. ADMINISTRATIVE RECORD

The following section is a list of the fact sheet citations to applicable statutory or regulatory provisions and appropriate supporting references.

#### A. PERMIT(S)

TPDES Permit No. WQ0002117000 issued on **June 29, 2023**.

### B. APPLICATION

TPDES wastewater permit application received on May 2, 2025 and additional information received on May 22, 2025.

#### C. 40 CFR CITATION(S)

40 CFR Part 423

### D. <u>LETTERS/MEMORANDA/RECORDS OF COMMUNICATION</u>

Letter dated April 29, 2014, from L'Oreal W. Stepney, P.E., Deputy Director, Office of Water, TCEQ, to Bill Honker, Director, Water Quality Protection Division, EPA (TCEQ proposed development strategy for thermal evaluation procedures).

Letter dated May 12, 2014, from William K. Honker, P.E., Director, Water Quality Protection Division, EPA, to L'Oreal W. Stepney, P.E., Deputy Director, Office of Water, TCEQ (Approval of TCEQ proposed development strategy for thermal evaluation procedures).

Letter dated May 28, 2014, from L'Oreal W. Stepney, P.E., Deputy Director, Office of Water, TCEQ, to Bill Honker, Director, Water Quality Protection Division, EPA (TCEQ proposed development strategy for pH evaluation procedures).

Letter dated June 2, 2014, from William K. Honker, P.E., Director, Water Quality Protection Division, EPA, to L'Oreal W. Stepney, P.E., Deputy Director, Office of Water, TCEQ (Approval of TCEQ proposed development strategy for pH evaluation procedures).

Letter dated December 28, 2015, from L'Oreal Stepney, P.E., Deputy Director, Office of Water, TCEQ, to Bill Honker, Director, Water Quality Protection Division, EPA (TCEQ proposed development strategy for procedures to determine reasonable potential for whole effluent toxicity limitations).

Letter dated December 28, 2015, from William K. Honker, P.E., Director, Water Quality Protection Division, EPA, to L'Oreal W. Stepney, P.E., Deputy Director, Office of Water, TCEQ (Approval of TCEQ proposed development strategy for procedures to determine reasonable potential for whole effluent toxicity limitations).

TCEQ Interoffice Memorandum dated **June 5**, **2025**, from **Jeff Paull** of the Standards Implementation Team, Water Quality Assessment Section, to the Industrial Permits Team, Wastewater Permitting Section (Standards Memo).

TCEQ Interoffice Memorandum dated **June 19**, **2025**, from **Sarah Musgrove** of the Water Quality Assessment Team, Water Quality Assessment Section, to the Industrial Permits Team, Wastewater Permitting Section (Critical Conditions Memo).

TCEQ Interoffice Memorandum dated **June 23**, **2025**, from **Orlando M. Vasquez**, **Jr.**, **P.E.** of the Water Quality Assessment Team, Water Quality Assessment Section, to the Industrial Permits Team, Wastewater Permitting Section (Modeling Memo).

TCEQ Interoffice Memorandum dated **June 27, 2025**, from Brad Caston of the Standards Implementation Team, Water Quality Assessment Section, to the Industrial Permits Team, Wastewater Permitting Section (Biomonitoring Memo).

#### E. MISCELLANEOUS

The State of Texas 2022 Integrated Report – Texas 303(d) List (Category 5), TCEQ, July 7, 2022.

*Texas Surface Water Quality Standards*, 30 TAC §§307.1 - 307.10, TCEQ, effective March 1, 2018, as approved by EPA Region 6.

*Texas Surface Water Quality Standards*, 30 TAC §§307.1 - 307.10, TCEQ, effective March 6, 2014, as approved by EPA Region 6, for portions of the 2018 standards not approved by EPA Region 6.

*Texas Surface Water Quality Standards*, 30 TAC §§307.1 - 307.10, TCEQ, effective July 22, 2010, as approved by EPA Region 6, for portions of the 2014 standards not yet approved by EPA Region 6.

*Texas Surface Water Quality Standards*, 30 TAC §§307.1 - 307.10, TCEQ, effective August 17, 2000, and Appendix E, effective February 27, 2002, for portions of the 2010 standards not yet approved by EPA Region 6.

Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms, Fourth Edition (EPA-821-R-02-013).

Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms, Fifth Edition (EPA-821-R-02-012).

Procedures to Implement the Texas Surface Water Quality Standards, TCEQ, June 2010, as approved by EPA Region 6.

Procedures to Implement the Texas Surface Water Quality Standards, TCEQ, January 2003, for portions of the 2010 IPs not approved by EPA Region 6.

Guidance Document for Establishing Monitoring Frequencies for Domestic and Industrial Wastewater Discharge Permits, TCEQ Document No. 98-001.000-OWR-WQ, May 1998.

# Appendix A Calculated Technology-Based Effluent Limits

#### Outfall 001

The discharge at Outfall 001 consists of cooling tower blowdown, low volume wastes (boiler blowdown, floor and yard drains, washdown water, and leaks) and stormwater. Technology-based effluent limitations for the discharges of low volume wastes are applied at Outfall 001.

The discharges of cooling tower blowdown and low volume waste are subject to categorical guidelines in 40 CFR Part 423 (Steam Electric Power Generating Point Source Category).

Technology-based effluent limitations applicable to low volume wastes are listed as follows:

### BPT (40 CFR §423.12)

<u>Parameter</u>	<u>Daily Average</u>	<u>Daily Maximum</u>
Total Suspended Solids	30 mg/L	100 mg/L
Oil and Grease	15 mg/L	20 mg/L
рH	Between 6.0 and 9.0 st	andard units

Technology-based effluent limitations applicable to cooling tower blowdown are listed as follows:

#### BPT (40 CFR §423.12)

<u>Parameter</u>	<u>Daily Average</u>	Daily Maximum
Free Available Chlorine	0.2 mg/L	o.5 mg/L
рН	Between 6.0 and 9.0 stan	dard units

#### BAT (40 CFR §423.13)

The 126 priority pollutants (Appendix A of Part 423) contained in chemicals added for cooling tower maintenance, except chromium and zinc, shall be limited in the discharge to "no detectable amount". If used, total chromium shall be limited to 0.2 mg/L maximum at any time and total zinc shall be limited to 1.0 mg/L at any time.

Total residual chlorine may not be discharged from any single generating unit for more than two hours per day unless the discharger demonstrates to the permitting authority that discharge for more than two hours is required for macroinvertebrate control. Simultaneous multi-unit chlorination is not permitted.

Using best professional judgment, the effluent limitations specified above are applied to the discharge of stormwater at Outfall 001.

In addition to the effluent limitations specified above, the current permit includes effluent limitations and/or reporting requirements for flow, temperature, and total iron. The flow at Outfall 001 is designated as intermittent and flow variable with monitoring requirements only at the request of the permittee. Effluent limitations and monitoring requirements for temperature are based on the Segment 1242 temperature criteria and in accordance with 30 TAC Chapter 307. Effluent limitations for total iron are based on best professional judgment and 30 TAC 319.

Because this is an intermittent and flow-variable discharge, mass-based effluent limitations are not included in the draft permit.

The technology-based effluent limitations outlined above are equal to those included in the current permit, and are continued in the draft permit as follows:

<u>Parameter</u>	<u>Daily Average</u>	<u>Daily Maximum</u>
Total Suspended Solids	30 mg/L	100 mg/L
Oil and Grease	15 mg/L	20 mg/L
Iron, Total	N/A	1.0 mg/L
Temperature (°F)	N/A	(95)
рH	Between 6.0 and 9.0 st	andard units

#### Outfall 002

The discharge at Outfall 002 consists of stormwater, low volume wastes, and effluent from the roof drain system.

The discharge of low volume waste is subject to categorical guidelines in 40 CFR Part 423 (Steam Electric Power Generating Point Source Category).

Technology-based effluent limitations applicable to low volume wastes are listed as follows:

# BPT (40 CFR §423.12)

<u>Parameter</u>	<u>Daily Average</u>	<u>Daily Maximum</u>
Total Suspended Solids	30 mg/L	100 mg/L
Oil and Grease	15 mg/L	20 mg/L
pH	Between 6.0 and 9.0	standard units

Using best professional judgment, the effluent limitations specified above are applied to the discharge of stormwater at Outfall 002.

In addition to the effluent limitations specified above, the current permit includes effluent limitations and/or reporting requirements for flow, temperature, and total iron. The flow at Outfall 002 is designated as intermittent and flow variable with monitoring requirements only at the request of the permittee. Effluent limitations and monitoring requirements for temperature are based on the Segment 1242 temperature criteria and in accordance with 30 TAC Chapter 307. Effluent limitations for total iron are based on best professional judgment and 30 TAC 319.

Because this is an intermittent and flow variable discharge, mass-based effluent limitations are not included in the draft permit.

The technology-based effluent limitations outlined above are equal to those included in the current permit, and are continued in the draft permit as follows:

<u>Parameter</u>	<u>Daily Average</u>	<u>Daily Maximum</u>
Total Suspended Solids	30 mg/L	100 mg/L
Oil and Grease	15 mg/L	20 mg/L
Iron, Total	N/A	1.0 mg/L
Temperature	N/A	95 °F
рН	Between 6.0 and 9.0	standard units

#### Outfall 003

The discharge at Outfall 003 consists of once-through cooling water.

The discharge of once-through cooling water is subject to categorical guidelines in 40 CFR Part 423 (Steam Electric Power Generating Point Source Category).

Technology-based effluent limitations are listed as follows:

BPT (40 CFR §423.12)

<u>Parameter</u> <u>Daily Average</u> <u>Daily Maximum</u> Free Available Chlorine 0.2 mg/L 0.5 mg/L

BAT (40 CFR §423.13)

ParameterDaily AverageDaily MaximumTotal Residual ChlorineN/A0.2 mg/L

The permittee uses a combination of sodium hypochlorite and sodium bromide in the condenser associated with once-through cooling water for Outfall 003. For this reason, effluent limitations are established for free available oxidants at Outfall 003.

Mass based effluent limitations were calculated in the following way:

#### Free Available Oxidants

Daily Average =  $[(0.2 \text{ mg/L}) \times (8.345) \times 156 \text{ MGD}) \times (2 \text{ hours/24 hours})]$ Daily Maximum =  $[(0.5 \text{ mg/L}) \times (8.345) \times (156 \text{ MGD}) \times (2 \text{ hours/24 hours})]$ 

The concentration limitation is multiplied by a conversion factor, then by the flow. The flow of 156 MGD represents the condenser's two 78-MGD pumps. The result is multiplied by 2/24 because chlorination is limited to 2 hours out of each 24-hour day.

Monitoring Requirements are established for temperature based on best professional judgement.

Technology-based effluent limitations outlined above are equal to those included in the current permit, and are continued in the draft permit as follows:

 $\begin{array}{c|ccccc} \underline{Parameter} & \underline{Daily\ Average} & \underline{Daily\ Maximum} \\ Free\ Available\ Oxidants & 0.2\ mg/L & 0.5\ mg/L \\ & 21.7\ lbs/day & 54.2\ lbs/day \\ Temperature & Report\ (^\circF) & Report\ (^\circF) \end{array}$ 

<sup>\*</sup> Free available nor total residual chlorine may not be discharged from any single generating unit for more than two hours per day.

# Appendix B Calculated Water Quality-Based Effluent Limits

#### TEXTOX MENU #1 - INTERMITTENT STREAM

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

Table 1, 2014 Texas Surface Water Quality Standards (30 TAC 307) for Freshwater "Procedures to Implement the Texas Surface Water Quality Standards," TCEQ, June

#### PERMIT INFORMATION

Permittee Name:	City of Bryan
TPDES Permit No:	WQ0002117000
Outfall No:	001 and 002
Prepared By:	Thomas Starr
Date:	January 19, 2023

#### **DISCHARGE INFORMATION**

Intermittent Receiving Waterbody:	Drainage Ditch
Segment No:	1242
TSS (mg/L):	11
pH (Standard Units):	7.7
Hardness (mg/L as CaCO₃):	221
Chloride (mg/L):	179
Effluent Flow for Aquatic Life (MGD):	0.027
Critical Low Flow [7Q2] (cfs):	0
% Effluent for Acute Aquatic Life:	100

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

			Partition	Dissolved		Water	
	Intercept	Slope	Coefficient	Fraction		Effect	
Stream/River Metal	(b)	(m)	(Kp)	(Cd/Ct)	Source	Ratio	Source
Aluminum	N/A	N/A	N/A	1.00	Assumed	1.00	Assumed
Arsenic	5.68	-0.73	83134.89	0.522		1.00	Assumed
Cadmium	6.60	-1.13	264988.04	0.255		1.00	Assumed
Chromium (total)	6.52	-0.93	356044.93	0.203		1.00	Assumed
Chromium (trivalent)	6.52	-0.93	356044.93	0.203		1.00	Assumed
Chromium (hexavalent)	N/A	N/A	N/A	1.00	Assumed	1.00	Assumed
Copper	6.02	-0.74	177569.93	0.339		1.00	Assumed
Lead	6.45	-0.80	413890.88	0.180		1.00	Assumed
Mercury	N/A	N/A	N/A	1.00	Assumed	1.00	Assumed
Nickel	5.69	-0.57	124855.07	0.421		1.00	Assumed
Selenium	N/A	N/A	N/A	1.00	Assumed	1.00	Assumed
Silver	6.38	-1.03	202939.01	0.309		1.00	Assumed
Zinc	6.10	-0.70	234976.87	0.279		1.00	Assumed

AQUATIC LIFE CALCULATE DAILY AVERAGE AND DAILY MAXIMUM EFFLUENT LIMITATIONS:

	FW Acute				Daily
	Criterion	WLAa	LTAa	Daily Avg.	Max.
Parameter	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(μg/L)
Aldrin	3.0	3.00	1.72	2.52	5.34
Aluminum	991	991	568	834	1765
Arsenic	340	651	373	548	1159
Cadmium	18.54252	72.6	41.6	61.1	129
Carbaryl	2.0	2.00	1.15	1.68	3.56
Chlordane	2.4	2.40	1.38	2.02	4.27
Chlorpyrifos	0.083	0.0830	0.0476	0.0699	0.147
Chromium (trivalent)	1090.817	5363	3073	4517	9557
Chromium (hexavalent)	15.7	15.7	9.00	13.2	27.9
Copper	29.97989	88.5	50.7	74.5	157
Cyanide (free)	45.8	45.8	26.2	38.5	81.6
4,4'-DDT	1.1	1.10	0.630	0.926	1.96
Demeton	N/A	N/A	N/A	N/A	N/A
Diazinon	0.17	0.170	0.0974	0.143	0.302
Dicofol [Kelthane]	59.3	59.3	34.0	49.9	105
Dieldrin	0.24	0.240	0.138	0.202	0.427
Diuron	210	210	120	176	374
Endosulfan I (alpha)	0.22	0.220	0.126	0.185	0.392
Endosulfan II (beta )	0.22	0.220	0.126	0.185	0.392
Endosulfan sulfate	0.22	0.220	0.126	0.185	0.392
Endrin	0.086	0.0860	0.0493	0.0724	0.153
Guthion [Azinphos Methyl]	N/A	N/A	N/A	N/A	N/A
Heptachlor	0.52	0.520	0.298	0.438	0.926
Hexachlorocyclohexane (gamma ) [Lind	1.126	1.13	0.645	0.948	2.00
Lead	151.334	840	482	707	1497
Malathion	N/A	N/A	N/A	N/A	N/A
Mercury	2.4	2.40	1.38	2.02	4.27
Methoxychlor	N/A	N/A	N/A		N/A
Mirex	N/A	N/A	N/A	N/A	N/A
Nickel	915.8418	2174	1246	1830	38 <b>7</b> 3
Nonylphenol	28	28.0	16.0	23.5	49.8
Parathion (ethyl)	0.065	0.0650	0.0372	0.0547	0.115
Pentachlorophenol	17.6282	17.6	10.1	14.8	31.4
Phenanthrene	30	30.0	17.2	25.2	53.4
Polychlorinated Biphenyls [PCBs]	2.0	2.00	1.15	1.68	3.56
Selenium	20	20.0	11.5	16.8	35.6
Silver	0.8	28.8	16.5	24.2	51.3
Toxaphene	0.78	0.780	0.447	0.657	1.38
Tributyltin [TBT]	0.13	0.130	0.0745	0.109	0.231
2,4,5 Trichlorophe nol	136	136	77.9	114	242
Zinc	229.4345	822	471	692	1465

	700/ -6	050/ -4
A municipality	70% of	85% of
Aquatic Life	Daily Avg.	
Parameter	(μg/L)	(μg/L)
Aldrin	1.76	2.14
Aluminum	584	709
Arsenic	383	466
Cadmium	42.8	
Carbaryl	1.17	1.43
Chlordane	1.41	1.71
Chlorpyrifos	0.0489	0.0594
Chromium (trivalent)	3162	3839
Chromium (hexavalent)	9.25	11.2
Copper	52.2	63.3
Cyanide (free)	27.0	32.7
4,4'-DDT	0.648	0.787
Demeton	N/A	N/A
Diazinon	0.100	0.121
Dicofol [Kelthane]	34.9	42.4
Dieldrin	0.141	0.171
Diuron	123	150
Endosulfan I (alpha)	0.129	0.157
Endosulfan II (beta )	0.129	0.157
Endosulfan sulfate	0.129	0.157
Endrin	0.0507	0.0615
Guthion [Azinphos Methyl]	N/A	N/A
Heptachlor	0.306	0.372
Hexachlorocyclohexane (gamma) [Lind	0.663	0.806
Lead	495	601
Malathion	N/A	N/A
Mercury	1.41	1.71
Methoxychlor	N/A	N/A
Mirex	N/A	N/A
Nickel	1281	1556
Nonylphenol	16.5	20.0
Parathion (ethyl)	0.0383	0.0465
Pentachlorophenol	10.3	12.6
Phenanthrene	17.6	21.4
Polychlorinated Biphenyls [PCBs]	1.17	1.43
Selenium	11.7	14.3
Silver	16.9	20.6
Toxaphene	0.459	0.558
TributyItin [TBT]	0.0766	
2,4,5 Trichlorophenol	80.1	97.3
Zinc	484	588
LIIIC	404	200

#### TEXTOX MENU #4 - LAKE OR RESERVOIR

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

#### PERMITINFORMATION

 Permittee Name:
 City of Bryan

 TPDES Permit No:
 WQ0002117000

 Outfall No:
 003

 Prepared by:
 Thomas Starr

 Date:
 January 19, 2023

#### DISCHARGEINFORMATION

Receiving Waterbody:	Lake Bryan	
Segment No.:	1242	
TSS (mg/L):	11	
pH (Standard Units):	7.7	
Hardness (mg/L as CaCO₃):	221	
Chloride (mg/L):	179	
Effluent Flow for Aquatic Life (MGD):	78	
% Effluent for Chronic Aquatic Life (Mixing Zone):	33	
% Effluent for Acute Aquatic Life (ZID):	100	
Effluent Flow for Human Health (MGD):	78	
% Effluent for Human Health:	16	
Human Health Criterion (select: PWS, FISH, or INC	FISH	

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

-			Partition	Dissolved		Water	
	Intercept	Slope	Coefficient	Fraction		<b>Effect</b>	
Lake/Reservoir Metal	(b)	(m)	(Kp)	(Cd/Ct)	Source	Ratio	Source
Aluminum	N/A	N/A	N/A	1.00	Assumed	1.00	Assumed
Arsenic	5.68	-0.73	83134.89	0.522		1.00	Assumed
Cadmium	6.55	-0.92	390767.76	0.189		1.00	Assumed
Chromium (total)	6.34	-0.27	1145048.74	0.074		1.00	Assumed
Chromium (trivalent)	6.34	-0.27	1145048.74	0.074		1.00	Assumed
Chromium (hexavalent)	N/A	N/A	N/A	1.00	Assumed	1.00	Assumed
Copper	6.45	-0.90	325646.63	0.218		1.00	Assumed
Lead	6.31	-0.53	572877.65	0.137		1.00	Assumed
Mercury	N/A	N/A	N/A	1.00	Assumed	1.00	Assumed
Nickel	6.34	-0.76	353623.86	0.205		1.00	Assumed
Selenium	N/A	N/A	N/A	1.00	Assumed	1.00	Assumed
Silver	6.38	-1.03	202939.01	0.309		1.00	Assumed
Zinc	6.52	-0.68	648414.88	0.123		1.00	Assumed

AQUATIC LIFE

CALCULATE DAILY AVERAGE AND DAILY MAXIMUM EFFLUENT LIMITATIONS:

	FW Acute	Chronic						
	Criterion	Criterion	WLAa	WLAc	LTAa	LTAc	Daily Ava	Daily 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	0.960	N/A	1.41	2.98
Aluminum	991	N/A	991	N/A	317	N/A	466	986
Arsenic	340	150	651	870	208	531	306	647
Cadmium	18.54	0.427	98.2	6.85	31.4	4.18	6.14	12.9
Carbaryl	2.0	N/A	2.00	N/A	0.640	N/A	0.940	1.99
Chlordane	2.4	0.004	2.40	0.0121	0.768	0.00739	0.0108	0.0229
Chlorpyrifos	0.083	0.041	0.0830	0.124	0.0266	0.0758	0.0390	0.0826
Chromium (trivalent)	1091	141.9	14830	5846	4746	3566	5241	11090
Chromium (hexavalent)	15.7	10.6	15.7	32.1	5.02	19.6	7.38	15.6
Copper	29.98	18.65	137	259	44.0	158	64.6	136
Cyanide (free)	45.8	10.7	45.8	32.4	14.7	19.8	21.5	45.5
4,4'-DDT	1.1	0.001	1.10	0.00303	0.352	0.00185	0.00271	0.00574
Demeton	N/A	0.1	N/A	0.303	N/A	0.185	0.271	0.574
Diazinon	0.17	0.17	0.170	0.515	0.0544	0.314	0.0799	0.169
Dicofol [Kelthane]	59.3	19.8	59.3	60.0	19.0	36.6	27.8	59.0
Dieldrin	0.24	0.002	0.240	0.00606	0.0768	0.00370	0.00543	0.0114
Diuron	210	70	210	212	67.2	129	98.7	208
Endosulfan I (alpha )	0.22	0.056	0.220	0.170	0.0704	0.104	0.103	0.218
Endosulfan II (beta )	0.22	0.056	0.220	0.170	0.0704	0.104	0.103	0.218
Endosulfan sulfate	0.22	0.056	0.220	0.170	0.0704	0.104	0.103	0.218
Endrin	0.086	0.002	0.0860	0.00606	0.0275	0.00370	0.00543	0.0114
Guthion [Azinphos Methyl]	N/A	0.01	N/A	0.0303	N/A	0.0185	0.0271	0.0574
Heptachlor	0.52	0.004	0.520	0.0121	0.166	0.00739	0.0108	0.0229
Hexachlorocyclohexane (gamma) [Lindane]	1.126	0.08	1.13	0.242	0.360	0.148	0.217	0.459
Lead	151.3	5.90	1105	130	354	79.6	117	247
Malathion	N/A	0.01	N/A	0.0303	N/A	0.0185	0.0271	0.0574
Mercury	2.4	1.3	2.40	3.94	0.768	2.40	1.12	2.38
Methoxychlor	N/A	0.03	N/A	0.0909	N/A	0.0555	0.0815	0.172
Mirex	N/A	0.001	N/A	0.00303	N/A	0.00185	0.00271	0.00574
Nickel	916	101.7	4478	1507	1433	919	1351	2859
Nonylphenol	28	6.6	28.0	20.0	8.96	12.2	13.1	27.8
Parathion (ethyl)	0.065	0.013	0.0650	0.0394	0.0208	0.0240	0.0305	0.0646
Pentachlorophenol	17.6	13.52	17.6	41.0	5.64	25.0	8.29	17.5
Phenanthrene	30	30	30.0	90.9	9.60	55.5	14.1	29.8
Polychlorinated Biphenyls [PCBs]	2.0	0.014	2.00	0.0424	0.640	0.0259	0.0380	0.0804
Selenium	20	5	20.0	15.2	6.40	9.24	9.40	19.9
Silver	0.8	N/A	28.8	N/A	9.21	N/A	13.5	28.6
Toxaphene	0.78	0.0002	0.780	0.000606	0.250	0.000370	0.000543	0.00114
Tributyltin [TBT]	0.13	0.024	0.130	0.0727	0.0416	0.0444	0.0611	0.129
2,4,5 Trichlorophenol	136	64	136	194	43.5	118	63.9	135
Zinc	229.4	231.3	1866	5700	597	3477	877	1856

# HUMAN HEALTH

CALCULATE DAILY AVERAGE AND DAILY MAXIMUM EFFLUENT LIMITATIONS:

	Fish	Fish Only	Fish				
	Criterion	Criterion	Criterion	WLAh	LTAh	Daily Avg.	Daily Max.
Parameter	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(μg/L)
Acrylonitrile	1.0	115	1150	719	668	982	2078
Aldrin	1.146E-05	1.147E-05	1.147E-04	0.0000717	0.0000667	0.0000980	0.000207
Anthracene	1109	1317	13170	8231	7655	11252	23807
Antimony	6	1071	10710	6694	6225	9151	19360
Arsenic	10	N/A	N/A	N/A	N/A	N/A	N/A
Barium	2000	N/A	N/A	N/A	N/A	N/A	N/A
Benzene	5	581	5810	3631	3377	4964	10502
Benzidine	0.0015	0.107	1.07	0.669	0.622	0.914	1.93
Benzo(a )a nthra ce ne	0.024	0.025	0.25	0.156	0.145	0.213	0.451
Benzo(a )pyrene	0.0025	0.0025	0.025	0.0156	0.0145	0.0213	0.0451

	Water and Fish Criterion	Fish Only Criterion	Incidental Fish Criterion		LTAh	Daily Avg	•
ameter	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(μg/L
Bis(chloromethyl)ether	0.0024	0.2745	2.745	1.72	1.60	2.34	4.96
Bis (2-chloroethyl)ether	0.60	42.83	428.3	268	249	365	774
Bis(2-ethylhexyl) phthalate [Di(2-ethylhexyl) phth		7.55	75.5	47.2	43.9	64.5	136
Bromodichloromethane [Dichlorobromomethane		275	2750	1719	1598	2349	4971
Bromoform [Tribromomethane]	66.9	1060	10600	6625	6161	9057	19161
Cadmium	5	N/A	N/A	N/A	N/A	N/A	N/A
Carbon Tetrachloride	4.5	46	460	288	267	393	831
Chlordane	0.0025	0.0025	0.025	0.0156	0.0145	0.0213	0.0451
Chlorobe nze ne	100	2737	27370	17106	15909	23385	49476
Chlorodibromomethane [Dibromochloromethane		183	1830	1144	1064	1563	3308
Chloroform [Trichloromethane]	70	7697	76970	48106	44739	65766	139137
Chromium (hexavalent)	62	502	5020	3138	2918	4289	9074
Chrysene	2.45	2.52	25.2	15.8	14.6	21.5	45.5
Cresols [Methylphenols]	1041	9301	93010	58131	54062	79471	168133
Cyanide (free) 4,4'-DDD	200	N/A	N/A	0.0125	N/A	0.0170	N/A
	0.002	0.002	0.02		0.0116		0.0361
4,4'-DDE	0.00013	0.00013	0.0013	0.000813	0.000756	0.00111	0.00234
4,4'-DDT	0.0004	0.0004	0.004	0.00250	0.00233	0.00341	0.00723
2,4'-D	70	N/A	N/A	N/A	N/A	N/A	N//
Danitol [Fenpropathrin]	262	473	4730	2956	2749	4041	8550
1,2-Dibromoethane [Ethylene Dibromide]	0.17	4.24	42.4	26.5	24.6	36.2	76.6
m -Dichlorobenzene [1,3-Dichlorobenzene] o -Dichlorobenzene [1,2-Dichlorobenzene]	322	595	5950	3719	3458	5083	10755
	600	3299	32990	20619	19175	28187	5963
p -Dichlorobenzene [1,4-Dichlorobenzene]	0.79	N/A 2.24	N/A	N/A	N/A	N/A	N/A
3,3'-Dichlorobenzidine			22.4	14.0	13.0	19.1	40.4
1,2-Dichloroethane 1,1-Dichloroethylene [1,1-Dichloroethene]	<u>5</u>	364 55114	3640 551140	2275 344463	2116 320350	3110 470914	6579
Dichloromethane [Methylene Chloride]	5	13333	1333330	83331	77498	113922	996288 241018
1,2-Dichloropropane	5	259	2590	1619	1505	2212	4683
1,3-Dichloropropene [1,3-Dichloropropylene]	2.8	119	1190	744	692	1016	215
Dicofol (Kelthane)	0.30	0.30	3	1.88	1.74	2.56	5.4
Dieldrin	2.0E-05	2.0E-05	2.0E-04	0.000125	0.000116	0.000170	0.00036
2,4-Dimethylphenol	444	8436	84360	52725	49034	72080	15249
Di-n -Butyl Phthalate	88.9	92.4	924	578	537	72080	167
Dioxins/Furans [TCDD Equivalents]	7.80E-08	7.97E-08	7.97E-07	4.98E-07	4.63E-07		0.000001
Endrin	0.02	0.02	0.2	0.125	0.116	0.302.07	0.36
Epichlorohydrin	53.5	2013	20130	12581	11701	17199	3638
Ethylbenzene	700	1867	18670	11669	10852	15952	3374
Ethylene Glycol	46744	1.68E+07		105000000		143545500	
Fluoride	4000	N/A	N/A	N/A	N/A	N/A	N/.
Heptachlor	8.0E-05	0.0001	0.001	0.000625	0.000581	0.000854	0.0018
Heptachlor Epoxide	0.00029	0.00029	0.0029	0.00181	0.00169	0.00247	0.0052
Hexachlorobenzene	0.00068	0.00068	0.0068	0.00425	0.00395	0.00581	0.012
Hexachlorobutadiene	0.21	0.22	2.2	1.38	1.28	1.87	3.9
Hexachlorocyclohexane (alpha)	0.0078	0.0084	0.084	0.0525	0.0488	0.0717	0.15
Hexachlorocyclohexane (beta )	0.15	0.26	2.6	1.63	1.51	2.22	4.69
Hexachlorocyclohexane (gamma) [Lindane]	0.2	0.341	3.41	2.13	1.98	2.91	6.1
Hexachlorocyclopentadiene	10.7	11.6	116	72.5	67.4	99.1	20:
Hexachloroethane	1.84	2.33	23.3	14.6	13.5	19.9	42.
Hexachlorophene	2.05	2.90	23.3	18.1	16.9	24.7	52.
4,4'-lsopropylidenediphenol [Bisphenol A]	1092	15982	159820	99888	92895	136556	28890
Lead	1.15	3.83	38.3	175	163	238	
Mercury	0.0122	0.0122	0.122	0.0763	0.0709	0.104	0.22
	0.0122	0.0122	0.122	0.0763	0.0709	0.104	0.22
		2 ∩	20	10 0	17.4	25.6	E4
Methoxychlor Methyl Ethyl Ketone	2.92 13865	3.0 9.92E+05	30 9.92E+06	18.8 6200000	17.4 5766000	25.6 8476020	54. 1793226

Parameter	Fish Criterion (μg/L)	Fish Only Criterion (μg/L)	Fish Criterion (μg/L)	WLAh (μg/L)	LTAh (μg/L)	Daily Avg. (μg/L)	Daily Max. (μg/L)
Nickel	332	1140	11400	34840	32401	47630	100768
Nitrate-Nitrogen (as Total Nitrogen)	10000	N/A	N/A	N/A	N/A	N/A	N/A
Nitrobenzene	45.7	1873	18730	11706	10887	16003	33857
N-Nitrosodiethylamine	0.0037	2.1	21	13.1	12.2	17.9	37.9
N-Nitroso-di-n -Butylamine	0.119	4.2	42	26.3	24.4	35.8	75.9
Pentachlorobenzene	0.348	0.355	3.55	2.22	2.06	3.03	6.41
Pentachlorophenol	0.22	0.29	2.9	1.81	1.69	2.47	5.24
Polychlorinated Biphenyls [PCBs]	6.4E-04	6.4E-04	6.40E-03	0.00400	0.00372	0.00546	0.0115
Pyridine	23	947	9470	5919	5504	8091	17118
Selenium	50	N/A	N/A	N/A	N/A	N/A	N/A
1,2,4,5-Tetrachlorobenzene	0.23	0.24	2.4	1.50	1.40	2.05	4.33
1,1,2,2-Tetrachloroethane	1.64	26.35	263.5	165	153	225	476
Tetrachloroethylene [Tetrachloroethylene]	5	280	2800	1750	1628	2392	5061
Thallium	0.12	0.23	2.3	1.44	1.34	1.96	4.15
Toluene	1000	N/A	N/A	N/A	N/A	N/A	N/A
Toxaphene	0.011	0.011	0.11	0.0688	0.0639	0.0939	0.198
2,4,5-TP [Silvex]	50	369	3690	2306	2145	3152	6670
1,1,1-Trichloroethane	200	784354	7843540	4902213	4559058	6701814	14178669
1,1,2-Trichloroethane	5	166	1660	1038	965	1418	3000
Trichloroethylene [Trichloroethene]	5	71.9	719	449	418	614	1299
2,4,5-Trichlorophenol	1039	1867	18670	11669	10852	15952	33749
TTHM [Sum of Total Trihalomethanes]	80	N/A	N/A	N/A	N/A	N/A	N/A
Vinyl Chloride	0.23	16.5	165	103	95.9	140	298

	70% of	85% of
Aquatic Life	Daily Avg.	Daily Avg.
Parameter	(μg/L)	(μg/L)
Aldrin	0.987	1.19
Aluminum	326	396
Arse nic	214	260
Cadmium	4.29	5.21
Carbaryl	0.658	0.799
Chlordane	0.00760	0.00923
Chlorpyrifos	0.0273	0.0331
Chromium (trivalent)	3669	4455
Chromium (hexavalent)	5.16	6.27
Copper	45.2	54.9
Cyanide (free)	15.0	18.3
4,4'-DDT	0.00190	0.00230
Demeton	0.190	0.230
Diazinon	0.0559	0.0679
Dicofol [Kelthane]	19.5	23.7
Dieldrin	0.00380	0.00461
Diuron	69.1	83.9
Endosulfan I (alpha)	0.0724	0.0879
Endosulfan II (beta )	0.0724	0.0879
Endosulfan sulfate	0.0724	0.0879
Endrin	0.00380	0.00461
Guthion [Azinphos Methyl]	0.0190	0.0230
Heptachlor	0.00760	0.00923
Hexachlorocyclohexane (gamma) [Lindane]	0.152	0.184
Lead	81.9	99.4
Malathion	0.0190	0.0230
Mercury	0.790	0.959
Methoxychlor	0.0570	0.0692
Mirex	0.00190	0.00230
Nicke I	946	1148
Nonylphenol	9.21	11.1
Parathion (ethyl)	0.0214	0.0259
Pentachlorophenol	5.80	7.04
Phenanthrene	9.87	11.9
Polych lorinated Biphe nyls [PCBs]	0.0266	0.0323
Se le n ium	6.58	7.99
Silver	9.48	11.5
Toxaphene	0.000380	0.000461
Tributyltin [TBT]	0.0428	0.0519
2,4,5 Trichlorophenol	44.7	54.3
Zinc	614	746

	70% of	85% of
Human Health	Daily Avg.	Daily Avg.
Parameter	(μg/L)	(μg/L)
Acrylonitrile	687	835
Aldrin	0.0000686	0.0000833
Anthracene	7877	9565
Antimony	6405	7778
Arsenic	N/A	N/A
Barium	N/A	N/A
Benzene	3474	4219
Benzidine	0.639	0.777
Benzo(a )anthracene	0.149	0.181
Benzo(a )pyrene	0.0149	0.0181
Bis (chloromethyl)ether	1.64	1.99
Bis (2-chloroethyl)ether	256	311
Bis (2-ethylhexyl) phthalate [Di (2-ethylhexyl) phtha	45.1	54.8
Bromodichloromethane [Dichlorobromomethane	1644	1997
Bromoform [Tribromomethane]	6339	7698
Cadmium	N/A	N/A
Carbon Tetrachloride	275	334
Chlordane	0.0149	0.0181
Chlorobenzene	16370	19878
Chlorodibromomethane [Dibromochloromethane	1094	1329
Chloroform [Trichloromethane]	46036	55901
Chromium (hexavalent)	3002	3645
Chrysene	15.0	18.3
Cresols [Methylphenols]	55629	67550
Cyanide (free)	N/A	N/A
4,4'-DDD	0.0119	0.0145
4,4'-DDE	0.000777	0.000944
4,4'-DDT	0.00239	0.00290
2,4'-D	N/A	N/A
Danitol [Fenpropathrin]	2829	3435
1,2-Dibromoethane [Ethylene Dibromide]	25.3	30.7
m -Dichlorobenzene [1,3-Dichlorobenzene]	3558 19 <b>7</b> 31	4321
o -Dichlorobenzene [1,2-Dichlorobenzene]		23959
p -Dichlorobenzene [1,4-Dichlorobenzene] 3,3'-Dichlorobenzidine	N/A 13.3	N/A 16.2
1,2-Dichloroethane	2177	2643
1,1-Dichloroethylene [1,1-Dichloroethene]	329640	400277
Dichloromethane [Methylene Chloride]	79745	96833
1,2-Dichloropropane	1549	1881
1,3-Dichloropropene [1,3-Dichloropropylene]	711	864
Dicofol [Kelthane]	1.79	2.17
Dieldrin	0.000119	0.000145
2,4-Dimethylphenol	50456	61268
Di-n -Butyl Phthalate	552	671
Dioxins/Furans [TCDD Equivalents]	4.76E-07	5.78E-07
Endrin	0.119	0.145
Epichlorohydrin	12039	14619
Ethylbenzene	11166	13559
Ethylene Glycol	100481850	
Fluoride	N/A	N/A
Heptachlor	0.000598	0.000726
He ptachlor Epoxide	0.00173	0.00210
He xa chloro benze ne	0.00406	0.00493
Hexachlorobutadiene	1.31	1.59
He xa chlorocyclo hexane (alpha )	0.0502	0.0610
He xa chlorocyclohexane (beta)	1.55	1.88
He xa chlorocyclohexane (gamma ) [Linda ne]	2.03	2.47
[gamma / [Emache]	2.00	2.77

Human Health         Daily Avg.         Daily Avg.         Daily Avg.         Parly Avg.         Parl
Hexachlorocyclopentadiene69.384Hexachloroethane13.916
Hexachloroethane 13.9 16
Hexachlorophene 17.3 21
4,4'-Isopropylidenediphenol [Bisphenol A] 95589 1160
Lead 167 2
Mercury 0.0729 0.08
Methoxychlor 17.9 21
Methyl Ethyl Ketone 5933214 72046
Methyl tert -butyl ether [MTBE] 62693 7613
Nickel 33341 404
Nitrate-Nitrogen (as Total Nitrogen) N/A N
Nitrobenzene 11202 136
N-Nitrosodiethylamine 12.5 15
N-Nitroso-di- <i>n</i> -Butylamine 25.1 30
Pentachlorobenzene 2.12 2.5
Pentachlorophenol 1.73 2.3
Polychlorinated Biphenyls [PCBs] 0.00382 0.004
Pyridine 5664 68
Selenium N/A N
1,2,4,5-Tetrachlorobenzene 1.43 1.
1,1,2,2-Tetrachloroethane 157 1
Tetrachloroethylene [Tetrachloroethylene] 1674 203
Thallium 1.37 1.
Toluene N/A N
Toxaphene 0.0657 0.075
2,4,5-TP [Silvex] 2207 26
1,1,1-Trichloroethane 4691270 56965
1,1,2-Trichloroethane 992 12
Trichloroethylene [Trichloroethene] 430 5:
2,4,5-Trichlorophenol 11166 135
TTHM [Sum of Total Trihalomethanes] N/A N
Vinyl Chloride 98.6 1:

# Appendix C TDS, Chloride, and Sulfate Screening Calculations

# Screening Calculations for Total Dissolved Solids, Chloride, and Sulfate Menu 4 - Discharge to a Lake

Applicant Name:

Permit Number, Outfall:
Segment Number:

City of Bryan

WQ0002117000

1242

Enter values needed for screening:		Data Source (edit if different)
EF - Effluent <u>fraction</u> at edge of human health MZ	0.16 decimal	2025 CC memo
	fraction	
CA - TDS - ambient segment concentration	<b>693</b> mg/L	2010 IP, Appendix D
CA - chloride - ambient segment concentration	<b>179</b> mg/L	2010 IP, Appendix D
CA - sulfate - ambient segment concentration	<b>103</b> mg/L	2010 IP, Appendix D
CC - TDS - segment criterion	<b>1000</b> mg/L	2010 TSWQS, Appendix A
CC - chloride - segment criterion	<b>350</b> mg/L	2010 TSWQS, Appendix A
CC - sulfate - segment criterion	<b>200</b> mg/L	2010 TSWQS, Appendix A
CE - TDS - average effluent concentration	<b>619</b> mg/L	2022 Permit application
CE - chloride - average effluent concentration	<b>117</b> mg/L	2022 Permit application
CE - sulfate - average effluent concentration	<b>68</b> mg/L	2022 Permit application

#### **Screening Equation**

 $CC \ge (EF)(CE)+(1-EF)(CA)$ 

#### **Permit Limit Calculations**

#### **TDS**

Calculate the WLA	WLA= [CC -	(1-EF)(CA)	2611.75		
Calculate the LTA	LTA = WLA * 0.93				
Calculate the daily average	Daily Avg. = LTA * 1.47				
Calculate the daily maximum	Daily Max. =	7553.96			
Calculate 70% of the daily average	70% of Daily	Avg. =	2499.37		
Calculate 85% of the daily average	85% of Daily Avg. =			3034.94	
No permit limitations needed if:	619	≤	2499.37		
Reporting needed if:	619	>	2499.37	but ≤	3034.94
Permit limits may be needed if:	619	>	3034.94		

No permit limitations needed for TDS

# Chloride

Calculate the WLA	WLA= [CC - (1-EF)(CA)	1247.75		
	- , ,, ,	_		
Calculate the LTA	LTA = WLA * 0.93		1160.41	
Calculate the daily average	Daily Avg. = LTA * 1.4	1705.80		
Calculate the daily maximum	Daily Max. = LTA * 3.1	3608.87		
Calculate 70% of the daily average	70% of Daily Avg. =			
Calculate 85% of the daily average	85% of Daily Avg. =	1449.93		
No permit limitations needed if:	117 ≤	1194.06		
Reporting needed if:	117 >	1194.06	but≤	1449.93
Permit limits may be needed if:	117 >	1449.93		

# No permit limitations needed for chloride

# Sulfate

Sanate				
Calculate the WLA	WLA= [CC - (1-EF)(CA	709.25	_	
Calculate the LTA	LTA = WLA * 0.93	659.60		
Calculate the daily average	Daily Avg. = LTA * 1.4	969.62		
Calculate the daily maximum	Daily Max. = LTA * 3.	2051.36		
Calculate 70% of the daily average	70% of Daily Avg. =	678.73		
Calculate 85% of the daily average	85% of Daily Avg. =	824.17		
No permit limitations needed if:	68 ≤	678.73		
Reporting needed if:	68 >	678.73	but≤	824.17
Permit limits may be needed if:	68 >	824.17		
		01 011 0		82

No permit limitations needed for sulfate

# Appendix D Comparison of Effluent Limits

The following table is a summary of technology-based effluent limitations calculated/assessed in the draft permit (Technology-Based), calculated/assessed water quality-based effluent limitations (Water Quality-Based), and effluent limitations in the existing permit (Existing Permit). Effluent limitations appearing in bold are the most stringent of the three and are included in the draft permit.

		Technolog	y-Based	Water Qua	ality-Based	Existing Permit		
Outfall	Pollutant	Daily Avg	Daily Max	Daily Avg	Daily Max	Daily Avg	Daily Max	
		mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	
001	Flow	Report, MGD	Report, MGD	-	-	Report, MGD	Report, MGD	
	TSS	30	100	-	-	30	100	
	Oil and Grease	15	20	-	-	15	20	
	TDS	N/A	2,000	-	-	N/A	2,000	
	Total Iron	N/A	1.0	-	-	N/A	1.0	
	Total Copper	N/A	0.22	-	0.157	N/A	0.22	
	Temperature	N/A	95 °F	-	-	N/A	95 °F	
	pН	6.0 SU, minimum	9.0 SU	-	-	6.0 SU, minimum	9.0 SU	
002	Flow	Report, MGD	Report, MGD		_	Report, MGD	Report, MGD	
	TSS	30	100	-	-	30	100	
	Oil and Grease	15	20	-	-	15	20	
	TDS	N/A	2,000	-	-	N/A	2,000	
	Total Iron	N/A	1.0	-	-	N/A	1.0	
	Total Copper	N/A	0.22	-	0.157	N/A	0.22	
	Temperature	N/A	95 °F	-	-	N/A	95 °F	
	рН	6.0 SU, minimum	9.0 SU	-	-	6.0 SU, minimum	9.0 SU	

	Pollutant	Technology-Based			Water Quality-Based			Existing Permit					
Outfall		Daily Avg		Daily Max		Daily Avg		Daily Max		Daily Avg		Daily Max	
		lbs/day	mg/L	lbs/day	mg/L	lbs/day	mg/L	lbs/day	mg/L	lbs/day	mg/L	lbs/day	mg/L
003	Flow	78 MGD		156 MGD		-		-		78 MGD		156 MGD	
	Free Available Oxidants	21.7	0.2	54.2	0.5	-	1	-	1	21.7	0.2	54.2	0.5
	Temperature	Repo	Report, °F		Report, °F		ı	-	ı	Report, °F		Report, °F	
	Total Aluminum <sup>1</sup>	N	/A	Report		-	0.466	-	0.986	Report		Report	

<sup>&</sup>lt;sup>1</sup> See Other Requirements No. 10.