



Technical Package Cover Page

This file contains the following documents:

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

Attachment No. 3 - Cameron WWTP Plain Language Summary (PLS)

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 Texas Administrative Code 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.

The City of Cameron (CN600344162) proposes to operate the City of Cameron wastewater treatment plant (RN110762879), an activated sludge process plant operated in complete mix mode. The facility will be located approximately 4300 ft south-southeast of the intersection of US 190 and 77, State Highway 36 and Adams Street; and approximately one (1) half mile east of the intersection of Oak Street and Gillis Street in the City of More Texas, Texas County, Texas 71234.

This application is for a new application to discharge at a daily average flow of 960,000 gallons per day of treated domestic wastewater under interim phase. Final phase shall not exceed 1,250,000 gallons per day.

Discharges from the facility are expected to contain five-day carbonaceous biochemical oxygen demand (CBOD₅), total suspended solids (TSS), ammonia nitrogen (NH₃-N), and *Escherichia coli*. Additional potential pollutants are included in the Domestic Technical Report 1.0, Section 7. Pollutant Analysis of Treated Effluent in the permit application package. Domestic wastewater will be treated by an activated sludge process plant and the treatment units under the interim phase will include a manual bar screen, flow equalization basin, aeration basin, final clarifiers, sludge digesters and dewatering containers, and chlorine contact chamber. Final phase improvements will consist of fine screens, vortex grit removal, flow equalization basin, continuous flow sequencing batch reactors, sludge digesters, chlorine contact basin and effluent cascade aeration.

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY



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

PROPOSED PERMIT NO. WQ0010004003

APPLICATION. City of Cameron, P.O. Box 833, Cameron, Texas 76520, has applied to the Texas Commission on Environmental Quality (TCEQ) for proposed Texas Pollutant Discharge Elimination System (TPDES) Permit No. WQ0010004003 (EPA I.D. No. TX0146382) to authorize the discharge of treated wastewater at a volume not to exceed an annual average flow of 1,250,000 gallons per day. The domestic wastewater treatment facility is located approximately 0.5 mile east of the intersection of Oak Avenue and Gillis Avenue, near the city of Cameron, in Milam County, Texas 76520. The discharge route is from the plant site to an unnamed tributary, thence to Little River. Authorization to discharge was previously permitted by expired Permit No. WQ0010004001. TCEQ received this application on July 22, 2024. The permit application will be available for viewing and copying at Cameron Water Department, 2nd floor office, 100 South Houston Avenue, Cameron, in Milam County, Texas prior to the date this notice is published in the newspaper. The application, including any updates, and associated notices are available electronically at the following webpage: <https://www.tceq.texas.gov/permitting/wastewater/pending-permits/tpdes-applications>. This link to an electronic map of the site or facility's general location is provided as a public courtesy and not part of the application or notice. For the exact location, refer to the application. <https://gisweb.tceq.texas.gov/LocationMapper/?marker=-96.9697,30.845&level=18>

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

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

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

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

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

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

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

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

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

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

Further information may also be obtained from City of Cameron at the address stated above or by calling Ms. Amy Harris, City Secretary, at 254-697-6646.

Issuance Date: October 4, 2024

Texas Commission on Environmental Quality



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

NEW

PERMIT NO. WQ0010004003

APPLICATION AND PRELIMINARY DECISION. City of Cameron, P.O. Box 833, Cameron, Texas 76520, has applied to the Texas Commission on Environmental Quality (TCEQ) for new Texas Pollutant Discharge Elimination System (TPDES) Permit No. WQ0010004003, to authorize the discharge of treated domestic wastewater at an annual average flow not to exceed 1,250,000 gallons per day. The facility was previously permitted under TPDES Permit No. WQ0010004001 which expired June 26, 2024. TCEQ received this application on July 22, 2024.

The facility is located approximately 0.5 mile east of the intersection of Oak Avenue and Gillis Avenue, in Milam County, Texas 76520. The treated effluent is discharged to an unnamed tributary, thence to Little River in Segment No. 1213 of the Brazos River Basin. The unclassified receiving water use is minimal aquatic life use for the unnamed tributary. The designated uses for Segment No. 1213 are primary contact recreation, public water supply, and high aquatic life use. In accordance with 30 TAC § 307.5 and the TCEQ's *Procedures to Implement the Texas Surface Water Quality Standards* (June 2010), an antidegradation review of the receiving waters was performed. A Tier 1 antidegradation review has preliminarily determined that existing water quality uses will not be impaired by this permit action. Numerical and narrative criteria to protect existing uses will be maintained. A Tier 2 review has preliminarily determined that no significant degradation of water quality is expected in Little River, which has been identified as having high aquatic life use. Existing uses will be maintained and protected. The preliminary determination can be reexamined and may be modified if new information is received. This link to an electronic map of the site or facility's general location is provided as a public courtesy and is not part of the application or notice. For the exact location, refer to the application. <https://gisweb.tceq.texas.gov/LocationMapper/?marker=-96.9697,30.845&level=18>

The TCEQ Executive Director has completed the technical review of the application and prepared a draft permit. The draft permit, if approved, would establish the conditions under which the facility must operate. The Executive Director has made a preliminary decision that this permit, if issued, meets all statutory and regulatory requirements. The permit application, Executive Director's preliminary decision, and draft permit are available for viewing and copying at Cameron Water Department, 2nd floor office, 100 South Houston Avenue, Cameron, in Milam County, Texas 76520. 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>.

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

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

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

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

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

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

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

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

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

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

Further information may also be obtained from City of Cameron at the address stated above or by calling Ms. Amy Harris, City Secretary, at 254-697-6646.

Issuance Date: September 19, 2025



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

DOMESTIC WASTEWATER PERMIT APPLICATION CHECKLIST

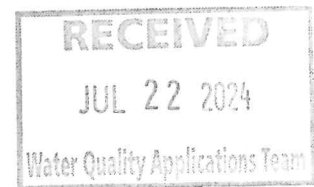
Complete and submit this checklist with the application.

APPLICANT NAME: City of Cameron

PERMIT NUMBER (If new, leave blank): WQ00 10004001

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

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



For TCEQ Use Only

Segment Number _____ County _____
Expiration Date _____ Region _____
Permit Number _____



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

DOMESTIC WASTEWATER PERMIT APPLICATION ADMINISTRATIVE REPORT 1.0

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

Section 1. Application Fees (Instructions Page 26)

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

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

Minor Amendment (for any flow) \$150.00 ☐

Payment Information:

Mailed Check/Money Order Number: [Click to enter text.](#)
Check/Money Order Amount: [Click to enter text.](#)
Name Printed on Check: Kasberg, Patrick & Associates, LP
EPAY Voucher Number: [Click to enter text.](#)
Copy of Payment Voucher enclosed? Yes ☐

Section 2. Type of Application (Instructions Page 26)

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

- ☒ Publicly-Owned Domestic Wastewater
- ☐ Privately-Owned Domestic Wastewater
- ☐ Conventional Wastewater Treatment

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

- ☐ Active ☐ Inactive

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

- ☒ TPDES Permit
- ☐ TLAP
- ☐ TPDES Permit with TLAP component
- ☐ Subsurface Area Drip Dispersal System (SADDS)

d. Check the box next to the appropriate application type

- ☐ New
- ☐ Major Amendment with Renewal
- ☐ Major Amendment without Renewal
- ☒ Renewal without changes
- ☐ Minor Amendment with Renewal
- ☐ Minor Amendment without Renewal
- ☐ Minor Modification of permit

e. For amendments or modifications, describe the proposed changes: [Click to enter text.](#)

f. For existing permits:

Permit Number: WQ00 10004001

EPA I.D. (TPDES only): TX 0053651

Expiration Date: June 26, 2024

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

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

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

City of Cameron

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

If the applicant is currently a customer with the TCEQ, what is the Customer Number (CN)?

You may search for your CN on the TCEQ website at <http://www15.tceq.texas.gov/crpub/>

CN: 600344162

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

Prefix: Mr.

Last Name, First Name: White, Brandon

Title: Public Works Director

Credential: [Click to enter text.](#)

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

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

N/A

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

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

CN: N/A

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

Prefix: Click to enter text.

Last Name, First Name: Click to enter text.

Title: Click to enter text.

Credential: Click to enter text.

Provide a brief description of the need for a co-permittee: Click to enter text.

C. Core Data Form

Complete the Core Data Form for each customer and include as an attachment. If the customer type selected on the Core Data Form is **Individual**, complete **Attachment 1** of Administrative Report 1.0. Exhibit No. 1

Section 4. Application Contact Information (Instructions Page 27)

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

- A. Prefix: Mr. Last Name, First Name: Karimov, Askarali
Title: Technical Director Credential: EIT, Ph. D.
Organization Name: Kasberg, Patrick & Associates, LP
Mailing Address: 19 N. Main Street City, State, Zip Code: Temple, TX 76501
Phone No.: (254) 773-3731 E-mail Address: akarimov@kpaengineers.com
Check one or both: ☒ Administrative Contact ☐ Technical Contact
- B. Prefix: Mr. Last Name, First Name: Valle, Thomas
Title: Principal Credential: P.E.
Organization Name: Kasberg, Patrick & Associates, LP
Mailing Address: 19 N. Main Street City, State, Zip Code: Temple, TX 76501
Phone No.: (254) 773-3731 E-mail Address: tvalle@kpaengineers.com
Check one or both: ☐ Administrative Contact ☒ Technical Contact

Section 5. Permit Contact Information (Instructions Page 27)

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

- A. Prefix: Mr. Last Name, First Name: White, Brandon
Title: Public Works Director Credential: Click to enter text.
Organization Name: City of Cameron
Mailing Address: P.O. Box 833 City, State, Zip Code: Cameron, TX 76520
Phone No.: (254) 697-6646 E-mail Address: bwhite@camerontexas.net

B. Prefix: Mr. Last Name, First Name: Burkett, Andrew
Title: Plant Operator Credential: Click to enter text.
Organization Name: City of Cameron
Mailing Address: P.O. Box 833 City, State, Zip Code: Cameron, TX 76520
Phone No.: (254) 697-6646 E-mail Address: aburkett@camerontexas.net

Section 6. Billing Contact Information (Instructions Page 27)

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

Prefix: Ms. Last Name, First Name: Harris, Amy
Title: City Secretary Credential: Click to enter text.
Organization Name: City of Cameron
Mailing Address: P.O. Box 833 City, State, Zip Code: Cameron, TX 76520
Phone No.: (254) 697-6646 E-mail Address: aharris@camerontexas.net

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

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

Prefix: Mr. Last Name, First Name: Burkett, Andrew
Title: Plant Operator Credential: Click to enter text.
Organization Name: City of Cameron
Mailing Address: P.O. Box 833 City, State, Zip Code: Cameron, TX 76520
Phone No.: (254) 697-6646 E-mail Address: aburkett@camerontexas.net

Section 8. Public Notice Information (Instructions Page 27)

A. Individual Publishing the Notices

Prefix: Ms. Last Name, First Name: Harris, Amy
Title: City Secretary Credential: Click to enter text.
Organization Name: City of Cameron
Mailing Address: P.O. Box 833 City, State, Zip Code: Cameron, TX 76520
Phone No.: (254) 697-6646 E-mail Address: aharris@camerontexas.net

B. Method for Receiving Notice of Receipt and Intent to Obtain a Water Quality Permit Package

Indicate by a check mark the preferred method for receiving the first notice and instructions:

- ☒ E-mail Address
☐ Fax
☐ Regular Mail

C. Contact permit to be listed in the Notices

Prefix: Ms. Last Name, First Name: Harris, Amy

Title: City Secretary Credential: Click to enter text.

Organization Name: City of Cameron

Mailing Address: P.O. Box 833 City, State, Zip Code: Cameron, TX 76520

Phone No.: (254) 697-6646 E-mail Address: aharris@camerontexas.net

D. Public Viewing Information

If the facility or outfall is located in more than one county, a public viewing place for each county must be provided.

Public building name: Cameron Water Department

Location within the building: 2nd Floor Office

Physical Address of Building: 100 South Houston Ave

City: Cameron County: Milam

Contact (Last Name, First Name): Harris, Amy

Phone No.: (254) 697-6646 Ext.: Click to enter text.

E. Bilingual Notice Requirements

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

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

Please call the bilingual/ESL coordinator at the nearest elementary and middle schools and obtain the following information to determine whether an alternative language notices are required.

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

☐ Yes ☒ No

If **no**, publication of an alternative language notice is not required; **skip to** Section 9 below.

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

☐ Yes ☐ No

3. Do the students at these schools attend a bilingual education program at another location?
- ☐ Yes ☐ No
4. Would the school be required to provide a bilingual education program but the school has waived out of this requirement under 19 TAC §89.1205(g)?
- ☐ Yes ☐ No
5. If the answer is **yes** to **question 1, 2, 3, or 4**, public notices in an alternative language are required. Which language is required by the bilingual program? [Click to enter text.](#)

F. Plain Language Summary Template

Complete the Plain Language Summary (TCEQ Form 20972) and include as an attachment.

Attachment: N/A

G. Public Involvement Plan Form

Complete the Public Involvement Plan Form (TCEQ Form 20960) for each application for a **new permit or major amendment to a permit** and include as an attachment.

Attachment: N/A

Section 9. Regulated Entity and Permitted Site Information (Instructions Page 29)

- A. If the site is currently regulated by TCEQ, provide the Regulated Entity Number (RN) issued to this site. RN 101607828

Search the TCEQ's Central Registry at <http://www15.tceq.texas.gov/crpub/> to determine if the site is currently regulated by TCEQ.

- B. Name of project or site (the name known by the community where located):

City of Cameron WWTP

- C. Owner of treatment facility: City of Cameron

Ownership of Facility: ☒ Public ☐ Private ☐ Both ☐ Federal

- D. Owner of land where treatment facility is or will be:

Prefix: N/A

Last Name, First Name: N/A

Title: N/A

Credential: N/A

Organization Name: City of Cameron

Mailing Address: P.O. Box 833

City, State, Zip Code: Cameron, TX 76520

Phone No.: (254) 697-6646

E-mail Address: bwhite@camerontexas.net

If the landowner is not the same person as the facility owner or co-applicant, attach a lease agreement or deed recorded easement. See instructions.

Attachment: N/A

E. Owner of effluent disposal site:

Prefix: [Click to enter text.](#)

Last Name, First Name: [Click to enter text.](#)

Title: [Click to enter text.](#)

Credential: [Click to enter text.](#)

Organization Name: [Click to enter text.](#)

Mailing Address: [Click to enter text.](#)

City, State, Zip Code: [Click to enter text.](#)

Phone No.: [Click to enter text.](#)

E-mail Address: [Click to enter text.](#)

If the landowner is not the same person as the facility owner or co-applicant, attach a lease agreement or deed recorded easement. See instructions.

Attachment: [Click to enter text.](#)

F. Owner sewage sludge disposal site (if authorization is requested for sludge disposal on property owned or controlled by the applicant)::

Prefix: [Click to enter text.](#)

Last Name, First Name: [Click to enter text.](#)

Title: [Click to enter text.](#)

Credential: [Click to enter text.](#)

Organization Name: [Click to enter text.](#)

Mailing Address: [Click to enter text.](#)

City, State, Zip Code: [Click to enter text.](#)

Phone No.: [Click to enter text.](#)

E-mail Address: [Click to enter text.](#)

If the landowner is not the same person as the facility owner or co-applicant, attach a lease agreement or deed recorded easement. See instructions.

Attachment: [Click to enter text.](#)

Section 10. TPDES Discharge Information (Instructions Page 31)

A. Is the wastewater treatment facility location in the existing permit accurate?

☒ Yes ☐ No

If **no**, or a new permit application, please give an accurate description:

[Click to enter text.](#)

B. Are the point(s) of discharge and the discharge route(s) in the existing permit correct?

☒ Yes ☐ No

If **no**, or a new or amendment permit application, provide an accurate description of the point of discharge and the discharge route to the nearest classified segment as defined in 30 TAC Chapter 307:

[Click to enter text.](#)

City nearest the outfall(s): City of Cameron

County in which the outfalls(s) is/are located: Milam

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

☐ Yes ☒ No

If **yes**, indicate by a check mark if:

- ☐ Authorization granted ☐ Authorization pending

For **new and amendment** applications, provide copies of letters that show proof of contact and the approval letter upon receipt.

Attachment: Click to enter text.

- D. For all applications involving an average daily discharge of 5 MGD or more, provide the names of all counties located within 100 statute miles downstream of the point(s) of discharge: N/A

Section 11. TLAP Disposal Information (Instructions Page 32)

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

☐ Yes ☐ No

If **no**, or a **new or amendment permit application**, provide an accurate description of the disposal site location:

Click to enter text.

- B. City nearest the disposal site: Click to enter text.

- C. County in which the disposal site is located: Click to enter text.

- D. For TLAPs, describe the routing of effluent from the treatment facility to the disposal site:

Click to enter text.

- E. For TLAPs, please identify the nearest watercourse to the disposal site to which rainfall runoff might flow if not contained: N/A

Section 12. Miscellaneous Information (Instructions Page 32)

- A. Is the facility located on or does the treated effluent cross American Indian Land?

☐ Yes ☒ No

- B. If the existing permit contains an onsite sludge disposal authorization, is the location of the sewage sludge disposal site in the existing permit accurate?

☒ Yes ☐ No ☒ Not Applicable

If No, or if a new onsite sludge disposal authorization is being requested in this permit application, provide an accurate location description of the sewage sludge disposal site.

Previously, the City of Cameron utilized On-Site Sludge Drying Beds for sludge storage prior to disposal in a landfill. As of 2019 and described in the previously approved Major Amendment, the City now de-waters sludge in haul-off containers prior to disposal by a registered entity in a landfill.

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

☐ Yes ☒ No

If yes, list each person formerly employed by the TCEQ who represented your company and was paid for service regarding the application: N/A

D. Do you owe any fees to the TCEQ?

☐ Yes ☒ No

If yes, provide the following information:

Account number: [Click to enter text.](#)

Amount past due: [Click to enter text.](#)

E. Do you owe any penalties to the TCEQ?

☐ Yes ☒ No

If yes, please provide the following information:

Enforcement order number: [Click to enter text.](#)

Amount past due: [Click to enter text.](#)

Section 13. Attachments (Instructions Page 33)

Indicate which attachments are included with the Administrative Report. Check all that apply:

☐ Lease agreement or deed recorded easement, if the land where the treatment facility is located or the effluent disposal site are not owned by the applicant or co-applicant.

☒ Original full-size USGS Topographic Map with the following information:

- Applicant's property boundary
- Treatment facility boundary
- Labeled point of discharge for each discharge point (TPDES only)
- Highlighted discharge route for each discharge point (TPDES only)
- Onsite sewage sludge disposal site (if applicable)
- Effluent disposal site boundaries (TLAP only)
- New and future construction (if applicable)
- 1 mile radius information
- 3 miles downstream information (TPDES only)
- All ponds.

☐ Attachment 1 for Individuals as co-applicants

☐ Other Attachments. Please specify: [Click to enter text.](#)

Section 14. Signature Page (Instructions Page 34)

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

Permit Number: WQ0010004001

Applicant: City of Cameron

Certification:

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

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

Signatory name (typed or printed): Brandon White

Signatory title: Public Works Director

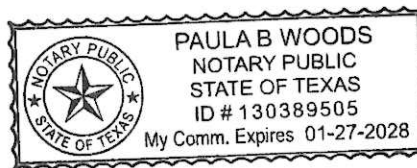
Signature:  Date: 7/19/2024
(Use blue ink)

Subscribed and Sworn to before me by the said Brandon White
on this 19 day of July, 20 24.
My commission expires on the 27 day of January, 20 28.

Paula B Woods
Notary Public

[SEAL]

Milam
County, Texas



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: City of Cameron
Permit No. WQ00 100040001

EPA ID No. TX 0053651

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

LOCATED APPROX 1300 FT S-SE OF THE INTERX OF US 190 AND 77, SH 36 AND ADAMS ST; AND APPROX ONE HALF MILE OF THE INTERX OF OAK ST AND GILLIS ST

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: Brandon White

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

Title: Public Works Director

Mailing Address: P.O. Box 833

City, State, Zip Code: Cameron, TX 76520

Phone No.: (254) 667-6646 Ext.: click here to enter text Fax No.: (254) 667-3040

E-mail Address: bwhite@camerontexas.net

2. List the county in which the facility is located: Milam
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, Landowner is permittee

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.

Effluent discharges into unnamed tributary and travels approximately 0.40 miles South-South East to Little River Segment No. 1213 of the Brazos River Basin.

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):

Construction will consist of building large concrete basins for new treatment units within WWTP site approximately 3 Acres of surface impact. Excavation depth will range from slab on grade to approximately 6'-8' below existing ground. No karst features or caves are expected to be encountered.

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

Existing disturbances is noise from WWTP operations. Only vegetation within site is grass. Construction area within the WWTP has been previously disturbed.

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:

Original Treatment Plant was constructed in 1958 this included existing clarifiers (2), digesters (2), aeration basin (1), chlorine contact basin (1), headworks and influent pump station. Equalization basin and headworks improvements (fine screens) were added in 2005.

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

Architect/Builder is not known, site was a grass/brush filled area with a few neighboring houses when WWTP was built in 1958.



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

DOMESTIC WASTEWATER PERMIT APPLICATION TECHNICAL REPORT 1.0

For any questions about this form, please contact the Domestic Wastewater Permitting Team at 512-239-4671.

The following information is required for all renewal, new, and amendment applications.

Section 1. Permitted or Proposed Flows (Instructions Page 43)

A. Existing/Interim I Phase

Design Flow (MGD): 0.96

2-Hr Peak Flow (MGD): 2.4

Estimated construction start date: 1958

Estimated waste disposal start date: 1958

B. Interim II Phase

Design Flow (MGD): 1.25

2-Hr Peak Flow (MGD): 5.0

Estimated construction start date: 9/1/2024

Estimated waste disposal start date: 12/1/2025

C. Final Phase

Design Flow (MGD): N/A

2-Hr Peak Flow (MGD): N/A

Estimated construction start date: N/A

Estimated waste disposal start date: N/A

D. Current Operating Phase

Provide the startup date of the facility: Existing/Interim I

Section 2. Treatment Process (Instructions Page 43)

A. Current Operating Phase

Provide a detailed description of the treatment process. **Include the type of treatment plant, mode of operation, and all treatment units.** Start with the plant's head works and

finish with the point of discharge. Include all sludge processing and drying units. **If more than one phase exists or is proposed, a description of each phase must be provided.**

Existing/Interim Phase I – Existing Process is Conventional Activated Sludge. Wastewater is pumped from various small lift stations into 12" & 15" gravity sewer entering influent lift station. Existing Phase flows through manual bar screen, equalization basin and aeration basin for primary treatment. Secondary Treatment consists of two (2) clarifiers and chlorine contact chambers before discharging into unnamed tributary. Waste sludge is decomposed in two (2) digesters, pumped to on-site dewatering containers and then hauled off to Temple landfill. Interim Phase II – Includes addition of 0.29 MGD treatment capacity consisting of the replacement of existing influent wet well, new headworks structure with manual and fine screens, equalization pump station, vortex grit removal, four (4) new continuous flow Sequence Batch Reactor basins replacing existing clarification, two (2) new chlorine contact basins and cascade aerator. Existing haul off sludge dewatering containers will remain. Phase II will connect to existing outfall.

B. Treatment Units

In Table 1.0(1), provide the treatment unit type, the number of units, and dimensions (length, width, depth) of each treatment unit, accounting for **all** phases of operation.

Table 1.0(1) - Treatment Units

Treatment Unit Type	Number of Units	Dimensions (L x W x D)
See attached Exhibit 9		

C. Process Flow Diagram

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

Attachment: 4

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

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

- Latitude: 30.84516
- Longitude: -96.9661

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

- Latitude: N/A
- Longitude: N/A

Provide a site drawing for the facility that shows the following:

- The boundaries of the treatment facility;
- The boundaries of the area served by the treatment facility;

- If land disposal of effluent, the boundaries of the disposal site and all storage/holding ponds; and
- If sludge disposal is authorized in the permit, the boundaries of the land application or disposal site.

Attachment: 5

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

WWTP service area is the City Limits of Cameron TX as shown on Exhibit No. 13. The approximate area is 3,325 Acres with Residential and Commercial Development.

Collection System Information **for wastewater TPDES permits only**: Provide information for each **uniquely owned** collection system, existing and new, served by this facility, including satellite collection systems. **Please see the instructions for a detailed explanation and examples.**

Collection System Information

Collection System Name	Owner Name	Owner Type	Population Served
City of Cameron	City of Cameron	Publicly Owned	5,511
		Choose an item.	
		Choose an item.	
		Choose an item.	

Section 4. Unbuilt Phases (Instructions Page 45)

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

☒ Yes ☐ No

If yes, does the existing permit contain a phase that has not been constructed **within five years** of being authorized by the TCEQ?

☒ Yes ☐ No

If yes, provide a detailed discussion regarding the continued need for the unbuilt phase. **Failure to provide sufficient justification may result in the Executive Director recommending denial of the unbuilt phase or phases.**

Please see attached Exhibit No. 14

Section 5. Closure Plans (Instructions Page 45)

Have any treatment units been taken out of service permanently, or will any units be taken out of service in the next five years?

☒ Yes ☐ No

If yes, was a closure plan submitted to the TCEQ?

☒ Yes ☐ No

If yes, provide a brief description of the closure and the date of plan approval.

Interim Phase II improvements will remove the Manual Bar Screen, Influent Pump Station, Clarifiers, Chlorine Contact Basins and Sludge Drying Beds (Previously Demolished). Approval letter is dated August 19, 2023

Section 6. Permit Specific Requirements (Instructions Page 45)

For applicants with an existing permit, check the Other Requirements or Special Provisions of the permit.

A. Summary transmittal

Have plans and specifications been approved for the existing facilities and each proposed phase?

☐ Yes ☒ No

If yes, provide the date(s) of approval for each phase: [Click to enter text.](#)

Provide information, including dates, on any actions taken to meet a *requirement or provision* pertaining to the submission of a summary transmittal letter. **Provide a copy of an approval letter from the TCEQ, if applicable.**

[Click to enter text.](#)

B. Buffer zones

Have the buffer zone requirements been met?

☒ Yes ☐ No

Provide information below, including dates, on any actions taken to meet the conditions of the buffer zone. If available, provide any new documentation relevant to maintaining the buffer zones.

None, see Exhibit No. 7

C. Other actions required by the current permit

Does the *Other Requirements* or *Special Provisions* section in the existing permit require submission of any other information or other required actions? Examples include Notification of Completion, progress reports, soil monitoring data, etc.

☐ Yes ☒ No

If yes, provide information below on the status of any actions taken to meet the conditions of an *Other Requirement* or *Special Provision*.

Click to enter text.

D. Grit and grease treatment

1. Acceptance of grit and grease waste

Does the facility have a grit and/or grease processing facility onsite that treats and decants or accepts transported loads of grit and grease waste that are discharged directly to the wastewater treatment plant prior to any treatment?

☐ Yes ☒ No

If No, stop here and continue with Subsection E. Stormwater Management.

2. Grit and grease processing

Describe below how the grit and grease waste is treated at the facility. In your description, include how and where the grit and grease is introduced to the treatment works and how it is separated or processed. Provide a flow diagram showing how grit and grease is processed at the facility.

Click to enter text.

3. Grit disposal

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

☐ Yes ☐ No

If No, contact the TCEQ Municipal Solid Waste team at 512-239-2335. Note: A registration or permit is required for grit disposal. Grit shall not be combined with treatment plant sludge. See the instruction booklet for additional information on grit disposal requirements and restrictions.

Describe the method of grit disposal.

[Click to enter text.](#)

4. *Grease and decanted liquid disposal*

Note: A registration or permit is required for grease disposal. Grease shall not be combined with treatment plant sludge. For more information, contact the TCEQ Municipal Solid Waste team at 512-239-2335.

Describe how the decant and grease are treated and disposed of after grit separation.

[Click to enter text.](#)

E. Stormwater management

1. *Applicability*

Does the facility have a design flow of 1.0 MGD or greater in any phase?

☒ Yes ☐ No

Does the facility have an approved pretreatment program, under 40 CFR Part 403?

☐ Yes ☒ No

If no to both of the above, then skip to Subsection F, Other Wastes Received.

2. *MSGP coverage*

Is the stormwater runoff from the WWTP and dedicated lands for sewage disposal currently permitted under the TPDES Multi-Sector General Permit (MSGP), TXR050000?

☐ Yes ☒ No

If yes, please provide MSGP Authorization Number and skip to Subsection F, Other Wastes Received:

TXR05 [Click to enter text.](#) or TXRNE [Click to enter text.](#)

If no, do you intend to seek coverage under TXR050000?

☐ Yes ☐ No

3. Conditional exclusion

Alternatively, do you intend to apply for a conditional exclusion from permitting based TXR050000 (Multi Sector General Permit) Part II B.2 or TXR050000 (Multi Sector General Permit) Part V, Sector T 3(b)?

☐ Yes ☒ No

If yes, please explain below then proceed to Subsection F, Other Wastes Received:

Click to enter text.

4. Existing coverage in individual permit

Is your stormwater discharge currently permitted through this individual TPDES or TLAP permit?

☒ Yes ☐ No

If yes, provide a description of stormwater runoff management practices at the site that are authorized in the wastewater permit then skip to Subsection F, Other Wastes Received.

Stormwater is collected in central location and then returned to headworks. Existing Berm surrounding WWTP prevents runoff from escaping the site.

5. Zero stormwater discharge

Do you intend to have no discharge of stormwater via use of evaporation or other means?

☐ Yes ☒ No

If yes, explain below then skip to Subsection F. Other Wastes Received.

Click to enter text.

Note: If there is a potential to discharge any stormwater to surface water in the state as the result of any storm event, then permit coverage is required under the MSGP or an individual discharge permit. This requirement applies to all areas of facilities with treatment plants or systems that treat, store, recycle, or reclaim domestic sewage, wastewater or sewage sludge (including dedicated lands for sewage sludge disposal located within the onsite property boundaries) that meet the applicability criteria of above. You have the option of obtaining coverage under the MSGP for direct discharges, (recommended), or obtaining coverage under this individual permit.

6. Request for coverage in individual permit

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

☐ Yes ☒ No

If **yes**, provide a description of stormwater runoff management practices at the site for which you are requesting authorization in this individual wastewater permit and describe whether you intend to comingle this discharge with your treated effluent or discharge it via a separate dedicated stormwater outfall. Please also indicate if you intend to divert stormwater to the treatment plant headworks and indirectly discharge it to water in the state.

[Click to enter text.](#)

Note: Direct stormwater discharges to waters in the state authorized through this individual permit will require the development and implementation of a stormwater pollution prevention plan (SWPPP) and will be subject to additional monitoring and reporting requirements. Indirect discharges of stormwater via headworks recycling will require compliance with all individual permit requirements including 2-hour peak flow limitations. All stormwater discharge authorization requests will require additional information during the technical review of your application.

F. Discharges to the Lake Houston Watershed

Does the facility discharge in the Lake Houston watershed?

☐ Yes ☒ No

If yes, attach a Sewage Sludge Solids Management Plan. See Example 5 in the instructions.
[Click to enter text.](#)

G. Other wastes received including sludge from other WWTPs and septic waste

1. Acceptance of sludge from other WWTPs

Does or will the facility accept sludge from other treatment plants at the facility site?

☐ Yes ☒ No

If **yes**, attach sewage sludge solids management plan. See Example 5 of instructions.

In addition, provide the date the plant started or is anticipated to start accepting sludge, an estimate of monthly sludge acceptance (gallons or millions of gallons), an estimate of the BOD₅ concentration of the sludge, and the design BOD₅ concentration of the influent from the collection system. Also note if this information has or has not changed since the last permit action.

[Click to enter text.](#)

Note: Permits that accept sludge from other wastewater treatment plants may be required to have influent flow and organic loading monitoring.

2. Acceptance of septic waste

Is the facility accepting or will it accept septic waste?

☒ Yes ☐ No

If **yes**, does the facility have a Type V processing unit?

☐ Yes ☒ No

If **yes**, does the unit have a Municipal Solid Waste permit?

☐ Yes ☒ No

If **yes to any of the above**, provide the date the plant started or is anticipated to start accepting septic waste, an estimate of monthly septic waste acceptance (gallons or millions of gallons), an estimate of the BOD₅ concentration of the septic waste, and the design BOD₅ concentration of the influent from the collection system. Also note if this information has or has not changed since the last permit action.

The anticipated acceptance date is December 1, 2025 at completion of Phase II Improvements. 10,000 to 20,000 gallons per month. Expected average septage BOD is 7500 mg/l.

Note: Permits that accept sludge from other wastewater treatment plants may be required to have influent flow and organic loading monitoring.

3. Acceptance of other wastes (not including septic, grease, grit, or RCRA, CERCLA or as discharged by IUs listed in Worksheet 6)

Is or will the facility accept wastes that are not domestic in nature excluding the categories listed above?

☐ Yes ☒ No

If **yes**, provide the date that the plant started accepting the waste, an estimate how much waste is accepted on a monthly basis (gallons or millions of gallons), a description of the entities generating the waste, and any distinguishing chemical or other physical characteristic of the waste. Also note if this information has or has not changed since the last permit action.

Click to enter text.

Section 7. Pollutant Analysis of Treated Effluent (Instructions Page 50)

Is the facility in operation?

☒ Yes ☐ No

If **no**, this section is not applicable. Proceed to Section 8.

If yes, provide effluent analysis data for the listed pollutants. **Wastewater treatment facilities** complete Table 1.0(2). **Water treatment facilities** discharging filter backwash water, complete Table 1.0(3). Provide copies of the laboratory results sheets. **These tables are not applicable for a minor amendment without renewal.** See the instructions for guidance.

Note: The sample date must be within 1 year of application submission.

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

Pollutant	Average Conc.	Max Conc.	No. of Samples	Sample Type	Sample Date/Time
CBOD ₅ , mg/l		15.0	1	Grab	4/25/24 / 10:15 AM
Total Suspended Solids, mg/l		21.0	1	Grab	4/25/24 / 9:00 AM
Ammonia Nitrogen, mg/l		11.9	1	Grab	4/25/24 / 6:30 PM
Nitrate Nitrogen, mg/l		< 0.10	1	Grab	4/30/24 / 7:31 PM
Total Kjeldahl Nitrogen, mg/l		16.7	1	Grab	4/25/24 / 7:50 PM
Sulfate, mg/l		90.8	1	Grab	4/25/24 / 7:31 PM
Chloride, mg/l		111.0	1	Grab	4/25/24 / 7:31 PM
Total Phosphorus, mg/l		1.05	1	Grab	4/25/24 / 4:15 PM
pH, standard units		7.2	1	Grab	4/24/24 / 12:24 PM
Dissolved Oxygen*, mg/l					
Chlorine Residual, mg/l					
<i>E.coli</i> (CFU/100ml) freshwater		2420	1	Grab	4/24/24 / 4:20 PM
Enterococci (CFU/100ml) saltwater	N/A	N/A	N/A	N/A	N/A
Total Dissolved Solids, mg/l		602.0	1	Grab	4/29/24 / 7:31 PM
Electrical Conductivity, μ mohs/cm, †		1071	1	Grab	4/25/24 / 1:30 PM
Oil & Grease, mg/l		< 5.0	1	Grab	4/29/24 / 1:30 PM
Alkalinity (CaCO ₃)*, mg/l		291.0	1	Grab	4/29/24 / 9:00 AM

*TPDES permits only

†TLAP permits only

Table1.0(3) – Pollutant Analysis for Water Treatment Facilities

Pollutant	Average Conc.	Max Conc.	No. of Samples	Sample Type	Sample Date/Time
Total Suspended Solids, mg/l					
Total Dissolved Solids, mg/l					
pH, standard units					
Fluoride, mg/l					
Aluminum, mg/l					
Alkalinity (CaCO ₃), mg/l					

Section 8. Facility Operator (Instructions Page 50)

Facility Operator Name: Andrew Burkett

Facility Operator's License Classification and Level: Class/Level C

Facility Operator's License Number: WW0061723

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

A. WWTP's Biosolids Management Facility Type

Check all that apply. See instructions for guidance

- ☒ Design flow $\geq$ 1 MGD
- ☐ Serves $\geq$ 10,000 people
- ☐ Class I Sludge Management Facility (per 40 CFR § 503.9)
- ☐ Biosolids generator
- ☐ Biosolids end user – land application (onsite)
- ☐ Biosolids end user – surface disposal (onsite)
- ☐ Biosolids end user – incinerator (onsite)

B. WWTP's Biosolids Treatment Process

Check all that apply. See instructions for guidance.

- ☒ Aerobic Digestion
- ☒ Air Drying (or sludge drying beds)
- ☐ Lower Temperature Composting
- ☐ Lime Stabilization
- ☐ Higher Temperature Composting
- ☐ Heat Drying
- ☐ Thermophilic Aerobic Digestion
- ☐ Beta Ray Irradiation

- ☐ Gamma Ray Irradiation
- ☐ Pasteurization
- ☐ Preliminary Operation (e.g. grinding, de-gritting, blending)
- ☐ Thickening (e.g. gravity thickening, centrifugation, filter press, vacuum filter)
- ☐ Sludge Lagoon
- ☒ Temporary Storage (< 2 years)
- ☐ Long Term Storage (>= 2 years)
- ☐ Methane or Biogas Recovery
- ☒ Other Treatment Process: Sludge is dewatered in onsite haul off containers and disposed of by a registered transporter in the City of Temple landfill.

C. Biosolids Management

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

Biosolids Management

Management Practice	Handler or Preparer Type	Bulk or Bag Container	Amount (dry metric tons)	Pathogen Reduction Options	Vector Attraction Reduction Option
Disposal in Landfill	On-Site Owner or Operator	Bulk		Class B: PSRP Aerobic Digestion	Choose an item.
Choose an item.	Choose an item.	Choose an item.		Choose an item.	Choose an item.
Choose an item.	Choose an item.	Choose an item.		Choose an item.	Choose an item.

If "Other" is selected for Management Practice, please explain (e.g. monofill or transport to another WWTP): Click to enter text.

D. Disposal site

Disposal site name: Temple Recycling and Disposal Facility

TCEQ permit or registration number: Ho692

County where disposal site is located: Bell

E. Transportation method

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

Name of the hauler: City of Cameron

Hauler registration number: 22167

Sludge is transported as a:

Liquid ☐ semi-liquid ☐ semi-solid ☒ solid ☐

Section 10. Permit Authorization for Sewage Sludge Disposal (Instructions Page 53)

A. Beneficial use authorization

Does the existing permit include authorization for land application of sewage sludge for beneficial use?

☐ Yes ☒ No

If **yes**, are you requesting to continue this authorization to land apply sewage sludge for beneficial use?

☐ Yes ☐ No

If **yes**, is the completed **Application for Permit for Beneficial Land Use of Sewage Sludge (TCEQ Form No. 10451)** attached to this permit application (see the instructions for details)?

☐ Yes ☐ No

B. Sludge processing authorization

Does the existing permit include authorization for any of the following sludge processing, storage or disposal options?

Sludge Composting	☐ Yes	☒ No
Marketing and Distribution of sludge	☐ Yes	☒ No
Sludge Surface Disposal or Sludge Monofill	☐ Yes	☒ No
Temporary storage in sludge lagoons	☐ Yes	☒ No

If **yes** to any of the above sludge options and the applicant is requesting to continue this authorization, is the completed **Domestic Wastewater Permit Application: Sewage Sludge Technical Report (TCEQ Form No. 10056)** attached to this permit application?

☐ Yes ☐ No

Section 11. Sewage Sludge Lagoons (Instructions Page 53)

Does this facility include sewage sludge lagoons?

☐ Yes ☒ No

If yes, complete the remainder of this section. If no, proceed to Section 12.

A. Location information

The following maps are required to be submitted as part of the application. For each map, provide the Attachment Number.

- Original General Highway (County) Map:

Attachment: [Click to enter text.](#)

- USDA Natural Resources Conservation Service Soil Map:

Attachment: [Click to enter text.](#)

- Federal Emergency Management Map:

Attachment: [Click to enter text.](#)

- Site map:

Attachment: [Click to enter text.](#)

Discuss in a description if any of the following exist within the lagoon area. Check all that apply.

- ☐ Overlap a designated 100-year frequency flood plain
- ☐ Soils with flooding classification
- ☐ Overlap an unstable area
- ☐ Wetlands
- ☐ Located less than 60 meters from a fault
- ☐ None of the above

Attachment: [Click to enter text.](#)

If a portion of the lagoon(s) is located within the 100-year frequency flood plain, provide the protective measures to be utilized including type and size of protective structures:

[Click to enter text.](#)

B. Temporary storage information

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

Nitrate Nitrogen, mg/kg: [Click to enter text.](#)

Total Kjeldahl Nitrogen, mg/kg: [Click to enter text.](#)

Total Nitrogen (=nitrate nitrogen + TKN), mg/kg: [Click to enter text.](#)

Phosphorus, mg/kg: [Click to enter text.](#)

Potassium, mg/kg: [Click to enter text.](#)

pH, standard units: [Click to enter text.](#)

Ammonia Nitrogen mg/kg: [Click to enter text.](#)

Arsenic: [Click to enter text.](#)

Cadmium: [Click to enter text.](#)

Chromium: [Click to enter text.](#)

Copper: [Click to enter text.](#)

Lead: [Click to enter text.](#)

Mercury: [Click to enter text.](#)

Molybdenum: [Click to enter text.](#)

Nickel: [Click to enter text.](#)

Selenium: [Click to enter text.](#)

Zinc: [Click to enter text.](#)

Total PCBs: [Click to enter text.](#)

Provide the following information:

Volume and frequency of sludge to the lagoon(s): [Click to enter text.](#)

Total dry tons stored in the lagoons(s) per 365-day period: [Click to enter text.](#)

Total dry tons stored in the lagoons(s) over the life of the unit: [Click to enter text.](#)

C. Liner information

Does the active/proposed sludge lagoon(s) have a liner with a maximum hydraulic conductivity of 1×10^{-7} cm/sec?

☐ Yes ☐ No

If yes, describe the liner below. Please note that a liner is required.

[Click to enter text.](#)

D. Site development plan

Provide a detailed description of the methods used to deposit sludge in the lagoon(s):

[Click to enter text.](#)

Attach the following documents to the application.

- Plan view and cross-section of the sludge lagoon(s)
Attachment: [Click to enter text.](#)
- Copy of the closure plan
Attachment: [Click to enter text.](#)
- Copy of deed recordation for the site
Attachment: [Click to enter text.](#)
- Size of the sludge lagoon(s) in surface acres and capacity in cubic feet and gallons
Attachment: [Click to enter text.](#)
- Description of the method of controlling infiltration of groundwater and surface water from entering the site
Attachment: [Click to enter text.](#)

- Procedures to prevent the occurrence of nuisance conditions

Attachment: [Click to enter text.](#)

E. Groundwater monitoring

Is groundwater monitoring currently conducted at this site, or are any wells available for groundwater monitoring, or are groundwater monitoring data otherwise available for the sludge lagoon(s)?

☐ Yes ☐ No

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

Attachment: [Click to enter text.](#)

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

A. Additional authorizations

Does the permittee have additional authorizations for this facility, such as reuse authorization, sludge permit, etc?

☐ Yes ☒ No

If yes, provide the TCEQ authorization number and description of the authorization:

[Click to enter text.](#)

B. Permittee enforcement status

Is the permittee currently under enforcement for this facility?

☐ Yes ☒ No

Is the permittee required to meet an implementation schedule for compliance or enforcement?

☐ Yes ☒ No

If yes to either question, provide a brief summary of the enforcement, the implementation schedule, and the current status:

Click to enter text.

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

A. RCRA hazardous wastes

Has the facility received in the past three years, does it currently receive, or will it receive RCRA hazardous waste?

☐ Yes ☒ No

B. Remediation activity wastewater

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

☐ Yes ☒ No

C. Details about wastes received

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

Attachment: [Click to enter text.](#)

Section 14. Laboratory Accreditation (Instructions Page 56)

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

- The laboratory is an in-house laboratory and is:
 - 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: Andrew Janek

Title: Technical Director

Signature: _____

Date: 7-18-2024

DOMESTIC WASTEWATER PERMIT APPLICATION

WORKSHEET 2.0: RECEIVING WATERS

The following information is required for all TPDES permit applications.

Section 1. Domestic Drinking Water Supply (Instructions Page 64)

Is there a surface water intake for domestic drinking water supply located within 5 miles downstream from the point or proposed point of discharge?

☐ Yes ☒ No

If **no**, proceed to Section 2. If **yes**, provide the following:

Owner of the drinking water supply: [Click to enter text.](#)

Distance and direction to the intake: [Click to enter text.](#)

Attach a USGS map that identifies the location of the intake.

Attachment: [Click to enter text.](#)

Section 2. Discharge into Tidally Affected Waters (Instructions Page 64)

Does the facility discharge into tidally affected waters?

☐ Yes ☒ No

If **no**, proceed to Section 3. If **yes**, complete the remainder of this section. If no, proceed to Section 3.

A. Receiving water outfall

Width of the receiving water at the outfall, in feet: [Click to enter text.](#)

B. Oyster waters

Are there oyster waters in the vicinity of the discharge?

☐ Yes ☐ No

If **yes**, provide the distance and direction from outfall(s).

[Click to enter text.](#)

C. Sea grasses

Are there any sea grasses within the vicinity of the point of discharge?

☐ Yes ☐ No

If **yes**, provide the distance and direction from the outfall(s).

[Click to enter text.](#)

Section 3. Classified Segments (Instructions Page 64)

Is the discharge directly into (or within 300 feet of) a classified segment?

☐ Yes ☒ No

If **yes**, this Worksheet is complete.

If **no**, complete Sections 4 and 5 of this Worksheet.

Section 4. Description of Immediate Receiving Waters (Instructions Page 65)

Name of the immediate receiving waters: Unnamed Tributary

A. Receiving water type

Identify the appropriate description of the receiving waters.

- ☒ Stream
- ☐ Freshwater Swamp or Marsh
- ☐ Lake or Pond

Surface area, in acres: Click to enter text.

Average depth of the entire water body, in feet: Click to enter text.

Average depth of water body within a 500-foot radius of discharge point, in feet:
Click to enter text.

- ☐ Man-made Channel or Ditch
- ☐ Open Bay
- ☐ Tidal Stream, Bayou, or Marsh
- ☐ Other, specify: Click to enter text.

B. Flow characteristics

If a stream, man-made channel or ditch was checked above, provide the following. For existing discharges, check one of the following that best characterizes the area *upstream* of the discharge. For new discharges, characterize the area *downstream* of the discharge (check one).

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

Check the method used to characterize the area upstream (or downstream for new dischargers).

- ☐ USGS flow records
- ☐ Historical observation by adjacent landowners
- ☒ Personal observation
- ☐ Other, specify: Click to enter text.

C. Downstream perennial confluences

List the names of all perennial streams that join the receiving water within three miles downstream of the discharge point.

Segment No. 1213 Little River

D. Downstream characteristics

Do 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, discuss how.

Click to enter text.

E. Normal dry weather characteristics

Provide general observations of the water body during normal dry weather conditions.

The stream is completely dry at least one week during most years. No observable fish are sustained within the creek. Photos are included as Exhibit 8.

Date and time of observation: 7/19/24 / 8:00 AM

Was the water body influenced by stormwater runoff during observations?

☐ Yes ☒ No

Section 5. General Characteristics of the Waterbody (Instructions Page 66)

A. Upstream influences

Is the immediate receiving water upstream of the discharge or proposed discharge site influenced by any of the following? Check all that apply.

- | | |
|---|---|
| ☐ Oil field activities | ☒ Urban runoff |
| ☐ Upstream discharges | ☐ Agricultural runoff |
| ☐ Septic tanks | ☐ Other(s), specify: <u>Click to enter text.</u> |

B. Waterbody uses

Observed or evidences of the following uses. Check all that apply.

- | | |
|--|--|
| ☐ Livestock watering | ☐ Contact recreation |
| ☐ Irrigation withdrawal | ☐ Non-contact recreation |
| ☐ Fishing | ☐ Navigation |
| ☐ Domestic water supply | ☐ Industrial water supply |
| ☐ Park activities | ☒ Other(s), specify: <u>No uses expected. Very small tributary receiving runoff from 3-5 residents/businesses.</u> |

C. Waterbody aesthetics

Check one of the following that best describes the aesthetics of the receiving water and the surrounding area.

- ☐ Wilderness: outstanding natural beauty; usually wooded or unpastured area; water clarity exceptional
- ☒ Natural Area: trees and/or native vegetation; some development evident (from fields, pastures, dwellings); water clarity discolored
- ☐ Common Setting: not offensive; developed but uncluttered; water may be colored or turbid
- ☐ Offensive: stream does not enhance aesthetics; cluttered; highly developed; dumping areas; water discolored

DOMESTIC WASTEWATER PERMIT APPLICATION

WORKSHEET 4.0: POLLUTANT ANALYSIS REQUIREMENTS

The following is **required** for facilities with a permitted or proposed flow of **1.0 MGD or greater**, facilities with an approved **pretreatment** program, or facilities classified as a **major** facility. See instructions for further details.

This worksheet is not required minor amendments without renewal.

Section 1. Toxic Pollutants (Instructions Page 78)

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

Grab ☐ Composite ☐

Date and time sample(s) collected: [Click to enter text.](#)

Existing Phase is permitted at 0.96 MGD and the approved Interim Phase II of 1.25 MGD will begin construction later this year. Worksheet 4.0 is not applicable due to current phase.

Table 4.0(1) – Toxics Analysis

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

DOMESTIC WASTEWATER PERMIT APPLICATION

WORKSHEET 5.0: TOXICITY TESTING REQUIREMENTS

The following **is required** for facilities with a current operating design flow of **1.0 MGD or greater**, with an EPA-approved **pretreatment** program (or those required to have one under 40 CFR Part 403), or are required to perform Whole Effluent Toxicity testing. See instructions for further details.

This worksheet is not required minor amendments without renewal.

Section 1. Required Tests (Instructions Page 88)

Indicate the number of 7-day chronic or 48-hour acute Whole Effluent Toxicity (WET) tests performed in the four and one-half years prior to submission of the application.

7-day Chronic: [Click to enter text.](#)

48-hour Acute: [Click to enter text.](#)

Section 2. Toxicity Reduction Evaluations (TREs)

Has this facility completed a TRE in the past four and a half years? Or is the facility currently performing a TRE?

☐ Yes ☐ No

If **yes**, describe the progress to date, if applicable, in identifying and confirming the toxicant.

[Click to enter text.](#)

Existing Phase is permitted at 0.96 MGD and the approved Interim Phase II of 1.25 MGD will begin construction later this year. Worksheet 5.0 is not applicable due to current phase.

DOMESTIC WASTEWATER PERMIT APPLICATION

WORKSHEET 6.0: INDUSTRIAL WASTE CONTRIBUTION

The following is required for all publicly owned treatment works.

Section 1. All POTWs (Instructions Page 89)

A. Industrial users (IUs)

Provide the number of each of the following types of industrial users (IUs) that discharge to your POTW and the daily flows from each user. See the Instructions for definitions of Categorical IUs, Significant IUs - non-categorical, and Other IUs.

If there are no users, enter 0 (zero).

Categorical IUs:

Number of IUs: 6, See Attached List

Average Daily Flows, in MGD: 0

Significant IUs - non-categorical:

Number of IUs: 0

Average Daily Flows, in MGD: 0

Other IUs:

Number of IUs: 0

Average Daily Flows, in MGD: 0

B. Treatment plant interference

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

☐ Yes ☒ No

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

Click to enter text.

C. Treatment plant pass through

In the past three years, has your POTW experienced pass through (see instructions)?

☐ Yes ☒ No

If **yes**, identify the dates, duration, a description of the pollutants passing through the treatment plant, and probable cause(s) and possible source(s) of each pass through event. Include the names of the IUs that may have caused pass through.

Click to enter text.

D. Pretreatment program

Does your POTW have an approved pretreatment program?

☐ Yes ☒ No

If **yes**, complete Section 2 only of this Worksheet.

Is your POTW required to develop an approved pretreatment program?

☐ Yes ☒ No

If **yes**, complete Section 2.c. and 2.d. only, and skip Section 3.

If **no to either question above**, skip Section 2 and complete Section 3 for each significant industrial user and categorical industrial user.

Section 2. POTWs with Approved Programs or Those Required to Develop a Program (Instructions Page 90)

A. Substantial modifications

Have there been any **substantial modifications** to the approved pretreatment program that have not been submitted to the TCEQ for approval according to *40 CFR §403.18*?

☐ Yes ☒ No

If **yes**, identify the modifications that have not been submitted to TCEQ, including the purpose of the modification.

Click to enter text.

B. Non-substantial modifications

Have there been any **non-substantial modifications** to the approved pretreatment program that have not been submitted to TCEQ for review and acceptance?

☐ Yes ☒ No

If yes, identify all non-substantial modifications that have not been submitted to TCEQ, including the purpose of the modification.

Click to enter text.

C. Effluent parameters above the MAL

In Table 6.0(1), list all parameters measured above the MAL in the POTW's effluent monitoring during the last three years. Submit an attachment if necessary.

Table 6.0(1) – Parameters Above the MAL

Pollutant	Concentration	MAL	Units	Date

D. Industrial user interruptions

Has any SIU, CIU, or other IU caused or contributed to any problems (excluding interferences or pass throughs) at your POTW in the past three years?

☐ Yes ☒ No

If yes, identify the industry, describe each episode, including dates, duration, description of the problems, and probable pollutants.

Click to enter text.

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

A. General information

Company Name: [Click to enter text.](#)

SIC Code: [Click to enter text.](#)

Contact name: [Click to enter text.](#)

Address: [Click to enter text.](#)

City, State, and Zip Code: [Click to enter text.](#)

Telephone number: [Click to enter text.](#)

Email address: [Click to enter text.](#)

B. Process information

Describe the industrial processes or other activities that affect or contribute to the SIU(s) or CIU(s) discharge (i.e., process and non-process wastewater).

[Click to enter text.](#)

C. Product and service information

Provide a description of the principal product(s) or services performed.

[Click to enter text.](#)

D. Flow rate information

See the Instructions for definitions of “process” and “non-process wastewater.”

Process Wastewater:

Discharge, in gallons/day: [Click to enter text.](#)

Discharge Type: ☐ Continuous ☐ Batch ☐ Intermittent

Non-Process Wastewater:

Discharge, in gallons/day: [Click to enter text.](#)

Discharge Type: ☐ Continuous ☐ Batch ☐ Intermittent

E. Pretreatment standards

Is the SIU or CIU subject to technically based local limits as defined in the instructions?

☐ Yes ☐ No

Is the SIU or CIU subject to categorical pretreatment standards found in *40 CFR Parts 405-471*?

☐ Yes ☐ No

If subject to categorical pretreatment standards, indicate the applicable category and subcategory for each categorical process.

Category: Subcategories: [Click to enter text.](#)

[Click or tap here to enter text.](#) [Click to enter text.](#)

Category: [Click to enter text.](#)

Subcategories: [Click to enter text.](#)

Category: [Click to enter text.](#)

Subcategories: [Click to enter text.](#)

Category: [Click to enter text.](#)

Subcategories: [Click to enter text.](#)

Category: [Click to enter text.](#)

Subcategories: [Click to enter text.](#)

F. Industrial user interruptions

Has the SIU or CIU caused or contributed to any problems (e.g., interferences, pass through, odors, corrosion, blockages) at your POTW in the past three years?

☐ Yes ☐ No

If yes, identify the SIU, describe each episode, including dates, duration, description of problems, and probable pollutants.

[Click to enter text.](#)

City of Cameron Wastewater Treatment Facility									
COMPANY NAME	PHYSICAL ADDRESS	PHYSICAL CITY	STATE	PHYSICAL ZIP CODE	PHONE	CFR	SIC	SIC DESCRIPTION	CODE
L L SAMS INC	1203 INDUSTRIAL BLVD	CAMERON	TX	76520-1176	800-537-4723	433	25310200	CHURCH FURNITURE	SD
TEXWOOD LTD	1110 INDUSTRIAL BLVD	CAMERON	TX	76520-1177	888-388-3224	433	25319905	LIBRARY FURNITURE	SD
LONE STAR BEER DISTRIBUTOR	101 N BOWIE AVE	CAMERON	TX	76520-3239	254-697-3561		20829902	BEER (ALCOHOLIC BEVERAGE)	SD
ROYAL SEATING LLC	1110 INDUSTRIAL BLVD	CAMERON	TX	76520-1177	877-437-8880	433	25220000	OFFICE FURNITURE, EXCEPT WOOD	SD

40 CFR Ch. I SubCh. N Designations	
433	Metal finishing

EPA Enforcement and Compliance History Online (ECHO) Database			
FacName	FacStreet	FacCity	Code
CHARLOTTE PIPE AND FOUNDRY	2700 N BLAKE AVE	CAMERON	SD
FIKES WHOLESALE INC	208 S CROCKETT	CAMERON	SD
MCKINNEY BODY SHOP	3800 N TRAVIS	CAMERON	SD

CODES	
OD	= does not discharge any wastewater
D	= discharges process wastewater
SD	= discharges sanitary wastewater
NC	= not connected to the city sewer
DD	= direct discharger to waters of the State

Hazardous Waste Generators - RCRAInfo Database
None

Toxics Release Inventory (TRI) Program Database
None

Bulk Transporter Database
None

LL Sams, Texwood and Royal Seating were bought out by a company named AIS. It is believed they are discharging sanitary wastewater as the previous companies did.

Lone Star Beer is no longer in business.

**TCEQ ADMINISTRATIVE AND TECHNICAL REPORT EXHIBITS
CITY OF CAMERON – PERMIT No. WQ0011318-001**

1. Core Data Form
2. Administrative USGS Map – Three (3) Mile Discharge Route
3. SPIF USGS Map - One (1) Mile Discharge Route
4. Landowner Map
5. Landowner List
6. Landowner List Media (Labels)
7. Buffer Zone Map
8. Original Photographs and Location Map
9. Treatment Units
10. Process Flow Diagram
11. Facility Site Map
12. General Location Map
13. Cameron WWTP Service Area
14. Description of Need for Un-Built Phases
15. FEMA Map Panel ID 4804780002D & Elevations Exhibit
16. Effluent Testing Reports
17. TCEQ ePay Payment Vouchers (712704, 713705)



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 600344162		RN 101607828

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)			
<i>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).</i>			
6. Customer Legal Name (If an individual, print last name first: eg: Doe, John)		<i>If new Customer, enter previous Customer below:</i>	
City of Cameron			
7. TX SOS/CPA Filing Number	8. TX State Tax ID (11 digits)	9. Federal Tax ID (9 digits) TX0053651	10. DUNS Number (if applicable)
11. Type of Customer:		Partnership: ☐ General ☐ Limited	
☐ Corporation		☐ Individual	
Government: ☒ City ☐ County ☐ Federal ☐ Local ☐ State ☐ Other		☐ Sole Proprietorship ☐ Other:	
12. Number of Employees		13. Independently Owned and Operated?	
☐ 0-20 ☒ 21-100 ☐ 101-250 ☐ 251-500 ☐ 501 and higher		☒ Yes ☐ No	
14. Customer Role (Proposed or Actual) – as it relates to the Regulated Entity listed on this form. Please check one of the following			
☒ Owner ☐ Operator ☐ Owner & Operator ☐ Other:			
☐ Occupational Licensee ☐ Responsible Party ☐ VCP/BSA Applicant			
15. Mailing Address:			
P. O. Box 833			
City	Cameron	State	TX
ZIP	76520	ZIP + 4	0833
16. Country Mailing Information (if outside USA)		17. E-Mail Address (if applicable)	
18. Telephone Number		19. Extension or Code	20. Fax Number (if applicable)

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							
<i>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).</i>							
22. Regulated Entity Name (Enter name of the site where the regulated action is taking place.)							
Cameron Waste Water Treatment Plant							
23. Street Address of the Regulated Entity: (No PO Boxes)							
	City		State		ZIP		ZIP + 4
24. County							
If no Street Address is provided, fields 25-28 are required.							
25. Description to Physical Location:		LOCATED APPROX 1300 FT SOUTH-SOUTHEAST OF THE INTERSECTION OF US 190 AND 77, SH 36 AND ADAMS ST; AND APPROX ONE HALF MILE EAST OF THE INTERSECTION OF OAK ST AND GILLIS STREET.					
26. Nearest City				State		Nearest ZIP Code	
Cameron				TX		76520	
<i>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).</i>							
27. Latitude (N) In Decimal:		30.8450		28. Longitude (W) In Decimal:		96.9697	
Degrees	Minutes	Seconds		Degrees	Minutes	Seconds	
30	50	41.86		96	58	0.28	
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)	
4952		N/A		22132		N/A	
33. What is the Primary Business of this entity? (Do not repeat the SIC or NAICS description.)							
Wastewater Treatment Facility							
34. Mailing Address:		P. O. Box 833					
	City	Cameron	State	TX	ZIP	76520	ZIP + 4 833
35. E-Mail Address:							
36. Telephone Number				37. Extension or Code		38. Fax Number (if applicable)	
(254) 697-6646						(254) 697-3040	

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.

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.

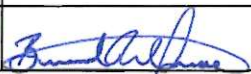
☐ Dam Safety	☐ Districts	☐ Edwards Aquifer	☐ Emissions Inventory Air	☐ Industrial Hazardous Waste
☐ Municipal Solid Waste	☐ New Source Review Air	☐ OSSF	☐ Petroleum Storage Tank	☐ PWS
☐ Sludge	☐ Storm Water	☐ Title V Air	☐ Tires	☐ Used Oil
☐ Voluntary Cleanup	☒ Wastewater	☐ Wastewater Agriculture	☐ Water Rights	☐ Other:
	WQ0010004001			

SECTION IV: Preparer Information

40. Name:	Brandon White		41. Title:	Public Works Director
42. Telephone Number	43. Ext./Code	44. Fax Number	45. E-Mail Address	
(254) 667-6646		(254) 667-3040	bwhite@camerontexas.net	

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.

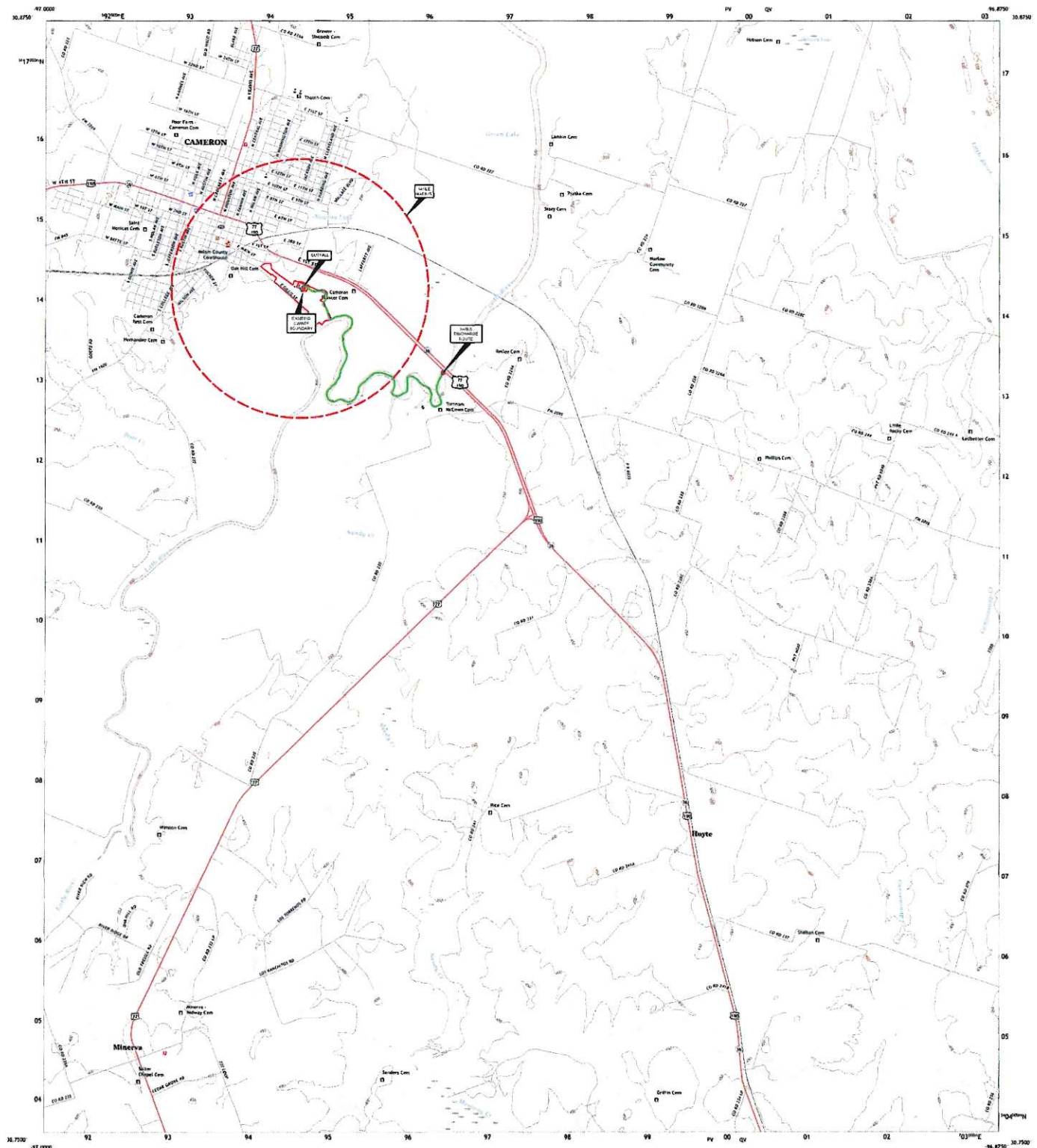
Company:	City of Cameron	Job Title:	Public Works Director
Name (In Print):	BRANDON WHITE	Phone:	(254) 667- 6646
Signature:			Date: 7/19/2024



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



CAMERON QUADRANGLE
TEXAS - HILLMAN COUNTY
7.5-MINUTE SERIES



Produced by the United States Geological Survey
North American Datum of 1983 (NAD83)
Horizontal datum: North American Datum of 1983
Vertical datum: Mean Sea Level
This map is not a legal document. Boundaries may be
determined by the local authority. Please consult the local
government for more information. State boundaries are shown
for reference only.

Property: U.S. Copyright: 2014, November 2014
Data: U.S. Copyright: 2014, November 2014
Images: U.S. Copyright: 2014, November 2014
Topography: U.S. Copyright: 2014, November 2014
Cartography: U.S. Copyright: 2014, November 2014
Boundaries: U.S. Copyright: 2014, November 2014
Wetlands: U.S. Copyright: 2014, November 2014

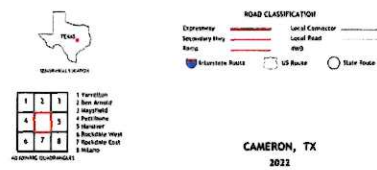
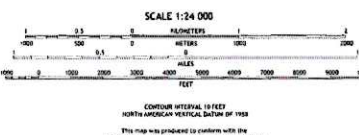
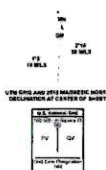


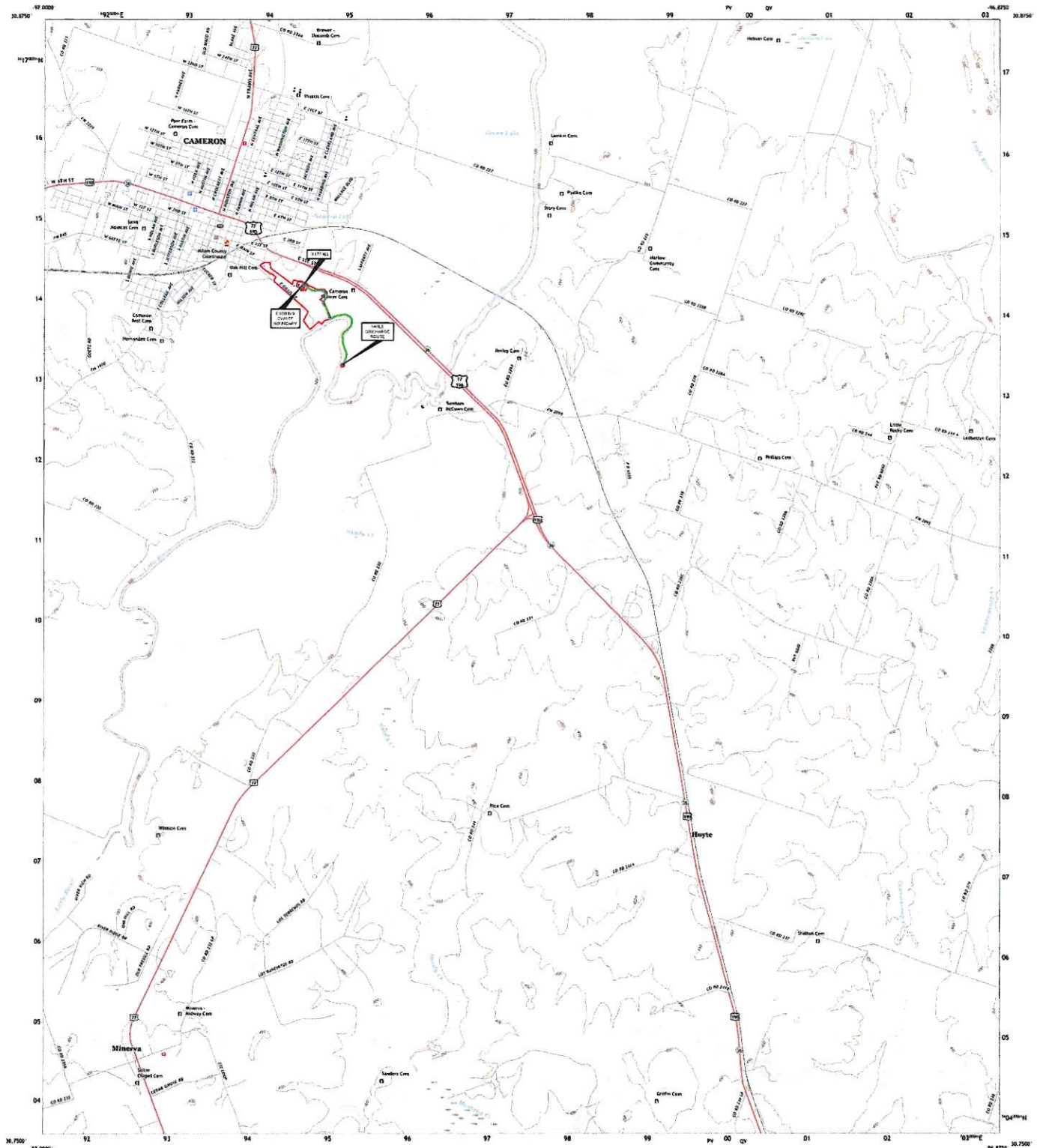
EXHIBIT 2 - ADMINISTRATIVE USGS THREE MILE DISCHARGE ROUTE



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



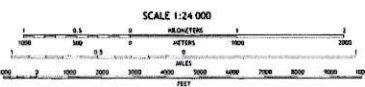
CAMERON QUADRANGLE
TEXAS - MILAM COUNTY
7.5-MINUTE SERIES



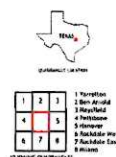
Produced by the United States Geological Survey
with American Indian and 1883 (1883)

Horizontal Datum: North American Datum of 1983 (NAD83). Elevation and
1:500 contour and contour interval: 20 feet. Since 1983
this map is not a legal document. Boundaries may be
generalized for this map scale. Private land with government
rights may not be shown. Other jurisdictional features
shown per state laws.

Map, September 2013, November 2013
Roads: U.S. Census Bureau, 2013, 2014
Names: U.S. Census Bureau, 2013, 2014
Hydrography: Hydrography, Bureau, 2013, 2014
Contours: National Hydrography Dataset, 2013
Boundaries: Multiple sources, the multiple use, 2013
Northarrow: FWS National Wetlands Inventory, 2011, Available



SCALE 1:24,000
CONTOUR INTERVAL 20 FEET
NORTH AMERICAN DATUM OF 1983
This map was produced in conformance with the
National Geographic Program US Topographic Standard.



ROAD CLASSIFICATION
Primary Road
Secondary Road
Ramp
Unimproved Road
Local Road
US Road
State Road

CAMERON, TX
2022

EXHIBIT 3 - SPIF USGS ONE MILE DISCHARGE ROUTE

Exhibit No. 5 - Adjacent Property Owner List

No.	Property ID	Property Owner	Mailing Address	City	State	Zipcode
1	13495	WANBOB LC	901 CADY RD	ROCKDALE	TX	76567
2	16670	B&G RANCH PROPERTIES LTD ATTN: GLENN HERZOG	PO BOX 1040	PFLUGERVILLE	TX	78691
3	11713	MATYASTIK FRANCES & ROBERT ESTATE ATT: DANA HORTON & ARLENE BROLL	2307 BASTROP CIR	BRYAN	TX	77808
4	62262	CITY OF CAMERON	PO BOX 833	CAMERON	TX	76520
5	68113	CITY OF CAMERON	PO BOX 833	CAMERON	TX	76520
6	11640	PIERCE DEBORAH	700 HILL TRAIL DR., UNIT 305	EULESS	TX	76039
7	11558	PRICE FRANCES	908 E GILLIS AVE	CAMERON	TX	76520
8	10355	CITY OF CAMERON	PO BOX 833	CAMERON	TX	76520
9	12253	FIKES WHOLESale INC	PO BOX 1287	TEMPLE	TX	76503
10	58374	MIRANDA CONSUELO S	1412 FM 845	CAMERON	TX	76520
11	12581	MIRANDA CONSUELO S	1412 FM 845	CAMERON	TX	76520
12	13665	MIRANDA CONNIE JO	1412 FM 845	CAMERON	TX	76520

WANBOB LC
901 CADY RD
ROCKDALE, TX 76567

HERZOG GLENN & BRITTA
PO BOX 1040
PFLUGERVILLE, TX 78691

MATYASTIK FRANCES & ROBERT
2307 BASTROP CIRCLE
BRYAN, TX 77808

CITY OF CAMERON
PO BOX 833
CAMERON, TX 76520

CITY OF CAMERON
PO BOX 833
CAMERON, TX 76520

PIERCE DEPORAH
700 HILL TRAIL DRIVE UNIT 305
EULESS, TX 76039

PRICE FRANCES
908 E GILLIS AVE
CAMERON, TX 76520

CITY OF CAMERON
PO BOX 833
CAMERON, TX 76520

FIKES WHOLESALE INC
PO BOX 1287
TEMPLE, TX 76503

MIRANDA CONSUELO S
1412 FM 845
CAMERON, TX 76520

MIRANDA CONSUELO S
1412 FM 845
CAMERON, TX 76520

MIRANDA CONNIE JO
1412 FM 845
CAMERON, TX 76520

End Set No. 1
Begin Set No. 2

WANBOB LC
901 CADY RD
ROCKDALE, TX 76567

HERZOG GLENN & BRITTA
PO BOX 1040
PFLUGERVILLE, TX 78691

MATYASTIK FRANCES & ROBERT
2307 BASTROP CIRCLE
BRYAN, TX 77808

CITY OF CAMERON
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PIERCE DEPORAH
700 HILL TRAIL DRIVE UNIT 305
EULESS, TX 76039

PRICE FRANCES
908 E GILLIS AVE
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CITY OF CAMERON
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CAMERON, TX 76520

FIKES WHOLESALE INC
PO BOX 1287
TEMPLE, TX 76503

MIRANDA CONSUELO S
1412 FM 845
CAMERON, TX 76520

MIRANDA CONSUELO S
1412 FM 845
CAMERON, TX 76520

MIRANDA CONNIE JO
1412 FM 845
CAMERON, TX 76520

End Set No. 2
Begin Set No. 3

WANBOB LC
901 CADY RD
ROCKDALE, TX 76567

HERZOG GLENN & BRITTA
PO BOX 1040
PFLUGERVILLE, TX 78691

MATYASTIK FRANCES & ROBERT
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CAMERON, TX 76520

MIRANDA CONSUELO S
1412 FM 845
CAMERON, TX 76520

MIRANDA CONNIE JO
1412 FM 845
CAMERON, TX 76520

End Set No. 3
Begin Set No. 4

WANBOB LC
901 CADY RD
ROCKDALE, TX 76567

HERZOG GLENN & BRITTA
PO BOX 1040
PFLUGERVILLE, TX 78691

MATYASTIK FRANCES & ROBERT
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BRYAN, TX 77808

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MIRANDA CONSUELO S
1412 FM 845
CAMERON, TX 76520

MIRANDA CONNIE JO
1412 FM 845
CAMERON, TX 76520



Exhibit 8 (04) - Overall Aerial of Existing WWTP



Exhibit 8 (02) - Downstream of Discharge



Exhibit 8 (03) - Upstream of Discharge

**EXHIBIT NO. 9 – TCEQ DOMESTIC TECHNICAL REPORT 1.0
CITY OF CAMERON – PERMIT No. WQ0010004-001**

	<u>TYPE OF UNIT</u>	<u>NUMBER OF UNITS</u>	<u>SIZE (WxLxD)</u>
Existing/Interim Phase I			
	Manual Screen	1	2.40 MGD Capacity Each
	Flow Equalization Basin	1	70' x 90' x 10'
	Aeration Basin	1	70' Diameter, 8'-6" SWD
To Be Removed From Service	Clarifiers	2	40' Diameter, 10'-6" SWD
	Chlorine Contact Basins	2	N/A – To be Removed
	Aerobic Digesters	2	30' Diameter, 15' SWD
	Sludge Dewatering Containers	2	20 Cubic Yards
Interim Phase II Improvements			
	Headworks/Influent Lift Station	1	29' L x 14' W x 16' SWD
	Flow Equalization Basin	1	70' Diameter, 8'-6" SWD
	Continuous Flow SBR	1	133' L x 105' W x 20' SWD
	Blowers	5	25 HP
	Aerobic Digesters (Rehab)	2	30' Diameter, 15' SWD
	Vortex Grit Removal	1	12' Diameter, 5 MGD Unit
	Chlorine Contact Basins	2	32.5' L x 25.6' W x 16' SWD
	Effluent Aeration	1	40' L x 6' W



LEGEND:
CITY OF CAMERON PROPERTY
OTHERS



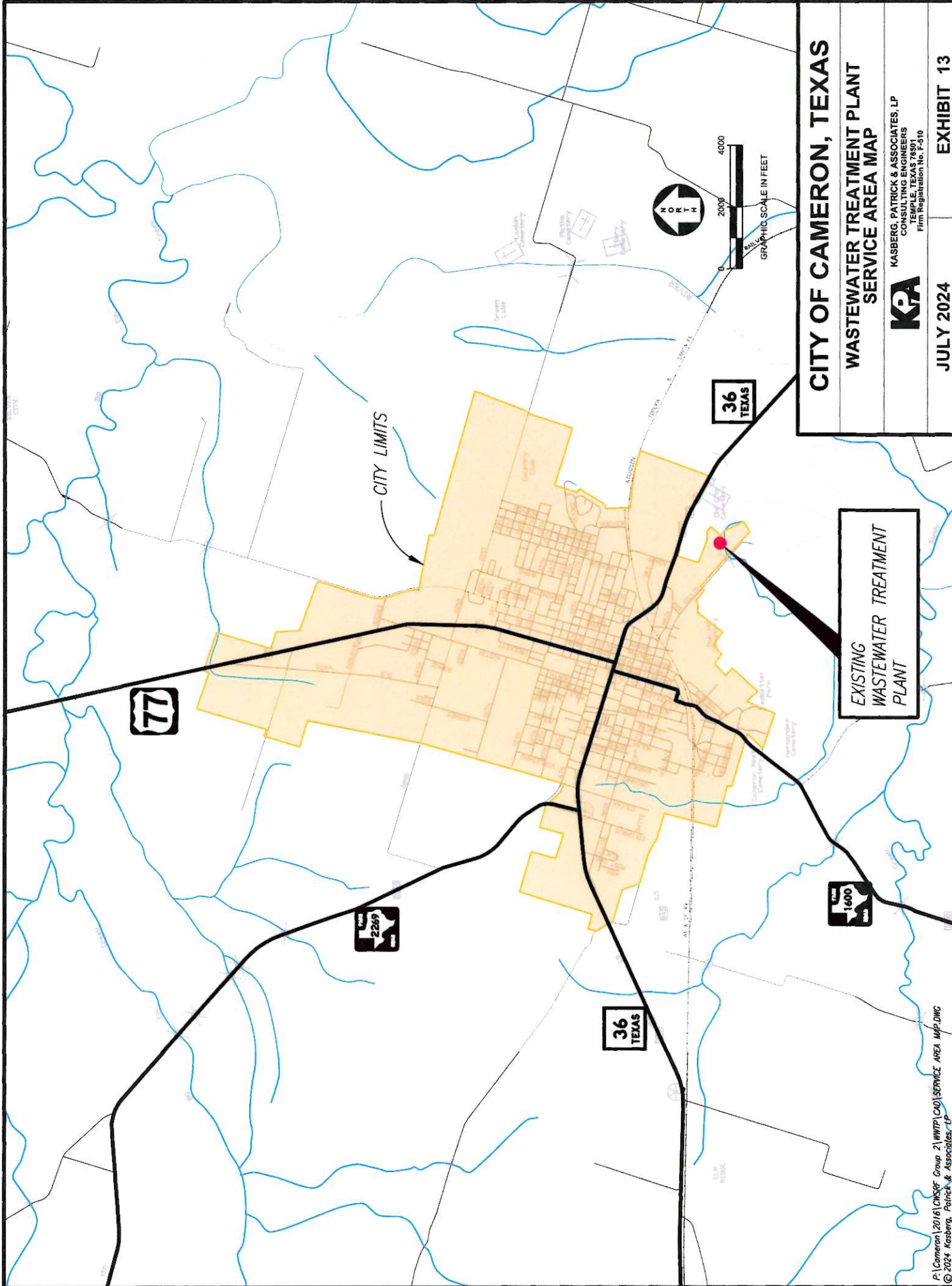
CITY OF CAMERON, TEXAS

CAMERON WWTP LOCATION MAP

KPA KASBERG, PATRICK & ASSOCIATES, LP
CONSULTING ENGINEERS
TEMPLE, TEXAS 76501
Firm Registration No. F-510

JULY 2024

EXHIBIT 12



CITY OF CAMERON, TEXAS	
WASTEWATER TREATMENT PLANT SERVICE AREA MAP	
	KASBERG, PATRICK & ASSOCIATES, LP CONSULTING ENGINEERS 1000 S. 10TH STREET, SUITE 100 CAMERON, TEXAS 79401 Firm Registration No. F-310
JULY 2024	EXHIBIT 13

**EXISTING
WASTEWATER TREATMENT
PLANT**

EXHIBIT 14 - TCEQ TECHNICAL REPORT 1.0
CITY OF CAMERON – PERMIT No. WQ0011318-001
DESCRIPTION OF NEED FOR UN-BUILT PHASES

The proposed Interim Phase II will increase the capacity of the WWTP from 0.96 MGD to 1.25 MGD. While it has not reached the mandatory TCEQ triggers (75% and 90%) for expansion due to flow conditions, portions of the infrastructure are currently failing and endangering the City's ability to meet effluent discharge regulations. The following is a summary of the proposed Interim Phase II improvements and description of need for these WWTP unbuilt phase:

1. Increase in WWTP capacity from 0.96 MGD (2.4 MGD Peak) to a design flow of 1.25 MGD (5.0 MGD Peak).
 - Per Region G Water Projections listed below, the proposed improvements are designed to meet a 2040 population of 6,481.

Table 2
2016 Region G Water Projections

<u>Year</u>	<u>Population</u>	<u>Per Capita Use (GPCD)</u>	<u>Water Use (MGD)</u>
2000	5,634	n/a	n/a
2010	5,552	216	1.20
2020	4,884	206	1.21
2030	6,233	202	1.26
2040	6,481	198	1.28

- The existing biological treatment cannot treat the projected biological design flow. The circular construction and limited footprint does not allow for modular expansion. Due to this and constraints from other treatment units, the proposed un-built phase consists of a continuous flow SBR (4 Basins) to provide this treatment capacity.
2. Headworks Fine Screens and Bypass - Influent flow currently passes through a manually cleaned coarse bar screen. This allows a great deal of debris to bypass the screen causing issues at the influent pump station and in downstream treatment units.
 3. Submersible Influent Pump Station and Increased Pump Capacity – The current influent pump station is a wet well / dry pit configuration. However, the dry pit is not readily accessible and is difficult to work in. Likewise, there have been considerable issues with pumps, including the emergency installation of additional pumps earlier this year when 2 of the 3 influent pumps were not operational.

4. Equalization Basin – The existing WWTP does have a Contact Stabilization Biological Treatment Unit for this purpose. However, proposed improvements replaces blowers and rehabilitate existing basin for this purpose.
5. Chlorine Contact Basin, Storage and Feed – Existing basin, storage and feed is nearing the end of its useful capacity. Existing basins are deteriorating and does not have enough length for sufficient contact for future flows.
6. Cascade Aeration Unit - Due to the height of the Clarifiers, there are instances where the water level outside of the berm is higher than that of the effluent outfall and there is not sufficient head to allow effluent flow to exit the treatment facility. With the new SBR units, these improvements will help achieve requirement DO levels under future conditions.

Additionally, we have also attached the TCEQ approval letter from August 9, 2023 for the proposed infrastructure.

Jon Niermann, *Chairman*
Emily Lindley, *Commissioner*
Bobby Janecka, *Commissioner*
Kelly Keel, *Interim Executive Director*



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

August 9, 2023

Thomas D. Valle, P.E.
Kasberg, Patrick & Associates, LP
19 North Main Street
Temple, TX 76501

Re: City of Cameron
Cameron WWTP Modifications & Improvements
Permit No. WQ0010004-001 73727
WWPR Log No. 0723/054
CN600344162, RN101607828
Milam County

Dear Mr. Valle:

Texas Commission on Environmental Quality (TCEQ) received the project summary transmittal letter dated July 14, 2023, and the subsequent submittal of additional project information.

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

The proposed improvements will bring the City of Cameron Wastewater Treatment Plant (WWTP) to the permitted Final phase annual average flow of 1.25 MGD. The plant is regulated by TPDES Permit No. WQ0010004001, which allows a Final phase annual average flow of 1.25 MGD and effluent limits of 10 mg/L of CBOD₅, 15 mg/L of TSS, 2 mg/L of Ammonia Nitrogen, and 126 CFU or MPN of *E. coli* per 100 mL.

The proposed improvements will include the following infrastructure:

- 1.25 MGD Design Capacity
- 5.0 MGD peak Capacity
- Headworks
 - Fine Screen
 - Bypass
- Influent Pump Station
 - Four (4) submersible pumps, 4,800 gpm total capacity/3,600 gpm (5 MGD) rated capacity.
 - 20 HP each.
- Continuous flow SBR
 - Four (4) basins, each 25' Wide x 106' Long (16' Pre-React Zone, 90' ICEAS Basin) x 18' SWD.
 - Three (3) 50 HP Blowers (2 duty, 1 standby).

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

How is our customer service? tceq.texas.gov/customersurvey

printed on recycled paper

Thomas D. Valle, P.E.

Page 2

August 9, 2023

- Sanitaire membrane Diffusers
- EQ Basin
 - Existing Contact Stabilization Biological Treatment Unit to be utilized for equalization. The existing blowers will be utilized/replaced, and the transfer pump will be replaced.
 - 10 HP transfer pump
 - 25 HP blower
- Chlorine Contact Basins
 - Two (2) Basins, each 23' x 16' x 14' SWD, total volume of 10,304 cu ft.
 - Plant Water Pumps
 - Cascade Aeration
 - Outfall
- Chlorine Storage and Feed
- Dechlorination Storage and Feed
- Interior Plant Drain Water Pump Station.

The following existing treatment units will be removed from service:

- Manual Bar Screen
- Influent Pump Station
- Clarifiers
- Chlorine Contact Basins
- Sludge Drying Beds (previously demolished – replaced with sludge dewatering trailers).

The following treatment units will remain as they currently are:

- Aerobic Digesters
- Sludge Holding Tank

TCEQ's review indicated that the documents provided are in general compliance with the applicable minimum standards as set forth in 30 TAC Chapter 217, Design Criteria for Wastewater Systems. On that basis, the proposed project is conditionally approved for construction. The condition is that all work be completed to the requirements of Chapter 217.

You must keep certain materials on file for the life of the project and provide them to TCEQ upon request. These materials include an engineering report, test results, a summary transmittal letter, and the final version of the project plans and specifications. These materials shall be prepared and sealed by a Professional Engineer licensed in the State of Texas and must show substantial compliance with Chapter 217. All plans and specifications must conform to any waste discharge requirements authorized in a permit by the TCEQ. Certain specific items which shall be addressed in the engineering report are discussed in §217.6(d). Additionally, the engineering report must include all constants, graphs, equations, and calculations needed to show substantial compliance with Chapter 217. The items which shall be included in the summary transmittal letter are addressed in §217.6(d)(1)-(9).

Thomas D. Valle, P.E.

Page 3

August 9, 2023

Any deviations from Chapter 217 shall be disclosed in the summary transmittal letter and the technical justifications for those deviations shall be provided in the engineering report. Any deviations from Chapter 217 shall be based on the best professional judgement of the licensed professional engineer sealing the materials and the engineer's judgement that the design would not result in a threat to public health or the environment.

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

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

If you have any questions, or if we can be of any further assistance, please call me at (512) 239-4924.

Sincerely,

A handwritten signature in black ink, appearing to read 'Balazar', written over the word 'Sincerely,'.

Balazar Lucero-Ramirez, P.E.
Wastewater Permits Section (MC 148)
Water Quality Division
Texas Commission on Environmental Quality

cc: TCEQ, Region 9 Office

BIO CHEM LAB, INC. **PHONE: 254.829.8001 FAX: 254.829.8013**
4751 TOKIO RD. WEST, TX 76691

ANALYTICAL REPORT**CLIENT IDENTIFICATION INFORMATION:**

CITY OF CAMERON
P O BOX 833
CAMERON, TX 76520
CLIENT CONTACT: BRANDON WHITE

JUNE 2024 - CAMERON

REPORT ID: **CAM-071024**
LAB CONTACT: **SHAY OCHOA**
REPORT DATE: **7.10.24**

EFFLUENT**FIELD DATA / SAMPLE DESCRIPTION**

Collection Point		EFFLUENT	EFFLUENT	EFFLUENT	EFFLUENT
Date/ Time Collected		6.4.24 / 09:47-11:48	6.12.24 / 07:28-09:29	6.18.24 / 09:54-11:55	6.25.24 / 09:06-11:07
Date/ Time Received by Lab		6.5.24 / 16:15	6.12.24 / 17:05	6.19.24 / 17:26	6.26.24 / 16:25
Laboratory Sample ID		13241-24	13885-24	14501-24	15078-24
Sampling Description/Procedure		Client Collected	Client Collected	Client Collected	Client Collected
Sample Matrix		Aqueous-NPW	Aqueous-NPW	Aqueous-NPW	Aqueous-NPW
Sample Type		Composite	Composite	Composite	Composite
Collector		A. Allen	A. Allen	A. Allen	A. Allen
pH, SU	SM 4500-H+B	6.9	6.7	7.0	7.0
Dissolved Oxygen, mg/L	SM 4500 O G	2.0	2.0	2.0	3.1
Temperature, C		26.0	26.5	27.1	28.3
Date / Time Analyzed	(Field Analysis)	6.5.24 / 12:04	6.12.24 / 12:09	6.19.24 / 12:46	6.26.24 / 12:01
Analyst Initials		CR	CR	CR	CR

PARAMETER / UNIT / METHOD

BOD₅, mg/L	SM 5210 B	28.	Q 24.	6.	13.
Reporting Limit, mg/L		2.	2.	2.	2.
Dilution Factor		1	1	1	1
Date / Time Analyzed		6.6.24 / 10:00	6.13.24 / 10:00	6.20.24 / 09:30	6.27.24 / 10:00
Analyst Initials		LD	LD	LD	LD

TSS, mg/L	SM 2540 D	48.	30.	28.	20.
Reporting Limit, mg/L		2.	2.	2.	2.
Dilution Factor		1	1	1	1
Date / Time Analyzed		6.6.24 / 09:20	6.13.24 / 09:30	6.20.24 / 09:30	6.27.24 / 09:30
Analyst Initials		MH	MH	MH	MH

BIO CHEM LAB, INC. **PHONE: 254.829.8001 FAX: 254.829.8013**
4751 TOKIO RD. WEST, TX 76691

ANALYTICAL REPORT**CLIENT IDENTIFICATION INFORMATION:**

CITY OF CAMERON
 P O BOX 833
 CAMERON, TX 76620
 CLIENT CONTACT: BRANDON WHITE

JUNE 2024 - CAMERON

REPORT ID: CAM-071024
 LAB CONTACT: SHAY OCHOA
 REPORT DATE: 7.10.24
INFLUENT

FIELD DATA / SAMPLE DESCRIPTION

Collection Point	INFLUENT	INFLUENT	INFLUENT	INFLUENT
Date/ Time Collected	6.4.24 / 11:58	6.12.24 / 09:58	6.18.24 / 12:05	6.25.24 / 11:16
Date/ Time Received by Lab	6.5.24 / 16:15	6.12.24 / 17:05	6.18.24 / 17:26	6.26.24 / 16:25
Laboratory Sample ID	13240-24	13884-24	14500-24	15077-24
Sampling Description/Procedure	Client Collected	Client Collected	Client Collected	Client Collected
Sample Matrix	Aqueous-NPW	Aqueous-NPW	Aqueous-NPW	Aqueous-NPW
Sample Type	Grab	Grab	Grab	Grab
Collector	A. Allen	A. Allen	A. Allen	A. Allen
pH, SU SM 4500-H+B	7.0	6.3	7.0	7.0
Temperature, C	25.6	26.1	26.9	27.5
Date / Time Analyzed (Field Analysis)	6.5.24 / 11:59	6.12.24 / 12:04	6.19.24 / 12:40	6.26.24 / 11:56
Analyst Initials	CR	CR	CR	CR

PARAMETER / UNIT / METHOD

BOD₅, mg/L SM 5210 B	166.	Q 150.	77.	164.
Reporting Limit, mg/L	2.	2.	2.	2.
Dilution Factor	1	1	1	1
Date / Time Analyzed	6.6.24 / 10:00	6.13.24 / 10:00	6.20.24 / 09:30	6.27.24 / 10:00
Analyst Initials	LD	LD	LD	LD

TSS, mg/L SM 2540 D	216.	167.	106.	121.
Reporting Limit, mg/L	2.	2.	2.	2.
Dilution Factor	1	1	1	1
Date / Time Analyzed	6.6.24 / 09:20	6.13.24 / 09:30	6.20.24 / 09:30	6.27.24 / 09:30
Analyst Initials	MH	MH	MH	MH

ANALYTICAL NOTES, INTERPRETATIONS, METHOD DEVIATIONS OR ENVIRONMENTAL CONDITIONS :

pH and Dissolved Oxygen readings taken on field grabs by laboratory personnel while on-site at the facility.

STATEMENT OF COMPLIANCE/NON-COMPLIANCE:

The above analytical data was derived from submitted samples that have met all established acceptance criteria, unless otherwise qualified, and are compliant with the laboratory's Quality System. The Director of Operations or designee has authorized the release of this report. The results contained herein relate only to the Laboratory Sample ID(s) documented above. This analytical test report may not be reproduced except in full, without the written approval of the laboratory.

Quality Assurance / Quality Control Data associated with results within this report are documented in the attached QA/QC Report.

Please contact 254.829.8001 with any questions or concerns.



A. Shay Ochoa, Senior Environmental Project Manager
 Bio Chem Lab, Inc.



BIO CHEM LAB, INC. **PHONE: 254.829.8001** **FAX: 254.829.8013**
4751 TOKIO RD. WEST, TX 76691

ANALYTICAL REPORT**CLIENT IDENTIFICATION INFORMATION:**

CITY OF CAMERON
P O BOX 833
CAMERON, TX 76520
CLIENT CONTACT: BRANDON WHITE

JUNE 2024 - CAMERON

REPORT ID: CAM-071024
LAB CONTACT: SHAY OCHOA
REPORT DATE: 7.10.24

QC SUMMARY**BIOCHEMICAL OXYGEN DEMAND**

SM 5210 B

SETUP DATE	SETUP ID	BATCH ID	
6.6.24	B-060624-04	B-060624-04-02	
DUPLICATE	RESULT 1	RESULT 2	% DEV
13223-24	72	68	2.9
13240-24	154	164	3.1
BOD-BLANK	CBOD-BLANK	LCS -GGA	LCS-CGGA
0.13	0.06	187	Q2 160

SETUP DATE	SETUP ID	BATCH ID	
6.13.24	B-061324-10	B-061324-10-02	
DUPLICATE	RESULT 1	RESULT 2	% DEV
13921-24	129	141	4.4
13929-24	113	128	6.2
BOD-BLANK	CBOD-BLANK	LCS -GGA	LCS-CGGA
0.17	0.20	Q2 165	169

SETUP DATE	SETUP ID	BATCH ID	
6.20.24	B-062024-16	B-062024-16-02	
DUPLICATE	RESULT 1	RESULT 2	% DEV
14511-24	138	162	8.0
14548-24	203	201	0.5
BOD-BLANK	CBOD-BLANK	LCS -GGA	LCS-CGGA
0.19	0.16	175	208

SETUP DATE	SETUP ID	BATCH ID	
6.27.24	B-062724-22	B-062724-22-02	
DUPLICATE	RESULT 1	RESULT 2	% DEV
15059-24	125	145	7.4
BOD-BLANK	CBOD-BLANK	LCS -GGA	LCS-CGGA
0.10	0.08	175	178

TOTAL SUSPENDED SOLIDS

SM 2540 D

SETUP DATE	SETUP ID	BATCH ID	
6.6.24	T-060624-03	T-060624-03-02	
SAMPLE ID:	RESULT 1	RESULT 2	% DEV
13215-24	238	236	0.4
13231-24 Q4	25	21	7.2
BLANK, mg/L	<2 LCS % REC		98.9

SETUP DATE	SETUP ID	BATCH ID	
6.13.24	T-061324-07	T-061324-07-02	
SAMPLE ID:	RESULT 1	RESULT 2	% DEV
13855-24	753.3	763.3	0.7
13860-24	590	583	0.6
BLANK, mg/L	<2 LCS % REC		100.3

SETUP DATE	SETUP ID	BATCH ID	
6.20.24	T-062024-11	T-062024-11-02	
SAMPLE ID:	RESULT 1	RESULT 2	% DEV
14489-24	32	30.7	2.1
14493-24	553	543	0.9
BLANK, mg/L	<2 LCS % REC		98.3

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CITY OF CAMERON
P O BOX 833
CAMERON, TX 76520
CLIENT CONTACT: BRANDON WHITE

JUNE 2024 - CAMERON

REPORT ID: CAM-071024
LAB CONTACT: SHAY OCHOA
REPORT DATE: 7.10.24

QC SUMMARY**TOTAL SUSPENDED SOLIDS**

SM 2540 D

SETUP DATE	SETUP ID	BATCH ID	
6.27.24	T-062724-15	T-062724-15-02	
SAMPLE ID:	RESULT 1	RESULT 2	% DEV
15071-24	22	20	4.8
15076-24	2550	2610	1.2
BLANK, mg/L	<2 LCS % REC		96.1

FIELD METER CALIBRATION / VERIFICATION

ROUTE DATE	FIELD TEST	METHOD	ANALYST
6.5.24	pH	PROBE	CR
BUFFER, SU	RESULT	8.00 LCS, SU	
7.00	7.00	DAILY INITIAL	7.96
10.00	10.01	DAILY FINAL	7.96
4.00	4.01	METER SLOPE,%	98.5

ROUTE DATE	FIELD TEST	METHOD	ANALYST
6.5.24	DO	PROBE	CR
INTERNAL CAL VALUE, %	LCS READOUT, %		
101.4	101.4		

ROUTE DATE	FIELD TEST	METHOD	ANALYST
6.12.24	pH	PROBE	CR
BUFFER, SU	RESULT	8.00 LCS, SU	
7.00	7.00	DAILY INITIAL	7.97
10.00	10.01	DAILY FINAL	7.97
4.00	4.01	METER SLOPE,%	98.6

ROUTE DATE	FIELD TEST	METHOD	ANALYST
6.12.24	DO	PROBE	CR
INTERNAL CAL VALUE, %	LCS READOUT, %		
95.1	95.1		

ROUTE DATE	FIELD TEST	METHOD	ANALYST
6.19.24	pH	PROBE	CR
BUFFER, SU	RESULT	8.00 LCS, SU	
7.00	7.00	DAILY INITIAL	7.95
10.00	10.01	DAILY FINAL	7.95
4.00	4.01	METER SLOPE,%	98.4

ROUTE DATE	FIELD TEST	METHOD	ANALYST
6.19.24	DO	PROBE	CR
INTERNAL CAL VALUE, %	LCS READOUT, %		
98.2	98.2		

ROUTE DATE	FIELD TEST	METHOD	ANALYST
6.26.24	pH	PROBE	CR
BUFFER, SU	RESULT	8.00 LCS, SU	
7.00	7.00	DAILY INITIAL	7.97
10.00	10.01	DAILY FINAL	7.97
4.00	4.01	METER SLOPE,%	98.1

ROUTE DATE	FIELD TEST	METHOD	ANALYST
6.26.24	DO	PROBE	CR
INTERNAL CAL VALUE, %	LCS READOUT, %		
96.9	97.0		

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CAMERON, TX 76520
CLIENT CONTACT: BRANDON WHITE

JUNE 2024 - CAMERON

REPORT ID:	CAM-071024
LAB CONTACT:	SHAY OCHOA
REPORT DATE:	7.10.24

BCL PROJECT DATA QUALIFIERS:

- Q** Failed Quality Data. Refer to QA/QC Report of the affected data for specific details.
- Q1** Blank outside desired limits. Data accepted based on passing batch LCS recoveries.
- Q2** LCS recovery outside desired limits. Data accepted on basis of additional narrative if applicable
- Q3** Matrix Spike and/or Matrix Spike Duplicate outside desired limits. Data accepted on basis of passing LCS recoveries.
- QS3** Matrix Spike and/or Matrix Spike Duplicate outside desired limits. Sample not spiked at a high enough concentration to be statistically different from the native sample result. Data accepted on basis of passing LCS recoveries.
- Q4** Sample specific duplicate precision outside desired range.
- QM1** Microbiology precision unable to be evaluated due to low background concentration (< 10 CFU / MPN) of target analyte
- QM2** Microbiology precision unable to be evaluated due to high background concentration (> 2420 CFU / MPN) of target analyte
- QM3** Microbiology precision outside desired range.
- B1** Results for CBOD / BOD reported as less than [< 2 mg/L] with no sample dilution depleting method required 2.00 mg/L
- B2** Results for CBOD / BOD reported as an estimate due to no dilution meeting a method stated depletion criteria.
- B3** Result for CBOD / BOD unable to be determined due to excessive oxidant content, high chlorine residual.
- W1** Result is an average of multiple weighing / drying cycles.
- C** Reported result over the laboratory's calibration range
- C1** Reported result over the laboratory's calibration range but within the laboratory verified Linear Dynamic Range.
- J5** Reported result less than the laboratory reporting limit but greater than the Limit of Detection.
- ND** Not detected
- V** Additional sample volume would have been required to meet analytical method specifications.
- HT** Sample analysis performed outside method / regulatory prescribed holding time.
- T** Sample received outside method / regulatory prescribed requirements for thermal preservation.
- P** Sample received outside method / regulatory prescribed requirements for pH preservation.
- A** Accreditation for analysis performed is either not currently offered or is currently outside the laboratory's scope of accreditation.
- N** The associated analysis was performed by a network / sub-contract laboratory.
- L** Laboratory Error
- PW** Potable Water
- NPW** Non-Potable Water
- Z** Refer to additional notes / supplemental narrative

ADDITIONAL NOTES:

ANALYTICAL REPORT

CITY OF CAMERON
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JUNE 2024 - CAMERON

REPORT ID:	CAM-071024
LAB CONTACT:	SHAY OCHOA
REPORT DATE:	7.10.24



OFFICE NO.: 254.829.8001
FAX NO.: 254.829.8013
CELL NO.: 254.749.4320
EMERGENCY: 254.749.4320



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WEST, TX 76691-0356
E-MAIL: CUSTOMERSERVICE@

SERVICE • VISION • COMMUNITY • COMMITMENT

CLIENT / PROJECT:				CONTACT:				SAMPLES COLLECTED BY:			
ADDRESS:				PHONE NO.:				FIELD DATA: pH DO TEMP			
FLOW				DATE / TIME / INITIALS				DATE / TIME / INITIALS			
Sample ID	Obs Temp	Corr Temp	Sample Name, Site Description or Case Number	Date	Time	Matrix	Container No. / Volume	Grab / Composite	Preservation Code	Verified	Analysis Requested
8240-24	5.0	5.1	Influent	6-4-24	11:58	UPW	15m/L	Grab	1	/	TSS, BODs
3241-24	11:47	1:30	Effluent	6-4-24	9:47	1	1.817	Camp	1	/	
	11:48	1:39		6-4-24	10:47	1	1.302		1	/	
				6-4-24	11:48	1	1.391		1	/	
PROJECT COMMENTS / SAMPLING PROCEDURES: 9:47 .817 10:47 1.302 11:48 1.391 Documentation of TRC / Mn Correction, as needed: Average flow - 0.006 11:54 1.54 6.5-24 CR Eff PH 6.9 DO 2.0 Temp 26.0C 12:04 6.5-24 CR											
LABORATORY COMMENTS:											
PRESERVATIVE REAGENT ID H ₂ SO ₄ HNO ₃ HCl NaOH Na ₂ THIO OTHER:											
PLACED IN REFRIGERATOR / INITIALS (FRIDGE ID) RECEIVED BY: 11:54 11:54 THERMOMETER ID: 12-1											
Matrix: AQ - Aqueous NPW - Non-Potable Water S - Sludge/Solid/Sediment PW - Potable Water Container: P - Plastic AP - Amber Plastic G - Clear Glass AG - Amber Glass M - Bacti MICRO B - Whirl Pak / BAG VOA - 40 mL vial O - OTHER Describe: pH STRIPS: (0-6): (7.5-14): CUSTODY SEALS: COOLER CONTAINERS NANO											
ADDITIONAL PRESERVATION / SAMPLE INTEGRITY NOTES: REQUESTED TAT: STANDARD (7-10 DAYS) BCL EXPRESS (5-6 DAYS) (1.25X) BCL PRIORITY (3-4 DAYS) (1.5X) BCL FIRE (1-2 DAYS) (2.0X) Rush service availability may depend on circumstances.											

BIO CHEM LAB, INC. PHONE: 254.829.8001 FAX: 254.829.8013
4751 TOKIO RD. WEST, TX 76691

ANALYTICAL REPORT**CLIENT IDENTIFICATION INFORMATION:**

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P O BOX 833
CAMERON, TX 76520
CLIENT CONTACT: BRANDON WHITE

JUNE 2024 - CAMERON

REPORT ID: CAM-071024
LAB CONTACT: SHAY OCHOA
REPORT DATE: 7.10.24



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SERVICE • VISION • COMMUNITY • COMMITMENT											
CLIENT / PROJECT:		CONTACT:		SAMPLES COLLECTED BY:		FIELD DATA: pH DO TEMP		FLOW DATE / TIME / INITIALS			
City of Cameron		P.O. Box 833		April Allen		6-12-24		10:03			
ADDRESS:		PHONE NO.:		FAX NO.:		CELL NO.:		EMERGENCY:			
Cameron TX 76520		254-462-2782		254-462-2782		254-749-4320		254-749-4320			
Sample ID	Obs Temp	Corr Temp	Sample Name, Site Description or Case Number	Collection Date	Time	Matrix	Container No. / Volume	Grab / Composite	Preservation Code	Verified	Analysis Requested
12884-24	39.38		Influent	6-12-24	9:58	WV	1.500	Comp			735, BOD5
12885-24	1.895		Effluent		9:28		1.689	Comp			
					8:29		1.875				
					9:29		2.067				
PROJECT COMMENTS / SAMPLING PROCEDURES: 7:29 469 8:29 1.895 9:29 2.067 Documentation of TRC / Mn Correction, as needed: Average Flow - 0.0014 12:09 26.12 12:09 6-12-24 CR 12:09 26.50 12:09 6-12-24 CR 12:09 26.50 12:09 6-12-24 CR											
DATE	TIME	RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	PLACED IN REFRIGERATOR / INITIALS (FRIDGE ID)	LABORATORY COMMENTS:				
6-12-24	10:03	April Allen	6-12-24	12:01	Brandon Kamos		PRESERVATIVE	REAGENT ID			
6-12-24	12:05	Brandon Kamos	6-12-24	12:05	Brandon Kamos		H ₂ SO ₄				
							HNO ₃				
							HCl				
							Na-OH				
							Na-THIO				
							OTHER:				
							THERMOMETER ID: 18-1				
Matrix: AO - Aqueous NPW - Non-Potable Water S - Sludge/Solid/Sediment PW - Potable Water Container: P - Plastic AP - Amber Plastic G - Clear Glass AG - Amber Glass M - Bact / MICRO B - Whirl Pak / BAG VOA - 40 mL vial O - OTHER Describe:											
pH STRIPS: (0-6): (7.5-14): ADDITIONAL PRESERVATION / SAMPLE INTEGRITY NOTES:											
REQUESTED TAT: STANDARD (7-10 DAYS) BCL EXPRESS (5-6 DAYS) (1.25X) BCL PRIORITY (3-4 DAYS) (1.5X) BCL FIRE (1-2 DAYS) (2.0X) Rush service availability may depend											

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ANALYTICAL REPORT**CLIENT IDENTIFICATION INFORMATION:**

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CLIENT CONTACT: BRANDON WHITE

JUNE 2024 - CAMERON

REPORT ID: CAM-071024
LAB CONTACT: SHAY OCHOA
REPORT DATE: 7.10.24



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WEST, TX 76691-0356
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SERVICE • VISION • COMMUNITY • COMMITMENT											
CLIENT / PROJECT:		CONTACT:		SAMPLES COLLECTED BY:		FIELD DATA: pH DO TEMP					
City of Cameron		PHONE NO.: (254) 482-2782		APRIL ALLEN		FLOW DATE / TIME / INITIALS 6-18-24 12:10					
ADDRESS: P.O. BOX 833		EMAIL: CameronTX76520									
Sample ID	Obs Temp	Corr Temp	Sample Name, Site Description or Case Number	Collection Date	Time	Matrix	Container No. / Volume	Grab / Composite	Preservation Code	Verified	Analysis Requested
14500-24	9.3	9.2	Influent	6-18-24	12:05	WML/BA/P	Grab	6			TS, BODs
14501-24			Effluent		9:54		1.000	Comp			
					10:54		0.437				
					11:55		0.592				
PROJECT COMMENTS / SAMPLING PROCEDURES: INF PH 7.0 Temp 26.9C 12:40 6-19-24 OK EFF PH 7.0 DO 2.0 Temp 27.8C 12:40 6-19-24 OK Documentation of TRC / Mn Correction, as needed: Average flow 0.8783											
DATE	TIME	RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	PLACED IN REFRIGERATOR / INITIALS (FRIDGE ID)	PRESERVATIVE	REAGENT ID	LABORATORY COMMENTS:		
6-18-24	12:10	April Allen	6-19-24	12:29	Camalanes		H ₂ SO ₄ 13241				
6-19-24	17:24	Camalanes	6-19-24	17:24	Camalanes		HNO ₃				
							HCl				
							Na-OH				
							Na-THIO				
							OTHER:				
THERMOMETER ID: 12-1											
Matrix: AG - Aqueous NPW - Non-Petroleum Water S - Sludge/Solid/Sediment PW - Potable Water Container: P - Plastic AP - Amber Plastic G - Clear Glass M - Bac/ MICRO B - Whirl Pak / BAG VOA - 40 mL vial O - OTHER Describe:											
pH STRIPS: (0-6): (7.5-14): ADDITIONAL PRESERVATION / SAMPLE INTEGRITY NOTES:											
REQUESTED TAT: STANDARD (7-10 DAYS) BCL EXPRESS (5-6 DAYS) (1.25X) BCL PRIORITY (3-4 DAYS) (1.5X) BCL FIRE (1-2 DAYS) (2.0X) Rush service availability may depend											

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4751 TOKIO RD. WEST, TX 76691

ANALYTICAL REPORT**CLIENT IDENTIFICATION INFORMATION:**

CITY OF CAMERON
P O BOX 833
CAMERON, TX 76520
CLIENT CONTACT: BRANDON WHITE

JUNE 2024 - CAMERON

REPORT ID: CAM-071024
LAB CONTACT: SHAY OCHOA
REPORT DATE: 7.10.24



OFFICE NO.: 254.829.8001
FAX NO.: 254.829.8013
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EMERGENCY: 254.749.4320



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WEST, TX 76691-0356
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SERVICE • VISION • COMMITMENT											
CLIENT / PROJECT: City of Cameron				CONTACT: April Allen							
ADDRESS: P.O. Box 833				PHONE NO.: (254) 482-2782							
Cameron, TX 76520				FIELD DATA: pH ____ DO ____ TEMP ____							
E-MAIL: CUSTOMERSERVICE@BIOCHEMLABTX.COM				DATE / TIME / INITIALS: 6-25-24 11:20							
Sample ID	Obs Temp	Corr Temp	Sample Name, Site Description or Case Number	Date	Time	Matrix	Container No. / Volume	Grab / Composite	Preservation Code	Verified	Analysis Requested
15071-24	50.49		Influent	6-25-24	11:16	WPH	150ml	Grab	1		TS, BODs
15078-24	11.07		Effluent		9:06		0.600	Comp			
					10:07		0.632				
					11:07		1.465				
PROJECT COMMENTS / SAMPLING PROCEDURES: 9:06 0.606 Inf. pH-7.0 Temp. 27.5°C 11:50 6-26-24 CR 10:07 0.632 Eff. pH-7.0 DO 3.1 Temp. 28.3°C 12:01 6-26-24 CR 11:07 1.465 Documentation of TRC / Mn Correction, as needed. Average Fluor 0.899											
DATE	TIME	RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	PLACED IN REFRIGERATOR / INITIALS (FRIDGE ID)	PRESERVATIVE	REAGENT ID			
6-25-24	11:20	April Allen	6-26-24	11:50	Shay Ochoa						
6-26-24	11:25	Shay Ochoa	6-26-24	11:25	Shay Ochoa						
LABORATORY COMMENTS: PRESERVATIVE: H ₂ SO ₄ , HNO ₃ , HCl, NaOH, Na-TiO ₂ , OTHER: THERMOMETER ID: 12-1 Matrix: AQ - Aqueous NPW - Non-Potable Water S - Sludge/Solid/Sediment PW - Potable Water Container: P - Plastic AP - Amber Plastic G - Clear Glass AG - Amber Glass M - Bact / MICRO B - Whirl Pak / BAG VOA - 40 mL vial O - OTHER Describe: pH STRIPS: (0-6): (7.5-14): CUSTODY SEALS: COOLER CONTAINERS NANO SEALS INTACT: YES NO ADDITIONAL PRESERVATION / SAMPLE INTEGRITY NOTES: REQUESTED TAT: STANDARD (7-10 DAYS) BCL EXPRESS (5-6 DAYS) (1.25X) BCL PRIORITY (3-4 DAYS) (1.5X) BCL FIRE (1-2 DAYS) (2.0X) Rush service availability may depend											

BIO CHEM LAB, INC. PHONE: 254.829.8001 FAX: 254.829.8013
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ANALYTICAL REPORTS**CLIENT IDENTIFICATION INFORMATION:**

CITY OF CAMERON
P O BOX 833
CAMERON, TX 76520
CLIENT CONTACT: BRANDON WHITE

APRIL 2024 CAMERON

REPORT ID: CAM-050724
LAB CONTACT: SHAY OCHOA
REPORT DATE: 5.7.24
PERMIT RENEWAL

FIELD DATA / SAMPLE DESCRIPTION

		EFFLUENT
Collection Point		
Date/ Time Collected		4.24.24 / 12:27
Date/ Time Received by Lab		4.24.24 / 16:49
Laboratory Sample ID		10029-24, 10030-24
Sampling Description/Procedure		BCL.SOP.119
Sample Type		Grab
Sample Matrix		Aqueous-NPW
Collector		CR
Total Residual Chlorine, mg/L	SM 4500 Cl G	0.24
pH, SU	SM 4500-H+B	7.2
Dissolved Oxygen, mg/L	SM 4500 O G	3.8
Temperature, C		23.0
Date / Time Analyzed	(Field Analysis)	4.24.24 / 12:24
Analyst Initials		CR

PARAMETER / UNIT / METHOD

CBOD₅, mg/L	SM 5210 B	Q 15.
Reporting Limit, mg/L		2.
Dilution Factor		1
Date / Time Analyzed		4.25.24 / 10:15
Analyst Initials		LD

Total Suspended Solids, mg/L	SM 2540 D	21.
Reporting Limit, mg/L		2.
Dilution Factor		1
Date / Time Analyzed		4.25.24 / 09:00
Analyst Initials		MH

Sulfate, mg/L	EPA 300.0	90.8
Reporting Limit, mg/L		5.00
Dilution Factor		10
Date / Time Analyzed		4.25.24 / 19:31
Analyst Initials		AJ

Chloride, mg/L	EPA 300.0	111.
Reporting Limit, mg/L		5.00
Dilution Factor		10
Date / Time Analyzed		4.25.24 / 19:31
Analyst Initials		AJ

TDS, mg/L	SM 2540 C	602.
Reporting Limit, mg/L		20.
Dilution Factor		1
Date / Time Analysis Completed		4.29.24 / 08:00
Analyst Initials		ARJ

Electrical Conductivity, μmhos @ 25°C	SM 2510 B	1,071
Reporting Limit, μ mhos @ 25°C		10.
Dilution Factor		1
Date Analyzed		4.25.24 / 13:30
Analyst Initials		ARJ

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CAMERON, TX 76520
CLIENT CONTACT: BRANDON WHITE

APRIL 2024 CAMERON

REPORT ID: CAM-050724
LAB CONTACT: SHAY OCHOA
REPORT DATE: 5.7.24

FIELD DATA / SAMPLE DESCRIPTION

Collection Point	EFFLUENT
Date/ Time Collected	4.24.24 / 12:27
Date/ Time Received by Lab	4.24.24 / 16:49
Laboratory Sample ID	10030-24, 10031-24, 10032-24

PARAMETER / UNIT / METHOD

Total Alkalinity, mg/L	SM 2320 B	291.
Reporting Limit, mg/L		10.
Dilution Factor		1
Date / Time Analyzed		4.29.24 / 09:00
Analyst Initials		ARJ

Nitrate as N, mg/L	EPA 300.0	< 0.10
Reporting Limit, mg/L		0.10
Dilution Factor		10
Date / Time Analyzed		4.25.24 / 19:31
Analyst Initials		AJ

NH₃N, mg/L	SM 4500 NH ₃ B, D	11.9
Reporting Limit, mg/L		0.10
Dilution Factor		1
Date / Time Analyzed		4.25.24 / 18:30
Analyst Initials		SV

TKN, mg/L	SM 4500 N _{org} B	16.7
Reporting Limit, mg/L		1.00
Dilution Factor		2
Date / Time Analyzed		4.30.24 / 19:50
Analyst Initials		SV

Total Phosphorus, mg/L	SM 4500 P B.5, E	1.05
Reporting Limit, mg/L		0.80
Dilution Factor		5
Date / Time Analyzed		4.25.24 / 16:15
Analyst Initials		LD

Oil & Grease mg/L	EPA 1664 A	< 5.0
Reporting Limit, mg/L		5.0
Dilution Factor		1
Date / Time Analyzed		4.29.24 / 13:30
Analyst Initials		CD

E. coli. MPN / 100ml	SM 9223 B	2,420
Reporting Limit, MPN / 100 ml		1.
Dilution Factor		1
Date / Time Analyzed		4.24.24 / 16:20
Analyst Initials		JLJ

BIO CHEM LAB, INC. PHONE: 254.829.8001 FAX: 254.829.8013
4751 TOKIO RD. WEST, TX 76691

ANALYTICAL REPORT**CLIENT IDENTIFICATION INFORMATION:**

CITY OF CAMERON
 P O BOX 833
 CAMERON, TX 76520
 CLIENT CONTACT: BRANDON WHITE

APRIL 2024 CAMERON

REPORT ID: CAM-050724
 LAB CONTACT: SHAY OCHOA
 REPORT DATE: 5.7.24

QC SUMMARY**BIOCHEMICAL OXYGEN DEMAND**

SM 5210 B

SETUP DATE	SETUP ID	BATCH ID		
4.25.24	B-042524-22	B-042524-22-02		
DUPLICATE	RESULT 1	RESULT 2	% DEV	
9976-24	109	123	6.0	
10018-24	166	184	5.1	
BOD-BLANK	CBOD-BLANK	LCS -GGA	LCS-CGGA	
0.08	0.03	169	Q2 150	

TOTAL SUSPENDED SOLIDS

SM 2540 D

SETUP DATE	SETUP ID	BATCH ID		
4.25.24	T-042524-16	T-042524-16-03		
SAMPLE ID:	RESULT 1	RESULT 2	% DEV	
10041-24	156	158	0.6	
BLANK, mg/L	<2 LCS % REC		97.9	

SULFATE

EPA 300.0

SETUP DATE	SEQUENCE ID			
4.25.24 - 4.26.24	IC-042524-17			
SAMPLE ID	RESULT 1	RESULT 2	RPD	
10089-24	38.0	36.9	2.9	
SPIKE ID:	RESULT 1	RESULT 2	% REC	
10089-24 Q3	38.0	169.6	131.6	
IPCS-1 % REC:	101.6	IPCS-2 % REC:	108.9	
LCS % REC:	106.5	LCSD % REC:	105.9	
BLANK, mg/L:	<0.50	LOQ % REC:	---	

CHLORIDE

EPA 300.0

SETUP DATE	SEQUENCE ID			
4.25.24 - 4.26.24	IC-042524-17			
SAMPLE ID	RESULT 1	RESULT 2	RPD	
10089-24	38.2	37.0	3.2	
SPIKE ID:	RESULT 1	RESULT 2	% REC	
10089-24 Q3	38.2	164.8	126.6	
IPCS-1 % REC:	98.7	IPCS-2 % REC:	103.7	
LCS % REC:	101.8	LCSD % REC:	102.2	
BLANK, mg/L:	<0.50	LOQ % REC:	---	

TOTAL DISSOLVED SOLIDS

SM 2540 C

DATE	SETUP ID	BATCH ID		
4.29.24	DS-042924-08	DS-042924-08-01		
SAMPLE ID:	RESULT 1	RESULT 2	% DEV	
9900-24	282	298	2.8	
SPIKE ID:	RESULT 1	RESULT 2	% REC	
10157-24	352	872	104.0	
BLANK, mg/L	< 20	LCS, %REC	95.9	

ELECTRICAL CONDUCTIVITY

SM 2510 B

SETUP DATE	SETUP ID			
4.25.24	EC-042524-05			
SAMPLE ID	RESULT 1	RESULT 2	% DEV	
9746-24	1079	1079	0.0	
LCS % REC	101.6	LCSD % REC	101.4	
LRB, μ mhos	<5	LOQ % REC	---	

TOTAL ALKALINITY

SM 2320 B

SETUP DATE	SETUP ID	BATCH ID		
4.29.24	ALK-042924-05	ALK-042924-05-01		
SAMPLE ID:	RESULT 1	RESULT 2	% DEV	
9878-24	50.4	46.8	3.7	
SPIKE ID:	RESULT 1	RESULT 2	% REC	
10178-24	129.4	228.3	98.9	
LRB-BLANK	LCS, %REC	LCSD, %REC	LOQ, % REC	
< 5	92.5	93.5	---	

NITRATE

EPA 300.0

SETUP DATE	SEQUENCE ID			
4.25.24 - 4.26.24	IC-042524-17			
SAMPLE ID	RESULT 1	RESULT 2	RPD	
13537	9.9	10.5	5.4	
SPIKE ID:	RESULT 1	RESULT 2	% REC	
10089-24	0.0	95.4	95.4	
IPCS-1 % REC:	99.4	IPCS-2 % REC:	104.5	
LCS % REC:	102.9	LCSD % REC:	102.0	
BLANK, mg/L:	<0.01	LOQ % REC:	---	

BIO CHEM LAB, INC. PHONE: 254.829.8001 FAX: 254.829.8013
4751 TOKIO RD. WEST, TX 76691

ANALYTICAL REPORT**CLIENT IDENTIFICATION INFORMATION:**

CITY OF CAMERON
 P O BOX 833
 CAMERON, TX 76520
 CLIENT CONTACT: BRANDON WHITE

APRIL 2024 CAMERON

REPORT ID: CAM-050724
 LAB CONTACT: SHAY OCHOA
 REPORT DATE: 5.7.24

QC SUMMARY**NH3N**

SM 4500 NH3 B, D

SETUP DATE:	SETUP ID:	BATCH ID:	
04.25.24	N-042524-22	N-042524-22-01	
SAMPLE ID:	RESULT 1:	RESULT 2:	% DEV:
10050-24	41.7	42.5	1.0
10091-24	28.4	28.5	0.3
SPIKE ID:	RESULT 1:	RESULT 2:	% REC:
10052-24	0.03	1.92	94.6
10052-24	0.03	1.96	96.6
BLANK, mg/L:	LCS % REC:	LCSD % REC:	
< 0.05	106.0	107	

TKN

SM 4500 Norg B

SETUP DATE	SETUP ID	BATCH ID	
4.30.24	TKN-043024-06	TKN-043024-06-01	
SAMPLE ID:	RESULT 1:	RESULT 2:	% DEV
9905-24	200	195	1.3
10030-24	18.7	17.1	4.4
SPIKE ID:	RESULT 1:	RESULT 2:	% REC
9955-24	38.2	50.0	118.0
9955-24	38.2	46.8	86.0
BLANK, mg/L:	LCS % REC:	LCSD % REC:	
< 0.25		109.0	103.6

TOTAL PHOSPHORUS

SM 4500 P B.5, E

SETUP DATE	SETUP ID	BATCH ID	
4.25.24	P-042524-06	P-042524-06-01	
SAMPLE ID	RESULT 1	RESULT 2	% DEV
9667-24	3.14	3.18	0.6
9905-24	36.0	43.1	8.9
SPIKE ID:	RESULT 1	RESULT 2	% REC
9803-24	0.78	1.38	93.8
9803-24	0.78	1.46	106.3
BLANK, as P:	LCS % REC:	LCSD % REC:	
< 0.08	91.5	94.8	

OIL & GREASE

EPA 1664 A

SETUP DATE	SETUP ID	BATCH ID	
4.29.24	OG-042924-06	OG-042924-06-01	
DUPLICATE ID:	RESULT 1:	RESULT 2:	% DEV
734131604	34.0	36.7	3.8
BLANK, mg/L:	QCS % REC:	LCS % REC:	LCSD % REC:
<1.4	---	85.0	91.8

E. COLI

SM 9223 B

SETUP DATE	SETUP ID	BATCH ID	
4.24.24	E-042424-15	E-042424-15-01	
DUPLICATE ID:	RESULT 1:	RESULT 2:	PRECISION
10009-24	>241960	>241960	QM2
10010-24	>24196	>24196	QM1
BLANK, MPN	PRECISION RANGE		
<1	0.0-0.15		

ANALYTICAL NOTES, INTERPRETATIONS, METHOD DEVIATIONS OR ENVIRONMENTAL CONDITIONS :

NONE TO REPORT

STATEMENT OF COMPLIANCE/NON-COMPLIANCE:

The above analytical data was derived from submitted samples that have met all established acceptance criteria, unless otherwise qualified, and are compliant with the laboratory's Quality System. The Director of Operations or designee has authorized the release of this report. The results contained herein relate only to the Laboratory Sample ID(s) documented above. This analytical test report may not be reproduced except in full, without the written approval of the laboratory. Quality Assurance / Quality Control Data associated with results within this report are documented in the attached QA/QC Report. Please contact 254.829.8001 with any questions or concerns.



A. Shay Ochoa, Senior Environmental Project Manager
 Bio Chem Lab, Inc.



BIO CHEM LAB, INC. **PHONE: 254.829.8001** **FAX: 254.829.8013**
4751 TOKIO RD. WEST, TX 76691

ANALYTICAL REPORT**CLIENT IDENTIFICATION INFORMATION:**

CITY OF CAMERON
P O BOX 833
CAMERON, TX 76520
CLIENT CONTACT: BRANDON WHITE

APRIL 2024 CAMERON	
REPORT ID:	CAM-050724
LAB CONTACT:	SHAY OCHOA
REPORT DATE:	5.7.24

BCL PROJECT DATA QUALIFIERS:

- Q** Failed Quality Data. Refer to QA/QC Report of the affected data for specific details.
- Q1** Blank outside desired limits. Data accepted based on passing batch LCS recoveries.
- Q2** LCS recovery outside desired limits. Data accepted on basis of additional narrative if applicable
- Q3** Matrix Spike and/or Matrix Spike Duplicate outside desired limits. Data accepted on basis of passing LCS recoveries.
- QS3** Matrix Spike and/or Matrix Spike Duplicate outside desired limits. Sample not spiked at a high enough concentration to be statistically different from the native sample result. Data accepted on basis of passing LCS recoveries.
- Q4** Sample specific duplicate precision outside desired range.
- QM1** Microbiology precision unable to be evaluated due to low background concentration (< 10 CFU / MPN) of target analyte
- QM2** Microbiology precision unable to be evaluated due to high background concentration (> 2420 CFU / MPN) of target analyte
- QM3** Microbiology precision outside desired range.
- B1** Results for CBOD / BOD reported as less than [< 2 mg/L] with no sample dilution depleting method required 2.00 mg/L
- B2** Results for CBOD / BOD reported as an estimate due to no dilution meeting a method stated depletion criteria.
- B3** Result for CBOD / BOD unable to be determined due to excessive oxidant content, high chlorine residual.
- W1** Result is an average of multiple weighing / drying cycles.
- C** Reported result over the laboratory's calibration range
- C1** Reported result over the laboratory's calibration range but within the laboratory verified Linear Dynamic Range.
- J5** Reported result less than the laboratory reporting limit but greater than the Limit of Detection.
- ND** Not detected
- V** Additional sample volume would have been required to meet analytical method specifications.
- HT** Sample analysis performed outside method / regulatory prescribed holding time.
- T** Sample received outside method / regulatory prescribed requirements for thermal preservation.
- P** Sample received outside method / regulatory prescribed requirements for pH preservation.
- A** Accreditation for analysis performed is either not currently offered or is currently outside the laboratory's scope of accreditation.
- N** The associated analysis was performed by a network / sub-contract laboratory.
- L** Laboratory Error
- PW** Potable Water
- NPW** Non-Potable Water
- Z** Refer to additional notes / supplemental narrative

ADDITIONAL NOTES:

Your transaction is complete. Thank you for using TCEQ ePay.

Note: It may take up to 3 working days for this electronic payment to be processed and be reflected in the TCEQ ePay system. Print this receipt and the vouchers for your records. An email receipt has also been sent.

Transaction Information

Trace Number: 582EA000618172

Date: 07/19/2024 11:54 AM

Payment Method: ACH - Authorization 0078096894

ePay Actor: SARA WILLIAMS

Actor Email: swilliams@kpaengineers.com

IP: 209.112.228.29

TCEQ Amount: \$2,015.00

Texas.gov Price: \$2,015.00*

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

Payment Contact Information

Name: JAKE BLAIR

Company: KASBERG PATRICK & ASSOCIATES LP

Address: 19 N MAIN ST, TEMPLE, TX 76501

Phone: 254-773-3731

Cart Items

Click on the voucher number to see the voucher details.

Voucher	Fee Description	AR Number	Amount
713704	WW PERMIT - FACILITY WITH FLOW >= 1.0 MGD - RENEWAL		\$2,000.00
713705	30 TAC 305.53B WQ RENEWAL NOTIFICATION FEE		\$15.00
TCEQ Amount:			\$2,015.00

[ePay Again](#)[Exit ePay](#)

Note: It may take up to 3 working days for this electronic payment to be processed and be reflected in the TCEQ ePay system. Print this receipt for your records.

TCEQ ePay Voucher Receipt

Transaction Information

Voucher Number: 713704
Trace Number: 582EA000618172
Date: 07/19/2024 11:54 AM
Payment Method: ACH - Authorization 0078096894
Voucher Amount: \$2,000.00
Fee Type: WW PERMIT - FACILITY WITH FLOW >= 1.0 MGD - RENEWAL
ePay Actor: SARA WILLIAMS

Payment Contact Information

Name: JAKE BLAIR
Company: KASBERG PATRICK & ASSOCIATES LP
Address: 19 N MAIN ST, TEMPLE, TX 76501
Phone: 254-773-3731

Site Information

Site Name: CAMERON WASTEWATER TREATMENT PLANT
Site Address: 2000 E GILLIS, CAMERON, TX 76520
Site Location: APPROX 1300 FT S-SE OF THE INTERX OF US 190 190 AND 77 SH 36 & ADAMS ST & APPROX

Customer Information

Customer Name: CITY OF CAMERON
Customer Address: 100 S HOUSTON AVE, CAMERON, TX 76520

Other Information

Program Area ID: 10004001

TCEQ ePay Voucher Receipt

Transaction Information

Voucher Number:	713705
Trace Number:	582EA000618172
Date:	07/19/2024 11:54 AM
Payment Method:	ACH - Authorization 0078096894
Voucher Amount:	\$15.00
Fee Type:	30 TAC 305.53B WQ RENEWAL NOTIFICATION FEE
ePay Actor:	SARA WILLIAMS

Payment Contact Information

Name:	JAKE BLAIR
Company:	KASBERG PATRICK & ASSOCIATES LP
Address:	19 N MAIN ST, TEMPLE, TX 76501
Phone:	254-773-3731

Candice Calhoun

From: Jake Blair <JBlair@kpaengineers.com>
Sent: Friday, September 27, 2024 8:45 PM
To: Candice Calhoun
Cc: Tommy Valle; Askarali K. Karimov
Subject: RE: Application for New Permit No.WQ0010004003-City of Cameron-Notice of Deficiency 30-Day Will Return Letter
Attachments: 0. Cameron WWTP WQ0010004003 - Response Cover Letter.pdf; 1. Attachment No. 1.pdf; 2. Attachment No. 2.pdf; 3. Attachment No. 3 - TCEQ WQ0010004001 TPDES PLS.docx; 4. Attachment No. 4.pdf; 5. Attachment No. 5.pdf
Follow Up Flag: Follow up
Flag Status: Completed

Good Evening Mrs. Calhoun,

Thank you for the notice and our apologies on the confusion, please see attached cover letter and responses to the NOD on the City of Cameron WQ0010004003 WWTP permit request. Please note that four (4) corresponding hard copies have been mailed to your attention for full size USGS maps. If they have not been received, please advise and we will hand deliver next week to ensure receipt.

We are available at your convenience to address any questions.

Thank you and have a good weekend!



Jake Blair, PE

Associate

19 North Main Street, Temple, TX 76501

☎ (254) 773-3731

☎ (806) 438-6378

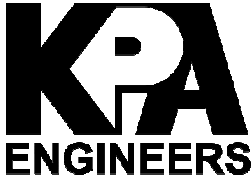


From: Candice Calhoun <Candice.Calhoun@tceq.texas.gov>
Sent: Friday, September 27, 2024 10:15 AM
To: Jake Blair <JBlair@kpaengineers.com>; Askarali K. Karimov <akarimov@kpaengineers.com>
Cc: Tommy Valle <tvalle@kpaengineers.com>
Subject: FW: Application for New Permit No.WQ0010004003-City of Cameron-Notice of Deficiency 30-Day Will Return Letter
Importance: High

Good afternoon, Mr. Blair, and Mr. Karimov,

Your response deadlines have passed, and my next step is to route the application to management to return the application. If you can provide me with a complete response, no later than **October 2, 2024**, then I can avoid routing it to management to return.

Regards,



19 North Main Street • Temple, TX 76501 • (254) 773-3731
800 South Austin Ave • Georgetown, TX 78626 • (512) 819-9478

September 16, 2024

Texas Commission on Environmental Quality
ATTN: Mrs. Candice Calhoun
Applications Review and Processing Team (MC148)
P.O. Box 13087
Austin, Texas 78711-3087

RE: Application for Proposed Permit No.: WQ0010004003 EPA I.D. No. TX0146382)
Applicant Name: City of Cameron (CN600344162)
Site Name: City of Cameron WWTP (RN110762879)
Type of Application: New

Dear Mrs. Calhoun:

This letter is in response to the letter dated July 31, 2024 concerning the deficiencies in the application for proposed WWTP permit operated by the City of Cameron. As listed below, the original TCEQ inquiry is in black text with a [response in blue](#):

1. Administrative Report 1.0

Section 1 - Application Fee: We were unable to confirm payment of the application processing fee. The filing fee for your application is \$2,050.00. Please submit payment to: TCEQ, Revenue Section (MC 214), P.O. Box 13088, Austin, Texas 78711-3088. Also, provide a copy of the check along with the response to this letter.

[Included as Exhibit No. 17 in the original application is an EPay Voucher 713705 showing a payment of \\$2,015.00 under Trace No. 582EA000618172 on 07/19/2024. A copy of this payment is included under Attachment No. 1 for reference. Additionally, we have executed an additional check in the amount of \\$35.00 to bring the total payment to \\$2,050.00. This check has been mailed to the address above and a copy is attached.](#)

Section 2, item b – A box for the appropriate facility status was not checked. Please provide an updated section of the application to show the appropriate facility status.

[See Attachment No. 1 for the Revised Page 2 of the application.](#)

Section 10, item B – An accurate description of the point of discharge and the discharge route to the nearest classified segment was not provided. This section is required to be completed for all new or amendment permit applications. Please provide an updated section of the application to show the accurate description requested.

[See Attachment No. 1 for the revised page 8 of the application.](#)

Section 12, item B – The question “if the existing permit contain an onsite sludge disposal authorization, is the location of the sewage sludge disposal site in the existing permit accurate” was answered both as “Yes” and “Not Applicable”, but the Owner of sewage sludge disposal site was not provided in Section 9, item F. If the correct answer to Section 12, item B is “Not Applicable” please provide an updated section to not include the description. If the correct answer is “Yes”, please remove the check mark for “Not Applicable” and provide the owner of sewage sludge disposal site in Section 9, item F

[Correct answer is Not Applicable. See Attachment No. 1 for the Revised Page 9 of the application.](#)

2. USGS Topographic Map

The USGS map provided was illegible. Please provide a legible USGS map.

[Both revised USGS Maps for The Administrative Report 1.0 and Supplemental Permit Information Form \(SPIF\) originally referred to as Exhibit No. 2 and No. 3 are included under Attachment No. 2 as requested.](#)

3. Plain Language Summary (PLS)

The English PLS was not provided. Please use the attached Plain Language Summary (PLS) Template to provide a plain language summary in English. Please provide the PLS in a Microsoft Word Document.

[Requested City of Cameron WWTP TDPES PLS is provided in a word document format in Attachment No. 3](#)

4. Supplemental Permit Information Form (SPIF)

The Supplemental Permit Information Form (SPIF) was missing from the application. The supplemental permit information form (SPIF) is required for all TPDES applications. Please provide the SPIF.

[The completed Supplemental Permit Information Form \(SPIF\) is included as Attachment No. 4. The required USGS map is included in Attachment No. 2](#)

5. Administrative Report 1.1

The Administrative Report 1.1 was missing from the application. The Administrative Report 1.1 form is required for all New applications. Please provide a completed Administrative Report 1.1.

The completed Administrative Report 1.1 is included as Attachment No. 5 including all required exhibits and testing requirements (Worksheet 4.0).

6. NORI

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.

APPLICATION. City of Cameron, P.O. Box 833, Cameron, Texas 76520, has applied to the Texas Commission on Environmental Quality (TCEQ) for proposed Texas Pollutant Discharge Elimination System (TPDES) Permit No. WQ0010004003 (EPA I.D. No. TX0146382) to authorize the discharge of wastewater at a volume not to exceed a daily average flow of 1,250,000 gallons per day. The domestic wastewater treatment facility will be located approximately 0.5 mile east of the intersection of Oak Avenue and Gillis Avenue, near the city of Cameron, in Milam County, Texas 76520. The discharge route will be from the plant site to **PENDING RWA REVIEW**. Authorization to discharge was previously permitted by expired Permit No. WQ0010004001. TCEQ received this application on July 22, 2024. The permit application will be available for viewing and copying at Cameron Water Department, 2nd floor office, 100 South Houston Avenue, Cameron, in Milam County, Texas prior to the date this notice is published in the newspaper. The application, including any updates, and associated notices are available electronically at the following webpage: <https://www.tceq.texas.gov/permitting/wastewater/pending-permits/tpdes-applications>. This link to an electronic map of the site or facility's general location is provided as a public courtesy and not part of the application or notice. For the exact location, refer to the application.

<https://gisweb.tceq.texas.gov/LocationMapper/?marker=-96.9697,30.845&level=18>

Further information may also be obtained from City of Cameron at the address stated above or by calling Ms. Amy Harris, City Secretary, at 254-697-6646.

We have reviewed the NORI and do not find any errors or omissions outside of the pending discharge route review.

Applications Review and Processing Team (MC148)
September 16, 2024
Page Four

We are available to discuss any additional questions or concerns, at your convenience. Please contact Jake Blair at (254) 773-3731 or jblair@kpaengineers.com.

Sincerely,

A handwritten signature in blue ink, appearing to read "JL Blair", with a stylized flourish at the end.

Jake L. Blair P.E.

JLB/

Attachment No. 1

Admin 10053 Page 2 – Payment Information and WWTP Status

Admin 10053 – Payment Submittal Form & Check 52195

Admin 10053 – EPay Voucher 713704/Tracer 582EA000618172

Admin 10053 Page 8 – TPDES Discharge Route Description

Admin 10053 Page 9 – On-Site Sludge Disposal Clarification



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

**DOMESTIC WASTEWATER PERMIT APPLICATION
ADMINISTRATIVE REPORT 1.0**

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

Section 1. Application Fees (Instructions Page 26)

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

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

Minor Amendment (for any flow) \$150.00 ☐

Payment Information:

Mailed Check/Money Order Number: 52195
Check/Money Order Amount: 35
Name Printed on Check: Kasberg, Patrick & Associates, LP
EPAY Voucher Number: 713705
Copy of Payment Voucher enclosed? Yes ☒

Section 2. Type of Application (Instructions Page 26)

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

- ☒ Publicly-Owned Domestic Wastewater
☐ Privately-Owned Domestic Wastewater
☐ Conventional Wastewater Treatment

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

- ☒ Active ☐ Inactive

WATER QUALITY PERMIT

PAYMENT SUBMITTAL FORM

Use this form to submit the Application Fee, if the mailing the payment.

- Complete items 1 through 5 below.
- Staple the check or money order in the space provided at the bottom of this document.
- **Do Not mail this form with the application form.**
- Do not mail this form to the same address as the application.
- Do not submit a copy of the application with this form as it could cause duplicate permit entries.

Mail this form and the check or money order to:

BY REGULAR U.S. MAIL

Texas Commission on Environmental Quality
Financial Administration Division
Cashier's Office, MC-214
P.O. Box 13088
Austin, Texas 78711-3088

BY OVERNIGHT/EXPRESS MAIL

Texas Commission on Environmental Quality
Financial Administration Division
Cashier's Office, MC-214
12100 Park 35 Circle
Austin, Texas 78753

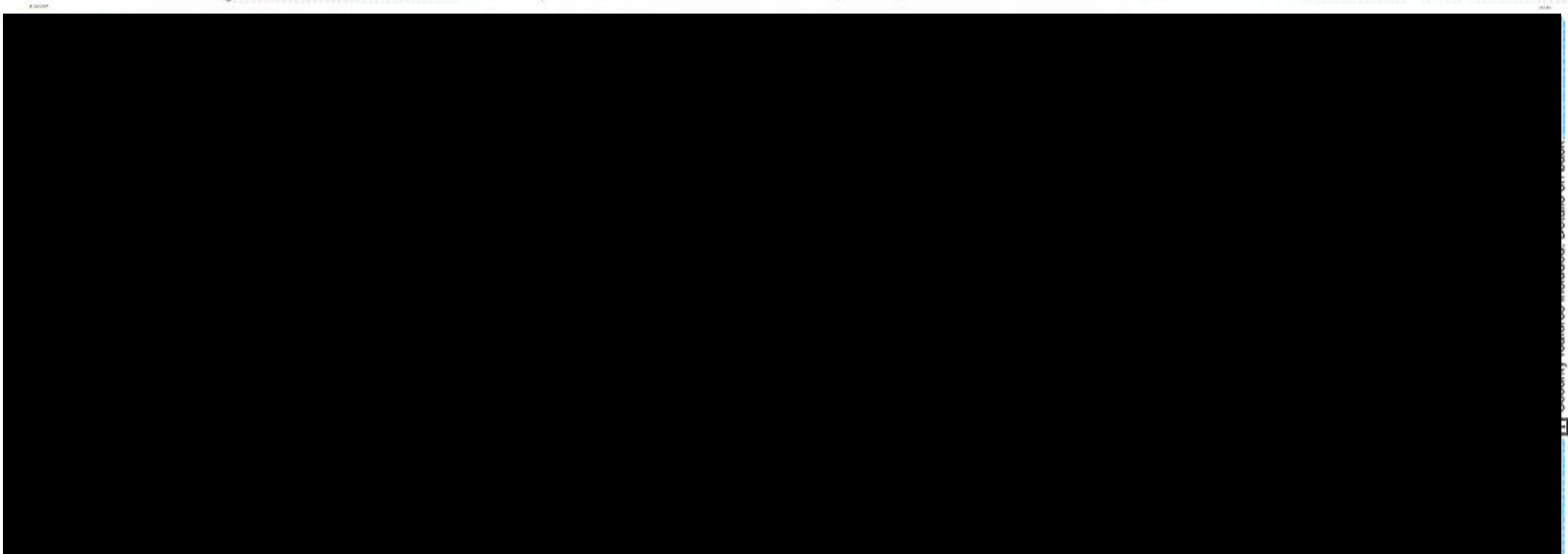
Fee Code: WQP **Waste Permit No: WQ0010004003**

1. Check or Money Order Number: 52195
2. Check or Money Order Amount: 35
3. Date of Check or Money Order: 09/17/2024
4. Name on Check or Money Order: Kasberg, Patrick & Associates, LP
5. APPLICATION INFORMATION

Name of Project or Site: Cameron Wastewater Treatment Plant

Physical Address of Project or Site: LOCATED APPROX 4300 FT S-SE OF THE INTERX OF US 190 AND 77, SH 36 AND ADAMS ST; AND APPROX ONE HALF MILE EAST OF THE INTERX OF OAK ST AND GILLIS ST

If the check is for more than one application, attach a list which includes the name of each Project or Site (RE) and Physical Address, exactly as provided on the application.



Your transaction is complete. Thank you for using TCEQ ePay.

Note: It may take up to 3 working days for this electronic payment to be processed and be reflected in the TCEQ ePay system. Print this receipt and the vouchers for your records. An email receipt has also been sent.

Transaction Information

Trace Number: 582EA000618172

Date: 07/19/2024 11:54 AM

Payment Method: ACH - Authorization 0078096894

ePay Actor: SARA WILLIAMS

Actor Email: swilliams@kpaengineers.com

IP: 209.112.228.29

TCEQ Amount: \$2,015.00

Texas.gov Price: \$2,015.00*

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

Payment Contact Information

Name: JAKE BLAIR

Company: KASBERG PATRICK & ASSOCIATES LP

Address: 19 N MAIN ST, TEMPLE, TX 76501

Phone: 254-773-3731

Cart Items

Click on the voucher number to see the voucher details.

Voucher	Fee Description	AR Number	Amount
713704	WW PERMIT - FACILITY WITH FLOW >= 1.0 MGD - RENEWAL		\$2,000.00
713705	30 TAC 305.53B WQ RENEWAL NOTIFICATION FEE		\$15.00
TCEQ Amount:			\$2,015.00

[ePay Again](#)[Exit ePay](#)

Note: It may take up to 3 working days for this electronic payment to be processed and be reflected in the TCEQ ePay system. Print this receipt for your records.

TCEQ ePay Voucher Receipt

Transaction Information

Voucher Number: 713704
Trace Number: 582EA000618172
Date: 07/19/2024 11:54 AM
Payment Method: ACH - Authorization 0078096894
Voucher Amount: \$2,000.00
Fee Type: WW PERMIT - FACILITY WITH FLOW >= 1.0 MGD - RENEWAL
ePay Actor: SARA WILLIAMS

Payment Contact Information

Name: JAKE BLAIR
Company: KASBERG PATRICK & ASSOCIATES LP
Address: 19 N MAIN ST, TEMPLE, TX 76501
Phone: 254-773-3731

Site Information

Site Name: CAMERON WASTEWATER TREATMENT PLANT
Site Address: 2000 E GILLIS, CAMERON, TX 76520
Site Location: APPROX 1300 FT S-SE OF THE INTERX OF US 190 190 AND 77 SH 36 & ADAMS ST & APPROX

Customer Information

Customer Name: CITY OF CAMERON
Customer Address: 100 S HOUSTON AVE, CAMERON, TX 76520

Other Information

Program Area ID: 10004001

TCEQ ePay Voucher Receipt

Transaction Information

Voucher Number:	713705
Trace Number:	582EA000618172
Date:	07/19/2024 11:54 AM
Payment Method:	ACH - Authorization 0078096894
Voucher Amount:	\$15.00
Fee Type:	30 TAC 305.53B WQ RENEWAL NOTIFICATION FEE
ePay Actor:	SARA WILLIAMS

Payment Contact Information

Name:	JAKE BLAIR
Company:	KASBERG PATRICK & ASSOCIATES LP
Address:	19 N MAIN ST, TEMPLE, TX 76501
Phone:	254-773-3731

E. Owner of effluent disposal site:

Prefix: [Click to enter text.](#)

Last Name, First Name: [Click to enter text.](#)

Title: [Click to enter text.](#)

Credential: [Click to enter text.](#)

Organization Name: [Click to enter text.](#)

Mailing Address: [Click to enter text.](#)

City, State, Zip Code: [Click to enter text.](#)

Phone No.: [Click to enter text.](#)

E-mail Address: [Click to enter text.](#)

If the landowner is not the same person as the facility owner or co-applicant, attach a lease agreement or deed recorded easement. See instructions.

Attachment: [Click to enter text.](#)

F. Owner sewage sludge disposal site (if authorization is requested for sludge disposal on property owned or controlled by the applicant):

Prefix: [Click to enter text.](#)

Last Name, First Name: [Click to enter text.](#)

Title: [Click to enter text.](#)

Credential: [Click to enter text.](#)

Organization Name: [Click to enter text.](#)

Mailing Address: [Click to enter text.](#)

City, State, Zip Code: [Click to enter text.](#)

Phone No.: [Click to enter text.](#)

E-mail Address: [Click to enter text.](#)

If the landowner is not the same person as the facility owner or co-applicant, attach a lease agreement or deed recorded easement. See instructions.

Attachment: [Click to enter text.](#)

Section 10. TPDES Discharge Information (Instructions Page 31)

A. Is the wastewater treatment facility location in the existing permit accurate?

☐ Yes ☐ No

If **no, or a new permit application**, please give an accurate description:

LOCATED APPROX 4300 FT S-SE OF THE INTERX OF US 190 AND 77, SH 36 AND ADAMS ST;
AND APPROX ONE HALF MILE EAST OF THE INTERX OF OAK ST AND GILLIS ST

B. Are the point(s) of discharge and the discharge route(s) in the existing permit correct?

☐ Yes ☐ No

If **no, or a new or amendment permit application**, provide an accurate description of the point of discharge and the discharge route to the nearest classified segment as defined in 30 TAC Chapter 307:

Effluent discharges into unnamed tributary and travels approximately 0.40 miles South-South East to Little River Segment No. 1213 of the Brazos River Basin

City nearest the outfall(s): Cameron

County in which the outfalls(s) is/are located: Milam

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

☐ Yes ☒ No

If **yes**, indicate by a check mark if:

- ☐ Authorization granted ☐ Authorization pending

For **new and amendment** applications, provide copies of letters that show proof of contact and the approval letter upon receipt.

Attachment: [Click to enter text.](#)

- D. For all applications involving an average daily discharge of 5 MGD or more, provide the names of all counties located within 100 statute miles downstream of the point(s) of discharge: [Click to enter text.](#)

Section 11. TLAP Disposal Information (Instructions Page 32)

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

☐ Yes ☐ No

If **no, or a new or amendment permit application**, provide an accurate description of the disposal site location:

N/A. Land Application is not utilized.

- B. City nearest the disposal site: [Click to enter text.](#)

- C. County in which the disposal site is located: [Click to enter text.](#)

- D. For **TLAPs**, describe the routing of effluent from the treatment facility to the disposal site:

[Click to enter text.](#)

- E. For **TLAPs**, please identify the nearest watercourse to the disposal site to which rainfall runoff might flow if not contained: [Click to enter text.](#)

Section 12. Miscellaneous Information (Instructions Page 32)

- A. Is the facility located on or does the treated effluent cross American Indian Land?

☐ Yes ☒ No

- B. If the existing permit contains an onsite sludge disposal authorization, is the location of the sewage sludge disposal site in the existing permit accurate?

☐ Yes ☐ No ☒ Not Applicable

If No, or if a new onsite sludge disposal authorization is being requested in this permit application, provide an accurate location description of the sewage sludge disposal site.

Attachment No. 2

Exhibit No. 2 – Administrative USGS Map

Exhibit No. 3 – SPIF USGS Map



2022



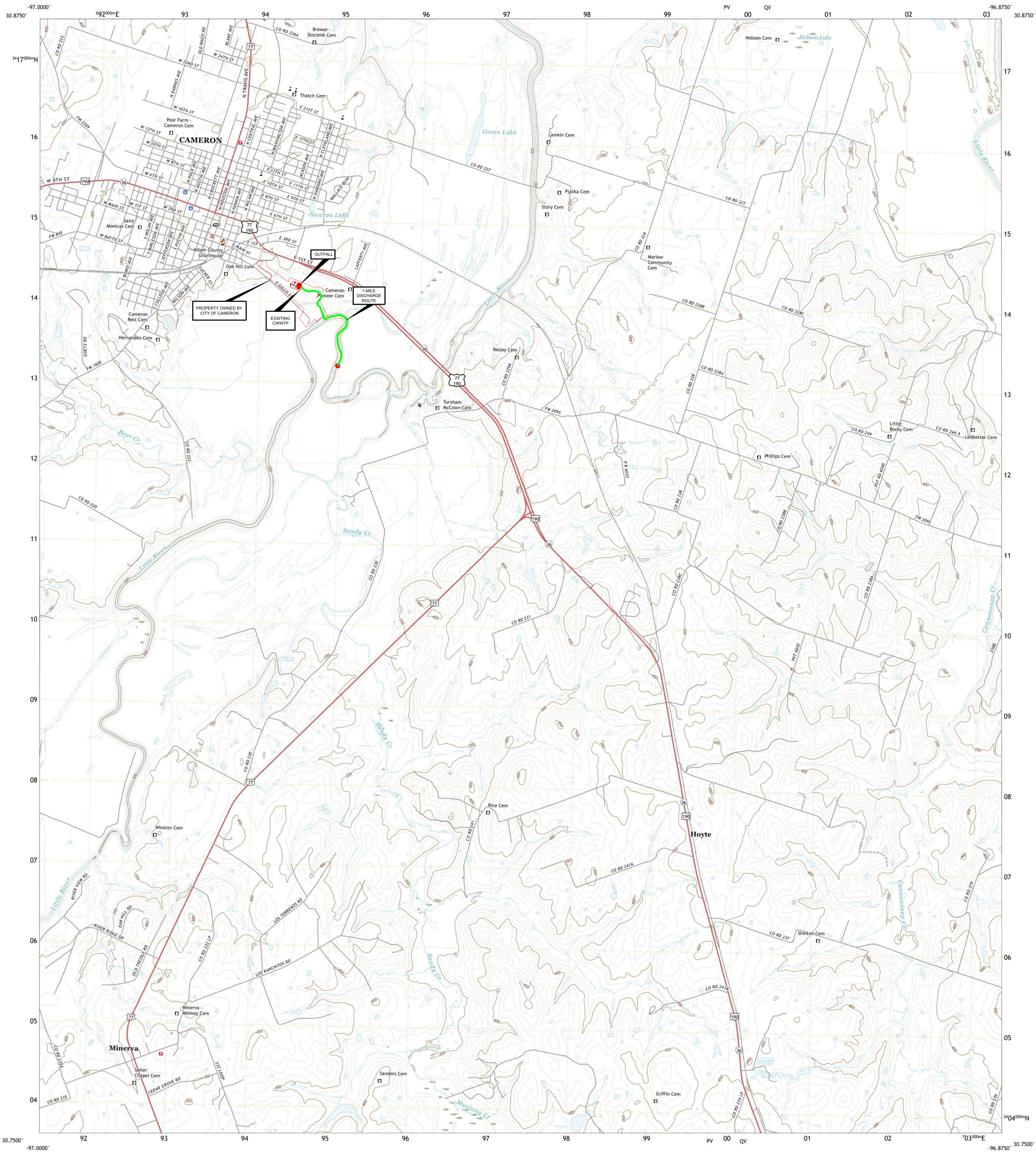
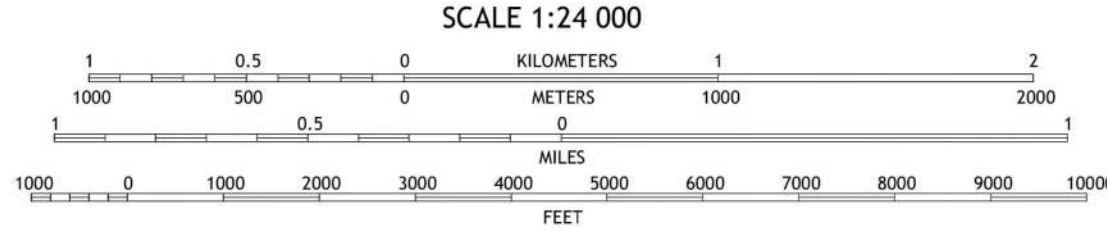
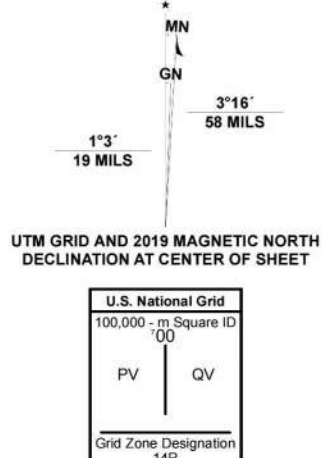


EXHIBIT 3 - SPIF USGS ONE MILE DISCHARGE ROUTE

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 14R
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, 2019
Boundaries.....Multiple sources; see metadata file 2019 - 2021
Wetlands.....FWS National Wetlands Inventory Not Available



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.

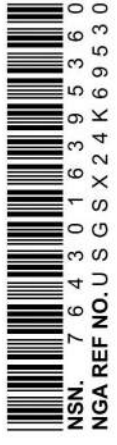


1	2	3
4	5	6
7	8	9

ADJOINING QUADRANGLES

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

CAMERON, TX
2022



Attachment No. 4
Supplemental Permit Information Form (SPIF)

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

SUPPLEMENTAL PERMIT INFORMATION FORM (SPIF)

FOR AGENCIES REVIEWING DOMESTIC OR INDUSTRIAL TPDES WASTEWATER PERMIT APPLICATIONS

TCEQ USE ONLY:

Application type: ____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: City of Cameron

Permit No. WQ00 100040001EPA ID No. TX 0053651

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

LOCATED APPROX 4300 FT S-SE OF THE INTERX OF US 190 AND 77, SH 36 AND ADAMS ST;
AND APPROX ONE HALF MILE EAST OF THE INTERX OF OAK ST AND GILLIS ST

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: Brandon White

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

Title: Public Works Director

Mailing Address: P.O. Box 833

City, State, Zip Code: Cameron, TX 76520

Phone No.: (254) 667-6646 Ext.: Fax No.: (254) 667-3040

E-mail Address: bwhite@camerontexas.net

2. List the county in which the facility is located: Milam
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, Landowner is permittee

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.

Effluent discharges into unnamed tributary and travels approximately 0.40 miles South-Southeast to Little River Segment No. 1213 of the Brazos River Basin.

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):

Construction will consist of building large concrete basins for new treatment units within WWTP site approximately 3 Acres of surface impact. Excavation depth will range from slab on grade to approximately 6'-8' below existing ground. No karst features or caves are expected to be encountered.

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

Existing disturbances is noise from WWTP operations. Only vegetation within site is grass. Construction area within the WWTP has been previously disturbed.

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:

Original Treatment Plant was constructed in 1958 this included existing clarifiers (2), digesters (2), aeration basin (1), chlorine contact basin (1), headworks and influent pump station. Equalization basin and headworks improvements (fine screens) were added in 2005.

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

Architect/Builder is not known, site was a grass/brush filled area with a few neighboring houses when WWTP was built in 1958.

Attachment No. 5

Administrative Report 1.1 & Exhibits

Worksheet 4.0 & Lab Results

DOMESTIC WASTEWATER PERMIT APPLICATION

TECHNICAL REPORT 1.1

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

Section 1. Justification for Permit (Instructions Page 57)

A. Justification of permit need

Provide a detailed discussion regarding the need for any phase(s) not currently permitted. Failure to provide sufficient justification may result in the Executive Director recommending denial of the proposed phase(s) or permit.

Major Amendment for Phase II includes addition of 0.29 MGD Treatment Capacity to meet existing flows and comply with TCEQ Capacity Requirements. The existing treatment capacity is 0.96 MGD. The attached document details the basis for the 1.25 MGD Capacity. Improvements are required to replace aging infrastructure, upgrade treatment capacity to 2040 projected values and to address Notice of Violations stated in Investigation No. 1455348 issued by TCEQ. (See Attached Sheet) We are under TWDB final review and shall be bidding the project within the year.

B. Regionalization of facilities

For additional guidance, please review [TCEQ's Regionalization Policy for Wastewater Treatment](#)¹.

Provide the following information concerning the potential for regionalization of domestic wastewater treatment facilities:

1. *Municipally incorporated areas*

If the applicant is a city, then Item 1 is not applicable. Proceed to Item 2 Utility CCN areas.

Is any portion of the proposed service area located in an incorporated city?

☐ Yes ☐ No ☐ Not Applicable

If yes, within the city limits of: [Click to enter text.](#)

If yes, attach correspondence from the city.

Attachment: [Click to enter text.](#)

If consent to provide service is available from the city, attach a justification for the proposed facility and a cost analysis of expenditures that includes the cost of connecting to the city versus the cost of the proposed facility or expansion attached.

Attachment: [Click to enter text.](#)

2. *Utility CCN areas*

Is any portion of the proposed service area located inside another utility's CCN area?

☐ Yes ☒ No

¹ <https://www.tceq.texas.gov/permitting/wastewater/tceq-regionalization-for-wastewater>

If **yes**, attach a justification for the proposed facility and a cost analysis of expenditures that includes the cost of connecting to the CCN facilities versus the cost of the proposed facility or expansion.

Attachment: [Click to enter text.](#)

3. *Nearby WWTPs or collection systems*

Are there any domestic permitted wastewater treatment facilities or collection systems located within a three-mile radius of the proposed facility?

☐ Yes ☒ No

If **yes**, attach a list of these facilities and collection systems that includes each permittee's name and permit number, and an area map showing the location of these facilities and collection systems.

Attachment: [Click to enter text.](#)

If **yes**, attach proof of mailing a request for service to each facility and collection system, the letters requesting service, and correspondence from each facility and collection system.

Attachment: [Click to enter text.](#)

If the facility or collection system agrees to provide service, attach a justification for the proposed facility and a cost analysis of expenditures that includes the cost of connecting to the facility or collection system versus the cost of the proposed facility or expansion.

Attachment: [Click to enter text.](#)

Section 2. Proposed Organic Loading (Instructions Page 59)

Is this facility in operation?

☒ Yes ☐ No

If **no**, proceed to Item B, Proposed Organic Loading.

If **yes**, provide organic loading information in Item A, Current Organic Loading

A. Current organic loading

Facility Design Flow (flow being requested in application): 1.25 MGD

Average Influent Organic Strength or BOD₅ Concentration in mg/l: 142 mg/L

Average Influent Loading (lbs/day = total average flow X average BOD₅ conc. X 8.34): 1,481 lbs

Provide the source of the average organic strength or BOD₅ concentration.

Municipal Wastewater determined by Influent Sampling

B. Proposed organic loading

This table must be completed if this application is for a facility that is not in operation or if this application is to request an increased flow that will impact organic loading.

Table 1.1(1) – Design Organic Loading

Source	Total Average Flow (MGD)	Influent BOD5 Concentration (mg/l)
Municipality		
Subdivision		
Trailer park – transient		
Mobile home park		
School with cafeteria and showers		
School with cafeteria, no showers		
Recreational park, overnight use		
Recreational park, day use		
Office building or factory		
Motel		
Restaurant		
Hospital		
Nursing home		
Other		
TOTAL FLOW from all sources		
AVERAGE BOD ₅ from all sources		

Section 3. Proposed Effluent Quality and Disinfection (Instructions Page 59)

A. Existing/Interim I Phase Design Effluent Quality

Biochemical Oxygen Demand (5-day), mg/l: 20

Total Suspended Solids, mg/l: 20

Ammonia Nitrogen, mg/l: N/A

Total Phosphorus, mg/l: N/A

Dissolved Oxygen, mg/l: 3.0

Other: Click to enter text.

B. Interim II Phase Design Effluent Quality

Biochemical Oxygen Demand (5-day), mg/l: 10

Total Suspended Solids, mg/l: 15

Ammonia Nitrogen, mg/l: 2

Total Phosphorus, mg/l: N/A

Dissolved Oxygen, mg/l: 6

Other: Click to enter text.

C. Final Phase Design Effluent Quality

Biochemical Oxygen Demand (5-day), mg/l: N/A

Total Suspended Solids, mg/l: N/A

Ammonia Nitrogen, mg/l: N/A

Total Phosphorus, mg/l: N/A

Dissolved Oxygen, mg/l: N/A

Other: Click to enter text.

D. Disinfection Method

Identify the proposed method of disinfection.

☒ Chlorine: 1.0 mg/l after 20 minutes detention time at peak flow

Dechlorination process: Sulphur Bisulfite

☐ Ultraviolet Light: Click to enter text. seconds contact time at peak flow

☐ Other: Click to enter text.

Section 4. Design Calculations (Instructions Page 59)

Attach design calculations and plant features for each proposed phase. Example 4 of the instructions includes sample design calculations and plant features.

Attachment: See Exhibit No. 16 – Design Calculations

Section 5. Facility Site (Instructions Page 60)

A. 100-year floodplain

Will the proposed facilities be located above the 100-year frequency flood level?

☒ Yes ☐ No

If no, describe measures used to protect the facility during a flood event. Include a site map showing the location of the treatment plant within the 100-year frequency flood level. If applicable, provide the size and types of protective structures.

Click to enter text.

Provide the source(s) used to determine 100-year frequency flood plain.

Exhibits No. 15 FEMA Map Panel ID 4804780002D

For a new or expansion of a facility, will a wetland or part of a wetland be filled?

☐ Yes ☒ No

If **yes**, has the applicant applied for a US Corps of Engineers 404 Dredge and Fill Permit?

☐ Yes ☐ No

If **yes**, provide the permit number: [Click to enter text.](#)

If **no**, provide the approximate date you anticipate submitting your application to the Corps: [Click to enter text.](#)

B. Wind rose

Attach a wind rose: [Click to enter text.](#)

Section 6. Permit Authorization for Sewage Sludge Disposal (Instructions Page 60)

A. Beneficial use authorization

Are you requesting to include authorization to land apply sewage sludge for beneficial use on property located adjacent to the wastewater treatment facility under the wastewater permit?

☐ Yes ☒ No

If **yes**, attach the completed **Application for Permit for Beneficial Land Use of Sewage Sludge (TCEQ Form No. 10451)**: [Click to enter text.](#)

B. Sludge processing authorization

Identify the sludge processing, storage or disposal options that will be conducted at the wastewater treatment facility:

- ☐ Sludge Composting
- ☐ Marketing and Distribution of sludge
- ☐ Sludge Surface Disposal or Sludge Monofill

If **any of the above**, sludge options are selected, attach the completed **Domestic Wastewater Permit Application: Sewage Sludge Technical Report (TCEQ Form No. 10056)**: [Click to enter text.](#)

Section 7. Sewage Sludge Solids Management Plan (Instructions Page 61)

Attach a solids management plan to the application.

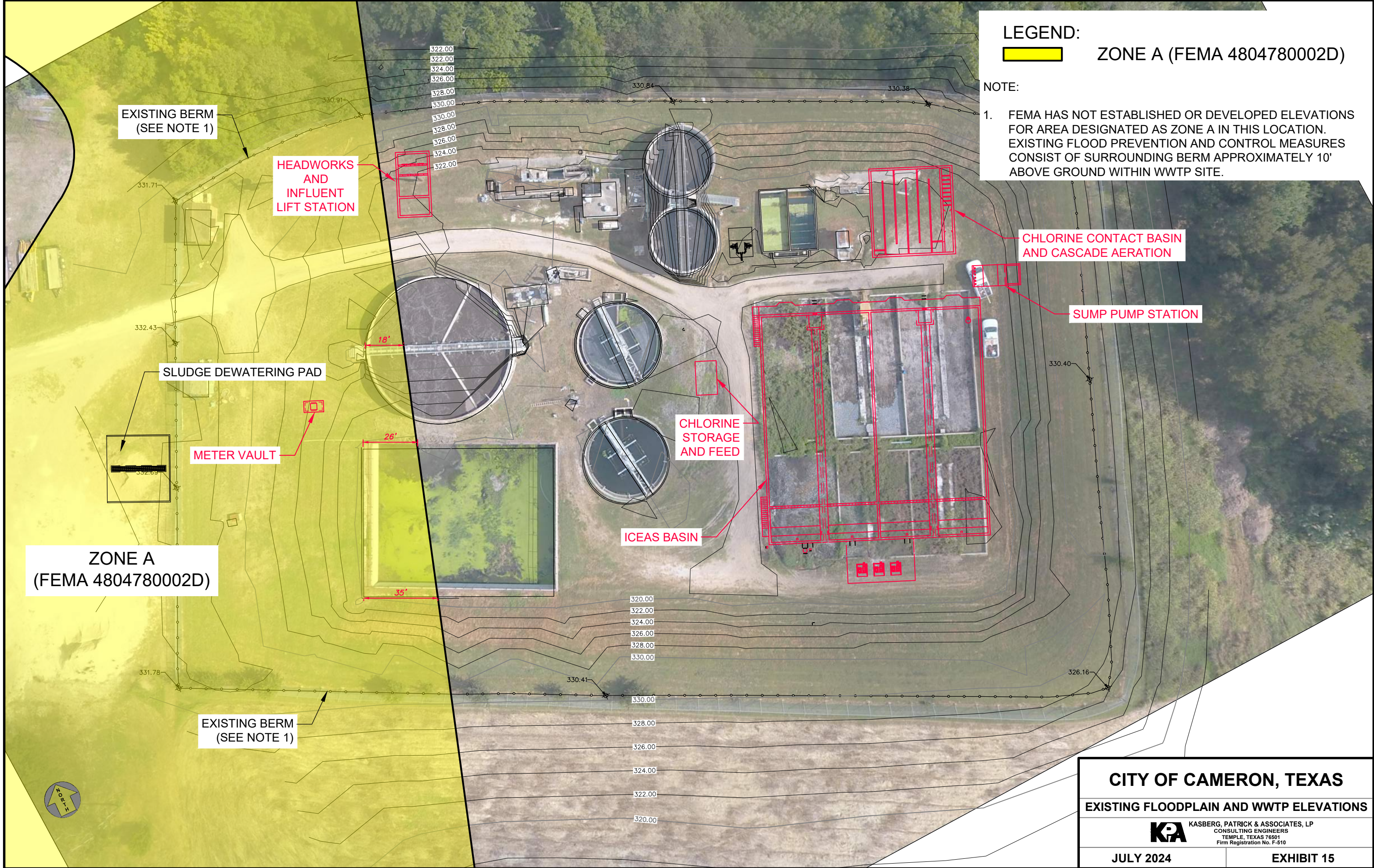
Attachment: [See Exhibit No. 17 – Sludge Management](#)

The sewage sludge solids management plan must contain the following information:

- Treatment units and processes dimensions and capacities

- Solids generated at 100, 75, 50, and 25 percent of design flow
- Mixed liquor suspended solids operating range at design and projected actual flow
- Quantity of solids to be removed and a schedule for solids removal
- Identification and ownership of the ultimate sludge disposal site
- For facultative lagoons, design life calculations, monitoring well locations and depths, and the ultimate disposal method for the sludge from the facultative lagoon

An example of a sewage sludge solids management plan has been included as Example 5 of the instructions.



LEGEND:



ZONE A (FEMA 4804780002D)

NOTE:

1. FEMA HAS NOT ESTABLISHED OR DEVELOPED ELEVATIONS FOR AREA DESIGNATED AS ZONE A IN THIS LOCATION. EXISTING FLOOD PREVENTION AND CONTROL MEASURES CONSIST OF SURROUNDING BERM APPROXIMATELY 10' ABOVE GROUND WITHIN WWTP SITE.

EXISTING BERM
(SEE NOTE 1)

HEADWORKS
AND
INFLUENT
LIFT STATION

CHLORINE CONTACT BASIN
AND CASCADE AERATION

SUMP PUMP STATION

SLUDGE DEWATERING PAD

METER VAULT

CHLORINE
STORAGE
AND FEED

ICEAS BASIN

ZONE A
(FEMA 4804780002D)

EXISTING BERM
(SEE NOTE 1)

CITY OF CAMERON, TEXAS

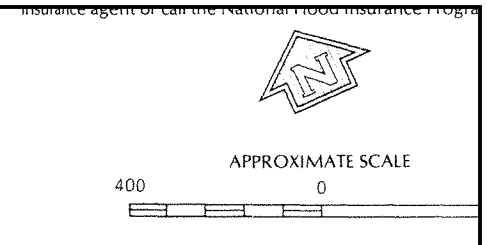
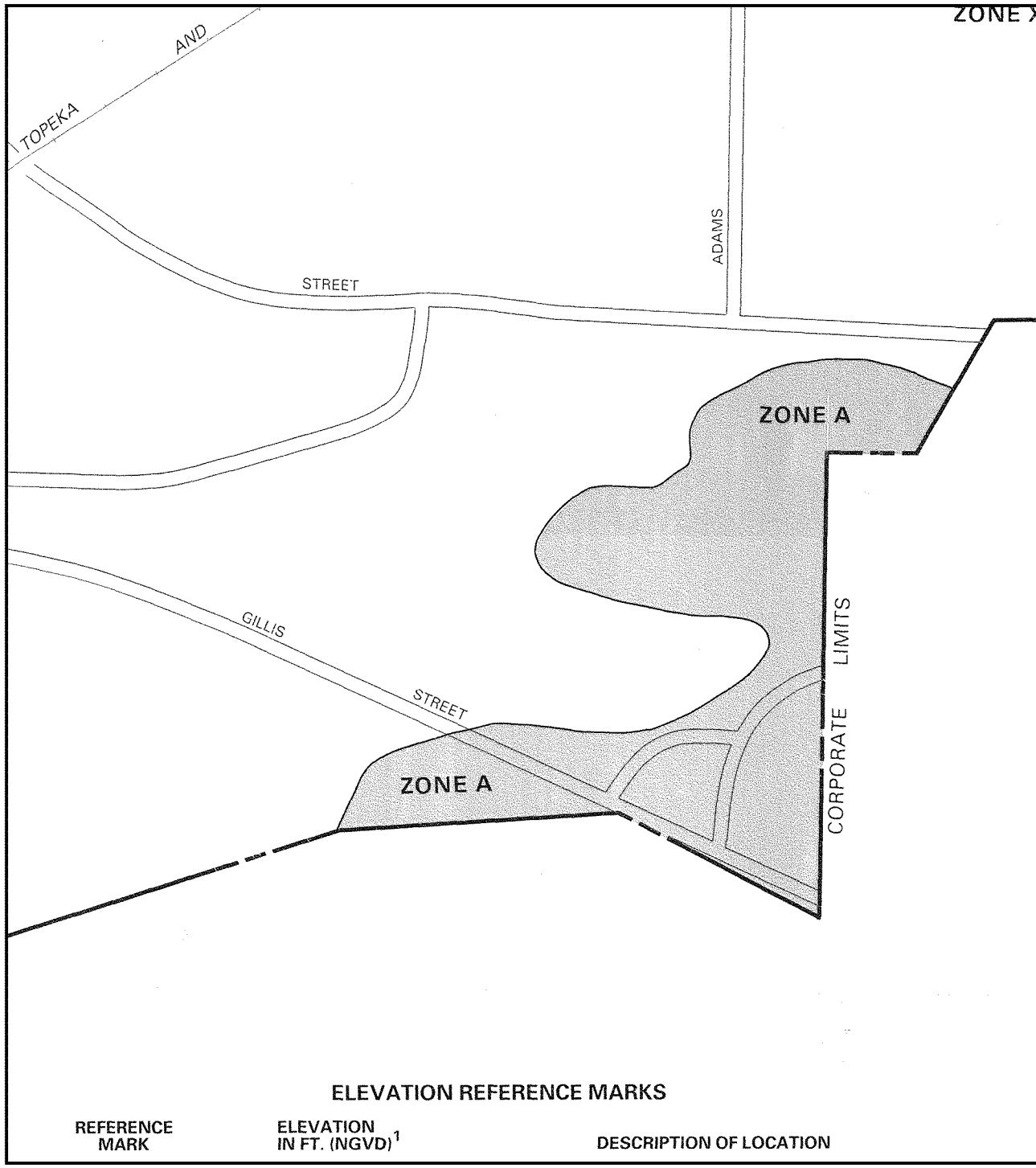
EXISTING FLOODPLAIN AND WWTP ELEVATIONS



KASBERG, PATRICK & ASSOCIATES, LP
CONSULTING ENGINEERS
TEMPLE, TEXAS 76501
Firm Registration No. F-510

JULY 2024

EXHIBIT 15



NATIONAL FLOOD INSURANCE PROGRAM

FIRM
FLOOD INSURANCE RATE MAP

CITY OF
CAMERON, TEXAS
MILAM COUNTY

PANEL 2 OF 2
(SEE MAP INDEX FOR PANELS NOT PRINTED)

PANEL LOCATION

COMMUNITY-PANEL NUMBER
480478 0002 D

MAP REVISED:
DECEMBER 2, 1992

Federal Emergency Management Agency

ELEVATION REFERENCE MARKS

REFERENCE MARK	ELEVATION IN FT. (NGVD) ¹	DESCRIPTION OF LOCATION
----------------	--------------------------------------	-------------------------

This is an official copy of a portion of the above referenced flood map. It was extracted using F-MIT On-Line. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. For the latest product information about National Flood Insurance Program flood maps check the FEMA Flood Map Store at www.msc.fema.gov

Cameron Wastewater Treatment Plant

Exhibit No. 16 - Design Calculations

Influent Quality Characteristics:

<u>Parameter</u>	<u>Average</u>	<u>Std Deviation</u>	<u>Design Value</u>
BOD ₅	142 mg/L	40 mg/L	182 mg/L
TSS	119 mg/L	13 mg/L	132 mg/L
NH ₃ -N	26 mg/L	6 mg/L	32 mg/L

Influent Flow Characteristics:

The Cameron WWTP (currently 0.96 MGD) receives gravity flow from the City of Cameron collection system. The historical flow data was reviewed and incorporated into flow projections. The following projections are through the year 2040.

Table 4(1) – Design Calculations

Flow	Gallons Per Day	Gallons Per Minute
Average Daily Flow (Q _{ave})	1,250,000	868
Peak 2-Hour Flow (Q _{pk})	5,000,000	3,472

Loading	Pounds Per Day
BOD ₅	1,898
TSS	1,376

Existing Process Design

The existing treatment process consists of an aeration basin and two clarifiers. The existing aeration basin will not be required in the 1.25 MGD Plant Expansion. The existing aeration basin will be converted to equalization to allow consistent flow to the proposed process. Likewise, the existing clarifiers do not meet the hydraulic requirements and will be removed from service and abandoned in place.

Process Design

A Continuous Flow SBR will be constructed (4 adjacent basins) for the new treatment process, replacing both the existing Aeration Basin and the Clarifiers.

Phasing

The construction of the Cameron WWTP expansion is recommended to be constructed in two (2) concurrent phases:

1. Phase I
 - a. Construct sludge dewatering / solids handling facilities consisting of:
 - i. 2 – 20 Yard Sludge Mate dewatering trailers
 - ii. Applicable pumping and piping modifications to allow water to be returned to head of plant.
 - b. No Change in Capacity

- c. Will allow Phase II to be constructed in place of existing Sludge Drying Beds.
- 2. Phase II – to be constructed pursuant to this permit amendment
 - a. Design Flow = 1.25 MGD
 - b. Peak Flow = 5.0 MGD
 - c. Treatment Facilities
 - i. Influent Fine Screen
 - ii. Clarifier
 - iii. Filtration (34 MGD installed, sized for 50 MGD)
 - iv. UV Disinfection (34 MGD installed, sized for 50 MGD)
 - v. Gravity Thickener
 - vi. Associated Pump Stations

Treatment Units

Biological Treatment – See attached SBR Design Sheets

Facility Design Features

A. Emergency Power Requirements

Emergency Generation will be incorporated into the Phase II Improvements.

B. Alarm Feature

The Cameron WWTP will have its Supervisory Control and Data Acquisition (SCADA) system upgraded, incorporating alarms on each of the existing treatment units. The system will have both audible/visual alarms at key treatment units and shows alarms at the operator's computer. In addition to the existing alarms, the following will be integrated into the system:

- i. Equipment Run Signal (on/off)
- ii. Pump/Blower Run Failure
- iii. High/Low Water Level Indicators
- iv. SBR SCADA system
- v. Chlorine Residual (before and after dechlor)
- vi. Effluent Flow

C. Design Features for Reliability and Operating Flexibility

The Continuous Flow SBR will have 4 separate basins (treatment trains) that will allow the wide range of flows to be treated at the facility. Likewise, the fine screen will have a manually screened bypass. The inclusion of an equalization facility will allow the existing treatment unit to be utilized during high flow events. This will allow the SBR to operate within its design parameters and allow the flexibility of storing flow should there be a unit out downstream.

D. Overflow Prevention

The following design parameters and/or features have been included to prevent overflow of wastewater from the treatment units:

- i. The inclusion of emergency generation and equalization gives extra flexibility and overflow protection.

- ii. The facility hydraulic design, including piping, channels, weirs, troughs and other features are sized to allow the 2-hour peak flow to pass through the facility without exceeding the minimum freeboard requirements with any single treatment unit out of service.
- iii. Should either of these improvements have issues, the entire site is “bermed” which will contain any overflows (which are not anticipated)

DESIGN PROPOSAL

Cameron TX Sanitaire #26845-16A

Design*	MGD	1.25
Max 4.0hr Cycle Flow	MGD	3.75
Max 3.0hr Cycle Flow	MGD	5.00
	mg/l	lb/day
BOD ₅ (20°C)	250	2606
Suspended Solids	240	2502
TKN	40	417
Max Wastewater Temperature	°C	20
Min Wastewater Temperature	°C	15
Ambient Air Temperature	°F	20 - 90
Site Elevation	ft	400

* - Maximum 30 day period mass flow

Table B: ICEAS® EFFLUENT QUALITY (MONTHLY AVERAGE)

BOD ₅ (20°C)	mg/l	10
Suspended Solids	mg/l	10
NH ₃ -N	mg/l	1

Table C: ICEAS PROCESS DESIGN CRITERIA

Operating Basins		4
Operating Top Water Level	ft	18.00
F / M	BOD5/DAY/MLSS	0.065
SVI (after 30 minutes settling)	ml/g	150
MLSS at Bottom Water Level	mg/l	5,015
Waste Sludge Produced (Approx.)	lb/day	1,962
Volume of Sludge Produced (Approx., 0.85% solids)	GPD	27,700
Normal Decant Rate	GPM	2,604
Peak Decant Rate	GPM	3,472
Hydraulic Retention Time	Days	0.89
Sludge Age	Days	19.3
Alkalinity	mg/l	223

Bold, italicized text indicate assumptions made by Sanitaire

Cycle Timing

		Max Month*	
		Normal	Min
Air-On	min	120	90
Settle	min	60	45
Decant	min	60	45
Total	min	240	180

Table D: KEY ICEAS DESIGN DETAILS

Top Water Level	ft	18.00
Basin Width (Inside)	ft	25.0
Basin Length (Inside)	ft	107.0
Bottom Water Level	ft	12.07

ICEAS EQUIPMENT(Base Design)

				Motor HP	No. Req.
Decanter Mechanism	17.5 ' Weir length				4
Decanter Drive Unit				3/4	4
ICEAS Blower	720 SCFM	8.0 PSIG		50	3
ICEAS Fine Bubble Aeration System	686 Disc Diffusers/Basin				4
Air Control Valve	8 "				4
Waste Sludge Pump	110 GPM			2.4	4
ICEAS Controls	(SBR Panel, Local Decanter Panels, DO & SRT Control, MCC fo SBR Equipment)				1

ICEAS POWER REQUIREMENTS

Max Month	<u>(At Average Aeration Depth)</u>				Kwh/Day
Decant Drive Unit	0.6 BHP	4 run	@	6 Hrs/day	10.7
ICEAS Air Blowers	40.7 BHP	2 run*	@	24 Hrs/day	1,456.4
Waste Sludge Pump	1.9 BHP	8 run	@	1.0 Hrs/day	12.0
				KWH/DAY	1,479.1
			AVERAGE	KWH/HR	61.63

* Shared ICEAS Blowers

SANITAIRE ICEAS Detailed Design Calculations
BOD Removal and Nitrification Process

SANITAIRE Project #26845-16A
Cameron TX

Design Parameters

A. Flow

Design	1,250,000 GPD
Max 4.0hr Cycle Flow	3,750,000 GPD
Max 3.0hr Cycle Flow	5,000,000 GPD

B. Treatment

	Influent Quality	Effluent Requirement
BOD ₅ (20°C), mg/l	250	10
Suspended Solids, mg/l	240	10
TKN, mg/l	40	
NH ₃ -N, mg/l		1
TN, mg/l		
Phosphorus		

C. Environment

Alkalinity (Minimum Requirement)	225 mg/l
Max Wastewater Temperature	20 °C
Min Wastewater Temperature	15 °C
Ambient Air Temperature	20 - 90 °F
Site Elevation	400 ft

D. ICEAS Process Design Criteria

F / M	0.065 BOD ₅ / MLSS / day
SVI (after 30 minutes settling)	150 ml/g
Number of ICEAS Basins	4
Top Water Level	18 ft

E. Cycle Timing

		Normal	Storm
Air-On	min	120	90
Air-Off	min		
Settle	min	60	45
Decant	min	60	45
Total	hrs	4	3

F. Detailed Calculations

Mass of BOD

$$\text{BODL} = \frac{Q \times \text{BODin} \times 8.34}{1,000,000} = \frac{312,500 \times 250 \times 8.34}{1,000,000} = \mathbf{652 \text{ lb/day/basin}}$$

where: BODL = BOD Load (lb/day/basin)

Q = Average Dry Weather Flow per basin (gal/day)

BODin = Influent BOD concentration (mg/l)

1,000,000 = Conversion (l/mg)

8.34 = Conversion (lb/gal)

Mass of Biomass

$$\text{BMOB} = \frac{\text{BOD}_L}{F / M} = \frac{652}{0.0653} = \mathbf{9,972 \text{ lb/basin}}$$

where: BMOB = Mass of Biomass (lb/day/basin)

F / M = Food to Microorganism ratio (day⁻¹)

Volume of Biomass

$$\text{Vbio} = \text{BMOB} \times \text{SVI} = 9,972 \times 2.4 = \mathbf{23,933 \text{ ft}^3/\text{basin}}$$

where: Vbio = Volume of Biomass (ft³/basin)

SVI = Sludge Volume Index (ft³/lb)



Maximum Volume Above Bottom Water Level

Peak Dry Weather Flow:

$$V_{bwld} = \frac{PDWF \times (NCT - NDT)}{24 \times 7.48} = \frac{937,500 \times (4.0 - 1.00)}{24 \times 7.48} = \mathbf{15,667 \text{ ft}^3/\text{basin}}$$

where: V_{bwld} = Maximum Volume Above BWL at Peak Dry Weather Flow (ft^3/basin)

PDWF = Peak Dry Weather Flow (gal/day)

NCT = Normal Cycle Time (hr/cycle)

NDT = Decant Time (hr/cycle)

7.48 = Conversion (gal/ ft^3)

24 = Conversion (hours/day)

Peak Wet Weather Flow:

$$V_{bwls} = \frac{PWWF \times (SCT - SDT)}{24 \times 7.48} = \frac{1,250,000 \times (3.0 - 0.75)}{24 \times 7.48} = \mathbf{15,667 \text{ ft}^3/\text{basin}}$$

where: V_{bwls} = Maximum Volume Above BWL at Peak Wet Weather (Storm) Flow (ft^3/basin)

PWWF = Peak Wet Weather Flow (gal/day)

SCT = Storm Cycle Time (hr/cycle)

SDT = Storm Decant Time (hr/cycle)

MVAB (Maximum Volume Above Bottom Water Level) is larger of Peak Dry Weather and Peak Wet Weather Calculation

$$MVAB = \mathbf{15,667 \text{ ft}^3/\text{basin}}$$

Decant Rates

Peak Dry Weather Flow:

$$PDR = \frac{MVAB \times 7.48}{NDT} + \frac{PDWF}{1,440} = \frac{15,667 \times 7.48}{60.0} + \frac{937,500}{1,440} = \mathbf{2,604 \text{ gal/min}}$$

where: PDR = Normal Decant Rate (gal/min)

NDT = Normal Decant Time (min/cycle)

1440 = Conversion (min/day)

Peak Wet Weather Flow:

$$PWR = \frac{MVAB \times 7.48}{SDT} + \frac{PWWF}{1,440} = \frac{15,667 \times 7.48}{45.0} + \frac{1,250,000}{1,440} = \mathbf{3,472 \text{ gal/min}}$$

where: PWR = Peak Decant Rate (gal/min)

SDT = Storm Decant Time (min/cycle)

Decanter Sizing

Peak Dry Weather Flow:

$$DL_a = \frac{PDR}{\text{Weir Loading Rate} \times 7.48} = \frac{2,604}{20 \times 7.48} = \mathbf{17.41 \text{ ft}}$$

where: DL_a = Decanter Length for Average Dry Weather Flow (ft)
 20 = Weir Loading Rate (ft³/min/ft of decanter weir)

Peak Wet Weather Flow:

$$DL_p = \frac{PWR}{\text{Weir Loading Rate} \times 7.48} = \frac{3,472}{27 \times 7.48} = \mathbf{17.19 \text{ ft}}$$

where: DL_p = Decanter Length for Peak Wet Weather (Storm) Flow (ft)
 27 = Weir Loading Rate (ft³/min/ft of decanter weir)

$$\text{Design Decanter Length} = \mathbf{17.5 \text{ ft}}$$

Basin Working Volume

$$BWV = MVAB + V_{bio} = 15,667 + 23,933 = \mathbf{39,600 \text{ ft}^3/\text{basin}}$$

where: BWV = Basin Working Volume (ft³/basin)

Basin Area

$$BA = \frac{BWV}{TWL - BZ} = \frac{39,600}{18.0 - 3.0} = \mathbf{2,640 \text{ ft}^2/\text{basin}}$$

where: BA = Basin Area (ft²)
 TWL = Top Water Level (ft)
 BZ = Buffer Zone (ft) (Safety Factor)

Sludge Depth

$$SD = \frac{V_{bio}}{BA} = \frac{23,933}{2,640} = \mathbf{9.07 \text{ ft}}$$

where: SD = Sludge Depth (ft)

Decanter Draw Down

$$DD = \frac{MVAB}{BA} = \frac{15,667}{2,640} = \mathbf{5.93 \text{ ft}}$$

where: DD = Draw Down (ft)

Bottom Water Level

$$BWL = SD + BZ = 9.07 + 3.00 = \mathbf{12.07 \text{ ft}}$$

where: BWL = Bottom Water Level (ft)

Vd = Depth of Chemical Sludge for Phosphorus precipitation (ft)

Top Water Level

$$TWL = BWL + DD = 12.07 + 5.93 = \mathbf{18.00 \text{ ft}}$$

where: TWL = Top Water Level (ft)

Hydraulic Retention Time

$$HRT = \frac{BA \times MAFD \times 7.48}{QT}$$

where: HRT = Hydraulic Retention Time (days)

MAFD = Maximum Average Flow Depth (ft)

QT = Fill Rate at Average Dry Weather Flow (gal/day)

$$MAFD = \frac{Q \times [(NCT \times 60) - NDT]}{BA \times 1,440 \times 7.48} + BWL = \frac{312,500 \times [(4.0 \times 60) - 60.0]}{2,640 \times 1,440 \times 7.48} + 12.07 = \mathbf{14.04 \text{ ft}}$$

$$HRT = \frac{2,640 \times 14.04 \times 7.48}{312,500} = \mathbf{0.89 \text{ days}}$$



MLSS Concentration at Bottom Water Level

$$MLSS = \frac{M_{bio} \times 1,000,000}{BWL \times BA \times 62.42} = \frac{9,972 \times 1,000,000}{12.07 \times 2,640 \times 62.42} = \mathbf{5,015 \text{ mg/l}}$$

where: MLSS = Mixed Liquor Suspended Solids concentration at Bottom Water Level (mg/l)
 62.42/1E+06 = Conversion (lb/mg x l/ft³)

Mass of Sludge Produced

$$\Delta M = \left(\frac{Y \times (BOD_{in} - BOD_{out})}{1 + (B \times \theta^{(T-20)} \times SRT)} + Z_{io} + Z_{no} \right) \times \frac{Q \times 8.34}{1,000,000} + C_{sludge}$$

$$\Delta M = \left(\frac{0.6 \times (250 - 10.0)}{1 + (0.07 \times 1.04^{(15-20)} \times 19.3)} + 48.0 + 72.0 \right) \times \frac{3.1E+05 \times 8.34}{1,000,000} + 0 = \mathbf{490 \text{ lb/day/basin}}$$

(Lawrence-McCarty Equation as presented in WEF MOP/8 4th Edition, pg 11-11, Eqn. 11.7)

where: ΔM = Mass of Sludge Produced (lb/day/basin)
 Y = Volatile cell yield (VSS/BOD removed)
 q = Arrhenius Temperature Correction Factor
 B = Decay Rate (day⁻¹)
 BOD_{out} = Anticipated Effluent BOD (mg/l)
 SRT = Solids Retention Time (days)
 Z_{io} = Nonvolatile Influent suspended solids (mg/l)
 Z_{no} = Volatile Non-Biodegradable solids (mg/l)
 T = Minimum Wastewater Temperature (°C)



Volume of Sludge Produced

$$V_{ws} = \frac{\Delta M}{SFws \times 8.34} = \frac{490}{0.0085 \times 8.34} = \mathbf{6,918 \text{ gal/day/basin}}$$

where: V_{ws} = Volume of Waste Sludge (gal/day/basin)
 $SFws$ = Solids Fraction in Waste Sludge
 8.34 = Density (lb/gal)

Observed Yield Factor

$$Y_{obs} = \frac{\Delta M}{BOD_L} = \frac{490}{652} = \mathbf{0.75 \frac{MLSS}{BOD}}$$

Observed Yield Factor (lb/day MLSS/lb/day BODremoved)

Mean Cell Residence Time

$$MCRT = \frac{M_{bio}}{\Delta M + ((Q - V_{ws}) \times TESS \times 8.34 / 1E+06)}$$

$$MCRT = \frac{9,972}{490 + ((312,500 - 6,918) \times 10.0 \times 8.34 / 1,000,000)} = \mathbf{19.3 \text{ days}}$$

where: $MCRT$ = Mean Cell Residence Time (days)
 $TESS$ = Anticipated Effluent Total Suspended Solids (mg/l)
 $8.34E-06$ = Conversion (lb/mg x l/gal)



Sludge Age for Nitrification

Refer to Metcalf and Eddy, Edition IV pages 614 and 705

Constants and Temperature Corrections:

Coefficient	Base Value	Theta	Temperature Corrected	Symbol
Maximum Specific Growth Rate of Nitrifying bacteria, g VSS/g VSS.day	0.75	1.07	0.535	$\mu_{nm}(T)$
Half-Velocity constant for nitrifiers	0.74	1.053	0.572	$K_n(T)$
Nitrifier decay rate	0.08	1.04	0.066	$K_{dn}(T)$
Dissolved Oxygen, mg/l	2		2	DO
Half-Velocity Constant for Dissolved Oxygen, mg/l	0.5		0.5	K_o
Minimum Water Temperature, °C	15		15	T
Safety Factor	2.0		2.0	SF

Calculations:

$$\mu_n = \left(\mu_{nm}(T) \times \frac{TENH_3}{TENH_3 + K_n(T)} \times \frac{DO}{DO + K_o} \right) - K_{dn}(T)$$

$$\mu_n = \left(0.535 \times \frac{1.0}{1.0 + 0.572} \times \frac{2.0}{2.0 + 0.5} \right) - 0.066 = \mathbf{0.206 \text{ days}^{-1}}$$

$$SRT_{min} = \frac{1}{\mu_n} = \frac{1}{0.206} = \mathbf{4.8 \text{ days}}$$

$$SRT_{aerobic} = SRT_{min} \times SF = 4.8 \times 2.0 = \mathbf{9.6 \text{ days}}$$

$$SRT_{overall} = \frac{SRT_{aerobic} \times 24}{TA} = \frac{9.6 \times 24}{12.0} = \mathbf{19.3 \text{ days}}$$

Design sludge age adequate for nitrification.

where: $\mu_{nm}(T)$ = Maximum Temperature Corrected Nitrifier Growth Rate (days^{-1})

μ_n = Specific Nitrifier Growth Rate at Temperature, DO, and Effluent NH_3 (g/g-days)

SRT_{min} = Minimum Sludge age required for Nitrification (days)

$SRT_{aerobic}$ = Design Aerobic Sludge Age (days)

SF = Safety Factor

$SRT_{overall}$ = Sludge Age accounting for entire ICEAS cycle (days)

TA = Aeration Time (hrs/day)

$TENH_3$ = Anticipated Effluent Ammonia (mg/l)

Waste Sludge Pump Capacity

$$WSP = \frac{V_{ws} \times NCT}{24 \times SPT} = \frac{6,918 \times 4.0}{24 \times 10.48} = \mathbf{110 \text{ gal/min}}$$

where: WSP = Waste Sludge Pump Capacity(gal/min)
SPT = Sludge Pumping Time (min/cycle)

SANITAIRE ICEAS Aeration Design Calculations
BOD Removal and Nitrification Process

SANITAIRE Project #26845-16A
Cameron TX

Carbonaceous Oxygen Demand

$$AOR1 = A \times \frac{Q \times BOD_{in}}{1,000,000} \times 8.34 = 1.20 \times \frac{312,500 \times 250}{1,000,000} \times 8.34 = \mathbf{782 \text{ lb/day/basin}}$$

where AOR1 = Actual Oxygen Required for BOD oxidation (lb/day/basin)

A = O₂ / BOD

Q = Average flow (gal/day/basin)

BOD_{in} = Influent BOD received (mg/l)

1,000,000 = Conversion (g x mg)

8.34 = Conversion (lb x gal)

Nitrification Oxygen Demand

$$AOR2 = TKN_{ox} \times 4.60 = 63.3 \times 4.60 = \mathbf{291 \text{ lb/day/basin}}$$

where AOR2 = Actual Oxygen required for Ammonia Oxidation (lb/day/basin)

TKN_{ox} = Nitrogen available for oxidation (lb/day/basin)

Constants

Coefficient	Value	Symbol
VSS/TSS	0.7574	
Sludge N	0.07	N _s
Effluent Dissolved Organic Nitrogen, mg/l	1	EDON
Expected Effluent Ammonium concentration	1	TENH ₃

$$TKN_{ox} = (TKN - EDON - TENH_3 - N_{assim} - N_{part}) \times Q \times 8.34 \div 1,000,000$$

$$TKN_{ox} = (40 - 1 - 1 - 13.17 - 0.53) \times 312,500 \times 8.34 \div 1,000,000 = \mathbf{63.3 \text{ lb/day/basin}}$$

where N_{assim} = Nitrogen assimilated into biomass, (mg/l)

$$N_{assim} = BOD_{in} \times N_s \times Y_{obs} = 250 \times 0.07 \times 0.753 = \mathbf{13.17 \text{ mg/l}}$$

where Y_{obs} = Observed Sludge Yield, (MLSS produced / BOD removed)

$$N_{part} = TESS \times N_s \times VSS/TSS = 10 \times 0.07 \times 0.76 = \mathbf{0.53 \text{ mg/l}}$$

where N_{part} = Nitrogen bound to VSS portion of effluent TSS (mg/l)

TESS = Anticipated Effluent Total Suspended Solids (mg/l)

Total Actual Oxygen Transfer

$$\text{AOR} = \text{AOR1} + \text{AOR2} - \text{AOR3} = 782 + 291 + 0 = \mathbf{1,073 \text{ lb/day}}$$

where AOR = Total Actual Oxygen Required (lb/day/basin)

Total Standard Oxygen Transfer

$$\text{SOR} = \frac{\text{AOR}}{\text{AOR} / \text{SOR}} = \frac{1,073}{0.4455} = \mathbf{2,409 \text{ lb/day/basin}}$$

$$\frac{\text{AOR}}{\text{SOR}} = \frac{\alpha \times \theta^{(\text{T}_{\text{Site}} - 20)} \times (\beta \times C^*_{\text{sat}_{20}} \times P_{\text{site}} / P_{\text{std}} \times C_{\text{surf}_T} / C_{\text{surf}_{20}} - \text{D.O.})}{C^*_{\text{sat}_{20}}}$$

$$\frac{\text{AOR}}{\text{SOR}} = \frac{0.60 \times 1.024^{(20 - 20)} \times (0.95 \times 10.25 \times 14.50 / 14.70 \times 9.07 / 9.07 - 2.0)}{10.25} = \mathbf{0.4455}$$

where SOR = Standard Condition Oxygen Requirement (lb/day/basin)

α = Alpha factor

θ = Temperature coefficient

T_{site} = Water temperature (°C)

β = Beta factor

P_{site} = Site Atmospheric Pressure

P_{std} = Standard atmospheric pressure (psig)

$C^*_{\text{sat}_{20}}$ = Dissolved oxygen solubility at standard conditions (mg/l)

C_{surf_T} = Dissolved oxygen solubility at site water temperature (mg/l)

$C_{\text{surf}_{20}}$ = Dissolved oxygen solubility at 20°C (mg/l)

D.O. = Residual dissolved oxygen concentration (mg/l)

Aeration System Standard Oxygen Transfer Rate

$$\text{SOTR} = \frac{\text{SOR}}{\text{TA}} = \frac{2,409}{12} = \mathbf{201 \text{ lb/hr/basin}}$$

where SOTR = Standard oxygen transfer rate (lb/hr/basin)

TA = Aeration Time, (hrs/day)

Aeration Depth

Average Aeration Depth

$$\text{AADad} = \frac{Q \times [(\text{NCT} \times 60) - (\text{NDT} + \text{NST})]}{2 \times 1,440 \times 7.48 \times \text{BA}} + \text{BWL}$$

$$\text{AADad} = \frac{313,000 \times [(4.0 \times 60) - (60 + 60)]}{2 \times 1,440 \times 7.48 \times 2,640} + 12.07 = \mathbf{12.72 \text{ ft}}$$

where AADad = Average Aeration Depth at Average Dry Weather Flow (gpd)

Q = Average Dry Weather Flow (gpd/basin)

NCT = Normal Cycle Time (hr)

NDT = Normal Decant Time (min)

NST = Normal Settling Time (min)

BA = Basin Area (ft²)

1440 = Conversion (min/day)

2 = Calculate Aeration Depth at Middle of Normal Reaction Phase (NCT - NST - NDT)

7.48 = Conversion (gal/ft³)

Maximum Aeration Depth

$$\text{MADpw} = \frac{\text{PWWF} \times [(\text{SCT} \times 60) - (\text{SDT} + \text{SST})]}{1,440 \times 7.48 \times \text{BA}} + \text{BWL}$$

$$\text{MADpw} = \frac{1,250,000 \times [(3.0 \times 60) - (45 + 45)]}{1,440 \times 7.48 \times 2,640} + 12.07 = \mathbf{16.02 \text{ ft}}$$

where MADpw = Maximum Aeration Depth at Peak Wet Weather Flow (gpd)

PWWF = Peak Wet Weather Flow (gpd/basin)

SCT = Storm Cycle Time (hr)

SDT = Storm Decant Time (min)

SST = Storm Settle time (min)

MAD = Maximum Aeration Depth (ft)

MAD is larger of MADad and MADpw

$$\text{MAD} = \mathbf{16.02 \text{ ft}}$$

Air Flow Requirement

$$\text{Process Air} = \frac{\text{SOTR} \times 10,000}{\rho \times \text{SOTE} \times \text{Opw} \times 60} = \frac{201 \times 10,000}{0.075 \times 26.71 \times 23.2 \times 60} = \mathbf{720 \text{ scfm}}$$

where Process Air = Process air flow requirement (scfm)

ρ = Air density (0.075 lb/day/ft³)

SOTE = Standard Oxygen Transfer Efficiency @ Submergence of 11.72 ft

Opw = Fraction of Oxygen in air by Weight

10,000 = Conversion (100% * 100%)

60 = Conversion (min/hr)

$$\text{Mixing Air} = \text{MI} \times \text{BA} = 0.13 \times 2,640 = \mathbf{330 \text{ scfm}}$$

where

Mixing Air = Mixing air flow requirement (scfm)

MI = recommended air flow per unit area of basin (scfm/ft²)

Blower Unit Capacity

Blower unit capacity (BUC) is the larger of the process air requirement and the mixing air requirement.

Process Air 720 scfm

Mixing Air 330 scfm

Use 1 blower per tank

$$\text{BUC} = \mathbf{720 \text{ scfm}}$$

Blower Pressure

$$\text{psig} = \text{MAD} \times 0.432 + H_L = 16.02 \times 0.432 + 1.00 = \mathbf{8.0 \text{ psig}}$$

where psig = blower pressure (rounded to next psig)

0.432 = water density (psi/ft)

H_L = Cumulative piping and diffuser headloss (psig)

Cameron Wastewater Treatment Plant

Exhibit No. 17 - Sludge Management Plan

Influent Design Flow = 1.25 MGD

Influent BOD Concentration = 180 mg/L

Cameron will utilize digesters prior to sludge dewatering trailers.

Table 1 - Sludge Production

Solids Generated	100% Flow	75% Flow	50% Flow	25% Flow
Influent BOD (lbs)	1,960	1,470	980	490
Digested	685	514	343	171
Dry Sludge (lbs)	240	180	120	60
Wet Sludge Produced (lbs)	3,427	2,570	1,713	857
Wet Sludge Produced (Gal)	411	308	205	103
Dewatered				
Dry Sludge (lbs)	240	180	120	60
Wet Sludge Produced (lbs)	1997	1498	998	499
Wet Sludge Produced (Gal)	239	180	120	60

Assumes 2% Solids from the Digester and 12% from Dewatering Trailers

Sludge will be wasted from the SBR basins. Sludge solids will be stabilized in the digester and then transferred to the Sludge Trailers for further dewatering. Supernatant from the digester and water from the dewater process will be returned to the head of the facility for treatment. The dewatered sludge will be transported by City of Cameron Staff, Registration #22167 to Temple Recycling and Disposal Facility, Permit No. H0692, in Bell County.

DOMESTIC WASTEWATER PERMIT APPLICATION

WORKSHEET 4.0: POLLUTANT ANALYSIS REQUIREMENTS

The following **is required** for facilities with a permitted or proposed flow of **1.0 MGD or greater**, facilities with an approved **pretreatment** program, or facilities classified as a **major** facility. See instructions for further details.

This worksheet is not required minor amendments without renewal.

Section 1. Toxic Pollutants (Instructions Page 78)

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

Grab ☒

Composite ☐

Date and time sample(s) collected: 8/12/2024 from 10:34 to 11:05 AM

Table 4.0(1) – Toxics Analysis

Pollutant	AVG Effluent Conc. (µg/l)	MAX Effluent Conc. (µg/l)	Number of Samples	MAL (µg/l)
Acrylonitrile	<5	<5	2	50
Aldrin	<0.01	<0.01	2	0.01
Aluminum	298	298	2	2.5
Anthracene	<0.952	<0.952	2	10
Antimony	<0.8	<0.8	2	5
Arsenic	2.46	2.46	2	0.5
Barium	72.9	72.9	2	3
Benzene	<1.5	<1.5	2	10
Benzidine	<0.952	<0.952	2	50
Benzo(a)anthracene	<0.952	<0.952	2	5
Benzo(a)pyrene	<0.952	<0.952	2	5
Bis(2-chloroethyl)ether	<0.952	<0.952	2	10
Bis(2-ethylhexyl)phthalate	7.12	7.12	2	10
Bromodichloromethane	<1.5	<1.5	2	10
Bromoform	<1.5	<1.5	2	10
Cadmium	<0.3	<0.3	2	1
Carbon Tetrachloride	<1.5	<1.5	2	2
Carbaryl	<0.01	<0.01	2	5
Chlordane*	0.195	0.195	2	0.2
Chlorobenzene	<1.5	<1.5	2	10

Pollutant	AVG Effluent Conc. (µg/l)	MAX Effluent Conc. (µg/l)	Number of Samples	MAL (µg/l)
Chlorodibromomethane	<1.5	<1.5	2	10
Chloroform	3.28	3.28	2	10
Chlorpyrifos	<0.01	<0.01	2	0.05
Chromium (Total)	2.49	2.49	2	3
Chromium (Tri) (*1)	2.49	2.49	2	N/A
Chromium (Hex)	<3	<3	2	3
Copper	32.7	32.7	2	2
Chrysene	<0.952	<0.952	2	5
p-Chloro-m-Cresol	<1.9	<1.9	2	10
4,6-Dinitro-o-Cresol	<1.9	<1.9	2	50
p-Cresol	11.9	11.9	2	10
Cyanide (*2)	<10	<10	2	10
4,4'- DDD	<0.01	<0.01	2	0.1
4,4'- DDE	<0.01	<0.01	2	0.1
4,4'- DDT	<0.01	<0.01	2	0.02
2,4-D	<0.159	<0.159	2	0.7
Demeton (O and S)	<0.01	<0.01	2	0.20
Diazinon	<0.01	<0.01	2	0.5/0.1
1,2-Dibromoethane	<1.5	<1.5	2	10
m-Dichlorobenzene	<1.5	<1.5	2	10
o-Dichlorobenzene	<1.5	<1.5	2	10
p-Dichlorobenzene	<1.5	<1.5	2	10
3,3'-Dichlorobenzidine	<0.952	<0.952	2	5
1,2-Dichloroethane	<1.5	<1.5	2	10
1,1-Dichloroethylene	<1.5	<1.5	2	10
Dichloromethane	<1.5	<1.5	2	20
1,2-Dichloropropane	<1.5	<1.5	2	10
1,3-Dichloropropene	<1.5	<1.5	2	10
Dicofol	<0.2	<0.2	2	1
Dieldrin	<0.01	<0.01	2	0.02
2,4-Dimethylphenol	<0.952	<0.952	2	10
Di-n-Butyl Phthalate	<2.86	<2.86	2	10
Diuron	<0.0298	<0.0298	2	0.09

Pollutant	AVG Effluent Conc. (µg/l)	MAX Effluent Conc. (µg/l)	Number of Samples	MAL (µg/l)
Endosulfan I (alpha)	<0.01	<0.01	2	0.01
Endosulfan II (beta)	<0.01	<0.01	2	0.02
Endosulfan Sulfate	<0.01	<0.01	2	0.1
Endrin	<0.01	<0.01	2	0.02
Ethylbenzene	<1.5	<1.5	2	10
Fluoride	<100	<100	2	500
Guthion	<0.01	<0.01	2	0.1
Heptachlor	<0.01	<0.01	2	0.01
Heptachlor Epoxide	<0.01	<0.01	2	0.01
Hexachlorobenzene	<0.952	<0.952	2	5
Hexachlorobutadiene	<0.952	<0.952	2	10
Hexachlorocyclohexane (alpha)	<0.01	<0.01	2	0.05
Hexachlorocyclohexane (beta)	<0.01	<0.01	2	0.05
gamma-Hexachlorocyclohexane (Lindane)	<0.01	<0.01	2	0.05
Hexachlorocyclopentadiene	<0.952	<0.952	2	10
Hexachloroethane	<0.952	<0.952	2	20
Hexachlorophene	<0.992	<0.992	2	10
Lead	1.64	1.64	2	0.5
Malathion	<0.01	<0.01	2	0.1
Mercury	<0.0025	<0.0025	2	0.005
Methoxychlor	<0.002	<0.002	2	2
Methyl Ethyl Ketone	<25	<25	2	50
Mirex	<0.01	<0.01	2	0.02
Nickel	2.99	2.99	2	2
Nitrate-Nitrogen	<100	<100	2	100
Nitrobenzene	<0.952	<0.952	2	10
N-Nitrosodiethylamine	<1.9	<1.9	2	20
N-Nitroso-di-n-Butylamine	<0.992	<0.992	2	20
Nonylphenol	<66.7	<66.7	2	333
Parathion (ethyl)	<0.01	<0.01	2	0.1
Pentachlorobenzene	<0.952	<0.952	2	20
Pentachlorophenol	<0.952	<0.952	2	5

Pollutant	AVG Effluent Conc. (µg/l)	MAX Effluent Conc. (µg/l)	Number of Samples	MAL (µg/l)
Phenanthrene	<0.952	<0.952	2	10
Polychlorinated Biphenyls (PCB's) (*3)	<0.1	<0.1	2	0.2
Pyridine	<0.952	<0.952	2	20
Selenium	<2	<2	2	5
Silver	<0.5	<0.5	2	0.5
1,2,4,5-Tetrachlorobenzene	<0.952	<0.952	2	20
1,1,2,2-Tetrachloroethane	<1.5	<1.5	2	10
Tetrachloroethylene	<3	<3	2	10
Thallium	<0.5	<0.5	2	0.5
Toluene	<3	<3	2	10
Toxaphene	<0.3	<0.3	2	0.3
2,4,5-TP (Silvex)	<0.0893	<0.0893	2	0.3
Tributyltin (see instructions for explanation)	N/A	N/A	N/A	0.01
1,1,1-Trichloroethane	<1.5	<1.5	2	10
1,1,2-Trichloroethane	<1.5	<1.5	2	10
Trichloroethylene	<3	<3	2	10
2,4,5-Trichlorophenol	<0.952	<0.952	2	50
TTHM (Total Trihalomethanes)	<3.28	<3.28	2	10
Vinyl Chloride	<1.5	<1.5	2	10
Zinc	98.9	98.9	2	5

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

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

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

Section 2. Priority Pollutants

For pollutants identified in Tables 4.0(2)A-E, indicate type of sample.

Grab ☒

Composite ☐

Date and time sample(s) collected: 8/12/2024 from 10:34 to 11:05 AM

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

Pollutant	AVG Effluent Conc. (µg/l)	MAX Effluent Conc. (µg/l)	Number of Samples	MAL (µg/l)
Antimony	<0.8	<0.8	1	5
Arsenic	2.46	2.46	1	0.5
Beryllium	<0.5	<0.5	1	0.5
Cadmium	<0.3	<0.3	1	1
Chromium (Total)	2.49	2.49	1	3
Chromium (Hex)	<3	<3	1	3
Chromium (Tri) (*1)	2.49	2.49	1	N/A
Copper	32.7	32.7	1	2
Lead	1.64	1.64	1	0.5
Mercury	0.0025	0.0025	1	0.005
Nickel	2.99	2.99	1	2
Selenium	<2	<2	1	5
Silver	<0.5	<0.5	1	0.5
Thallium	<0.5	<0.5	1	0.5
Zinc	98.9	98.9	1	5
Cyanide (*2)	<10	<10	1	10
Phenols, Total	21	21	1	10

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

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

Table 4.0(2)B – Volatile Compounds

Pollutant	AVG Effluent Conc. (µg/l)	MAX Effluent Conc. (µg/l)	Number of Samples	MAL (µg/l)
Acrolein	<25	<25	3	50
Acrylonitrile	<5	<5	3	50
Benzene	<1.5	<1.5	3	10
Bromoform	<1.5	<1.5	3	10
Carbon Tetrachloride	<1.5	<1.5	3	2
Chlorobenzene	<1.5	<1.5	3	10
Chlorodibromomethane	<1.5	<1.5	3	10
Chloroethane	<5	<5	3	50
2-Chloroethylvinyl Ether	<30	<30	3	10
Chloroform	3.28	3.28	3	10
Dichlorobromomethane [Bromodichloromethane]	<1.5	<1.5	3	10
1,1-Dichloroethane	<1.5	<1.5	3	10
1,2-Dichloroethane	<1.5	<1.5	3	10
1,1-Dichloroethylene	<1.5	<1.5	3	10
1,2-Dichloropropane	<1.5	<1.5	3	10
1,3-Dichloropropylene [1,3-Dichloropropene]	<1.5	<1.5	3	10
1,2-Trans-Dichloroethylene	<1.5	<1.5	3	10
Ethylbenzene	<1.5	<1.5	3	10
Methyl Bromide	<5	<5	3	50
Methyl Chloride	<5	<5	3	50
Methylene Chloride	<12.5	<12.5	3	20
1,1,2,2-Tetrachloroethane	<1.5	<1.5	3	10
Tetrachloroethylene	<3	<3	3	10
Toluene	<3	<3	3	10
1,1,1-Trichloroethane	<1.5	<1.5	3	10
1,1,2-Trichloroethane	<1.5	<1.5	3	10
Trichloroethylene			3	10
Vinyl Chloride	<1.5	<1.5	3	10

Table 4.0(2)C – Acid Compounds

Pollutant	AVG Effluent Conc. (µg/l)	MAX Effluent Conc. (µg/l)	Number of Samples	MAL (µg/l)
2-Chlorophenol	<0.952	<0.952	2	10
2,4-Dichlorophenol	<0.952	<0.952	2	10
2,4-Dimethylphenol	<0.952	<0.952	2	10
4,6-Dinitro-o-Cresol	<1.9	<1.9	2	50
2,4-Dinitrophenol	<1.9	<1.9	2	50
2-Nitrophenol	<0.95	<0.95	2	20
4-Nitrophenol	<1.9	<1.9	2	50
P-Chloro-m-Cresol	<1.9	<1.9	2	10
Pentalchlorophenol	<0.952	<0.952	2	5
Phenol	<0.952	<0.952	2	10
2,4,6-Trichlorophenol	<0.952	<0.952	2	10

Table 4.0(2)D – Base/Neutral Compounds

Pollutant	AVG Effluent Conc. (µg/l)	MAX Effluent Conc. (µg/l)	Number of Samples	MAL (µg/l)
Acenaphthene	<0.952	<0.952	2	10
Acenaphthylene	<0.952	<0.952	2	10
Anthracene	<0.952	<0.952	2	10
Benzidine	<0.952	<0.952	2	50
Benzo(a)Anthracene	<0.952	<0.952	2	5
Benzo(a)Pyrene	<0.952	<0.952	2	5
3,4-Benzofluoranthene	<0.952	<0.952	2	10
Benzo(ghi)Perylene	<0.952	<0.952	2	20
Benzo(k)Fluoranthene	<0.952	<0.952	2	5
Bis(2-Chloroethoxy)Methane	<0.952	<0.952	2	10
Bis(2-Chloroethyl)Ether	<0.952	<0.952	2	10
Bis(2-Chloroisopropyl)Ether	<0.952	<0.952	2	10
Bis(2-Ethylhexyl)Phthalate	7.12	7.12	2	10
4-Bromophenyl Phenyl Ether	<0.952	<0.952	2	10
Butyl benzyl Phthalate	<2.86	<2.86	2	10
2-Chloronaphthalene	<0.952	<0.952	2	10
4-Chlorophenyl phenyl ether	<0.952	<0.952	2	10
Chrysene	<0.952	<0.952	2	5
Dibenzo(a,h)Anthracene	<0.952	<0.952	2	5
1,2-(o)Dichlorobenzene	<1.5	<1.5	2	10
1,3-(m)Dichlorobenzene	<1.5	<1.5	2	10
1,4-(p)Dichlorobenzene	<1.5	<1.5	2	10
3,3-Dichlorobenzidine	<0.952	<0.952	2	5
Diethyl Phthalate	<2.86	<2.86	2	10
Dimethyl Phthalate	<2.86	<2.86	2	10
Di-n-Butyl Phthalate	<2.86	<2.86	2	10
2,4-Dinitrotoluene	<0.952	<0.952	2	10
2,6-Dinitrotoluene	<0.952	<0.952	2	10
Di-n-Octyl Phthalate	<0.402	<0.402	2	10
1,2-Diphenylhydrazine (as Azo-benzene)	<0.952	<0.952	2	20
Fluoranthene	<0.952	<0.952	2	10

Pollutant	AVG Effluent Conc. (µg/l)	MAX Effluent Conc. (µg/l)	Number of Samples	MAL (µg/l)
Fluorene	<0.952	<0.952	2	10
Hexachlorobenzene	<0.952	<0.952	2	5
Hexachlorobutadiene	<0.952	<0.952	2	10
Hexachlorocyclo-pentadiene	<0.952	<0.952	2	10
Hexachloroethane	<0.952	<0.952	2	20
Indeno(1,2,3-cd)pyrene	<0.952	<0.952	2	5
Isophorone	<0.952	<0.952	2	10
Naphthalene	<0.952	<0.952	2	10
Nitrobenzene	<0.952	<0.952	2	10
N-Nitrosodimethylamine	<1.9	<1.9	2	50
N-Nitrosodi-n-Propylamine	<0.952	<0.952	2	20
N-Nitrosodiphenylamine	<0.952	<0.952	2	20
Phenanthrene	<0.952	<0.952	2	10
Pyrene	<0.952	<0.952	2	10
1,2,4-Trichlorobenzene	<0.952	<0.952	2	10

Table 4.0(2)E - Pesticides

Pollutant	AVG Effluent Conc. (µg/l)	MAX Effluent Conc. (µg/l)	Number of Samples	MAL (µg/l)
Aldrin	<0.01	<0.01	3	0.01
alpha-BHC (Hexachlorocyclohexane)	<0.01	<0.01	3	0.05
beta-BHC (Hexachlorocyclohexane)	<0.01	<0.01	3	0.05
gamma-BHC (Hexachlorocyclohexane)	<0.01	<0.01	3	0.05
delta-BHC (Hexachlorocyclohexane)	<0.01	<0.01	3	0.05
Chlordane	<0.195	<0.195	3	0.2
4,4-DDT	<0.01	<0.01	3	0.02
4,4-DDE	<0.01	<0.01	3	0.1
4,4,-DDD	<0.01	<0.01	3	0.1
Dieldrin	<0.01	<0.01	3	0.02
Endosulfan I (alpha)	<0.01	<0.01	3	0.01
Endosulfan II (beta)	<0.01	<0.01	3	0.02
Endosulfan Sulfate	<0.01	<0.01	3	0.1
Endrin	<0.01	<0.01	3	0.02
Endrin Aldehyde	<0.01	<0.01	3	0.1
Heptachlor	<0.01	<0.01	3	0.01
Heptachlor Epoxide	<0.01	<0.01	3	0.01
PCB-1242	<0.1	<0.1	3	0.2
PCB-1254	<0.1	<0.1	3	0.2
PCB-1221	<0.1	<0.1	3	0.2
PCB-1232	<0.1	<0.1	3	0.2
PCB-1248	<0.1	<0.1	3	0.2
PCB-1260	<0.1	<0.1	3	0.2
PCB-1016	<0.1	<0.1	3	0.2
Toxaphene	<3.28	<3.28	3	0.3

* For PCBs, if all are non-detects, enter the highest non-detect preceded by a "<".



August 28, 2024

Askarali Karimov
Kasberg, Patrick & Associates, LP
19 North Main Street
Temple, TX 76501
TEL: (979) 412-9919
FAX:
RE: Cameron Permit

Order No.: 2408153

Dear Askarali Karimov:

DHL Analytical, Inc. received 1 sample(s) on 8/12/2024 for the analyses presented in the following report.

There were no problems with the analyses and all data for associated QC met EPA or laboratory specifications except where noted in the Case Narrative and all estimated uncertainties of results are within method specifications.

If you have any questions regarding these tests results, please feel free to call.

Sincerely,

A handwritten signature in red ink, appearing to read "John DuPont".

John DuPont
General Manager

This report was performed under the accreditation of the State of Texas Laboratory Certification Number: T104704211 - TX-C24-00120



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CLIENT: Kasberg, Patrick & Associates, LP
Project: Cameron Permit
Lab Order: 2408153

CASE NARRATIVE

Samples were analyzed using the methods outlined in the following references:

E632, E200.8, E625.1, D5812-96MOD, D7065-17, E624.1, E300 and Standard Methods.

For Diuron-Hexachlorophene analysis an MS/MSD was not performed due to insufficient sample volume. An LCS/LCSD was performed instead.

For Volatiles analysis the sample was diluted prior to analysis due to the nature of the sample (matrix).

All method blanks, laboratory spikes, and/or matrix spikes met quality assurance objectives except where noted in the following. For Volatiles analysis by method E624.1 the matrix spike and matrix spike duplicate had no recoveries for 2-Chloroethylvinylether. These are flagged accordingly in the enclosed QC summary report. The "S" flag denotes spike recovery was outside control limits. The LCS was within control limits for this compound. No further corrective actions were taken.

For Semivolatiles analysis by method E625.1 the matrix spike and matrix spike duplicate recoveries were out of control limits for up to four compounds. In addition, the matrix spike and matrix spike duplicate had the RPD above control limits for Bis(2-chloroisopropyl)ether. These are flagged accordingly. The "S" flag denotes spike recovery was outside control limits and the "R" flag denotes the RPD was outside control limits. The LCS was within control limits for these compounds. No further corrective actions were taken.

For Hexavalent Chromium analysis by method M3500-Cr B the matrix spike duplicate recovery was slightly below control limits. This was due to matrix effect. This is flagged accordingly. The "S" flag denotes spike recovery was outside control limits. The LCS was within control limits. No further corrective actions were taken.

For Semivolatiles analysis by method E625.1 the surrogate recoveries for the method blank were above control limits for three surrogates. These are flagged accordingly. The remaining surrogates were within control limits. No further corrective actions were taken.

The Mercury, Herbicide and Total Phenols analyses were sub-contracted to SPL.

CLIENT: Kasberg, Patrick & Associates, LP
Project: Cameron Permit
Lab Order: 2408153

Work Order Sample Summary

Lab Smp ID	Client Sample ID	Tag Number	Date Collected	Date Recved
2408153-01	Effluent		08/12/24 11:05 AM	08/12/2024

Lab Order: 2408153
Client: Kasberg, Patrick & Associates, LP
Project: Cameron Permit

PREP DATES REPORT

Sample ID	Client Sample ID	Collection Date	Matrix	Test Number	Test Name	Prep Date	Batch ID
2408153-01A	Effluent	08/12/24 11:05 AM	Aqueous	E624_PR	Purge and Trap Water GC/MS	08/12/24 10:00 AM	116680
2408153-01B	Effluent	08/12/24 11:05 AM	Aqueous	E200.8_PR	Aq Digestion for Metals: ICP-MS	08/22/24 06:55 AM	116885
2408153-01C	Effluent	08/12/24 11:05 AM	Aqueous	M4500-CN E	Cyanide Water Prep	08/15/24 09:29 AM	116745
2408153-01D	Effluent	08/12/24 11:05 AM	Aqueous	E300	Anion Preparation	08/13/24 03:43 PM	116715
	Effluent	08/12/24 11:05 AM	Aqueous	E300	Anion Preparation	08/13/24 03:43 PM	116715
	Effluent	08/12/24 11:05 AM	Aqueous	M3500-Cr B	Hexachrom Prep Water	08/12/24 06:23 PM	116690
2408153-01E	Effluent	08/12/24 11:05 AM	Aqueous	E625_PR	Semivol Extraction for 625.1	08/19/24 08:51 AM	116798
	Effluent	08/12/24 11:05 AM	Aqueous	E625_PR	Semivol Extraction for 625.1	08/19/24 08:51 AM	116798
2408153-01F	Effluent	08/12/24 11:05 AM	Aqueous	E625_PR	Aq Prep Sep Funnel: Pest or PCB	08/13/24 08:30 AM	116681
2408153-01G	Effluent	08/12/24 11:05 AM	Aqueous	E625_PR	Aq Prep Sep Funnel: Pest or PCB	08/13/24 08:30 AM	116681
	Effluent	08/12/24 11:05 AM	Aqueous	E625_PR	Aq Prep Sep Funnel: Pest or PCB	08/13/24 08:30 AM	116681
2408153-01H	Effluent	08/12/24 11:05 AM	Aqueous	E632	632 Prep	08/16/24 09:09 AM	116771

Lab Order: 2408153
Client: Kasberg, Patrick & Associates, LP
Project: Cameron Permit

ANALYTICAL DATES REPORT

Sample ID	Client Sample ID	Matrix	Test Number	Test Name	Batch ID	Dilution	Analysis Date	Run ID
2408153-01A	Effluent	Aqueous	E624.1	624.1 Volatiles Water	116680	5	08/13/24 02:16 AM	GCMS5_240812B
2408153-01B	Effluent	Aqueous	E200.8	Total Recoverable Metals: ICP-MS	116885	1	08/23/24 09:56 AM	ICP-MS5_240823A
2408153-01C	Effluent	Aqueous	M4500-CN E	Cyanide - Water Sample	116745	1	08/15/24 04:17 PM	UV/VIS_2_240815D
2408153-01D	Effluent	Aqueous	E300	Anions by IC method - Water	116715	10	08/14/24 04:38 AM	IC2_240813B
	Effluent	Aqueous	E300	Anions by IC method - Water	116715	1	08/13/24 09:08 PM	IC2_240813B
	Effluent	Aqueous	M3500-Cr B	Hexavalent Chromium-Water	116690	1	08/12/24 07:35 PM	UV/VIS_2_240812C
2408153-01E	Effluent	Aqueous	E625.1	625.1 Semivolatile Water	116798	1	08/20/24 01:35 PM	GCMS9_240820A
	Effluent	Aqueous	D7065-17	Nonylphenol in Water by ASTM Method	116798	1	08/20/24 01:35 PM	GCMS9_240820D
2408153-01F	Effluent	Aqueous	E625.1	625.1 PCB by GC/MS	116681	1	08/13/24 02:08 PM	GCMS8_240813A
2408153-01G	Effluent	Aqueous	E625.1	625.1 Pesticide by GC/MS	116681	1	08/13/24 06:03 PM	GCMS10_240813A
	Effluent	Aqueous	D5812-96mod	Dicofol in Water by ASTM Method	116681	1	08/13/24 06:03 PM	GCMS10_240813B
2408153-01H	Effluent	Aqueous	E632	Diuron-Hexachlorophene by LCMS	116771	1	08/16/24 04:43 PM	LCMS2_240816A
2408153-01I	Effluent	Aqueous	E245.7	Mercury Low Level	R134934	1.06	08/16/24 12:19 PM	SUB_240816A
2408153-01J	Effluent	Aqueous	E420.4	Total Phenols Water	R134935	1	08/16/24 09:29 AM	SUB_240816B
2408153-01K	Effluent	Aqueous	E615	Herbicide in Water	R134938	1	08/23/24 02:41 PM	SUB_240823A

DHL Analytical, Inc.

Date: 28-Aug-24

CLIENT: Kasberg, Patrick & Associates, LP
Project: Cameron Permit
Project No:
Lab Order: 2408153

Client Sample ID: Effluent
Lab ID: 2408153-01
Collection Date: 08/12/24 11:05 AM
Matrix: AQUEOUS

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
DIURON-HEXACHLOROPHENE BY LCMS							Analyst: RA
Diuron	<0.0000298	0.0000298	0.0000794	N	mg/L	1	08/16/24 04:43 PM
Hexachlorophene	<0.000992	0.000992	0.00496	N	mg/L	1	08/16/24 04:43 PM
Surr: Carbazole	64.4	0	35-145		%REC	1	08/16/24 04:43 PM
TOTAL RECOVERABLE METALS: ICP-MS							Analyst: SP
Aluminum	0.298	0.00250	0.0300		mg/L	1	08/23/24 09:56 AM
Antimony	<0.000800	0.000800	0.00250		mg/L	1	08/23/24 09:56 AM
Arsenic	0.00246	0.000500	0.00500	J	mg/L	1	08/23/24 09:56 AM
Barium	0.0729	0.00300	0.0100		mg/L	1	08/23/24 09:56 AM
Beryllium	<0.000500	0.000500	0.00100		mg/L	1	08/23/24 09:56 AM
Cadmium	<0.000300	0.000300	0.00100		mg/L	1	08/23/24 09:56 AM
Chromium	0.00249	0.00200	0.00300	J	mg/L	1	08/23/24 09:56 AM
Copper	0.0327	0.00100	0.00200		mg/L	1	08/23/24 09:56 AM
Lead	0.00164	0.000300	0.00100		mg/L	1	08/23/24 09:56 AM
Nickel	0.00299	0.00100	0.00200		mg/L	1	08/23/24 09:56 AM
Selenium	<0.00200	0.00200	0.00500		mg/L	1	08/23/24 09:56 AM
Silver	<0.000500	0.000500	0.00200		mg/L	1	08/23/24 09:56 AM
Thallium	<0.000500	0.000500	0.00100		mg/L	1	08/23/24 09:56 AM
Zinc	0.0989	0.00200	0.00500		mg/L	1	08/23/24 09:56 AM
625.1 PCB BY GC/MS							Analyst: DEW
Aroclor 1016	<0.000100	0.000100	0.000200		mg/L	1	08/13/24 02:08 PM
Aroclor 1221	<0.000100	0.000100	0.000200		mg/L	1	08/13/24 02:08 PM
Aroclor 1232	<0.000100	0.000100	0.000200		mg/L	1	08/13/24 02:08 PM
Aroclor 1242	<0.000100	0.000100	0.000200		mg/L	1	08/13/24 02:08 PM
Aroclor 1248	<0.000100	0.000100	0.000200		mg/L	1	08/13/24 02:08 PM
Aroclor 1254	<0.000100	0.000100	0.000200		mg/L	1	08/13/24 02:08 PM
Aroclor 1260	<0.000100	0.000100	0.000200		mg/L	1	08/13/24 02:08 PM
Total PCBs	<0.000100	0.000100	0.000200		mg/L	1	08/13/24 02:08 PM
Surr: 2-Fluorobiphenyl	88.2	0	43-116		%REC	1	08/13/24 02:08 PM
Surr: 4-Terphenyl-d14	91.0	0	33-141		%REC	1	08/13/24 02:08 PM
625.1 SEMIVOLATILE WATER							Analyst: DEW
Anthracene	<0.000952	0.000952	0.00190		mg/L	1	08/20/24 01:35 PM
Benzidine	<0.000952	0.000952	0.00381		mg/L	1	08/20/24 01:35 PM
Benzo[a]anthracene	<0.000952	0.000952	0.00190		mg/L	1	08/20/24 01:35 PM
Benzo[a]pyrene	<0.000952	0.000952	0.00190		mg/L	1	08/20/24 01:35 PM
Bis(2-chloroethyl)ether	<0.000952	0.000952	0.00190		mg/L	1	08/20/24 01:35 PM
Bis(2-ethylhexyl)phthalate	0.00712	0.00286	0.00571		mg/L	1	08/20/24 01:35 PM
Chrysene	<0.000952	0.000952	0.00190		mg/L	1	08/20/24 01:35 PM

Qualifiers:	*	Value exceeds TCLP Maximum Concentration Level	C	Sample Result or QC discussed in the Case Narrative
	DF	Dilution Factor	E	TPH pattern not Gas or Diesel Range Pattern
	J	Analyte detected between MDL and RL	MDL	Method Detection Limit
	ND	Not Detected at the Method Detection Limit	RL	Reporting Limit
	S	Spike Recovery outside control limits	N	Parameter not NELAP certified

DHL Analytical, Inc.

Date: 28-Aug-24

CLIENT: Kasberg, Patrick & Associates, LP
Project: Cameron Permit
Project No:
Lab Order: 2408153

Client Sample ID: Effluent
Lab ID: 2408153-01
Collection Date: 08/12/24 11:05 AM
Matrix: AQUEOUS

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
625.1 SEMIVOLATILE WATER		E625.1		Analyst: DEW			
4,6-Dinitro-o-cresol	<0.00190	0.00190	0.00381		mg/L	1	08/20/24 01:35 PM
o-Cresol	<0.00190	0.00190	0.00381		mg/L	1	08/20/24 01:35 PM
p-Chloro-m-Cresol	<0.00190	0.00190	0.00381		mg/L	1	08/20/24 01:35 PM
m,p-Cresols	0.0119	0.00190	0.00381		mg/L	1	08/20/24 01:35 PM
3,3'-Dichlorobenzidine	<0.000952	0.000952	0.00476		mg/L	1	08/20/24 01:35 PM
2,4-Dimethylphenol	<0.000952	0.000952	0.00190		mg/L	1	08/20/24 01:35 PM
Di-n-butyl phthalate	<0.00286	0.00286	0.00571		mg/L	1	08/20/24 01:35 PM
Hexachlorobenzene	<0.000952	0.000952	0.00190		mg/L	1	08/20/24 01:35 PM
Hexachlorobutadiene	<0.000952	0.000952	0.00190		mg/L	1	08/20/24 01:35 PM
Hexachlorocyclopentadiene	<0.000952	0.000952	0.00190		mg/L	1	08/20/24 01:35 PM
Hexachloroethane	<0.000952	0.000952	0.00190		mg/L	1	08/20/24 01:35 PM
Nitrobenzene	<0.000952	0.000952	0.00190		mg/L	1	08/20/24 01:35 PM
N-Nitrosodiethylamine	<0.00190	0.00190	0.00381		mg/L	1	08/20/24 01:35 PM
N-Nitrosodi-n-butylamine	<0.000952	0.000952	0.00381		mg/L	1	08/20/24 01:35 PM
Pentachlorobenzene	<0.000952	0.000952	0.00190		mg/L	1	08/20/24 01:35 PM
Pentachlorophenol	<0.000952	0.000952	0.00190		mg/L	1	08/20/24 01:35 PM
Phenanthrene	<0.000952	0.000952	0.00190		mg/L	1	08/20/24 01:35 PM
Pyridine	<0.000952	0.000952	0.00190		mg/L	1	08/20/24 01:35 PM
1,2,4,5-Tetrachlorobenzene	<0.000952	0.000952	0.00190		mg/L	1	08/20/24 01:35 PM
2,4,5-Trichlorophenol	<0.000952	0.000952	0.00190		mg/L	1	08/20/24 01:35 PM
2-Chlorophenol	<0.000952	0.000952	0.00190		mg/L	1	08/20/24 01:35 PM
2,4-Dichlorophenol	<0.000952	0.000952	0.00190		mg/L	1	08/20/24 01:35 PM
2,4-Dinitrophenol	<0.00190	0.00190	0.00381		mg/L	1	08/20/24 01:35 PM
2-Nitrophenol	<0.000952	0.000952	0.00190		mg/L	1	08/20/24 01:35 PM
4-Nitrophenol	<0.00190	0.00190	0.00381		mg/L	1	08/20/24 01:35 PM
Phenol	<0.000952	0.000952	0.00190		mg/L	1	08/20/24 01:35 PM
2,4,6-Trichlorophenol	<0.000952	0.000952	0.00190		mg/L	1	08/20/24 01:35 PM
Acenaphthene	<0.000952	0.000952	0.00190		mg/L	1	08/20/24 01:35 PM
Acenaphthylene	<0.000952	0.000952	0.00190		mg/L	1	08/20/24 01:35 PM
Benzo[b]fluoranthene	<0.000952	0.000952	0.00190		mg/L	1	08/20/24 01:35 PM
Benzo[g,h,i]perylene	<0.000952	0.000952	0.00190		mg/L	1	08/20/24 01:35 PM
Benzo[k]fluoranthene	<0.000952	0.000952	0.00190		mg/L	1	08/20/24 01:35 PM
Bis(2-chloroethoxy)methane	<0.000952	0.000952	0.00190		mg/L	1	08/20/24 01:35 PM
Bis(2-chloroisopropyl)ether	<0.000952	0.000952	0.00190		mg/L	1	08/20/24 01:35 PM
4-Bromophenyl phenyl ether	<0.000952	0.000952	0.00190		mg/L	1	08/20/24 01:35 PM
Butyl benzyl phthalate	<0.00286	0.00286	0.00571		mg/L	1	08/20/24 01:35 PM
2-Chloronaphthalene	<0.000952	0.000952	0.00190		mg/L	1	08/20/24 01:35 PM
4-Chlorophenyl phenyl ether	<0.000952	0.000952	0.00190		mg/L	1	08/20/24 01:35 PM

Qualifiers:	*	Value exceeds TCLP Maximum Concentration Level	C	Sample Result or QC discussed in the Case Narrative
	DF	Dilution Factor	E	TPH pattern not Gas or Diesel Range Pattern
	J	Analyte detected between MDL and RL	MDL	Method Detection Limit
	ND	Not Detected at the Method Detection Limit	RL	Reporting Limit
	S	Spike Recovery outside control limits	N	Parameter not NELAP certified

DHL Analytical, Inc.

Date: 28-Aug-24

CLIENT: Kasberg, Patrick & Associates, LP
Project: Cameron Permit
Project No:
Lab Order: 2408153

Client Sample ID: Effluent
Lab ID: 2408153-01
Collection Date: 08/12/24 11:05 AM
Matrix: AQUEOUS

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
625.1 SEMIVOLATILE WATER		E625.1		Analyst: DEW			
Dibenz[a,h]anthracene	<0.000952	0.000952	0.00190		mg/L	1	08/20/24 01:35 PM
Diethyl phthalate	<0.00286	0.00286	0.00571		mg/L	1	08/20/24 01:35 PM
Dimethyl phthalate	<0.00286	0.00286	0.00571		mg/L	1	08/20/24 01:35 PM
2,4-Dinitrotoluene	<0.000952	0.000952	0.00190		mg/L	1	08/20/24 01:35 PM
2,6-Dinitrotoluene	<0.000952	0.000952	0.00190		mg/L	1	08/20/24 01:35 PM
Di-n-octyl phthalate	0.00402	0.00286	0.00571	J	mg/L	1	08/20/24 01:35 PM
1,2-Diphenylhydrazine	<0.000952	0.000952	0.00190		mg/L	1	08/20/24 01:35 PM
Fluoranthene	<0.000952	0.000952	0.00190		mg/L	1	08/20/24 01:35 PM
Fluorene	<0.000952	0.000952	0.00190		mg/L	1	08/20/24 01:35 PM
Indeno[1,2,3-cd]pyrene	<0.000952	0.000952	0.00190		mg/L	1	08/20/24 01:35 PM
Isophorone	<0.000952	0.000952	0.00190		mg/L	1	08/20/24 01:35 PM
Naphthalene	<0.000952	0.000952	0.00190		mg/L	1	08/20/24 01:35 PM
N-Nitrosodimethylamine	<0.000952	0.000952	0.00190		mg/L	1	08/20/24 01:35 PM
N-Nitrosodi-n-propylamine	<0.000952	0.000952	0.00190		mg/L	1	08/20/24 01:35 PM
N-Nitrosodiphenylamine	<0.000952	0.000952	0.00190		mg/L	1	08/20/24 01:35 PM
Pyrene	<0.000952	0.000952	0.00190		mg/L	1	08/20/24 01:35 PM
1,2,4-Trichlorobenzene	<0.000952	0.000952	0.00190		mg/L	1	08/20/24 01:35 PM
Surr: 2,4,6-Tribromophenol	96.8	0	10-123		%REC	1	08/20/24 01:35 PM
Surr: 2-Fluorobiphenyl	79.8	0	43-116		%REC	1	08/20/24 01:35 PM
Surr: 2-Fluorophenol	41.5	0	21-100		%REC	1	08/20/24 01:35 PM
Surr: 4-Terphenyl-d14	83.0	0	33-141		%REC	1	08/20/24 01:35 PM
Surr: Nitrobenzene-d5	85.3	0	35-115		%REC	1	08/20/24 01:35 PM
Surr: Phenol-d5	24.8	0	10-94		%REC	1	08/20/24 01:35 PM
625.1 PESTICIDE BY GC/MS		E625.1		Analyst: DEW			
4,4'-DDD	<0.0000100	0.0000100	0.0000200		mg/L	1	08/13/24 06:03 PM
4,4'-DDE	<0.0000100	0.0000100	0.0000200		mg/L	1	08/13/24 06:03 PM
4,4'-DDT	<0.0000100	0.0000100	0.0000200		mg/L	1	08/13/24 06:03 PM
Aldrin	<0.0000100	0.0000100	0.0000100		mg/L	1	08/13/24 06:03 PM
alpha-BHC	<0.0000100	0.0000100	0.0000200		mg/L	1	08/13/24 06:03 PM
beta-BHC	<0.0000100	0.0000100	0.0000200		mg/L	1	08/13/24 06:03 PM
Carbaryl	<0.0000100	0.0000100	0.0000300	N	mg/L	1	08/13/24 06:03 PM
Chlordane	0.000195	0.0000600	0.000200	JN	mg/L	1	08/13/24 06:03 PM
Chlorpyrifos	<0.0000100	0.0000100	0.0000300	N	mg/L	1	08/13/24 06:03 PM
delta-BHC	<0.0000100	0.0000100	0.0000200		mg/L	1	08/13/24 06:03 PM
Diazinon	<0.0000100	0.0000100	0.0000300	N	mg/L	1	08/13/24 06:03 PM
Dieldrin	<0.0000100	0.0000100	0.0000200		mg/L	1	08/13/24 06:03 PM
Endosulfan I	<0.0000100	0.0000100	0.0000100		mg/L	1	08/13/24 06:03 PM
Endosulfan II	<0.0000100	0.0000100	0.0000200		mg/L	1	08/13/24 06:03 PM

Qualifiers:	*	Value exceeds TCLP Maximum Concentration Level	C	Sample Result or QC discussed in the Case Narrative
	DF	Dilution Factor	E	TPH pattern not Gas or Diesel Range Pattern
	J	Analyte detected between MDL and RL	MDL	Method Detection Limit
	ND	Not Detected at the Method Detection Limit	RL	Reporting Limit
	S	Spike Recovery outside control limits	N	Parameter not NELAP certified

DHL Analytical, Inc.

Date: 28-Aug-24

CLIENT: Kasberg, Patrick & Associates, LP
Project: Cameron Permit
Project No:
Lab Order: 2408153

Client Sample ID: Effluent
Lab ID: 2408153-01
Collection Date: 08/12/24 11:05 AM
Matrix: AQUEOUS

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
625.1 PESTICIDE BY GC/MS		E625.1		Analyst: DEW			
Endosulfan sulfate	<0.0000100	0.0000100	0.0000200		mg/L	1	08/13/24 06:03 PM
Endrin	<0.0000100	0.0000100	0.0000200		mg/L	1	08/13/24 06:03 PM
Endrin aldehyde	<0.0000100	0.0000100	0.0000200		mg/L	1	08/13/24 06:03 PM
gamma-BHC	<0.0000100	0.0000100	0.0000200		mg/L	1	08/13/24 06:03 PM
Guthion (Azinphosmethyl)	<0.0000100	0.0000100	0.0000300	N	mg/L	1	08/13/24 06:03 PM
Heptachlor	<0.0000100	0.0000100	0.0000100		mg/L	1	08/13/24 06:03 PM
Heptachlor epoxide	<0.0000100	0.0000100	0.0000100		mg/L	1	08/13/24 06:03 PM
Malathion	<0.0000100	0.0000100	0.0000300	N	mg/L	1	08/13/24 06:03 PM
Methoxychlor	<0.0000200	0.0000200	0.0000200	N	mg/L	1	08/13/24 06:03 PM
Mirex	<0.0000100	0.0000100	0.0000200	N	mg/L	1	08/13/24 06:03 PM
Parathion, ethyl	<0.0000100	0.0000100	0.0000300	N	mg/L	1	08/13/24 06:03 PM
Toxaphene	<0.000300	0.000300	0.000300		mg/L	1	08/13/24 06:03 PM
Demeton (O & S)	<0.0000100	0.0000100	0.0000300	N	mg/L	1	08/13/24 06:03 PM
Surr: 2-Fluorobiphenyl	72.6	0	43-116		%REC	1	08/13/24 06:03 PM
Surr: 4-Terphenyl-d14	101	0	33-141		%REC	1	08/13/24 06:03 PM
DICOFOL IN WATER BY ASTM METHOD		D5812-96MOD		Analyst: DEW			
Dicofol	<0.000200	0.000200	0.000400	N	mg/L	1	08/13/24 06:03 PM
NONYLPHENOL IN WATER BY ASTM METHOD		D7065-17		Analyst: DEW			
Nonylphenol	<0.0667	0.0667	0.0952	N	mg/L	1	08/20/24 01:35 PM
624.1 VOLATILES WATER		E624.1		Analyst: JVR			
Acrylonitrile	<0.00500	0.00500	0.0150		mg/L	5	08/13/24 02:16 AM
Benzene	<0.00150	0.00150	0.00500		mg/L	5	08/13/24 02:16 AM
Bromodichloromethane	<0.00150	0.00150	0.00500		mg/L	5	08/13/24 02:16 AM
Bromoform	<0.00150	0.00150	0.00500		mg/L	5	08/13/24 02:16 AM
Carbon tetrachloride	<0.00150	0.00150	0.00500		mg/L	5	08/13/24 02:16 AM
Chlorobenzene	<0.00150	0.00150	0.00500		mg/L	5	08/13/24 02:16 AM
Chlorodibromomethane	<0.00150	0.00150	0.00500		mg/L	5	08/13/24 02:16 AM
Chloroform	0.00328	0.00150	0.00500	J	mg/L	5	08/13/24 02:16 AM
1,2-Dibromoethane	<0.00150	0.00150	0.00500		mg/L	5	08/13/24 02:16 AM
1,3-Dichlorobenzene	<0.00150	0.00150	0.00500		mg/L	5	08/13/24 02:16 AM
1,2-Dichlorobenzene	<0.00150	0.00150	0.00500		mg/L	5	08/13/24 02:16 AM
1,4-Dichlorobenzene	<0.00150	0.00150	0.00500		mg/L	5	08/13/24 02:16 AM
1,2-Dichloroethane	<0.00150	0.00150	0.00500		mg/L	5	08/13/24 02:16 AM
1,1-Dichloroethene	<0.00150	0.00150	0.00500		mg/L	5	08/13/24 02:16 AM
Methylene chloride (DCM)	<0.0125	0.0125	0.0250		mg/L	5	08/13/24 02:16 AM
1,2-Dichloropropane	<0.00150	0.00150	0.00500		mg/L	5	08/13/24 02:16 AM
1,3-Dichloropropene (cis)	<0.00150	0.00150	0.00500		mg/L	5	08/13/24 02:16 AM

Qualifiers:	*	Value exceeds TCLP Maximum Concentration Level	C	Sample Result or QC discussed in the Case Narrative
	DF	Dilution Factor	E	TPH pattern not Gas or Diesel Range Pattern
	J	Analyte detected between MDL and RL	MDL	Method Detection Limit
	ND	Not Detected at the Method Detection Limit	RL	Reporting Limit
	S	Spike Recovery outside control limits	N	Parameter not NELAP certified

DHL Analytical, Inc.

Date: 28-Aug-24

CLIENT: Kasberg, Patrick & Associates, LP
Project: Cameron Permit
Project No:
Lab Order: 2408153

Client Sample ID: Effluent
Lab ID: 2408153-01
Collection Date: 08/12/24 11:05 AM
Matrix: AQUEOUS

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
624.1 VOLATILES WATER		E624.1		Analyst: JVR			
1,3-Dichloropropene (trans)	<0.00150	0.00150	0.00500		mg/L	5	08/13/24 02:16 AM
Ethylbenzene	<0.00150	0.00150	0.00500		mg/L	5	08/13/24 02:16 AM
Methyl ethyl ketone	<0.0250	0.0250	0.0750		mg/L	5	08/13/24 02:16 AM
1,1,2,2-Tetrachloroethane	<0.00150	0.00150	0.00500		mg/L	5	08/13/24 02:16 AM
Tetrachloroethene	<0.00300	0.00300	0.0100		mg/L	5	08/13/24 02:16 AM
Toluene	<0.00300	0.00300	0.0100		mg/L	5	08/13/24 02:16 AM
1,1,1-Trichloroethane	<0.00150	0.00150	0.00500		mg/L	5	08/13/24 02:16 AM
1,1,2-Trichloroethane	<0.00150	0.00150	0.00500		mg/L	5	08/13/24 02:16 AM
Trichloroethene	<0.00300	0.00300	0.00500		mg/L	5	08/13/24 02:16 AM
TTHM (Total Trihalomethanes)	0.00328	0.00150	0.00500	J	mg/L	5	08/13/24 02:16 AM
Vinyl chloride	<0.00150	0.00150	0.00500		mg/L	5	08/13/24 02:16 AM
Acrolein	<0.0250	0.0250	0.0750		mg/L	5	08/13/24 02:16 AM
Chloroethane	<0.00500	0.00500	0.0250		mg/L	5	08/13/24 02:16 AM
2-Chloroethylvinylether	<0.0300	0.0300	0.0500		mg/L	5	08/13/24 02:16 AM
1,1-Dichloroethane	<0.00150	0.00150	0.00500		mg/L	5	08/13/24 02:16 AM
Methyl bromide	<0.00500	0.00500	0.0250		mg/L	5	08/13/24 02:16 AM
Methyl chloride	<0.00500	0.00500	0.0250		mg/L	5	08/13/24 02:16 AM
trans-1,2-Dichloroethylene	<0.00150	0.00150	0.0100		mg/L	5	08/13/24 02:16 AM
Surr: 1,2-Dichloroethane-d4	97.1	0	72-119		%REC	5	08/13/24 02:16 AM
Surr: 4-Bromofluorobenzene	102	0	76-119		%REC	5	08/13/24 02:16 AM
Surr: Dibromofluoromethane	104	0	85-115		%REC	5	08/13/24 02:16 AM
Surr: Toluene-d8	104	0	81-120		%REC	5	08/13/24 02:16 AM
MERCURY LOW LEVEL		E245.7		Analyst: SUB			
Mercury	0.00000250	0.00000128	0.00000532	J	mg/L	1.06	08/16/24 12:19 PM
HERBICIDE IN WATER		E615		Analyst: SUB			
2,4,5-TP (Silvex)	<0.0000893	0.0000893	0.000300		mg/L	1	08/23/24 02:41 PM
2,4-D	<0.000159	0.000159	0.000500		mg/L	1	08/23/24 02:41 PM
TOTAL PHENOLS WATER		E420.4		Analyst: SUB			
Phenols, Total	0.0210	0.00300	0.00500		mg/L	1	08/16/24 09:29 AM
ANIONS BY IC METHOD - WATER		E300		Analyst: KES			
Fluoride	<0.100	0.100	0.400		mg/L	1	08/13/24 09:08 PM
Nitrate-N	<0.100	0.100	0.500		mg/L	1	08/13/24 09:08 PM
HEXAVALENT CHROMIUM-WATER		M3500-CR B		Analyst: JL			
Hexavalent Chromium	<0.00300	0.00300	0.00300		mg/L	1	08/12/24 07:35 PM
Trivalent Chromium	0.00249	0.00200	0.00300	N	mg/L	1	08/12/24 07:35 PM

Qualifiers:	*	Value exceeds TCLP Maximum Concentration Level	C	Sample Result or QC discussed in the Case Narrative
	DF	Dilution Factor	E	TPH pattern not Gas or Diesel Range Pattern
	J	Analyte detected between MDL and RL	MDL	Method Detection Limit
	ND	Not Detected at the Method Detection Limit	RL	Reporting Limit
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DHL Analytical, Inc.**Date:** 28-Aug-24

CLIENT: Kasberg, Patrick & Associates, LP
Project: Cameron Permit
Project No:
Lab Order: 2408153

Client Sample ID: Effluent
Lab ID: 2408153-01
Collection Date: 08/12/24 11:05 AM
Matrix: AQUEOUS

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
CYANIDE - WATER SAMPLE		M4500-CN E				Analyst: SMA	
Cyanide, Amenable to Chlorination	<0.0100	0.0100	0.0200		mg/L	1	08/15/24 04:17 PM
Cyanide, Total	<0.0100	0.0100	0.0200		mg/L	1	08/15/24 04:17 PM

Qualifiers:	*	Value exceeds TCLP Maximum Concentration Level	C	Sample Result or QC discussed in the Case Narrative
	DF	Dilution Factor	E	TPH pattern not Gas or Diesel Range Pattern
	J	Analyte detected between MDL and RL	MDL	Method Detection Limit
	ND	Not Detected at the Method Detection Limit	RL	Reporting Limit
	S	Spike Recovery outside control limits	N	Parameter not NELAP certified

CLIENT: Kasberg, Patrick & Associates, LP
Work Order: 2408153
Project: Cameron Permit

ANALYTICAL QC SUMMARY REPORT**RunID: LCMS2_240816A**

The QC data in batch 116771 applies to the following samples: 2408153-01H

Sample ID: MB-116771	Batch ID: 116771	TestNo: E632	Units: mg/L							
SampType: MBLK	Run ID: LCMS2_240816A	Analysis Date: 8/16/2024 3:58:21 PM	Prep Date: 8/16/2024							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Diuron	<0.0000300	0.0000800								N
Hexachlorophene	<0.00100	0.00500								N
Surr: Carbazole	6.76		10.00		67.6	35	145			

Sample ID: LCS-116771	Batch ID: 116771	TestNo: E632	Units: mg/L							
SampType: LCS	Run ID: LCMS2_240816A	Analysis Date: 8/16/2024 4:09:46 PM	Prep Date: 8/16/2024							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Diuron	0.00160	0.0000800	0.00200	0	79.8	35	145			N
Hexachlorophene	0.00197	0.00500	0.00200	0	98.6	35	145			N
Surr: Carbazole	6.44		10.00		64.4	35	145			

Sample ID: LCSD-116771	Batch ID: 116771	TestNo: E632	Units: mg/L							
SampType: LCSD	Run ID: LCMS2_240816A	Analysis Date: 8/20/2024 11:23:39 AM	Prep Date: 8/16/2024							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Diuron	0.00162	0.0000800	0.00200	0	81.1	35	145	1.60	30	N
Hexachlorophene	0.00189	0.00500	0.00200	0	94.3	35	145	4.47	30	N
Surr: Carbazole	6.21		10.00		62.1	35	145	0	0	

Qualifiers: B Analyte detected in the associated Method Blank
J Analyte detected between MDL and RL
ND Not Detected at the Method Detection Limit
RL Reporting Limit
J Analyte detected between SDL and RL

DF Dilution Factor
MDL Method Detection Limit
R RPD outside accepted control limits
S Spike Recovery outside control limits
N Parameter not NELAP certified

CLIENT: Kasberg, Patrick & Associates, LP
Work Order: 2408153
Project: Cameron Permit

ANALYTICAL QC SUMMARY REPORT

RunID: ICP-MS5_240823A

The QC data in batch 116885 applies to the following samples: 2408153-01B

Sample ID: MB-116885	Batch ID: 116885	TestNo: E200.8	Units: mg/L							
SampType: MBLK	Run ID: ICP-MS5_240823A	Analysis Date: 8/23/2024 9:08:00 AM	Prep Date: 8/22/2024							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Aluminum	<0.0100	0.0300								
Antimony	<0.000800	0.00250								
Arsenic	<0.00200	0.00500								
Barium	<0.00300	0.0100								
Beryllium	<0.000300	0.00100								
Cadmium	<0.000300	0.00100								
Chromium	<0.00200	0.00500								
Copper	<0.00200	0.0100								
Lead	<0.000300	0.00100								
Nickel	<0.00300	0.0100								
Selenium	<0.00200	0.00500								
Silver	<0.00100	0.00200								
Thallium	<0.000500	0.00150								
Zinc	<0.00200	0.00500								

Sample ID: LCS-116885	Batch ID: 116885	TestNo: E200.8	Units: mg/L							
SampType: LCS	Run ID: ICP-MS5_240823A	Analysis Date: 8/23/2024 9:22:00 AM	Prep Date: 8/22/2024							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Aluminum	4.93	0.0300	5.00	0	98.6	85	115			
Antimony	0.199	0.00250	0.200	0	99.3	85	115			
Arsenic	0.195	0.00500	0.200	0	97.7	85	115			
Barium	0.195	0.0100	0.200	0	97.5	85	115			
Beryllium	0.197	0.00100	0.200	0	98.6	85	115			
Cadmium	0.197	0.00100	0.200	0	98.5	85	115			
Chromium	0.195	0.00500	0.200	0	97.7	85	115			
Copper	0.196	0.0100	0.200	0	97.9	85	115			
Lead	0.193	0.00100	0.200	0	96.3	85	115			
Nickel	0.198	0.0100	0.200	0	98.8	85	115			
Selenium	0.199	0.00500	0.200	0	99.5	85	115			
Silver	0.194	0.00200	0.200	0	97.2	85	115			
Thallium	0.186	0.00150	0.200	0	93.1	85	115			
Zinc	0.197	0.00500	0.200	0	98.6	85	115			

Sample ID: LCSD-116885	Batch ID: 116885	TestNo: E200.8	Units: mg/L							
SampType: LCSD	Run ID: ICP-MS5_240823A	Analysis Date: 8/23/2024 9:25:00 AM	Prep Date: 8/22/2024							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Aluminum	4.94	0.0300	5.00	0	98.7	85	115	0.129	15	
Antimony	0.207	0.00250	0.200	0	104	85	115	4.26	15	

Qualifiers: B Analyte detected in the associated Method Blank
J Analyte detected between MDL and RL
ND Not Detected at the Method Detection Limit
RL Reporting Limit
J Analyte detected between SDL and RL

DF Dilution Factor
MDL Method Detection Limit
R RPD outside accepted control limits
S Spike Recovery outside control limits
N Parameter not NELAP certified

CLIENT: Kasberg, Patrick & Associates, LP
Work Order: 2408153
Project: Cameron Permit

ANALYTICAL QC SUMMARY REPORT

RunID: ICP-MS5_240823A

Sample ID: LCSD-116885	Batch ID: 116885	TestNo: E200.8	Units: mg/L
SampType: LCSD	Run ID: ICP-MS5_240823A	Analysis Date: 8/23/2024 9:25:00 AM	Prep Date: 8/22/2024

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.200	0.00500	0.200	0	99.9	85	115	2.17	15	
Barium	0.200	0.0100	0.200	0	100	85	115	2.73	15	
Beryllium	0.199	0.00100	0.200	0	99.5	85	115	0.830	15	
Cadmium	0.201	0.00100	0.200	0	101	85	115	2.05	15	
Chromium	0.198	0.00500	0.200	0	98.8	85	115	1.17	15	
Copper	0.199	0.0100	0.200	0	99.6	85	115	1.78	15	
Lead	0.195	0.00100	0.200	0	97.3	85	115	1.03	15	
Nickel	0.201	0.0100	0.200	0	101	85	115	1.95	15	
Selenium	0.206	0.00500	0.200	0	103	85	115	3.64	15	
Silver	0.202	0.00200	0.200	0	101	85	115	3.64	15	
Thallium	0.190	0.00150	0.200	0	95.1	85	115	2.11	15	
Zinc	0.202	0.00500	0.200	0	101	85	115	2.29	15	

Sample ID: 2408226-02B SD	Batch ID: 116885	TestNo: E200.8	Units: mg/L
SampType: SD	Run ID: ICP-MS5_240823A	Analysis Date: 8/23/2024 9:33:00 AM	Prep Date: 8/22/2024

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Aluminum	0.189	0.150	0	0.194				2.64	10	
Antimony	<0.00400	0.0125	0	0				0	10	
Arsenic	<0.0100	0.0250	0	0				0	10	
Barium	0.109	0.0500	0	0.105				3.85	10	
Beryllium	<0.00150	0.00500	0	0				0	10	
Cadmium	<0.00150	0.00500	0	0				0	10	
Chromium	<0.0100	0.0250	0	0.00277				0	10	
Copper	<0.0100	0.0500	0	0				0	10	
Lead	<0.00150	0.00500	0	0				0	10	
Nickel	<0.0150	0.0500	0	0				0	10	
Selenium	<0.0100	0.0250	0	0.00442				0	10	
Silver	<0.00500	0.0100	0	0				0	10	
Thallium	<0.00250	0.00750	0	0				0	10	
Zinc	<0.0100	0.0250	0	0.00317				0	10	

Sample ID: 2408226-02B PDS	Batch ID: 116885	TestNo: E200.8	Units: mg/L
SampType: PDS	Run ID: ICP-MS5_240823A	Analysis Date: 8/23/2024 9:58:00 AM	Prep Date: 8/22/2024

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Aluminum	5.10	0.0300	5.00	0.195	98.1	75	125			
Antimony	0.203	0.00250	0.200	0	101	75	125			
Arsenic	0.197	0.00500	0.200	0	98.7	75	125			
Barium	0.304	0.0100	0.200	0.105	99.5	75	125			
Beryllium	0.200	0.00100	0.200	0	100	75	125			

Qualifiers: B Analyte detected in the associated Method Blank
J Analyte detected between MDL and RL
ND Not Detected at the Method Detection Limit
RL Reporting Limit
J Analyte detected between SDL and RL
DF Dilution Factor
MDL Method Detection Limit
R RPD outside accepted control limits
S Spike Recovery outside control limits
N Parameter not NELAP certified

CLIENT: Kasberg, Patrick & Associates, LP
Work Order: 2408153
Project: Cameron Permit

ANALYTICAL QC SUMMARY REPORT

RunID: ICP-MS5_240823A

Sample ID: 2408226-02B PDS	Batch ID: 116885	TestNo: E200.8	Units: mg/L							
SampType: PDS	Run ID: ICP-MS5_240823A	Analysis Date: 8/23/2024 9:58:00 AM	Prep Date: 8/22/2024							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Cadmium	0.204	0.00100	0.200	0	102	75	125			
Chromium	0.207	0.00500	0.200	0.00277	102	75	125			
Copper	0.197	0.0100	0.200	0	98.6	75	125			
Lead	0.200	0.00100	0.200	0	100	75	125			
Nickel	0.203	0.0100	0.200	0	102	75	125			
Selenium	0.200	0.00500	0.200	0.00442	97.9	75	125			
Silver	0.177	0.00200	0.200	0	88.4	75	125			
Thallium	0.201	0.00150	0.200	0	100	75	125			
Zinc	0.200	0.00500	0.200	0.00317	98.6	75	125			

Sample ID: 2408226-02B MS	Batch ID: 116885	TestNo: E200.8	Units: mg/L							
SampType: MS	Run ID: ICP-MS5_240823A	Analysis Date: 8/23/2024 10:01:00 AM	Prep Date: 8/22/2024							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Aluminum	5.04	0.0300	5.00	0.195	97.0	70	130			
Antimony	0.197	0.00250	0.200	0	98.7	70	130			
Arsenic	0.193	0.00500	0.200	0	96.7	70	130			
Barium	0.304	0.0100	0.200	0.105	99.5	70	130			
Beryllium	0.194	0.00100	0.200	0	97.1	70	130			
Cadmium	0.196	0.00100	0.200	0	98.2	70	130			
Chromium	0.197	0.00500	0.200	0.00277	96.9	70	130			
Copper	0.191	0.0100	0.200	0	95.3	70	130			
Lead	0.192	0.00100	0.200	0	96.2	70	130			
Nickel	0.191	0.0100	0.200	0	95.6	70	130			
Selenium	0.196	0.00500	0.200	0.00442	95.6	70	130			
Silver	0.192	0.00200	0.200	0	96.2	70	130			
Thallium	0.189	0.00150	0.200	0	94.3	70	130			
Zinc	0.193	0.00500	0.200	0.00317	94.7	70	130			

Sample ID: 2408226-02B MSD	Batch ID: 116885	TestNo: E200.8	Units: mg/L							
SampType: MSD	Run ID: ICP-MS5_240823A	Analysis Date: 8/23/2024 10:04:00 AM	Prep Date: 8/22/2024							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Aluminum	5.10	0.0300	5.00	0.195	98.0	70	130	1.03	15	
Antimony	0.201	0.00250	0.200	0	100	70	130	1.65	15	
Arsenic	0.196	0.00500	0.200	0	98.1	70	130	1.52	15	
Barium	0.307	0.0100	0.200	0.105	101	70	130	1.13	15	
Beryllium	0.196	0.00100	0.200	0	98.0	70	130	1.00	15	
Cadmium	0.198	0.00100	0.200	0	99.1	70	130	0.869	15	
Chromium	0.200	0.00500	0.200	0.00277	98.4	70	130	1.46	15	
Copper	0.193	0.0100	0.200	0	96.6	70	130	1.41	15	

Qualifiers: B Analyte detected in the associated Method Blank
J Analyte detected between MDL and RL
ND Not Detected at the Method Detection Limit
RL Reporting Limit
J Analyte detected between SDL and RL
DF Dilution Factor
MDL Method Detection Limit
R RPD outside accepted control limits
S Spike Recovery outside control limits
N Parameter not NELAP certified

CLIENT: Kasberg, Patrick & Associates, LP
Work Order: 2408153
Project: Cameron Permit

ANALYTICAL QC SUMMARY REPORT

RunID: ICP-MS5_240823A

Sample ID: 2408226-02B MSD	Batch ID: 116885	TestNo: E200.8	Units: mg/L							
SampType: MSD	Run ID: ICP-MS5_240823A	Analysis Date: 8/23/2024 10:04:00 AM	Prep Date: 8/22/2024							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Lead	0.195	0.00100	0.200	0	97.3	70	130	1.16	15	
Nickel	0.194	0.0100	0.200	0	97.0	70	130	1.47	15	
Selenium	0.196	0.00500	0.200	0.00442	95.9	70	130	0.256	15	
Silver	0.194	0.00200	0.200	0	97.2	70	130	0.986	15	
Thallium	0.192	0.00150	0.200	0	95.8	70	130	1.58	15	
Zinc	0.195	0.00500	0.200	0.00317	96.1	70	130	1.39	15	

Qualifiers: B Analyte detected in the associated Method Blank
J Analyte detected between MDL and RL
ND Not Detected at the Method Detection Limit
RL Reporting Limit
J Analyte detected between SDL and RL

DF Dilution Factor
MDL Method Detection Limit
R RPD outside accepted control limits
S Spike Recovery outside control limits
N Parameter not NELAP certified

CLIENT: Kasberg, Patrick & Associates, LP
Work Order: 2408153
Project: Cameron Permit

ANALYTICAL QC SUMMARY REPORT

RunID: GCMS10_240813A

The QC data in batch 116681 applies to the following samples: 2408153-01F, 2408153-01G

Sample ID: LCS-116681	Batch ID: 116681	TestNo: E625.1	Units: mg/L							
SampType: LCS	Run ID: GCMS10_240813A	Analysis Date: 8/13/2024 2:47:00 PM	Prep Date: 8/12/2024							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
4,4´-DDD	0.000326	0.0000200	0.000400	0	81.5	0.1	135			
4,4´-DDE	0.000323	0.0000200	0.000400	0	80.8	19	120			
4,4´-DDT	0.000342	0.0000200	0.000400	0	85.6	0.1	171			
Aldrin	0.000284	0.0000100	0.000400	0	71.0	7	152			
alpha-BHC	0.000303	0.0000200	0.000400	0	75.6	42	108			
beta-BHC	0.000313	0.0000200	0.000400	0	78.2	42	131			
Carbaryl	0.000396	0.0000300	0.000400	0	99.0	38	168			N
Chlorpyrifos	0.000394	0.0000300	0.000400	0	98.4	42	131			N
delta-BHC	0.000312	0.0000200	0.000400	0	78.0	0.1	120			
Diazinon	0.000354	0.0000300	0.000400	0	88.5	52	120			N
Dieldrin	0.000306	0.0000200	0.000400	0	76.5	44	119			
Endosulfan I	0.000318	0.0000100	0.000400	0	79.4	47	128			
Endosulfan II	0.000315	0.0000200	0.000400	0	78.7	52	125			
Endosulfan sulfate	0.000341	0.0000200	0.000400	0	85.2	0.1	120			
Endrin	0.000357	0.0000200	0.000400	0	89.4	50	151			
Endrin aldehyde	0.000214	0.0000200	0.000400	0	53.6	0.1	189			
gamma-BHC	0.000286	0.0000200	0.000400	0	71.6	41	111			
Guthion (Azinphosmethyl)	0.000381	0.0000300	0.000400	0	95.1	44	193			N
Heptachlor	0.000296	0.0000100	0.000400	0	73.9	0.1	172			
Heptachlor epoxide	0.000324	0.0000100	0.000400	0	81.0	71	120			
Malathion	0.000481	0.0000300	0.000400	0	120	56	161			N
Methoxychlor	0.000369	0.0000200	0.000400	0	92.1	38	156			N
Mirex	0.000268	0.0000200	0.000400	0	66.9	27	131			N
Parathion, ethyl	0.000409	0.0000300	0.000400	0	102	13	184			N
Demeton (O & S)	0.000357	0.0000300	0.000400	0	89.3	28	154			N
Surr: 2-Fluorobiphenyl	3.03		4.000		75.7	43	116			
Surr: 4-Terphenyl-d14	3.79		4.000		94.8	33	141			

Sample ID: LCSD-116681	Batch ID: 116681	TestNo: E625.1	Units: mg/L							
SampType: LCSD	Run ID: GCMS10_240813A	Analysis Date: 8/13/2024 3:15:00 PM	Prep Date: 8/12/2024							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
4,4´-DDD	0.000351	0.0000200	0.000400	0	87.9	0.1	135	7.49	50	
4,4´-DDE	0.000344	0.0000200	0.000400	0	85.9	19	120	6.14	50	
4,4´-DDT	0.000378	0.0000200	0.000400	0	94.4	0.1	171	9.88	50	
Aldrin	0.000275	0.0000100	0.000400	0	68.8	7	152	3.21	50	
alpha-BHC	0.000315	0.0000200	0.000400	0	78.8	42	108	4.03	50	
beta-BHC	0.000341	0.0000200	0.000400	0	85.2	42	131	8.68	50	
Carbaryl	0.000406	0.0000300	0.000400	0	102	38	168	2.51	50	N
Chlorpyrifos	0.000408	0.0000300	0.000400	0	102	42	131	3.59	50	N

Qualifiers: B Analyte detected in the associated Method Blank DF Dilution Factor
J Analyte detected between MDL and RL MDL Method Detection Limit
ND Not Detected at the Method Detection Limit R RPD outside accepted control limits
RL Reporting Limit S Spike Recovery outside control limits
J Analyte detected between SDL and RL N Parameter not NELAP certified

CLIENT: Kasberg, Patrick & Associates, LP
Work Order: 2408153
Project: Cameron Permit

ANALYTICAL QC SUMMARY REPORT

RunID: GCMS10_240813A

Sample ID: LCSD-116681	Batch ID: 116681	TestNo: E625.1	Units: mg/L							
SampType: LCSD	Run ID: GCMS10_240813A	Analysis Date: 8/13/2024 3:15:00 PM	Prep Date: 8/12/2024							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
delta-BHC	0.000334	0.0000200	0.000400	0	83.5	0.1	120	6.81	50	
Diazinon	0.000387	0.0000300	0.000400	0	96.8	52	120	8.87	50	N
Dieldrin	0.000348	0.0000200	0.000400	0	86.9	44	119	12.8	50	
Endosulfan I	0.000343	0.0000100	0.000400	0	85.8	47	128	7.68	50	
Endosulfan II	0.000352	0.0000200	0.000400	0	87.9	52	125	11.1	50	
Endosulfan sulfate	0.000362	0.0000200	0.000400	0	90.6	0.1	120	6.12	50	
Endrin	0.000384	0.0000200	0.000400	0	96.0	50	151	7.21	50	
Endrin aldehyde	0.000240	0.0000200	0.000400	0	60.1	0.1	189	11.5	50	
gamma-BHC	0.000292	0.0000200	0.000400	0	73.0	41	111	1.95	50	
Guthion (Azinphosmethyl)	0.000420	0.0000300	0.000400	0	105	44	193	9.78	50	N
Heptachlor	0.000286	0.0000100	0.000400	0	71.4	0.1	172	3.43	50	
Heptachlor epoxide	0.000348	0.0000100	0.000400	0	87.0	71	120	7.13	50	
Malathion	0.000527	0.0000300	0.000400	0	132	56	161	9.12	50	N
Methoxychlor	0.000395	0.0000200	0.000400	0	98.7	38	156	6.85	50	N
Mirex	0.000281	0.0000200	0.000400	0	70.1	27	131	4.71	50	N
Parathion, ethyl	0.000431	0.0000300	0.000400	0	108	13	184	5.21	50	N
Demeton (O & S)	0.000384	0.0000300	0.000400	0	96.0	28	154	7.18	50	N
Surr: 2-Fluorobiphenyl	2.91		4.000		72.7	43	116	0	0	
Surr: 4-Terphenyl-d14	3.89		4.000		97.1	33	141	0	0	

Sample ID: MB-116681	Batch ID: 116681	TestNo: E625.1	Units: mg/L							
SampType: MBLK	Run ID: GCMS10_240813A	Analysis Date: 8/13/2024 5:07:00 PM	Prep Date: 8/12/2024							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
4,4´-DDD	<0.0000100	0.0000200								
4,4´-DDE	<0.0000100	0.0000200								
4,4´-DDT	<0.0000100	0.0000200								
Aldrin	<0.0000100	0.0000100								
alpha-BHC	<0.0000100	0.0000200								
beta-BHC	<0.0000100	0.0000200								
Carbaryl	<0.0000100	0.0000300								N
Chlordane	<0.0000600	0.000200								N
Chlorpyrifos	<0.0000100	0.0000300								N
delta-BHC	<0.0000100	0.0000200								
Diazinon	<0.0000100	0.0000300								N
Dieldrin	<0.0000100	0.0000200								
Endosulfan I	<0.0000100	0.0000100								
Endosulfan II	<0.0000100	0.0000200								
Endosulfan sulfate	<0.0000100	0.0000200								
Endrin	<0.0000100	0.0000200								
Endrin aldehyde	<0.0000100	0.0000200								

Qualifiers: B Analyte detected in the associated Method Blank
J Analyte detected between MDL and RL
ND Not Detected at the Method Detection Limit
RL Reporting Limit
J Analyte detected between SDL and RL
DF Dilution Factor
MDL Method Detection Limit
R RPD outside accepted control limits
S Spike Recovery outside control limits
N Parameter not NELAP certified

CLIENT: Kasberg, Patrick & Associates, LP
Work Order: 2408153
Project: Cameron Permit

ANALYTICAL QC SUMMARY REPORT

RunID: GCMS10_240813A

Sample ID: MB-116681	Batch ID: 116681	TestNo: E625.1	Units: mg/L							
SampType: MBLK	Run ID: GCMS10_240813A	Analysis Date: 8/13/2024 5:07:00 PM	Prep Date: 8/12/2024							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
gamma-BHC	<0.0000100	0.0000200								
Guthion (Azinphosmethyl)	<0.0000100	0.0000300								N
Heptachlor	<0.0000100	0.0000100								
Heptachlor epoxide	<0.0000100	0.0000100								
Malathion	<0.0000100	0.0000300								N
Methoxychlor	<0.0000200	0.0000200								N
Mirex	<0.0000100	0.0000200								N
Parathion, ethyl	<0.0000100	0.0000300								N
Toxaphene	<0.000300	0.000300								
Demeton (O & S)	<0.0000100	0.0000300								N
Surr: 2-Fluorobiphenyl	2.92		4.000		73.0	43	116			
Surr: 4-Terphenyl-d14	3.84		4.000		96.0	33	141			

Qualifiers: B Analyte detected in the associated Method Blank
J Analyte detected between MDL and RL
ND Not Detected at the Method Detection Limit
RL Reporting Limit
J Analyte detected between SDL and RL

DF Dilution Factor
MDL Method Detection Limit
R RPD outside accepted control limits
S Spike Recovery outside control limits
N Parameter not NELAP certified

CLIENT: Kasberg, Patrick & Associates, LP
Work Order: 2408153
Project: Cameron Permit

ANALYTICAL QC SUMMARY REPORT

RunID: GCMS10_240813B

The QC data in batch 116681 applies to the following samples: 2408153-01F, 2408153-01G

Sample ID: LCS-116681-DICO	Batch ID: 116681	TestNo: D5812-96mod	Units: mg/L							
SampType: LCS	Run ID: GCMS10_240813B	Analysis Date: 8/13/2024 4:40:00 PM	Prep Date: 8/12/2024							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Dicofol	0.000930	0.000400	0.00100	0	93.0	22	180			N

Sample ID: MB-116681	Batch ID: 116681	TestNo: D5812-96mod	Units: mg/L							
SampType: MBLK	Run ID: GCMS10_240813B	Analysis Date: 8/13/2024 5:07:00 PM	Prep Date: 8/12/2024							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Dicofol	<0.000200	0.000400								N

Qualifiers:	B	Analyte detected in the associated Method Blank	DF	Dilution Factor
	J	Analyte detected between MDL and RL	MDL	Method Detection Limit
	ND	Not Detected at the Method Detection Limit	R	RPD outside accepted control limits
	RL	Reporting Limit	S	Spike Recovery outside control limits
	J	Analyte detected between SDL and RL	N	Parameter not NELAP certified

CLIENT: Kasberg, Patrick & Associates, LP
Work Order: 2408153
Project: Cameron Permit

ANALYTICAL QC SUMMARY REPORT

RunID: GCMS8_240813A

The QC data in batch 116681 applies to the following samples: 2408153-01F, 2408153-01G

Sample ID: LCS-116681-PCB	Batch ID: 116681	TestNo: E625.1	Units: mg/L							
SampType: LCS	Run ID: GCMS8_240813A	Analysis Date: 8/13/2024 12:37:00 PM	Prep Date: 8/12/2024							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Aroclor 1016	0.00355	0.000200	0.00400	0	88.7	37	130			
Aroclor 1260	0.00342	0.000200	0.00400	0	85.5	19	130			
Total PCBs	0.00697	0.000200	0.00800	0	87.1	19	130			
Surr: 2-Fluorobiphenyl	3.61		4.000		90.3	43	116			
Surr: 4-Terphenyl-d14	3.78		4.000		94.4	33	141			

Sample ID: MB-116681	Batch ID: 116681	TestNo: E625.1	Units: mg/L							
SampType: MBLK	Run ID: GCMS8_240813A	Analysis Date: 8/13/2024 1:08:00 PM	Prep Date: 8/12/2024							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Aroclor 1016	<0.000100	0.000200								
Aroclor 1221	<0.000100	0.000200								
Aroclor 1232	<0.000100	0.000200								
Aroclor 1242	<0.000100	0.000200								
Aroclor 1248	<0.000100	0.000200								
Aroclor 1254	<0.000100	0.000200								
Aroclor 1260	<0.000100	0.000200								
Total PCBs	<0.000100	0.000200								
Surr: 2-Fluorobiphenyl	3.32		4.000		82.9	43	116			
Surr: 4-Terphenyl-d14	3.62		4.000		90.5	33	141			

Qualifiers: B Analyte detected in the associated Method Blank
J Analyte detected between MDL and RL
ND Not Detected at the Method Detection Limit
RL Reporting Limit
J Analyte detected between SDL and RL
DF Dilution Factor
MDL Method Detection Limit
R RPD outside accepted control limits
S Spike Recovery outside control limits
N Parameter not NELAP certified

CLIENT: Kasberg, Patrick & Associates, LP
Work Order: 2408153
Project: Cameron Permit

ANALYTICAL QC SUMMARY REPORT

RunID: GCMS9_240820A

The QC data in batch 116798 applies to the following samples: 2408153-01E

Sample ID: LCS-116798	Batch ID: 116798	TestNo: E625.1	Units: mg/L
SampType: LCS	Run ID: GCMS9_240820A	Analysis Date: 8/20/2024 10:38:00 AM	Prep Date: 8/19/2024

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzidine	0.0143	0.00400	0.0400	0	35.7	5	125			
Benzo[a]anthracene	0.0344	0.00200	0.0400	0	86.0	33	143			
Benzo[a]pyrene	0.0385	0.00200	0.0400	0	96.2	17	163			
Chrysene	0.0365	0.00200	0.0400	0	91.2	17	168			
2,4-Dimethylphenol	0.0312	0.00200	0.0400	0	78.1	32	120			
4,6-Dinitro-o-cresol	0.0404	0.00400	0.0400	0	101	10	181			
m,p-Cresols	0.0246	0.00400	0.0400	0	61.4	10	125			
o-Cresol	0.0263	0.00400	0.0400	0	65.7	25	125			
p-Chloro-m-Cresol	0.0337	0.00400	0.0400	0	84.4	22	147			
Hexachlorobenzene	0.0340	0.00200	0.0400	0	85.0	10	152			
Hexachlorobutadiene	0.0289	0.00200	0.0400	0	72.2	24	120			
Hexachloroethane	0.0307	0.00200	0.0400	0	76.8	40	120			
Nitrobenzene	0.0345	0.00200	0.0400	0	86.4	35	180			
N-Nitrosodiethylamine	0.0318	0.00400	0.0400	0	79.4	20	125			
N-Nitrosodi-n-butylamine	0.0383	0.00400	0.0400	0	95.6	20	125			
Pentachlorobenzene	0.0324	0.00200	0.0400	0	81.0	40	140			
Pentachlorophenol	0.0309	0.00200	0.0400	0	77.2	14	176			
Phenanthrene	0.0334	0.00200	0.0400	0	83.5	54	120			
Pyridine	0.0163	0.00200	0.0400	0	40.7	10	75			
1,2,4,5-Tetrachlorobenzene	0.0314	0.00200	0.0400	0	78.6	30	140			
2,4,5-Trichlorophenol	0.0370	0.00200	0.0400	0	92.6	25	125			
2-Chlorophenol	0.0292	0.00200	0.0400	0	73.1	23	134			
2,4-Dichlorophenol	0.0327	0.00200	0.0400	0	81.6	39	135			
2,4-Dinitrophenol	0.0328	0.00400	0.0400	0	81.9	10	191			
2-Nitrophenol	0.0350	0.00200	0.0400	0	87.6	29	182			
4-Nitrophenol	0.0216	0.00400	0.0400	0	53.9	10	132			
Phenol	0.0144	0.00200	0.0400	0	36.0	5	120			
2,4,6-Trichlorophenol	0.0355	0.00200	0.0400	0	88.7	37	144			
Acenaphthene	0.0343	0.00200	0.0400	0	85.7	47	145			
Acenaphthylene	0.0330	0.00200	0.0400	0	82.5	33	145			
Anthracene	0.0345	0.00200	0.0400	0	86.3	27	133			
Benzo[b]fluoranthene	0.0388	0.00200	0.0400	0	97.0	24	159			
Benzo[g,h,i]perylene	0.0395	0.00200	0.0400	0	98.8	10	219			
Benzo[k]fluoranthene	0.0352	0.00200	0.0400	0	88.0	11	162			
Bis(2-chloroethoxy)methane	0.0327	0.00200	0.0400	0	81.7	33	184			
Bis(2-chloroethyl)ether	0.0356	0.00200	0.0400	0	89.0	12	158			
Bis(2-chloroisopropyl)ether	0.0294	0.00200	0.0400	0	73.6	36	166			
Bis(2-ethylhexyl)phthalate	0.0432	0.00600	0.0400	0	108	10	158			
4-Bromophenyl phenyl ether	0.0347	0.00200	0.0400	0	86.8	53	127			
Butyl benzyl phthalate	0.0403	0.00600	0.0400	0	101	10	152			

Qualifiers:	B	Analyte detected in the associated Method Blank	DF	Dilution Factor
	J	Analyte detected between MDL and RL	MDL	Method Detection Limit
	ND	Not Detected at the Method Detection Limit	R	RPD outside accepted control limits
	RL	Reporting Limit	S	Spike Recovery outside control limits
	J	Analyte detected between SDL and RL	N	Parameter not NELAP certified

CLIENT: Kasberg, Patrick & Associates, LP
Work Order: 2408153
Project: Cameron Permit

ANALYTICAL QC SUMMARY REPORT

RunID: GCMS9_240820A

Sample ID: LCS-116798	Batch ID: 116798	TestNo: E625.1	Units: mg/L							
SampType: LCS	Run ID: GCMS9_240820A	Analysis Date: 8/20/2024 10:38:00 AM	Prep Date: 8/19/2024							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

2-Chloronaphthalene	0.0334	0.00200	0.0400	0	83.6	60	120			
4-Chlorophenyl phenyl ether	0.0356	0.00200	0.0400	0	88.9	25	158			
Dibenz[a,h]anthracene	0.0393	0.00200	0.0400	0	98.2	10	125			
3,3'-Dichlorobenzidine	0.0340	0.00500	0.0400	0	85.1	10	262			
Diethyl phthalate	0.0389	0.00600	0.0400	0	97.2	10	120			
Dimethyl phthalate	0.0364	0.00600	0.0400	0	91.0	10	120			
Di-n-butyl phthalate	0.0407	0.00600	0.0400	0	102	10	120			
2,4-Dinitrotoluene	0.0371	0.00200	0.0400	0	92.8	39	139			
2,6-Dinitrotoluene	0.0366	0.00200	0.0400	0	91.4	50	158			
Di-n-octyl phthalate	0.0396	0.00600	0.0400	0	99.1	10	146			
1,2-Diphenylhydrazine	0.0338	0.00200	0.0400	0	84.5	40	140			
Fluoranthene	0.0376	0.00200	0.0400	0	94.0	26	137			
Fluorene	0.0370	0.00200	0.0400	0	92.6	59	121			
Hexachlorocyclopentadiene	0.0336	0.00200	0.0400	0	84.1	8	130			
Indeno[1,2,3-cd]pyrene	0.0380	0.00200	0.0400	0	95.1	10	171			
Isophorone	0.0328	0.00200	0.0400	0	82.1	21	196			
Naphthalene	0.0314	0.00200	0.0400	0	78.6	21	133			
N-Nitrosodimethylamine	0.0152	0.00200	0.0400	0	38.0	10	125			
N-Nitrosodi-n-propylamine	0.0336	0.00200	0.0400	0	84.0	10	230			
N-Nitrosodiphenylamine	0.0357	0.00200	0.0400	0	89.3	20	125			
Pyrene	0.0365	0.00200	0.0400	0	91.4	52	120			
1,2,4-Trichlorobenzene	0.0311	0.00200	0.0400	0	77.8	44	142			
Surr: 2,4,6-Tribromophenol	71.4		80.00		89.2	10	123			
Surr: 2-Fluorobiphenyl	58.8		80.00		73.5	43	116			
Surr: 2-Fluorophenol	44.2		80.00		55.2	21	100			
Surr: 4-Terphenyl-d14	65.8		80.00		82.2	33	141			
Surr: Nitrobenzene-d5	67.8		80.00		84.8	35	115			
Surr: Phenol-d5	26.4		80.00		33.0	10	94			

Sample ID: MB-116798	Batch ID: 116798	TestNo: E625.1	Units: mg/L							
SampType: MBLK	Run ID: GCMS9_240820A	Analysis Date: 8/20/2024 12:06:00 PM	Prep Date: 8/19/2024							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Benzidine	<0.00100	0.00400								
Benzo[a]anthracene	<0.00100	0.00200								
Benzo[a]pyrene	<0.00100	0.00200								
Chrysene	<0.00100	0.00200								
2,4-Dimethylphenol	<0.00100	0.00200								
4,6-Dinitro-o-cresol	<0.00200	0.00400								
m,p-Cresols	<0.00200	0.00400								
o-Cresol	<0.00200	0.00400								

Qualifiers: B Analyte detected in the associated Method Blank
J Analyte detected between MDL and RL
ND Not Detected at the Method Detection Limit
RL Reporting Limit
J Analyte detected between SDL and RL
DF Dilution Factor
MDL Method Detection Limit
R RPD outside accepted control limits
S Spike Recovery outside control limits
N Parameter not NELAP certified

CLIENT: Kasberg, Patrick & Associates, LP
Work Order: 2408153
Project: Cameron Permit

ANALYTICAL QC SUMMARY REPORT

RunID: GCMS9_240820A

Sample ID: MB-116798	Batch ID: 116798	TestNo: E625.1	Units: mg/L							
SampType: MBLK	Run ID: GCMS9_240820A	Analysis Date: 8/20/2024 12:06:00 PM	Prep Date: 8/19/2024							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

p-Chloro-m-Cresol	<0.00200	0.00400
Hexachlorobenzene	<0.00100	0.00200
Hexachlorobutadiene	<0.00100	0.00200
Hexachloroethane	<0.00100	0.00200
Nitrobenzene	<0.00100	0.00200
N-Nitrosodiethylamine	<0.00200	0.00400
N-Nitrosodi-n-butylamine	<0.00100	0.00400
Pentachlorobenzene	<0.00100	0.00200
Pentachlorophenol	<0.00100	0.00200
Phenanthrene	<0.00100	0.00200
Pyridine	<0.00100	0.00200
1,2,4,5-Tetrachlorobenzene	<0.00100	0.00200
2,4,5-Trichlorophenol	<0.00100	0.00200
2-Chlorophenol	<0.00100	0.00200
2,4-Dichlorophenol	<0.00100	0.00200
2,4-Dinitrophenol	<0.00200	0.00400
2-Nitrophenol	<0.00100	0.00200
4-Nitrophenol	<0.00200	0.00400
Phenol	<0.00100	0.00200
2,4,6-Trichlorophenol	<0.00100	0.00200
Acenaphthene	<0.00100	0.00200
Acenaphthylene	<0.00100	0.00200
Anthracene	<0.00100	0.00200
Benzo[b]fluoranthene	<0.00100	0.00200
Benzo[g,h,i]perylene	<0.00100	0.00200
Benzo[k]fluoranthene	<0.00100	0.00200
Bis(2-chloroethoxy)methane	<0.00100	0.00200
Bis(2-chloroethyl)ether	<0.00100	0.00200
Bis(2-chloroisopropyl)ether	<0.00100	0.00200
Bis(2-ethylhexyl)phthalate	<0.00300	0.00600
4-Bromophenyl phenyl ether	<0.00100	0.00200
Butyl benzyl phthalate	<0.00300	0.00600
2-Chloronaphthalene	<0.00100	0.00200
4-Chlorophenyl phenyl ether	<0.00100	0.00200
Dibenz[a,h]anthracene	<0.00100	0.00200
3,3'-Dichlorobenzidine	<0.00100	0.00500
Diethyl phthalate	<0.00300	0.00600
Dimethyl phthalate	<0.00300	0.00600
Di-n-butyl phthalate	<0.00300	0.00600
2,4-Dinitrotoluene	<0.00100	0.00200
2,6-Dinitrotoluene	<0.00100	0.00200

Qualifiers: B Analyte detected in the associated Method Blank
J Analyte detected between MDL and RL
ND Not Detected at the Method Detection Limit
RL Reporting Limit
J Analyte detected between SDL and RL

DF Dilution Factor
MDL Method Detection Limit
R RPD outside accepted control limits
S Spike Recovery outside control limits
N Parameter not NELAP certified

CLIENT: Kasberg, Patrick & Associates, LP
Work Order: 2408153
Project: Cameron Permit

ANALYTICAL QC SUMMARY REPORT

RunID: GCMS9_240820A

Sample ID: MB-116798	Batch ID: 116798	TestNo: E625.1	Units: mg/L							
SampType: MBLK	Run ID: GCMS9_240820A	Analysis Date: 8/20/2024 12:06:00 PM	Prep Date: 8/19/2024							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Di-n-octyl phthalate	<0.00300	0.00600								
1,2-Diphenylhydrazine	<0.00100	0.00200								
Fluoranthene	<0.00100	0.00200								
Fluorene	<0.00100	0.00200								
Hexachlorocyclopentadiene	<0.00100	0.00200								
Indeno[1,2,3-cd]pyrene	<0.00100	0.00200								
Isophorone	<0.00100	0.00200								
Naphthalene	<0.00100	0.00200								
N-Nitrosodimethylamine	<0.00100	0.00200								
N-Nitrosodi-n-propylamine	<0.00100	0.00200								
N-Nitrosodiphenylamine	<0.00100	0.00200								
Pyrene	<0.00100	0.00200								
1,2,4-Trichlorobenzene	<0.00100	0.00200								
Surr: 2,4,6-Tribromophenol	116		80.00		145	10	123			S
Surr: 2-Fluorobiphenyl	94.6		80.00		118	43	116			S
Surr: 2-Fluorophenol	60.4		80.00		75.5	21	100			
Surr: 4-Terphenyl-d14	98.8		80.00		124	33	141			
Surr: Nitrobenzene-d5	109		80.00		137	35	115			S
Surr: Phenol-d5	33.2		80.00		41.5	10	94			

Sample ID: 2408124-01AMS	Batch ID: 116798	TestNo: E625.1	Units: mg/L							
SampType: MS	Run ID: GCMS9_240820A	Analysis Date: 8/20/2024 4:56:00 PM	Prep Date: 8/19/2024							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Benzidine	<0.00936	0.0375	0.375	0	0	5	125			S
Benzo[a]anthracene	0.359	0.0187	0.375	0	96.0	33	143			
Benzo[a]pyrene	0.390	0.0187	0.375	0	104	17	163			
Chrysene	0.351	0.0187	0.375	0	93.8	17	168			
2,4-Dimethylphenol	0.336	0.0187	0.375	0	89.8	32	120			
4,6-Dinitro-o-cresol	0.392	0.0375	0.375	0	105	10	181			
m,p-Cresols	0.334	0.0375	0.375	0	89.3	10	125			
o-Cresol	0.325	0.0375	0.375	0	86.6	25	125			
p-Chloro-m-Cresol	0.351	0.0375	0.375	0	93.7	22	147			
Hexachlorobenzene	0.331	0.0187	0.375	0	88.2	10	152			
Hexachlorobutadiene	0.310	0.0187	0.375	0	82.7	24	120			
Hexachloroethane	0.322	0.0187	0.375	0	86.1	40	120			
Nitrobenzene	0.370	0.0187	0.375	0	98.8	35	180			
N-Nitrosodiethylamine	0.344	0.0375	0.375	0	91.8	20	125			
N-Nitrosodi-n-butylamine	0.366	0.0375	0.375	0	97.6	20	125			
Pentachlorobenzene	0.339	0.0187	0.375	0	90.4	40	140			
Pentachlorophenol	0.316	0.0187	0.375	0	84.3	14	176			

Qualifiers:	B	Analyte detected in the associated Method Blank	DF	Dilution Factor
	J	Analyte detected between MDL and RL	MDL	Method Detection Limit
	ND	Not Detected at the Method Detection Limit	R	RPD outside accepted control limits
	RL	Reporting Limit	S	Spike Recovery outside control limits
	J	Analyte detected between SDL and RL	N	Parameter not NELAP certified

CLIENT: Kasberg, Patrick & Associates, LP
Work Order: 2408153
Project: Cameron Permit

ANALYTICAL QC SUMMARY REPORT

RunID: GCMS9_240820A

Sample ID: 2408124-01AMS	Batch ID: 116798	TestNo: E625.1	Units: mg/L
SampType: MS	Run ID: GCMS9_240820A	Analysis Date: 8/20/2024 4:56:00 PM	Prep Date: 8/19/2024

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Phenanthrene	0.325	0.0187	0.375	0	86.9	54	120			
Pyridine	0.290	0.0187	0.375	0	77.5	10	75			S
1,2,4,5-Tetrachlorobenzene	0.312	0.0187	0.375	0	83.2	30	140			
2,4,5-Trichlorophenol	0.370	0.0187	0.375	0	98.7	25	125			
2-Chlorophenol	0.330	0.0187	0.375	0	88.0	23	134			
2,4-Dichlorophenol	0.352	0.0187	0.375	0	93.9	39	135			
2,4-Dinitrophenol	0.372	0.0375	0.375	0	99.4	10	191			
2-Nitrophenol	0.368	0.0187	0.375	0	98.2	29	182			
4-Nitrophenol	0.382	0.0375	0.375	0	102	10	132			
Phenol	0.325	0.0187	0.375	0	86.9	5	120			
2,4,6-Trichlorophenol	0.370	0.0187	0.375	0	98.9	37	144			
Acenaphthene	0.336	0.0187	0.375	0	89.6	47	145			
Acenaphthylene	0.316	0.0187	0.375	0	84.2	33	145			
Anthracene	0.323	0.0187	0.375	0	86.4	27	133			
Benzo[b]fluoranthene	0.398	0.0187	0.375	0	106	24	159			
Benzo[g,h,i]perylene	0.405	0.0187	0.375	0	108	10	219			
Benzo[k]fluoranthene	0.357	0.0187	0.375	0	95.2	11	162			
Bis(2-chloroethoxy)methane	0.330	0.0187	0.375	0	88.2	33	184			
Bis(2-chloroethyl)ether	1.30	0.0187	0.375	0	348	12	158			S
Bis(2-chloroisopropyl)ether	0.308	0.0187	0.375	0	82.4	36	166			
Bis(2-ethylhexyl)phthalate	0.445	0.0562	0.375	0	119	10	158			
4-Bromophenyl phenyl ether	0.344	0.0187	0.375	0	91.8	53	127			
Butyl benzyl phthalate	0.411	0.0562	0.375	0	110	10	152			
2-Chloronaphthalene	0.338	0.0187	0.375	0	90.2	60	120			
4-Chlorophenyl phenyl ether	0.341	0.0187	0.375	0	91.0	25	158			
Dibenz[a,h]anthracene	0.400	0.0187	0.375	0	107	10	125			
3,3'-Dichlorobenzidine	0.127	0.0468	0.375	0	34.0	10	262			
Diethyl phthalate	0.358	0.0562	0.375	0	95.7	10	120			
Dimethyl phthalate	0.350	0.0562	0.375	0	93.4	10	120			
Di-n-butyl phthalate	0.396	0.0562	0.375	0	106	10	120			
2,4-Dinitrotoluene	0.345	0.0187	0.375	0	92.0	39	139			
2,6-Dinitrotoluene	0.354	0.0187	0.375	0	94.5	50	158			
Di-n-octyl phthalate	0.422	0.0562	0.375	0	113	10	146			
1,2-Diphenylhydrazine	0.331	0.0187	0.375	0	88.5	40	140			
Fluoranthene	0.383	0.0187	0.375	0	102	26	137			
Fluorene	0.354	0.0187	0.375	0	94.4	59	121			
Hexachlorocyclopentadiene	0.369	0.0187	0.375	0	98.4	8	130			
Indeno[1,2,3-cd]pyrene	0.390	0.0187	0.375	0	104	10	171			
Isophorone	0.336	0.0187	0.375	0	89.7	21	196			
Naphthalene	0.309	0.0187	0.375	0	82.5	21	133			
N-Nitrosodimethylamine	0.319	0.0187	0.375	0	85.0	10	125			

Qualifiers:	B	Analyte detected in the associated Method Blank	DF	Dilution Factor
	J	Analyte detected between MDL and RL	MDL	Method Detection Limit
	ND	Not Detected at the Method Detection Limit	R	RPD outside accepted control limits
	RL	Reporting Limit	S	Spike Recovery outside control limits
	J	Analyte detected between SDL and RL	N	Parameter not NELAP certified

CLIENT: Kasberg, Patrick & Associates, LP
Work Order: 2408153
Project: Cameron Permit

ANALYTICAL QC SUMMARY REPORT

RunID: GCMS9_240820A

Sample ID: 2408124-01AMS	Batch ID: 116798	TestNo: E625.1	Units: mg/L							
SampType: MS	Run ID: GCMS9_240820A	Analysis Date: 8/20/2024 4:56:00 PM	Prep Date: 8/19/2024							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

N-Nitrosodi-n-propylamine	0.350	0.0187	0.375	0	93.4	10	230			
N-Nitrosodiphenylamine	0.346	0.0187	0.375	0	92.5	20	125			
Pyrene	0.346	0.0187	0.375	0	92.5	52	120			
1,2,4-Trichlorobenzene	0.315	0.0187	0.375	0	84.0	44	142			
Surr: 2,4,6-Tribromophenol	704		749.1		94.0	10	123			
Surr: 2-Fluorobiphenyl	612		749.1		81.8	43	116			
Surr: 2-Fluorophenol	678		749.1		90.5	21	100			
Surr: 4-Terphenyl-d14	622		749.1		83.0	33	141			
Surr: Nitrobenzene-d5	682		749.1		91.0	35	115			
Surr: Phenol-d5	596		749.1		79.5	10	94			

Sample ID: 2408124-01AMSD	Batch ID: 116798	TestNo: E625.1	Units: mg/L							
SampType: MSD	Run ID: GCMS9_240820A	Analysis Date: 8/20/2024 5:18:00 PM	Prep Date: 8/19/2024							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Benzidine	<0.0100	0.0400	0.400	0	0	5	125	0	50	S
Benzo[a]anthracene	0.382	0.0200	0.400	0	95.4	33	143	6.05	50	
Benzo[a]pyrene	0.425	0.0200	0.400	0	106	17	163	8.57	50	
Chrysene	0.382	0.0200	0.400	0	95.6	17	168	8.53	50	
2,4-Dimethylphenol	0.360	0.0200	0.400	0	90.0	32	120	6.85	50	
4,6-Dinitro-o-cresol	0.420	0.0400	0.400	0	105	10	181	6.81	50	
m,p-Cresols	0.351	0.0400	0.400	0	87.8	10	125	5.00	50	
o-Cresol	0.345	0.0400	0.400	0	86.2	25	125	6.00	50	
p-Chloro-m-Cresol	0.370	0.0400	0.400	0	92.4	22	147	5.23	50	
Hexachlorobenzene	0.365	0.0200	0.400	0	91.2	10	152	9.80	50	
Hexachlorobutadiene	0.336	0.0200	0.400	0	83.9	24	120	8.02	50	
Hexachloroethane	0.350	0.0200	0.400	0	87.4	40	120	8.13	50	
Nitrobenzene	0.400	0.0200	0.400	0	100	35	180	7.88	50	
N-Nitrosodiethylamine	0.369	0.0400	0.400	0	92.2	20	125	7.01	50	
N-Nitrosodi-n-butylamine	0.392	0.0400	0.400	0	97.9	20	125	6.88	50	
Pentachlorobenzene	0.370	0.0200	0.400	0	92.6	40	140	8.98	50	
Pentachlorophenol	0.334	0.0200	0.400	0	83.5	14	176	5.56	50	
Phenanthrene	0.354	0.0200	0.400	0	88.4	54	120	8.29	39	
Pyridine	0.315	0.0200	0.400	0	78.7	10	75	8.11	50	S
1,2,4,5-Tetrachlorobenzene	0.336	0.0200	0.400	0	84.0	30	140	7.47	50	
2,4,5-Trichlorophenol	0.392	0.0200	0.400	0	97.9	25	125	5.76	50	
2-Chlorophenol	0.352	0.0200	0.400	0	88.0	23	134	6.63	50	
2,4-Dichlorophenol	0.377	0.0200	0.400	0	94.2	39	135	6.90	50	
2,4-Dinitrophenol	0.392	0.0400	0.400	0	98.0	10	191	5.06	50	
2-Nitrophenol	0.400	0.0200	0.400	0	100	29	182	8.39	50	
4-Nitrophenol	0.403	0.0400	0.400	0	101	10	132	5.34	50	

Qualifiers: B Analyte detected in the associated Method Blank DF Dilution Factor
J Analyte detected between MDL and RL MDL Method Detection Limit
ND Not Detected at the Method Detection Limit R RPD outside accepted control limits
RL Reporting Limit S Spike Recovery outside control limits
J Analyte detected between SDL and RL N Parameter not NELAP certified

CLIENT: Kasberg, Patrick & Associates, LP
Work Order: 2408153
Project: Cameron Permit

ANALYTICAL QC SUMMARY REPORT

RunID: GCMS9_240820A

Sample ID: 2408124-01AMSD	Batch ID: 116798	TestNo: E625.1	Units: mg/L
SampType: MSD	Run ID: GCMS9_240820A	Analysis Date: 8/20/2024 5:18:00 PM	Prep Date: 8/19/2024

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Phenol	0.345	0.0200	0.400	0	86.3	5	120	5.83	50	
2,4,6-Trichlorophenol	0.397	0.0200	0.400	0	99.2	37	144	6.93	50	
Acenaphthene	0.363	0.0200	0.400	0	90.8	47	145	7.85	48	
Acenaphthylene	0.342	0.0200	0.400	0	85.4	33	145	7.93	50	
Anthracene	0.355	0.0200	0.400	0	88.8	27	133	9.37	50	
Benzo[b]fluoranthene	0.423	0.0200	0.400	0	106	24	159	6.20	50	
Benzo[g,h,i]perylene	0.446	0.0200	0.400	0	112	10	219	9.71	50	
Benzo[k]fluoranthene	0.394	0.0200	0.400	0	98.4	11	162	9.82	50	
Bis(2-chloroethoxy)methane	0.361	0.0200	0.400	0	90.2	33	184	8.82	50	
Bis(2-chloroethyl)ether	1.28	0.0200	0.400	0	320	12	158	1.90	50	S
Bis(2-chloroisopropyl)ether	0.0300	0.0200	0.400	0	7.50	36	166	165	50	SR
Bis(2-ethylhexyl)phthalate	0.480	0.0600	0.400	0	120	10	158	7.45	50	
4-Bromophenyl phenyl ether	0.378	0.0200	0.400	0	94.4	53	127	9.36	43	
Butyl benzyl phthalate	0.438	0.0600	0.400	0	110	10	152	6.44	50	
2-Chloronaphthalene	0.365	0.0200	0.400	0	91.3	60	120	7.84	24	
4-Chlorophenyl phenyl ether	0.366	0.0200	0.400	0	91.4	25	158	7.12	50	
Dibenz[a,h]anthracene	0.438	0.0200	0.400	0	110	10	125	9.21	50	
3,3'-Dichlorobenzidine	0.161	0.0500	0.400	0	40.4	10	262	23.6	50	
Diethyl phthalate	0.384	0.0600	0.400	0	95.9	10	120	6.84	50	
Dimethyl phthalate	0.375	0.0600	0.400	0	93.8	10	120	7.00	50	
Di-n-butyl phthalate	0.428	0.0600	0.400	0	107	10	120	7.75	47	
2,4-Dinitrotoluene	0.367	0.0200	0.400	0	91.7	39	139	6.25	42	
2,6-Dinitrotoluene	0.382	0.0200	0.400	0	95.5	50	158	7.63	48	
Di-n-octyl phthalate	0.455	0.0600	0.400	0	114	10	146	7.68	50	
1,2-Diphenylhydrazine	0.362	0.0200	0.400	0	90.6	40	140	8.92	50	
Fluoranthene	0.414	0.0200	0.400	0	103	26	137	7.60	50	
Fluorene	0.381	0.0200	0.400	0	95.4	59	121	7.58	38	
Hexachlorocyclopentadiene	0.431	0.0200	0.400	0	108	8	130	15.6	50	
Indeno[1,2,3-cd]pyrene	0.429	0.0200	0.400	0	107	10	171	9.46	50	
Isophorone	0.361	0.0200	0.400	0	90.2	21	196	7.19	50	
Naphthalene	0.335	0.0200	0.400	0	83.9	21	133	8.26	50	
N-Nitrosodimethylamine	0.350	0.0200	0.400	0	87.4	10	125	9.30	50	
N-Nitrosodi-n-propylamine	0.374	0.0200	0.400	0	93.4	10	230	6.63	50	
N-Nitrosodiphenylamine	0.378	0.0200	0.400	0	94.4	20	125	8.66	50	
Pyrene	0.370	0.0200	0.400	0	92.6	52	120	6.68	49	
1,2,4-Trichlorobenzene	0.340	0.0200	0.400	0	85.0	44	142	7.70	50	
Surr: 2,4,6-Tribromophenol	762		800.0		95.2	10	123	0	0	
Surr: 2-Fluorobiphenyl	672		800.0		84.0	43	116	0	0	
Surr: 2-Fluorophenol	732		800.0		91.5	21	100	0	0	
Surr: 4-Terphenyl-d14	658		800.0		82.2	33	141	0	0	
Surr: Nitrobenzene-d5	738		800.0		92.2	35	115	0	0	

Qualifiers:	B	Analyte detected in the associated Method Blank	DF	Dilution Factor
	J	Analyte detected between MDL and RL	MDL	Method Detection Limit
	ND	Not Detected at the Method Detection Limit	R	RPD outside accepted control limits
	RL	Reporting Limit	S	Spike Recovery outside control limits
	J	Analyte detected between SDL and RL	N	Parameter not NELAP certified

CLIENT: Kasberg, Patrick & Associates, LP
Work Order: 2408153
Project: Cameron Permit

ANALYTICAL QC SUMMARY REPORT

RunID: GCMS9_240820A

Sample ID: 2408124-01AMSD	Batch ID: 116798	TestNo: E625.1	Units: mg/L							
SampType: MSD	Run ID: GCMS9_240820A	Analysis Date: 8/20/2024 5:18:00 PM	Prep Date: 8/19/2024							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: Phenol-d5	638		800.0		79.8	10	94	0	0	

Qualifiers: B Analyte detected in the associated Method Blank
J Analyte detected between MDL and RL
ND Not Detected at the Method Detection Limit
RL Reporting Limit
J Analyte detected between SDL and RL

DF Dilution Factor
MDL Method Detection Limit
R RPD outside accepted control limits
S Spike Recovery outside control limits
N Parameter not NELAP certified

CLIENT: Kasberg, Patrick & Associates, LP
Work Order: 2408153
Project: Cameron Permit

ANALYTICAL QC SUMMARY REPORT

RunID: GCMS9_240820D

The QC data in batch 116798 applies to the following samples: 2408153-01E

Sample ID: LCS-116798-NP	Batch ID: 116798	TestNo: D7065-17	Units: mg/L							
SampType: LCS	Run ID: GCMS9_240820D	Analysis Date: 8/20/2024 11:22:00 AM	Prep Date: 8/19/2024							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Nonylphenol	0.814	0.100	1.00	0	81.4	40	140			N
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Sample ID: MB-116798	Batch ID: 116798	TestNo: D7065-17	Units: mg/L							
SampType: MBLK	Run ID: GCMS9_240820D	Analysis Date: 8/20/2024 12:06:00 PM	Prep Date: 8/19/2024							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Nonylphenol	<0.0700	0.100								N
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CLIENT: Kasberg, Patrick & Associates, LP
Work Order: 2408153
Project: Cameron Permit

ANALYTICAL QC SUMMARY REPORT

RunID: GCMS5_240812B

The QC data in batch 116680 applies to the following samples: 2408153-01A

Sample ID: LCS-116680	Batch ID: 116680	TestNo: E624.1	Units: mg/L							
SampType: LCS	Run ID: GCMS5_240812B	Analysis Date: 8/12/2024 11:38:00 AM	Prep Date: 8/12/2024							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.0251	0.00100	0.0232	0	108	65	135			
Carbon tetrachloride	0.0238	0.00100	0.0232	0	103	70	130			
Chlorobenzene	0.0233	0.00100	0.0232	0	101	35	135			
Chloroform	0.0238	0.00100	0.0232	0	102	70	135			
Chlorodibromomethane	0.0238	0.00100	0.0232	0	103	70	135			
1,2-Dibromoethane	0.0231	0.00100	0.0232	0	99.4	60	140			
1,2-Dichloroethane	0.0231	0.00100	0.0232	0	99.5	70	130			
1,1-Dichloroethene	0.0242	0.00100	0.0232	0	104	50	150			
Methyl ethyl ketone	0.128	0.0150	0.116	0	111	60	140			
Tetrachloroethene	0.0246	0.00200	0.0232	0	106	70	130			
Trichloroethene	0.0247	0.00100	0.0232	0	107	65	135			
1,1,1-Trichloroethane	0.0232	0.00100	0.0232	0	99.8	70	130			
TTHM (Total Trihalomethanes)	0.0951	0.00100	0.0928	0	102	60	140			
Vinyl chloride	0.0265	0.00100	0.0232	0	114	5	195			
Acrolein	0.0449	0.0150	0.0580	0	77.3	60	140			
Acrylonitrile	0.0512	0.00300	0.0464	0	110	60	140			
1,1,2,2-Tetrachloroethane	0.0217	0.00100	0.0232	0	93.4	60	140			
Bromoform	0.0239	0.00100	0.0232	0	103	65	135			
Chloroethane	0.0229	0.00500	0.0232	0	98.9	40	160			
2-Chloroethylvinylether	0.0170	0.0100	0.0232	0	73.1	5	225			
Bromodichloromethane	0.0236	0.00100	0.0232	0	102	65	135			
1,1-Dichloroethane	0.0257	0.00100	0.0232	0	111	70	130			
1,2-Dichloropropane	0.0270	0.00100	0.0232	0	116	35	165			
1,3-Dichloropropene (cis)	0.0243	0.00100	0.0232	0	105	25	175			
1,3-Dichloropropene (trans)	0.0239	0.00100	0.0232	0	103	50	150			
Ethylbenzene	0.0232	0.00100	0.0232	0	100	60	140			
Methyl bromide	0.0195	0.00500	0.0232	0	84.0	15	185			
Methyl chloride	0.0319	0.00500	0.0232	0	138	5	205			
Methylene chloride (DCM)	0.0246	0.00500	0.0232	0	106	60	140			
Toluene	0.0240	0.00200	0.0232	0	104	70	130			
trans-1,2-Dichloroethylene	0.0249	0.00200	0.0232	0	107	70	130			
1,1,2-Trichloroethane	0.0241	0.00100	0.0232	0	104	70	130			
1,2-Dichlorobenzene	0.0225	0.00100	0.0232	0	97.1	65	135			
1,3-Dichlorobenzene	0.0222	0.00100	0.0232	0	95.7	70	130			
1,4-Dichlorobenzene	0.0222	0.00100	0.0232	0	95.7	65	135			
Surr: 1,2-Dichloroethane-d4	183		200.0		91.3	72	119			
Surr: 4-Bromofluorobenzene	185		200.0		92.4	76	119			
Surr: Dibromofluoromethane	196		200.0		98.1	85	115			
Surr: Toluene-d8	195		200.0		97.3	81	120			

Qualifiers:	B	Analyte detected in the associated Method Blank	DF	Dilution Factor
	J	Analyte detected between MDL and RL	MDL	Method Detection Limit
	ND	Not Detected at the Method Detection Limit	R	RPD outside accepted control limits
	RL	Reporting Limit	S	Spike Recovery outside control limits
	J	Analyte detected between SDL and RL	N	Parameter not NELAP certified

CLIENT: Kasberg, Patrick & Associates, LP
Work Order: 2408153
Project: Cameron Permit

ANALYTICAL QC SUMMARY REPORT

RunID: GCMS5_240812B

Sample ID: MB-116680	Batch ID: 116680	TestNo: E624.1	Units: mg/L
SampType: MBLK	Run ID: GCMS5_240812B	Analysis Date: 8/12/2024 12:30:00 PM	Prep Date: 8/12/2024

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	<0.000300	0.00100								
Carbon tetrachloride	<0.000300	0.00100								
Chlorobenzene	<0.000300	0.00100								
Chloroform	<0.000300	0.00100								
Chlorodibromomethane	<0.000300	0.00100								
1,2-Dibromoethane	<0.000300	0.00100								
1,2-Dichloroethane	<0.000300	0.00100								
1,1-Dichloroethene	<0.000300	0.00100								
Methyl ethyl ketone	<0.00500	0.0150								
Tetrachloroethene	<0.000600	0.00200								
Trichloroethene	<0.000600	0.00100								
1,1,1-Trichloroethane	<0.000300	0.00100								
TTHM (Total Trihalomethanes)	<0.000300	0.00100								
Vinyl chloride	<0.000300	0.00100								
Acrolein	<0.00500	0.0150								
Acrylonitrile	<0.00100	0.00300								
1,1,2,2-Tetrachloroethane	<0.000300	0.00100								
Bromoform	<0.000300	0.00100								
Chloroethane	<0.00100	0.00500								
2-Chloroethylvinylether	<0.00600	0.0100								
Bromodichloromethane	<0.000300	0.00100								
1,1-Dichloroethane	<0.000300	0.00100								
1,2-Dichloropropane	<0.000300	0.00100								
1,3-Dichloropropene (cis)	<0.000300	0.00100								
1,3-Dichloropropene (trans)	<0.000300	0.00100								
Ethylbenzene	<0.000300	0.00100								
Methyl bromide	<0.00100	0.00500								
Methyl chloride	<0.00100	0.00500								
Methylene chloride (DCM)	<0.00250	0.00500								
Toluene	<0.000600	0.00200								
trans-1,2-Dichloroethylene	<0.000300	0.00200								
1,1,2-Trichloroethane	<0.000300	0.00100								
1,2-Dichlorobenzene	<0.000300	0.00100								
1,3-Dichlorobenzene	<0.000300	0.00100								
1,4-Dichlorobenzene	<0.000300	0.00100								
Surr: 1,2-Dichloroethane-d4	190		200.0		94.9	72	119			
Surr: 4-Bromofluorobenzene	202		200.0		101	76	119			
Surr: Dibromofluoromethane	204		200.0		102	85	115			
Surr: Toluene-d8	209		200.0		104	81	120			

Qualifiers:	B	Analyte detected in the associated Method Blank	DF	Dilution Factor
	J	Analyte detected between MDL and RL	MDL	Method Detection Limit
	ND	Not Detected at the Method Detection Limit	R	RPD outside accepted control limits
	RL	Reporting Limit	S	Spike Recovery outside control limits
	J	Analyte detected between SDL and RL	N	Parameter not NELAP certified

CLIENT: Kasberg, Patrick & Associates, LP
Work Order: 2408153
Project: Cameron Permit

ANALYTICAL QC SUMMARY REPORT

RunID: GCMS5_240812B

Sample ID: SB-240812	Batch ID: 116680	TestNo: E624.1	Units: mg/L
SampType: SBLK	Run ID: GCMS5_240812B	Analysis Date: 8/12/2024 5:15:00 PM	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	<0.000300	0.00100	0							
Carbon tetrachloride	<0.000300	0.00100	0							
Chlorobenzene	<0.000300	0.00100	0							
Chloroform	<0.000300	0.00100	0							
Chlorodibromomethane	<0.000300	0.00100	0							
1,2-Dibromoethane	<0.000300	0.00100	0							
1,2-Dichloroethane	<0.000300	0.00100	0							
1,1-Dichloroethene	<0.000300	0.00100	0							
Methyl ethyl ketone	<0.00500	0.0150	0							
Tetrachloroethene	<0.000600	0.00200	0							
Trichloroethene	<0.000600	0.00100	0							
1,1,1-Trichloroethane	<0.000300	0.00100	0							
TTHM (Total Trihalomethanes)	<0.000300	0.00100	0							
Vinyl chloride	<0.000300	0.00100	0							
Acrolein	<0.00500	0.0150	0							
Acrylonitrile	<0.00100	0.00300	0							
1,1,2,2-Tetrachloroethane	<0.000300	0.00100	0							
Bromoform	<0.000300	0.00100	0							
Chloroethane	<0.00100	0.00500	0							
2-Chloroethylvinylether	<0.00600	0.0100	0							
Bromodichloromethane	<0.000300	0.00100	0							
1,1-Dichloroethane	<0.000300	0.00100	0							
1,2-Dichloropropane	<0.000300	0.00100	0							
1,3-Dichloropropene (cis)	<0.000300	0.00100	0							
1,3-Dichloropropene (trans)	<0.000300	0.00100	0							
Ethylbenzene	<0.000300	0.00100	0							
Methyl bromide	<0.00100	0.00500	0							
Methyl chloride	<0.00100	0.00500	0							
Methylene chloride (DCM)	<0.00250	0.00500	0							
Toluene	<0.000600	0.00200	0							
trans-1,2-Dichloroethylene	<0.000300	0.00200	0							
1,1,2-Trichloroethane	<0.000300	0.00100	0							
1,2-Dichlorobenzene	<0.000300	0.00100	0							
1,3-Dichlorobenzene	<0.000300	0.00100	0							
1,4-Dichlorobenzene	<0.000300	0.00100	0							
Surr: 1,2-Dichloroethane-d4	194		0							
Surr: 4-Bromofluorobenzene	205		0							
Surr: Dibromofluoromethane	206		0							
Surr: Toluene-d8	209		0							

Qualifiers:	B	Analyte detected in the associated Method Blank	DF	Dilution Factor
	J	Analyte detected between MDL and RL	MDL	Method Detection Limit
	ND	Not Detected at the Method Detection Limit	R	RPD outside accepted control limits
	RL	Reporting Limit	S	Spike Recovery outside control limits
	J	Analyte detected between SDL and RL	N	Parameter not NELAP certified

CLIENT: Kasberg, Patrick & Associates, LP
Work Order: 2408153
Project: Cameron Permit

ANALYTICAL QC SUMMARY REPORT

RunID: GCMS5_240812B

Sample ID: 2408120-05AMS	Batch ID: 116680	TestNo: E624.1	Units: mg/L							
SampType: MS	Run ID: GCMS5_240812B	Analysis Date: 8/13/2024 2:42:00 AM	Prep Date: 8/12/2024							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.0264	0.00100	0.0232	0	114	37	151			
Carbon tetrachloride	0.0254	0.00100	0.0232	0	110	70	140			
Chlorobenzene	0.0243	0.00100	0.0232	0	105	37	160			
Chloroform	0.0254	0.00100	0.0232	0	110	51	138			
Chlorodibromomethane	0.0244	0.00100	0.0232	0	105	53	149			
1,2-Dibromoethane	0.0236	0.00100	0.0232	0	102	40	160			
1,2-Dichloroethane	0.0246	0.00100	0.0232	0	106	49	155			
1,1-Dichloroethene	0.0245	0.00100	0.0232	0	105	10	234			
Methyl ethyl ketone	0.127	0.0150	0.116	0	109	40	160			
Tetrachloroethene	0.0245	0.00200	0.0232	0	105	64	148			
Trichloroethene	0.0255	0.00100	0.0232	0	110	70	157			
1,1,1-Trichloroethane	0.0244	0.00100	0.0232	0	105	52	162			
TTHM (Total Trihalomethanes)	0.0985	0.00100	0.0928	0.000963	105	40	160			
Vinyl chloride	0.0252	0.00100	0.0232	0	108	10	251			
Acrolein	0.0357	0.0150	0.0580	0	61.5	40	160			
Acrylonitrile	0.0525	0.00300	0.0464	0	113	40	160			
1,1,2,2-Tetrachloroethane	0.0245	0.00100	0.0232	0	105	46	157			
Bromoform	0.0238	0.00100	0.0232	0	102	45	169			
Chloroethane	0.0232	0.00500	0.0232	0	99.8	14	230			
2-Chloroethylvinylether	<0.00600	0.0100	0.0232	0	0	5	273			S
Bromodichloromethane	0.0249	0.00100	0.0232	0.000963	103	35	155			
1,1-Dichloroethane	0.0269	0.00100	0.0232	0	116	59	155			
1,2-Dichloropropane	0.0284	0.00100	0.0232	0	122	10	210			
1,3-Dichloropropene (cis)	0.0227	0.00100	0.0232	0	97.8	10	227			
1,3-Dichloropropene (trans)	0.0226	0.00100	0.0232	0	97.6	17	183			
Ethylbenzene	0.0237	0.00100	0.0232	0	102	37	162			
Methyl bromide	0.0167	0.00500	0.0232	0	71.9	10	242			
Methyl chloride	0.0316	0.00500	0.0232	0	136	5	273			
Methylene chloride (DCM)	0.0264	0.00500	0.0232	0	114	10	221			
Toluene	0.0256	0.00200	0.0232	0	110	47	150			
trans-1,2-Dichloroethylene	0.0246	0.00200	0.0232	0	106	54	156			
1,1,2-Trichloroethane	0.0266	0.00100	0.0232	0	115	52	150			
1,2-Dichlorobenzene	0.0240	0.00100	0.0232	0	103	18	190			
1,3-Dichlorobenzene	0.0236	0.00100	0.0232	0	102	59	156			
1,4-Dichlorobenzene	0.0234	0.00100	0.0232	0	101	18	190			
Surr: 1,2-Dichloroethane-d4	198		200.0		99.2	72	119			
Surr: 4-Bromofluorobenzene	188		200.0		94.0	76	119			
Surr: Dibromofluoromethane	202		200.0		101	85	115			
Surr: Toluene-d8	192		200.0		95.8	81	120			

Qualifiers:	B	Analyte detected in the associated Method Blank	DF	Dilution Factor
	J	Analyte detected between MDL and RL	MDL	Method Detection Limit
	ND	Not Detected at the Method Detection Limit	R	RPD outside accepted control limits
	RL	Reporting Limit	S	Spike Recovery outside control limits
	J	Analyte detected between SDL and RL	N	Parameter not NELAP certified

CLIENT: Kasberg, Patrick & Associates, LP
Work Order: 2408153
Project: Cameron Permit

ANALYTICAL QC SUMMARY REPORT

RunID: GCMS5_240812B

Sample ID: 2408120-05AMSD		Batch ID: 116680		TestNo: E624.1		Units: mg/L				
SampType: MSD		Run ID: GCMS5_240812B		Analysis Date: 8/13/2024 3:07:00 AM		Prep Date: 8/12/2024				
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.0259	0.00100	0.0232	0	112	37	151	1.80	40	
Carbon tetrachloride	0.0251	0.00100	0.0232	0	108	70	140	1.27	40	
Chlorobenzene	0.0242	0.00100	0.0232	0	104	37	160	0.577	40	
Chloroform	0.0250	0.00100	0.0232	0	108	51	138	1.59	40	
Chlorodibromomethane	0.0247	0.00100	0.0232	0	107	53	149	1.19	40	
1,2-Dibromoethane	0.0241	0.00100	0.0232	0	104	40	160	2.27	40	
1,2-Dichloroethane	0.0243	0.00100	0.0232	0	105	49	155	1.00	40	
1,1-Dichloroethene	0.0244	0.00100	0.0232	0	105	10	234	0.307	32	
Methyl ethyl ketone	0.138	0.0150	0.116	0	119	40	160	8.35	40	
Tetrachloroethene	0.0238	0.00200	0.0232	0	102	64	148	2.91	39	
Trichloroethene	0.0248	0.00100	0.0232	0	107	70	157	2.97	40	
1,1,1-Trichloroethane	0.0238	0.00100	0.0232	0	103	52	162	2.51	36	
TTHM (Total Trihalomethanes)	0.0997	0.00100	0.0928	0.000963	106	40	160	1.24	40	
Vinyl chloride	0.0249	0.00100	0.0232	0	107	10	251	0.910	40	
Acrolein	0.0369	0.0150	0.0580	0	63.6	40	160	3.29	40	
Acrylonitrile	0.0530	0.00300	0.0464	0	114	40	160	0.961	40	
1,1,2,2-Tetrachloroethane	0.0255	0.00100	0.0232	0	110	46	157	4.24	40	
Bromoform	0.0240	0.00100	0.0232	0	104	45	169	1.04	40	
Chloroethane	0.0226	0.00500	0.0232	0	97.6	14	230	2.24	40	
2-Chloroethylvinylether	<0.00600	0.0100	0.0232	0	0	5	273	0	40	S
Bromodichloromethane	0.0259	0.00100	0.0232	0.000963	108	35	155	4.28	40	
1,1-Dichloroethane	0.0270	0.00100	0.0232	0	116	59	155	0.361	40	
1,2-Dichloropropane	0.0275	0.00100	0.0232	0	119	10	210	3.04	40	
1,3-Dichloropropene (cis)	0.0227	0.00100	0.0232	0	98.0	10	227	0.224	40	
1,3-Dichloropropene (trans)	0.0233	0.00100	0.0232	0	100	17	183	2.72	40	
Ethylbenzene	0.0235	0.00100	0.0232	0	101	37	162	0.877	40	
Methyl bromide	0.0175	0.00500	0.0232	0	75.5	10	242	4.98	40	
Methyl chloride	0.0310	0.00500	0.0232	0	134	5	273	2.00	40	
Methylene chloride (DCM)	0.0253	0.00500	0.0232	0	109	10	221	4.19	28	
Toluene	0.0252	0.00200	0.0232	0	109	47	150	1.43	40	
trans-1,2-Dichloroethylene	0.0248	0.00200	0.0232	0	107	54	156	0.668	40	
1,1,2-Trichloroethane	0.0260	0.00100	0.0232	0	112	52	150	2.25	40	
1,2-Dichlorobenzene	0.0247	0.00100	0.0232	0	107	18	190	3.05	40	
1,3-Dichlorobenzene	0.0242	0.00100	0.0232	0	104	59	156	2.66	40	
1,4-Dichlorobenzene	0.0240	0.00100	0.0232	0	103	18	190	2.42	40	
Surr: 1,2-Dichloroethane-d4	187		200.0		93.7	72	119	0	0	
Surr: 4-Bromofluorobenzene	194		200.0		96.8	76	119	0	0	
Surr: Dibromofluoromethane	200		200.0		99.8	85	115	0	0	
Surr: Toluene-d8	195		200.0		97.3	81	120	0	0	

Qualifiers:	B	Analyte detected in the associated Method Blank	DF	Dilution Factor
	J	Analyte detected between MDL and RL	MDL	Method Detection Limit
	ND	Not Detected at the Method Detection Limit	R	RPD outside accepted control limits
	RL	Reporting Limit	S	Spike Recovery outside control limits
	J	Analyte detected between SDL and RL	N	Parameter not NELAP certified

CLIENT: Kasberg, Patrick & Associates, LP
Work Order: 2408153
Project: Cameron Permit

ANALYTICAL QC SUMMARY REPORT

RunID: IC2_240813B

The QC data in batch 116715 applies to the following samples: 2408153-01D

Sample ID: MB-116715	Batch ID: 116715	TestNo: E300	Units: mg/L							
SampType: MBLK	Run ID: IC2_240813B	Analysis Date: 8/13/2024 3:37:58 PM	Prep Date: 8/13/2024							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	<0.100	0.400								
Nitrate-N	<0.100	0.500								

Sample ID: LCS-116715	Batch ID: 116715	TestNo: E300	Units: mg/L							
SampType: LCS	Run ID: IC2_240813B	Analysis Date: 8/13/2024 3:55:58 PM	Prep Date: 8/13/2024							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	4.12	0.400	4.000	0	103	90	110			
Nitrate-N	4.95	0.500	5.000	0	99.1	90	110			

Sample ID: 2408158-01AMS		Batch ID: 116715		TestNo: E300		Units: mg/L				
SampType: MS		Run ID: IC2_240813B		Analysis Date: 8/14/2024 3:08:25 AM		Prep Date: 8/13/2024				
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	201	4.00	200.0	0	100	90	110			
Nitrate-N	54.9	5.00	45.16	10.20	98.9	90	110			

Sample ID: 2408158-01AMSD		Batch ID: 116715		TestNo: E300		Units: mg/L				
SampType: MSD		Run ID: IC2_240813B		Analysis Date: 8/14/2024 3:26:25 AM		Prep Date: 8/13/2024				
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	201	4.00	200.0	0	100	90	110	0.085	20	
Nitrate-N	54.8	5.00	45.16	10.20	98.8	90	110	0.088	20	

Sample ID: 2408159-01EMS	Batch ID: 116715	TestNo: E300	Units: mg/L							
SampType: MS	Run ID: IC2_240813B	Analysis Date: 8/14/2024 4:02:25 AM	Prep Date: 8/13/2024							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	209	4.00	200.0	0	104	90	110			
Nitrate-N	77.2	5.00	45.16	28.20	109	90	110			

Sample ID: 2408159-01EMSD	Batch ID: 116715	TestNo: E300	Units: mg/L							
SampType: MSD	Run ID: IC2_240813B	Analysis Date: 8/14/2024 4:20:25 AM	Prep Date: 8/13/2024							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	210	4.00	200.0	0	105	90	110	0.606	20	
Nitrate-N	77.5	5.00	45.16	28.20	109	90	110	0.394	20	

Qualifiers: B Analyte detected in the associated Method Blank
J Analyte detected between MDL and RL
ND Not Detected at the Method Detection Limit
RL Reporting Limit
J Analyte detected between SDL and RL

DF Dilution Factor
MDL Method Detection Limit
R RPD outside accepted control limits
S Spike Recovery outside control limits
N Parameter not NELAP certified

CLIENT: Kasberg, Patrick & Associates, LP
Work Order: 2408153
Project: Cameron Permit

ANALYTICAL QC SUMMARY REPORT

RunID: IC2_240813B

Sample ID: LCSD-116715	Batch ID: 116715	TestNo: E300	Units: mg/L							
SampType: LCSD	Run ID: IC2_240813B	Analysis Date: 8/14/2024 11:30:23 AM	Prep Date: 8/13/2024							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	4.21	0.400	4.000	0	105	90	110	2.02	20	
Nitrate-N	4.78	0.500	5.000	0	95.6	90	110	3.57	20	

Qualifiers: B Analyte detected in the associated Method Blank
J Analyte detected between MDL and RL
ND Not Detected at the Method Detection Limit
RL Reporting Limit
J Analyte detected between SDL and RL

DF Dilution Factor
MDL Method Detection Limit
R RPD outside accepted control limits
S Spike Recovery outside control limits
N Parameter not NELAP certified

CLIENT: Kasberg, Patrick & Associates, LP
Work Order: 2408153
Project: Cameron Permit

ANALYTICAL QC SUMMARY REPORT

RunID: UV/VIS_2_240812C

The QC data in batch 116690 applies to the following samples: 2408153-01D

Sample ID: MB-116690	Batch ID: 116690	TestNo: M3500-Cr B	Units: mg/L							
SampType: MBLK	Run ID: UV/VIS_2_240812C	Analysis Date: 8/12/2024 7:27:00 PM	Prep Date: 8/12/2024							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Hexavalent Chromium	<0.00300	0.00300								
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Sample ID: LCS-116690	Batch ID: 116690	TestNo: M3500-Cr B	Units: mg/L							
SampType: LCS	Run ID: UV/VIS_2_240812C	Analysis Date: 8/12/2024 7:29:00 PM	Prep Date: 8/12/2024							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Hexavalent Chromium	0.0961	0.00300	0.100	0	96.1	85	115			
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Sample ID: LCSD-116690	Batch ID: 116690	TestNo: M3500-Cr B	Units: mg/L							
SampType: LCSD	Run ID: UV/VIS_2_240812C	Analysis Date: 8/12/2024 7:30:00 PM	Prep Date: 8/12/2024							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Hexavalent Chromium	0.0963	0.00300	0.100	0	96.3	85	115	0.197	15	
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Sample ID: 2408153-01DMS	Batch ID: 116690	TestNo: M3500-Cr B	Units: mg/L							
SampType: MS	Run ID: UV/VIS_2_240812C	Analysis Date: 8/12/2024 7:38:00 PM	Prep Date: 8/12/2024							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Hexavalent Chromium	0.0935	0.00300	0.100	0	93.5	85	115			
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Sample ID: 2408153-01DMSD	Batch ID: 116690	TestNo: M3500-Cr B	Units: mg/L							
SampType: MSD	Run ID: UV/VIS_2_240812C	Analysis Date: 8/12/2024 7:40:00 PM	Prep Date: 8/12/2024							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Hexavalent Chromium	0.0824	0.00300	0.100	0	82.4	85	115	12.7	15	S
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Qualifiers:

B	Analyte detected in the associated Method Blank
J	Analyte detected between MDL and RL
ND	Not Detected at the Method Detection Limit
RL	Reporting Limit
J	Analyte detected between SDL and RL

DF	Dilution Factor
MDL	Method Detection Limit
R	RPD outside accepted control limits
S	Spike Recovery outside control limits
N	Parameter not NELAP certified

CLIENT: Kasberg, Patrick & Associates, LP
Work Order: 2408153
Project: Cameron Permit

ANALYTICAL QC SUMMARY REPORT

RunID: UV/VIS_2_240815D

The QC data in batch 116745 applies to the following samples: 2408153-01C

Sample ID: MB-116745	Batch ID: 116745	TestNo: M4500-CN E	Units: mg/L							
SampType: MBLK	Run ID: UV/VIS_2_240815D	Analysis Date: 8/15/2024 4:09:00 PM	Prep Date: 8/15/2024							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Cyanide, Amenable to Chlorination	<0.0100	0.0200								
Cyanide, Total	<0.0100	0.0200								

Sample ID: LCS-116745	Batch ID: 116745	TestNo: M4500-CN E	Units: mg/L							
SampType: LCS	Run ID: UV/VIS_2_240815D	Analysis Date: 8/15/2024 4:09:00 PM	Prep Date: 8/15/2024							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Cyanide, Total	0.185	0.0200	0.2000	0	92.5	85	115			

Sample ID: 2408104-01AMS	Batch ID: 116745	TestNo: M4500-CN E	Units: mg/L							
SampType: MS	Run ID: UV/VIS_2_240815D	Analysis Date: 8/15/2024 4:10:00 PM	Prep Date: 8/15/2024							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Cyanide, Total	0.179	0.0200	0.2000	0	89.5	79	114			

Sample ID: 2408104-01AMSD		Batch ID: 116745		TestNo: M4500-CN E		Units: mg/L				
SampType: MSD		Run ID: UV/VIS_2_240815D		Analysis Date: 8/15/2024 4:11:00 PM		Prep Date: 8/15/2024				
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Cyanide, Total	0.171	0.0200	0.2000	0	85.5	79	114	4.57	20	

Qualifiers: B Analyte detected in the associated Method Blank
J Analyte detected between MDL and RL
ND Not Detected at the Method Detection Limit
RL Reporting Limit
J Analyte detected between SDL and RL

DF Dilution Factor
MDL Method Detection Limit
R RPD outside accepted control limits
S Spike Recovery outside control limits
N Parameter not NELAP certified

Project
1114138

DHL1-C

DHL Analytical - SPL
 John Dupont
 2300 Double Creek Dr
 Round Rock, TX 78664

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1114138_r03_01_ProjectHold	SPL Kilgore Project P:1114138 C:DHL1 Project Holding Time Compliance	1
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1114138_r03_06_D_ProjectTRRP	SPL Kilgore Project P:1114138 C:DHL1 Project TRRP Results Report for Class D	2
1114138_r03_06_M_ProjectTRRP	SPL Kilgore Project P:1114138 C:DHL1 Project TRRP Results Report for Class M	2
1114138_r03_06_O_ProjectTRRP	SPL Kilgore Project P:1114138 C:DHL1 Project TRRP Results Report for Class O	2
1114138_r10_01_ProjectQCgroup	SPL Kilgore Project P:1114138 C:DHL1 Project Sample QCgroup Reference	1
1114138_r10_05_ProjectQC	SPL Kilgore Project P:1114138 C:DHL1 Project Quality Control Groups	3
1114138_r99_09_CoC__1_of_1	SPL Kilgore CoC DHL1 1114138_1_of_1	3
1114138_SETQA_1133430_1133749	SPL Kilgore Project P:1114138 C:DHL1 Project Quality Control TRRP-13 Check Lists 1133430_1133749	2
1114138_SETQA_1133729_1133870	SPL Kilgore Project P:1114138 C:DHL1 Project Quality Control TRRP-13 Check Lists 1133729_1133870	2
1114138_SETQA_1134073_1135392	SPL Kilgore Project P:1114138 C:DHL1 Project Quality Control TRRP-13 Check Lists 1134073_1135392	2
1114138_SETQA_er_1133430_1133749	SPL Kilgore Project P:1114138 C:DHL1 Project Quality Control TRRP-13 Check List Error Report 1133430_1133749	1

Email: Kilgore.ProjectManagement@spilabs.com



Report Page 1 of 31



Project
1114138

DHL1-C

DHL Analytical - SPL
John Dupont
2300 Double Creek Dr
Round Rock, TX 78664

Printed 08/28/2024
7:18

This report consists of this Table of Contents and the following pages:

Report Name	Description	Pages
1114138_SETQA_er_1133729_1133870	SPL Kilgore Project P:1114138 C:DHL1 Project Quality Control TRRP-13 Check List Error Report 1133729_1133870	1
1114138_SETQA_er_1134073_1135392	SPL Kilgore Project P:1114138 C:DHL1 Project Quality Control TRRP-13 Check List Error Report 1134073_1135392	1
Total Pages:		29



LABORATORY DATA PACKAGE COVER PAGE

Project
1114138

WW EFFLUENT

This data package consists of:

- ☒ This signature page, the laboratory review checklist, and the following reportable data:
- ☒ R1 Field chain-of-custody documentation;
- ☒ R2 Sample identification cross-reference;
- ☒ R3 Test reports (analytical data sheets) for each environmental sample that includes:
 - a) Items consistent with NELAC 5.13 or ISO/IEC 17025 Section 5.10
 - b) dilution factors,
 - c) preparation methods,
 - d) cleanup methods, and
 - e) if required for the project, tentatively identified compounds (TICs).
- ☒ R4 Surrogate recovery data including: (R4 - R8: See QC Report)
 - a) Calculated recovery (%R), and
 - b) The laboratory's surrogate QC limits.
- ☒ R5 Test reports/summary forms for blank samples;
- ☒ R6 Test reports/summary forms for laboratory control samples (LCSs) including:
 - a) LCS spiking amounts,
 - b) Calculated %R for each analyte, and
 - c) The laboratory's LCS QC limits.
- ☒ R7 Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:
 - a) Samples associated with the MS/MSD clearly identified,
 - b) MS/MSD spiking amounts,
 - c) Concentration of each MS/MSD analyte measured in the parent and spiked samples,
 - d) Calculated %Rs and relative percent differences (RPDs), and
 - e) The laboratory's MS/MSD QC limits
- ☒ R8 Laboratory analytical duplicate (if applicable) recovery and precision:
 - a) the amount of analyte measured in the duplicate,
 - b) the calculated RPD, and
 - c) the laboratory's QC limits for analytical duplicates.
- ☒ R9 List of method quantitation limits (MQLs) for each analyte for each method and matrix; See Results Summary
- ☒ R10 Other problems or anomalies.
- ☒ The Exception Report for every "No" or "Not Reviewed (NR)" item in laboratory review checklist.

Release Statement: I am responsible for the release of this laboratory data package. This data package has been reviewed by the laboratory and is complete and technically compliant with the requirements of the methods used, except where noted by the laboratory in the attached exception reports. By my signature below, I affirm to the best of my knowledge, all problems/anomalies, observed by the laboratory as having the potential to affect the quality of the data, have been identified by the laboratory in the Laboratory Review Checklist, and no information or data have been knowingly withheld that would affect the quality of the data.



Bill Peery (WJP)

VP Technical Services

8/28/2024

Name

Signature

Official Title

Date

Email: Kilgore.ProjectManagement@spllabs.com



Central TX Region: 8101 Cameron Rd - Ste 305 Austin TX 78754

Report Page 3 of 31



SAMPLE CROSS REFERENCE

Project
1114138

DHL Analytical - SPL
John Dupont
2300 Double Creek Dr
Round Rock, TX 78664

Printed 8/28/2024 Page 1 of 1
WW EFFLUENT

Sample	Sample ID	Taken	Time	Received
2324827	EFFLUENT Low Level Mercury	08/12/2024	11:05:00	08/13/2024

Bottle 01 Glass /clean metals w/HCl
Bottle 02 Prepared Bottle: Mercury Preparation for Metals (Batch 1133729) Volume: 50.00000 mL <== Derived from 01 (47 ml)

Method	Bottle	PrepSet	Preparation	QcGroup	Analytical
EPA 245.7 2	02	1133729	08/16/2024	1133870	08/16/2024

Sample	Sample ID	Taken	Time	Received
2324832	Phenol EPA 420.4	08/12/2024	11:05:00	08/13/2024

Bottle 01 Client supplied H2SO4 Amber Glass
Bottle 02 Prepared Bottle: Phenol TRAACS Autosampler Vial (Batch 1133430) Volume: 6.00000 mL <== Derived from 01 (6 ml)
Bottle 03 Prepared Bottle: Phenol TRAACS Autosampler Vial (Batch 1133430) Volume: 6.00000 mL <== Derived from 01 (6 ml)
Bottle 04 Prepared Bottle: Phenol TRAACS Autosampler Vial (Batch 1133430) Volume: 6.00000 mL <== Derived from 01 (6 ml)

Method	Bottle	PrepSet	Preparation	QcGroup	Analytical
EPA 420.4 1	02	1133430	08/15/2024	1133749	08/16/2024

Sample	Sample ID	Taken	Time	Received
2324834	615 Herbicides	08/12/2024	11:05:00	08/13/2024

Bottle 01 Client Supplied Amber Glass
Bottle 02 Client Supplied Amber Glass
Bottle 03 Prepared Bottle: 2 mL Autosampler Vial (Batch 1134073) Volume: 10.00000 mL <== Derived from 01 (1000 ml)

Method	Bottle	PrepSet	Preparation	QcGroup	Analytical
EPA 615	03	1134073	08/19/2024	1135392	08/23/2024

Email: Kilgore.ProjectManagement@spllabs.com

SAMPLE PREPARATION

DHL Analytical - SPL
John Dupont
2300 Double Creek Dr
Round Rock, TX 78664

Default

Project

1114138

Prep Set # 1133430			08/15/2024
Analytical Set # 1133749	EPA 420.4 1	08/16/2024	
Sample	Sample ID	Bottle	
2324832	Phenol EPA 420.4	02	

Prep Set # 1133729			08/16/2024
Analytical Set # 1133870	EPA 245.7 2	08/16/2024	
Sample	Sample ID	Bottle	
2324827	EFFLUENT Low Level Mercury	02	

Prep Set # 1134073			08/19/2024
Analytical Set # 1135392	EPA 615	08/23/2024	
Sample	Sample ID	Bottle	
2324834	615 Herbicides	03	



HOLDING TIME COMPLIANCE

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Project
1114138

WW EFFLUENT

<u>Name</u>	<u>Method</u>	<u>Taken:</u>	<u>Received</u>	<u>Analyzed</u>	<u>Hold</u>	<u>Elapsed</u>
	2324827	8/12/24 11:05	08/13/2024			
Mercury, Total (low level)	EPA 245.7 2			8/16/24 12:19	90.00	4.00
Low Level Mercury Liquid Metals	EPA 245.7 2			8/16/24 9:00	90.00	3.00
	2324832	8/12/24 11:05	08/13/2024			
Phenol Distillation	EPA 420.4 1			8/15/24 8:12	28.00	2.00
Phenolics, Total Recoverable	EPA 420.4 1			8/16/24 9:29	28.00	3.00
	2324834	8/12/24 11:05	08/13/2024			
Herbicides by GC	EPA 615			8/23/24 14:41	45.00	11.00
Esterification of Sample	EPA 615			8/19/24 13:00	7.00	7.00

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DHL1-C

DHL Analytical - SPL
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Round Rock, TX 78664

Page 1 of 3

Project
1114138

Printed: 08/28/2024

RESULTS

Sample Results

2324827 EFFLUENT Low Level Mercury

Received: 08/13/2024

Non-Potable Water

Collected by: Client
Taken: 08/12/2024

DHL Analytical - SPL
11:05:00

PO:

EPA 245.7 2

Prepared: 1133729 08/16/2024 09:00:00 Analyzed 1133870 08/16/2024 12:19:00 MPI

	Parameter	Results	Units	RL	Flags	CAS	Bottle
NELAC	Mercury, Total (low level)	2.50	ng/L	5.32	J	7439-97-6	02

2324832 Phenol EPA 420.4

Received: 08/13/2024

Non-Potable Water

Collected by: Client
Taken: 08/12/2024

DHL Analytical - SPL
11:05:00

PO:

EPA 420.4 1

Prepared: 1133430 08/15/2024 08:12:56 Analyzed 1133749 08/16/2024 09:29:00 AMB

	Parameter	Results	Units	RL	Flags	CAS	Bottle
NELAC	Phenolics, Total Recoverable	0.021	mg/L	0.005	P		02

2324834 615 Herbicides

Received: 08/13/2024

Non-Potable Water

Collected by: Client
Taken: 08/12/2024

DHL Analytical - SPL
11:05:00

PO:

EPA 615

Prepared: 1134073 08/19/2024 13:00:00 Analyzed 1135392 08/23/2024 14:41:00 KAP

	Parameter	Results	Units	RL	Flags	CAS	Bottle
NELAC	2,4 Dichlorophenoxyacetic acid	<0.500	ug/L	0.500		94-75-7	03
NELAC	2,4,5-TP (Silvex)	<0.300	ug/L	0.300		93-72-1	03

Sample Preparation



Report Page 7 of 31

DHL1-C

Page 2 of 3

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Project
1114138

Printed: 08/28/2024

2324827 EFFLUENT Low Level Mercury

Received: 08/13/2024

08/12/2024

Prepared: 08/28/2024 07:09:00 Analyzed 08/28/2024 07:09:00 WJP

Level IV Data Review

Completed

EPA 245.7 2 Prepared: 1133729 08/16/2024 09:00:00 Analyzed 1133729 08/16/2024 09:00:00 MP1

NELAC Low Level Mercury Liquid Metals 50/47 ml 01

2324832 Phenol EPA 420.4

Received: 08/13/2024

08/12/2024

EPA 420.4 1 Prepared: 1133430 08/15/2024 08:12:56 Analyzed 1133430 08/15/2024 08:12:56 MEG

NELAC Phenol Distillation 6/6 ml 01

2324834 615 Herbicides

Received: 08/13/2024

08/12/2024

Prepared: 08/13/2024 15:23:19 Calculated 08/13/2024 15:23:19 CAL

Environmental Fee (per Project)

Verified

EPA 615 Prepared: 1134073 08/19/2024 13:00:00 Analyzed 1134073 08/19/2024 13:00:00 CRS

NELAC Esterification of Sample 10/1000 ml 01



Report Page 8 of 31

Project
1114138





RESULTS

Project

1114138

Printed 08/28/2024

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DHL1

CAS	Parameter	Results	MDL	SDL	MQL	MQLAdj	Flag	Units	Target	Bottle	Dilute
Non-Potable Water		Distillations								EPA 420.4 1	
2324832	Phenol EPA 420.4										
		Collection:	08/12/2024		11:05:00	Client			Received:	08/13/2024	
Prepared:		1133430									
					Analyzed:	1133749		8/16/24	09:29:00		
Phenolics, Total Recoverable		0.021	0.003	0.003	0.005	0.005	P	mg/L	0.005	02	1.00

MDL is Method Detection Limit (40 CFR 136 Appendix B)

MQL is the Method Quantitation Limit and corresponds to a low standard

Qualifiers:

J - Analyte detected below quantitation limit

P - Spike recovery outside control limits due to matrix effects.

We report results on an As Received (or Wet) basis unless marked Dry Weight.

Unless otherwise noted, testing was performed at SPL, Inc. - Kilgore laboratory which holds International, Federal, and state accreditations. Please see our Websites for details.

(N)ELAC - Covered in our NELAC scope of accreditation

z -- Not covered by our NELAC scope of accreditation

These analytical results relate to the sample tested. This report may NOT be reproduced EXCEPT in FULL without written approval of SPL Kilgore. Unless otherwise specified, these test results meet the requirements of NELAC.

SDL is Sample Detection Limit and is the adjusted MDL (sample specific dilutions, dry weight)

MQLADJ is the Adjusted Method Quantitation Limit (dilutions, dry weight)

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Project

1114138

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RESULTS

DHL1

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Bill Peery, MS, VP Technical Services



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RESULTS

Project

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DHL1

CAS	Parameter	Results	MDL	SDL	MQL	MQLAdj	Flag	Units	Target	Bottle	Dilute
Non-Potable Water		Metals		EPA 245.7 2							
2324827	EFFLUENT Low Level Mercury										
		Collection:	08/12/2024	11:05:00		Client		Received:		08/13/2024	
Prepared:		1133729									
		Analyzed:		1133870		8/16/24	12:19:00				
7439-97-6	Mercury, Total (low level)	2.50	1.20	1.28	5.00	5.32	J	ng/L	5.00	02	1.06

MDL is Method Detection Limit (40 CFR 136 Appendix B)

MQL is the Method Quantitation Limit and corresponds to a low standard

Qualifiers:

J - Analyte detected below quantitation limit

P - Spike recovery outside control limits due to matrix effects.

We report results on an As Received (or Wet) basis unless marked Dry Weight.

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SDL is Sample Detection Limit and is the adjusted MDL (sample specific dilutions, dry weight)

MQLADJ is the Adjusted Method Quantitation Limit (dilutions, dry weight)

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Project
1114138

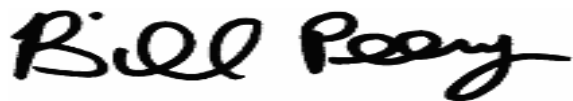
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WW EFFLUENT

RESULTS

DHL1

DHL Analytical - SPL
John Dupont
2300 Double Creek Dr
Round Rock, TX 78664



Bill Peery, MS, VP Technical Services



1
2
3
4
5
6
7

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RESULTS

Project

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DHL Analytical - SPL
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2300 Double Creek Dr
Round Rock, TX 78664

DHL1

CAS	Parameter	Results	MDL	SDL	MQL	MQLAdj	Flag	Units	Target	Bottle	Dilute	
Non-Potable Water		Organics								EPA 615		
2324834	615 Herbicides											
Collection:			08/12/2024		11:05:00		Client		Received:		08/13/2024	
Prepared:		1134073										
Analyzed:					1135392		8/23/24		14:41:00			
94-75-7	2,4 Dichlorophenoxyacetic acid		ND	0.159	0.159	0.500	0.500	ug/L	0.700	03	1.00	
93-72-1	2,4,5-TP (Silvex)		ND	0.0893	0.0893	0.300	0.300	ug/L	0.300	03	1.00	

MDL is Method Detection Limit (40 CFR 136 Appendix B)

MQL is the Method Quantitation Limit and corresponds to a low standard

Qualifiers:

J - Analyte detected below quantitation limit

P - Spike recovery outside control limits due to matrix effects.

We report results on an As Received (or Wet) basis unless marked Dry Weight.

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These analytical results relate to the sample tested. This report may NOT be reproduced EXCEPT in FULL without written approval of SPL Kilgore. Unless otherwise specified, these test results meet the requirements of NELAC.

SDL is Sample Detection Limit and is the adjusted MDL (sample specific dilutions, dry weight)

MQLADJ is the Adjusted Method Quantitation Limit (dilutions, dry weight)

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Project
1114138

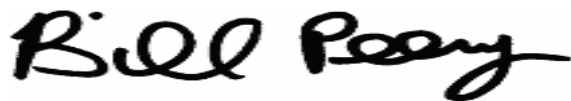
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RESULTS

DHL1

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Bill Peery, MS, VP Technical Services



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QC GROUPS

08/28/2024

Page 1 of 1

DHL Analytical - SPL
 John Dupont
 2300 Double Creek Dr
 Round Rock, TX 78664

Project
1114138

	<i>Test</i>	<i>QCgroup</i>	<i>Analyzed</i>	
	PhDL	1,133,430	08/15/2024	
	245I	1,133,729	08/16/2024	
	ESRL	1,134,073	08/19/2024	
1545	HP 5890A - ECD5890 w/autosampler	HP		3336A57718
	!HER	1,135,392	08/23/2024	
6581	Astoria 2 Autoanalyzer	Astoria-Pacific		200343
	Phna	1,133,749	08/16/2024	
7472	Mercury analyzer (Low Level)	Teledyne Leeman labs		US23192001
	*Hgl	1,133,870	08/16/2024	

Email: Kilgore.ProjectManagement@spllabs.com



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Report Page 16 of 31

QUALITY CONTROL



Page 1 of 3

DHL1-C

DHL Analytical - SPL
John Dupont
2300 Double Creek Dr
Round Rock, TX 78664

Project
1114138

Printed 08/28/2024

Analytical Set 1133749

EPA 420.4 1

Blank

Parameter	PrepSet	Reading	MDL	MQL	Units	File
Phenolics, Total Recoverable	1133430	ND	0.003	0.005	mg/L	126666048

CCV

Parameter	Reading	Known	Units	Recover%	Limits%	File
Phenolics, Total Recoverable	0.202	0.200	mg/L	101	90.0 - 110	126666047
Phenolics, Total Recoverable	0.183	0.200	mg/L	91.5	90.0 - 110	126666056
Phenolics, Total Recoverable	0.209	0.200	mg/L	104	90.0 - 110	126666062

Duplicate

Parameter	Sample	Result	Unknown	Unit	RPD	Limit%
Phenolics, Total Recoverable	2324832	0.019	0.021	mg/L	10.0	20.0

ICV

Parameter	Reading	Known	Units	Recover%	Limits%	File
Phenolics, Total Recoverable	0.206	0.200	mg/L	103	90.0 - 110	126666046

LCS Dup

Parameter	PrepSet	LCS	LCSD	Known	Limits%	LCS%	LCSD%	Units	RPD	Limit%
Phenolics, Total Recoverable	1133430	0.207	0.210	0.200	90.0 - 110	104	105	mg/L	1.44	20.0

Mat. Spike

Parameter	Sample	Spike	Unknown	Known	Units	Recovery %	Limits %	File
Phenolics, Total Recoverable	2324832	0.177	0.021	0.200	mg/L	78.0	90.0 - 110	126666053

Analytical Set 1133870

EPA 245.7 2

AWRL/LOQ C

Parameter	Reading	Known	Units	Recover%	Limits%	File
Mercury, Total (low level)	6.46	5.00	ng/L	129	70.0 - 130	126668565

Blank

Parameter	PrepSet	Reading	MDL	MQL	Units	File
Mercury, Total (low level)	1133729	ND	1.20	5.00	ng/L	126668568

CCB

Parameter	PrepSet	Reading	MDL	MQL	Units	File
Mercury, Total (low level)	1133729	ND	1.20	5.00	ng/L	126668567
Mercury, Total (low level)	1133729	ND	1.20	5.00	ng/L	126668582
Mercury, Total (low level)	1133729	1.28	1.20	5.00	ng/L	126668592
Mercury, Total (low level)	1133729	ND	1.20	5.00	ng/L	126668598
Mercury, Total (low level)	1133870	ND	1.20	5.00	ng/L	126668604

CCV

Parameter	Reading	Known	Units	Recover%	Limits%	File
Mercury, Total (low level)	25.6	25.0	ng/L	102	87.0 - 113	126668566
Mercury, Total (low level)	26.6	25.0	ng/L	106	87.0 - 113	126668581
Mercury, Total (low level)	26.4	25.0	ng/L	106	87.0 - 113	126668591

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Report Page 17 of 31

QUALITY CONTROL



DHL1-C

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Page 2 of 3

Project
1114138

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CCV

Parameter	Reading	Known	Units	Recover%	Limits%	File
Mercury, Total (low level)	23.0	25.0	ng/L	92.0	87.0 - 113	126668597
Mercury, Total (low level)	21.1	25.0	ng/L	84.4	87.0 - 113 *	126668603

ICL

Parameter	Reading	Known	Units	Recover%	Limits%	File
Mercury, Total (low level)	47.8	50.0	ng/L	95.6	90.0 - 110	126668563

ICV

Parameter	Reading	Known	Units	Recover%	Limits%	File
Mercury, Total (low level)	24.2	25.0	ng/L	96.8	90.0 - 110	126668564

LCS Dup

Parameter	PrepSet	LCS	LCSD	Known	Limits%	LCS%	LCSD%	Units	RPD	Limit%
Mercury, Total (low level)	1133729	21.3	21.3	25.0	76.0 - 115	85.2	85.2	ng/L	0	50.0

MSD

Parameter	Sample	MS	MSD	UNK	Known	Limits	MS%	MSD%	Units	RPD	Limit%
Mercury, Total (low level)	2323311	20.4	23.6	ND	26.6	63.0 - 111	76.7	88.7	ng/L	14.5	18.0
Mercury, Total (low level)	2323816	13.9	13.6	1.78	26.6	63.0 - 111	45.6 *	44.4 *	ng/L	2.51	18.0

Analytical Set

1135392

EPA 615

Blank

Parameter	PrepSet	Reading	MDL	MQL	Units	File
2,4 Dichlorophenoxyacetic acid	1134073	ND	0.159	0.500	ug/L	126704291
2,4,5-TP (Silvex)	1134073	0.0962	0.0893	0.300	ug/L	126704291

CCV

Parameter	Reading	Known	Units	Recover%	Limits%	File
2,4 Dichlorophenoxyacetic acid	156	150	ug/L	104	80.0 - 115	126704290
2,4 Dichlorophenoxyacetic acid	156	150	ug/L	104	80.0 - 115	126704297
2,4,5-TP (Silvex)	162	150	ug/L	108	80.0 - 115	126704290
2,4,5-TP (Silvex)	162	150	ug/L	108	80.0 - 115	126704297

LCS Dup

Parameter	PrepSet	LCS	LCSD	Known	Limits%	LCS%	LCSD%	Units	RPD	Limit%
2,4 Dichlorophenoxyacetic acid	1134073	0.444	0.538	1.00	0.100 - 319	44.4	53.8	ug/L	19.1	30.0
2,4,5-TP (Silvex)	1134073	0.541	0.671	1.00	0.100 - 244	54.1	67.1	ug/L	21.5	30.0

Surrogate

Parameter	Sample	Type	Reading	Known	Units	Recover%	Limits%	File
2,4-Dichlorophenylacetic Acid		CCV	174	200	ug/L	87.0	0.100 - 313	126704290
2,4-Dichlorophenylacetic Acid		CCV	180	200	ug/L	90.0	0.100 - 313	126704297
2,4-Dichlorophenylacetic Acid	1134073	Blank	97.3	200	ug/L	48.6	0.100 - 313	126704291
2,4-Dichlorophenylacetic Acid	1134073	LCS	86.2	200	ug/L	43.1	0.100 - 313	126704292
2,4-Dichlorophenylacetic Acid	1134073	LCS Dup	102	200	ug/L	51.0	0.100 - 313	126704293
2,4-Dichlorophenylacetic Acid	2324834	Unknown	1.44	2.00	ug/L	72.0	0.100 - 313	126704294

Email: Kilgore.ProjectManagement@spllabs.com



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QUALITY CONTROL



DHL1-C

DHL Analytical - SPL
John Dupont
2300 Double Creek Dr
Round Rock, TX 78664

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Project
1114138

Printed 08/28/2024

* Out RPD is Relative Percent Difference: $\text{abs}(r_1 - r_2) / \text{mean}(r_1, r_2) * 100\%$

Recover% is Recovery Percent: $\text{result} / \text{known} * 100\%$

Blank - Method Blank (reagent water or other blank matrices that contains all reagents except standard(s) and is processed simultaneously with and under the same conditions as samples; carried through preparation and analytical procedures exactly like a sample; monitors); CCV - Continuing Calibration Verification (same standard used to prepare the curve; typically a mid-range concentration; verifies the continued validity of the calibration curve); ICV - Initial Calibration Verification; LCS Dup - Laboratory Control Sample Duplicate (replicate LCS; analyzed when there is insufficient sample for duplicate or MSD; quantifies accuracy and precision.); CCB - Continuing Calibration Blank; MSD - Matrix Spike Duplicate (replicate of the matrix spike; same solution and amount of target analyte added to the MS is added to a third aliquot of sample; quantifies matrix bias and precision.); AWRL/LOQ C - Ambient Water Reporting Limit/LOQ Check Std; Surrogate - Surrogate (mimics the analyte of interest but is unlikely to be found in environmental samples; added to analytical samples for QC purposes. **ANSI/ASQC E4 1994 Ref #4 TRADE QA Resources Guide.)

Email: Kilgore.ProjectManagement@spllabs.com



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1114138 CoC Print Group 001 of 001

DHL Analytical, Inc.
2300 Double Creek Drive
Round Rock, TX 78664

TEL: (512) 388-8222

FAX:

Work Order: 2408153

Subcontractor:

SPL Laboratory Kilgore
2600 Dudley Rd
Kilgore, TX 75662

TEL: (903) 984-0551

FAX:

Acct #:

CHAIN-OF-CUSTODY RECORD

Page 1 of 1

Date _____ Time _____ Tech _____
Temp: _____ C

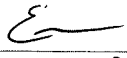
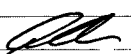
Therm#: 6444 Corr Fact: -0.7 C

12-Aug-24

Sample ID	Matrix	DHL#	Date Collected	Bottle Type	Requested Tests			
					Hg-LoLevel E245.7	PHENOL E420.4	Herb_W E615	
2321827	Effluent	Aqueous	01I	08/12/24 11:05 AM	500GHCL	1		
2324832	Effluent	Aqueous	01J	08/12/24 11:05 AM	250GAM-H2SO4	1		
2324834	Effluent	Aqueous	01K	08/12/24 11:05 AM	500AMGU		2	

General Comments:

See attached target list.
Please analyze these samples with a Standard Turnaround Time.
Quality Control Package Needed: Standard - SEND PDF & Excel EDD Please
EMAIL report to both cac@dhlanalytical.com & dupont@dhlanalytical.com
Call John DuPont if you have questions.

Date/Time		Date/Time	
Relinquished by: 	8/12/24 1700	Received by: 	
Relinquished by: UPS	8/13/24 1030	Received by: Andy Owens - SPL, Inc. 	8/13/24 1030

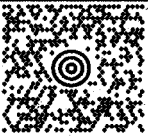
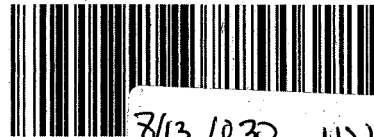
1114138 CoC Print Group 001 of 001

SEL List for E615

Rpt	T	Analyte	Synonym	MDL	PQL
☒	A	2,4-D		0.01	0.3
☒	A	2,4,5-TP (Silvex)		0.01	0.3

3 of 3

1114138 CoC Print Group 001 of 001

LOGIN 512388222 DHL ANALYTICAL 2300 DOUBLE CREEK DR ROUND ROCK TX 78664		44 LBS	1 OF 1
SHIP TO: LOGIN 9039840551 ANA-LAB 2600 DUDLEY RD KILGORE TX 75662			
		TX 756 0-32 	
UPS GROUND TRACKING #: 1Z 970 R40 03 1098 5973			
			
BILLING: P/P		Date Time Tech emp: 39/3.2c therm#: 6443 Corr Fact: -0.2 C	
XOL 24.08.02		NV45 33.0A 08/2024* TM	

Appendix A:		Laboratory Review Checklist: Reportable Data					
Laboratory Name:		SPL Kilgore		LRC Date:		08/28/2024	
Project Name:		Default		Laboratory Job (Project) Number:		1114138	
Reviewer Name:		Bill Peery (WJP)		PrepSet:		1133430 QCgroup: 1133749	
#	A	Description	Yes	No	NA	NR	ER#
R01	OI	Chain-of-Custody (C-O-C)					
		Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?				X	1
		Were all departures from standard conditions described in the exception report?	X				
R02	OI	Sample and Quality Control (QC) Identification					
		Are all field sample ID numbers cross referenced to the laboratory ID numbers?	X				
		Are all laboratory ID numbers cross-referenced to the corresponding QC data?	X				
R03	OI	Test Reports					
		Were all samples prepared and analyzed within holding times?	X				
		Other than those results < MQL, were all other raw values bracketed by calibration standards?	X				
		Were calculations checked by a peer or supervisor?	X				
		Were all analyte identifications checked by a peer or supervisor?	X				
		Were sample quantitation limits reported for all analytes not detected?	X				
		Were all results for soil and sediment samples reported on a dry weight basis?			X		
		Were % moisture (or solids) reported for all soil and sediment samples?			X		
		If required for the project, tentatively identified compounds reported?			X		
R04	O	Surrogate Recovery Data					
		Were surrogates added prior to extraction?			X		
		Were surrogate percent recoveries in all samples within the laboratory QC limits?			X		
R05	OI	Test Reports/Summary Forms for Blank Samples					
		Were appropriate type(s) of blanks analyzed?	X				
		Were blanks analyzed at the appropriate frequency?	X				
		Were blank concentrations < MQL?	X				
R06	OI	Laboratory Control Samples (LCS)					
		Were all chemicals of concern included in the LCS?			X		
		Was each LCS taken though the entire analytical procedure, including prep and cleanup steps?			X		
		Were LCSs analyzed at the required frequency?			X		
		Were LCS (and LCS duplicate, if applicable) %Rs within the laboratory QC limits?	X				
		Does the detectability data document the laboratory's capability to detect the chemicals of concern at the MDL used to calculate the SQLs?	X				
R07		Matrix Spike (MS) and Matrix Spike Duplicate (MSD) data					
		Were the project/method specified analytes included in the MS and MSD?	X				
		Were MS/MSD analyzed at the appropriate frequency?	X				
		Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?		X			2
		Were MS/MSD RPDs within laboratory QC limits?			X		
R08	OI	Analytical Duplicate Data					
		Were appropriate analytical duplicates analyzed for each matrix?	X				
		Were analytical duplicates analyzed at the appropriate frequency?	X				
		Were RPDs or relative standard deviations within the laboratory QC limits?	X				
R09	OI	Method Quantitation Limits (MQLs)					
		Are the MQLs for each method analyte included in the laboratory data package?	X				
		Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	X				
		Are unadjusted MQLs included in the laboratory data package?	X				
R10	OI	Other Problems/Anomalies					
		Are all known problems/anomalies/special condition noted in this LRC and ER?	X				
		Were all necessary corrective actions preformed for the reported data?	X				
		Was applicable and available technology used to lower the SQL and minimize the matrix interference effects on the sample results?	X				

Appendix A:		Laboratory Review Checklist: Reportable Data					
Laboratory Name: SPL Kilgore		LRC Date: 08/28/2024					
Project Name: Default		Laboratory Job (Project) Number: 1114138					
Reviewer Name: Bill Peery (WJP)		PrepSet: 1133430 QCgroup: 1133749					
#	A	Description	Yes	No	NA	NR	ER#
S01	OI	Initial Calibration (ICAL)					
		Were response factors and/or relative response factors for each analyte within QC limits?	X				
		Were percent RSDs or correlation coefficient criteria met?	X				
		Was the number of standards recommended in the method used for all analytes?	X				
		Were all points generated between the lowest and highest standard used to calculate the curve?	X				
		Are ICAL data available for all instruments used?	X				
		Has the initial calibration curve been verified using an appropriate second source standard?	X				
S02	OI	Initial and Continuing Calibration Verification (ICCV and CCV) and Continuing Calibration					
		Was the CCV analyzed at the method-required frequency?	X				
		Were percent differences for each analyte within the method-required QC limits?	X				
		Was the ICAL curve verified for each analyte?	X				
		Was the absolute value of the analyte concentration in the inorganic CCB < MQL?			X		
S03	O	Mass Spectral Tuning					
		Was the appropriate compound for the method used for tuning?			X		
		Were ion abundance data within the method-required QC limits?			X		
S04	O	Internal Standards (IS)					
		Were IS area counts and retention times within the method-required QC limits?			X		
S05	OI	Raw Data (NELAC section 1 appendix A glossary, and section 5.12 or ISO/IEC 17025 section . . .)					
		Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	X				
		Were data associated with manual integrations flagged on the raw data?	X				
S06	O	Dual Column Confirmation					
		Did dual column confirmation results meet the method-required QC?			X		
S07	O	Tentatively Identified Compounds (TICs)					
		If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?			X		
S08	I	Interference Check Sample (ICS) Results					
		Were percent recoveries within method QC limits?			X		
S09	I	Serial Dilutions, Post Digestion Spikes, and Method of Standard Additions					
		Were percent differences, recoveries, and the linearity within the QC limits specified in the method?			X		
S10	OI	Method Detection Limit (MDL) Studies					
		Was a MDL study performed for each reported analyte?	X				
		Is the MDL either adjusted or supported by the analysis of detectability check samples?	X				
S11	OI	Proficiency Test Reports					
		Was the laboratory's performance acceptable on the applicable proficiency tests or evaluation studies?	X				
S12	OI	Standards Documentation					
		Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?	X				
S13	IO	Compound/Analyte Identification Procedures					
		Are the procedures for compound/analyte identification documented?	X				
S14	OI	Demonstration of Analyst Competency (DOC)					
		Was DOC conducted consistent with NELAC Chapter 5C or ISO/IEC Section 4?	X				
		Is documentation of the analyst's competency up-to-date and on file?	X				
S15	OI	Verification/Validation Documentation Methods (NELAC Chapter 5 or ISO/IEC Section 5)					
		Are all the methods used to generate the data documented, verified and validated, where applicable?	X				
S16	OI	Laboratory Standard Operating Procedures (SOPs)					
		Are laboratory SOPs current and on file for each method performed?	X				

- Items identified by the letter "R" must be included on the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention
- O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
- N/A = Not applicable;
- NR = Not reviewed
- ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Appendix A:		Laboratory Review Checklist: Reportable Data					
Laboratory Name: SPL Kilgore		LRC Date: 08/28/2024					
Project Name: Default		Laboratory Job (Project) Number: 1114138					
Reviewer Name: Bill Peery (WJP)		PrepSet: 1133729 QCgroup: 1133870					
#	A	Description	Yes	No	NA	NR	ER#
R01	OI	Chain-of-Custody (C-O-C)					
		Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?				X	1
		Were all departures from standard conditions described in the exception report?	X				
R02	OI	Sample and Quality Control (QC) Identification					
		Are all field sample ID numbers cross referenced to the laboratory ID numbers?	X				
		Are all laboratory ID numbers cross-referenced to the corresponding QC data?	X				
R03	OI	Test Reports					
		Were all samples prepared and analyzed within holding times?	X				
		Other than those results < MQL, were all other raw values bracketed by calibration standards?	X				
		Were calculations checked by a peer or supervisor?	X				
		Were all analyte identifications checked by a peer or supervisor?	X				
		Were sample quantitation limits reported for all analytes not detected?	X				
		Were all results for soil and sediment samples reported on a dry weight basis?			X		
		Were % moisture (or solids) reported for all soil and sediment samples?			X		
		If required for the project, tentatively identified compounds reported?			X		
R04	O	Surrogate Recovery Data					
		Were surrogates added prior to extraction?			X		
		Were surrogate percent recoveries in all samples within the laboratory QC limits?			X		
R05	OI	Test Reports/Summary Forms for Blank Samples					
		Were appropriate type(s) of blanks analyzed?	X				
		Were blanks analyzed at the appropriate frequency?	X				
		Were blank concentrations < MQL?	X				
		Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	X				
R06	OI	Laboratory Control Samples (LCS)					
		Were all chemicals of concern included in the LCS?			X		
		Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?			X		
		Were LCSs analyzed at the required frequency?			X		
		Were LCS (and LCS duplicate, if applicable) %Rs within the laboratory QC limits?	X				
		Does the detectability data document the laboratory's capability to detect the chemicals of concern at the MDL used to calculate the SQLs?	X				
		Was the LCS duplicate relative percent difference within QC limits?	X				
R07		Matrix Spike (MS) and Matrix Spike Duplicate (MSD) data					
		Were the project/method specified analytes included in the MS and MSD?			X		
		Were MS/MSD analyzed at the appropriate frequency?			X		
		Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?		X			2
		Were MS/MSD RPDs within laboratory QC limits?	X				
R08	OI	Analytical Duplicate Data					
		Were appropriate analytical duplicates analyzed for each matrix?			X		
		Were analytical duplicates analyzed at the appropriate frequency?			X		
		Were RPDs or relative standard deviations within the laboratory QC limits?			X		
R09	OI	Method Quantitation Limits (MQLs)					
		Are the MQLs for each method analyte included in the laboratory data package?	X				
		Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	X				
		Are unadjusted MQLs included in the laboratory data package?	X				
R10	OI	Other Problems/Anomalies					
		Are all known problems/anomalies/special condition noted in this LRC and ER?	X				
		Were all necessary corrective actions preformed for the reported data?	X				
		Was applicable and available technology used to lower the SQL and minimize the matrix interference effects on the sample results?	X				

Appendix A:		Laboratory Review Checklist: Reportable Data					
Laboratory Name: SPL Kilgore		LRC Date: 08/28/2024					
Project Name: Default		Laboratory Job (Project) Number: 1114138					
Reviewer Name: Bill Peery (WJP)		PrepSet: 1133729 QCgroup: 1133870					
#	A	Description	Yes	No	NA	NR	ER#
S01	OI	Initial Calibration (ICAL)					
		Were response factors and/or relative response factors for each analyte within QC limits?	X				
		Were percent RSDs or correlation coefficient criteria met?	X				
		Was the number of standards recommended in the method used for all analytes?	X				
		Were all points generated between the lowest and highest standard used to calculate the curve?	X				
		Are ICAL data available for all instruments used?	X				
		Has the initial calibration curve been verified using an appropriate second source standard?	X				
S02	OI	Initial and Continuing Calibration Verification (ICCV and CCV) and Continuing Calibration					
		Was the CCV analyzed at the method-required frequency?	X				
		Were percent differences for each analyte within the method-required QC limits?		X			3
		Was the ICAL curve verified for each analyte?	X				
		Was the absolute value of the analyte concentration in the inorganic CCB < MQL?	X				
S03	O	Mass Spectral Tuning					
		Was the appropriate compound for the method used for tuning?			X		
		Were ion abundance data within the method-required QC limits?			X		
S04	O	Internal Standards (IS)					
		Were IS area counts and retention times within the method-required QC limits?			X		
S05	OI	Raw Data (NELAC section 1 appendix A glossary, and section 5.12 or ISO/IEC 17025 section . . .)					
		Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	X				
		Were data associated with manual integrations flagged on the raw data?	X				
S06	O	Dual Column Confirmation					
		Did dual column confirmation results meet the method-required QC?			X		
S07	O	Tentatively Identified Compounds (TICs)					
		If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?			X		
S08	I	Interference Check Sample (ICS) Results					
		Were percent recoveries within method QC limits?	X				
S09	I	Serial Dilutions, Post Digestion Spikes, and Method of Standard Additions					
		Were percent differences, recoveries, and the linearity within the QC limits specified in the method?			X		
S10	OI	Method Detection Limit (MDL) Studies					
		Was a MDL study performed for each reported analyte?	X				
		Is the MDL either adjusted or supported by the analysis of detectability check samples?	X				
S11	OI	Proficiency Test Reports					
		Was the laboratory's performance acceptable on the applicable proficiency tests or evaluation studies?	X				
S12	OI	Standards Documentation					
		Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?	X				
S13	IO	Compound/Analyte Identification Procedures					
		Are the procedures for compound/analyte identification documented?	X				
S14	OI	Demonstration of Analyst Competency (DOC)					
		Was DOC conducted consistent with NELAC Chapter 5C or ISO/IEC Section 4?	X				
		Is documentation of the analyst's competency up-to-date and on file?	X				
S15	OI	Verification/Validation Documentation Methods (NELAC Chapter 5 or ISO/IEC Section 5)					
		Are all the methods used to generate the data documented, verified and validated, where applicable?	X				
S16	OI	Laboratory Standard Operating Procedures (SOPs)					
		Are laboratory SOPs current and on file for each method performed?	X				

- Items identified by the letter "R" must be included on the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention
- O = organic analyses; I = ionorganic analyses (and general chemistry, when applicable);
- N/A = Not applicable;
- NR = Not reviewed
- ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Appendix A:		Laboratory Review Checklist: Reportable Data					
Laboratory Name:		SPL Kilgore		LRC Date:		08/28/2024	
Project Name:		Default		Laboratory Job (Project) Number:		1114138	
Reviewer Name:		Bill Peery (WJP)		PrepSet:		1134073 QCgroup: 1135392	
#	A	Description	Yes	No	NA	NR	ER#
R01	OI	Chain-of-Custody (C-O-C)					
		Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?				X	1
		Were all departures from standard conditions described in the exception report?	X				
R02	OI	Sample and Quality Control (QC) Identification					
		Are all field sample ID numbers cross referenced to the laboratory ID numbers?	X				
		Are all laboratory ID numbers cross-referenced to the corresponding QC data?	X				
R03	OI	Test Reports					
		Were all samples prepared and analyzed within holding times?	X				
		Other than those results < MQL, were all other raw values bracketed by calibration standards?	X				
		Were calculations checked by a peer or supervisor?	X				
		Were all analyte identifications checked by a peer or supervisor?	X				
		Were sample quantitation limits reported for all analytes not detected?	X				
		Were all results for soil and sediment samples reported on a dry weight basis?			X		
		Were % moisture (or solids) reported for all soil and sediment samples?			X		
		If required for the project, tentatively identified compounds reported?			X		
R04	O	Surrogate Recovery Data					
		Were surrogates added prior to extraction?	X				
		Were surrogate percent recoveries in all samples within the laboratory QC limits?	X				
R05	OI	Test Reports/Summary Forms for Blank Samples					
		Were appropriate type(s) of blanks analyzed?	X				
		Were blanks analyzed at the appropriate frequency?	X				
		Were blank concentrations < MQL?	X				
R06	OI	Laboratory Control Samples (LCS)					
		Were all chemicals of concern included in the LCS?			X		
		Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?			X		
		Were LCSs analyzed at the required frequency?			X		
		Were LCS (and LCS duplicate, if applicable) %Rs within the laboratory QC limits?	X				
		Does the detectability data document the laboratory's capability to detect the chemicals of concern at the MDL used to calculate the SQLs?	X				
R07		Matrix Spike (MS) and Matrix Spike Duplicate (MSD) data					
		Were the project/method specified analytes included in the MS and MSD?			X		
		Were MS/MSD analyzed at the appropriate frequency?			X		
		Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?			X		
		Were MS/MSD RPDs within laboratory QC limits?			X		
R08	OI	Analytical Duplicate Data					
		Were appropriate analytical duplicates analyzed for each matrix?			X		
		Were analytical duplicates analyzed at the appropriate frequency?			X		
R09	OI	Method Quantitation Limits (MQLs)					
		Are the MQLs for each method analyte included in the laboratory data package?	X				
		Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	X				
R10	OI	Other Problems/Anomalies					
		Are all known problems/anomalies/special condition noted in this LRC and ER?	X				
		Were all necessary corrective actions preformed for the reported data?	X				
			Was applicable and available technology used to lower the SQL and minimize the matrix interference effects on the sample results?	X			

Appendix A:		Laboratory Review Checklist: Reportable Data					
Laboratory Name: SPL Kilgore		LRC Date: 08/28/2024					
Project Name: Default		Laboratory Job (Project) Number: 1114138					
Reviewer Name: Bill Peery (WJP)		PrepSet: 1134073 QCgroup: 1135392					
#	A	Description	Yes	No	NA	NR	ER#
S01	OI	Initial Calibration (ICAL)					
		Were response factors and/or relative response factors for each analyte within QC limits?	X				
		Were percent RSDs or correlation coefficient criteria met?	X				
		Was the number of standards recommended in the method used for all analytes?	X				
		Were all points generated between the lowest and highest standard used to calculate the curve?	X				
		Are ICAL data available for all instruments used?	X				
		Has the initial calibration curve been verified using an appropriate second source standard?	X				
S02	OI	Initial and Continuing Calibration Verification (ICCV and CCV) and Continuing Calibration					
		Was the CCV analyzed at the method-required frequency?	X				
		Were percent differences for each analyte within the method-required QC limits?	X				
		Was the ICAL curve verified for each analyte?	X				
		Was the absolute value of the analyte concentration in the inorganic CCB < MQL?			X		
S03	O	Mass Spectral Tuning					
		Was the appropriate compound for the method used for tuning?			X		
		Were ion abundance data within the method-required QC limits?			X		
S04	O	Internal Standards (IS)					
		Were IS area counts and retention times within the method-required QC limits?			X		
S05	OI	Raw Data (NELAC section 1 appendix A glossary, and section 5.12 or ISO/IEC 17025 section . . .)					
		Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	X				
		Were data associated with manual integrations flagged on the raw data?	X				
S06	O	Dual Column Confirmation					
		Did dual column confirmation results meet the method-required QC?	X				
S07	O	Tentatively Identified Compounds (TICs)					
		If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?			X		
S08	I	Interference Check Sample (ICS) Results					
		Were percent recoveries within method QC limits?			X		
S09	I	Serial Dilutions, Post Digestion Spikes, and Method of Standard Additions					
		Were percent differences, recoveries, and the linearity within the QC limits specified in the method?			X		
S10	OI	Method Detection Limit (MDL) Studies					
		Was a MDL study performed for each reported analyte?	X				
		Is the MDL either adjusted or supported by the analysis of detectability check samples?	X				
S11	OI	Proficiency Test Reports					
		Was the laboratory's performance acceptable on the applicable proficiency tests or evaluation studies?	X				
S12	OI	Standards Documentation					
		Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?	X				
S13	IO	Compound/Analyte Identification Procedures					
		Are the procedures for compound/analyte identification documented?	X				
S14	OI	Demonstration of Analyst Competency (DOC)					
		Was DOC conducted consistent with NELAC Chapter 5C or ISO/IEC Section 4?	X				
		Is documentation of the analyst's competency up-to-date and on file?	X				
S15	OI	Verification/Validation Documentation Methods (NELAC Chapter 5 or ISO/IEC Section 5)					
		Are all the methods used to generate the data documented, verified and validated, where applicable?	X				
S16	OI	Laboratory Standard Operating Procedures (SOPs)					
		Are laboratory SOPs current and on file for each method performed?	X				

- Items identified by the letter "R" must be included on the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention
- O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
- N/A = Not applicable;
- NR = Not reviewed
- ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Appendix A: (cont'd): Laboratory Review Checklist: Exception Reports	
Laboratory Name: SPL Kilgore	LRC Date: 08/28/2024
Project Name: Default	Laboratory Job (Project) Number: 1114138
Reviewer Name: Bill Peery (WJP)	PrepSet: 1133430 QCgroup: 1133749
ER#	Description
1	Bottles were reviewed at login. Please see the chain of custody record for sample receipt details.
2	The following MS/MSD constituents have recoveries outside of laboratory QC limits: (MS) Phenolics, Total Recoverable

1 ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked on the LRC)

Appendix A: (cont'd): Laboratory Review Checklist: Exception Reports	
Laboratory Name: SPL Kilgore	LRC Date: 08/28/2024
Project Name: Default	Laboratory Job (Project) Number: 1114138
Reviewer Name: Bill Peery (WJP)	PrepSet: 1133729 QCgroup: 1133870
ER#	Description
1	Bottles were reviewed at login. Please see the chain of custody record for sample receipt details.
2	The following MS/MSD constituents have recoveries outside of laboratory QC limits: (MSD) Mercury, Total (low level)
3	The following CCV constituents have recoveries outside of laboratory QC limits: Mercury, Total (low level)

1 ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked on the LRC)

Appendix A: (cont'd): Laboratory Review Checklist: Exception Reports	
Laboratory Name: SPL Kilgore	LRC Date: 08/28/2024
Project Name: Default	Laboratory Job (Project) Number: 1114138
Reviewer Name: Bill Peery (WJP)	PrepSet: 1134073 QCgroup: 1135392
ER#	Description
1	Bottles were reviewed at login. Please see the chain of custody record for sample receipt details.

1 ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked on the LRC)



TPDES PERMIT NO.
WQ0010004003
*[For TCEQ office use only - EPA I.D.
No. TX0146382]*

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

PERMIT TO DISCHARGE WASTES
under provisions of
Section 402 of the Clean Water Act
and Chapter 26 of the Texas Water Code

City of Cameron

whose mailing address is

P.O. Box 833
Cameron, Texas 76520

is authorized to treat and discharge wastes from the City of Cameron Wastewater Treatment Facility, SIC Code 4952

located approximately 0.5 mile east of the intersection of Oak Avenue and Gillis Avenue, in Milam County, Texas 76520

to an unnamed tributary, thence to Little River in Segment No. 1213 of the Brazos River Basin

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

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

ISSUED DATE:

For the Commission

INTERIM EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTSOutfall Number 001

1. During the period beginning upon the date of issuance and lasting through the completion of expansion to the 1.25 million gallons per day (MGD) facility, the permittee is authorized to discharge subject to the following effluent limitations:

The daily average flow of effluent shall not exceed 0.96 MGD nor shall the average discharge during any two-hour period (2-hour peak) exceed 1,670 gallons per minute (gpm)

Effluent Characteristic	Discharge Limitations				Min. Self-Monitoring Requirements	
	Daily Avg mg/l (lbs/day)	7-day Avg mg/l	Daily Max mg/l	Single Grab mg/l	Report Daily Avg. & Daily Max. Measurement Frequency	Sample Type
Flow, MGD	Report	N/A	Report	N/A	Continuous	Totalizing Meter
Biochemical Oxygen Demand (5-day)	20 (160)	30	45	65	One/week	Composite
Total Suspended Solids	20 (160)	30	45	65	One/week	Composite
<i>E. coli</i> , colony-forming units or most probable number per 100 ml	126	N/A	399	N/A	Two/month	Grab

2. The effluent shall contain a total chlorine residual of at least 1.0 mg/l after a detention time of at least 20 minutes (based on peak flow) and shall be monitored daily by grab sample. The permittee shall dechlorinate the chlorinated effluent to less than 0.1 mg/l total chlorine residual and shall monitor total chlorine residual daily by grab sample after the dechlorination process. An equivalent method of disinfection may be substituted only with prior approval of the Executive Director.
3. The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units and shall be monitored twice per month by grab sample.
4. There shall be no discharge of floating solids or visible foam in other than trace amounts and no discharge of visible oil.
5. Effluent monitoring samples shall be taken at the following location(s): Following the final treatment unit.
6. The effluent shall contain a minimum dissolved oxygen of 3.0 mg/l and shall be monitored once per week by grab sample.

FINAL EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTSOutfall Number 001

1. During the period beginning upon the completion of expansion to the 1.25 million gallons per day (MGD) facility and lasting through the date of expiration, the permittee is authorized to discharge subject to the following effluent limitations:

The annual average flow of effluent shall not exceed 1.25 MGD*.

Effluent Characteristic	Discharge Limitations				Min. Self-Monitoring Requirements	
	Daily Avg mg/l (lbs/day)	7-day Avg mg/l	Daily Max mg/l	Single Grab mg/l	Report Daily Avg. & Daily Max. Measurement Frequency	Sample Type
Flow, MGD	Report	N/A	Report	N/A	Continuous	Totalizing Meter
Carbonaceous Biochemical Oxygen Demand (5-day)	10 (104)	15	25	35	Two/week	Composite
Total Suspended Solids	15 (156)	25	40	60	Two/week	Composite
Ammonia Nitrogen	2 (21)	5	10	15	Two/week	Composite
<i>E. coli</i> , colony-forming units or most probable number per 100 ml	126	N/A	399	N/A	One/week	Grab

***See Other Requirement No. 9.**

- The effluent shall contain a total chlorine residual of at least 1.0 mg/l after a detention time of at least 20 minutes (based on peak flow) and shall be monitored daily by grab sample. The permittee shall dechlorinate the chlorinated effluent to less than 0.1 mg/l total chlorine residual and shall monitor total chlorine residual daily by grab sample after the dechlorination process. An equivalent method of disinfection may be substituted only with prior approval of the Executive Director.
- The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units and shall be monitored once per week by grab sample.
- There shall be no discharge of floating solids or visible foam in other than trace amounts and no discharge of visible oil.
- Effluent monitoring samples shall be taken at the following location(s): Following the final treatment unit.
- The effluent shall contain a minimum dissolved oxygen of 6.0 mg/l and shall be monitored twice per week by grab sample.
- The annual average flow and maximum 2-hour peak flow shall be reported monthly.

DEFINITIONS AND STANDARD PERMIT CONDITIONS

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

1. Flow Measurements

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

2. Concentration Measurements

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

- ii. For all other wastewater treatment plants - When four samples are not available in a calendar month, the arithmetic average (weighted by flow) of all values taken during the month shall be utilized as the daily average concentration.
- b. 7-day average concentration - the arithmetic average of all effluent samples, composite or grab as required by this permit, within a period of one calendar week, Sunday through Saturday.
- c. Daily maximum concentration - the maximum concentration measured on a single day, by the sample type specified in the permit, within a period of one calendar month.
- d. Daily discharge - the discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling. For pollutants with limitations expressed in terms of mass, the daily discharge is calculated as the total mass of the pollutant discharged over the sampling day. For pollutants with limitations expressed in other units of measurement, the daily discharge is calculated as the average measurement of the pollutant over the sampling day.

The daily discharge determination of concentration made using a composite sample shall be the concentration of the composite sample. When grab samples are used, the daily discharge determination of concentration shall be the arithmetic average (weighted by flow value) of all samples collected during that day.

- e. Bacteria concentration (*E. coli* or Enterococci) - Colony Forming Units (CFU) or Most Probable Number (MPN) of bacteria per 100 milliliters effluent. The daily average bacteria concentration is a geometric mean of the values for the effluent samples collected in a calendar month. The geometric mean shall be determined by calculating the n th root of the product of all measurements made in a calendar month, where n equals the number of measurements made; or, computed as the antilogarithm of the arithmetic mean of the logarithms of all measurements made in a calendar month. For any measurement of bacteria equaling zero, a substituted value of one shall be made for input into either computation method. If specified, the 7-day average for bacteria is the geometric mean of the values for all effluent samples collected during a calendar week.
 - f. Daily average loading (lbs/day) - the arithmetic average of all daily discharge loading calculations during a period of one calendar month. These calculations must be made for each day of the month that a parameter is analyzed. The daily discharge, in terms of mass (lbs/day), is calculated as (Flow, MGD x Concentration, mg/l x 8.34).
 - g. Daily maximum loading (lbs/day) - the highest daily discharge, in terms of mass (lbs/day), within a period of one calendar month.
3. Sample Type
- a. Composite sample - For domestic wastewater, a composite sample is a sample made up of a minimum of three effluent portions collected in a continuous 24-hour period or during the period of daily discharge if less than 24 hours, and combined in volumes proportional to flow, and collected at the intervals required by 30 TAC § 319.9 (a). For industrial wastewater, a composite sample is a sample made up of a minimum of three effluent portions collected in a continuous 24-hour period or during the period of daily discharge if less than 24 hours, and combined in volumes proportional to flow, and collected at the intervals required by 30 TAC § 319.9 (b).

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

MONITORING AND REPORTING REQUIREMENTS

1. Self-Reporting

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

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

2. Test Procedures

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

3. Records of Results

- a. Monitoring samples and measurements shall be taken at times and in a manner so as to be representative of the monitored activity.

- b. Except for records of monitoring information required by this permit related to the permittee's sewage sludge or biosolids use and disposal activities, which shall be retained for a period of at least five years (or longer as required by 40 CFR Part 503), monitoring and reporting records, including strip charts and records of calibration and maintenance, copies of all records required by this permit, records of all data used to complete the application for this permit, and the certification required by 40 CFR § 264.73(b)(9) shall be retained at the facility site, or shall be readily available for review by a TCEQ representative for a period of three years from the date of the record or sample, measurement, report, application or certification. This period shall be extended at the request of the Executive Director.
- c. Records of monitoring activities shall include the following:
 - i. date, time and place of sample or measurement;
 - ii. identity of individual who collected the sample or made the measurement.
 - iii. date and time of analysis;
 - iv. identity of the individual and laboratory who performed the analysis;
 - v. the technique or method of analysis; and
 - vi. the results of the analysis or measurement and quality assurance/quality control records.

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

4. Additional Monitoring by Permittee

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

5. Calibration of Instruments

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

6. Compliance Schedule Reports

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of the permit shall be submitted no later than 14 days following each schedule date to the Regional Office and the Enforcement

Division (MC 224).

7. Noncompliance Notification

- a. In accordance with 30 TAC § 305.125(9) any noncompliance which may endanger human health or safety, or the environment shall be reported by the permittee to the TCEQ. Except as allowed by 30 TAC § 305.132, report of such information shall be provided orally or by facsimile transmission (FAX) to the Regional Office within 24 hours of becoming aware of the noncompliance. A written submission of such information shall also be provided by the permittee to the Regional Office and the Enforcement Division (MC 224) within five working days of becoming aware of the noncompliance. For Publicly Owned Treatment Works (POTWs), effective December 21, 2025, the permittee must submit the written report for unauthorized discharges and unanticipated bypasses that exceed any effluent limit in the permit using the online electronic reporting system available through the TCEQ website unless the permittee requests and obtains an electronic reporting waiver. The written submission shall contain a description of the noncompliance and its cause; the potential danger to human health or safety, or the environment; the period of noncompliance, including exact dates and times; if the noncompliance has not been corrected, the time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance, and to mitigate its adverse effects.
 - b. The following violations shall be reported under Monitoring and Reporting Requirement 7.a.:
 - i. Unauthorized discharges as defined in Permit Condition 2(g).
 - ii. Any unanticipated bypass that exceeds any effluent limitation in the permit.
 - iii. Violation of a permitted maximum daily discharge limitation for pollutants listed specifically in the Other Requirements section of an Industrial TPDES permit.
 - c. In addition to the above, any effluent violation which deviates from the permitted effluent limitation by more than 40% shall be reported by the permittee in writing to the Regional Office and the Enforcement Division (MC 224) within 5 working days of becoming aware of the noncompliance.
 - d. Any noncompliance other than that specified in this section, or any required information not submitted or submitted incorrectly, shall be reported to the Enforcement Division (MC 224) as promptly as possible. For effluent limitation violations, noncompliances shall be reported on the approved self-report form.
8. In accordance with the procedures described in 30 TAC §§ 35.301 - 35.303 (relating to Water Quality Emergency and Temporary Orders) if the permittee knows in advance of the need for a bypass, it shall submit prior notice by applying for such authorization.
9. Changes in Discharges of Toxic Substances

All existing manufacturing, commercial, mining, and silvicultural permittees shall notify the Regional Office, orally or by facsimile transmission within 24 hours, and both the Regional Office and the Enforcement Division (MC 224) in writing within five (5) working days, after becoming aware of or having reason to believe:

- a. That any activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant listed at 40 CFR Part 122, Appendix D, Tables II and III (excluding Total Phenols) which is not limited in the permit, if that discharge will exceed the highest of the following “notification levels”:
 - i. One hundred micrograms per liter (100 µg/L);
 - ii. Two hundred micrograms per liter (200 µg/L) for acrolein and acrylonitrile; five hundred micrograms per liter (500 µg/L) for 2,4-dinitrophenol and for 2-methyl-4,6-dinitrophenol; and one milligram per liter (1 mg/L) for antimony;
 - iii. Five (5) times the maximum concentration value reported for that pollutant in the permit application; or
 - iv. The level established by the TCEQ.
- b. That any activity has occurred or will occur which would result in any discharge, on a nonroutine or infrequent basis, of a toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following “notification levels”:
 - i. Five hundred micrograms per liter (500 µg/L);
 - ii. One milligram per liter (1 mg/L) for antimony;
 - iii. Ten (10) times the maximum concentration value reported for that pollutant in the permit application; or
 - iv. The level established by the TCEQ.

10. Signatories to Reports

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

11. All POTWs must provide adequate notice to the Executive Director of the following:

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

PERMIT CONDITIONS**1. General**

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

2. Compliance

- a. Acceptance of the permit by the person to whom it is issued constitutes acknowledgment and agreement that such person will comply with all the terms and conditions embodied in the permit, and the rules and other orders of the Commission.
- b. The permittee has a duty to comply with all conditions of the permit. Failure to comply with any permit condition constitutes a violation of the permit and the Texas Water Code or the Texas Health and Safety Code, and is grounds for enforcement action, for permit amendment, revocation, or suspension, or for denial of a permit renewal application or an application for a permit for another facility.
- c. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit.
- d. The permittee shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal or other permit violation that has a reasonable likelihood of adversely affecting human health or the environment.
- e. Authorization from the Commission is required before beginning any change in the permitted facility or activity that may result in noncompliance with any permit requirements.
- f. A permit may be amended, suspended and reissued, or revoked for cause in accordance

with 30 TAC §§ 305.62 and 305.66 and TWC§ 7.302. The filing of a request by the permittee for a permit amendment, suspension and reissuance, or termination, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition.

- g. There shall be no unauthorized discharge of wastewater or any other waste. For the purpose of this permit, an unauthorized discharge is considered to be any discharge of wastewater into or adjacent to water in the state at any location not permitted as an outfall or otherwise defined in the Other Requirements section of this permit.
- h. In accordance with 30 TAC § 305.535(a), the permittee may allow any bypass to occur from a TPDES permitted facility which does not cause permitted effluent limitations to be exceeded or an unauthorized discharge to occur, but only if the bypass is also for essential maintenance to assure efficient operation.
- i. The permittee is subject to administrative, civil, and criminal penalties, as applicable, under TWC §§ 7.051 - 7.075 (relating to Administrative Penalties), 7.101 - 7.111 (relating to Civil Penalties), and 7.141 - 7.202 (relating to Criminal Offenses and Penalties) for violations including, but not limited to, negligently or knowingly violating the federal CWA §§ 301, 302, 306, 307, 308, 318, or 405, or any condition or limitation implementing any sections in a permit issued under the CWA § 402, or any requirement imposed in a pretreatment program approved under the CWA §§ 402 (a)(3) or 402 (b)(8).

3. Inspections and Entry

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

4. Permit Amendment and/or Renewal

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

prohibition. The permittee shall comply with effluent standards or prohibitions established under CWA § 307(a) for toxic pollutants within the time provided in the regulations that established those standards or prohibitions, even if the permit has not yet been modified to incorporate the requirement.

5. Permit Transfer

- a. Prior to any transfer of this permit, Commission approval must be obtained. The Commission shall be notified in writing of any change in control or ownership of facilities authorized by this permit. Such notification should be sent to the Applications Review and Processing Team (MC 148) of the Water Quality Division.
- b. A permit may be transferred only according to the provisions of 30 TAC § 305.64 (relating to Transfer of Permits) and 30 TAC § 50.133 (relating to Executive Director Action on Application or WQMP update).

6. Relationship to Hazardous Waste Activities

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

7. Relationship to Water Rights

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

8. Property Rights

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

9. Permit Enforceability

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

10. Relationship to Permit Application

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

11. Notice of Bankruptcy

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

- iii. an affiliate (as that term is defined in 11 USC, § 101(2)) of the permittee.
- b. This notification must indicate:
 - i. the name of the permittee;
 - ii. the permit number(s);
 - iii. the bankruptcy court in which the petition for bankruptcy was filed; and
 - iv. the date of filing of the petition.

OPERATIONAL REQUIREMENTS

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

6. The permittee shall remit an annual water quality fee to the Commission as required by 30 TAC Chapter 21. Failure to pay the fee may result in revocation of this permit under TWC § 7.302(b)(6).

7. Documentation

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

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

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

- b. The plans and specifications for domestic sewage collection and treatment works associated with any domestic permit must be approved by the Commission and failure to secure approval before commencing construction of such works or making a discharge is a violation of this permit and each day is an additional violation until approval has been

secured.

- c. Permits for domestic wastewater treatment plants are granted subject to the policy of the Commission to encourage the development of area-wide waste collection, treatment, and disposal systems. The Commission reserves the right to amend any domestic wastewater permit in accordance with applicable procedural requirements to require the system covered by this permit to be integrated into an area-wide system, should such be developed; to require the delivery of the wastes authorized to be collected in, treated by or discharged from said system, to such area-wide system; or to amend this permit in any other particular to effectuate the Commission's policy. Such amendments may be made when the changes required are advisable for water quality control purposes and are feasible on the basis of waste treatment technology, engineering, financial, and related considerations existing at the time the changes are required, exclusive of the loss of investment in or revenues from any then existing or proposed waste collection, treatment or disposal system.
9. Domestic wastewater treatment plants shall be operated and maintained by sewage plant operators holding a valid certificate of competency at the required level as defined in 30 TAC Chapter 30.
 10. For Publicly Owned Treatment Works (POTWs), the 30-day average (or monthly average) percent removal for BOD and TSS shall not be less than 85%, unless otherwise authorized by this permit.
 11. Facilities that generate industrial solid waste as defined in 30 TAC § 335.1 shall comply with these provisions:
 - a. Any solid waste, as defined in 30 TAC § 335.1 (including but not limited to such wastes as garbage, refuse, sludge from a waste treatment, water supply treatment plant or air pollution control facility, discarded materials, discarded materials to be recycled, whether the waste is solid, liquid, or semisolid), generated by the permittee during the management and treatment of wastewater, must be managed in accordance with all applicable provisions of 30 TAC Chapter 335, relating to Industrial Solid Waste Management.
 - b. Industrial wastewater that is being collected, accumulated, stored, or processed before discharge through any final discharge outfall, specified by this permit, is considered to be industrial solid waste until the wastewater passes through the actual point source discharge and must be managed in accordance with all applicable provisions of 30 TAC Chapter 335.
 - c. The permittee shall provide written notification, pursuant to the requirements of 30 TAC § 335.8(b)(1), to the Corrective Action Section (MC 127) of the Remediation Division informing the Commission of any closure activity involving an Industrial Solid Waste Management Unit, at least 90 days prior to conducting such an activity.
 - d. Construction of any industrial solid waste management unit requires the prior written notification of the proposed activity to the Registration and Reporting Section (MC 129) of the Permitting and Registration Support Division. No person shall dispose of industrial solid waste, including sludge or other solids from wastewater treatment processes, prior to fulfilling the deed recordation requirements of 30 TAC § 335.5.

- e. The term “industrial solid waste management unit” means a landfill, surface impoundment, waste-pile, industrial furnace, incinerator, cement kiln, injection well, container, drum, salt dome waste containment cavern, or any other structure vessel, appurtenance, or other improvement on land used to manage industrial solid waste.
- f. The permittee shall keep management records for all sludge (or other waste) removed from any wastewater treatment process. These records shall fulfill all applicable requirements of 30 TAC § 335 and must include the following, as it pertains to wastewater treatment and discharge:
 - i. Volume of waste and date(s) generated from treatment process;
 - ii. Volume of waste disposed of on-site or shipped off-site;
 - iii. Date(s) of disposal;
 - iv. Identity of hauler or transporter;
 - v. Location of disposal site; and
 - vi. Method of final disposal.

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

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

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SLUDGE PROVISIONS

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

SECTION I. REQUIREMENTS APPLYING TO ALL SEWAGE SLUDGE OR BIOSOLIDS LAND APPLICATION

A. General Requirements

1. The permittee shall handle and dispose of sewage sludge or biosolids in accordance with 30 TAC § 312 and all other applicable state and federal regulations in a manner that protects public health and the environment from any reasonably anticipated adverse effects due to any toxic pollutants that may be present in the sludge or biosolids.
2. In all cases, if the person (permit holder) who prepares the sewage sludge supplies the sewage sludge to another person for land application use or to the owner or lease holder of the land, the permit holder shall provide necessary information to the parties who receive the sludge to assure compliance with these regulations.
3. The land application of processed or unprocessed chemical toilet waste, grease trap waste, grit trap waste, milk solids, or similar non-hazardous municipal or industrial solid wastes, or any of the wastes listed in this provision combined with biosolids, WTP residuals or domestic septage is prohibited unless the grease trap waste is added at a fats, oil and grease (FOG) receiving facility as part of an anaerobic digestion process.

B. Testing Requirements

1. Sewage sludge or biosolids shall be tested once during the term of this permit in the Interim phase, and annually in the Final phase in accordance with the method specified in both 40 CFR Part 261, Appendix II and 40 CFR Part 268, Appendix I [Toxicity Characteristic Leaching Procedure (TCLP)] or other method that receives the prior approval of the TCEQ for the contaminants listed in 40 CFR Part 261.24, Table 1. Sewage sludge or biosolids failing this test shall be managed according to RCRA standards for generators of hazardous waste, and the waste's disposition must be in accordance with all applicable requirements for hazardous waste processing, storage, or disposal. Following failure of any TCLP test, the management or disposal of sewage sludge or biosolids at a facility other than an authorized hazardous waste processing, storage, or disposal facility shall be prohibited until such time as the permittee can demonstrate the sewage sludge or biosolids no longer exhibits the hazardous waste toxicity characteristics (as demonstrated by the results of the TCLP tests). A written report shall be provided to both the TCEQ Registration and Reporting Section (MC 129) of the Permitting and Registration Support Division and the Regional Director (MC Region 9) within seven (7) days after failing the TCLP Test.

The report shall contain test results, certification that unauthorized waste management has stopped, and a summary of alternative disposal plans that comply with RCRA standards for the management of hazardous waste. The report shall be addressed to: Director, Permitting and Registration Support Division (MC 129), Texas Commission on Environmental Quality, P.O. Box 13087, Austin, Texas 78711-3087. In addition, the permittee shall prepare an annual report on the results of all sludge toxicity testing. The permittee shall submit the following information in an annual report to the TCEQ by September 30th of each year. The permittee must submit this annual report using the online electronic reporting system available through TCEQ's website. If the permittee requests and obtains an electronic reporting waiver, the annual report can be submitted in hard copy to the TCEQ Regional Office (MC Region 9) and the Enforcement Division (MC 224).

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

TABLE 1

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

* Dry weight basis

3. Pathogen Control

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

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

Alternative 1 - The temperature of the sewage sludge that is used or disposed shall be maintained at or above a specific value for a period of time. See 30 TAC § 312.82(a)(3)(A) for specific information;

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

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

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

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

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

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

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

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

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

Alternative 1

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

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

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

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

- i. Prior to use or disposal, all the sewage sludge must have been generated from a single location, except as provided in paragraph v. below;

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

In addition to the Alternatives 1 – 3, the following site restrictions must be met if Class B biosolids are land applied:

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

- viii. Public access to land with a low potential for public exposure shall be restricted for 30 days after application of biosolids.
 - ix. Land application of biosolids shall be in accordance with the buffer zone requirements found in 30 TAC § 312.44.
4. Vector Attraction Reduction Requirements

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

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

Alternative 8 - The percent solids of sewage sludge that contains unstabilized solids generated in a primary wastewater treatment process shall be equal to or greater than 90% based on the moisture content and total solids prior to mixing with other materials at the time the sludge is used. Unstabilized solids are defined as organic materials in sewage sludge that have not been treated in either an aerobic or anaerobic treatment process.

Alternative 9 -

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

Alternative 10 -

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

C. Monitoring Requirements

Toxicity Characteristic Leaching Procedure (TCLP) Test	- once during the term of this permit in the Interim phase, and annually in the Final phase
PCBs	- once during the term of this permit in the Interim phase, and annually in the Final phase

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

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

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

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

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

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

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

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

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

A. Pollutant Limits

Table 2

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

Table 3

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

*Dry weight basis

B. Pathogen Control

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

C. Management Practices

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

D. Notification Requirements

1. If bulk biosolids are applied to land in a State other than Texas, written notice shall be provided prior to the initial land application to the permitting authority for the State in which the bulk biosolids are proposed to be applied. The notice shall include:
 - a. The location, by street address, and specific latitude and longitude, of each land application site.
 - b. The approximate time period bulk biosolids will be applied to the site.
 - c. The name, address, telephone number, and National Pollutant Discharge Elimination System permit number (if appropriate) for the person who will apply the bulk biosolids.

E. Record Keeping Requirements

The documents will be retained at the facility site and/or shall be readily available for review by a TCEQ representative. The person who prepares bulk sewage sludge or a biosolids material shall develop the following information and shall retain the information at the facility site and/or shall be readily available for review by a TCEQ representative for a period of five years. If the permittee supplies the sludge to another person who land applies the sludge, the permittee shall notify the land applier of the requirements for record keeping found in 30 TAC § 312.47 for persons who land apply.

1. The concentration (mg/kg) in the sludge of each pollutant listed in Table 3 above and the applicable pollutant concentration criteria (mg/kg), or the applicable cumulative pollutant loading rate and the applicable cumulative pollutant loading rate limit (lbs/ac) listed in Table 2 above.
2. A description of how the pathogen reduction requirements are met (including site restrictions for Class AB and Class B biosolids, if applicable).
3. A description of how the vector attraction reduction requirements are met.
4. A description of how the management practices listed above in Section II.C are being met.
5. The following certification statement:

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

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

F. Reporting Requirements

The permittee shall submit the following information in an annual report to the TCEQ by September 30th of each year. The permittee must submit this annual report using the online electronic reporting system available through TCEQ's website. If the permittee requests and obtains an electronic reporting waiver, the annual report can be submitted in hard copy to the TCEQ Regional Office (MC Region 9) and the Enforcement Division (MC 224).

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

17. The certification statement listed in either 30 TAC § 312.47(a)(4)(A)(ii) or 30 TAC § 312.47(a)(5)(A)(ii) as applicable to the permittee's sludge or biosolids treatment activities, shall be attached to the annual reporting form.
18. When the amount of any pollutant applied to the land exceeds 90% of the cumulative pollutant loading rate for that pollutant, as described in Table 2, the permittee shall report the following information as an attachment to the annual reporting form.
 - a. The location, by street address, and specific latitude and longitude.
 - b. The number of acres in each site on which bulk biosolids are applied.
 - c. The date and time bulk biosolids are applied to each site.
 - d. The cumulative amount of each pollutant (i.e., pounds/acre) listed in Table 2 in the bulk biosolids applied to each site.
 - e. The amount of biosolids (i.e., dry tons) applied to each site.

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

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

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

Following failure of any TCLP test, the management or disposal of sewage sludge or biosolids at a facility other than an authorized hazardous waste processing, storage, or disposal facility shall be prohibited until such time as the permittee can demonstrate the sewage sludge or biosolids no longer exhibits the hazardous waste toxicity characteristics (as demonstrated by the results of the TCLP tests). A written report shall be provided to both the TCEQ Registration and Reporting Section (MC 129) of the Permitting and Registration Support Division and the Regional Director (MC Region 9) of the appropriate TCEQ field office within 7 days after failing the TCLP Test.

The report shall contain test results, certification that unauthorized waste management has stopped, and a summary of alternative disposal plans that comply with RCRA standards for the management of hazardous waste. The report shall be addressed to: Director, Permitting and Registration Support Division (MC 129), Texas Commission on Environmental Quality, P. O. Box 13087, Austin, Texas 78711-3087. In addition, the permittee shall prepare an annual report on the results of all sludge toxicity testing. This annual report shall be submitted to the TCEQ Regional Office (MC Region 9) and the Enforcement Division (MC 224), by September 30 of each year.

- D. Sewage sludge or biosolids shall be tested as needed, in accordance with the requirements of 30 TAC Chapter 330.
- E. Record Keeping Requirements

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

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

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

F. Reporting Requirements

The permittee shall submit the following information in an annual report to the TCEQ by September 30th of each year. The permittee must submit this annual report using the online electronic reporting system available through TCEQ's website. If the permittee requests and obtains an electronic reporting waiver, the annual report can be submitted in hard copy to the TCEQ Regional Office (MC Region 9) and the Enforcement Division (MC 224).

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

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

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

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

A. General Requirements

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

B. Record Keeping Requirements

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

C. Reporting Requirements

The permittee shall submit the following information in an annual report to the TCEQ by September 30th of each year. The permittee must submit this annual report using the online electronic reporting system available through TCEQ's website. If the permittee requests and obtains an electronic reporting waiver, the annual report can be submitted in hard copy to the TCEQ Regional Office (MC Region 9) and the Enforcement Division (MC 224).

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

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OTHER REQUIREMENTS

1. The permittee shall employ or contract with one or more licensed wastewater treatment facility operators or wastewater system operations companies holding a valid license or registration according to the requirements of 30 TAC Chapter 30, Occupational Licenses and Registrations, and in particular 30 TAC Chapter 30, Subchapter J, Wastewater Operators and Operations Companies.

This Category Category C in the Interim phase and Category B in the Final phase facility must be operated by a chief operator or an operator holding a Class C in the Interim phase and Class B in the Final phase license or higher. The facility must be operated a minimum of five days per week by the licensed chief operator or an operator holding the required level of license or higher. The licensed chief operator or operator holding the required level of license or higher must be available by telephone or pager seven days per week. Where shift operation of the wastewater treatment facility is necessary, each shift that does not have the on-site supervision of the licensed chief operator must be supervised by an operator in charge who is licensed not less than one level below the category for the facility.

2. The facility is not located in the Coastal Management Program boundary.
3. There is no mixing zone established for this discharge to an intermittent stream. Acute toxic criteria apply at the point of discharge.
4. The permittee shall comply with the requirements of 30 TAC § 309.13(a) through (d). In addition, by ownership of the required buffer zone area, the permittee shall comply with the requirements of 30 TAC § 309.13(e).
5. The permittee shall provide facilities for the protection of its wastewater treatment facility from a 100-year flood.
6. In accordance with 30 TAC § 319.9, a permittee that has at least twelve months of uninterrupted compliance with its bacteria limit may notify the commission in writing of its compliance and request a less frequent measurement schedule. To request a less frequent schedule, the permittee shall submit a written request to the TCEQ Wastewater Permitting Section (MC 148) for each phase that includes a different monitoring frequency. The request must contain all of the reported bacteria values (Daily Avg. and Daily Max/Single Grab) for the twelve consecutive months immediately prior to the request. If the Executive Director finds that a less frequent measurement schedule is protective of human health and the environment, the permittee may be given a less frequent measurement schedule. For this permit, two/month may be reduced to one/month in the Interim phase and one/week may be reduced to two/month in the Final phase. **A violation of any bacteria limit by a facility that has been granted a less frequent measurement schedule will require the permittee to return to the standard frequency schedule and submit written notice to the TCEQ Wastewater Permitting Section (MC 148).** The permittee may not apply for another reduction in measurement frequency for at least 24 months from the date of the last violation. The Executive Director may establish a more frequent measurement schedule if necessary to protect human health or the environment.
7. Within 120 days from permit issuance for the Interim Phase and prior to construction of the Final phase wastewater treatment facilities, the permittee shall submit to the TCEQ Wastewater Permitting Section (MC 148) a summary transmittal letter in accordance with

the requirements in 30 TAC § 217.6(d). If requested by the Wastewater Permitting Section, the permittee shall submit plans, specifications, and a final engineering design report which comply with 30 TAC Chapter 217, Design Criteria for Domestic Wastewater Systems. The permittee shall clearly show how the treatment system will meet the effluent limitations required on Page 2 and 2a of this permit. A copy of the summary transmittal letter shall be available at the plant site for inspection by authorized representatives of the TCEQ.

8. The permittee shall notify the TCEQ Regional Office (MC Region 9) and the Applications Review and Processing Team (MC 148) of the Water Quality Division, in writing at least forty-five days prior to the completion of the Final phase wastewater treatment facility on Notification of Completion Form 20007.
9. This facility is designed for batch discharge. Maximum 2-hour peak flow limits are not included in the permit. The permittee shall operate the disinfection facilities to ensure that the effluent complies with permit limits for bacteria and chlorine residual. This provision does not limit or restrict future inclusion of peak flow limits.
10. The facility was previously permitted under TPDES Permit No. WQ0010004001 which expired on June 26, 2023.

CONTRIBUTING INDUSTRIES AND PRETREATMENT REQUIREMENTS

1. The following pollutants may not be introduced into the treatment facility:
 - a. Pollutants which create a fire or explosion hazard in the publicly owned treatment works (POTW), including, but not limited to, waste streams with a closed-cup flash point of less than 140° Fahrenheit (60° Celsius) using the test methods specified in 40 CFR § 261.21;
 - b. Pollutants which will cause corrosive structural damage to the POTW, but in no case shall there be discharges with a pH lower than 5.0 standard units, unless the works are specifically designed to accommodate such discharges;
 - c. Solid or viscous pollutants in amounts which will cause obstruction to the flow in the POTW, resulting in Interference;
 - d. Any pollutant, including oxygen-demanding pollutants (e.g., biochemical oxygen demand), released in a discharge at a flow rate and/or pollutant concentration which will cause Interference with the POTW;
 - e. Heat in amounts which will inhibit biological activity in the POTW, resulting in Interference, but in no case shall there be heat in such quantities that the temperature at the POTW treatment plant exceeds 104° Fahrenheit (40° Celsius) unless the Executive Director, upon request of the POTW, approves alternate temperature limits;
 - f. Petroleum oil, nonbiodegradable cutting oil, or products of mineral oil origin in amounts that will cause Interference or Pass Through;
 - g. Pollutants which result in the presence of toxic gases, vapors, or fumes within the POTW in a quantity that may cause acute worker health and safety problems; and
 - h. Any trucked or hauled pollutants except at discharge points designated by the POTW.
2. The permittee shall require any indirect discharger to the treatment works to comply with the reporting requirements of Sections 204(b), 307, and 308 of the Clean Water Act, including any requirements established under 40 CFR Part 403 [*rev. Federal Register/ Vol. 70/ No. 198/ Friday, October 14, 2005/ Rules and Regulations, pages 60134-60798*].
3. The permittee shall provide adequate notification to the Executive Director, care of the Wastewater Permitting Section (MC 148) of the Water Quality Division, within 30 days subsequent to the permittee's knowledge of either of the following:
 - a. Any new introduction of pollutants into the treatment works from an indirect discharger which would be subject to Sections 301 and 306 of the Clean Water Act if it were directly discharging those pollutants; and
 - b. Any substantial change in the volume or character of pollutants being introduced into the treatment works by a source introducing pollutants into the treatment works at the time of issuance of the permit.

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

Revised July 2007

BIOMONITORING REQUIREMENTS**48-HOUR ACUTE BIOMONITORING REQUIREMENTS: FRESHWATER**

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

1. Scope, Frequency, and Methodology

- a. The permittee shall test the effluent for toxicity in accordance with the provisions below. Such testing will determine if an appropriately dilute effluent sample adversely affects the survival of the test organism.
- b. Within 90 days of initial discharge of the 1.25 MGD facility, the permittee shall conduct the following toxicity tests using the test organisms, procedures, and quality assurance requirements specified in this part of this permit and in accordance with "Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms," fifth edition (EPA-821-R-02-012) or its most recent update:
 - 1) Acute static renewal 48-hour definitive toxicity test using the water flea (*Daphnia pulex* or *Ceriodaphnia dubia*). A minimum of five replicates with eight organisms per replicate shall be used in the control and in each dilution. This test shall be conducted once per quarter.
 - 2) Acute static renewal 48-hour definitive toxicity test using the fathead minnow (*Pimephales promelas*). A minimum of five replicates with eight organisms per replicate shall be used in the control and in each dilution. This test shall be conducted once per quarter.

The permittee must perform and submit a valid test for each test species during the required reporting period for that species. A minimum of five replicates with eight organisms per replicate shall be used in the control and each dilution. A repeat test shall include the control and all effluent dilutions and use the appropriate number of organisms and replicates, as specified above. An invalid test is defined as any test failing to satisfy the test acceptability criteria, procedures, and quality assurance requirements specified in the test methods and permit.

- c. The permittee shall use five effluent dilution concentrations and a control in each toxicity test. These effluent dilution concentrations are 32%, 42%, 56%, 75%, and 100% effluent. The critical dilution, defined as 100% effluent, is the effluent concentration representative of the proportion of effluent in the receiving water during critical low flow or critical mixing conditions.
- d. This permit may be amended to require a WET limit, a chemical-specific limit, a best management practice, or other appropriate actions to address toxicity. The permittee may be required to conduct a toxicity reduction evaluation (TRE) after multiple toxic events.

e. Testing Frequency Reduction

- 1) If none of the first four consecutive quarterly tests demonstrates significant lethal effects, the permittee may submit this information in writing and, upon approval, reduce the testing frequency to once per six months for the invertebrate test species and once per year for the vertebrate test species.
- 2) If one or more of the first four consecutive quarterly tests demonstrates significant lethal effects, the permittee shall continue quarterly testing for that species until this permit is reissued. If a testing frequency reduction had been previously granted and a subsequent test demonstrates significant lethal effects, the permittee shall resume a quarterly testing frequency for that species until this permit is reissued.

2. Required Toxicity Testing Conditions

a. Test Acceptance - The permittee shall repeat any toxicity test, including the control and all effluent dilutions, which fails to meet any of the following criteria:

- 1) a control mean survival of 90% or greater; and
- 2) a coefficient of variation percent (CV%) of 40 or less for both the control and critical dilution. However, if significant lethality is demonstrated, a CV% greater than 40 shall not invalidate the test. The CV% requirement does not apply when significant lethality occurs.

b. Statistical Interpretation

- 1) For the water flea and fathead minnow tests, the statistical analyses used to determine if there is a significant difference between the control and an effluent dilution shall be in accordance with the manual referenced in Part 1.b.
- 2) The permittee is responsible for reviewing test concentration-response relationships to ensure that calculated test results are interpreted and reported correctly. The document entitled "Method Guidance and Recommendation for Whole Effluent Toxicity (WET) Testing (40 CFR Part 136)" (EPA 821-B-00-004) provides guidance on determining the validity of test results.
- 3) If significant lethality is demonstrated (that is, there is a statistically significant difference in survival at the critical dilution when compared to the survival in the control), the conditions of test acceptability are met, and the survival of the test organisms are equal to or greater than 90% in the critical dilution and all dilutions below that, then the permittee shall report a survival No Observed Effect Concentration (NOEC) of not less than the critical dilution for the reporting requirements.
- 4) The NOEC is defined as the greatest effluent dilution at which no

significant lethality is demonstrated. The Lowest Observed Effect Concentration (LOEC) is defined as the lowest effluent dilution at which significant lethality is demonstrated. Significant lethality is defined as a statistically significant difference the survival of the test organism in a specified effluent dilution when compared to the survival of the test organism in the control.

- 5) The use of NOECs and LOECs assumes either a monotonic (continuous) concentration-response relationship or a threshold model of the concentration-response relationship. For any test result that demonstrates a non-monotonic (non-continuous) response, the NOEC should be determined based on the guidance manual referenced in Item 2.
- 6) Pursuant to the responsibility assigned to the permittee in Part 2.b.2), test results that demonstrate a non-monotonic (non-continuous) concentration-response relationship may be submitted, prior to the due date, for technical review. The guidance manual referenced in Item 2 will be used when making a determination of test acceptability.
- 7) TCEQ staff will review test results for consistency with rules, procedures, and permit requirements.

c. Dilution Water

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

- b) the test indicating receiving water toxicity was carried out to completion; and
 - c) the permittee submitted all test results indicating receiving water toxicity with the reports and information required in Part 3.
- 3) The synthetic dilution water shall consist of standard, moderately hard, reconstituted water. Upon approval, the permittee may substitute other appropriate dilution water with chemical and physical characteristics similar to that of the receiving water.

d. Samples and Composites

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

3. Reporting

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

- a. The permittee shall prepare a full report of the results of all tests conducted in accordance with the manual referenced in Part 1.b for every valid and invalid toxicity test initiated, whether carried to completion or not.

- b. The permittee shall routinely report the results of each biomonitoring test on the Table 1 forms provided with this permit.
 - 1) Annual biomonitoring test results are due on or before January 20th for biomonitoring conducted during the previous 12-month period.
 - 2) Semiannual biomonitoring test results are due on or before July 20th and January 20th for biomonitoring conducted during the previous 6-month period.
 - 3) Quarterly biomonitoring test results are due on or before April 20th, July 20th, October 20th, and January 20th for biomonitoring conducted during the previous calendar quarter.
 - 4) Monthly biomonitoring test results are due on or before the 20th day of the month following sampling.
- c. Enter the following codes for the appropriate parameters for valid tests only:
 - 1) For the water flea, Parameter TEM3D, enter a "1" if the NOEC for survival is less than the critical dilution; otherwise, enter a "0."
 - 2) For the water flea, Parameter TOM3D, report the NOEC for survival.
 - 3) For the water flea, Parameter TXM3D, report the LOEC for survival.
 - 4) For the fathead minnow, Parameter TEM6C, enter a "1" if the NOEC for survival is less than the critical dilution; otherwise, enter a "0."
 - 5) For the fathead minnow, Parameter TOM6C, report the NOEC for survival.
 - 6) For the fathead minnow, Parameter TXM6C, report the LOEC for survival.
- d. Enter the following codes for retests only:
 - 1) For retest number 1, Parameter 22415, enter a "1" if the NOEC for survival is less than the critical dilution; otherwise, enter a "0."
 - 2) For retest number 2, Parameter 22416, enter a "1" if the NOEC for survival is less than the critical dilution; otherwise, enter a "0."

4. Persistent Toxicity

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

- a. The permittee shall conduct a total of 2 additional tests (retests) for any species that demonstrates significant lethality. The two retests shall be conducted monthly during the next two consecutive months. The permittee shall not

substitute either of the two retests in lieu of routine toxicity testing. All reports shall be submitted within 20 days of test completion. Test completion is defined as the last day of the test.

- b. If one or both of the two retests specified in Part 4.a. demonstrates significant lethality, the permittee shall initiate the TRE requirements as specified in Part 5.
- c. The provisions of Part 4.a. are suspended upon completion of the two retests and submittal of the TRE action plan and schedule defined in Part 5.

5. Toxicity Reduction Evaluation

- a. Within 45 days of the retest that demonstrates significant lethality, the permittee shall submit a general outline for initiating a TRE. The outline shall include, but not be limited to, a description of project personnel, a schedule for obtaining consultants (if needed), a discussion of influent and effluent data available for review, a sampling and analytical schedule, and a proposed TRE initiation date.
- b. Within 90 days of the retest that demonstrates significant lethality, the permittee shall submit a TRE action plan and schedule for conducting a TRE. The plan shall specify the approach and methodology to be used in performing the TRE. A TRE is a step-wise investigation combining toxicity testing with physical and chemical analyses to determine actions necessary to eliminate or reduce effluent toxicity to a level not effecting significant lethality at the critical dilution. The TRE action plan shall describe an approach for the reduction or elimination of lethality for both test species defined in Part 1.b. At a minimum, the TRE action plan shall include the following:
 - 1) Specific Activities - The TRE action plan shall specify the approach the permittee intends to utilize in conducting the TRE, including toxicity characterizations, identifications, confirmations, source evaluations, treatability studies, and alternative approaches. When conducting characterization analyses, the permittee shall perform multiple characterizations and follow the procedures specified in the document entitled "Methods for Aquatic Toxicity Identification Evaluations: Phase I Toxicity Characterization Procedures" (EPA/600/6-91/003) or alternate procedures. The permittee shall perform multiple identifications and follow the methods specified in the documents entitled "Methods for Aquatic Toxicity Identification Evaluations: Phase II Toxicity Identification Procedures for Samples Exhibiting Acute and Chronic Toxicity" (EPA/600/R-92/080) and "Methods for Aquatic Toxicity Identification Evaluations: Phase III Toxicity Confirmation Procedures for Samples Exhibiting Acute and Chronic Toxicity" (EPA/600/R-92/081). All characterization, identification, and confirmation tests shall be conducted in an orderly and logical progression;
 - 2) Sampling Plan - The TRE action plan should describe sampling locations, methods, holding times, chain of custody, and preservation techniques. The effluent sample volume collected for all tests shall be adequate to perform the toxicity characterization/identification/confirmation procedures and chemical-specific analyses when the toxicity tests show significant lethality. Where the permittee has identified or suspects a

- specific pollutant and source of effluent toxicity, the permittee shall conduct, concurrent with toxicity testing, chemical-specific analyses for the identified and suspected pollutant and source of effluent toxicity;
- 3) Quality Assurance Plan - The TRE action plan should address record keeping and data evaluation, calibration and standardization, baseline tests, system blanks, controls, duplicates, spikes, toxicity persistence in the samples, randomization, reference toxicant control charts, and mechanisms to detect artifactual toxicity; and
 - 4) Project Organization - The TRE action plan should describe the project staff, project manager, consulting engineering services (where applicable), consulting analytical and toxicological services, etc.
- c. Within 30 days of submittal of the TRE action plan and schedule, the permittee shall implement the TRE.
 - d. The permittee shall submit quarterly TRE activities reports concerning the progress of the TRE. The quarterly reports are due on or before April 20th, July 20th, October 20th, and January 20th. The report shall detail information regarding the TRE activities including:
 - 1) results and interpretation of any chemical specific analyses for the identified and suspected pollutant performed during the quarter;
 - 2) results and interpretation of any characterization, identification, and confirmation tests performed during the quarter;
 - 3) any data and substantiating documentation which identifies the pollutant(s) and source of effluent toxicity;
 - 4) results of any studies/evaluations concerning the treatability of the facility's effluent toxicity;
 - 5) any data that identifies effluent toxicity control mechanisms that will reduce effluent toxicity to the level necessary to meet no significant lethality at the critical dilution; and
 - 6) any changes to the initial TRE plan and schedule that are believed necessary as a result of the TRE findings.
 - e. During the TRE, the permittee shall perform, at a minimum, quarterly testing using the more sensitive species. Testing for the less sensitive species shall continue at the frequency specified in Part 1.b.
 - f. If the effluent ceases to effect significant lethality, i.e., there is a cessation of lethality, the permittee may end the TRE. A cessation of lethality is defined as no significant lethality for a period of 12 consecutive months with at least monthly testing. At the end of the 12 months, the permittee shall submit a statement of intent to cease the TRE and may then resume the testing frequency specified in Part 1.b.

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

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

- g. The permittee shall complete the TRE and submit a final report on the TRE activities no later than 28 months from the last test day of the retest that confirmed significant lethal effects at the critical dilution. The permittee may petition the Executive Director (in writing) for an extension of the 28-month limit. However, to warrant an extension the permittee must have demonstrated due diligence in its pursuit of the toxicity identification evaluation/TRE and must prove that circumstances beyond its control stalled the toxicity identification/TRE. The report shall provide information pertaining to the specific control mechanism selected that will, when implemented, result in the reduction of effluent toxicity to no significant lethality at the critical dilution. The report shall also provide a specific corrective action schedule for implementing the selected control mechanism.
- h. Based on the results of the TRE and proposed corrective actions, this permit may be amended to modify the biomonitoring requirements, where necessary, require a compliance schedule for implementation of corrective actions, specify a WET limit, specify a best management practice, and specify a chemical-specific limit.
- i. Copies of any and all required TRE plans and reports shall also be submitted to the U.S. EPA Region 6 office, 6WQ-PO.

TABLE 1 (SHEET 1 OF 2)

WATER FLEA SURVIVAL

Dates and Times No. 1 FROM: _____ Date _____ Time _____ TO: _____ Date _____ Time _____
 Composites
 Collected No. 2 FROM: _____ TO: _____

Test initiated: _____ am/pm _____ date
 Dilution water used: _____ Receiving water _____ Synthetic Dilution water

PERCENT SURVIVAL

Time	Rep	Percent effluent					
		0%	32%	42%	56%	75%	100%
24h	A						
	B						
	C						
	D						
	E						
48h	A						
	B						
	C						
	D						
	E						
Mean at test end							
CV%*							

*Coefficient of Variation = Standard Deviation x 100/mean

Dunnett's Procedure or Steel's Many-One Rank Test as appropriate:

Is the mean survival at 48 hours significantly less than the control survival?

CRITICAL DILUTION (100%): _____ YES _____ NO

Enter percent effluent corresponding to the NOEC below:

1) NOEC survival = _____% effluent

2) LOEC survival = _____% effluent

TABLE 1 (SHEET 2 OF 2)

FATHEAD MINNOW SURVIVAL

Dates and Times No. 1 FROM: _____ Date Time TO: _____ Date Time
 Composites
 Collected No. 2 FROM: _____ TO: _____

Test initiated: _____ am/pm _____ date

Dilution water used: _____ Receiving water _____ Synthetic Dilution water

PERCENT SURVIVAL

Time	Rep	Percent effluent					
		0%	32%	42%	56%	75%	100%
24h	A						
	B						
	C						
	D						
	E						
48h	A						
	B						
	C						
	D						
	E						
Mean at test end							
CV%*							

* Coefficient of Variation = standard deviation x 100/mean

Dunnett's Procedure or Steel's Many-One Rank Test as appropriate:

Is the mean survival at 48 hours significantly less than the control survival?

CRITICAL DILUTION (100%): _____ YES _____ NO

Enter percent effluent corresponding to the NOEC below:

1) NOEC survival = _____% effluent

2) LOEC survival = _____% effluent

24-HOUR ACUTE BIOMONITORING REQUIREMENTS: FRESHWATER

The provisions of this section apply to Outfall 001 for WET testing.

1. Scope, Frequency, and Methodology

- a. The permittee shall test the effluent for lethality in accordance with the provisions in this section. Such testing will determine compliance with Texas Surface Water Quality Standard 30 TAC § 307.6(e)(2)(B), which requires greater than 50% survival of the appropriate test organisms in 100% effluent for a 24-hour period.
- b. Within 90 days of initial discharge of the 1.25 MGD facility, the toxicity tests specified shall be conducted once per six months. The permittee shall conduct the following toxicity tests using the test organisms, procedures, and quality assurance requirements specified in this section of the permit and in accordance with "Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms," fifth edition (EPA-821-R-02-012) or its most recent update:
 - 1) Acute 24-hour static toxicity test using the water flea (*Daphnia pulex* or *Ceriodaphnia dubia*). A minimum of five replicates with eight organisms per replicate shall be used in the control and each dilution.
 - 2) Acute 24-hour static toxicity test using the fathead minnow (*Pimephales promelas*). A minimum of five replicates with eight organisms per replicate shall be used in the control and each dilution.

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

- c. In addition to an appropriate control, a 100% effluent concentration shall be used in the toxicity tests. The control and dilution water shall consist of standard, synthetic, moderately hard, reconstituted water.
- d. This permit may be amended to require a WET limit, a best management practice, a chemical-specific limit, or other appropriate actions to address toxicity. The permittee may be required to conduct a toxicity reduction evaluation (TRE) after multiple toxic events.
- e. As the dilution series specified in the 48-Hour Acute Biomonitoring Requirements includes a 100% effluent concentration, the results from those tests may fulfill the requirements of this section; any tests performed in the proper time interval may be substituted. Compliance will be evaluated as specified in Part 1.a. The 50% survival in 100% effluent for a 24-hour period standard applies to all tests utilizing a 100% effluent dilution, regardless of whether the results are submitted to comply with the minimum testing frequency.

2. Required Toxicity Testing Conditions

- a. Test Acceptance – The permittee shall repeat any toxicity test, including the control, if the control fails to meet a mean survival equal to or greater than 90%.
- b. Dilution Water - In accordance with Part 1.c., the control and dilution water shall consist of standard, synthetic, moderately hard, reconstituted water.
- c. Samples and Composites
 - 1) The permittee shall collect one composite sample from Outfall 001.
 - 2) The permittee shall collect the composite sample such that the sample is representative of any periodic episode of chlorination, biocide usage, or other potentially toxic substance being discharged on an intermittent basis.
 - 3) The permittee shall initiate the toxicity tests within 36 hours after collection of the last portion of the composite sample. The sample shall be maintained at a temperature of 0-6 degrees Centigrade during collection, shipping, and storage.
 - 4) If Outfall 001 ceases discharging during the collection of the effluent composite sample, the requirements for the minimum number of effluent portions are waived. However, the permittee must have collected a composite sample volume sufficient for completion of the required test. The abbreviated sample collection, duration, and methodology must be documented in the full report.
 - 5) The effluent sample shall not be dechlorinated after sample collection.

3. Reporting

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

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

during the previous calendar quarter.

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

4. Persistent Mortality

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

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

5. Toxicity Reduction Evaluation

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

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

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

information regarding the TRE activities including:

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

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

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

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

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

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

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

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

TABLE 2 (SHEET 1 OF 2)

WATER FLEA SURVIVAL

GENERAL INFORMATION

	Time	Date
Composite Sample Collected		
Test Initiated		

PERCENT SURVIVAL

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

Enter percent effluent corresponding to the LC₅₀ below:

24 hour LC₅₀ = _____% effluent

TABLE 2 (SHEET 2 OF 2)
FATHEAD MINNOW SURVIVAL

GENERAL INFORMATION

	Time	Date
Composite Sample Collected		
Test Initiated		

PERCENT SURVIVAL

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

Enter percent effluent corresponding to the LC₅₀ below:

24 hour LC₅₀ = _____% effluent

FACT SHEET AND EXECUTIVE DIRECTOR'S PRELIMINARY DECISION

For draft Texas Pollutant Discharge Elimination System (TPDES) Permit No. WQ0010004003, EPA I.D. No. TX0146382, to discharge to water in the state.

Issuing Office: Texas Commission on Environmental Quality
P.O. Box 13087
Austin, Texas 78711-3087

Applicant: City of Cameron
P.O. Box 833
Cameron, Texas 76520

Prepared By: Paula Palmar
Municipal Permits Team
Wastewater Permitting Section (MC 148)
Water Quality Division
(512) 239-4561

Date: July 22, 2025

Permit Action: New Permit

1. EXECUTIVE DIRECTOR RECOMMENDATION

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

2. APPLICANT ACTIVITY

The applicant has applied to the Texas Commission on Environmental Quality (TCEQ) for a new permit to authorize the discharge of treated domestic wastewater at a daily average flow not to exceed 0.96 million gallons per day (MGD) in the Interim phase and an annual average flow not to exceed 1.25 MGD in the Final phase. The existing wastewater treatment facility serves the City of Cameron.

3. FACILITY AND DISCHARGE LOCATION

The plant site is located approximately 0.5 mile east of the intersection of Oak Avenue and Gillis Avenue, in Milam County, Texas 76520.

Outfall Location:

Outfall Number	Latitude	Longitude
001	30.845286 N	96.966100 W

The treated effluent is discharged to an unnamed tributary, thence to Little River in Segment No. 1213 of the Brazos River Basin. The unclassified receiving water use is minimal aquatic life use for the unnamed tributary. The designated uses for Segment No. 1213 are primary contact recreation, public water supply, and high aquatic life use.

4. TREATMENT PROCESS DESCRIPTION AND SEWAGE SLUDGE DISPOSAL

The City of Cameron Wastewater Treatment Plant (WWTP) is an activated sludge process plant operated in the conventional mode in the Interim phase and a Sequencing Batch Reactor (SBR) facility in the Final phase. Treatment units in the Interim phase include a bar screen, an equalization basin, an aeration basin, two aerobic digesters, two final clarifiers, two sludge dewatering containers, two chlorine contact chambers, and a dechlorination chamber. Treatment units in the Final phase will include bar screens, a flow equalization basin, four SBR basins, five blowers, two aerobic digesters, a vorex grit removal, two chlorine contact chambers, effluent aeration, and a dechlorination chamber. The facility is operating in the Interim phase.

Sludge generated from the treatment facility is hauled by a registered transporter and disposed of at a TCEQ-permitted landfill, Temple Recycling and Disposal Facility, MSW Permit No. 692B, in Bell County. The draft permit also authorizes the disposal of sludge at a TCEQ-authorized land application site, co-disposal landfill, wastewater treatment facility, or facility that further processes sludge.

5. INDUSTRIAL WASTE CONTRIBUTION

The draft permit includes pretreatment requirements that are appropriate for a facility of this size and complexity. The City of Cameron WWTP does not appear to receive significant industrial wastewater contributions. The WWTP receives process wastewater from no significant industrial users (SIU). The process wastewater flow from the SIU's is 0% of the WWTP current maximum hydraulic capacity. The POTW has not experienced any instances of pass through or interference, therefore, at this time, the TCEQ is not requiring the permittee to develop a pretreatment program.

6. SUMMARY OF SELF-REPORTED EFFLUENT ANALYSES

Self-reporting data is available since the facility is in operation. The facility was previously permitted under TPDES Permit No. WQ0010004001 which expired on June 26, 2024.

The following is a summary of the applicant's effluent monitoring data for the period April 2023 through April 2025. The average of Daily Average value is computed by the averaging of all 30-day average values for the reporting period for each parameter: flow, five-day biochemical oxygen demand (BOD₅), and total suspended solids (TSS). The average of Daily Average value for *E. coli* in CFU or MPN per 100 ml is calculated via geometric mean.

<u>Parameter</u>	<u>Average of Daily Avg</u>
Flow, MGD	0.75
BOD ₅ , mg/l	13
TSS, mg/l	27
<i>E. coli</i> , CFU or MPN per 100 ml	22

*A review of the effluent monitoring data included in the application indicates that City of Cameron WWTP has reached 75% of the permitted daily flow for three or more consecutive months. The permittee was notified via letter on June 30, 2025, that the City of Cameron WWTP has reached 75% of the permitted daily average flow for three or

more consecutive months. The operational requirements of the existing permit specify that whenever flow measurements for any domestic sewage treatment facility reach 75% of the permitted daily average flow for three consecutive months, the permittee must initiate engineering and financial planning for expansion and/or upgrading the domestic wastewater treatment and/or collection facilities. (See Operational Requirement 8a on page 14 of the existing permit and 30 TAC § 305.126). A response from the permittee was received on July 7, 2025, with information regarding expansion. Additionally, the funding of the construction project is currently under review by the Texas Water Development Board. It is anticipated that the project will be bid and begin construction as soon as the TWDB clearances are achieved.

7. DRAFT PERMIT CONDITIONS AND MONITORING REQUIREMENTS

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

A. INTERIM PHASE EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

The daily average flow of effluent shall not exceed 0.96 MGD, nor shall the average discharge during any two-hour period (2-hour peak) exceed 1,670 gallons per minute (gpm).

<u>Parameter</u>	<u>30-Day Average</u>		<u>7-Day Average</u>	<u>Daily Maximum</u>
	<u>mg/l</u>	<u>lbs/day</u>	<u>mg/l</u>	<u>mg/l</u>
BOD ₅	20	160	30	45
TSS	20	160	30	45
DO (minimum)	3.0	N/A	N/A	N/A
<i>E. coli</i> , CFU or MPN per 100 ml	126	N/A	N/A	399

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

The effluent shall contain a total chlorine residual of at least 1.0 mg/l after a detention time of at least 20 minutes (based on peak flow) and shall be monitored daily by grab sample. The permittee shall dechlorinate the chlorinated effluent to less than 0.1 mg/l total chlorine residual and shall monitor total chlorine residual daily by grab sample after the dechlorination process. An equivalent method of disinfection may be substituted only with prior approval of the Executive Director.

<u>Parameter</u>	<u>Monitoring Requirement</u>
Flow, MGD	Continuous
BOD ₅	One/week
TSS	One/week
DO	One/week
<i>E. coli</i>	Two/month

B. FINAL PHASE EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

The annual average flow of effluent shall not exceed 1.25 MGD, nor shall the average discharge during any two-hour period (2-hour peak) exceed 3,472 gpm.

<u>Parameter</u>	<u>30-Day Average</u>		<u>7-Day Average</u>	<u>Daily Maximum</u>
	<u>mg/l</u>	<u>lbs/day</u>	<u>mg/l</u>	<u>mg/l</u>
CBOD ₅	10	104	15	25
TSS	15	156	25	40
NH ₃ -N	2	21	5	10
DO (minimum)	6.0	N/A	N/A	N/A
<i>E. coli</i> , CFU or MPN/100 ml	126	N/A	N/A	399

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

The effluent shall contain a total chlorine residual of at least 1.0 mg/l after a detention time of at least 20 minutes (based on peak flow) and shall be monitored daily by grab sample. The permittee shall dechlorinate the chlorinated effluent to less than 0.1 mg/l total chlorine residual and shall monitor total chlorine residual daily by grab sample after the dechlorination process. An equivalent method of disinfection may be substituted only with prior approval of the Executive Director.

<u>Parameter</u>	<u>Monitoring Requirement</u>
Flow, MGD	Continuous
CBOD ₅	Two/week
TSS	Two/week
NH ₃ -N	Two/week
DO	Two/week
<i>E. coli</i>	One/week

C. SEWAGE SLUDGE REQUIREMENTS

The draft permit includes Sludge Provisions according to the requirements of 30 TAC Chapter 312, Sludge Use, Disposal, and Transportation. Sludge generated from the treatment facility is hauled by a registered transporter and disposed of at a TCEQ-permitted landfill, Temple Recycling and Disposal Facility, MSW Permit No. 692B, in Bell County. The draft permit also authorizes the disposal of sludge at a TCEQ-authorized land application site, co-disposal landfill, wastewater treatment facility, or facility that further processes sludge.

D. PRETREATMENT REQUIREMENTS

Permit requirements for pretreatment are based on TPDES regulations contained in 30 TAC Chapter 305, which references 40 Code of Federal Regulations (CFR)

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

E. WHOLE EFFLUENT TOXICITY (BIOMONITORING) REQUIREMENTS

- (1) The draft permit includes 48-hour acute freshwater biomonitoring requirements as follows. The permit requires five dilutions in addition to the control (0% effluent) to be used in the toxicity tests. These additional effluent concentrations shall be 32%, 42%, 56%, 75%, and 100%. The low-flow effluent concentration (critical dilution) is defined as 100% effluent. The critical dilution is in accordance with the "Aquatic Life Criteria" section of the "Water Quality Based Effluent Limitations/Conditions" section.
 - (a) Acute static renewal 48-hour definitive toxicity tests using the water flea (*Daphnia pulex* or *Ceriodaphnia dubia*). The frequency of the testing is once per quarter for at least the first year of testing, after which the permittee may apply for a testing frequency reduction.
 - (b) Acute static renewal 48-hour definitive toxicity test using the fathead minnow (*Pimephales promelas*). The frequency of the testing is once per quarter or at least the first year of testing, after which the permittee may apply for a testing frequency reduction.
- (2) The draft permit includes the following minimum 24-hour acute freshwater biomonitoring requirements at a frequency of once per six months.
 - (a) Acute 24-hour static toxicity test using the water flea (*Daphnia pulex* or *Ceriodaphnia dubia*).
 - (b) Acute 24-hour static toxicity test using the fathead minnow (*Pimephales promelas*).

F. BUFFER ZONE REQUIREMENTS

The permittee shall comply with the requirements of 30 TAC § 309.13(a) through (d). In addition, by ownership of the required buffer zone area, the permittee shall comply with the requirements of 30 TAC § 309.13(e).

G. SUMMARY OF CHANGES FROM APPLICATION

None.

8. DRAFT PERMIT RATIONALE

A. TECHNOLOGY-BASED EFFLUENT LIMITATIONS/CONDITIONS

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

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

B. WATER QUALITY SUMMARY AND COASTAL MANAGEMENT PLAN

(1) WATER QUALITY SUMMARY

The treated effluent is discharged to an unnamed tributary, thence to Little River in Segment No. 1213 of the Brazos River Basin. The unclassified receiving water use is minimal aquatic life use for the unnamed tributary. The designated uses for Segment No. 1213 are primary contact recreation, public water supply, and high aquatic life use. The effluent limitations in the draft permit will maintain and protect the existing instream uses. In accordance with 30 TAC § 307.5 and the TCEQ's *Procedures to Implement the Texas Surface Water Quality Standards* (June 2010), an antidegradation review of the receiving waters was performed. A Tier 1 antidegradation review has preliminarily determined that existing water quality uses will not be impaired by this permit action. Numerical and narrative criteria to protect existing uses will be maintained. A Tier 2 review has preliminarily determined that no significant degradation of water quality is expected in Little River, which has been identified as having high aquatic life use. Existing uses will be maintained and protected. The preliminary determination can be reexamined and may be modified if new information is received. All determinations are preliminary and subject to additional review and/or revisions.

No priority watershed of critical concern has been identified in Segment No. 1213. However, the Houston toad (*Bufo houstonensis* Sanders), an endangered species, is known to occur in Milam County. This determination is based on the United States Fish and Wildlife Service's (USFWS) biological opinion on the State of Texas authorization of the TPDES (September 14, 1998, October 21, 1998 update). To make this determination for TPDES permits, TCEQ and EPA only consider aquatic or aquatic dependent species occurring in watersheds of critical concern or high priority as listed in Appendix A of the USFWS biological opinion. The determination is subject to reevaluation due to subsequent updates or amendments to the biological opinion. The presence of the Houston toad, an endangered aquatic dependent species, requires EPA review and, if appropriate, consultation with USFWS.

Segment No. 1213 is not currently listed on the state's inventory of impaired and threatened waters (the 2022 CWA § 303(d) list).

The pollutant analysis of treated effluent provided by the permittee in the application indicated 602 mg/l total dissolved solids (TDS), 111 mg/l sulfate, and 91 mg/l chloride present in the effluent. The segment criteria for Segment No. 1213 are 342 mg/l for TDS, 35 mg/l for sulfate, and 41 mg/l for chlorides. Based on dissolved solids screening, no additional limits or monitoring requirements are needed for total dissolved solids, chloride, or sulfate. See Attachment A of this Fact Sheet.

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

(2) CONVENTIONAL PARAMETERS

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

The effluent limits recommended above have been reviewed for consistency with the State of Texas Water Quality Management Plan (WQMP). The proposed limits are consistent with the approved WQMP under expired Permit No. WQ0010004001.

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

(3) COASTAL MANAGEMENT PLAN

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

C. WATER QUALITY-BASED EFFLUENT LIMITATIONS/CONDITIONS

(1) GENERAL COMMENTS

The Texas Surface Water Quality Standards (30 TAC Chapter 307) state that surface waters will not be toxic to man, or to terrestrial or aquatic life. The methodology outlined in the "Procedures to Implement the Texas Surface Water Quality Standards" is designed to ensure compliance with 30 TAC Chapter 307. Specifically, the methodology is designed to ensure that no source will be allowed to discharge any wastewater that: (1) results in instream aquatic toxicity; (2) causes a violation of an applicable narrative or numerical state water quality standard; (3) results in the

endangerment of a drinking water supply; or (4) results in aquatic bioaccumulation that threatens human health.

(2) AQUATIC LIFE CRITERIA

(a) SCREENING

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

There is no mixing zone or zone of initial dilution for this discharge directly to an intermittent stream; acute freshwater criteria apply at the end of pipe. Chronic freshwater criteria are applied in the perennial freshwater stream.

For the intermittent stream, the percent effluent for acute protection of aquatic life is 100% because the 7Q2 of the intermittent stream is 0.0 cfs. This effluent percentage also provides acute protection of aquatic life in the perennial stream. TCEQ uses the mass balance equation to estimate dilution in the perennial stream during critical conditions. The estimated dilution for chronic protection of aquatic life is calculated using the permitted flow of 1.25 MGD and the 7-day, 2-year (7Q2) flow of 68.2 cubic feet per second (cfs) for unnamed tributary within three miles of Little River, the perennial stream. The following critical effluent percentages are being used:

Acute Effluent %:	100%	Chronic Effluent %:	2.76%
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Waste load allocations (WLAs) are calculated using the above estimated effluent percentages, criteria outlined in the Texas Surface Water Quality Standards, and partitioning coefficients for metals (when appropriate and designated in the implementation procedures). The WLA is the end-of-pipe effluent concentration that can be discharged when, after mixing in the receiving stream, instream numerical criteria will not be exceeded. From the WLA, a long-term average (LTA) is calculated using a log normal probability distribution, a given coefficient of variation (0.6), and a 90th percentile confidence level. The LTA is the long-term average effluent concentration for which the WLA will never be exceeded using a selected percentile confidence level. The lower of the two LTAs (acute and chronic) is used to calculate a daily average and daily maximum effluent limitation for the protection of aquatic life using the same statistical considerations with the 99th percentile confidence level and a standard number of monthly effluent samples collected (12).

Assumptions used in deriving the effluent limitations include segment values for hardness, chlorides, pH, and total suspended solids (TSS) according to the segment-specific values contained in the TCEQ guidance document "Procedures to Implement the Texas Surface Water Quality Standards." The segment values are 158 mg/l for hardness (as calcium carbonate), 41 mg/l chlorides, 7.7 standard units for pH, and 21 mg/l for

TSS. For additional details on the calculation of water quality-based effluent limitations, refer to the TCEQ guidance document.

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

(b) PERMIT ACTION

Analytical data reported in the application was screened against calculated water quality-based effluent limitations for the protection of aquatic life. Reported analytical data does not exceed 70% of the calculated daily average water quality-based effluent limitations for aquatic life protection.

(3) AQUATIC ORGANISM BIOACCUMULATION CRITERIA

(a) SCREENING

Water quality-based effluent limitations for the protection of human health are calculated using criteria for the consumption of freshwater fish tissue and drinking water found in Table 2 of the Texas Surface Water Quality Standards (30 TAC Chapter 307). Freshwater fish tissue bioaccumulation and drinking water criteria are applied for human health protection in the perennial stream. TCEQ uses the mass balance equation to estimate dilution in the perennial stream during average flow conditions. The estimated dilution for human health protection is calculated using the permitted flow of 1.25 MGD and the harmonic mean flow of 228.9 cfs for unnamed tributary within three miles of Little River, the perennial stream. The following critical effluent percentage is being used:

Human Health Effluent %: 0.838%

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

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

(b) PERMIT ACTION

Reported analytical data does not exceed 70% of the calculated daily average water quality-based effluent limitation for human health protection.

(4) DRINKING WATER SUPPLY PROTECTION

(a) SCREENING

Water Quality Segment No. 1213, which receives the discharge from this facility, is designated as a public water supply. The screening procedure used to calculate water quality-based effluent limitations and determine the need for effluent limitations or monitoring requirements is identical to the procedure outlined in the aquatic organism bioaccumulation section of this fact sheet. Criteria used in the calculation of water quality-based effluent limitations for the protection of a drinking water supply are outlined in Table 2 (Water and Fish) of the Texas Surface Water Quality Standards (30 TAC Chapter 307). These criteria are developed from either drinking water maximum contaminant level (MCL) criteria outlined in 30 TAC Chapter 290 or from the combined human health effects of exposure to consumption of fish tissue and ingestion of drinking water.

(b) PERMIT ACTION

Criteria in the "Water and Fish" section of Table 2 do not distinguish if the criteria is based on a drinking water standard or the combined effects of ingestion of drinking water and fish tissue. Effluent limitations or monitoring requirements to protect the drinking water supply (and other human health effects) were previously calculated and outlined in the aquatic organism bioaccumulation criteria section of this fact sheet.

(5) WHOLE EFFLUENT TOXICITY (BIOMONITORING) CRITERIA

(a) SCREENING

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

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

letter to the EPA dated December 28, 2015, and approved by the EPA in a letter dated December 28, 2015.

With no WET testing history, and therefore zero failures, a determination of no RP was made. WET limits are not required and the permittee may be eligible for the testing frequency reduction after one year of quarterly testing occurs.

The existing permit includes 48-hour acute freshwater biomonitoring requirements. A summary of the biomonitoring testing for the facility indicates that this facility is operating in a phase with a design flow of less than 1 MGD. Therefore, there is no WET testing history to review. WET testing will commence within 90 days of initial discharge from the final phase 1.25 MGD facility.

(b) PERMIT ACTION

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

This facility is operating in a phase with a design flow of less than 1 MGD. Therefore, there is no WET testing history to review. WET testing will commence within 90 days of initial discharge from the final phase 1.25 MGD facility.

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

(a) SCREENING

The existing permit includes 24-hour acute freshwater biomonitoring language. A summary of the biomonitoring testing for the facility indicates that this facility is operating in a phase with a design flow of less than 1 MGD. Therefore, there is no WET testing history to review. WET testing will commence within 90 days of initial discharge from the final phase 1.25 MGD facility.

(b) PERMIT ACTION

The applicant is not currently monitoring whole effluent toxicity because the requirements do not take effect until the Final phase.

9. WATER QUALITY VARIANCE REQUESTS

No variance requests have been received.

10. PROCEDURES FOR FINAL DECISION

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

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

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

After the public comment deadline, the Executive Director prepares a response to all significant public comments on the application or the draft permit raised during the public comment period. The Chief Clerk then mails the Executive Director's response to comments and final decision to people who have filed comments, requested a contested case hearing, or requested to be on the mailing list. This notice provides that if a person is not satisfied with the Executive Director's response and decision, they can request a contested case hearing or file a request to reconsider the Executive Director's decision within 30 days after the notice is mailed.

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

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

For additional information about this application, contact Paula Palmar at (512) 239-4561.

11. ADMINISTRATIVE RECORD

The following items were considered in developing the draft permit:

A. PERMIT(S)

This facility was previously permitted under TPDES Permit No. WQ0010004001, which expired on June 26, 2024.

B. APPLICATION

Application received on July 22, 2024, and additional information received on June 26, 2025 and July 22, 2025.

C. MEMORANDA

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

D. MISCELLANEOUS

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

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

Procedures to Implement the Texas Surface Water Quality Standards (IP), Texas Commission on Environmental Quality, June 2010, as approved by the U.S. Environmental Protection Agency, and the IP, January 2003, for portions of the 2010 IP not approved by the U.S. Environmental Protection Agency.

Texas 2024 Clean Water Act Section 303(d) List, Texas Commission on Environmental Quality, June 26, 2024; approved by the U.S. Environmental Protection Agency on November 13, 2024.

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

Attachment A: Screening Calculations for Total Dissolved Solids, Chloride, and Sulfate

Screening Calculations for Total Dissolved Solids, Chloride, and Sulfate

Menu 2 - Discharge to an Intermittent Stream within 3 Miles of a Perennial Stream

Screen the Perennial Stream

Applicant Name:

City of Cameron

Permit Number, Outfall:

WQ0010004003

Segment Number:

1213

Enter values needed for screening:		Data Source (edit if different)	
QE - Average effluent flow (2 yr avg)	1.25 MGD	2 year max	
QS - Perennial stream harmonic mean flow	243.00 cfs	2024 Critical conditions memo	
QE - Average effluent flow	1.9340 cfs	Calculated	
CA - TDS - ambient segment concentration	332 mg/L	2010 IP, Appendix D	
CA - chloride - ambient segment concentration	42 mg/L	2010 IP, Appendix D	
CA - sulfate - ambient segment concentration	36 mg/L	2010 IP, Appendix D	
CC - TDS - segment criterion	400 mg/L	2014 TSWQS, Appendix A	
CC - chloride - segment criterion	75 mg/L	2014 TSWQS, Appendix A	
CC - sulfate - segment criterion	75 mg/L	2014 TSWQS, Appendix A	
CE - TDS - average effluent concentration	602 mg/L	Permit application	
CE - chloride - average effluent concentration	111 mg/L	Permit application	
CE - sulfate - average effluent concentration	90.8 mg/L	Permit application	

Screening Equation

$$CC \geq [(QS)(CA) + (QE)(CE)]/[QE + QS]$$

No further screening for TDS needed if:	334.13	≤	400
No further screening for chloride needed if:	42.54	≤	75
No further screening for sulfate needed if:	36.43	≤	75

Permit Limit Calculations

TDS

Calculate the WLA	WLA = [CC(QE+QS) - (QS)(CA)]/QE	8943.78
Calculate the LTA	LTA = WLA * 0.93	8317.72
Calculate the daily average	Daily Avg. = LTA * 1.47	12227.05
Calculate the daily maximum	Daily Max. = LTA * 3.11	25868.11
Calculate 70% of the daily average	70% of Daily Avg. =	8558.93

City of Cameron TPDES Permit No. WQ0010004003
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Calculate 85% of the daily average 85% of Daily Avg. = 10392.99

No permit limitations needed if:	602	≤	8558.93		
Reporting needed if:	602	>	8558.93	but ≤	10392.99
Permit limits may be needed if:	602	>	10392.99		

No permit limitations needed for TDS

Chloride

Calculate the WLA	WLA= [CC(QE+QS) - (QS)(CA)]/QE	4221.25
Calculate the LTA	LTA = WLA * 0.93	3925.76
Calculate the daily average	Daily Avg. = LTA * 1.47	5770.87
Calculate the daily maximum	Daily Max. = LTA * 3.11	12209.12
Calculate 70% of the daily average	70% of Daily Avg. =	4039.61
Calculate 85% of the daily average	85% of Daily Avg. =	4905.24

No permit limitations needed if:	111	≤	4039.61		
Reporting needed if:	111	>	4039.61	but ≤	4905.24
Permit limits may be needed if:	111	>	4905.24		

No permit limitations needed for chloride

Sulfate

Calculate the WLA	WLA= [CC(QE+QS) - (QS)(CA)]/QE	4975.11
Calculate the LTA	LTA = WLA * 0.93	4626.85
Calculate the daily average	Daily Avg. = LTA * 1.47	6801.48
Calculate the daily maximum	Daily Max. = LTA * 3.11	14389.52
Calculate 70% of the daily average	70% of Daily Avg. =	4761.03
Calculate 85% of the daily average	85% of Daily Avg. =	5781.25

No permit limitations needed if:	90.8	≤	4761.03		
Reporting needed if:	90.8	>	4761.03	but ≤	5781.25
Permit limits may be needed if:	90.8	>	5781.25		

No permit limitations needed for sulfate

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Attachment B: Calculated Water Quality Based Effluent Limitations

TEXTTOX MENU #2 - INTERMITTENT STREAM WITHIN 3 MILES OF A FRESHWATER PERENNIAL STREAM/RIVER

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

Table 1, 2014 Texas Surface Water Quality Standards (30 TAC 307) for Freshwater Aquatic Life

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

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

PERMIT INFORMATION

Permittee Name:	City of Cameron
TPDES Permit No.:	WQ0010004003
Outfall No.:	001
Prepared by:	Paula Palmar
Date:	06/27/2025

DISCHARGE INFORMATION

Intermittent Receiving Waterbody:	Unnamed tributary
Perennial Stream/River within 3 Miles:	Little River
Segment No.:	1213
TSS (mg/L):	21
pH (Standard Units):	7.7
Hardness (mg/L as CaCO ₃):	158
Chloride (mg/L):	41
Effluent Flow for Aquatic Life (MGD):	1.25
Critical Low Flow [7Q2] (cfs) for intermittent:	0
Critical Low Flow [7Q2] (cfs) for perennial:	68.2
% Effluent for Chronic Aquatic Life (Mixing Zone):	2.76
% Effluent for Acute Aquatic Life (ZID):	100
Effluent Flow for Human Health (MGD):	1.25
Harmonic Mean Flow (cfs) for perennial:	228.9
% Effluent for Human Health:	0.838
Human Health Criterion (select: PWS, FISH, or INC)	PWS

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

<i>Stream/River Metal</i>	<i>Intercept (b)</i>	<i>Slope (m)</i>	<i>Partition Coefficient (Kp)</i>	<i>Dissolved Fraction (Cd/Ct)</i>	<i>Source</i>	<i>Water Effect Ratio (WER)</i>	<i>Source</i>
Aluminum	N/A	N/A	N/A	1.00	Assumed	1.00	Assumed
Arsenic	5.68	-0.73	51853.72	0.479		1.00	Assumed
Cadmium	6.60	-1.13	127612.20	0.272		1.00	Assumed
Chromium (total)	6.52	-0.93	195135.40	0.196		1.00	Assumed
Chromium (trivalent)	6.52	-0.93	195135.40	0.196		1.00	Assumed
Chromium (hexavalent)	N/A	N/A	N/A	1.00	Assumed	1.00	Assumed
Copper	6.02	-0.74	110041.81	0.302		1.00	Assumed
Lead	6.45	-0.80	246731.48	0.162		1.00	Assumed
Mercury	N/A	N/A	N/A	1.00	Assumed	1.00	Assumed
Nickel	5.69	-0.57	86364.45	0.355		1.00	Assumed
Selenium	N/A	N/A	N/A	1.00	Assumed	1.00	Assumed
Silver	6.38	-1.03	104259.14	0.314		1.00	Assumed
Zinc	6.10	-0.70	149432.99	0.242		1.00	Assumed

AQUATIC LIFE

CALCULATE DAILY AVERAGE AND DAILY MAXIMUM EFFLUENT LIMITATIONS:

City of Cameron TPDES Permit No. WQ0010004003
Fact Sheet and Executive Director's Preliminary Decision

<i>Parameter</i>	<i>FW Acute Criterion (µg/L)</i>	<i>FW Chronic Criterion (µg/L)</i>	<i>WLAa (µg/L)</i>	<i>WLAc (µg/L)</i>	<i>LTAa (µg/L)</i>	<i>LTAc (µg/L)</i>	<i>Daily Avg. (µg/L)</i>	<i>Daily Max. (µg/L)</i>
Aldrin	3.0	N/A	3.00	N/A	1.72	N/A	2.52	5.34
Aluminum	991	N/A	991	N/A	568	N/A	834	1765
Arsenic	340	150	710	11363	407	8749	598	1265
Cadmium	13.4	0.338	49.3	45.1	28.2	34.7	41.4	87.7
Carbaryl	2.0	N/A	2.00	N/A	1.15	N/A	1.68	3.56
Chlordane	2.4	0.004	2.40	0.145	1.38	0.112	0.164	0.347
Chlorpyrifos	0.083	0.041	0.0830	1.49	0.0476	1.14	0.0699	0.147
Chromium (trivalent)	829	108	4225	19928	2421	15344	3558	7528
Chromium (hexavalent)	15.7	10.6	15.7	384	9.00	296	13.2	27.9
Copper	21.9	14.0	72.4	1681	41.5	1294	60.9	128
Cyanide (free)	45.8	10.7	45.8	388	26.2	299	38.5	81.6
4,4'-DDT	1.1	0.001	1.10	0.0363	0.630	0.0279	0.0410	0.086 8
Demeton	N/A	0.1	N/A	3.63	N/A	2.79	4.10	8.68
Diazinon	0.17	0.17	0.170	6.16	0.0974	4.75	0.143	0.302
Dicofol [Kelthane]	59.3	19.8	59.3	718	34.0	553	49.9	105
Dieldrin	0.24	0.002	0.240	0.0725	0.138	0.0558	0.0820	0.173
Diuron	210	70	210	2538	120	1955	176	374
Endosulfan I (<i>alpha</i>)	0.22	0.056	0.220	2.03	0.126	1.56	0.185	0.392
Endosulfan II (<i>beta</i>)	0.22	0.056	0.220	2.03	0.126	1.56	0.185	0.392
Endosulfan sulfate	0.22	0.056	0.220	2.03	0.126	1.56	0.185	0.392
Endrin	0.086	0.002	0.0860	0.0725	0.0493	0.0558	0.0724	0.153
Guthion [Azinphos Methyl]	N/A	0.01	N/A	0.363	N/A	0.279	0.410	0.868
Heptachlor	0.52	0.004	0.520	0.145	0.298	0.112	0.164	0.347
Hexachlorocyclohexane (<i>gamma</i>) [Lindane]	1.126	0.08	1.13	2.90	0.645	2.23	0.948	2.00
Lead	106	4.13	654	925	375	712	551	1166
Malathion	N/A	0.01	N/A	0.363	N/A	0.279	0.410	0.868
Mercury	2.4	1.3	2.40	47.1	1.38	36.3	2.02	4.27
Methoxychlor	N/A	0.03	N/A	1.09	N/A	0.838	1.23	2.60
Mirex	N/A	0.001	N/A	0.0363	N/A	0.0279	0.0410	0.086 8
Nickel	689	76.6	1940	7814	1112	6017	1634	3457
Nonylphenol	28	6.6	28.0	239	16.0	184	23.5	49.8
Parathion (ethyl)	0.065	0.013	0.0650	0.471	0.0372	0.363	0.0547	0.115
Pentachlorophenol	17.6	13.5	17.6	490	10.1	378	14.8	31.4
Phenanthrene	30	30	30.0	1088	17.2	838	25.2	53.4
Polychlorinated Biphenyls [PCBs]	2.0	0.014	2.00	0.508	1.15	0.391	0.574	1.21
Selenium	20	5	20.0	181	11.5	140	16.8	35.6
Silver	0.8	N/A	9.35	N/A	5.36	N/A	7.87	16.6
Toxaphene	0.78	0.0002	0.780	0.00725	0.447	0.00558	0.00820	0.017 3
Tributyltin [TBT]	0.13	0.024	0.130	0.870	0.0745	0.670	0.109	0.231
2,4,5 Trichlorophenol	136	64	136	2321	77.9	1787	114	242
Zinc	173	174	714	26121	409	20113	601	1273

HUMAN HEALTH

CALCULATE DAILY AVERAGE AND DAILY MAXIMUM EFFLUENT LIMITATIONS:

<i>Parameter</i>	<i>Water and Fish Criterion (µg/L)</i>	<i>Fish Only Criterion (µg/L)</i>	<i>Incidental Fish Criterion (µg/L)</i>	<i>WLAh (µg/L)</i>	<i>LTAh (µg/L)</i>	<i>Daily Avg. (µg/L)</i>	<i>Daily Max. (µg/L)</i>
Acrylonitrile	1.0	115	1150	119	111	163	345
Aldrin	1.146E-05	1.147E-05	1.147E-04	0.00137	0.00127	0.00186	0.00395

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Anthracene	1109	1317	13170	132364	123098	180954	382835
Antimony	6	1071	10710	716	666	979	2071
Arsenic	10	N/A	N/A	2493	2319	3408	7211
Barium	2000	N/A	N/A	238708	221999	326338	690415
Benzene	5	581	5810	597	555	815	1726
Benzidine	0.0015	0.107	1.07	0.179	0.166	0.244	0.517
Benzo(a)anthracene	0.024	0.025	0.25	2.86	2.66	3.91	8.28
Benzo(a)pyrene	0.0025	0.0025	0.025	0.298	0.277	0.407	0.863
Bis(chloromethyl)ether	0.0024	0.2745	2.745	0.286	0.266	0.391	0.828
Bis(2-chloroethyl)ether	0.60	42.83	428.3	71.6	66.6	97.9	207
Bis(2-ethylhexyl) phthalate [Di(2-ethylhexyl) phthalate]	6	7.55	75.5	716	666	979	2071
Bromodichloromethane [Dichlorobromomethane]	10.2	275	2750	1217	1132	1664	3521
Bromoform [Tribromomethane]	66.9	1060	10600	7985	7426	10916	23094
Cadmium	5	N/A	N/A	2196	2042	3002	6351
Carbon Tetrachloride	4.5	46	460	537	499	734	1553
Chlordane	0.0025	0.0025	0.025	0.298	0.277	0.407	0.863
Chlorobenzene	100	2737	27370	11935	11100	16316	34520
Chlorodibromomethane [Dibromochloromethane]	7.5	183	1830	895	832	1223	2589
Chloroform [Trichloromethane]	70	7697	76970	8355	7770	11421	24164
Chromium (hexavalent)	62	502	5020	7400	6882	10116	21402
Chrysene	2.45	2.52	25.2	292	272	399	845
Cresols [Methylphenols]	1041	9301	93010	124248	115550	169858	359361
Cyanide (free)	200	N/A	N/A	23871	22200	32633	69041
4,4'-DDD	0.002	0.002	0.02	0.239	0.222	0.326	0.690
4,4'-DDE	0.00013	0.00013	0.0013	0.0155	0.0144	0.0212	0.0448
4,4'-DDT	0.0004	0.0004	0.004	0.0477	0.0444	0.0652	0.138
2,4'-D	70	N/A	N/A	8355	7770	11421	24164
Danitol [Fenpropathrin]	262	473	4730	31271	29082	42750	90444
1,2-Dibromoethane [Ethylene Dibromide]	0.17	4.24	42.4	20.3	18.9	27.7	58.6
<i>m</i> -Dichlorobenzene [1,3-Dichlorobenzene]	322	595	5950	38432	35742	52540	111156
<i>o</i> -Dichlorobenzene [1,2-Dichlorobenzene]	600	3299	32990	71612	66600	97901	207124
<i>p</i> -Dichlorobenzene [1,4-Dichlorobenzene]	75	N/A	N/A	8952	8325	12237	25890
3,3'-Dichlorobenzidine	0.79	2.24	22.4	94.3	87.7	128	272
1,2-Dichloroethane	5	364	3640	597	555	815	1726
1,1-Dichloroethylene [1,1-Dichloroethene]	7	55114	551140	835	777	1142	2416
Dichloromethane [Methylene Chloride]	5	13333	133330	597	555	815	1726
1,2-Dichloropropane	5	259	2590	597	555	815	1726
1,3-Dichloropropene [1,3-Dichloropropylene]	2.8	119	1190	334	311	456	966
Dicofol [Kelthane]	0.30	0.30	3	35.8	33.3	48.9	103
Dieldrin	2.0E-05	2.0E-05	2.0E-04	0.00239	0.00222	0.00326	0.00690
2,4-Dimethylphenol	444	8436	84360	52993	49284	72447	153272
Di- <i>n</i> -Butyl Phthalate	88.9	92.4	924	10611	9868	14505	30688
				0.000009	0.000008	0.000012	0.000026
Dioxins/Furans [TCDD Equivalents]	7.80E-08	7.97E-08	7.97E-07	3	7	7	9
Endrin	0.02	0.02	0.2	2.39	2.22	3.26	6.90
Epichlorohydrin	53.5	2013	20130	6385	5938	8729	18468
Ethylbenzene	700	1867	18670	83548	77700	114218	241645
Ethylene Glycol	46744	1.68E+07	1.68E+08	5579089	5188553	7627172	16136398
Fluoride	4000	N/A	N/A	477416	443997	652676	1380831
Heptachlor	8.0E-05	0.0001	0.001	0.00955	0.00888	0.0130	0.0276
Heptachlor Epoxide	0.00029	0.00029	0.0029	0.0346	0.0322	0.0473	0.100
Hexachlorobenzene	0.00068	0.00068	0.0068	0.0812	0.0755	0.110	0.234
Hexachlorobutadiene	0.21	0.22	2.2	25.1	23.3	34.2	72.4
Hexachlorocyclohexane (<i>alpha</i>)	0.0078	0.0084	0.084	0.931	0.866	1.27	2.69
Hexachlorocyclohexane (<i>beta</i>)	0.15	0.26	2.6	17.9	16.6	24.4	51.7

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Hexachlorocyclohexane (<i>gamma</i>) [Lindane]	0.2	0.341	3.41	23.9	22.2	32.6	69.0
Hexachlorocyclopentadiene	10.7	11.6	116	1277	1188	1745	3693
Hexachloroethane	1.84	2.33	23.3	220	204	300	635
Hexachlorophene	2.05	2.90	29	245	228	334	707
4,4'-Isopropylidenediphenol [Bisphenol A]	1092	15982	159820	130335	121211	178180	376967
Lead	1.15	3.83	38.3	848	789	1159	2453
Mercury	0.0122	0.0122	0.122	1.46	1.35	1.99	4.21
Methoxychlor	2.92	3.0	30	349	324	476	1008
Methyl Ethyl Ketone	13865	9.92E+05	9.92E+06	1654845	1539006	2262338	4786307
Methyl <i>tert</i> -butyl ether [MTBE]	15	10482	104820	1790	1665	2447	5178
Nickel	332	1140	11400	111493	103688	152421	322470
Nitrate-Nitrogen (as Total Nitrogen)	10000	N/A	N/A	1193541	1109993	1631690	3452079
Nitrobenzene	45.7	1873	18730	5454	5073	7456	15776
N-Nitrosodiethylamine	0.0037	2.1	21	0.442	0.411	0.603	1.27
N-Nitroso-di- <i>n</i> -Butylamine	0.119	4.2	42	14.2	13.2	19.4	41.0
Pentachlorobenzene	0.348	0.355	3.55	41.5	38.6	56.7	120
Pentachlorophenol	0.22	0.29	2.9	26.3	24.4	35.8	75.9
Polychlorinated Biphenyls [PCBs]	6.4E-04	6.4E-04	6.40E-03	0.0764	0.0710	0.104	0.220
Pyridine	23	947	9470	2745	2553	3752	7939
Selenium	50	N/A	N/A	5968	5550	8158	17260
1,2,4,5-Tetrachlorobenzene	0.23	0.24	2.4	27.5	25.5	37.5	79.3
1,1,2,2-Tetrachloroethane	1.64	26.35	263.5	196	182	267	566
Tetrachloroethylene [Tetrachloroethylene]	5	280	2800	597	555	815	1726
Thallium	0.12	0.23	2.3	14.3	13.3	19.5	41.4
Toluene	1000	N/A	N/A	119354	110999	163169	345207
Toxaphene	0.011	0.011	0.11	1.31	1.22	1.79	3.79
2,4,5-TP [Silvex]	50	369	3690	5968	5550	8158	17260
1,1,1-Trichloroethane	200	784354	7843540	23871	22200	32633	69041
1,1,2-Trichloroethane	5	166	1660	597	555	815	1726
Trichloroethylene [Trichloroethene]	5	71.9	719	597	555	815	1726
2,4,5-Trichlorophenol	1039	1867	18670	124009	115328	169532	358671
TTHM [Sum of Total Trihalomethanes]	80	N/A	N/A	9548	8880	13053	27616
Vinyl Chloride	0.23	16.5	165	27.5	25.5	37.5	79.3

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

Aquatic Life	70% of	85% of
Parameter	Daily Avg.	Daily Avg.
	(µg/L)	(µg/L)
Aldrin	1.76	2.14
Aluminum	584	709
Arsenic	418	508
Cadmium	29.0	35.2
Carbaryl	1.17	1.43
Chlordane	0.114	0.139
Chlorpyrifos	0.0489	0.0594
Chromium (trivalent)	2490	3024
Chromium (hexavalent)	9.25	11.2
Copper	42.6	51.8
Cyanide (free)	27.0	32.7
4,4'-DDT	0.0287	0.0348
Demeton	2.87	3.48
Diazinon	0.100	0.121
Dicofol [Kelthane]	34.9	42.4

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Dieldrin	0.0574	0.0697
Diuron	123	150
Endosulfan I (<i>alpha</i>)	0.129	0.157
Endosulfan II (<i>beta</i>)	0.129	0.157
Endosulfan sulfate	0.129	0.157
Endrin	0.0507	0.0615
Guthion [Azinphos Methyl]	0.287	0.348
Heptachlor	0.114	0.139
Hexachlorocyclohexane (<i>gamma</i>) [Lindane]	0.663	0.806
Lead	385	468
Malathion	0.287	0.348
Mercury	1.41	1.71
Methoxychlor	0.861	1.04
Mirex	0.0287	0.0348
Nickel	1143	1388
Nonylphenol	16.5	20.0
Parathion (ethyl)	0.0383	0.0465
Pentachlorophenol	10.3	12.6
Phenanthrene	17.6	21.4
Polychlorinated Biphenyls [PCBs]	0.402	0.488
Selenium	11.7	14.3
Silver	5.51	6.69
Toxaphene	0.00574	0.00697
Tributyltin [TBT]	0.0766	0.0930
2,4,5 Trichlorophenol	80.1	97.3
Zinc	421	511

Human Health	70% of Daily Avg.	85% of Daily Avg.
Parameter	(µg/L)	(µg/L)
Acrylonitrile	114	138
Aldrin	0.00130	0.00158
Anthracene	126668	153811
Antimony	685	832
Arsenic	2385	2897
Barium	228436	277387
Benzene	571	693
Benzidine	0.171	0.208
Benzo(a)anthracene	2.74	3.32
Benzo(a)pyrene	0.285	0.346
Bis(chloromethyl)ether	0.274	0.332
Bis(2-chloroethyl)ether	68.5	83.2
Bis(2-ethylhexyl) phthalate [Di(2-ethylhexyl) phthalate]	685	832
Bromodichloromethane [Dichlorobromomethane]	1165	1414
Bromoform [Tribromomethane]	7641	9278
Cadmium	2101	2551
Carbon Tetrachloride	513	624
Chlordane	0.285	0.346
Chlorobenzene	11421	13869
Chlorodibromomethane [Dibromochloromethane]	856	1040
Chloroform [Trichloromethane]	7995	9708
Chromium (hexavalent)	7081	8599
Chrysene	279	339
Cresols [Methylphenols]	118901	144380

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Cyanide (free)	22843	27738
4,4'-DDD	0.228	0.277
4,4'-DDE	0.0148	0.0180
4,4'-DDT	0.0456	0.0554
2,4'-D	7995	9708
Danitol [Fenprothrin]	29925	36337
1,2-Dibromoethane [Ethylene Dibromide]	19.4	23.5
<i>m</i> -Dichlorobenzene [1,3-Dichlorobenzene]	36778	44659
<i>o</i> -Dichlorobenzene [1,2-Dichlorobenzene]	68530	83216
<i>p</i> -Dichlorobenzene [1,4-Dichlorobenzene]	8566	10402
3,3'-Dichlorobenzidine	90.2	109
1,2-Dichloroethane	571	693
1,1-Dichloroethylene [1,1-Dichloroethene]	799	970
Dichloromethane [Methylene Chloride]	571	693
1,2-Dichloropropane	571	693
1,3-Dichloropropene [1,3-Dichloropropylene]	319	388
Dicofol [Kelthane]	34.2	41.6
Dieldrin	0.00228	0.00277
2,4-Dimethylphenol	50712	61579
Di- <i>n</i> -Butyl Phthalate	10154	12329
	0.000008	0.000010
Dioxins/Furans [TCDD Equivalents]	9	8
Endrin	2.28	2.77
Epichlorohydrin	6110	7420
Ethylbenzene	79952	97085
Ethylene Glycol	5339020	6483096
Fluoride	456873	554774
Heptachlor	0.00913	0.0110
Heptachlor Epoxide	0.0331	0.0402
Hexachlorobenzene	0.0776	0.0943
Hexachlorobutadiene	23.9	29.1
Hexachlorocyclohexane (<i>alpha</i>)	0.890	1.08
Hexachlorocyclohexane (<i>beta</i>)	17.1	20.8
Hexachlorocyclohexane (<i>gamma</i>) [Lindane]	22.8	27.7
Hexachlorocyclopentadiene	1222	1484
Hexachloroethane	210	255
Hexachlorophene	234	284
4,4'-Isopropylidenediphenol [Bisphenol A]	124726	151453
Lead	811	985
Mercury	1.39	1.69
Methoxychlor	333	404
Methyl Ethyl Ketone	1583636	1922987
Methyl <i>tert</i> -butyl ether [MTBE]	1713	2080
Nickel	106695	129558
Nitrate-Nitrogen (as Total Nitrogen)	1142183	1386936
Nitrobenzene	5219	6338
N-Nitrosodiethylamine	0.422	0.513
N-Nitroso-di- <i>n</i> -Butylamine	13.5	16.5
Pentachlorobenzene	39.7	48.2
Pentachlorophenol	25.1	30.5
Polychlorinated Biphenyls [PCBs]	0.0730	0.0887
Pyridine	2627	3189
Selenium	5710	6934
1,2,4,5-Tetrachlorobenzene	26.2	31.8
1,1,2,2-Tetrachloroethane	187	227
Tetrachloroethylene [Tetrachloroethylene]	571	693

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Thallium	13.7	16.6
Toluene	114218	138693
Toxaphene	1.25	1.52
2,4,5-TP [Silvex]	5710	6934
1,1,1-Trichloroethane	22843	27738
1,1,2-Trichloroethane	571	693
Trichloroethylene [Trichloroethene]	571	693
2,4,5-Trichlorophenol	118672	144102
TTHM [Sum of Total Trihalomethanes]	9137	11095
Vinyl Chloride	26.2	31.8