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

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

PROPOSED PERMIT NO. WQ0005495000

APPLICATION. Select Water Solutions, LLC, 1820 North Interstate 35, Gainesville, Texas 76240, which owns a facility that will treat produced water from multiple oil and gas exploration and production facilities, has applied to the Texas Commission on Environmental Quality (TCEQ) for proposed Texas Pollutant Discharge Elimination System (TPDES) Permit No. WQ0005495000 (EPA I.D. No. TX0148172) to authorize the discharge of treated wastewater at a volume not to exceed a daily average flow of 4,200,000 gallons per day. The facility will be located approximately 0.42 mile northeast of the intersection of Red Bluff Lake Road and U.S. Highway 285, in Reeves County, Texas 79770. The discharge route will be from the plant site to an unnamed tributary of Salt Creek; thence to Salt Creek; thence to Upper Pecos River. TCEQ received this application on July 14, 2025. The permit application will be available for viewing and copying at Reeves County Library, 315 South Oak Street, Pecos, in Reeves 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=-103.9305,31.864166&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.**

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 Select Water Solutions, LLC at the address stated above or by calling Mr. Robert Huizenga, Vice President, Technical Advisory & Special Projects, at 918-607-2918.

Issuance Date: July 22, 2025

Comisión de Calidad Ambiental del Estado de Texas

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

PERMISO PROPUESTO NO. WQ0005495000

SOLICITUD. Select Water Solutions, LLC, 1820 North Interstate 35, Gainesville, Texas 76240, que posee una instalación que tratará el agua producida de múltiples instalaciones de exploración y producción de petróleo y gas, ha solicitado a la Comisión de Calidad Ambiental de Texas (TCEQ) para el propuesto Permiso No. WQ0005495000 (EPA I.D. No. TX 0148172) 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 4,200,000 galones por día. La planta estará ubicada aproximadamente 0.42 millas al noreste de la intersección de Red Bluff Lake Road y U.S. Highway 285, en el Condado de Reeves, Texas 79770. La ruta de descarga estará del sitio de la planta a a un afluente sin nombre del Arroyo Salado; de allí al Arroyo Salado; de allí al río Pecos Superior. La TCEQ recibió esta solicitud el día 14 de julio de 2025. La solicitud para el permiso estará disponible para leerla y copiarla en la Biblioteca del Condado de Reeves, 315 South Oak Street, Pecos, en el condado de Reeves, 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=-103.9305,31.864166&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.**

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 Select Water Solutions, LLC a la dirección indicada arriba o llamando al Sr. Robert Huizenga, Vicepresidente, Proyectos especiales y asesoria técnica al 918-607-2915.

Fecha de emisión: 22 de julio de 2025

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

PLAIN LANGUAGE SUMMARY FOR TPDES OR TLAP PERMIT APPLICATIONS

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

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

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

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

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

Select Water Solutions, LLC (CN603611161) proposes to operate Orla Kessler SWD 1 (RN Number not yet assigned), a produced water treatment facility that can generate treated effluent for discharge 4.2 MGD to surface water. The facility will be located at approximately 0.42 mile northeast of the intersection of US Hwy 285 and Red Bluff Lake Road, in Orla, Reeves County, Texas 79770. The applicant seeks a new TPDES permit to discharge treated produced water via Outfall 001 to a tributary of Salt Creek in three phases. During phase 1 the discharge will be 0.42 MGD, during phase 2 will be 0.84 MGD, and phase 3 will be 4.2 MGD. From Outfall 001 the discharge will flow northwest (NW), 3 miles, to Salt Creek, a tributary of the Upper Pecos River, which runs about 1 mile to the Upper Pecos River.

Discharges from the facility are expected to contain treated produced water with trace amounts of the following: organics, ammonia, colloidal solids, volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), and total dissolved solids (TDS). Produced water will be treated by a commercially available purification process that will be something

similar to the following description: desalination process, ammonia removal process, pH adjustment before entering the ammonia removal process and also after the ammonia removal process effluent tank, then to a final effluent blending tank where chemical remineralization will be performed, if needed, to meet discharge requirements for inorganic compounds before the treated water is discharge through Outfall 001.

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.

Select Water Solutions, LLC (CN603611161) propone operar Orla Kessler SWD 1 RN todavía no ha sido asignado, una instalación de tratamiento de agua producida que puede generar efluentes tratados para la descarga de 4.2 MGD a aguas superficiales. La instalación estará ubicada en aproximadamente 0.42 milla al noroeste de la intersección de US HWY 285 y Red Bluff Lake Road, en Orla, Condado de Reeves, Texas 79770. El solicitante busca un nuevo permiso TPDES para descargar agua producida tratada a través del drenaje 001 a un afluente de Salt Creek en tres fases. Durante la fase 1 la descarga será de 0.42 MGD, durante la fase 2 será de 0.84 MGD y la fase 3 será de 4.2 MGD. Desde el drenaje 001, la descarga fluirá hacia el noroeste (NO), 3 millas, hasta Salt Creek, un afluente del río Upper Pecos, que se extiende aproximadamente 1 milla hasta el río Upper Pecos. Desde el drenaje 001, la descarga fluirá hacia el noroeste (NO), 3 millas, hasta Salt Creek, un afluente del río superior Pecos (Upper Pecos River), que corre aproximadamente 1 milla hasta el río superior Pecos.

Se espera que las descargas de la instalación contengan agua producida tratada con trazas de lo siguiente: compuestos orgánicos, amoníaco, sólidos coloidales, compuestos orgánicos volátiles (VOCs), compuestos orgánicos semi-volátiles (SVOCs) y sólidos disueltos totales (TDS). El agua producida será tratada por un proceso de purificación disponible en el mercado que será algo similar a la siguiente descripción: desalinización, proceso de eliminación de amoníaco, ajuste del pH antes de ingresar al proceso de eliminación de amoníaco y también después del tanque de efluentes del proceso de eliminación de amoníaco, luego a un tanque de mezcla de efluentes final donde se realizará la remineralización química, si es necesario, para cumplir con los requisitos de descarga de compuestos inorgánicos antes de que el agua tratada se descargue a través del drenaje 001.

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

July 14, 2025

Re: Confirmation of Submission of the New Industrial Wastewater Individual Permit Application

Dear Applicant:

This is an acknowledgement that you have successfully completed Industrial Wastewater Individual Permit Application.

ER Account Number: ER062975
Application Reference Number: 689469
Authorization Number: WQ0005495000
Site Name: Orla Kessler Swd 1
Regulated Entity: RN112246541 - ORLA KESSLER SWD 1
Customer(s): CN603611161 - Select Water Solutions, LLC

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

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

Sincerely,
Applications Review and Processing Team
Water Quality Division

Texas Commission on Environmental Quality

New Domestic or Industrial Individual Permit

Site Information (Regulated Entity)

What is the name of the site to be authorized?	Orla Kessler SWD 1
Does the site have a physical address?	No
Because there is no physical address, describe how to locate this site:	From the intersection of US Hwy 285 and TX-652/CR-108 travel 2.71-miles northwest then make a right at the intersection with Red Buff Lake Rd and go 0.5-miles, site is located to the left.
City	Orla
State	TX
ZIP	79770
County	REEVES
Latitude (N) (##.######)	31.86416
Longitude (W) (-###.######)	-103.930667
Primary SIC Code	1389
Secondary SIC Code	
Primary NAICS Code	213112
Secondary NAICS Code	
Regulated Entity Site Information	
What is the Regulated Entity's Number (RN)?	
What is the name of the Regulated Entity (RE)?	Orla Kessler SWD 1
Does the RE site have a physical address?	No
Because there is no physical address, describe how to locate this site:	From the intersection of US Hwy 285 and TX-652/CR-108 travel 2.71-miles northwest then make a right at the intersection with Red Buff Lake Rd and go 0.5-miles, site is located to the left.
City	Orla
State	TX
ZIP	79770
County	REEVES
Latitude (N) (##.######)	31.86416
Longitude (W) (-###.######)	-103.930667
Facility NAICS Code	213112
What is the primary business of this entity?	Management of O & G Produced Water

Select -Customer (Applicant) Information (Owner Operator)

How is this applicant associated with this site?	Owner Operator
What is the applicant's Customer Number (CN)?	CN603611161
Type of Customer	Corporation
Full legal name of the applicant:	
Legal Name	Select Water Solutions, LLC
Texas SOS Filing Number	800780667
Federal Tax ID	205960810
State Franchise Tax ID	12059608104
State Sales Tax ID	
Local Tax ID	
DUNS Number	18755979
Number of Employees	501+
Independently Owned and Operated?	Yes
I certify that the full legal name of the entity applying for this permit has been provided and is legally authorized to do business in Texas.	Yes
Responsible Authority Contact	
Organization Name	Select Water Solutions, LLC
Prefix	MS
First	Halie
Middle	
Last	Butler
Suffix	
Credentials	
Title	Director-Environmental
Responsible Authority Mailing Address	
Enter new address or copy one from list:	
Address Type	Domestic
Mailing Address (include Suite or Bldg. here, if applicable)	1820 N I 35
Routing (such as Mail Code, Dept., or Attn:)	
City	GAINESVILLE
State	TX
ZIP	76240
Phone (###-###-####)	2814673153
Extension	

Alternate Phone (###-###-####)	
Fax (###-###-####)	
E-mail	hbutler@selectwater.com

Billing Contact

Responsible contact for receiving billing statements:	
Select the permittee that is responsible for payment of the annual fee.	CN603611161, Select Water Solutions, LLC
Organization Name	Select Water Solutions, LLC
Prefix	MR
First	Brandon
Middle	
Last	Prill
Suffix	
Credentials	
Title	President Business Unit
Enter new address or copy one from list:	CN603611161, Select Water Solutions, LLC
Mailing Address	
Address Type	Domestic
Mailing Address (include Suite or Bldg. here, if applicable)	1820 N I 35
Routing (such as Mail Code, Dept., or Attn:)	
City	GAINESVILLE
State	TX
ZIP	76240
Phone (###-###-####)	2696154108
Extension	
Alternate Phone (###-###-####)	
Fax (###-###-####)	
E-mail	bprill@selectenergy.com

Application Contact

Person TCEQ should contact for questions about this application:	
Same as another contact?	
Organization Name	Select Water Solutions LLC
Prefix	MR
First	Robert

Middle	
Last	Huizenga
Suffix	
Credentials	
Title	Vice President, Technical Advisory & Special Projects
Enter new address or copy one from list:	
Mailing Address	
Address Type	Domestic
Mailing Address (include Suite or Bldg. here, if applicable)	1233 WEST LOOP S STE 400
Routing (such as Mail Code, Dept., or Attn:)	
City	HOUSTON
State	TX
ZIP	77027
Phone (###-###-####)	9186072918
Extension	
Alternate Phone (###-###-####)	
Fax (###-###-####)	
E-mail	rhuizenga@selectwater.com

Technical Contact

Person TCEQ should contact for questions about this application:	
Same as another contact?	
Organization Name	Tetra Tech Inc
Prefix	MR
First	Edwin
Middle	C
Last	Centeno
Suffix	
Credentials	PE
Title	Senior Project Manager
Enter new address or copy one from list:	
Mailing Address	
Address Type	Domestic
Mailing Address (include Suite or Bldg. here, if applicable)	1500 CITYWEST BLVD STE 1000
Routing (such as Mail Code, Dept., or Attn:)	
City	HOUSTON

State	TX
ZIP	77042
Phone (###-###-####)	8328721075
Extension	
Alternate Phone (###-###-####)	
Fax (###-###-####)	
E-mail	e.centenojimenez@tetratech.com

DMR Contact

Person responsible for submitting Discharge Monitoring Report Forms:

Same as another contact?	
Organization Name	Select Water Solutions LLC
Prefix	MR
First	Blake
Middle	
Last	McCarthy
Suffix	
Credentials	
Title	Senior DIrector
Enter new address or copy one from list:	

Mailing Address:

Address Type	Domestic
Mailing Address (include Suite or Bldg. here, if applicable)	118 E LEATHERWOOD RD
Routing (such as Mail Code, Dept., or Attn:)	
City	BIG SPRING
State	TX
ZIP	79720
Phone (###-###-####)	3256179011
Extension	
Alternate Phone (###-###-####)	
Fax (###-###-####)	
E-mail	bmccarthy@selectwater.com

Section 1# Permit Contact

Permit Contact#: 1

Person TCEQ should contact throughout the permit term.

1) Same as another contact?	Billing Contact
2) Organization Name	Select Water Solutions, LLC
3) Prefix	MR
4) First	Brandon
5) Middle	
6) Last	Prill
7) Suffix	
8) Credentials	
9) Title	President Business Unit

Mailing Address

10) Enter new address or copy one from list	
11) Address Type	Domestic
11.1) Mailing Address (include Suite or Bldg. here, if applicable)	1820 N I 35
11.2) Routing (such as Mail Code, Dept., or Attn:)	
11.3) City	GAINESVILLE
11.4) State	TX
11.5) ZIP	76240
12) Phone (###-###-####)	2696154108
13) Extension	
14) Alternate Phone (###-###-####)	
15) Fax (###-###-####)	
16) E-mail	bprill@selectenergy.com

Section 2# Permit Contact

Permit Contact#: 2

Person TCEQ should contact throughout the permit term.

1) Same as another contact?	DMR Contact
2) Organization Name	Select Water Solutions LLC
3) Prefix	MR
4) First	Blake
5) Middle	
6) Last	McCarthy
7) Suffix	
8) Credentials	
9) Title	Senior DIrector

Mailing Address

10) Enter new address or copy one from list	
11) Address Type	Domestic
11.1) Mailing Address (include Suite or Bldg. here, if applicable)	118 E LEATHERWOOD RD
11.2) Routing (such as Mail Code, Dept., or Attn:)	
11.3) City	BIG SPRING
11.4) State	TX
11.5) ZIP	79720
12) Phone (###-###-####)	3256179011
13) Extension	
14) Alternate Phone (###-###-####)	
15) Fax (###-###-####)	
16) E-mail	bmccarthy@selectwater.com

Public Notice Information

Individual Publishing the Notices

1) Prefix	MR
2) First and Last Name	Edwin C Centeno
3) Credential	PE
4) Title	Senior Project Manager
5) Organization Name	Tetra Tech Inc
6) Mailing Address	1500 CITYWEST BLVD
7) Address Line 2	Suite 1000
8) City	HOUSTON
9) State	TX
10) Zip Code	77042
11) Phone (###-###-####)	8328721075
12) Extension	
13) Fax (###-###-####)	
14) Email	e.centenojimenez@tetratech.com

Contact person to be listed in the Notices

15) Prefix	MR
16) First and Last Name	Robert Huizenga
17) Credential	
18) Title	Vice President, Technical Advisory & Special Projects
19) Organization Name	Select Water Solutions LLC

20) Phone (###-###-####)	9186072918
21) Fax (###-###-####)	
22) Email	rhuizenga@selectwater.com

Bilingual Notice Requirements

23) Is a bilingual education program required by the Texas Education Code at the elementary or middle school nearest to the facility or proposed facility?	Yes
23.1) Are the students who attend either the elementary school or the middle school enrolled in a bilingual education program at that school?	Yes
23.2) Do the students at these schools attend a bilingual education program at another location?	No
23.3) Would the school be required to provide a bilingual education program but the school has waived out of this requirement under 19 TAC 89.1205(g)?	No
23.4) Which language is required by the bilingual program?	Spanish

Section 1# Public Viewing Information

County#: 1

1) County	REEVES
2) Public building name	Reeves County Library
3) Location within the building	TBD
4) Physical Address of Building	315 South Oak Street
5) City	Pecos
6) Contact Name	Dr. Sharon Thomas
7) Phone (###-###-####)	4327550914
8) Extension	
9) Is the location open to the public?	Yes

Owner Information

Owner of Treatment Facility

1) Prefix	
2) First and Last Name	
3) Organization Name	Select Water Solutions LLC
4) Mailing Address	1820 N I-35
5) City	Gainsville
6) State	TX
7) Zip Code	76240
8) Phone (###-###-####)	9406681818

9) Extension	
10) Email	sstabler@selectwater.com
11) What is ownership of the treatment facility?	Private
Owner of Land (where treatment facility is or will be)	
12) Prefix	
13) First and Last Name	
14) Organization Name	Basic Energy Services
15) Mailing Address	1820 N I-35
16) City	Gainsville
17) State	TX
18) Zip Code	76240
19) Phone (###-###-####)	9406681818
20) Extension	
21) Email	rsusong@selectwater.com
22) Is the landowner the same person as the facility owner or co-applicant?	No

Admin General Information

1) Is the facility located on or does the treated effluent cross American Indian Land?	No
2) What is the authorization type that you are seeking?	Industrial Wastewater
2.1) Are the discharges at your facility subjected to federal effluent limitation guidelines (ELG) 40 CFR Part 400-471?	Yes
3) What is your facility operational status?	Inactive
4) What is the classification for your authorization?	TPDES
4.1) City nearest the outfall(s):	Orla
4.2) County where the outfalls are located:	REEVES
4.3) Is or will the treated wastewater discharge to a city, county, or state highway right-of-way, or a flood control district drainage ditch?	No
4.4) Is the daily average discharge at your facility of 5 MGD or more?	No
5) Did any person formerly employed by the TCEQ represent your company and get paid for service regarding this application?	No

Lease Agreement or Deed Attachment

1) Attach a lease agreement or deed recorded easement	
[File Properties]	
File Name	LEASE_Orla Special Warranty Deed.pdf
Hash	F2CFC9F5F7713B2C0E1875D75494EE26E69491B2F338D0671A764B22EAF2AFC1

MIME-Type	application/pdf

Plain Language

1) Plain Language	
[File Properties]	
File Name	LANG_Attachment AR-2 - PLAIN LANGUAGE SUMMARY.pdf
Hash	0B7276EC1D7C7A6E7D62041B4D650AE732BFE0FFD5ABFE1B915DFB1A73DB6C8A
MIME-Type	application/pdf

Supplemental Permit Information Form

1) Supplemental Permit Information Form (SPIF)	
[File Properties]	
File Name	SPIF_Attachment AR-8 - SUPPLEMENTAL PERMIT INFORMATION FORM (SPIF).pdf
Hash	E15E5AF3FA5CA352F47F009A3D34A397CB298B643B661809230D677DF06B4445
MIME-Type	application/pdf
[File Properties]	
File Name	SPIF_Attachment AR-8 - Select Orla Kessler SPIF_Map_03.18.25.pdf
Hash	91DD966E19A379CEABE2FA0B88874B662882B967EB80EC300CDE0A05950F0E3C
MIME-Type	application/pdf

Industrial Attachments

1) Have you clearly outlined and labeled the required information on the original full size USGS Topographic Map?	Yes
1.1) I certify that I have clearly outlined and labeled the required information on the Topographic map and attached here.	
[File Properties]	
File Name	MAP_Attachment AR-4 - Select Orla Kessler USGS_Topo_Map.pdf
Hash	A2152B42009D9AF1D74ACA5C7093C4F1442163D3E3A018A06DD48D1395B47623
MIME-Type	application/pdf

[File Properties]

File Name	MAP_Attachment AR-4 - Select Orla Kessler USGS_Topo_Map2_03.18.25.pdf
Hash	34DAD38F10D5343059FE535C7962FB59ABB36539220A790E1CE997DA2808E985
MIME-Type	application/pdf

2) Public Involvement Plan (TCEQ Form 20960)

[File Properties]

File Name	PIP_Attachment AR-3 - pip-form-tceq-20960.pdf
Hash	244D37BDAE9FD3D549DF173B4610D7BB19893F4E44A92654A425C61DC7A8769C
MIME-Type	application/pdf

3) Administrative Report 1.1

[File Properties]

File Name	ARPT_Administratiive Report 1.1_Oil & Gas_Orla Kessler.pdf
Hash	1F9EE958C7C6E14982669C0D936E6E325A51800BD3AC15602DDC01EEC674CD83
MIME-Type	application/pdf

4) I confirm that all required sections of Technical Report 1.0 are complete and will be included in the Technical Attachment.	Yes
4.1) I confirm that Worksheet 1.0 (EPA Categorical Effluent Guidelines) is complete and included in the Technical Attachment.	Yes
4.2) I confirm that Worksheet 4.0 (Receiving Waters) is complete and included in the Technical Attachment.	Yes
4.3) Are you planning to include Worksheet 4.1 (Waterbody Physical Characteristics) in the Technical Attachment?	Yes
4.4) Are you planning to include Worksheet 6.0 (Industrial Waste Contribution) in the Technical Attachment?	No
4.5) Are you planning to include Worksheet 7.0 (Stormwater Discharges Associated with Industrial Activities) to the Technical Attachment?	No
4.6) Are you planning to include Worksheet 8.0 (Aquaculture) in the Technical Attachment?	No
4.7) Are you planning to include Worksheet 9.0 (Class V Injection Well Inventory/Authorization) in the Technical Attachment?	No
4.8) Are you planning to include Worksheet 10.0 (Quarries in the John Graves Scenic Riverway) in the Technical Attachment?	No
4.9) Are you planning to include Worksheet 11.0 (Cooling Water System Information) in the Technical Attachment?	No
4.10) Are you planning to include Worksheet 11.1 (Impingement Mortality) in the Technical Attachment?	No
4.11) Are you planning to include Worksheet 11.2 (Source Water Biological Data) in the Technical Attachment?	No

4.12) Are you planning to include Worksheet 11.3 (Entrainment) in the Technical Attachment?	No
4.13) Technical Attachment	
[File Properties]	
File Name	TECH_TECHNICAL REPORT 1.0 Orla Kessler.pdf
Hash	A9EFCDB1BDC30AF3655F493B14FE7DD1CD65FD111E1009B677EC2EBBDF528DD2
MIME-Type	application/pdf
5) Affected Landowners Map	
[File Properties]	
File Name	LANDMP_Attachment AR-5 - Select Orla Kessler Landowners Map_03.18.25.pdf
Hash	01EB163A02A50A981273708C05DD3B27EC82F4D946E14C58E1F051215BB3006D
MIME-Type	application/pdf
6) Landowners Cross Reference List	
[File Properties]	
File Name	LANDCRL_Attachment AR-6 - Landowners List Orla Kessler.pdf
Hash	C3EAFF2F53837DF8228C42B170DDC7656E1D1C3C1338F8772A54373B50BF6757
MIME-Type	application/pdf
7) Landowner Avery Template	
[File Properties]	
File Name	LANDAT_Attachment AR-6 - Orla Kessler Address Labels.doc
Hash	E74AF14971D1E97CC531FB1113D33B810036502D4AA4DB42699B3D3D44A83A06
MIME-Type	application/msword
8) Flow Diagram	
[File Properties]	
File Name	FLDIA_Attachment TR-3 - Flow and Water Balance Orla Kessler.pdf
Hash	0DB7EEC324CD96065FF0AE34A1870CCD52C27F38796A137CE3F4BCDB2E5F52F6
MIME-Type	application/pdf
9) Site Drawing	
[File Properties]	
File Name	SITEDR_Attachment TR-2 - Facility Map.pdf
Hash	B6F6C4C9D998DD70F275902398C1EE339944E1AE9AE5A6F8A87120D505C5ADD6
MIME-Type	application/pdf

10) Original Photographs

[File Properties]

File Name	ORIGPH_Attachment AR-7 - Orla Kessler Photo Log & Plot2.pdf
Hash	16B74AC8867EF3C4160CA334D8AE5EB62631F42EE37D40FEEC768432879E1B7A
MIME-Type	application/pdf

11) Design Calculations

12) Solids Management Plan

13) Water Balance

[File Properties]

File Name	WB_Attachment TR-3 - Flow and Water Balance Orla Kessler.pdf
Hash	0DB7EEC324CD96065FF0AE34A1870CCD52C27F38796A137CE3F4BCDB2E5F52F6
MIME-Type	application/pdf

14) Other Attachments

[File Properties]

File Name	OTHER_Attachment AR-1 - TCEQ Core Data Form Orla Kessler.pdf
Hash	7A09C7302AFD5D5BA41814CEAE4C4F6667194F8BF19EBCE166A5B5A3CD87FEF7
MIME-Type	application/pdf

[File Properties]

File Name	OTHER_Attachment TR-1 - Select Technical Supplement Process Description for OrlaKessler 10-20-100 BPD.pdf
Hash	DBFDE5538E28344AC5D5A0BA10A9F967E00C3EAE2F3ABBAAA9CDE1C4A9810FE0
MIME-Type	application/pdf

Certification

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

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

1. I am Halie Butler, the owner of the STEERS account ER048557.
2. I have the authority to sign this data on behalf of the applicant named above.
3. I have personally examined the foregoing and am familiar with its content and the content of any attachments, and based upon my personal knowledge and/or inquiry of any individual responsible for information contained herein, that this information is true, accurate, and complete.
4. I further certify that I have not violated any term in my TCEQ STEERS participation agreement and that I have no reason to believe that the confidentiality or use of my password has been compromised at any time.

5. I understand that use of my password constitutes an electronic signature legally equivalent to my written signature.
6. I also understand that the attestations of fact contained herein pertain to the implementation, oversight and enforcement of a state and/or federal environmental program and must be true and complete to the best of my knowledge.
7. I am aware that criminal penalties may be imposed for statements or omissions that I know or have reason to believe are untrue or misleading.
8. I am knowingly and intentionally signing New Domestic or Industrial Individual Permit.
9. My signature indicates that I am in agreement with the information on this form, and authorize its submittal to the TCEQ.

OWNER OPERATOR Signature: Halie Butler OWNER OPERATOR

Customer Number:	CN603611161
Legal Name:	Select Water Solutions, LLC
Account Number:	ER048557
Signature IP Address:	24.254.97.156
Signature Date:	2025-07-14
Signature Hash:	69F714EC0F0D4E13F1B9348E2FCC4071B58D52AB06FACC0F363D522359C481D3
Form Hash Code at time of Signature:	2AAF7D4D4D20E273E48ABD52FC23B731BC43700A8F5D4629225BC32DD8307D01

Fee Payment

Transaction by:	The application fee payment transaction was made by ER062975/Edwin C Centeno
Paid by:	The application fee was paid by EDWIN C CENTENO
Fee Amount:	$1200.00
Paid Date:	The application fee was paid on 2025-07-08
Transaction/Voucher number:	The transaction number is 582EA000675416 and the voucher number is 773999

Submission

Reference Number:	The application reference number is 689469
Submitted by:	The application was submitted by ER062975/Edwin C Centeno
Submitted Timestamp:	The application was submitted on 2025-07-14 at 09:08:10 CDT
Submitted From:	The application was submitted from IP address 152.186.245.190
Confirmation Number:	The confirmation number is 664262
Steers Version:	The STEERS version is 6.92

Additional Information

Application Creator: This account was created by Edwin C Centeno

INDUSTRIAL WASTEWATER PERMIT APPLICATION ADMINISTRATIVE REPORT 1.1 FOR OIL AND GAS EXPLORATION AND PRODUCTION PERMITS ISSUED UNDER TEXAS WATER CODE CH. 26

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

1. AFFECTED LANDOWNER INFORMATION (Instructions, Page 16)

a. Landowner Map Components

Attach a landowner map or drawing, with scale, as applicable. Check the box next to each item to confirm it has been provided.

- ☒ The facility's boundaries.
- ☒ The property boundaries of all properties adjacent to the facility's boundaries.
- ☒ The property boundaries of all properties within the facility's boundaries.
- ☒ The property boundaries of all properties overlapping the facility's boundaries.
- ☒ The property boundaries of all properties adjacent to any property overlapping the facility's boundaries.
- ☒ The point(s) of discharge and highlighted discharge route(s) clearly shown for one mile downstream of the discharge point(s).
- ☒ The property boundaries of the landowners located on both sides of the discharge route for one full stream mile downstream of the discharge point(s).
- ☐ The property boundaries of the landowners along the watercourse for a one-half mile radius from the discharge point(s) if the discharge is into a lake, bay, estuary, or affected by tides.

Attachment: AR-5

b. Landowner List Media

Check the box next to the format of the landowners list:

☒ Readable/Writeable CD or USB ☐ Four sets of labels

c. Cross-Referenced Landowner List

☐ Check this box to confirm a separate list with the landowners' names and mailing addresses cross-referenced to the landowner map has been attached.

Attachment: AR-6

d. Landowner Data Source

Provide the source of the landowners' names and mailing addresses: Reeves County Appraisal District

e. School Fund Land

As required by *TWC § 5.115*, is any permanent school fund land affected by this application?

☐ Yes ☒ No

If **yes**, provide the location and foreseeable impacts and effects this application has on the land(s): Click to enter text.

2. ORIGINAL PHOTOGRAPHS (Instructions, Page 18)

Provide original ground-level photographs. Indicate the following information is provided.

☒ At least one original photograph of the new or expanded facility location.

☒ At least two photographs of the existing/proposed point of discharge and as much area downstream (photo 1) and upstream (photo 2) as can be captured. If the discharge is to an open water body (e.g., lake, bay), the point of discharge should be in the right or left edge of each photograph showing the open water and with as much area on each respective side of the discharge as can be captured.

☒ A plot plan or map showing the location and direction of each photograph.

Attachment: AR-7

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

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: AR-8

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 603611161		**RN**

SECTION II: Customer Information

4. General Customer Information

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

☐ 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:

Select Water Solutions, LLC.

7. TX SOS/CPA Filing Number	**8. TX State Tax ID** (11 digits)	**9. Federal Tax ID** (9 digits)	**10. DUNS Number** *(if applicable)*
800780667	12059608104	20-5960810	18755979

11. Type of Customer:

☒ Corporation ☐ Individual Partnership: ☐ General ☐ Limited
Government: ☐ City ☐ County ☐ Federal ☐ Local ☐ State ☐ Other ☐ Sole Proprietorship ☒ Other: LLC

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
☐ Occupational Licensee ☐ Responsible Party ☐ VCP/BSA Applicant ☐ Other:

15. Mailing Address:

1820 N I-35

City	Gainesville	**State**	TX	**ZIP**	76240	**ZIP + 4**	

16. Country Mailing Information *(if outside USA)*	**17. E-Mail Address** *(if applicable)*
	rsusong@selectwater.com

18. Telephone Number	19. Extension or Code	20. Fax Number *(if applicable)*
(940) 668-1818		( ) -

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.)*

Orla Kessler SWD 1

23. Street Address of the Regulated Entity: ***(No PO Boxes)***								
	City	Orla	**State**	TX	**ZIP**	79770	**ZIP + 4**	
24. County	Reeves							

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

25. Description to Physical Location:	From the intersection of US Hwy 285 and TX-652/CR-108 travel 2.71-miles northwest then make a right at the intersection with Red Buff Lake Rd and go 0.5-miles, site is located to the left.				
26. Nearest City			**State**	**Nearest ZIP Code**	
Orla			TX	79770	

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:	31.864160		**28. Longitude (W) In Decimal:**	-103.930667	
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)
1389		213112	

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

Management of O & G Produced Water

34. Mailing Address:	**1820 N I-35**							
	City	**Gainesville**	**State**	**TX**	**ZIP**	**76240**	**ZIP + 4**	
35. E-Mail Address:	**sstabler@selectwater.com**							

36. Telephone Number	37. Extension or Code	38. Fax Number *(if applicable)*
(940) 668-1818		( ) -

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
☐ 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:

SECTION IV: Preparer Information

40. Name:	Edwin C. Centeno	41. Title:	Senior Project Manager

42. Telephone Number	43. Ext./Code	44. Fax Number	45. E-Mail Address
(832) 872-1075		( ) -	e.centenojimenez@tetratech.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:	Select Water Solutions, LLC	Job Title:	Chief Operating Officer
Name *(In Print)*:	Michael Skarke	Phone:	(713) 302- 1602
Signature:		Date:	6/30/2025

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

PLAIN LANGUAGE SUMMARY FOR TPDES OR TLAP PERMIT APPLICATIONS

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

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

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

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

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

Select Water Solutions, LLC (CN603611161) proposes to operate Orla Kessler SWD 1 (RN Number not yet assigned), a produced water treatment facility that can generate treated effluent for discharge 4.2 MGD to surface water. The facility will be located at approximately 0.42 mile northeast of the intersection of US Hwy 285 and Red Bluff Lake Road, in Orla, Reeves County, Texas 79770. The applicant seeks a new TPDES permit to discharge treated produced water via Outfall 001 to a tributary of Salt Creek in three phases. During phase 1 the discharge will be 0.42 MGD, during phase 2 will be 0.84 MGD, and phase 3 will be 4.2 MGD. From Outfall 001 the discharge will flow northwest (NW), 3 miles, to Salt Creek, a tributary of the Upper Pecos River, which runs about 1 mile to the Upper Pecos River.

Discharges from the facility are expected to contain treated produced water with trace amounts of the following: organics, ammonia, colloidal solids, volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), and total dissolved solids (TDS). Produced water will be treated by a commercially available purification process that will be something

similar to the following description: desalination process, ammonia removal process, pH adjustment before entering the ammonia removal process and also after the ammonia removal process effluent tank, then to a final effluent blending tank where chemical remineralization will be performed, if needed, to meet discharge requirements for inorganic compounds before the treated water is discharge through Outfall 001.

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.

Select Water Solutions, LLC (CN603611161) propone operar Orla Kessler SWD 1 RN todavía no ha sido asignado, una instalación de tratamiento de agua producida que puede generar efluentes tratados para la descarga de 4.2 MGD a aguas superficiales. La instalación estará ubicada en aproximadamente 0.42 milla al noroeste de la intersección de US HWY 285 y Red Bluff Lake Road, en Orla, Condado de Reeves, Texas 79770. El solicitante busca un nuevo permiso TPDES para descargar agua producida tratada a través del drenaje 001 a un afluente de Salt Creek en tres fases. Durante la fase 1 la descarga será de 0.42 MGD, durante la fase 2 será de 0.84 MGD y la fase 3 será de 4.2 MGD. Desde el drenaje 001, la descarga fluirá hacia el noroeste (NO), 3 millas, hasta Salt Creek, un afluente del río Upper Pecos, que se extiende aproximadamente 1 milla hasta el río Upper Pecos. Desde el drenaje 001, la descarga fluirá hacia el noroeste (NO), 3 millas, hasta Salt Creek, un afluente del río superior Pecos (Upper Pecos River), que corre aproximadamente 1 milla hasta el río superior Pecos.

Se espera que las descargas de la instalación contengan agua producida tratada con trazas de lo siguiente: compuestos orgánicos, amoníaco, sólidos coloidales, compuestos orgánicos volátiles (VOCs), compuestos orgánicos semi-volátiles (SVOCs) y sólidos disueltos totales (TDS). El agua producida será tratada por un proceso de purificación disponible en el mercado que será algo similar a la siguiente descripción: desalinización, proceso de eliminación de amoníaco, ajuste del pH antes de ingresar al proceso de eliminación de amoníaco y también después del tanque de efluentes del proceso de eliminación de amoníaco, luego a un tanque de mezcla de efluentes final donde se realizará la remineralización química, si es necesario, para cumplir con los requisitos de descarga de compuestos inorgánicos antes de que el agua tratada se descargue a través del drenaje 001.

INSTRUCTIONS

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

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

Example

Individual Industrial Wastewater Application

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

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

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

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

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

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

Texas Commission on Environmental Quality

Public Involvement Plan Form for Permit and Registration Applications

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

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

Section 1. Preliminary Screening

☒ New Permit or Registration Application

☐ New Activity – modification, registration, amendment, facility, etc. (see instructions)

If neither of the above boxes are checked, completion of the form is not required and does not need to be submitted.

Section 2. Secondary Screening

☒ Requires public notice,

☒ Considered to have significant public interest, **and**

☒ Located within any of the following geographical locations:

- Austin
- Dallas
- Fort Worth
- Houston
- San Antonio
- West Texas
- Texas Panhandle
- Along the Texas/Mexico Border
- Other geographical locations should be decided on a case-by-case basis

If all the above boxes are not checked, a Public Involvement Plan is not necessary. Stop after Section 2 and submit the form.

☐ Public Involvement Plan not applicable to this application. Provide **brief** explanation.

Section 3. Application Information

Type of Application (check all that apply):

Air ☐ Initial ☐ Federal ☐ Amendment ☐ Standard Permit ☐ Title V

Waste ☐ Municipal Solid Waste ☐ Industrial and Hazardous Waste ☐ Scrap Tire
☐ Radioactive Material Licensing ☐ Underground Injection Control

Water Quality

☒ Texas Pollutant Discharge Elimination System (TPDES)

- ☐ Texas Land Application Permit (TLAP)
- ☐ State Only Concentrated Animal Feeding Operation (CAFO)
- ☐ Water Treatment Plant Residuals Disposal Permit

☐ Class B Biosolids Land Application Permit

☐ Domestic Septage Land Application Registration

Water Rights New Permit

☐ New Appropriation of Water

☐ New or existing reservoir

Amendment to an Existing Water Right

☐ Add a New Appropriation of Water

☐ Add a New or Existing Reservoir

☐ Major Amendment that could affect other water rights or the environment

Section 4. Plain Language Summary

Provide a brief description of planned activities.

Select Water Solutions, LLC (CN603611161) proposes to operate Orla Kessler SWD 1 (RN Number not yet assigned), a produced water treatment facility that can generate treated effluent for discharge 4.2 MGD to surface water. The facility will be located at approximately 2.71 miles northwest of the intersection of US Hwy 285 and TX-652/CR-108, in Orla, Reeves County, Texas 79770. The applicant seeks a new TPDES permit to discharge treated produced water via Outfall 001 to a tributary of Salt Creek in three phases. During phase 1 the discharge will be 0.42 MGD, during phase 2 will be 0.84 MGD, and phase 3 will be 4.2 MGD. From Outfall 001 the discharge will flow northwest (NW), 3 miles, to Salt Creek, a tributary of the Upper Pecos River, which runs about 1 mile to the Upper Pecos River.

Discharges from the facility are expected to contain treated produced water with trace amounts of the following: organics, ammonia, colloidal solids, volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), and total dissolved solids (TDS). Produced water will be treated by a commercially available purification process that will be something similar to the following description: desalination process, ammonia removal process, pH adjustment before entering the ammonia removal process and also after the ammonia removal process effluent tank, then to a final effluent blending tank where chemical remineralization will be performed, if needed, to meet discharge requirements for inorganic compounds before the treated water is discharge through Outfall 001.

Section 5. Community and Demographic Information

Community information can be found using EPA's EJ Screen, U.S. Census Bureau information, or generally available demographic tools.

Information gathered in this section can assist with the determination of whether alternative language notice is necessary. Please provide the following information.

Pecos (nearest city with census data)

(City)

Reeves County

(County)

11,770 (County), 9,965 (Pecos)

(Census Tract)

Please indicate which of these three is the level used for gathering the following information.

☐ City ☐ County ☒ Census Tract

(a) Percent of people over 25 years of age who at least graduated from high school

71% (County)

(b) Per capita income for population near the specified location

$26,180(County)

(c) Percent of minority population and percent of population by race within the specified location

Minority Population (31.4%).
Hispanic or Latino (of any race) - 35%
White - 68.6%

(d) Percent of Linguistically Isolated Households by language within the specified location

Data not available

(e) Languages commonly spoken in area by percentage

Spanish: 52.6%
English only: 46.4%
Asian and Pacific Islander languages: 1.0%

(f) Community and/or Stakeholder Groups

Red Bluff Water Control District, Friends of the Pecos River, Reeves County Judge and Commissioners

(g) Historic public interest or involvement

Aquatic life use, contact recreation use, general use, fish consumption use

Section 6. Planned Public Outreach Activities

(a) Is this application subject to the public participation requirements of Title 30 Texas Administrative Code (30 TAC) Chapter 39?

☒ Yes ☐ No

(b) If yes, do you intend at this time to provide public outreach other than what is required by rule?

☒ Yes ☐ No

If Yes, please describe.

§ 39.551. Application for Wastewater Discharge Permit, Including Application for the Disposal of Sewage Sludge or Water Treatment Sludge

If you answered "yes" that this application is subject to 30 TAC Chapter 39, answering the remaining questions in Section 6 is not required.

(c) Will you provide notice of this application in alternative languages?

☐ Yes ☐ No

Please refer to Section 5. If more than 5% of the population potentially affected by your application is Limited English Proficient, then you are required to provide notice in the alternative language.

If yes, how will you provide notice in alternative languages?

☐ Publish in alternative language newspaper

☐ Posted on Commissioner's Integrated Database Website

☐ Mailed by TCEQ's Office of the Chief Clerk

☐ Other (specify)

(d) Is there an opportunity for some type of public meeting, including after notice?

☐ Yes ☐ No

(e) If a public meeting is held, will a translator be provided if requested?

☐ Yes ☐ No

(f) Hard copies of the application will be available at the following (check all that apply):

☐ TCEQ Regional Office ☐ TCEQ Central Office

☐ Public Place (specify)

Section 7. Voluntary Submittal

For applicants voluntarily providing this Public Involvement Plan, who are not subject to formal public participation requirements.

Will you provide notice of this application, including notice in alternative languages?

☒ Yes ☐ No

What types of notice will be provided?

☒ Publish in alternative language newspaper

☐ Posted on Commissioner's Integrated Database Website

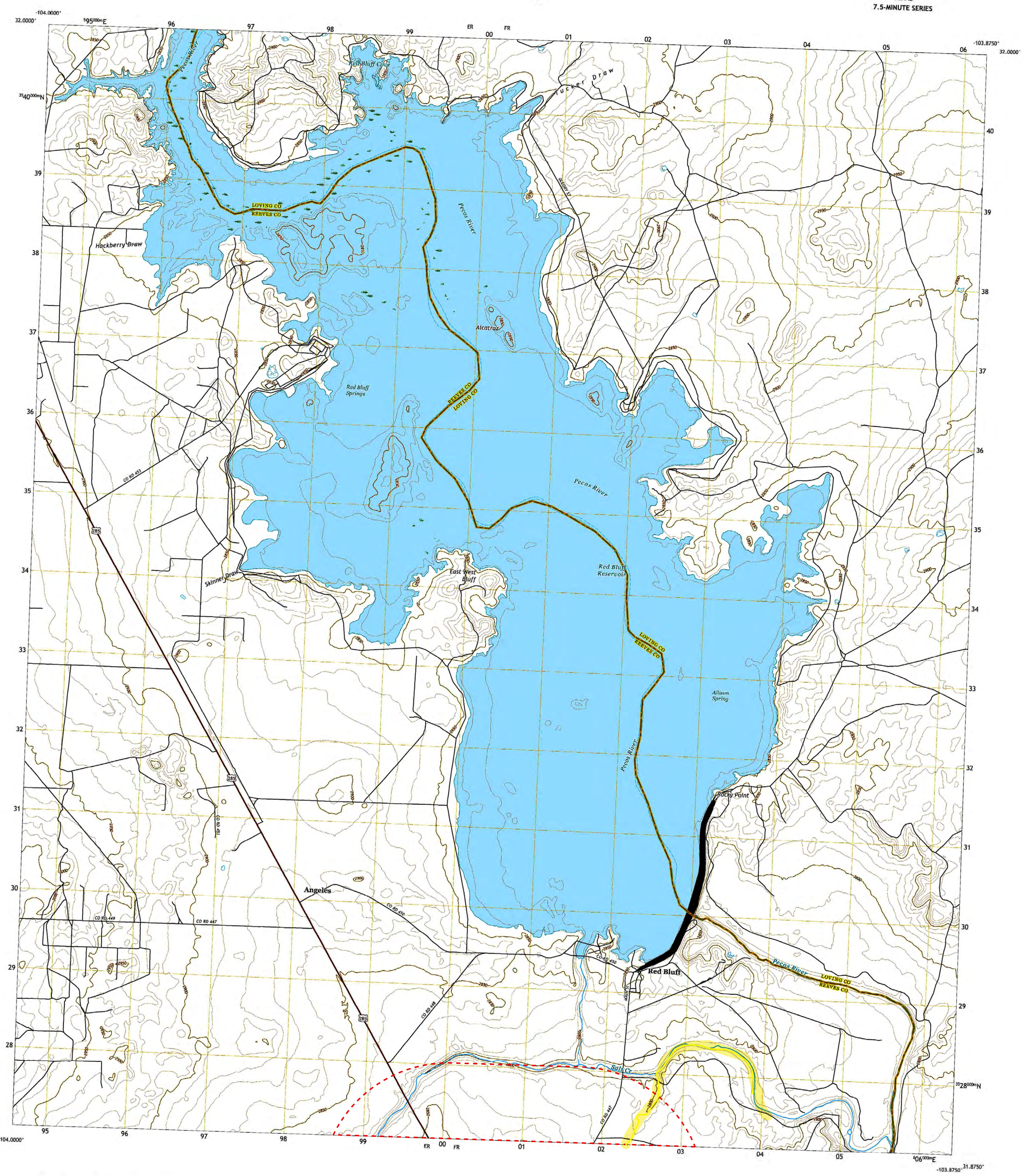
☐ Mailed by TCEQ's Office of the Chief Clerk

☐ Other (specify)

U.S. DEPARTMENT OF THE INTERIOR
U.S. GEOLOGICAL SURVEY

The National Map US Topo

RED BLUFF QUADRANGLE
TEXAS
7.5-MINUTE SERIES



Produced by the United States Geological Survey
North American Datum of 1983 (NAD83)
World Geodetic System of 1984 (WGS84). Projection and 1 000-meter grid:Universal Transverse Mercator, Zone 13R
This map is not a legal document. Boundaries may be generalized for this map scale. Private lands within government reservations may not be shown. Obtain permission before entering private lands.

Imagery	NAIP,	September 2016 - November 2016
Roads	U.S. Census Bureau,	2015 - 2018
Names	GNIS,	1979 - 2022
Hydrography	National Hydrography Dataset,	2002 - 2018
Contours	National Elevation Dataset,	2021
Boundaries	Multiple sources; see metadata file	2019 - 2021
Wetlands	FWS National Wetlands Inventory	Not Available

UTM GRID AND 2019 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET
MN
GN
0°34'
10 MILS
8°56'
159 MILS
U.S. National Grid
100,000-m Square ID
ER FR
Grid Zone Designation
13S
32°N
13R

SCALE 1:24 000
1000 500 0 KILOMETERS 1 2
1000 0 1000 2000 3000 4000 5000 6000 7000 8000 9000 10000 FEET
1 0.5 0 METERS 1000 2000
1 0.5 0 MILES 1

CONTOUR INTERVAL 10 FEET
NORTH AMERICAN VERTICAL DATUM OF 1988

This map was produced to conform with the National Geospatial Program US Topo Product Standard.

TEXAS
QUADRANGLE LOCATION

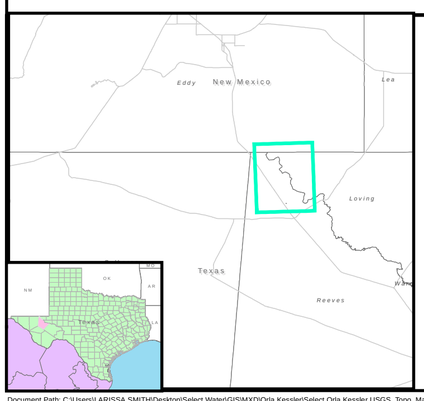
1 2 3
4 5
6 7 8
ADJOINING QUADRANGLES
1 Red Bluff
2 Ross Ranch
3 Phantom Banks
4 Screw Bean Draw NE
5 Orla NE
6 Screw Bean Draw East
7 Orla
8 Orla SE

ROAD CLASSIFICATION
Expressway
Secondary Hwy
Ramp
Local Connector
Local Road
4WD
Interstate Route
US Route
State Route

RED BLUFF, TX
2022

NSN 7643016397897
NGA REF NO. USGSX24K71356

Source: USGS 7.5 Minute Series, Redlands, Texas 2022.



LEGEND
3-miles Discharge Route
1-Mile Radius

N
SCALE: 1 IN = 2,083.3 feet
0 2,000 4,000
Feet

Date: 10/24/2024
Project: 212C-HN-02919

SELECT

ATTACHMENT AR-4

7.5-MINUTE USGS TOPOGRAPHIC QUADRANGLE MAP

REEVES COUNTY, TEXAS

Prepared By: TETRA TECH

Document Path: C:\Users\LARISSA.SMITH\Desktop\Select Water\GIS\MXD\Orla Kessler\Select Orla Kessler USGS_Topo_Map.mxd User Name: LARISSA.SMITH

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USGS science for a changing world

U.S. DEPARTMENT OF THE INTERIOR
U.S. GEOLOGICAL SURVEY

The National Map US Topo

ORLA QUADRANGLE
TEXAS
7.5-MINUTE SERIES

-104.0000° 31.8750° 595000mE 3527000mN -103.8750° 31.8750°

95 96 97 98 99 ER 00 FR 01 02 03 04 05 06

27 26 25 24 23 22 21 20 19 18 17 16 15 14

3514000mN

31.7500° -104.0000° -103.8750° 31.7500° 606000mE

Produced by the United States Geological Survey
North American Datum of 1983 (NAD83)
World Geodetic System of 1984 (WGS84). Projection and
1 000-meter grid:Universal Transverse Mercator, Zone 13R
This map is not a legal document. Boundaries may be generalized for this map scale. Private lands within government reservations may not be shown. Obtain permission before entering private lands.

Imagery.....NAIP, September 2016 - November 2016
Roads.....U.S. Census Bureau, 2015
Names.....GNIS, 1979 - 2019
Hydrography.....National Hydrography Dataset, 2002 - 2018
Contours.....National Elevation Dataset, 2021
Boundaries.....Multiple sources; see metadata file 2019 - 2021
Wetlands.....FWS National Wetlands Inventory Not Available

MN 0°56' 123 MILS
GN 0°34' 10 MILS
UTM GRID AND 2019 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET

U.S. National Grid
100,000-m Square ID
ER FR
Grid Zone Designation 13R

SCALE 1:24 000
1 KILOMETERS 1 2
1000 500 0 METERS 1000 2000
1 0.5 0 MILES 1
1000 0 1000 2000 3000 4000 5000 6000 7000 8000 9000 10000 FEET

CONTOUR INTERVAL 10 FEET
NORTH AMERICAN VERTICAL DATUM OF 1988

This map was produced to conform with the National Geospatial Program US Topo Product Standard.

TEXAS
QUADRANGLE LOCATION

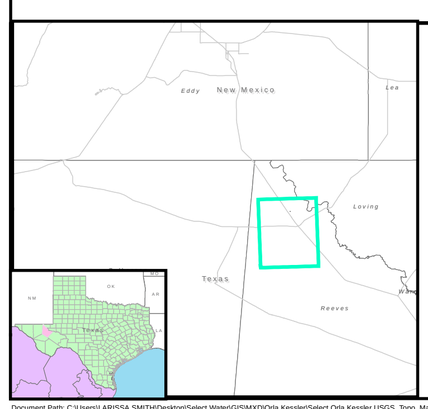
ADJOINING QUADRANGLES
1 2 3
4 5
6 7 8
1 Screw Bean Draw NE
2 Red Bluff
3 Orla NE
4 Screw Bean Draw East
5 Orla SE
6 Derrick Draw
7 Threemile Draw
8 Narrow Bow Draw

ROAD CLASSIFICATION
Expressway
Secondary Hwy
Ramp
Local Connector
Local Road
4WD
Interstate Route
US Route
State Route

NSN 7643016397538
NGA REF NO. USGS24K3343

ORLA, TX
2022

Source: USGS 7.5 Minute Series, Redlands, Texas 2022.



LEGEND

- Pipeline
- 3-miles Discharge Route
- 1-Mile Radius
- Property Boundary
- Facility Boundary
- Outfall 001

N

SCALE: 1 IN = 2,083.3 feet

0 2,000 4,000
Feet

Date: 3/18/2025
Project: 212C-HN-02919

SELECT

FIGURE 2

7.5-MINUTE USGS TOPOGRAPHIC QUADRANGLE MAP

REEVES COUNTY, TEXAS

Prepared By: TETRA TECH

Document Path: C:\Users\LARISSA.SMITH\Desktop\Select Water\GIS\MXD\Orla Kessler\Select Orla Kessler USGS_Topo_Map2.mxd User Name: LARISSA.SMITH

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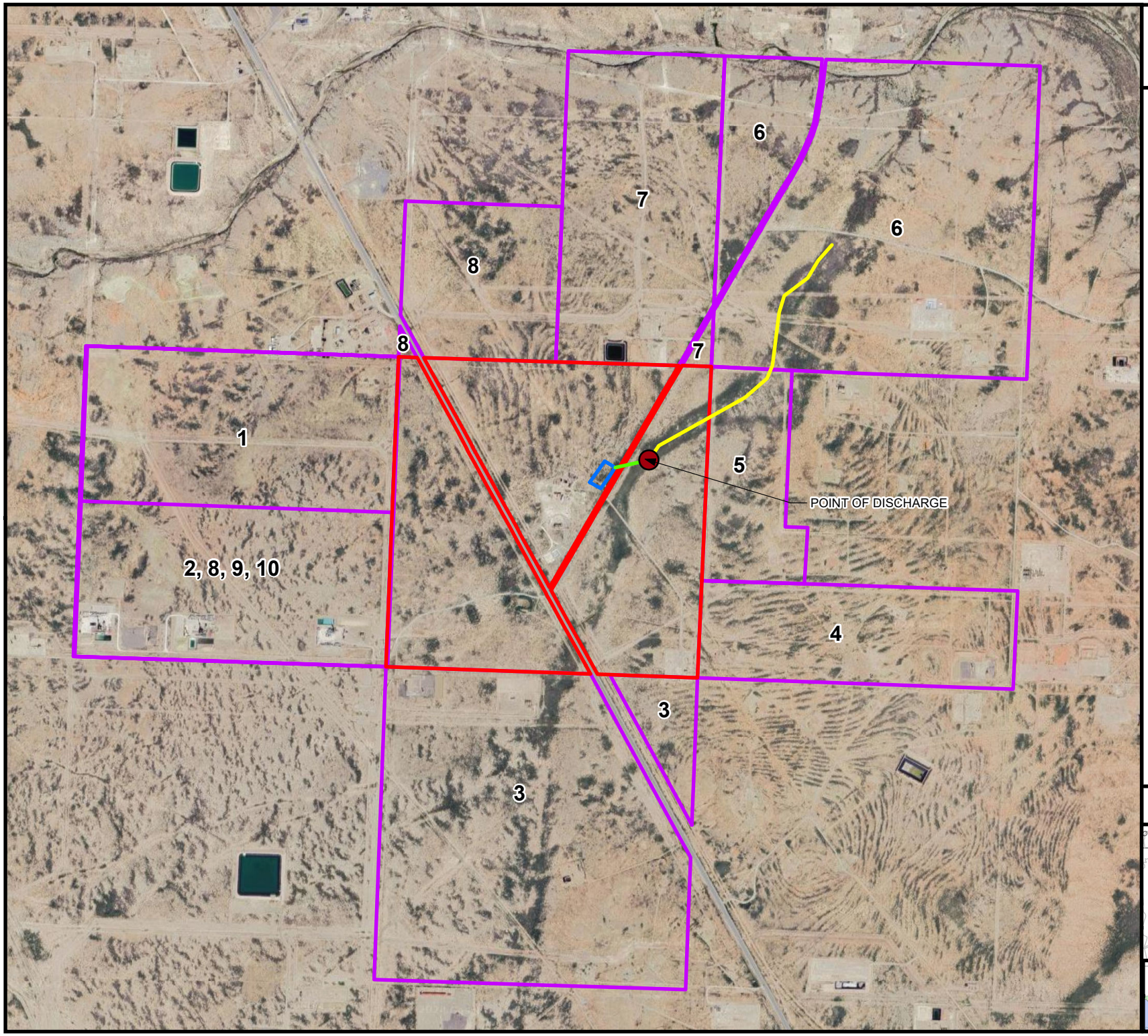


SELECT

FIGURE 2

AFFECTED LANDOWNERS MAP

REEVES COUNTY, TEXAS

LEGEND

- Property Boundary
- Facility Boundary
- Adjacent Property Boundary
- 1-mile Downstream of Point of Discharge
- Outfall 001
- Pipeline

N

SCALE: 1 IN = 2,185.6 feet

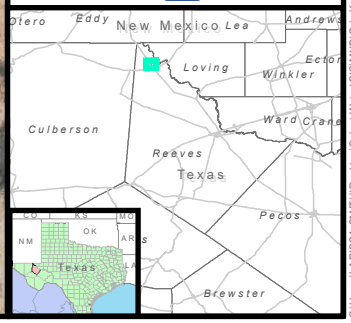
0 1,000 2,000

Feet

SOURCE: GOOGLE EARTH PRO, 2020.

Date: 3/18/2025
Project: 212C-HN-02919

Prepared By: TETRA TECH



Document Path: C:\Users\LARISSA.SMITH\Desktop\Select Water\GIS\MXD\Orla Kessler\Select Orla Kessler Landowners Map.mxd User Name: LARISSA.SMITH

C:\Users\LARISSA.SMITH\Desktop\Select Water\GIS\MXD\Orla Kessler\Select Orla Kessler Landowners Map.mxd

Attachment AR-6
Landowners List
Orla Kessler

Map ID	Parcel ID*	Name	Street	City	State	Zip Code
1	24104	WESTBROOK CARLENE LEE	2068 CULVER LOOP	SUTHERLIN	OR	97479-9907
2**, 10**	33106	HATCH ROYALTY LLC	1717 W 6TH ST, STE 290	AUSTIN	TX	78703-4789
3	-	PROPERTY NOT FOUND IN COUNTY RECORDS	-	-	-	-
4	13894	STATE OF TEXAS	1700 NORTH CONGRESS AVENUE	AUSTIN	TX	78701
5	15188	TUNSTILL OIL & LAND CO	PO BOX 50119	AUSTIN	TX	78763-0119
6	7719	KESSLER A D & JACLYN S TRUST	PO BOX L	RANCHO SANTA FE	CA	92067-0560
7	8928	BLAKE OIL & GAS CORP	400 N MAIN ST	MIDLAND	TX	79701-4710
8**	6395	HERD PARTNERS CO	PO BOX 130	MIDLAND	TX	79702-0130
	33105	LEE BARNEY A/K/A BARNEY GENE LEE	16049 N WINSOR AVE	GARDENDALE	TX	79758
9**	33107	LEE ROBERT A	8264 VILLA LAGO DR APT 533	FORTH WORTH	TX	76179

* From the Reeves County Appraisal District parcel number.
**There is not geometric shape for these parcels on file.

WESTBROOK CARLENE LEE
2068 CULVER LOOP
SUTHERLIN, OR 97479-9907

HATCH ROYALTY LLC
1717 W 6TH ST, STE 290
AUSTIN, TX 78703-4789

STATE OF TEXAS
1700 NORTH CONGRESS AVENUE
AUSTIN, TX 78701

TUNSTILL OIL & LAND CO
PO BOX 50119
AUSTIN, TX 78763-0119

KESSLER A D & JACLYN S TRUST
PO BOX L
RANCHO SANTA FE, CA 92067-0560

BLAKE OIL & GAS CORP
400 N MAIN ST
MIDLAND, TX 79701-4710

HERD PARTNERS CO
PO BOX 130
MIDLAND, TX 79702-0130

LEE BARNEY A/K/A BARNEY GENE LEE
16049 N WINSOR AVE
GARDENDALE, TX 79758

LEE ROBERT A
8264 VILLA LAGO DR APT 533
FORTH WORTH, TX 76179

Photographic Log & Plot Plan
Attachment AR-7
Select Water Solutions, LLC
New TPDES Permit Application

Photo 1: View of area where the proposed produced water (PW) treatment unit will be installed, standing at Red Bluff Lake Road and facing north (N).

Photo 2: View of area where the proposed PW treatment unit will be installed, standing at Red Bluff Lake Road and facing northwest (NW).

Photo 3: View of area where the proposed PW treatment unit will be installed, standing at Red Bluff Lake Road and facing southwest (SW).

Photo 4: View of area of proposed Outfall 001.

Date Taken	Photographs Taken By:	Page No.	Client:	Site Name:	
8/6/2021	Midland Group	1 of 2	Select	Orla Kessler, TX	TETRA TECH

Photographic Log & Plot Plan
Attachment AR-7
Select Water Solutions, LLC
New TPDES Permit Application

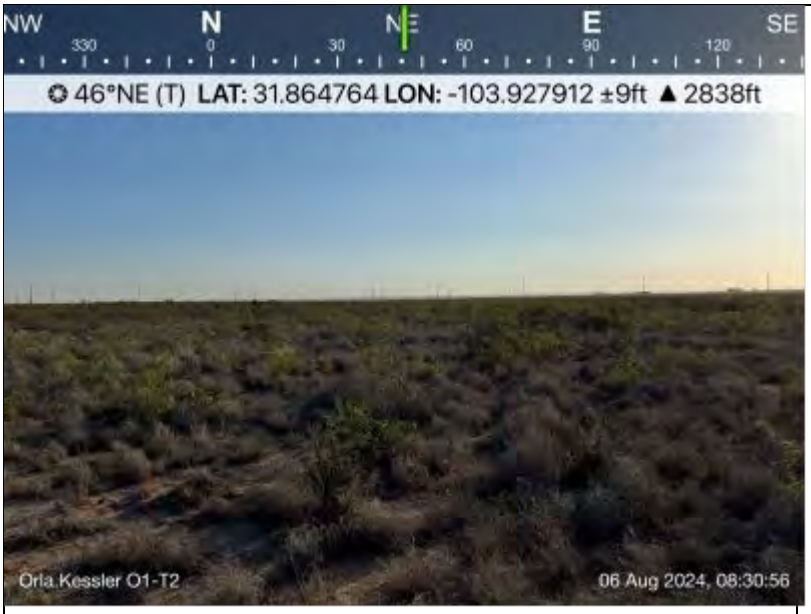


Photo 5: View of area of proposed Outfall 001.

Date Taken	Photographs Taken By:	Page No.	Client:	Site Name:	
8/6/2021	Midland Group	2 of 2	Select	Orla Kessler, TX	TETRA TECH


447
Photo 3
Photo 4
Outfall 001 Option 1
O1-T2
Site
Photo 5
Photo 2
Photo 1
Red Bluff Lake Rd
Google Earth
Image © 2025 Airbus
N
1000 ft

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: Select Water Solutions, LLC

   Permit No. WQ00 N/A EPA ID No. TX N/A

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

   Head northwest from Orla, TX on US Hwy 285 for approximately 2.71-miles. Turn right at Red Bluff Lake Road (County Road 447) and travel approximately 0.5-miles. Facility will be located to the left. The approximate lat/log coordinates for the facility are: 31.864160 N, -103.930667 W.

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

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

First and Last Name: Robert Huizenga

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

Title: Vice President, Technical Advisory & Special Projects

Mailing Address: 1233 West Loop South, Suite 1400

City, State, Zip Code: Houston, TX 77027

Phone No.: 918-607-2918 Ext.: Click here to enter text. Fax No.: Click here to enter text.

E-mail Address: rhuizenga@selectwater.com

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

N/A

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

From Outfall 001 the discharge will flow northwest (NW), 3 miles, to Salt Creek, a tributary of the Pecos River, which runs about 1 mile to the Upper Pecos River (Stream Segment 2311).

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):

The proposed construction impact will include installation for the discharge pipeline from the facility to Outfall 001. The area of impact is estimated to be approximately six (6) surface acres.

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

The land where the facility will be constructed is not in use. To the south of the facility the Orla Kessler Saltwater Disposal (SWD) facility permitted by the RRC is in operation.

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:

The proposed date of construction for the facility will be the 2nd quarter of 2026.

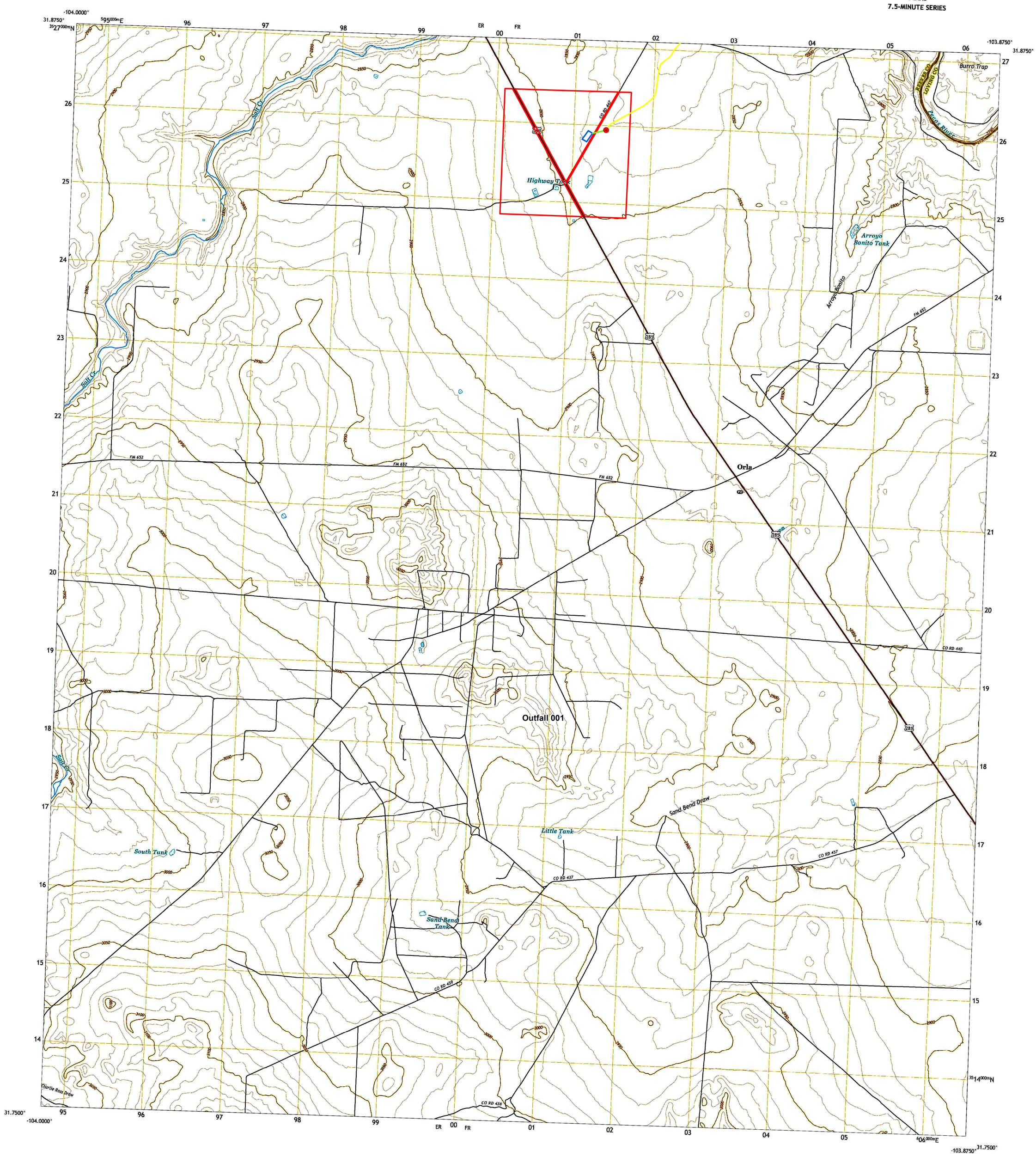
4. Provide a brief history of the property, and name of the architect/builder, if known.

Part of the area is used for disposal of produced water via depth well injection. Before that the area was used as farm or cattle ranches.

U.S. DEPARTMENT OF THE INTERIOR
U.S. GEOLOGICAL SURVEY

The National Map US Topo

ORLA QUADRANGLE
TEXAS
7.5-MINUTE SERIES



Produced by the United States Geological Survey
North American Datum of 1983 (NAD83)
World Geodetic System of 1984 (WGS84). Projection and
1 000-meter grid:Universal Transverse Mercator, Zone 13R
This map is not a legal document. Boundaries may be generalized for this map scale. Private lands within government reservations may not be shown. Obtain permission before entering private lands.

Imagery.....NAIP, September 2016 - November 2016
Roads.....U.S. Census Bureau, 2015
Names.....GNIS, 1979 - 2019
Hydrography.....National Hydrography Dataset, 2002 - 2018
Contours.....National Elevation Dataset, 2021
Boundaries.....Multiple sources; see metadata file 2019 - 2021
Wetlands.....FWS National Wetlands Inventory Not Available

SCALE 1:24 000

1 0.5 0 KILOMETERS 1 2
1000 500 0 METERS 1000 2000
1 0.5 0 MILES 1
1000 0 1000 2000 3000 4000 5000 6000 7000 8000 9000 10000 FEET

CONTOUR INTERVAL 10 FEET
NORTH AMERICAN VERTICAL DATUM OF 1988

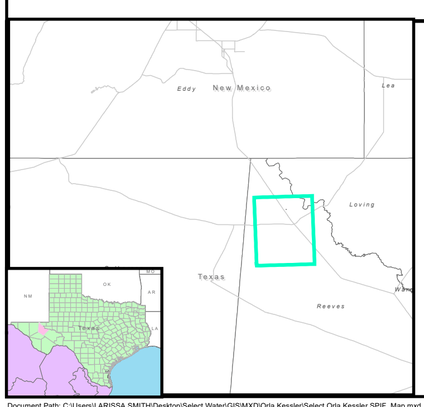
This map was produced to conform with the National Geospatial Program US Topo Product Standard.

ROAD CLASSIFICATION
Expressway
Secondary Hwy
Ramp
Local Connector
Local Road
4WD
Interstate Route
US Route
State Route

NSN 7643016397538
NGA REF NO. USGS24K3343O

ORLA, TX
2022

Source: USGS 7.5 Minute Series, Redlands, Texas 2022.



LEGEND
- 1-mile Discharge Route
- Pipeline
- Property Boundary
- Facility Boundary
- Outfall 001

N

SCALE: 1 IN = 2,083.3 feet
0 2,000 4,000
Feet

Date: 3/18/2025
Project: 212C-HN-02919

SELECT

SPIF FIGURE 1

7.5-MINUTE USGS TOPOGRAPHIC QUADRANGLE MAP

REEVES COUNTY, TEXAS

Prepared By: TETRA TECH

Document Path: C:\Users\LARISSA.SMITH\Desktop\Select Water\GIS\MXD\Orla Kessler\Select Orla Kessler SPIF_Map.mxd User Name: LARISSA.SMITH

C:\Users\LARISSA.SMITH\Desktop\Select Water\GIS\MXD\Orla Kessler\Select Orla Kessler SPIF_Map.mxd

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).

Select Water Solutions LLC collects Produced Water (PW) from multiple facilities and seeks to treat the PW to generate a treated effluent that can be discharged to surface water. Treatment of the PW shall include water desalination. The applicable SIC code is 1389 – Oil and Gas Field Services, Not Elsewhere Classified.

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

The Desalination unit process shall generate a reject brine stream and solids. The desalination waste stream and solids will be returned to the RRC facility for Recovery/Recycle/Disposal. The processed water will continue for pH adjustment if necessary and to the ammonia removal process. After the ammonia removal process, the stream is sent to the ammonia removal process effluent tank and then the pH will be adjusted. Stream continues to the final effluent blending tank where chemical remineralization will occur if needed and then discharged through Outfall 001. The facility will be built to discharge in phases: Phase 1 will be 0.42 MGD, phase 2 will be 0.84 MGD, and phase 3 will be 4.2 MGD. See the Technical Supplement Process Description in Attachment TR-1 for a full description of the wastewater-generating processes at the facility.

[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
Produced Water from O&G Exploration and Production		Treated Water
		Brine Stream

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: TR-2

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 has not completed a study to determine flood hazard for the selected location; therefore, a flood map has not been published at this time.

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: Click to enter text.

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.

See Technical Supplement Process Description in Attachment TR-1.

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

Attachment: TR-3

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)				
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	Approximately 31.864735° N	Approximately -103.927926° W
	Final coordinates will be adjusted after detailed design is finished	

Outfall Location Description

Outfall No.	Location Description
001	Approximately 0.12-0.15-miles northeast of the proposed facility.

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

Outfall No.	Description of sampling point
001	At the metering station just before entering the discharge pipeline.

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			0.42	0.42	06/30/2026
001			0.84	0.84	06/30/2027
001			4.2	4.2	06/30/2028

Outfall Discharge – Method and Measurement

Outfall No.	Pumped Discharge? Y/N	Gravity Discharge? Y/N	Type of Flow Measurement Device Used
001	TBD	TBD	TBD

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	28-31	12

Outfall Wastestream Contributions

Outfall No. 001

Contributing Wastestream	Volume (MGD)	Percent (%) of Total Flow
Treated Produced Water	0.42-4.2	100%

Outfall No. Click to enter text.

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

Outfall No. Click to enter text.

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: Click to enter text.

c. Cooling Towers and Boilers

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

Cooling Towers and Boilers

Type of Unit	Number of Units	Daily Avg Blowdown (gallons/day)	Daily Max Blowdown (gallons/day)
Cooling Towers			
Boilers			

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: Click to enter text.

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.
TBD	TBD

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:** Click to enter text.

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

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

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				
Owner				
Operator				

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

   ☐ Yes ☐ No

   If **no**, continue. If **yes**, provide the PWS Registration No. and stop here: PWS No. Click to enter text.

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

   ☐ Yes ☐ No

   If **no**, continue. If **yes**, provide the Reuse Authorization No. and stop here: Click to enter text.

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

   ☐ Yes ☐ No

   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: Click to enter text.

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 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

   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*: Click to enter text.

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: N/A – No labs in this application.

Title:

Signature: _____

Date: _____

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): N/A – Facility is new and has not been constructed yet.

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:** Click to enter text.

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– See Technical Supplement Process Description (Attachment TR-1) for estimated effluent concentrations based on pilot study **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)				
CBOD (5-day)				
Chemical oxygen demand				
Total organic carbon				
Dissolved oxygen				
Ammonia nitrogen				
Total suspended solids				
Nitrate nitrogen				
Total organic nitrogen				
Total phosphorus				

Pollutant	Sample 1 (mg/L)	Sample 2 (mg/L)	Sample 3 (mg/L)	Sample 4 (mg/L)
Oil and grease				
Total residual chlorine				
Total dissolved solids				
Sulfate				
Chloride				
Fluoride				
Total alkalinity (mg/L as CaCO3)				
Temperature (˚F)				
pH (standard units)				

Table 2 for Outfall No.: 001– See Technical Supplement Process Description (Attachment TR-1) for estimated effluent concentrations based on pilot study

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					2.5
Antimony, total					5
Arsenic, total					0.5
Barium, total					3
Beryllium, total					0.5
Cadmium, total					1
Chromium, total					3
Chromium, hexavalent					3
Chromium, trivalent					N/A
Copper, total					2
Cyanide, available					2/10
Lead, total					0.5
Mercury, total					0.005/0.0005
Nickel, total					2
Selenium, total					5
Silver, total					0.5
Thallium, total					0.5
Zinc, total					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.: 001– See Technical Supplement Process Description (Attachment TR-1) for estimated effluent concentrations based on pilot study **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

Pollutant	Sample 1 (µg/L)*	Sample 2 (µg/L)*	Sample 3 (µg/L)*	Sample 4 (µg/L)*	MAL (µg/L)*
1,2-Dichloroethane					10
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
Ethylbenzene					10
Fluoride					500
Hexachlorobenzene					5
Hexachlorobutadiene					10
Hexachlorocyclopentadiene					10
Hexachloroethane					20
Methyl ethyl ketone					50
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
Toluene					10
1,1,1-Trichloroethane					10
1,1,2-Trichloroethane					10
Trichloroethene					10

Pollutant	Sample 1 (µg/L)*	Sample 2 (µg/L)*	Sample 3 (µg/L)*	Sample 4 (µg/L)*	MAL (µg/L)*
[Trichloroethylene]					
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
Dicofol [Kelthane]					1
Dieldrin					0.02
Diuron					0.090

Pollutant	Sample 1 (µg/L)*	Sample 2 (µg/L)*	Sample 3 (µg/L)*	Sample 4 (µg/L)*	MAL (µg/L)*
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– See Technical Supplement Process Description (Attachment TR-1) for estimated effluent concentrations based on pilot study

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)	☐	☐					—
Nitrate-Nitrite (as N)	☐	☐					—
Sulfide (as S)	☐	☐					—
Sulfite (as SO3)	☐	☐					—
Surfactants	☐	☐					—
Boron, total	☐	☐					20
Cobalt, total	☐	☐					0.3
Iron, total	☐	☐					7
Magnesium, total	☐	☐					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.: N/A **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
Acrylonitrile					50
Benzene					10
Bromoform					10
Carbon tetrachloride					2
Chlorobenzene					10
Chlorodibromomethane					10
Chloroethane					50
2-Chloroethylvinyl ether					10
Chloroform					10
Dichlorobromomethane [Bromodichloromethane]					10
1,1-Dichloroethane					10
1,2-Dichloroethane					10
1,1-Dichloroethylene [1,1-Dichloroethene]					10
1,2-Dichloropropane					10
1,3-Dichloropropylene [1,3-Dichloropropene]					10
Ethylbenzene					10
Methyl bromide [Bromomethane]					50
Methyl chloride [Chloromethane]					50
Methylene chloride [Dichloromethane]					20
1,1,2,2-Tetrachloroethane					10
Tetrachloroethylene [Tetrachloroethene]					10
Toluene					10
1,2-Trans-dichloroethylene [1,2-Trans-dichloroethene]					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
1,1,2-Trichloroethane					10
Trichloroethylene [Trichloroethene]					10
Vinyl chloride					10

* Indicate units if different from µg/L.

Table 9 for Outfall No.: N/A **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
2,4-Dichlorophenol					10
2,4-Dimethylphenol					10
4,6-Dinitro-o-cresol					50
2,4-Dinitrophenol					50
2-Nitrophenol					20
4-Nitrophenol					50
p-Chloro-m-cresol					10
Pentachlorophenol					5
Phenol					10
2,4,6-Trichlorophenol					10

* Indicate units if different from µg/L.

Table 10 for Outfall No.: N/A **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.: N/A **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.: N/A **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.: 001– See Technical Supplement Process Description (Attachment TR-1) for estimated effluent concentrations based on pilot study

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: Tributary of Salt Creek

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: Salt Creek

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: Looks dry with no water.

Date and time of observation: 8/6/2024. From 8:22 am to 10:05 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
☐ agricultural runoff
☐ upstream discharges
☐ urban runoff
☐ septic tanks
☐ other, specify: Click to enter text.

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

☒ livestock watering
☐ non-contact recreation
☐ domestic water supply
☐ contact recreation
☐ fishing
☐ industrial water supply
☐ irrigation withdrawal
☐ navigation
☐ picnic/park activities
☐ 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

INDUSTRIAL WASTEWATER PERMIT APPLICATION WORKSHEET 4.1: WATERBODY PHYSICAL CHARACTERISTICS

The following information **is required** for new applications, EPA-designated Major facilities, and major amendment applications requesting to add an outfall if the receiving waters are perennial or intermittent with perennial pools (including impoundments) for a TDPES permit.

Complete the transects downstream of the existing or proposed discharges.

Item 1. Data Collection (Instructions, Page 82)

a. Date of study: 8/6/2024 Time of study: 8:22 am – 10:05 am

Waterbody name: None

General location: East of Red Bluff Lake Road

b. Type of stream upstream of an existing discharge or downstream of a proposed discharge (check only one):

☐ perennial ☒ intermittent with perennial pools ☐ impoundment

c. No. of defined stream bends:

Well: 0 Moderately: 0 Poorly: 0

d. No. of riffles: 0

e. Evidence of flow fluctuations (check one):

☒ Minor ☐ Moderate ☐ Severe

f. Provide the observed stream uses and where there is evidence of channel obstructions/modifications: Stream is a draw that only have water when rains.

g. Complete the following table with information regarding the transect measurements.

Stream Transect Data

Transect Location	Habitat Type*	Water Surface Width (ft)	Stream Depths (ft)**								
O1-T1	-	50	1								
O1-T2	-	150	2								
O1-T3	-	200	2.5								
O1-T4	-	200	2								
O1-T5	-	220	3								
O1-T6	-	160	6								
01-T7	-	18	8								

* riffle, run, glide, or pool

** channel bed to water surface

Item 2. Summarize Measurements (Instructions, Page 83)

Provide the following information regarding the transect measurements:

Streambed slope of entire reach (from USGS map in ft. /ft.): 0.0034

Approximate drainage area above the most downstream transect from USGS map or county highway map (square miles): 0.12

Length of stream evaluated (ft): 10,085

Number of lateral transects made: 7

Average stream width (ft): 99.42

Average stream depth (ft): 3.63

Average stream velocity (ft/sec): ND

Instantaneous stream flow (ft^3/sec): ND

Indicate flow measurement method (VERY IMPORTANT – type of meter, floating chip timed over a fixed distance, etc.): None. Dry ditch.

Flow fluctuations (i.e., minor, moderate, or severe): None

Size of pools (i.e., large, small, moderate, or none): None

Maximum pool depth (ft): 0

Total number of stream bends: 0

Number well defined: 0

Number moderately defined: 0

Number poorly defined: 0

Total number of riffles: 0

ATTACHMENT TR-1 – SELECT TECHNICAL SUPPLEMENT PROCESS DESCRIPTION

Supplemental Technical Report for Select Water Solutions

Texas Pollutant Discharge Elimination System (TPDES) Application

June 23, 2025

Attachment TR-1

TETRA TECH

Select Water Solutions

Supplemental Technical Report

TPDES Permit Application

Attachment TR-1

March 20th, 2025

PRESENTED TO

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TETRA TECH

1.0 BACKGROUND

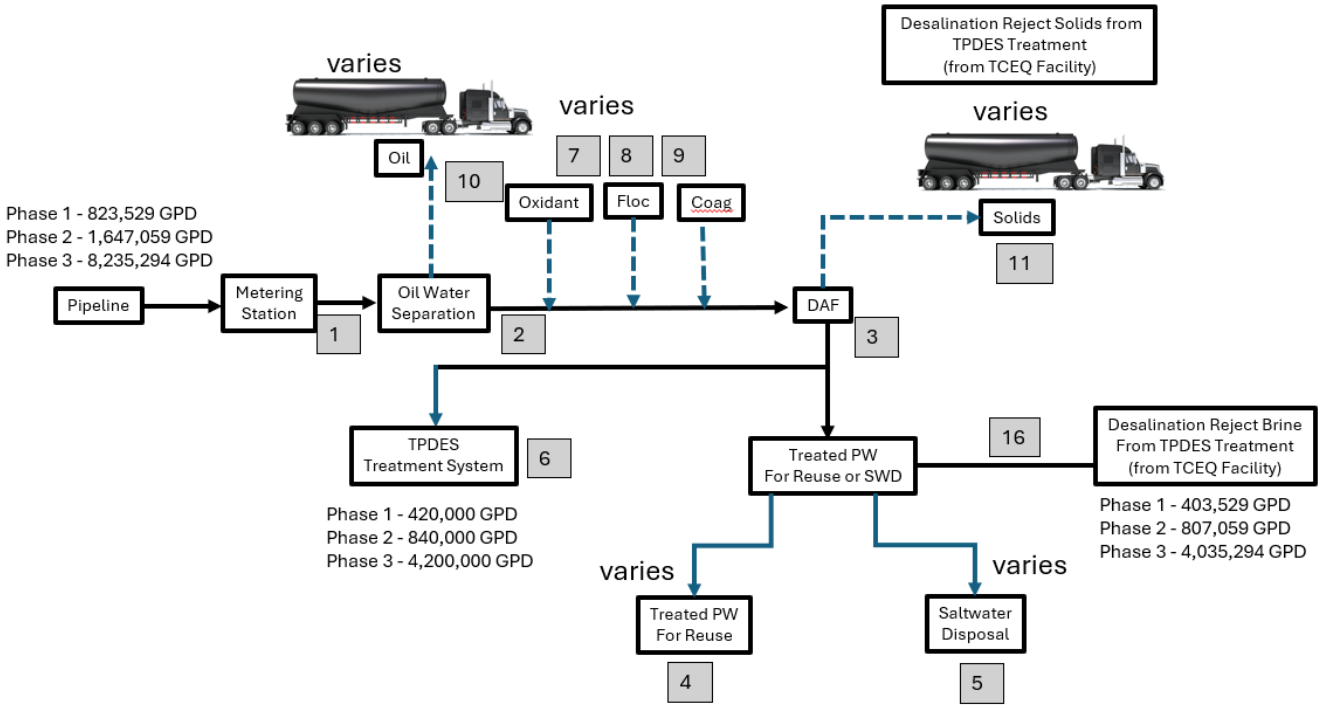
Select Water Solutions (Select) is currently applying for a Texas Pollutant Discharge Elimination System (TPDES) Permit as an alternative method for disposal, reuse, and recycle of produced water (PW). This Supplemental Technical Report describes the proposed collection, treatment, and disposal of PW.

Select provides end-to-end water solutions and well-site services to energy producers in the Oilfield. Select effectively and safely sources, transports, tests, treats, and disposes of water and fluids within every major U.S. shale play in an environmentally conscious manner. Select Water Solutions, LLC has been in this business since 2007 when John Schmitz and a few key industry leaders founded Peak Wellsite Rentals, LLC, in Gainesville, Texas. In 2008, the company acquired Impact Energy Services and was officially renamed Select Energy Services. Through its three operating segments, Select has nearly 4,000 employees servicing over 400 customers in every major shale play throughout the United States. Select Energy Services is headquartered in Gainesville, Texas. Select has several Water Recycling facilities located in Texas. The facility which is the subject of this TPDES Application is the Orla Kessler Saltwater Disposal (SWD) facility , in Reeves County, TX. This facility is currently regulated under the Railroad Commission of Texas (RRC).

2.0 EXISTING SELECT PW SWD RECYCLING FACILITY

PW is received from the Oil & Gas Operator(s) and treated by Select. The Oil & Gas Operator(s) source the PW from multiple wells, each with their own produced water characteristics. The Custody of this PW is then transferred to Select via pipeline. No sewage is included in the Process Water. The existing PW recycling system & SWD includes a Metering Station [1], oil separation [2] and a Dissolved Air Floatation (DAF) unit which removes trace oil and scaling cations [3] . The DAF Effluent is sent to Reuse (for Fracking) under RRC rules [4], sent to the SWD for disposal [5], or transferred to the Desalination Treatment Facility which is the subject of this TPDES permit application [6]. Coagulants, Flocculants, and Oxidants may be added to aid in the pretreatment of the PW [7.8.9]. Oil Skimming and DAF float [10] are recovered and recycled or disposed of under RRC rules. Currently the pretreated PW can be reused by clients [6] for Fracking or disposed of through the SWD [7]. The Flow Diagram for the existing facility is shown in **Figure 1**.

Figure -1 Recycling facility – This portion of the Water System is Regulated by Railroad Commission of Texas (RRC)



Within this TPDES Permit application, Select proposes to transfer pretreated PW from this RRC Facility into a newly constructed facility for further PW treatment to discharge into Texas Surface Waters [6]. The new facility would be regulated by the Texas Commission on Environmental Quality (TCEQ).

3.0 PROPOSED PW TREATMENT SYSTEM (PWTS)

Select proposes to connect this partially treated PW to a PW Treatment System (PWTS) prior to pumping it through an effluent pipeline for discharge at the proposed Outfall location into a tributary of Salt Creek, which eventually flows to the Upper Pecos River (Segment 2311). The PWTS would have an effluent capacity of up to 100,000 barrels per day (bpd) (4,200,000 gallons per day (gpd) or 4.2 million gallons per day (MGD)). The effluent would be discharged in Phases (see below). PWTS seeks to be regulated under the TPDES Permit by the TCEQ.

3.1 PHASES OF OPERATION AND ASSOCIATED FLOW RATES

The Orla Kessler TPDES facility will be constructed in three Phases of Operation:

1. Phase 1 Maximum Effluent flow of 10,000 Barrels per Day (BPD) or 420,000 gallons per day (GPD) Discharge at Outfall 001
2. Phase 2 Maximum Effluent flow of 20,000 BPD or 840,000 GPD Discharge at Outfall 001
3. Phase 3 Maximum Effluent flow of 100,000 BPD or 4,200,000 GPD Discharge at Outfall 001

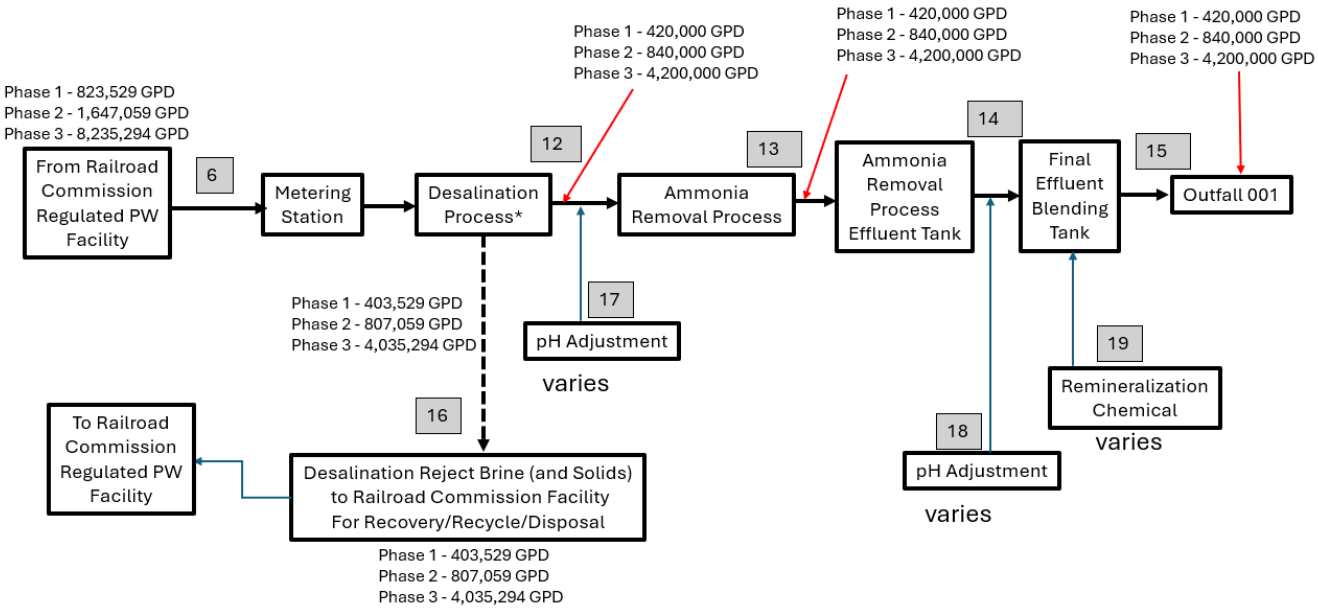
It is anticipated that up to 5 years may be required full implementation of all 3 phases. Select Water Solutions, LLC would notify TCEQ prior to activation of each Phase, by submitting Form 20007 to the agency, at least 45 days in advance.

3.2 PROCESS DESCRIPTION AND DIAGRAMS

The proposed treatment facility is shown in a Process Diagram in **Figure 2**. The proposed PWTS utilizes several unit processes to remove pollutants and treat the PW for discharge. The unit processes are selected based on proven industrial wastewater processes currently in use. The unit processes remove a portion of the following pollutant groups:

- Trace oil and oily solids (O&G)
- Volatile Organic Compounds (VOCs), potentially present above 25 mg/L total VOCs in some PW
- Colloidal Total Suspended Solids (TSS)
- Dissolved Organics (VOCs, Semi-Volatile Organic Compounds (SVOCs), Dissolved Hydrocarbons)
- Scale-forming cations (Calcium, Magnesium, Iron, Barium, and Strontium)
- Total Dissolved Solids (TDS)
- Ammonia
- Dissolved metals and salts, including potentially Boron, Silica, and Trace Radioactive Elements

Figure -2 Surface Water Desalination Treatment Facility – This portion of the Water System is Regulated by TCEQ



The applicant has provided references of several publications from the Texas Produced Water Consortium and the New Mexico Produced Water Consortium which have reported the characteristics of partially and untreated produced water from Permian Basin samples. Tetra Tech This projected effluent was prepared by Tetra Tech based on pilot studies at similar facilities and using technology similar to that proposed by Select. The PW sample was collected at the current fractionation tanks. Further analytical samples are in the laboratory and will be sent to TCEQ as an addendum after the permit application is submitted. The projected concentrations of the treated PW effluent for discharge were developed using treatability studies and engineering analyses.

The proposed PWTS includes the following unit processes:

- The proposed PWTS receives RRC-regulated impoundment effluent [6], and this is considered the battery limit for the TCEQ-regulated facility under the TPDES application.
- The PW goes through a metering station at the Battery Limit
- Next, the PW passes through a process which removes any dissolved hydrocarbons, VOCs, and some of the salt content (TDS). This process is referred to as "Desalination"[12]. The process consists of:
    - Thermal and Mechanical desalination to reduce salinity in the PW. Each pass through the freezing distillation process reduces the TDS by approximately 60%.
    - Condensate is evaporated and collected through condensation. This becomes the effluent of the Desalination process
    - The Desalination process has a waste brine which is primarily Sodium Chloride [16]. The slurry that is concentrated salts of Calcium, Magnesium, and Barium are also found in this stream. The salt slurry
    - The Waste Tank is pumped back to the RRC-regulated facility as recycle brine and added back to the reuse/disposal process. In the water balance , a conservative efficiency or net processing throughput of 51% was assumed. This means that for every 100 gallons in the feed to Desalination, 51 gallons will pass to the next unit in treatment, while 49 gallons passes to the Waste Tank, and eventually back to the RRC facility for recycling.
- The Desalination Effluent [12] can be passed through Ammonia Removal, depending on the Ammonia concentration in the PW. Select has not determined the exact process but considers Ammonia Stripping or Biological Treatment.
    - Ammonia Stripping is a common wastewater treatment process where the partially treated PW is pH adjusted with Caustic [17] to raise the PH to 11. Then the PW is passed in "downflow' to a shallow tray air stripper, such as is manufactured by Branch Environmental. Low pressor air compressors, called "blowers," transfer air into the stripper and it flows upward taking the Ammonia with it. The ratio of air to water flow is greater than 60. The efficiency of the process is greater than 95% so the ammonia is removed to <10 mg/L. At this time, the location of the facility should not require off-gas condensation and capture. But if that is required under air permitting then Select will add a condenser to the process. The stripper effluent, or "Bottoms" will still be at a high pH, so it is anticipated a 2nd pH adjustment chemical, an acid, will be added after the Stripper [18]. While Select is still in the evaluation process for this technology, it offers the benefit of a simple, reliable, small footprint. If the PW still contains soluble organics, then the Air Stripping process will have little or no effect on the organics.
    - An alternative process for the removal of NH3 and any trace organics is a biological treatment process. Based on our experience with partially Desalinated PW Tetra Tech believes the alternative will be an activated sludge system, designed as a tank-based aeration tank and clarifier, or an aeration tank and membrane system to remove solids, known as an MBR. Removal of ammonia will require a system with a Hydraulic Retention Time (HRT) of 12 hours minimum and a Mean Cell Residence Time (MCRT). The Aeration tank will be aerated and mixed by surface or subsurface aeration. Clarifiers use gravity. MBRs use membranes to separate effluent from solids. In each technology most of the biomass is retained and a small

portion is ‘wasted” or disposed of as Nonhazardous Solid Waste. This technology has a larger footprint and is more capital intensive than air striping but has the advantages of removing all the organics as well as Ammonia. So, this process may be used if required by the TPDES Permit effluent requirements.

- The Effluent from the Ammonia Removal process [13] passes into a Final Effluent Blending Tank [14], and then to the Outfall 001 [15].The distillate may be too low in Alkalinity and certain soluble ions and salts required to sustain aquatic life in the Receiving waters. Thus, alkalinity and certain ions must be added back to support aquatic life. If necessary, the process will add potential sources of alkalinity, especially calcium and magnesium ions which aid in the formation of Calcium Carbonate, Calcium Sulfate, Magnesium Carbonate, and Magnesium Sulfate. In some cases, a Calcium Chloride Solution [19] may be added to the effluent ASTs to boost alkalinity and reduce aquatic toxicity.
- The PWTS will discharge by gravity into Outfall 001, which leads to an unnamed tributary leading to the receiving waters, Salt Creek and then the Upper Pecos River (TCEQ Segment 2311).

3.3 EFFLUENT DIFFUSER

Tetra Tech and Select have determined that no effluent diffuser is required.

3.4 PROPOSED EFFLUENT DISCHARGE QUALITY

The quality of the proposed discharge has been estimated using analytical data from analyses of the PW and assuming the unit processes described above. The laboratory reports will be provided later in the process.

- The effluent for discharge is the Post Desalination effluent. **Table 1** shows the estimated water quality and notes on the processes that control the effluent quality.
- The receiving water is a tributary of Salt Creek, which is not classified, but it is assumed TCEQ will apply water quality criteria from the downstream segment, Upper Pecos River (Segment 2311), which Salt Creek flows into. That segment is rated PCR1 with limited aquatic life use, mostly because of low stream flow and low dissolved oxygen values.
- The Water Quality criteria for the receiving water, Upper Pecos River (Segment 2311) is listed in 30 TAC 307 (2018 Water Quality Standards) as:
    - Chlorides 7,000 mg/L
    - Sulfate 3,500 mg/L
    - TDS 15,000 mg/L
    - Dissolved Oxygen 5.0 mg/L minimum
    - pH 6.5 - 9.0 SU
    - Bacteria < 33 CFU/100 mL
    - Temperature < 92 °F

Tetra Tech and Select considered the effects of discharge on the aquatic species in both Salt Creek and the Upper Pecos River. The intended discharge volumes from the Select site to Salt Creek and thence to the Upper Pecos River are expected to have little impact on the limited aquatic resources in the Upper Pecos River. A

survey conducted in 1987 (TPWD, River Studies No. 9, 1996), showed only six (6) fish species present in the Pecos River at FM 652, about 6 miles downstream of the confluence of Salt Creek with the Pecos River.

One of the threatened fish species in Salt Creek is the Pecos pupfish (*Cyprinodon pecosensis*). The Pecos pupfish was once one of the most abundant fish in the Pecos River but is now restricted to Salt Creek and just a few locations in New Mexico due to hybridization with Sheepshead Minnow (*C. variegatus*) and groundwater pumping. As a result, it is classified as "threatened" in Texas. Tolerant of high salinity, the Pecos pupfish can move from water saltier than sea water into freshwater with no ill effects.

It was determined that moderate effluent TDS discharged into the Upper Pecos River will have little impact on the current sport-fishery. The available background data from the river indicates that the river is already moderately brackish. This limits year-to-year recruitment in fish stocks for many species. Consequently, the Pecos River fishery exists only through Texas Parks Wildlife Department (TPWD) stocking programs. It is essentially a put-and-take proposition based mostly on salt-tolerant white bass x striped bass hybrids.

The critical parameter in 30 TAC 307 for the river is chlorides. Tetra Tech suggests the effluent design be set so that the discharge is set at <3,000 mg/L chloride, well below the background value of 7,000 mg/L. This is equivalent to a sodium chloride (NaCl)-based contribution of about 5,000 mg/L. The non-NaCl constituents in the treated PW will add another ~1,800 mg/L TDS, so the final effluent is proposed to be ~7,000 mg/L.

This is reflected in **Table 1** below. This will be beneficial to the aquatic species in the Upper Pecos River downstream and to all water users.

Table 1: Projected Effluent Quality at Outfall 001

Projected Feed and Effluent Water Quality				
Parameters	Typical Produced Water (Permian Basin), as Fed to New Mexico PW research Consortium PW Desalination Pilot[1]	Pilot Desalination New Mexico PW research Consortium PW Desalination Pilot[1] (prior to Ammonia removal)	Tetra Tech Projected Effluent Quality after Ammonia removal, Final Ph Adjustment, and remineralization	Water Quality Parameters (30TAC307, 2018) for Upper Pecos River Segment 2311
Phase 1 Flow, MGD	0.840[2]		0.420[2]	
Phase 2 Flow, MGD	1.680[2]		0.840[2]	
Phase 3 Flow, MGD	8.400[2]		4.200[2]	
NH3, mg/L	611	44.93[3]	<50	-
TOC, mg/L	74.39	0.28		-
TPH, mg/L	28	11.33	<15	-
Alkalinity, mg/L as Ca CO3	116.8	64		-
Chlorides, mg/L	63,756	230		7,000
Sulfate, mg/L	368	45		3,500
Ba, mg/L	5.9	0.014		3,500
Li, mg/L	30.8	0.03		5
TDS, mg/L	103,352	475	<5000	15,000
pH, SU	6.58	8.52[3]		6.5-9.0

1. The estimated Feed Water Quality should be similar to that described in Table 1 (Mean Values) on page 5 in "Treatment of produced water from the Permian Basin: Chemical and toxicological characterization of the effluent from a pilot-scale low-temperature distillation system", Yeinner Tarazona, Mike Hightower, Pei Xu, Yanyan Zhang, Journal of Water Process Engineering, 67 (2024) 106146, Elsevier
2. The maximum discharge is based on a material balance calculation of the maximum achievable Post Desalination and RO permeates.
3. These projected Outfall concentrations are based on influent and effluent samples of a pilot study system.
4. Additional feed and effluent results will be transmitted to TCEQ after application submittal.

3.5 RESIDUALS MANAGEMENT

The design will have process residuals that will be managed to minimize waste.

The residuals from the proposed PWTS shall include:

- RO reject [16]: The RO system has to reject the excess salt to prevent membrane fouling. The RO efficiency is expected to be approximately 60-75%, and the RO reject is 25-40% of the forward flow or a maximum of 0.84 MGD in Phase 1 and 2.7 mgd in Phase 2. All of the RO reject will be added into the Cryogenic Desalination inlet, along with any CIP wastewater.
- Desalination backwash [22]: This will be a periodic purge from the Desalination Unit to remove brines and slurries, which may contain sodium, potassium, calcium, iron, and magnesium salts. These constituents tend to accumulate in the Desalination units and can cause corrosion and fouling. The Desalination unit will be flushed with RO permeate to remove the salts periodically. All of the salt and any hydrocarbon residuals will be transferred back to the RRC-regulated facility for beneficial reuse as brine. This volume is approximately 30% of the total charge to the Desalination unit. The RRC-regulated facility will use the brine for recycle use and any excess brine will be disposed of through SWDs.

Note: No SDS or chemical are presented here, because Select has not yet finished selecting the final process to be used. Select will inform TCEQ when the final decision is make and the chemicals to be used are selected based on the process selected.

3.6 DESIGN INFRASTRUCTURE

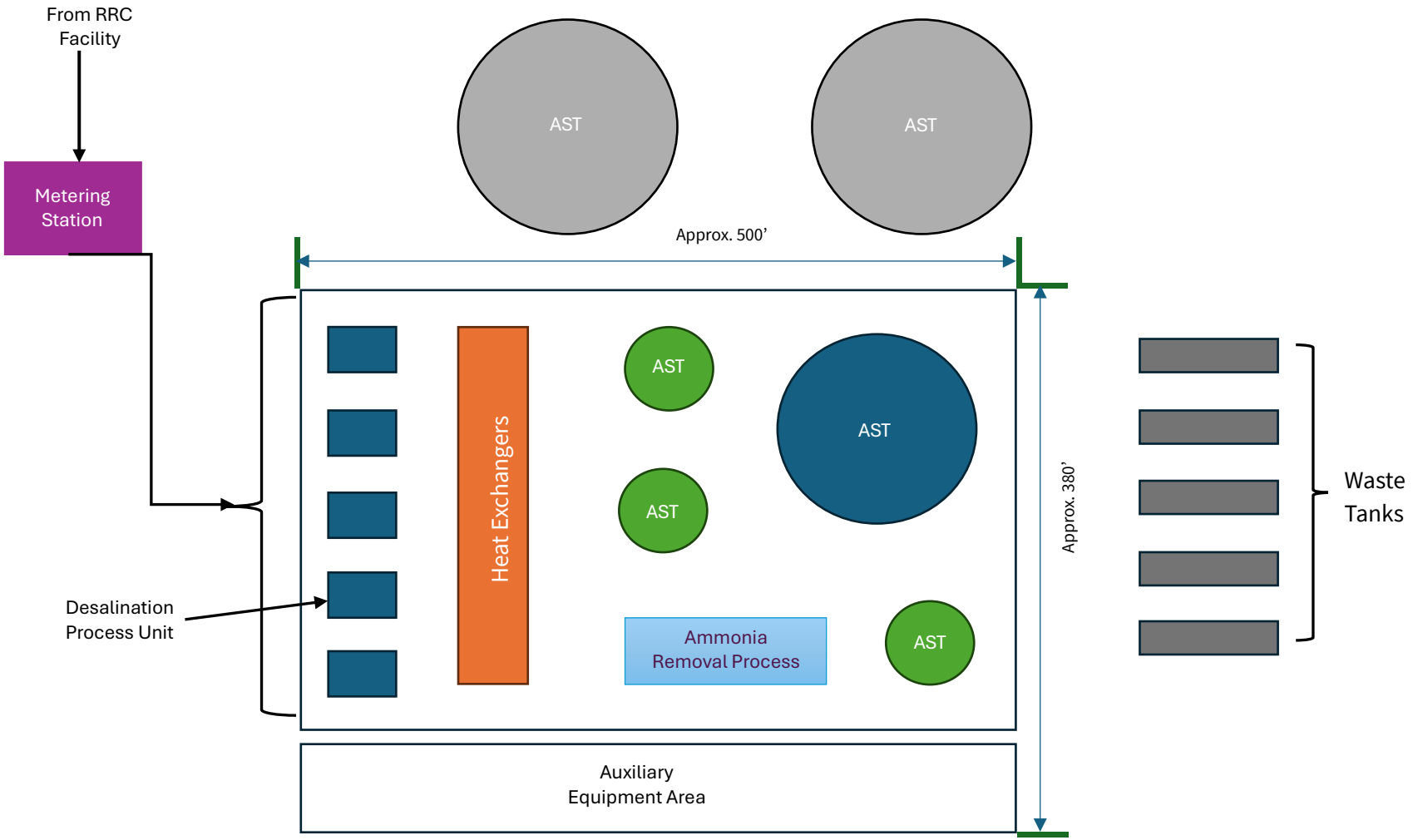
The PW treatment process will have a reasonable, compact footprint so that unit processes can be protected from weather and elements. The support infrastructure will include:

- Foundations, concrete pads, or steel skids, as desired for permanent or moveable unit processes.
- Prefabricated Metal Buildings to contain the smaller unit processes.
- Utility connection and transformers for Motor Control Center (MCC). Electrical controls, safety switches, and Variable Frequency Drive (VFD) units in the appropriate level of classification. Power supplied to all motors using waterproof cables in conduits or cable trays.
- Modular pipe racks with above ground interconnected piping which could be disassembled for unit movement. Hoses or lay-flat piping may be used where required for short connections.
- The system will be highly automated with controls reporting to a local Programmable Logic Controller (PLC) that allows remote access, data logging, and automatic controls.
- Process resiliency featuring critical parts in redundant mode, so that if a pump or other critical component fails, the system can continue to run using warehouse spares with little downtime.
- This system should be designed to be shop built, then assembled and commissioned in the field in a “plug and play” mode.
- Any containers with oils or oily chemicals are subject to U.S. EPA's Spill Prevention, Control, and Countermeasure (SPCC) regulation (40 CFR Part 112). An SPCC Plan will be prepared for the applicable portion of the TCEQ regulated PWTS prior to operation.

References

1. Texas Commission on Environmental Quality Chapter 307 - Texas Surface Water Quality Standards, 2018, page 86 Segment 1412, Colorado River Below Lake J. B. Thomas
2. “Treatment of produced water from the Permian Basin: Chemical and toxicological characterization of the effluent from a pilot-scale low-temperature distillation system,” Yeinner Tarazona, Mike Hightower, Pei Xu, Yanyan Zhang, Journal of Water Process Engineering, 67 (2024) 106146, Elsevier.

ATTACHMENT TR-2 – FACILITY MAP



SELECT

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This is a sketch of a typical facility. Details for the facility will be available during the design phase.

Attachment TR-2
Facility Map

ATTACHMENT TR-3 – WATER BALANCES FOR THREE OPTIONS

Figure -1 Recycling facility – This portion of the Water System is Regulated by Railroad Commission of Texas (RRC)

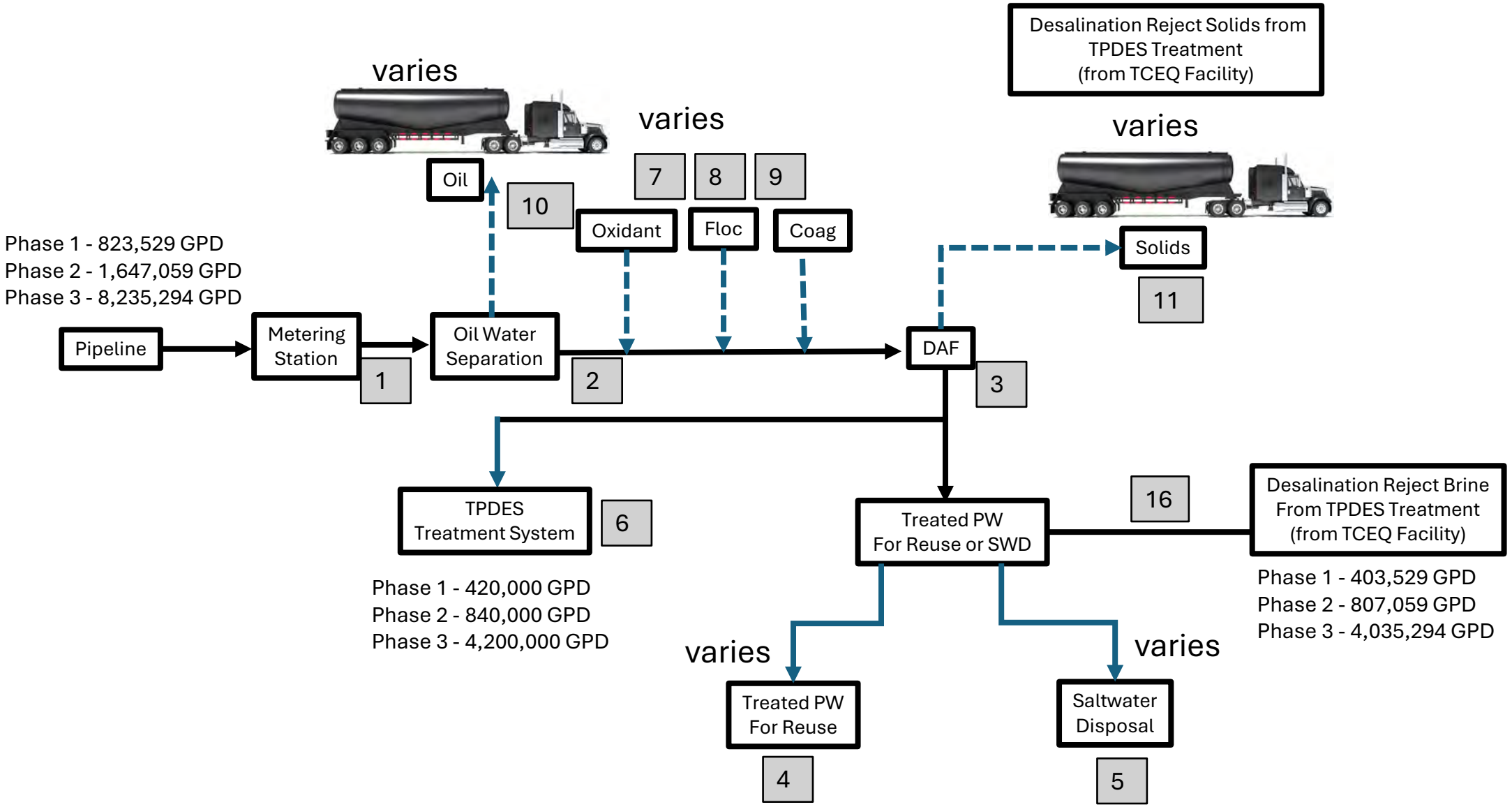

Figure -2 Surface Water Desalination Treatment Facility – This portion of the Water System is Regulated by TCEQ

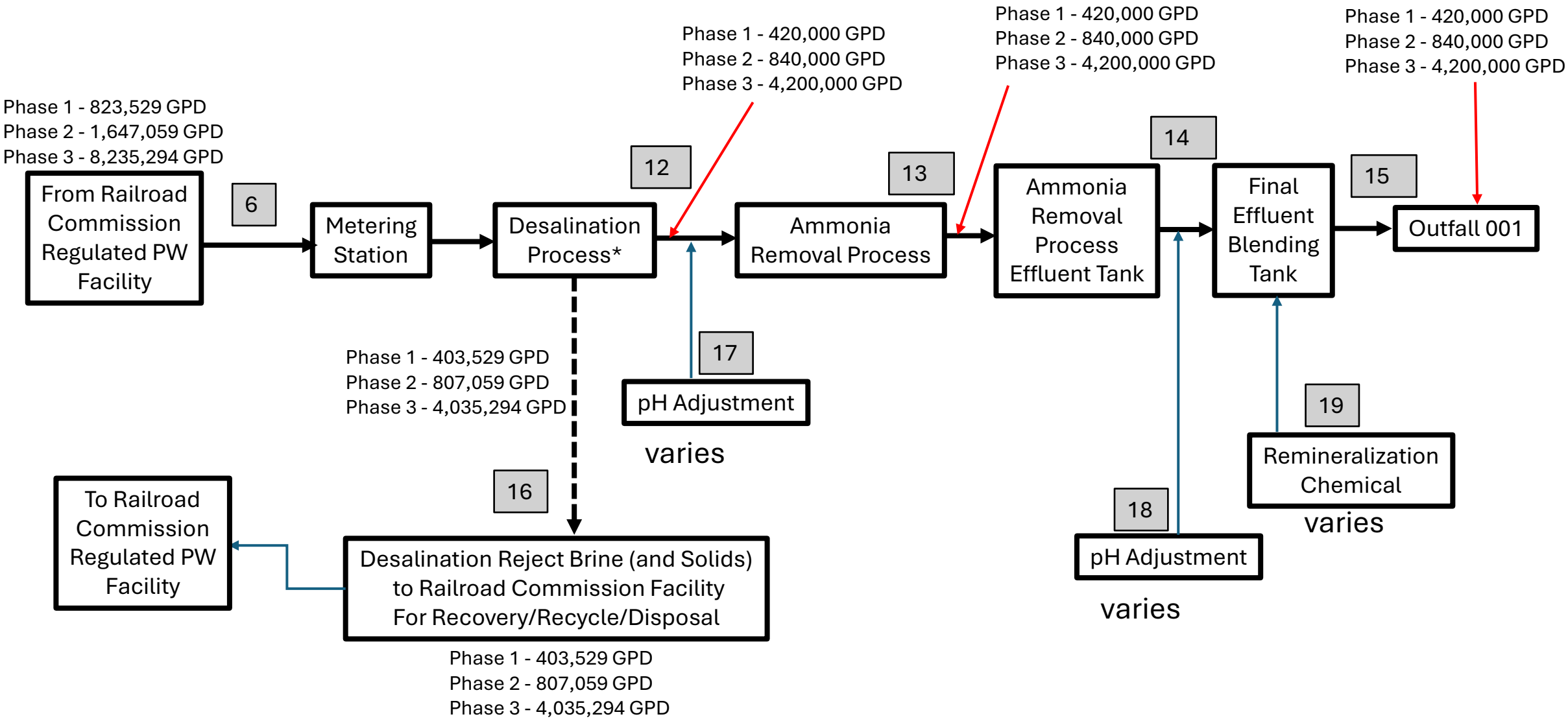

Table 1 Material Balance for Desalination System-Phase 1 Discharge 10,000 BPD (420,000GPD)								
Feed of PW	**Desalination Effluent**	**Ammonia Removal Process Effluent**	**Final Effluent Blending Tank Feed**	**Outfall 001**	**Desalination Reject Brine to RRC Facility**	**Caustic pH Adjustment (50% Caustic)**	**Acid pH Adjustment (93% H2SO4)**	**Demineralization (Calcium Chloride)**
6	12	13	14	15	16	17	18	19
19,608	10,000	10,000	10,000	10,000	9,608			
823,529	420,000	420,000	420,000	420,000	403,529	350	200	400
0.82	0.42	0.42	0.42	0.42	0.40	0.00	0.00	0.00
50	20	10	10	10	81.2			
50	20	10	10	10	81.2			
1000	250	40	40	40	1780.6			
28	1	1	1	1	56.1			
0	0							
611	11.33	10	10	10	1235.1			
51	10	10	5	10	93.7			
10	10	10	10	1	10.0			
100	50	20	20	20	152.0			
0.1	0.1	0.1	0.1	0.1	0.1			
25	25	5	1	5	25.0			
0	0	0	0		0.0			
103352	475	475.0	475.0	475	210428.1			
368	18	18.1	18.1	18	732.2			
63756	230	230.0	230.0	230	129874.9			
117	258	258.0	258.0	258	116.8			
68	180	180.0	180.0	180	180.0			
7	7	7.0	7.0	7	7.0			
35018	35018	35018.0	35018.0	35018	35018.0			
4491	4491	4491.0	4491.0	4491	4491.0			
585	585	585.0	585.0	585	585.0			
701	701	701.0	701.0	701	701.0			
6	6	5.9	5.9	6	5.9			
1212	1212	1212.0	1212.0	1212	1212.0			
31	31	30.8	30.8	31	30.8			
7	7	6.9	6.9	7	6.9			
1	1	0.6	0.6	1	0.6			
0	0	0.1	0.1	0	0.1			

System-Phase 2 Discharge 20,0		Table 2 Material Balance for Desalination System-Phase 2 Discharge 20,000 BPD (840,000GPD)								
Row #	Location	Feed of PW	Desalination Effluent	Ammonia Removal Process Effluent	Final Effluent Blending Tank Feed	Outfall 001	Desalination Reject Brine to RRC Facility	Caustic pH Adjustment (50% Caustic)	Acid pH Adjustment (93% H2SO4)	Demineralization (Calcium Chloride)
1	Location No.	6	12	13	14	15	16	17	18	19
2	Flow, BPD	39,216	20,000	20,000	20,000	20,000	19,216			
3	Flow, Gallons per Day	1,647,059	840,000	840,000	840,000	840,000	807,059	350	200	400
4.00	Flow, MGD	1.65	0.84	0.84	0.84	0.84	0.81	0.00	0.00	0.00
5	Pollutant									
6	BOD (5-day)	50	20	10	10	10	81.2			
7	CBOD (5-day)	50	20	10	10	10	81.2			
8	Chemical oxygen demand	1000	250	40	40	40	1780.6			
9	Total organic carbon	28	1	1	1	1	56.1			
10	Dissolved oxygen									
11	Ammonia nitrogen	611	11.33	10	10	10	1235.1			
12	Total suspended solids	51	10	10	5	10	93.7			
15	Nitrate nitrogen	10	10	10	10	1	10.0			
16	Total organic nitrogen	100	50	20	20	20	152.0			
17	Total phosphorus	0.1	0.1	0.1	0.1	0.1	0.1			
18	Oil and grease	25	25	5	1	5	25.0			
19	Total residual chlorine									
20	Total dissolved solids	103352	475	475.0	475.0	475	210428.1			
21	Sulfate	368	18	18.1	18.1	18	732.2			
22	Chloride	63756	230	230.0	230.0	230	129874.9			
24	Total alkalinity (mg/L as CaCO3)	117	258	258.0	258.0	258	116.8			
25	Temperature (°F)	68	180	180.0	180.0	180	180.0			
26	pH (standard units)	7	7	7.0	7.0	7	7.0			
125	Sodium, mg/L	35018	35018	35018.0	35018.0	35018	35018.0			
126	Calcium, mg/L	4491	4491	4491.0	4491.0	4491	4491.0			
127	Potassium, mg/L	585	585	585.0	585.0	585	585.0			
128	Magnesium, mg/L	701	701	701.0	701.0	701	701.0			
129	Barium, mg/L	6	6	5.9	5.9	6	5.9			
130	Strontium, mg/L	1212	1212	1212.0	1212.0	1212	1212.0			
131	Lithium, mg/L	31	31	30.8	30.8	31	30.8			
132	Iron, mg/L	7	7	6.9	6.9	7	6.9			
133	Managanese, mg/L	1	1	0.6	0.6	1	0.6			
134	Zinc, mg/L	0	0	0.1	0.1	0	0.1			

Table 3 Material Balance for Desalination System-Phase 3 Discharge 100,000 BPD (4,200,000 GPD)								
Feed of PW	**Desalination Effluent**	**Ammonia Removal Process Effluent**	**Final Effluent Blending Tank Feed**	**Outfall 001**	**Desalination Reject Brine to RRC Facility**	**Caustic pH Adjustment (50% Caustic)**	**Acid pH Adjustment (93% H2SO4)**	**Demineralization (Calcium Chloride)**
6	12	13	14	15	16	17	18	19
196,078	100,000	100,000	100,000	100,000	96,078			
8,235,294	4,200,000	4,200,000	4,200,000	420,000	4,035,294	350	200	400
8.24	4.20	4.20	4.20	0.42	4.04	0.00	0.00	0.00
50	20	10	10	10	81.2			
50	20	10	10	10	81.2			
1000	250	40	40	40	1780.6			
28	1	1	1	1	56.1			
0	0							
611	11.33	10	10	10	1235.1			
51	10	10	5	10	93.7			
10	10	10	10	1	10.0			
100	50	20	20	20	152.0			
0.1	0.1	0.1	0.1	0.1	0.1			
25	25	5	1	5	25.0			
0	0	0	0		0.0			
103352	475	475.0	475.0	475	210428.1			
368	18	18.1	18.1	18	732.2			
63756	230	230.0	230.0	230	129874.9			
117	258	258.0	258.0	258	116.8			
68	180	180.0	180.0	180	180.0			
7	7	7.0	7.0	7	7.0			
35018	35018	35018.0	35018.0	35018	35018.0			
4491	4491	4491.0	4491.0	4491	4491.0			
585	585	585.0	585.0	585	585.0			
701	701	701.0	701.0	701	701.0			
6	6	5.9	5.9	6	5.9			
1212	1212	1212.0	1212.0	1212	1212.0			
31	31	30.8	30.8	31	30.8			
7	7	6.9	6.9	7	6.9			
1	1	0.6	0.6	1	0.6			
0	0	0.1	0.1	0	0.1			

Supplemental Technical Report for Select Water Solutions

Texas Pollutant Discharge Elimination System (TPDES) Application

June 23, 2025

Attachment TR-1

TETRA TECH

Select Water Solutions

Supplemental Technical Report

TPDES Permit Application

Attachment TR-1

March 20th, 2025

PRESENTED TO

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1.0 BACKGROUND

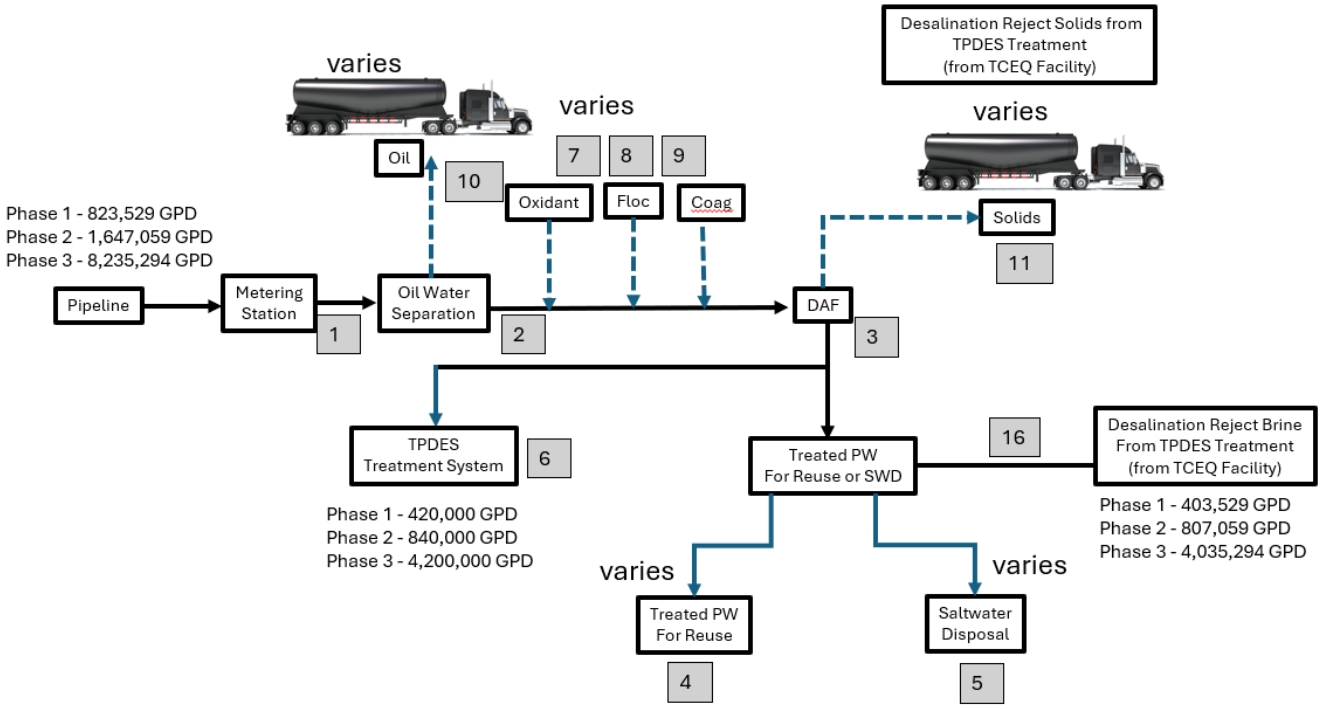
Select Water Solutions (Select) is currently applying for a Texas Pollutant Discharge Elimination System (TPDES) Permit as an alternative method for disposal, reuse, and recycle of produced water (PW). This Supplemental Technical Report describes the proposed collection, treatment, and disposal of PW.

Select provides end-to-end water solutions and well-site services to energy producers in the Oilfield. Select effectively and safely sources, transports, tests, treats, and disposes of water and fluids within every major U.S. shale play in an environmentally conscious manner. Select Water Solutions, LLC has been in this business since 2007 when John Schmitz and a few key industry leaders founded Peak Wellsite Rentals, LLC, in Gainesville, Texas. In 2008, the company acquired Impact Energy Services and was officially renamed Select Energy Services. Through its three operating segments, Select has nearly 4,000 employees servicing over 400 customers in every major shale play throughout the United States. Select Energy Services is headquartered in Gainesville, Texas. Select has several Water Recycling facilities located in Texas. The facility which is the subject of this TPDES Application is the Orla Kessler Saltwater Disposal (SWD) facility , in Reeves County, TX. This facility is currently regulated under the Railroad Commission of Texas (RRC).

2.0 EXISTING SELECT PW SWD RECYCLING FACILITY

PW is received from the Oil & Gas Operator(s) and treated by Select. The Oil & Gas Operator(s) source the PW from multiple wells, each with their own produced water characteristics. The Custody of this PW is then transferred to Select via pipeline. No sewage is included in the Process Water. The existing PW recycling system & SWD includes a Metering Station [1], oil separation [2] and a Dissolved Air Floatation (DAF) unit which removes trace oil and scaling cations [3] . The DAF Effluent is sent to Reuse (for Fracking) under RRC rules [4], sent to the SWD for disposal [5], or transferred to the Desalination Treatment Facility which is the subject of this TPDES permit application [6]. Coagulants, Flocculants, and Oxidants may be added to aid in the pretreatment of the PW [7.8.9]. Oil Skimming and DAF float [10] are recovered and recycled or disposed of under RRC rules. Currently the pretreated PW can be reused by clients [6] for Fracking or disposed of through the SWD [7]. The Flow Diagram for the existing facility is shown in **Figure 1**.

Figure -1 Recycling facility – This portion of the Water System is Regulated by Railroad Commission of Texas (RRC)



Within this TPDES Permit application, Select proposes to transfer pretreated PW from this RRC Facility into a newly constructed facility for further PW treatment to discharge into Texas Surface Waters [6]. The new facility would be regulated by the Texas Commission on Environmental Quality (TCEQ).

3.0 PROPOSED PW TREATMENT SYSTEM (PWTS)

Select proposes to connect this partially treated PW to a PW Treatment System (PWTS) prior to pumping it through an effluent pipeline for discharge at the proposed Outfall location into a tributary of Salt Creek, which eventually flows to the Upper Pecos River (Segment 2311). The PWTS would have an effluent capacity of up to 100,000 barrels per day (bpd) (4,200,000 gallons per day (gpd) or 4.2 million gallons per day (MGD)). The effluent would be discharged in Phases (see below). PWTS seeks to be regulated under the TPDES Permit by the TCEQ.

3.1 PHASES OF OPERATION AND ASSOCIATED FLOW RATES

The Orla Kessler TPDES facility will be constructed in three Phases of Operation:

1. Phase 1 Maximum Effluent flow of 10,000 Barrels per Day (BPD) or 420,000 gallons per day (GPD) Discharge at Outfall 001
2. Phase 2 Maximum Effluent flow of 20,000 BPD or 840,000 GPD Discharge at Outfall 001
3. Phase 3 Maximum Effluent flow of 100,000 BPD or 4,200,000 GPD Discharge at Outfall 001

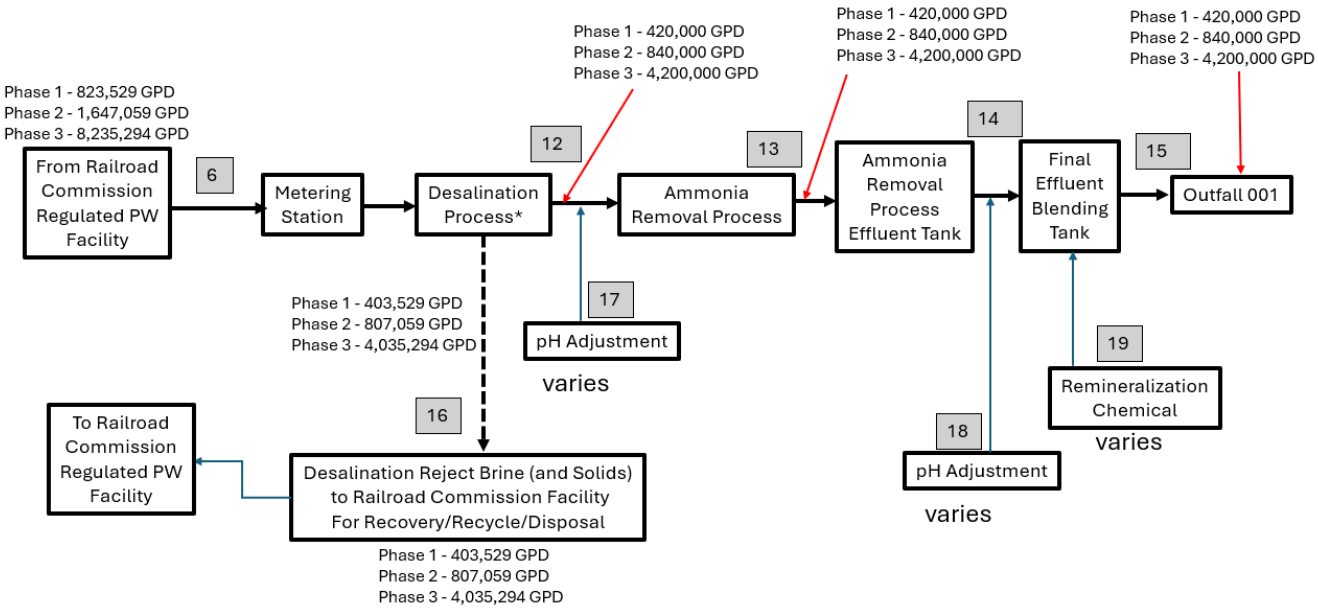
It is anticipated that up to 5 years may be required full implementation of all 3 phases. Select Water Solutions, LLC would notify TCEQ prior to activation of each Phase, by submitting Form 20007 to the agency, at least 45 days in advance.

3.2 PROCESS DESCRIPTION AND DIAGRAMS

The proposed treatment facility is shown in a Process Diagram in **Figure 2**. The proposed PWTS utilizes several unit processes to remove pollutants and treat the PW for discharge. The unit processes are selected based on proven industrial wastewater processes currently in use. The unit processes remove a portion of the following pollutant groups:

- Trace oil and oily solids (O&G)
- Volatile Organic Compounds (VOCs), potentially present above 25 mg/L total VOCs in some PW
- Colloidal Total Suspended Solids (TSS)
- Dissolved Organics (VOCs, Semi-Volatile Organic Compounds (SVOCs), Dissolved Hydrocarbons)
- Scale-forming cations (Calcium, Magnesium, Iron, Barium, and Strontium)
- Total Dissolved Solids (TDS)
- Ammonia
- Dissolved metals and salts, including potentially Boron, Silica, and Trace Radioactive Elements

Figure -2 Surface Water Desalination Treatment Facility – This portion of the Water System is Regulated by TCEQ



The applicant has provided references of several publications from the Texas Produced Water Consortium and the New Mexico Produced Water Consortium which have reported the characteristics of partially and untreated produced water from Permian Basin samples. Tetra Tech This projected effluent was prepared by Tetra Tech based on pilot studies at similar facilities and using technology similar to that proposed by Select. The PW sample was collected at the current fractionation tanks. Further analytical samples are in the laboratory and will be sent to TCEQ as an addendum after the permit application is submitted. The projected concentrations of the treated PW effluent for discharge were developed using treatability studies and engineering analyses.

The proposed PWTS includes the following unit processes:

- The proposed PWTS receives RRC-regulated impoundment effluent [6], and this is considered the battery limit for the TCEQ-regulated facility under the TPDES application.
- The PW goes through a metering station at the Battery Limit
- Next, the PW passes through a process which removes any dissolved hydrocarbons, VOCs, and some of the salt content (TDS). This process is referred to as "Desalination"[12]. The process consists of:
    - Thermal and Mechanical desalination to reduce salinity in the PW. Each pass through the freezing distillation process reduces the TDS by approximately 60%.
    - Condensate is evaporated and collected through condensation. This becomes the effluent of the Desalination process
    - The Desalination process has a waste brine which is primarily Sodium Chloride [16]. The slurry that is concentrated salts of Calcium, Magnesium, and Barium are also found in this stream. The salt slurry
    - The Waste Tank is pumped back to the RRC-regulated facility as recycle brine and added back to the reuse/disposal process. In the water balance , a conservative efficiency or net processing throughput of 51% was assumed. This means that for every 100 gallons in the feed to Desalination, 51 gallons will pass to the next unit in treatment, while 49 gallons passes to the Waste Tank, and eventually back to the RRC facility for recycling.
- The Desalination Effluent [12] can be passed through Ammonia Removal, depending on the Ammonia concentration in the PW. Select has not determined the exact process but considers Ammonia Stripping or Biological Treatment.
    - Ammonia Stripping is a common wastewater treatment process where the partially treated PW is pH adjusted with Caustic [17] to raise the PH to 11. Then the PW is passed in "downflow' to a shallow tray air stripper, such as is manufactured by Branch Environmental. Low pressor air compressors, called "blowers," transfer air into the stripper and it flows upward taking the Ammonia with it. The ratio of air to water flow is greater than 60. The efficiency of the process is greater than 95% so the ammonia is removed to <10 mg/L. At this time, the location of the facility should not require off-gas condensation and capture. But if that is required under air permitting then Select will add a condenser to the process. The stripper effluent, or "Bottoms" will still be at a high pH, so it is anticipated a 2nd pH adjustment chemical, an acid, will be added after the Stripper [18]. While Select is still in the evaluation process for this technology, it offers the benefit of a simple, reliable, small footprint. If the PW still contains soluble organics, then the Air Stripping process will have little or no effect on the organics.
    - An alternative process for the removal of NH3 and any trace organics is a biological treatment process. Based on our experience with partially Desalinated PW Tetra Tech believes the alternative will be an activated sludge system, designed as a tank-based aeration tank and clarifier, or an aeration tank and membrane system to remove solids, known as an MBR. Removal of ammonia will require a system with a Hydraulic Retention Time (HRT) of 12 hours minimum and a Mean Cell Residence Time (MCRT). The Aeration tank will be aerated and mixed by surface or subsurface aeration. Clarifiers use gravity. MBRs use membranes to separate effluent from solids. In each technology most of the biomass is retained and a small

portion is ‘wasted” or disposed of as Nonhazardous Solid Waste. This technology has a larger footprint and is more capital intensive than air striping but has the advantages of removing all the organics as well as Ammonia. So, this process may be used if required by the TPDES Permit effluent requirements.

- The Effluent from the Ammonia Removal process [13] passes into a Final Effluent Blending Tank [14], and then to the Outfall 001 [15].The distillate may be too low in Alkalinity and certain soluble ions and salts required to sustain aquatic life in the Receiving waters. Thus, alkalinity and certain ions must be added back to support aquatic life. If necessary, the process will add potential sources of alkalinity, especially calcium and magnesium ions which aid in the formation of Calcium Carbonate, Calcium Sulfate, Magnesium Carbonate, and Magnesium Sulfate. In some cases, a Calcium Chloride Solution [19] may be added to the effluent ASTs to boost alkalinity and reduce aquatic toxicity.
- The PWTS will discharge by gravity into Outfall 001, which leads to an unnamed tributary leading to the receiving waters, Salt Creek and then the Upper Pecos River (TCEQ Segment 2311).

3.3 EFFLUENT DIFFUSER

Tetra Tech and Select have determined that no effluent diffuser is required.

3.4 PROPOSED EFFLUENT DISCHARGE QUALITY

The quality of the proposed discharge has been estimated using analytical data from analyses of the PW and assuming the unit processes described above. The laboratory reports will be provided later in the process.

- The effluent for discharge is the Post Desalination effluent. **Table 1** shows the estimated water quality and notes on the processes that control the effluent quality.
- The receiving water is a tributary of Salt Creek, which is not classified, but it is assumed TCEQ will apply water quality criteria from the downstream segment, Upper Pecos River (Segment 2311), which Salt Creek flows into. That segment is rated PCR1 with limited aquatic life use, mostly because of low stream flow and low dissolved oxygen values.
- The Water Quality criteria for the receiving water, Upper Pecos River (Segment 2311) is listed in 30 TAC 307 (2018 Water Quality Standards) as:
    - Chlorides 7,000 mg/L
    - Sulfate 3,500 mg/L
    - TDS 15,000 mg/L
    - Dissolved Oxygen 5.0 mg/L minimum
    - pH 6.5 - 9.0 SU
    - Bacteria < 33 CFU/100 mL
    - Temperature < 92 °F

Tetra Tech and Select considered the effects of discharge on the aquatic species in both Salt Creek and the Upper Pecos River. The intended discharge volumes from the Select site to Salt Creek and thence to the Upper Pecos River are expected to have little impact on the limited aquatic resources in the Upper Pecos River. A

survey conducted in 1987 (TPWD, River Studies No. 9, 1996), showed only six (6) fish species present in the Pecos River at FM 652, about 6 miles downstream of the confluence of Salt Creek with the Pecos River.

One of the threatened fish species in Salt Creek is the Pecos pupfish (*Cyprinodon pecosensis*). The Pecos pupfish was once one of the most abundant fish in the Pecos River but is now restricted to Salt Creek and just a few locations in New Mexico due to hybridization with Sheepshead Minnow (*C. variegatus*) and groundwater pumping. As a result, it is classified as "threatened" in Texas. Tolerant of high salinity, the Pecos pupfish can move from water saltier than sea water into freshwater with no ill effects.

It was determined that moderate effluent TDS discharged into the Upper Pecos River will have little impact on the current sport-fishery. The available background data from the river indicates that the river is already moderately brackish. This limits year-to-year recruitment in fish stocks for many species. Consequently, the Pecos River fishery exists only through Texas Parks Wildlife Department (TPWD) stocking programs. It is essentially a put-and-take proposition based mostly on salt-tolerant white bass x striped bass hybrids.

The critical parameter in 30 TAC 307 for the river is chlorides. Tetra Tech suggests the effluent design be set so that the discharge is set at <3,000 mg/L chloride, well below the background value of 7,000 mg/L. This is equivalent to a sodium chloride (NaCl)-based contribution of about 5,000 mg/L. The non-NaCl constituents in the treated PW will add another ~1,800 mg/L TDS, so the final effluent is proposed to be ~7,000 mg/L.

This is reflected in **Table 1** below. This will be beneficial to the aquatic species in the Upper Pecos River downstream and to all water users.

Table 1: Projected Effluent Quality at Outfall 001

Projected Feed and Effluent Water Quality				
Parameters	Typical Produced Water (Permian Basin), as Fed to New Mexico PW research Consortium PW Desalination Pilot[1]	Pilot Desalination New Mexico PW research Consortium PW Desalination Pilot[1] (prior to Ammonia removal)	Tetra Tech Projected Effluent Quality after Ammonia removal, Final Ph Adjustment, and remineralization	Water Quality Parameters (30TAC307, 2018) for Upper Pecos River Segment 2311
Phase 1 Flow, MGD	0.840[2]		0.420[2]	
Phase 2 Flow, MGD	1.680[2]		0.840[2]	
Phase 3 Flow, MGD	8.400[2]		4.200[2]	
NH3, mg/L	611	44.93[3]	<50	-
TOC, mg/L	74.39	0.28		-
TPH, mg/L	28	11.33	<15	-
Alkalinity, mg/L as Ca CO3	116.8	64		-
Chlorides, mg/L	63,756	230		7,000
Sulfate, mg/L	368	45		3,500
Ba, mg/L	5.9	0.014		3,500
Li, mg/L	30.8	0.03		5
TDS, mg/L	103,352	475	<5000	15,000
pH, SU	6.58	8.52[3]		6.5-9.0

1. The estimated Feed Water Quality should be similar to that described in Table 1 (Mean Values) on page 5 in "Treatment of produced water from the Permian Basin: Chemical and toxicological characterization of the effluent from a pilot-scale low-temperature distillation system", Yeinner Tarazona, Mike Hightower, Pei Xu, Yanyan Zhang, Journal of Water Process Engineering, 67 (2024) 106146, Elsevier
2. The maximum discharge is based on a material balance calculation of the maximum achievable Post Desalination and RO permeates.
3. These projected Outfall concentrations are based on influent and effluent samples of a pilot study system.
4. Additional feed and effluent results will be transmitted to TCEQ after application submittal.

3.5 RESIDUALS MANAGEMENT

The design will have process residuals that will be managed to minimize waste.

The residuals from the proposed PWTS shall include:

- RO reject [16]: The RO system has to reject the excess salt to prevent membrane fouling. The RO efficiency is expected to be approximately 60-75%, and the RO reject is 25-40% of the forward flow or a maximum of 0.84 MGD in Phase 1 and 2.7 mgd in Phase 2. All of the RO reject will be added into the Cryogenic Desalination inlet, along with any CIP wastewater.
- Desalination backwash [22]: This will be a periodic purge from the Desalination Unit to remove brines and slurries, which may contain sodium, potassium, calcium, iron, and magnesium salts. These constituents tend to accumulate in the Desalination units and can cause corrosion and fouling. The Desalination unit will be flushed with RO permeate to remove the salts periodically. All of the salt and any hydrocarbon residuals will be transferred back to the RRC-regulated facility for beneficial reuse as brine. This volume is approximately 30% of the total charge to the Desalination unit. The RRC-regulated facility will use the brine for recycle use and any excess brine will be disposed of through SWDs.

Note: No SDS or chemical are presented here, because Select has not yet finished selecting the final process to be used. Select will inform TCEQ when the final decision is make and the chemicals to be used are selected based on the process selected.

3.6 DESIGN INFRASTRUCTURE

The PW treatment process will have a reasonable, compact footprint so that unit processes can be protected from weather and elements. The support infrastructure will include:

- Foundations, concrete pads, or steel skids, as desired for permanent or moveable unit processes.
- Prefabricated Metal Buildings to contain the smaller unit processes.
- Utility connection and transformers for Motor Control Center (MCC). Electrical controls, safety switches, and Variable Frequency Drive (VFD) units in the appropriate level of classification. Power supplied to all motors using waterproof cables in conduits or cable trays.
- Modular pipe racks with above ground interconnected piping which could be disassembled for unit movement. Hoses or lay-flat piping may be used where required for short connections.
- The system will be highly automated with controls reporting to a local Programmable Logic Controller (PLC) that allows remote access, data logging, and automatic controls.
- Process resiliency featuring critical parts in redundant mode, so that if a pump or other critical component fails, the system can continue to run using warehouse spares with little downtime.
- This system should be designed to be shop built, then assembled and commissioned in the field in a “plug and play” mode.
- Any containers with oils or oily chemicals are subject to U.S. EPA's Spill Prevention, Control, and Countermeasure (SPCC) regulation (40 CFR Part 112). An SPCC Plan will be prepared for the applicable portion of the TCEQ regulated PWTS prior to operation.

References

1. Texas Commission on Environmental Quality Chapter 307 - Texas Surface Water Quality Standards, 2018, page 86 Segment 1412, Colorado River Below Lake J. B. Thomas
2. “Treatment of produced water from the Permian Basin: Chemical and toxicological characterization of the effluent from a pilot-scale low-temperature distillation system,” Yeinner Tarazona, Mike Hightower, Pei Xu, Yanyan Zhang, Journal of Water Process Engineering, 67 (2024) 106146, Elsevier.

---------- [Space Above This Line For Recording Data] ----------

NOTICE OF CONFIDENTIALITY RIGHTS: IF YOU ARE A NATURAL PERSON, YOU MAY REMOVE OR STRIKE ANY OR ALL OF THE FOLLOWING INFORMATION FROM ANY INSTRUMENT THAT TRANSFERS AN INTEREST IN REAL PROPERTY BEFORE IT IS FILED FOR RECORD IN THE PUBLIC RECORDS: YOUR SOCIAL SECURITY NUMBER OR YOUR DRIVER'S LICENSE NUMBER.

Special Warranty Deed

Date: May 21, 2025

Grantor: BASIC ENERGY LIQUIDATION TRUST, a trust governed by and construed in accordance with the laws of the State of Texas, formed pursuant to that certain Liquidation Trust Agreement dated effective August 26, 2022, in connection with the Order Confirming the Debtors' Combined Plan of Liquidation and Approving on a Final Basis the Disclosure Statement of Basic Energy Services, Inc., and Its Affiliated Debtors Pursuant to Chapter 11 of the Bankruptcy Code dated August 9, 2022 [Docket No. 1436], confirming the Combined Disclosure Statement and Joint Plan of Liquidation of Basic Energy Services, Inc. and Its Affiliated Debtor dated June 28, 2022 [Docket No. 1269], filed in the case *In re Basic Energy Services, Inc., et al.*, Case No. 21-90002 (DRJ), United States Bankruptcy Court for the Southern District of Texas

Grantor's Mailing Address: 402 Heights Blvd
Houston, TX 77007
Harris County

Grantee: SELECT WATER SOLUTIONS, LLC, a Delaware limited liability company

Grantee's Mailing Address: 1233 West Loop South, Suite 1400
Houston, Texas 77027
_____ County

Consideration:

TEN AND NO/100 DOLLARS ($10.00) and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged.

Property (including any improvements):

Section 11, Block 57, Township 2, T & P RR Co. Survey, Reeves County, Texas, said Section is described as follows:

METES AND BOUNDS DESCRIPTION OF SECTION 11, BLOCK 57, T-2, T. & P. RR. CO. SURVEY, REEVES COUNTY, TEXAS:

BEGINNING AT A LARGE NAIL FOUND FOR THE NORTHEAST CORNER OF SAID SECTION 11;

THENCE SOUTH 02°16'43" WEST, WITH THE WEST LINE OF SAID SECTION 12, A DISTANCE OF 5299.7 FEET TO AN IRON ROD WITH CAP FOUND FOR THE SOUTHEAST CORNER OF SAID SECTION 11;

THENCE NORTH 88°15'25" WEST, WITH THE NORTH LINE OF SAID SECTION 14, A DISTANCE OF 5299.0 FEET TO AN IRON ROD FOUND FOR THE SOUTHWEST CORNER OF SAID SECTION 11;

THENCE NORTH 02°24'16" EAST, WITH THE EAST LINE OF SAID SECTION 10, A DISTANCE OF 5325.1 FEET TO POINT FOR THE NORTHWEST CORNER OF SAID SECTION 11;

THENCE SOUTH 87°58'58" EAST, WITH THE SOUTH LINE OF SECTION 12, A DISTANCE OF 5287.1 FEET TO THE PLACE OF BEGINNING.

CONTAINING 615.38 ACRES OR 28,112,752.80 SQ. FEET.

SAVE AND EXCEPT THE FOLLOWING TRACT:

BEING a 43.15 Acre Tract out of Section 11, Block 57 T2, Abstract 1019, T. & P.R.R. Co. Survey, Reeves County, Texas, and being further described by metes and bounds as follows:

BEGINNING at a 1/2 Inch Iron Rod with Cap marked "CEC 10194378" Set for the South Corner, from which a ½ Inch Iron Rod Found for the Southeast Corner of said Section 11 bears S. 56°43'02" E. - 2995.39 feet;

THENCE N. 28°41'16" W. - 1720.56 feet along the North Right-of-Way line of Highway 285 North, as described in Volume 214, Page 291, Deed Records of Reeves County, Texas, to a 1/2 Inch Iron Rod Set for the Northwest Corner;

THENCE N. 61°18'44" E. - 1236.83 feet to a 1/2 Inch Iron Rod Set for the North Corner;

THENCE S. 60°15'49" E. - 834.69 feet to a 1/2 Inch Iron Rod Set for the Northeast Corner;

THENCE S. 30°13'12" W. - 1954.72 feet to the POINT OF BEGINNING and containing 43.15 Acres more or less.

Reservations from Conveyance:

None.

Exceptions to Conveyance and Warranty:

Liens described as part of the Consideration and any other liens described in this Deed as being either assumed or subject to which title is taken; validly existing easements, rights-of-way and prescriptive rights, whether of record or not; all presently recorded and validly existing restrictions, reservations, covenants, conditions, oil and gas leases, mineral interests, geothermal interests, and water interests outstanding in persons other than Grantor, and other instruments, other than conveyances of the surface fee estate, that affect the Property; validly existing rights of adjoining owners in any walls and fences situated on a common boundary; any discrepancies, conflicts or shortages in area or boundary lines; any encroachments or overlapping of improvements; all zoning laws, regulations and ordinances of municipal and/or other governmental authorities, if any, and taxes for 2025, which Grantee assumes and agrees to pay, and subsequent assessments for that and prior years due to change in land usage, ownership or both, the payment of which Grantee assumes.

Grantor, for the Consideration and subject to the Reservations from Conveyance and the Exceptions to Conveyance and Warranty, grants, sells, and conveys to Grantee the Property, together with all and singular the rights and appurtenances thereto in any way belonging, to have and to hold it to Grantee and Grantee's heirs, successors, and assigns forever. Grantor binds Grantor and Grantor's heirs and successors to warrant and forever defend all and singular the Property to Grantee and Grantee's heirs, successors, and assigns against every person whomsoever lawfully claiming or to claim the same or any part thereof *when the claim is by, through or under Grantor, but not otherwise*, except as to the Reservations from Conveyance and the Exceptions to Conveyance and Warranty.

When the context requires, singular nouns and pronouns include the plural.

BASIC ENERGY LIQUIDATION TRUST, a trust governed by and construed in accordance with the laws of the State of Texas

By: _____
DAVID DUNN, Trustee

STATE OF Texas §
§
COUNTY OF Harris §

This instrument was acknowledged before me on May 21, 2025, by DAVID DUNN, as Trustee of the BASIC ENERGY LIQUIDATION TRUST, a trust governed by and construed in accordance with the laws of the State of Texas, on behalf of said Liquidation Trust.

MARGEAUX LAFLEUR GORMAN
Notary Public
STATE OF TEXAS
ID# 126626293
My Comm. Exp. August 6, 2028

_____
Notary Public, State of Texas
My Commission Expires: August 6, 2028

AFTER RECORDING RETURN TO:

SELECT WATER SOLUTIONS, LLC
1233 West Loop South, Suite 1400
Houston, Texas 77027

Figure -1 Recycling facility – This portion of the Water System is Regulated by Railroad Commission of Texas (RRC)

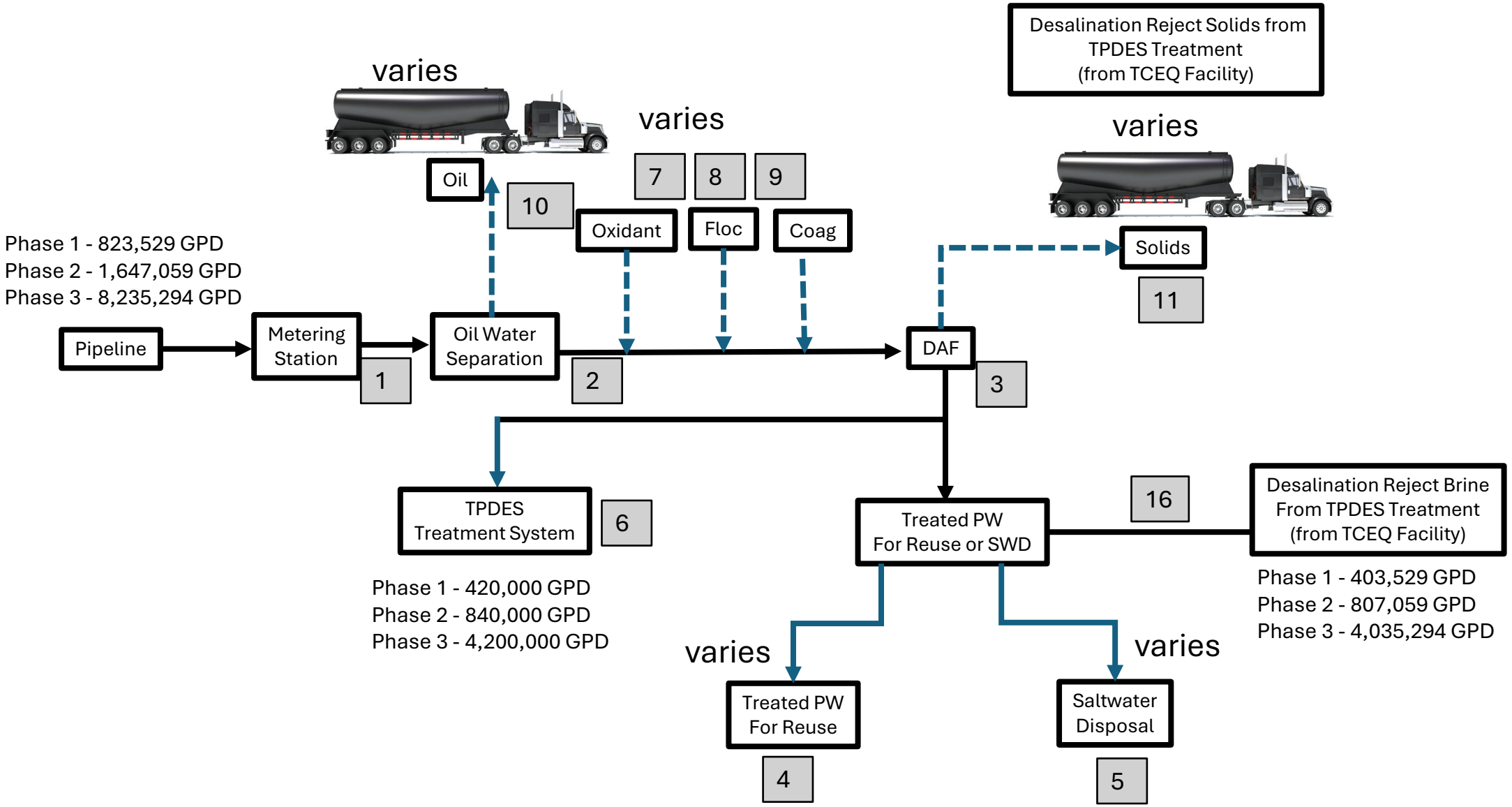


Figure -2 Surface Water Desalination Treatment Facility – This portion of the Water System is Regulated by TCEQ

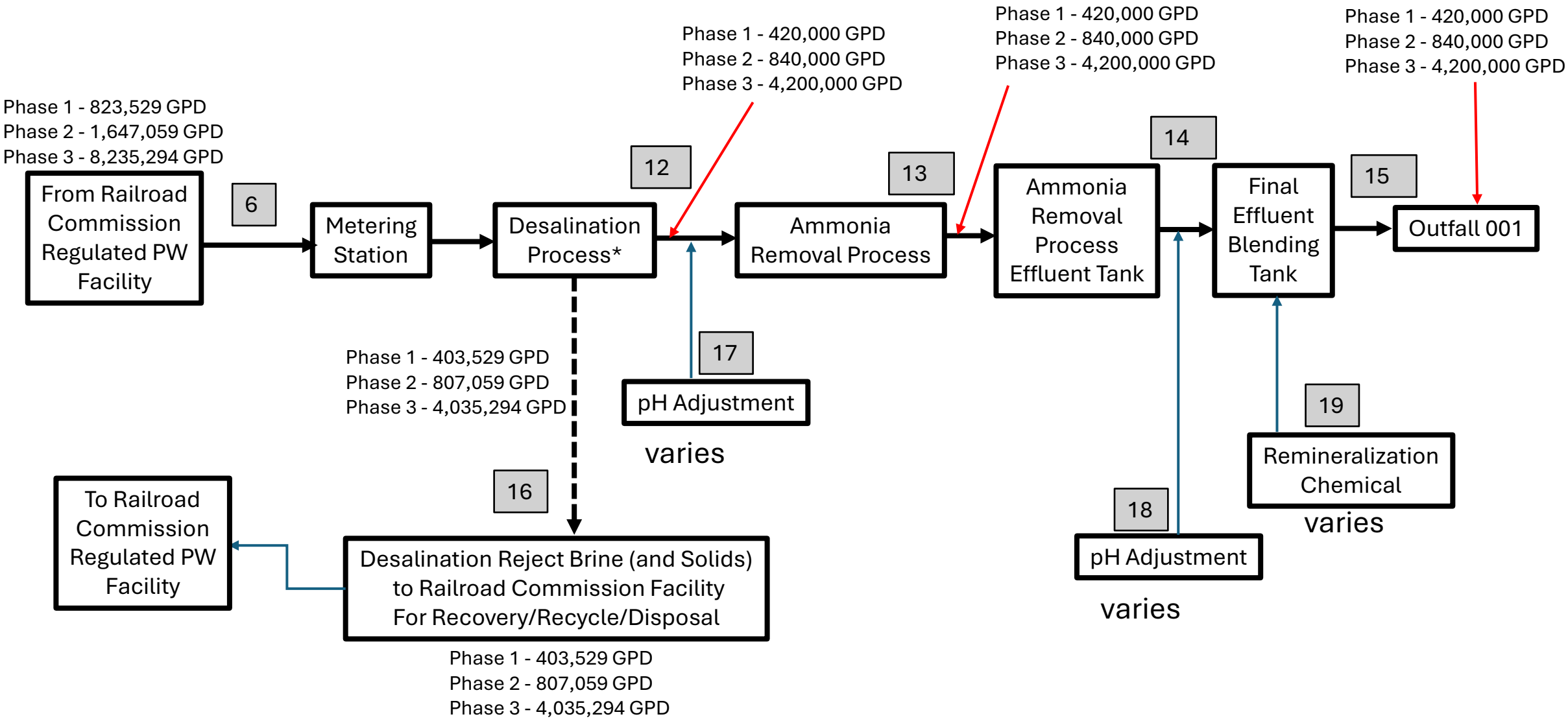
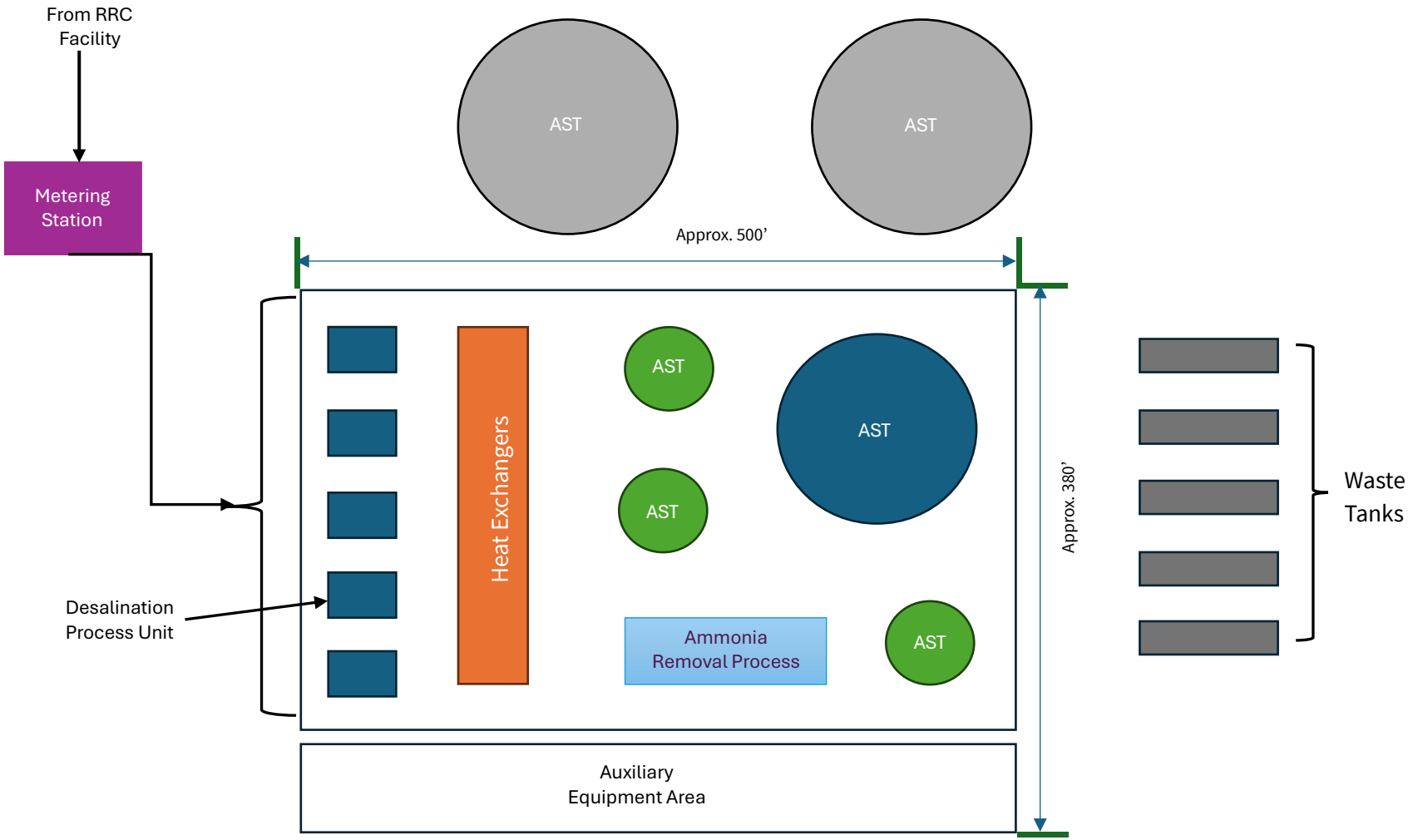


Table 1 Material Balance for Desalination System-Phase 1 Discharge 10,000 BPD (420,000GPD)								
Feed of PW	**Desalination Effluent**	**Ammonia Removal Process Effluent**	**Final Effluent Blending Tank Feed**	**Outfall 001**	**Desalination Reject Brine to RRC Facility**	**Caustic pH Adjustment (50% Caustic)**	**Acid pH Adjustment (93% H2SO4)**	**Demineralization (Calcium Chloride)**
6	12	13	14	15	16	17	18	19
19,608	10,000	10,000	10,000	10,000	9,608			
823,529	420,000	420,000	420,000	420,000	403,529	350	200	400
0.82	0.42	0.42	0.42	0.42	0.40	0.00	0.00	0.00
50	20	10	10	10	81.2			
50	20	10	10	10	81.2			
1000	250	40	40	40	1780.6			
28	1	1	1	1	56.1			
0	0							
611	11.33	10	10	10	1235.1			
51	10	10	5	10	93.7			
10	10	10	10	1	10.0			
100	50	20	20	20	152.0			
0.1	0.1	0.1	0.1	0.1	0.1			
25	25	5	1	5	25.0			
0	0	0	0		0.0			
103352	475	475.0	475.0	475	210428.1			
368	18	18.1	18.1	18	732.2			
63756	230	230.0	230.0	230	129874.9			
117	258	258.0	258.0	258	116.8			
68	180	180.0	180.0	180	180.0			
7	7	7.0	7.0	7	7.0			
35018	35018	35018.0	35018.0	35018	35018.0			
4491	4491	4491.0	4491.0	4491	4491.0			
585	585	585.0	585.0	585	585.0			
701	701	701.0	701.0	701	701.0			
6	6	5.9	5.9	6	5.9			
1212	1212	1212.0	1212.0	1212	1212.0			
31	31	30.8	30.8	31	30.8			
7	7	6.9	6.9	7	6.9			
1	1	0.6	0.6	1	0.6			
0	0	0.1	0.1	0	0.1			

System-Phase 2 Discharge 20,0		Table 2 Material Balance for Desalination System-Phase 2 Discharge 20,000 BPD (840,000GPD)								
Row #	Location	Feed of PW	Desalination Effluent	Ammonia Removal Process Effluent	Final Effluent Blending Tank Feed	Outfall 001	Desalination Reject Brine to RRC Facility	Caustic pH Adjustment (50% Caustic)	Acid pH Adjustment (93% H2SO4)	Demineralization (Calcium Chloride)
1	Location No.	6	12	13	14	15	16	17	18	19
2	Flow, BPD	39,216	20,000	20,000	20,000	20,000	19,216			
3	Flow, Gallons per Day	1,647,059	840,000	840,000	840,000	840,000	807,059	350	200	400
4.00	Flow, MGD	1.65	0.84	0.84	0.84	0.84	0.81	0.00	0.00	0.00
5	Pollutant									
6	BOD (5-day)	50	20	10	10	10	81.2			
7	CBOD (5-day)	50	20	10	10	10	81.2			
8	Chemical oxygen demand	1000	250	40	40	40	1780.6			
9	Total organic carbon	28	1	1	1	1	56.1			
10	Dissolved oxygen									
11	Ammonia nitrogen	611	11.33	10	10	10	1235.1			
12	Total suspended solids	51	10	10	5	10	93.7			
15	Nitrate nitrogen	10	10	10	10	1	10.0			
16	Total organic nitrogen	100	50	20	20	20	152.0			
17	Total phosphorus	0.1	0.1	0.1	0.1	0.1	0.1			
18	Oil and grease	25	25	5	1	5	25.0			
19	Total residual chlorine									
20	Total dissolved solids	103352	475	475.0	475.0	475	210428.1			
21	Sulfate	368	18	18.1	18.1	18	732.2			
22	Chloride	63756	230	230.0	230.0	230	129874.9			
24	Total alkalinity (mg/L as $CaCO_3$)	117	258	258.0	258.0	258	116.8			
25	Temperature (°F)	68	180	180.0	180.0	180	180.0			
26	pH (standard units)	7	7	7.0	7.0	7	7.0			
125	Sodium, mg/L	35018	35018	35018.0	35018.0	35018	35018.0			
126	Calcium, mg/L	4491	4491	4491.0	4491.0	4491	4491.0			
127	Potassium, mg/L	585	585	585.0	585.0	585	585.0			
128	Magnesium, mg/L	701	701	701.0	701.0	701	701.0			
129	Barium, mg/L	6	6	5.9	5.9	6	5.9			
130	Strontium, mg/L	1212	1212	1212.0	1212.0	1212	1212.0			
131	Lithium, mg/L	31	31	30.8	30.8	31	30.8			
132	Iron, mg/L	7	7	6.9	6.9	7	6.9			
133	Managanese, mg/L	1	1	0.6	0.6	1	0.6			
134	Zinc, mg/L	0	0	0.1	0.1	0	0.1			

Table 3 Material Balance for Desalination System-Phase 3 Discharge 100,000 BPD (4,200,000 GPD)								
Feed of PW	**Desalination Effluent**	**Ammonia Removal Process Effluent**	**Final Effluent Blending Tank Feed**	**Outfall 001**	**Desalination Reject Brine to RRC Facility**	**Caustic pH Adjustment (50% Caustic)**	**Acid pH Adjustment (93% H2SO4)**	**Demineralization (Calcium Chloride)**
6	12	13	14	15	16	17	18	19
196,078	100,000	100,000	100,000	100,000	96,078			
8,235,294	4,200,000	4,200,000	4,200,000	420,000	4,035,294	350	200	400
8.24	4.20	4.20	4.20	0.42	4.04	0.00	0.00	0.00
50	20	10	10	10	81.2			
50	20	10	10	10	81.2			
1000	250	40	40	40	1780.6			
28	1	1	1	1	56.1			
0	0							
611	11.33	10	10	10	1235.1			
51	10	10	5	10	93.7			
10	10	10	10	1	10.0			
100	50	20	20	20	152.0			
0.1	0.1	0.1	0.1	0.1	0.1			
25	25	5	1	5	25.0			
0	0	0	0		0.0			
103352	475	475.0	475.0	475	210428.1			
368	18	18.1	18.1	18	732.2			
63756	230	230.0	230.0	230	129874.9			
117	258	258.0	258.0	258	116.8			
68	180	180.0	180.0	180	180.0			
7	7	7.0	7.0	7	7.0			
35018	35018	35018.0	35018.0	35018	35018.0			
4491	4491	4491.0	4491.0	4491	4491.0			
585	585	585.0	585.0	585	585.0			
701	701	701.0	701.0	701	701.0			
6	6	5.9	5.9	6	5.9			
1212	1212	1212.0	1212.0	1212	1212.0			
31	31	30.8	30.8	31	30.8			
7	7	6.9	6.9	7	6.9			
1	1	0.6	0.6	1	0.6			
0	0	0.1	0.1	0	0.1			



SELECT

TETRA TECH

This is a sketch of a typical facility. Details for the facility will be available during the design phase.

Attachment TR-2
Facility Map

Figure -1 Recycling facility – This portion of the Water System is Regulated by Railroad Commission of Texas (RRC)

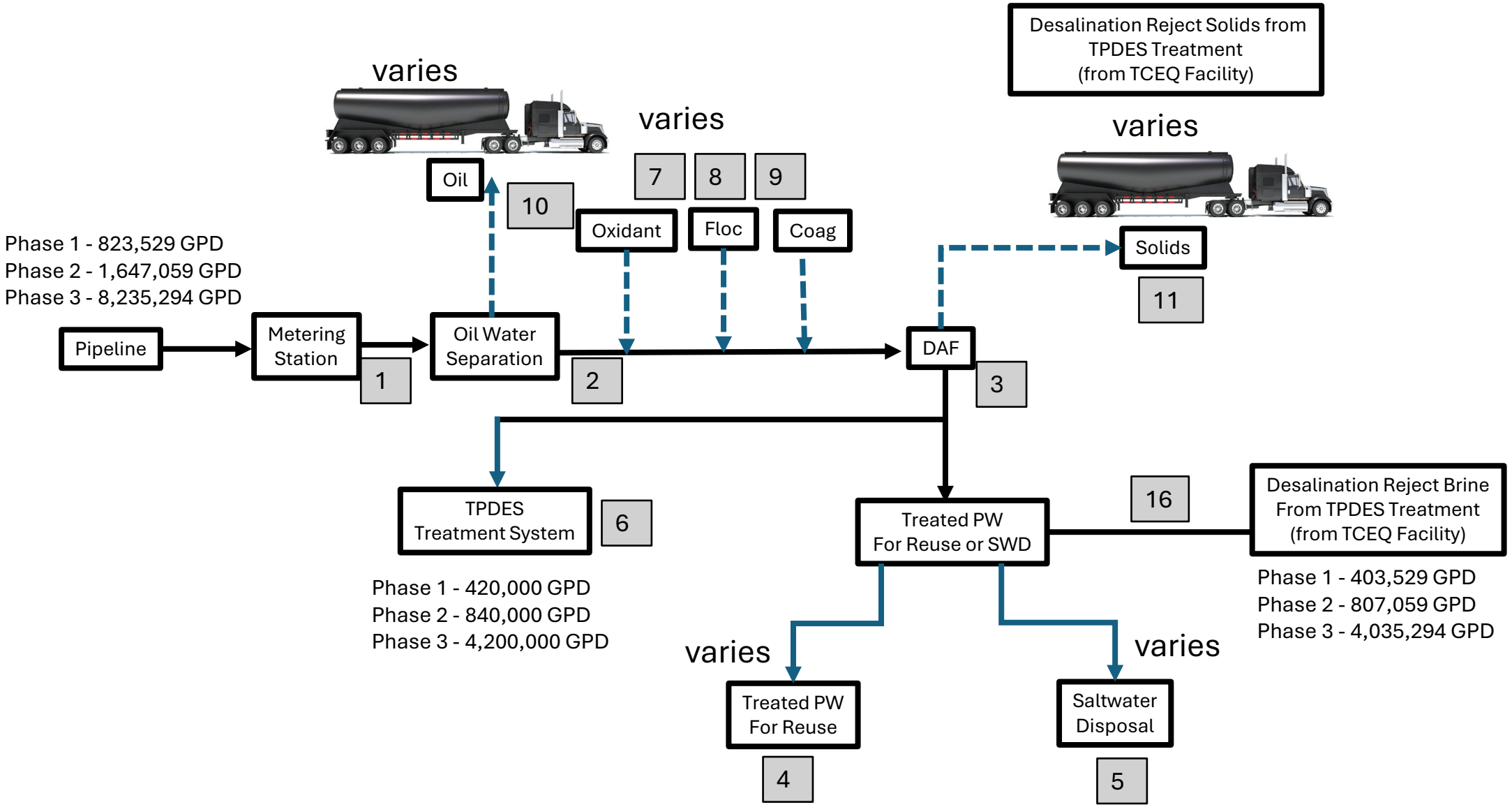


Figure -2 Surface Water Desalination Treatment Facility – This portion of the Water System is Regulated by TCEQ

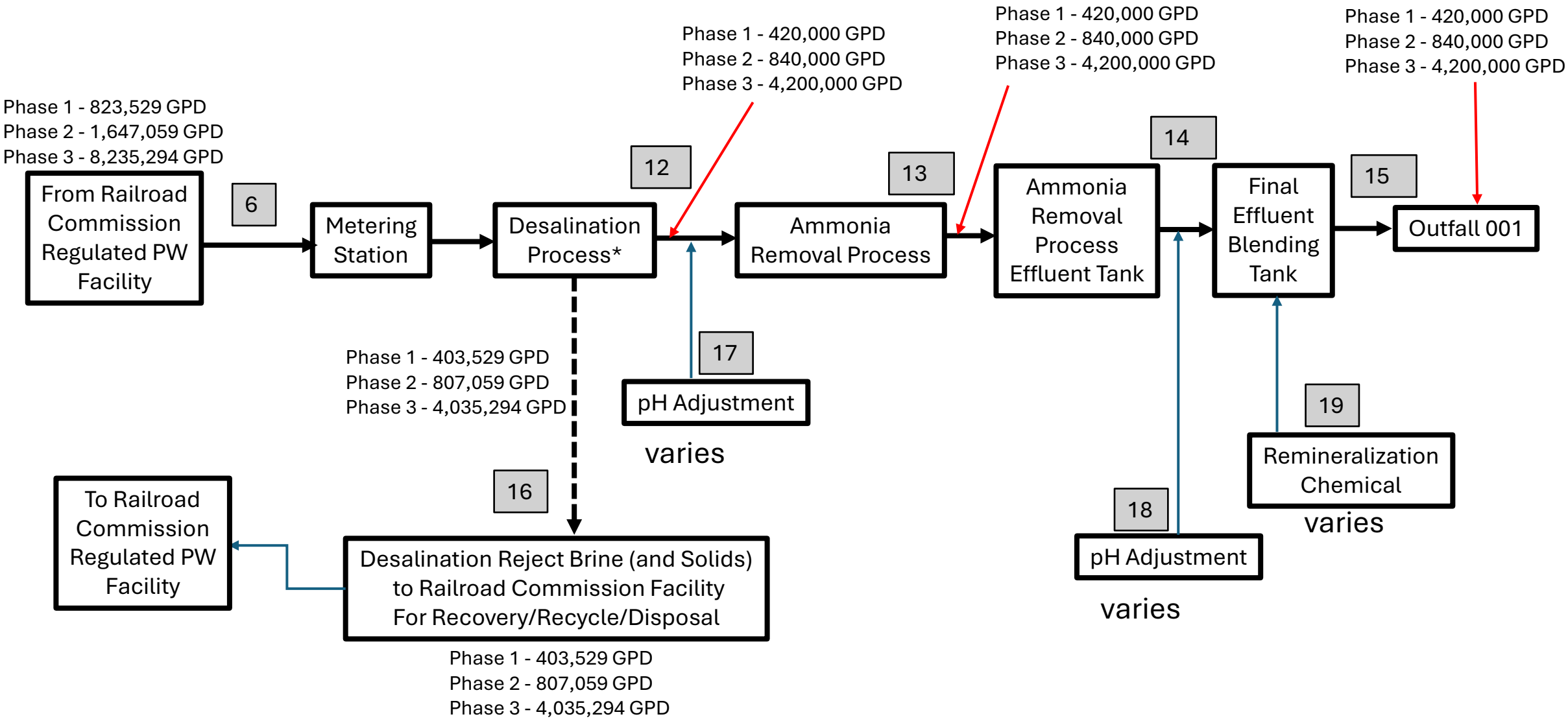


Table 1 Material Balance for Desalination System-Phase 1 Discharge 10,000 BPD (420,000GPD)								
Feed of PW	**Desalination Effluent**	**Ammonia Removal Process Effluent**	**Final Effluent Blending Tank Feed**	**Outfall 001**	**Desalination Reject Brine to RRC Facility**	**Caustic pH Adjustment (50% Caustic)**	**Acid pH Adjustment (93% H2SO4)**	**Demineralization (Calcium Chloride)**
6	12	13	14	15	16	17	18	19
19,608	10,000	10,000	10,000	10,000	9,608			
823,529	420,000	420,000	420,000	420,000	403,529	350	200	400
0.82	0.42	0.42	0.42	0.42	0.40	0.00	0.00	0.00
50	20	10	10	10	81.2			
50	20	10	10	10	81.2			
1000	250	40	40	40	1780.6			
28	1	1	1	1	56.1			
0	0							
611	11.33	10	10	10	1235.1			
51	10	10	5	10	93.7			
10	10	10	10	1	10.0			
100	50	20	20	20	152.0			
0.1	0.1	0.1	0.1	0.1	0.1			
25	25	5	1	5	25.0			
0	0	0	0		0.0			
103352	475	475.0	475.0	475	210428.1			
368	18	18.1	18.1	18	732.2			
63756	230	230.0	230.0	230	129874.9			
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7	7	7.0	7.0	7	7.0			
35018	35018	35018.0	35018.0	35018	35018.0			
4491	4491	4491.0	4491.0	4491	4491.0			
585	585	585.0	585.0	585	585.0			
701	701	701.0	701.0	701	701.0			
6	6	5.9	5.9	6	5.9			
1212	1212	1212.0	1212.0	1212	1212.0			
31	31	30.8	30.8	31	30.8			
7	7	6.9	6.9	7	6.9			
1	1	0.6	0.6	1	0.6			
0	0	0.1	0.1	0	0.1			

System-Phase 2 Discharge 20,0		Table 2 Material Balance for Desalination System-Phase 2 Discharge 20,000 BPD (840,000GPD)								
Row #	Location	Feed of PW	Desalination Effluent	Ammonia Removal Process Effluent	Final Effluent Blending Tank Feed	Outfall 001	Desalination Reject Brine to RRC Facility	Caustic pH Adjustment (50% Caustic)	Acid pH Adjustment (93% H2SO4)	Demineralization (Calcium Chloride)
1	Location No.	6	12	13	14	15	16	17	18	19
2	Flow, BPD	39,216	20,000	20,000	20,000	20,000	19,216			
3	Flow, Gallons per Day	1,647,059	840,000	840,000	840,000	840,000	807,059	350	200	400
4.00	Flow, MGD	1.65	0.84	0.84	0.84	0.84	0.81	0.00	0.00	0.00
5	Pollutant									
6	BOD (5-day)	50	20	10	10	10	81.2			
7	CBOD (5-day)	50	20	10	10	10	81.2			
8	Chemical oxygen demand	1000	250	40	40	40	1780.6			
9	Total organic carbon	28	1	1	1	1	56.1			
10	Dissolved oxygen									
11	Ammonia nitrogen	611	11.33	10	10	10	1235.1			
12	Total suspended solids	51	10	10	5	10	93.7			
15	Nitrate nitrogen	10	10	10	10	1	10.0			
16	Total organic nitrogen	100	50	20	20	20	152.0			
17	Total phosphorus	0.1	0.1	0.1	0.1	0.1	0.1			
18	Oil and grease	25	25	5	1	5	25.0			
19	Total residual chlorine									
20	Total dissolved solids	103352	475	475.0	475.0	475	210428.1			
21	Sulfate	368	18	18.1	18.1	18	732.2			
22	Chloride	63756	230	230.0	230.0	230	129874.9			
24	Total alkalinity (mg/L as $CaCO_3$)	117	258	258.0	258.0	258	116.8			
25	Temperature (°F)	68	180	180.0	180.0	180	180.0			
26	pH (standard units)	7	7	7.0	7.0	7	7.0			
125	Sodium, mg/L	35018	35018	35018.0	35018.0	35018	35018.0			
126	Calcium, mg/L	4491	4491	4491.0	4491.0	4491	4491.0			
127	Potassium, mg/L	585	585	585.0	585.0	585	585.0			
128	Magnesium, mg/L	701	701	701.0	701.0	701	701.0			
129	Barium, mg/L	6	6	5.9	5.9	6	5.9			
130	Strontium, mg/L	1212	1212	1212.0	1212.0	1212	1212.0			
131	Lithium, mg/L	31	31	30.8	30.8	31	30.8			
132	Iron, mg/L	7	7	6.9	6.9	7	6.9			
133	Managanese, mg/L	1	1	0.6	0.6	1	0.6			
134	Zinc, mg/L	0	0	0.1	0.1	0	0.1			

Table 3 Material Balance for Desalination System-Phase 3 Discharge 100,000 BPD (4,200,000 GPD)								
Feed of PW	**Desalination Effluent**	**Ammonia Removal Process Effluent**	**Final Effluent Blending Tank Feed**	**Outfall 001**	**Desalination Reject Brine to RRC Facility**	**Caustic pH Adjustment (50% Caustic)**	**Acid pH Adjustment (93% H2SO4)**	**Demineralization (Calcium Chloride)**
6	12	13	14	15	16	17	18	19
196,078	100,000	100,000	100,000	100,000	96,078			
8,235,294	4,200,000	4,200,000	4,200,000	420,000	4,035,294	350	200	400
8.24	4.20	4.20	4.20	0.42	4.04	0.00	0.00	0.00
50	20	10	10	10	81.2			
50	20	10	10	10	81.2			
1000	250	40	40	40	1780.6			
28	1	1	1	1	56.1			
0	0							
611	11.33	10	10	10	1235.1			
51	10	10	5	10	93.7			
10	10	10	10	1	10.0			
100	50	20	20	20	152.0			
0.1	0.1	0.1	0.1	0.1	0.1			
25	25	5	1	5	25.0			
0	0	0	0		0.0			
103352	475	475.0	475.0	475	210428.1			
368	18	18.1	18.1	18	732.2			
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4491	4491	4491.0	4491.0	4491	4491.0			
585	585	585.0	585.0	585	585.0			
701	701	701.0	701.0	701	701.0			
6	6	5.9	5.9	6	5.9			
1212	1212	1212.0	1212.0	1212	1212.0			
31	31	30.8	30.8	31	30.8			
7	7	6.9	6.9	7	6.9			
1	1	0.6	0.6	1	0.6			
0	0	0.1	0.1	0	0.1			

Candice Calhoun

From: CentenoJimenez, Edwin <e.centenojimenez@tetratech.com>
Sent: Wednesday, July 16, 2025 5:05 PM
To: Candice Calhoun; rhuizenga@selectwater.com
Cc: Robert Huizenga; Christiansen, John; Krueger, Pam
Subject: RE: Application for Proposed Permit No. WQ0005495000 (Select Water Solutions, LLC) - Notice of Deficiency
Attachments: Industrial Discharge New Spanish NORI.docx; Attachment AR-6 - Orla Kessler Address Labels.doc; Select NOD answer.pdf

Ms. Calhoun,

Attached ore response for the NOD labels and Spanish NORI. If you have any questions please contact me.

Edwin C. Centeno, PE (LA, TX, PR) | Engineering Project Manager II – Environmental PM | Tetra Tech, Inc.
Direct **+1 (832)-251-6093** | Mobile **+1 (832) 872-1075** | e.centenojimenez@tetratech.com

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From: Candice Calhoun <Candice.Calhoun@tceq.texas.gov>
Sent: Wednesday, July 16, 2025 8:54 AM
To: rhuizenga@selectwater.com
Cc: CentenoJimenez, Edwin <e.centenojimenez@tetratech.com>
Subject: Application for Proposed Permit No. WQ0005495000 (Select Water Solutions, LLC) - Notice of Deficiency
Importance: High

Good morning, Mr. Huizenga,

The attached Notice of Deficiency (NOD) letter dated July 16, 2025, requests additional information needed to declare the application administratively complete. Please send complete response no later than July 30, 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

Candice Calhoun

From: CentenoJimenez, Edwin <e.centenojimenez@tetratech.com>
Sent: Friday, July 18, 2025 12:30 PM
To: Candice Calhoun
Subject: RE: Application for Proposed Permit No. WQ0005495000 (Select Water Solutions, LLC) - Notice of Deficiency

Ms. Calhoun,

Are you taking about items 2, 3 ,4 of which report? Technical or Administrative?

For Item 1 - The facility is located approximately 0.40 miles northeast of the intersection of US Hwy 285 and County Road 447 (Red Bluff Lake Rd).

Edwin C. Centeno, PE (LA, TX, PR) | Engineering Project Manager II – Environmental PM | Tetra Tech, Inc.
Direct **+1 (832)-251-6093** | Mobile **+1 (832) 872-1075** | e.centenojimenez@tetratech.com

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From: Candice Calhoun <Candice.Calhoun@tceq.texas.gov>
Sent: Friday, July 18, 2025 9:07 AM
To: CentenoJimenez, Edwin <e.centenojimenez@tetratech.com>; rhuizenga@selectwater.com
Cc: Robert Huizenga <rhuizenga@selectwater.com>; Christiansen, John <John.Christiansen@tetratech.com>; Krueger, Pam <PAM.KRUEGER@tetratech.com>
Subject: RE: Application for Proposed Permit No. WQ0005495000 (Select Water Solutions, LLC) - Notice of Deficiency

Edwin,

Thank you, the response to items 2, 3, and 4 are sufficient. However, more information is needed for item 1. Please see below.

1. Item 1 – The response is insufficient. The information provided seems to be directions to the facility. It must be a description to the facility location. An example of a location description is “The facility is located approximately 2.5 miles northeast of the

July 16, 2025

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

Via email to: candice.calhoun@tceq.texas.gov

RE: Response to TCEQ Notice of Deficiency
Application for Proposed/Permit No.: WQ0005495000 (EPA I.D. No. TX0148172)
Applicant Name: Select Water Solutions, LLC (CN603611161)
Site Name: Orla Kessler SWD 1 (RN112246541)
Type of Application: New

Dear Ms. Calhoun:

Select Water Solutions, LLC (Select) and Tetra Tech have reviewed the Notice of Deficiency (NOD) and have provided the original requests from Texas Commission on Environmental Quality (TCEQ) and the following responses:

TCEQ Comment:

1. *Item 1 – Site Information: The facility location description provided is insufficient. The description must include the distance in feet or miles from road intersections and must not be directions to the facility. Please provide a revised facility location description that uses road intersections.*

Tetra Tech/Select Response:

Site information: Beginning at the intersection of US Highway 285 N, County Road 108 and US 652 in Orla, Texas drive northwest for 2.71-miles up to the intersection of US Highway 285 N and County Road 447 also known as Red Bluff Lake Road then head northeast for approximately 0.41 miles site is located to the left.

2. *Landowner Labels: Please provide the landowner list formatted for mailing labels (Avery 5160) in a Microsoft Word Document.*

Tetra Tech/Select Response:

Attached to this e-mail with this response are the mailing labels (Avery 5160) in a Microsoft Word Document.

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

Tetra Tech/Select Response:

No errors or omissions found in the portion of the NORI.

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.*

Tetra Tech/Select Response:

Attached to this e-mail with this NORI translation in Spanish in a Microsoft Word Document.

Thank you for the opportunity to update our application. Please contact Edwin C. Centeno at 832-872-1075 or e.centenojimenez@tetratech.com, or Robert Huizenga at 660-829-5100 or rhuizenga@selectwater.com, if you have further questions.

Sincerely,

Edwin C. Centeno

Edwin C. Centeno, PE
Senior Environmental Project Manager
Tetra Tech, Inc.

cc: Robert Huizenga, Select Water Solutions, LLC

WESTBROOK CARLENE LEE
2068 CULVER LOOP
SUTHERLIN, OR 97479-9907

HATCH ROYALTY LLC
1717 W 6TH ST, STE 290
AUSTIN, TX 78703-4789

STATE OF TEXAS
1700 NORTH CONGRESS AVENUE
AUSTIN, TX 78701

TUNSTILL OIL & LAND CO
PO BOX 50119
AUSTIN, TX 78763-0119

KESSLER A D & JACLYN S TRUST
PO BOX L
RANCHO SANTA FE, CA 92067-0560

BLAKE OIL & GAS CORP
400 N MAIN ST
MIDLAND, TX 79701-4710

HERD PARTNERS CO
PO BOX 130
MIDLAND, TX 79702-0130

LEE BARNEY A/K/A BARNEY GENE LEE
16049 N WINSOR AVE
GARDENDALE, TX 79758

LEE ROBERT A
8264 VILLA LAGO DR APT 533
FORTH WORTH, TX 76179

Attachment AR-6
Landowners List
Orla Kessler

Map ID	Parcel ID*	Name	Street	City	State	Zip Code
1	24104	WESTBROOK CARLENE LEE	2068 CULVER LOOP	SUTHERLIN	OR	97479-9907
2**, 10**	33106	HATCH ROYALTY LLC	1717 W 6TH ST, STE 290	AUSTIN	TX	78703-4789
3	-	PROPERTY NOT FOUND IN COUNTY RECORDS	-	-	-	-
4	13894	STATE OF TEXAS	1700 NORTH CONGRESS AVENUE	AUSTIN	TX	78701
5	15188	TUNSTILL OIL & LAND CO	PO BOX 50119	AUSTIN	TX	78763-0119
6	7719	KESSLER A D & JACLYN S TRUST	PO BOX L	RANCHO SANTA FE	CA	92067-0560
7	8928	BLAKE OIL & GAS CORP	400 N MAIN ST	MIDLAND	TX	79701-4710
8**	6395	HERD PARTNERS CO	PO BOX 130	MIDLAND	TX	79702-0130
	33105	LEE BARNEY A/K/A BARNEY GENE LEE	16049 N WINSOR AVE	GARDENDALE	TX	79758
9**	33107	LEE ROBERT A	8264 VILLA LAGO DR APT 533	FORTH WORTH	TX	76179

* From the Reeves County Appraisal District parcel number.
**There is not geometric shape for these parcels on file.