

# Technical Package Cover Page

### This file contains the following documents:

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

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY



### PLAIN LANGUAGE SUMMARY FOR TPDES OR TLAP PERMIT APPLICATIONS

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

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

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

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

## ENGLISH TEMPLATE FOR TPDES or TLAP NEW/RENEWAL/AMENDMENT APPLICATIONS DOMESTIC WASTEWATER/STORMWATER

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

City of Stinnett (CN601122179) proposes to operate City of Stinnett Wastewater Treatment Plant (RN102079613), a facultative lagoon and storage pond. The facility will be located at approximately 3,000 feet South and 3,500 feet East of intersection of State Highway 152 and State Highway 136, in Stinnett, Hutchinson County, Texas 79083. This permit is a new application to discharge 200,000 gallons per day of treated wastewater to 160 acres of nonpublic access land. Effluent will be used for irrigation of 160 acres. This permit will not authorize the discharge of pollutants into water in the state.

Discharges from the facility are expected to contain BOD<sub>5</sub>. Domestic wastewater will be treated by a facultative lagoon and a storage pond.

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

#### AGUAS RESIDUALES Introduzca 'INDUSTRIALES' o 'DOMÉSTICAS' aquí /AGUAS PLUVIALES

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

1. Introduzca el nombre del solicitante aquí (2. Introduzca el número de cliente aquí (es decir, CN6#######).) 3. Elija del menú desplegable 4. Introduzca el nombre de la instalación aquí 5. Introduzca el número de entidad regulada aquí (es decir, RN1#########), 6. Elija del menú desplegable 7. Introduzca la descripción de la instalación aquí. La instalación 8. Elija del menú desplegable. ubicada en 9. Introduzca la ubicación aquí, en 10. Introduzca el nombre de la ciudad aquí, Condado de 11. Introduzca el nombre del condado aquí, Texas 12. Introduzca el código postal aquí. 13. Introduzca el resumen de la petición de solicitud aquí. *<<Para las solicitudes de TLAP incluya la siguiente oración, de lo contrario, elimine:>>* Este permiso no autorizará una descarga de contaminantes en el agua en el estado.

Se espera que las descargas de la instalación contengan 14. Liste todos los contaminantes esperados aquí. 15. Introduzca los tipos de aguas residuales descargadas aquí. 16. Elija del menú desplegable tratado por 17. Introduzca una descripción del tratamiento de aguas residuales utilizado en la instalación aquí.

### **TEXAS COMMISSION ON ENVIRONMENTAL QUALITY**



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

#### PROPOSED PERMIT NO. WQ0010291002

**APPLICATION.** City of Stinnett, P.O. Box 909, Stinnett, Texas 79083, has applied to the Texas Commission on Environmental Quality (TCEQ) for proposed Texas Land Application Permit (TLAP) No. WQ0010291002 to authorize the disposal of treated wastewater at a volume not to exceed a daily average flow of 200,000 gallons per day via surface irrigation of 160 acres of non-public access land. The domestic wastewater treatment facility and disposal area are located approximately 3000 feet south and 3500 feet east of the intersection of State Highway 152 and State Highway 136, near the city of Stinnett, in Hutchinson County, Texas 79083. Authorization for disposal was previously permitted by expired Permit No. WQ0010291001. TCEQ received this application on December 30, 2024. The permit application will be available for viewing and copying at Stinnett City Hall, main entrance, 609 MacKenzie Avenue, Stinnett, in Hutchinson 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:

<u>https://www.tceq.texas.gov/permitting/wastewater/pending-permits/tlap-applications</u>. 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=-101.4306,35.807708&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.

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

Further information may also be obtained from City of Stinnett at the address stated above or by calling Ms. Stacie Miller, City Manager, at 806-878-2422.

Issuance Date: February 3, 2025

#### **TEXAS COMMISSION ON ENVIRONMENTAL QUALITY**



#### COMBINED

#### NOTICE OF RECEIPT OF APPLICATION AND INTENT TO OBTAIN WATER QUALITY PERMIT (NORI)

AND

#### NOTICE OF APPLICATION AND PRELIMINARY DECISION FOR WATER QUALITY LAND APPLICATION PERMIT FOR MUNICIPAL WASTEWATER

#### NEW

#### **PERMIT NO. WQ0010291002**

**APPLICATION AND PRELIMINARY DECISION**. City of Stinnett, P.O. Box 909, Stinnett, Texas 79083, has applied to the Texas Commission on Environmental Quality (TCEQ) for a new permit, TCEQ Permit No. WQ0010291002 to authorize the disposal of treated domestic wastewater at **a daily average flow not to exceed 300,000 gallons per day in the Interim phase, and 200,000 gallons per day in the Final phase** via surface irrigation of 160 acres of non-public access land. The facility was previously permitted under Permit No. WQ0010291001 which expired on October 1, 2024. This permit will not authorize a discharge of pollutants into water in the state. TCEQ received this application on December 30, 2024.

### This combined notice is being issued to correct the daily average flow description include in the original NORI.

The wastewater treatment facility and disposal site are located approximately 3,000 feet south and 3,500 feet east of the intersection of State Highway 152 and State Highway 136, near the City of Stinnett, Hutchinson County, Texas 79083. The wastewater treatment facility and disposal site are located in the drainage basin of Canadian River Below Lake Meredith in Segment No. 0101 of the Canadian River Basin. 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=-101.4306,35.807708&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 Stinnett City Hall, main entrance, 609 MacKenzie Avenue, Stinnett, in Hutchinson County, Texas. The application, including any updates, and associated notices are available electronically at the following webpage:

https://www.tceq.texas.gov/permitting/wastewater/pending-permits/tlap-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 <a href="http://www.tceq.texas.gov/goto/comment">www.tceq.texas.gov/goto/comment</a> within 30 days from the date of newspaper publication of this notice.

**INFORMATION AVAILABLE ONLINE.** For details about the status of the application, visit the Commissioners' Integrated Database at <u>www.tceq.texas.gov/goto/cid</u>. 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 <u>www.tceq.texas.gov/goto/comment</u>, 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 <u>www.tceq.texas.gov/goto/pep</u>. Si desea información en Español, puede llamar al 1-800-687-4040.

Further information may also be obtained from City of Stinnett at the address stated above or by calling Ms. Stacie Miller, City Manager, at 806-878-2422.

Issuance Date: July 10, 2025

PERMIT NO. WQ0010291002



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY P.O. Box 13087 Austin, Texas 78711-3087

#### <u>PERMIT TO DISCHARGE WASTES</u> under provisions of Chapter 26 of the Texas Water Code

City of Stinnett

whose mailing address is

P.O. Box 909 Stinnett, Texas 79083

Nature of Business Producing Waste: Domestic wastewater treatment operation, SIC Code 4952.

General Description and Location of Waste Disposal System:

Description: The City of Stinnett Wastewater Treatment Facility consists of a pond system. Treatment units in the Interim phase includes two Imhoff tanks in parallel, three stabilzation ponds, and three sludge drying beds. Treatment units in the Final phase includes headworks including a bar screen, and a facultative lagoon. The permittee is authorized to dispose of treated domestic wastewater effluent at a daily average flow not to exceed 0.30 million gallons per day (MGD) in the Interim phase, and 0.20 MGD in the Final phase via surface irrigation of 160 acres of non-public access land. The Interim phase facility includes a storage pond with a total surface area of 1.4 acres and total capacity of 11 acre-feet for storage of treated effluent prior to irrigation. The Final phase facility includes a storage pond with a total capacity of 55.8 acre-feet for storage of treated effluent prior to irrigation rates to the irrigated land shall not exceed 4.2 acre-feet per year per acre irrigated and shall not exceed a net application rate of 2.1 acre-feet per year per acre based on the permitted flow and the acreage of the disposal site. The irrigated crops include native grass and Rye crops.

Location: The wastewater treatment facility and disposal site are located approximately 3,000 feet south and 3,500 feet east of the intersection of State Highway 152 and State Highway 136, near the City of Stinnett, Hutchinson County, Texas 79083. See Attachment A.

Drainage Area: The wastewater treatment facility and disposal site are located in the drainage basin of Canadian River Below Lake Meredith in Segment No. 0101 of the Canadian River Basin. No discharge of pollutants into water in the state is authorized by this permit.

This permit and the authorization contained herein shall expire at midnight, **five years from the date of issuance**.

ISSUED DATE:

For the Commission

#### EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

## Conditions of the Permit: No discharge of pollutants into water in the state is authorized.

#### A. <u>Effluent Limitations</u>

Character: Treated Domestic Sewage Effluent

<u>Volume</u>: Daily Average Flow – 0.30 MGD from the treatment system in the Interim phase Daily Average Flow – 0.20 MGD from the treatment system in the Final phase

#### <u>Quality</u>: The following effluent limitations are required:

	Effluent Concentrations	
	(Not to Exceed)	
	Daily	Single
<u>Parameter</u>	Average	Grab
	mg/l	mg/l
Biochemical Oxygen Demand (5-day)	N/A	100

The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units.

#### B. <u>Monitoring Requirements</u>:

<u>Parameter</u> Flow (Interim phase)	<u>Monitoring Frequency</u> Five/week	<u>Sample Type</u> Instantaneous
(Final phase)	Continuous	Totalizing Meter
Biochemical Oxygen	One/month	Grab
Demand (5-day)		
pH	One/month	Grab

The monitoring shall be done after the final treatment unit and prior to storage of the treated effluent. If the effluent is land applied directly from the treatment system, monitoring shall be done after the final treatment unit and prior to land application. These records shall be maintained on a monthly basis and be available at the plant site for inspection by authorized representatives of the Commission for at least three years.

#### STANDARD PERMIT CONDITIONS

This permit is granted in accordance with the Texas Water Code and the rules and other Orders of the Commission and the laws of the State of Texas.

#### **DEFINITIONS**

All definitions in Section 26.001 of the Texas Water Code 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. 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 determinations on days of discharge.
  - b. Annual average flow the arithmetic average of all daily flow determinations taken within the preceding 12 consecutive calendar months. The annual average flow determination shall consist of daily flow volume determinations made by a totalizing meter, charted on a chart recorder and limited to major domestic wastewater discharge facilities with a 1 million gallons per day or greater permitted flow.
  - c. Instantaneous flow the measured flow during the minimum time required to interpret the flow measuring device.
- 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.

- 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-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 which 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 REQUIREMENTS

1. Monitoring Requirements

Monitoring results shall be collected 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 in accordance with 30 TAC §§ 319.4 - 319.12.

As provided by state law, the permittee is subject to administrative, civil and criminal penalties, as applicable, for negligently or knowingly violating the Texas Water Code, Chapters 26, 27, and 28, and Texas Health and Safety Code, Chapter 361, including but not limited to knowingly making any false statement, representation, or certification on any report, record or other document submitted or required to be maintained under this permit, including monitoring reports, records or reports of compliance or noncompliance, or falsifying, tampering with or knowingly rendering inaccurate any monitoring device or method required by this permit or violating any other requirement imposed by state or federal regulations.

- 2. Test Procedures
  - a. Unless otherwise specified in this permit, test procedures for the analysis of pollutants shall comply with procedures specified in 30 TAC §§ 319.11 319.12. Measurements, tests and calculations shall be accurately accomplished in a representative manner.

- b. All laboratory tests submitted to demonstrate compliance with this permit must meet the requirements of 30 TAC Chapter 25, Environmental Testing Laboratory Accreditation and Certification.
- 3. Records of Results
  - a. Monitoring samples and measurements shall be taken at times and in a manner so as to be representative of the monitored activity.
  - b. Except for records of monitoring information required by this permit related to the permittee's sewage sludge or biosolids use and disposal activities, which shall be retained for a period of at least five years, monitoring and reporting records, including strip charts and records of calibration and maintenance, copies of all records required by this permit, and records of all data used to complete the application for this permit 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, or application. 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 determining compliance with permit requirements.

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. 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 which exceeds any effluent limitation in the 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.
- 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  $\mu$ g/L);
- ii. Two hundred micrograms per liter (200  $\mu$ g/L) for acrolein and acrylonitrile; five hundred micrograms per liter (500  $\mu$ g/L) for 2,4-dinitrophenol and for 2-methyl-4,6-dinitrophenol; and one milligram per liter (1 mg/L) for antimony;
- iii. Five (5) times the maximum concentration value reported for that pollutant in the permit 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  $\mu$ g/L);
  - ii. One milligram per liter (1 mg/L) for antimony;
  - iii. Ten (10) times the maximum concentration value reported for that pollutant in the permit application; or
  - iv. The level established by the 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).

#### **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 which 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 Texas Water Code Section 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 Special Provisions section of this permit.
- h. The permittee is subject to administrative, civil, and criminal penalties, as applicable, under Texas Water Code §§ 7.051 7.075 (relating to Administrative Penalties), 7.101 7.111 (relating to Civil Penalties), and 7.141 7.202 (relating to Criminal Offenses and Penalties).
- 3. Inspections and Entry
  - a. Inspection and entry shall be allowed as prescribed in the Texas Water Code Chapters 26, 27, and 28, and Texas Health and Safety Code Chapter 361.
  - b. The members of the Commission and employees and agents of the Commission are entitled to enter any public or private property at any reasonable time for the purpose of inspecting and investigating conditions relating to the quality of water in the state or the compliance with any rule, regulation, permit or other order of the Commission. Members, employees, or agents of the Commission and Commission contractors are entitled to enter public or private property at any reasonable time to investigate or monitor or, if the responsible party is not responsive or there is an immediate danger to

public health or the environment, to remove or remediate a condition related to the quality of water in the state. Members, employees, Commission contractors, or agents acting under this authority who enter private property shall observe the establishment's rules and regulations concerning safety, internal security, and fire protection, and if the property has management in residence, shall notify management or the person then in charge of his presence and shall exhibit proper credentials. If any member, employee, Commission contractor, or agent is refused the right to enter in or on public or private property under this authority, the Executive Director may invoke the remedies authorized in Texas Water Code Section 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 could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject neither to effluent limitations in the permit, nor to notification requirements in Monitoring and Reporting Requirements No. 9;
    - ii. 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 Texas Water Code § 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.
- 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 which requires a permit or other authorization pursuant to the Texas Health and Safety Code.

7. Property Rights

A permit does not convey any property rights of any sort, or any exclusive privilege.

8. 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.

9. 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.

- 10. 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 Texas Water Code § 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 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 which 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 percent 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 percent 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 percent 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 judgement 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. Facilities which generate industrial solid waste as defined in 30 TAC § 335.1 shall comply with these provisions:
  - a. Any solid waste, as defined in 30 TAC § 335.1 (including but not limited to such wastes as garbage, refuse, sludge from a waste treatment, water supply treatment plant or air pollution control facility, discarded materials, discarded materials to be recycled, whether the waste is solid, liquid, or semisolid), generated by the permittee during the management and treatment of wastewater, must be managed in accordance with all applicable provisions of 30 TAC Chapter 335, relating to Industrial Solid Waste Management.
  - b. Industrial wastewater that is being collected, accumulated, stored, or processed before discharge through any final discharge outfall, specified by this permit, is considered to be industrial solid waste until the wastewater passes through the actual point source discharge and must be managed in accordance with all applicable provisions of 30 TAC Chapter 335.
  - c. The permittee shall provide written notification, pursuant to the requirements of 30 TAC § 335.8(b)(1), to the Corrective Action Section (MC 127) of the Remediation Division informing the Commission of any closure activity involving an Industrial Solid Waste Management Unit, at least 90 days prior to conducting such an activity.
  - d. Construction of any industrial solid waste management unit requires the prior written notification of the proposed activity to the Registration and Reporting Section (MC 129) of the Permitting and Remediation Support Division. No person shall dispose of industrial solid waste, including sludge or other solids from wastewater treatment processes, prior to fulfilling the deed recordation requirements of 30 TAC § 335.5.
  - e. The term "industrial solid waste management unit" means a landfill, surface impoundment, waste-pile, industrial furnace, incinerator, cement kiln, injection well, container, drum, salt dome waste containment cavern, or any other structure vessel, appurtenance, or other improvement on land used to manage industrial solid waste.
  - f. The permittee shall keep management records for all sludge (or other waste) removed from any wastewater treatment process. These records shall fulfill all applicable requirements of 30 TAC Chapter 335 and must include the following, as it pertains to wastewater treatment and discharge:
    - i. Volume of waste and date(s) generated from treatment process;
    - ii. Volume of waste disposed of on-site or shipped off-site;
    - iii. Date(s) of disposal;

- iv. Identity of hauler or transporter;
- v. Location of disposal site; and
- vi. Method of final disposal.

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

11. For industrial facilities to which the requirements of 30 TAC Chapter 335 do not apply, sludge and solid wastes, including tank cleaning and contaminated solids for disposal, shall be disposed of in accordance with Chapter 361 of the Texas Health and Safety Code.

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#### SLUDGE PROVISIONS

The permittee is authorized to dispose of sludge or biosolids 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 or biosolids supplies the sewage sludge or biosolids 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 or biosolids 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

Sewage sludge or biosolids shall be tested once during the term of this permit in the 1. Interim phase, and prior to sludge disposal 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 TCEO 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 1) 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 30<sup>th</sup> 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 1) 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.

<u>Pollutant</u>	Ceiling Concentration	
	( <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	

#### TABLE 1

\* 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:

<u>Alternative 1</u> - 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:

<u>Alternative 2</u> - 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

<u>Alternative 3</u> - 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

<u>Alternative 4</u> - 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).

<u>Alternative 2</u> - 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.

<u>Alternative 3</u> - 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 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.

- <u>Alternative 1</u> The mass of volatile solids in the sewage sludge shall be reduced by a minimum of 38%.
- <u>Alternative 2</u> 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.
- <u>Alternative 3</u> 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.
- <u>Alternative 4</u> 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.
- <u>Alternative 5</u> 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.
- <u>Alternative 6</u> 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.
- <u>Alternative 7</u> 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.

<u>Alternative 8</u> - 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.

- <u>Alternative 9</u> i. Sewage sludge shall be injected below the surface of the land.
  - ii. No significant amount of the sewage sludge shall be present on the land surface within one hour after the sewage sludge is 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.
- <u>Alternative 10</u>- 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 sewage sludge 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	- once during the term of this permit in the
(TCLP) Test	Interim phase, and prior to sludge disposal
	in the Final phase
PCBs	- once during the term of this permit in the
	Interim phase, and prior to sludge disposal
	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):

Amount of biosolids (*) <u>metric tons per 365-day period</u>	Monitoring Frequency
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, 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 FOR APPLICATION TO THE LAND MEETING CLASS A, CLASS AB or B BIOSOLIDS 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	
Pollutant Arsenic Cadmium Chromium Copper Lead Mercury Molybdenum Nickel Selenium Zinc		Cumulative Pollutant Loading Rate ( <u>pounds per acre</u> )* 36 35 2677 1339 268 15 Report Only 375 89 2500
	Table 3	
<u>Pollutant</u> Arsenic Cadmium Chromium Copper Lead		Monthly Average Concentration ( <u>milligrams per kilogram</u> )* 41 39 1200 1500 300

17

420

2800

36

Report Only

**B.** Pathogen Control

Mercury

Selenium

Nickel

Zinc

Molybdenum

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.

\*Dry weight basis

#### **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 or biosolids enters a wetland or other waters in the State.
- 2. Bulk sewage sludge not meeting Class A biosolids 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 Class A or AB 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 sewage sludge 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.
- 2. The permittee shall give 180 days prior notice to the Executive Director in care of the Wastewater Permitting Section (MC 148) of the Water Quality Division of any change planned in the biosolids disposal practice.

#### 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 <u>five years</u>. 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), <u>or</u> 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 <u>indefinitely</u>. 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 or biosolids treatment activities.
  - b. The location, by street address, and specific latitude and longitude, of each site on which sludge or biosolids are applied.
  - c. The number of acres in each site on which bulk sludge or biosolids are applied.
  - d. The date and time sludge or 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 sludge 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 30<sup>th</sup> 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 1) 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 or biosolids 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 or biosolids meet the requirements in 30 TAC § 330 concerning the quality of the sludge disposed in a municipal solid waste landfill.
- B. If the permittee generates sewage sludge or biosolids 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. The permittee shall give 180 days prior notice to the Executive Director in care of the Wastewater Permitting Section (MC 148) of the Water Quality Division of any change planned in the sewage sludge or biosolids disposal practice.
- D. Sewage sludge or biosolids shall be tested once during the term of this permit in the Interim phase, and prior to sludge disposal 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 1) 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 1) and the Enforcement Division (MC 224), by September 30<sub>th</sub> of each year.

- E. Sewage sludge or biosolids shall be tested as needed, in accordance with the requirements of 30 TAC Chapter 330.
- F. 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.

G. Reporting Requirements

The permittee shall submit the following information in an annual report to the TCEQ by September 30<sup>th</sup> 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 1) and the Enforcement Division (MC224).

- 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 or biosolids 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 30<sup>th</sup> 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 1) 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.

TCEQ Revision 06/2020

#### **SPECIAL PROVISIONS:**

- 1. This permit is 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 this permit in accordance with applicable procedural requirements to require the system covered by this permit to be integrated into an area-wide system, if an area-wide system is developed; to require the delivery of the wastes authorized to be collected in, treated by, or discharged from the system, to an 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.
- 2. 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 D facility must be operated by a chief operator or an operator holding a Class D 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 which 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.

- 3. The permittee shall maintain and operate the treatment facility in order to achieve optimum efficiency of treatment capability. This shall include required monitoring of effluent flow and quality as well as appropriate grounds and building maintenance.
- 4. The permittee shall obtain representative soil samples from the root zones of the land application area. Composite sampling techniques shall be used. Each composite sample shall represent no more than 80 acres with no fewer than 10 to 15 subsamples representing each composite sample. For analysis and reporting, subsamples shall be composited by like sampling depth, type of crop, and soil type. Soil types are soils that have like topsoil or plow layer textures. These soils shall be sampled individually from 0 to 6 inches, 6 to 18 inches and 18 to 30 inches below ground level. The permittee shall sample soils in December to February of each year. Soil samples shall be analyzed within 30 days of sample collection.

Samples shall be analyzed annually according to the following table:

Parameter	Method	Minimum Analytical Level (MAL)	Reporting units
рН	2:1 (v/v) water to soil		Reported to 0.1 pH units

	mixture		after calibration of pH meter
Electrical Conductivity	2:1 (v/v) water to soil mixture	0.01	dS/m (same as mmho/cm)
Nitrate-nitrogen	From a 1 <u>N</u> KCl soil extract	1	mg/kg (dry weight basis)
Total Kjeldahl Nitrogen (TKN)	For determination of Organic plus Ammonium Nitrogen. Procedures that use Mercury (Hg) are not acceptable.	20	mg/kg (dry weight basis)
Total Nitrogen	= TKN plus Nitrate- nitrogen		mg/kg (dry weight basis)
Plant-available: Phosphorus	Mehlich III with inductively coupled plasma	1 (P)	mg/kg (dry weight basis)
Plant-available: Potassium (K)	May be determined in the same Mehlich III extract with inductively coupled plasma	5 (K)	mg/kg (dry weight basis)
Amendment addition, e.g., gypsum			Report in <i>short</i> <i>tons/acre</i> in the year effected

A copy of this soil testing plan shall be provided to the analytical laboratory prior to sample analysis. The permittee shall submit the results of the annual soil sample analyses with copies of the laboratory reports and a map depicting the areas that have received wastewater within the permanent land application fields to the TCEQ Regional Office (MC Region 1) and the Enforcement Division (MC 224) of the Enforcement Division, no later than the end of September of each sampling year. If wastewater is not applied in a particular year, the permittee shall notify the same TCEQ offices and indicate that wastewater has not been applied on the approved land irrigation site(s) during that year.

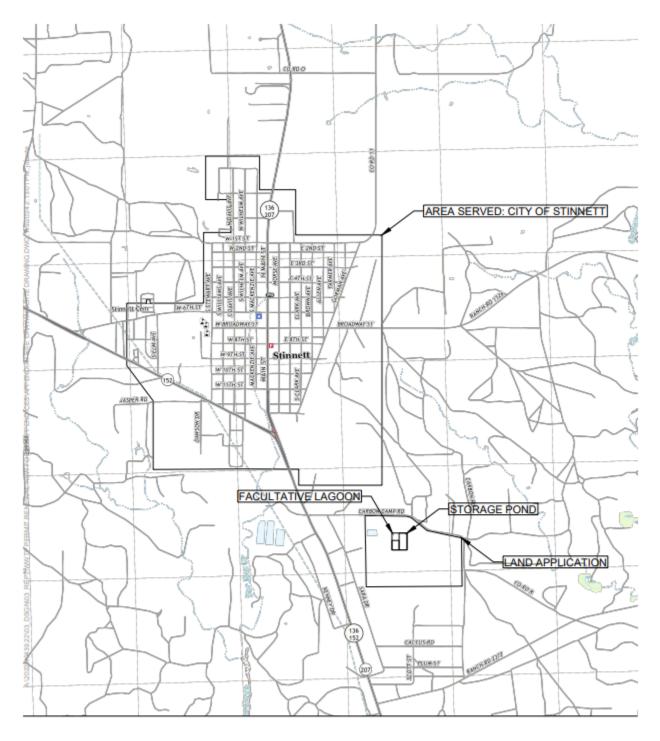
5. The irrigated crops include native grass and rye crops. Application rates to the irrigated land shall not exceed 4.2 acre-feet per year per acre irrigated and shall not exceed a net application rate of 2.1 acre-feet per year per acre based on the permitted flow and the acreage of the disposal site. The permittee is responsible for providing equipment to determine application rates and maintaining accurate records of the volume of effluent applied. These records shall be made available for review by the Texas Commission on Environmental Quality and shall be maintained for least three years.

- 6. Irrigation practices shall be designed and managed as to prevent ponding of effluent or contamination of ground and surface waters and to prevent the occurrence of nuisance conditions in the area. To promote effluent and nutrient uptake by the crop, and to prevent pathways for effluent surfacing, native grass and rye crops shall be established and well maintained in the irrigation area throughout the year. Tailwater control facilities shall be provided as necessary to prevent the discharge of any effluent from the irrigated land.
- 7. Effluent shall not be applied for irrigation during rainfall events or when the ground is frozen or saturated.
- 8. Holding ponds shall conform to the Texas Commission on Environmental Quality "Design Criteria for Sewerage Systems" requirements for stabilization ponds with regard to construction and levee design, and a minimum of 2 feet of freeboard shall be maintained.
- 9. For any area where treated effluent is stored or where there exist hose bibs or faucets, the permittee shall erect adequate signs stating that the irrigation water is from a non-potable water supply. Signs shall consist of a red slash superimposed over the international symbol for drinking water accompanied by the message "DO NOT DRINK THE WATER" in both English and Spanish. All piping transporting the effluent shall be clearly marked with these same signs.
- 10. Spray fixtures for the irrigation system shall be of such design that they cannot be operated by unauthorized personnel.
- 11. Irrigation with effluent shall be done when the irrigation area is not in use.
- 12 The permittee shall use cultural practices to promote and maintain the health and propagation of the native grass and rye grass crops and avoid plant lodging. The permittee shall harvest the crops (cut and remove it from the field) as needed during the year. Harvesting and mowing dates shall be recorded in a log book kept on site to be made available to TCEQ personnel upon request.
- 13. The physical condition of the land application fields shall be monitored on a weekly basis. Any area with problems such as surface runoff, surficial erosion, or stressed or damaged vegetation, etc., shall be recorded in a field log kept onsite. Corrective measures will be implemented within 24 hours of discovery.
- 14. The permittee shall comply with buffer zone requirements of 30 TAC § 309.13(c). A wastewater treatment plant unit, defined by 30 TAC Section § 309.11(a)(9), must be located a minimum horizontal distance of 250 feet from a private well and a minimum horizontal distance of 500 feet from a public water well site, spring, or other similar sources of public drinking water, as provided by § 290.41(c)(1)(C) of this title.
- 15. The permittee shall comply with the buffer zone requirements of 30 TAC § 309.13(c), specifically regarding water wells. The wastewater application area shall be located a minimum horizontal distance of 150 feet from private water wells; and a minimum horizontal distance of 500 feet from public water supply wells, springs, or other similar sources of public drinking water.
- 16. Any new or modified wastewater pond shall be adequately lined to control seepage in accordance with 30 TAC § 217.203 and 30 TAC § 309.13(d) since the facility overlies the

recharge zone of an aquifer. The Permittee shall submit the liner certification for a newlyconstructed or modified wastewater pond to the Water Quality Assessment Team (MC-150), the TCEQ Regional Office (MC-Region 1), and the TCEQ Enforcement Division (MC-224) within 30 days of completion and prior to use. The certification shall be signed and sealed by a Texas-licensed professional engineer and include a description of how the liner meets the requirements of 30 TAC § 217.203 and 30 TAC § 309.13(d) since the facility is located on the recharge zone of an aquifer.

- 17. Wastewater ponds shall be maintained and operated in a manner that prevents unauthorized discharge to water in the state and contamination of groundwater.
- 18. Facilities for the retention of treated or untreated wastewater shall be adequately managed and lined to control seepage. At least once per month, the Permittee shall inspect the sides and bottom (if visible) of all wastewater ponds for signs of damage and leakage, and any pond leak detection systems that are in service. Leaking ponds shall be removed from service, or operated in a manner to prevent discharge, until repairs are made or replacement ponds are constructed. A record of the monthly inspections shall be maintained in a field log and kept onsite for TCEQ inspection.
- 19. Pond liner certifications and all liner construction and repair documentation shall be maintained by the Permittee for the life of the facility and be made available for TCEQ personnel for inspection and review.
- 20. Permanent transmission lines shall be installed from the holding pond to each tract of land to be irrigated utilizing effluent from that pond.

#### Attachment A – Site Map City of Stinnett TCEQ Permit No. WQ0010291002



# City of Stinnett Wastewater Treatment Plant Renewal

City of Stinnett P.O. Box 909 Stinnett, TX 79083

# Parkhill

#### Site Drawing

	Issue:	Renewal
Parkhill.com	Date:	07/10/2024
	Project No:	40439.22
	Sheet:	1 OF 1

#### TECHNICAL SUMMARY AND EXECUTIVE DIRECTOR'S PRELIMINARY DECISION

#### **DESCRIPTION OF APPLICATION**

Applicant:	City of Stinnett TCEQ Permit No. WQ0010291002
Regulated Activity:	Domestic Wastewater Permit
Type of Application:	New Permit
Request:	New Permit
Authority:	Texas Water Code (TWC) § 26.027; 30 Texas Administrative Code (TAC) Chapters 305, 309, 312, 319, and 30; and Commission policies.

#### 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**, according to 30 TAC Section 305.127(1)(C)(ii)(III), Conditions to be Determined for Individual Permits.

#### REASON FOR PROJECT PROPOSED

City of Stinnett has applied to the Texas Commission on Environmental Quality (TCEQ) for new TCEQ Permit No. WQ0010291002 to authorize the disposal of treated domestic wastewater at a daily average flow not to exceed 0.30 million gallons per day (MGD) in the Interim phase, and 0.20 MGD in the Final phase via surface irrigation of 160 acres of non-public access land. The Interim phase facility includes a storage pond with a total surface area of 1.4 acres and total capacity of 11 acre-feet for storage of treated effluent prior to irrigation. The Final phase facility will include a storage pond with a total surface area of 4.65 acres and a total capacity of 55.8 acre-feet for storage of treated effluent prior to irrigation. The existing wastewater treatment facility serves the City of Stinnett.

#### PROJECT DESCRIPTION AND LOCATION

The City of Stinnett Wastewater Treatment Facility consists of a pond system. Treatment units in the Interim phase include two Imhoff tanks in parallel, three stabilization ponds, an effluent holding pond, and three sludge drying beds. Treatment units in the Final phase will include headworks including a bar screen, a facultative lagoon, and an effluent storage pond. The facility is operating in the Interim phase.

The draft permit authorizes the disposal of sludge at a TCEQ-authorized land application site, co-disposal landfill, wastewater treatment facility, or facility that further processes sludge.

The wastewater treatment facility and disposal site are located approximately 3,000 feet south and 3,500 feet east of the intersection of State Highway 152 and State Highway 136 in Hutchinson County, Texas 79083.

The wastewater treatment facility and disposal site are located in the drainage basin of Canadian River Below Lake Meredith in Segment No. 0101 of the Canadian River Basin. No discharge of pollutants into water in the state is authorized by this permit.

#### SUMMARY OF EFFLUENT DATA

The following is a summary of the applicant's flow monitoring data for the period January 2022 through November 2023, and a summary of the applicant's effluent monitoring data for five-day biochemical oxygen demand ( $BOD_5$ ) for the period July 2023 through December 2023. The average of Daily Average value is computed by averaging of all 30-day average values for the reporting period for each parameter: flow, and  $BOD_5$ .

<u>Parameter</u>	<u>Average of Daily Average</u>
Flow, MGD	0.083
BOD <sub>5</sub> , mg/l *	42

\*The applicant provided information via email on May 29, 2025, that indicated that the missing effluent data was due to personnel changes.

#### **DRAFT PERMIT CONDITIONS**

The draft permit authorizes the disposal of treated domestic wastewater effluent at a daily average flow not to exceed 0.30 MGD in the Interim phase, and 0.20 MGD in the Final phase via surface irrigation of 160 acres of non-public access land. The Interim phase facility includes a storage pond with a total surface area of 1.4 acres and total capacity of 11 acre-feet for storage of treated effluent prior to irrigation. The Final phase facility will include a storage pond with a total surface and a total capacity of 55.8 acre-feet for storage of treated effluent prior to irrigation. Application rates to the irrigated land shall not exceed 4.2 acre-feet per year per acre irrigated and shall not exceed a net application rate of 2.1 acre-feet per year per acre based on the permitted flow and the acreage of the disposal site. The irrigated crops include native grass and Rye crops.

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).

The draft permit includes Sludge Provisions according to the requirements of 30 TAC Chapter 312, Sludge Use, Disposal, and Transportation. The draft permit authorizes the disposal of sludge at a TCEQ-authorized land application site, co-disposal landfill, wastewater treatment facility, or facility that further processes sludge.

#### SUMMARY OF CHANGES FROM APPLICATION

None.

#### SUMMARY OF CHANGES FROM EXPIRED PERMIT

Effluent limitations in the draft permit remain the same as the existing permit (expired permit

City of Stinnett Permit No. WQ0010291002 Statement of Basis/Technical Summary and Executive Director's Preliminary Decision

No. WQ0010291001) effluent limitations. The Sludge Provisions, Special Provisions, and Standard Provisions have been revised in the draft permit.

Special Provisions No. 4, 5, 6, 9, and 11 in the existing permit (expired permit No. WQ0010291001) have been revised in the draft permit. Special Provisions Nos.12, 13,14, 15, 16, 17, 18, 19 have been added to the draft permit.

The monitoring frequency requirements in the draft permit for flow have been updated from the existing permit requirements.

The existing permit (expired permit No. WQ0010291001) authorizes the disposal of treated domestic wastewater effluent at a daily average flow not to exceed 0.30 MGD via surface irrigation of 160 acres of non-public access land. The draft permit authorizes the disposal of treated domestic wastewater at a daily average volume not to exceed 0.30 MGD in the Interim phase, and 0.20 MGD in the Final phase.

#### BASIS FOR DRAFT PERMIT

The following items were considered in developing the draft permit:

- 1. Application received on December 30, 2024, and additional information received on February 11, 2025.
- 2. The facility was previously permitted under Permit No. WQ0010291001 which expired on October 1, 2024.
- 3. Interoffice Memorandum from the Water Quality Assessment Team, Water Quality Assessment & Standards Section, Water Quality Division.

#### 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

City of Stinnett Permit No. WQ0010291002 Statement of Basis/Technical Summary and Executive Director's Preliminary Decision

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 Sumitra Pokharel at (512) 239-4722.

#### Sumitra Tokharel

June 27, 2025

Sumitra Pokharel Municipal Permits Team Wastewater Permitting Section (MC 148) Date

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY



# DOMESTIC WASTEWATER PERMIT APPLICATION CHECKLIST

# Complete and submit this checklist with the application.

APPLICANT NAME: City of Stinnett

PERMIT NUMBER (If new, leave blank): WQ00 10291001

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

Ν

Y

	1	IN
Administrative Report 1.0	$\boxtimes$	
Administrative Report 1.1	$\boxtimes$	
SPIF		$\boxtimes$
Core Data Form	$\boxtimes$	
Public Involvement Plan Form	$\boxtimes$	
Technical Report 1.0	$\boxtimes$	
Technical Report 1.1	$\boxtimes$	
Worksheet 2.0		$\boxtimes$
Worksheet 2.1		$\boxtimes$
Worksheet 3.0	$\boxtimes$	
Worksheet 3.1	$\boxtimes$	
Worksheet 3.2		$\boxtimes$
Worksheet 3.3		$\boxtimes$
Worksheet 4.0		$\boxtimes$
Worksheet 5.0		$\boxtimes$
Worksheet 6.0	$\boxtimes$	
Worksheet 7.0		$\boxtimes$

Original USGS Map	$\boxtimes$	
Affected Landowners Map	$\boxtimes$	
Landowner Disk or Labels	$\boxtimes$	
Buffer Zone Map	$\boxtimes$	
Flow Diagram	$\boxtimes$	
Site Drawing	$\boxtimes$	
Original Photographs	$\boxtimes$	
Design Calculations	$\boxtimes$	
Solids Management Plan	$\boxtimes$	
Water Balance	$\boxtimes$	

Y

Ν

# For TCEQ Use Only

Segment Number	County
0	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 🗆
$\geq 0.05$ 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 Numbe	er: Click to enter text.
	Check/Money Order Amour	nt: Click to enter text.
	Name Printed on Check: Cli	ck to enter text.
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.
  - Discly-Owned Domestic Wastewater
  - □ Privately-Owned Domestic Wastewater
  - Conventional Wastewater Treatment
- **b.** Check the box next to the appropriate facility status.
  - $\boxtimes$  Active  $\square$  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 <u>with</u> Renewal □ Minor Amendment <u>with</u> Renewal
  - Major Amendment <u>without</u> Renewal
    Minor Amendment <u>without</u> Renewal
  - □ Renewal without changes □ Minor Modification of permit
- e. For amendments or modifications, describe the proposed changes: <u>The City of Stinnett is</u> <u>constructing a new 0.2 MGD WWTP Facility. New Treatment units will include a facultative lagoon and</u> <u>a new storage pond. Treated effluent will be irrigated on 160 acres of existing, non-public access, land.</u>

# f. For existing permits:

Permit Number: WQ00 <u>10291001</u>

EPA I.D. (TPDES only): TX Click to enter text.

Expiration Date: October 1, 2024

# Section 3. Facility Owner (Applicant) and Co-Applicant 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 Stinnett

(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 <u>http://www15.tceq.texas.gov/crpub/</u>

# CN: <u>601122179</u>

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: <u>Mr.</u>	Last Name, First Name: <u>Ivrin, Jeff</u>
Title: <u>Mayor</u>	Credential: Click to enter text.

**B. Co-applicant 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-applicant applying for this permit?

<u>N/A</u>

(*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: <u>http://www15.tceq.texas.gov/crpub/</u>

CN: Click to enter text.

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: <u>Click to enter text</u>.

#### 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. <u>Appendix A: Core Data Form</u>

# 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: <u>Ms.</u>	Last Name, First Name: <u>Miller, Stacie</u>			
	Title: <u>City Manager</u>	Credential: Click to enter text.			
	Organization Name: City of Stinne	<u>tt</u>			
	Mailing Address: <u>P.O. Box 909</u>	City, State, Zip Code: <u>Stinnett, TX 79083</u>			
	Phone No.: <u>806.878.2422</u>	E-mail Address: <u>smiller@cityofstinnett.com</u>			
	Check one or both: $\square$ Adm	ninistrative Contact 🛛 Technical Contact			
B.	Prefix: <u>Mr.</u>	Last Name, First Name: <u>Krueger, Paul</u>			
	Title: <u>Civil Engineer</u>	Credential: <u>P.E.</u>			
	Organization Name: Parkhill				
	Mailing Address: <u>4222 85th St</u>	City, State, Zip Code: <u>Lubbock, TX 79423</u>			
Phone No.: <u>806.473.3715</u>		E-mail Address: <u>pkrueger@parkhill.com</u>			
	Check one or both: $\square$ Adm	ninistrative 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: <u>Ms.</u>	Last Name, First Name: Miller, Stacie
	Title: <u>City Manager</u>	Credential: Click to enter text.
	Organization Name: City of Stinne	<u>tt</u>

Mailing Address: <u>P.O. Box 909</u> Phone No.: 806.878.2422

B. Prefix: <u>Mr.</u> Title: <u>Civil Engineer</u> Organization Name: <u>Parkhill</u> Mailing Address: <u>4222 85th St</u> Phone No.: 806.473.3715 City, State, Zip Code: <u>Stinnett, TX 79083</u> E-mail Address: <u>smiller@cityofstinnett.com</u> Last Name, First Name: <u>Krueger, Paul</u> Credential: <u>P.E.</u>

City, State, Zip Code: <u>Lubbock, TX 79423</u> E-mail Address: <u>pkrueger@parkhill.com</u>

# 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: <u>Ms.</u>	Last Name, First Name: <u>Miller, Stacie</u>			
Title: <u>City Manager</u>	Credential: Click to enter text.			
Organization Name: <u>City of Stinnett</u>				
Mailing Address: P.O. Box 909 City, State, Zip Code: Stinnett, TX 79083				
Phone No.: <u>806.878.2422</u>	E-mail Address: <u>smiller@cityofstinnett.com</u>			

# 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: <u>Ms.</u>	Last Name, First Name: <u>Miller, Stacie</u>			
Title: <u>City Manager</u>	Credential: Click to enter text.			
Organization Name: <u>City of Stinnett</u>				
Mailing Address: <u>P.O. Box 909</u> City, State, Zip Code: <u>Stinnett, TX 79083</u>				
Phone No.: <u>806.878.2422</u>	E-mail Address: <u>smiller@cityofstinnett.com</u>			

# Section 8. Public Notice Information (Instructions Page 27)

A.	Individual	Publishing	the Notices
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Prefix: <u>Mr.</u>	Last Name, First Name: <u>Krueger, Paul</u>
Title: <u>Civil Engineer</u>	Credential: <u>P.E.</u>
Organization Name: Parkhill	
Mailing Address: <u>4222 85th St</u>	City, State, Zip Code: <u>Lubbock, TX 79423</u>
Phone No.: <u>806.473.3715</u>	E-mail Address: <u>pkrueger@parkhill.com</u>

# 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: <u>Ms.</u>	Last Name, First Name: <u>Miller, Stacie</u>			
Title: City ManagerCredential: Click to enter text.				
Organization Name: <u>City of Stinnett</u>				
Mailing Address: P.O. Box 909City, State, Zip Code: Stinnett, TX 79083				
Phone No.: <u>806.878.2422</u>	E-mail Address: <a href="mailto:smiller@cityofstinnett.com">smiller@cityofstinnett.com</a>			

## **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: City Hall

Location within the building: Main Entrance

Physical Address of Building: P.O. Box 909

City: <u>Sinnett</u> County: <u>Hutchinson</u>

Contact (Last Name, First Name): <u>Miller, Stacie</u>

Phone No.: <u>806.878.2422</u> Ext.: <u>N/A</u>

#### 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: Appendix B: Plain Language Summary

## 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: Appendix C: Public Involvement Plan

# 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** <u>102079613</u>

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

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

Stinnett Wastewater Treatment Plant

C. Owner of treatment facility: <u>City of Stinnett</u>

Ownership of Facility: $\square$	Public		Private		Both		Federal
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**D.** Owner of land where treatment facility is or will be:

Prefix: <u>N/A</u>	Last Name, First Name: Click to enter text.
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Title: Click to enter text. Credential: Click to enter text.

Organization Name: City of Stinnett

Mailing Address: P.O. Box 909 City, State, Zip Code: Stinnett, TX 79083

Phone No.: <u>806.878.2422</u>

E-mail Address: <u>smiller@cityofstinnett.com</u>

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: <u>N/A</u>

**E.** Owner of effluent disposal site:

Prefix: <u>N/A</u>	Last Name, First Name: Click to enter text.			
Title: Click to enter text.	Credential: Click to enter text.			
Organization Name: <u>City of Stinnett</u>				
Mailing Address: <u>P.O. Box 909</u> City, State, Zip Code: <u>Stinnett, TX 79083</u>				
Phone No.: <u>806.878.2422</u> E-mail Address: <u>smiller@cityofstinnett.com</u>				
If the landowner is not the same nerson as the facility owner or co-applicant attach a				

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: <u>N/A</u>

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

Prefix: <u>N/A</u>	Last Name, First Name: Click to enter text.
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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:

N/A – TLAP only

- **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): Click to enter text.

County in which the outfalls(s) is/are located: Click to enter text.

- **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:

Land application area will not change as a result of the proposed amendment.

- B. City nearest the disposal site: Stinnett
- C. County in which the disposal site is located: Hutchinson
- **D.** For **TLAPs**, describe the routing of effluent from the treatment facility to the disposal site:

Treated effluent is pumped from storage pond to the irrigation area.

**E.** For **TLAPs**, please identify the nearest watercourse to the disposal site to which rainfall runoff might flow if not contained: <u>Cottonwood Creek – Southeast of disposal site</u>

# 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

 $\Box$  No  $\boxtimes$  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.

Click to enter text.

- **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: Click to enter text.

**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: <u>Appendix A: Core Data Form; Appendix B: Plain Language</u> <u>Summary; Appendix C: Public Involvement Plan</u>

Appendix D: USGS Map

# Section 14. Signature Page (Instructions Page 34)

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

Permit Number: WQ0010291001

Applicant: <u>City of Stinnett</u>

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): Jeff Irvin

Signatory title: Mayor

Signature:		Date:	
(Use blue ink)			
Subscribed and Sworn to before	me by the said		
on this	day of		, 20
My commission expires on the	day of		, 20

Notary Public

[SEAL]

County, Texas

# DOMESTIC WASTEWATER PERMIT APPLICATION ADMINISTRATIVE REPORT 1.0

The following information is required for new and amendment applications.

# Section 1. Affected Landowner Information (Instructions Page 36)

- A. Indicate by a check mark that the landowners map or drawing, with scale, includes the following information, as applicable:
  - The applicant's property boundaries

Appendix E: Landowner Map

- The facility site boundaries within the applicant's property boundaries
- □ The distance the buffer zone falls into adjacent properties and the property boundaries of the landowners located within the buffer zone
- The property boundaries of all landowners surrounding the applicant's property (Note: if the application is a major amendment for a lignite mine, the map must include the property boundaries of all landowners adjacent to the new facility (ponds).)
- The point(s) of discharge and highlighted discharge route(s) clearly shown for one mile downstream
- □ The property boundaries of the landowners located on both sides of the discharge route for one full stream mile downstream of the point of discharge
- The property boundaries of the landowners along the watercourse for a one-half mile radius from the point of discharge if the point of discharge is into a lake, bay, estuary, or affected by tides
- The boundaries of the effluent disposal site (for example, irrigation area or subsurface drainfield site) and all evaporation/holding ponds within the applicant's property
- The property boundaries of all landowners surrounding the effluent disposal site
- □ The boundaries of the sludge land application site (for land application of sewage sludge for beneficial use) and the property boundaries of landowners surrounding the applicant's property boundaries where the sewage sludge land application site is located
- □ The property boundaries of landowners within one-half mile in all directions from the applicant's property boundaries where the sewage sludge disposal site (for example, sludge surface disposal site or sludge monofill) is located
- **B.** Indicate by a check mark that a separate list with the landowners' names and mailing addresses cross-referenced to the landowner's map has been provided.
- **C.** Indicate by a check mark in which format the landowners list is submitted:
  - $\boxtimes$  USB Drive  $\square$  Four sets of labels
- **D.** Provide the source of the landowners' names and mailing addresses: <u>County Appraisal District</u> <u>Website</u>
- **E.** As required by *Texas Water Code § 5.115*, is any permanent school fund land affected by this application?
  - 🗆 Yes 🖾 No

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

Click to enter text.

# Section 2. Original Photographs (Instructions Page 38)

Provide original ground level photographs. Indicate with checkmarks that the following information is provided.

- At least one original photograph of the new or expanded treatment unit location
- At least two photographs of the existing/proposed point of discharge and as much area downstream (photo 1) and upstream (photo 2) as can be captured. If the discharge is to an open water body (e.g., lake, bay), the point of discharge should be in the right or left edge of each photograph showing the open water and with as much area on each respective side of the discharge as can be captured.
- At least one photograph of the existing/proposed effluent disposal site
- A plot plan or map showing the location and direction of each photograph

# Section 3. Buffer Zone Map (Instructions Page 38)

- **A.** Buffer zone map. Provide a buffer zone map on 8.5 x 11-inch paper with all of the following information. The applicant's property line and the buffer zone line may be distinguished by using dashes or symbols and appropriate labels.
  - The applicant's property boundary;

Appendix G: Buffer Zone

- The required buffer zone; and
- Each treatment unit; and
- The distance from each treatment unit to the property boundaries.
- **B.** Buffer zone compliance method. Indicate how the buffer zone requirements will be met. Check all that apply.
  - ⊠ Ownership
  - □ Restrictive easement
  - □ Nuisance odor control
  - □ Variance
- **C.** Unsuitable site characteristics. Does the facility comply with the requirements regarding unsuitable site characteristic found in 30 TAC § 309.13(a) through (d)?



# DOMESTIC WASTEWATER PERMIT APPLICATION SUPPLEMENTAL PERMIT INFORMATION FORM (SPIF)

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

Attachment: N/A

# 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	BY OVERNIGHT/EXPRESS MAIL
Texas Commission on Environmental Quality	Texas Commission on Environmental Quality
Financial Administration Division	Financial Administration Division
Cashier's Office, MC-214	Cashier's Office, MC-214
P.O. Box 13088	12100 Park 35 Circle
Austin, Texas 78711-3088	Austin, Texas 78753

#### Fee Code: WOP Waste Permit No: WQ0010291001

- 1. Check or Money Order Number: Click to enter text.
- 2. Check or Money Order Amount: Click to enter text.
- 3. Date of Check or Money Order: Click to enter text.
- 4. Name on Check or Money Order: Click to enter text.
- 5. APPLICATION INFORMATION

Name of Project or Site: Stinnett Wastewater Treatment Plant

Physical Address of Project or Site: Approximately 3,000 feet South and 3,500 feet East of intersection of State Highway 152 and State Highway 136.

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.

# Staple Check or Money Order in This Space

# **ATTACHMENT 1**

# INDIVIDUAL INFORMATION

# Section 1. Individual Information (Instructions Page 41)

Complete this attachment if the facility applicant or co-applicant is an individual. Make additional copies of this attachment if both are individuals.

Prefix (Mr., Ms., Miss): Click to enter text.

Full legal name (Last Name, First Name, Middle Initial): Click to enter text.

Driver's License or State Identification Number: Click to enter text.

Date of Birth: Click to enter text.

Mailing Address: Click to enter text.

City, State, and Zip Code: Click to enter text.

Phone Number: Click to enter text. Fax Number: Click to enter text.

E-mail Address: Click to enter text.

CN: Click to enter text.

For Commission Use Only: Customer Number: Regulated Entity Number: Permit Number:

# DOMESTIC WASTEWATER PERMIT APPLICATION CHECKLIST OF COMMON DEFICIENCIES

Below is a list of common deficiencies found during the administrative review of domestic wastewater permit applications. To ensure the timely processing of this application, please review the items below and indicate by checking Yes that each item is complete and in accordance applicable rules at 30 TAC Chapters 21, 281, and 305. If an item is not required this application, indicate by checking N/A where appropriate. Please do not submit the application until the items below have been addressed.

Core Data Form (TCEQ Form No. 10400) (Required for all application types. Must be completed in its entirety and signed. Note: Form may be signed by applicant representative.)						
Correct and Current Industrial Wastewater Permit Application Forms (TCEQ Form Nos. 10053 and 10054. Version dated 6/25/2018 or later.)						
Water Quality Permit Payment Submittal Form (Page 19) (Original payment sent to TCEQ Revenue Section. See instructions for mailing ad						
7.5 Minute USGS Quadrangle Topographic Map Attached (Full-size map if seeking "New" permit. 8 ½ x 11 acceptable for Renewals and Amendments)			$\boxtimes$	Yes		
Current/Non-Expired, Executed Lease Agreement or Easement	$\boxtimes$	N/A		Yes		
Landowners Map (See instructions for landowner requirements)		N/A	$\boxtimes$	Yes		

#### Things to Know:

- All the items shown on the map must be labeled.
- The applicant's complete property boundaries must be delineated which includes boundaries of contiguous property owned by the applicant.
- The applicant cannot be its own adjacent landowner. You must identify the landowners immediately adjacent to their property, regardless of how far they are from the actual facility.
- If the applicant's property is adjacent to a road, creek, or stream, the landowners on the opposite side must be identified. Although the properties are not adjacent to applicant's property boundary, they are considered potentially affected landowners. If the adjacent road is a divided highway as identified on the USGS topographic map, the applicant does not have to identify the landowners on the opposite side of the highway.

Landowners Cross Reference List (See instructions for landowner requirements)		N/A	$\boxtimes$	Yes
Landowners Labels or USB Drive attached (See instructions for landowner requirements)		N/A	$\boxtimes$	Yes
Original signature per 30 TAC § 305.44 – Blue Ink Preferred (If signature page is not signed by an elected official or principle exect a copy of signature authority/delegation letter must be attached)	tive	officer	⊠	Yes
Plain Language Summary			$\boxtimes$	Yes
	_		_	

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): <u>0.3</u> 2-Hr Peak Flow (MGD): <u>0.9</u> Estimated construction start date: <u>Click to enter text.</u> Estimated waste disposal start date: <u>1977</u>

# B. Interim II Phase

Design Flow (MGD): <u>Click to enter text.</u>

2-Hr Peak Flow (MGD): <u>Click to enter text.</u>

Estimated construction start date: Click to enter text.

Estimated waste disposal start date: Click to enter text.

# C. Final Phase

Design Flow (MGD): <u>0.2</u>

2-Hr Peak Flow (MGD): Click to enter text.

Estimated construction start date: <u>TBD due to pending funding</u>

Estimated waste disposal start date: Approximately 1 year after construction start date

# **D.** Current Operating Phase

Provide the startup date of the facility: <u>1977</u>

# 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**.

<u>Existing Phase: Two Imhoff Tanks in Parallel operation. Three Stabilization Ponds in</u> Series operation. One Storage Pond. 160 acres of pastureland for irrigation. Three sludge drying beds. Final Phase: Headworks and bar screens will be added.

#### **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**.

Treatment Unit Type	Number of Units	Dimensions (L x W x D)
Imhoff Tank #1 (existing)	1	20' Dia. X 28' Depth
Imhoff Tank #2 (existing)	1	26' Dia. X 28' Depth
Stabilization Pond#1 (existing)	1	3.4 acres Surface Area
Stabilization Pond#2 (existing)	1	4.6 acres Surface Area
Stabilization Pond#3 (existing)	1	4.2 acres Surface Area
Irrigation Holding Pond (existing)	1	1.4 acres – acre-ft
Sludge Drying Bed (existing)	3	25' x 20' x 2'
Headworks (Proposed)	1	TBD
Bar Screen (Proposed)	1	1/4" x 24" x 24"

Table 1.0(1) - Treatment Units

#### C. Process Flow Diagram

Provide flow diagrams for the existing facilities and **each** proposed phase of construction. Attachment: <u>Appendix H: Flow Diagram</u>

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

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

- Latitude: <u>N/A</u>
- Longitude: <u>N/A</u>

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

- Latitude: <u>35° 48' 29.35</u>"
- Longitude: <u>-101° 25' 49.82"</u>

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

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: Appendix I: Site Map

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

City of S	Stinnett						
		- 0			 -	-	 

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
Stinnett Collection System	City of Stinnett	Publicly Owned	1,650

# 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**.

N/A

# 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.

N/A		

# 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: <u>N/A</u>

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**.

N/<u>A</u>

# **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.

N/A

#### 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*.

City conducts annual soil monitoring. Liner Certification will be provided for new WWTP Ponds.

#### 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?



**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.

Click to enter text.

### 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. N/A

### 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 BOD<sub>5</sub> concentration of the sludge, and the design BOD<sub>5</sub> concentration of the influent from the collection system. Also note if this information has or has not changed since the last permit action.

N/A

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 BOD<sub>5</sub> concentration of the septic waste, and the

design BOD<sub>5</sub> concentration of the influent from the collection system. Also note if this information has or has not changed since the last permit action.

N/	Ά
----	---

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.

N/A

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

Is the facility in operation?

🖾 Yes 🗆 No

Appendix J: Pollutant Analysis

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.

Pollutant	Average Conc.	Max Conc.	No. of Samples	Sample Type	Sample Date/Time
CBOD <sub>5</sub> , mg/l	28.8	28.8	1	Grab	11/28/2023 @2:30pm
Total Suspended Solids, mg/l	45.0	45.0	1	Grab	11/28/2023 @2:30pm
Ammonia Nitrogen, mg/l	13.8	13.8	1	Grab	11/28/2023 @2:30pm
Nitrate Nitrogen, mg/l	0.120	0.120	1	Grab	11/28/2023 @2:30pm
Total Kjeldahl Nitrogen, mg/l	16.2	16.2	1	Grab	11/28/2023 @2:30pm
Sulfate, mg/l	21.6	21.6	1	Grab	11/28/2023 @2:30pm
Chloride, mg/l	226	226	1	Grab	11/28/2023 @2:30pm
Total Phosphorus, mg/l	1.86	1.86	1	Grab	11/28/2023 @2:30pm
pH, standard units	8.9	8.9	1	Grab	11/28/2023 @2:30pm
Dissolved Oxygen*, mg/l	N/A	N/A	N/A	N/A	N/A
Chlorine Residual, mg/l	< 0.500	< 0.500	1	Grab	11/28/2023 @2:30pm
<i>E.coli</i> (CFU/100ml) freshwater	>2400	>2400	1	Grab	11/28/2023 @2:30pm
Entercocci (CFU/100ml) saltwater	N/A	N/A	N/A	N/A	N/A
Total Dissolved Solids, mg/l	758	758	1	Grab	11/28/2023 @2:30pm
Electrical Conductivity, µmohs/cm, †	1360	1360	1	Grab	11/28/2023 @2:30pm
Oil & Grease, mg/l	<5.88	<5.88	1	Grab	11/28/2023 @2:30pm
Alkalinity (CaCO <sub>3</sub> )*, mg/l	N/A	N/A	N/A	N/A	N/A

Table1.0(2) – Pollutant Analysis for Wastewater Treatment Facilities

\*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	N/A	N/A	N/A	N/A	N/A
Total Dissolved Solids, mg/l	N/A	N/A	N/A	N/A	N/A
pH, standard units	N/A	N/A	N/A	N/A	N/A
Fluoride, mg/l	N/A	N/A	N/A	N/A	N/A
Aluminum, mg/l	N/A	N/A	N/A	N/A	N/A
Alkalinity (CaCO <sub>3</sub> ), mg/l	N/A	N/A	N/A	N/A	N/A

## Section 8. Facility Operator (Instructions Page 50)

Facility Operator Name: <u>Curtis Hampton</u>

Facility Operator's License Classification and Level: Operator C

Facility Operator's License Number: <u>WW0048060</u>

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

N/A

### A. WWTP's Biosolids Management Facility Type

Check all that apply. See instructions for guidance

- $\Box$  Design flow>= 1 MGD
- $\Box$  Serves >= 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)
- $\boxtimes$  Long Term Storage (>= 2 years)
- □ Methane or Biogas Recovery

### □ Other Treatment Process: <u>Click to enter text.</u>

### 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
Storage	On-Site Owner or Operator	Not Applicable		Class B: PSRP Equivalency	Option 5: Aerobic process for 14 days at >40C

If "Other" is selected for Management Practice, please explain (e.g. monofill or transport to another WWTP): <u>Sludge will be stored in the ponds for the life of the plant.</u>

### D. Disposal site

Disposal site name: <u>N/A</u>

TCEQ permit or registration number: <u>Click to enter text.</u>

County where disposal site is located: <u>Click to enter text.</u>

### E. Transportation method

Method of transportation (truck, train, pipe, other): <u>N/A</u>

Name of the hauler: <u>Click to enter text.</u>

Hauler registration number: Click to enter text.

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	$\boxtimes$	No
Marketing and Distribution of sludge	Yes	$\boxtimes$	No
Sludge Surface Disposal or Sludge Monofill	Yes	$\boxtimes$	No
Temporary storage in sludge lagoons	Yes	$\boxtimes$	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

 $\Box$  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: <u>Click to enter text.</u>

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

Phosphorus, mg/kg: Click to enter text.

Potassium, mg/kg: <u>Click to enter text.</u>

pH, standard units: <u>Click to enter text.</u>

Ammonia Nitrogen mg/kg: <u>Click to enter text.</u>

Arsenic: <u>Click to enter text.</u>

Cadmium: <u>Click to enter text.</u>

Chromium: Click to enter text.

Copper: <u>Click to enter text.</u>

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): <u>Click to enter text.</u>

Total dry tons stored in the lagoons(s) per 365-day period: <u>Click to enter text.</u>

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  $1 \times 10^{-7}$  cm/sec?

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: <u>Click to enter text.</u>
- 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:

N/A

## 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:
  - $\circ~$  periodically inspected by the TCEQ; or
  - $\circ$  located in another state and is accredited or inspected by that state; or
  - o 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: Jeff Irvin

Title: <u>Mayor</u>

Signature:
------------

Date: \_\_\_\_\_

## 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.

The City of Sinnett WWTP has reached the end of its useful life. In order to effectively treat wastewater, the city is planning construction of a new treatment facility. A major amendment to the permit is needed to replace the existing facility.

### **B.** Regionalization of facilities

For additional guidance, please review <u>TCEQ's Regionalization Policy for Wastewater</u> <u>Treatment</u><sup>1</sup>.

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: <u>Click to enter text.</u>

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

<sup>&</sup>lt;sup>1</sup> <u>https://www.tceq.texas.gov/permitting/wastewater/tceq-regionalization-for-wastewater</u>

**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): <u>0.20 MGD</u>

Average Influent Organic Strength or BOD<sub>5</sub> Concentration in mg/l: <u>250</u>

Average Influent Loading (lbs/day = total average flow X average BOD<sub>5</sub> conc. X 8.34): <u>417</u>

Provide the source of the average organic strength or BOD<sub>5</sub> concentration.

Values pulled from 30 TAC 217.32(a)(3)

### 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.

Source	Total Average Flow (MGD)	Influent BOD5 Concentration (mg/l)
Municipality	N/A - Same Influent/No Impact	
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 <sub>5</sub> from all sources		

Table 1.1(1) – Design Organic Loading

## 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: <u>100</u> Total Suspended Solids, mg/l: <u>Click to enter text.</u> Ammonia Nitrogen, mg/l: <u>Click to enter text.</u> Total Phosphorus, mg/l: <u>Click to enter text.</u> Dissolved Oxygen, mg/l: <u>Click to enter text.</u> Other: <u>Click to enter text.</u>

### B. Interim II Phase Design Effluent Quality

Biochemical Oxygen Demand (5-day), mg/l: <u>N/A</u> Total Suspended Solids, mg/l: <u>Click to enter text.</u> Ammonia Nitrogen, mg/l: <u>Click to enter text.</u> Total Phosphorus, mg/l: <u>Click to enter text.</u> Dissolved Oxygen, mg/l: <u>Click to enter text.</u> Other: <u>Click to enter text.</u>

### C. Final Phase Design Effluent Quality

Biochemical Oxygen Demand (5-day), mg/l: <u>100</u> Total Suspended Solids, mg/l: <u>Click to enter text.</u> Ammonia Nitrogen, mg/l: <u>Click to enter text.</u> Total Phosphorus, mg/l: <u>Click to enter text.</u> Dissolved Oxygen, mg/l: <u>Click to enter text.</u> Other: <u>Click to enter text.</u>

### **D. Disinfection Method**

Identify the proposed method of disinfection.

□ Chlorine: <u>Click to enter text.</u> mg/l after <u>Click to enter text.</u> minutes detention time at peak flow

Dechlorination process: <u>Click to enter text.</u>

- □ Ultraviolet Light: <u>Click to enter text.</u> seconds contact time at peak flow
- $\boxtimes$  Other: <u>N/A TLAP</u>

### 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: <u>Appendix K: Design Calculations</u>

### 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.

FE<u>MA</u>

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: <u>Click to enter text.</u>

### B. Wind rose

Attach a wind rose: <u>Appendix L: Wind Rose</u>

## 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): <u>Click to enter text.</u>

### **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**): <u>Click to enter text.</u>

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

Attach a solids management plan to the application.

Attachment: Appendix M: Solids 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.

## 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 it Section 2. **If yes**, provide the following:

Owner of the drinking water supply: <u>Click to enter text.</u>

Distance and direction to the intake: <u>Click to enter text.</u>

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.

N/A

## 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: Click to enter text.

### A. Receiving water type

Identify the appropriate description of the receiving waters.

- □ Stream
- □ Freshwater Swamp or Marsh
- □ Lake or Pond

Surface area, in acres: <u>Click to enter text.</u>

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

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

- □ Man-made Channel or Ditch
- Open Bay
- 🗆 🛛 Tidal Stream, Bayou, or Marsh
- □ Other, specify: <u>Click to enter text</u>.

### **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: <u>Click to enter text</u>.

### C. Downstream perennial confluences

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

N/A

#### **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.

N/A

### E. Normal dry weather characteristics

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

Click to enter text.

Date and time of observation: <u>Click to enter text</u>.

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
   Upstream discharges
   Agricultural runoff
   Oil () activities
- □ 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
- Irrigation withdrawal
- Fishing
- Domestic water supply
- Park activities  $\boxtimes$ Other(s), specify: N/A

### 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

- Non-contact recreation
- Navigation
- Industrial water supply
- Contact recreation

# DOMESTIC WASTEWATER PERMIT APPLICATION UNCLOSED BY WORKSHEET 2.1: STREAM PHYSICAL CHARACTERISTICS

### Required for new applications, major facilities, and applications adding an outfall.

Worksheet 2.1 is not required for discharges to intermittent streams or discharges directly to (or within 300 feet of) a classified segment.

## Section 1. General Information (Instructions Page 66)

Date of study: Click to enter text. Time of study: Click to enter text.

Stream name: <u>Click to enter text.</u>

Location: <u>Click to enter text.</u>

Type of stream upstream of existing discharge or downstream of proposed discharge (check one).

□ Perennial □ Intermittent with perennial pools

## Section 2. Data Collection (Instructions Page 66)

Number of stream bends that are well defined: Click to enter text.

Number of stream bends that are moderately defined: Click to enter text.

Number of stream bends that are poorly defined: Click to enter text.

Number of riffles: <u>Click to enter text.</u>

Evidence of flow fluctuations (check one):

	Minor		moderate		severe
--	-------	--	----------	--	--------

Indicate the observed stream uses and if there is evidence of flow fluctuations or channel obstruction/modification.

Click to enter text.

### Stream transects

In the table below, provide the following information for each transect downstream of the existing or proposed discharges. Use a separate row for each transect.

Stream type at transect	Transect location	Water surface	<b>Stream depths (ft)</b> at 4 to 10 points along each
Select riffle, run, glide, or pool. See Instructions, Definitions section.		width (ft)	transect from the channel bed to the water surface. Separate the measurements with commas.
Choose an item.			

 Table 2.1(1) - Stream Transect Records

## Section 3. Summarize Measurements (Instructions Page 66)

Streambed slope of entire reach, from USGS map in feet/feet: Click to enter text.

Approximate drainage area above the most downstream transect (from USGS map or county highway map, in square miles): <u>Click to enter text.</u>

Length of stream evaluated, in feet: Click to enter text.

Number of lateral transects made: Click to enter text.

Average stream width, in feet: <u>Click to enter text.</u>

Average stream depth, in feet: <u>Click to enter text</u>.

Average stream velocity, in feet/second: Click to enter text.

Instantaneous stream flow, in cubic feet/second: Click to enter text.

Indicate flow measurement method (type of meter, floating chip timed over a fixed distance, etc.): <u>Click to enter text.</u>

Size of pools (large, small, moderate, none): Click to enter text.

Maximum pool depth, in feet: Click to enter text.

## DOMESTIC WASTEWATER PERMIT APPLICATION WORKSHEET 3.0: LAND DISPOSAL OF EFFLUENT

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

## Section 1. Type of Disposal System (Instructions Page 68)

Identify the method of land disposal:

 $\boxtimes$ 

	Surface application		Subsurface application
--	---------------------	--	------------------------

- Irrigation 🗆 Subsurface soils absorption
- Drip irrigation system 🛛 Subsurface area drip dispersal system
- □ Evaporation □ Evapotranspiration beds
- □ Other (describe in detail): <u>Click to enter text.</u>

NOTE: All applicants without authorization or proposing new/amended subsurface disposal MUST complete and submit Worksheet 7.0.

### For existing authorizations, provide Registration Number: <u>N/A</u>

## Section 2. Land Application Site(s) (Instructions Page 68)

In table 3.0(1), provide the requested information for the land application sites. Include the agricultural or cover crop type (wheat, cotton, alfalfa, bermuda grass, native grasses, etc.), land use (golf course, hayland, pastureland, park, row crop, etc.), irrigation area, amount of effluent applied, and whether or not the public has access to the area. Specify the amount of land area and the amount of effluent that will be allotted to each agricultural or cover crop, if more than one crop will be used.

### Table 3.0(1) – Land Application Site Crops

Crop Type & Land Use	Irrigation Area (acres)	Effluent Application (GPD)	Public Access? Y/N
Previous Phase: Native Grass and Rye Grass	160 Acres	300,000	Ν
Final Phase: Native Grass and Rye Grass	160 Acres	200,000	N

## Section 3. Storage and Evaporation Lagoons/Ponds (Instructions Page 68)

Pond Number	Surface Area (acres)	Storage Volume (acre-feet)	Dimensions	Liner Type
Ex. Phase: 1	1.4	11	521 X 174	Clay
Fi. Phase: 1	4.65	55.8	450 X 450	Synthetic

#### Table 3.0(2) – Storage and Evaporation Ponds

Attach a copy of a liner certification that was prepared, signed, and sealed by a Texas licensed professional engineer for each pond.

Attachment: <u>N/A – Certification will be provided upon completion</u>

## Section 4. Flood and Runoff Protection (Instructions Page 68)

Is the land application site within the 100-year frequency flood level?

🗆 Yes 🖾 No

If yes, describe how the site will be protected from inundation.

N/A

Provide the source used to determine the 100-year frequency flood level:

FEMA

Provide a description of tailwater controls and rainfall run-on controls used for the land application site.

Land Application will not occur during rainfall events.

## Section 5. Annual Cropping Plan (Instructions Page 68)

Attach an Annual Cropping Plan which includes a discussion of each of the following items. If not applicable, provide a detailed explanation indicating why. **Attachment**: <u>Appendix N: Annual</u> <u>Cropping Plan</u>

- Soils map with crops
- Cool and warm season plant species
- Crop yield goals
- Crop growing season
- Crop nutrient requirements
- Additional fertilizer requirements
- Minimum/maximum harvest height (for grass crops)
- Supplemental watering requirements
- Crop salt tolerances
- Harvesting method/number of harvests
- Justification for not removing existing vegetation to be irrigated

## Section 6. Well and Map Information (Instructions Page 69)

Attach a USGS map with the following information shown and labeled. If not applicable, provide a detailed explanation indicating why. Attachment: <u>Appendix O: Well Map & Info</u>

- The boundaries of the land application site(s)
- Waste disposal or treatment facility site(s)
- On-site buildings
- Buffer zones
- Effluent storage and tailwater control facilities
- All water wells within 1-mile radius of the disposal site or property boundaries
- All springs and seeps onsite and within 500 feet of the property boundaries
- All surface waters in the state onsite and within 500 feet of the property boundaries
- All faults and sinkholes onsite and within 500 feet of the property

List and cross reference all water wells located within a half-mile radius of the disposal site or property boundaries shown on the USGS map in the following table. Attach additional pages as necessary to include all of the wells.

Well ID	Well Use	Producing? Y/N	Open, cased, capped, or plugged?	Proposed Best Management Practice
159967	Stock	Y	Cased	Buffer
269025	Domestic	Y	Cased	Buffer
			Choose an item.	
			Choose an item.	

Table 3.0(3) – Water Well Data

Well ID	Well Use	Producing? Y/N	Open, cased, capped, or plugged?	Proposed Best Management Practice
			Choose an item.	

If water quality data or well log information is available please include the information in an attachment listed by Well ID.

Attachment: Appendix O: Well Map & Info

## Section 7. Groundwater Quality (Instructions Page 69)

Attach a Groundwater Quality Technical Report which assesses the impact of the wastewater disposal system on groundwater. This report shall include an evaluation of the water wells (including the information in the well table provided in Item 6. above), the wastewater application rate, and pond liners. Indicate by a check mark that this report is provided.

Attachment: Appendix P: Groundwater Quality

Do you plan to install ground water monitoring wells or lysimeters around the land application site?  $\Box$  Yes  $\boxtimes$  No

If yes, provide the proposed location of the monitoring wells or lysimeters on a site map.

Attachment: Click to enter text.

## Section 8. Soil Map and Soil Analyses (Instructions Page 70)

### A. Soil map

Attach a USDA Soil Survey map that shows the area to be used for effluent disposal.

Attachment: Appendix Q: Soil Map and Analysis

### **B.** Soil analyses

Attach the laboratory results sheets from the soil analyses. **Note**: for renewal applications, the current annual soil analyses required by the permit are acceptable as long as the test date is less than one year prior to the submission of the application.

Attachment: Appendix Q: Soil Map and Analysis

List all USDA designated soil series on the proposed land application site. Attach additional pages as necessary.

### Table 3.0(4) – Soil Data

Soil Series	Depth from Surface	Permeability	Available Water Capacity	Curve Number

Soil Series	Depth from Surface	Permeability	Available Water Capacity	Curve Number

## Section 9. Effluent Monitoring Data (Instructions Page 71)

Is the facility in operation?

🖾 Yes 🗆 No

If no, this section is not applicable and the worksheet is complete.

**If yes**, provide the effluent monitoring data for the parameters regulated in the existing permit. If a parameter is not regulated in the existing permit, enter N/A.

Table 3.0(5) – Effluent Monitoring Data

Date	30 Day Avg Flow MGD	BOD5 mg/l	TSS mg/l	pH	Chlorine Residual mg/l	Acres irrigated
01/2022	0.0704	-	-	-	-	160
02/2022	0.0791	-	-	-	-	160
03/2022	0.0690	-	-	-	-	160
04/2022	0.0655	-	-	-	-	160
05/2022	0.0675	-	-	-	-	160
06/2022	0.0575	-	-	-	-	160
07/2022	0.0568	-	-	-	-	160
08/2022	0.0756	-	-	-	-	160
09/2022	0.0726	-	-	-	-	160
10/2022	0.0845	-	-	-	-	160
11/2022	0.0824	-	-	-	-	160
12/2022	0.0984	-	-	-	-	160
01/2023	0.0755	-	-	-	-	160
02/2023	0.0790	-	-	-	-	160
03/2023	0.0873	-	-	-	-	160
04/2023	0.0974	-	-	-	-	160
05/2023	0.0954	-	-	-	-	160
06/2023	0.0974	-	-	-	-	160

Date	30 Day Avg Flow MGD	BOD5 mg/l	TSS mg/l	рН	Chlorine Residual mg/l	Acres irrigated
07/2023	0.0897	30	-	7.7	-	160
08/2023	0.0883	30	-	8.3	-	160
09/2023	0.1127	47	-	8.4	-	160
10/2023	0.1199	50	-	8.3	-	160
11/2023	0.0975	50	-	8.3	-	160
12/2023	-	45	-	8.3	-	160

Provide a discussion of all persistent excursions above the permitted limits and any corrective actions taken.

Click to enter text.

## DOMESTIC WASTEWATER PERMIT APPLICATION WORKSHEET 3.1: SURFACE LAND DISPOSAL OF EFFLUENT

The following is required for new and major amendment permit applications. Renewal and minor amendment permit applications may be asked for this worksheet on a case by case basis.

## Section 1. Surface Disposal (Instructions Page 72)

Complete the item that applies for the method of disposal being used.

### A. Irrigation

Area under irrigation, in acres: <u>160</u>

Design application frequency:

hours/day 8 And days/week 5

Land grade (slope):

average percent (%): <u>1%</u>

maximum percent (%): <u>8.4%</u>

Design application rate in acre-feet/acre/year: <u>3.2</u>

Design total nitrogen loading rate, in lbs N/acre/year: <u>0.041565</u>

Soil conductivity (mmhos/cm): 8

Method of application: Water Reel

Attach a separate engineering report with the water balance and storage volume calculations, method of application, irrigation efficiency, and nitrogen balance.

Attachment: Appendix R: Water Balance

### **B.** Evaporation ponds

Daily average effluent flow into ponds, in gallons per day: N/A

Attach a separate engineering report with the water balance and storage volume calculations.

Attachment: Click to enter text.

### C. Evapotranspiration beds

Number of beds: N/A

Area of bed(s), in acres: <u>Click to enter text.</u>

Depth of bed(s), in feet: <u>Click to enter text.</u>

Void ratio of soil in the beds: <u>Click to enter text.</u>

Storage volume within the beds, in acre-feet: Click to enter text.

Attach a separate engineering report with the water balance and storage volume calculations, and a description of the lining.

Attachment: Click to enter text.

### D. Overland flow

Area used for application, in acres: <u>N/A</u>

Slopes for application area, percent (%): <u>Click to enter text.</u>

Design application rate, in gpm/foot of slope width: Click to enter text.

Slope length, in feet: Click to enter text.

Design BOD<sub>5</sub> loading rate, in lbs BOD<sub>5</sub>/acre/day: <u>Click to enter text.</u>

Design application frequency:

hours/day: Click to enter text. And days/week: Click to enter text.

Attach a separate engineering report with the method of application and design requirements according to *30 TAC Chapter 217*.

Attachment: Click to enter text.

## Section 2. Edwards Aquifer (Instructions Page 73)

Is the facility subject to 30 TAC Chapter 213, Edwards Aquifer Rules?

🗆 Yes 🖾 No

If **yes**, is the facility located on the Edwards Aquifer Recharge Zone?

🗆 Yes 🗆 No

If yes, attach a geological report addressing potential recharge features.

Attachment: <u>Click to enter text.</u>

# DOMESTIC WASTEWATER PERMIT APPLICATION

The following **is required** for **new and major amendment** permit applications. Renewal and minor amendments applicants may be asked for the worksheet on a case by case basis.

NOTE: All applicants proposing new/amended subsurface disposal MUST complete and submit Worksheet 7.0. This worksheet applies to any subsurface disposal system that **does not meet** the definition of a subsurface area drip dispersal system as defined in *30 TAC Chapter 222, Subsurface Area Drip Dispersal System.* 

## Section 1. Subsurface Application (Instructions Page 74)

Identify the type of system:

- Conventional Gravity Drainfield, Beds, or Trenches (new systems must be less than 5,000 GPD)
- □ Low Pressure Dosing
- □ Other, specify: <u>Click to enter text</u>.

Application area, in acres: <u>Click to enter text.</u>

Area of drainfield, in square feet: <u>Click to enter text.</u>

Application rate, in gal/square foot/day: Click to enter text.

Depth to groundwater, in feet: Click to enter text.

Area of trench, in square feet: <u>Click to enter text.</u>

Dosing duration per area, in hours: <u>Click to enter text.</u>

Number of beds: Click to enter text.

Dosing amount per area, in inches/day: <u>Click to enter text.</u>

Infiltration rate, in inches/hour: Click to enter text.

Storage volume, in gallons: <u>Click to enter text.</u>

Area of bed(s), in square feet: <u>Click to enter text.</u>

Soil Classification: Click to enter text.

Attach a separate engineering report with the information required in *30 TAC* § *309.20*, excluding the requirements of § 309.20 b(3)(A) and (B) design analysis which may be asked for on a case by case basis. Include a description of the schedule of dosing basin rotation.

Attachment: Click to enter text.

## Section 2. Edwards Aquifer (Instructions Page 74)

Is the subsurface system over the Edwards Aquifer Recharge Zone as mapped by TCEQ?

🗆 Yes 🗆 No

Is the subsurface system over the Edwards Aquifer Transition Zone as mapped by TCEQ?

🗆 Yes 🗆 No

**If yes to either question**, the subsurface system may be prohibited by *30 TAC §213.8*. Please call the Municipal Permits Team, at 512-239-4671, to schedule a pre-application meeting.

## DOMESTIC WASTEWATER PERMIT APPLICATION WORKSHEET 3.3: SUBSURFACE AREA DRIP DISPERSAL (SADDS) LAND DISPOSAL OF EFFLUENT

The following **is required** for **new and major amendment** subsurface area drip dispersal system permit applications. Renewal and minor amendments applicants may be asked for the worksheet on a case by case basis.

NOTE: All applicants proposing new/amended subsurface disposal MUST complete and submit Worksheet 7.0. This worksheet applies to any subsurface disposal system that **meets** the definition of a subsurface area drip dispersal system as defined in *30 TAC Chapter 222, Subsurface Area Drip Dispersal System.* 

## Section 1. Administrative Information (Instructions Page 75)

- **A.** Provide the legal name of all corporations or other business entities managed, owned, or otherwise closely related to the owner of the treatment facility:
- **B.** <u>Click to enter text</u>. Is the owner of the land where the treatment facility is located the same as the owner of the treatment facility?

🗆 Yes 🗆 No

If **no**, provide the legal name of all corporations or other business entities managed, owned, or otherwise closely related to the owner of the land where the treatment facility is located.

<u>Click to enter text.</u>

- C. Owner of the subsurface area drip dispersal system: Click to enter text.
- **D.** Is the owner of the subsurface area drip dispersal system the same as the owner of the wastewater treatment facility or the site where the wastewater treatment facility is located?

□ Yes □ No

If **no**, identify the names of all corporations or other business entities managed, owned, or otherwise closely related to the entity identified in Item 1.C.

Click to enter text.

- E. Owner of the land where the subsurface area drip dispersal system is located: <u>Click to</u> <u>enter text.</u>
- **F.** Is the owner of the land where the subsurface area drip dispersal system is located the same as owner of the wastewater treatment facility, the site where the wastewater treatment facility is located, or the owner of the subsurface area drip dispersal system?

🗆 Yes 🗆 No

If **no**, identify the name of all corporations or other business entities managed, owned, or otherwise closely related to the entity identified in item 1.E.

Click to enter text.

N/A

## Section 2. Subsurface Area Drip Dispersal System (Instructions Page 75)

### A. Type of system

- □ Subsurface Drip Irrigation
- □ Surface Drip Irrigation
- □ Other, specify: <u>Click to enter text</u>.

### **B.** Irrigation operations

Application area, in acres: <u>Click to enter text.</u>

Infiltration Rate, in inches/hour: Click to enter text.

Average slope of the application area, percent (%): Click to enter text.

Maximum slope of the application area, percent (%): Click to enter text.

Storage volume, in gallons: <u>Click to enter text.</u>

Major soil series: Click to enter text.

Depth to groundwater, in feet: Click to enter text.

### C. Application rate

Is the facility located **west** of the boundary shown in *30 TAC § 222.83* **and** also using a vegetative cover of non-native grasses over seeded with cool season grasses during the winter months (October-March)?

🗆 Yes 🗆 No

**If yes**, then the facility may propose a hydraulic application rate not to exceed 0.1 gal/square foot/day.

Is the facility located **east** of the boundary shown in *30 TAC § 222.83* **or** in any part of the state when the vegetative cover is any crop other than non-native grasses?

□ Yes □ No

If **yes**, the facility must use the formula in *30 TAC §222.83* to calculate the maximum hydraulic application rate.

Do you plan to submit an alternative method to calculate the hydraulic application rate for approval by the executive director?

🗆 Yes 🗆 No

Hydraulic application rate, in gal/square foot/day: <u>Click to enter text.</u> Nitrogen application rate, in lbs/gal/day: <u>Click to enter text.</u>

### **D.** Dosing information

Number of doses per day: <u>Click to enter text.</u>

Dosing duration per area, in hours: <u>Click to enter text.</u>

Rest period between doses, in hours: Click to enter text.

Dosing amount per area, in inches/day: Click to enter text.

Number of zones: Click to enter text.

Does the proposed subsurface drip irrigation system use tree vegetative cover as a crop?

🗆 Yes 🗆 No

If **yes**, provide a vegetation survey by a certified arborist. Please call the Water Quality Assessment Team at (512) 239-4671 to schedule a pre-application meeting.

Attachment: Click to enter text.

### Section 3. Required Plans (Instructions Page 75)

### A. Recharge feature plan

Attach a Recharge Feature Plan with all information required in *30 TAC §222.79*.

Attachment: Click to enter text.

### **B.** Soil evaluation

Attach a Soil Evaluation with all information required in *30 TAC §222.73*.

Attachment: Click to enter text.

### C. Site preparation plan

Attach a Site Preparation Plan with all information required in 30 TAC §222.75.

Attachment: Click to enter text.

### D. Soil sampling/testing

Attach soil sampling and testing that includes all information required in *30 TAC §222.157*.

Attachment: Click to enter text.

## Section 4. Floodway Designation (Instructions Page 76)

### A. Site location

Is the existing/proposed land application site within a designated floodway?

□ Yes □ No

### B. Flood map

Attach either the FEMA flood map or alternate information used to determine the floodway.

Attachment: Click to enter text.

## Section 5. Surface Waters in the State (Instructions Page 76)

### A. Buffer Map

Attach a map showing appropriate buffers on surface waters in the state, water wells, and springs/seeps.

Attachment: Click to enter text.

#### **B.** Buffer variance request

Do you plan to request a buffer variance from water wells or waters in the state?

□ Yes □ No

If yes, then attach the additional information required in 30 TAC § 222.81(c).

Attachment: <u>Click to enter text</u>.

## Section 6. Edwards Aquifer (Instructions Page 76)

A. Is the SADDS located over the Edwards Aquifer Recharge Zone as mapped by TCEQ?

🗆 Yes 🗆 No

B. Is the SADDS located over the Edwards Aquifer Transition Zone as mapped by TCEQ?

🗆 Yes 🗆 No

**If yes to either question**, then the SADDS may be prohibited by *30 TAC §213.8*. Please call the Municipal Permits Team at 512-239-4671 to schedule a pre-application meeting.

# 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.

Table 4.0(1) -	<b>Toxics Analysis</b>
----------------	------------------------

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
Benzidine				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

Pollutant	AVG Effluent Conc. (μg/l)	MAX Effluent Conc. (µg/l)	Number of Samples	MAL (µg/l)
Chloroform				10
Chlorpyrifos				0.05
Chromium (Total)				3
Chromium (Tri) (*1)				N/A
Chromium (Hex)				3
Copper				2
Chrysene				5
p-Chloro-m-Cresol				10
4,6-Dinitro-o-Cresol				50
p-Cresol				10
Cyanide (*2)				10
4,4'- DDD				0.1
4,4'- DDE				0.1
4,4'- DDT				0.02
2,4-D				0.7
Demeton (O and S)				0.20
Diazinon				0.5/0.1
1,2-Dibromoethane				10
m-Dichlorobenzene				10
o-Dichlorobenzene				10
p-Dichlorobenzene				10
3,3'-Dichlorobenzidine				5
1,2-Dichloroethane				10
1,1-Dichloroethylene				10
Dichloromethane				20
1,2-Dichloropropane				10
1,3-Dichloropropene				10
Dicofol				1
Dieldrin				0.02
2,4-Dimethylphenol				10
Di-n-Butyl Phthalate				10
Diuron				0.09
Endosulfan I (alpha)				0.01

Pollutant	AVG Effluent Conc. (μg/l)	MAX Effluent Conc. (µg/l)	Number of Samples	MAL (µg/l)
Endosulfan II (beta)				0.02
Endosulfan Sulfate				0.1
Endrin				0.02
Ethylbenzene				10
Fluoride				500
Guthion				0.1
Heptachlor				0.01
Heptachlor Epoxide				0.01
Hexachlorobenzene				5
Hexachlorobutadiene				10
Hexachlorocyclohexane (alpha)				0.05
Hexachlorocyclohexane (beta)				0.05
gamma-Hexachlorocyclohexane				0.05
(Lindane)				
Hexachlorocyclopentadiene				10
Hexachloroethane				20
Hexachlorophene				10
Lead				0.5
Malathion				0.1
Mercury				0.005
Methoxychlor				2
Methyl Ethyl Ketone				50
Mirex				0.02
Nickel				2
Nitrate-Nitrogen				100
Nitrobenzene				10
N-Nitrosodiethylamine				20
N-Nitroso-di-n-Butylamine				20
Nonylphenol				333
Parathion (ethyl)				0.1
Pentachlorobenzene				20
Pentachlorophenol				5
Phenanthrene				10

Pollutant	AVG Effluent Conc. (µg/l)	MAX Effluent Conc. (µg/l)	Number of Samples	MAL (µg/l)
Polychlorinated Biphenyls (PCB's) (*3)				0.2
Pyridine				20
Selenium				5
Silver				0.5
1,2,4,5-Tetrachlorobenzene				20
1,1,2,2-Tetrachloroethane				10
Tetrachloroethylene				10
Thallium				0.5
Toluene				10
Toxaphene				0.3
2,4,5-TP (Silvex)				0.3
Tributyltin (see instructions for explanation)				0.01
1,1,1-Trichloroethane				10
1,1,2-Trichloroethane				10
Trichloroethylene				10
2,4,5-Trichlorophenol				50
TTHM (Total Trihalomethanes)				10
Vinyl Chloride				10
Zinc				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  $\Box$  Composite  $\Box$ 

Date and time sample(s) collected: <u>Click to enter text.</u>

## 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				5
Arsenic				0.5
Beryllium				0.5
Cadmium				1
Chromium (Total)				3
Chromium (Hex)				3
Chromium (Tri) (*1)				N/A
Copper				2
Lead				0.5
Mercury				0.005
Nickel				2
Selenium				5
Silver				0.5
Thallium				0.5
Zinc				5
Cyanide (*2)				10
Phenols, Total				10

(\*1) Determined by subtracting hexavalent Cr from total Cr.

(\*2) Cyanide, amenable to chlorination or weak-acid dissociable

Pollutant	AVG Effluent Conc. (µg/l)	MAX Effluent Conc. (µg/l)	Number of Samples	MAL (µg/l)
Acrolein				50
Acrylonitrile				50
Benzene				10
Bromoform				10
Carbon Tetrachloride				2
Chlorobenzene				10
Chlorodibromomethane				10
Chloroethane				50
2-Chloroethylvinyl Ether				10
Chloroform				10
Dichlorobromomethane [Bromodichloromethane]				10
1,1-Dichloroethane				10
1,2-Dichloroethane				10
1,1-Dichloroethylene				10
1,2-Dichloropropane				10
1,3-Dichloropropylene				10
[1,3-Dichloropropene]				
1,2-Trans-Dichloroethylene				10
Ethylbenzene				10
Methyl Bromide				50
Methyl Chloride				50
Methylene Chloride				20
1,1,2,2-Tetrachloroethane				10
Tetrachloroethylene				10
Toluene				10
1,1,1-Trichloroethane				10
1,1,2-Trichloroethane				10
Trichloroethylene				10
Vinyl Chloride				10

# Table 4.0(2)B – Volatile Compounds

# 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				10
2,4-Dichlorophenol				10
2,4-Dimethylphenol				10
4,6-Dinitro-o-Cresol				50
2,4-Dinitrophenol				50
2-Nitrophenol				20
4-Nitrophenol				50
P-Chloro-m-Cresol				10
Pentalchlorophenol				5
Phenol				10
2,4,6-Trichlorophenol				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				10
Acenaphthylene				10
Anthracene				10
Benzidine				50
Benzo(a)Anthracene				5
Benzo(a)Pyrene				5
3,4-Benzofluoranthene				10
Benzo(ghi)Perylene				20
Benzo(k)Fluoranthene				5
Bis(2-Chloroethoxy)Methane				10
Bis(2-Chloroethyl)Ether				10
Bis(2-Chloroisopropyl)Ether				10
Bis(2-Ethylhexyl)Phthalate				10
4-Bromophenyl Phenyl Ether				10
Butyl benzyl Phthalate				10
2-Chloronaphthalene				10

Pollutant	AVG Effluent Conc. (µg/l)	MAX Effluent Conc. (µg/l)	Number of Samples	MAL (µg/l)
4-Chlorophenyl phenyl ether				10
Chrysene				5
Dibenzo(a,h)Anthracene				5
1,2-(o)Dichlorobenzene				10
1,3-(m)Dichlorobenzene				10
1,4-(p)Dichlorobenzene				10
3,3-Dichlorobenzidine				5
Diethyl Phthalate				10
Dimethyl Phthalate				10
Di-n-Butyl Phthalate				10
2,4-Dinitrotoluene				10
2,6-Dinitrotoluene				10
Di-n-Octyl Phthalate				10
1,2-Diphenylhydrazine (as Azo- benzene)				20
Fluoranthene				10
Fluorene				10
Hexachlorobenzene				5
Hexachlorobutadiene				10
Hexachlorocyclo-pentadiene				10
Hexachloroethane				20
Indeno(1,2,3-cd)pyrene				5
Isophorone				10
Naphthalene				10
Nitrobenzene				10
N-Nitrosodimethylamine				50
N-Nitrosodi-n-Propylamine				20
N-Nitrosodiphenylamine				20
Phenanthrene				10
Pyrene				10
1,2,4-Trichlorobenzene				10

Pollutant	AVG Effluent Conc. (µg/l)	MAX Effluent Conc. (µg/l)	Number of Samples	MAL (µg/l)
Aldrin				0.01
alpha-BHC (Hexachlorocyclohexane)				0.05
beta-BHC (Hexachlorocyclohexane)				0.05
gamma-BHC (Hexachlorocyclohexane)				0.05
delta-BHC (Hexachlorocyclohexane)				0.05
Chlordane				0.2
4,4-DDT				0.02
4,4-DDE				0.1
4,4,-DDD				0.1
Dieldrin				0.02
Endosulfan I (alpha)				0.01
Endosulfan II (beta)				0.02
Endosulfan Sulfate				0.1
Endrin				0.02
Endrin Aldehyde				0.1
Heptachlor				0.01
Heptachlor Epoxide				0.01
PCB-1242				0.2
PCB-1254				0.2
PCB-1221				0.2
PCB-1232				0.2
PCB-1248				0.2
PCB-1260				0.2
PCB-1016				0.2
Toxaphene				0.3

# Table 4.0(2)E - Pesticides

\* For PCBS, if all are non-detects, enter the highest non-detect preceded by a "<".

# Section 3. Dioxin/Furan Compounds

**A.** Indicate which of the following compounds from may be present in the influent from a contributing industrial user or significant industrial user. Check all that apply.

2,4,5-trichlorophenoxy acetic acid
Common Name 2,4,5-T, CASRN 93-76-5
2-(2,4,5-trichlorophenoxy) propanoic acid
Common Name Silvex or 2,4,5-TP, CASRN 93-72-1
2-(2,4,5-trichlorophenoxy) ethyl 2,2-dichloropropionate
Common Name Erbon, CASRN 136-25-4
0,0-dimethyl 0-(2,4,5-trichlorophenyl) phosphorothioate
Common Name Ronnel, CASRN 299-84-3
2,4,5-trichlorophenol
Common Name TCP, CASRN 95-95-4
hexachlorophene
Common Name HCP, CASRN 70-30-4

For each compound identified, provide a brief description of the conditions of its/their presence at the facility.

Click to enter text.

**B.** Do you know or have any reason to believe that 2,3,7,8 Tetrachlorodibenzo-P-Dioxin (TCDD) or any congeners of TCDD may be present in your effluent?

🗆 Yes 🗆 No

If **yes**, provide a brief description of the conditions for its presence.

Click to enter text.

**C.** If any of the compounds in Subsection A **or** B are present, complete Table 4.0(2)F.

For pollutants identified in Table 4.0(2)F, indicate the type of sample.

Grab □ Composite □

Date and time sample(s) collected: <u>Click to enter text.</u>

## Table 4.0(2)F – Dioxin/Furan Compounds

Compound	Toxic Equivalenc y Factors	Wastewater Concentration (ppq)	Wastewater Equivalents (ppq)	Sludge Concentration (ppt)	Sludge Equivalents (ppt)	MAL (ppq)
2,3,7,8 TCDD	1					10
1,2,3,7,8 PeCDD	0.5					50
2,3,7,8 HxCDDs	0.1					50
1,2,3,4,6,7,8 HpCDD	0.01					50
2,3,7,8 TCDF	0.1					10
1,2,3,7,8 PeCDF	0.05					50
2,3,4,7,8 PeCDF	0.5					50
2,3,7,8 HxCDFs	0.1					50
2,3,4,7,8 HpCDFs	0.01					50
OCDD	0.0003					100
OCDF	0.0003					100
PCB 77	0.0001					0.5
PCB 81	0.0003					0.5
PCB 126	0.1					0.5
PCB 169	0.03					0.5
Total						

# 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: <u>20</u>

## 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.

# Section 3. Summary of WET Tests

If the required biomonitoring test information has not been previously submitted via both the Discharge Monitoring Reports (DMRs) and the Table 1 (as found in the permit), provide a summary of the testing results for all valid and invalid tests performed over the past four and one-half years. Make additional copies of this table as needed.

## Table 5.0(1) Summary of WET Tests

Test Date	Test Species	NOEC Survival	NOEC Sub-lethal

# 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: <u>o</u>

Average Daily Flows, in MGD: <u>N/A</u>

Significant IUs – non-categorical:

Number of IUs: o

Average Daily Flows, in MGD: <u>N/A</u>

Other IUs:

Number of IUs: o

Average Daily Flows, in MGD: <u>N/A</u>

#### **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.

#### 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.

N/A		

#### 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.

#### **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.

#### 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
N/A				

#### 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.

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

#### A. General information

Company Name: <u>N/A</u> SIC Code: <u>Click to enter text.</u> Contact name: <u>Click to enter text.</u> Address: <u>Click to enter text.</u> City, State, and Zip Code: <u>Click to enter text.</u> Telephone number: <u>Click to enter text.</u> Email address: <u>Click to enter text.</u>

#### **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).

N/A

#### C. Product and service information

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

N/A

#### D. Flow rate information

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

Process Wastewater:

Discharge, in gallon	s/day: <u>N/A</u>			
Discharge Type: 🗆	Continuous	□ Batcl	n 🗆	Intermittent
Non-Process Wastewate	er:			
Discharge, in gallon	s/day: <u>Click to</u>	enter text.		
Discharge Type: 🗆	Continuous	□ Batcl	n 🗆	Intermittent

#### E. Pretreatment standards

Is the SIU or CIU subject to technically based local limits as defined in the *i*nstructions?

□ 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: N/A

Click or tap here to enter text. Click to enter text.

Category: Click to enter text.

Subcategories: <u>Click to enter text.</u>

Category: <u>Click to enter text.</u>

Subcategories: Click to enter text.

Category: <u>Click to enter text.</u>

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.

# WORKSHEET 7.0

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

## CLASS V INJECTION WELL INVENTORY/AUTHORIZATION FORM

Submit the completed form to:

TCEQ IUC Permits Team Radioactive Materials Division MC-233 PO Box 13087 Austin, Texas 78711-3087 512-239-6466 For TCEQ Use Only Reg. No.\_\_\_\_\_ Date Received\_\_\_\_\_\_ Date Authorized\_\_\_\_\_

## Section 1. General Information (Instructions Page 92)

## 1. TCEQ Program Area

Program Area (PST, VCP, IHW, etc.): <u>Click to enter text.</u>

Program ID: <u>Click to enter text.</u>

Contact Name: Click to enter text.

Phone Number: <u>Click to enter text.</u>

## 2. Agent/Consultant Contact Information

Contact Name: <u>Click to enter text.</u>

Address: Click to enter text.

City, State, and Zip Code: Click to enter text.

Phone Number: <u>Click to enter text.</u>

## 3. Owner/Operator Contact Information

Owner
 Operator
 Owner/Operator Name: Click to enter text.
 Contact Name: Click to enter text.
 Address: Click to enter text.
 City, State, and Zip Code: Click to enter text.
 Phone Number: Click to enter text.

## 4. Facility Contact Information

Facility Name: <u>Click to enter text.</u>
Address: <u>Click to enter text.</u>
City, State, and Zip Code: <u>Click to enter text.</u>
Location description (if no address is available): <u>Click to enter text.</u>
Facility Contact Person: <u>Click to enter text.</u>
Phone Number: <u>Click to enter text.</u>

## 5. Latitude and Longitude, in degrees-minutes-seconds

Latitude: <u>Click to enter text.</u> Longitude: <u>Click to enter text.</u> Method of determination (GPS, TOPO, etc.): <u>Click to enter text.</u> Attach topographic quadrangle map as attachment A.

### 6. Well Information

Type of Well Construction, select one:

- Vertical Injection
- □ Subsurface Fluid Distribution System
- □ Infiltration Gallery
- □ Temporary Injection Points
- □ Other, Specify: <u>Click to enter text</u>.

Number of Injection Wells: <u>Click to enter text.</u>

#### 7. Purpose

Detailed Description regarding purpose of Injection System:

Click to enter text.

Attach a Site Map as Attachment B (Attach the Approved Remediation Plan, if appropriate.)

#### 8. Water Well Driller/Installer

Water Well Driller/Installer Name: Click to enter text.

City, State, and Zip Code: Click to enter text.

Phone Number: <u>Click to enter text.</u>

License Number: Click to enter text.

## Section 2. Proposed Down Hole Design

Attach a diagram signed and sealed by a licensed engineer as Attachment C.

#### Table 7.0(1) – Down Hole Design Table

Name of String	Size	Setting Depth	Sacks Cement/Grout – Slurry Volume – Top of Cement	Hole Size	Weight (lbs/ft) PVC/Steel
Casing					
Tubing					
Screen					

Section 3. Proposed Trench System, Subsurface Fluid Distribution System, or Infiltration Gallery

Attach a diagram signed and sealed by a licensed engineer as Attachment D.

System(s) Dimensions: <u>Click to enter text.</u>

System(s) Construction: Click to enter text.

## Section 4. Site Hydrogeological and Injection Zone Data

- 1. Name of Contaminated Aquifer: <u>Click to enter text.</u>
- 2. Receiving Formation Name of Injection Zone: <u>Click to enter text.</u>
- **3.** Well/Trench Total Depth: <u>Click to enter text.</u>
- 4. Surface Elevation: <u>Click to enter text.</u>
- 5. Depth to Ground Water: <u>Click to enter text.</u>
- 6. Injection Zone Depth: <u>Click to enter text.</u>
- **7.** Injection Zone vertically isolated geologically? □ Yes □ No

Impervious Strata between Injection Zone and nearest Underground Source of Drinking Water:

Name: <u>Click to enter text.</u>

Thickness: Click to enter text.

- 8. Provide a list of contaminants and the levels (ppm) in contaminated aquifer Attach as Attachment E.
- **9.** Horizontal and Vertical extent of contamination and injection plume Attach as Attachment F.
- **10.** Formation (Injection Zone) Water Chemistry (Background levels) TDS, etc. Attach as Attachment G.
- **11.** Injection Fluid Chemistry in PPM at point of injection Attach as Attachment H.
- 12. Lowest Known Depth of Ground Water with < 10,000 PPM TDS: <u>Click to enter text.</u>
- 13. Maximum injection Rate/Volume/Pressure: <u>Click to enter text.</u>
- 14. Water wells within 1/4 mile radius (attach map as Attachment I): <u>Click to enter text.</u>
- **15.** Injection wells within 1/4 mile radius (attach map as Attachment J): <u>Click to enter</u> <u>text.</u>
- **16.** Monitor wells within 1/4 mile radius (attach drillers logs and map as Attachment K): <u>Click to enter text.</u>
- 17. Sampling frequency: <u>Click to enter text.</u>
- 18. Known hazardous components in injection fluid: Click to enter text.

#### Section 5. Site History

- 1. Type of Facility: Click to enter text.
- 2. Contamination Dates: Click to enter text.
- 3. Original Contamination (VOCs, TPH, BTEX, etc.) and Concentrations (attach as Attachment L): Click to enter text.
- 4. Previous Remediation (attach results of any previous remediation as attachment M): Click to enter text.

#### NOTE: Authorization Form should be completed in detail and authorization given by the TCEO before construction, operation, and/or conversion can begin. Attach additional pages as necessary.

## Class V Injection Well Designations

- 5A07 Heat Pump/AC return (IW used for groundwater to heat and/or cool buildings)
- 5A19 Industrial Cooling Water Return Flow (IW used to cool industrial process equipment)
- 5B22 Salt Water Intrusion Barrier (IW used to inject fluids to prevent the intrusion of salt water into an aquifer)
- 5D02 Storm Water Drainage (IW designed for the disposal of rain water)
- 5D04 Industrial Stormwater Drainage Wells (IW designed for the disposal of rain water associated with industrial facilities)
- 5F01 Agricultural Drainage (IW that receive agricultural runoff)
- 5R21 Aguifer Recharge (IW used to inject fluids to recharge an aguifer)
- 5S23 Subsidence Control Wells (IW used to control land subsidence caused by ground water withdrawal)
- 5W09 Untreated Sewage
- 5W10 Large Capacity Cesspools (Cesspools that are designed for 5,000 gpd or greater)
- 5W11 Large Capacity Septic systems (Septic systems designed for 5,000 gpd or greater)
- 5W12 WTTP disposal
- 5W20 Industrial Process Waste Disposal Wells
- 5W31 Septic System (Well Disposal method)
- 5W32 Septic System Drainfield Disposal
- 5X13 Mine Backfill (IW used to control subsidence, dispose of mining byproducts, and/or fill sections of a mine)
- 5X25 Experimental Wells (Pilot Test) (IW used to test new technologies or tracer dye studies)
- 5X26 Aguifer Remediation (IW used to clean up, treat, or prevent contamination of a USDW) 5X27 Other Wells
- 5X28 Motor Vehicle Waste Disposal Wells (IW used to dispose of waste from a motor vehicle site - These are currently banned)
- 5X29 Abandoned Drinking Water Wells (waste disposal)

Appendix A

Core Data Form



# **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**

<b>1. Reason for Submission</b> (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	e renewal form)	Other							
2. Customer Reference Number (if issued)	Follow this link to search								
CN 601122179     for CN or RN numbers in Central Registry**     RN 102079613									

# **SECTION II: Customer Information**

4. General Customer	4. General Customer Information         5. Effective Date for Customer Information Updates (mm/dd/yyyy)												
New Customer       Update to Customer Information       Change in Regulated Entity Ownership         Change in Legal Name (Verifiable with the Texas Secretary of State or Texas Comptroller of Public Accounts)													
The Customer Name submitted here may be updated automatically based on what is current and active with the Texas Secretary of State													
(SOS) or Texas Comptroller of Public Accounts (CPA).													
6. Customer Legal Na	<b>ne</b> (If an i	ndividual, prii	nt last name fil	rst: eg: Doe, J	lohn)			<u>lf new</u>	v Customer, o	enter pre	evious Custom	er below	<u>:</u>
City of Stinnett													
					<b>10. DUNS I</b> applicable)	Numbe	· (if						
11. Type of Customer		Corporat	ion				🗌 Individ	ual		Partne	rship: 🗌 Gen	eral 🗌	Limited
Government: 🔀 City 🗌	County 🗌	] Federal 🔲	Local 🗌 State	e 🗌 Other			Sole Pr	oprieto	orship	🗌 Otl	her:		
12. Number of Emplo	yees							13. lr	ndependen	ntly Ow	ned and Ope	erated?	
☑ 0-20  □ 21-100	101-25	50 🗌 251-	500 🗌 501	and higher				🗌 Ye	es [	🛛 No			
14. Customer Role (Pr	oposed or	Actual) – <i>as it</i>	t relates to the	e Regulated Er	ntity list	ed o	n this form. I	Please c	check one of	the follo	wing		
Owner		erator esponsible Par		wner & Opera VCP/BSA App					Other:				
P.O. Box 15. Mailing	909												
Address:													
						ZIP	79083	3		ZIP + 4			
16. Country Mailing In	formatio	<b>)n</b> (if outside	USA)			17	. E-Mail Ac	dress	(if applicable	e)			
						sm	niller@cityof	stinnett	com				
18. Telephone Number     19. Extension or Code     20. Fax Number (if applicable)													

# **SECTION III: Regulated Entity Information**

21. General Regulated En	21. General Regulated Entity Information (If 'New Regulated Entity" is selected, a new permit application is also required.)								
New Regulated Entity 🛛 Update to Regulated Entity Name 🔲 Update to Regulated Entity Information									
The Regulated Entity Name submitted may be updated, in order to meet TCEQ Core Data Standards (removal of organizational endings such as Inc, LP, or LLC).									
22. Regulated Entity Nam	<b>1e</b> (Enter name	of the site where the i	regulated action	is taking plac	ce.)				
City of Stinnett Wastewater 1	Freatment Plan	t							
23. Street Address of the Regulated Entity:									
(No BO Boyas)									
(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:	approximat	ely 3,000 feet Sou	th and 3,500 feet East	of intersection	n of State Hi	ghway 152 and State H	lighway 136			
26. Nearest City						State	Nea	rest ZIP Code		
Stinnett TX 79083										
Latitude/Longitude are re used to supply coordinate	•		•		ıta Standaı	rds. (Geocoding of t	he Physical	Address may be		
27. Latitude (N) In Decim	al:	35.807708		28. Loi	ngitude (W	/) In Decimal:	-101.430	633		
Degrees	Minutes		Seconds	Degree	S	Minutes		Seconds		
39		48	27.75		-101	25		50.28		
29. Primary SIC Code (4 digits)		Secondary SIC (	Code	<b>31. Primary</b> (5 or 6 digits)		de 32. Sec (5 or 6 d	ondary NAI igits)	CS Code		
4952 33. What is the Primary E	Business of t	this entity? (Do	o not repeat the SIC or	221320 NAICS descrip	otion.)					
Domestic Wastewater Treatm	nent									
34. Mailing	P.O. Box 9	09								
Address:			-							
	City	Stinnett	State	тх	ZIP	79083	ZIP + 4			
35. E-Mail Address:	smi	ller@cityofstinnet	tt.com							
36. Telephone Number			37. Extension or (	Code	38. Fa	<b>x Number</b> (if applica	ble)			
( 806 ) 878-2422					( )	-				

**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.

		I		
Dam Safety	Districts	Edwards Aquifer	Emissions Inventory Air	Industrial Hazardous Waste
	_			_
Municipal Solid Waste	New Source		Petroleum Storage Tank	☐ PWS
	Review Air			
Sludge	Storm Water	Title V Air	Tires	Used Oil
Voluntary Cleanup	🛛 Wastewater	Wastewater Agriculture	Water Rights	Other:
	WQ0010291001			
	VVQ0010291001			

## **SECTION IV: Preparer Information**

40. Name:	Paul Krueger, P.E.			41. Title:	Civil Engineer
42. Telephone Number		43. Ext./Code	44. Fax Number	45. E-Mail Address	
( 806 ) 473-3715			( ) -	PKrueger@Parkhill.com	

## **SECTION V: Authorized Signature**

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

Company:	City of Stinnett	Job Title:	City Manager		
Name (In Print):	Stacie Miller			Phone:	( 806 ) 878- <b>2422</b>
Signature:				Date:	

Appendix B

Plain Language Summary

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY



# PLAIN LANGUAGE SUMMARY FOR TPDES OR TLAP PERMIT APPLICATIONS

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

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

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

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

#### ENGLISH TEMPLATE FOR TPDES or TLAP NEW/RENEWAL/AMENDMENT APPLICATIONS Enter 'INDUSTRIAL' or 'DOMESTIC' here WASTEWATER/STORMWATER

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

City of Stinnett (CN601122179) proposes to operate City of Stinnett Wastewater Treatment Plant (RN102079613), a facultative lagoon and storage pond. The facility will be located at approximately 3,000 feet South and 3,500 feet East of intersection of State Highway 152 and State Highway 136, in Stinnett, Hutchinson County, Texas 79083. This permit is a major amendment with renewal to discharge 200,000 gallons per day of treated wastewater. Effluent will be used for irrigation of 160 acres. This permit will not authorize a discharge of pollutants into water in the state.

Discharges from the facility are expected to contain BOD<sub>5</sub>. Domestic wastewater will be treated by a facultative lagoon and a storage pond.

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

#### AGUAS RESIDUALES Introduzca 'INDUSTRIALES' o 'DOMÉSTICAS' aquí /AGUAS PLUVIALES

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

1. Introduzca el nombre del solicitante aquí (2. Introduzca el número de cliente aquí (es decir, CN6#######).) 3. Elija del menú desplegable 4. Introduzca el nombre de la instalación aquí 5. Introduzca el número de entidad regulada aquí (es decir, RN1########), 6. Elija del menú desplegable 7. Introduzca la descripción de la instalación aquí. La instalación 8. Elija del menú desplegable. ubicada en 9. Introduzca la ubicación aquí, en 10. Introduzca el nombre de la ciudad aquí, Condado de 11. Introduzca el nombre del condado aquí, Texas 12. Introduzca el código postal aquí. 13. Introduzca el resumen de la petición de solicitud aquí. *<<Para las solicitudes de TLAP incluya la siguiente oración, de lo contrario, elimine:>>* Este permiso no autorizará una descarga de contaminantes en el agua en el estado.

Se espera que las descargas de la instalación contengan 14. Liste todos los contaminantes esperados aquí. 15. Introduzca los tipos de aguas residuales descargadas aquí. 16. Elija del menú desplegable tratado por 17. Introduzca una descripción del tratamiento de aguas residuales utilizado en la instalación aquí.

## INSTRUCTIONS

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

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

# Example

#### Individual Industrial Wastewater Application

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

ABC Corporation (CN60000000) operates the Starr Power Station (RN1000000000), a twounit gas-fired electric generating facility. Unit 1 has a generating capacity of 393 megawatts (MWs) and Unit 2 has a generating capacity of 528 MWs. The facility is located at 1356 Starr Street, near the City of Austin, Travis County, Texas 78753.

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

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

Cooling water and boiler make-up water are supplied by Lake Starr Reservoir. The City of Austin municipal water plant (CN60000000, PWS 00000) supplies the facility's potable water and serves as an alternate source of boiler make-up water. Water from the Lake Starr Reservoir is withdrawn at the intake structure and treated with sodium hypochlorite to prevent biofouling and sodium bromide as a chlorine enhancer to improve efficacy and then passed through condensers and auxiliary equipment on a once-through basis to cool equipment and condense exhaust steam.

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

Appendix C

Public Involvement Plan



<sup>7</sup> Texas Commission on Environmental Quality

# Public Involvement Plan Form for Permit and Registration Applications

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

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

#### Section 1. Preliminary Screening

New Permit or Registration Application New Activity – modification, registration, amendment, facility, etc. (see instructions)

If neither of the above boxes are checked, completion of the form is not required and does not

#### need to be submitted.

#### Section 2. Secondary Screening

Requires public notice,

Considered to have significant public interest, and

Located within any of the following geographical locations:

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

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

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

Section 3	B. Applicat	tion Inform	nation				
Type of A	pplication	(check all t	hat apply):				
Air	Initial	Federal	Amendment	Standard Permit	Title V		
Waste	-	ll Solid Wast ive Material		and Hazardous Waste Underground I	e Scrap Tire injection Control		
Water Qua	ality						
Texas	Pollutant D	oischarge Eli	mination System	(TPDES)			
Texas Land Application Permit (TLAP)							
Sta	State Only Concentrated Animal Feeding Operation (CAFO)						
Water Treatment Plant Residuals Disposal Permit							
Class I	Class B Biosolids Land Application Permit						
Domes	stic Septage	e Land Appli	cation Registratio	on			
147 A. D. 1							
0	hts New Pe						
		on of Water					
New o	r existing r	eservoir					
Amendme	ent to an Ex	isting Water	Right				
Add a	New Appro	priation of	Water				
Add a	Add a New or Existing Reservoir						
Major	Amendmer	nt that could	affect other wat	er rights or the enviro	nment		

# Section 4. Plain Language Summary

Provide a brief description of planned activities.

Section 5. Community and Demographic Information
Community information can be found using EPA's EJ Screen, U.S. Census Bureau information, or generally available demographic tools.
Information gathered in this section can assist with the determination of whether alternative language notice is necessary. Please provide the following information.
inguage notice to necessary) i rease provide the ronoving mornation
(City)
(County)
(Census Tract)
Please indicate which of these three is the level used for gathering the following information.
City County Census Tract
(a) Percent of people over 25 years of age who at least graduated from high school
(b) Per capita income for population near the specified location
(c) Percent of minority population and percent of population by race within the specified location
(d) Percent of Linguistically Isolated Households by language within the specified location
(a) referre of Englistically isolated flousenoids by language within the specifica location
(e) Languages commonly spoken in area by percentage
(f) Community and/or Stakeholder Groups
(g) Historic public interest or involvement

Section 6. Planned Public Outreach Activities	
(a) Is this application subject to the public participation r Administrative Code (30 TAC) Chapter 39?	equirements of Title 30 Texas
Yes No	
(b) If yes, do you intend at this time to provide public out	reach other than what is required by rule?
Yes No	
If Yes, please describe.	
If you answered "yes" that this application is answering the remaining questions in (c) Will you provide notice of this application in alternativ	Section 6 is not required.
Yes No	
Please refer to Section 5. If more than 5% of the populat application is Limited English Proficient, then you are r alternative language.	
If yes, how will you provide notice in alternative language	rs?
Publish in alternative language newspaper	
Posted on Commissioner's Integrated Database W	ebsite
Mailed by TCEQ's Office of the Chief Clerk	
Other (specify)	
(d) Is there an opportunity for some type of public meeting	ng, including after notice?
Yes No	
(e) If a public meeting is held, will a translator be provide	ed if requested?
Yes No	
(f) Hard copies of the application will be available at the	following (check all that apply):
TCEQ Regional Office TCEQ Central Offi	ce
Public Place (specify)	

### Section 7. Voluntary Submittal

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

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

Yes No

What types of notice will be provided?

Publish in alternative language newspaper

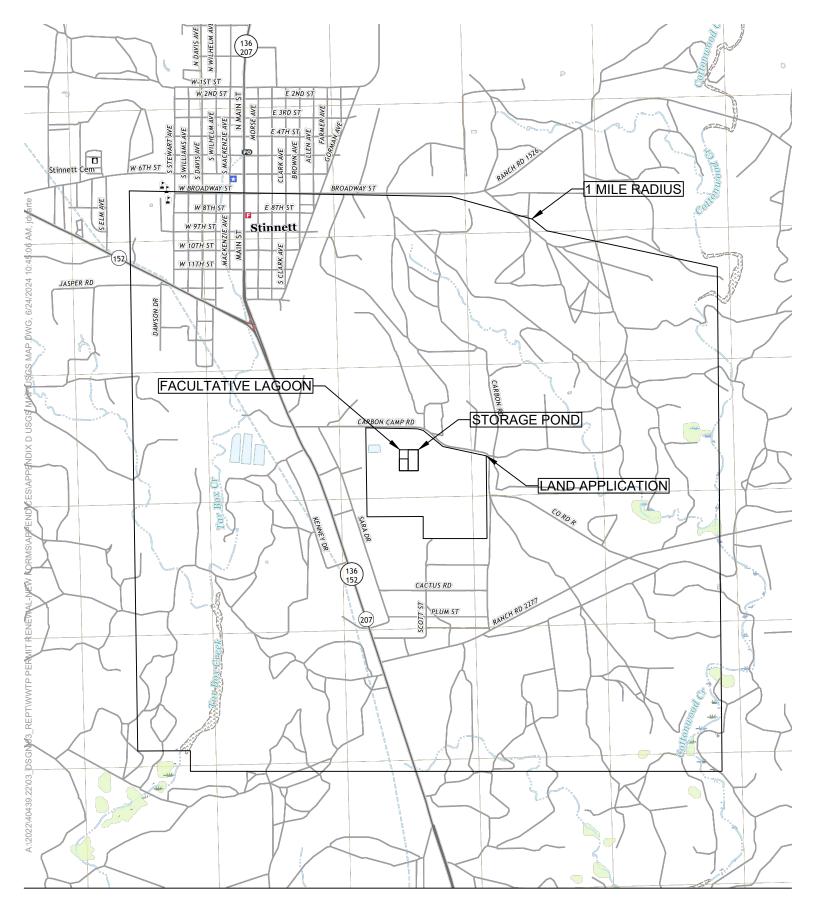
Posted on Commissioner's Integrated Database Website

Mailed by TCEQ's Office of the Chief Clerk

Other (specify)

Appendix D

USGS Map



## City of Stinnett Wastewater Parkhill **Treatment Plant Renewal**

Parkhill.com

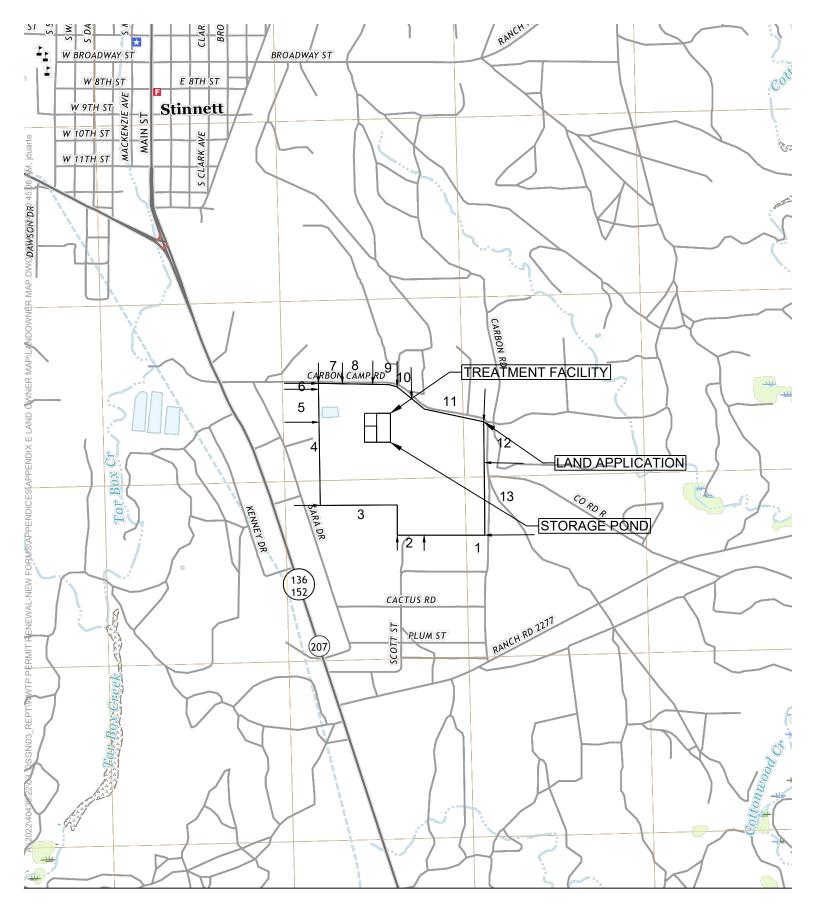
Issue: Date: Project No: Sheet:

**USGS Map** 

Renewal 07/10/2024 40439.22 1 OF 1

**City of Stinnett** P.O. Box 909 Stinnett, TX 79083 Appendix E

Land Owner Map



## City of Stinnett Wastewater Parkh **Treatment Plant Renewal**

Parkhill.com

#### Landowner Map

Issue: Date: Project No: Sheet:

#### Renewal 07/10/2024 40439.22 1 OF 1

**City of Stinnett** P.O. Box 909 Stinnett, TX 79083

### City of Stinnett, Texas

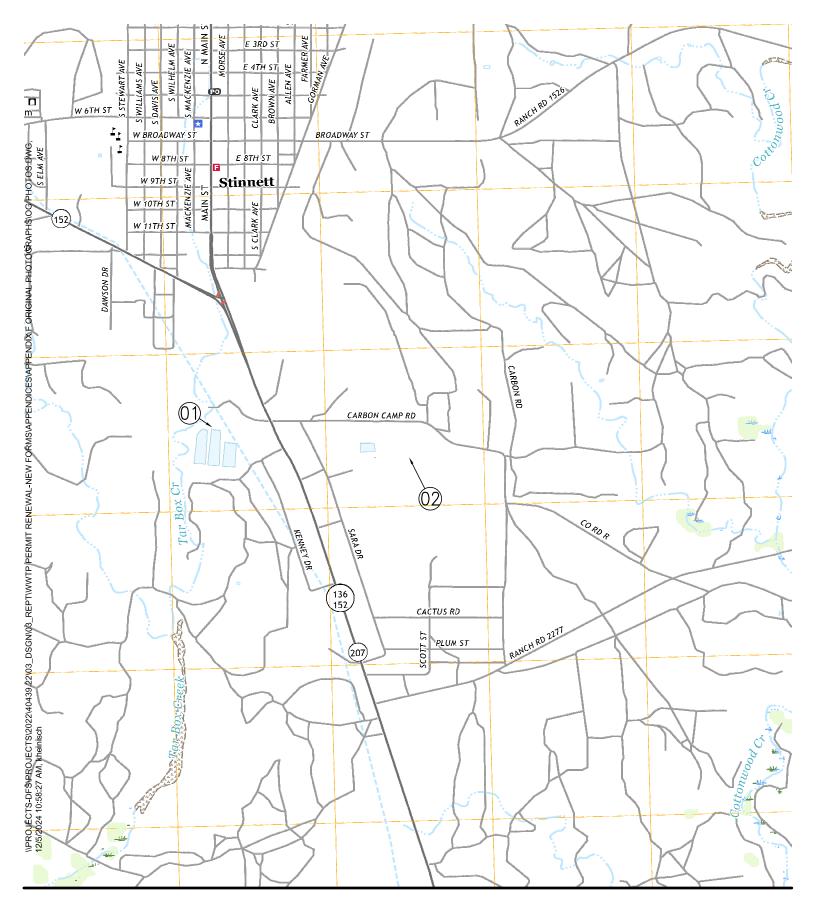
#### Affected Landowner's Cross Reference List and Adjoining Properties

- 1. JODY NOLAN PO BOX 1161 STINNETT TX 79083
- JODY NOLAN AND LARRY DIFFIELD PO BOX 1161 STINNETT TX 79083
- LANTELME DEAN R AND RHONDA G 119 SCHOENHALS LN FRITCH TX 79036
- LANTELME DEAN R AND RHONDA G 119 SCHOENHALS LN FRITCH TX 79036
- 5. PSP CISD ET AL SHERRIF SALE PO BOX 3440 STINNETT TX 79083
- DAVID AND DEBBIE WILSON PO BOX 711 STINNETT TX 79083
- FRANCISCO BARRAZA 414 ROMERO ST FRITCH TX 79036
- CHRISTOPHER AND RACHEL BOGNER PO BOX 801 STINNETT TX 79083
- CHRISTOPHER AND RACHEL BOGNER PO BOX 801 STINNETT TX 79083

- 10. SANDRA HEFNER PO BOX 3388 STINNETT TX 79083
- 11. SANDRA AND KEITH HEFNER PO BOX 3388 STINNETT TX 79083
- 12. TYM ENERGY UNKNOWN
- 13. BROWN ROBERT ALFRED AND TALLY G PO BOX 1196 STINNETT TX 79083

Appendix F

**Original Photographs** 



## City of Stinnett Wastewater Treatment Plant Renewal

**City of Stinnett** 

Stinnett, TX 79083

P.O. Box 909



#### Parkhill.com

Original	Photographs
----------	-------------

Issue: Date: Project No: Sheet: Renewal 07/10/2024 40439.22 1 OF 1 Photograph 01 – Existing Effluent Irrigation Site

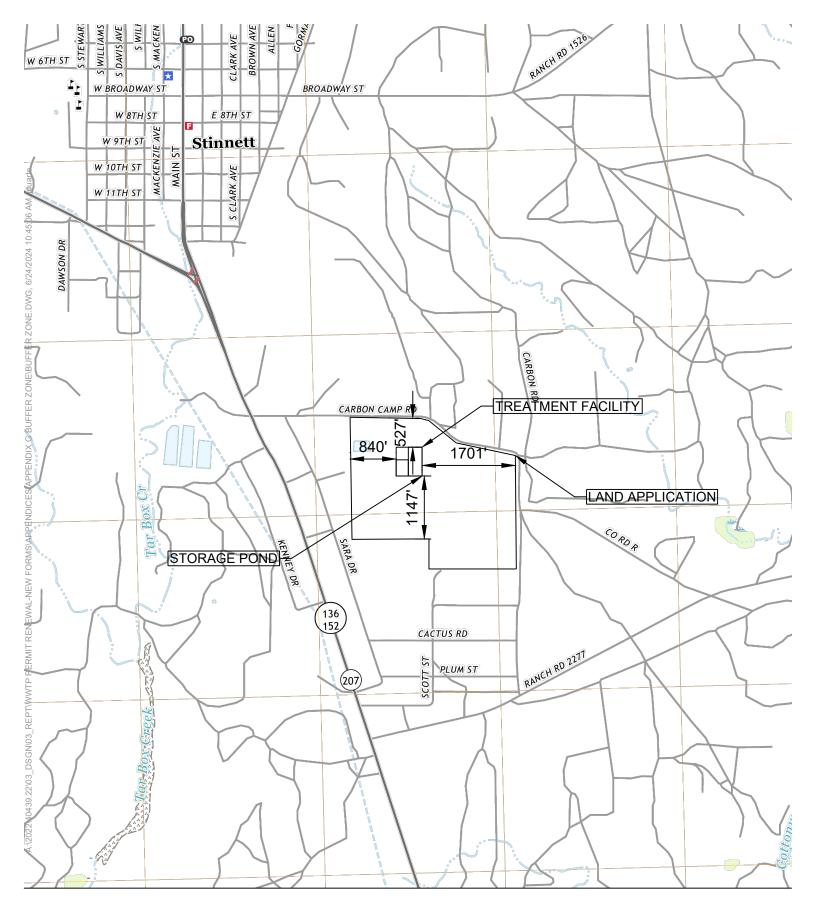


Photograph 02 – New Treatment Unit Location



Appendix G

**Buffer Zone** 



## City of Stinnett Wastewater Parkh **Treatment Plant Renewal**

Parkhill.com

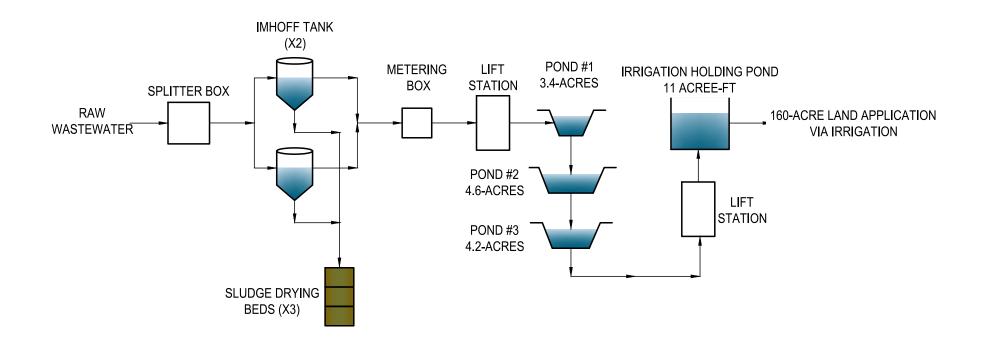
**Buffer Zone** 

Issue: Date: Project No: Sheet:

Renewal 07/09/2024 40439.22 1 OF 1

**City of Stinnett** P.O. Box 909 Stinnett, TX 79083 Appendix H

Flow Diagram



## City of Stinnett Wastewater Treatment Plant

City of Stinnett P.O. Box 909 Stinnett, TX 79083



Parkhill.com

# Flow Diagram Existing

Issue:	Renewal
Date:	07/10/2023
Project No:	40439.22
Sheet:	1 OF 1



## City of Stinnett Wastewater Treatment Plant

City of Stinnett P.O. Box 909 Stinnett, TX 79083



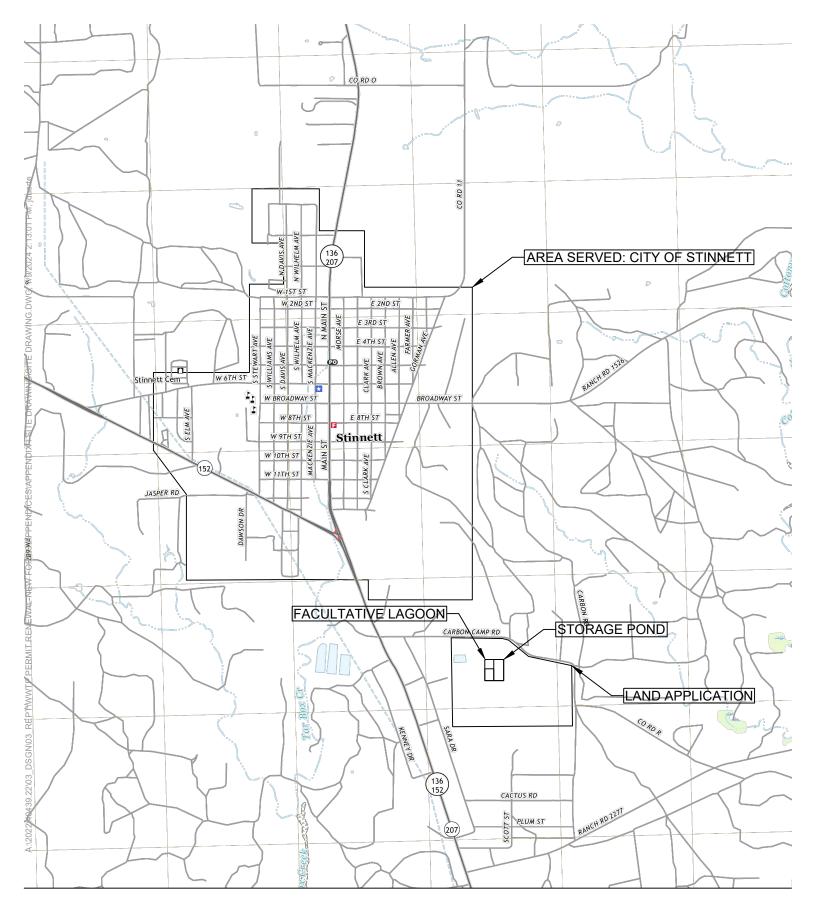


#### Flow Diagram Proposed

Issue:	Renewal
Date:	07/10/2023
Project No:	40439.22
Sheet:	1 OF 1

Appendix I

Site Drawing



# City of Stinnett Wastewater **Parkhi**l Treatment Plant Renewal

#### **City of Stinnett** P.O. Box 909 Stinnett, TX 79083

Parkhill.com

Site Drawing

Issue: Date: Project No: Sheet: Renewal 07/10/2024 40439.22 1 OF 1 Appendix J

**Pollutant Analysis** 



**Environment Testing** 

# **ANALYTICAL REPORT**

## PREPARED FOR

Attn: Paul K Krueger Parkhill Smith & Cooper Inc. 4222 85th Street Lubbock, Texas 79423 Generated 12/17/2023 8:18:23 PM

JOB DESCRIPTION

Stinnett WWTP

## **JOB NUMBER**

820-11094-1

Eurofins Lubbock 6701 Aberdeen Ave. Suite 8 Lubbock TX 79424



See page two for job notes and contact information.



## **Eurofins Lubbock**

## Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing South Central, LLC Project Manager.

## Authorization

Authorized for release by Anita Patel, Project Manager <u>Anita.Patel@et.eurofinsus.com</u> (832)776-2275

Generated

12/17/2023 8:18:23 PM

1

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## Qualifiers

Qualifiers		3
HPLC/IC		
Qualifier	Qualifier Description	
U	Indicates the analyte was analyzed for but not detected.	
General Cher	nistry	5
Qualifier	Qualifier Description	
HF	Parameter with a holding time of 15 minutes. Test performed by laboratory at client's request. Sample was analyzed outside of hold time.	
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.	
U	Indicates the analyte was analyzed for but not detected.	
Biology		
Qualifier	Qualifier Description	8
Н	Sample was prepped or analyzed beyond the specified holding time. This does not meet regulatory requirements.	
H3	Sample was received and analyzed past holding time. This does not meet regulatory requirements.	9
Glossary		10
Abbreviation	These commonly used abbreviations may or may not be present in this report.	
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis	
%R	Percent Recovery	
CFL	Contains Free Liquid	
CFU	Colony Forming Unit	
CNF	Contains No Free Liquid	
DER	Duplicate Error Ratio (normalized absolute difference)	
Dil Fac	Dilution Factor	
DL	Detection Limit (DoD/DOE)	

DL, RA, RE, IN Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample

	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
	Limit of Detection $(DoD/DOE)$

LOD	LITTIL OF DELECTION (DOD/DOE)
LOQ	Limit of Quantitation (DoD/DOI

DE) MCL EPA recommended "Maximum Contaminant Level"

MDA Minimum Detectable Activity (Radiochemistry)

MDC Minimum Detectable Concentration (Radiochemistry)

MDL	Method Detection Limit							
ML	Minimum Level (Dioxin)							
MPN	Most Probable Number							

MQL Method Quantitation Limit NC Not Calculated

ND Not Detected at the reporting limit (or MDL or EDL if shown)

NEG Negative / Absent

POS Positive / Present Practical Quantitation Limit PQL

PRES Presumptive

QC Quality Control RER Relative Error Ratio (Radiochemistry)

RL Reporting Limit or Requested Limit (Radiochemistry)

RPD Relative Percent Difference, a measure of the relative difference between two points

TEF Toxicity Equivalent Factor (Dioxin) TEQ Toxicity Equivalent Quotient (Dioxin)

TNTC Too Numerous To Count

#### Laboratory: Eurofins Lubbock

#### Narrative

Job Narrative 820-11094-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method. Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

#### Receipt

The sample was received on 11/29/2023 8:50 AM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 1.5°C

#### HPLC/IC

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

#### General Chemistry

Method 4500\_CL\_G: The following sample was diluted due to the nature of the sample matrix: WWTP outfall (820-11094-1). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

#### Biology

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

#### **Client Sample ID: WWTP outfall**

Date Collected: 11/28/23 14:30 Date Received: 11/29/23 08:50

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	226		0.500		mg/L			12/12/23 03:10	1
Sulfate	21.6		0.500		mg/L			12/12/23 03:10	1
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM (1664B)	<5.88	U	5.88		mg/L			12/17/23 07:15	1
SGT-HEM (1664B)	<5.88	U	5.88		mg/L			12/17/23 07:15	1
Ammonia as N (EPA 350.1)	13.8		1.00		mg/L			12/12/23 11:30	10
Nitrogen, Kjeldahl (EPA 351.2)	16.2		1.43		mg/L		12/12/23 20:50	12/13/23 14:51	7.143
Nitrate Nitrite as N (EPA 353.2)	0.120		0.100		mg/L			12/01/23 21:55	1
Total Phosphorus as P (EPA 365.1)	1.86		0.100		mg/L		12/08/23 16:34	12/11/23 13:09	5
Specific Conductance (SM 2510B)	1360		10.0		umho/cm @ 25C			12/06/23 10:49	1
Total Dissolved Solids (SM 2540C)	758		10.0		mg/L			12/04/23 09:41	1
Total Suspended Solids (SM 2540D)	45.0		20.0		mg/L			12/01/23 10:20	1
Chlorine, Total Residual (SM 4500 Cl G)	<0.500	U HF	0.500		mg/L			12/01/23 10:55	10
pH (SM 4500 H+ B)	8.9	HF			SU			12/02/23 13:38	1
Temperature (SM 4500 H+ B)	16.7	HF			Degrees C			12/02/23 13:38	1
Carbonaceous Biochemical Oxygen Demand (SM5210B CBOD)	28.8		6.00		mg/L		11/30/23 12:00	11/30/23 14:25	1

#### Method: SM 9223B - Coliforms, Total, and E.Coll (Colilert - Quanti Tray)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Escherichia coli	>2400	н нз	1.0		MPN/100mL	_		11/29/23 16:45	1
Coliform, Total	>2400	H H3	1.0		MPN/100mL			11/29/23 16:45	1

Job ID: 820-11094-1

Matrix: Water

## Lab Sample ID: 820-11094-1

#### Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 860-134603/44											Client S	ample ID: Me		
Matrix: Water												Ргер Тур	e: Tot	al/NA
Analysis Batch: 134603	мр	мв												
Analyte		мв Qualifier		RL		мпі	Unit		D	Б	repared	Analyzed		Dil Fac
Chloride	<0.500			0.500			mg/L		- <u>-</u> -		epareu	12/12/23 01:5		
Sulfate	<0.500			0.500			mg/L					12/12/23 01:5		
Lab Sample ID: LCS 860-134603/45									Cli	ient	Sample	ID: Lab Cont	rol Sa	mple
Matrix: Water												Prep Typ	e: Tot	al/N/
Analysis Batch: 134603														
			Spike		LCS	LCS						%Rec		
Analyte			Added		Result	Qua	lifier	Unit		D	%Rec	Limits		
Chloride			10.0		9.252			mg/L		_	93	90 - 110		
Sulfate			10.0		9.464			mg/L			95	90 - 110		
Lab Sample ID: LCSD 860-134603/46								C	lient S	Sam	ple ID: I	Lab Control S	ample	e Duj
Matrix: Water												Prep Typ	e: Tot	al/N/
Analysis Batch: 134603														
-			Spike		LCSD	LCS	D					%Rec		RPD
Analyte			Added		Result	Qua	lifier	Unit		D	%Rec	Limits	RPD	Limi
Chloride			10.0		9.238			mg/L		_	92	90 - 110	0	20
Sulfate			10.0		9.454			mg/L			95	90 - 110	0	20
lethod: 1664B - HEM and SGT-H	EM													
Lab Sample ID: MB 860-135532/1											Client S	ample ID: Me	thod	Blank
Matrix: Water												Prep Typ	e: Tot	al/N/
Analysis Batch: 135532														
	МВ	MB												
Analyte	Result	Qualifier		RL		MDL	Unit		D	P	repared	Analyzed		Dil Fac
HEM	<5.00	U		5.00			mg/L					12/17/23 07:1	5	
SGT-HEM	<5.00	U		5.00			mg/L					12/17/23 07:1	5	
Lab Sample ID: LCS 860-135532/2									Cli	ient	Sample	ID: Lab Cont		
Matrix: Water												Ргер Тур	e: Tot	al/N/
Analysis Batch: 135532														
			Spike		LCS	LCS						%Rec		
										-	~ -			

	opino	200	200				/011000	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
HEM	40.0	41.20		mg/L		103	78 - 114	
SGT-HEM	20.0	24.20		mg/L		121	64 - 132	

Lab Sample ID: LCSD 860-135532/3				Cli	ent San	nple ID:	Lab Contro	I Sampl	e Dup
Matrix: Water							Prep 1	Гуре: To	tal/NA
Analysis Batch: 135532									
	Spike	LCSD	LCSD				%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
HEM	40.0	42.40		mg/L		106	78 - 114	3	18
SGT-HEM	20.0	24.00		mg/L		120	64 - 132	1	18

#### Method: 350.1 - Nitrogen, Ammonia

Lab Sample ID: MB 860-135099/16										Client S	ample ID:		
Matrix: Water											Prep	Type: To	otal/N
Analysis Batch: 135099													
	MB	MB											
Analyte	Result	Qualifier		RL		MDL Un	it	D	Р	repared	Analy	zed	Dil Fa
Ammonia as N	<0.100	U		0.100		mg	/L				12/12/23	10:11	
Lab Sample ID: LCS 860-135099/17								с	lient	Sample	ID: Lab C	ontrol S	Samp
Matrix: Water												Type: To	
Analysis Batch: 135099												.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
Analysis Baton. 100000			Spike		LCS	LCS					%Rec		
Analyte			Added			Qualifier	Unit		D	%Rec	Limits		
Ammonia as N			1.00		1.094	quanto	mg/L			109	90 - 110		
									_				
Lab Sample ID: LCSD 860-135099/18							C	lient	Sam	ple ID: L	ab Contro		
Matrix: Water											Prep	Type: To	otal/N
Analysis Batch: 135099													
			Spike		LCSD	LCSD					%Rec		RF
Analyte			Added		Result	Qualifier	Unit		D	%Rec	Limits	RPD	Lin
Ammonia as N			1.00		1.094		mg/L			109	90 - 110	0	
lethod: 351.2 - Nitrogen, Total Kje	ldahl												
												Mothod	
-										Client S			
-										Client S	Prep	Type: To	otal/N
Matrix: Water										Client S	Prep		otal/N
Matrix: Water	МВ	МВ								Client S	Prep	Type: To	otal/N
Matrix: Water Analysis Batch: 135046	Result	Qualifier		RL		MDL Un	it	D		repared	Prep	Type: To Batch:	otal/N 13489
Matrix: Water Analysis Batch: 135046 Analyte		Qualifier		<b>RL</b> 0.200		MDL Un mg		<b>D</b>	P		Prep Prep	Type: To Batch: ' zed	otal/N 13489
Matrix: Water Analysis Batch: 135046 Analyte Nitrogen, Kjeldahl	Result	Qualifier							<b>P</b> 12/1	repared 2/23 20:50	Prep Prep Analy 12/13/23	Type: To Batch: 1 zed 14:13	Dil F
Matrix: Water Analysis Batch: 135046 Analyte Nitrogen, Kjeldahl Lab Sample ID: LCS 860-134896/33-A	Result	Qualifier							<b>P</b> 12/1	repared 2/23 20:50	Prep Prep 	Type: To Batch: zed 14:13	Dial/N 13489 Dil F Samp
Matrix: Water Analysis Batch: 135046 Analyte Nitrogen, Kjeldahl Lab Sample ID: LCS 860-134896/33-A Matrix: Water	Result	Qualifier							<b>P</b> 12/1	repared 2/23 20:50	Prep Prep - <u>Analy</u> 12/13/23 ID: Lab C Prep	Type: To Batch: 22ed 14:13 Control S Type: To	Dil F Dil F Samp Dtal/N
Matrix: Water Analysis Batch: 135046 Analyte Nitrogen, Kjeldahl Lab Sample ID: LCS 860-134896/33-A Matrix: Water	Result	Qualifier				mg			<b>P</b> 12/1	repared 2/23 20:50	Prep Prep - <u>Analy</u> 12/13/23 ID: Lab C Prep Prep	Type: To Batch: zed 14:13	Dil F Dil F Samp Dital/N
Matrix: Water Analysis Batch: 135046 Analyte Nitrogen, Kjeldahl Lab Sample ID: LCS 860-134896/33-A Matrix: Water Analysis Batch: 135046	Result	Qualifier	Spike	0.200	LCS	LCS	/L		P 12/1 lient	repared 2/23 20:50 Sample	Prep Prep - <u>Analy</u> 12/13/23 ID: Lab C Prep Prep %Rec	Type: To Batch: 22ed 14:13 Control S Type: To	Dil F Dil F Samp Dital/N
Matrix: Water Analysis Batch: 135046 Analyte Nitrogen, Kjeldahl Lab Sample ID: LCS 860-134896/33-A Matrix: Water Analysis Batch: 135046 Analyte	Result	Qualifier		0.200	LCS	mg	/L		<b>P</b> 12/1	repared 2/23 20:50	Prep Prep - <u>Analy</u> 12/13/23 ID: Lab C Prep Prep	Type: To Batch: 22ed 14:13 Control S Type: To	Dil F Dil F Samp Dital/N
Matrix: Water Analysis Batch: 135046 Analyte Nitrogen, Kjeldahl Lab Sample ID: LCS 860-134896/33-A Matrix: Water Analysis Batch: 135046 Analyte Nitrogen, Kjeldahl	Result	Qualifier	Spike Added	0.200	LCS Result	LCS	/L <u>Unit</u> mg/L	 C	P 12/1 lient	repared 2/23 20:50 Sample <u>%Rec</u> 98	Prep Prep Analy 12/13/23 ID: Lab C Prep Prep %Rec Limits 90 - 110	Type: To Batch: ' 14:13 Control S Type: To Batch: '	Dil F Dil F Samp Dital/N 1348
Matrix: Water Analysis Batch: 135046 Analyte Nitrogen, Kjeldahl Lab Sample ID: LCS 860-134896/33-A Matrix: Water Analysis Batch: 135046 Analyte Nitrogen, Kjeldahl Lab Sample ID: LCSD 860-134896/34-A	Result	Qualifier	Spike Added	0.200	LCS Result	LCS	/L <u>Unit</u> mg/L	 C	P 12/1 lient	repared 2/23 20:50 Sample <u>%Rec</u> 98	Prep Prep 	Type: To Batch: ' 14:13 Control S Type: To Batch: ' ol Samp	Dil F Dil F Samp Dtal/N 13489
Matrix: Water Analysis Batch: 135046 Analyte Nitrogen, Kjeldahl Lab Sample ID: LCS 860-134896/33-A Matrix: Water Analysis Batch: 135046 Analyte Nitrogen, Kjeldahl Lab Sample ID: LCSD 860-134896/34-A Matrix: Water	Result	Qualifier	Spike Added	0.200	LCS Result	LCS	/L <u>Unit</u> mg/L	 C	P 12/1 lient	repared 2/23 20:50 Sample <u>%Rec</u> 98	Prep Prep - Analy 12/13/23 ID: Lab C Prep %Rec Limits 90 - 110 .ab Contro Prep	Type: To Batch: ' '14:13 control S Type: To Batch: ' ol Samp Type: To	Dial/N 13489 Dil F Samp Dial/N 13489 Die Du Die Du
Matrix: Water Analysis Batch: 135046 Analyte Nitrogen, Kjeldahl Lab Sample ID: LCS 860-134896/33-A Matrix: Water Analysis Batch: 135046 Analyte Nitrogen, Kjeldahl Lab Sample ID: LCSD 860-134896/34-A Matrix: Water	Result	Qualifier	Spike Added 2.00	0.200	LCS Result 1.968	LCS Qualifier	/L <u>Unit</u> mg/L	 C	P 12/1 lient	repared 2/23 20:50 Sample <u>%Rec</u> 98	Prep Prep - Analy 12/13/23 ID: Lab C Prep %Rec Limits 90 - 110 .ab Contro Prep Prep	Type: To Batch: ' 14:13 Control S Type: To Batch: ' ol Samp	Dil F Dil F Samp Dital/N 13489 Ule Du Dtal/N 13489
Matrix: Water Analysis Batch: 135046 Analyte Nitrogen, Kjeldahl Lab Sample ID: LCS 860-134896/33-A Matrix: Water Analysis Batch: 135046 Analyte Nitrogen, Kjeldahl Lab Sample ID: LCSD 860-134896/34-A Matrix: Water	Result	Qualifier	Spike Added 2.00 Spike	0.200	LCS Result 1.968	LCS	/L <u>Unit</u> mg/L	 C	P 12/1 lient	repared 2/23 20:50 Sample <u>%Rec</u> 98 	Prep Prep - Analy 12/13/23 ID: Lab C Prep %Rec Limits 90 - 110 .ab Contro Prep Prep %Rec	Type: To Batch: ' '14:13 Control S Type: To Batch: ' ol Samp Type: To Batch: '	Dil F Dil F Gamp Dtal/N 13489 Dtal/N 13489
Matrix: Water Analysis Batch: 135046 Analyte Nitrogen, Kjeldahl Lab Sample ID: LCS 860-134896/33-A Matrix: Water Analysis Batch: 135046 Analyte Nitrogen, Kjeldahl Lab Sample ID: LCSD 860-134896/34-A Matrix: Water Analysis Batch: 135046 Analyte	Result	Qualifier	Spike Added 2.00 Spike Added	0.200	LCS Result 1.968 LCSD	LCS Qualifier	/L <u>Unit</u> mg/L	 C	P 12/1 lient	repared 2/23 20:50 Sample <u>%Rec</u> 98	Prep Prep 12/13/23 ID: Lab C Prep %Rec Limits 90 - 110 .ab Contro Prep %Rec Limits	Type: To Batch: ' '14:13 control S Type: To Batch: ' ol Samp Type: To	Dil Fi Dil Fi Samp Dtal/N 13489 Die Du Dtal/N 13489 RF Lin
Matrix: Water Analysis Batch: 135046 Analyte Nitrogen, Kjeldahl Lab Sample ID: LCS 860-134896/33-A Matrix: Water Analysis Batch: 135046 Nitrogen, Kjeldahl Lab Sample ID: LCSD 860-134896/34-A Matrix: Water Analysis Batch: 135046 Analyte	Result	Qualifier	Spike Added 2.00 Spike	0.200	LCS Result 1.968 LCSD	LCS Qualifier LCSD	/L <u>Unit</u> mg/L	 C	P 12/1 lient	repared 2/23 20:50 Sample <u>%Rec</u> 98 	Prep Prep - Analy 12/13/23 ID: Lab C Prep %Rec Limits 90 - 110 .ab Contro Prep Prep %Rec	Type: To Batch: ' '14:13 Control S Type: To Batch: ' ol Samp Type: To Batch: '	Dil Fi Dil Fi Samp Dtal/N 13489 Die Du Dtal/N 13489 RF Lin
Matrix: Water Analysis Batch: 135046 Analyte Nitrogen, Kjeldahl Lab Sample ID: LCS 860-134896/33-A Matrix: Water Analysis Batch: 135046 Analyte Nitrogen, Kjeldahl Lab Sample ID: LCSD 860-134896/34-A Matrix: Water Analysis Batch: 135046 Analyte Nitrogen, Kjeldahl	Result	Qualifier	Spike Added 2.00 Spike Added	0.200	LCS Result 1.968 LCSD Result	LCS Qualifier LCSD	/L Unit mg/L C Unit	C	P 12/1 lient Sam	repared 2/23 20:50 Sample %Rec 98 ple ID: L %Rec 98	Prep Prep 12/13/23 ID: Lab C Prep %Rec Limits 90 - 110 %Rec Limits 90 - 110	Type: To Batch: ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' '	Dil F Dil F Gamp Dia F Dil F Dil F Dia F Dia F Dia Control Dia Control Di Control Dia Control Di Control Dia Control Dia Control Dia Contr
Matrix: Water Analysis Batch: 135046 Analyte Nitrogen, Kjeldahl Lab Sample ID: LCS 860-134896/33-A Matrix: Water Analysis Batch: 135046 Analyte Nitrogen, Kjeldahl Lab Sample ID: LCSD 860-134896/34-A Matrix: Water Analysis Batch: 135046 Analyte Nitrogen, Kjeldahl Lab Sample ID: LLCS 860-134896/5-A	Result	Qualifier	Spike Added 2.00 Spike Added	0.200	LCS Result 1.968 LCSD Result	LCS Qualifier LCSD	/L Unit mg/L C Unit	C	P 12/1 lient Sam	repared 2/23 20:50 Sample %Rec 98 ple ID: L %Rec 98	Prep Prep - Analy 12/13/23 ID: Lab C Prep Prep %Rec Limits 90 - 110 .ab Contro Prep %Rec Limits 90 - 110 ID: Lab C	Type: To Batch: ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' '	Dill F Dill F Gamp Dia F Dill
Matrix: Water Analysis Batch: 135046 Analyte Nitrogen, Kjeldahl Lab Sample ID: LCS 860-134896/33-A Matrix: Water Analysis Batch: 135046 Analyte Nitrogen, Kjeldahl Lab Sample ID: LCSD 860-134896/34-A Matrix: Water Analysis Batch: 135046 Analyte Nitrogen, Kjeldahl Lab Sample ID: LLCS 860-134896/5-A Matrix: Water	Result	Qualifier	Spike Added 2.00 Spike Added	0.200	LCS Result 1.968 LCSD Result	LCS Qualifier LCSD	/L Unit mg/L C Unit	C	P 12/1 lient Sam	repared 2/23 20:50 Sample %Rec 98 ple ID: L %Rec 98	Prep Prep Analy 12/13/23 ID: Lab C Prep %Rec Limits 90 - 110 .ab Contro Prep %Rec Limits 90 - 110 ID: Lab C Prep	Type: To Batch: ' 14:13 Control S Type: To Batch: ' ol Samp Type: To Batch: ' RPD 1 Control S Type: To	Dill Fi Dill Fi Gamp Dtal/N 13489 Ule Du Dtal/N 13489 RF Lin Samp Dtal/N
Matrix: Water Analysis Batch: 135046 Analyte Nitrogen, Kjeldahl Lab Sample ID: LCS 860-134896/33-A Matrix: Water Analysis Batch: 135046 Analyte Nitrogen, Kjeldahl Lab Sample ID: LCSD 860-134896/34-A Matrix: Water Analysis Batch: 135046 Analyte Nitrogen, Kjeldahl Lab Sample ID: LLCS 860-134896/5-A Matrix: Water	Result	Qualifier	Spike Added 2.00 Spike Added 2.00	0.200	LCS Result 1.968 LCSD Result 1.950	LCS Qualifier Qualifier	/L Unit mg/L C Unit	C	P 12/1 lient Sam	repared 2/23 20:50 Sample %Rec 98 ple ID: L %Rec 98	Prep Prep 12/13/23 ID: Lab C Prep %Rec Limits 90 - 110 .ab Contro Prep %Rec Limits 90 - 110 ID: Lab C Prep Prep %Rec	Type: To Batch: ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' '	Dil Fa Dil Fa Samplotal/N 13489 Dile Du otal/N 13489 RF Lin Samplotal/N
Lab Sample ID: MB 860-134896/4-A Matrix: Water Analysis Batch: 135046 Analyte Nitrogen, Kjeldahl Lab Sample ID: LCS 860-134896/33-A Matrix: Water Analysis Batch: 135046 Analyte Nitrogen, Kjeldahl Lab Sample ID: LCSD 860-134896/34-A Matrix: Water Analysis Batch: 135046 Analyte Nitrogen, Kjeldahl Lab Sample ID: LLCS 860-134896/5-A Matrix: Water Analysis Batch: 135046 Analyte	Result	Qualifier	Spike Added 2.00 Spike Added	0.200	LCS Result 1.968 LCSD Result 1.950	LCS Qualifier LCSD	/L Unit mg/L Unit mg/L	C	P 12/1 lient Sam	repared 2/23 20:50 Sample %Rec 98 ple ID: L %Rec 98	Prep Prep Analy 12/13/23 ID: Lab C Prep %Rec Limits 90 - 110 .ab Contro Prep %Rec Limits 90 - 110 ID: Lab C Prep	Type: To Batch: ' 14:13 Control S Type: To Batch: ' ol Samp Type: To Batch: ' RPD 1 Control S Type: To	Dil Fa Dil Fa Sampl Dil Ta Sampl Dile Du Dile Du Dile Du Dile Du Dile Du Dila (N) 13489 RP Lim 2 Sampl Dila (N)

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5 6 7

#### Method: 353.2 - Nitrogen, Nitrate-Nitrite

Motrix: Motor									Sherit Si	ample ID: I		
Matrix: Water										Prepi	ype: To	otal/N/
Analysis Batch: 133464												
		MB	_				_	_				
Analyte		Qualifier	R		MDL Unit		D	Pr	repared	Analyz		Dil Fa
Nitrate Nitrite as N	<0.100	U	0.10	0	mg/L					12/01/23 2	21:04	
Lab Sample ID: LCS 860-133464/11							Cli	ient	Sample	ID: Lab Co	ontrol S	Sample
Matrix: Water											ype: To	-
Analysis Batch: 133464												
· ·····, ···· · · · · · · · · · · · · ·			Spike	LCS	LCS					%Rec		
Analyte			Added	Result	Qualifier	Unit		D	%Rec	Limits		
Nitrate Nitrite as N			1.00	1.005		mg/L			100	90 - 110		
Lab Sample ID: LCSD 860-133464/12						CI	ient S	Sam	ple ID: L	ab Contro		
Matrix: Water										Prep T	ype: To	otal/N/
Analysis Batch: 133464												
			Spike		LCSD					%Rec		RPD
Analyte			Added		Qualifier	Unit		D	%Rec	Limits	RPD	Limi
Nitrate Nitrite as N			1.00	1.028		mg/L			103	90 - 110	2	20
/lethod: 365.1 - Phosphorus, Tota	ıl											
Lab Sample ID: MB 860-134428/46-A									Client S	ample ID: I	Mothod	l Blan
									onent of			
Matrix: Wator										Drop T	VDO: TO	stal/NL
Matrix: Water												
Matrix: Water Analysis Batch: 134611	MB	MP									ype: To Batch:	
Analysis Batch: 134611	MB		-				_	_		Prep E	Batch:	13442
Analysis Batch: 134611 Analyte	Result	Qualifier	R		MDL Unit		<u>D</u>		repared	Prep E Analyz	Batch:	134423 Dil Fa
Analysis Batch: 134611 Analyte		Qualifier	<b></b> 0.41		MDL Unit mg/L				<b>repared</b> 8/23 16:34	Prep E	Batch:	13442 Dil Fa
Analysis Batch: 134611	Result	Qualifier						12/08	8/23 16:34	Prep E Analyz	Batch:	13442 Dil Fa
Analysis Batch: 134611 Analyte Total Phosphorus as P	Result	Qualifier						12/08	8/23 16:34	Prep E 	Batch:	13442 Dil Fa
Analysis Batch: 134611 Analyte Total Phosphorus as P Lab Sample ID: MB 860-134428/4-A	Result	Qualifier						12/08	8/23 16:34	Analyz 12/11/23 ample ID: I Prep T	Batch: 1 ed 12:36 Method	134423 Dil Fa I Blanl otal/N/
Analysis Batch: 134611 Analyte Total Phosphorus as P Lab Sample ID: MB 860-134428/4-A Matrix: Water	Result <0.417	Qualifier						12/08	8/23 16:34	Analyz 12/11/23 ample ID: I Prep T	Batch: 1 ed 12:36 Method Type: To	134423 Dil Fa I Blanl otal/N/
Analysis Batch: 134611 Analyte Total Phosphorus as P Lab Sample ID: MB 860-134428/4-A Matrix: Water	Result <0.417 MB	Qualifier U		7				12/08	8/23 16:34	Analyz 12/11/23 ample ID: I Prep T	Batch: 1 12:36 Method Type: To Batch: 1	Dil Fa Dil Fa I Blanl otal/N/ 13442
Analysis Batch: 134611 Analyte Total Phosphorus as P Lab Sample ID: MB 860-134428/4-A Matrix: Water Analysis Batch: 134611	Result <0.417 MB	Qualifier U MB Qualifier	0.41	7 	mg/L			12/08 Pr	8/23 16:34 Client Sa	Analyz 12/11/23 ample ID: I Prep T Prep E Analyz	Batch: ed 12:36 Method Satch: ed	Dil Fa Dil Fa I Blanl Dtal/N/ 13442 Dil Fa
Analysis Batch: 134611 Analyte Total Phosphorus as P Lab Sample ID: MB 860-134428/4-A Matrix: Water Analysis Batch: 134611 Analyte Total Phosphorus as P	Result <0.417 MB Result	Qualifier U MB Qualifier	0.41	7 	MDL Unit			12/08 Pr 12/08	Client Sa Client Sa repared 3/23 16:34	Prep E           Analyz           12/11/23           ample ID: I           Prep T           Prep E           Analyz           12/11/23	Batch: 1 12:36 Method Type: To Batch: 1 11:49	Dil Fa Dil Fa I Blan otal/N/ 13442 Dil Fa
Analysis Batch: 134611 Analyte Total Phosphorus as P Lab Sample ID: MB 860-134428/4-A Matrix: Water Analysis Batch: 134611 Analyte Total Phosphorus as P Lab Sample ID: LCS 860-134428/47-A	Result <0.417 MB Result	Qualifier U MB Qualifier	0.41	7 	MDL Unit			12/08 Pr 12/08	Client Sa Client Sa repared 3/23 16:34	Prep E Analyz 12/11/23 ample ID: I Prep T Prep E Analyz 12/11/23 ID: Lab Co	Batch: 1 ed 12:36 Method Type: To Batch: 1 ed 11:49 Sontrol S	I Blani Dil Fa I Blani Dil J 13442 Dil Fa
Analysis Batch: 134611          Analyte         Total Phosphorus as P         Lab Sample ID: MB 860-134428/4-A         Matrix: Water         Analysis Batch: 134611         Analyte         Total Phosphorus as P         Lab Sample ID: LCS 860-134428/47-A         Matrix: Water	Result <0.417 MB Result	Qualifier U MB Qualifier	0.41	7 	MDL Unit			12/08 Pr 12/08	Client Sa Client Sa repared 3/23 16:34	Prep E Analyz 12/11/23 ample ID: I Prep T Prep E Analyz 12/11/23 ID: Lab Co Prep T	Batch: 1 ed 12:36 Method Spe: To Batch: 1 ed 11:49 Sontrol S Sype: To	134423 Dil Fa I Blanl Dtal/N/ 134423 Dil Fa Sample Dtal/N/
Analysis Batch: 134611 Analyte Total Phosphorus as P Lab Sample ID: MB 860-134428/4-A Matrix: Water Analysis Batch: 134611 Analyte Total Phosphorus as P Lab Sample ID: LCS 860-134428/47-A	Result <0.417 MB Result	Qualifier U MB Qualifier	0.41	7 L 0	MDL Unit mg/L			12/08 Pr 12/08	Client Sa Client Sa repared 3/23 16:34	Prep E Analyz 12/11/23 ample ID: I Prep T Prep E Analyz 12/11/23 ID: Lab Co Prep T Prep E	Batch: 1 ed 12:36 Method Type: To Batch: 1 ed 11:49 Sontrol S	134428 Dil Fa I Blanl Dtal/NA 134428 Dil Fa Sample Dtal/NA
Analysis Batch: 134611 Analyte Total Phosphorus as P Lab Sample ID: MB 860-134428/4-A Matrix: Water Analysis Batch: 134611 Analyte Total Phosphorus as P Lab Sample ID: LCS 860-134428/47-A Matrix: Water Analysis Batch: 134611	Result <0.417 MB Result	Qualifier U MB Qualifier	0.41 R 0.020 Spike	L	MDL Unit mg/L			12/08 Pr 12/08 ient	23 16:34 Client Sa repared 3/23 16:34 Sample	Prep E Analyz 12/11/23 ample ID: I Prep T Prep E Analyz 12/11/23 ID: Lab Co Prep T Prep E %Rec	Batch: 1 ed 12:36 Method Spe: To Batch: 1 ed 11:49 Sontrol S Sype: To	134428 Dil Fac I Blank Dtal/NA 134428 Dil Fac Sample Dtal/NA
Analysis Batch: 134611 Analyte Total Phosphorus as P Lab Sample ID: MB 860-134428/4-A Matrix: Water Analysis Batch: 134611 Analyte Total Phosphorus as P Lab Sample ID: LCS 860-134428/47-A Matrix: Water	Result <0.417 MB Result	Qualifier U MB Qualifier	0.41	L	MDL Unit mg/L LCS Qualifier	Unit mg/L		12/08 Pr 12/08	Client Sa Client Sa repared 3/23 16:34	Prep E Analyz 12/11/23 ample ID: I Prep T Prep E Analyz 12/11/23 ID: Lab Co Prep T Prep E	Batch: 1 ed 12:36 Method Spe: To Batch: 1 ed 11:49 Sontrol S Sype: To	134428 Dil Fa I Blanl Dtal/NA 134428 Dil Fa Sample Dtal/NA
Analysis Batch: 134611  Analyte  Total Phosphorus as P  Lab Sample ID: MB 860-134428/4-A Matrix: Water Analysis Batch: 134611  Analyte  Total Phosphorus as P  Lab Sample ID: LCS 860-134428/47-A Matrix: Water Analysis Batch: 134611  Analyte  Total Phosphorus as P	Result           <0.417	Qualifier U MB Qualifier	0.41 R 0.020 Spike Added	LCS Result	MDL Unit mg/L LCS Qualifier	mg/L	D Cli	12/08 Pr 12/08 ient	3/23 16:34         Client Same         repared         3/23 16:34         Sample         %Rec         101	Prep E Analyz 12/11/23 ample ID: I Prep T Prep E Analyz 12/11/23 ID: Lab Co Prep T Prep E %Rec Limits 90 - 110	Batch: 1 12:36 Method Type: To Batch: 1 2 Sontrol S Satch: 1 Satch:	I Blani Dil Fa I Blani Dil Fa Dil Fa Dil Fa Sample Dtal/N/ 134423
Analysis Batch: 134611          Analyte         Total Phosphorus as P         Lab Sample ID: MB 860-134428/4-A         Matrix: Water         Analysis Batch: 134611         Analyte         Total Phosphorus as P         Lab Sample ID: LCS 860-134428/47-A         Matrix: Water         Analysis Batch: 134611         Analysis Batch: 134611         Analysis Batch: 134611         Analyte         Total Phosphorus as P         Lab Sample ID: LCS 860-134428/47-A         Matrix: Water         Analysis Batch: 134611         Analyte         Total Phosphorus as P         Lab Sample ID: LCSD 860-134428/48-A	Result           <0.417	Qualifier U MB Qualifier	0.41 R 0.020 Spike Added	LCS Result	MDL Unit mg/L LCS Qualifier	mg/L	D Cli	12/08 Pr 12/08 ient	3/23 16:34         Client Same         repared         3/23 16:34         Sample         %Rec         101	Prep E Analyz 12/11/23 ample ID: I Prep T Prep E Analyz ID: Lab Coc Prep T Prep E %Rec Limits 90 - 110 ab Contro	Batch: 1 12:36 Method Type: To Batch: 1 2 Sontrol S Type: To Batch: 1 Satch:	Dil Fa Dil Fa I Blani otal/N/ 13442: Dil Fa Sample otal/N/ 13442: Dil E Duj
Analysis Batch: 134611          Analyte         Total Phosphorus as P         Lab Sample ID: MB 860-134428/4-A         Matrix: Water         Analysis Batch: 134611         Analyte         Total Phosphorus as P         Lab Sample ID: LCS 860-134428/47-A         Matrix: Water         Analysis Batch: 134611         Analysis Batch: 134611         Analysis Batch: 134611         Analyte         Total Phosphorus as P         Lab Sample ID: LCS 860-134428/47-A         Matrix: Water         Analysis Batch: 134611         Analyte         Total Phosphorus as P         Lab Sample ID: LCSD 860-134428/48-A	Result           <0.417	Qualifier U MB Qualifier	0.41 R 0.020 Spike Added	LCS Result	MDL Unit mg/L LCS Qualifier	mg/L	D Cli	12/08 Pr 12/08 ient	3/23 16:34         Client Same         repared         3/23 16:34         Sample         %Rec         101	Prep E Analyz 12/11/23 ample ID: I Prep T Prep E Analyz ID: Lab Coc Prep T Prep E %Rec Limits 90 - 110 ab Contro	Batch: 1 12:36 Method Type: To Batch: 1 2 Sontrol S Satch: 1 Satch:	Dil Fa Dil Fa I Blani otal/N/ 13442: Dil Fa Sample otal/N/ 13442: Dil E Duj
Analysis Batch: 134611  Analyte  Total Phosphorus as P  Lab Sample ID: MB 860-134428/4-A Matrix: Water Analysis Batch: 134611  Analyte  Total Phosphorus as P  Lab Sample ID: LCS 860-134428/47-A Matrix: Water Analysis Batch: 134611  Analyte  Total Phosphorus as P	Result           <0.417	Qualifier U MB Qualifier	0.41 R 0.020 Spike Added	LCS Result	MDL Unit mg/L LCS Qualifier	mg/L	D Cli	12/08 Pr 12/08 ient	3/23 16:34         Client Same         repared         3/23 16:34         Sample         %Rec         101	Prep E Analyz 12/11/23 Ample ID: I Prep T Prep E Analyz ID: Lab Co Prep T Prep E %Rec Limits 90 - 110 Ample ID: ID Ample I	Batch: 1 12:36 Method Type: To Batch: 1 2 Sontrol S Type: To Batch: 1 Satch:	I Blani Dil Fa I Blani Dal/NA 134428 Dil Fa Sample Dal/NA 134428
Analysis Batch: 134611          Analyte         Total Phosphorus as P         Lab Sample ID: MB 860-134428/4-A         Matrix: Water         Analysis Batch: 134611         Analyte         Total Phosphorus as P         Lab Sample ID: LCS 860-134428/47-A         Matrix: Water         Analysis Batch: 134611         Analysis Batch: 134611         Analysis Batch: 134611         Analyte         Total Phosphorus as P         Lab Sample ID: LCS 860-134428/47-A         Matrix: Water         Analyte         Total Phosphorus as P         Lab Sample ID: LCSD 860-134428/48-A         Matrix: Water	Result           <0.417	Qualifier U MB Qualifier	0.41 R 0.020 Spike Added	LCS Result 5.176	MDL Unit mg/L LCS Qualifier	mg/L	D Cli	12/08 Pr 12/08 ient	3/23 16:34         Client Same         repared         3/23 16:34         Sample         %Rec         101	Prep E Analyz 12/11/23 Ample ID: I Prep T Prep E Analyz ID: Lab Co Prep T Prep E %Rec Limits 90 - 110 Ample ID: ID Ample I	Anterna Satch: 12:36 Method Type: To Batch: 12:36 Satch:	Dil Fac
Analysis Batch: 134611          Analyte         Total Phosphorus as P         Lab Sample ID: MB 860-134428/4-A         Matrix: Water         Analysis Batch: 134611         Analyte         Total Phosphorus as P         Lab Sample ID: LCS 860-134428/47-A         Matrix: Water         Analysis Batch: 134611         Analysis Batch: 134611         Analysis Batch: 134611         Analyte         Total Phosphorus as P         Lab Sample ID: LCS 860-134428/47-A         Matrix: Water         Analyte         Total Phosphorus as P         Lab Sample ID: LCSD 860-134428/48-A         Matrix: Water	Result           <0.417	Qualifier U MB Qualifier	0.41 R 0.020 	LCS Result 5.176	MDL Unit mg/L LCS Qualifier	mg/L	D Cli	12/08 Pr 12/08 ient	3/23 16:34         Client Same         repared         3/23 16:34         Sample         %Rec         101	Prep E Analyz 12/11/23 ample ID: I Prep T Prep E Analyz 12/11/23 ID: Lab Co Prep T Prep E %Rec Limits 90 - 110 Analyz Prep T Prep E	Anterna Satch: 12:36 Method Type: To Batch: 12:36 Satch:	I Blank Dil Fac I Blank Dil Fac Dil Fac Dil Fac Sample Dtal/NA 134428

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#### Method: 365.1 - Phosphorus, Total (Continued)

Lab Sample ID: LLCS 860-134428/7-A					Client	Sample		ontrol Sample
Matrix: Water							Prep	Type: Total/NA
Analysis Batch: 134611							Prep	Batch: 134428
	Spike	LLCS	LLCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Total Phosphorus as P	0.0200	0.02370		mg/L		119	70 - 130	

#### Method: SM 2510B - Conductivity, Specific Conductance

Lab Sample ID: MB 860-133978/2 Matrix: Water									Client Sa	ample ID: Metho Prep Type: T	
Analysis Batch: 133978											
		MB MB									
Analyte	Res	ult Qualifi	er RL		MDL	Unit		D	Prepared	Analyzed	Dil Fac
Specific Conductance	<1	0.0 U	10.0			umho/ 25C	'cm @			12/06/23 10:49	1
Lab Sample ID: 820-11094-1 DU									Client Sa	ample ID: WWTP	outfall
Matrix: Water										Prep Type: T	otal/NA
Analysis Batch: 133978											
	Sample S	Sample		DU	DU						RPD
Analyte	Result (	Qualifier		Result	Qua	lifier	Unit		D	RPD	Limit
Specific Conductance	1360			1347			umho/cm @ 25C	ו		1	20

#### Method: SM 2540C - Solids, Total Dissolved (TDS)

Matrix: Water										Client	Sample ID: M Prep Ty		
Analysis Batch: 133549													
	ME	З МВ											
Analyte	Resu	t Qualifier		RL		MDL	Unit		D	Prepared	Analyzed	I	Dil Fac
Total Dissolved Solids	<5.0	D U		5.00		I	mg/L				12/04/23 09	:41	1
Lab Sample ID: LCS 860-133549/2									Clie	nt Sample	e ID: Lab Cor	trol S	ample
Matrix: Water											Prep Ty	pe: To	tal/NA
Analysis Batch: 133549													
			Spike		LCS	LCS					%Rec		
Analyte			Added		Result	Qualif	fier	Unit	D	%Rec	Limits		
Total Dissolved Solids			1000		1001			mg/L		100	80 - 120		
Lab Sample ID: LCSD 860-133549/3								0		male ID.			
								U	ient Sa	mple ID:	Lab Control	Sampi	e Dup
Matrix: Water								CI	ient Sa	mple ID:	Lab Control Prep Ty		
								CI	lent Sa	mpie iD:			
Matrix: Water			Spike		LCSD	LCSD		CI	ient Sa	mpie iD:			
Matrix: Water			Spike Added		LCSD Result			Unit	lient Sa	-	Prep Ty		tal/NA
Matrix: Water Analysis Batch: 133549			•							-	Prep Ty %Rec	pe: To	tal/NA RPD
Matrix: Water Analysis Batch: 133549 Analyte			Added		Result			Unit		<b>%Rec</b> 101	Prep Ty %Rec Limits	<b>RPD</b>	tal/NA RPD Limit 10
Matrix: Water Analysis Batch: 133549 Analyte Total Dissolved Solids			Added		Result			Unit		<b>%Rec</b> 101	Prep Ty           %Rec           Limits           80 - 120	RPD 0 WTP 0	RPD Limit 10
Matrix: Water Analysis Batch: 133549 Analyte Total Dissolved Solids Lab Sample ID: 820-11094-1 DU			Added		Result			Unit		<b>%Rec</b> 101	Prep Ty %Rec Limits 80 - 120 Sample ID: W	RPD 0 WTP 0	RPD Limit 10
Matrix: Water Analysis Batch: 133549 Analyte Total Dissolved Solids Lab Sample ID: 820-11094-1 DU Matrix: Water Analysis Batch: 133549	ample Sa	mple	Added		<b>Result</b> 1006			Unit		<b>%Rec</b> 101	Prep Ty %Rec Limits 80 - 120 Sample ID: W	RPD 0 WTP 0	RPD Limit 10
Matrix: Water Analysis Batch: 133549 Analyte Total Dissolved Solids Lab Sample ID: 820-11094-1 DU Matrix: Water Analysis Batch: 133549	ample Sa Result Qu	•	Added		<b>Result</b> 1006	Qualif	fier	Unit		%Rec 101 Client	Prep Ty %Rec Limits 80 - 120 Sample ID: W	RPD 0 WTP 0	tal/NA RPD Limit 10 Dutfall tal/NA

#### Method: SM 2540D - Solids, Total Suspended (TSS)

Lab Sample ID: MB 860-133306/1											Client S	Sample ID		
Matrix: Water												Prep	Type: T	otal/NA
Analysis Batch: 133306														
	MB	MB												
Analyte	Result	Qualifier		RL		MDL	Unit		D	Р	repared	Anal	yzed	Dil Fac
Total Suspended Solids	<4.00	U	4	.00			mg/L					12/01/2	3 10:20	1
Lab Sample ID: LCS 860-133306/2									CI	ient	Sample	ID: Lab (	Control	Sample
Matrix: Water													Type: T	
Analysis Batch: 133306														
			Spike		LCS	LCS						%Rec		
Analyte			Added	R	esult	Qual	ifier	Unit		D	%Rec	Limits		
Total Suspended Solids		<u> </u>	100		99.00			mg/L	;	_	99	80 - 120		·
								~		<b>.</b>				
Lab Sample ID: LCSD 860-133306/3	5							C	ient	Sam	ipie iD:	Lab Conti	-	
Matrix: Water												Prep	Туре: Т	otal/NA
Analysis Batch: 133306														
			Spike	L	.CSD	LCSI	D					%Rec		RPD
Analyte			Added	R	esult	Qual	ifier	Unit		D	%Rec	Limits	RPD	Limit
Total Suspended Solids			100	1	102.0			mg/L			102	80 - 120	3	10
											Client S	Sample ID	: WWTP	outfal
Matrix: Water													Type: T	
Analysis Batch: 133306													.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
Analysis Baton. 100000	Sample San	nple			DU	DU								RPD
Analyte	Result Qua	•		R		Qual	ifior	Unit		D			RPD	
Total Suspended Solids	45.0				46.50			mg/L		_			3	
 Method: SM 4500 Cl G - Chlori	ne, Resid	ual												
_ Lab Sample ID: MB 860-133318/3											Client	Sample ID	· Methor	d Blank
Matrix: Water											onente		Type: T	
												Fieh	Type. T	Utal/11/
Analysis Batch: 133318	МР	мв												
Analysis		Qualifier		RL			11		D		u a va a va d	Amak	um a al	
Analyte Chlorine, Total Residual	<0.0500		0.0			MDL			<u> </u>	r	repared	Anal		Dil Fac
	<0.0500	0	0.0	500			mg/L					12/01/2	5 10.55	
Lab Sample ID: LCS 860-133318/4									CI	ient	Sample	D: Lab	Control S	Sample
Matrix: Water												Prep	Type: T	otal/NA
Analysis Batch: 133318														
			Spike		LCS	LCS						%Rec		
			Added	R	esult	Qual	ifier	Unit		D	%Rec	Limits		
Analvte			0.250		2508			mg/L		_	100	85 - 115		
Analyte Chlorine, Total Residual														
Chlorine, Total Residual	-							0	iont (	C		ah Cont	ol Same	
Chlorine, Total Residual Lab Sample ID: LCSD 860-133318/	5							C	ient	Sam	ple ID:	Lab Conti		
Chlorine, Total Residual Lab Sample ID: LCSD 860-133318/ Matrix: Water	5							C	ient	Sam	ple ID:		rol Samp Type: T	
Chlorine, Total Residual Lab Sample ID: LCSD 860-133318/	5			-			_	C	ient	Sam	ple ID:	Prep		otal/NA
Chlorine, Total Residual Lab Sample ID: LCSD 860-133318/ Matrix: Water Analysis Batch: 133318	5		Spike			LCSI			ient			Prep %Rec	Type: T	otal/NA
Chlorine, Total Residual Lab Sample ID: LCSD 860-133318/ Matrix: Water	5		Spike <u>Added</u> 0.250	R		LCSI Qual		Cl Unit mg/L	ient	Sam D	<b>%Rec</b> 98	Prep		otal/NA RPD

### **QC Sample Results**

Job ID: 820-11094-1

#### Method: SM5210B CBOD - Carbonaceous BOD, 5 Day

Lab Sample ID: SCB 860-134266/2 Matrix: Water Analysis Batch: 134266								Client S	ample ID: Meth Prep Type:	
	SCB	SCB								
Analyte	Result	Qualifier	RL	М	DL Unit		<u>D</u>	Prepared	Analyzed	Dil Fac
Carbonaceous Biochemical Oxygen	0.8460		0.0000020		mg/L				11/30/23 14:34	1
Demand			0							
Lab Sample ID: USB 860-134266/1								Client S	ample ID: Meth	od Blank
Matrix: Water									Prep Type:	Total/NA
Analysis Batch: 134266										
	USB	USB								
Analyte	Result	Qualifier	RL	М	DL Unit		D	Prepared	Analyzed	Dil Fac
Carbonaceous Biochemical Oxygen	0.1800		0.0000020		mg/L				11/30/23 14:31	1
Demand			0							
Lab Sample ID: LCS 860-134266/3							CI	ient Sample	ID: Lab Contro	Sample
Matrix: Water									Prep Type:	Total/NA
Analysis Batch: 134266										
			Spike	LCS L	cs				%Rec	
Analyte			Added	Result Q	ualifier	Unit		D %Rec	Limits	
Carbonaceous Biochemical			198	174.5		mg/L		88	85 _ 115	
Oxygen Demand										

## HPLC/IC

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-11094-1	WWTP outfall	Total/NA	Water	300.0	
MB 860-134603/44	Method Blank	Total/NA	Water	300.0	
LCS 860-134603/45	Lab Control Sample	Total/NA	Water	300.0	
LCSD 860-134603/46	Lab Control Sample Dup	Total/NA	Water	300.0	
General Chemistry	1				
rep Batch: 133193					
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-11094-1	WWTP outfall	Total/NA	Water	BOD Prep	· · ·
nalysis Batch: 13330	6				
Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
820-11094-1	WWTP outfall	Total/NA	Water	SM 2540D	· · · · ·
MB 860-133306/1	Method Blank	Total/NA	Water	SM 2540D	
LCS 860-133306/2	Lab Control Sample	Total/NA	Water	SM 2540D	
LCSD 860-133306/3	Lab Control Sample Dup	Total/NA	Water	SM 2540D	
820-11094-1 DU	WWTP outfall	Total/NA	Water	SM 2540D	
- Analysis Batch: 13331	8				
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-11094-1	WWTP outfall	Total/NA	Water	SM 4500 CI G	
MB 860-133318/3	Method Blank	Total/NA	Water	SM 4500 CI G	
LCS 860-133318/4	Lab Control Sample	Total/NA	Water	SM 4500 CI G	
LCSD 860-133318/5	Lab Control Sample Dup	Total/NA	Water	SM 4500 CI G	
Analysis Batch: 13344	4				
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-11094-1	WWTP outfall	Total/NA	Water	SM 4500 H+ B	
nalysis Batch: 13346	4				
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-11094-1	WWTP outfall	Total/NA	Water	353.2	
MB 860-133464/10	Method Blank	Total/NA	Water	353.2	
LCS 860-133464/11	Lab Control Sample	Total/NA	Water	353.2	
LCSD 860-133464/12	Lab Control Sample Dup	Total/NA	Water	353.2	
nalysis Batch: 13354	9				
Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batcl
820-11094-1	WWTP outfall	Total/NA	Water	SM 2540C	

820-11094-1	WWTP outfall	Total/NA	Water	SM 2540C
MB 860-133549/1	Method Blank	Total/NA	Water	SM 2540C
LCS 860-133549/2	Lab Control Sample	Total/NA	Water	SM 2540C
LCSD 860-133549/3	Lab Control Sample Dup	Total/NA	Water	SM 2540C
LLCS 860-133549/26	Lab Control Sample	Total/NA	Water	SM 2540C
820-11094-1 DU	WWTP outfall	Total/NA	Water	SM 2540C
Analysis Batch: 133978				
Analysis Batch. 199970				

Prep Batch Lab Sample ID **Client Sample ID** Prep Type Matrix Method 820-11094-1 WWTP outfall Total/NA Water SM 2510B Total/NA SM 2510B MB 860-133978/2 Method Blank Water LCS 860-133978/3 Total/NA SM 2510B Lab Control Sample Water

#### **General Chemistry (Continued)**

#### Analysis Batch: 133978 (Continued)

Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
LCSD 860-133978/4	Lab Control Sample Dup	Total/NA	Water	SM 2510B	
820-11094-1 DU	WWTP outfall	Total/NA	Water	SM 2510B	
nalysis Batch: 134266	i -				
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-11094-1	WWTP outfall	Total/NA	Water	SM5210B CBOD	133193
SCB 860-134266/2	Method Blank	Total/NA	Water	SM5210B CBOD	
USB 860-134266/1	Method Blank	Total/NA	Water	SM5210B CBOD	
LCS 860-134266/3	Lab Control Sample	Total/NA	Water	SM5210B CBOD	
rep Batch: 134428					
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batcl
820-11094-1	WWTP outfall	Total/NA	Water	365.2/365.3/365	
MB 860-134428/46-A	Method Blank	Total/NA	Water	365.2/365.3/365	
MB 860-134428/4-A	Method Blank	Total/NA	Water	365.2/365.3/365	
LCS 860-134428/47-A	Lab Control Sample	Total/NA	Water	365.2/365.3/365	
LCSD 860-134428/48-A	Lab Control Sample Dup	Total/NA	Water	365.2/365.3/365	
LLCS 860-134428/7-A	Lab Control Sample	Total/NA	Water	365.2/365.3/365	
nalysis Batch: 134611					
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-11094-1	WWTP outfall	Total/NA	Water	365.1	134428
MB 860-134428/46-A	Method Blank	Total/NA	Water	365.1	134428
MB 860-134428/4-A	Method Blank	Total/NA	Water	365.1	134428
LCS 860-134428/47-A	Lab Control Sample	Total/NA	Water	365.1	134428
LCSD 860-134428/48-A	Lab Control Sample Dup	Total/NA	Water	365.1	134428
LLCS 860-134428/7-A	Lab Control Sample	Total/NA	Water	365.1	134428
rep Batch: 134896					
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-11094-1	WWTP outfall	Total/NA	Water	351.2	
MB 860-134896/4-A	Method Blank	Total/NA	Water	351.2	
LCS 860-134896/33-A	Lab Control Sample	Total/NA	Water	351.2	
LCSD 860-134896/34-A	Lab Control Sample Dup				
LOOD 000-10+030/04-/1	Lab Control Sample Dup	Total/NA	Water	351.2	
LLCS 860-134896/5-A	Lab Control Sample	Total/NA Total/NA	Water Water	351.2 351.2	
	Lab Control Sample				
LLCS 860-134896/5-A	Lab Control Sample				Prep Batch
LLCS 860-134896/5-A malysis Batch: 135046	Lab Control Sample	Total/NA	Water	351.2	
LLCS 860-134896/5-A malysis Batch: 135046 Lab Sample ID	Lab Control Sample	Total/NA Prep Type	Water Matrix	351.2 Method	134896
LLCS 860-134896/5-A nalysis Batch: 135046 Lab Sample ID 820-11094-1	Lab Control Sample Client Sample ID WWTP outfall	Total/NA           Prep Type           Total/NA	Water Matrix Water	351.2 <u>Method</u> 351.2	134896 134896
LLCS 860-134896/5-A <b>nalysis Batch: 135046</b> <b>Lab Sample ID</b> 820-11094-1 MB 860-134896/4-A	Lab Control Sample Client Sample ID WWTP outfall Method Blank	Total/NA          Prep Type         Total/NA         Total/NA	Water Matrix Water Water	351.2 Method 351.2 351.2	134896 134896 134896
LLCS 860-134896/5-A <b>nalysis Batch: 135046</b> <b>Lab Sample ID</b> 820-11094-1 MB 860-134896/4-A LCS 860-134896/33-A	Lab Control Sample Client Sample ID WWTP outfall Method Blank Lab Control Sample	Total/NA           Prep Type           Total/NA           Total/NA           Total/NA	Water Matrix Water Water Water	351.2 Method 351.2 351.2 351.2	134896 134896 134896 134896
LLCS 860-134896/5-A <b>Lab Sample ID</b> 820-11094-1 MB 860-134896/4-A LCS 860-134896/33-A LCSD 860-134896/34-A	Lab Control Sample Client Sample ID WWTP outfall Method Blank Lab Control Sample Lab Control Sample Lab Control Sample	Total/NA           Prep Type           Total/NA           Total/NA           Total/NA           Total/NA           Total/NA	Water Matrix Water Water Water Water Water	351.2 Method 351.2 351.2 351.2 351.2 351.2	134896 134896 134896 134896
LLCS 860-134896/5-A <b>Lab Sample ID</b> 820-11094-1 MB 860-134896/4-A LCS 860-134896/33-A LCSD 860-134896/34-A LLCS 860-134896/5-A	Lab Control Sample Client Sample ID WWTP outfall Method Blank Lab Control Sample Lab Control Sample Lab Control Sample	Total/NA           Prep Type           Total/NA           Total/NA           Total/NA           Total/NA           Total/NA	Water Matrix Water Water Water Water Water	351.2 Method 351.2 351.2 351.2 351.2 351.2	134896 134896 134896 134896 134896
LLCS 860-134896/5-A <b>Lab Sample ID</b> 820-11094-1 MB 860-134896/4-A LCS 860-134896/33-A LCSD 860-134896/34-A LLCS 860-134896/5-A <b>malysis Batch: 135099</b>	Lab Control Sample Client Sample ID WWTP outfall Method Blank Lab Control Sample Lab Control Sample Lab Control Sample	Total/NA Prep Type Total/NA Total/NA Total/NA Total/NA Total/NA Total/NA	Water Matrix Water Water Water Water Water	351.2 Method 351.2 351.2 351.2 351.2 351.2 351.2 351.2	134896 134896 134896 134896 134896
LLCS 860-134896/5-A analysis Batch: 135046 Lab Sample ID 820-11094-1 MB 860-134896/4-A LCS 860-134896/33-A LCSD 860-134896/34-A LLCS 860-134896/5-A analysis Batch: 135099 Lab Sample ID	Lab Control Sample Client Sample ID WWTP outfall Method Blank Lab Control Sample Lab Control Sample Lab Control Sample Dup Lab Control Sample Client Sample ID	Total/NA Prep Type Total/NA Total/NA Total/NA Total/NA Total/NA Total/NA Prep Type	Water Matrix Water Water Water Water Water Matrix	351.2 Method 351.2 351.2 351.2 351.2 351.2 351.2 351.2 351.2 351.2	Prep Batch 134896 134896 134896 134896 134896 Prep Batch

**QC** Association Summary

### **QC Association Summary**

Client: Parkhill Smith & Cooper Inc. Project/Site: Stinnett WWTP Job ID: 820-11094-1

#### **General Chemistry**

#### Analysis Batch: 135532

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-11094-1	WWTP outfall	Total/NA	Water	1664B	
MB 860-135532/1	Method Blank	Total/NA	Water	1664B	
LCS 860-135532/2	Lab Control Sample	Total/NA	Water	1664B	
LCSD 860-135532/3	Lab Control Sample Dup	Total/NA	Water	1664B	

#### **Biology**

#### Analysis Batch: 2196

Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
820-11094-1	WWTP outfall	Total/NA	Water	9223B	

#### Client Sample ID: WWTP outfall

Date Collected: 11/28/23 14:30 Date Received: 11/29/23 08:50

Prep Type Total/NA Total/NA

#### Lab Sample ID: 820-11094-1 Matrix: Water

11/29/23 08:50	)									4
Batch	Batch		Dil	Initial	Final	Batch	Prepared			
Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab	5
Analysis	300.0		1			134603	12/12/23 03:10	WP	EET HOU	
Analysis	1664B		1	850 mL	1000 mL	135532	12/17/23 07:15	ТВ	EET HOU	6
Analysis	350.1		10	10 mL	10 mL	135099	12/12/23 11:30	ADL	EET HOU	7
Prep	351.2			20 mL	20 mL	134896	12/12/23 20:50	LD	EET HOU	
Analysis	351.2		7.143			135046	12/13/23 14:51	AA	EET HOU	8
Analysis	353.2		1	10 mL	10 mL	133464	12/01/23 21:55	LD	EET HOU	0
Prep	365.2/365.3/365			10 mL	10 mL	134428	12/08/23 16:34	LD	EET HOU	9
Analysis	365.1		5			134611	12/11/23 13:09	AA	EET HOU	
Analysis	SM 2510B		1			133978	12/06/23 10:49	KEG	EET HOU	10
Analysis	SM 2540C		1	100 mL	200 mL	133549	12/04/23 09:41	SA	EET HOU	
Analysis	SM 2540D		1	200 mL	1000 mL	133306	12/01/23 10:20	SA	EET HOU	11
Analysis	SM 4500 CI G		10	10 mL	10 mL	133318	12/01/23 10:55	SCI	EET HOU	10
Analysis	SM 4500 H+ B		1			133444	12/02/23 13:38	KEG	EET HOU	
Prep	BOD Prep					133193	11/30/23 12:00	ALL	EET HOU	13
Analysis	SM5210B CBOD		1	100 mL	300 mL	134266	11/30/23 14:25	ALL	EET HOU	
Analysis	9223B		1	100 mL	100 mL	2196	11/29/23 16:45	СТ	EET LUB	

#### Laboratory References:

EET HOU = Eurofins Houston, 4145 Greenbriar Dr, Stafford, TX 77477, TEL (281)240-4200

EET LUB = Eurofins Lubbock, 6701 Aberdeen Ave., Suite 8, Lubbock, TX 79424, TEL (806)794-1296

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#### Laboratory: Eurofins Lubbock

Laboratory: Eurofins	Lubbock			
All accreditations/certifications he	eld by this laboratory are listed. Not all accreditati	ons/certifications are applicable to this report		
Authority	Program	Identification Number	Expiration Date	
Texas	NELAP	T104704219-23-30	03-31-24	
Laboratory: Eurofins	Houston			D

#### Laboratory: Eurofins Houston

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

uthority	Program		Identification Number	Expiration Date
exas	NELAP		T104704215-23-53	06-30-24
The following analyte	are included in this report, but th	e laboratory is not certi	fied by the governing authority. This lis	t may include analyte
• •	•	e laboratory is not certi	fied by the governing authority. This lis	st may include analyte
• •	are included in this report, but th does not offer certification.	e laboratory is not certi	fied by the governing authority. This lis	st may include analyte
• •	•	e laboratory is not certi Matrix	fied by the governing authority. This lis Analyte	st may include analyte

#### Client: Parkhill Smith & Cooper Inc. Project/Site: Stinnett WWTP

Method	Method Description	Protocol	Laboratory
300.0	Anions, Ion Chromatography	EPA	EET HOU
1664B	HEM and SGT-HEM	1664B	EET HOU
350.1	Nitrogen, Ammonia	EPA	EET HOU
351.2	Nitrogen, Total Kjeldahl	EPA	EET HOU
353.2	Nitrogen, Nitrate-Nitrite	EPA	EET HOU
365.1	Phosphorus, Total	EPA	EET HOU
SM 2510B	Conductivity, Specific Conductance	SM	EET HOU
SM 2540C	Solids, Total Dissolved (TDS)	SM	EET HOU
SM 2540D	Solids, Total Suspended (TSS)	SM	EET HOU
SM 4500 CI G	Chlorine, Residual	SM	EET HOU
SM 4500 H+ B	pH	SM	EET HOU
SM5210B CBOD	Carbonaceous BOD, 5 Day	SM	EET HOU
9223B	Coliforms, Total, and E.Coll (Colilert - Quanti Tray)	SM	EET LUB
351.2	Nitrogen, Total Kjeldahl	EPA	EET HOU
365.2/365.3/365	Phosphorus, Total	EPA	EET HOU
BOD Prep	Preparation, BOD	SM	EET HOU

#### Protocol References:

1664B = EPA-821-98-002

EPA = US Environmental Protection Agency

SM = "Standard Methods For The Examination Of Water And Wastewater"

#### Laboratory References:

EET HOU = Eurofins Houston, 4145 Greenbriar Dr, Stafford, TX 77477, TEL (281)240-4200

EET LUB = Eurofins Lubbock, 6701 Aberdeen Ave., Suite 8, Lubbock, TX 79424, TEL (806)794-1296

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### Sample Summary

Client: Parkhill Smith & Cooper Inc. Project/Site: Stinnett WWTP

Lob Somelo ID	Client Semple ID	Matrix	Collected	Received
Lab Sample ID	Client Sample ID	Watrix	Collected	Received
820-11094-1	WWTP outfall	Water	11/28/23 14:30	11/29/23 08:50

Dermation     Phone       Jackson Vauthier     Phone       Company     Phone       Company     Phone       Parkhill Smith & Cooper Inc.     Due Date Requested:       Address     Due Date Requested:       City     TAT Requested (days):       Lubbock     State. Zp       Prone     Prone       Prone     Prone       Frone     Prone       Stinett WWTP     Stimett WWTP       Stimet     SSOW#:			
Cooper Inc.	GISM	alysis Req	
Cooper Inc.		alysis	Page 1 of 1
com	ed Sample (Yes or No)	Hq ,5	:# qop
com	ed Sample (Yes of No)		
com	ed Sample (Yes or No)		A - HCL B - NaOH C - Zn Acetate D - NaOANS
com	ed Sample (Yes or No)	CF ( uqe 323 <sup>.2'</sup>	
com	ed Sample (Yes or N	al Colif of Grea Nitrite al 4500	
	ed Sample (Yes	toT br ns liO -atetti tstlu2 subise	1 - Ice J - DI Water
	ed Sample	Coli ar F-HEM 51.2, N 5108, Mine R Mine R	C E E DTA C E C E A Y - Trizma L - E DA Z - other (specify)
	ed 5	oliqe' _ D' CHiq ::::::::::::::::::::::::::::::::::::	of con
	Type (Wawater Htte Type (Wawater Htte Sesolid, C-Comp, Corwasteroli, 20	162108_CB00 162108_CB00 162108_CB00 162108_CB164 - 3 100 - TS3 100	tal Numper I
Sample Identification Sample Date 1	ы Х	255 255 257 257 257 257 257 257 257 257	P Special Instructions/Note:
WWTP UUFFall 11/38/2023 3	1-8		
		820-11094 CI	Chain of Custody
Possible Hazard Identification	Radiological	Sample Disposal ( A fee may be assessed if samples are retained longer than       Return To Client	
sted: I, II, III, IV, Other (specify)		Requiremo	
Empty Kit Relinquished by: Date:	Time:	Method of S	
Relinquished by Date Time. Date Mine. 19/20	620	Received of Annal Off and Day	Date/Time 24/23 08/90 Company
<b>b</b>	Company	Received by	Date/Tîmé. •/ Company
Relinquished by Date/Time:	Company	Received by Da	Date/Time. Company
Custody Seals Intact: Custody Seal No.:		Cooler Temperatury(s) °C and Other Remarks: TK-4	t (-D,1)

🛟 eurofins

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06/08/2021

Eurofins Lubbock											1		i												
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Client Information (Sub Contract Lab)	Sampler			Lab PM: Patel, /	Lab PM: Patel, Anita							Carrier Tracking No(s)	Track	ng No	<u>(8)</u>			88	COC No: 820-8571 1	<u> </u>					
	Phone:			E-Mail: Anita.	E-Mail: Anita.Patel@et.eurofinsus.com	t.euro	finsu	S.CON				State of Origin: Texas	Ongi	-	Í			Page: Page	Page: Page 1 of 1		- {				
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5

**12** 13

Client: Parkhill Smith & Cooper Inc.

#### Login Number: 11094 List Number: 1 Creator: Triplett, Colby

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information	True	
s the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is 66mm (1/4").	N/A	

Job Number: 820-11094-1

List Source: Eurofins Lubbock

Client: Parkhill Smith & Cooper Inc.

#### Login Number: 11094 List Number: 2 Creator: Baker, Jeremiah

<6mm (1/4").

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is	True	

13

List Source: Eurofins Houston

List Creation: 11/30/23 12:16 PM

Appendix K

**Design Calculations** 

			Sti	innett 2/2023					
Cut and Fill Calc's		Surface Dimensions	Length	Inside top of Dike 533	Outside top of dike 557	At existing ground 48			Million Gallons
			Width	186	240	13		11.00	
	Side Slopes Top of Dike (ft)	3 12					<b>Water Surface Dime</b> Length Width	nsions	521 Connected to FL Calcs 174
Height of dike Above Ground Surface	Fill: X (ft) Area (ft^2) Length (ft) Volume (ft^3) Volume (cy)	8.5 318.75 1486.551761 <b>473,838</b> <b>17,549.57</b>	5						1.40 Acres
	<b>Cut:</b> Freeboard (ft)	2	Cut + Freeboard	Actual Cut					
	Deep (ft)	10	12	3.5	i				
	Volume (ft^3) Volume (cy)	321,281 11,899.29	205,742 7,620.08						
CUT: FILL 1.3		0.68	0.43						
Pond Liner To inside top of dike	Volume (ft^2) :	Bottom	Sides	Sum					
Deep End		52,522.55	49,124.79	101,647.34					
			Total (ft^2) Total (sy)	101,647.34 11,294.15					
Slope Protection	15.8	1 feet down the slope							
	Height Length	5 15	5						
	Area (ft^2) Area (sy)	21,796.82 2,421.87							
	Net Pond Liner Area (ft^2 Area (sy			21,796.82 2,421.87					

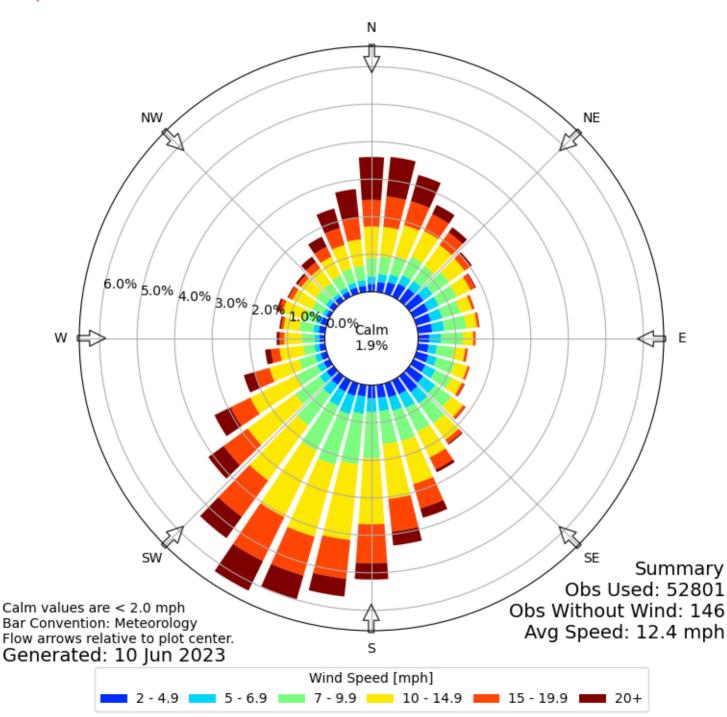
Storage Pond Calculations

Appendix L

Wind Rose



Obs Between: 25 Apr 2017 02:00 PM - 09 Jun 2023 06:00 PM America/Chicago



Appendix M

Solids Management Plan

### Sewage Sludge Management Plan

### CITY OF STINNETT, TEXAS

### Treatment Units and Processes Dimensions and Capacities

Facultative Lagoon #1 = 1.95 ac The deep end of the lagoon will be 12 ft in depth and accounts for approximately 25% of the surface area. The shallow end of the lagoon will be 8 ft in depth and accounts approximately 75% of the surface area.

Solids Generated at 100, 75, 50, and 25 Percent of Design Flow and Quantity of Solids to Be Removed and a Schedule For Solids Removal

The proposed facultative lagoon will provide primary treatment.

Design Flow		0.2 MGD
Influent BOD <sub>5</sub> Conce 50% BOD <sub>5</sub> Removed	entration d in Facultative Lagoon	200 mg/L <u>100 mg/L</u>
Remaining BOD₅ Co Average Effluent BO		100 mg/L <u>50 mg/L</u>
Average Net BOD₅ F	Removed	50 mg/L
100% Flow: 50	) x 0.20 x 8.351 x 0.351 =	29.3 lb/day sludge produced
75% Flow: 50	) x 0.15 x 8.351 x 0.351 =	22.0 lb/day sludge produced
50% Flow: 50	0 x 0.1 x 8.351 x 0.351 = <sup>-</sup>	14.7 <i>lb/day sludge produced</i>
25% Flow: 50	x 0.05 x 8.351 x 0.351 =	7.3 lb/day sludge produced

Due to the low flow conditions of the treatment facility, the amount of sludge produced will be negligible considering the size of the lagoons and the life expectancy of the synthetic liner. For this reason, the facultative lagoon is able to store and digest sludge throughout its design life. At this time, it is planned to de-water the lagoons at the end of the pond's useful life, let the sludge air dry to the extent feasible, then fill in the ponds, leaving the air dried sludge in situ. In any event, closure will follow the TCEQ rules in effect at that future time.

Appendix N

Annual Cropping Plan

#### APPENDIX N

#### **ANNUAL CROPPING PLAN**

### Stinnett, Texas

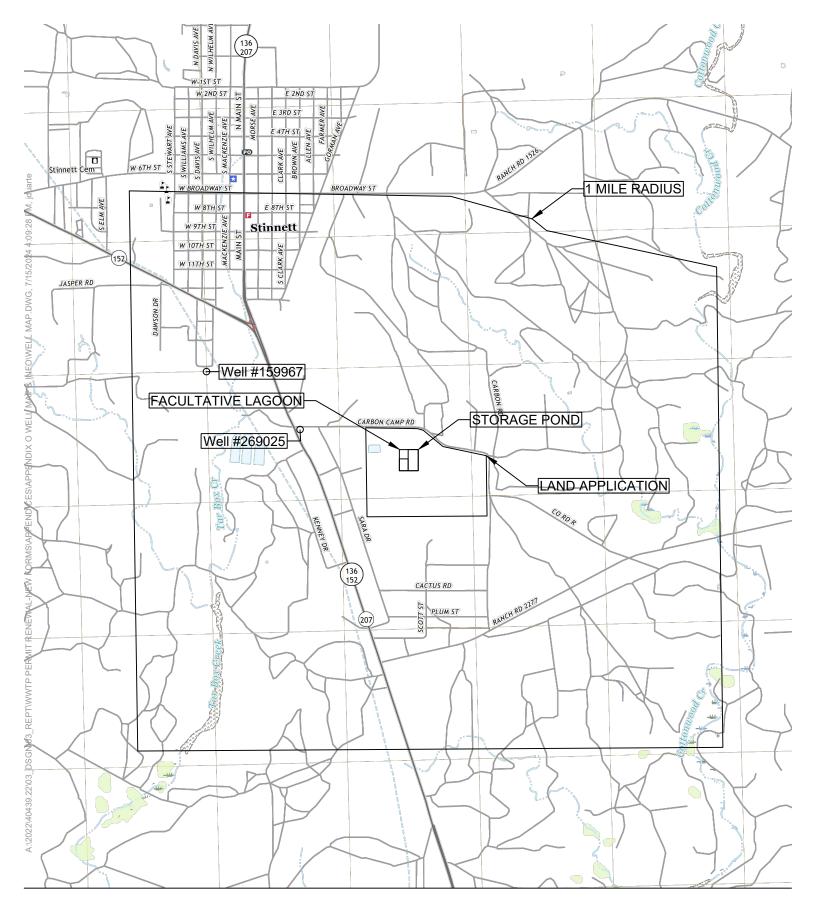
- A. See attached Soil Map(Appendix Q)
- B. The City of Stinnett grows approximately 160 acres of Native Perennial and Rye Grass, as shown on the attached map. These crops are capable of being grown year round.
- C. N/A
- D. Typical Annual Growing Season is as follows:

Month	Native Perennial and Rye Grass
January	Х
February	Х
March	Х
April	Х
May	Х
June	Х
August	Х
September	Х
October	Х
November	Х
December	Х

- E. The City of Stinnett will provide essential nutrients to keep the grasses healthy year round.
- F. There is no minimum harvest height.
- G. No additional water requirements are necessary.
- H. According to Table 3 of TAC 309.20, ryegrass is relatively salt tolerant with 6.0 8.0 millimhos/cm at 25° C
- I. The land application area will be mowed as necessary
- J. The crop is existing native vegetation that will not be harvested.

Appendix O

Well Map and Info



### City of Stinnett Wastewater Parkhill **Treatment Plant Renewal**

Parkhill.com

Issue: Date: Project No: Sheet:

Well Map

Renewal 07/10/2024 40439.22 1 OF 1

**City of Stinnett** P.O. Box 909 Stinnett, TX 79083

	STATE OF TEXAS WELL REP	PORT for Trac	king #159967
Owner:	BUNK FARLEY	Owner Well #:	11-08
Address:	HCR 2 BOX 113 STINNETT, TX 79083	Grid #:	06-13-5
Well Location:		Latitude:	35° 48' 46" N
	STINNETT, TX 79083	Longitude:	101° 26' 46" W
Well County:	Hutchinson	Elevation:	3152 ft. above sea level
Type of Work:	New Well	Proposed Use:	Stock

Drilling Start Date: 11/14/2008 Drilling End Date: 11/14/2008

	Diameter	(in.)	Top Depth (ft.)	Bottom Dept	h (ft.)
Borehole:	9		0	355	
Drilling Method:	Mud (Hydrauli	c) Rotary			
Borehole Completion:	Filter Packed				
	Top Depth (ft.)	Bottom Depth (ft.)	Filter	Material	Size
ilter Pack Intervals:	20	355	Gr	avel	#1 fine
	Top Depth (ft.)	Bottom Depth (	(ft.) D	escription (number of sa	cks & material)
Annular Seal Data:	2	20		5	
Seal Method: Ha	and Mixed		Distance to F	Property Line (ft.): N	/A
Sealed By: Dr	iller			otic Field or other ontamination (ft.): <b>N</b>	I/A
			Distance to	Septic Tank (ft.): N	lo Data
			Metho	od of Verification: <b>N</b>	o Data
Surface Completion:	Pitless Adapte	r Used			
Water Level:	116 ft. below la	and surface on <b>20</b>	<b>08-11-14</b> Mea	surement Method:	Unknown
Packers:	No Data				
Type of Pump:	No Data				
Well Tests:	Bailer			nours, no drawdow	

\_

	Strata Depth (ft.)	Water Type	
Water Quality:	No Data	No Data	
		Chemical Analysis Ma	ade: No
		wingly penetrate any strata wh contained injurious constituen	
	driller's direct supervision correct. The driller under		statements herein are true and the required items will result in
	driller's direct supervision correct. The driller under	<ul> <li>and that each and all of the s stood that failure to complete ed for completion and resubmine</li> </ul>	statements herein are true and the required items will result in
	driller's direct supervisior correct. The driller under the report(s) being return	<ul> <li>and that each and all of the s stood that failure to complete ed for completion and resubmine</li> </ul>	statements herein are true and the required items will result in
	driller's direct supervisior correct. The driller under the report(s) being return LES TAYLOR DRILLIN P.O. BOX 310	n) and that each and all of the s rstood that failure to complete ed for completion and resubmin IG	statements herein are true and the required items will result in
Company Information:	driller's direct supervision correct. The driller under the report(s) being return LES TAYLOR DRILLIN P.O. BOX 310 SUNRAY, TX 79086	and that each and all of the structure to complete the structure to complete the structure for completion and resubmining structures and the structure structure structures and the structure structure structures and s	statements herein are true and the required items will result in ittal.

#### Lithology: DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing: BLANK PIPE & WELL SCREEN DATA

From (ft) To (ft) Description	Dia. (in.) New/Used Type Setting From/To (ft.)
0 120 surface sand gravel & clay	5 N STEEL +2 -3
120 160 clay & sandy clay w/sand & sandstone	5 N PVC -3 245
160 200 clay & sandy clay w/sand strips	5 N PERFS 245 345 .050
200 240 clay & sandy clay w/sand strips	5 N PVC 345 355
240 280 fine to med fairly loose	
280 320 fairly loose sand clay & white rock	
320 355 white rock, some broken & clay(red)	

### IMPORTANT NOTICE FOR PERSONS HAVING WELLS DRILLED CONCERNING CONFIDENTIALITY

TEX. OCC. CODE Title 12, Chapter 1901.251, authorizes the owner (owner or the person for whom the well was drilled) to keep information in Well Reports confidential. The Department shall hold the contents of the well log confidential and not a matter of public record if it receives, by certified mail, a written request to do so from the owner.

Please include the report's Tracking Number on your written request.

Texas Department of Licensing and Regulation P.O. Box 12157 Austin, TX 78711 (512) 334-5540

STATE OF TEXAS WELL REPORT for Tracking #269025					
Owner:	Dusty Irvin	Owner Well #:	No Data		
Address:	Box 3432 Stinnett, TX 79083	Grid #:	06-13-5		
Well Location:	105 Scott St	Latitude:	35° 48' 33" N		
	Stinnett, TX	Longitude:	101° 26' 16" W		
Well County:	Hutchinson	Elevation:	No Data		
Type of Work:	New Well	Proposed Use:	Domestic		

Drilling Start Date: 10/7/2011 Drilling

Drilling End Date: 10/7/2011

	Diameter (	in.)	Top Depth (ft.)	Bottom Dept	h (ft.)
Borehole:	9		0	445	
Drilling Method:	Mud (Hydraulic) Rotary				
Borehole Completion:	Filter Packed				
	Top Depth (ft.)	p Depth (ft.) Bottom Depth (ft.)		Material	Size
Filter Pack Intervals:	22	245	Gr	avel	8/16
	Top Depth (ft.)	Bottom Dept	h (ft.) D	Description (number of sacks & material)	
Annular Seal Data:	2	22		5 cement	
	330	335		bentonite	
Seal Method: tre	emmie		Distance to F	Property Line (ft.): 5	0+
Sealed By: Ma	ark			tic Field or other ontamination (ft.):	lo Data
			Distance to	Septic Tank (ft.): N	lo Data
			Metho	od of Verification: <b>n</b>	neasured
Surface Completion: Pitless Adapter Used					
Water Level:	186 ft. below land surface on 2011-10-07 Measurement Method: Unknown				
Packers:	No Data				
Type of Pump:	Submersible				
Well Tests:	Bailer	Yield: 12	GPM with 112 ft	. drawdown after 1	hours

\_

	Strata Depth (ft.)	Water Type		
Water Quality:	No Data	No Data		
		Chemical Analysis Made	e: <b>No</b>	
		vingly penetrate any strata which contained injurious constituents?		
Certification Data:	driller's direct supervision) correct. The driller unders	e driller drilled this well (or the w ) and that each and all of the sta stood that failure to complete the ed for completion and resubmitta	atements her e required ite	ein are true and
Certification Data: Company Information:	driller's direct supervision) correct. The driller unders the report(s) being returne	) and that each and all of the sta stood that failure to complete the	atements her e required ite	ein are true and
	driller's direct supervision) correct. The driller unders the report(s) being returne	) and that each and all of the sta stood that failure to complete the	atements her e required ite	ein are true and
	driller's direct supervision) correct. The driller unders the report(s) being returner K-Ran Drilling 5230 Hester	) and that each and all of the sta stood that failure to complete the ed for completion and resubmitta	atements her e required ite	ein are true and
Company Information:	driller's direct supervision) correct. The driller unders the report(s) being returner K-Ran Drilling 5230 Hester Amarillo, TX 79124	) and that each and all of the sta stood that failure to complete the ed for completion and resubmitta License	atements her e required ite al.	rein are true and ems will result in 2848

### Lithology: DESCRIPTION & COLOR OF FORMATION MATERIAL

Top (ft.)	Bottom (ft.)	Description
0	2	top soil
2	8	reddish sand
8	19	light brown loose sand
19	34	light brown sandy clay
34	45	light green clay
45	56	dolomite (drill soft)
56	208	red clay
208	370	red clay with red sand
370	445	red clay with light brown sand

### Casing: BLANK PIPE & WELL SCREEN DATA

Dia. (in.) New/Used	Туре	Setting From/To (ft.)	
5 new pvc 0-260	200 cl		
5 new pvc 260-36	60 <b>250</b> (	cl	
5 new perf .035 3	60-440	200 cl	
5' blank on botto	m		

### IMPORTANT NOTICE FOR PERSONS HAVING WELLS DRILLED CONCERNING CONFIDENTIALITY

TEX. OCC. CODE Title 12, Chapter 1901.251, authorizes the owner (owner or the person for whom the well was drilled) to keep information in Well Reports confidential. The Department shall hold the contents of the well log confidential and not a matter of public record if it receives, by certified mail, a written request to do so from the owner.

Please include the report's Tracking Number on your written request.

Texas Department of Licensing and Regulation P.O. Box 12157 Austin, TX 78711 (512) 334-5540 Appendix P

**Ground Water Quality** 

### Groundwater Quality Report

The City of Stinnett Wastewater Treatment Plant and effluent disposal site are located in central Hutchison County, south of Stinnett, Texas. The site is located within the boundaries of the Ogallala Aquifer, a major aquifer in West Texas. Please refer to the map provided for further details. The maps and following information was obtained from Texas Water Development Board Groundwater Database.

The Ogallala Aquifer – is unconfined and the largest aquifer in the United States. The aquifer consists of sand, gravel, clay and silt and has a maximum thickness of 800 feet. Freshwater saturated thickness of the aquifer averages 95 feet.

The proposed plant is expected to have minimal to no impact on groundwater in the area. Year round operation at maximum permitted flow would result in 224.03 acreft/year of applied effluent over 160 acres of non-public access land. Effluent will be applied at a rate to not penetrate past the root zone into the groundwater. The proposed facility will utilize 60 mil HDPE linear and 20 oz geotextile, which will be an improvement from the existing lagoon system.

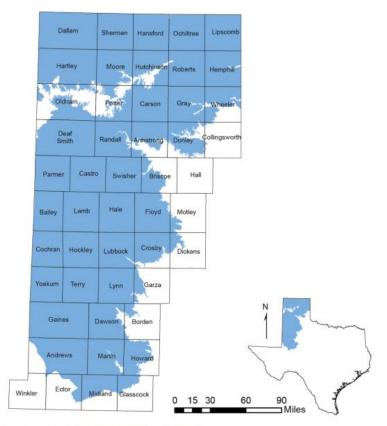


Figure 6-24. Extent of the Ogallala Aquifer in Texas.

Appendix Q

Soil Map and Analysis



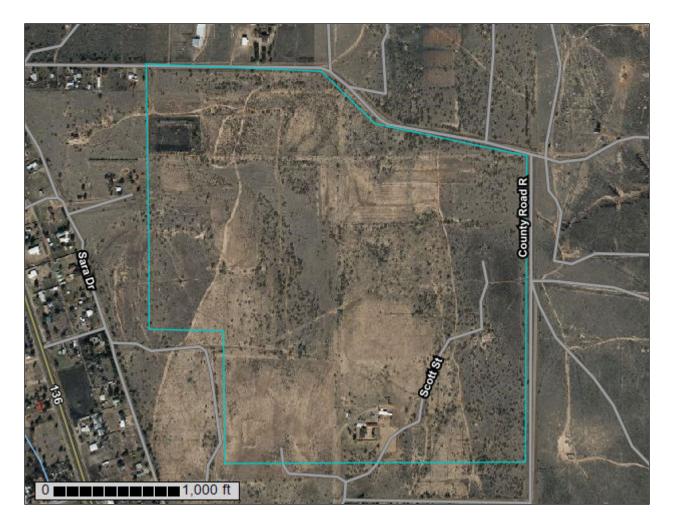
United States Department of Agriculture

Natural Resources Conservation

Service

A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants

# Custom Soil Resource Report for Hutchinson County, Texas



### Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (https://offices.sc.egov.usda.gov/locator/app?agency=nrcs) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/? cid=nrcs142p2\_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

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## **How Soil Surveys Are Made**

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

# Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

### Custom Soil Resource Report Soil Map



	MAP L	EGEND	MAP INFORMATION
Area of In	<b>terest (AOI)</b> Area of Interest (AOI)	Spoil Area	The soil surveys that comprise your AOI were mapped at 1:24,000.
 Special ©	Soil Map Unit Polygons Soil Map Unit Lines Soil Map Unit Points <b>Point Features</b> Blowout	<ul> <li>Very Stony Spot</li> <li>Wet Spot</li> <li>Other</li> <li>Special Line Features</li> <li>Water Features</li> <li>Streams and Canals</li> </ul>	Warning: Soil Map may not be valid at this scale. Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.
⊠ ※ ◇ 光 ⊹ ◎ ● ◆ ▲ ☆ ● ● ◇	Borrow Pit Clay Spot Closed Depression Gravel Pit Gravelly Spot Landfill Lava Flow Marsh or swamp Mine or Quarry Miscellaneous Water Perennial Water Rock Outcrop Saline Spot Sandy Spot Severely Eroded Spot Sinkhole	Transportation+++Rails→Interstate Highways→US Routes→Major Roads→Local RoadsBackgrout▲Aerial Photography	<ul> <li>Please rely on the bar scale on each map sheet for map measurements.</li> <li>Source of Map: Natural Resources Conservation Service Web Soil Survey URL: Coordinate System: Web Mercator (EPSG:3857)</li> <li>Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.</li> <li>This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.</li> <li>Soil Survey Area: Hutchinson County, Texas Survey Area Data: Version 19, Aug 24, 2022</li> <li>Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.</li> <li>Date(s) aerial images were photographed: Nov 13, 2022—Nov</li> </ul>
\$ Ø	Slide or Slip Sodic Spot		21, 2022 The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

### **Map Unit Legend**

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
DaA	Ady fine sandy loam, 0 to 1 percent slopes	78.6	42.6%
DaB	Ady fine sandy loam, 1 to 3 percent slopes	105.9	57.4%
Totals for Area of Interest		184.4	100.0%

### **Map Unit Descriptions**

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however,

onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

### **Hutchinson County, Texas**

### DaA—Ady fine sandy loam, 0 to 1 percent slopes

### **Map Unit Setting**

National map unit symbol: 2w84l Elevation: 2,200 to 4,920 feet Mean annual precipitation: 15 to 26 inches Mean annual air temperature: 55 to 63 degrees F Frost-free period: 180 to 220 days Farmland classification: Farmland of statewide importance

### **Map Unit Composition**

Ady and similar soils: 80 percent Minor components: 20 percent Estimates are based on observations, descriptions, and transects of the mapunit.

### **Description of Ady**

### Setting

Landform: Erosion remnants, interfluves, hillslopes Landform position (two-dimensional): Summit, shoulder Landform position (three-dimensional): Crest, interfluve, side slope Down-slope shape: Convex, linear Across-slope shape: Convex Parent material: Loamy slope alluvium

### **Typical profile**

A - 0 to 10 inches: fine sandy loam Bt - 10 to 30 inches: sandy clay loam Btk1 - 30 to 48 inches: sandy clay loam Btk2 - 48 to 80 inches: clay loam

### **Properties and qualities**

Slope: 0 to 1 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Negligible
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.57 to 1.98 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 30 percent
Maximum salinity: Nonsaline to very slightly saline (0.5 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 4.0
Available water supply, 0 to 60 inches: Moderate (about 8.7 inches)

### Interpretive groups

Land capability classification (irrigated): 2e Land capability classification (nonirrigated): 3c Hydrologic Soil Group: B Ecological site: R077EY066TX - Sandy Loam 16-24" PZ Hydric soil rating: No

#### **Minor Components**

#### Alibates

Percent of map unit: 8 percent Landform: Erosion remnants, interfluves Landform position (two-dimensional): Summit Landform position (three-dimensional): Interfluve Down-slope shape: Linear Across-slope shape: Linear Ecological site: R077EY051TX - Clay Loam 16-24" PZ Hydric soil rating: No

#### Mobeetie

Percent of map unit: 7 percent Landform: Valley flats, valley sides, scarps Landform position (two-dimensional): Footslope, backslope Landform position (three-dimensional): Base slope, side slope Down-slope shape: Convex Across-slope shape: Convex, concave Ecological site: R077EY061TX - Mixedland Slopes 16-24" PZ Hydric soil rating: No

#### Veal

Percent of map unit: 5 percent Landform: Valley sides, scarps, knolls Landform position (two-dimensional): Backslope, summit Landform position (three-dimensional): Side slope, crest Down-slope shape: Convex Across-slope shape: Concave, convex Ecological site: R077EY057TX - Limy Upland 16-24" PZ Hydric soil rating: No

# DaB—Ady fine sandy loam, 1 to 3 percent slopes

#### Map Unit Setting

National map unit symbol: 2w84m Elevation: 2,200 to 4,920 feet Mean annual precipitation: 15 to 26 inches Mean annual air temperature: 55 to 63 degrees F Frost-free period: 80 to 220 days Farmland classification: Farmland of statewide importance

## **Map Unit Composition**

Ady and similar soils: 80 percent Minor components: 20 percent Estimates are based on observations, descriptions, and transects of the mapunit.

#### **Description of Ady**

#### Setting

Landform: Erosion remnants, interfluves, hillslopes Landform position (two-dimensional): Summit, shoulder Landform position (three-dimensional): Crest, interfluve, side slope Down-slope shape: Convex, linear Across-slope shape: Convex Parent material: Loamy slope alluvium

#### **Typical profile**

A - 0 to 10 inches: fine sandy loam Bt - 10 to 30 inches: sandy clay loam Btk1 - 30 to 48 inches: sandy clay loam Btk2 - 48 to 80 inches: clay loam

# **Properties and qualities**

Slope: 1 to 3 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.57 to 1.98 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 30 percent
Maximum salinity: Nonsaline to very slightly saline (0.5 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 4.0
Available water supply, 0 to 60 inches: Moderate (about 8.7 inches)

# Interpretive groups

Land capability classification (irrigated): 2e Land capability classification (nonirrigated): 3c Hydrologic Soil Group: B Ecological site: R077EY066TX - Sandy Loam 16-24" PZ Hydric soil rating: No

# **Minor Components**

#### Alibates

Percent of map unit: 8 percent Landform: Erosion remnants, interfluves Landform position (two-dimensional): Summit Landform position (three-dimensional): Interfluve Down-slope shape: Convex, linear Across-slope shape: Convex Ecological site: R077EY051TX - Clay Loam 16-24" PZ Hydric soil rating: No

### Mobeetie

Percent of map unit: 7 percent Landform: Valley flats, valley sides, scarps Landform position (two-dimensional): Footslope, backslope Landform position (three-dimensional): Base slope, side slope Down-slope shape: Convex Across-slope shape: Convex, concave Ecological site: R077EY061TX - Mixedland Slopes 16-24" PZ Hydric soil rating: No

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Percent of map unit: 5 percent Landform: Valley sides, scarps, knolls Landform position (two-dimensional): Backslope, summit Landform position (three-dimensional): Side slope, crest Down-slope shape: Convex Across-slope shape: Concave, convex Ecological site: R077EY057TX - Limy Upland 16-24" PZ Hydric soil rating: No

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United States Department of Agriculture

Natural Resources Conservation

Service

A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants

# Custom Soil Resource Report for Hutchinson County, Texas



# Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (https://offices.sc.egov.usda.gov/locator/app?agency=nrcs) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/? cid=nrcs142p2\_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

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# **How Soil Surveys Are Made**

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

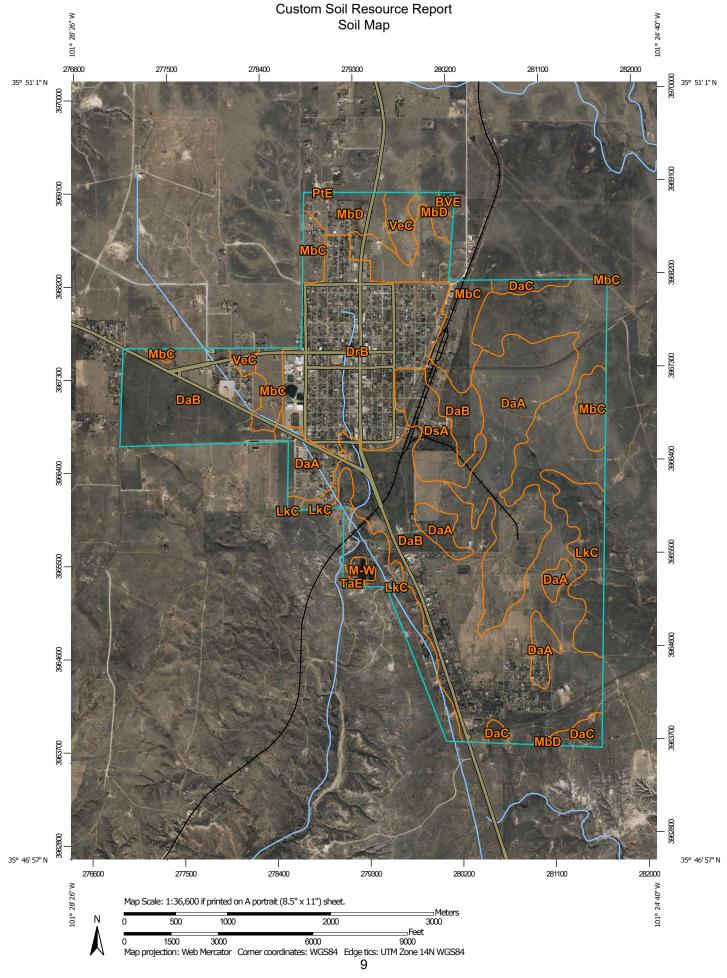
Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

# Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.



MAP LEGEND				MAP INFORMATION
Area of Inter	r <b>est (AOI)</b> Area of Interest (AOI)	8	Spoil Area Stony Spot	The soil surveys that comprise your AOI were mapped at 1:24,000.
	Soil Map Unit Polygons Soil Map Unit Lines	Ø0 ♥	Very Stony Spot Wet Spot	Please rely on the bar scale on each map sheet for map measurements.
	Soil Map Unit Points	۵ ••	Other Special Line Features	Source of Map: Natural Resources Conservation Service Web Soil Survey URL: Coordinate System: Web Mercator (EPSG:3857)
×	Blowout Borrow Pit Clay Spot	Water Fea	Streams and Canals	Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more
×	Closed Depression Gravel Pit Gravelly Spot	<b>* * *</b>	Interstate Highways US Routes Major Roads	accurate calculations of distance or area are required. This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.
Ă.	Landfill Lava Flow Marsh or swamp	Backgrou	Local Roads nd Aerial Photography	Soil Survey Area: Hutchinson County, Texas Survey Area Data: Version 19, Aug 24, 2022
☆ ©	Mine or Quarry Miscellaneous Water Perennial Water			Soil map units are labeled (as space allows) for map scales 1:50,000 or larger. Date(s) aerial images were photographed: Nov 13, 2022—Nov 21, 2022
× +	Rock Outcrop Saline Spot Sandy Spot			The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor
⇔ ◊	Severely Eroded Spot Sinkhole Slide or Slip			shifting of map unit boundaries may be evident.
ø	Sodic Spot			

# **Map Unit Legend**

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
BVE	Berda and Veal soils, 3 to 15 percent slopes	6.0	0.2%
DaA	Ady fine sandy loam, 0 to 1 percent slopes	529.9	15.2%
DaB	Ady fine sandy loam, 1 to 3 percent slopes	1,499.2	42.9%
DaC	Ady fine sandy loam, 3 to 5 percent slopes	55.3	1.6%
DrB	Dallam-Urban land complex, 0 to 3 percent slopes	523.1	15.0%
DsA	Dumas loam, 0 to 1 percent slopes	116.2	3.3%
LkC	Likes loamy fine sand, 1 to 8 percent slopes	277.3	7.9%
M-W	Miscellaneous water	11.5	0.3%
MbC	Mobeetie fine sandy loam, 3 to 5 percent slopes, cool	315.5	9.0%
MbD	Mobeetie fine sandy loam, cool, 5 to 12 percent slopes	104.4	3.0%
PtE Potter soils, 3 to 20 percent slopes, cool		0.1	0.0%
ТаЕ	Tascosa gravelly loam, 3 to 30 percent slopes	5.2	0.1%
VeC	Veal fine sandy loam, 3 to 5 percent slopes, cool	53.1	1.5%
Totals for Area of Interest		3,496.9	100.0%

# **Map Unit Descriptions**

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example. An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

# Hutchinson County, Texas

# BVE—Berda and Veal soils, 3 to 15 percent slopes

# Map Unit Setting

National map unit symbol: dbtz Elevation: 2,800 to 3,400 feet Mean annual precipitation: 18 to 24 inches Mean annual air temperature: 56 to 62 degrees F Frost-free period: 180 to 210 days Farmland classification: Not prime farmland

## **Map Unit Composition**

Berda and similar soils: 45 percent Veal and similar soils: 35 percent Minor components: 20 percent Estimates are based on observations, descriptions, and transects of the mapunit.

# **Description of Berda**

## Setting

Landform: Hillslopes Landform position (two-dimensional): Backslope Landform position (three-dimensional): Side slope Down-slope shape: Convex Across-slope shape: Linear Parent material: Neogene calcareous loamy colluvium and/or slope alluvium

# **Typical profile**

A - 0 to 10 inches: loam Bw - 10 to 24 inches: sandy clay loam Bk1 - 24 to 42 inches: sandy clay loam Bk2 - 42 to 80 inches: sandy clay loam

# **Properties and qualities**

Slope: 3 to 15 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Medium
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.57 to 1.98 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 30 percent
Maximum salinity: Nonsaline to slightly saline (0.5 to 4.0 mmhos/cm)
Sodium adsorption ratio, maximum: 5.0
Available water supply, 0 to 60 inches: High (about 9.3 inches)

# Interpretive groups

Land capability classification (irrigated): 6e Land capability classification (nonirrigated): 6e Hydrologic Soil Group: B Ecological site: R077EY055TX - Hardland Slopes 16-24" PZ Forage suitability group: Unnamed (G077EH000TX) *Other vegetative classification:* Unnamed (G077EH000TX) *Hydric soil rating:* No

### **Description of Veal**

### Setting

Landform: Valley sides, scarps, knolls Landform position (two-dimensional): Backslope, summit Landform position (three-dimensional): Side slope, crest Down-slope shape: Convex Across-slope shape: Concave, convex Parent material: Neogene calcareous loamy colluvium and/or slope alluvium

### **Typical profile**

A - 0 to 3 inches: loam Bk - 3 to 13 inches: gravelly fine sandy loam Bkk - 13 to 80 inches: gravelly loam

## Properties and qualities

Slope: 3 to 15 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Medium
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.57 to 1.98 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 60 percent
Maximum salinity: Nonsaline to very slightly saline (0.1 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: High (about 10.8 inches)

# Interpretive groups

Land capability classification (irrigated): 6e Land capability classification (nonirrigated): 6e Hydrologic Soil Group: B Ecological site: R077EY057TX - Limy Upland 16-24" PZ Hydric soil rating: No

#### **Minor Components**

#### Potter

Percent of map unit: 9 percent Landform: Draws, escarpments, valley sides Landform position (two-dimensional): Footslope, backslope Landform position (three-dimensional): Side slope, crest Down-slope shape: Linear, convex Across-slope shape: Concave, convex Ecological site: R077EY068TX - Very Shallow 16-24" PZ Hydric soil rating: No

### Mobeetie

Percent of map unit: 7 percent Landform: Valley flats, valley sides, scarps Landform position (two-dimensional): Footslope, backslope Landform position (three-dimensional): Base slope, side slope Down-slope shape: Convex Across-slope shape: Convex, concave Ecological site: R077EY061TX - Mixedland Slopes 16-24" PZ Hydric soil rating: No

#### Guadalupe, occasionally flooded

Percent of map unit: 4 percent Landform: Flood plains, drainageways Landform position (three-dimensional): Tread Down-slope shape: Linear, concave Across-slope shape: Linear, concave Ecological site: R077EY065TX - Sandy Bottomland 16-24" PZ Hydric soil rating: No

# DaA—Ady fine sandy loam, 0 to 1 percent slopes

#### Map Unit Setting

National map unit symbol: 2w84l Elevation: 2,200 to 4,920 feet Mean annual precipitation: 15 to 26 inches Mean annual air temperature: 55 to 63 degrees F Frost-free period: 180 to 220 days Farmland classification: Farmland of statewide importance

#### **Map Unit Composition**

Ady and similar soils: 80 percent Minor components: 20 percent Estimates are based on observations, descriptions, and transects of the mapunit.

### **Description of Ady**

#### Setting

Landform: Erosion remnants, interfluves, hillslopes Landform position (two-dimensional): Summit, shoulder Landform position (three-dimensional): Crest, interfluve, side slope Down-slope shape: Convex, linear Across-slope shape: Convex Parent material: Loamy slope alluvium

#### **Typical profile**

A - 0 to 10 inches: fine sandy loam Bt - 10 to 30 inches: sandy clay loam Btk1 - 30 to 48 inches: sandy clay loam Btk2 - 48 to 80 inches: clay loam

#### **Properties and qualities**

Slope: 0 to 1 percent Depth to restrictive feature: More than 80 inches Drainage class: Well drained Runoff class: Negligible

#### **Custom Soil Resource Report**

Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.57 to 1.98 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 30 percent
Maximum salinity: Nonsaline to very slightly saline (0.5 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 4.0
Available water supply, 0 to 60 inches: Moderate (about 8.7 inches)

#### Interpretive groups

Land capability classification (irrigated): 2e Land capability classification (nonirrigated): 3c Hydrologic Soil Group: B Ecological site: R077EY066TX - Sandy Loam 16-24" PZ Hydric soil rating: No

# **Minor Components**

#### Alibates

Percent of map unit: 8 percent Landform: Erosion remnants, interfluves Landform position (two-dimensional): Summit Landform position (three-dimensional): Interfluve Down-slope shape: Linear Across-slope shape: Linear Ecological site: R077EY051TX - Clay Loam 16-24" PZ Hydric soil rating: No

## Mobeetie

Percent of map unit: 7 percent Landform: Valley flats, valley sides, scarps Landform position (two-dimensional): Footslope, backslope Landform position (three-dimensional): Base slope, side slope Down-slope shape: Convex Across-slope shape: Convex, concave Ecological site: R077EY061TX - Mixedland Slopes 16-24" PZ Hydric soil rating: No

#### Veal

Percent of map unit: 5 percent Landform: Valley sides, scarps, knolls Landform position (two-dimensional): Backslope, summit Landform position (three-dimensional): Side slope, crest Down-slope shape: Convex Across-slope shape: Concave, convex Ecological site: R077EY057TX - Limy Upland 16-24" PZ Hydric soil rating: No

# DaB—Ady fine sandy loam, 1 to 3 percent slopes

## Map Unit Setting

National map unit symbol: 2w84m Elevation: 2,200 to 4,920 feet Mean annual precipitation: 15 to 26 inches Mean annual air temperature: 55 to 63 degrees F Frost-free period: 80 to 220 days Farmland classification: Farmland of statewide importance

## Map Unit Composition

Ady and similar soils: 80 percent Minor components: 20 percent Estimates are based on observations, descriptions, and transects of the mapunit.

### **Description of Ady**

## Setting

Landform: Erosion remnants, interfluves, hillslopes Landform position (two-dimensional): Summit, shoulder Landform position (three-dimensional): Crest, interfluve, side slope Down-slope shape: Convex, linear Across-slope shape: Convex Parent material: Loamy slope alluvium

# **Typical profile**

A - 0 to 10 inches: fine sandy loam Bt - 10 to 30 inches: sandy clay loam Btk1 - 30 to 48 inches: sandy clay loam Btk2 - 48 to 80 inches: clay loam

### **Properties and qualities**

Slope: 1 to 3 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.57 to 1.98 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 30 percent
Maximum salinity: Nonsaline to very slightly saline (0.5 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 4.0
Available water supply, 0 to 60 inches: Moderate (about 8.7 inches)

# Interpretive groups

Land capability classification (irrigated): 2e Land capability classification (nonirrigated): 3c Hydrologic Soil Group: B *Ecological site:* R077EY066TX - Sandy Loam 16-24" PZ *Hydric soil rating:* No

#### **Minor Components**

#### Alibates

Percent of map unit: 8 percent Landform: Erosion remnants, interfluves Landform position (two-dimensional): Summit Landform position (three-dimensional): Interfluve Down-slope shape: Convex, linear Across-slope shape: Convex Ecological site: R077EY051TX - Clay Loam 16-24" PZ Hydric soil rating: No

#### Mobeetie

Percent of map unit: 7 percent Landform: Valley flats, valley sides, scarps Landform position (two-dimensional): Footslope, backslope Landform position (three-dimensional): Base slope, side slope Down-slope shape: Convex Across-slope shape: Convex, concave Ecological site: R077EY061TX - Mixedland Slopes 16-24" PZ Hydric soil rating: No

#### Veal

Percent of map unit: 5 percent Landform: Valley sides, scarps, knolls Landform position (two-dimensional): Backslope, summit Landform position (three-dimensional): Side slope, crest Down-slope shape: Convex Across-slope shape: Concave, convex Ecological site: R077EY057TX - Limy Upland 16-24" PZ Hydric soil rating: No

# DaC—Ady fine sandy loam, 3 to 5 percent slopes

#### Map Unit Setting

National map unit symbol: 2w84n Elevation: 2,200 to 4,920 feet Mean annual precipitation: 15 to 26 inches Mean annual air temperature: 55 to 63 degrees F Frost-free period: 80 to 220 days Farmland classification: Farmland of statewide importance

#### **Map Unit Composition**

*Ady and similar soils:* 80 percent *Minor components:* 20 percent *Estimates are based on observations, descriptions, and transects of the mapunit.* 

#### **Description of Ady**

#### Setting

Landform: Erosion remnants, interfluves, hillslopes Landform position (two-dimensional): Summit, shoulder Landform position (three-dimensional): Crest, interfluve, side slope Down-slope shape: Convex, linear Across-slope shape: Convex Parent material: Loamy slope alluvium

#### **Typical profile**

A - 0 to 10 inches: fine sandy loam Bt - 10 to 30 inches: sandy clay loam Btk1 - 30 to 48 inches: sandy clay loam Btk2 - 48 to 80 inches: clay loam

# **Properties and qualities**

Slope: 3 to 5 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.57 to 1.98 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 30 percent
Maximum salinity: Nonsaline to very slightly saline (0.5 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 4.0
Available water supply, 0 to 60 inches: Moderate (about 8.7 inches)

# Interpretive groups

Land capability classification (irrigated): 3e Land capability classification (nonirrigated): 3e Hydrologic Soil Group: B Ecological site: R077EY066TX - Sandy Loam 16-24" PZ Hydric soil rating: No

#### **Minor Components**

#### Alibates

Percent of map unit: 8 percent Landform: Erosion remnants, interfluves Landform position (two-dimensional): Summit Landform position (three-dimensional): Interfluve Down-slope shape: Convex, linear Across-slope shape: Convex Ecological site: R077EY051TX - Clay Loam 16-24" PZ Hydric soil rating: No

### Mobeetie

Percent of map unit: 7 percent Landform: Valley flats, valley sides, scarps Landform position (two-dimensional): Footslope, backslope Landform position (three-dimensional): Base slope, side slope Down-slope shape: Convex Across-slope shape: Convex, concave Ecological site: R077EY061TX - Mixedland Slopes 16-24" PZ Hydric soil rating: No

#### Veal

Percent of map unit: 5 percent Landform: Valley sides, scarps, knolls Landform position (two-dimensional): Backslope, summit Landform position (three-dimensional): Side slope, crest Down-slope shape: Convex Across-slope shape: Concave, convex Ecological site: R077EY057TX - Limy Upland 16-24" PZ Hydric soil rating: No

# DrB-Dallam-Urban land complex, 0 to 3 percent slopes

## **Map Unit Setting**

National map unit symbol: dbv8 Elevation: 0 to 4,500 feet Mean annual precipitation: 8 to 60 inches Mean annual air temperature: 54 to 73 degrees F Frost-free period: 175 to 310 days Farmland classification: Not prime farmland

#### Map Unit Composition

Dallam and similar soils: 60 percent Urban land: 30 percent Minor components: 10 percent Estimates are based on observations, descriptions, and transects of the mapunit.

#### **Description of Dallam**

#### Setting

Landform: Hillslopes Landform position (three-dimensional): Side slope Down-slope shape: Linear Across-slope shape: Convex Parent material: Calcareous loamy colluvium and/or alluvium from the ogallala formation of miocene-pliocence age

#### **Typical profile**

H1 - 0 to 7 inches: fine sandy loam

- H2 7 to 34 inches: sandy clay loam
- H3 34 to 80 inches: sandy clay loam

#### **Properties and qualities**

Slope: 0 to 3 percent Depth to restrictive feature: More than 80 inches Drainage class: Well drained Runoff class: Low

#### **Custom Soil Resource Report**

Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.57 to 1.98 in/hr) Depth to water table: More than 80 inches Frequency of flooding: None Frequency of ponding: None Calcium carbonate, maximum content: 30 percent Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm) Available water supply, 0 to 60 inches: Moderate (about 8.3 inches)

#### Interpretive groups

Land capability classification (irrigated): 3e Land capability classification (nonirrigated): 3e Hydrologic Soil Group: B Ecological site: R077AY012TX - Sandy Loam 16-22" PZ Hydric soil rating: No

# **Description of Urban Land**

Typical profile H1 - 0 to 80 inches: variable

#### Interpretive groups

Land capability classification (irrigated): None specified Land capability classification (nonirrigated): 8 Hydrologic Soil Group: D Hydric soil rating: No

#### **Minor Components**

#### Unnamed

*Percent of map unit:* 10 percent *Hydric soil rating:* No

# DsA—Dumas loam, 0 to 1 percent slopes

#### Map Unit Setting

National map unit symbol: dbv9 Elevation: 3,000 to 4,750 feet Mean annual precipitation: 16 to 24 inches Mean annual air temperature: 54 to 57 degrees F Frost-free period: 175 to 190 days Farmland classification: All areas are prime farmland

#### Map Unit Composition

*Dumas and similar soils:* 100 percent *Estimates are based on observations, descriptions, and transects of the mapunit.* 

#### **Description of Dumas**

#### Setting

Landform: Sand sheets Down-slope shape: Linear Across-slope shape: Linear Parent material: Loamy eolian deposits

#### **Typical profile**

*H1 - 0 to 8 inches:* loam *H2 - 8 to 48 inches:* clay loam *H3 - 48 to 80 inches:* clay loam

#### **Properties and qualities**

Slope: 0 to 1 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Negligible
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.57 to 1.98 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 40 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: High (about 10.1 inches)

### Interpretive groups

Land capability classification (irrigated): 2e Land capability classification (nonirrigated): 3e Hydrologic Soil Group: B Ecological site: R077AY001TX - Deep Hardland 16-22" PZ Hydric soil rating: No

# LkC—Likes loamy fine sand, 1 to 8 percent slopes

#### **Map Unit Setting**

National map unit symbol: 2tqtm Elevation: 1,970 to 3,940 feet Mean annual precipitation: 15 to 26 inches Mean annual air temperature: 57 to 61 degrees F Frost-free period: 185 to 220 days Farmland classification: Not prime farmland

#### **Map Unit Composition**

*Likes and similar soils:* 95 percent *Minor components:* 5 percent *Estimates are based on observations, descriptions, and transects of the mapunit.* 

#### **Description of Likes**

#### Setting

Landform: Hillslopes, alluvial fans Landform position (two-dimensional): Summit, shoulder, backslope, footslope, toeslope Landform position (three-dimensional): Side slope Down-slope shape: Convex Across-slope shape: Convex Parent material: Calcareous sandy colluvium and/or alluvium

#### **Typical profile**

A - 0 to 10 inches: loamy fine sand Ck - 10 to 80 inches: loamy sand

#### **Properties and qualities**

Slope: 1 to 8 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Somewhat excessively drained
Runoff class: Very low
Capacity of the most limiting layer to transmit water (Ksat): High to very high (5.95 to 19.98 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 4 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: Low (about 4.9 inches)

#### Interpretive groups

Land capability classification (irrigated): 6e Land capability classification (nonirrigated): 6e Hydrologic Soil Group: A Ecological site: R077EY064TX - Sandy 16-24" PZ Hydric soil rating: No

#### **Minor Components**

#### Mobeetie

Percent of map unit: 2 percent Landform: Alluvial fans, hillslopes Landform position (two-dimensional): Summit, shoulder, backslope, footslope, toeslope Landform position (three-dimensional): Side slope Down-slope shape: Linear, convex Across-slope shape: Linear, convex Ecological site: R077EY061TX - Mixedland Slopes 16-24" PZ Hydric soil rating: No

#### Tivoli

Percent of map unit: 2 percent Landform: Dunes Landform position (two-dimensional): Summit Landform position (three-dimensional): Side slope Down-slope shape: Convex Across-slope shape: Convex *Ecological site:* R077EY063TX - Sand Hills 16-24" PZ *Hydric soil rating:* No

#### Guadalupe

Percent of map unit: 1 percent Landform: Terraces, flood plains Landform position (two-dimensional): Summit Landform position (three-dimensional): Tread Down-slope shape: Linear Across-slope shape: Linear Ecological site: R077EY065TX - Sandy Bottomland 16-24" PZ Hydric soil rating: No

# M-W—Miscellaneous water

#### **Map Unit Composition**

*Water, miscellaneous:* 100 percent *Estimates are based on observations, descriptions, and transects of the mapunit.* 

#### **Description of Water, Miscellaneous**

## Interpretive groups

Land capability classification (irrigated): None specified Land capability classification (nonirrigated): 8 Hydrologic Soil Group: D Hydric soil rating: No

# MbC—Mobeetie fine sandy loam, 3 to 5 percent slopes, cool

#### **Map Unit Setting**

National map unit symbol: 2tqtp Elevation: 2,200 to 4,700 feet Mean annual precipitation: 15 to 26 inches Mean annual air temperature: 57 to 61 degrees F Frost-free period: 180 to 210 days Farmland classification: Not prime farmland

#### Map Unit Composition

Mobeetie and similar soils: 85 percent Minor components: 15 percent Estimates are based on observations, descriptions, and transects of the mapunit.

#### **Description of Mobeetie**

#### Setting

Landform: Valley flats, hillslopes, valley sides Landform position (two-dimensional): Backslope Landform position (three-dimensional): Side slope *Down-slope shape:* Convex *Across-slope shape:* Linear, convex *Parent material:* Calcareous, sandy colluvium and/or slope alluvium

#### **Typical profile**

A - 0 to 10 inches: fine sandy loam Bk - 10 to 42 inches: fine sandy loam BCk - 42 to 80 inches: fine sandy loam

#### **Properties and qualities**

Slope: 3 to 5 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Very low
Capacity of the most limiting layer to transmit water (Ksat): High (1.98 to 5.95 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 15 percent
Maximum salinity: Nonsaline (0.0 to 1.0 mmhos/cm)
Available water supply, 0 to 60 inches: Moderate (about 7.8 inches)

#### Interpretive groups

Land capability classification (irrigated): 4e Land capability classification (nonirrigated): 4e Hydrologic Soil Group: A Ecological site: R077EY061TX - Mixedland Slopes 16-24" PZ Hydric soil rating: No

### **Minor Components**

#### Berda

Percent of map unit: 5 percent Landform: Hillslopes Landform position (two-dimensional): Backslope Landform position (three-dimensional): Side slope Down-slope shape: Convex Across-slope shape: Linear Ecological site: R077EY055TX - Hardland Slopes 16-24" PZ Hydric soil rating: No

#### Likes

Percent of map unit: 4 percent Landform: Hillslopes, alluvial fans Landform position (two-dimensional): Summit, shoulder, backslope, footslope, toeslope Landform position (three-dimensional): Side slope Down-slope shape: Convex Across-slope shape: Convex Ecological site: R077EY064TX - Sandy 16-24" PZ Hydric soil rating: No

#### Veal

Percent of map unit: 4 percent Landform: Valley sides, scarps, knolls Landform position (two-dimensional): Backslope, summit Landform position (three-dimensional): Side slope, crest Down-slope shape: Convex Across-slope shape: Concave, convex Ecological site: R077EY057TX - Limy Upland 16-24" PZ Hydric soil rating: No

## Guadalupe

Percent of map unit: 2 percent Landform: Terraces, flood plains, draws Landform position (two-dimensional): Footslope, toeslope, backslope Landform position (three-dimensional): Base slope, tread Down-slope shape: Linear, concave Across-slope shape: Linear Ecological site: R077EY065TX - Sandy Bottomland 16-24" PZ Hydric soil rating: No

# MbD—Mobeetie fine sandy loam, cool, 5 to 12 percent slopes

#### Map Unit Setting

National map unit symbol: 2tqty Elevation: 2,200 to 4,000 feet Mean annual precipitation: 15 to 26 inches Mean annual air temperature: 57 to 63 degrees F Frost-free period: 180 to 210 days Farmland classification: Not prime farmland

#### Map Unit Composition

Mobeetie and similar soils: 85 percent Minor components: 15 percent Estimates are based on observations, descriptions, and transects of the mapunit.

#### **Description of Mobeetie**

#### Setting

Landform: Valley flats, hillslopes, valley sides Landform position (two-dimensional): Backslope Landform position (three-dimensional): Side slope Down-slope shape: Convex Across-slope shape: Linear, convex Parent material: Neogene coarse-loamy colluvium and/or slope alluvium

#### **Typical profile**

*A - 0 to 10 inches:* fine sandy loam *Bk - 10 to 42 inches:* fine sandy loam *BCk - 42 to 80 inches:* fine sandy loam

#### **Properties and qualities**

Slope: 5 to 12 percent Depth to restrictive feature: More than 80 inches Drainage class: Well drained Runoff class: Low Capacity of the most limiting layer to transmit water (Ksat): High (1.98 to 5.95 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 15 percent
Maximum salinity: Nonsaline (0.1 to 1.0 mmhos/cm)
Available water supply, 0 to 60 inches: Moderate (about 7.8 inches)

#### Interpretive groups

Land capability classification (irrigated): 6e Land capability classification (nonirrigated): 6e Hydrologic Soil Group: A Ecological site: R077EY061TX - Mixedland Slopes 16-24" PZ Hydric soil rating: No

#### **Minor Components**

#### Berda

Percent of map unit: 5 percent Landform: Hillslopes Landform position (two-dimensional): Backslope Landform position (three-dimensional): Side slope Down-slope shape: Convex Across-slope shape: Linear Ecological site: R077EY055TX - Hardland Slopes 16-24" PZ Hydric soil rating: No

#### Veal

Percent of map unit: 4 percent Landform: Valley sides, scarps, knolls Landform position (two-dimensional): Backslope, summit Landform position (three-dimensional): Side slope, crest Down-slope shape: Convex Across-slope shape: Concave, convex Ecological site: R077EY057TX - Limy Upland 16-24" PZ Hydric soil rating: No

#### Likes

Percent of map unit: 4 percent Landform: Hillslopes, alluvial fans Landform position (two-dimensional): Summit, shoulder, backslope, footslope, toeslope Landform position (three-dimensional): Side slope Down-slope shape: Convex Across-slope shape: Convex Ecological site: R077EY064TX - Sandy 16-24" PZ Other vegetative classification: Unnamed (G077EH000TX) Hydric soil rating: No

## Guadalupe, occasionally flooded

Percent of map unit: 2 percent Landform: Flood plains, draws Landform position (two-dimensional): Toeslope, backslope Landform position (three-dimensional): Base slope, tread Down-slope shape: Linear, concave Across-slope shape: Linear *Ecological site:* R077EY065TX - Sandy Bottomland 16-24" PZ *Hydric soil rating:* No

# PtE—Potter soils, 3 to 20 percent slopes, cool

#### Map Unit Setting

National map unit symbol: 2w84c Elevation: 2,200 to 5,300 feet Mean annual precipitation: 15 to 26 inches Mean annual air temperature: 57 to 63 degrees F Frost-free period: 180 to 210 days Farmland classification: Not prime farmland

#### Map Unit Composition

*Potter and similar soils:* 85 percent *Minor components:* 15 percent *Estimates are based on observations, descriptions, and transects of the mapunit.* 

#### **Description of Potter**

#### Setting

Landform: Draws, escarpments, valley sides Landform position (two-dimensional): Footslope, backslope Landform position (three-dimensional): Side slope, crest Down-slope shape: Linear, convex Across-slope shape: Concave, convex Parent material: Calcareous loamy alluvium

#### Typical profile

A - 0 to 6 inches: gravelly loam Bkk - 6 to 15 inches: very gravelly sandy loam BCkk1 - 15 to 29 inches: very gravelly sandy loam BCkk2 - 29 to 80 inches: extremely gravelly fine sandy loam

## **Properties and qualities**

Slope: 3 to 20 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Very high
Capacity of the most limiting layer to transmit water (Ksat): Moderately low (0.01 to 0.14 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 80 percent
Maximum salinity: Nonsaline to very slightly saline (0.1 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 1.0
Available water supply, 0 to 60 inches: Low (about 3.9 inches)

#### Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 7e Hydrologic Soil Group: C Ecological site: R077EY068TX - Very Shallow 16-24" PZ Hydric soil rating: No

### **Minor Components**

#### Rock outcrop

Percent of map unit: 5 percent Landform: Escarpments on hillslopes Landform position (two-dimensional): Shoulder Landform position (three-dimensional): Side slope Down-slope shape: Convex Across-slope shape: Convex Hydric soil rating: No

#### Berda

Percent of map unit: 5 percent Landform: Hillslopes Landform position (two-dimensional): Backslope Landform position (three-dimensional): Side slope Down-slope shape: Convex Across-slope shape: Linear Ecological site: R077EY055TX - Hardland Slopes 16-24" PZ Hydric soil rating: No

#### Veal

Percent of map unit: 3 percent Landform: Valley sides, scarps, knolls Landform position (two-dimensional): Backslope, summit Landform position (three-dimensional): Side slope, crest Down-slope shape: Convex Across-slope shape: Concave, convex Ecological site: R077EY057TX - Limy Upland 16-24" PZ Hydric soil rating: No

#### Bippus, occasionally flooded, cool

Percent of map unit: 2 percent Landform: Flood plains, draws Landform position (two-dimensional): Toeslope Landform position (three-dimensional): Tread Down-slope shape: Linear Across-slope shape: Linear Ecological site: R077EY052TX - Draw 16-24" PZ Hydric soil rating: No

## TaE—Tascosa gravelly loam, 3 to 30 percent slopes

#### Map Unit Setting

National map unit symbol: 2zfmv Elevation: 2,500 to 4,300 feet Mean annual precipitation: 16 to 22 inches Mean annual air temperature: 56 to 59 degrees F Frost-free period: 180 to 200 days Farmland classification: Not prime farmland

#### Map Unit Composition

*Tascosa and similar soils:* 80 percent *Minor components:* 20 percent *Estimates are based on observations, descriptions, and transects of the mapunit.* 

### **Description of Tascosa**

#### Setting

Landform: Hillslopes Landform position (two-dimensional): Backslope Landform position (three-dimensional): Side slope Down-slope shape: Linear Across-slope shape: Linear Parent material: Neogene calcareous sandy and gravelly alluvium and/or colluvium

#### **Typical profile**

A - 0 to 8 inches: gravelly loam Bk - 8 to 14 inches: very gravelly loam Ck1 - 14 to 22 inches: very gravelly loam Ck2 - 22 to 80 inches: very gravelly sandy loam

#### **Properties and qualities**

Slope: 3 to 30 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Medium
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.57 to 1.98 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 50 percent
Maximum salinity: Nonsaline to very slightly saline (0.1 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: Low (about 4.8 inches)

#### Interpretive groups

Land capability classification (irrigated): 7e Land capability classification (nonirrigated): 7e Hydrologic Soil Group: B Ecological site: R077EY053TX - Gravelly 16-24" PZ Hydric soil rating: No

#### Minor Components

#### Mobeetie

Percent of map unit: 8 percent Landform: Hillslopes Landform position (two-dimensional): Backslope Landform position (three-dimensional): Side slope Down-slope shape: Linear Across-slope shape: Linear *Ecological site:* R077EY061TX - Mixedland Slopes 16-24" PZ *Hydric soil rating:* No

#### Likes

Percent of map unit: 6 percent Landform: Hillslopes Landform position (two-dimensional): Backslope Landform position (three-dimensional): Side slope Down-slope shape: Linear Across-slope shape: Linear Ecological site: R077EY064TX - Sandy 16-24" PZ Hydric soil rating: No

#### Veal

Percent of map unit: 4 percent Landform: Hillslopes Landform position (two-dimensional): Backslope Landform position (three-dimensional): Side slope Down-slope shape: Linear Across-slope shape: Linear Ecological site: R077EY057TX - Limy Upland 16-24" PZ Hydric soil rating: No

#### Alibates

Percent of map unit: 2 percent Landform: Hillslopes Landform position (two-dimensional): Backslope Landform position (three-dimensional): Side slope Down-slope shape: Linear Across-slope shape: Linear Ecological site: R077EY051TX - Clay Loam 16-24" PZ Hydric soil rating: No

#### VeC—Veal fine sandy loam, 3 to 5 percent slopes, cool

#### Map Unit Setting

National map unit symbol: 2w84j Elevation: 2,200 to 5,300 feet Mean annual precipitation: 15 to 26 inches Mean annual air temperature: 57 to 61 degrees F Frost-free period: 180 to 210 days Farmland classification: Not prime farmland

#### Map Unit Composition

Veal, cool, and similar soils: 85 percent Minor components: 15 percent Estimates are based on observations, descriptions, and transects of the mapunit.

#### **Description of Veal, Cool**

#### Setting

Landform: Valley sides, scarps, knolls Landform position (two-dimensional): Backslope, summit Landform position (three-dimensional): Side slope, crest Down-slope shape: Convex Across-slope shape: Concave, convex Parent material: Calcareous loamy colluvium and/or slope alluvium

#### **Typical profile**

A - 0 to 3 inches: fine sandy loam Bk - 3 to 13 inches: gravelly fine sandy loam Bkk1 - 13 to 54 inches: gravelly loam Bkk2 - 54 to 80 inches: gravelly loam

#### **Properties and qualities**

Slope: 3 to 5 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.57 to 1.98 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 60 percent
Maximum salinity: Nonsaline to very slightly saline (0.1 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: High (about 10.7 inches)

#### Interpretive groups

Land capability classification (irrigated): 3e Land capability classification (nonirrigated): 4e Hydrologic Soil Group: B Ecological site: R077EY057TX - Limy Upland 16-24" PZ Hydric soil rating: No

#### **Minor Components**

#### Berda

Percent of map unit: 4 percent Landform: Hillslopes Landform position (two-dimensional): Backslope Landform position (three-dimensional): Side slope Down-slope shape: Convex Across-slope shape: Linear Ecological site: R077EY055TX - Hardland Slopes 16-24" PZ Hydric soil rating: No

#### Potter

Percent of map unit: 4 percent Landform: Draws, escarpments, valley sides Landform position (two-dimensional): Footslope, backslope Landform position (three-dimensional): Side slope, crest Down-slope shape: Linear, convex Across-slope shape: Concave, convex *Ecological site:* R077EY068TX - Very Shallow 16-24" PZ *Hydric soil rating:* No

#### Mobeetie

Percent of map unit: 4 percent Landform: Valley flats, valley sides, scarps Landform position (two-dimensional): Footslope, backslope Landform position (three-dimensional): Base slope, side slope Down-slope shape: Convex Across-slope shape: Convex, concave Ecological site: R077EY061TX - Mixedland Slopes 16-24" PZ Hydric soil rating: No

#### Ady

Percent of map unit: 3 percent Landform: Hillslopes Landform position (two-dimensional): Backslope Landform position (three-dimensional): Side slope Down-slope shape: Convex Across-slope shape: Convex Ecological site: R077EY066TX - Sandy Loam 16-24" PZ Hydric soil rating: No

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Appendix R

Water Balance and Nitrogen Balance

#### APPENDIX R WATER BALANCE

						Tuble 1					
Month:	Avg. Rain	Avg. Run	Avg. Ri	ET_crop	Req. Lea	Total Needs	Eff. Needs	Net Evap.	Net Evap. R	Eff. App.	Cons. Res.
January	0.57961538	0.046159	0.53346	1.921	0.1166	2.0375687	1.50411214	2.8438462	0.047723	1.76954369	1.817267
February	0.53307692	0.056311	0.47677	2.1675	0.142	2.30954	1.83277417	3.2057692	0.053797	2.156204911	2.2100017
March	1.28076923	0.009794	1.27098	3.5063	0.1878	3.6940373	2.42306227	5.3165385	0.089218	2.85066149	2.9398797
April	1.69807692	0.071438	1.62664	4.811	0.2675	5.0785208	3.45188165	6.5419231	0.109782	4.061037241	4.1708189
May	2.32192308	0.248514	2.07341	5.8531	0.3175	6.170635	4.09722573	6.9365385	0.116404	4.820265567	4.9366694
June	2.56730769	0.340749	2.22656	6.4303	0.3532	6.7834056	4.55684658	9.1465385	0.15349	5.360995977	5.5144863
July	2.27038462	0.230618	2.03977	7.225	0.4356	7.6606159	5.62084971	9.6796154	0.162436	6.612764367	6.7752004
August	2.91115385	0.487784	2.42337	6.46	0.3391	6.7991206	4.37575031	8.4492308	0.141789	5.147941536	5.2897302
September	1.57884615	0.048581	1.53027	4.93	0.2856	5.2156146	3.68534908	7.0169231	0.117753	4.335704797	4.4534575
October	2.10269231	0.176202	1.92649	4.08	0.1809	4.2609181	2.33442732	5.4669231	0.091742	2.746385084	2.8381269
November	0.70692308	0.023885	0.68304	2.4608	0.1493	2.6100971	1.92705899	4.0438462	0.067861	2.267128228	2.334989
December	0.66038462	0.031118	0.62927	1.87	0.1042	1.9742351	1.34496853	2.9711538	0.04986	1.582315916	1.6321756
Total:	19.2111538	1.771152	17.44	51.715	2.8795	54.594309	37.1543065	71.618846	1.201854	43.7109488	44.912803

Table 1

					Table 2					
Month:	Eff. Rec.	MRD%	Rain Ma	Run Max	Ri(worst)	Total Ava.	DOM%	Net Ev.(	Storage	Acc. Stor.
January	6.9186319	3.01732	1.1046	0.000581	1.10406	8.022692	3.96544	3.3238	2.496553834	5.501859
February	9.2088513	2.77505	1.0159	0.000212	1.015735	10.22459	4.470104	3.7468	3.939887146	9.441746
March	8.5164672	6.66733	2.4409	0.291825	2.149086	10.66555	7.413346	6.2139	0.485010789	9.926757
April	8.7319708	8.83972	3.2362	0.643534	2.592689	11.32466	9.122015	7.6461	-1.83860974	8.088147
May	7.897598	12.0873	4.4252	1.321935	3.103224	11.00082	9.672264	8.1073	-3.81841289	4.269735
June	7.877938	13.3647	4.8928	1.625379	3.267439	11.14538	12.75387	10.69	-6.94879056	-2.67906
July	7.3230057	11.819	4.3269	1.260493	3.066443	10.38945	13.49719	11.313	-9.39524962	-12.0743
August	7.4954926	15.1547	5.5481	2.077096	3.471028	10.96652	11.78155	9.8753	-6.29520719	-18.3695
September	6.0183898	8.21904	3.009	0.533053	2.475938	8.494328	9.784352	8.2012	-5.40600289	-23.7755
October	6.5823119	10.946	4.0073	1.066669	2.940676	9.522988	7.623042	6.3896	-1.36054758	-25.1361
November	6.9257734	3.68005	1.3473	0.016031	1.331235	8.257008	5.638713	4.7264	0.694860819	-24.4412
December	6.6344864	3.43778	1.2586	0.008039	1.250532	7.885019	4.142958	3.4726	2.310444547	-22.1308
Total:	90.130917	100.008	36.613	8.844846	27.76809	117.899	99.86485	83.707		

Ν	itrogen E	Balance for Ryegrass
	-	Inputs
Design flow =	0.2	MGD
Design flow =	224	acre-ft/year
Area under irrigation =	160	acres
Design application rate =	1.40	acre-ft/acre/year
Nitrogen effluent		
concentration =	10	mg/L
Applied nitrogen effluent		
concentration =	8	mg/L (assuming 20% volatilization)
Design Total Nitrogen loading rate		
=	0.08	lbs N / acre / day
Design Total Nitrogen loading rate		
=	30	lbs N /acre / year
Crop nutrient uptake rate =	150	lbs N / acre/ year
Calculated liquid loading rate according	to §309	.20(b)(3)(C):
L = N / (2.7 * C)		
where,		
L = annual liquid loading (acre-f	t/year)	
C = effluent nitrogen concentra		/L)
-		plus 20% volatilization (lb/acre/year)
	0 -	
C =	8	mg/L (Assume 20% volitilzation)
N =		lb/acre/year
L=	6.94	acre-ft/year

Flow	200,000	GPD
Nitrogen	10	mg/L
Uptake	4,873.5	lbs N/ yr
Acreage	160	acres
Total N	30	lbs N/ ac-yr

Nitrogen Uptake Rate

150 lbs of N/acre/year

#### **Candice Calhoun**

From:	Paul Krueger < PKrueger@Parkhill.com>
Sent:	Thursday, January 23, 2025 1:52 PM
То:	Candice Calhoun; smiller@cityofstinnett.com
Cc:	Roy Haden
Subject:	RE: Application for Proposed Permit No. WQ0010291002 - City of Stinnett
Attachments:	TCEQ_Stinnett-ApplicationResponse_01.22.2025.pdf; Affected Land Owners Avery5160
	Template (002).docx

Hi Candice,

Please find our NOD response for the above referenced permit application attached. Feel free to reach out to me if you have any questions or would like to discuss further.

Thank you,

Paul Krueger, PE Civil Engineer

Parkhill 806.473.3715 | Parkhill.com

From: Candice Calhoun <Candice.Calhoun@tceq.texas.gov>
Sent: Thursday, January 9, 2025 3:28 PM
To: smiller@cityofstinnett.com
Cc: Paul Krueger <PKrueger@Parkhill.com>
Subject: RE: Application for Proposed Permit No. WQ0010291002 - City of Stinnett

My apologies, Please see the attached NOD with the corrected letterhead.



Candice Courville, LPS III Texas Commission on Environmental Quality Water Quality Division Application Review & Processing Team 512-239-4312 candice.calhoun@tceq.texas.gov

How is our customer service? Fill out our online customer satisfaction survey at <a href="http://www.tceq.texas.gov/customersurvey">www.tceq.texas.gov/customersurvey</a>

From: Candice Calhoun Sent: Thursday, January 9, 2025 3:24 PM To: <u>smiller@cityofstinnett.com</u> Cc: Paul Krueger < <u>PKrueger@Parkhill.com</u>>

#### **Candice Calhoun**

From:	Paul Krueger < PKrueger@Parkhill.com>
Sent:	Thursday, January 9, 2025 11:30 AM
То:	Candice Calhoun; smiller@cityofstinnett.com
Subject:	RE: Clarification Needed for WQ0010291002

Good Morning,

The final phase flow of 0.20 MGD is correct.

Thank you,

Paul Krueger, PE Civil Engineer

Parkhill 806.473.3715 | Parkhill.com

From: Candice Calhoun <Candice.Calhoun@tceq.texas.gov>
Sent: Thursday, January 9, 2025 11:23 AM
To: smiller@cityofstinnett.com
Cc: Paul Krueger <PKrueger@Parkhill.com>
Subject: Clarification Needed for WQ0010291002
Importance: High

Good morning, Ms. Miller,

I am working on the administrative review of Proposed Permit No. WQ0010291002 and need some clarification regarding the technical report, item 1.

In the previous permit for expired permit no. WQ0010291001, it was authorized for 0.3MGD. In the technical report provided in the new application, it looks like you are wanting to lower the final phase to 0.2MGD. Is this correct? I just want to make sure before I complete my review of the application or send any Notice of Deficiency (NOD) letter.

Please let me know if you have any questions.

Regards,

#### **Candice Calhoun**

From: Sent: To: Cc: Subject: Deba Dutta Thursday, January 9, 2025 11:55 AM Candice Calhoun Deba Dutta RE: Clarification Needed for WQ0010291002

Candice,

This is rare; however, I have seen such cases in the past, having a lower Final phase. I think, that should be okay.

Thanks.

Deba

From: Candice Calhoun <Candice.Calhoun@tceq.texas.gov>
Sent: Thursday, January 9, 2025 11:40 AM
To: Deba Dutta <Deba.Dutta@tceq.texas.gov>
Cc: Jose Alfonso Martinez <Jose.Martinez@tceq.texas.gov>
Subject: FW: Clarification Needed for WQ0010291002
Importance: High

Good morning, Deba,

The application for Proposed Permit No. WQ0010291002 was originally submitted as a major amendment renewal for WQ0010291001, but since their permit already expired, we entered it as a new application. In their amendment request they had put this:

- d. Check the box next to the appropriate application type
  - □ New
  - Major Amendment <u>with</u> Renewal
  - Major Amendment <u>without</u> Renewal
  - Renewal without changes

- Minor Amendment <u>with</u>
- Minor Amendment <u>with</u>
- Minor Modification of period
- e. For amendments or modifications, describe the proposed changes: <u>The City of S</u> <u>constructing a new 0.2 MGD WWTP Facility. New Treatment units will include a facult</u> <u>a new storage pond. Treated effluent will be irrigated on 160 acres of existing, non-publ</u>

And in their technical report they put this:

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): 0.3 2-Hr Peak Flow (MGD): 0.9 Estimated construction start date: Click to enter text. Estimated waste disposal start date: 1977 B. Interim II Phase Design Flow (MGD): Click to enter text. 2-Hr Peak Flow (MGD): Click to enter text. Estimated construction start date: Click to enter text. Estimated waste disposal start date: Click to enter text. C. Final Phase Design Flow (MGD): 0.2 2-Hr Peak Flow (MGD): Click to enter text. Estimated construction start date: TBD due to pending funding Estimated waste disposal start date: Approximately 1 year after construction start date D. Current Operating Phase Provide the startup date of the facility: 1977

I did confirm that they want their final phase to be 0.2MGD, but I just wanted to double check with you and your team to see if it is okay to have the interim I phase flow higher than the final phase or should they switch these two?

Please let me know if you have any questions.

Thank you in advance,



Candice Courville, LPS III Texas Commission on Environmental Quality Water Quality Division Application Review & Processing Team 512-239-4312 candice.calhoun@tceq.texas.gov

How is our customer service? Fill out our online customer satisfaction survey at <a href="http://www.tceq.texas.gov/customersurvey">www.tceq.texas.gov/customersurvey</a>

From: Paul Krueger < PKrueger@Parkhill.com >
Sent: Thursday, January 9, 2025 11:30 AM
To: Candice Calhoun < Candice.Calhoun@tceq.texas.gov >; smiller@cityofstinnett.com
Subject: RE: Clarification Needed for WQ0010291002

Good Morning,

January 23, 2025



Candice Courville, LPS III Texas Commission on Environmental Quality Water Quality Division Application Review & Processing Team PO Box 13087 Austin, Texas 78711-3087

Re: Application for Proposed Permit No.: WQ0010291002 Applicant Name: City of Stinnett (CN601122179) Site Name: City of Stinnett WWTP (RN102079613) Type of Application: New

Dear Ms. Calhoun-Courville:

Please see our complete responses addressing the items in your letter received on January 9, 2025, for the above referenced permit.

Comment: Application Fee on page 1 of the administrative report: We were unable to confirm
payment of the application processing fee. The filing fee for your application is \$1,250.00. Please
submit payment to: TCEQ, Revenue Section (MC 214), P.O. Box 13088, Austin, Texas 787113088. Also, provide a copy of the check along with the response to this letter.

Response: The City of Stinnett mailed a check for \$850.00 based on Section 1 of the Administrative Report. A copy of the check is included as Attachment E.

- 2. Administrative Report 1.0
  - i. Comment: Section 2, item d the application type marked is incorrect for this application. Since the permit for WQ0010291001 has expired, a new application is required. Please update this section to show the application type as "New".

Response: Please see Attachment A for an updated Administrative Report.

ii. Comment: Section 8, item D- The physical address of the public viewing location cannot be a P.O. Box. Please provide an updated section of the application with a valid public viewing location and physical address.

Response: The address has been updated to 609 MacKenzie Ave, Stinnett, TX 79083. See Attachment A for an updated Administrative Report.

iii. Comment: Section 11, item A – the box listed as "No" should be marked as this is a new application. Please provide a revised section to show the correct box marked as well as provide an accurate description of the disposal site location.

Response: Please see Attachment A for an updated Administrative Report.

\projects-dfs\projects\2022\40439.22\03\_DSGN\Z\_TO\FROM\_TCEQ\TCEQ\_Stinnett-ApplicationResponse\_01.22.2025.docx

iv. Comment: Section 14 – Signature Page – the signature page was not completed and notarized. Please provide a complete and notarized signature page.

Response: Hard copies of the executed and notarized signature pages were submitted through mail. Following submission, an electronic copy of the application was requested. The electronic copy was provided; however, the completed signatures were not added since they had been mailed out.

- 3. Core Data Form
  - i. Comment: Section V: Authorized Signature the Core Data Form was not signed or dated. Please provide a signed and dated CDF.

Response: A signed version of the Core Data Form was provided in the original submission via mail.

- 4. USGS Topographic Map
  - i. Comment: The applicant's complete property boundary and the treatment facility boundaries were not labeled. As well as the one-mile radius is hard to see. Please provide an updated USGS map to include the requested information as well as to provide a more legible one-mile radius.

Response: Please see Attachment B for a corrected map.

- 5. Plain Language Summary
  - i. Comment: The Plain Language Summary provided, in English language, states "This permit is a major amendment with renewal..." This is a new application. Please update this PLS, in English language, accordingly.

Response: Please see Attachment C.

ii. Comment: Section 5, item e of the Public Involvement Plan form indicates that 15.2% speak a language other than English. If more than 5% of the population speaks another language other than English, then you are required to provide notice in the alternative language. Please use the attached PLS template to translate to the appropriate language. It seems the appropriate language is Spanish. If so, please use the attached Spanish PLS template.

Response: Please note that the 15.2% value provided is incorrect. Based on the latest Census data as well as the EPA's Environmental Justice Screening and Mapping Tool, the percentage of Spanish speaking households is 8%. This value is still above the 5% threshold; however, it does not account for English proficiency. Per the TCEQ Public Involvement Plan Form and its instructions: "If more than 5% of the population potentially affected by the new facility is *limited English proficient*, then you are required to provide notice for the alternate language." According to the EPA's Environmental Justice Screen and Mapping Tool, which is the suggested resource given to complete the PIP form, the percentage of limited English speaking households of the population is 0%. Since this is less than the 5% threshold, an alternative language notice is not required.

- 6. Administrative Report 1.1
  - i. Comment: Landowner Map the applicant's complete property boundaries were not delineated and labeled. Please provide an updated landowner to include the requested information.

Response: Please see Attachment D.

ii. Comment: Mailing Labels – Please provide the landowner list formatted for mailing labels (Avery 5160) in a Microsoft Word document.

Response: The formatted list is provided as an attachment to this response email in a Microsoft Word document.

- 7. Notice of Receipt of Application and Intent to Obtain Permit
  - i. Comment: The following is a portion of the NORI which contains information relevant to your application. Please read it carefully and indicate if it contains any errors or omissions. The complete notice will be sent to you once the application is declared administratively complete.

Response: The portion of the NORI is correct.

ii. Comment: The application indicates that public notices in Spanish are required. After confirming the portion of the NORI above does not contain any errors or omissions, please use the attached template to translate the NORI into Spanish. Only the first and last paragraphs are unique to this application and require translation. Please provide the translated Spanish NORI in a Microsoft Word document.

Response: Per Response 2 in the Plain Language Summary section above, a Spanish notice is not required.

If you should have any questions, please do not hesitate to contact me at <u>pkrueger@parkhill.com</u> or 806.473.2200.

Sincerely,

PARKHILL

Paul Krueger

Civil Engineer

PK/rh/acs Enclosures

es Attachment A: Updated Administrative Report Attachment B: Updated USGS Map Attachment C: Plain Language Summary Attachment D: Updated Landowner Map Attachment E: Copy of Application Check

cc: Stacie Miller, City Manager, City of Stinnett

# Attachment A

# Updated Administrative Report

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY



## DOMESTIC WASTEWATER PERMIT APPLICATION CHECKLIST

#### Complete and submit this checklist with the application.

APPLICANT NAME: City of Stinnett

PERMIT NUMBER (If new, leave blank): WQ00 Click to enter text.

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

Ν

Y

	1	IN
Administrative Report 1.0	$\boxtimes$	
Administrative Report 1.1	$\boxtimes$	
SPIF		$\boxtimes$
Core Data Form	$\boxtimes$	
Public Involvement Plan Form	$\boxtimes$	
Technical Report 1.0	$\boxtimes$	
Technical Report 1.1	$\boxtimes$	
Worksheet 2.0		$\boxtimes$
Worksheet 2.1		$\boxtimes$
Worksheet 3.0	$\boxtimes$	
Worksheet 3.1	$\boxtimes$	
Worksheet 3.2		$\boxtimes$
Worksheet 3.3		$\boxtimes$
Worksheet 4.0		$\boxtimes$
Worksheet 5.0		$\boxtimes$
Worksheet 6.0	$\boxtimes$	
Worksheet 7.0		$\boxtimes$

Original USGS Map	$\boxtimes$	
Affected Landowners Map	$\boxtimes$	
Landowner Disk or Labels	$\boxtimes$	
Buffer Zone Map	$\boxtimes$	
Flow Diagram	$\boxtimes$	
Site Drawing	$\boxtimes$	
Original Photographs	$\boxtimes$	
Design Calculations	$\boxtimes$	
Solids Management Plan	$\boxtimes$	
Water Balance	$\boxtimes$	

Y

Ν

#### 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 <b></b>	\$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 Amoun	Click to enter text.			
	Name Printed on Check: Clic	k to enter text.			
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.
  - $\boxtimes$  Active  $\square$  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 □ Minor Amendment *with* Renewal
  - □ Major Amendment <u>without</u> Renewal □ Minor Amendment <u>without</u> Renewal
  - □ Renewal without changes □ Minor Modification of permit
- e. For amendments or modifications, describe the proposed changes: <u>The City of Stinnett is</u> <u>constructing a new 0.2 MGD WWTP Facility. New Treatment units will include a facultative lagoon and</u> <u>a new storage pond. Treated effluent will be irrigated on 160 acres of existing, non-public access, land.</u>

#### f. For existing permits:

Permit Number: WQ00 10291001

EPA I.D. (TPDES only): TX Click to enter text.

Expiration Date: October 1, 2024

# Section 3. Facility Owner (Applicant) and Co-Applicant 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 Stinnett

(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 <u>http://www15.tceq.texas.gov/crpub/</u>

#### CN: <u>601122179</u>

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: <u>Mr.</u>	Last Name, First Name: <u>Ivrin, Jeff</u>
Title: <u>Mayor</u>	Credential: Click to enter text.

**B. Co-applicant 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-applicant applying for this permit?

<u>N/A</u>

(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: <u>http://www15.tceq.texas.gov/crpub/</u>

CN: Click to enter text.

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: <u>Click to enter text</u>.

#### 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. <u>Appendix A: Core Data Form</u>

### 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: <u>Ms.</u>	Last Name, First Name: Miller,	Staci	<u>e</u>
	Title: <u>City Manager</u>	Credential: Click to enter text		
	Organization Name: City of Stinne	tt		
	Mailing Address: <u>P.O. Box 909</u>	City, State, Zip Code	e: <u>Stir</u>	<u>nnett, TX 79083</u>
	Phone No.: <u>806.878.2422</u>	E-mail Address: <u>smiller@cityo</u>	fstinn	<u>ett.com</u>
	Check one or both: $\square$ Adm	ninistrative Contact		Technical Contact
B.	Prefix: <u>Mr.</u>	Last Name, First Name: <u>Krueg</u> e	er, Pau	ul
	Title: <u>Civil Engineer</u>	Credential: <u>P.E.</u>		
	Organization Name: Parkhill			
	Mailing Address: <u>4222 85th St</u>	City, State, Zip Code	e: <u>Lub</u>	bock, TX <u>79423</u>
	Phone No.: <u>806.473.3715</u>	E-mail Address: <u>pkrueger@pa</u>	rkhill.	<u>.com</u>
	Check one or both: $\square$ Adm	ninistrative Contact	$\boxtimes$	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: <u>Ms.</u>	Last Name, First Name: Miller, Stacie
	Title: <u>City Manager</u>	Credential: Click to enter text.
	Organization Name: City of Stinne	<u>tt</u>

Mailing Address: <u>P.O. Box 909</u> Phone No.: 806.878.2422

B. Prefix: <u>Mr.</u> Title: <u>Civil Engineer</u> Organization Name: <u>Parkhill</u> Mailing Address: <u>4222 85th St</u> Phone No.: 806.473.3715 City, State, Zip Code: <u>Stinnett, TX 79083</u> E-mail Address: <u>smiller@cityofstinnett.com</u> Last Name, First Name: <u>Krueger, Paul</u> Credential: <u>P.E.</u>

City, State, Zip Code: <u>Lubbock, TX 79423</u> E-mail Address: <u>pkrueger@parkhill.com</u>

## 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: <u>Ms.</u>	Last Name, First Name: <u>Miller, Stacie</u>	
Title: <u>City Manager</u>	Credential: Click to enter text.	
Organization Name: City of Stinne	<u>tt</u>	
Mailing Address: <u>P.O. Box 909</u>	City, State, Zip Code: <u>Stinnett, TX 79083</u>	
Phone No.: <u>806.878.2422</u>	E-mail Address: <u>smiller@cityofstinnett.com</u>	

## 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: <u>Ms.</u>	Last Name, First Name: <u>Miller, Stacie</u>
Title: <u>City Manager</u>	Credential: Click to enter text.
Organization Name: City of Stinne	ett
Mailing Address: <u>P.O. Box 909</u>	City, State, Zip Code: <u>Stinnett, TX 79083</u>
Phone No.: <u>806.878.2422</u>	E-mail Address: <u>smiller@cityofstinnett.com</u>

## Section 8. Public Notice Information (Instructions Page 27)

A.	Individual	Publishing	the Notices
----	------------	------------	-------------

Prefix: <u>Mr.</u>	Last Name, First Name: <u>Krueger, Paul</u>
Title: <u>Civil Engineer</u>	Credential: <u>P.E.</u>
Organization Name: Parkhill	
Mailing Address: <u>4222 85th St</u>	City, State, Zip Code: <u>Lubbock, TX 79423</u>
Phone No.: <u>806.473.3715</u>	E-mail Address: <u>pkrueger@parkhill.com</u>

# 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: <u>Ms.</u>	Last Name, First Name: <u>Miller, Stacie</u>
Title: <u>City Manager</u>	Credential: Click to enter text.
Organization Name: <u>City of Stinn</u>	<u>ett</u>
Mailing Address: <u>P.O. Box 909</u>	City, State, Zip Code: <u>Stinnett, TX 79083</u>
Phone No.: <u>806.878.2422</u>	E-mail Address: <u>smiller@cityofstinnett.com</u>

#### **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: City Hall

Location within the building: Main Entrance

Physical Address of Building: 609 MacKenzie Ave

City: Sinnett

County: Hutchinson

Contact (Last Name, First Name): <u>Miller, Stacie</u>

Phone No.: <u>806.878.2422</u> Ext.: <u>N/A</u>

#### 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: <u>Appendix B: Plain Language Summary</u>

#### 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: Appendix C: Public Involvement Plan

# 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** <u>102079613</u>

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

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

Stinnett Wastewater Treatment Plant

C. Owner of treatment facility: <u>City of Stinnett</u>

Ownership of Facility:	$\boxtimes$	Public		Private		Both		Federal
------------------------	-------------	--------	--	---------	--	------	--	---------

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

Prefix: <u>N/A</u>	Last Name, First Name: Click to enter text.
--------------------	---

Title: Click to enter text. Credential: Click to enter text.

Organization Name: City of Stinnett

Mailing Address: P.O. Box 909 City, State, Zip Code: Stinnett, TX 79083

Phone No.: <u>806.878.2422</u>

E-mail Address: <u>smiller@cityofstinnett.com</u>

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: <u>N/A</u>

**E.** Owner of effluent disposal site:

Prefix: <u>N/A</u>	Last Name, First Name: Click to enter text.
Title: Click to enter text.	Credential: Click to enter text.
Organization Name: City of Stinne	<u>tt</u>
Mailing Address: <u>P.O. Box 909</u>	City, State, Zip Code: <u>Stinnett, TX 79083</u>
Phone No.: <u>806.878.2422</u>	E-mail Address: <u>smiller@cityofstinnett.com</u>
If the landowner is not the same	person as the facility owner or co-applicant attach a

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: <u>N/A</u>

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

Prefix: <u>N/A</u>	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:

N/A – TLAP only

- **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): Click to enter text.

County in which the outfalls(s) is/are located: Click to enter text.

- **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:

Approximately 1.0 mile north of the intersection of Farm to Market Road 2277 and State Highway 136, South of Stinnett, in Hutchinson County

- **B.** City nearest the disposal site: <u>Stinnett</u>
- C. County in which the disposal site is located: <u>Hutchinson</u>
- **D.** For **TLAPs**, describe the routing of effluent from the treatment facility to the disposal site:

Treated effluent is pumped from storage pond to the irrigation area.

**E.** For **TLAPs**, please identify the nearest watercourse to the disposal site to which rainfall runoff might flow if not contained: <u>Cottonwood Creek – Southeast of disposal site</u>

#### Section 12. Miscellaneous Information (Instructions Page 32)

- A. Is the facility located on or does the treated effluent cross American Indian Land?
  - 🗆 Yes 🖾 No

□ 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

☑ 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.

Click to enter text.

- **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: Click to enter text.

**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: <u>Appendix A: Core Data Form; Appendix B: Plain Language</u> <u>Summary; Appendix C: Public Involvement Plan</u>

### Section 14. Signature Page (Instructions Page 34)

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

Permit Number: WQ0010291001

Applicant: <u>City of Stinnett</u>

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): <u>Jeff Irvin</u>

Signatory title: Mayor

Signature:		Date:	
(Use blue ink)			
Subscribed and Sworn to before	me by the said		
on this	day of		, 20
My commission expires on the	day of		, 20

Notary Public

[SEAL]

County, Texas

## DOMESTIC WASTEWATER PERMIT APPLICATION ADMINISTRATIVE REPORT 1.0

The following information is required for new and amendment applications.

### Section 1. Affected Landowner Information (Instructions Page 36)

- **A.** Indicate by a check mark that the landowners map or drawing, with scale, includes the following information, as applicable:
  - The applicant's property boundaries
  - The facility site boundaries within the applicant's property boundaries
  - □ The distance the buffer zone falls into adjacent properties and the property boundaries of the landowners located within the buffer zone
  - The property boundaries of all landowners surrounding the applicant's property (Note: if the application is a major amendment for a lignite mine, the map must include the property boundaries of all landowners adjacent to the new facility (ponds).)
  - The point(s) of discharge and highlighted discharge route(s) clearly shown for one mile downstream
  - □ The property boundaries of the landowners located on both sides of the discharge route for one full stream mile downstream of the point of discharge
  - The property boundaries of the landowners along the watercourse for a one-half mile radius from the point of discharge if the point of discharge is into a lake, bay, estuary, or affected by tides
  - The boundaries of the effluent disposal site (for example, irrigation area or subsurface drainfield site) and all evaporation/holding ponds within the applicant's property
  - The property boundaries of all landowners surrounding the effluent disposal site
  - □ The boundaries of the sludge land application site (for land application of sewage sludge for beneficial use) and the property boundaries of landowners surrounding the applicant's property boundaries where the sewage sludge land application site is located
  - □ The property boundaries of landowners within one-half mile in all directions from the applicant's property boundaries where the sewage sludge disposal site (for example, sludge surface disposal site or sludge monofill) is located
- **B.** Indicate by a check mark that a separate list with the landowners' names and mailing addresses cross-referenced to the landowner's map has been provided.
- **C.** Indicate by a check mark in which format the landowners list is submitted:
  - $\boxtimes$  USB Drive  $\square$  Four sets of labels
- **D.** Provide the source of the landowners' names and mailing addresses: <u>County Appraisal District</u> <u>Website</u>
- **E.** As required by *Texas Water Code § 5.115*, is any permanent school fund land affected by this application?
  - 🗆 Yes 🖾 No

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

Click to enter text.

## Section 2. Original Photographs (Instructions Page 38)

Provide original ground level photographs. Indicate with checkmarks that the following information is provided.

- At least one original photograph of the new or expanded treatment unit location
- At least two photographs of the existing/proposed point of discharge and as much area downstream (photo 1) and upstream (photo 2) as can be captured. If the discharge is to an open water body (e.g., lake, bay), the point of discharge should be in the right or left edge of each photograph showing the open water and with as much area on each respective side of the discharge as can be captured.
- At least one photograph of the existing/proposed effluent disposal site
- A plot plan or map showing the location and direction of each photograph

### Section 3. Buffer Zone Map (Instructions Page 38)

- **A.** Buffer zone map. Provide a buffer zone map on 8.5 x 11-inch paper with all of the following information. The applicant's property line and the buffer zone line may be distinguished by using dashes or symbols and appropriate labels.
  - The applicant's property boundary;
  - The required buffer zone; and
  - Each treatment unit; and
  - The distance from each treatment unit to the property boundaries.
- **B.** Buffer zone compliance method. Indicate how the buffer zone requirements will be met. Check all that apply.
  - ⊠ Ownership
  - □ Restrictive easement
  - □ Nuisance odor control
  - □ Variance
- **C.** Unsuitable site characteristics. Does the facility comply with the requirements regarding unsuitable site characteristic found in 30 TAC § 309.13(a) through (d)?



# DOMESTIC WASTEWATER PERMIT APPLICATION

## SUPPLEMENTAL PERMIT INFORMATION FORM (SPIF)

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

Attachment: N/A

## 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	BY OVERNIGHT/EXPRESS MAIL
Texas Commission on Environmental Quality	Texas Commission on Environmental Quality
Financial Administration Division	Financial Administration Division
Cashier's Office, MC-214	Cashier's Office, MC-214
P.O. Box 13088	12100 Park 35 Circle
Austin, Texas 78711-3088	Austin, Texas 78753

#### Fee Code: WOP Waste Permit No: WQ0010291002

- 1. Check or Money Order Number: Click to enter text.
- 2. Check or Money Order Amount: Click to enter text.
- 3. Date of Check or Money Order: Click to enter text.
- 4. Name on Check or Money Order: Click to enter text.
- 5. APPLICATION INFORMATION

Name of Project or Site: Stinnett Wastewater Treatment Plant

Physical Address of Project or Site: Approximately 3,000 feet South and 3,500 feet East of intersection of State Highway 152 and State Highway 136.

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.

#### Staple Check or Money Order in This Space

## **ATTACHMENT 1**

## INDIVIDUAL INFORMATION

## Section 1. Individual Information (Instructions Page 41)

Complete this attachment if the facility applicant or co-applicant is an individual. Make additional copies of this attachment if both are individuals.

Prefix (Mr., Ms., Miss): Click to enter text.

Full legal name (Last Name, First Name, Middle Initial): Click to enter text.

Driver's License or State Identification Number: Click to enter text.

Date of Birth: Click to enter text.

Mailing Address: Click to enter text.

City, State, and Zip Code: Click to enter text.

Phone Number: Click to enter text. Fax Number: Click to enter text.

E-mail Address: Click to enter text.

CN: Click to enter text.

For Commission Use Only: Customer Number: Regulated Entity Number: Permit Number:

## DOMESTIC WASTEWATER PERMIT APPLICATION CHECKLIST OF COMMON DEFICIENCIES

Below is a list of common deficiencies found during the administrative review of domestic wastewater permit applications. To ensure the timely processing of this application, please review the items below and indicate by checking Yes that each item is complete and in accordance applicable rules at 30 TAC Chapters 21, 281, and 305. If an item is not required this application, indicate by checking N/A where appropriate. Please do not submit the application until the items below have been addressed.

Core Data Form (TCEQ Form No. 10400) (Required for all application types. Must be completed in its entirety and signed. Note: Form may be signed by applicant representative.)				
Correct and Current Industrial Wastewater Permit Application Forms (TCEQ Form Nos. 10053 and 10054. Version dated 6/25/2018 or later.)				Yes
Water Quality Permit Payment Submittal Form (Page 19) (Original payment sent to TCEQ Revenue Section. See instructions for mailing ad				Yes :.)
7.5 Minute USGS Quadrangle Topographic Map Attached (Full-size map if seeking "New" permit. 8 ½ x 11 acceptable for Renewals and Amendments)			$\boxtimes$	Yes
Current/Non-Expired, Executed Lease Agreement or Easement	$\boxtimes$	N/A		Yes
Landowners Map (See instructions for landowner requirements)		N/A	$\boxtimes$	Yes

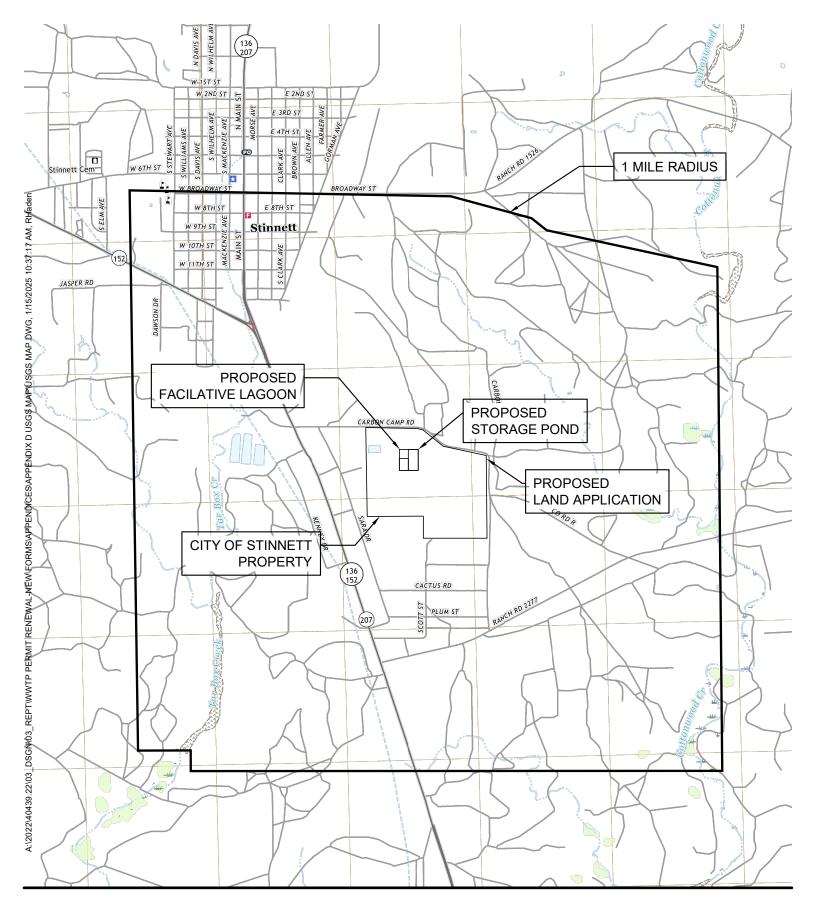
#### Things to Know:

- All the items shown on the map must be labeled.
- The applicant's complete property boundaries must be delineated which includes boundaries of contiguous property owned by the applicant.
- The applicant cannot be its own adjacent landowner. You must identify the landowners immediately adjacent to their property, regardless of how far they are from the actual facility.
- If the applicant's property is adjacent to a road, creek, or stream, the landowners on the opposite side must be identified. Although the properties are not adjacent to applicant's property boundary, they are considered potentially affected landowners. If the adjacent road is a divided highway as identified on the USGS topographic map, the applicant does not have to identify the landowners on the opposite side of the highway.

Landowners Cross Reference List (See instructions for landowner requirements)		N/A	$\boxtimes$	Yes
Landowners Labels or USB Drive attached (See instructions for landowner requirements)		N/A	$\boxtimes$	Yes
Original signature per 30 TAC § 305.44 – Blue Ink Preferred (If signature page is not signed by an elected official or principle executive officer, a copy of signature authority/delegation letter must be attached)				Yes
Plain Language Summary			$\boxtimes$	Yes

Attachment B

Updated USGS Map



## City of Stinnett Wastewater Parkhi **Treatment Plant Application**

Parkhill.com

Issue: Date: Project No: Sheet:

**USGS Map** 

New 1/13/2025 40439.22 1 OF 1

**City of Stinnett** P.O. Box 909 Stinnett, TX 79083 Attachment C

Plain Language Summary

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY



### PLAIN LANGUAGE SUMMARY FOR TPDES OR TLAP PERMIT APPLICATIONS

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

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

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

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

## ENGLISH TEMPLATE FOR TPDES or TLAP NEW/RENEWAL/AMENDMENT APPLICATIONS DOMESTIC WASTEWATER/STORMWATER

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

City of Stinnett (CN601122179) proposes to operate City of Stinnett Wastewater Treatment Plant (RN102079613), a facultative lagoon and storage pond. The facility will be located at approximately 3,000 feet South and 3,500 feet East of intersection of State Highway 152 and State Highway 136, in Stinnett, Hutchinson County, Texas 79083. This permit is a new application to discharge 200,000 gallons per day of treated wastewater to 160 acres of nonpublic access land. Effluent will be used for irrigation of 160 acres. This permit will not authorize the discharge of pollutants into water in the state.

Discharges from the facility are expected to contain BOD<sub>5</sub>. Domestic wastewater will be treated by a facultative lagoon and a storage pond.

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

#### AGUAS RESIDUALES Introduzca 'INDUSTRIALES' o 'DOMÉSTICAS' aquí /AGUAS PLUVIALES

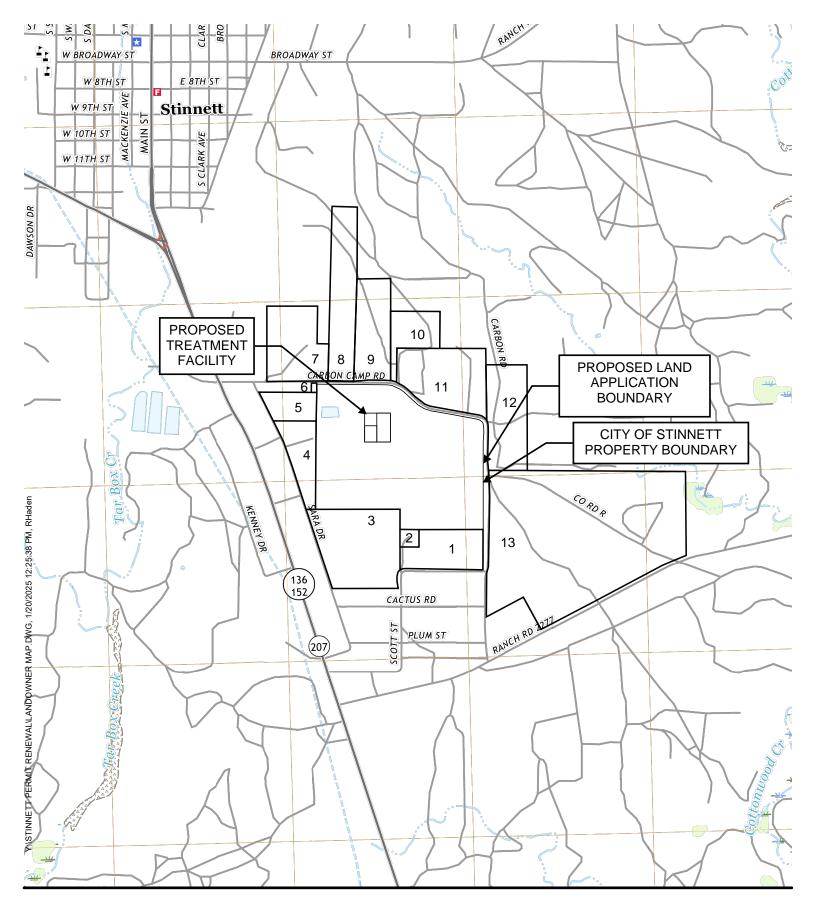
*El siguiente resumen se proporciona para esta solicitud de permiso de calidad del agua pendiente que está siendo revisada por la Comisión de Calidad Ambiental de Texas según lo requerido por el Capítulo 39 del Código Administrativo de Texas 30. La información proporcionada en este resumen puede cambiar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

1. Introduzca el nombre del solicitante aquí (2. Introduzca el número de cliente aquí (es decir, CN6#######).) 3. Elija del menú desplegable 4. Introduzca el nombre de la instalación aquí 5. Introduzca el número de entidad regulada aquí (es decir, RN1########), 6. Elija del menú desplegable 7. Introduzca la descripción de la instalación aquí. La instalación 8. Elija del menú desplegable. ubicada en 9. Introduzca la ubicación aquí, en 10. Introduzca el nombre de la ciudad aquí, Condado de 11. Introduzca el nombre del condado aquí, Texas 12. Introduzca el código postal aquí. 13. Introduzca el resumen de la petición de solicitud aquí. *<<Para las solicitudes de TLAP incluya la siguiente oración, de lo contrario, elimine:>>* Este permiso no autorizará una descarga de contaminantes en el agua en el estado.

Se espera que las descargas de la instalación contengan 14. Liste todos los contaminantes esperados aquí. 15. Introduzca los tipos de aguas residuales descargadas aquí. 16. Elija del menú desplegable tratado por 17. Introduzca una descripción del tratamiento de aguas residuales utilizado en la instalación aquí.

## Attachment D

## Updated Landowner Map



## City of Stinnett Wastewater Par Treatment Plant Application



### Landowner Map

 Issue:
 New

 Date:
 1/13/2025

 Project No:
 40439.22

 Sheet:
 1 OF 1

**City of Stinnett** P.O. Box 909 Stinnett, TX 79083

### Parkhill.com

## Attachment E

## Copy of Application Check

### **Candice Calhoun**

From: Sent: To: Cc: Subject:	Candice Calhoun Monday, January 27, 2025 9:42 AM smiller@cityofstinnett.com Paul Krueger; Erwin Madrid Application for Permit No. WQ0010291002 - Notice of Deficiency 30-Day Will Return Letter
Attachments:	WQ0010291002_Will Return Ltr.pdf
Importance:	High

Dear applicant,

The attached Notice of Deficiency 30-Day Will Return Letter was mailed on <u>January 27, 2025</u>, requesting additional information needed to declare the application administratively complete. Please mail an original and two copies (with a cover letter) of the complete response by <u>February 26, 2025</u>.

Regards,



Candice Courville License & Permit Specialist ARP Team | Water Quality Division Texas Commission on Environmental Quality 512-239-4312 candice.calhoun@tceq.texas.gov

How is our customer service? Fill out our online customer satisfaction survey at <a href="http://www.tceq.texas.gov/customersurvey">www.tceq.texas.gov/customersurvey</a>

### **Candice Calhoun**

From:	Paul Krueger < PKrueger@Parkhill.com>
Sent:	Monday, January 27, 2025 4:02 PM
То:	Candice Calhoun; smiller@cityofstinnett.com
Cc:	Roy Haden
Subject:	RE: Application for Proposed Permit No. WQ0010291002 - City of Stinnett
Attachments:	Landowner Map Appendix E Updated.pdf; Affected Land Owners Avery5160
	Template.docx; TYM Energy Hutchinson CAD.png

Mrs. Courville

In response to item 6.ii, please find the attached landowner map, cross reference list, and mailing labels. I have also attached a screenshot of the county appraisal district website, showing the lack of address information for TYM Energy.

Thank you,

Paul Krueger, PE Civil Engineer

Parkhill 806.473.3715 | Parkhill.com

From: Candice Calhoun <Candice.Calhoun@tceq.texas.gov>
Sent: Friday, January 24, 2025 2:22 PM
To: Paul Krueger <PKrueger@Parkhill.com>; smiller@cityofstinnett.com
Cc: Roy Haden <rhaden@parkhill.com>
Subject: RE: Application for Proposed Permit No. WQ0010291002 - City of Stinnett

Good afternoon, Mr. Krueger,

Thank you.

Item 1 of the NOD – Application Fee: Thank you, I will also continue to check our reports to see if we have received/entered the check information.

**Signature Pages:** Yes sir, of course, I will reach out to you Tuesday to let you know if I was able to locate them.

**Item 6.ii of the NOD – Mailing Labels:** although some may be duplicates, some differ slightly. For example, number 1 on the landowner list is for "Jody Nolan", but number 2 is for "Jody Nolan and Larry Diffield". Also, in the updated landowners list, number 3 is listed for "Edward Allie Nievens", yet in the mailing labels, is only shows "Edward Allie Nievens". The landowner list and mailing labels should match exactly. Please provide updated mailing labels to provide

### **Candice Calhoun**

From:	Jeff Goebel <jgoebel@undinellc.com></jgoebel@undinellc.com>
Sent:	Monday, January 27, 2025 4:44 PM
То:	Candice Calhoun
Cc:	Erwin Madrid
Subject:	RE: Follow-up WQ0015473001
Attachments:	A-2 PLS.docx; Municipal Disposal Renewal Spanish NORI.docx; Municipal TPDES and
	TLAP PLS Form (Spanish).docx; scanner_20250127_173139.pdf

From: Candice Calhoun <Candice.Calhoun@tceq.texas.gov>
Sent: Friday, January 24, 2025 1:35 PM
To: Jeff Goebel <jgoebel@undinellc.com>
Cc: Erwin Madrid <Erwin.Madrid@tceq.texas.gov>
Subject: RE: Follow-up WQ0015473001

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

### Good afternoon,

I just wanted to add to Erwins email below. Along with the original paper copy and the fee, the items below are also still needed:

1. Updated Section 9 of the administrative report to correct the site name. Per a previous email, you were not wanting to update the site name, so an updated section to show "Indian Hill Harbor WWTF" is needed.

#### Site Name is 'The Addie'

2. Updated USGS map to include the one-mile radius as well as to remove the word "proposed" for the applicant and site boundaries.

Please see revised map with correct scale showing 1 mile radius

3. English and Spanish Plain Language Summaries **Attached** 

4. Technical report and worksheet 3.0 Attached

5. Spanish NORI

JODY NOLAN PO BOX 1161 STINNETT TX 79083

LANTELME DEAN R AND RHONDA G 119 SCHOENHALS LN FRITCH TX 79036

SANDRA HEFNER PO BOX 3388 STINNETT TX 79083

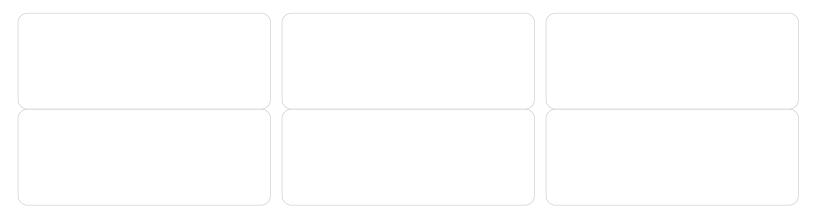
DAVID AND DEBBIE WILSON PO BOX 711 STINNETT TX 79083 JODY NOLAN AND LARRY DIFFIELD PO BOX 1161 STINNETT TX 79083

KODIAK OPERATING LLC 2126 N ROCKY TOP DR BATTLEFIELD MO 65619-8101

SANDRA AND KEITH HEFNER PO BOX 3388 STINNETT TX 79083 BROWN ROBERT ALFRED AND TALLY G PO BOX 1196 STINNETT TX 79083

CHRISTOPHER AND RACHEL BOGNER PO BOX 801 STINNETT TX 79083

FRANCISCO BARRAZA 414 ROMERO ST FRITCH TX 79036



🔡 📔 📀 eCFR :: 40 CFR Chap 🍱 DEQ Home - Oklah 🝣 Drinking Water	Reg 🚳 Welcome to the Tex 🚳 Rules and Regulatio 募 TxGIO DataHub 🧱
🕲 (806)274-2294 🛛 hcad@hutchinsoncad.c	com
About Us V Resources V	
Geographic ID	50312-01025-00050-000000
Description	REAL PROPERTY
Agent	999 - UNKNOWN ADDRESS

Category Code

**Total Acres** 

WNER		
Owner ID	R42631	
Name	TYM ENERGY	
Care of		
Mailing Address	UNKNOWN UNKNOWN	
% Ownership	1.000000	
Exemptions		

A5 - RES-LEASED GROUND

0.0000



## **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 desc	ribe 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	3. Regulated Entity Reference Number (if issued)						
CN 601122179	<u>Central Registry**</u>	RN 102079613						

### **SECTION II: Customer Information**

4. General Cu	stomer In	formation	5. Effective Date for Customer Information Updates (mm/dd/yyyy)									
New Custor		Verifiable with the	Update to Custo Texas Secretary of			otroller			egulated Enti nts)	ity Owne	ership	1
A 15/12/10.14 (11/2)		bmitted here ma ller of Public Aca		automaticall	y base	d on v	vhat is c	urrent	and active	with th	e Texas Secr	etary of State
6. Customer l	egal Nam	e (If an individual,	print last name f	irst: eg: Doe, J	ohn)	1		<u>If new</u>	v Customer, e	enter pre	vious Custom	er below:
City of Stinnett												
7. TX SOS/CP	A Filing Nu	ımber	8. TX State	e Tax ID (11 d	igits)			9. Fee (9 dig	deral Tax II its)	D	<b>10. DUNS</b> applicable)	Number (if
11. Type of C	ustomer:	Corpo	pration				Individ	dual		Partne	rship: 🔲 Gen	eral 🔲 Limited
Government: 🛛	🛛 City 🔲 C	ounty 🗌 Federal	🗌 Local 🗌 Stat	te 🗌 Other			Sole P	roprieto	orship	🗌 Otł	ner:	
12. Number o	of Employe	es						13. lr	ndependen	tly Ow	ned and Ope	erated?
⊠ 0-20 □ 2	21-100	] 101-250 🗌 2	51-500 50	1 and higher				☐ Ye	es [	🗙 No		
14. Customer	Role (Prop	oosed or Actual) -	as it relates to th	e Regulated Er	ntity list	ed on t	his form.	Please c	check one of	the follo	wing	
Owner Occupationa	al Licensee	Operator Responsible		wner & Opera VCP/BSA App					Other:			
15. Mailing	P.O. Box 9	09										
Address:												
, 1991 6351	City	Stinnett		State	ТХ		ZIP	79083	3		ZIP + 4	
16. Country M	Vailing Inf	ormation (if outs	ide USA)			17. E-Mail Address (if applicable)				-		
						smill	er@cityo	fstinnett	t.com			
18. Telephon	e Number			19. Extensio	on or C	ode			20. Fax N	umber	(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

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

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

City of Stinnett Wastewater Treatment Plant

23. Street Address of					
the Regulated Entity:					
(No PO Boxes)	City	State	ZIP	ZIP + 4	
24. County		I			

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

25. Description to	approxim	ately 3,000 feet Sout	th and 3,500 feet Eas	t of intersectio	on of State Hi	ighway 152 i	and State Hi	ghway 136	
Physical Location:		nonena 🦕 en contra en anterne en contra							
26. Nearest City				-		State	· · · · ·	Nea	rest ZIP Code
Stinnett						ТХ		7908	33
Latitude/Longitude are re used to supply coordinate					ata Standa	rds. (Geoco	oding of th	e Physical	Address may be
27. Latitude (N) In Decimal:         35.807708         28. Longitude (W) In Decimal:         -101.430633						533			
Degrees	Minutes		Seconds	Degree	es	Mi	nutes		Seconds
39		48	27.75		-101		25		50.28
29. Primary SIC Code	30. Secondary SIC Code     31. Primary NAICS Code     32. Secondary NAICS Code						CS Code		
(4 digits)	(4	digits)		<b>(</b> 5 or 6 digit	5)		(5 or 6 dig	its)	
4952				221320					
33. What is the Primary E	Business o	f this entity? (Do	o not repeat the SIC o	r NAICS descri	ption.)		Anne Antonio		
Domestic Wastewater Treatm	nent				1				
	P.O. Box	909							
34. Mailing									
Address:	City	Stinnett	State	тх	ZIP	79083		ZIP + 4	T
		Sumen	State		2	/5005			
35. E-Mail Address:	si	niller@cityofstinne	tt.com						
36. Telephone Number			37. Extension or	Code	38. F	ax Number	(if applicab	le)	
( 806 ) 878-2422					(	) -			

**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	D PWS
Sludge	Storm Water	🔲 Title V Air	Tires	Used Oil
Voluntary Cleanup	Wastewater	Wastewater Agriculture	UWater Rights	Other:
	WQ0010291001			

### **SECTION IV: Preparer Information**

40. Name:	Paul Krueger	, P.E.		41. Title:	Civil Engineer	
42. Telephone	Number	43. Ext./Code	44. Fax Number	45. E-Mail Address		
( 806 ) 473-371	5		( ) -	PKrueger@	Parkhill.com	

### **SECTION V: Authorized Signature**

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

Company:	City of Stinnett	Job Title:	City Mana	ager	
Name (In Print):	Stacie Miller	-	Phone:	( 806 ) 878- 2422	
Signature:	Stacie miller			Date:	12-19-2024

### Section 14. Signature Page (Instructions Page 34)

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

Permit Number: WQ0010291001

Applicant: City of Stinnett

#### 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.

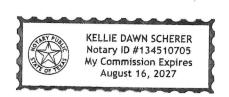
Signatory name (typed or printed): Jeff Irvin

Signatory title: Mayor

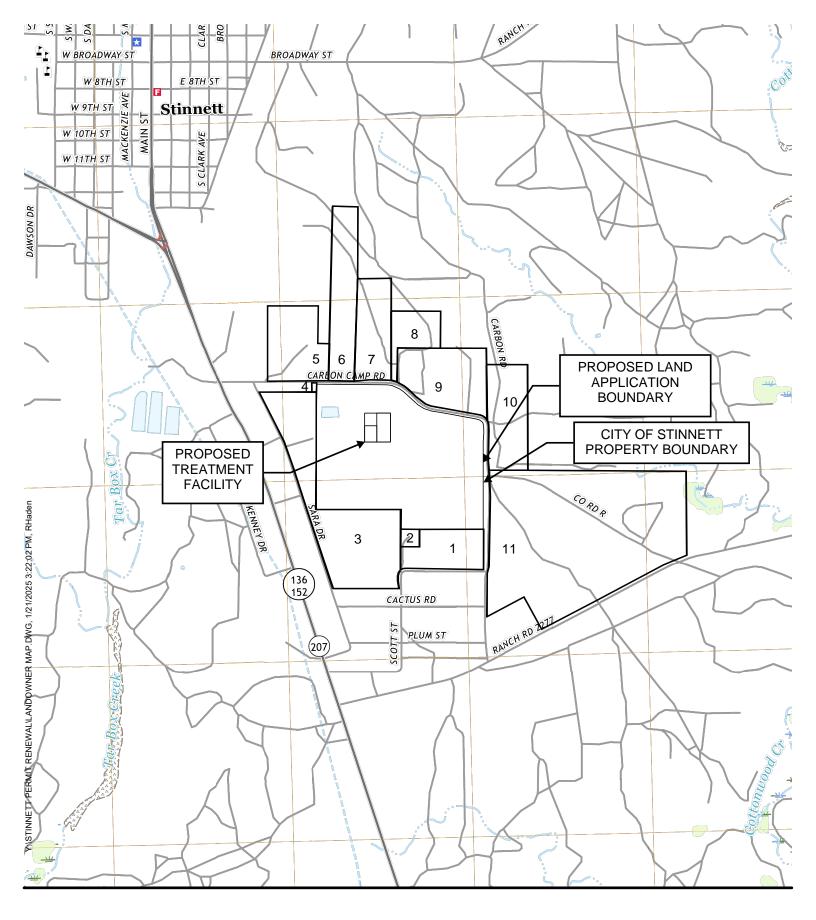
Signature: (Use blue ink)	Date:24
Subscribed and Sworn to before me by the said	Jeffrey L. Irvin

on this	19th	_day of	December	, 20,24
My commission e	expires on the	16th	_day of Aucust	, 20 <u>-27</u>

otary Public



[SEAL]



## City of Stinnett Wastewater **Par** Treatment Plant Application



### Landowner Map

 Issue:
 New

 Date:
 1/13/2025

 Project No:
 40439.22

 Sheet:
 1 OF 1

**City of Stinnett** P.O. Box 909 Stinnett, TX 79083

### Parkhill.com

### City of Stinnett, Texas

### Affected Landowner's Cross Reference List and Adjoining Properties

- 1. JODY NOLAN PO BOX 1161 STINNETT TX 79083
- JODY NOLAN AND LARRY DIFFIELD PO BOX 1161 STINNETT TX 79083
- LANTELME DEAN R AND RHONDA G 119 SCHOENHALS LN FRITCH TX 79036
- DAVID AND DEBBIE WILSON PO BOX 711 STINNETT TX 79083
- 5. FRANCISCO BARRAZA 414 ROMERO ST FRITCH TX 79036
- KODIAK OPERATING LLC 2126 N ROCKY TOP DR BATTLEFIELD MO 65619-8101
- CHRISTOPHER AND RACHEL BOGNER PO BOX 801 STINNETT TX 79083
- 8. SANDRA HEFNER PO BOX 3388 STINNETT TX 79083
- SANDRA AND KEITH HEFNER PO BOX 3388 STINNETT TX 79083
- 10. TYM ENERGY UNKNOWN

11. BROWN ROBERT ALFRED AND TALLY G PO BOX 1196 STINNETT TX 79083 From:Paul KruegerTo:Sumitra PokharelCc:Stacie Miller; Roy HadenSubject:RE: WQ0010291002 City of StinnettDate:Tuesday, July 8, 2025 4:28:42 PMAttachments:image001.ipg

Good Afternoon,

We accept the draft permit.

Thank you,

Paul Krueger, PE Civil Engineer

Parkhill 806.473.3715 | Parkhill.com

From: Sumitra Pokharel <Sumitra.Pokharel@tceq.texas.gov>
Sent: Tuesday, July 8, 2025 4:12 PM
To: Paul Krueger <PKrueger@Parkhill.com>
Cc: Stacie Miller <smiller@cityofstinnett.com>; Roy Haden <rhaden@parkhill.com>
Subject: RE: WQ0010291002 City of Stinnett

Good afternoon,

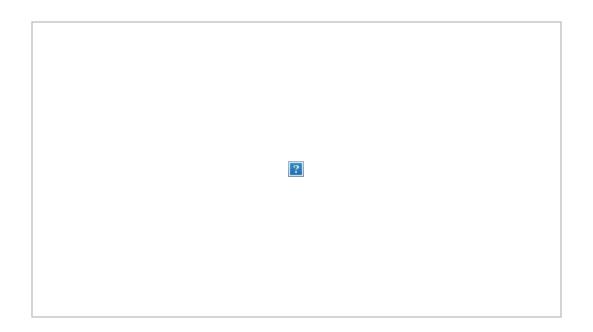
This is a gentle reminder to submit any further **comments and/or approval** on the draft permit package no later than 7/9/2025.

Sincerely, Sumitra Pokharel

From: Paul Krueger <<u>PKrueger@Parkhill.com</u>>
Sent: Monday, July 7, 2025 9:35 AM
To: Sumitra Pokharel <<u>Sumitra.Pokharel@tceq.texas.gov</u>>
Cc: Stacie Miller <<u>smiller@cityofstinnett.com</u>>; Roy Haden <<u>rhaden@parkhill.com</u>>
Subject: RE: WQ0010291002 City of Stinnett

Morning Sumitra,

We believe there is a typo in the notice of application. See screenshot of highlighted portion.



Thank you,

Paul Krueger, PE Civil Engineer

Parkhill 806.473.3715 | Parkhill.com

From: Shemica Wilford <<u>Shemica.Wilford@tceq.texas.gov</u>>
Sent: Friday, June 27, 2025 2:47 PM
To: Paul Krueger <<u>PKrueger@Parkhill.com</u>>; <u>smiller@cityofstinnett.com</u>
Cc: Sumitra Pokharel <<u>Sumitra.Pokharel@tceq.texas.gov</u>>
Subject: WQ0010291002 City of Stinnett

To whom it may concern,

Attached for your review, is the letter, DRAFT permit, NAPD, and statement of basis/technical summary, for Permit WQ0010291002 City of Stinnett.

Please submit any comments and/or approval no later than, *Monday, July 7, 2025*. (Due to 4<sup>th</sup> of July Holiday) If the comments and/ or approval are not received by the given deadline, it may cause significant delays in the permit process. Please contact Sumitra Pokharel with your comments and/ or approval to: <u>Sumitra.Pokharel@tceq.texas.gov</u>.

Thank you,

Shemica Wilford

Customer Information Assistance (CIA) Water Quality Division Texas Commission on Environmental Quality (TCEQ) <u>Shemica.Wiflord@tceq.texas.gov</u> The TCEQ is committed to accessibility. To request a more accessible version of this report, please contact the TCEQ Help Desk at (512) 239-4357.



## **Compliance History Report**

Compliance History Report for CN601122179, RN102079613, Rating Year 2024 which includes Compliance History (CH) components from September 1, 2019, through August 31, 2024.

Customer, Respondent, or Owner/Operator:	CN601122179, City of Stinnett	Classification: HIGH	<b>Rating:</b> 0.00
Regulated Entity:	RN102079613, CITY OF STINNETT	Classification: HIGH	<b>Rating:</b> 0.00
<b>Complexity Points:</b>	8	Repeat Violator: NO	
CH Group:	08 - Sewage Treatment Facilities		
Location:	LOCATED APPROXIMATELY 1.2 MILES 136 AND APPROXIMATELY .65 MILES S HIGHWAY 152 STINNETT HUTCHINSO	OF THE INTERSECTION OF STATE	HIGHWAY 136 AND STATE
TCEQ Region:	REGION 01 - AMARILLO		
ID Number(s): WASTEWATER PERMIT WQ0	010291002		
Compliance History Peri	od: September 01, 2019 to August 31	, 2024 <b>Rating Year:</b> 2024	<b>Rating Date:</b> 09/01/2024
Date Compliance History	<b>y Report Prepared:</b> February 10,	2025	
Agency Decision Requir		- Issuance, renewal, amendment, n sion, or revocation of a permit.	nodification, denial,
<b>Component Period Selec</b>	cted: December 30, 2019 to Februar	y 10, 2025	
TCEQ Staff Member to C	ontact for Additional Informatio	on Regarding This Complianc	e History.
Name: PT		<b>Phone:</b> (512) 239-3	3581
Site and Owner/Oper			
	nce and/or operation for the full five yea		YES NO
2) Has there been a (known)	change in ownership/operator of the site	e during the compliance period?	NO
Components (Multime	edia) for the Site Are Listed i	n Sections A - J	
A. Final Orders, court jon N/A	udgments, and consent decrees	:	
B. Criminal convictions	:		
C. Chronic excessive er	nissions events:		
D. The approval dates o	of investigations (CCEDS Inv. Tr	ack. No.):	

N/A

E. Written notices of violations (NOV) (CCEDS Inv. Track. No.):

A notice of violation represents a written allegation of a violation of a specific regulatory requirement from the commission to a regulated entity. A notice of violation is not a final enforcement action, nor proof that a violation has actually occurred. N/A

F. Environmental audits:

N/A

- G. Type of environmental management systems (EMSs):  $_{\mbox{N/A}}$
- H. Voluntary on-site compliance assessment dates:  $$\rm N/A$$
- I. Participation in a voluntary pollution reduction program: \$N/A\$
- J. Early compliance:

N/A

#### Sites Outside of Texas:

N/A

Senate Bill 709 (84th Legislative Session, 2015) amended the Texas Water Code by adding new Section 5.5553, which requires the Texas Commission on Environmental Quality (TCEQ) to provide written notice to you at least thirty (30) days prior to the TCEQ's issuance of draft permits for applications that are located in your district.

City of Stinnett, P.O. Box 909, Stinnett, Texas 79083, has applied to the TCEQ for proposed Texas Land Application Permit No. WQ0010291002 to authorize the disposal of treated wastewater at a volume not to exceed a daily average flow of 200,000 gallons per day via surface irrigation of 160 acres of non-public access land. The domestic wastewater treatment facility and disposal area are located approximately 3000 feet south and 3500 feet east of the intersection of State Highway 152 and State Highway 136, near the city of Stinnett, in Hutchinson County, Texas 79083. Authorization for disposal was previously permitted by expired Permit No. WQ0010291001. TCEQ received this application on December 30, 2024. The permit application will be available for viewing and copying at Stinnett City Hall, main entrance, 609 MacKenzie Avenue, Stinnett, in Hutchinson County, Texas. The application, including any updates, and associated notices are available electronically at the following webpage: https://www.tceq.texas.gov/permitting/wastewater/pending-permits/tlap-applications. 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=-101.4306,35.807708&level=18

TCEQ is preparing the initial draft permit. At the time the draft permit is issued, the applicant will be required to publish notice in a newspaper of general circulation, and the TCEQ will provide a copy of the notice of draft permit to persons who have requested to be on a mailing list.

Questions regarding this application may be directed to Mr. Deba Dutta, P.E., by calling 512-239-4608.

Issuance Date: \_\_\_\_\_

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**.

<u>Existing Phase: Two Imhoff Tanks in Parallel operation. Three Stabilization Ponds in</u> Series operation. One Storage Pond. 160 acres of pastureland for irrigation. Three sludge drying beds. Final Phase: Headworks and bar screens will be added.

#### **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**.

Treatment Unit Type	Number of Units	Dimensions (L x W x D)
Imhoff Tank #1 (existing)	1	20' Dia. X 28' Depth
Imhoff Tank #2 (existing)	1	26' Dia. X 28' Depth
Stabilization Pond#1 (existing)	1	3.4 acres Surface Area
Stabilization Pond#2 (existing)	1	4.6 acres Surface Area
Stabilization Pond#3 (existing)	1	4.2 acres Surface Area
Irrigation Holding Pond (existing)	1	1.4 acres – acre-ft
Sludge Drying Bed (existing)	3	25' x 20' x 2'
Headworks (Proposed)	1	TBD
Bar Screen (Proposed)	1	1/4" x 24" x 24"
Facultative Lagoon (Proposed)	1	557' X 210' X 12 to 8'
Storage Pond (Proposed)	1	557' X 240' X 10'

#### Table 1.0(1) - Treatment Units

#### C. Process Flow Diagram

Provide flow diagrams for the existing facilities and **each** proposed phase of construction. Attachment: <u>Appendix H: Flow Diagram</u>

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

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

- Latitude: <u>N/A</u>
- Longitude: <u>N/A</u>

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

- Latitude: <u>35° 48' 29.35"</u>
- Longitude: <u>-101° 25' 49.82"</u>

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

#### **TCEQ Interoffice Memorandum**

To:	Deba Dutta, Team Leader
	Municipal Permits Team
From:	Mara Guerin
	Water Quality Assessment Team
Date:	February 11, 2025
Subject:	Agronomy Recommendation, Stinnett WWTF, Renewal, Permit WQ0010291002, Hutchinson County
	Hutchinson County

### Based upon review of the permit application and an evaluation of soils and agronomy information, the WQA Team reviewing agronomist recommends the following:

1. Add the following Special Provision:

The permittee shall use cultural practices to promote and maintain the health and propagation of the native grass and rye grass crops and avoid plant lodging. The permittee shall harvest the crops (cut and remove it from the field) as needed during the year. Harvesting and mowing dates shall be recorded in a log book kept on site to be made available to TCEQ personnel upon request.

2. Add the following Special Provision:

The physical condition of the land application fields shall be monitored on a weekly basis. Any area with problems such as surface runoff, surficial erosion, or stressed or damaged vegetation, etc., shall be recorded in a field log kept onsite. Corrective measures will be implemented within 24 hours of discovery.

3. Replace Special Provision 5 with the following:

The irrigated crops include native grass and rye crops. Application rates to the irrigated land shall not exceed 4.2 acre-feet per year per acre irrigated and shall not exceed a net application rate of 2.1 acre-feet per year per acre based on the permitted flow and the acreage of the disposal site. The permittee is responsible for providing equipment to determine application rates and maintaining accurate records of the volume of effluent applied. These records shall be made available for review by the Texas Commission on Environmental Quality and shall be maintained for least three years.

#### 4. Update Special Provision 4 to the following:

The permittee shall obtain representative soil samples from the root zones of the land application area. Composite sampling techniques shall be used. Each composite sample shall represent no more than 80 acres with no fewer than 10 to 15 subsamples representing each composite sample. For analysis and reporting, subsamples shall be composited by like sampling depth, type of crop, and soil type. Soil types are soils that have like topsoil or plow layer textures. These soils shall be sampled individually from 0 to 6 inches, 6 to 18 inches and 18 to 30 inches below ground level. The permittee shall sample soils in December to February of each year. Soil samples shall be analyzed within 30 days of sample collection.

Samples shall be analyzed annually according to the following table:

Parameter	Method	Minimum Analytical Level (MAL)	Reporting units
рН	2:1 (v/v) water to soil mixture		Reported to 0.1 pH units after calibration of pH meter
Electrical Conductivity	2:1 (v/v) water to soil mixture	0.01	dS/m (same as mmho/cm)
Nitrate-nitrogen	From a 1 <u>N</u> KCl soil extract	1	mg/kg (dry weight basis)
Total Kjeldahl Nitrogen (TKN)	For determination of Organic plus Ammonium Nitrogen. Procedures that use Mercury (Hg) are not acceptable.	20	mg/kg (dry weight basis)
Total Nitrogen	= TKN plus Nitrate- nitrogen		mg/kg (dry weight basis)
Plant-available: Phosphorus	Mehlich III with inductively coupled plasma	1 (P)	mg/kg (dry weight basis)
Plant-available: Potassium (K)	May be determined in the same Mehlich III extract with inductively coupled plasma	5 (K)	mg/kg (dry weight basis)
Amendment addition, e.g., gypsum			Report in <i>short tons/acre</i> in the year effected

A copy of this soil testing plan shall be provided to the analytical laboratory prior to sample analysis. The permittee shall submit the results of the annual soil sample analyses with copies of the laboratory reports and a map depicting the areas that have received wastewater within the permanent land application fields to the TCEQ Regional Office (MC Region 1) and the Compliance Monitoring Team (MC 224) of the Enforcement Division, no later than the end of September of each sampling year. If wastewater is not applied in a particular year, the permittee shall notify the same TCEQ offices and indicate that wastewater has not been applied on the approved land irrigation site(s) during that year.

5. Update Special Provision 6 to the following:

Irrigation practices shall be designed and managed as to prevent ponding of effluent or contamination of ground and surface waters and to prevent the occurrence of nuisance

conditions in the area. To promote effluent and nutrient uptake by the crop, and to prevent pathways for effluent surfacing, native grass and rye crops shall be established and well maintained in the irrigation area throughout the year. Tailwater control facilities shall be provided as necessary to prevent the discharge of any effluent from the irrigated land.

6. Update Special Provision 9 to the following:

For any area where treated effluent is stored or where there exist hose bibs or faucets, the permittee shall erect adequate signs stating that the irrigation water is from a non-potable water supply. Signs shall consist of a red slash superimposed over the international symbol for drinking water accompanied by the message "DO NOT DRINK THE WATER" in both English and Spanish. All piping transporting the effluent shall be clearly marked with these same signs.

7. Update Special Provision 11 to the following:

Irrigation with effluent shall only be done when the irrigation area is not in use.

#### **TCEQ Interoffice Memorandum**

To:Deba Dutta, P.E., Team Leader, Municipal Permits TeamFrom:Andrew Gorton, P.G., Water Quality Assessment TeamDate:February 4, 2025Subject:Geology Recommendations, City of Stinnett, Application for a New Permit,

Permit No. WQ0010291002, Hutchinson County

Based upon the review of the permit application and an evaluation of geology and groundwater information, the WQA Team reviewing geologist recommends the following as special provisions that will become an enforceable part of the permit (this document does not include agronomy recommendations):

- 1. The permittee shall comply with buffer zone requirements of 30 TAC §309.13(c). A wastewater treatment plant unit, defined by 30 TAC Section §309.11(a)(9), must be located a minimum horizontal distance of 250 feet from a private well and a minimum horizontal distance of 500 feet from a public water well site, spring, or other similar sources of public drinking water, as provided by §290.41(c)(1)(C) of this title.
- 2. The permittee shall comply with the buffer zone requirements of 30 TAC §309.13(c), specifically regarding water wells. The wastewater application area shall be located a minimum horizontal distance of 150 feet from private water wells; and a minimum horizontal distance of 500 feet from public water supply wells, springs, or other similar sources of public drinking water.
- 3. Any new or modified wastewater pond shall be adequately lined to control seepage in accordance with 30 TAC §217.203 **and** 30 TAC 309.13(d) since the facility overlies the recharge zone of an aquifer. The Permittee shall submit the liner certification for a newly-constructed or modified wastewater pond to the Water Quality Assessment Team (MC-150), the TCEQ Regional Office (MC-Region 1), and the TCEQ Compliance Monitoring Section (MC-224) within 30 days of completion and prior to use. The certification shall be signed and sealed by a Texas-licensed professional engineer and include a description of how the liner meets the requirements of 30 TAC §217.203 **and** 30 TAC §309.13(d) since the facility is located on the recharge zone of an aquifer.
- 4. Wastewater ponds shall be maintained and operated in a manner that prevents unauthorized discharge to water in the state and contamination of groundwater.
- 5. Facilities for the retention of treated or untreated wastewater shall be adequately managed and lined to control seepage. At least once per month, the Permittee shall inspect the sides and bottom (if visible) of all wastewater ponds for signs of damage and leakage, and any pond leak detection systems that are in service. Leaking ponds shall be removed from service, or operated in a manner to prevent discharge, until repairs are made or replacement ponds are constructed. A record of the monthly inspections shall be maintained in a field log and kept onsite for TCEQ inspection.
- 6. Pond liner certifications and all liner construction and repair documentation shall be maintained by the Permittee for the life of the facility and be made available for TCEQ personnel for inspection and review.

#### CITY OF STINNETT WWTF APPLICATION FOR MAJOR PERMIT AMENDMENT WITH RENEWAL PERMIT NO. WQ0010291001 Technical Completeness Review

#### Please address the following items:

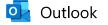
#### GEOLOGY & GROUNDWATER

1. Please ensure all maps showing the proposed wastewater ponds and irrigation fields consistently show an accurate property boundary.

#### SOILS & AGRONOMY

- 1. Domestic Worksheet 3.0 Section 2.
  - a. Please include land use in column 1 of the table.
- 2. Domestic Worksheet 3.0 Section 5. Annual Cropping Plan, Attachment T5
  - a. Please provide the quantity of the crops' nutrient requirements. For reference I have attached the S Crops table, a reputable source for crop nutrient requirements.
- 3. Domestic Worksheet 3.0 Section 8, Attachment T8
  - a. Please provide the Soil Analyses as outlined in Special Provision 4 in the permit.

Please feel free to call Andrew Gorton, P.G. for geology/groundwater questions at (512) 239-4585 or via email (preferred) at Andrew.Gorton@tceq.texas.gov. For soils/agronomy questions, please feel free to call Mara Guerin at (512) 239-4532 or via email (preferred) at Mara.Guerin@tceq.texas.gov).



#### Stinnett WWTP Permit - Appendix Maps Update

From Paul Krueger < PKrueger@Parkhill.com>

Date Wed 1/15/2025 11:40 AM

- To Andrew Gorton <Andrew.Gorton@Tceq.Texas.Gov>
- Cc Roy Haden <rhaden@parkhill.com>; Anastasia Hawkins-Mendoza <ahawkins-mendoza@parkhill.com>

2 attachments (2 MB)

Site Drawing-Appendix I.pdf; Well Map Appendix O Updated.pdf;

Hi Andrew,

Following up on our phone conversation last week to provide updated appendix maps. The two attached maps show the correct land application area. This area should now be consistent throughout the application.

The well map includes the additional well we discussed that was not included on the original map. I have also attached the state tracking report for the new well.

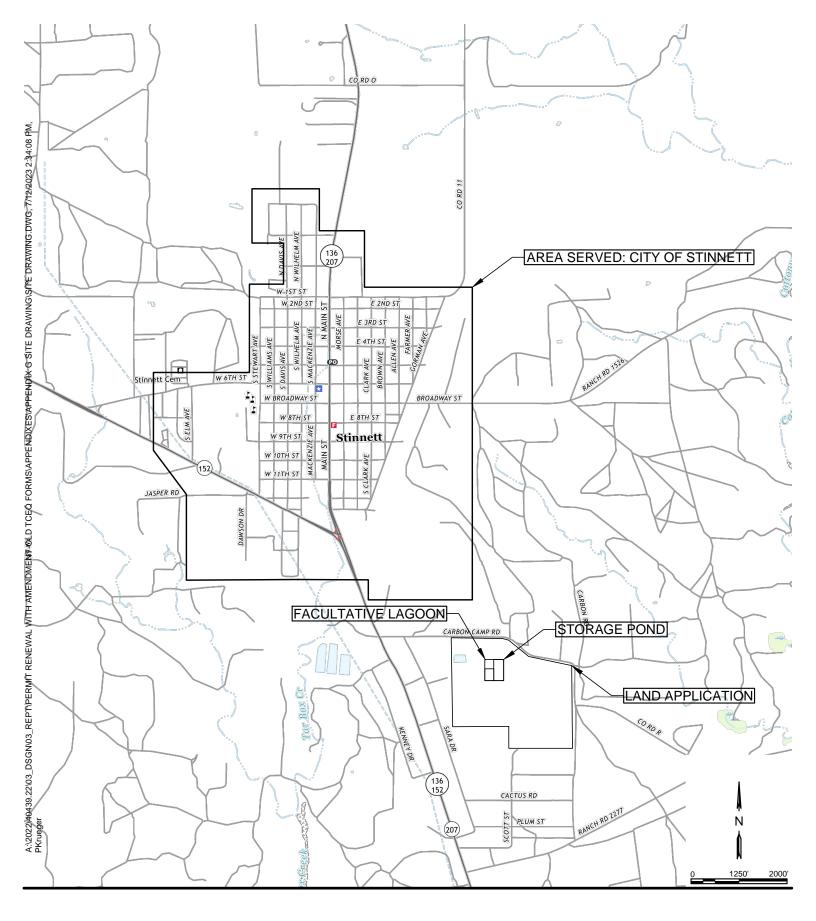
Let me know if you need anything else. Thank you,

#### Paul Krueger, PE

**Civil Engineer** 

#### Parkhill

806.473.3715 | Parkhill.com



## City of Stinnett Wastewater Treatment Plant Renewal

### **City of Stinnett**

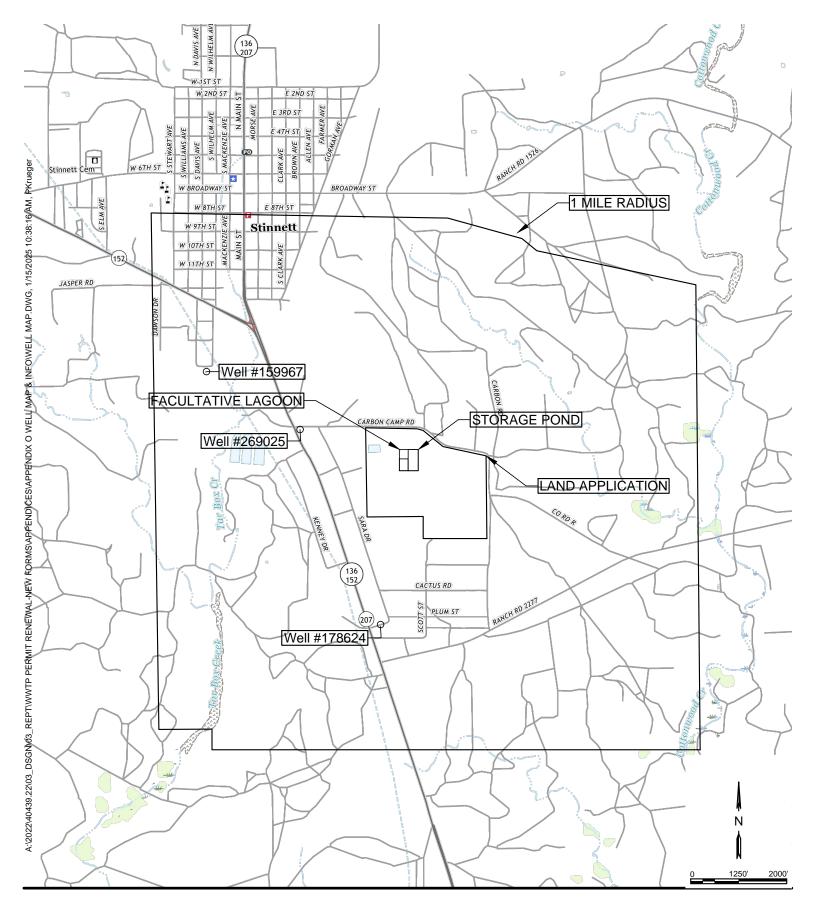
609 Mackenzie Ave Stinnett, TX 79083

### Parkhill.com

Parkh

Site Drawing

Issue: Date: Project No: Sheet: Renewal 01/15/2025 40439.22 1 OF 1



# City of Stinnett Wastewater Parl

## 'khill

Parkhill.com

### Well Map

Issue: Date: 1 Project No: Sheet:

New 1/13/2025 40439.22 1 OF 1

**City of Stinnett** P.O. Box 909 Stinnett, TX 79083

STATE OF TEXAS WELL REPORT for Tracking #178624				
Owner:	Polecat Well Service	Owner Well #:	No Data	
Address:	P. O. Box 1066	Grid #:	06-13-5	
Well Location:	Stinnett, TX 79083	Latitude:	35° 47' 45" N	
	Stinnett, TX	Longitude:	101° 25' 53" W	
Well County:	Hutchinson	Elevation:	No Data	
Type of Work:	New Well	Proposed Use:	Domestic	

Drilling Start Date: 3/20/2006

Drilling End Date: 3/20/2006

	Diameter	(in.)	Top Depth (ft.)	Bottom Depth	(ft.)
Borehole:	9		0	440	
Drilling Method:	Mud (Hydrauli	c) Rotary			
Borehole Completion:	Filter Packed				
	Top Depth (ft.)	Bottom Depth (ft.)	Filter	Material	Size
ilter Pack Intervals:	27	440	Gr	avel	
	Top Depth (ft.)	Bottom Depth	(ft.) De	escription (number of sac	ks & material)
Annular Seal Data:	3	27		4	
Seal Method: Ha	and Mix		Distance to P	Property Line (ft.): No	o Data
Sealed By: <b>Dr</b>	iller			tic Field or other ontamination (ft.): <b>20</b>	00
			Distance to	Septic Tank (ft.): No	o Data
			Metho	od of Verification: Me	easured
Surface Completion:	Pitless Adapte	er Used			
Water Level:	215 ft. below I	and surface on 20	0 <b>6-03-20</b> Mea	surement Method:	Unknown
Packers:	No Data				
Type of Pump:	No Data				

Water Quality:	No Dete	No Doto		
Water Quality.	No Data	No Data		
		Chemical Analysis Ma	ade: <b>No</b>	
	Did the driller ki	nowingly penetrate any strata whi contained injurious constituent		
Certification Data:	driller's direct supervis correct. The driller und	t the driller drilled this well (or the ion) and that each and all of the s derstood that failure to complete t urned for completion and resubmi	statements he the required it	rein are true and
Certification Data: Company Information:	driller's direct supervis correct. The driller und the report(s) being retu	ion) and that each and all of the s derstood that failure to complete t	statements he the required it	rein are true and
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#### Lithology: DESCRIPTION & COLOR OF FORMATION MATERIAL

Top (ft.)	Bottom (ft.)	Description
0	110	Surface Caliche,Clay and Sand
110	190	Red Clay and Fine Sand
190	230	Red Clay and Little Sand
230	270	Red Clay and Fine Sand
270	430	Sandy Red Clay
430	440	Red Clay

#### Casing: BLANK PIPE & WELL SCREEN DATA

Dia. (in.) New/Used Type Setting From/To (ft.)

5 New PVC 0 440

5 New Perforated 430 360 .030

#### IMPORTANT NOTICE FOR PERSONS HAVING WELLS DRILLED CONCERNING CONFIDENTIALITY

TEX. OCC. CODE Title 12, Chapter 1901.251, authorizes the owner (owner or the person for whom the well was drilled) to keep information in Well Reports confidential. The Department shall hold the contents of the well log confidential and not a matter of public record if it receives, by certified mail, a written request to do so from the owner.

Please include the report's Tracking Number on your written request.

Texas Department of Licensing and Regulation P.O. Box 12157 Austin, TX 78711 (512) 334-5540

#### **Mara Guerin**

From:	Paul Krueger <pkrueger@parkhill.com></pkrueger@parkhill.com>
Sent:	Monday, February 10, 2025 11:00 AM
To:	Mara Guerin
Cc:	smiller@cityofstinnett.com; Andrew Gorton; Roy Haden
Subject:	RE: Re: Proposed Permit No. WQ0010291002
Attachments:	WQ0010291002_NOD_Response.pdf
Follow Up Flag:	Follow up
Flag Status:	Completed

#### Good Morning Mara,

Please see our attached response to the preliminary review of proposed permit WQ0010291002 for the City of Stinnett.

#### Thank you,

Paul Krueger, PE Civil Engineer

Parkhill 806.473.3715 | Parkhill.com

From: Mara Guerin <Mara.Guerin@tceq.texas.gov> Sent: Friday, February 7, 2025 10:54 AM To: Paul Krueger <PKrueger@Parkhill.com> Subject: RE: Re: Proposed Permit No. WQ0010291002

Good morning,

Thank you for the update you provided over the phone yesterday. The following message is for documentation purposes.

We have received the renewal application for WQ0010291002 – City of Stinnett, and it is missing information necessary to complete our review. Please provide the updated information listed above in the attachment of this email within 14 days or by February 21st, 2025.

Any revisions can be sent electronically. If you have any questions, please do not hesitate to reach out. Thank you, Mara Guerin Modeling & Assessment Specialist Water Quality Assessment 512-239-4532 she/her/hers



From: Mara Guerin
Sent: Tuesday, February 4, 2025 11:46 AM
To: 'Paul Krueger' <<u>PKrueger@Parkhill.com</u>>
Subject: RE: Re: Proposed Permit No. WQ0010291002

Hi Paul,

I just thought I'd follow up on this.

I look forward to receiving the updated information and continuing my review.

Please let me know if you have any questions.

Best, Mara Guerin Modeling & Assessment Specialist Water Quality Assessment 512-239-4532 she/her/hers



From: Mara Guerin
Sent: Friday, January 10, 2025 2:24 PM
To: smiller@cityofstinnett.com; pkrueger@parkhill.com
Cc: Andrew Gorton <<u>Andrew.Gorton@Tceq.Texas.Gov</u>>
Subject: Re: Proposed Permit No. WQ0010291002

Hello,

The Water Quality Assessment (WQA) Team of the Texas Commission on Environmental Quality has completed a preliminary review of the permit application information and identified deficiencies (attached) that must be addressed before the WQA Team can continue with the technical review. The deficient item(s) will require your response in a timely, complete, and accurate manner.

An accurate and complete revised permit application is essential for making recommendations to the commission regarding whether this permit should be issued. Based on the information provided in the

application, the executive director does not have sufficient information to make a recommendation. Therefore, you must send updated technically complete and accurate information within 14 days (January 24) of the date of this email.

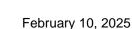
Any revisions can be sent electronically to me (WQA Team Agronomist) or to Andrew Gorton (WQA Team Geologist). If you have any questions, please feel free to contact either me or Andrew.

Thank you,

Mara Guerin Modeling & Assessment Specialist Water Quality Assessment 512-239-4532 she/her/hers



This email has been scanned for spam and viruses by Proofpoint Essentials. Click <u>here</u> to report this email as spam.



Andrew Gorton, P.G Texas Commission on Environmental Quality Water Quality Division Application Review & Processing Team PO Box 13087 Austin, Texas 78711-3087

Re: Application for Proposed Permit No.: WQ0010291002 Applicant Name: City of Stinnett (CN601122179) Site Name: City of Stinnett WWTP (RN102079613) Type of Application: New

Dear Mara Guerin:

Parkhill

Please see our complete responses addressing the items in your letter received on January 10th, 2025, for the above referenced permit.

#### **Geology & Groundwater**

1. Comment: Please ensure all maps showing the proposed wastewater ponds and irrigation fields consistently show an accurate property boundary.

Response: Updated maps were emailed to Andrew Gorton on January 15th.

#### Soils & Agronomy

1. Comment: Domestic Worksheet 3.0 Section 2. – i. Please include land use in column 1 of the table.

Response: Please see Attachment A for an updated technical report.

- 2. Comment: Domestic Worksheet 3.0 Section 5. Annual Cropping Plan, Attachment T5
  - i. Please provide the quantity of the crops' nutrient requirements. For reference I have attached the S Crops table, a reputable source for crop nutrient requirements.

Response: Please see Attachment B for an updated Annual Cropping Plan.

Comment: Domestic Worksheet 3.0 Section 8, Attachment T8 –

 Please provide the Soil Analysis as outlined in Special Provision 4 in the permit.

Response: Wastewater has not been land applied in the past year. According to Special Provision 4 in the permit, the permittee shall obtain representative soil samples from the root zones of the land application area receiving wastewater. Since the land application site has not revived wastewater in the past year a soil analysis is not required.

If you should have any questions, please do not hesitate to contact me at <u>pkrueger@parkhill.com</u> or 806.473.2200.

Sincerely,

PARKHILL

By

Paul Krueger, PE Civil Engineer

PK/rh/acs Enclosures

Attachment A: Updated Technical Report Attachment B: Updated Cropping Plan

cc: Stacie Miller, City Manager, City of Stinnett

## Attachment A

Updated Technical Report

### DOMESTIC WASTEWATER PERMIT APPLICATION WORKSHEET 3.0: LAND DISPOSAL OF EFFLUENT

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

### Section 1. Type of Disposal System (Instructions Page 68)

Identify the method of land disposal:

	Surface application		Subs
--	---------------------	--	------

☑ Irrigation

- Subsurface application
- □ Subsurface soils absorption
- □ Drip irrigation system
- Subsurface area drip dispersal system
- □ Other (describe in detail): <u>Click to enter text.</u>

NOTE: All applicants without authorization or proposing new/amended subsurface disposal MUST complete and submit Worksheet 7.0.

### For existing authorizations, provide Registration Number: <u>N/A</u>

### Section 2. Land Application Site(s) (Instructions Page 68)

In table 3.0(1), provide the requested information for the land application sites. Include the agricultural or cover crop type (wheat, cotton, alfalfa, bermuda grass, native grasses, etc.), land use (golf course, hayland, pastureland, park, row crop, etc.), irrigation area, amount of effluent applied, and whether or not the public has access to the area. Specify the amount of land area and the amount of effluent that will be allotted to each agricultural or cover crop, if more than one crop will be used.

#### Table 3.0(1) – Land Application Site Crops

Crop Type & Land Use	Irrigation Area (acres)	Effluent Application (GPD)	Public Access? Y/N
Previous Phase: Native Grass and Rye Grass,	160 Acres	300,000	N
Native Pastureland			
Final Phase: Native Grass and Rye Grass,	160 Acres	200,000	Ν
Native Pastureland			

## Attachment B

## Updated Annual Cropping Plan

#### APPENDIX N

#### ANNUAL CROPPING PLAN

#### Stinnett, Texas

- A. See attached Soil Map(Appendix Q)
- B. The City of Stinnett grows approximately 160 acres of Native Perennial and Rye Grass, as shown on the attached map. These crops are capable of being grown year round.
- C. N/A
- D. Typical Annual Growing Season is as follows:

Month	Native Perennial and Rye Grass	
January	Х	
February	Х	
March	Х	
April	Х	
May	Х	
June	Х	
August	Х	
September	Х	
October	Х	
November	Х	
December	Х	

- E. The City of Stinnett will provide essential nutrients to keep the grasses healthy year round.
- F. Nutrient Removal Rates for Rye Grass
  - a. Nitrogen: 117 lbs/acre
  - b. Phosphorous Pentoxide: 43 lbs/acre
  - c. Potassium Oxide: 165 lbs/acre
- G. There is no minimum harvest height.
- H. No additional water requirements are necessary.
- According to Table 3 of TAC 309.20, ryegrass is relatively salt tolerant with 6.0 8.0 millimhos/cm at 25° C
- J. The land application area will be mowed as necessary
- K. The crop is existing native vegetation that will not be harvested.