Administrative Package Cover Page

This file contains the following documents:

1. Summary of application (in plain language)
   - English
   - Alternative Language (Spanish)
2. First Notice (NORI-Notice of Receipt of Application and Intent to Obtain a Permit)
   - English
   - Alternative Language (Spanish)
3. Application materials (**NOTE:** This application was declared Administratively Complete before June 1, 2024. Application materials are available for review at the Public Viewing Location provided in the NORI.)

Portada de Paquete Administrativo

Este archivo contiene los siguientes documentos:

1. Resumen en lenguaje sencillo (PLS, por sus siglas en inglés) de la actividad propuesta
   - Inglés
   - Idioma alternativo (español)
2. Primer aviso (NORI, el Aviso de Recepción de Solicitud e Intención de Obtener un Permiso)
   - Inglés
   - Idioma alternativo (español)
3. Solicitud original (**NOTA:** Esta solicitud se declaró administrativamente completa antes del 1 de junio de 2024. Los materiales de la solicitud están disponibles para revisión en la ubicación de consulta pública que se indica en el NORI.)

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

PLAIN LANGUAGE SUMMARY FOR TPDES OR TLAP PERMIT APPLICATIONS

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

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

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

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

ENGLISH TEMPLATE FOR TPDES or TLAP NEW/RENEWAL/AMENDMENT APPLICATIONS
Enter 'INDUSTRIAL' or 'DOMESTIC' here WASTEWATER/STORMWATER
The following summary is provided for this pending water quality permit application being reviewed by the Texas Commission on Environmental Quality as required by 30 TAC Chapter 39. The information provided in this summary may change during the technical review of the application and is not a federal enforceable representation of the permit application.

Linde Inc. (CN600130645) operates Linde Freeport Plant (RN107737546), a facility that produces industrial gases in compressed and liquid forms. The facility is located at 5619 East State Highway 332, in Freeport, Brazoria County, Texas 77541. Linde Inc. requests renewal to discharge treated wastewater and stormwater at a daily average flow not to exceed 200,000 gallons per day via Outfall 101; treated wastewater and stormwater at a daily average flow not to exceed 320,000 gallons per day via Outfall 201, commingled with non-regulated stormwater at a continuous and variable flow rate via Outfall 001.

Discharges from the facility are expected to contain non-contact cooling water blowdown, sand filter backwash, compressor condensate, and oily water separator discharge. Waste streams with potential oil are treated by oily water separators prior to discharge via outfalls101 and 201. Other waste streams are discharged without treatment due to limited organic and particulate concentrations. Sanitary wastewater is treated in an onsite septic system with drainfield or is contained in holding tanks.

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

AGUAS RESIDUALES Introduzca 'INDUSTRIALES' o 'DOMÉSTICAS' aquí **/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.

Linde Inc. (CN600130645) opera la planta de Linde Freeport (RN107737546), una instalación que produce gases industriales en forma comprimida y líquida. La instalación está ubicada en 5619 East State Highway 332, en Freeport, Condado de Brazoria, Texas 77541. Linde Inc. solicita la renovación para descargar aguas residuales tratadas y aguas pluviales a un flujo promedio diario que no exceda los 200,000 galones por día a través del desagüe 101; aguas residuales y pluviales tratadas a un flujo promedio diario que no exceda los 320,000 galones por día a través del desagüe 201, mezcladas con aguas pluviales no reguladas a un caudal continuo y variable a través del desagüe 001.

Se espera que las descargas de la instalación contengan purga de agua de enfriamiento sin contacto, retrolavado del filtro de arena, condensado del compresor y descarga del separador de agua aceitosa. Los flujos de residuos con potencial de aceite son tratados por separadores de agua aceitosa antes de su descarga a través de los emisarios 101 y 201. Otros flujos de residuos se descargan sin tratamiento debido a las concentraciones limitadas de materia orgánica y partículas. Las aguas residuales sanitarias se tratan en un sistema séptico in situ con campo de drenaje o se contienen en tanques de retención.

INSTRUCTIONS

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

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

Example

Individual Industrial Wastewater Application

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

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

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

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

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

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

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

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

PERMIT NO. WQ0005182000

APPLICATION. Linde Inc., 5619 East Highway 332, Freeport, Texas 77541, which owns a facility that produces industrial gases in compressed and liquid forms, has applied to the Texas Commission on Environmental Quality (TCEQ) to renew Texas Pollutant Discharge Elimination System (TPDES) Permit No. WQ0005182000 (EPA I.D. No. TX0136671) to authorize the discharge of treated wastewater and stormwater at a daily average flow not to exceed 200,000 gallons per day via Outfall 101; treated wastewater and stormwater at a daily average flow not to exceed 320,000 gallons per day via Outfall 201, commingled with non-regulated stormwater at a continuous and variable flow rate via Outfall 001. The facility is located at 5619 East Highway 332, near the city of Freeport, in Brazoria County, Texas 77541. The discharge route is from the plant site via Outfall 001 to the Flag Lake Drainage Canal, thence to East Union Bayou, thence to the Intracoastal Waterway, thence to Old Brazos River Channel Tidal; or via Outfall 001 to the Flag Lake Drainage Canal, thence to Flag Lake Drainage Canal Tidal, thence to the Brazos River Tidal. TCEQ received this application on March 21, 2024. The permit application will be available for viewing and copying at Freeport Branch Library, 410 North Brazosport Boulevard, Freeport, in Brazoria County, Texas prior to the date this notice is published in the newspaper. This link to an electronic map of the site or facility's general location is provided as a public courtesy and not part of the application or notice. For the exact location, refer to the application.
https://gisweb.tceq.texas.gov/LocationMapper/?marker=-95.356111,28.990833&level=18

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

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

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

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

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

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

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

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

If you wish to be placed on the permanent and/or the county mailing list, clearly specify which list(s) and send your request to TCEQ Office of the Chief Clerk at the address below.

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

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

Further information may also be obtained from Linde Inc. at the address stated above or by calling Mr. Todd Bausch, Environmental Specialist, at 409-270-9885.

Issuance Date: April 26, 2024

Comisión de Calidad Ambiental del Estado de Texas

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

PERMISO NO. WQ0005182000

SOLICITUD. Linde Inc., 5619 East Highway 332, Freeport, Texas 77541, que posee una instalación que produce gases industriales en formas comprimidas y líquidas, ha solicitado a la Comisión de Calidad Ambiental del Estado de Texas (TCEQ) para renovar el Permiso No. WQ0005182000 (EPA I.D. No. TX 0136671) del Sistema de Eliminación de Descargas de Contaminantes de Texas (TPDES) para autorizar la descarga de aguas residuales tratadas en un volumen que no sobrepasa un flujo promedio diario de 200,000 galones por día a través del emisario 101; aguas residuales y pluviales tratadas con un caudal medio diario que no exceda 320,000 galones por día a través del desagüe 201, mezclado con aguas pluviales no reguladas en un caudal continuo y variable a través del emisario 001. La planta está ubicada 5619 Autopista Este 332, cerca de la ciudad de Freeport en el Condado de Brazoria, Texas 77541. La ruta de descarga es del sitio de la planta a Desagüe 001 al canal de drenaje de Flag Lake, de allí a East Union Bayou, de allí a el Canal Intracostero, de allí al Canal del Río Old Brazos Tidal; o a través del emisario 001 a la Canal de drenaje de Flag Lake, de allí a Canal de drenaje de Flag Lake Tidal, de allí al río Brazos Mareomotriz. La TCEQ recibió esta solicitud el 21 de marzo de 2024. La solicitud para el permiso estará disponible para leerla y copiarla en Freeport Sucursal de la Biblioteca, 410 North Brazosport Boulevard, Freeport, en el condado de Brazoria, Texas antes de la fecha de publicación de este aviso en el periódico. Este enlace a un mapa electrónico de la ubicación general del sitio o de la instalación es proporcionado como una cortesía y no es parte de la solicitud o del aviso. Para la ubicación exacta, consulte la solicitud.
https://gisweb.tceq.texas.gov/LocationMapper/?marker=-95.356111,28.990833&level=18

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

COMENTARIO PUBLICO / REUNION PUBLICA. Usted puede presentar comentarios públicos o pedir una reunión pública sobre esta solicitud. El propósito de una reunión pública es dar la oportunidad de presentar comentarios o hacer preguntas acerca de la solicitud. La TCEQ

realiza una reunión pública si el Director Ejecutivo determina que hay un grado de interés público suficiente en la solicitud o si un legislador local lo pide. Una reunión pública no es una audiencia administrativa de lo contencioso.

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

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

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

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

solicitud. Además, puede pedir que la TCEQ ponga su nombre en una o mas de las listas correos siguientes (1) la lista de correo permanente para recibir los avisos de el solicitante indicado por nombre y número del permiso específico y/o (2) la lista de correo de todas las solicitudes en un condado especifico. Si desea que se agrega su nombre en una de las listas designe cual lista(s) y envía por correo su pedido a la Oficina del Secretario Principal de la TCEQ.

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

También se puede obtener información adicional del Linde Inc. a la dirección indicada arriba o llamando a Sr. Todd Bausch, Especialista en Medio Ambiente al 409-270-9885.

Fecha de emisión 26 de abril de 2024

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

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

RENEWAL

Permit No. WQ0005182000

APPLICATION AND PRELIMINARY DECISION. Linde Inc., 5619 East Highway 332, Freeport, Texas 77541, which operates Linde Freeport Plant, a facility that produces industrial gases in compressed and liquid forms, has applied to the Texas Commission on Environmental Quality (TCEQ) for a renewal of Texas Pollutant Discharge Elimination System (TPDES) Permit No. WQ0005182000, which authorizes the discharge of previously monitored effluents (PMEs) (utility wastewater and stormwater from internal Outfall 101 not to exceed a daily average dry weather flow of 200,000 gallons per day (gpd); and process wastewater, utility wastewater and stormwater from internal Outfall 201 not to exceed a daily average dry weather flow of 320,000 gpd) commingled with non-regulated stormwater on a continuous and flow-variable basis via Outfall 001. The TCEQ received this application on March 21, 2024.

The facility is located at 5619 East Highway 332, near the City of Freeport, Brazoria County, Texas 77541. This link to an electronic map of the site or facility's general location is provided as a public courtesy and is not part of the application or notice. For the exact location, refer to the application.
https://gisweb.tceq.texas.gov/LocationMapper/?marker=-95.356111,28.990833&level=18

The effluent is discharged via Outfall 001 to the Flag Lake Drainage Canal, thence to East Union Bayou, thence to the Intracoastal Waterway, thence to Old Brazos River Channel Tidal in Segment No. 1111 of the San Jacinto-Brazos Coastal Basin; or via Outfall 001 to the Flag Lake Drainage Canal, thence to Flag Lake Drainage Canal Tidal, thence to Brazos River Tidal in Segment No. 1201 of the Brazos River Basin. The unclassified receiving water use is intermediate aquatic life use for the Flag Lake Drainage Canal. The designated uses for Segment No. 1111 are primary contact recreation and high aquatic life use. The designated uses for Segment No. 1201 are primary contact recreation, public water supply, and high aquatic life use. The public water supply use for Segment No. 1201 only applies from the upstream boundary to 300 meters (330 yards) downstream of SH 332 in Brazoria County, which does not include this permit outfall location.

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 the Freeport Branch Library, 410 North Brazosport Boulevard, Freeport, in Brazoria County, Texas.

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

EXECUTIVE DIRECTOR ACTION. The Executive Director may issue final approval of the application unless a timely contested case hearing request or 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 https://www.tceq.texas.gov/goto/comment **within 30 days from the date of newspaper publication of this notice.**

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

AGENCY CONTACTS AND INFORMATION. Public comments and requests must be submitted either electronically at https://www.tceq.texas.gov/goto/comment, or in writing to the Texas Commission on Environmental Quality, Office of the Chief Clerk, MC-105, P.O. Box 13087, Austin, Texas 78711-3087. 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 https://www.tceq.texas.gov/agency/decisions/participation/permitting-participation. Si desea información en Español, puede llamar al 1-800-687-4040.

Further information may also be obtained from Linde Inc. at the address stated above or by calling Mr. Todd Bausch, Environmental Specialist, at 409-270-9885.

Issued: February 19, 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

RENOVACIÓN

PERMISO NO. WQ0005182000

SOLICITUD Y DECISIÓN PRELIMINAR. Linde Inc., 5619 East Highway 332, Freeport, Texas 77541, que opera la Planta Linde Freeport, una instalación que produce gases industriales en formas comprimidas y líquidas, ha solicitado a la Comisión de Calidad Ambiental de Texas (TCEQ) una renovación del Permiso No. WQ0005182000, que autoriza la descarga de efluentes previamente monitoreados (PME) (aguas residuales de servicios públicos y aguas pluviales del desagüe interno 101 que no excedan un flujo promedio diario de clima seco de 200,000 galones por día (gpd); y aguas residuales de proceso, aguas residuales de servicios públicos y aguas pluviales del emisario interno 201 que no excedan un flujo promedio diario de clima seco de 320,000 gpd) mezclados con aguas pluviales no reguladas de manera continua y de flujo variable a través del desagüe 001. La TCEQ recibió esta solicitud el 21 de marzo de 2024.

La instalación está ubicada en 5619 East Highway 332, cerca de la ciudad de Freeport, condado de Brazoria, Texas 77541. Este enlace a un mapa electrónico de la ubicación general del sitio o instalación se proporciona como cortesía pública y no es parte de la solicitud o aviso. Para conocer la ubicación exacta, consulte la aplicación.
https://gisweb.tceq.texas.gov/LocationMapper/?marker=-95.356111,28.990833&level=18

El efluente se descarga a través del desagüe 001 al canal de drenaje de Flag Lake, de allí a East Union Bayou, de allí al Canal Intracostero, de allí a Old Brazos River Channel Tidal en el Segmento No. 1111 de la Cuenca Costera de San Jacinto-Brazos; o a través del desagüe 001 hasta el canal de drenaje del lago Flag, de allí al canal de drenaje del lago Flag Tidal, de allí a la marea del río Brazos en el segmento No. 1201 de la cuenca del río Brazos. El uso de agua receptora no clasificada es el uso intermedio de vida acuática para el Canal de Drenaje del Lago Flag. Los usos designados para el Segmento No. 1111 son la recreación de contacto primario y el uso de vida acuática alta. Los usos designados para el Segmento No. 1201 son la recreación de contacto primario, el suministro de agua pública y el uso de alta vida acuática. El uso del suministro público de agua para el Segmento No. 1201 solo se aplica desde el límite aguas arriba hasta 300 metros (330 yardas) aguas abajo de la SH 332 en el condado de Brazoria, que no incluye esta ubicación de desagüe de permiso.

El Director Ejecutivo de la TCEQ ha completado el examen técnico de la solicitud y ha preparado un proyecto de permiso. El borrador del permiso, de ser aprobado, establecería las condiciones bajo las cuales la instalación debe operar. El Director Ejecutivo ha tomado una decisión preliminar de que este permiso, si se expide, cumple con todos los requisitos legales y

reglamentarios. La solicitud de permiso, la decisión preliminar del Director Ejecutivo y el borrador del permiso están disponibles para su visualización y
copiando en la Biblioteca Sucursal de Freeport, 410 North Brazosport Boulevard, Freeport, en el Condado de Brazoria, Texas.

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

COMENTARIO PÚBLICO / REUNIÓN PÚBLICA. Puede enviar comentarios públicos o solicitar una reunión pública sobre esta solicitud. El propósito de una reunión pública es brindar la oportunidad de presentar comentarios escritos u orales o de hacer preguntas sobre la solicitud. Por lo general, la TCEQ celebrará una reunión pública si el Director Ejecutivo determina que existe un grado significativo de interés público en la solicitud o si lo solicita un legislador local. Una reunión pública no es una audiencia de caso impugnado.

OPORTUNIDAD PARA UNA AUDIENCIA DE CASO IMPUGNADO. Después de la fecha límite para los comentarios públicos, el Director Ejecutivo considerará los comentarios y preparará una respuesta a todos los comentarios públicos relevantes y materiales, o significativos. **La respuesta a los comentarios, junto con la decisión del Director Ejecutivo sobre la solicitud, se enviará por correo a todas las personas que presentaron comentarios públicos o que solicitaron estar en una lista de correo para esta solicitud. Si se reciben comentarios, el correo también proporcionará instrucciones para solicitar una audiencia de caso impugnado o una reconsideración de la decisión del Director Ejecutivo.** Una audiencia de caso impugnado es un procedimiento legal similar a un juicio civil en un tribunal de distrito estatal.

PARA SOLICITAR UNA AUDIENCIA DE CASO IMPUGNADO, DEBE INCLUIR LOS SIGUIENTES ELEMENTOS EN SU SOLICITUD: su nombre, dirección, número de teléfono; nombre del solicitante y número de permiso propuesto; la ubicación y distancia de su propiedad/actividades en relación con la instalación propuesta; una descripción específica de cómo se vería afectado negativamente por la instalación de una manera que no es común para el público en general; una lista de todas las cuestiones de hecho en disputa que envíe durante el período de comentarios; y la declaración "[Yo/nosotros] solicito una audiencia de caso impugnado". Si la solicitud de audiencia de caso impugnado se presenta en nombre de un grupo o asociación, la solicitud debe designar al representante del grupo para recibir correspondencia futura; identificar por nombre y dirección física a un miembro individual del grupo que se vería afectado negativamente por la instalación o actividad propuesta; proporcionar la información mencionada anteriormente con respecto a la ubicación y la distancia del miembro afectado de la instalación o actividad; explicar cómo y por qué el miembro se vería afectado; y explicar cómo los intereses que el grupo busca proteger son relevantes para el propósito del grupo.

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

La Comisión solo puede conceder una solicitud de audiencia de un caso impugnado sobre cuestiones que el solicitante presentó en sus comentarios oportunos que no fueron retirados posteriormente. **Si se concede una audiencia, el tema de una audiencia se limitará a**

cuestiones de hecho en disputa o preguntas mixtas de hecho y derecho relacionadas con preocupaciones relevantes y materiales sobre la calidad del agua presentadas durante el período de comentarios. TCEQ puede actuar sobre una solicitud para renovar un permiso para la descarga de aguas residuales sin brindar la oportunidad de una audiencia de caso impugnado si se cumplen ciertos criterios.

ACCIÓN DEL DIRECTOR EJECUTIVO. El Director Ejecutivo puede emitir la aprobación final de la solicitud a menos que se presente una solicitud de audiencia de caso impugnado a tiempo o una solicitud de reconsideración oportuna. Si se presenta una solicitud de audiencia oportuna o una solicitud de reconsideración, el Director Ejecutivo no emitirá la aprobación final del permiso y enviará la solicitud y las solicitudes a los Comisionados de TCEQ para su consideración en una reunión programada de la Comisión.

LISTA DE CORREO. Si presenta comentarios públicos, una solicitud para una audiencia de caso impugnado o una reconsideración de la decisión del Director Ejecutivo, se le agregará a la lista de correo de esta solicitud específica para recibir avisos públicos futuros enviados por correo por la Oficina del Secretario Principal. Además, puede solicitar que se le agregue a: (1) la lista permanente para un nombre y número de permiso de solicitante específico; y (2) la lista de correo de un condado específico. Si desea ser incluido en la lista de correo permanente y del condado, especifique claramente qué lista(s) y envíe su solicitud a la Oficina del Secretario Principal de TCEQ a la dirección que se indica a continuación.

Todos los comentarios públicos por escrito y las solicitudes de reuniones públicas deben enviarse a la Oficina del Secretario Principal, MC 105, TCEQ, P.O. Box 13087, Austin, TX 78711-3087 o electrónicamente en https://www.tceq.texas.gov/goto/comment **dentro de los 30 días a partir de la fecha de publicación de este aviso en el periódico.**

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

CONTACTOS E INFORMACIÓN DE LA AGENCIA. Los comentarios públicos y las solicitudes deben presentarse electrónicamente en https://www.tceq.texas.gov/goto/comment o por escrito a la Comisión de Calidad Ambiental de Texas, Oficina del Secretario Principal, MC-105, P.O. Box 13087, Austin, Texas 78711-3087. Tenga en cuenta que cualquier información de contacto que proporcione, incluido su nombre, número de teléfono, dirección de correo electrónico y dirección física, pasará a formar parte del registro público de la agencia. Para obtener más información sobre esta solicitud de permiso o el proceso de permisos, llame al Programa de Educación Pública de 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 más información de Linde Inc. en la dirección indicada anteriormente o llamando al Sr. Todd Bausch, Especialista en Medio Ambiente, al 409-270-9885.

Emitido: 19 de febrero de 2025

TPDES PERMIT NO.
WQ0005182000
[For TCEQ office use only -
EPA I.D. No. TX0136671]

This renewal replaces TPDES Permit No. WQ0005182000, issued on September 18, 2019.

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 415

Linde Inc.

whose mailing address is

5619 East Highway 332
Freeport, Texas 77541

is authorized to treat and discharge wastes from Linde Freeport Plant, a facility that produces industrial gases in compressed and liquid forms (SIC 2813)

located at 5619 East Highway 332, near the City of Freeport, Brazoria County, Texas 77541

via Outfall 001 to the Flag Lake Drainage Canal, thence to East Union Bayou, thence to the Intracoastal Waterway, thence to Old Brazos River Channel Tidal in Segment No. 1111 of the San Jacinto-Brazos Coastal Basin; or via Outfall 001 to the Flag Lake Drainage Canal, thence to Flag Lake Drainage Canal Tidal, thence to Brazos River Tidal in Segment No. 1201 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, five years from the date of permit issuance.

ISSUED DATE:

_____
For the Commission

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 previously monitored effluents (PMEs) (utility wastewater and stormwater from internal Outfalls 101, and process wastewater, utility wastewater and stormwater from internal Outfall 201) commingled with non-regulated stormwater subject to the following effluent limitations:

   Flow: continuous and variable.

Effluent Characteristics	Discharge Limitations			Minimum Self-Monitoring Requirements	
	Daily Average mg/L	Daily Maximum mg/L	Single Grab mg/L	Report Daily Average and Daily Maximum Measurement Frequency	Sample Type
Flow	Report, MGD	Report, MGD	N/A	1/day	Estimate
Copper, Total [1]	Report	Report	N/A	1/week	Grab

2. There must be no discharge of floating solids or visible foam in other than trace amounts and no discharge of visible oil.

3. Effluent monitoring samples must be taken at the following location: At Outfall 001, after wastewaters have commingled and prior to discharge into waters of the state.

[1] Beginning upon date of permit issuance and self-expires 34 months from date of permit expiration.

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS Outfall Number 101

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 utility wastewater [1] and stormwater subject to the following effluent limitations:

   The daily average dry weather flow of effluent shall not exceed 0.20 million gallons per day (MGD). The daily maximum dry weather flow shall not exceed 0.25 MGD.

Effluent Characteristics	Discharge Limitations			Minimum Self-Monitoring Requirements	
	Daily Average mg/L	Daily Maximum mg/L	Single Grab mg/L	Report Daily Average and Daily Maximum Measurement Frequency	Sample Type
Dry Weather Flow [2]	0.20 MGD	0.25 MGD	N/A	Continuous	Flow-Meter
Total Suspended Solids	50	Report	150	1/week	Grab
Oil and Grease	10	Report	30	1/week	Grab
Total Residual Chlorine	0.2	0.5	0.5	1/week	Grab

2. The pH must not be less than 6.0 standard units nor greater than 9.0 standard units and must be monitored 1/week by grab sample.

3. There must be no discharge of floating solids or visible foam in other than trace amounts and no discharge of visible oil.

4. Effluent monitoring samples must be taken at the following location: At internal Outfall 101, at the end pipe from the pressure swing adsorption hydrogen purification unit prior to commingling with the discharge from internal Outfall 201 in the facility drainage ditch.

[1] Utility wastewater includes but is not limited to the following: cooling tower blowdown, steam condensate, air-conditioner condensate, filter backwash, water treatment waste, safety shower water, equipment washdown water, and oily water separator wastewater.

[2] See Other Requirement No. 6.

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 process wastewater [1], utility wastewater [2], and stormwater subject to the following effluent limitations:

   The daily average dry weather flow of effluent shall not exceed 0.32 million gallons per day (MGD). The daily maximum dry weather flow shall not exceed 0.40 MGD.

Effluent Characteristics	Discharge Limitations			Minimum Self-Monitoring Requirements	
	Daily Average lbs/day	Daily Maximum lbs/day	Single Grab mg/L	Report Daily Average and Daily Maximum Measurement Frequency	Sample Type
Dry Weather Flow [3]	0.32 MGD	0.40 MGD	N/A	Continuous	Flow-Meter
Oil and Grease	39.43	54.71	30	1/week	Grab

2. The pH must not be less than 6.0 standard units nor greater than 9.0 standard units and must be monitored 1/week by grab sample.

3. There must be no discharge of floating solids or visible foam in other than trace amounts and no discharge of visible oil.

4. Effluent monitoring samples must be taken at the following location: At internal Outfall 201, the end of the pipe from the air-separation and carbon dioxide units prior to commingling with the discharge from internal Outfall 101 in the facility drainage ditch.

[1] Process wastewater includes but is not limited to the following: air separation condensate and may be re-used as make-up water for cooling water system.

[2] Utility wastewater includes but is not limited to the following: cooling tower blowdown, pre-purifier drainage, moisture separator water, scupper water drainage, steam condensate, air-compressor condensate, air-conditioner condensate, filter backwash, water treatment wastes, safety shower water, equipment washdown water, and oily water separator wastewater.

[3] See Other Requirement No. 6.

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 × Concentration, mg/L × 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 224).

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.

   c. 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:

   a. 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 µg/L);
      ii. two hundred micrograms per liter (200 µg/L) for acrolein and acrylonitrile; five hundred micrograms per liter (500 µg/L) for 2,4-dinitrophenol and for 2-methyl-4,6-dinitrophenol; and one milligram per liter (1 mg/L) for antimony;
      iii. five (5) times the maximum concentration value reported for that pollutant in the permit application; or
      iv. the level established by the TCEQ.

b. That any activity has occurred or will occur 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 μg/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 TCEQ.

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;

b. any substantial change in the volume or character of pollutants being introduced into that POTW by a source introducing pollutants into the POTW at the time of issuance of the permit; and

c. for the purpose of this paragraph, adequate notice shall include information on:

i. the quality and quantity of effluent introduced into the POTW; and
ii. any anticipated impact of the change on the quantity or quality of effluent to be discharged from the POTW.

PERMIT CONDITIONS

1. General

a. When the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in an application or in any report to the Executive Director, it shall promptly submit such facts or information.

b. This permit is granted on the basis of the information supplied and representations made by the permittee during action on an application, and relying upon the accuracy and completeness of that information and those representations. After notice and opportunity for a hearing, this permit may be modified, suspended, or revoked, in whole or in part, in accordance with 30 TAC Chapter 305, Subchapter D, during its term for good cause including, but not limited to, the following:

i. violation of any terms or conditions of this permit;
ii. obtaining this permit by misrepresentation or failure to disclose fully all relevant facts; or
iii. a change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge.

c. The permittee shall furnish to the Executive Director, upon request and within a reasonable time, any information to determine whether cause exists for amending, revoking, suspending, or terminating the permit. The permittee shall also furnish to the Executive Director, upon request, copies of records required to be kept by the permit.

2. Compliance

a. Acceptance of the permit by the person to whom it is issued constitutes acknowledgment and agreement that such person will comply with all the terms and conditions embodied in the permit, and the rules and other orders of the Commission.

b. The permittee has a duty to comply with all conditions of the permit. Failure to comply with any permit condition constitutes a violation of the permit and the Texas Water Code or the Texas Health and Safety Code, and is grounds for enforcement action, for permit amendment,

revocation, or suspension, or for denial of a permit renewal application or an application for a permit for another facility.

c. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit.

d. The permittee shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal or other permit violation that has a reasonable likelihood of adversely affecting human health or the environment.

e. Authorization from the Commission is required before beginning any change in the permitted facility or activity that may result in noncompliance with any permit requirements.

f. A permit may be amended, suspended and reissued, or revoked for cause in accordance with 30 TAC §§305.62 and 305.66 and TWC §7.302. The filing of a request by the permittee for a permit amendment, suspension and reissuance, or termination, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition.

g. There shall be no unauthorized discharge of wastewater or any other waste. For the purpose of this permit, an unauthorized discharge is considered to be any discharge of wastewater into or adjacent to water in the state at any location not permitted as an outfall or otherwise defined in the Other Requirements section of this permit.

h. In accordance with 30 TAC §305.535(a), the permittee may allow any bypass to occur from a TPDES permitted facility 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, §101(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

1. The permittee shall at all times ensure that the facility and all of its systems of collection, treatment, and disposal are properly operated and maintained. This includes, but is not limited to, the regular, periodic examination of wastewater solids within the treatment plant by the operator in order to maintain an appropriate quantity and quality of solids inventory as described in the various operator training manuals and according to accepted industry standards for process control. Process control, maintenance, and operations records shall be retained at the facility site, or shall be readily available for review by a TCEQ representative, for a period of three years.

2. Upon request by the Executive Director, the permittee shall take appropriate samples and provide proper analysis in order to demonstrate compliance with Commission rules. Unless otherwise specified in this permit or otherwise ordered by the Commission, the permittee shall comply with all applicable provisions of 30 TAC Chapter 312 concerning sewage sludge use and disposal and 30 TAC §§319.21 - 319.29 concerning the discharge of certain hazardous metals.

3. Domestic wastewater treatment facilities shall comply with the following provisions:

   a. The permittee shall notify the Municipal Permits Team, Wastewater Permitting Section (MC 148) of the Water Quality Division, in writing, of any facility expansion at least 90 days prior to conducting such activity.

   b. The permittee shall submit a closure plan for review and approval to the Municipal Permits Team, Wastewater Permitting Section (MC 148) of the Water Quality Division, for any closure activity at least 90 days prior to conducting such activity. Closure is the act of permanently taking a waste management unit or treatment facility out of service and includes the permanent removal from service of any pit, tank, pond, lagoon, surface impoundment 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.

9. 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; and
vi. method of final disposal.

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

12. For industrial facilities to which the requirements of 30 TAC 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 12 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 12 and Compliance Monitoring Team (MC 224):

   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.

Pollutant	MAL[1] (mg/L)
Copper (Total)	0.002

   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. COOLING WATER INTAKE STRUCTURE REQUIREMENTS
   The permittee shall provide written notification to the TCEQ Industrial Permits Team (MC 148) and Region 12 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.

3. The Executive Director reviewed this action for consistency with the goals and policies of the Texas Coastal Management Program (CMP) in accordance with the regulations of the General Land Office and determined that the action is consistent with the applicable CMP goals and policies.

4. 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.

[1] Minimum analytical level.

5. The chronic aquatic life mixing zone is defined as a volume within a radius of 55 feet from the point of discharge. Chronic toxic criteria apply at the edge of the chronic aquatic life mixing zone.

   The width of the Flag Lake Drainage Canal at the point of discharge is approximately 110 feet. The ZID is defined as a volume within a radius of 13.75 feet from the point of discharge. The human health mixing zone is defined as a volume within a radius of 110 feet from the point of discharge.

6. The permittee shall continuously record flow via a flow meter at internal Outfalls 101 and 201, individually and separately. Compliance with the flow limitations established at internal Outfalls 101 and 201, on pages 2a and 2b of this permit respectively, will be based upon days in which there is dry weather flow only. For the purpose of this permit, dry weather flow is defined as days in which the total flow at internal Outfalls 101 and 201 consists of any of the following sources: process wastewater (Outfall 201 only), utility wastewater, and stormwater runoff resulting from rainfall less than 0.1 inches in a 24-hour period. The permittee shall install and maintain a permanent rain gage at the plant site and keep daily records of rainfall and the resulting flows at internal Outfalls 101 and 201. Flows at internal Outfalls 101 and 201 during days when the rainfall exceeds 0.1 inch during any 24-hour period must not be used in calculating the daily average or daily maximum flows to be submitted on the monthly effluent report forms.

STATEMENT OF BASIS/TECHNICAL SUMMARY AND
EXECUTIVE DIRECTOR'S PRELIMINARY DECISION

DESCRIPTION OF APPLICATION

Applicant:	Linde Inc.; Texas Pollutant Discharge Elimination System (TPDES) Permit No. WQ0005182000 (EPA I.D. No. TX0136671)
Regulated activity:	Industrial wastewater permit
Type of application:	Renewal
Request:	Renewal without changes
Authority:	Federal Clean Water Act (CWA) §402; Texas Water Code (TWC) §26.027; 30 Texas Administrative Code (TAC) Chapter 305, Subchapters C-F, and Chapters 307 and 319; commission policies; and Environmental Protection Agency (EPA) guidelines

EXECUTIVE DIRECTOR RECOMMENDATION

The Executive Director has made a preliminary decision that this permit, if issued, meets all statutory and regulatory requirements. The draft permit will expire at midnight, five years from the date of permit issuance according to the requirements of 30 TAC §305.127(1)(C)(i).

REASON FOR PROJECT PROPOSED

The applicant applied to the Texas Commission on Environmental Quality (TCEQ) for a renewal of its existing permit.

PROJECT DESCRIPTION AND LOCATION

The applicant currently operates the Linde Freeport Plant, a facility that produces industrial gases in compressed and liquid forms.

The pressure-swing adsorption (PSA) unit generates non-contact cooling water blowdown, sand filter backwash, and oily water separator wastestreams which are monitored and discharged via internal Outfall 101. The air separation unit (ASU) and carbon dioxide (CO_2) plant generates non-contact cooling water blowdown, compressor condensate, and oily water separator wastestreams which are monitored and discharged via internal Outfall 201. The discharges from internal Outfalls 101 and 201 are commingled with stormwater runoff and combined into a single discharge via final Outfall 001.

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

The facility is located at 5619 East Highway 332, near the City of Freeport, Brazoria County, Texas 77541.

Discharge Routes and Designated Uses

The effluent is discharged via Outfall 001 to the Flag Lake Drainage Canal, thence to East Union Bayou, thence to the Intracoastal Waterway, thence to Old Brazos River Channel Tidal in Segment No. 1111 of the San Jacinto-Brazos Coastal Basin; or via Outfall 001 to the Flag Lake Drainage Canal, thence to Flag Lake Drainage Canal Tidal, thence to Brazos River Tidal in Segment No. 1201 of the Brazos River Basin. The unclassified receiving water use is intermediate aquatic life use for the Flag Lake Drainage Canal. The designated uses for Segment No. 1111 are primary contact recreation and

high aquatic life use. The designated uses for Segment No. 1201 are primary contact recreation, public water supply, and high aquatic life use. The public water supply use for Segment No. 1201 only applies from the upstream boundary to 300 meters (330 yards) downstream of SH 332 in Brazoria County, which does not include this permit outfall location. The effluent limits in the draft permit will maintain and protect the existing instream uses. All determinations are preliminary and subject to additional review and revisions.

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 program (September 14, 1998; October 21, 1998 update). To make this determination for TPDES permits, TCEQ and the 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. Though the piping plover, *Charadrius melodus* Ord, can occur in Brazoria County, the county is north of Copano Bay and not a watershed of high priority per Appendix A of the 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 Nos. 1111 and 1201 are not currently listed on the state's inventory of impaired and threatened waters, the 2022 CWA §303(d) list.

Completed Total Maximum Daily Loads (TMDLs)
There are no completed TMDLs for Segment Nos. 1111 and 1201.

Dissolved Oxygen
Due to the low concentrations of oxygen demanding constituents expected in the wastewater, no significant dissolved oxygen depletion is anticipated in the receiving waters as a result of this discharge.

SUMMARY OF EFFLUENT DATA

The following is a quantitative description of the discharge described in the monthly effluent report data for the period October 2019 through October 2024. The "Avg of Daily Avg" values presented in the following table are the average of all daily average values for the reporting period for each pollutant. The "Max of Daily Max" values presented in the following table are the individual maximum values for the reporting period for each pollutant. Flows are expressed in million gallons per day (MGD). All pH values are expressed in standard units (SU).

Flow

Outfall	Frequency	Avg of Daily Avg	Max of Daily Max
001	Continuous	9.85 MGD	790 MGD
101	Continuous (dry weather)	0.041 MGD	0.136 MGD
201	Continuous (dry weather)	0.052 MGD	0.4 MGD

Effluent Characteristics

Outfall	Pollutant	Avg of Daily Avg	Max of Daily Max
		mg/L	mg/L
101	Total Suspended Solids	7.55	128

Effluent Characteristics

Outfall	Pollutant	Avg of Daily Avg	Max of Daily Max
		mg/L	mg/L
101	Oil and Grease	3.45	11.9
	Total Residual Chlorine	0.001	0.11
	pH	6.5 SU (min)	8.93 SU
201	Oil and Grease	2.30	7.56
	pH	6.78 SU (min)	9.22 SU

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

Effluent Limitation Violations

Outfall	Pollutant (units)	Report Date	Daily Average		Daily Maximum	
			Limit	Reported	Limit	Reported
201	pH (SU)	06/2023	---	---	9.0	9.22

The draft permit was not changed to address this effluent limit violation for pH at internal Outfall 201 because this one-time pH violation does not show a trend of non-compliance.

DRAFT PERMIT CONDITIONS

The draft permit authorizes the discharge of previously monitored effluents (PMEs) (utility wastewater and stormwater from internal Outfall 101; and process wastewater, utility wastewater and stormwater from internal Outfall 201) commingled with non-regulated stormwater on a continuous and flow-variable basis via Outfall 001; utility wastewater and stormwater at a daily average dry weather flow not to exceed 0.20 MGD via internal Outfall 101; and process wastewater, utility wastewater, and stormwater at a daily average dry weather flow not to exceed 0.32 MGD via internal Outfall 201. See Appendix D for a comparison of technology-based effluent limits, water quality-based effluent limits, existing permit effluent limits, and proposed effluent limits in the draft permit.

OUTFALL LOCATIONS

Outfall	Latitude	Longitude
001	28.987784 N	95.356295 W

Technology-Based Effluent Limitations

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. Technology-based effluent limitations from 40 CFR Part 415, Subpart AW apply to the discharge of wastewaters from ASU at this facility. Development of technology-based effluent limitations is presented in Appendix A.

Water Quality-Based Effluent Limitations

Calculations of water quality-based effluent limitations for the protection of aquatic life and human health are presented in Appendix B. The discharge enters a freshwater body that flows into a saltwater segment, therefore values from a representative freshwater segment was used. The values for pH, TSS, hardness, and chloride from Segment No. 1202 were used for the freshwater portion of the discharge route. Aquatic life criteria established in Table 1 and human health criteria established in Table 2 of 30 TAC Chapter 307 are incorporated into the calculations, as are recommendations in the Water Quality Assessment Team's memorandum dated January 7, 2025. TCEQ practice for determining significant

potential is to compare the reported analytical data from the facility against percentages of the calculated daily average water quality-based effluent limitation. Permit limitations are required when analytical data reported in the application exceeds 85 percent of the calculated daily average water quality-based effluent limitation. Monitoring and reporting is required when analytical data reported in the application exceeds 70 percent of the calculated daily average water quality-based effluent limitation.

Analytical data provided on April 19, 2024, was screened against the calculated water quality-based effluent limitations. Based on the screening, total copper exceeded 70 percent of the calculated daily average water quality-based effluent limitation, therefore, monitoring and reporting requirements for total copper at Outfall 001 have been included in the draft permit for the protection of water quality.

Total Dissolved Solids (TDS), Chloride, and Sulfate Screening
The discharge enters a freshwater body that flows into a saltwater segment, therefore values from a representative freshwater segment was used. The values for TDS, chloride, and sulfate from Segment No. 1202 were used for the freshwater portion of the discharge route. Screening procedures and effluent limitations for TDS, chloride, and sulfate are calculated using the methodology in the *Procedures to Implement the Texas Surface Water Quality Standards*, June 2010, and criteria in the *Texas Surface Water Quality Standards* (30 TAC Chapter 307). Detailed calculations are presented in **Error! Reference source not found.**. Based on the screening, no effluent limitations are needed for TDS, chloride, or sulfate.

Segment Nos. 1111 and 1201, which receives the discharge from this facility, does not have criteria established for TDS, chloride, or sulfate in 30 TAC Chapter 307; therefore, no screening was performed for TDS, chloride, or sulfate in the effluent.

pH Screening
The existing permit includes pH limits of 6.0 – 9.0 SU at internal Outfalls 101 and 201, which discharge via Outfall 001 into an unclassified water body. 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. These limits have been carried forward in the draft permit.

316(b) Cooling Water Intake Structures
The facility obtains water from Dow Chemical Company Plant B, a public water system (PWS No. TX0200232), for cooling purposes. The use of water obtained from a public water system 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.

The Other Requirement No. 2 is continued in the draft permit 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.

Whole Effluent Toxicity Testing (Biomonitoring)
Biomonitoring requirements are not included in the draft permit.

This facility is subject to 40 CFR Part 415, Subpart AW which apply to the discharge of wastewaters from ASU at this facility. The wastewater discharge authorized in this permit does not establish any toxic technology-based limits and this inorganic wastewater is properly controlled with the effluent limitations established in the draft permit.

SUMMARY OF CHANGES FROM APPLICATION

No changes were made from the application.

SUMMARY OF CHANGES FROM EXISTING PERMIT

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

1. The facility's location description has been updated from 5619 East Highway 332, on the south side of East Highway 332, approximately 1.3 miles northwest of the intersection of East Highway 332 and Farm-to-Market Road 523, in the City of Freeport in Brazoria County, Texas 77541 to 5619 East Highway 332, near the City of Freeport, Brazoria County, Texas 77541.
2. Added monitoring and reporting requirements for total copper at Outfall 001 for the protection of aquatic life based on the screening of the analytical data provided on April 19, 2024, and the calculated water quality-based effluent limitations in Appendix B. Monitoring and reporting requirements for total copper expires 34 months from the date of permit expiration.
3. Pages 3-13 were updated (May 2021 version).
4. Item No. 1 in the Other Requirement Section has been modified to establish the minimum analytical level (MAL) for total copper.
5. Existing Item No. 3 in the Other Requirements Section regarding effluent retest for Outfall 001 was removed because it has been fulfilled.

BASIS FOR DRAFT PERMIT

The following items were considered in developing the draft permit:

1. Application received on March 21, 2024, and additional information received on December 16, 2024.
2. Existing permits: TPDES Permit No. WQ0005182000 issued on September 18, 2019.
3. TCEQ Rules.
4. *Texas Surface Water Quality Standards* – 30 TAC §§307.1-307.10, effective March 1, 2018, as approved by EPA Region 6.
5. *Texas Surface Water Quality Standards* – 30 TAC §§307.1-307.10, effective March 6, 2014, as approved by EPA Region 6, for portions of the 2018 standards not approved by EPA Region 6.
6. *Texas Surface Water Quality Standards* – 30 TAC §§307.1-307.10, effective July 22, 2010, as approved by EPA Region 6, for portions of the 2014 standards not approved by EPA Region 6.
7. *Texas Surface Water Quality Standards* – 30 TAC §§307.1-307.10, effective August 17, 2000, and Appendix E, effective February 27, 2002, for portions of the 2010 standards not approved by EPA Region 6.
8. *Procedures to Implement the Texas Surface Water Quality Standards* (IPs), Texas Commission on Environmental Quality, June 2010, as approved by EPA Region 6.
9. *Procedures to Implement the Texas Surface Water Quality Standards*, Texas Commission on Environmental Quality, January 2003, for portions of the 2010 IPs not approved by EPA Region 6.
10. Memos from the Standards Implementation Team and Water Quality Assessment Team of the Water Quality Assessment Section of the TCEQ.
11. *Guidance Document for Establishing Monitoring Frequencies for Domestic and Industrial Wastewater Discharge Permits*, TCEQ Document No. 98-001.000-OWR-WQ, May 1998.

12. EPA Effluent Guidelines: 40 CFR Part 415 Subpart AW (BPT). A new source determination was performed and the discharge of process wastewater is not a new source as defined at 40 CFR §122.2.
13. Consistency with the Coastal Management Plan: The executive director has reviewed this action for consistency with the goals and policies of the Texas Coastal Management Program (CMP) in accordance with the regulations of the General Land Office and has determined that the action is consistent with the applicable CMP goals and policies.
14. 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).
15. 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).
16. General Guidance – Industrial Permits: Uncontaminated Stormwater Runoff, EPA, January 1997.

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 to the Chief Clerk, along with the Executive Director's preliminary decision contained in the technical summary or fact sheet. 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 hearing.

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 Mónica Vallin-Báez at (512) 239-5784.

Mónica Vallin-Báez
Mónica Vallin-Báez

January 21, 2024
Date

Appendix A
Calculated Technology-Based Effluent Limits

Outfall 001

Outfall 001 includes previously monitored effluents from internal Outfalls 101 and 201 commingled with unregulated stormwater runoff. The draft permit includes reporting requirements for flow based on the requirements of 40 CFR §122.44(i)(1)(ii).

Internal Outfall 101

Internal Outfall 101 authorizes the discharge of utility wastewater and stormwater at a daily average flow not to exceed 200,000 gallons per day.

Technology-based effluent limitations for dry-weather flow and pH at internal Outfall 101 were originally established based on BPJ and are continued from the existing permit as required by EPA anti-backsliding regulations [40 CFR § 122.44(l)].

Technology-based daily average effluent limitations for total suspended solids, oil & grease, and total residual chlorine at internal Outfall 101 were originally established based on BPJ and are continued from the existing permit as required by EPA anti-backsliding regulations [40 CFR § 122.44(l)].

Daily maximum reporting requirements for total suspended solids and oil & grease at internal Outfall 101 were originally established based on BPJ and are continued from the existing permit as required by EPA anti-backsliding regulations [40 CFR § 122.44(l)].

Technology-based daily maximum effluent limitations for total residual chlorine at internal Outfall 101 were originally established based on BPJ and are continued from the existing permit as required by EPA anti-backsliding regulations [40 CFR § 122.44(l)].

Internal Outfall 201

A. BEST PROFESSIONAL JUDGEMENT (BPJ) EFFLUENT LIMITATIONS

Technology-based effluent limitations for flow at internal Outfall 201 are based on the design flow stated in the application. These limitations are based on BPJ.

B. PROCESS WASTEWATER ALLOCATIONS

Process wastewaters generated from the production of oxygen and nitrogen are subject to EPA categorical effluent limitation guidelines (ELGs) in 40 CFR §415.492 (Part 415, Subpart AW).

Based on information in Worksheet 1.0 of the application, the projected daily production rate is 1,600 tons/day, which converts to 3,200,000 lbs product per day (3,200 klbs product/day). Effluent limitation allocations for oil and grease (O&G) for process wastewaters were calculated as follows:

Dly Avg O&G = (0.0010 lbs/klbs product) x (3200 klbs product/day) = 3.20 lbs/day

Dly Max O&G = (0.0020 lbs/klbs product) x (3200 klbs product/day) = 6.40 lbs/day

Additionally, the applicable ELG requires the pH to be within the range of 6.0 SU to 9.0 SU.

C. COOLING TOWER BLOWDOWN ALLOCATIONS

Mass allocations for O&G for the non-categorical wastestream cooling tower blowdown are calculated and summed with the mass allocations for the other contributing sources. The generated process wastewater is reused as make-up water for the cooling tower prior to commingling with other wastewaters. The flow used for determining additional non-categorical allocations for the cooling tower blowdown are calculated by subtracting the amount of process wastewater used for make-up water from the total volume of cooling tower blowdown. The resulting flow is then multiplied by BPJ concentration criteria for cooling tower blowdown and the constant conversion factor of 8.345. The BPJ concentration criteria for O&G in cooling tower blowdown was derived from 40 CFR §423.12(b)(3) for low volume wastes, a similar wastestream.

Cooling Tower Blowdown Flow Determination

Total CTB Flow		0.11808 MGD
Process wastewater used for make-up water	-	0.02794 MGD
CTB Allocation Flow		0.09014 MGD

Cooling Tower Blowdown Mass Allocation Determination

O&G Avg	15 mg/L x 0.09014 MGD x 8.345 =	11.28 lbs/day
O&G Max	20 mg/L x 0.08916 MGD x 8.345 =	15.04 lbs/day

D. MISCELLANEOUS NON-CATEGORICAL ALLOCATIONS

Mass allocations for O&G for the remaining non-categorical wastestreams are calculated and then summed with the mass allocations for the other contributing sources. The remaining non-categorical wastestreams include contributing flows, that total 0.200304 MGD, from scuppers (0.19872 MGD) and the moisture separators (0.001584 MGD). The combined flow is multiplied by the BPJ concentration criteria and the constant conversion factor of 8.345. The BPJ concentration criteria for O&G was derived from 40 CFR §423.12(b)(3) for low volume wastes, a similar wastestream.

Mass Allocation Determination

O&G Avg	15 mg/L x 0.200304 MGD x 8.345 =	25.07 lbs/day
O&G Max	20 mg/L x 0.200304 MGD x 8.345 =	33.43 lbs/day

E. O&G SUMMATIONS

The mass effluent limitation allocations for O&G are summed below.

SOURCE	DLY AVG LBS/DAY	DLY MAX LBS/DAY
Process Wastewater	3.20	6.40
Cooling Tower Blowdown	11.28	15.04
Miscellaneous Wastewaters	25.07	33.43
TOTAL	39.55	54.87

F. TECHNOLOGY-BASED EFFLUENT LIMITATIONS FOR INTERNAL OUTFALL 201

The calculated technology-based effluent limitations for internal Outfall 201 are as follows.

PARAMETER	DLY AVG	DLY MAX
Flow	0.32 MGD	0.40 MGD
Oil and Grease	39.55 lbs/day	54.87 lbs/day
pH	6.0 SU (min)	9.0 SU

Appendix B
Calculated Water Quality-Based Effluent Limits

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	
PERMIT INFORMATION	
Permittee Name:	Linde Inc.
TPDES Permit No:	WQ0005182000
Outfall No:	001
Prepared by:	Mónica Báez
Date:	January 13, 2025
DISCHARGE INFORMATION	
Receiving Waterbody:	Flag Lake Drainage Canal
Segment No.:	1202
TSS (mg/L):	32
pH (Standard Units):	7.7
Hardness (mg/L as $CaCO_3$):	160
Chloride (mg/L):	86
Effluent Flow for Aquatic Life (MGD):	0.171
% Effluent for Chronic Aquatic Life (Mixing Zone):	27
% Effluent for Acute Aquatic Life (ZID):	100
Effluent Flow for Human Health (MGD):	0.097
% Effluent for Human Health:	14
Human Health Criterion (select: PWS, FISH, or INC)	**FISH**

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

Lake/Reservoir Metal	*Intercept (b)*	*Slope (m)*	*Partition Coefficient (Kp)*	*Dissolved Fraction (Cd/Ct)*	*Source*	*Water Effect Ratio*	*Source*
Aluminum	N/A	N/A	N/A	1.00	Assumed	1.00	Assumed
Arsenic	5.68	-0.73	38127.69	0.450		1.00	Assumed
Cadmium	6.55	-0.92	146305.96	0.176		1.00	Assumed
Chromium (total)	6.34	-0.27	858241.49	0.035		1.00	Assumed
Chromium (trivalent)	6.34	-0.27	858241.49	0.035		1.00	Assumed
Chromium (hexavalent)	N/A	N/A	N/A	1.00	Assumed	1.00	Assumed
Copper	6.45	-0.90	124556.11	0.201		1.00	Assumed
Lead	6.31	-0.53	325289.85	0.088		1.00	Assumed
Mercury	N/A	N/A	N/A	1.00	Assumed	1.00	Assumed
Nickel	6.34	-0.76	157067.39	0.166		1.00	Assumed
Selenium	N/A	N/A	N/A	1.00	Assumed	1.00	Assumed
Silver	6.38	-1.03	67560.91	0.316		1.00	Assumed
Zinc	6.52	-0.68	313688.08	0.091		1.00	Assumed

Appendix B
Calculated Water Quality-Based Effluent Limits

AQUATIC LIFE

CALCULATE DAILY AVERAGE AND DAILY MAXIMUM EFFLUENT LIMITATIONS:

Parameter	*FW Acute Criterion (µg/L)*	*FW Chronic Criterion (µg/L)*	*WLAa (µg/L)*	*WLAc (µg/L)*	*LTAa (µg/L)*	*LTAc (µg/L)*	*Daily Avg. (µg/L)*	*Daily Max. (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	755	1233	242	752	355	751
Cadmium	13.55	0.341	77.0	7.17	24.6	4.38	6.43	13.6
Carbaryl	2.0	N/A	2.00	N/A	0.640	N/A	0.940	1.99
Chlordane	2.4	0.004	2.40	0.0148	0.768	0.00904	0.0132	0.0281
Chlorpyrifos	0.083	0.041	0.0830	0.152	0.0266	0.0926	0.0390	0.0826
Chromium (trivalent)	837	108.9	23832	11482	7626	7004	10295	21781
Chromium (hexavalent)	15.7	10.6	15.7	39.3	5.02	23.9	7.38	15.6
Copper	22.11	14.15	110	261	35.3	159	51.8	109
Cyanide (free)	45.8	10.7	45.8	39.6	14.7	24.2	21.5	45.5
4,4'-DDT	1.1	0.001	1.10	0.00370	0.352	0.00226	0.00332	0.00702
Demeton	N/A	0.1	N/A	0.370	N/A	0.226	0.332	0.702
Diazinon	0.17	0.17	0.170	0.630	0.0544	0.384	0.0799	0.169
Dicofol [Kelthane]	59.3	19.8	59.3	73.3	19.0	44.7	27.8	59.0
Dieldrin	0.24	0.002	0.240	0.00741	0.0768	0.00452	0.00664	0.0140
Diuron	210	70	210	259	67.2	158	98.7	208
Endosulfan I (*alpha*)	0.22	0.056	0.220	0.207	0.0704	0.127	0.103	0.218
Endosulfan II (*beta*)	0.22	0.056	0.220	0.207	0.0704	0.127	0.103	0.218
Endosulfan sulfate	0.22	0.056	0.220	0.207	0.0704	0.127	0.103	0.218
Endrin	0.086	0.002	0.0860	0.00741	0.0275	0.00452	0.00664	0.0140
Guthion [Azinphos Methyl]	N/A	0.01	N/A	0.0370	N/A	0.0226	0.0332	0.0702
Heptachlor	0.52	0.004	0.520	0.0148	0.166	0.00904	0.0132	0.0281
Hexachlorocyclohexane (*gamma*) [Lindane]	1.126	0.08	1.13	0.296	0.360	0.181	0.265	0.562
Lead	107.3	4.18	1224	177	392	108	158	335
Malathion	N/A	0.01	N/A	0.0370	N/A	0.0226	0.0332	0.0702
Mercury	2.4	1.3	2.40	4.81	0.768	2.94	1.12	2.38
Methoxychlor	N/A	0.03	N/A	0.111	N/A	0.0678	0.0996	0.210
Mirex	N/A	0.001	N/A	0.00370	N/A	0.00226	0.00332	0.00702
Nickel	697	77.4	4199	1728	1344	1054	1549	3277
Nonylphenol	28	6.6	28.0	24.4	8.96	14.9	13.1	27.8
Parathion (ethyl)	0.065	0.013	0.0650	0.0481	0.0208	0.0294	0.0305	0.0646
Pentachlorophenol	17.6	13.52	17.6	50.1	5.64	30.6	8.29	17.5
Phenanthrene	30	30	30.0	111	9.60	67.8	14.1	29.8
Polychlorinated Biphenyls [PCBs]	2.0	0.014	2.00	0.0519	0.640	0.0316	0.0464	0.0983
Selenium	20	5	20.0	18.5	6.40	11.3	9.40	19.9
Silver	0.8	N/A	18.2	N/A	5.84	N/A	8.57	18.1
Toxaphene	0.78	0.0002	0.780	0.000741	0.250	0.000452	0.000664	0.00140
Tributyltin [TBT]	0.13	0.024	0.130	0.0889	0.0416	0.0542	0.0611	0.129
2,4,5 Trichlorophenol	136	64	136	237	43.5	145	63.9	135
Zinc	174.5	175.9	1926	7192	616	4387	906	1916

Appendix B
Calculated Water Quality-Based Effluent Limits

HUMAN HEALTH

CALCULATE DAILY AVERAGE AND DAILY MAXIMUM EFFLUENT LIMITATIONS:

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)*
Acrylonitrile	1.0	115	1150	821	764	1122	2375
Aldrin	1.146E-05	1.147E-05	1.147E-04	0.0000819	0.0000762	0.000112	0.000236
Anthracene	1109	1317	13170	9407	8749	12860	27208
Antimony	6	1071	10710	7650	7115	10458	22126
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	4150	3860	5673	12003
Benzidine	0.0015	0.107	1.07	0.764	0.711	1.04	2.21
Benzo(*a*)anthracene	0.024	0.025	0.25	0.179	0.166	0.244	0.516
Benzo(*a*)pyrene	0.0025	0.0025	0.025	0.0179	0.0166	0.0244	0.0516
Bis(chloromethyl)ether	0.0024	0.2745	2.745	1.96	1.82	2.68	5.67
Bis(2-chloroethyl)ether	0.60	42.83	428.3	306	285	418	884
Bis(2-ethylhexyl) phthalate [Di(2-ethylhexyl) phtha	6	7.55	75.5	53.9	50.2	73.7	155
Bromodichloromethane [Dichlorobromomethane	10.2	275	2750	1964	1827	2685	5681
Bromoform [Tribromomethane]	66.9	1060	10600	7571	7041	10350	21898
Cadmium	5	N/A	N/A	N/A	N/A	N/A	N/A
Carbon Tetrachloride	4.5	46	460	329	306	449	950
Chlordane	0.0025	0.0025	0.025	0.0179	0.0166	0.0244	0.0516
Chlorobenzene	100	2737	27370	19550	18182	26726	56544
Chlorodibromomethane [Dibromochloromethane	7.5	183	1830	1307	1216	1786	3780
Chloroform [Trichloromethane]	70	7697	76970	54979	51130	75161	159014
Chromium (hexavalent)	62	502	5020	3586	3335	4902	10370
Chrysene	2.45	2.52	25.2	18.0	16.7	24.6	52.0
Cresols [Methylphenols]	1041	9301	93010	66436	61785	90824	192152
Cyanide (free)	200	N/A	N/A	N/A	N/A	N/A	N/A
4,4'-DDD	0.002	0.002	0.02	0.0143	0.0133	0.0195	0.0413
4,4'-DDE	0.00013	0.00013	0.0013	0.000929	0.000864	0.00126	0.00268
4,4'-DDT	0.0004	0.0004	0.004	0.00286	0.00266	0.00390	0.00826
2,4'-D	70	N/A	N/A	N/A	N/A	N/A	N/A
Danitol [Fenpropathrin]	262	473	4730	3379	3142	4618	9771
1,2-Dibromoethane [Ethylene Dibromide]	0.17	4.24	42.4	30.3	28.2	41.4	87.5
m-Dichlorobenzene [1,3-Dichlorobenzene]	322	595	5950	4250	3953	5810	12292
o-Dichlorobenzene [1,2-Dichlorobenzene]	600	3299	32990	23564	21915	32214	68154
p-Dichlorobenzene [1,4-Dichlorobenzene]	75	N/A	N/A	N/A	N/A	N/A	N/A
3,3'-Dichlorobenzidine	0.79	2.24	22.4	16.0	14.9	21.8	46.2
1,2-Dichloroethane	5	364	3640	2600	2418	3554	7519
1,1-Dichloroethylene [1,1-Dichloroethene]	7	55114	551140	393671	366114	538188	1138615
Dichloromethane [Methylene Chloride]	5	13333	133330	95236	88569	130196	275450
1,2-Dichloropropane	5	259	2590	1850	1721	2529	5350
1,3-Dichloropropene [1,3-Dichloropropylene]	2.8	119	1190	850	791	1162	2458
Dicofol [Kelthane]	0.30	0.30	3	2.14	1.99	2.92	6.19
Dieldrin	2.0E-05	2.0E-05	2.0E-04	0.000143	0.000133	0.000195	0.000413
2,4-Dimethylphenol	444	8436	84360	60257	56039	82377	174281
Di-*n*-Butyl Phthalate	88.9	92.4	924	660	614	902	1908
Dioxins/Furans [TCDD Equivalents]	7.80E-08	7.97E-08	7.97E-07	5.69E-07	5.29E-07	7.78E-07	0.0000016

Appendix B
Calculated Water Quality-Based Effluent Limits

HUMAN HEALTH - continued

CALCULATE DAILY AVERAGE AND DAILY MAXIMUM EFFLUENT LIMITATIONS:

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)*
Endrin	0.02	0.02	0.2	0.143	0.133	0.195	0.413
Epichlorohydrin	53.5	2013	20130	14379	13372	19656	41587
Ethylbenzene	700	1867	18670	13336	12402	18231	38570
Ethylene Glycol	46744	1.68E+07	1.68E+08	120000000	111600000	164052000	347076000
Fluoride	4000	N/A	N/A	N/A	N/A	N/A	N/A
Heptachlor	8.0E-05	0.0001	0.001	0.000714	0.000664	0.000976	0.00206
Heptachlor Epoxide	0.00029	0.00029	0.0029	0.00207	0.00193	0.00283	0.00599
Hexachlorobenzene	0.00068	0.00068	0.0068	0.00486	0.00452	0.00664	0.0140
Hexachlorobutadiene	0.21	0.22	2.2	1.57	1.46	2.14	4.54
Hexachlorocyclohexane (*alpha*)	0.0078	0.0084	0.084	0.0600	0.0558	0.0820	0.173
Hexachlorocyclohexane (*beta*)	0.15	0.26	2.6	1.86	1.73	2.53	5.37
Hexachlorocyclohexane (*gamma*) [Lindane]	0.2	0.341	3.41	2.44	2.27	3.32	7.04
Hexachlorocyclopentadiene	10.7	11.6	116	82.9	77.1	113	239
Hexachloroethane	1.84	2.33	23.3	16.6	15.5	22.7	48.1
Hexachlorophene	2.05	2.90	29	20.7	19.3	28.3	59.9
4,4'-Isopropylidenediphenol [Bisphenol A]	1092	15982	159820	114157	106166	156064	330176
Lead	1.15	3.83	38.3	312	290	426	902
Mercury	0.0122	0.0122	0.122	0.0871	0.0810	0.119	0.252
Methoxychlor	2.92	3.0	30	21.4	19.9	29.2	61.9
Methyl Ethyl Ketone	13865	9.92E+05	9.92E+06	7085714	6589714	9686880	20494011
Methyl *tert* -butyl ether [MTBE]	15	10482	104820	74871	69630	102356	216550
Nickel	332	1140	11400	49070	45635	67083	141925
Nitrate-Nitrogen (as Total Nitrogen)	10000	N/A	N/A	N/A	N/A	N/A	N/A
Nitrobenzene	45.7	1873	18730	13379	12442	18289	38694
N-Nitrosodiethylamine	0.0037	2.1	21	15.0	14.0	20.5	43.3
N-Nitroso-di-*n* -Butylamine	0.119	4.2	42	30.0	27.9	41.0	86.7
Pentachlorobenzene	0.348	0.355	3.55	2.54	2.36	3.46	7.33
Pentachlorophenol	0.22	0.29	2.9	2.07	1.93	2.83	5.99
Polychlorinated Biphenyls [PCBs]	6.4E-04	6.4E-04	6.40E-03	0.00457	0.00425	0.00624	0.0132
Pyridine	23	947	9470	6764	6291	9247	19564
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	1.71	1.59	2.34	4.95
1,1,2,2-Tetrachloroethane	1.64	26.35	263.5	188	175	257	544
Tetrachloroethylene [Tetrachloroethylene]	5	280	2800	2000	1860	2734	5784
Thallium	0.12	0.23	2.3	1.64	1.53	2.24	4.75
Toluene	1000	N/A	N/A	N/A	N/A	N/A	N/A
Toxaphene	0.011	0.011	0.11	0.0786	0.0731	0.107	0.227
2,4,5-TP [Silvex]	50	369	3690	2636	2451	3603	7623
1,1,1-Trichloroethane	200	784354	7843540	5602529	5210352	7659216	16204193
1,1,2-Trichloroethane	5	166	1660	1186	1103	1620	3429
Trichloroethylene [Trichloroethene]	5	71.9	719	514	478	702	1485
2,4,5-Trichlorophenol	1039	1867	18670	13336	12402	18231	38570
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	118	110	161	340

Appendix B
Calculated Water Quality-Based Effluent Limits

CALCULATE 70% AND 85% OF DAILY AVERAGE EFFLUENT LIMITATIONS:		
Aquatic Life	***70% of Daily Avg.***	***85% of Daily Avg.***
Parameter	***(µg/L)***	***(µg/L)***
Aldrin	0.987	1.19
Aluminum	326	396
Arsenic	248	301
Cadmium	4.50	5.46
Carbaryl	0.658	0.799
Chlordane	0.00929	0.0112
Chlorpyrifos	0.0273	0.0331
Chromium (trivalent)	7206	8751
Chromium (hexavalent)	5.16	6.27
Copper	36.3	44.0
Cyanide (free)	15.0	18.3
4,4'-DDT	0.00232	0.00282
Demeton	0.232	0.282
Diazinon	0.0559	0.0679
Dicofol [Kelthane]	19.5	23.7
Dieldrin	0.00464	0.00564
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	0.00464	0.00564
Guthion [Azinphos Methyl]	0.0232	0.0282
Heptachlor	0.00929	0.0112
Hexachlorocyclohexane (*gamma*) [Lindane]	0.185	0.225
Lead	110	134
Malathion	0.0232	0.0282
Mercury	0.790	0.959
Methoxychlor	0.0697	0.0846
Mirex	0.00232	0.00282
Nickel	1084	1316
Nonylphenol	9.21	11.1
Parathion (ethyl)	0.0214	0.0259
Pentachlorophenol	5.80	7.04
Phenanthrene	9.87	11.9
Polychlorinated Biphenyls [PCBs]	0.0325	0.0395
Selenium	6.58	7.99
Silver	6.00	7.29
Toxaphene	0.000464	0.000564
Tributyltin [TBT]	0.0428	0.0519
2,4,5 Trichlorophenol	44.7	54.3
Zinc	634	770

Appendix B
Calculated Water Quality-Based Effluent Limits

Human Health	*70% of Daily Avg.*	*85% of Daily Avg.*
Parameter	***(µg/L)***	***(µg/L)***
Acrylonitrile	786	954
Aldrin	0.0000784	0.0000952
Anthracene	9002	10931
Antimony	7320	8889
Arsenic	N/A	N/A
Barium	N/A	N/A
Benzene	3971	4822
Benzidine	0.731	0.888
Benzo(*a*)anthracene	0.170	0.207
Benzo(*a*)pyrene	0.0170	0.0207
Bis(chloromethyl)ether	1.87	2.27
Bis(2-chloroethyl)ether	292	355
Bis(2-ethylhexyl) phthalate [Di(2-ethylhexyl) phth	51.6	62.6
Bromodichloromethane [Dichlorobromomethane	1879	2282
Bromoform [Tribromomethane]	7245	8798
Cadmium	N/A	N/A
Carbon Tetrachloride	314	381
Chlordane	0.0170	0.0207
Chlorobenzene	18708	22717
Chlorodibromomethane [Dibromochloromethane	1250	1518
Chloroform [Trichloromethane]	52612	63887
Chromium (hexavalent)	3431	4166
Chrysene	17.2	20.9
Cresols [Methylphenols]	63576	77200
Cyanide (free)	N/A	N/A
4,4'-DDD	0.0136	0.0166
4,4'-DDE	0.000888	0.00107
4,4'-DDT	0.00273	0.00332
2,4'-D	N/A	N/A
Danitol [Fenpropathrin]	3233	3926
1,2-Dibromoethane [Ethylene Dibromide]	28.9	35.1
m -Dichlorobenzene [1,3-Dichlorobenzene]	4067	4938
o -Dichlorobenzene [1,2-Dichlorobenzene]	22550	27382
p -Dichlorobenzene [1,4-Dichlorobenzene]	N/A	N/A
3,3'-Dichlorobenzidine	15.3	18.5
1,2-Dichloroethane	2488	3021
1,1-Dichloroethylene [1,1-Dichloroethene]	376731	457459
Dichloromethane [Methylene Chloride]	91137	110667
1,2-Dichloropropane	1770	2149
1,3-Dichloropropene [1,3-Dichloropropylene]	813	987
Dicofol [Kelthane]	2.05	2.49
Dieldrin	0.000136	0.000166
2,4-Dimethylphenol	57664	70020
Di-*n* -Butyl Phthalate	631	766
Dioxins/Furans [TCDD Equivalents]	5.44E-07	6.61E-07

Appendix B
Calculated Water Quality-Based Effluent Limits

Human Health - continued *Parameter*	*70% of Daily Avg.* *(µg/L)*	*85% of Daily Avg.* *(µg/L)*
Endrin	0.136	0.166
Epichlorohydrin	13759	16708
Ethylbenzene	12761	15496
Ethylene Glycol	114836400	139444200
Fluoride	N/A	N/A
Heptachlor	0.000683	0.000830
Heptachlor Epoxide	0.00198	0.00240
Hexachlorobenzene	0.00464	0.00564
Hexachlorobutadiene	1.50	1.82
Hexachlorocyclohexane (*alpha*)	0.0574	0.0697
Hexachlorocyclohexane (*beta*)	1.77	2.15
Hexachlorocyclohexane (*gamma*) [Lindane]	2.33	2.83
Hexachlorocyclopentadiene	79.2	96.2
Hexachloroethane	15.9	19.3
Hexachlorophene	19.8	24.0
4,4'-Isopropylidenediphenol [Bisphenol A]	109244	132654
Lead	298	362
Mercury	0.0833	0.101
Methoxychlor	20.5	24.9
Methyl Ethyl Ketone	6780816	8233848
Methyl *tert* -butyl ether [MTBE]	71649	87003
Nickel	46958	57021
Nitrate-Nitrogen (as Total Nitrogen)	N/A	N/A
Nitrobenzene	12802	15546
N-Nitrosodiethylamine	14.3	17.4
N-Nitroso-di-*n* -Butylamine	28.7	34.8
Pentachlorobenzene	2.42	2.94
Pentachlorophenol	1.98	2.40
Polychlorinated Biphenyls [PCBs]	0.00437	0.00531
Pyridine	6473	7860
Selenium	N/A	N/A
1,2,4,5-Tetrachlorobenzene	1.64	1.99
1,1,2,2-Tetrachloroethane	180	218
Tetrachloroethylene [Tetrachloroethylene]	1913	2324
Thallium	1.57	1.90
Toluene	N/A	N/A
Toxaphene	0.0751	0.0913
2,4,5-TP [Silvex]	2522	3062
1,1,1-Trichloroethane	5361451	6510334
1,1,2-Trichloroethane	1134	1377
Trichloroethylene [Trichloroethene]	491	596
2,4,5-Trichlorophenol	12761	15496
TTHM [Sum of Total Trihalomethanes]	N/A	N/A
Vinyl Chloride	112	136

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:	**Linde Freeport Plant**
Permit Number, Outfall:	**05182-000**
Segment Number:	**Segment 1111 (Using freshwater segment 1202)**

Enter values needed for screening:			**Data Source (edit if different)**
EF - Effluent fraction at edge of human health MZ	**0.14**	decimal fraction	Critical conditions memo
CA - TDS - ambient segment concentration	**438**	mg/L	2010 IP, Appendix D
CA - chloride - ambient segment concentration	**88**	mg/L	2010 IP, Appendix D
CA - sulfate - ambient segment concentration	**60**	mg/L	2010 IP, Appendix D
CC - TDS - segment criterion	**750**	mg/L	2022 TSWQS, Appendix A
CC - chloride - segment criterion	**300**	mg/L	2022 TSWQS, Appendix A
CC - sulfate - segment criterion	**200**	mg/L	2022 TSWQS, Appendix A
CE - TDS - average effluent concentration	**1650**	mg/L	Permit application
CE - chloride - average effluent concentration	**171**	mg/L	Permit application
CE - sulfate - average effluent concentration	**365**	mg/L	Permit application

Screening Equation

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

No further screening for TDS needed if:	**607.68**	**≤**	**750**
No further screening for chloride needed if:	**99.62**	**≤**	**300**
No further screening for sulfate needed if:	**102.70**	**≤**	**200**

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.

Outfall	*Pollutant*	*Technology-Based*		*Water Quality-Based*		*Existing Permit*	
		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**
	Copper, Total [1]	---	---	**Report**	**Report**	---	---
101	Dry-Weather Flow	0.20 MGD	0.25 MGD	---	---	**0.20 MGD**	**0.25 MGD**
	Total Suspended Solids	50	Report	---	---	**50**	**Report**
	Oil and Grease	10	Report	---	---	**10**	**Report**
	Total Residual Chlorine	0.2	0.5	---	---	**0.2**	**0.5**
	pH	6.0 SU (minimum)	9.0 SU	---	---	**6.0 SU (minimum)**	**9.0 SU**

Outfall	*Pollutant*	*Technology-Based*		*Water Quality-Based*		*Existing Permit*	
		Daily Avg	*Daily Max*	*Daily Avg*	*Daily Max*	*Daily Avg*	*Daily Max*
		lbs/day	*lbs/day*	*lbs/day*	*lbs/day*	*lbs/day*	*lbs/day*
201	Dry-Weather Flow	0.32 MGD	0.40 MGD	---	---	**0.32 MGD**	**0.40 MGD**
	Oil and Grease	39.55	54.87	---	---	**39.43**	**54.71**
	pH	6.0 SU (minimum)	9.0 SU	---	---	**6.0 SU (minimum)**	**9.0 SU**

[1] Beginning upon date of permit issuance and self-expires 34 months from date of permit expiration.