Administrative Package Cover Page

This file contains the following documents:

1. Summary of application (in plain language)
   - English
   - Alternative Language (Spanish)
2. First Notice (NORI-Notice of Receipt of Application and Intent to Obtain a Permit)
   - English
   - Alternative Language (Spanish)
3. Application materials

Portada de Paquete Administrativo

Este archivo contiene los siguientes documentos:

1. Resumen en lenguaje sencillo (PLS, por sus siglas en inglés) de la actividad propuesta
   - Inglés
   - Idioma alternativo (español)
2. Primer aviso (NORI, por sus siglas en inglés)
   - Inglés
   - Idioma alternativo (español)
3. Solicitud original

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

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

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

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

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

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

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

Calpine Hidalgo Energy Center, L.P. (CN600121932); Public Utilities Board of the City of Brownsville, Texas (CN601658651); and Calpine Operating Services Company, Inc. (CN602680076) operates Calpine Hidalgo Energy Center (RN100224989), a power generating facility. The facility is located at 4005 N Seminary Road, in Edinburg, Hidalgo County, Texas 78541. The facility has applied to the Texas Commission on Environmental Quality (TCEQ) to renew Texas Pollutant Discharge Elimination System (TPDES) Permit No. WQ0004138000 to authorize the discharge of industrial wastewater at a volume not to exceed a daily average flow of 920,000 gallons per day.

Discharges from the facility are expected to contain carbonaceous biochemical oxygen demand (5-day), total dissolved solids, chloride, sulfate, nitrate nitrogen, ammonia nitrogen, total residual chlorine, total chromium, and zinc. Types of wastewater discharged from the facility include cooling tower blowdown and previously monitored effluents through Outfall

001. Previously monitored effluents discharged through Outfall 001 are low volume waste sources from internal Outfall 101 and offline combustion turbine wash water (metal cleaning wastes) from internal Outfall 201. Cooling tower blowdown is dechlorinated prior to discharge through Outfall 001. Low volume waste sources from internal Outfall 101 are treated by an oil water separator prior to comingling with other wastewaters for discharge through Outfall 001. Wastewater from internal Outfall 201 is not treated prior to discharge.

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

AGUAS RESIDUALES INDUSTRIALES /AGUAS PLUVIALES

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

Calpine Hidalgo Energy Center, L.P. (CN600121932); Public Utilities Board of the City of Brownsville, Texas (CN601658651); y Calpine Operating Services Company, Inc. (CN602680076) opera Calpine Hidalgo Energy Center (RN100224989), una instalación de generación de energía. La instalación está ubicada en 4005 N Seminary Road, en Edinburg, Condado de Hidalgo, Texas 78541. La instalación ha solicitado a la Comisión de Calidad Ambiental de Texas (TCEQ) la renovación del Permiso del Sistema de Eliminación de Descargas de Contaminantes de Texas (TPDES) No. WQ0004138000 para autorizar la descarga de aguas residuales industriales a un volumen que no exceda un promedio diario de 920,000 galones por día.

Se espera que las descargas de la instalación contengan demanda bioquímica carbonosa de oxígeno (5 días), sólidos disueltos totales, cloruro, sulfato, nitrato nitrógeno, nitrógeno amoniacal, cloro residual total, cromo total, y zinc. Los tipos de aguas residuales descargadas de la instalación incluyen el drenaje de la torre de enfriamiento y efluentes monitoreados previamente a través del emisario 001. Los efluentes monitoreados previamente descargaron de emisario 001 son fuentes de desechos de bajo volumen de emisario interno 101 y agua de lavado de turbinas de combustión fuera de línea (desechos de limpieza de metales) de emisario interno 201. El drenaje de la torre de enfriamiento es desclorado antes de ser descargado a través del emisario 001. Las fuentes de desechos de bajo volumen del emisario interno 101 se tratan mediante un separador de aceite y agua antes de mezclarse con otras aguas residuales para su descarga a través del emisario 001. Las aguas residuales de emisario interno 201 no se tratan antes de ser descargadas.

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

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

PERMIT NO. WQ0004138000

APPLICATION. Public Utilities Board of the City of Brownsville, Texas, Calpine Hidalgo Energy Center, L.P., and Calpine Operating Services Company, Inc., 717 Texas Avenue, Suite 1000, Houston, Texas 77002, which own a 500-megawatt combined cycle electric power generating facility, have applied to the Texas Commission on Environmental Quality (TCEQ) to renew Texas Pollutant Discharge Elimination System (TPDES) Permit No. WQ0004138000 (EPA I.D. No. TX0119423) to authorize the discharge of treated wastewater at a volume not to exceed a daily average flow of 920,000 gallons per day via Outfall 001. The facility is located at 4005 North Seminary Road, in the city of Edinburg, in Hidalgo County, Texas 78541. The discharge route is from the plant site to North Main Drain III; thence to North Main Drain II; thence to North Main Drain I; thence to North Floodway Channel; thence to Laguna Madre. TCEQ received this application on July 8, 2025. The permit application will be available for viewing and copying at Dustin Michael Sekula Memorial Library, Reference Desk, 1906 South Closner Boulevard, Edinburg, in Hidalgo County, Texas prior to the date this notice is published in the newspaper. The application, including any updates, and associated notices are available electronically at the following webpage: https://www.tceq.texas.gov/permitting/wastewater/pending-permits/tpdes-applications. This link to an electronic map of the site or facility's general location is provided as a public courtesy and not part of the application or notice. For the exact location, refer to the application. https://gisweb.tceq.texas.gov/LocationMapper/?marker=-98.175,26.341944&level=18

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

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

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

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

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

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

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

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

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

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

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

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

Further information may also be obtained from Public Utilities Board of the City of Brownsville, Texas, Calpine Hidalgo Energy Center, L.P., and Calpine Operating Services Company, Inc. at the address stated above or by calling Mr. Ray Dube, EHS Manager, Calpine Operating Services Company, Inc., at 830-305-8429.

Issuance Date: July 31, 2025

Comisión de Calidad Ambiental del Estado de Texas

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

PERMISO NO. WQ0004138000

SOLICITUD. Public Utilities Board of the City of Brownsville, Texas, Calpine Hidalgo Energy Center, L.P., y Calpine Operating Services Company, Inc., que posee una instalación de generación de electricidad de ciclo combinado de 500 megavatios, ha solicitado a la Comisión de Calidad Ambiental del Estado de Texas (TCEQ) para renovar el Permiso No. WQ0004138000 (EPA I.D. No. TX0119423) 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 920,000 galones por día. La planta está ubicada 4005 N Seminary Road, Edinburg en el Condado de Hidalgo, Texas 78541. La ruta de descarga es del sitio de la planta a Drenaje Principal Norte III; de ahí al Drenaje Principal Norte II; de ahí al Drenaje Principal Norte I; de ahí al Canal de Inundación Norte; de ahí a Laguna Madre. La TCEQ recibió esta solicitud el 8 de julio de 2025. La solicitud para el permiso estará disponible para leerla y copiarla en Dustin Michael Sekula Memorial Library, mesa de referencia, 1906 S Closner Boulevard, Edinburg, en el Condado de Hidaglo, Texas antes de la fecha de publicación de este aviso en el periódico. La solicitud (cualquier actualización y aviso inclusive) está disponible electrónicamente en la siguiente página web: https://www.tceq.texas.gov/permitting/wastewater/pending-permits/tpdes-applications. Este enlace a un mapa electrónico de la ubicación general del sitio o de la instalación es proporcionado como una cortesía y no es parte de la solicitud o del aviso. Para la ubicación exacta, consulte la solicitud.
https://gisweb.tceq.texas.gov/LocationMapper/?marker=-98.175,26.341944&level=18

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

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

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

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

También se puede obtener información adicional del Public Utilities Board of the City of Brownsville, Texas, Calpine Hidalgo Energy Center, L.P., y Calpine Operating Services, Inc. a la dirección indicada arriba o llamando a Sr. Ray Dube, Gerente de EHS, al 830-305-8429.

Fecha de emisión: 31 de julio de 2025

Weston Solutions, Inc.
5301 Southwest Parkway, Suite 450
Austin, TX 78735
512-651-7100
WestonSolutions.com

8 July 2025

Texas Commission on Environmental Quality
Water Quality Section
Waste Permits Division
Building F, 2nd Floor
P.O. Box 13087
12100 Park 35 Circle
Austin, Texas 78711-3087

Via Email: wqdecopy@tceq.texas.gov

RE: Transmittal of Texas Pollutant Discharge Elimination System (TPDES) Permit Renewal Application WQ0004138000
RN 100224989 Calpine Hidalgo Energy Center
CN 603752932 Brownsville Public Utility Board
CN 600131932 Calpine Hidalgo Energy Center, LP.
CN 602680076 Calpine Operating Services Company, Inc.

Dear Sir or Madam:

Weston Solutions, Inc. (WESTON®) is pleased to submit this Texas Pollutant Discharge Elimination System (TPDES) permit renewal application for the above-referenced facility on behalf of Calpine Hidalgo Energy Center. The original application is being sent separately via FedEx.

Payment for the permit application fee has been made via ePay; documentation is included in the application.

Please contact me at 512-651-7104 or at nancy.koch@westonsolutions.com should you have any questions regarding this application.

Very truly yours,
Weston Solutions, Inc.

N. L. Koch

Nancy L. Koch, P.E.
Project Manager

cc: Orielle Buentello, Calpine
Ray Dube, Calpine

Attachments:
Attachment A – TPDES Renewal Application

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

INDUSTRIAL WASTEWATER PERMIT APPLICATION CHECKLIST

Complete and submit this checklist with the industrial wastewater permit application.

APPLICANT NAME: Calpine Hidalgo Energy Center, L.P.; Public Utilities Board of the City of Brownsville, Texas; and Calpine Operating Services Company, Inc.

PERMIT NUMBER (If new, leave blank): WQ0004138000

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

	Y	N			Y	N	
Administrative Report 1.0	☒	☐		Worksheet 8.0	☐	☒	
Administrative Report 1.1	☐	☒		Worksheet 9.0	☐	☒	
SPIF	☒	☐	**E**	Worksheet 10.0	☐	☒	
Core Data Form	☒	☐	**B**	Worksheet 11.0	☐	☒	
Summary of Application (PLS)	☒	☐	**C**	Worksheet 11.1	☐	☒	
Public Involvement Plan Form	☐	☒		Worksheet 11.2	☐	☒	
Technical Report 1.0	☒	☐		Worksheet 11.3	☐	☒	
Worksheet 1.0	☒	☐		Original USGS Map	☒	☐	**D**
Worksheet 2.0	☒	☐		Affected Landowners Map	☐	☒	
Worksheet 3.0	☐	☒		Landowner Disk or Labels	☐	☒	
Worksheet 3.1	☐	☒		Flow Diagram	☒	☐	**G**
Worksheet 3.2	☐	☒		Site Drawing	☒	☐	**F**
Worksheet 3.3	☐	☒		Original Photographs	☐	☒	
Worksheet 4.0	☒	☐		Design Calculations	☐	☒	
Worksheet 4.1	☐	☒		Solids Management Plan	☐	☒	
Worksheet 5.0	☐	☒		Water Balance	☐	☒	
Worksheet 6.0	☐	☒					
Worksheet 7.0	☐	☒					

For TCEQ Use Only

Segment Number _____County _____
Expiration Date _____Region _____
Permit Number _____

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

INDUSTRIAL WASTEWATER PERMIT APPLICATION ADMINISTRATIVE REPORT 1.0

This report is required for all applications for TPDES permits and TLAPs, except applications for oil and gas extraction operations subject to 40 CFR Part 435. Contact the Applications Review and Processing Team at 512-239-4671 with any questions about completing this report.

Applications for oil and gas extraction operations subject to 40 CFR Part 435 must use Oil and Gas Exploration and Production Administrative Report (TCEQ Form-20893 and 20893-inst[1]).

Item 1. Application Information and Fees (Instructions, Page 26)

a. Complete each field with the requested information, if applicable.

Applicant Name: Calpine Hidalgo Energy Center

Permit No.: WQ0004138000

EPA ID No.: TX0119423

Expiration Date: 26 January 2026

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

☒ Industrial Wastewater (wastewater and stormwater)

☐ Industrial Stormwater (stormwater only)

☐ Reverse Osmosis Water Treatment (reverse osmosis water treatment wastewaters only)

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

☒ Active ☐ Inactive

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

☒ TPDES Permit ☐ TLAP ☐ TPDES with TLAP component

e. Check the box next to the appropriate application type.

☐ New

☐ Renewal with changes ☒ Renewal without changes

☐ Major amendment with renewal ☐ Major amendment without renewal

☐ Minor amendment without renewal

☐ Minor modification without renewal

f. If applying for an amendment or modification, describe the request: Click to enter text.

For TCEQ Use Only

Segment Number _____County _____
Expiration Date _____Region _____
Permit Number _____

[1] https://www.tceq.texas.gov/publications/search_forms.html

g. Application Fee

EPA Classification	New	Major Amend. (with or without renewal)	Renewal (with or without changes)	Minor Amend. / Minor Mod. (without renewal)
Minor facility not subject to EPA categorical effluent guidelines (40 CFR Parts 400-471)	☐ $350	☐ $350	☐ $315	☐ $150
Minor facility subject to EPA categorical effluent guidelines (40 CFR Parts 400-471)	☐ $1,250	☐ $1,250	☐ $1,215	☐ $150
Major facility	N/A [2]	☐ $2,050	☒ $2,015	☐ $450

h. Payment Information

Mailed

Check or money order No.: Click to enter text.

Check or money order amt.: Click to enter text.

Named printed on check or money order: Click to enter text.

Epay

Voucher number: 773993; 773994

Copy of voucher attachment: **A**

Item 2. Applicant Information (Instructions, Pages 26)

a. Customer Number, if applicant is an existing customer: CN 600131932 (HEC); 601658651 (BPUB)

Note: Locate the customer number using the TCEQ's Central Registry Customer Search[3].

b. Legal name of the entity (applicant) applying for this permit: Calpine Hidalgo Energy Center, L.P. (HEC); Public Utilities Board of the City of Brownsville, Texas (BPUB)

Note: The owner of the facility must apply for the permit. The legal name must be spelled exactly as filed with the TX SOS, Texas Comptroller of Public Accounts, County, or in the legal documents forming the entity.

c. Name and title of the person signing the application. (**Note:** The person must be an executive official that meets signatory requirements in 30 TAC § 305.44.)

Prefix: Mr. Full Name (Last/First Name): Key/Jacob

Title: Plant Manager Credential: Click to enter text.

d. Will the applicant have overall financial responsibility for the facility?

☐ Yes ☒ No

[2] All facilities are designated as minors until formally classified as a major by EPA.

[3] https://www15.tceq.texas.gov/crpub/index.cfm?fuseaction=cust.CustSearch

Note: The entity with overall financial responsibility for the facility must apply as a co-applicant, if not the facility owner.

Item 3. Co-applicant Information (Instructions, Page 27)

☐ Check this box if there is no co-applicant.; otherwise, complete the below questions.

a. Legal name of the entity (co-applicant) applying for this permit: Calpine Operating Services Company, Inc.

Note: The legal name must be spelled exactly as filed with the TX SOS, Texas Comptroller of Public Accounts, County, or in the legal documents forming the entity.

b. Customer Number (if applicant is an existing customer): CN602680076

Note: Locate the customer number using the TCEQ's Central Registry Customer Search.

c. Name and title of the person signing the application. (**Note:** The person must be an executive official that meets signatory requirements in 30 TAC § 305.44.)

Prefix: Mr. Full Name (Last/First Name): Pate/Ty

Title: VP Central Region Operations Credential: Click to enter text.

d. Will the co-applicant have overall financial responsibility for the facility?

☒ Yes ☐ No

Note: The entity with overall financial responsibility for the facility must apply as a co-applicant, if not the facility owner.

Item 4. Core Data Form (Instructions, Pages 27)

a. Complete and attach one Core Data Form (TCEQ Form 10400) for each customer (applicant and co-applicant(s)). If the customer type selected on the Core Data Form is Individual, complete Attachment 1 of the Administrative Report. Attachment: **B**

Item 5. Application Contact Information (Instructions, Page 27)

Provide names of two individuals who can be contacted about this application. Indicate if the individual can be contacted about administrative or technical information, or both.

a. ☒ Administrative Contact . ☒ Technical Contact

Prefix: Ms. Full Name (Last/First Name): Koch/Nancy

Title: Project Manager Credential: P.E.

Organization Name: Weston Solutions, Inc.

Mailing Address: 5301 Southwest Parkway, Suite 450 City/State/Zip: Austin, TX 78735

Phone No: 512-651-7104 Email: Nancy.Koch@westonsolutions.com

b. ☒ Administrative Contact ☒ Technical Contact

Prefix: Mr. Full Name (Last/First Name): Dube/Ray

Title: EHS Manager Credential: Click to enter text.

Organization Name: Calpine Operating Services Company, Inc.

Mailing Address: 717 Texas Avenue, Suite 1000 City/State/Zip: Houston, TX 77002

Phone No: 830-305-8429 Email: Ray.Dube@calpine.com

Attachment: Click to enter text.

Item 6. Permit Contact Information (Instructions, Page 28)

Provide two names of individuals that can be contacted throughout the permit term.

a. Prefix: Mr. Full Name (Last/First Name): Pate/Ty

Title: VP Central Region Operations Credential: Click to enter text.

Organization Name: Calpine Hidalgo Energy Center, L.P..

Mailing Address: 717 Texas Avenue, Suite 1000 City/State/Zip: Houston, TX 77002

Phone No: 713-570-4823 Email: Ty.Pate@calpine.com

b. Prefix: Mr. Full Name (Last/First Name): Key/Jacob

Title: Plant Manager Credential: Click to enter text.

Organization Name: Calpine Operating Services Company, Inc.

Mailing Address: 4005 N. Seminary Road City/State/Zip: Edinburg, TX 78541

Phone No: 956-587-3287 Email: Jacob.Key@calpine.com

Attachment: Click to enter text.

Item 7. Billing Contact Information (Instructions, Page 28)

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

Provide the complete mailing address where the annual fee invoice should be mailed and the name and phone number of the permittee's representative responsible for payment of the invoice.

Prefix: Ms. Full Name (Last/First Name): DeLeon/Ada

Title: Business Manager Credential: Click to enter text.

Organization Name: Calpine Operating Services Company, Inc.

Mailing Address: 4005 N. Seminary Road City/State/Zip: Edinburg, TX 78541

Phone No: 956-587-3322 Email: Ada.DeLeon@calpine.com

Item 8. DMR/MER Contact Information (Instructions, Page 28)

Provide the name and mailing address of the person delegated to receive and submit DMRs or MERs. **Note:** DMR data must be submitted through the NetDMR system. An electronic reporting account can be established once the facility has obtained the permit number.

Prefix: Ms. Full Name (Last/First Name): Buentello/Orielle

Title: EHS Specialist III Credential: Click to enter text.

Organization Name: Calpine Operating Services Company, Inc.

Mailing Address: 4005 N. Seminary Road City/State/Zip: Edinburg, TX 78541

Phone No: 956-732-8154 Email: Orielle.Buentello@calpine.com

Item 9. Notice Information (Instructions, Pages 28)

a. Individual Publishing the Notices

Prefix: Ms. Full Name (Last/First Name): Koch/Nancy

Title: Project Manager Credential: P.E.

Organization Name: Weston Solutions, Inc.

Mailing Address: 5301 Southwest Parkway, Suite 450 City/State/Zip: Austin, TX 78735

Phone No: 512-651-7104 Email: Nancy.Koch@westonsolutions.com

b. Method for Receiving Notice of Receipt and Intent to Obtain a Water Quality Permit Package (only for NORI, NAPD will be sent via regular mail)

☒ E-mail: Nancy.Koch@westonsolutions.com

☐ Fax: Click to enter text.

☐ Regular Mail (USPS)

Mailing Address: Click to enter text.

City/State/Zip Code: Click to enter text.

c. Contact in the Notice

Prefix: Mr. Full Name (Last/First Name): Dube/Ray

Title: EHS Manager Credential: Click to enter text.

Organization Name: Calpine Operating Services Company, Inc.

Phone No: 830-305-8429 Email: Ray.Dube@calpine.com

d. Public Viewing Location Information

Note: If the facility or outfall is located in more than one county, provide a public viewing place for each county.

Public building name: Dustin Michael Sekula Memorial Library Location within the building: Reference Desk

Physical Address of Building: 1906 S Closner Blvd

City: Edinburg County: Hidalgo

e. Bilingual Notice Requirements

This information is required for new, major amendment, minor amendment or minor modification, and renewal applications.

This section of the application is only used to determine if alternative language notices will be needed. Complete instructions on publishing the alternative language notices will be in your public notice package.

Call the bilingual/ESL coordinator at the nearest elementary and middle schools and obtain the following information to determine if an alternative language notice(s) is required.

1. Is a bilingual education program required by the Texas Education Code at the elementary or middle school nearest to the facility or proposed facility?

   ☒ Yes ☐ No

If no, publication of an alternative language notice is not required; skip to Item 8 (Regulated Entity and Permitted Site Information.)

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

   ☒ Yes ☐ No

3. Do the students at these schools attend a bilingual education program at another location?

   ☐ Yes ☒ No

4. Would the school be required to provide a bilingual education program, but the school has waived out of this requirement under 19 TAC §89.1205(g)?

   ☐ Yes ☒ No ☐ N/A

5. If the answer is yes to question 1, 2, 3, or 4, public notices in an alternative language are required. Which language is required by the bilingual program? Spanish

f. Summary of Application in Plain Language Template – Complete and attach the Summary of Application in Plain Language Template (TCEQ Form 20972), also known as the plain language summary or PLS. Attachment: **C**

g. Complete and attach one Public Involvement Plan (PIP) Form (TCEQ Form 20960) for each application for a new permit or major amendment. Attachment: Not applicable

Item 10. Regulated Entity and Permitted Site Information (Instructions Page 29)

a. TCEQ issued Regulated Entity Number (RN), if available: RN100224989

Note: If your business site is part of a larger business site, a Regulated Entity Number (RN) may already be assigned for the larger site. Use the RN assigned for the larger site. Search the TCEQ's Central Registry to determine the RN or to see if the larger site may already be registered as a Regulated Entity. If the site is found, provide the assigned RN.

b. Name of project or site (name known by the community where located): Hidalgo Energy Center

c. Is the location address of the facility in the existing permit the same?

☒ Yes ☐ No ☐ N/A (new permit)

Note: If the facility is located in Bexar, Comal, Hays, Kinney, Medina, Travis, Uvalde, or Williamson County, additional information concerning protection of the Edwards Aquifer may be required.

d. Owner of treatment facility:

Prefix: Click to enter text. Full Name (Last/First Name): Click to enter text.

or Organization Name: Calpine Hidalgo Energy Center, L.P. and Public Utilities Board of the City of Brownsville, Texas

Mailing Address: 1425 Robinhood Drive City/State/Zip: Brownsville, TX 78521

Phone No: 956-983-6121 Email: customerservice@brownsville-pub.com

e. Ownership of facility: ☐ Public ☐ Private ☒ Both ☐ Federal

f. Owner of land where treatment facility is or will be: Click to enter text.

Prefix: Click to enter text. Full Name (Last/First Name): Click to enter text.

or Organization Name: Calpine Hidalgo Energy Center, L.P.

Mailing Address: 4005 N Seminary Road City/State/Zip: Edinburg, TX 78541

Phone No: 956-587-3287 Email: Jacob.Key@calpine.com

Note: If not the same as the facility owner, attach a long-term lease agreement in effect for at least six years (In some cases, a lease may not suffice - see instructions). Attachment: Click to enter text.

g. Owner of effluent TLAP disposal site (if applicable): Not Applicable

Prefix: Click to enter text. Full Name (Last/First Name): Click to enter text.

or Organization Name: Click to enter text.

Mailing Address: Click to enter text. City/State/Zip: Click to enter text.

Phone No: Click to enter text. Email: Click to enter text.

Note: If not the same as the facility owner, attach a long-term lease agreement in effect for at least six years. Attachment: Click to enter text.

h. Owner of sewage sludge disposal site (if applicable):

Prefix: Click to enter text. Full Name (Last/First Name): Click to enter text.

or Organization Name: Click to enter text.

Mailing Address: Click to enter text. City/State/Zip: Click to enter text.

Phone No: Click to enter text. Email: Click to enter text.

Note: If not the same as the facility owner, attach a long-term lease agreement in effect for at least six years. Attachment: Click to enter text.

Item 11. TDPES Discharge/TLAP Disposal Information (Instructions, Page 31)

a. Is the facility located on or does the treated effluent cross Native American Land?

☐ Yes ☒ No

b. Attach an original full size USGS Topographic Map (or an 8.5"×11" reproduced portion for renewal or amendment applications) with all required information. Check the box next to each item below to confirm it has been included on the map.

☒ One-mile radius

☒ Applicant's property boundaries

☒ Labeled point(s) of discharge

☐ Effluent disposal site boundaries

☐ Sewage sludge disposal site

☒ Three-miles downstream information

☐ Treatment facility boundaries

☒ Highlighted discharge route(s)

☐ All wastewater ponds

☐ New and future construction

Attachment: **D**

c. Is the location of the sewage sludge disposal site in the existing permit accurate?

☐ Yes ☒ No or New Permit

If no, or a new application, provide an accurate location description: Not Applicable

d. Are the point(s) of discharge in the existing permit correct?

☒ Yes ☐ No or New Permit

If no, or a new application, provide an accurate location description: Click to enter text.

e. Are the discharge route(s) in the existing permit correct?

☒ Yes ☐ No or New Permit

If no, or a new permit, provide an accurate description of the discharge route: Click to enter text.

f. City nearest the outfall(s): Edinburg

g. County in which the outfalls(s) is/are located: Hidalgo

h. Is or will the treated wastewater discharge to a city, county, or state highway right-of-way, or a flood control district drainage ditch?

☒ Yes ☐ No

If yes, indicate by a check mark if: ☒ Authorization granted ☐ Authorization pending

For new and amendment applications, attach copies of letters that show proof of contact and provide the approval letter upon receipt. Attachment: Click to enter text.

For all applications involving an average daily discharge of 5 MGD or more, provide the names of all counties located within 100 statute miles downstream of the point(s) of discharge: Not Applicable

i. For TLAPs, is the location of the effluent disposal site in the existing permit accurate?

☐ Yes No or New Permit ☐ Not applicable

If no, or a new application, provide an accurate location description: Click to enter text.

j. City nearest the disposal site: Edinburgh

k. County in which the disposal site is located: Hidalgo

l. For TLAPs, describe how effluent is/will be routed from the treatment facility to the disposal site: Not applicable

m. For TLAPs, identify the nearest watercourse to the disposal site to which rainfall runoff might flow if not contained: Not applicable

Item 12. Miscellaneous Information (Instructions, Page 33)

a. Did any person formerly employed by the TCEQ represent your company and get paid for service regarding this application?

☐ Yes ☒ No

If yes, list each person: Click to enter text.

b. Do you owe any fees to the TCEQ?

☐ Yes ☒ No

If yes, provide the following information:

Account no.: Click to enter text.

Total amount due: Click to enter text.

c. Do you owe any penalties to the TCEQ?

☐ Yes ☒ No

If yes, provide the following information:

Enforcement order no.: Click to enter text.

Amount due: Click to enter text.

Item 13. Signature Page (Instructions, Page 33)

Permit No: WQ0004138000

Applicant Name: Calpine Operating Services Company, Inc.

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

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

Signatory name (typed or printed): Ty Pate

Signatory title: VP Central Region Operations

Signature: Ty Pate (Use blue ink) Date: 30-JUN-2025

Subscribed and Sworn to before me by the said Lori Kiker

on this June day of 30, 2025.

My commission expires on the July day of 12, 2027.

Lori Kiker
Notary Public

[SEAL] LORI KIKER
Notary Public, State of Texas
Comm. Expires 07-12-2027
Notary ID 134449872

Harris
County, Texas

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

Item 13. Signature Page (Instructions, Page 33)

Permit No: WQ0004138000

Applicant Name: Hidalgo Energy Center, LP.

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

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

Signatory name (typed or printed): Jacob Key

Signatory title: Plant Manager

Signature: _____ Date: 06/13/25
(Use blue ink)

Subscribed and Sworn to before me by the said Jacob Key

on this 16th day of June, 20 25.

My commission expires on the 24th day of February, 20 29.

_____
Notary Public

[SEAL]

ADA B DELEON
Notary ID #12241932
My Commission Expires
February 24, 2029

Hidalgo
County, Texas

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

Item 13. Signature Page (Instructions, Page 33)

Permit No: WQ0004138000

Applicant Name: Public Utilities Board of the City of Brownsville, Texas

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

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

Signatory name (typed or printed): Alberto Gomez, Jr.

Signatory title: Director of Environmental services

Signature: _____ Date: 06-23-2025
(Use blue ink)

Subscribed and Sworn to before me by the said Alberto Gomez, Jr.

on this 23 day of June, 20 25.

My commission expires on the 5th day of April, 20 28.

Nelda G. Lopez
Notary Public

NELDA G. LOPEZ
Notary Public, State of Texas
Comm. Expires 04-05-2028
Notary ID 2851140
[SEAL]

Cameron
County, Texas

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

INDUSTRIAL WASTEWATER PERMIT APPLICATION

SUPPLEMENTAL PERMIT INFORMATION FORM (SPIF)

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

Attachment: E

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

INDUSTRIAL WASTEWATER PERMIT APPLICATION TECHNICAL REPORT 1.0

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

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

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

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

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

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

The Calpine Hidalgo Energy Center is a combined-cycle power plant that produces energy by combusting natural gas in two combustion turbines (no duct firing), which provide steam through a Heat Recovery Steam Generator (HRSG) for one steam turbine. The electricity produced is transmitted to a nearby electrical substation for distribution to the power grid. SIC Code = 4911, NAICS Code = 22112.

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

Raw water to the plant is provided through a combination of the City of McAllen's publicly owned treatment work (POTW) effluent and the City of Edinburg's potable water. The plant has an option to use reclaimed water from the City of Edinburg when the City of McAllen's supply is interrupted. The primary wastewater stream is generated from non-contact cooling water blowdown. Blowdown from the steam generators and evaporative coolers is used as make-up water for the cooling tower, as are the wastes from the boiler water treatment system (the reverse osmosis generation reject stream and backwash from the ion exchange system). Low volume wastewater generated from plant area drains include the following sources: plant service water, wash water, spill cleanup wastes, and stormwater, which may accumulate within process or containment areas. Metal cleaning wastes is generated infrequently as offline combustion turbine wash water and is authorized under Outfall 201.

[1] https://www.tceq.texas.gov/permitting/wastewater/industrial/TPDES_industrial_wastewater_steps.html

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

Materials List

Raw Materials	Intermediate Products	Final Products
Natural Gas (no CAS)	Heat (no CAS)	Electricity (no CAS)
Sulfuric Acid (7664-93-9)	Steam (no CAS)	
Sodium Hypochlorite (7681-52-9)		
Sodium Bisulfite (7631-90-5)		

Attachment: Click to enter text.

d. Attach a facility map (drawn to scale) with the following information:

- Production areas, maintenance areas, materials-handling areas, waste-disposal areas, and water intake structures.
- The location of each unit of the WWTP including the location of wastewater collection sumps, impoundments, outfalls, and sampling points, if significantly different from outfall locations.

Attachment: F

e. Is this a new permit application for an existing facility?

☐ Yes ☒ No

If **yes**, provide background discussion: Click to enter text.

f. Is/will the treatment facility/disposal site be located above the 100-year frequency flood level.

☐ Yes ☒ No

List source(s) used to determine 100-year frequency flood plain: FEMA Flood Insurance Rate Map No. 480334 0325C, effective 6/6/2000.

If **no**, provide the elevation of the 100-year frequency flood plain and describe what protective measures are used/proposed to prevent flooding (including tail water and rainfall run-on controls) of the treatment facility and disposal area: There is no wastewater treatment facility per se; the only treatment consists of dechlorination of cooling tower blowdown and the use of an oil/water separator for low volume waste streams. The Hidalgo County Drainage District controls flooding in the larger region.

Attachment: Click to enter text.

g. For **new** or **major amendment** permit applications, will any construction operations result in a discharge of fill material into a water in the state?

☐ Yes ☐ No ☒ N/A (renewal only)

h. If **yes** to Item 1.g, has the applicant applied for a USACE CWA Chapter 404 Dredge and Fill permit?

☐ Yes ☐ No

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

If **no**, provide an approximate date of application submittal to the USACE: Click to enter text.

Item 2. Treatment System (Instructions, Page 40)

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

Cooling tower blowdown is dechlorinated prior to discharge via Outfall 001. The low volume waste streams are piped to an oil-water separator and are monitored prior to discharge via internal Outfall 101, then comingle with other wastes for discharge via Outfall 001.

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

Attachment: G

Item 3. Impoundments (Instructions, Page 40)

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

☐ Yes ☒ No

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

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

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

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

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

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

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

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

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

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

Impoundment Information

Parameter	**Pond #**	**Pond #**	**Pond #**	**Pond #**
Use Designation: (T) (D) (C) or (E)				
Associated Outfall Number				
Liner Type (C) (I) (S) or (A)				
Alt. Liner Attachment Reference				
Leak Detection System, Y/N				
Groundwater Monitoring Wells, Y/N				
Groundwater Monitoring Data Attachment				
Pond Bottom Located Above The Seasonal High-Water Table, Y/N				
Length (ft)				
Width (ft)				
Max Depth From Water Surface (ft), Not Including Freeboard				
Freeboard (ft)				
Surface Area (acres)				
Storage Capacity (gallons)				

Parameter	Pond #	Pond #	Pond #	Pond #
40 CFR Part 257, Subpart D, Y/N				
Date of Construction				

Attachment: Click to enter text.

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

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

1. Liner data

☐ Yes ☐ No ☐ Not yet designed

2. Leak detection system or groundwater monitoring data

☐ Yes ☐ No ☐ Not yet designed

3. Groundwater impacts

☐ Yes ☐ No ☐ Not yet designed

NOTE: Item b.3 is required if the bottom of the pond is not above the seasonal high-water table in the shallowest water-bearing zone.

Attachment: Click to enter text.

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

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

Attachment: Click to enter text.

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

Attachment: Click to enter text.

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

Attachment: Click to enter text.

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

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

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

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

Outfall Longitude and Latitude

Outfall No.	Latitude (Decimal Degrees)	Longitude (Decimal Degrees)
001	26.340944	-98.183986
101	26.342119	-98.175367
201	26.341603	-98.174642

Outfall Location Description

Outfall No.	Location Description
001	1,500 ft west of the SW corner of the property, where it is piped from the property to the N. Main Ditch of Hidalgo County Drainage District No. 1
101	Internal outfall immediately following the oil/water separator prior to mixing with other wastes.
201	Gas turbine generator sump (turbine wash sump).

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

Outfall No.	Description of sampling point
001	Approximately 100 ft west of the perimeter fence as shown in Attachment F.

Outfall Flow Information – Permitted and Proposed

Outfall No.	Permitted Daily Avg Flow (MGD)	Permitted Daily Max Flow (MGD)	Proposed Daily Avg Flow (MGD)	Proposed Daily Max Flow (MGD)	Anticipated Discharge Date (mm/dd/yy)
001	0.92	1.84	No change	No change	
101	Report	Report	No change	No change	
201	Report	Report	No change	No change	

Outfall Discharge – Method and Measurement

Outfall No.	Pumped Discharge? Y/N	Gravity Discharge? Y/N	Type of Flow Measurement Device Used
001	Y	N	Flow Meter
101	Y	N	Flow Meter
201	Y	N	Estimate

Outfall Discharge – Flow Characteristics

Outfall No.	Intermittent Discharge? Y/N	Continuous Discharge? Y/N	Seasonal Discharge? Y/N	Discharge Duration (hrs/day)	Discharge Duration (days/mo)	Discharge Duration (mo/yr)
001	N	Y	N	24	31	12
101	N	Y	N	24	31	12
201	Y	N	N	NA	NA	NA

Outfall Wastestream Contributions

Outfall No. 001

Contributing Wastestream	Volume (MGD)	Percent (%) of Total Flow
Cooling Tower Blowdown*	0.914	99.56
Low Volume Waste Sources (Miscellaneous Drains)	0.004	0.44
* Includes HRSG blowdown,		
evaporative cooler blowdown,		
ion exchange regeneration WW,		
and RO reject stream		

Outfall No. 101

Contributing Wastestream	Volume (MGD)	Percent (%) of Total Flow
Miscellaneous Drains	0.004	100

Outfall No. 201

Contributing Wastestream	Volume (MGD)	Percent (%) of Total Flow
Combustion Turbine Wash Water (and other metal cleaning wastes)	Variable, Low Volume	100

Contributing Wastestream	Volume (MGD)	Percent (%) of Total Flow

Attachment: Click to enter text.

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

a. Indicate if the facility currently or proposes to:

☒ Yes ☐ No Use cooling towers that discharge blowdown or other wastestreams

☒ Yes ☐ No Use boilers that discharge blowdown or other wastestreams

☐ Yes ☒ No Discharge once-through cooling water

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

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

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

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

Attachment: H

c. Cooling Towers and Boilers

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

Cooling Towers and Boilers

Type of Unit	Number of Units	Daily Avg Blowdown (gallons/day)	Daily Max Blowdown (gallons/day)
Cooling Towers	1	91,000	1,840,000
Boilers	2	40,800	40,800

Item 6. Stormwater Management (Instructions, Page 44)

Will any existing/proposed outfalls discharge stormwater associated with industrial activities, as defined at *40 CFR § 122.26(b)(14)*, commingled with any other wastestream?

☒ Yes ☐ No

If **yes**, briefly describe the industrial processes and activities that occur outdoors or in a manner which may result in exposure of the activities or materials to stormwater: Limited stormwater may collect in secondary containment areas that are subsequently combined with the miscellaneous drains.

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

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

a. Check the box next to the appropriate method of domestic sewage and domestic sewage sludge treatment or disposal. Complete Worksheet 5.0 or Item 7.b if directed to do so.

☒ Domestic sewage is routed (i.e., connected to or transported to) to a WWTP permitted to receive domestic sewage for treatment, disposal, or both. Complete Item 7.b.

☐ Domestic sewage disposed of by an on-site septic tank and drainfield system. Complete Item 7.b.

☐ Domestic and industrial treatment sludge ARE commingled prior to use or disposal.

☐ Industrial wastewater and domestic sewage are treated separately, and the respective sludge IS NOT commingled prior to sludge use or disposal. Complete Worksheet 5.0.

☐ Facility is a POTW. Complete Worksheet 5.0.

☐ Domestic sewage is not generated on-site.

☐ Other (e.g., portable toilets), specify and Complete Item 7.b: Click to enter text.

b. Provide the name and TCEQ, NPDES, or TPDES Permit No. of the waste-disposal facility which receives the domestic sewage/septage. If hauled by motorized vehicle, provide the name and TCEQ Registration No. of the hauler.

Domestic Sewage Plant/Hauler Name

Plant/Hauler Name	Permit/Registration No.
City of Edinburg	TX0024112

Item 8. Improvements or Compliance/Enforcement Requirements (Instructions, Page 45)

a. Is the permittee currently required to meet any implementation schedule for compliance or enforcement?

☐ Yes ☒ No

b. Has the permittee completed or planned for any improvements or construction projects?

☐ Yes ☒ No

c. If **yes** to either 8.a **or** 8.b, provide a brief summary of the requirements and a status update: Click to enter text.

Item 9. Toxicity Testing (Instructions, Page 45)

Have any biological tests for acute or chronic toxicity been made on any of the discharges or on a receiving water in relation to the discharge within the last three years?

☒ Yes ☐ No

If **yes**, identify the tests and describe their purposes: Click to enter text.

Additionally, attach a copy of all tests performed which **have not** been submitted to the TCEQ or EPA. **Attachment:** All acute and chronic biomonitoring tests required by the TPDES permit have previously been submitted to TCEQ.

Item 10. Off-Site/Third Party Wastes (Instructions, Page 45)

a. Does or will the facility receive wastes from off-site sources for treatment at the facility, disposal on-site via land application, or discharge via a permitted outfall?

☐ Yes ☒ No

If **yes**, provide responses to Items 10.b through 10.d below.

If **no**, proceed to Item 11.

b. Attach the following information to the application:

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

Attachment: Click to enter text.

c. Is or will wastewater from another TCEQ, NPDES, or TPDES permitted facility commingled with this facility's wastewater after final treatment and prior to discharge via the final outfall/point of disposal?

☐ Yes ☐ No

If **yes**, provide the name, address, and TCEQ, NPDES, or TPDES permit number of the contributing facility and a copy of any agreements or contracts relating to this activity.

Attachment: Click to enter text.

d. Is this facility a POTW that accepts/will accept process wastewater from any SIU and has/is required to have an approved pretreatment program under the NPDES/TPDES program?

☐ Yes ☐ No

If **yes**, **Worksheet 6.0** of this application **is required**.

Item 11. Radioactive Materials (Instructions, Page 46)

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

☐ Yes ☒ No

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

Radioactive Materials Mined, Used, Stored, or Processed

Radioactive Material Name	Concentration (pCi/L)

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

☐ Yes ☒ No

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

Radioactive Materials Present in the Discharge

Radioactive Material Name	Concentration (pCi/L)

Item 12. Cooling Water (Instructions, Page 46)

a. Does the facility use or propose to use water for cooling purposes?

☒ Yes

☐ No

☐ Decommissioned: Click to enter text.

☐ To Be Decommissioned: Click to enter text.

If **yes**, complete Items 12.b thru 12.f. If **no**, stop here.

If **decommissioned**, provide the date operation ceased and stop here.

If to **be decommissioned**, provide the date operation is anticipated to cease and stop here.

b. Cooling water is/will be obtained from a groundwater source (e.g., on-site well).

☐ Yes ☒ No

If **yes**, stop here. If **no**, continue.

c. Cooling Water Supplier

1. Provide the name of the owner(s) and operator(s) for the CWIS that supplies or will supply water for cooling purposes to the facility.

Cooling Water Intake Structure(s) Owner(s) and Operator(s)

CWIS ID	None – cooling water is reclaimed water obtained from the City of McAllen's Wastewater Treatment Plant WQ0010633004. Consequently, the facility is exempt from 316b Cooling Water Intake Structure requirements per 40 CFR 125.91(c).			
Owner				
Operator				

2. Cooling water is/will be obtained from a Public Water Supplier (PWS)

☒ No ☐ Yes; PWS No.:

If **no**, continue. If **yes**, provide the PWS Registration No. and stop here.

3. Cooling water is/will be obtained from a reclaimed water source?

☐ No ☒ Yes; Auth No.: WQ00010633004

If **no**, continue. If **yes**, provide the Reuse Authorization No. and stop here.

4. Cooling water is/will be obtained from an Independent Supplier

☐ No ☐ Yes; AIF: Click to enter text.

If **no**, proceed to Item 12.d. If **yes**, provide the actual intake flow of the Independent Supplier's CWIS that is/will be used to provide water for cooling purposes and proceed.

d. 316(b) General Criteria

1. The CWIS(s) used to provide water for cooling purposes to the facility has or will have a cumulative design intake flow of 2 MGD or greater.

☐ Yes ☐ No

2. At least 25% of the total water withdrawn by the CWIS(s) is/will be used at the facility exclusively for cooling purposes on an annual average basis.

☐ Yes ☐ No

3. The CWIS(s) withdraw(s)/propose(s) to withdraw water for cooling purposes from surface waters that meet the definition of Waters of the United States in *40 CFR § 122.2*.

☐ Yes ☐ No. Explanation: Click to enter text.

If **no**, provide an explanation of how the waterbody does not meet the definition of Waters of the United States in *40 CFR § 122.2*.

If **yes** to all three questions in Item 12.d, the facility **meets** the minimum criteria to be subject to the full requirements of Section 316(b) of the CWA. Proceed to **Item 12.f**.

If **no** to any of the questions in Item 12.d, the facility **does not meet** the minimum criteria to be subject to the full requirements of Section 316(b) of the CWA; however, a determination is required based upon BPJ. Proceed to **Item 12.e**.

e. The facility does not meet the minimum requirements to be subject to the fill requirements of Section 316(b) **and uses**/proposes **to use cooling towers**.

☐ Yes ☐ No

If **yes**, stop here. If **no**, complete Worksheet 11.0, Items 1.a, 1.b.1-3 and 6, 2.b.1, and 3.a to allow for a determination based upon BPJ.

f. Oil and Gas Exploration and Production

1. The facility is subject to requirements at 40 CFR Part 435, Subparts A or D.

☐ Yes ☐ No

If **yes**, continue. If **no**, skip to Item 12.g.

2. The facility is an existing facility as defined at 40 CFR § 125.92(k) or a new unit at an existing facility as defined at 40 CFR § 125.92(u).

☐ Yes ☐ No

If **yes**, complete Worksheet 11.0, Items 1.a, 1.b.1-3 and 6, 2.b.1, and 3.a to allow for a determination based upon BPJ. If **no**, skip to Item 12.g.3.

g. Compliance Phase and Track Selection

1. Phase I – New facility subject to 40 CFR Part 125, Subpart I

☐ Yes ☐ No

If **yes**, check the box next to the compliance track selection, attach the requested information, and complete Worksheet 11.0, Items 2 and 3, and Worksheet 11.2.

☐ Track I – AIF greater than 2 MGD, but less than 10 MGD

- Attach information required by *40 CFR §§ 125.86(b)(2)-(4)*.

☐ Track I – AIF greater than 10 MGD

- Attach information required by *40 CFR § 125.86(b)*.

☐ Track II

- Attach information required by *40 CFR § 125.86(c)*.

Attachment: Click to enter text.

2. Phase II – Existing facility subject to 40 CFR Part 125, Subpart J

☐ Yes ☐ No

If **yes**, complete Worksheets 11.0 through 11.3, as applicable.

3. Phase III – New facility subject to 40 CFR Part 125, Subpart N

☐ Yes ☐ No

If **yes**, check the box next to the compliance track selection and provide the requested information.

☐ Track I – Fixed facility

- Attach information required by 40 CFR § 125.136(b) and complete Worksheet 11.0, Items 2 and 3, and Worksheet 11.2.

☐ Track I – Not a fixed facility

- Attach information required by 40 CFR § 125.136(b) and complete Worksheet 11.0, Item 2 (except CWIS latitude/longitude under Item 2.a).

☐ Track II – Fixed facility

- Attach information required by 40 CFR § 125.136(c) and complete Worksheet 11.0, Items 2 and 3.

Attachment: Click to enter text.

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

This item is only applicable to existing permitted facilities.

a. Is the facility requesting a **major amendment** of an existing permit?

☐ Yes ☒ No

If **yes**, list each request individually and provide the following information: 1) detailed information regarding the scope of each request and 2) a justification for each request. Attach any supplemental information or additional data to support each request.

Click to enter text.

b. Is the facility requesting any **minor amendments** to the permit?

☐ Yes ☒ No

If **yes**, list and describe each change individually.

Click to enter text.

c. Is the facility requesting any **minor modifications** to the permit?

☐ Yes ☒ No

If **yes**, list and describe each change individually.

Click to enter text.

Item 14. Laboratory Accreditation (Instructions, Page 49)

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

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

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

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

CERTIFICATION:

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

Printed Name: Jacob Key

Title: Plant Manager

Signature: _____

Date: _____

INDUSTRIAL WASTEWATER PERMIT APPLICATION WORKSHEET 1.0: EPA CATEGORICAL EFFLUENT GUIDELINES

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

Item 1. Categorical Industries (Instructions, Page 53)

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

☒ Yes ☐ No

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

40 CFR Effluent Guideline

Industry	40 CFR Part
Power Generation – Combined Cycle Generating Units	423

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

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

a. Production Data

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

Production Data

Subcategory	Actual Quantity/Day	Design Quantity/Day	Units
No production-based limits			

Subcategory	Actual Quantity/Day	Design Quantity/Day	Units

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

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

Percentage of Total Production

Subcategory	Percent of Total Production	Appendix A and B - Metals	Appendix A - Cyanide
NA			

c. Refineries (40 CFR Part 419)

Provide the applicable subcategory and a brief justification.

Not Applicable

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

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

All wastewater is non-process wastewater made primarily of various utility wastewaters. No wastewater is generated from scrubbers or ash systems.

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

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

Wastewater Generating Processes Subject to Effluent Guidelines

Process	EPA Guideline Part	EPA Guideline Subpart	Date Process/ Construction Commenced
Power Generation	423		1999 (Commercial Operation Date June 2000)

INDUSTRIAL WASTEWATER PERMIT APPLICATION WORKSHEET 2.0: POLLUTANT ANALYSIS

Worksheet 2.0 **is required** for all applications submitted for a TPDES permit. Worksheet 2.0 is not required for applications for a permit to dispose of all wastewater by land disposal or for discharges solely of stormwater associated with industrial activities.

Item 1. General Testing Requirements (Instructions, Page 55)

a. Provide the date range of all sampling events conducted to obtain the analytical data submitted with this application (e.g., 05/01/2018-05/30/2018): 03/19/2025-04/09/2025

b. ☒ Check the box to confirm all samples were collected no more than 12 months prior to the date of application submittal.

c. Read the general testing requirements in the instructions for important information about sampling, test methods, and MALs. If a contact laboratory was used, attach a list which includes the name, contact information, and pollutants analyzed for each laboratory/firm. **Attachment:** I

Item 2. Specific Testing Requirements (Instructions, Page 56)

Attach correspondence from TCEQ approving submittal of less than the required number of samples, if applicable. **Attachment:** Click to enter text.

TABLE 1 and TABLE 2 (Instructions, Page 58)

Completion of Tables 1 and 2 is required for all external outfalls for all TPDES permit applications.

Table 1 for Outfall No.: 001 **Samples are (check one):** ☐ **Composite** ☒ **Grab**

Pollutant	**Sample 1 (mg/L)**	**Sample 2 (mg/L)**	**Sample 3 (mg/L)**	**Sample 4 (mg/L)**
BOD (5-day)	4.11	4.67	3.15	3.85
CBOD (5-day)	2.36	2.09	3.95	2.93
Chemical oxygen demand	24.5	54.0	51.9	30.8
Total organic carbon	15.9	23.8	19.4	13.0
Dissolved oxygen	7.4	7.3	6.8	8.5
Ammonia nitrogen	< 0.02	0.12	0.34	< 0.02
Total suspended solids	29.0	34.7	44.4	4.10
Nitrate nitrogen	61.7	102	79.3	44.4
Total organic nitrogen	6.95	4.52	3.24	2.09
Total phosphorus	9.62	13.2	13.8	6.67
Oil and grease	< 4.71	< 4.6	< 4.88	< 4.65
Total residual chlorine	0.00	0.03	0.03	0.01

Pollutant	Sample 1 (mg/L)	Sample 2 (mg/L)	Sample 3 (mg/L)	Sample 4 (mg/L)
Total dissolved solids	3470	5000	4560	3040
Sulfate	1130	1730	1620	1150
Chloride	937	1510	1310	839
Fluoride	< 0.5	< 0.5	< 0.5	< 0.5
Total alkalinity (mg/L as CaCO3)	19.7	29.6	31.6	12.2
Temperature (°F)	77.0	84.2	95.0	73.4
pH (standard units)	6.6	6.7	6.6	6.5

Table 2 for Outfall No.: 001 **Samples are (check one): ☐ Composite ☒ Grab**

Pollutant	Sample 1 (µg/L)	Sample 2 (µg/L)	Sample 3 (µg/L)	Sample 4 (µg/L)	MAL (µg/L)
Aluminum, total	952	973	1006	42.5	2.5
Antimony, total	< 5	12.2	5.7	< 5	5
Arsenic, total	9.7	12.8	14.7	8.6	0.5
Barium, total	184	308	282	152	3
Beryllium, total	< 1	< 0.5	< 1	< 0.5	0.5
Cadmium, total	< 1	< 1	< 1	< 1	1
Chromium, total	6.0	6.8	5.7	< 3	3
Chromium, hexavalent	< 3	< 3	< 3	< 3	3
Chromium, trivalent	3.0	3.8	2.7	< 3	N/A
Copper, total	24.5	25.8	22.1	15.9	2
Cyanide, available	< 10	< 10	< 10	< 10	2/10
Lead, total	< 1	0.7	< 1	< 0.5	0.5
Mercury, total	< 0.005	< 0.005	< 0.005	< 0.005	0.005/0.0005
Nickel, total	7.2	10.9	3.9	6.3	2
Selenium, total	< 5	< 5	< 5	< 5	5
Silver, total	< 1	< 1	< 1	< 0.5	0.5
Thallium, total	< 1	< 1	< 1	< 1	0.5
Zinc, total	126	172	96	90	5.0

TABLE 3 (Instructions, Page 58)

Completion of Table 3 **is required** for all **external outfalls** which discharge process wastewater.

Partial completion of Table 3 **is required** for all **external outfalls** which discharge non-process wastewater and stormwater associated with industrial activities commingled with other wastestreams (see instructions for additional guidance).

Table 3 for Outfall No.: Click to enter text. **Samples are (check one):** ☐ **Composite** ☐ **Grab**

Pollutant	**Sample 1 (µg/L)***	**Sample 2 (µg/L)***	**Sample 3 (µg/L)***	**Sample 4 (µg/L)***	**MAL (µg/L)***
Acrylonitrile					50
Anthracene					10
Benzene					10
Benzidine					50
Benzo(a)anthracene					5
Benzo(a)pyrene					5
Bis(2-chloroethyl)ether					10
Bis(2-ethylhexyl)phthalate					10
Bromodichloromethane [Dichlorobromomethane]					10
Bromoform					10
Carbon tetrachloride					2
Chlorobenzene					10
Chlorodibromomethane [Dibromochloromethane]					10
Chloroform					10
Chrysene					5
m-Cresol [3-Methylphenol]					10
o-Cresol [2-Methylphenol]					10
p-Cresol [4-Methylphenol]					10
1,2-Dibromoethane					10
m-Dichlorobenzene [1,3-Dichlorobenzene]					10
o-Dichlorobenzene [1,2-Dichlorobenzene]					10
p-Dichlorobenzene [1,4-Dichlorobenzene]					10
3,3'-Dichlorobenzidine					5
1,2-Dichloroethane					10

Pollutant	Sample 1 (µg/L)*	Sample 2 (µg/L)*	Sample 3 (µg/L)*	Sample 4 (µg/L)*	MAL (µg/L)*
1,1-Dichloroethene [1,1-Dichloroethylene]					10
Dichloromethane [Methylene chloride]					20
1,2-Dichloropropane					10
1,3-Dichloropropene [1,3-Dichloropropylene]					10
2,4-Dimethylphenol					10
Di-n-Butyl phthalate					10
Epichlorohydrin (1-Chloro-2,3-epoxypropane)					---
Ethylbenzene					10
Ethylene Glycol					---
Fluoride					500
Hexachlorobenzene					5
Hexachlorobutadiene					10
Hexachlorocyclopentadiene					10
Hexachloroethane					20
4,4'-Isopropylidenediphenol (bisphenol A)					1
Methyl ethyl ketone					50
Methyl tert-butyl ether (MTBE)					---
Nitrobenzene					10
N-Nitrosodiethylamine					20
N-Nitroso-di-n-butylamine					20
Nonylphenol					333
Pentachlorobenzene					20
Pentachlorophenol					5
Phenanthrene					10
Polychlorinated biphenyls (PCBs) (**)					0.2
Pyridine					20
1,2,4,5-Tetrachlorobenzene					20
1,1,2,2-Tetrachloroethane					10
Tetrachloroethene [Tetrachloroethylene]					10

Pollutant	Sample 1 (µg/L)*	Sample 2 (µg/L)*	Sample 3 (µg/L)*	Sample 4 (µg/L)*	MAL (µg/L)*
Toluene					10
1,1,1-Trichloroethane					10
1,1,2-Trichloroethane					10
Trichloroethene [Trichloroethylene]					10
2,4,5-Trichlorophenol					50
TTHM (Total trihalomethanes)					10
Vinyl chloride					10

(*) Indicate units if different from µg/L.

(**) Total of detects for PCB-1242, PCB-1254, PCB-1221, PCB-1232, PCB-1248, PCB-1260, and PCB-1016. If all non-detects, enter the highest non-detect preceded by a "<".

TABLE 4 (Instructions, Pages 58-59)

Partial completion of Table 4 **is required** for each **external outfall** based on the conditions below.

a. **Tributyltin**

Is this facility an industrial/commercial facility which currently or proposes to directly dispose of wastewater from the types of operations listed below or a domestic facility which currently or proposes to receive wastewater from the types of industrial/commercial operations listed below?

☐ Yes ☒ No

If **yes**, check the box next to each of the following criteria which apply and provide the appropriate testing results in Table 4 below (check all that apply).

☐ Manufacturers and formulators of tributyltin or related compounds.

☐ Painting of ships, boats and marine structures.

☐ Ship and boat building and repairing.

☐ Ship and boat cleaning, salvage, wrecking and scaling.

☐ Operation and maintenance of marine cargo handling facilities and marinas.

☐ Facilities engaged in wood preserving.

☐ Any other industrial/commercial facility for which tributyltin is known to be present, or for which there is any reason to believe that tributyltin may be present in the effluent.

b. **Enterococci (discharge to saltwater)**

This facility discharges/proposes to discharge directly into saltwater receiving waters **and** Enterococci bacteria are expected to be present in the discharge based on facility processes.

☐ Yes ☒ No

Domestic wastewater is/will be discharged.

☐ Yes ☒ No

If **yes to either** question, provide the appropriate testing results in Table 4 below.

c. E. coli (discharge to freshwater)

This facility discharges/proposes to discharge directly into freshwater receiving waters **and** *E. coli* bacteria are expected to be present in the discharge based on facility processes.

☐ Yes ☒ No

Domestic wastewater is/will be discharged.

☐ Yes ☒ No

If **yes to either** question, provide the appropriate testing results in Table 4 below.

Table 4 for Outfall No.: Click to enter text. **Samples are (check one):** ☐ **Composite** ☐ **Grab**

Pollutant	**Sample 1**	**Sample 2**	**Sample 3**	**Sample 4**	**MAL**
Tributyltin (µg/L)					0.010
Enterococci (cfu or MPN/100 mL)					N/A
E. coli (cfu or MPN/100 mL)					N/A

TABLE 5 (Instructions, Page 59)

Completion of Table 5 **is required** for all **external outfalls** which discharge process wastewater from a facility which manufactures or formulates pesticides or herbicides or other wastewaters which may contain pesticides or herbicides.

If this facility does not/will not manufacture or formulate pesticides or herbicides and does not/will not discharge other wastewaters that may contain pesticides or herbicides, check N/A.

☒ N/A

Table 5 for Outfall No.: Click to enter text. **Samples are (check one):** ☐ **Composite** ☐ **Grab**

Pollutant	**Sample 1 (µg/L)***	**Sample 2 (µg/L)***	**Sample 3 (µg/L)***	**Sample 4 (µg/L)***	**MAL (µg/L)***
Aldrin					0.01
Carbaryl					5
Chlordane					0.2
Chlorpyrifos					0.05
4,4'-DDD					0.1
4,4'-DDE					0.1
4,4'-DDT					0.02
2,4-D					0.7
Danitol [Fenpropathrin]					—
Demeton					0.20
Diazinon					0.5/0.1

Pollutant	**Sample 1 (µg/L)***	**Sample 2 (µg/L)***	**Sample 3 (µg/L)***	**Sample 4 (µg/L)***	**MAL (µg/L)***
Dicofol [Kelthane]					1
Dieldrin					0.02
Diuron					0.090
Endosulfan I (*alpha*)					0.01
Endosulfan II (*beta*)					0.02
Endosulfan sulfate					0.1
Endrin					0.02
Guthion [Azinphos methyl]					0.1
Heptachlor					0.01
Heptachlor epoxide					0.01
Hexachlorocyclohexane (*alpha*)					0.05
Hexachlorocyclohexane (*beta*)					0.05
Hexachlorocyclohexane (*gamma*) [Lindane]					0.05
Hexachlorophene					10
Malathion					0.1
Methoxychlor					2.0
Mirex					0.02
Parathion (ethyl)					0.1
Toxaphene					0.3
2,4,5-TP [Silvex]					0.3

* Indicate units if different from µg/L.

TABLE 6 (Instructions, Page 59)

Completion of Table 6 **is required** for all **external outfalls**.

Table 6 for Outfall No.: 001 **Samples are (check one): ☐ Composite ☒ Grab**

Pollutants	Believed Present	Believed Absent	Sample 1 (mg/L)	Sample 2 (mg/L)	Sample 3 (mg/L)	Sample 4 (mg/L)	MAL (µg/L)*
Bromide	☐	☒					400
Color (PCU)	☒	☐	25				—
Nitrate-Nitrite (as N)	☒	☐	63.1				—
Sulfide (as S)	☐	☒					—
Sulfite (as SO3)	☐	☒					—
Surfactants	☐	☒					—
Boron, total	☐	☒					20
Cobalt, total	☐	☒					0.3
Iron, total	☐	☒					7
Magnesium, total	☒	☐	81.4				20
Manganese, total	☐	☒					0.5
Molybdenum, total	☐	☒					1
Tin, total	☐	☒					5
Titanium, total	☐	☒					30

TABLE 7 (Instructions, Page 60)

Check the box next to any of the industrial categories applicable to this facility. If no categories are applicable, check N/A. If GC/MS testing is required, check the box provided to confirm the testing results for the appropriate parameters are provided with the application.

☐ N/A

Table 7 for Applicable Industrial Categories

Industrial Category	40 CFR Part	Volatiles Table 8	Acids Table 9	Bases/ Neutrals Table 10	Pesticides Table 11
☐ Adhesives and Sealants		☐ Yes	☐ Yes	☐ Yes	No
☐ Aluminum Forming	467	☐ Yes	☐ Yes	☐ Yes	No
☐ Auto and Other Laundries		☐ Yes	☐ Yes	☐ Yes	☐ Yes
☐ Battery Manufacturing	461	☐ Yes	No	☐ Yes	No
☐ Coal Mining	434	No	No	No	No
☐ Coil Coating	465	☐ Yes	☐ Yes	☐ Yes	No
☐ Copper Forming	468	☐ Yes	☐ Yes	☐ Yes	No
☐ Electric and Electronic Components	469	☐ Yes	☐ Yes	☐ Yes	☐ Yes
☐ Electroplating	413	☐ Yes	☐ Yes	☐ Yes	No
☐ Explosives Manufacturing	457	No	☐ Yes	☐ Yes	No
☐ Foundries		☐ Yes	☐ Yes	☐ Yes	No
☐ Gum and Wood Chemicals - Subparts A,B,C,E	454	☐ Yes	☐ Yes	No	No
☐ Gum and Wood Chemicals - Subparts D,F	454	☐ Yes	☐ Yes	☐ Yes	No
☐ Inorganic Chemicals Manufacturing	415	☐ Yes	☐ Yes	☐ Yes	No
☐ Iron and Steel Manufacturing	420	☐ Yes	☐ Yes	☐ Yes	No
☐ Leather Tanning and Finishing	425	☐ Yes	☐ Yes	☐ Yes	No
☐ Mechanical Products Manufacturing		☐ Yes	☐ Yes	☐ Yes	No
☐ Nonferrous Metals Manufacturing	421,471	☐ Yes	☐ Yes	☐ Yes	☐ Yes
☐ Oil and Gas Extraction - Subparts A, D, E, F, G, H	435	☐ Yes	☐ Yes	☐ Yes	No
☐ Ore Mining - Subpart B	440	No	☐ Yes	No	No
☐ Organic Chemicals Manufacturing	414	☐ Yes	☐ Yes	☐ Yes	☐ Yes
☐ Paint and Ink Formulation	446,447	☐ Yes	☐ Yes	☐ Yes	No
☐ Pesticides	455	☐ Yes	☐ Yes	☐ Yes	☐ Yes
☐ Petroleum Refining	419	☐ Yes	No	No	No
☐ Pharmaceutical Preparations	439	☐ Yes	☐ Yes	☐ Yes	No
☐ Photographic Equipment and Supplies	459	☐ Yes	☐ Yes	☐ Yes	No
☐ Plastic and Synthetic Materials Manufacturing	414	☐ Yes	☐ Yes	☐ Yes	☐ Yes
☐ Plastic Processing	463	☐ Yes	No	No	No
☐ Porcelain Enameling	466	No	No	No	No
☐ Printing and Publishing		☐ Yes	☐ Yes	☐ Yes	☐ Yes
☐ Pulp and Paperboard Mills - Subpart C	430	☐ *	☐ Yes	☐ *	☐ Yes
☐ Pulp and Paperboard Mills - Subparts F, K	430	☐ *	☐ Yes	☐ *	☐ *
☐ Pulp and Paperboard Mills - Subparts A, B, D, G, H	430	☐ Yes	☐ Yes	☐ *	☐ *
☐ Pulp and Paperboard Mills - Subparts I, J, L	430	☐ Yes	☐ Yes	☐ *	☐ Yes
☐ Pulp and Paperboard Mills - Subpart E	430	☐ Yes	☐ Yes	☐ Yes	☐ *
☐ Rubber Processing	428	☐ Yes	☐ Yes	☐ Yes	No
☐ Soap and Detergent Manufacturing	417	☐ Yes	☐ Yes	☐ Yes	No
☒ Steam Electric Power Plants	423	☒ Yes	☒ Yes	No	No
☐ Textile Mills (Not Subpart C)	410	☐ Yes	☐ Yes	☐ Yes	No
☐ Timber Products Processing	429	☐ Yes	☐ Yes	☐ Yes	☐ Yes

* Test if believed present.

TABLES 8, 9, 10, and 11 (Instructions, Page 60)

Completion of Tables 8, 9, 10, and 11 **is required** as specified in Table 7 for all **external outfalls** that contain process wastewater.

Completion of Tables 8, 9, 10, and 11 **may be required** for types of industry not specified in Table 7 for specific parameters that are believed to be present in the wastewater.

Table 8 for Outfall No.: 001 **Samples are (check one): ☐ Composite ☒ Grab**

Pollutant	Sample 1 (µg/L)*	Sample 2 (µg/L)*	Sample 3 (µg/L)*	Sample 4 (µg/L)*	MAL (µg/L)
Acrolein	< 50	< 50	< 50	< 50	50
Acrylonitrile	< 50	< 50	< 50	< 50	50
Benzene	< 10	< 10	< 10	< 10	10
Bromoform	< 10	< 10	< 10	< 10	10
Carbon tetrachloride	< 2	< 2	< 2	< 2	2
Chlorobenzene	< 10	< 10	< 10	< 10	10
Chlorodibromomethane	< 10	< 10	< 10	< 10	10
Chloroethane	< 50	< 50	< 50	< 50	50
2-Chloroethylvinyl ether	< 10	< 10	< 10	< 10	10
Chloroform	< 10	< 10	< 10	< 10	10
Dichlorobromomethane [Bromodichloromethane]	< 10	< 10	< 10	< 10	10
1,1-Dichloroethane	< 10	< 10	< 10	< 10	10
1,2-Dichloroethane	< 10	< 10	< 10	< 10	10
1,1-Dichloroethylene [1,1-Dichloroethene]	< 10	< 10	< 10	< 10	10
1,2-Dichloropropane	< 10	< 10	< 10	< 10	10
1,3-Dichloropropylene [1,3-Dichloropropene]	< 10	< 10	< 10	< 10	10
Ethylbenzene	< 10	< 10	< 10	< 10	10
Methyl bromide [Bromomethane]	< 50	< 50	< 50	< 50	50
Methyl chloride [Chloromethane]	< 50	< 50	< 50	< 50	50
Methylene chloride [Dichloromethane]	< 20	< 20	< 20	< 20	20
1,1,2,2-Tetrachloroethane	< 10	< 10	< 10	< 10	10
Tetrachloroethylene [Tetrachloroethene]	< 10	< 10	< 10	< 10	10
Toluene	< 10	< 10	< 10	< 10	10
1,2-Trans-dichloroethylene [1,2-Trans-dichloroethene]	< 10	< 10	< 10	< 10	10

Pollutant	Sample 1 (µg/L)*	Sample 2 (µg/L)*	Sample 3 (µg/L)*	Sample 4 (µg/L)*	MAL (µg/L)
1,1,1-Trichloroethane	< 10	< 10	< 10	< 10	10
1,1,2-Trichloroethane	< 10	< 10	< 10	< 10	10
Trichloroethylene [Trichloroethene]	< 10	< 10	< 10	< 10	10
Vinyl chloride	< 10	< 10	< 10	< 10	10

* Indicate units if different from µg/L.

Table 9 for Outfall No.: 001 **Samples are (check one): ☐ Composite ☒ Grab**

Pollutant	Sample 1 (µg/L)*	Sample 2 (µg/L)*	Sample 3 (µg/L)*	Sample 4 (µg/L)*	MAL (µg/L)
2-Chlorophenol	< 10	< 10	< 10	< 10	10
2,4-Dichlorophenol	< 10	< 10	< 10	< 10	10
2,4-Dimethylphenol	< 10	< 10	< 10	< 10	10
4,6-Dinitro-o-cresol	< 50	< 50	< 50	< 50	50
2,4-Dinitrophenol	< 50	< 50	< 50	< 50	50
2-Nitrophenol	< 20	< 20	< 20	< 20	20
4-Nitrophenol	< 50	< 50	< 50	< 50	50
p-Chloro-m-cresol	< 10	< 10	< 10	< 10	10
Pentachlorophenol	< 5	< 5	< 5	< 5	5
Phenol	< 10	< 10	< 10	< 10	10
2,4,6-Trichlorophenol	< 10	< 10	< 10	< 10	10

* Indicate units if different from µg/L.

Table 10 for Outfall No.: Click to enter text. **Samples are (check one): ☐ Composite ☐ Grab**

Pollutant	Sample 1 (µg/L)*	Sample 2 (µg/L)*	Sample 3 (µg/L)*	Sample 4 (µg/L)*	MAL (µg/L)
Acenaphthene					10
Acenaphthylene					10
Anthracene					10
Benzidine					50
Benzo(a)anthracene					5
Benzo(a)pyrene					5
3,4-Benzofluoranthene [Benzo(b)fluoranthene]					10
Benzo(ghi)perylene					20
Benzo(k)fluoranthene					5
Bis(2-chloroethoxy)methane					10

Pollutant	Sample 1 (µg/L)*	Sample 2 (µg/L)*	Sample 3 (µg/L)*	Sample 4 (µg/L)*	MAL (µg/L)
Bis(2-chloroethyl)ether					10
Bis(2-chloroisopropyl)ether					10
Bis(2-ethylhexyl)phthalate					10
4-Bromophenyl phenyl ether					10
Butylbenzyl phthalate					10
2-Chloronaphthalene					10
4-Chlorophenyl phenyl ether					10
Chrysene					5
Dibenzo(a,h)anthracene					5
1,2-Dichlorobenzene [o-Dichlorobenzene]					10
1,3-Dichlorobenzene [m-Dichlorobenzene]					10
1,4-Dichlorobenzene [p-Dichlorobenzene]					10
3,3'-Dichlorobenzidine					5
Diethyl phthalate					10
Dimethyl phthalate					10
Di-n-butyl phthalate					10
2,4-Dinitrotoluene					10
2,6-Dinitrotoluene					10
Di-n-octyl phthalate					10
1,2-Diphenylhydrazine (as Azobenzene)					20
Fluoranthene					10
Fluorene					10
Hexachlorobenzene					5
Hexachlorobutadiene					10
Hexachlorocyclopentadiene					10
Hexachloroethane					20
Indeno(1,2,3-cd)pyrene					5
Isophorone					10
Naphthalene					10
Nitrobenzene					10
N-Nitrosodimethylamine					50

Pollutant	Sample 1 (µg/L)*	Sample 2 (µg/L)*	Sample 3 (µg/L)*	Sample 4 (µg/L)*	MAL (µg/L)
N-Nitrosodi-n-propylamine					20
N-Nitrosodiphenylamine					20
Phenanthrene					10
Pyrene					10
1,2,4-Trichlorobenzene					10

* Indicate units if different from µg/L.

Table 11 for Outfall No.: Click to enter text. **Samples are (check one):** ☐ **Composite** ☐ **Grab**

Pollutant	Sample 1 (µg/L)*	Sample 2 (µg/L)*	Sample 3 (µg/L)*	Sample 4 (µg/L)*	MAL (µg/L)
Aldrin					0.01
alpha-BHC [alpha-Hexachlorocyclohexane]					0.05
beta-BHC [beta-Hexachlorocyclohexane]					0.05
gamma-BHC [gamma-Hexachlorocyclohexane]					0.05
delta-BHC [delta-Hexachlorocyclohexane]					0.05
Chlordane					0.2
4,4'-DDT					0.02
4,4'-DDE					0.1
4,4'-DDD					0.1
Dieldrin					0.02
Endosulfan I (alpha)					0.01
Endosulfan II (beta)					0.02
Endosulfan sulfate					0.1
Endrin					0.02
Endrin aldehyde					0.1
Heptachlor					0.01
Heptachlor epoxide					0.01
PCB 1242					0.2
PCB 1254					0.2
PCB 1221					0.2
PCB 1232					0.2
PCB 1248					0.2

Pollutant	Sample 1 (µg/L)*	Sample 2 (µg/L)*	Sample 3 (µg/L)*	Sample 4 (µg/L)*	MAL (µg/L)
PCB 1260					0.2
PCB 1016					0.2
Toxaphene					0.3

* Indicate units if different from µg/L.

Attachment: Click to enter text.

TABLE 12 (DIOXINS/FURAN COMPOUNDS)

Complete of Table 12 **is required** for **external outfalls**, as directed below. (Instructions, Pages 59-60)

Indicate which compound(s) are manufactured or used at the facility and provide a brief description of the conditions of its/their presence at the facility (check all that apply).

☐ 2,4,5-trichlorophenoxy acetic acid (2,4,5-T) CASRN 93-76-5

☐ 2-(2,4,5-trichlorophenoxy) propanoic acid (Silvex, 2,4,5-TP) CASRN 93-72-1

☐ 2-(2,4,5-trichlorophenoxy) ethyl 2,2-dichloropropionate (Erbon) CASRN 136-25-4

☐ 0,0-dimethyl 0-(2,4,5-trichlorophenyl) phosphorothioate (Ronnel) CASRN 299-84-3

☐ 2,4,5-trichlorophenol (TCP) CASRN 95-95-4

☐ hexachlorophene (HCP) CASRN 70-30-4

☒ None of the above

Description: Click to enter text.

Does the applicant or anyone at the facility know or have any reason to believe that 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) or any congeners of TCDD may be present in the effluent proposed for discharge?

☐ Yes ☒ No

Description: Click to enter text.

If **yes** to either Items a **or** b, complete Table 12 as instructed.

Table 12 for Outfall No.: Click to enter text. **Samples are (check one):** ☐ **Composite** ☐ **Grab**

Compound	Toxicity Equivalent Factors	Wastewater Concentration (ppq)	Wastewater Toxicity Equivalents (ppq)	Sludge Concentration (ppt)	Sludge Toxicity Equivalents (ppt)	MAL (ppq)
2,3,7,8-TCDD	1					10
1,2,3,7,8-PeCDD	1.0					50
2,3,7,8-HxCDDs	0.1					50
1,2,3,4,6,7,8-HpCDD	0.01					50

Compound	Toxicity Equivalent Factors	Wastewater Concentration (ppq)	Wastewater Toxicity Equivalents (ppq)	Sludge Concentration (ppt)	Sludge Toxicity Equivalents (ppt)	MAL (ppq)
2,3,7,8-TCDF	0.1					10
1,2,3,7,8-PeCDF	0.03					50
2,3,4,7,8-PeCDF	0.3					50
2,3,7,8-HxCDFs	0.1					50
2,3,4,7,8-HpCDFs	0.01					50
OCDD	0.0003					100
OCDF	0.0003					100
PCB 77	0.0001					500
PCB 81	0.0003					500
PCB 126	0.1					500
PCB 169	0.03					500
Total						

TABLE 13 (HAZARDOUS SUBSTANCES)

Complete Table 13 **is required** for all **external outfalls** as directed below. (Instructions, Pages 60-61)

Are there any pollutants listed in the instructions (pages 55-62) believed present in the discharge?

☐ Yes ☒ No

Are there pollutants listed in Item 1.c. of Technical Report 1.0 which are believed present in the discharge and have not been analytically quantified elsewhere in this application?

☐ Yes ☒ No

If **yes** to either Items a **or** b, complete Table 13 as instructed.

Table 13 for Outfall No.: Click to enter text. **Samples are (check one):** ☐ **Composite** ☐ **Grab**

Pollutant	CASRN	Sample 1 (µg/L)	Sample 2 (µg/L)	Sample 3 (µg/L)	Sample 4 (µg/L)	Analytical Method

INDUSTRIAL WASTEWATER PERMIT APPLICATION WORKSHEET 4.0: RECEIVING WATERS

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

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

a. There is a surface water intake for domestic drinking water supply located within 5 (five) miles downstream from the point/proposed point of discharge.

☐ Yes ☒ No

If **no**, stop here and proceed to Item 2. If **yes**, provide the following information:

1. The legal name of the owner of the drinking water supply intake: Click to enter text.
2. The distance and direction from the outfall to the drinking water supply intake: Click to enter text.

b. Locate and identify the intake on the USGS 7.5-minute topographic map provided for Administrative Report 1.0.

☐ Check this box to confirm the above requested information is provided.

Item 2. Discharge Into Tidally Influenced Waters (Instructions, Page 80)

If the discharge is to tidally influenced waters, complete this section. Otherwise, proceed to Item 3.

a. Width of the receiving water at the outfall: Click to enter text. feet

b. Are there oyster reefs in the vicinity of the discharge?

☐ Yes ☐ No

If **yes**, provide the distance and direction from the outfall(s) to the oyster reefs: Click to enter text.

c. Are there sea grasses within the vicinity of the point of discharge?

☐ Yes ☐ No

If **yes**, provide the distance and direction from the outfall(s) to the grasses: Click to enter text.

Item 3. Classified Segment (Instructions, Page 80)

The discharge is/will be directly into (or within 300 feet of) a classified segment.

☐ Yes ☒ No

If **yes**, stop here and do not complete Items 4 and 5 of this worksheet or Worksheet 4.1.

If **no**, complete Items 4 and 5 and Worksheet 4.1 may be required.

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

a. Name of the immediate receiving waters: Hidalgo County Drainage District No. 1 North Main Drain III

b. Check the appropriate description of the immediate receiving waters:

☐ Lake or Pond

- Surface area (acres): Click to enter text.
- Average depth of the entire water body (feet): Click to enter text.
- Average depth of water body within a 500-foot radius of the discharge point (feet): Click to enter text.

☒ Man-Made Channel or Ditch

☐ Stream or Creek

☐ Freshwater Swamp or Marsh

☐ Tidal Stream, Bayou, or Marsh

☐ Open Bay

☐ Other, specify:

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

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

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

☐ Intermittent (dry for at least one week during most years)

☐ Intermittent with Perennial Pools (enduring pools containing habitat to maintain aquatic life uses)

☒ Perennial (normally flowing)

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

☐ USGS flow records

☒ personal observation

☐ historical observation by adjacent landowner(s)

☐ other, specify: Click to enter text.

d. List the names of all perennial streams that join the receiving water within three miles downstream of the discharge point: None, North Main Drain III to North Main Drain II to North Main Drain I is more than 3 miles. This is a controlled drainage system.

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

☐ Yes ☒ No

If **yes**, describe how: Click to enter text.

f. General observations of the water body during normal dry weather conditions: Slow moving water, a bit murky

Date and time of observation: 5/15/2025 10:15 am

g. The water body was influenced by stormwater runoff during observations.

☐ Yes ☒ No

If **yes**, describe how: Click to enter text.

Item 5. General Characteristics of Water Body (Instructions, Page 81)

a. Is the receiving water upstream of the existing discharge or proposed discharge site influenced by any of the following (check all that apply):

☐ oil field activities
☒ urban runoff
☒ agricultural runoff
☐ septic tanks
☒ upstream discharges
☐ other, specify: Click to enter text.

b. Uses of water body observed or evidence of such uses (check all that apply):

☐ livestock watering
☐ industrial water supply
☐ non-contact recreation
☒ irrigation withdrawal
☐ domestic water supply
☐ navigation
☐ contact recreation
☐ picnic/park activities
☐ fishing
☐ other, specify: Click to enter text.

c. Description which best describes the aesthetics of the receiving water and the surrounding area (check only one):

☐ **Wilderness:** outstanding natural beauty; usually wooded or un-pastured area: water clarity exceptional

☐ **Natural Area:** trees or native vegetation common; some development evident (from fields, pastures, dwellings); water clarity discolored

☒ **Common Setting:** not offensive, developed but uncluttered; water may be colored or turbid

☐ **Offensive:** stream does not enhance aesthetics; cluttered; highly developed; dumping areas; water discolored

ATTACHMENT A

PAYMENT DOCUMENTATION

Koch, Nancy

Subject: FW: [EXT]:Fw: TCEQ ePay Receipt for 582EA000675412

-----Original Message-----
From: steers@tceq.texas.gov <steers@tceq.texas.gov>
Sent: Tuesday, July 8, 2025 10:03 AM
To: Ada DeLeon <Ada.Deleon@calpine.com>
Subject: TCEQ ePay Receipt for 582EA000675412

[You don't often get email from steers@tceq.texas.gov. Learn why this is important at https://aka.ms/LearnAboutSenderIdentification]

⚠ EXTERNAL SENDER ⚠
Do not click links, open attachments or enter your ID/Password unless you recognize the sender and are certain the content is safe. If anything appears suspicious, report it.
Consider the following before taking action: Were you expecting this email? Can you verify the sender? Are the grammar and spelling correct? Does the content or request make sense?

This is an automated message from the TCEQ ePay system. Please do not reply.
Trace Number: 582EA000675412
Date: 07/08/2025 10:03 AM
Payment Method: CC - Authorization 0000093178 TCEQ Amount: $2,015.00 Texas.gov Fee: $45.59 Texas.gov Price: $2,060.59*

* This service is provided by Texas.gov, the official website of Texas. The price of this service includes funds that support the ongoing operations and enhancements of Texas.gov, which is provided by a third party in partnership with the State.

Actor: ADA DELEON
Email: adeleon@calpine.com

Payment Contact: ADA DELEON
Phone: 956-587-3295
Company: CALPINE HIDALGO ENERGY
Address: 4005 N SEMINARY RD, EDINBURG, TX 78541

Fees Paid:
Fee Description AR Number Amount
WW PERMIT - MAJOR INDUSTRIAL FACILITY - RENEWAL $2,000.00
30 TAC 305.53B WQ RENEWAL NOTIFICATION FEE $15.00

TCEQ Amount: $2,015.00

==========

Voucher: 773993
Trace Number: 582EA000675412
Date: 07/08/2025 10:03 AM
Payment Method: CC - Authorization 0000093178 Voucher Amount: $2,000.00 Fee Paid: WW PERMIT - MAJOR INDUSTRIAL FACILITY - RENEWAL Site Name: CALPINE HIDALGO ENERGY CENTER Site Address: 4005 N SEMINARY RD, EDINBURG, TX 78541 Site Location: 4005 N SEMINARY RD EDINBURG TX 78541 Customer Name: CALPINE OPERATING SERVICES COMPANY INC Customer Address: 717 TEXAS AVENUE SUITE 1000, HOUSTON, TX 77002 Program Area ID: 0004138

Voucher: 773994
Trace Number: 582EA000675412
Date: 07/08/2025 10:03 AM
Payment Method: CC - Authorization 0000093178 Voucher Amount: $15.00 Fee Paid: 30 TAC 305.53B WQ RENEWAL NOTIFICATION FEE

==========

To print out a copy of the receipt and vouchers for this transaction either click on or copy and paste the following url into your browser:
https://www3.tceq.texas.gov/epay/index.cfm?fuseaction=cor.search&trace_num_txt=582EA000675412.

ATTACHMENT B

CORE DATA FORMS

TCEQ Use Only

TCEQ Core Data Form

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

SECTION I: General Information

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

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

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

2. Customer Reference Number *(if issued)*	Follow this link to search for CN or RN numbers in Central Registry**	**3. Regulated Entity Reference Number** *(if issued)*
CN 600131932		**RN 100224989**

SECTION II: Customer Information

4. General Customer Information	**5. Effective Date for Customer Information Updates** (mm/dd/yyyy)	7/1/2025

☐ New Customer ☒ Update to Customer Information ☐ Change in Regulated Entity Ownership
☐ Change in Legal Name (Verifiable with the Texas Secretary of State or Texas Comptroller of Public Accounts)

The Customer Name submitted here may be updated automatically based on what is current and active with the Texas Secretary of State (SOS) or Texas Comptroller of Public Accounts (CPA).

6. Customer Legal Name *(If an individual, print last name first: eg: Doe, John)*	*If new Customer, enter previous Customer below:*
Calpine Hidalgo Energy Center, LP	

7. TX SOS/CPA Filing Number	**8. TX State Tax ID** (11 digits)	**9. Federal Tax ID** (9 digits)	**10. DUNS Number** *(if applicable)*
801388449	17605735236	760573523	not applica

11. Type of Customer:	☐ Corporation	☐ Individual	Partnership: ☐ General ☒ Limited
Government: ☐ City ☐ County ☐ Federal ☐ Local ☐ State ☐ Other		☐ Sole Proprietorship	☐ Other:

12. Number of Employees	**13. Independently Owned and Operated?**
☐ 0-20 ☒ 21-100 ☐ 101-250 ☐ 251-500 ☐ 501 and higher	☒ **Yes** ☐ **No**

14. Customer Role (Proposed or Actual) – *as it relates to the Regulated Entity listed on this form. Please check one of the following*

☒ Owner ☐ Operator ☐ Owner & Operator
☐ Occupational Licensee ☐ Responsible Party ☐ VCP/BSA Applicant ☐ Other:

15. Mailing Address:	717 Texas Avenue, Suite 1000						
	City	Houston	**State**	TX	**ZIP**	77002	**ZIP + 4**

16. Country Mailing Information *(if outside USA)*	**17. E-Mail Address** *(if applicable)*
	ty.pate@calpine.com

18. Telephone Number	19. Extension or Code	20. Fax Number *(if applicable)*
(713) 830-8358		( ) -

SECTION III: Regulated Entity Information

21. General Regulated Entity Information *(If 'New Regulated Entity" is selected, a new permit application is also required.)*

☐ New Regulated Entity ☒ Update to Regulated Entity Name ☐ Update to Regulated Entity Information

The Regulated Entity Name submitted may be updated, in order to meet TCEQ Core Data Standards (removal of organizational endings such as Inc, LP, or LLC).

22. Regulated Entity Name *(Enter name of the site where the regulated action is taking place.)*

Calpine Hidalgo Energy Center

23. Street Address of the Regulated Entity: ***(No PO Boxes)***	4005 N. Seminary Road							
	City	Edinburg	**State**	TX	**ZIP**	78541	**ZIP + 4**	
24. County	Hidalgo							

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

25. Description to Physical Location:	

26. Nearest City	**State**	**Nearest ZIP Code**

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

27. Latitude (N) In Decimal:	26.3418056		**28. Longitude (W) In Decimal:**	-98.175025	
Degrees	Minutes	Seconds	Degrees	Minutes	Seconds

29. Primary SIC Code (4 digits)	**30. Secondary SIC Code** (4 digits)	**31. Primary NAICS Code** (5 or 6 digits)	**32. Secondary NAICS Code** (5 or 6 digits)
4911		221112	

33. What is the Primary Business of this entity? *(Do not repeat the SIC or NAICS description.)*

34. Mailing Address:	**4005 N. Seminary Road**							
	City	**Edinburg**	**State**	**TX**	**ZIP**	**78541**	**ZIP + 4**	
35. E-Mail Address:	**jacob.key@calpine.com**							

36. Telephone Number	**37. Extension or Code**	**38. Fax Number** *(if applicable)*
(956) 587-3287		( ) -

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

☐ Dam Safety	☐ Districts	☐ Edwards Aquifer	☐ Emissions Inventory Air	☒ Industrial Hazardous Waste
				86364
☐ Municipal Solid Waste	☒ New Source Review Air	☐ OSSF	☐ Petroleum Storage Tank	☐ PWS
	38599; Registrations 119552;147942;167541;167542			
☐ Sludge	☐ Storm Water	☒ Title V Air	☐ Tires	☐ Used Oil
		1837		
☐ Voluntary Cleanup	☒ Wastewater	☐ Wastewater Agriculture	☐ Water Rights	☐ Other:
	WQ0004138000			

SECTION IV: Preparer Information

40. Name:	Nancy L. Koch	41. Title:	Project Manager

42. Telephone Number	43. Ext./Code	44. Fax Number	45. E-Mail Address
(512) 651-7104		( ) -	nancy.koch@westonsolutions.com

SECTION V: Authorized Signature

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

Company:	Hidalgo Energy Center, LP	Job Title:	Plant Manager
Name *(In Print)*:	Jacob Key	Phone:	(956) 587- 3287
Signature:		Date:	6-25-25

TCEQ Use Only

TCEQ Core Data Form

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

SECTION I: General Information

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

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

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

☒ Other **Add as co-permittee to WQ0005219000**

2. Customer Reference Number *(if issued)*

CN 602680076

Follow this link to search for CN or RN numbers in Central Registry**

3. Regulated Entity Reference Number *(if issued)*

RN 100224989

SECTION II: Customer Information

4. General Customer Information

5. Effective Date for Customer Information Updates (mm/dd/yyyy) 7/1/2025

☐ New Customer ☒ Update to Customer Information ☐ Change in Regulated Entity Ownership

☐ Change in Legal Name (Verifiable with the Texas Secretary of State or Texas Comptroller of Public Accounts)

The Customer Name submitted here may be updated automatically based on what is current and active with the Texas Secretary of State (SOS) or Texas Comptroller of Public Accounts (CPA).

6. Customer Legal Name *(If an individual, print last name first: eg: Doe, John)*

Calpine Operating Services Company, Inc.

If new Customer, enter previous Customer below:

7. TX SOS/CPA Filing Number

800146045

8. TX State Tax ID (11 digits)

17108874284

9. Federal Tax ID (9 digits)

770212977

10. DUNS Number *(if applicable)*

11. Type of Customer:

☒ Corporation ☐ Individual Partnership: ☐ General ☐ Limited

Government: ☐ City ☐ County ☐ Federal ☐ Local ☐ State ☐ Other ☐ Sole Proprietorship ☐ Other:

12. Number of Employees

☐ 0-20 ☐ 21-100 ☐ 101-250 ☐ 251-500 ☒ 501 and higher

13. Independently Owned and Operated?

☒ **Yes** ☐ **No**

14. Customer Role (Proposed or Actual) – *as it relates to the Regulated Entity listed on this form. Please check one of the following*

☐ Owner ☒ Operator ☐ Owner & Operator ☐ Other:

☐ Occupational Licensee ☐ Responsible Party ☐ VCP/BSA Applicant

15. Mailing Address:

717 Texas Avenue

Suite 1000

City	Houston	**State**	TX	**ZIP**	77002	**ZIP + 4**	

16. Country Mailing Information *(if outside USA)*

17. E-Mail Address *(if applicable)*

Ray.dube@calpine.com

18. Telephone Number	19. Extension or Code	20. Fax Number *(if applicable)*
(830) 305-8429		( ) -

SECTION III: Regulated Entity Information

21. General Regulated Entity Information *(If 'New Regulated Entity" is selected, a new permit application is also required.)*

☐ New Regulated Entity ☐ Update to Regulated Entity Name ☒ Update to Regulated Entity Information

The Regulated Entity Name submitted may be updated, in order to meet TCEQ Core Data Standards (removal of organizational endings such as Inc, LP, or LLC).

22. Regulated Entity Name *(Enter name of the site where the regulated action is taking place.)*

Calpine Hidalgo Energy Center

23. Street Address of the Regulated Entity: ***(No PO Boxes)***	4005 N. Seminary Road							
	City	Edinburg	**State**	TX	**ZIP**	78541	**ZIP + 4**	
24. County	Hidalgo							

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

25. Description to Physical Location:	

26. Nearest City	**State**	**Nearest ZIP Code**

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

27. Latitude (N) In Decimal:	26.3418056		**28. Longitude (W) In Decimal:**	-98.175025	
Degrees	Minutes	Seconds	Degrees	Minutes	Seconds

29. Primary SIC Code (4 digits)	**30. Secondary SIC Code** (4 digits)	**31. Primary NAICS Code** (5 or 6 digits)	**32. Secondary NAICS Code** (5 or 6 digits)
4911		221112	

33. What is the Primary Business of this entity? *(Do not repeat the SIC or NAICS description.)*

Electrical Power Generation

34. Mailing Address:	**4005 N. Seminary Road**							
	City	**Edinburg**	**State**	**TX**	**ZIP**	**78541**	**ZIP + 4**	
35. E-Mail Address:	**jacob.key@calpine.com**							

36. Telephone Number	**37. Extension or Code**	**38. Fax Number** *(if applicable)*
(956) 587-3287		( ) -

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

☐ Dam Safety	☐ Districts	☐ Edwards Aquifer	☐ Emissions Inventory Air	☒ Industrial Hazardous Waste
				86364
☐ Municipal Solid Waste	☐ New Source Review Air	☐ OSSF	☐ Petroleum Storage Tank	☐ PWS
☐ Sludge	☐ Storm Water	☐ Title V Air	☐ Tires	☐ Used Oil
☐ Voluntary Cleanup	☒ Wastewater	☐ Wastewater Agriculture	☐ Water Rights	☐ Other:
	WQ0004138000			

SECTION IV: Preparer Information

40. Name:	Nancy L. Koch	**41. Title:**	Project Manager

42. Telephone Number	**43. Ext./Code**	**44. Fax Number**	**45. E-Mail Address**
(512) 651-7104		( ) -	Nancy.Koch@westonsolutions.com

SECTION V: Authorized Signature

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

Company:	Calpine Operating Services Company, Inc.	**Job Title:**	Plant Manager
Name *(In Print):*	Jacob Key	**Phone:**	(956) 587- **3287**
Signature:		**Date:**	6-25-25

TCEQ Use Only

TCEQ Core Data Form

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

SECTION I: General Information

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

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

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

2. Customer Reference Number *(if issued)*	Follow this link to search for CN or RN numbers in Central Registry**	**3. Regulated Entity Reference Number** *(if issued)*
CN 601658651		**RN 100224989**

SECTION II: Customer Information

4. General Customer Information	**5. Effective Date for Customer Information Updates** (mm/dd/yyyy)	7/1/2025

☐ New Customer ☒ Update to Customer Information ☐ Change in Regulated Entity Ownership
☐ Change in Legal Name (Verifiable with the Texas Secretary of State or Texas Comptroller of Public Accounts)

The Customer Name submitted here may be updated automatically based on what is current and active with the Texas Secretary of State (SOS) or Texas Comptroller of Public Accounts (CPA).

6. Customer Legal Name *(If an individual, print last name first: eg: Doe, John)*	*If new Customer, enter previous Customer below:*
Public Utilities Board of the City of Brownsville Texas	

7. TX SOS/CPA Filing Number	**8. TX State Tax ID** (11 digits)	**9. Federal Tax ID** (9 digits)	**10. DUNS Number** *(if applicable)*
Not applica	74-2137823	Not applica	not applica

11. Type of Customer:	☐ Corporation	☐ Individual	Partnership: ☐ General ☒ Limited
Government: ☐ City ☐ County ☐ Federal ☐ Local ☐ State ☐ Other		☐ Sole Proprietorship	☐ Other:

12. Number of Employees	**13. Independently Owned and Operated?**
☐ 0-20 ☒ 21-100 ☐ 101-250 ☐ 251-500 ☐ 501 and higher	☐ **Yes** ☐ **No**

14. Customer Role (Proposed or Actual) – *as it relates to the Regulated Entity listed on this form. Please check one of the following*

☒ Owner ☐ Operator ☐ Owner & Operator
☐ Occupational Licensee ☐ Responsible Party ☐ VCP/BSA Applicant
☒ Other: Public Utility

15. Mailing Address:	1425 Robinhood Drive						
	City	Brownsville	**State**	TX	**ZIP**	78521	**ZIP + 4**

16. Country Mailing Information *(if outside USA)*	**17. E-Mail Address** *(if applicable)*
	customerservice@brownsville-pub.com

18. Telephone Number	19. Extension or Code	20. Fax Number *(if applicable)*
(956) 983-6121		( ) -

SECTION III: Regulated Entity Information

21. General Regulated Entity Information *(If 'New Regulated Entity" is selected, a new permit application is also required.)*

☐ New Regulated Entity ☒ Update to Regulated Entity Name ☐ Update to Regulated Entity Information

The Regulated Entity Name submitted may be updated, in order to meet TCEQ Core Data Standards (removal of organizational endings such as Inc, LP, or LLC).

22. Regulated Entity Name *(Enter name of the site where the regulated action is taking place.)*

Calpine Hidalgo Energy Center

23. Street Address of the Regulated Entity: ***(No PO Boxes)***	4005 N. Seminary Road							
	City	Edinburg	**State**	TX	**ZIP**	78541	**ZIP + 4**	
24. County	Hidalgo							

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

25. Description to Physical Location:	

26. Nearest City	**State**	**Nearest ZIP Code**

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

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Degrees	Minutes	Seconds	Degrees	Minutes	Seconds

29. Primary SIC Code (4 digits)	**30. Secondary SIC Code** (4 digits)	**31. Primary NAICS Code** (5 or 6 digits)	**32. Secondary NAICS Code** (5 or 6 digits)
4911		221112	

33. What is the Primary Business of this entity? *(Do not repeat the SIC or NAICS description.)*

34. Mailing Address:	**4005 N. Seminary Road**							
	City	**Edinburg**	**State**	**TX**	**ZIP**	**78541**	**ZIP + 4**	
35. E-Mail Address:	**jacob.key@calpine.com**							

36. Telephone Number	**37. Extension or Code**	**38. Fax Number** *(if applicable)*
(956) 587-3287		( ) -

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

☐ Dam Safety	☐ Districts	☐ Edwards Aquifer	☐ Emissions Inventory Air	☒ Industrial Hazardous Waste
				86364
☐ Municipal Solid Waste	☒ New Source Review Air	☐ OSSF	☐ Petroleum Storage Tank	☐ PWS
	38599; Registrations 119552;147942;167541;167542			
☐ Sludge	☐ Storm Water	☒ Title V Air	☐ Tires	☐ Used Oil
		1837		
☐ Voluntary Cleanup	☒ Wastewater	☐ Wastewater Agriculture	☐ Water Rights	☐ Other:
	WQ0004138000			

SECTION IV: Preparer Information

40. Name:	Nancy L. Koch	**41. Title:**	Project Manager

42. Telephone Number	**43. Ext./Code**	**44. Fax Number**	**45. E-Mail Address**
(512) 651-7104		( ) -	nancy.koch@westonsolutions.com

SECTION V: Authorized Signature

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

Company:	Public Utilities Board of the City of Brownsville Texas	**Job Title:**	Director of Environmental
Name *(In Print)*:	Alberto Gomez	**Phone:**	(956) 983- 6251
Signature:	Albert G	**Date:**	6/24/25

ATTACHMENT C

PLAIN LANGUAGE SUMMARY

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

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

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

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

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

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

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

Calpine Hidalgo Energy Center, L.P. (CN600121932); Public Utilities Board of the City of Brownsville, Texas (CN601658651); and Calpine Operating Services Company, Inc. (CN602680076) operates Calpine Hidalgo Energy Center (RN100224989), a power generating facility. The facility is located at 4005 N Seminary Road, in Edinburg, Hidalgo County, Texas 78541. The facility has applied to the Texas Commission on Environmental Quality (TCEQ) to renew Texas Pollutant Discharge Elimination System (TPDES) Permit No. WQ0004138000 to authorize the discharge of industrial wastewater at a volume not to exceed a daily average flow of 920,000 gallons per day.

Discharges from the facility are expected to contain carbonaceous biochemical oxygen demand (5-day), total dissolved solids, chloride, sulfate, nitrate nitrogen, ammonia nitrogen, total residual chlorine, total chromium, and zinc. Types of wastewater discharged from the facility include cooling tower blowdown and previously monitored effluents through Outfall

001. Previously monitored effluents discharged through Outfall 001 are low volume waste sources from internal Outfall 101 and offline combustion turbine wash water (metal cleaning wastes) from internal Outfall 201. Cooling tower blowdown is dechlorinated prior to discharge through Outfall 001. Low volume waste sources from internal Outfall 101 are treated by an oil water separator prior to comingling with other wastewaters for discharge through Outfall 001. Wastewater from internal Outfall 201 is not treated prior to discharge.

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

AGUAS RESIDUALES INDUSTRIALES /AGUAS PLUVIALES

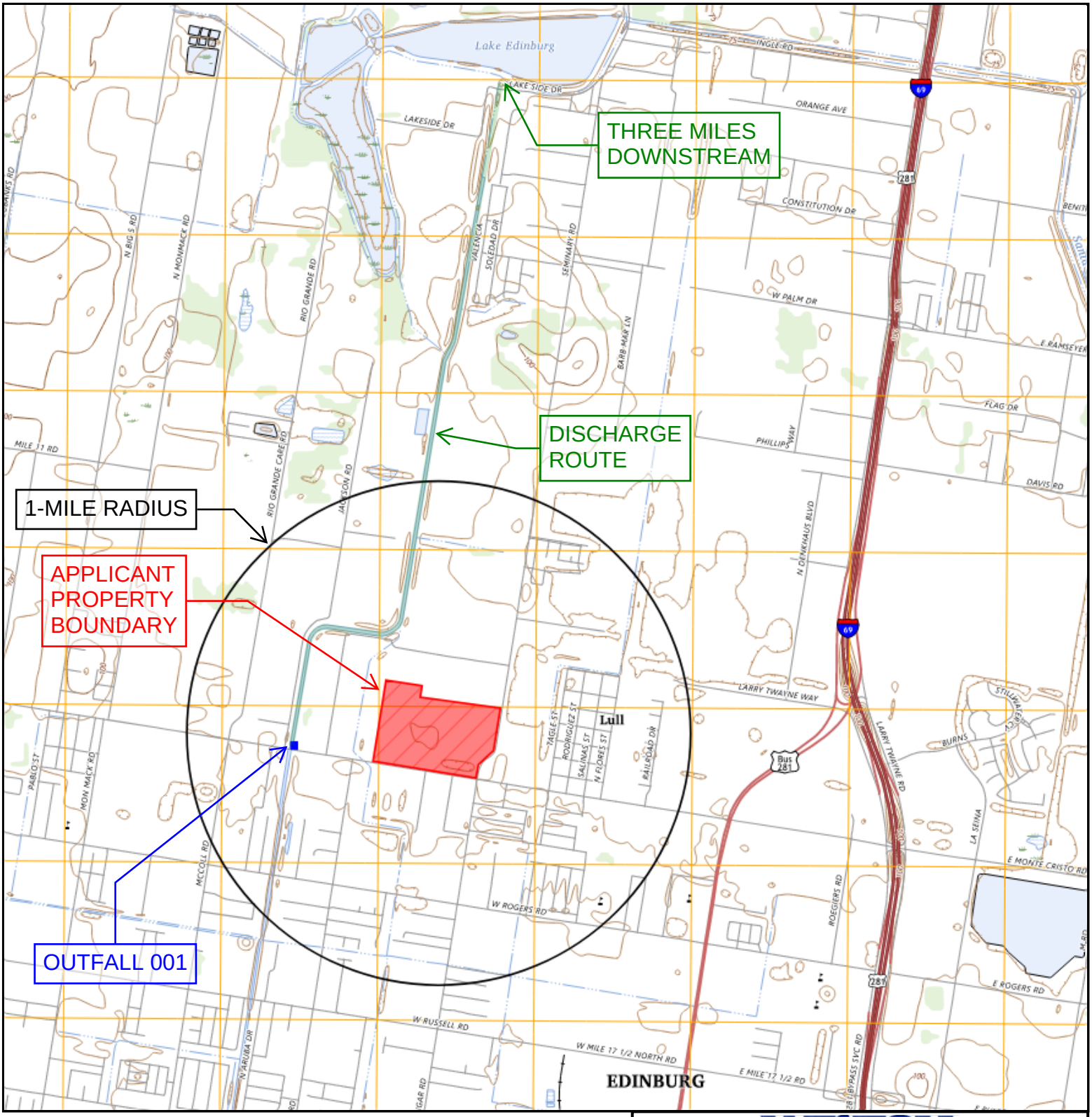
El siguiente resumen se proporciona para esta solicitud de permiso de calidad del agua pendiente que está siendo revisada por la Comisión de Calidad Ambiental de Texas según lo requerido por el Capítulo 39 del Código Administrativo de Texas 30. La información proporcionada en este resumen puede cambiar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

Calpine Hidalgo Energy Center, L.P. (CN600121932); Public Utilities Board of the City of Brownsville, Texas (CN601658651); y Calpine Operating Services Company, Inc. (CN602680076) opera Calpine Hidalgo Energy Center (RN100224989), una instalación de generación de energía. La instalación está ubicada en 4005 N Seminary Road, en Edinburg, Condado de Hidalgo, Texas 78541. La instalación ha solicitado a la Comisión de Calidad Ambiental de Texas (TCEQ) la renovación del Permiso del Sistema de Eliminación de Descargas de Contaminantes de Texas (TPDES) No. WQ0004138000 para autorizar la descarga de aguas residuales industriales a un volumen que no exceda un promedio diario de 920,000 galones por día.

Se espera que las descargas de la instalación contengan demanda bioquímica carbonosa de oxígeno (5 días), sólidos disueltos totales, cloruro, sulfato, nitrato nitrógeno, nitrógeno amoniacal, cloro residual total, cromo total, y zinc. Los tipos de aguas residuales descargadas de la instalación incluyen el drenaje de la torre de enfriamiento y efluentes monitoreados previamente a través del emisario 001. Los efluentes monitoreados previamente descargaron de emisario 001 son fuentes de desechos de bajo volumen de emisario interno 101 y agua de lavado de turbinas de combustión fuera de línea (desechos de limpieza de metales) de emisario interno 201. El drenaje de la torre de enfriamiento es desclorado antes de ser descargado a través del emisario 001. Las fuentes de desechos de bajo volumen del emisario interno 101 se tratan mediante un separador de aceite y agua antes de mezclarse con otras aguas residuales para su descarga a través del emisario 001. Las aguas residuales de emisario interno 201 no se tratan antes de ser descargadas.

ATTACHMENT D

USGS MAP

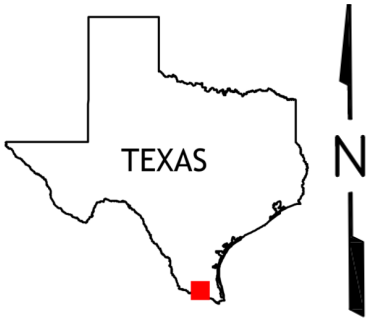


ROAD CLASSIFICATION

Expressway	Local Connector
Secondary Hwy	Local Road
Ramp	4WD

Interstate Route · US Route · State Route

1 MILE



SOURCE: USGS 7.5 MINUTE SERIES TOPOGRAPHIC (2025)

WESTON SOLUTIONS

ATTACHMENT D

USGS TOPOGRAPHIC MAP

HIDALGO ENERGY CENTER

EDINBURG, TX

DATE	PROJECT NO.	SCALE
APR 2025	14847.015.004.0001	AS SHOWN

ATTACHMENT E

SUPPLEMENTAL PERMIT INFORMATION FORM

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

SUPPLEMENTAL PERMIT INFORMATION FORM (SPIF)

FOR AGENCIES REVIEWING DOMESTIC OR INDUSTRIAL TPDES WASTEWATER PERMIT APPLICATIONS

TCEQ USE ONLY:

Application type: _____Renewal _____Major Amendment ____Minor Amendment _____New

County: _____ Segment Number: _____

Admin Complete Date: _____

Agency Receiving SPIF:

_____ Texas Historical Commission _____ U.S. Fish and Wildlife

_____ Texas Parks and Wildlife Department _____ U.S. Army Corps of Engineers

This form applies to TPDES permit applications only. (Instructions, Page 53)

Complete this form as a separate document. TCEQ will mail a copy to each agency as required by our agreement with EPA. If any of the items are not completely addressed or further information is needed, we will contact you to provide the information before issuing the permit. Address each item completely.

Do not refer to your response to any item in the permit application form. Provide each attachment for this form separately from the Administrative Report of the application. The application will not be declared administratively complete without this SPIF form being completed in its entirety including all attachments. Questions or comments concerning this form may be directed to the Water Quality Division's Application Review and Processing Team by email at WQ-ARPTeam@tceq.texas.gov or by phone at (512) 239-4671.

The following applies to all applications:

1. Permittee: Calpine Hidalgo Energy Center,LP; Brownsville Public Utility Board; and Calpine Operating Services Company, Inc.

   Permit No. WQ00 04138000 EPA ID No. TX 0119423

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

   4005 North Seminary Road, Edinburg, Hidalgo County (intersection of FM 1925 and N. Seminary Road.

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

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

First and Last Name: Orielle Buentello

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

Title: EHS Specialist III

Mailing Address: 4005 N. Seminary Road

City, State, Zip Code: Edinburg, TX, 78541

Phone No.: 956.732.8154 Ext.: Click here to enter text. Fax No.: Click here to enter text.

E-mail Address: orielle.buentello@calpine.com

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

The property is partly publicly owned, but the owners are the same as the permittee/applicant.

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

To North Main Drain III; to North Main Drain II; to North Main Drain I; to North Floodway Channel; to Laguna Madre in Segment No. 2491.

5. Please provide a separate 7.5-minute USGS quadrangle map with the project boundaries plotted and a general location map showing the project area. Please highlight the discharge route from the point of discharge for a distance of one mile downstream. (This map is required in addition to the map in the administrative report).

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

Does your project involve any of the following? Check all that apply.

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

☐ Disturbance of vegetation or wetlands

1. List proposed construction impact (surface acres to be impacted, depth of excavation, sealing of caves, or other karst features):

No construction activity is associated with this application.

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

The site is developed as a power generating facility.

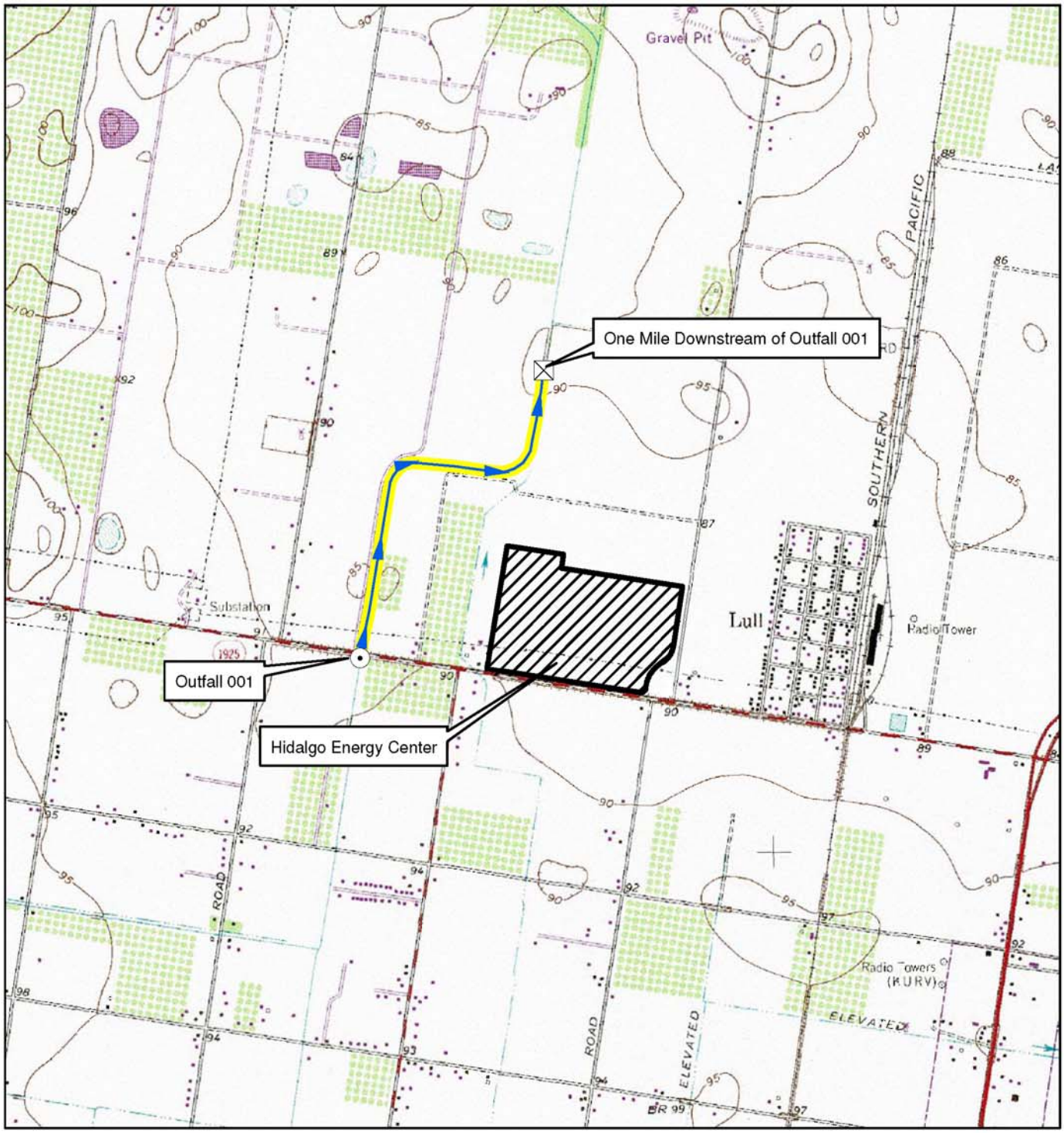
THE FOLLOWING ITEMS APPLY ONLY TO APPLICATIONS FOR NEW TPDES PERMITS AND MAJOR AMENDMENTS TO TPDES PERMITS

3. List construction dates of all buildings and structures on the property:

Not applicable

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

Not applicable



N

0 1,000 2,000 FEET

1 " = 2,000 '

1:24,000

LEGEND

Hidalgo Energy Center

Outfall 001 (Hidalgo)

BASEMAP: USGS 7.5' SERIES TOPO MAP, HIDALGO COUNTY MOSAIC.
MODIFICATIONS: RMT INC.

WESTON SOLUTIONS

FIGURE 1

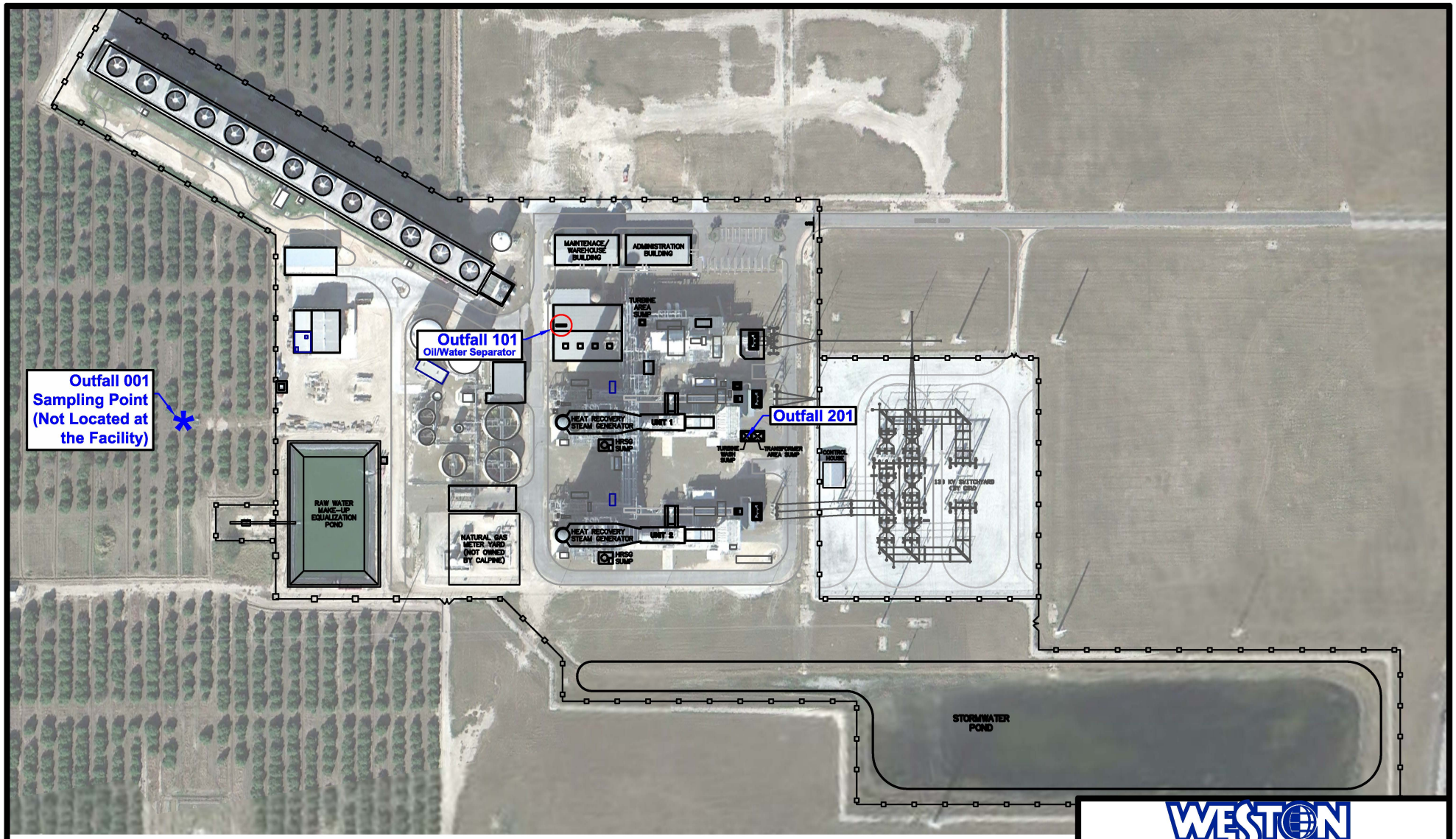
SUPPLEMENTAL PERMIT INFORMATION FORM

HIDALGO ENERGY CENTER
CALPINE CORPORATION
EDINBURG, TEXAS

DATE	PROJECT NO.	SCALE
JULY 2013	14847.008.001	AS SHOWN

ATTACHMENT F

FACILITY MAP



NOTE:

1. OUTFALL 001 IS LOCATED APPROXIMATELY 1,500 FEET FROM THE SW CORNER OF THE PROPERTY BOUNDARY AT NORTH MAIN DRAIN III.

0 60 120
SCALE IN FEET

N
PLANT NORTH

SOURCE: ORIGINAL BASEMAP PROVIDED CALPINE OPERATING SERVICES, INC.

WESTON SOLUTIONS

ATTACHMENT F

SITE PLAN

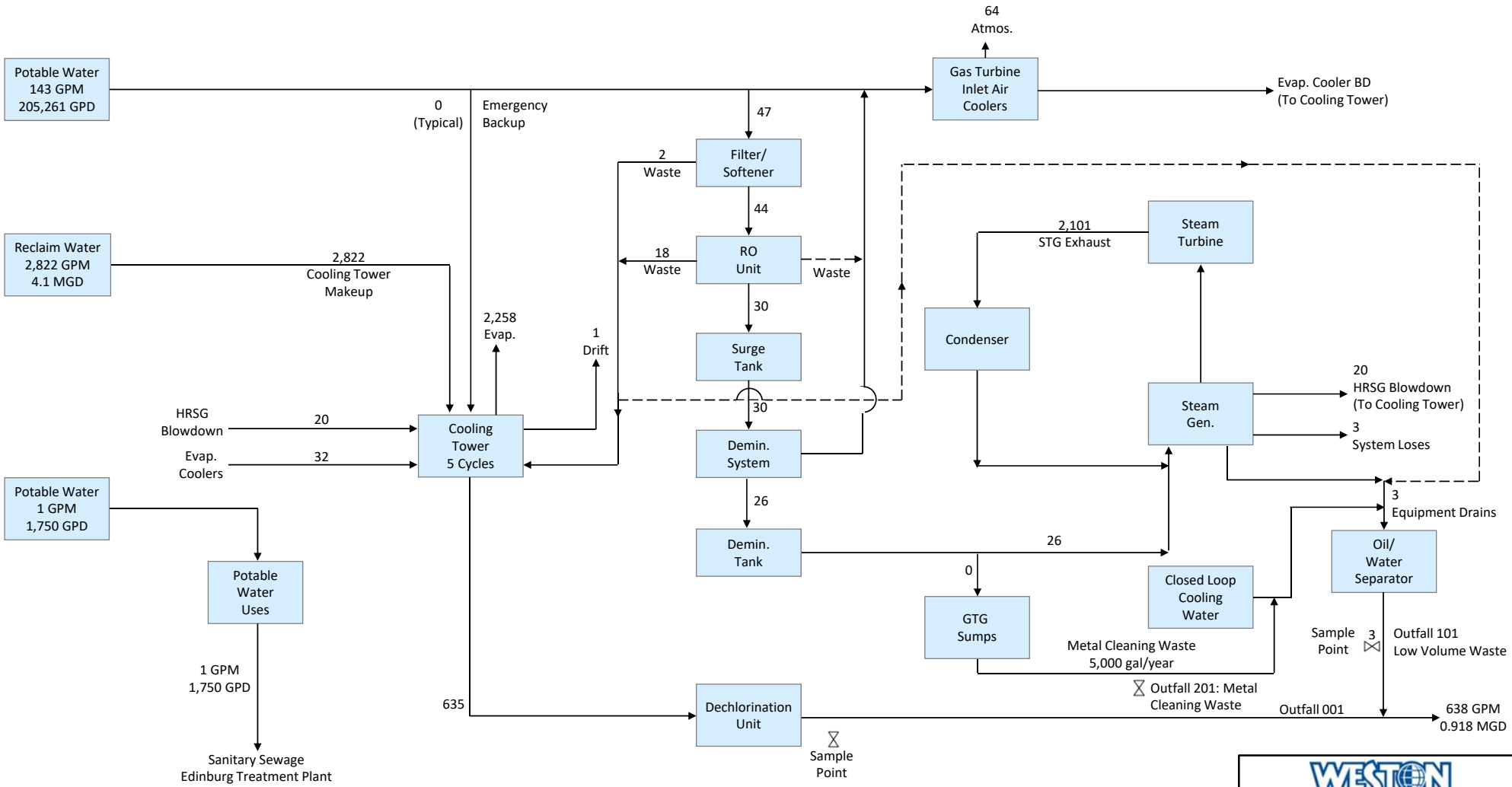
CALPINE HIDALGO
ENERGY FACILITY
EDINBURG, TEXAS

DATE	PROJECT NO.	SCALE
JUN 2019	14847.008.005.0001	AS SHOWN

V:\DATA\Calpine (14847)\14847.008 Hidalgo\14847.008.005 TPDES renewal\06.0 Data Library\Figures (dwg)\Attachments.dwg Layout: Att C

ATTACHMENT G

FLOW DIAGRAM



NOTES:

1. All flow rates in gallons per minute unless otherwise noted.
2. Conditions Operation: 2 X 1 Configuration Expanded, Ambient Temperature 102' F, CT Cycles 5

— — Alternate or backup conditions

SOURCE: RMT, INC. 2009

ATTACHMENT G
FLOW DIAGRAM

CALPINE HIDALGO ENERGY Center
EDINBURG, TEXAS

DATE	PROJECT NO.	SCALE
Jun 2019	14847.004.001	NOT TO SCALE

ATTACHMENT H

COOLING TOWER AND BOILER CHEMICALS

Attachment H
Summary of Cooling Tower and Boiler Chemical Additives
Hidalgo Energy Center

Mfg.	Manufacturers Product Identification/ Number	Product Use	Chemical Composition	Corresponding CAS Number	Toxicity		Toxicity for whole product?	Persistent/ Non-perisistent/ Bioaccumulative	Product or active ingredient half life			Concentration of product in blowdown	Frequency of product use
					Species and Test	LC50 and NOEL			time	pH	Temp		
ChemTreat	BL-1795	Boiler pH & Corrosion control/Boiler water treatment	Sodium phosphate, tribasic 1-5% Sodium hydroxide 1-5%	7601-54-9 1310-73-2	48 hr Ceriodaphnia dubia 96 hr Fathead Minnow	LC50 >10,000 mg/L LC50 >10,000 mg/L	No	N/A		13.1		3-7 ppm	Daily during operation
ChemTreat	CL-240	CT Foam Control/Defoamer	Non-hazardous	N/A	48 hr Daphnia magna 96 hr Fathead Minnow 96hr Sheepshead Minnow 48 hr Mysid Shrimp	LC50 6,000 mg/L LC50 8,600 mg/L LC50 >1,000 mg/L LC50 >1,000 mg/L	No	N/A		5.9		2 gal/day	Daily during operation
Brenntag	Sulfuric Acid	Cooling Tower pH control	Sulfuric Acid 85%	7664-93-9	96 hr Western Mosquitofish	LC50 42 mg/L	No	N/A		N/A		200 gal/day	Daily during operation
Brenntag	Sodium Hypochlorite	Biocide	Sodium hypochlorous acid, Soduim salt 12.5% Sodium Hydroxide 0.7%	7681-52-9 1310-73-2	96 hr Chinook Salmon 48 hr Water Flea 96 hr Western Mosquitofish	LC50 0.038-0.065 mg/L EC50 34.59-47.13 mg/L LC50 125 mg/L	No	N/A		11.5-13.5		250 gal/day	Daily during operation
Chemtreat	CL-4428	Dispersant/scale inhibitor/ Cooling water treatment	Non-hazardous	N/A	96 hr Bluegill Sunfish 96 hr Rainbow Trout 48 hr Daphnia magna 48 hr Mysid Shrimp 96 hr Inland Silverside 96 hr Algae 48 hr Ceriodaphnia dubia 96 hr Fathead Minnow	LC50 >1,000 mg/L LC50 >1,000 mg/L EC50 >1,000 mg/L LC50 >1,000 mg/L LC50 >1,000 mg/L EC50 58 mg/L LC50 888 mg/L LC50 3,314 mg/L	No	N/A		4.4		12-18 ppm	Daily during operation
ChemTreat	BL-124	De-chlorination/Boiler water treatment	Sodium Bisulfite 15-40%	7631-90-5	96 hr Sheepshead Minnow 48 hr Mysid Shrimp 96 hr Fathead Minnow 96 hr Fathead Minnow 7 day Fathead Minnow 7 day Fathead Minnow 7 day Fathead Minnow 48 hr Ceriodaphnia dubia 48 hr Ceriodaphnia dubia 7 day Ceriodaphnia dubia 7 day Ceriodaphnia dubia 7 day Ceriodaphnia dubia	LC50 100 mg/L LC50 70.7 mg/L LC50 > 1,000 mg/L LC50 849 mg/L NOEC 600 mg/L LOEC 1,200 mg/L IC25 750 mg/L LC50 390.4 mg/L LC50 459 mg/L NOEC 300 mg/L LOEC 600 mg/L IC25 420 mg/L	No	N/A		3.9		0.64 - 1.28 ppm	Daily during operation
ChemTreat	BL-152	Steam Cycle pH/Steam line treatment	Ammonium hydroxide 10-30% Ethanolamine 5-10%	1336-21-6 141-43-5	48 hr Ceriodaphnia dubia 96 hr Fathead Minnow	LC50 137 mg/L LC50 76 mg/L	No	N/A		13.1		3-4 gal / day	Daily during operation
ChemTreat	BL-8401	Boiler water treatment	N-Oleyl-1,3-diaminopropane 5-10% Acetic Acid 0-5% Formic Acid 0-5% Other componenets below reportable levels 90-100%	7173-62-8 64-19-7 64-18-6	96 hr Mysid Shrimp 48 hr Inland Silverside	LC50 3.9 mg/L LC50 2.7 mg/L	Yes	N/A		7-8			Daily during operation
ChemTreat	CL-206	Cooling Water Microbiocide	2-2-Dibromo-3-nitrilopropionamide 20%	10222-01-2	48 hr Daphnia magna 96 hr Bluegill Sunfish 96 hr Rainbow Trout 96 hr Fathead Minnow 48 hr Ceriodaphnia dubia 96 hr Sheepshead Minnow	LC50 6.2 mg/L LC50 6.5 mg/L LC50 5 mg/L LC50 6.8 mg/L LC50 5.733 mg/L LC50 7 mg/L	No	N/A		2.2			Used when changing raw water source

N/A - Not available

SAFETY DATA SHEET

Section 1. Chemical Product and Company Identification

Product Name:	ChemTreat BL1795
Product Use:	Boiler Water Treatment
Supplier's Name:	ChemTreat, Inc.
Emergency Telephone Number:	(800)424−9300 (Toll Free)
Address (Corporate Headquarters):	5640 Cox Road Glen Allen, VA 23060
Telephone Number for Information:	(800)648−4579
Date of SDS:	May 9, 2016
Revision Date:	May 9, 2016
Revision Number:	16050901AN

Section 2. Hazard(s) Identification

Signal Word: **DANGER**

GHS Classification(s):
Skin corrosion/irritation − Category 1b
Eye damage/irritation − Category 1
Acute Toxicity Dermal − Category 4
Acute Toxicity Inhalation − Category 4
Acute Toxicity Oral − Category 4

Hazard Statement(s):
H314 Causes severe skin burns and eye damage.
H318 Causes serious eye damage.
H312 Harmful in contact with skin.
H332 Harmful if inhaled.
H302 Harmful if swallowed.

Precautionary Statement(s):

Prevention:
P260 Do not breathe dust/fume/gas/mist/vapors/spray.
P264 Wash thoroughly after handling.
P270 Do not eat, drink, or smoke when using this product.
P271 Use only outdoors or in a well−ventilated area.
P280 Wear protective gloves/protective clothing/eye protection/face protection.

Response:
P301 + P312 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell
P301 + 330 + 331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303 + P361 + P353 IF ON SKIN (or hair): Remove/take off immediately all contaminated clothing. Rinse skin with water/shower
P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing
P305 + P351 + P388 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310 Immediately call a POISON CENTER/doctor.
P363 Wash contaminated clothing before reuse.

Storage: P405 Store locked up.

Disposal: P501 Dispose of contents and container in accordance with applicable local, regional, national, and/or international regulations.

System of Classification Used: Classification under 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200).

Hazards Not Otherwise Classified: None.

Section 3. Composition/Hazardous Ingredients

Component	CAS Registry #	Wt.%
Sodium phosphate, tribasic	7601−54−9	1 − 5
Sodium hydroxide	1310−73−2	1 − 5

Comments If chemical identity and/or exact percentage of composition has been withheld, this information is considered to be a trade secret.

Section 4. First Aid Measures

Inhalation: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a poison center or doctor/physician.

Eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center or doctor/physician.

Skin: Immediately remove/take off all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before re−use. Immediately call a poison center or doctor/physician.

Ingestion: DO NOT INDUCE VOMITING. Rinse mouth. Call a POISON CENTER or doctor/physician.

Most Important Symptoms: N/D

Indication of Immediate Medical Attention and Special Treatment Needed, If Necessary: N/A

Section 5. Fire Fighting Measures

Flammability of the Product: Not flammable.

Suitable Extinguishing Media: Use extinguishing media suitable to surrounding fire.

Specific Hazards Arising from the Chemical: None known.

Protective Equipment: If product is involved in a fire, wear full protective clothing including a positive−pressure, NIOSH approved, self−contained breathing apparatus.

Section 6. Accidental Release Measures

Personal Precautions: Use appropriate Personal Protective Equipment (PPE).

Environmental Precautions: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains, and sewers.

Methods for Cleaning up: Contain and recover liquid when possible. Flush spill area with water spray.

Other Statements: If RQ (Reportable Quantity) is exceeded, report to National Spill Response Office at 1−800−424−8802.

Section 7. Handling and Storage

Handling: Wear appropriate Personal Protective Equipment (PPE) when handling this product. Do not get in eyes, or on skin and clothing. Wash thoroughly after handling. Do not ingest. Avoid breathing vapors, mist or dust.

Storage: Store away from incompatible materials (see Section 10). Store at ambient temperatures. Keep container securely closed when not in use. Label precautions also apply to empty container. Recondition or dispose of empty containers in accordance with government regulations. For Industrial use only.
Do not store below 55°F.
Do not freeze. Store above Freeze Point. If freezes, then mechanical mixing is required.

Section 8. Exposure Controls/Personal Protection

Exposure Limits

Component	Source	Exposure Limits
Sodium phosphate, tribasic	N/E	N/E
Sodium hydroxide	ACGIH TLV	2 mg/m³ Ceiling
	OSHA PEL	2 mg/m³ TWA

Engineering Controls: Use only with adequate ventilation. The use of local ventilation is recommended to control emission near the source.

Personal Protection

Eyes: Wear chemical splash goggles or safety glasses with full−face shield. Maintain eyewash fountain in work area.

Skin: Maintain quick−drench facilities in work area.
Wear butyl rubber or neoprene gloves. Wash them after each use and replace as necessary. If conditions warrant, wear protective clothing such as boots, aprons, and coveralls to prevent skin contact.

Respiratory: If misting occurs, use NIOSH approved organic vapor/acid gas dual cartridge respirator with a dust/mist prefilter in accordance with 29 CFR 1910.134.

Section 9. Physical and Chemical Properties

Physical State and Appearance:	Liquid, Colorless, Clear
Specific Gravity:	1.054 @ 20°C
pH:	13.1 @ 20°C, 100.0%
Freezing Point:	55°F
Flash Point:	N/D
Odor:	Odorless
Melting Point:	N/A
Initial Boiling Point and Boiling Range:	212°F
Solubility in Water:	Complete
Evaporation Rate:	<1
Vapor Density:	N/D
Molecular Weight:	N/D
Viscosity:	<100 CPS @ 20°C
Flammability (solid, gas):	N/D
Flammable Limits:	N/A
Autoignition Temperature:	N/A
Density:	8.79 LB/GA
Vapor Pressure:	N/D
% VOC:	N/D
Odor Threshold	N/D
n−octanol Partition Coefficient	N/D
Decomposition Temperature	N/D

Section 10. Stability and Reactivity

Chemical Stability: Stable at normal temperatures and pressures.

Incompatibility with Various Substances: Strong oxidizers, Acids.

Hazardous Decomposition Products: Oxides of phosphorus.

Possibility of Hazardous Reactions: None known.

Reactivity: N/D

Conditions To Avoid: N/D

Section 11. Toxicological Information

Acute Toxicity

Chemical Name	Exposure	Type of Effect	Concentration	Species
Sodium phosphate, tribasic	Oral	LD50	7400 MG/KG	Rat
Sodium hydroxide	Oral	LD50	300 MG/KG	Rat
	Dermal	LD50	1350 MG/KG	Rabbit

Carcinogenicity Category

Component	Source	Code	Brief Description
Sodium phosphate, tribasic	N/E	N/E	N/E
Sodium hydroxide	N/E	N/E	N/E

Likely Routes of Exposure: N/D

Symptoms

Inhalation: N/D

Eye Contact: N/D

Skin Contact: N/D

Ingestion: N/D

Skin Corrosion/Irritation: N/D

Serious Eye Damage/Eye Irritation: N/D

Sensitization: N/D

Germ Cell Mutagenicity: N/D

Reproductive/Developmental Toxicity: N/D

Specific Target Organ Toxicity

Single Exposure: N/D

Repeated Exposure: N/D

Aspiration Hazard: N/D

Comments: None.

Section 12. Ecological Information

Ecotoxicity

Species	Duration	Type of Effect	Test Results
Ceriodaphnia dubia	48h	LC50	>10000 mg/l
Fathead Minnow	96h	LC50	>10000 mg/l

Persistence and Biodegradability: N/D

Bioaccumulative Potential: N/D

Mobility In Soil: N/D

Other Adverse Effects: N/D

Comments: None.

Section 13. Disposal Considerations

Dispose of in accordance with local, state and federal regulations.
EPA corrosivity characteristic hazardous waste D002 when disposed of in the original product form.

Section 14. Transport Information

Controlling Regulation	UN/NA#:	Proper Shipping Name:	Technical Name:	Hazard Class:	Packing Group:
DOT	UN1824	SODIUM HYDROXIDE SOLUTION	N/A	8	PGII
TDG	UN1824	SODIUM HYDROXIDE SOLUTION	N/A	8	PGII
ICAO	UN1824	SODIUM HYDROXIDE SOLUTION	N/A	8	PGII

Note: N/A

Section 15. Regulatory Information

Inventory Status

United States (TSCA): All ingredients listed.
Canada (DSL/NDSL): All ingredients listed.

Federal Regulations

SARA Title III Rules

Sections 311/312 Hazard Classes

Fire Hazard: No
Reactive Hazard: No
Release of Pressure: No
Acute Health Hazard: Yes
Chronic Health Hazard: No

Other Sections

Component	Section 313 Toxic Chemical	Section 302 EHS TPQ	CERCLA RQ
Sodium phosphate, tribasic	N/A	N/A	5000
Sodium hydroxide	N/A	N/A	1000

Comments: None.

State Regulations

California Proposition 65: None known.

Special Regulations

Component	States
Sodium phosphate, tribasic	MN, NY, PA
Sodium hydroxide	MA, MN, NY, PA, WA

International Regulations

Canada

WHMIS Classification: D2B (Toxic Material)
E (Corrosive Material)

Controlled Product Regulations (CPR): This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

Compliance Information

NSF: N/A

Food Regulations: FDA: All ingredients in this product are authorized in 21 CFR 173.310 for use as "Boiler Water Additives" where the steam may contact food.

KOSHER: This product is certified by the Orthodox Union as kosher pareve.
Only when prepared by the following ChemTreat facilities: Ashland, VA; Eldridge, IA; Nederland, TX; Vernon, CA.

FIFRA: N/A

Other: None

Comments: None.

Section 16. Other Information

HMIS Hazard Rating

Health:	2
Flammability:	0
Physical Hazard:	0
PPE:	X

Notes: The PPE rating depends on circumstances of use. See Section 8 for recommended PPE.
The Hazardous Material Information System (HMIS) is a voluntary, subjective alpha−numeric symbolic system for recommending hazard risk and personal protection equipment information. It is a subjective rating system based on the evaluator's understanding of the chemical associated risks. The end−user must determine if the code is appropriate for their use.

Abbreviations

Abbreviation	Definition
<	Less Than
>	Greater Than
ACGIH	American Conference of Governmental Industrial Hygienists
EHS	Environmental Health and Safety Dept
N/A	Not Applicable
N/D	Not Determined
N/E	Not Established
OSHA	Occupational Health and Safety Dept
PEL	Personal Exposure Limit
STEL	Short Term Exposure Limit
TLV	Threshold Limit Value
TWA	Time Weight Average
UNK	Unknown

Prepared by: Product Compliance Department; ProductCompliance@chemtreat.com

Revision Date: May 9, 2016

Disclaimer

SAFETY DATA SHEET

Section 1. Chemical Product and Company Identification

Product Name:	ChemTreat CL240
Product Use:	Defoamer
Supplier's Name:	ChemTreat, Inc.
Emergency Telephone Number:	(800)424−9300 (Toll Free)
Address (Corporate Headquarters):	5640 Cox Road Glen Allen, VA 23060
Telephone Number for Information:	(800)648−4579
Date of SDS:	February 8, 2018
Revision Date:	February 8, 2018
Revision Number:	18020801AN

Section 2. Hazard(s) Identification

Signal Word: **None**

GHS Classification(s): Non−Hazardous Substance

Hazard Statement(s): Non−Hazardous Substance

Precautionary Statement(s): No significant health risks are expected from exposures under normal conditions of use.

Prevention: None.

Response: None.

Storage: None.

Disposal: None.

System of Classification Used: Classification under 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200).

Hazards Not Otherwise Classified: None.

Section 3. Composition/Hazardous Ingredients

Component	CAS Registry #	Wt.%
Components not listed are either non hazardous or in concentration of less than 1%	N/A	N/A

Comments If chemical identity and/or exact percentage of composition has been withheld, this information is considered to be a trade secret.

Section 4. First Aid Measures

Inhalation: Call a POISON CENTER or doctor/physician if you feel unwell.

Eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists, get medical advice/attention.

Skin: Call a poison center or doctor/physician if you feel unwell.

Ingestion: Rinse mouth. Call a poison center or doctor/physician if you feel unwell.

Most Important Symptoms: N/D

Indication of Immediate Medical Attention and Special Treatment Needed, If Necessary: N/A

Section 5. Fire Fighting Measures

Flammability of the Product: Not flammable.

Suitable Extinguishing Media: Use extinguishing media suitable to surrounding fire.

Specific Hazards Arising from the Chemical: Product may emit toxic gases or fumes under fire conditions.

Protective Equipment: If product is involved in a fire, wear full protective clothing including a positive−pressure, NIOSH approved, self−contained breathing apparatus.

Section 6. Accidental Release Measures

Personal Precautions: Use appropriate Personal Protective Equipment (PPE).

Environmental Precautions: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains, and sewers.

Methods for Cleaning up: Contain and recover liquid when possible. Flush spill area with water spray.

Other Statements: None.

Section 7. Handling and Storage

Handling: Wear appropriate Personal Protective Equipment (PPE) when handling this product. Do not get in eyes, or on skin and clothing. Wash thoroughly after handling. Do not ingest. Avoid breathing vapors, mist or dust.

Storage: Store away from incompatible materials (see Section 10). Store at ambient temperatures. Keep container securely closed when not in use. Label precautions also apply to empty container. Recondition or dispose of empty containers in accordance with government regulations. For Industrial use only.
Do not freeze. Store above Freeze Point. If freezes, then product is unusable.

Section 8. Exposure Controls/Personal Protection

Exposure Limits

Component	Source	Exposure Limits
Components not listed are either non hazardous or in concentration of less than 1%	N/E	N/E

Engineering Controls: Use only with adequate ventilation. The use of local ventilation is recommended to control emission near the source.

Personal Protection

Eyes: Safety glasses are recommended if risk of eye contact.

Skin: Wear butyl rubber or neoprene gloves. Wash them after each use and replace as necessary. If conditions warrant, wear protective clothing such as boots, aprons, and coveralls to prevent skin contact.

Respiratory: If misting occurs, use NIOSH approved organic vapor/acid gas dual cartridge respirator with a dust/mist prefilter in accordance with 29 CFR 1910.134.

Section 9. Physical and Chemical Properties

Physical State and Appearance:	Liquid, White, Opaque
Specific Gravity:	1.006 @ 20°C
pH:	5.9 @ 20°C, 100.0%
Freezing Point:	34°F
Flash Point:	N/D
Odor:	Mild
Melting Point:	N/A
Initial Boiling Point and Boiling Range:	N/D
Solubility in Water:	Dispersible
Evaporation Rate:	N/D
Vapor Density:	N/D
Molecular Weight:	N/D
Viscosity:	1200 − 3200 CPS @ 20°C
Flammability (solid, gas):	N/D
Flammable Limits:	N/A
Autoignition Temperature:	N/A
Density:	8.39 LB/GA
Vapor Pressure:	N/D
% VOC:	0
Odor Threshold	N/D
n−octanol Partition Coefficient	N/D
Decomposition Temperature	N/D

Section 10. Stability and Reactivity

Chemical Stability: Stable at normal temperatures and pressures.

Incompatibility with Various Substances: Strong acids, Strong oxidizers.

Hazardous Decomposition Products: Oxides of carbon, Oxides of silicon.

Possibility of Hazardous Reactions: None known.

Reactivity: N/D

Conditions To Avoid: N/D

Section 11. Toxicological Information

Acute Toxicity

Chemical Name	Exposure	Type of Effect	Concentration	Species
N/D	N/D	N/D	N/D	N/D

Carcinogenicity Category

Component	Source	Code	Brief Description
Components not listed are either non hazardous or in concentration of less than 1%	N/E	N/E	N/E

Likely Routes of Exposure: N/D

Symptoms

Inhalation: N/D

Eye Contact: N/D

Skin Contact: N/D

Ingestion: N/D

Skin Corrosion/Irritation: N/D

Serious Eye Damage/Eye Irritation: N/D

Sensitization: N/D

Germ Cell Mutagenicity: N/D

Reproductive/Developmental Toxicity: N/D

Specific Target Organ Toxicity

Single Exposure: N/D

Repeated Exposure: N/D

Aspiration Hazard: N/D

Comments: None.

Section 12. Ecological Information

Ecotoxicity

Species	Duration	Type of Effect	Test Results
Daphnia magna	48h	LC50	6000 mg/l
Fathead Minnow	96h	LC50	8600 mg/l
Sheepshead Minnow	96h	LC50	>1000 mg/l
Mysid Shrimp	48h	LC50	>1000 mg/l

Persistence and Biodegradability: N/D

Bioaccumulative Potential: N/D

Mobility In Soil: N/D

Other Adverse Effects: N/D

Comments: None.

Section 13. Disposal Considerations

Dispose of in accordance with local, state and federal regulations.
Not a RCRA−regulated hazardous waste when disposed in the original product form.

Section 14. Transport Information

Controlling Regulation	UN/NA#:	Proper Shipping Name:	Technical Name:	Hazard Class:	Packing Group:
DOT	N/A	COMPOUND, INDUSTRIAL WATER TREATMENT, LIQUID	N/A	N/A	N/A
IMDG	N/A	COMPOUND, INDUSTRIAL WATER TREATMENT, LIQUID	N/A	N/A	N/A
TDG	N/A	COMPOUND, INDUSTRIAL WATER TREATMENT, LIQUID	N/A	N/A	N/A
ICAO	N/A	COMPOUND, INDUSTRIAL WATER TREATMENT, LIQUID	N/A	N/A	N/A

Note: N/A

Section 15. Regulatory Information

Inventory Status

United States (TSCA): All ingredients listed.
Canada (DSL/NDSL): All ingredients listed.

Federal Regulations

SARA Title III Rules

Sections 311/312 Hazard Classes

Fire Hazard: No
Reactive Hazard: No
Release of Pressure: No
Acute Health Hazard: Yes
Chronic Health Hazard: No

Other Sections

Component	Section 313 Toxic Chemical	Section 302 EHS TPQ	CERCLA RQ
Components not listed are either non hazardous or in concentration of less than 1%	N/A	N/A	N/A

Comments: None.

State Regulations

California Proposition 65: None known.

Special Regulations

Component	States
Components not listed are either non hazardous or in concentration of less than 1%	None.

International Regulations

Canada

WHMIS Classification: N/A

Controlled Product Regulations (CPR): N/A

Compliance Information

NSF: N/A

Food Regulations: N/A

KOSHER: This product has not been evaluated for Kosher approval.

Halal: This product has not been evaluated for Halal approval.

FIFRA: N/A

Other: None

Comments: None.

Section 16. Other Information

HMIS Hazard Rating

Health: 0
Flammability: 0
Physical Hazard: 0
PPE: X

Notes: The PPE rating depends on circumstances of use. See Section 8 for recommended PPE.
The Hazardous Material Information System (HMIS) is a voluntary, subjective alpha−numeric symbolic system for recommending hazard risk and personal protection equipment information. It is a subjective rating system based on the evaluator's understanding of the chemical associated risks. The end−user must determine if the code is appropriate for their use.

Abbreviations

Abbreviation	Definition
<	Less Than
>	Greater Than
ACGIH	American Conference of Governmental Industrial Hygienists
EHS	Environmental Health and Safety Dept
N/A	Not Applicable
N/D	Not Determined
N/E	Not Established
OSHA	Occupational Health and Safety Dept
PEL	Personal Exposure Limit
STEL	Short Term Exposure Limit
TLV	Threshold Limit Value

Abbreviation	Definition
TWA	Time Weight Average
UNK	Unknown

Prepared by: Product Compliance Department; ProductCompliance@chemtreat.com

Revision Date: February 8, 2018

Disclaimer

BRENNTAG

SAFETY DATA SHEET

1. Identification

Product identifier SULFURIC ACID 98%

Other means of identification None.

Recommended use ALL PROPER AND LEGAL PURPOSES

Recommended restrictions None known.

Manufacturer/Importer/Supplier/Distributor information

Manufacturer

Company name Brenntag Southwest, Inc.

Address 610 Fisher Road
Longview, TX 75604

Telephone 903-759-7151

E-mail Not available.

Emergency phone number 800-424-9300 CHEMTREC

2. Hazard(s) identification

Physical hazards Not classified.

Health hazards

Acute toxicity, inhalation	Category 2
Skin corrosion/irritation	Category 1A
Serious eye damage/eye irritation	Category 1

Environmental hazards

Hazardous to the aquatic environment, acute hazard	Category 3
Hazardous to the aquatic environment, long-term hazard	Category 3

OSHA defined hazards Not classified.

Label elements

Signal word Danger

Hazard statement Causes severe skin burns and eye damage. Causes serious eye damage. Fatal if inhaled. Harmful to aquatic life. Harmful to aquatic life with long lasting effects.

Precautionary statement

Prevention Do not breathe vapor. Wash thoroughly after handling. Use only outdoors or in a well-ventilated area. Avoid release to the environment. Wear eye protection/face protection. Wear protective gloves/protective clothing/eye protection/face protection. Wear respiratory protection.

Response If swallowed: Rinse mouth. Do NOT induce vomiting. If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. If inhaled: Remove person to fresh air and keep comfortable for breathing. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center/doctor. Specific treatment is urgent (see this label). Wash contaminated clothing before reuse.

Storage Store in a well-ventilated place. Keep container tightly closed. Store locked up.

Disposal Dispose of contents/container in accordance with local/regional/national/international regulations.

Hazard(s) not otherwise classified (HNOC) None known.

Supplemental information 15% of the mixture consists of component(s) of unknown acute inhalation toxicity. 15% of the mixture consists of component(s) of unknown acute hazards to the aquatic environment. 15% of the mixture consists of component(s) of unknown long-term hazards to the aquatic environment.

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
SULFURIC ACID		7664-93-9	85
Other components below reportable levels			15

*Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. First-aid measures

Inhalation Remove victim to fresh air and keep at rest in a position comfortable for breathing. Oxygen or artificial respiration if needed. Do not use mouth-to-mouth method if victim inhaled the substance. Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Call a physician or poison control center immediately.

Skin contact Take off immediately all contaminated clothing. Rinse skin with water/shower. Call a physician or poison control center immediately. Chemical burns must be treated by a physician. Wash contaminated clothing before reuse.

Eye contact Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician or poison control center immediately.

Ingestion Call a physician or poison control center immediately. Rinse mouth. Do not induce vomiting. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs.

Most important symptoms/effects, acute and delayed Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result.

Indication of immediate medical attention and special treatment needed Provide general supportive measures and treat symptomatically. Chemical burns: Flush with water immediately. While flushing, remove clothes which do not adhere to affected area. Call an ambulance. Continue flushing during transport to hospital. Keep victim warm. Keep victim under observation. Symptoms may be delayed.

General information Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance.

5. Fire-fighting measures

Suitable extinguishing media Powder. Foam. Carbon dioxide (CO_2).

Unsuitable extinguishing media Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from the chemical During fire, gases hazardous to health may be formed.

Special protective equipment and precautions for firefighters Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Fire fighting equipment/instructions Move containers from fire area if you can do so without risk.

Specific methods Use standard firefighting procedures and consider the hazards of other involved materials.

General fire hazards No unusual fire or explosion hazards noted.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Do not breathe vapors or spray mist. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

Methods and materials for containment and cleaning up Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Absorb in vermiculite, dry sand or earth and place into containers. Prevent product from entering drains. Following product recovery, flush area with water.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.

Environmental precautions Avoid release to the environment. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground. Inform appropriate managerial or supervisory personnel of all environmental releases.

7. Handling and storage

Precautions for safe handling Do not breathe vapors or spray mist. Do not get in eyes, on skin, or on clothing. Avoid prolonged exposure. Use only outdoors or in a well-ventilated area. Wear appropriate personal protective equipment. Avoid release to the environment. Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities Store locked up. Store in original tightly closed container. Store in a well-ventilated place. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

Occupational exposure limits

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value
SULFURIC ACID (CAS 7664-93-9)	PEL	1 mg/m3

US. ACGIH Threshold Limit Values

Components	Type	Value	Form
SULFURIC ACID (CAS 7664-93-9)	TWA	0.2 mg/m3	Thoracic fraction.

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value
SULFURIC ACID (CAS 7664-93-9)	TWA	1 mg/m3

Biological limit values No biological exposure limits noted for the ingredient(s).

Appropriate engineering controls Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Eye wash facilities and emergency shower must be available when handling this product.

Individual protection measures, such as personal protective equipment

Eye/face protection Chemical respirator with organic vapor cartridge and full facepiece.

Skin protection

Hand protection Wear appropriate chemical resistant gloves. Suitable gloves can be recommended by the glove supplier.

Other Wear appropriate chemical resistant clothing. Use of an impervious apron is recommended.

Respiratory protection Chemical respirator with organic vapor cartridge and full facepiece.

Thermal hazards Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. Physical and chemical properties

Appearance

Physical state Liquid.

Form Liquid.

Color CLEAR PALE YELLOW

Odor ODORLESS

Odor threshold Not available.

pH Not available.

Melting point/freezing point 50.56 °F (10.31 °C) estimated

Initial boiling point and boiling range 554 °F (290 °C) estimated

Flash point Not available.

Evaporation rate Not available.

Flammability (solid, gas) Not applicable.

Upper/lower flammability or explosive limits

Flammability limit - lower (%) Not available.

Flammability limit - upper (%) Not available.

Explosive limit - lower (%) Not available.

Explosive limit - upper (%) Not available.

Vapor pressure 0.00008 hPa estimated

Vapor density Not available.

Relative density Not available.

Solubility(ies)

Solubility (water) Not available.

Partition coefficient (n-octanol/water) Not available.

Auto-ignition temperature Not available.

Decomposition temperature Not available.

Viscosity Not available.

Other information

Density 15.40 lbs/gal

Explosive properties Not explosive.

Oxidizing properties Not oxidizing.

Specific gravity 1.85

10. Stability and reactivity

Reactivity The product is stable and non-reactive under normal conditions of use, storage and transport.

Chemical stability Material is stable under normal conditions.

Possibility of hazardous reactions Hazardous polymerization does not occur.

Conditions to avoid Contact with incompatible materials.

Incompatible materials Strong oxidizing agents.

Hazardous decomposition products No hazardous decomposition products are known.

11. Toxicological information

Information on likely routes of exposure

Inhalation Fatal if inhaled.

Skin contact Causes severe skin burns.

Eye contact Causes serious eye damage.

Ingestion Causes digestive tract burns.

Symptoms related to the physical, chemical and toxicological characteristics Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result.

Information on toxicological effects

Acute toxicity Fatal if inhaled.

Components	Species	Test Results
SULFURIC ACID (CAS 7664-93-9)		
Acute		
Inhalation		
LC50	Guinea pig	0.018 mg/l, 8 Hours
	Rat	347 mg/l, 1 Hours

* Estimates for product may be based on additional component data not shown.

Skin corrosion/irritation Causes severe skin burns and eye damage.

Serious eye damage/eye irritation Causes serious eye damage.

Respiratory or skin sensitization

Respiratory sensitization Not a respiratory sensitizer.

Skin sensitization This product is not expected to cause skin sensitization.

Germ cell mutagenicity No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

Carcinogenicity This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

Reproductive toxicity This product is not expected to cause reproductive or developmental effects.

Specific target organ toxicity - single exposure Not classified.

Specific target organ toxicity - repeated exposure Not classified.

Aspiration hazard Not an aspiration hazard.

Chronic effects Prolonged inhalation may be harmful.

12. Ecological information

Ecotoxicity Harmful to aquatic life with long lasting effects.

Components	Species	Test Results
SULFURIC ACID (CAS 7664-93-9)		
Aquatic		
Fish	LC50	Western mosquitofish (Gambusia affinis) 42 mg/l, 96 hours

* Estimates for product may be based on additional component data not shown.

Persistence and degradability No data is available on the degradability of this product.

Bioaccumulative potential No data available.

Mobility in soil No data available.

Other adverse effects No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

Disposal instructions Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations.

Local disposal regulations Dispose in accordance with all applicable regulations.

Hazardous waste code The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

Waste from residues / unused products Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

Contaminated packaging Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transport information

DOT

UN number UN1830

UN proper shipping name SULFURIC ACID

Transport hazard class(es)

Class 8

Subsidiary risk -

Packing group II

Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

ERG number 137

DOT information on packaging may be different from that listed.

DOT

15. Regulatory information

US federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.
One or more components are not listed on TSCA.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

SULFURIC ACID (CAS 7664-93-9) Listed.

SARA 304 Emergency release notification

SULFURIC ACID (CAS 7664-93-9) 1000 LBS

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories Immediate Hazard - Yes
Delayed Hazard - No
Fire Hazard - No
Pressure Hazard - No
Reactivity Hazard - No

SARA 302 Extremely hazardous substance

Chemical name	CAS number	Reportable quantity	Threshold planning quantity	Threshold planning quantity, lower value	Threshold planning quantity, upper value
SULFURIC ACID	7664-93-9	1000	1000 lbs		

SARA 311/312 Hazardous chemical No

SARA 313 (TRI reporting)

Chemical name	CAS number	% by wt.
SULFURIC ACID	7664-93-9	85

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act (SDWA) Not regulated.

Drug Enforcement Administration (DEA). List 2, Essential Chemicals (21 CFR 1310.02(b) and 1310.04(f)(2) and Chemical Code Number

SULFURIC ACID (CAS 7664-93-9) 6552

Drug Enforcement Administration (DEA). List 1 & 2 Exempt Chemical Mixtures (21 CFR 1310.12(c))

SULFURIC ACID (CAS 7664-93-9) 20 %WV

DEA Exempt Chemical Mixtures Code Number

SULFURIC ACID (CAS 7664-93-9) 6552

US state regulations

US. California Controlled Substances. CA Department of Justice (California Health and Safety Code Section 11100)

Not listed.

US. Massachusetts RTK - Substance List

SULFURIC ACID (CAS 7664-93-9)

US. New Jersey Worker and Community Right-to-Know Act

SULFURIC ACID (CAS 7664-93-9)

US. Pennsylvania Worker and Community Right-to-Know Law

SULFURIC ACID (CAS 7664-93-9)

US. Rhode Island RTK

SULFURIC ACID (CAS 7664-93-9)

US. California Proposition 65

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	No
Canada	Domestic Substances List (DSL)	No
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	No
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	No
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	No
New Zealand	New Zealand Inventory	No
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	No

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)
A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision

Issue date 05-09-2015

Revision date 07-10-2015

Version # 03

HMIS® ratings Health: 4
Flammability: 0
Physical hazard: 0

NFPA ratings Health: 4
Flammability: 0
Instability: 0

Disclaimer While Brenntag believes the information contained herein to be accurate, Brenntag makes no representation or warranty, express or implied, regarding, and assumes no liability for, the accuracy or completeness of the information. The Buyer assumes all responsibility for handling, using and/or reselling the Product in accordance with applicable federal, state, and local law. This SDS shall not in any way limit or preclude the operation and effect of any of the provisions of Brenntag's terms and conditions of sale.

Revision Information Fire-fighting measures: Special protective equipment and precautions for firefighters
Handling and storage: Precautions for safe handling
Handling and storage: Conditions for safe storage, including any incompatibilities
Stability and reactivity: Conditions to avoid
Other information, including date of preparation or last revision: Disclaimer

BRENNTAG

SAFETY DATA SHEET

1. Identification

Product identifier **SODIUM HYPOCHLORITE 12.5%**

Other means of identification None.

Recommended use ALL PROPER AND LEGAL PURPOSES

Recommended restrictions None known.

Manufacturer/Importer/Supplier/Distributor information

Manufacturer

Company name Brenntag Mid-South, Inc.

Address 1405 Highway 136, West
Henderson, KY 42420

Telephone 270-830-1222

E-mail Not available.

Emergency phone number 800-424-9300 CHEMTREC

2. Hazard(s) identification

Physical hazards Not classified.

Health hazards Skin corrosion/irritation Category 1
Serious eye damage/eye irritation Category 1

Environmental hazards Not classified.

OSHA defined hazards Not classified.

Label elements

Signal word Danger

Hazard statement Causes severe skin burns and eye damage. Causes serious eye damage.

Precautionary statement

Prevention Do not breathe mist or vapor. Wash thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection.

Response If swallowed: Rinse mouth. Do NOT induce vomiting. If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. If inhaled: Remove person to fresh air and keep comfortable for breathing. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center/doctor. Wash contaminated clothing before reuse.

Storage Store locked up.

Disposal Dispose of contents/container in accordance with local/regional/national/international regulations.

Hazard(s) not otherwise classified (HNOC) None known.

Supplemental information None.

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
HYPOCHLOROUS ACID, SODIUM SALT (1:1)		7681-52-9	12.5
SODIUM HYDROXIDE (NA(OH))		1310-73-2	0.7
Other components below reportable levels			86.8

*Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. First-aid measures

Inhalation Move to fresh air. Call a physician if symptoms develop or persist.

Skin contact Take off immediately all contaminated clothing. Rinse skin with water/shower. Call a physician or poison control center immediately. Chemical burns must be treated by a physician. Wash contaminated clothing before reuse.

Eye contact Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician or poison control center immediately.

Ingestion Call a physician or poison control center immediately. Rinse mouth. Do not induce vomiting. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs.

Most important symptoms/effects, acute and delayed Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result.

Indication of immediate medical attention and special treatment needed Provide general supportive measures and treat symptomatically. Chemical burns: Flush with water immediately. While flushing, remove clothes which do not adhere to affected area. Call an ambulance. Continue flushing during transport to hospital. Keep victim under observation. Symptoms may be delayed.

General information Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

5. Fire-fighting measures

Suitable extinguishing media Foam. Powder. Carbon dioxide (CO_2).

Unsuitable extinguishing media Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from the chemical During fire, gases hazardous to health may be formed.

Special protective equipment and precautions for firefighters Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Fire fighting equipment/instructions Move containers from fire area if you can do so without risk.

Specific methods Use standard firefighting procedures and consider the hazards of other involved materials.

General fire hazards No unusual fire or explosion hazards noted.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Do not breathe mist or vapor. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

Methods and materials for containment and cleaning up Use water spray to reduce vapors or divert vapor cloud drift. Prevent entry into waterways, sewer, basements or confined areas.

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.

Environmental precautions Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling Do not breathe mist or vapor. Do not get in eyes, on skin, or on clothing. Avoid prolonged exposure. Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities Store locked up. Store in original tightly closed container. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

Occupational exposure limits

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value
SODIUM HYDROXIDE (NA(OH)) (CAS 1310-73-2)	PEL	2 mg/m3

US. ACGIH Threshold Limit Values

Components	Type	Value
SODIUM HYDROXIDE (NA(OH)) (CAS 1310-73-2)	Ceiling	2 mg/m3

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value
SODIUM HYDROXIDE (NA(OH)) (CAS 1310-73-2)	Ceiling	2 mg/m3

US. Workplace Environmental Exposure Level (WEEL) Guides

Components	Type	Value
HYPOCHLOROUS ACID, SODIUM SALT (1:1) (CAS 7681-52-9)	STEL	2 mg/m3

Biological limit values No biological exposure limits noted for the ingredient(s).

Appropriate engineering controls Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Eye wash facilities and emergency shower must be available when handling this product.

Individual protection measures, such as personal protective equipment

Eye/face protection Wear safety glasses with side shields (or goggles) and a face shield.

Skin protection

Hand protection Wear appropriate chemical resistant gloves. Suitable gloves can be recommended by the glove supplier.

Other Wear appropriate chemical resistant clothing.

Respiratory protection In case of insufficient ventilation, wear suitable respiratory equipment.

Thermal hazards Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. Physical and chemical properties

Appearance

Physical state	Liquid.
Form	Liquid.
Color	CLEAR PALE YELLOW
Odor	CHLORINE
Odor threshold	Not available.
pH	11.5 - 13.5
Melting point/freezing point	-3 °F (-19.44 °C)
Initial boiling point and boiling range	230.55 °F (110.3 °C) estimated
Flash point	Not available.
Evaporation rate	Not available.
Flammability (solid, gas)	Not applicable.

Upper/lower flammability or explosive limits

Flammability limit - lower (%)	Not available.
Flammability limit - upper (%)	Not available.
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	Not available.
Vapor density	Not available.
Relative density	Not available.
Solubility(ies)	
Solubility (water)	Not available.
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	Not available.
Other information	
Density	10.00 lbs/gal
Explosive properties	Not explosive.
Oxidizing properties	Not oxidizing.
Percent volatile	86.8 % estimated
Specific gravity	1.2

10. Stability and reactivity

Reactivity Reacts violently with strong acids. This product may react with oxidizing agents.

Chemical stability Material is stable under normal conditions.

Possibility of hazardous reactions Hazardous polymerization does not occur.

Conditions to avoid Contact with incompatible materials. Do not mix with other chemicals.

Incompatible materials Acids. Oxidizing agents.

Hazardous decomposition products No hazardous decomposition products are known.

11. Toxicological information

Information on likely routes of exposure

Inhalation May cause irritation to the respiratory system. Prolonged inhalation may be harmful.

Skin contact Causes severe skin burns.

Eye contact Causes serious eye damage.

Ingestion Causes digestive tract burns.

Symptoms related to the physical, chemical and toxicological characteristics Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result.

Information on toxicological effects

Acute toxicity Not available.

Skin corrosion/irritation Causes severe skin burns and eye damage.

Serious eye damage/eye irritation Causes serious eye damage.

Respiratory or skin sensitization

Respiratory sensitization Not a respiratory sensitizer.

Skin sensitization This product is not expected to cause skin sensitization.

Germ cell mutagenicity No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

Carcinogenicity This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.

IARC Monographs. Overall Evaluation of Carcinogenicity

Not available.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

US. National Toxicology Program (NTP) Report on Carcinogens

Not available.

Reproductive toxicity This product is not expected to cause reproductive or developmental effects.

Specific target organ toxicity - single exposure Not classified.

Specific target organ toxicity - repeated exposure Not classified.

Aspiration hazard Not an aspiration hazard.

Chronic effects Prolonged inhalation may be harmful.

12. Ecological information

Ecotoxicity The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Components		Species	Test Results
HYPOCHLOROUS ACID, SODIUM SALT (1:1) (CAS 7681-52-9)			
Aquatic			
Fish	LC50	Chinook salmon (Oncorhynchus tshawytscha)	0.038 - 0.065 mg/l, 96 hours
SODIUM HYDROXIDE (NA(OH)) (CAS 1310-73-2)			
Aquatic			
Crustacea	EC50	Water flea (Ceriodaphnia dubia)	34.59 - 47.13 mg/l, 48 hours
Fish	LC50	Western mosquitofish (Gambusia affinis)	125 mg/l, 96 hours

* Estimates for product may be based on additional component data not shown.

Persistence and degradability No data is available on the degradability of this product.

Bioaccumulative potential No data available.

Mobility in soil No data available.

Other adverse effects No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

Disposal instructions Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of contents/container in accordance with local/regional/national/international regulations.

Local disposal regulations Dispose in accordance with all applicable regulations.

Hazardous waste code The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

Waste from residues / unused products Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

Contaminated packaging Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transport information

DOT

UN number	UN1791
UN proper shipping name	HYPOCHLORITE SOLUTIONS
Transport hazard class(es)	
Class	8
Subsidiary risk	-
Packing group	III
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.
ERG number	154

DOT information on packaging may be different from that listed.

DOT

General information IMDG Regulated Marine Pollutant.

15. Regulatory information

US federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

HYPOCHLOROUS ACID, SODIUM SALT (1:1) (CAS 7681-52-9) Listed.
SODIUM HYDROXIDE (NA(OH)) (CAS 1310-73-2) Listed.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories Immediate Hazard - Yes
Delayed Hazard - No
Fire Hazard - No
Pressure Hazard - No
Reactivity Hazard - No

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous chemical Yes

SARA 313 (TRI reporting)

Not regulated.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act (SDWA) Not regulated.

US state regulations

US. California Controlled Substances. CA Department of Justice (California Health and Safety Code Section 11100)

Not listed.

US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))

SODIUM HYDROXIDE (NA(OH)) (CAS 1310-73-2)

US. Massachusetts RTK - Substance List

HYPOCHLOROUS ACID, SODIUM SALT (1:1) (CAS 7681-52-9)
SODIUM HYDROXIDE (NA(OH)) (CAS 1310-73-2)

US. New Jersey Worker and Community Right-to-Know Act

HYPOCHLOROUS ACID, SODIUM SALT (1:1) (CAS 7681-52-9)
SODIUM HYDROXIDE (NA(OH)) (CAS 1310-73-2)

US. Pennsylvania Worker and Community Right-to-Know Law

HYPOCHLOROUS ACID, SODIUM SALT (1:1) (CAS 7681-52-9)
SODIUM HYDROXIDE (NA(OH)) (CAS 1310-73-2)

US. Rhode Island RTK

HYPOCHLOROUS ACID, SODIUM SALT (1:1) (CAS 7681-52-9)
SODIUM HYDROXIDE (NA(OH)) (CAS 1310-73-2)

US. California Proposition 65

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)
A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision

Issue date 06-06-2015

Revision date 03-30-2016

Version # 27

HMIS® ratings Health: 3
Flammability: 0
Physical hazard: 0

NFPA ratings Health: 3
Flammability: 0
Instability: 0

Disclaimer While Brenntag believes the information contained herein to be accurate, Brenntag makes no representation or warranty, express or implied, regarding, and assumes no liability for, the accuracy or completeness of the information. The Buyer assumes all responsibility for handling, using and/or reselling the Product in accordance with applicable federal, state, and local law. This SDS shall not in any way limit or preclude the operation and effect of any of the provisions of Brenntag's terms and conditions of sale.

ChemTreat

SDS

SAFETY DATA SHEET

Section 1. Chemical Product and Company Identification

Product Name: ChemTreat CL4428
Product Use: Cooling Water Treatment
Supplier's Name: ChemTreat, Inc.
Emergency Telephone Number: (800)424−9300 (Toll Free)
Address (Corporate Headquarters): 5640 Cox Road
Glen Allen, VA 23060
Telephone Number for Information: (800)648−4579
Date of SDS: May 9, 2016
Revision Date: May 9, 2016
Revision Number: 16050901AN

Section 2. Hazard(s) Identification

Signal Word: **None**

GHS Classification(s): Non−Hazardous Substance

Hazard Statement(s): Non−Hazardous Substance

Precautionary Statement(s): No significant health risks are expected from exposures under normal conditions of use.

Prevention: None.

Response: None.

Storage: None.

Disposal: None.

System of Classification Used: Classification under 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200).

Hazards Not Otherwise Classified: None.

ChemTreat

SDS

Section 3. Composition/Hazardous Ingredients

Component	CAS Registry #	Wt.%
Components not listed are either non hazardous or in concentration of less than 1%	N/A	N/A

Comments If chemical identity and/or exact percentage of composition has been withheld, this information is considered to be a trade secret.

Section 4. First Aid Measures

Inhalation: Call a POISON CENTER or doctor/physician if you feel unwell.

Eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists, get medical advice/attention.

Skin: Call a poison center or doctor/physician if you feel unwell.

Ingestion: Rinse mouth. Call a poison center or doctor/physician if you feel unwell.

Most Important Symptoms: N/D

Indication of Immediate Medical Attention and Special Treatment Needed, If Necessary: N/A

Section 5. Fire Fighting Measures

Flammability of the Product: Not flammable.

Suitable Extinguishing Media: Use extinguishing media suitable to surrounding fire.

Specific Hazards Arising from the Chemical: None known.

Protective Equipment: If product is involved in a fire, wear full protective clothing including a positive−pressure, NIOSH approved, self−contained breathing apparatus.

Section 6. Accidental Release Measures

Personal Precautions: Wear a self−contained breathing apparatus and appropriate Personal Protective Equipment (PPE).

Environmental Precautions: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains, and sewers.

Methods for Cleaning up: Contain and recover liquid when possible. Flush spill area with water spray.

Other Statements: None.

Section 7. Handling and Storage

Handling: Wear appropriate Personal Protective Equipment (PPE) when handling this product. Do not get in eyes, or on skin and clothing. Wash thoroughly after handling. Do not ingest. Avoid breathing vapors, mist or dust.

Storage: Store away from incompatible materials (see Section 10). Store at ambient temperatures. Keep container securely closed when not in use. Label precautions also apply to empty container. Recondition or dispose of empty containers in accordance with government regulations. For Industrial use only.
Store above Freeze Point.

Section 8. Exposure Controls/Personal Protection

Exposure Limits

Component	Source	Exposure Limits
Components not listed are either non hazardous or in concentration of less than 1%	N/E	N/E

Engineering Controls: Use only with adequate ventilation. The use of local ventilation is recommended to control emission near the source.

Personal Protection

Eyes: Safety glasses are recommended if risk of eye contact.

Skin: Wear butyl rubber or neoprene gloves. Wash them after each use and replace as necessary. If conditions warrant, wear protective clothing such as boots, aprons, and coveralls to prevent skin contact.

Respiratory: If misting occurs, use NIOSH approved organic vapor/acid gas dual cartridge respirator with a dust/mist prefilter in accordance with 29 CFR 1910.134.

Section 9. Physical and Chemical Properties

Physical State and Appearance:	Liquid, Straw, Clear
Specific Gravity:	1.151 @ 20°C
pH:	4.4 @ 20°C, 100.0%
Freezing Point:	34°F
Flash Point:	N/D
Odor:	Mild
Melting Point:	N/D
Initial Boiling Point and Boiling Range:	N/D
Solubility in Water:	Complete
Evaporation Rate:	N/D
Vapor Density:	Similar to water
Molecular Weight:	N/D
Viscosity:	<100 CPS @ 20°C
Flammability (solid, gas):	N/D
Flammable Limits:	N/A
Autoignition Temperature:	N/A
Density:	9.60 LB/GA
Vapor Pressure:	Similar to water
% VOC:	0
Odor Threshold	N/D
n−octanol Partition Coefficient	N/D
Decomposition Temperature	N/D

Section 10. Stability and Reactivity

Chemical Stability: Stable at normal temperatures and pressures.

Incompatibility with Various Substances: Strong oxidizers, Strong bases.

Hazardous Decomposition Products: Oxides of carbon.

Possibility of Hazardous Reactions: None known.

Reactivity: N/D

Conditions To Avoid: N/D

Section 11. Toxicological Information

Acute Toxicity

Chemical Name	Exposure	Type of Effect	Concentration	Species
N/D	N/D	N/D	N/D	N/D

Carcinogenicity Category

Component	Source	Code	Brief Description
Components not listed are either non hazardous or in concentration of less than 1%	N/E	N/E	N/E

Likely Routes of Exposure: N/D

Symptoms

Inhalation: N/D

Eye Contact: N/D

Skin Contact: N/D

Ingestion: N/D

Skin Corrosion/Irritation: N/D

Serious Eye Damage/Eye Irritation: N/D

Sensitization: N/D

Germ Cell Mutagenicity: N/D

Reproductive/Developmental Toxicity: N/D

Specific Target Organ Toxicity

Single Exposure: N/D

Repeated Exposure: N/D

Aspiration Hazard: N/D

Comments: None.

Section 12. Ecological Information

Ecotoxicity

Species	Duration	Type of Effect	Test Results
Bluegill Sunfish	96h	LC50	>1000 mg/l
Rainbow Trout	96h	LC50	>1000 mg/l
Daphnia magna	48h	EC50	>1000 mg/l
Mysid Shrimp	48h	LC50	>1000 mg/l
Inland Silverside	96h	LC50	>1000 mg/l
Algae	96h	EC50	58 mg/l
Ceriodaphnia dubia	48h	LC50	888 mg/l
Fathead Minnow	96h	LC50	3314 mg/l

Persistence and Biodegradability: N/D

Bioaccumulative Potential: N/D

Mobility In Soil: N/D

Other Adverse Effects: N/D

Comments: None.

Section 13. Disposal Considerations

Dispose of in accordance with local, state and federal regulations.
Not a RCRA−regulated hazardous waste when disposed in the original product form.

Section 14. Transport Information

Controlling Regulation	UN/NA#:	Proper Shipping Name:	Technical Name:	Hazard Class:	Packing Group:
DOT	N/A	COMPOUND, INDUSTRIAL WATER TREATMENT, LIQUID	N/A	N/A	N/A
IMDG	N/A	COMPOUND, INDUSTRIAL WATER TREATMENT, LIQUID	N/A	N/A	N/A
TDG	N/A	COMPOUND, INDUSTRIAL WATER TREATMENT, LIQUID	N/A	N/A	N/A
ICAO	N/A	COMPOUND, INDUSTRIAL WATER TREATMENT, LIQUID	N/A	N/A	N/A

Note: N/A

Section 15. Regulatory Information

Inventory Status

United States (TSCA): All ingredients listed.
Canada (DSL/NDSL): All ingredients listed.

Federal Regulations

SARA Title III Rules

Sections 311/312 Hazard Classes

Fire Hazard: No
Reactive Hazard: No
Release of Pressure: No
Acute Health Hazard: Yes
Chronic Health Hazard: No

Other Sections

Component	Section 313 Toxic Chemical	Section 302 EHS TPQ	CERCLA RQ
Components not listed are either non hazardous or in concentration of less than 1%	N/A	N/A	N/A

Comments: None.

State Regulations

California Proposition 65: None known.

Special Regulations

Component	States
Components not listed are either non hazardous or in concentration of less than 1%	None.

International Regulations

Canada

WHMIS Classification: N/A

Controlled Product Regulations (CPR): N/A

Compliance Information

NSF: N/A

Food Regulations: N/A

KOSHER: This product is certified by the Orthodox Union as kosher pareve.
Only when prepared by the following ChemTreat facilities: Ashland, VA; Eldridge, IA; Nederland, TX; Vernon, CA.

FIFRA: N/A

Other: None

Comments: None.

Section 16. Other Information

HMIS Hazard Rating

Health: 0
Flammability: 0
Physical Hazard: 0
PPE: X

Notes: The PPE rating depends on circumstances of use. See Section 8 for recommended PPE.
The Hazardous Material Information System (HMIS) is a voluntary, subjective alpha−numeric symbolic system for recommending hazard risk and personal protection equipment information. It is a subjective rating system based on the evaluator's understanding of the chemical associated risks. The end−user must determine if the code is appropriate for their use.

Abbreviations

Abbreviation	Definition
<	Less Than
>	Greater Than
ACGIH	American Conference of Governmental Industrial Hygienists
EHS	Environmental Health and Safety Dept
N/A	Not Applicable
N/D	Not Determined
N/E	Not Established
OSHA	Occupational Health and Safety Dept
PEL	Personal Exposure Limit
STEL	Short Term Exposure Limit

Abbreviation	Definition
TLV	Threshold Limit Value
TWA	Time Weight Average
UNK	Unknown

Prepared by: Product Compliance Department; ProductCompliance@chemtreat.com

Revision Date: May 9, 2016

Disclaimer

SAFETY DATA SHEET

Section 1. Chemical Product and Company Identification

Product Name:	ChemTreat BL124
Product Use:	Boiler Water Treatment
Supplier's Name:	ChemTreat, Inc.
Emergency Telephone Number:	(800)424−9300 (Toll Free)
Address (Corporate Headquarters):	5640 Cox Road Glen Allen, VA 23060
Telephone Number for Information:	(800)648−4579
Date of SDS:	March 20, 2017
Revision Date:	March 20, 2017
Revision Number:	17032001AN

Section 2. Hazard(s) Identification

Signal Word: **DANGER**

GHS Classification(s):
Corrosive to Metals − Category 1
Respiratory sensitization − Category 1
Sensitization Skin − Category 1
Skin corrosion/irritation − Category 2
Eye damage/irritation − Category 2a

Hazard Statement(s):
H290 May be corrosive to metals.
H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H317 May cause an allergic skin reaction.
H315 Causes skin irritation.
H319 Causes serious eye irritation.

Precautionary Statement(s): Sulphites may cause sensitization to susceptible individuals.

Prevention:
P234 Keep only in original container.
P260 Do not breathe dust/fume/gas/mist/vapors/spray.
P264 Wash thoroughly after handling.
P272 Contaminated work clothing should not be allowed out of the workplace.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P284 Wear respiratory protection.

Response:
P302 + P352 IF ON SKIN: Wash with plenty of soap and water.
P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337 + P313 If eye irritation persists, get medical advice/attention.
P333 + P313 If skin irritation or rash occurs: Get medical advice/attention.
P342 + P311 If experiencing respiratory symptoms: Call a POISON CENTER/doctor.
P362 + P364 Take off contaminated clothing and wash it before reuse.
P390 Absorb spillage to prevent material damage.

Storage: P406 Store in a corrosive resistant container with a resistant inner liner.

Disposal: P501 Dispose of contents and container in accordance with applicable local, regional, national, and/or international regulations.

System of Classification Used: Classification under 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200).

Hazards Not Otherwise Classified: None.

Section 3. Composition/Hazardous Ingredients

Component	CAS Registry #	Wt.%
Sodium bisulfite	7631−90−5	15 − 40

Comments If chemical identity and/or exact percentage of composition has been withheld, this information is considered to be a trade secret.

Section 4. First Aid Measures

Inhalation: Call a POISON CENTER or doctor/physician if you feel unwell.

Eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists, get medical advice/attention.

Skin: Wash with plenty of soap and water. Take off contaminated clothing and wash before re−use. If skin irritation occurs, seek medical advice/attention.

Ingestion: Rinse mouth. Call a poison center or doctor/physician if you feel unwell.

Most Important Symptoms: N/D

Indication of Immediate Medical Attention and Special Treatment Needed, If Necessary: N/A

Section 5. Fire Fighting Measures

Flammability of the Product: Not flammable.

Suitable Extinguishing Media: Use extinguishing media suitable to surrounding fire.

Specific Hazards Arising from the Chemical: Use water spray to keep containers cool.
Product may emit toxic gases or fumes under fire conditions.

Protective Equipment: If product is involved in a fire, wear full protective clothing including a positive−pressure, NIOSH approved, self−contained breathing apparatus.

Section 6. Accidental Release Measures

Personal Precautions: Use appropriate Personal Protective Equipment (PPE).

Environmental Precautions: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains, and sewers.

Methods for Cleaning up: Contain and/or absorb spill with inert material then place in suitable container.

Other Statements: If RQ (Reportable Quantity) is exceeded, report to National Spill Response Office at 1−800−424−8802.
Reportable Quantity of the product is 1618 Gal.

Section 7. Handling and Storage

Handling: Wear appropriate Personal Protective Equipment (PPE) when handling this product. Do not get in eyes, or on skin and clothing. Wash thoroughly after handling. Do not ingest. Avoid breathing vapors, mist or dust.

Storage: Store away from incompatible materials (see Section 10). Store at ambient temperatures. Keep container securely closed when not in use. Label precautions also apply to empty container. Recondition or dispose of empty containers in accordance with government regulations. For Industrial use only.
Do not store below 30°F.
Do not freeze. Store above Freeze Point. If freezes, then mechanical mixing is required.

Section 8. Exposure Controls/Personal Protection

Exposure Limits

Component	Source	Exposure Limits
Sodium bisulfite	ACGIH TLV	5 mg/m³ TWA

Engineering Controls: Use only with adequate ventilation. The use of local ventilation is recommended to control emission near the source.

Personal Protection

Eyes: Wear chemical splash goggles or safety glasses with full−face shield. Maintain eyewash fountain in work area.

Skin: Maintain quick−drench facilities in work area. Wear butyl rubber or neoprene gloves. Wash them after each use and replace as necessary. If conditions warrant, wear protective clothing such as boots, aprons, and coveralls to prevent skin contact.

Respiratory: If misting occurs, use NIOSH approved organic vapor/acid gas dual cartridge respirator with a dust/mist prefilter in accordance with 29 CFR 1910.134.

Section 9. Physical and Chemical Properties

Physical State and Appearance: Liquid, Colorless − Straw, Clear
Specific Gravity: 1.235 @ 20°C
pH: 3.9 @ 20°C, 100.0%
Freezing Point: 30°F
Flash Point: N/D
Odor: Strong
Melting Point: N/A
Initial Boiling Point and Boiling Range: 212°F
Solubility in Water: Complete
Evaporation Rate: <1
Vapor Density: N/D
Molecular Weight: N/D
Viscosity: <100 CPS @ 20°C
Flammability (solid, gas): N/D
Flammable Limits: N/A
Autoignition Temperature: N/A
Density: 10.30 LB/GA
Vapor Pressure: <17.5
% VOC: N/D
Odor Threshold N/D
n−octanol Partition Coefficient N/D
Decomposition Temperature N/D

Section 10. Stability and Reactivity

Chemical Stability: Stable at normal temperatures and pressures.

Incompatibility with Various Substances: Acids, Mineral acids, Oxidizers.

Hazardous Decomposition Products: Sulfur dioxide gas, Oxides of sulfur.

Possibility of Hazardous Reactions: None known.

Reactivity: N/D

Conditions To Avoid: N/D

Section 11. Toxicological Information

Acute Toxicity

Chemical Name	Exposure	Type of Effect	Concentration	Species
Sodium bisulfite	Oral	LD50	2000 MG/KG	Rat

Carcinogenicity Category

Component	Source	Code	Brief Description
Sodium bisulfite	N/E	N/E	N/E

Likely Routes of Exposure: N/D

Symptoms

Inhalation: N/D

Eye Contact: N/D

Skin Contact: N/D

Ingestion: N/D

Skin Corrosion/Irritation: N/D

Serious Eye Damage/Eye Irritation: N/D

Sensitization: N/D

Germ Cell Mutagenicity: N/D

Reproductive/Developmental Toxicity: N/D

Specific Target Organ Toxicity

Single Exposure: N/D

Repeated Exposure: N/D

Aspiration Hazard: N/D

Comments: None.

Section 12. Ecological Information

Ecotoxicity

Species	Duration	Type of Effect	Test Results
Sheepshead Minnow	96h	LC50	100 mg/l
Mysid Shrimp	48h	LC50	70.7 mg/l
Fathead Minnow	96h	LC50	>1000 mg/l
	96h	LC50	849 mg/l
	7d	NOEC	600 mg/l
	7d	LOEC	1200 mg/l
	7d	IC25	750 mg/l
Ceriodaphnia dubia	48h	LC50	390.4 mg/l
	48h	LC50	459 mg/l
	7d	NOEC	300 mg/l
	7d	LOEC	600 mg/l
	7d	IC25	420 mg/l

Persistence and Biodegradability: N/D

Bioaccumulative Potential: N/D

Mobility In Soil: N/D

Other Adverse Effects: N/D

Comments: None.

Section 13. Disposal Considerations

Dispose of in accordance with local, state and federal regulations.

Section 14. Transport Information

Controlling Regulation	UN/NA#:	Proper Shipping Name:	Technical Name:	Hazard Class:	Packing Group:
DOT	UN2693	BISULPHITES, AQUEOUS SOLUTIONS, N.O.S.	(SODIUM BISULFITE)	8	PGIII
Over 1618 GA	UN2693	RQ BISULPHITES, AQUEOUS SOLUTIONS, N.O.S.	(SODIUM BISULFITE)	8	PGIII
IMDG	UN2693	BISULPHITES, AQUEOUS SOLUTIONS, N.O.S.	(SODIUM BISULFITE)	8	PGIII
TDG	UN2693	BISULPHITES, AQUEOUS SOLUTIONS, N.O.S.	(SODIUM BISULFITE)	8	PGIII
ICAO	UN2693	BISULPHITES, AQUEOUS SOLUTIONS, N.O.S.	(SODIUM BISULFITE)	8	PGIII

Note: N/A

Section 15. Regulatory Information

Inventory Status

United States (TSCA): All ingredients listed.
Canada (DSL/NDSL): All ingredients listed.

Federal Regulations

SARA Title III Rules

Sections 311/312 Hazard Classes

Fire Hazard:	No
Reactive Hazard:	No
Release of Pressure:	No
Acute Health Hazard:	Yes
Chronic Health Hazard:	No

Other Sections

Component	Section 313 Toxic Chemical	Section 302 EHS TPQ	CERCLA RQ
Sodium bisulfite	N/A	N/A	5000

Comments: None.

State Regulations

California Proposition 65: This product may contain trace amounts of chemical(s) known to the State of California to cause cancer and/or to cause birth defects or other reproductive harm. Sulfur dioxide

Special Regulations

Component	States
Sodium bisulfite	MA, MN, NY, PA, WA

International Regulations

Canada

WHMIS Classification: D2A (Very Toxic Material)
E (Corrosive Material)

Controlled Product Regulations (CPR): This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

Compliance Information

NSF: This product conforms to the requirements of the NSF Nonfood Compounds Registration Program, Registration #148827; Category G6, G7.

Food Regulations: FDA: All ingredients in this product are authorized in 21 CFR 173.310 for use as "Boiler Water Additives" where the steam may contact food.

KOSHER: This product is certified by the Orthodox Union as kosher pareve.
Only when prepared by the following ChemTreat facilities: Ashland, VA; Eldridge, IA; Nederland, TX; Fontana, CA.

FIFRA: N/A

Other: None

Comments: None.

Section 16. Other Information

HMIS Hazard Rating

Health:	2
Flammability:	0
Physical Hazard:	0
PPE:	X

Notes: The PPE rating depends on circumstances of use. See Section 8 for recommended PPE.
The Hazardous Material Information System (HMIS) is a voluntary, subjective alpha−numeric symbolic system for recommending hazard risk and personal protection equipment information. It is a subjective rating system based on the evaluator's understanding of the chemical associated risks. The end−user must determine if the code is appropriate for their use.

Abbreviations

Abbreviation	Definition
<	Less Than
>	Greater Than
ACGIH	American Conference of Governmental Industrial Hygienists
EHS	Environmental Health and Safety Dept
N/A	Not Applicable

Abbreviation	Definition
N/D	Not Determined
N/E	Not Established
OSHA	Occupational Health and Safety Dept
PEL	Personal Exposure Limit
STEL	Short Term Exposure Limit
TLV	Threshold Limit Value
TWA	Time Weight Average
UNK	Unknown

Prepared by: Product Compliance Department; ProductCompliance@chemtreat.com

Revision Date: March 20, 2017

Disclaimer

SAFETY DATA SHEET

Section 1. Chemical Product and Company Identification

Product Name:	ChemTreat BL152
Product Use:	Steam Line Treatment
Supplier's Name:	ChemTreat, Inc.
Emergency Telephone Number:	(800)424−9300 (Toll Free)
Address (Corporate Headquarters):	5640 Cox Road Glen Allen, VA 23060
Telephone Number for Information:	(800)648−4579
Date of SDS:	March 30, 2017
Revision Date:	March 30, 2017
Revision Number:	17033001AN

Section 2. Hazard(s) Identification

Signal Word: **DANGER**

GHS Classification(s): Skin corrosion/irritation − Category 1b
Eye damage/irritation − Category 1
Acute Toxicity Dermal − Category 4
Acute Toxicity Inhalation − Category 4
Acute Toxicity Oral − Category 4

Hazard Statement(s): H314 Causes severe skin burns and eye damage.
H318 Causes serious eye damage.
H312 Harmful in contact with skin.
H332 Harmful if inhaled.
H302 Harmful if swallowed.

Precautionary Statement(s):

Prevention: P260 Do not breathe dust/fume/gas/mist/vapors/spray.
P264 Wash thoroughly after handling.
P270 Do not eat, drink, or smoke when using this product.
P271 Use only outdoors or in a well−ventilated area.
P280 Wear protective gloves/protective clothing/eye protection/face protection.

Response: P301 + P312 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell
P301 + 330 + 331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303 + P361 + P353 IF ON SKIN (or hair): Remove/take off immediately all contaminated clothing. Rinse skin with water/shower
P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310 Immediately call a POISON CENTER/doctor.
P363 Wash contaminated clothing before reuse.

Storage: P405 Store locked up.

Disposal: P501 Dispose of contents and container in accordance with applicable local, regional, national, and/or international regulations.

System of Classification Used: Classification under 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200).

Hazards Not Otherwise Classified: None.

Section 3. Composition/Hazardous Ingredients

Component	CAS Registry #	Wt.%
Ammonium hydroxide	1336−21−6	10 − 30
Ethanolamine	141−43−5	5 − 10

Comments If chemical identity and/or exact percentage of composition has been withheld, this information is considered to be a trade secret.

Section 4. First Aid Measures

Inhalation: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a poison center or doctor/physician.

Eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center or doctor/physician.

Skin: Immediately remove/take off all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before re−use. Immediately call a poison center or doctor/physician.

Ingestion: DO NOT INDUCE VOMITING. Rinse mouth. Call a POISON CENTER or doctor/physician.

Most Important Symptoms: N/D

Indication of Immediate Medical Attention and Special Treatment Needed, If Necessary: N/A

Section 5. Fire Fighting Measures

Flammability of the Product: Negative results obtained in sustained combustion test.

Suitable Extinguishing Media: Use extinguishing media suitable to surrounding fire.

Specific Hazards Arising from the Chemical: Thermal decomposition releases ammonia and oxides of nitrogen.

Protective Equipment: If product is involved in a fire, wear full protective clothing including a positive−pressure, NIOSH approved, self−contained breathing apparatus.

Section 6. Accidental Release Measures

Personal Precautions: Use appropriate Personal Protective Equipment (PPE).

Environmental Precautions: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains, and sewers.

Methods for Cleaning up: Contain and recover liquid when possible. Flush spill area with water spray.

Other Statements: If RQ (Reportable Quantity) is exceeded, report to National Spill Response Office at 1−800−424−8802.
Reportable Quantity of the product is 844 Gal.

Section 7. Handling and Storage

Handling: Wear appropriate Personal Protective Equipment (PPE) when handling this product. Do not get in eyes, or on skin and clothing. Wash thoroughly after handling. Do not ingest. Avoid breathing vapors, mist or dust.

Storage: Store away from incompatible materials (see Section 10). Store at ambient temperatures. Keep container securely closed when not in use. Label precautions also apply to empty container. Recondition or dispose of empty containers in accordance with government regulations. For Industrial use only.
Do not store or handle in aluminum, zinc, copper, or their alloys.
Store above Freeze Point.

Section 8. Exposure Controls/Personal Protection

Exposure Limits

Component	Source	Exposure Limits
Ammonium hydroxide	N/E	N/E
Ethanolamine	ACGIH TLV	15 mg/m³ STEL
	NIOSH	15 mg/m³ STEL
	OSHA PEL	6 mg/m³ TWA

Engineering Controls: Use only with adequate ventilation. The use of local ventilation is recommended to control emission near the source.

Personal Protection

Eyes: Wear chemical splash goggles or safety glasses with full−face shield. Maintain eyewash fountain in work area.

Skin: Maintain quick−drench facilities in work area.
Wear butyl rubber or neoprene gloves. Wash them after each use and replace as necessary. If conditions warrant, wear protective clothing such as boots, aprons, and coveralls to prevent skin contact.

Respiratory: If misting occurs, use NIOSH approved organic vapor/acid gas dual cartridge respirator with a dust/mist prefilter in accordance with 29 CFR 1910.134.

Section 9. Physical and Chemical Properties

Physical State and Appearance:	Liquid, Colorless, Clear
Specific Gravity:	0.947 @ 20°C
pH:	13.1 @ 20°C, 100.0%
Freezing Point:	<−13°F
Flash Point:	>140°F
Odor:	Strong
Melting Point:	N/A
Initial Boiling Point and Boiling Range:	N/D
Solubility in Water:	Soluble
Evaporation Rate:	N/A
Vapor Density:	N/D
Molecular Weight:	N/D
Viscosity:	<100 CPS @ 20°C
Flammability (solid, gas):	N/D
Flammable Limits:	N/A
Autoignition Temperature:	N/A
Density:	7.90 LB/GA
Vapor Pressure:	N/D
% VOC:	N/D
Odor Threshold	N/D
n−octanol Partition Coefficient	N/D
Decomposition Temperature	N/D

Section 10. Stability and Reactivity

Chemical Stability: Stable at normal temperatures and pressures.

Incompatibility with Various Substances: Strong oxidizers, Acids, Zinc, Copper/copper alloys.

Hazardous Decomposition Products: Ammonia, Oxides of nitrogen.

Possibility of Hazardous Reactions: None known.

Reactivity: N/D

Conditions To Avoid: N/D

Section 11. Toxicological Information

Acute Toxicity

Chemical Name	Exposure	Type of Effect	Concentration	Species
Ammonium hydroxide	Oral	LD50	350 MG/KG	Rat

Carcinogenicity Category

Component	Source	Code	Brief Description
Ammonium hydroxide	N/E	N/E	N/E
Ethanolamine	N/E	N/E	N/E

Likely Routes of Exposure: N/D

Symptoms

Inhalation: N/D

Eye Contact: N/D

Skin Contact: N/D

Ingestion: N/D

Skin Corrosion/Irritation: N/D

Serious Eye Damage/Eye Irritation: N/D

Sensitization: N/D

Germ Cell Mutagenicity: N/D

Reproductive/Developmental Toxicity: N/D

Specific Target Organ Toxicity

Single Exposure: N/D

Repeated Exposure: N/D

Aspiration Hazard: N/D

Comments: None.

Section 12. Ecological Information

Ecotoxicity

Species	Duration	Type of Effect	Test Results
Ceriodaphnia dubia	48h	LC50	137 mg/l
Fathead Minnow	96h	LC50	76 mg/l

Persistence and Biodegradability: N/D

Bioaccumulative Potential: N/D

Mobility In Soil: N/D

Other Adverse Effects: N/D

Comments: None.

Section 13. Disposal Considerations

Dispose of in accordance with local, state and federal regulations.
EPA corrosivity characteristic hazardous waste D002 when disposed of in the original product form.

Section 14. Transport Information

Controlling Regulation	UN/NA#:	Proper Shipping Name:	Technical Name:	Hazard Class:	Packing Group:
DOT	UN2672	AMMONIA SOLUTIONS (15%)	N/A	8	PGIII
Over 844 GA	UN2672	RQ AMMONIA SOLUTIONS (15%)	N/A	8	PGIII
IMDG	UN2672	AMMONIA SOLUTIONS (15%)	N/A	8	PGIII
TDG	UN2672	AMMONIA SOLUTIONS (15%)	N/A	8	PGIII
ICAO	UN2672	AMMONIA SOLUTIONS (15%)	N/A	8	PGIII
ANTT	UN2672	AMMONIA SOLUTIONS (15%)	N/A	8	PGIII

Note: N/A

Section 15. Regulatory Information

Inventory Status

United States (TSCA): All ingredients listed.
Canada (DSL/NDSL): All ingredients listed.

Federal Regulations

SARA Title III Rules

Sections 311/312 Hazard Classes

Fire Hazard: No
Reactive Hazard: No
Release of Pressure: No
Acute Health Hazard: Yes
Chronic Health Hazard: No

Other Sections

Component	Section 313 Toxic Chemical	Section 302 EHS TPQ	CERCLA RQ
Ammonium hydroxide	Yes	N/A	1000
Ethanolamine	N/A	N/A	N/A

Comments: None.

State Regulations

California Proposition 65: None known.

Special Regulations

Component	States
Ammonium hydroxide	MA, NY, PA
Ethanolamine	CA, ID, IL, MA, ME, MN, PA, WA, WI

International Regulations

Canada

WHMIS Classification: D1B (Toxic Material)
E (Corrosive Material)

Controlled Product Regulations (CPR): This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

Compliance Information

NSF: N/A

Food Regulations: N/A

KOSHER: This product has not been evaluated for Kosher approval.

FIFRA: N/A

Other: None

Comments: None.

Section 16. Other Information

HMIS Hazard Rating

Health: 3
Flammability: 1
Physical Hazard: 0
PPE: X

Notes: The PPE rating depends on circumstances of use. See Section 8 for recommended PPE.
The Hazardous Material Information System (HMIS) is a voluntary, subjective alpha−numeric symbolic system for recommending hazard risk and personal protection equipment information. It is a subjective rating system based on the evaluator's understanding of the chemical associated risks. The end−user must determine if the code is appropriate for their use.

Abbreviations

Abbreviation	Definition
<	Less Than
>	Greater Than
ACGIH	American Conference of Governmental Industrial Hygienists
EHS	Environmental Health and Safety Dept
N/A	Not Applicable
N/D	Not Determined
N/E	Not Established
OSHA	Occupational Health and Safety Dept
PEL	Personal Exposure Limit
STEL	Short Term Exposure Limit
TLV	Threshold Limit Value
TWA	Time Weight Average
UNK	Unknown

Prepared by: Product Compliance Department; ProductCompliance@chemtreat.com

Revision Date: March 30, 2017

Disclaimer

SAFETY DATA SHEET

Titan360® C-SERIES™

1. Identification

Product identifier BL8401

Other means of identification

Product code BL8401

Recommended use Boiler Water Treatment

Recommended restrictions None known.

Manufacturer/Importer/Supplier/Distributor information

Manufacturer

Company name ChemTreat

Address 5640 Cox Road
Glen Allen, VA 23060
United States

Telephone 800-648-4579

E-mail Not available.

Emergency phone number 800-424-9300

2. Hazard(s) identification

Physical hazards Not classified.

Health hazards

Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2
Specific target organ toxicity, repeated exposure	Category 1

Environmental hazards Hazardous to the aquatic environment, acute hazard — Category 2

OSHA defined hazards Not classified.

Label elements

Signal word Danger

Hazard statement Causes skin irritation. Causes serious eye irritation. Causes damage to organs through prolonged or repeated exposure. Toxic to aquatic life.

Precautionary statement

Prevention Do not breathe mist/vapors. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Avoid release to the environment. Wear eye protection/face protection. Wear protective gloves.

Response If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical advice/attention if you feel unwell. If skin irritation occurs: Get medical advice/attention. If eye irritation persists: Get medical advice/attention. Take off contaminated clothing and wash it before reuse.

Storage Store away from incompatible materials.

Disposal Dispose of contents/container in accordance with local/regional/national/international regulations.

Hazard(s) not otherwise classified (HNOC) None known.

Supplemental information None.

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
N-Oleyl-1,3-diaminopropane		7173-62-8	5 - < 10
Acetic Acid		64-19-7	0 - < 5
Formic Acid		64-18-6	0< 5
Other components below reportable levels			90 - 100

4. First-aid measures

Inhalation Move to fresh air. Call a physician if symptoms develop or persist.

Skin contact Remove contaminated clothing. Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention. Wash contaminated clothing before reuse.

Eye contact Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.

Ingestion Rinse mouth. Get medical attention if symptoms occur.

Most important symptoms/effects, acute and delayed Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May cause redness and pain. Prolonged exposure may cause chronic effects.

Indication of immediate medical attention and special treatment needed Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.

General information If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

5. Fire-fighting measures

Suitable extinguishing media Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).

Unsuitable extinguishing media Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from the chemical During fire, gases hazardous to health may be formed.

Special protective equipment and precautions for firefighters Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Fire fighting equipment/instructions Move containers from fire area if you can do so without risk.

Specific methods Use standard firefighting procedures and consider the hazards of other involved materials.

General fire hazards No unusual fire or explosion hazards noted.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Do not breathe mist/vapors. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

Methods and materials for containment and cleaning up Prevent product from entering drains.

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.

Environmental precautions Avoid release to the environment. Inform appropriate managerial or supervisory personnel of all environmental releases. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling Do not breathe mist/vapors. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. When using, do not eat, drink or smoke. Provide adequate ventilation. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Avoid release to the environment. Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities Store in tightly closed container. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

Occupational exposure limits

The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit. At this time, the other constituents have no known exposure limits.

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value
Acetic Acid (CAS 64-19-7)	PEL	25 mg/m3
		10 ppm
Formic Acid (CAS 64-18-6)	PEL	9 mg/m3
		5 ppm

US. ACGIH Threshold Limit Values

Components	Type	Value
Acetic Acid (CAS 64-19-7)	STEL	15 ppm
	TWA	10 ppm
Formic Acid (CAS 64-18-6)	STEL	10 ppm
	TWA	5 ppm

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value
Acetic Acid (CAS 64-19-7)	STEL	37 mg/m3
		15 ppm
	TWA	25 mg/m3
		10 ppm
Formic Acid (CAS 64-18-6)	TWA	9 mg/m3
		5 ppm

Biological limit values No biological exposure limits noted for the ingredient(s).

Appropriate engineering controls Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Provide eyewash station and safety shower.

Individual protection measures, such as personal protective equipment

Eye/face protection If contact is likely, safety glasses with side shields are recommended.

Skin protection

Hand protection Wear appropriate chemical resistant gloves.

Other Wear appropriate chemical resistant clothing. Use of an impervious apron is recommended.

Respiratory protection Not available.

Thermal hazards Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. Physical and chemical properties

Appearance

Physical state Liquid.

Form Liquid.

Color Light Straw

Odor Mild

Odor threshold Not available.

pH	7 - 8 (100% @ 20C)
Melting point/freezing point	39.20 °F (4.00 °C)
Initial boiling point and boiling range	Not available.
Flash point	Not available.
Evaporation rate	Not available.
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or explosive limits	
Flammability limit - lower (%)	Not available.
Flammability limit - upper (%)	Not available.
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	Not available.
Vapor density	Not available.
Relative density	Not available.
Solubility(ies)	
Solubility (water)	Not available.
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	0 - 200 cps
Other information	
Explosive properties	Not explosive.
Oxidizing properties	Not oxidizing.
Pounds per gallon	8.32
Specific gravity	0.99 - 1 @ 20C
VOC	0 %w/w

10. Stability and reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
Conditions to avoid	Contact with incompatible materials.
Incompatible materials	Strong oxidizing agents.
Hazardous decomposition products	No hazardous decomposition products are known.

11. Toxicological information

Information on likely routes of exposure

Inhalation	Prolonged inhalation may be harmful.
Skin contact	Causes skin irritation.
Eye contact	Causes serious eye irritation.
Ingestion	Expected to be a low ingestion hazard.
Symptoms related to the physical, chemical and toxicological characteristics	Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May cause redness and pain.

Information on toxicological effects

Acute toxicity Not known.

Components	Species	Test Results
Acetic Acid (CAS 64-19-7)		
Acute		
Dermal		
LD50	Rabbit	1060 mg/kg
Inhalation		
LC50	-	11.4 mg/l, 4 Hours
Oral		
LD50	Rat	3.31 g/kg
Formic Acid (CAS 64-18-6)		
Acute		
Inhalation		
LC50	-	7.4 mg/l, 4 Hours
Oral		
LD50	Rat	730 mg/kg

Skin corrosion/irritation	Causes skin irritation.
Serious eye damage/eye irritation	Causes serious eye irritation.
Respiratory or skin sensitization	
Respiratory sensitization	Not a respiratory sensitizer.
Skin sensitization	This product is not expected to cause skin sensitization.
Germ cell mutagenicity	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.
Carcinogenicity	Not classifiable as to carcinogenicity to humans.

IARC Monographs. Overall Evaluation of Carcinogenicity
Not listed.
OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)
Not regulated.
US. National Toxicology Program (NTP) Report on Carcinogens
Not listed.

Reproductive toxicity	This product is not expected to cause reproductive or developmental effects.
Specific target organ toxicity - single exposure	Not classified.
Specific target organ toxicity - repeated exposure	Causes damage to organs through prolonged or repeated exposure.
Aspiration hazard	Not an aspiration hazard.
Chronic effects	Prolonged inhalation may be harmful. Causes damage to organs through prolonged or repeated exposure.

12. Ecological information

Ecotoxicity Toxic to aquatic life.

Product		Species	Test Results
BL8401			
Aquatic			
Acute			
Crustacea	LC50	Mysid Shrimp (Mysidopsis bahia)	3.9 mg/l, 96 h
Fish	LC50	Inland silverside (Menidia beryllina)	2.7 mg/l, 48 h

Persistence and degradability No data is available on the degradability of any ingredients in the mixture.
Bioaccumulative potential

Partition coefficient n-octanol / water (log Kow)

Acetic Acid	-0.17
Formic Acid	-0.54

Mobility in soil No data available.

Other adverse effects No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

Disposal instructions	Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Incinerate the material under controlled conditions in an approved incinerator. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations.
Local disposal regulations	Dispose in accordance with all applicable regulations.
Hazardous waste code	D002: Waste Corrosive material [pH <=2 or =>12.5, or corrosive to steel] The waste code should be assigned in discussion between the user, the producer and the waste disposal company.
Waste from residues / unused products	Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).
Contaminated packaging	Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transport information

DOT
Not regulated as dangerous goods.
IATA
Not regulated as dangerous goods.
IMDG
Not regulated as dangerous goods.
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not established.

15. Regulatory information

US federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

Toxic Substances Control Act (TSCA)
TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)
Not regulated.
CERCLA Hazardous Substance List (40 CFR 302.4)

Acetic Acid (CAS 64-19-7)	Listed.
Formic Acid (CAS 64-18-6)	Listed.

SARA 304 Emergency release notification
Not regulated.
OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)
Not regulated.
Superfund Amendments and Reauthorization Act of 1986 (SARA)
SARA 302 Extremely hazardous substance
Not listed.

SARA 311/312 Hazardous chemical	Yes
Classified hazard categories	Skin corrosion or irritation Serious eye damage or eye irritation Specific target organ toxicity (single or repeated exposure)

SARA 313 (TRI reporting)

Chemical name	CAS number	% by wt.
Formic Acid	64-18-6	0< 5

Other federal regulations
Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List
Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)
Not regulated.

Safe Drinking Water Act (SDWA)	Not regulated.

FEMA Priority Substances Respiratory Health and Safety in the Flavor Manufacturing Workplace

Acetic Acid (CAS 64-19-7)	High priority
Formic Acid (CAS 64-18-6)	High priority

US state regulations
California Proposition 65
California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins. For more information go to www.P65Warnings.ca.gov.
International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
Taiwan	Taiwan Chemical Substance Inventory (TCSI)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)
A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

Compliance Information: Kosher
This product is certified by the Orthodox Unionas Kosher pareve
Only when prepared by the following ChemTreat facilities: Ashland, VA
Eldridge IA
Nederland, TX

Compliance Information: Food Regulations
21 CFR 173.310 (d)
Based on established FDA criteria and risk evaluations, BL8401 does not migrate at levels of concern and would be exempted from the regulation as a food additive when the product is fed at a maximum of 2 ppm in boiler feed water and 5 ppm when fed to the steam header. The product may not be used in steam that contacts milk or milk products.

16. Other information, including date of preparation or last revision

Issue date	05-19-2021
Revision date	02-06-2023
Version #	08
HMIS® ratings	Health: 3* Flammability: 0 Physical hazard: 0 Personal protection: X

Disclaimer	ChemTreat cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. The information in the sheet was written based on the best knowledge and experience currently available. Although the information and recommendations set forth herein (hereinafter "information") are presented in good faith and believed to be correct as of the date hereof, ChemTreat, Inc. makes no representations as to the completeness or accuracy thereof. Information is supplied upon the condition that the persons receiving same will make their own determination as to its suitability for their purposes prior to use. In no event will ChemTreat, Inc. be responsible for damages of any nature whatsoever resulting from the use or reliance upon information. No representation or warranties, either expressed or implied, of merchantability, fitness for a particular purpose, or of any other nature are made hereunder with respect to information or the product to which information refers.
Revision information	Regulatory information: Compliance Information:Food
Other information	Prepared by: Product Compliance Department; ProductCompliance@chemtreat.com

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SAFETY DATA SHEET

Section 1. Chemical Product and Company Identification

Product Name:	Chemical Treatment CL206
Product Use:	Cooling Water and Reverse Osmosis Microbiocide
Supplier's Name:	ChemTreat, Inc.
Emergency Telephone Number:	(800)424-9300 (Toll Free)
Address (Corporate Headquarters):	5640 Cox Road Glen Allen, VA 23060
Telephone Number for Information:	(800)648-4579
Date of SDS:	March 20, 2019
Revision Date:	March 20, 2019
Revision Number:	19032001AN

Section 2. Hazard(s) Identification

Signal Word:	**DANGER**
GHS Classification(s):	Eye damage/irritation - Category 1 Skin corrosion/irritation - Category 1a Sensitization Skin - Category 1 Acute Toxicity Inhalation - Category 4 Acute Toxicity Oral - Category 4 Hazardous to the aquatic environment Acute - Category 2
Hazard Statement(s):	H318 Causes serious eye damage. H314 Causes severe skin burns and eye damage. H317 May cause an allergic skin reaction. H332 Harmful if inhaled. H302 Harmful if swallowed. H401 Toxic to aquatic life.
Precautionary Statement(s):	

Prevention:	P261 Avoid breathing dust/fume/gas/mist/vapors/spray. P264 Wash thoroughly after handling. P270 Do not eat, drink, or smoke when using this product. P271 Use only outdoors or in a well-ventilated area. P272 Contaminated work clothing should not be allowed out of the workplace. P280 Wear protective gloves/protective clothing/eye protection/face protection. P273 Avoid release into the environment.
Response:	P301 + P312 + P330 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell. Rinse mouth. P301 + 330 + 331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. P303 + P361 + P353 IF ON SKIN (or hair): Remove/take off immediately all contaminated clothing. Rinse skin with water/shower P304 + P340 + P310 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or doctor/physician. P333 + P313 If skin irritation or rash occurs: Get medical advice/attention. P363 Wash contaminated clothing before reuse.
Storage:	P405 Store locked up.
Disposal:	P501 Dispose of contents and container in accordance with applicable local, regional, national, and/or international regulations.
System of Classification Used:	Classification under 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200).
Hazards Not Otherwise Classified:	None.

Section 3. Composition/Hazardous Ingredients

Component	CAS Registry #	Wt.%
2-2-Dibromo-3-nitrilopropionamide	10222-01-2	20

Comments If chemical identity and/or exact percentage of composition has been withheld, this information is considered to be a trade secret.

Section 4. First Aid Measures

Inhalation:	Remove to fresh air and keep at rest in a position comfortable for breathing. Call a poison center or doctor/physician if you feel unwell.
Eyes:	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center or doctor/physician.
Skin:	Immediately remove/take off all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before re-use. Immediately call a poison center or doctor/physician.
Ingestion:	DO NOT INDUCE VOMITING. Rinse mouth. Call a POISON CENTER or doctor/physician.
Most Important Symptoms:	N/D
Indication of Immediate Medical Attention and Special Treatment Needed, If Necessary:	Probable mucosal damage may contraindicate the use of gastric lavage. Have the product container, label or MSDS with you when calling a poison control center or doctor, or when going for treatment.

Section 5. Fire Fighting Measures

Flammability of the Product:	Not flammable.
Suitable Extinguishing Media:	Use extinguishing media suitable to surrounding fire.
Specific Hazards Arising from the Chemical:	Product may emit toxic gases or fumes under fire conditions.
Protective Equipment:	If product is involved in a fire, wear full protective clothing including a positive-pressure, NIOSH approved, self-contained breathing apparatus.

Section 6. Accidental Release Measures

Personal Precautions: Use appropriate Personal Protective Equipment (PPE).

Environmental Precautions: This pesticide is toxic to fish and aquatic organisms. Do not discharge effluent containing this product into lakes, ponds, streams, estuaries, oceans or public waters unless in accordance with the requirements of a National Pollutant Discharge Elimination System (NPDES) permit, and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product to sewer systems without previously notifying the local sewage treatment plant authority. For guidance contact your State Water Board or Regional Office of the EPA.

Methods for Cleaning up: Contain and recover liquid when possible. Flush spill area with water spray.

Other Statements: None.

Section 7. Handling and Storage

Handling: Wear appropriate Personal Protective Equipment (PPE) when handling this product. Do not get in eyes, or on skin and clothing. Wash thoroughly after handling. Do not ingest. Avoid breathing vapors, mist or dust.

Storage: Store away from incompatible materials (see Section 10). Store at ambient temperatures. Keep container securely closed when not in use. Label precautions also apply to empty container. Recondition or dispose of empty containers in accordance with government regulations. For Industrial use only.
Do not store above 95°F.
Store above Freeze Point.
Do not store or handle in aluminum, steel, copper, or their alloys.

Section 8. Exposure Controls/Personal Protection

Exposure Limits

Component	Source	Exposure Limits
2-2-Dibromo-3-nitrilopropionamide	N/E	N/E

Engineering Controls: Use only with adequate ventilation. The use of local ventilation is recommended to control emission near the source.

Personal Protection

Eyes: Wear chemical splash goggles or safety glasses with full-face shield. Maintain eyewash fountain in work area.

Skin: Maintain quick-drench facilities in work area. Wear butyl rubber or neoprene gloves. Wash them after each use and replace as necessary. If conditions warrant, wear protective clothing such as boots, aprons, and coveralls to prevent skin contact.

Respiratory: If misting occurs, use NIOSH approved organic vapor/acid gas dual cartridge respirator with a dust/mist prefilter in accordance with 29 CFR 1910.134.

Section 9. Physical and Chemical Properties

Physical State and Appearance:	Liquid, Colorless, Clear
Specific Gravity:	1.225 @ 20°C
pH:	2.2 @ 20°C, 100.0%
Freezing Point:	<-11°F
Flash Point:	212°F
Odor:	Strong
Melting Point:	N/D
Initial Boiling Point and Boiling Range:	>158°F
Solubility in Water:	Appreciable
Evaporation Rate:	N/D
Vapor Density:	N/D
Molecular Weight:	N/D
Viscosity:	N/A
Flammability (solid, gas):	N/D
Flammable Limits:	N/A
Autoignition Temperature:	N/A
Density:	10.20 LB/GA

Vapor Pressure:	N/D
% VOC:	0
Odor Threshold	N/D
n-octanol Partition Coefficient	N/D
Decomposition Temperature	N/D

Section 10. Stability and Reactivity

Chemical Stability: Stable at normal temperatures and pressures.

Incompatibility with Various Substances: Strong oxidizers, Strong bases, Aluminum/aluminum alloys.

Hazardous Decomposition Products: Dibromoacetonitrite, Cyanogen bromide, Carbon dioxide, Bromine, Toxic vapors/fumes/gases.

Possibility of Hazardous Reactions: None known.

Reactivity: N/D

Conditions To Avoid: N/D

Section 11. Toxicological Information

Acute Toxicity

Chemical Name	Exposure	Type of Effect	Concentration	Species
Chemical Treatment CL206	Oral	LD50	510 MG/KG	Rat
	Inhalation	LC50	1.25 MG/L	Rat
	Dermal	LD50	>2000 MG/KG	Rabbit

Carcinogenicity Category

Component	Source	Code	Brief Description
2-2-Dibromo-3-nitrilopropionamide	N/E	N/E	N/E

Likely Routes of Exposure: N/D

Symptoms

Inhalation: N/D

Eye Contact: N/D

Skin Contact: N/D

Ingestion: N/D

Skin Corrosion/Irritation: N/D

Serious Eye Damage/Eye Irritation: N/D

Sensitization: N/D

Germ Cell Mutagenicity: N/D

Reproductive/Developmental Toxicity: N/D

Specific Target Organ Toxicity

Single Exposure: N/D

Repeated Exposure: N/D

Aspiration Hazard: N/D

Comments: None.

Section 12. Ecological Information

Ecotoxicity

Species	Duration	Type of Effect	Test Results
Daphnia magna	48h	LC50	6.2 mg/l
Bluegill Sunfish	96h	LC50	6.5 mg/l
Rainbow Trout	96h	LC50	5 mg/l
Fathead Minnow	96h	LC50	6.8 mg/l
Ceriodaphnia dubia	48h	LC50	5.733 mg/l
Sheepshead Minnow	96h	LC50	7 mg/l

Persistence and Biodegradability: N/D

Bioaccumulative Potential: N/D

Mobility In Soil: N/D

Other Adverse Effects: N/D

Comments: Based on active ingredient

Section 13. Disposal Considerations

PESTICIDE DISPOSAL: Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal Law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.
CONTAINER DISPOSAL: Non-refillable container. Do not reuse or refill this container. Triple rinse or pressure rinse container (or equivalent) promptly after emptying. Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by procedures approved by state and local authorities.

Section 14. Transport Information

Controlling Regulation	UN/NA#:	Proper Shipping Name:	Technical Name:	Hazard Class:	Packing Group:
DOT	UN3265	CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S.	(2,2-DIBROMO-3-NITRILOPROPIONAMIDE)	8	PGIII
IMDG	UN3265	CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S.	(2,2-DIBROMO-3-NITRILOPROPIONAMIDE)	8	PGIII
ICAO	UN3265	CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S.	(2,2-DIBROMO-3-NITRILOPROPIONAMIDE)	8	PGIII
TDG	UN3265	CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S.	(2,2-DIBROMO-3-NITRILOPROPIONAMIDE)	8	PGIII

Note: N/A

Section 15. Regulatory Information

Inventory Status

United States (TSCA): All ingredients listed or exempt.
Canada (DSL/NDSL): All ingredients listed or exempt.

Federal Regulations

SARA Title III Rules

Sections 311/312 Hazard Classes

Fire Hazard: No
Reactive Hazard: No
Release of Pressure: No
Acute Health Hazard: Yes
Chronic Health Hazard: No

Other Sections

Component	Section 313 Toxic Chemical	Section 302 EHS TPQ	CERCLA RQ
2-2-Dibromo-3-nitrilopropionamide	No	N/A	N/A

Comments: None.

State Regulations

California Proposition 65: None known.

Special Regulations

Component	States
2-2-Dibromo-3-nitrilopropionamide	None.

Compliance Information

NSF: Certified to NSF/ANSI Standard 60
NSF as a membrane cleaner. This product is designed to be used off-line and flushed out prior to using the system for drinking water.
This product ships as NSF from:
Ashland, VA
Eldridge, IA
Nederland, TX

Food Regulations: N/A

KOSHER: This product is certified by the Orthodox Union as Kosher for Passover and year-round use.
Only when prepared by the following ChemTreat facilities: Ashland, VA; Eldridge, IA; Nederland, TX.

Halal: This product has not been evaluated for Halal approval.

FIFRA: Registered pesticide under 40 CFR 152.10, Federal Insecticide, Fungicide and Rodenticide Act (FIFRA), EPA Registration Number: 464-426-15300.

Other: None

Comments: None.

Section 16. Other Information

HMIS Hazard Rating

Health: 3
Flammability: 1
Physical Hazard: 1
PPE: X

Notes: The PPE rating depends on circumstances of use. See Section 8 for recommended PPE.
The Hazardous Material Information System (HMIS) is a voluntary, subjective alpha-numeric symbolic system for recommending hazard risk and personal protection equipment information. It is a subjective rating system based on the evaluator's understanding of the chemical associated risks. The end-user must determine if the code is appropriate for their use.

Abbreviations

Abbreviation	Definition
<	Less Than
>	Greater Than
ACGIH	American Conference of Governmental Industriel Hygienists
EHS	Environmental Health and Safety Dept
N/A	Not Applicable
N/D	Not Determined
N/E	Not Established
OSHA	Occupational Health and Safety Dept
PEL	Personal Exposure Limit
STEL	Short Term Exposure Limit
TLV	Threshold Limit Value
TWA	Time Weight Average
UNK	Unknown

Prepared by: Product Compliance Department; ProductCompliance@chemtreat.com

Revision Date: March 20, 2019

Disclaimer

ATTACHMENT I

LABORATORY SUMMARY

ATTACHMENT I

ANALYTICAL TESTING LABORATORY INFORMATION

Laboratory Name	SPL	
Address	2600 Dudley Rd, Kilgore, TX 75662	
Phone Number	903-984-0551	
Email	Kilgore.ProjectManagement@spllabs.com	
Sample Dates	3/19/25, 3/26/25, 4/2/25, 4/9/25	
Pollutants Analyzed	Table 1: • BOD (5-Day) • CBOD (5-Day) • Chemical oxygen demand • Total organic carbon • Ammonia nitrogen • Total suspended solids • Nitrate nitrogen • Total organic nitrogen • Total phosphorus • Oil and grease • Total residual chlorine • Total dissolved solids • Sulfate • Fluoride • Total alkalinity (mg/L as CaCo3) Field Parameters by Applicant • Total residual chlorine • Temperature (°F) • pH • Dissolved Oxygen	Table 2: • Aluminum • Antimony • Arsenic • Barium • Beryllium • Cadmium • Chromium, total • Chromium, hexavalent • Chromium, trivalent • Copper • Cyanide, available • Lead • Mercury • Nickel • Selenium • Silver • Thallium • Zinc Table 6: • Color • Nitrate-Nitrite Magnesium

Pollutants Analyzed	Table 8: • Acrolein • Acrylonitrile • Benzene • Bromoform • Carbon tetrachloride • Chlorobenzene • Chlorodibromomethane • Chloroethane • 2-Chloroethylvinyl ether • Chloroform • Dichlorobromomethane [Bromodichloromethane] • 1,1-Dichloroethane • 1,2-Dichloroethane • 1,1-Dichloroethylene [1,1-Dichloroethene] • 1,2-Dichloropropane • 1,3-Dichloropropylene [1,2-Dichloropropene] • Ethylbenzene • Methyl bromide [Bromomethane] • Methyl chloride [Chloromethane] • Methylene chloride [Dichloromethane] • 1,1,2,2-Tetrachloroethane • Tetrachloroethylene [Tetrachloroethene] • Toluene • 1,2-Trans-dichloroethylene [1,2-Trans-dichloroethene] • 1,1,1-Trichlorethane • 1,1,2-Trichlorethane • Trichloroethylene [Trichloroethene] • Vinyl chloride	Table 9: • 2-Chlorophenol • 2,4-Dichlorophenol • 2,4-Dimethylphenol • 4,6-Dinitro-o-cresol • 2,4-Dinitrophenol • 2-Nitrophenol • 4-Nitrophenol • p-Chloro-m-cresol • Pentachlorophenol • Phenol • 2,4,6-Trichlorophenol

Candice Calhoun

From: Koch, Nancy <Nancy.Koch@WestonSolutions.com>
Sent: Friday, July 25, 2025 1:29 PM
To: Candice Calhoun
Cc: ray.dube@calpine.com; Orielle Buentello; Jaron Bergin; Ty Pate; Jacob Key; Marcus Augustine
Subject: RE: [EXT]:Application to Renew Permit No. WQ0004138000 - Notice of Deficiency
Attachments: _WQ0004138000_ANOD_Response.pdf; WQ0004138000_Spanish_NORI.docx

Candice:
Attached please find our response to the Notice of Deficiency.
Let us know if you need anything additional.
Regards,
Nancy

WESTON SOLUTIONS
Nancy L. Koch, P.E
Senior Project Manager
(512) 651-7104 Nancy.Koch@WestonSolutions.com
5301 Southwest Parkway, Suite 450
Austin, TX 78735
Trust.Performance.People

From: Candice Calhoun <Candice.Calhoun@tceq.texas.gov>
Sent: Thursday, July 10, 2025 10:09 AM
To: Koch, Nancy <Nancy.Koch@WestonSolutions.com>
Cc: ray.dube@calpine.com
Subject: [EXT]:Application to Renew Permit No. WQ0004138000 - Notice of Deficiency
Importance: High

Good morning, Ms. Koch,

The attached Notice of Deficiency (NOD) letter dated July 10, 2025, requests additional information needed to declare the application administratively complete. Please send complete response no later than July 24, 2025.

Please let me know if you have any questions.

Regards,

Candice Courville
License & Permit Specialist
ARP Team | Water Quality Division
Texas Commission on Environmental Quality
512-239-4312
candice.calhoun@tceq.texas.gov

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

Weston Solutions, Inc.
5301 Southwest Parkway, Suite 450
Austin, TX 78735
512-651-7100
WestonSolutions.com

25 July 2025

Candice Calhoun
Application Review and Processing Team (MC 148)
Water Quality Division
Texas Commission on Environmental Quality

Via: candice.calhoun@tceq.texas.gov

Re: Response to Administrative Notice of Deficiency WQ0004138000
Public Utilities Board of the City of Brownsville, Texas (CN601658651); Hidalgo Energy Center, L.P. (CN600131932); Calpine Operating Services Company Inc. (CN602680076)
Calpine Hidalgo Energy Center (RN100224989)

Dear Ms. Calhoun:

Weston Solutions, Inc. (WESTON®) is pleased to submit this response to your Administrative Notice of Deficiency (ANOD), dated 10 July 2025, for the Texas Pollutant Discharge Elimination System (TPDES) permit application that was submitted on 8 July 2025. WESTON's response to the numbered comments/deficiencies on an item-by-item basis is provided below:

1. **Original Paper Copy of the Application.** The original paper copy of the application was sent via FedEx to TCEQ on 8 July 2025 and FedEx confirmed delivery of it on 10 July 2025.
2. **USGS Topographic Map.** The USGS map has been updated to show the applicant facility boundary as well as the applicant property boundary, which is provided in **Attachment A**.
3. **Portion of the Notice of Receipt of Application and Intent to Obtain a Water Quality Permit (NORI).** We have reviewed the NORI language provided and have one comment, provided in **Attachment B**.
4. **Spanish NORI**. The Spanish NORI, file "WQ0004138000_Spanish_NORI.docx," is provided as an attachment to the email referenced above, and a copy is included in **Attachment C**.

Should you have any questions regarding this submittal, please contact me at nancy.koch@westonsolutions.com or at (512) 651-7104.

Very truly yours,
Weston Solutions, Inc.

N. L. Koch

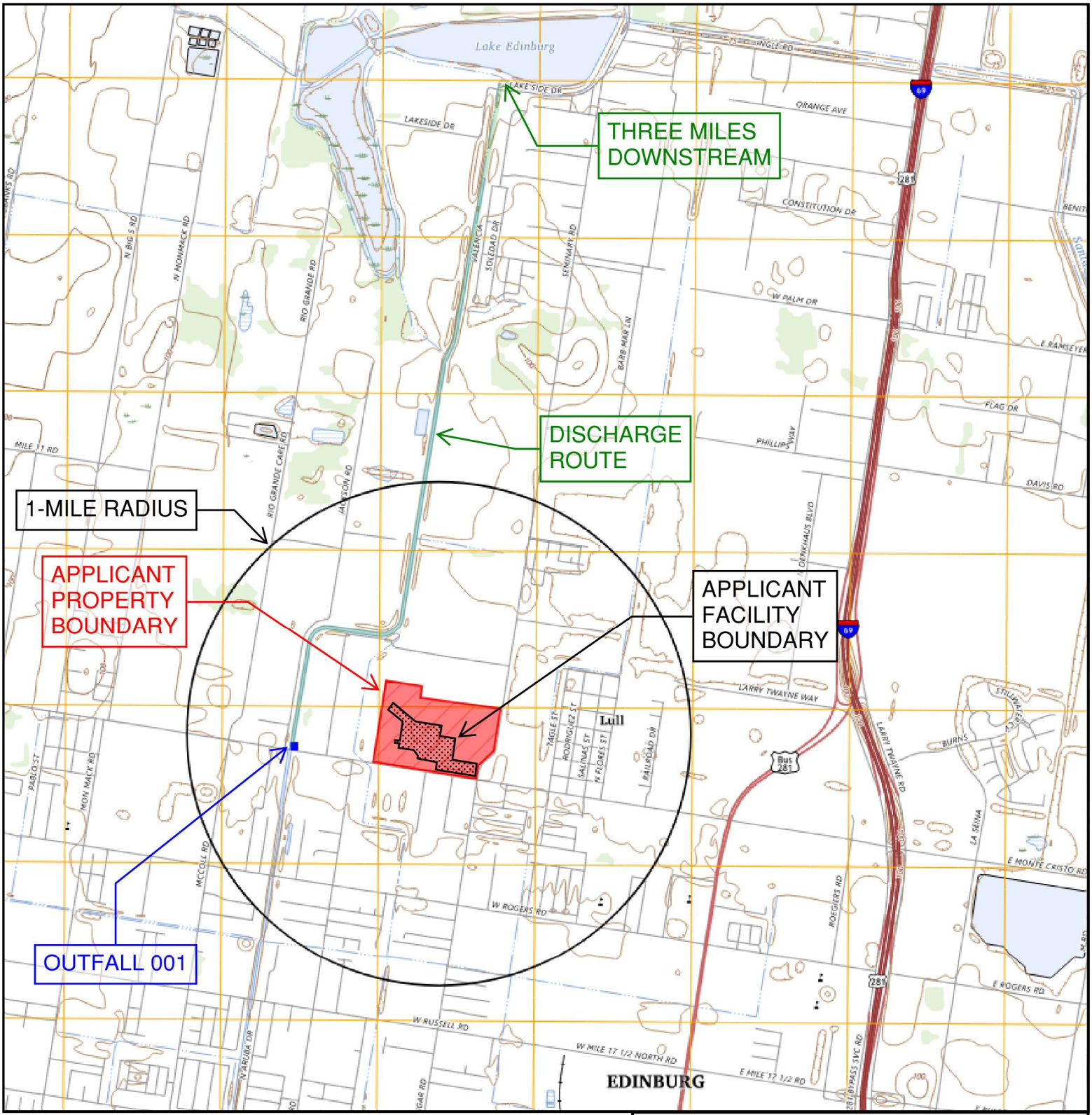
Nancy L. Koch, P.E.
Project Manager

Attachments:
Attachment A – USGS Map
Attachment B – Comments on English NORI
Attachment C – Spanish NORI

cc: Ray Dube, Calpine

ATTACHMENT A

USGS MAP

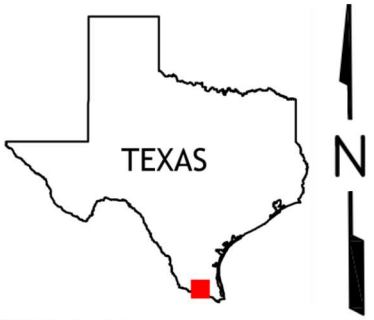


ROAD CLASSIFICATION

Expressway	Local Connector
Secondary Hwy	Local Road
Ramp	4WD

Interstate Route | US Route | State Route

1 MILE



SOURCE: USGS 7.5 MINUTE SERIES TOPOGRAPHIC (2025)

WESTON SOLUTIONS

ATTACHMENT D

USGS TOPOGRAPHIC MAP

HIDALGO ENERGY CENTER

EDINBURG, TX

DATE	PROJECT NO.	SCALE
APR 2025	14847.015.004.0001	AS SHOWN

ATTACHMENT B

COMMENTS ON ENGLISH NORI

(TCEQ) to

APPLICATION. Public Utilities Board of the City of Brownsville, Texas, Calpine Hidalgo Energy Center, L.P., and Calpine Operating Services Company, Inc., 717 Texas Avenue, Suite 1000, Houston, Texas 77002, which own a 500-megawatt combined cycle electric power generating facility, have applied to the Texas Commission on Environmental Quality (TCEQto renew Texas Pollutant Discharge Elimination System (TPDES) Permit No. WQ0004138000 (EPA I.D. No. TX0119423) to authorize the discharge of treated wastewater at a volume not to exceed a daily average flow of 920,000 gallons per day via Outfall 001. The facility is located at 4005 North Seminary Road, in the city of Edinburg, in Hidalgo County, Texas 78541. The discharge route is from the plant site to North Main Drain III; thence to North Main Drain II; thence to North Main Drain I; thence to North Floodway Channel; thence to Laguna Madre. TCEQ received this application on July 8, 2025. The permit application will be available for viewing and copying at Dustin Michael Sekula Memorial Library, Reference Desk, 1906 South Closner Boulevard, Edinburg, in Hidalgo County, Texas prior to the date this notice is published in the newspaper. The application, including any updates, and associated notices are available electronically at the following webpage: https://www.tceq.texas.gov/permitting/wastewater/pending-permits/tpdes-applications. This link to an electronic map of the site or facility's general location is provided as a public courtesy and not part of the application or notice. For the exact location, refer to the application. https://gisweb.tceq.texas.gov/LocationMapper/?marker=-98.175,26.341944&level=18

Further information may also be obtained from Public Utilities Board of the City of Brownsville, Texas, Calpine Hidalgo Energy Center, L.P., and Calpine Operating Services Company, Inc. at the address stated above or by calling Mr. Ray Dube, EHS Manager, Calpine Operating Services Company, Inc., at 830-305-8429.

4. The application indicates that public notices in Spanish are required. After confirming the portion of the NORI above does not contain any errors or omissions, please use the attached template to translate the NORI into Spanish. Only the first and last paragraphs are unique to this application and require translation. Please provide the translated Spanish NORI in a Microsoft Word document.

Please submit the complete response, addressed to my attention by July 24, 2025. If you should have any questions, please do not hesitate to contact me by phone at (512) 239-4312 or by email at candice.calhoun@tceq.texas.gov

Sincerely,

C. Calhoun

Candice Calhoun
Applications Review and Processing Team (MC148)
Water Quality Division
Texas Commission of Environmental Quality

ATTACHMENT C

SPANISH NORI (INCLUDED AS WORD DOC)

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. WQ000

SOLICITUD. Public Utilities Board of the City of Brownsville, Texas, Calpine Hidalgo Energy Center, L.P., y Calpine Operating Services Company, Inc., que posee una instalación de generación de electricidad de ciclo combinado de 500 megavatios, ha solicitado a la Comisión de Calidad Ambiental del Estado de Texas (TCEQ) para renovar el Permiso No. WQ0004138000 (EPA I.D. No. TX0119423) 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 920,000 galones por día. La planta está ubicada 4005 N Seminary Road, Edinburg en el Condado de Hidalgo, Texas 78541. La ruta de descarga es del sitio de la planta a Drenaje Principal Norte III; de ahí al Drenaje Principal Norte II; de ahí al Drenaje Principal Norte I; de ahí al Canal de Inundación Norte; de ahí a Laguna Madre. La TCEQ recibió esta solicitud el 8 de julio de 2025. La solicitud para el permiso estará disponible para leerla y copiarla en Dustin Michael Sekula Memorial Library, mesa de referencia, 1906 S Closner Boulevard, Edinburg, en el Condado de Hidaglo, Texas antes de la fecha de publicación de este aviso en el periódico. La solicitud (cualquier actualización y aviso inclusive) está disponible electrónicamente en la siguiente página web: https://www.tceq.texas.gov/permitting/wastewater/pending-permits/tpdes-applications. Este enlace a un mapa electrónico de la ubicación general del sitio o de la instalación es proporcionado como una cortesía y no es parte de la solicitud o del aviso. Para la ubicación exacta, consulte la solicitud.
https://gisweb.tceq.texas.gov/LocationMapper/?marker=-98.175,26.341944&level=18

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

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.**

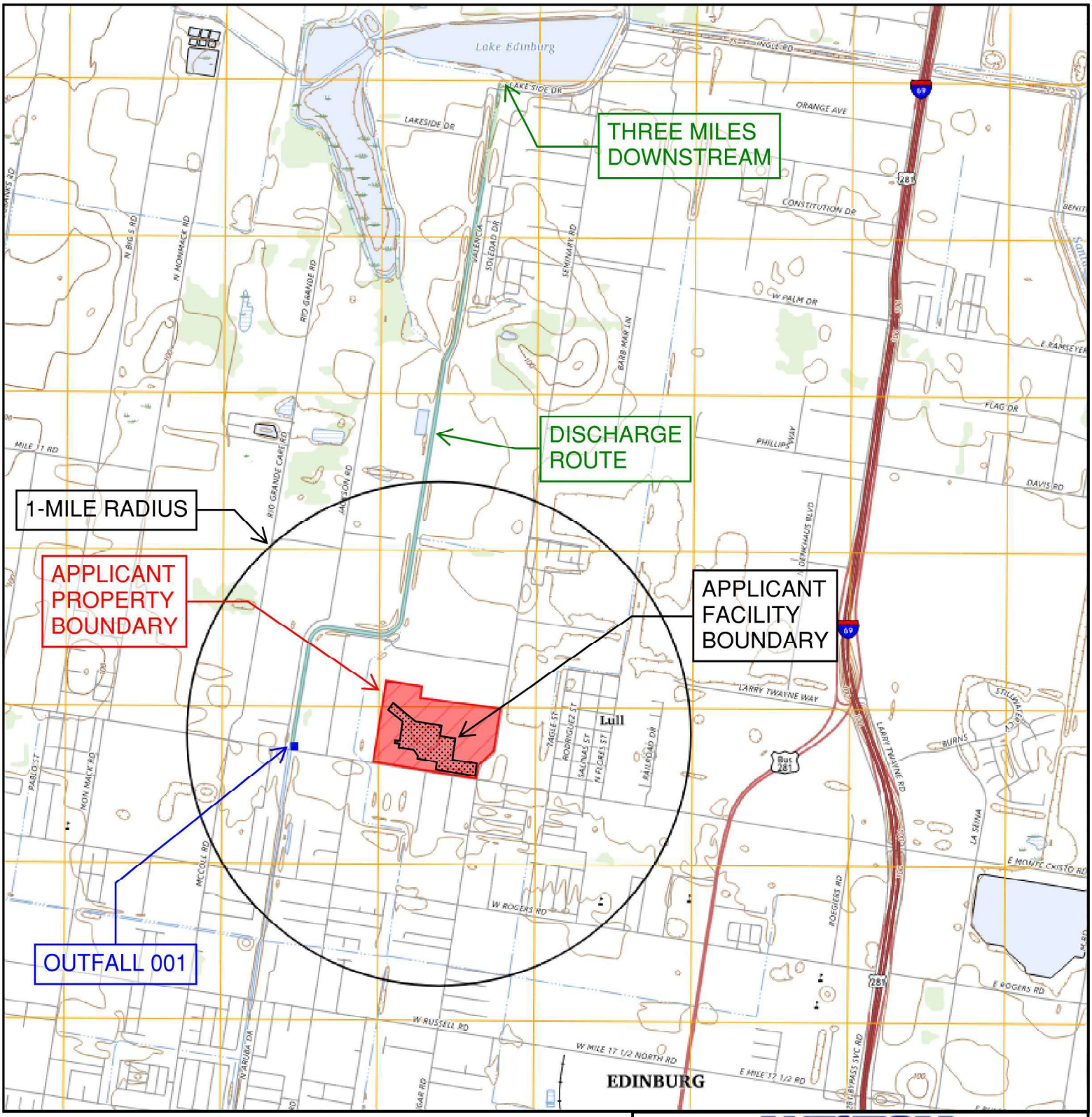
LISTA DE CORREO. Si somete comentarios públicos, un pedido para una audiencia administrativa de lo contencioso o una reconsideración de la decisión del Director Ejecutivo, la Oficina del Secretario Principal enviará por correo los avisos públicos en relación con la solicitud. Además, puede pedir que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

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

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

También se puede obtener información adicional del Public Utilities Board of the City of Brownsville, Texas, Calpine Hidalgo Energy Center, L.P., y Calpine Operating Services, Inc. a la dirección indicada arriba o llamando a Sr. Ray Dube, Gerente de EHS, al 830-305-8429.

Fecha de emisión: *[Date notice issued]*

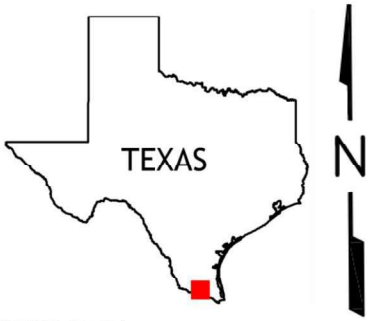


ROAD CLASSIFICATION

Expressway	Local Connector
Secondary Hwy	Local Road
Ramp	4WD

Interstate Route · US Route · State Route

1 MILE



SOURCE: USGS 7.5 MINUTE SERIES TOPOGRAPHIC (2025)

WESTON SOLUTIONS

ATTACHMENT D

USGS TOPOGRAPHIC MAP

HIDALGO ENERGY CENTER

EDINBURG, TX

DATE	PROJECT NO.	SCALE
APR 2025	14847.015.004.0001	AS SHOWN