



# 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 \*

\* **NOTE:** This application was declared Administratively Complete before June 1, 2024. The application materials, draft permit, and technical summary or fact sheet are available for review at the Public Viewing Location provided in the NAPD.

## Section 15. Plain Language Summary (Instructions Page 40)

If you are subject to the alternative language notice requirements in [30 Texas Administrative Code §39.426](#), **you must provide a translated copy of the completed plain language summary in the appropriate alternative language as part of your application package.** For your convenience, a Spanish template has been provided below.

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

#### DOMESTIC WASTEWATER

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

New Horizons Ranch and Center Inc (CN600705727 ) operates New Horizons Ranch and Center Inc wastewater treatment plant RN102343704. a domestic wastewater treatment plant with irrigation. The facility is located at 850 FM 574 West, in Goldthwaite, Mills County, Texas 76844.

This is for a renewal of the wastewater permit with no discharge <<For TLAP applications include the following sentence, otherwise delete:>> This permit will not authorize a discharge of pollutants into water in the state.

Discharges from the facility are expected to contain five-day biochemical oxygen demand (BOD<sub>5</sub>), total suspended solids (TSS), and Escherichia coli. Additional potential pollutants are included in the Domestic Technical Report 1.0, Section 7. Pollutant Analysis of Treated Effluent in the permit application package. domestic wastewater is treated by an extended aeration process. The phases are: Screening, Extended aeration, Settling in clarifier followed by chlorination. Sludge from the clarifier is returned to the aeration basin for additional treatment. There is an aerobic digester.



# TEXAS COMMISSION ON ENVIRONMENTAL QUALITY



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

PERMIT NO. WQ0012759001

**APPLICATION.** New Horizons Ranch and Center, Inc., 147 Sayles Boulevard, Abilene, Texas 79605, has applied to the Texas Commission on Environmental Quality (TCEQ) to renew Texas Land Application Permit (TLAP) No. WQ0012759001 to authorize the disposal of treated wastewater at a volume not to exceed a daily average flow of 12,000 gallons per day via surface irrigation of 15 acres of non-public access pastureland. The domestic wastewater facility and disposal area are located at 850 Farm-to-Market Road 574 West, near the city of Goldthwaite, in Mills County, Texas 76844. TCEQ received this application on March 4, 2024. The permit application will be available for viewing and copying at Mills County Courthouse, 1011 4<sup>th</sup> Street, Goldthwaite, Texas, prior to the date this notice is published in the newspaper. This link to an electronic map of the site or facility's general location is provided as a public courtesy and not part of the application or notice. For the exact location, refer to the application.

<https://gisweb.tceq.texas.gov/LocationMapper/?marker=-98.708049,31.460114&level=18>

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

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

**OPPORTUNITY FOR A CONTESTED CASE HEARING.** After the deadline for submitting public comments, the Executive Director will consider all timely comments and prepare a response to all relevant and material, or significant public comments. **Unless the application is directly referred for a contested case hearing, the response to comments, and the Executive Director's decision on the application, will be mailed to everyone who submitted public comments and to those persons who are on the mailing list for this**

**application.** If comments are received, the mailing will also provide instructions for requesting reconsideration of the Executive Director's decision and for requesting a contested case hearing. A contested case hearing is a legal proceeding similar to a civil trial in state district court.

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

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

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

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

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

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

**AGENCY CONTACTS AND INFORMATION.** All public comments and requests must be submitted either electronically at <https://www14.tceq.texas.gov/epic/eComment/>, or in writing to the Texas Commission on Environmental Quality, Office of the Chief Clerk, MC-105, P.O. Box 13087, Austin, Texas 78711-3087. Please be aware that any contact information you provide, including your name, phone number, email address and physical address will become part of the agency's public record. For more information about this permit

application or the permitting process, please call the TCEQ Public Education Program, Toll Free, at 1-800-687-4040 or visit their website at [www.tceq.texas.gov/goto/pep](http://www.tceq.texas.gov/goto/pep). Si desea información en Español, puede llamar al 1-800-687-4040.

Further information may also be obtained from New Horizons Ranch and Center, Inc. at the address stated above or by calling Mr. Tim Hart, Chief Operation Officer, at 325-437-1852.

Issuance Date: April 19, 2024

# 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

## RENEWAL

**PERMIT NO. WQ0012759001**

**APPLICATION AND PRELIMINARY DECISION.** New Horizons Ranch and Center, Inc., 147 Sayles Boulevard, Abilene, Texas 79605, has applied to the Texas Commission on Environmental Quality (TCEQ) for a renewal of TCEQ Permit No. WQ0012759001 which authorizes the disposal of treated domestic wastewater at a daily average flow not to exceed 18,000 gallons per day via surface irrigation of 15 acres of non-public access pastureland. The draft permit authorizes the disposal of treated domestic wastewater at a daily average flow not to exceed 12,000 gallons per day via surface irrigation of 15 acres of non-public access pastureland. This permit will not authorize a discharge of pollutants into water in the state. TCEQ received this application on March 4, 2024.

**This combined notice is being issued to change the point of contact from what was stated in the NORI.**

The wastewater treatment facility and disposal site are located at 850 Farm-to-Market Road 574 West, near the City of Goldthwaite, Mills County, Texas 76844. The wastewater treatment facility and disposal site are located in the drainage basin of Lower Pecan Bayou in Segment No. 1417 of the Colorado 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=-98.708049,31.460114&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 Mills County Courthouse, 1011 4th Street, Goldthwaite, 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. TCEQ may act on an application to renew a permit for discharge of wastewater without providing an opportunity for a contested case hearing if certain criteria are met.**

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

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

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

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

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

Further information may also be obtained from New Horizons Ranch and Center, Inc. at the address stated above or by calling **Mr. Michael England, Facilities Manager, at 325-260-5118.**

Issuance Date: April 28, 2025



PERMIT NO. WQ0012759001

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

This is a renewal of Permit No.  
WQ0012759001 issued on March  
30, 2015.

PERMIT TO DISCHARGE WASTES  
under provisions of Chapter 26  
of the Texas Water Code

New Horizons Ranch and Center, Inc.

whose mailing address is

147 Sayles Boulevard  
Abilene, Texas 79605

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

General Description and Location of Waste Disposal System:

Description: The New Horizons Ranch and Center Wastewater Treatment Facility consists of an activated sludge process plant using the extended aeration mode. Treatment units in the Interim phase include a bar screen, an aeration basin, final clarifiers, an aerobic digester, two holding ponds and a chlorine contact chamber. Treatments units in the Final phase will include a bar screen, an aeration basin, a aerated sludge holding tank, a final clarifier, one holding pond and a chlorine contact chamber. The permittee is authorized to dispose of treated domestic wastewater effluent at a daily average flow not to exceed 0.018 million gallons per day (MGD) in the Interim phase and 0.012 MGD in the Final phase via surface irrigation of 15 acres of non-public access pastureland. The facility includes two storage ponds with a a total surface area of 3.72 acres and total capacity of 6.29 acre-feet for storage of treated effluent prior to irrigation in the Interim phase and one storage pond with a total surface area of 1.26 acres and total capacity of 6.29 acre-feet for storage of treated effluent prior to irrigation in the Final phase. Application rates to the irrigated land shall not exceed 1.34 acre-feet per year per acre irrigated. The irrigated crops include Coastal Bermuda Grass and Cool Season Crops.

Location: The wastewater treatment facility and disposal site are located at 850 Farm-to-Market Road 574 West, near the City of Goldthwaite, Mills County, Texas 76844. (See Attachment A.)

Drainage Area: The wastewater treatment facility and disposal site are located in the drainage basin of Lower Pecan Bayou in Segment No. 1417 of the Colorado 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, **ten 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. Effluent Limitations

Character: Treated Domestic Sewage Effluent

Volume: Daily Average Flow – 0.018 MGD in the Interim phase and 0.012 MGD in the Final phase from the treatment system

Quality: The following effluent limitations are required:

<u>Parameter</u>	Effluent Concentrations			
	(Not to Exceed)			
	<u>Daily Average</u> mg/l	<u>7-Day Average</u> mg/l	<u>Daily Maximum</u> mg/l	<u>Single Grab</u> mg/l
Biochemical Oxygen Demand (5-day)	20	30	45	65

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

B. Monitoring Requirements:

<u>Parameter</u>	<u>Monitoring Frequency</u>	<u>Sample Type</u>
Flow	Five/week	Instantaneous
Biochemical Oxygen Demand (5-day)	One/month	Grab
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 determination for intermittent discharges shall consist of a minimum of three 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 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.

25

b. All laboratory tests submitted to demonstrate compliance with this permit must meet the requirements of 30 TAC Chapter , 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 Compliance Monitoring Team of 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 Compliance Monitoring Team of 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 Compliance Monitoring Team of 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 Compliance Monitoring Team of 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 Compliance Monitoring Team of the Enforcement Division (MC 224) in writing within five (5) working days, after becoming aware of or having reason to believe:

- a. That any activity has occurred or will occur which would result in the discharge, on a

routine or frequent basis, of any toxic pollutant listed at 40 CFR Part 122, Appendix D, Tables II and III (excluding Total Phenols) which is not limited in the permit, if that discharge will exceed the highest of the following “notification levels”:

- i. One hundred micrograms per liter (100 µg/L);
  - ii. Two hundred micrograms per liter (200 µg/L) for acrolein and acrylonitrile; five hundred micrograms per liter (500 µg/L) for 2,4-dinitrophenol and for 2-methyl-4,6-dinitrophenol; and one milligram per liter (1 mg/L) for antimony;
  - iii. Five (5) times the maximum concentration value reported for that pollutant in the permit application; or
  - iv. The level established by the TCEQ.
- b. That any activity has occurred or will occur which would result in any discharge, on a nonroutine or infrequent basis, of a toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following “notification levels”:
- i. Five hundred micrograms per liter (500 µg/L);
  - ii. One milligram per liter (1 mg/L) for antimony;
  - iii. Ten (10) times the maximum concentration value reported for that pollutant in the permit application; or
  - iv. The level established by the TCEQ.

#### 10. Signatories to Reports

All reports and other information requested by the Executive Director shall be signed by the person and in the manner required by 30 TAC § 305.128 (relating to Signatories to Reports).

### 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.

TCEQ Revision 06/2020

## 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

1. Sewage sludge or biosolids shall be tested once during the term of this permit in accordance with the method specified in both 40 CFR Part 261, Appendix II and 40 CFR Part 268, Appendix I [Toxicity Characteristic Leaching Procedure (TCLP)] or other method that receives the prior approval of the TCEQ for the contaminants listed in 40 CFR Part 261.24, Table 1. Sewage sludge or biosolids failing this test shall be managed according to RCRA standards for generators of hazardous waste, and the waste's disposition must be in accordance with all applicable requirements for hazardous waste processing, storage, or disposal. Following failure of any TCLP test, the management or disposal of sewage sludge or biosolids at a facility other than an authorized hazardous waste processing, storage, or disposal facility shall be prohibited until such time as the permittee can demonstrate the sewage sludge or biosolids no longer exhibits the hazardous waste toxicity characteristics (as demonstrated by the results of the TCLP tests). A written report shall be provided to both the TCEQ Registration and Reporting Section (MC 129) of the Permitting and Registration Support Division and the Regional Director (MC Region 9) within seven (7) days after failing the TCLP Test.

The report shall contain test results, certification that unauthorized waste management has stopped, and a summary of alternative disposal plans that comply with RCRA standards for the management of hazardous waste. The report shall be addressed to: Director, Permitting and Registration Support Division (MC 129), Texas Commission on Environmental Quality, P.O. Box 13087, Austin, Texas 78711-3087. In addition, the permittee shall prepare an annual report on the results of all sludge toxicity testing. The permittee shall submit the following information in an annual report to the TCEQ by September 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 9) and the Enforcement Division (MC 224).

2. Biosolids shall not be applied to the land if the concentration of the pollutants exceeds the pollutant concentration criteria in Table 1. The frequency of testing for pollutants in Table 1 is found in Section I.C. of this permit.

TABLE 1

<u>Pollutant</u>	<u>Ceiling Concentration</u> <u>(Milligrams per kilogram)*</u>
Arsenic	75
Cadmium	85
Chromium	3000
Copper	4300
Lead	840
Mercury	57
Molybdenum	75
Nickel	420
PCBs	49
Selenium	100
Zinc	7500

\* Dry weight basis

3. Pathogen Control

All sewage sludge that is applied to agricultural land, forest, a public contact site, or a reclamation site must be treated by one of the following methods to ensure that the sludge meets either the Class A, Class AB or Class B biosolids pathogen requirements.

- a. For sewage sludge to be classified as Class A biosolids with respect to pathogens, the density of fecal coliform in the sewage sludge must be less than 1,000 most probable number (MPN) per gram of total solids (dry weight basis), or the density of *Salmonella* sp. bacteria in the sewage sludge must be less than three MPN per four grams of total solids (dry weight basis) at the time the sewage sludge is used or disposed. In addition, one of the alternatives listed below must be met:

Alternative 1 - The temperature of the sewage sludge that is used or disposed shall be maintained at or above a specific value for a period of time. See 30 TAC § 312.82(a)(2)(A) for specific information;

Alternative 5 (PFRP) - Sewage sludge that is used or disposed of must be treated in one of the Processes to Further Reduce Pathogens (PFRP) described in 40 CFR Part 503, Appendix B. PFRP include composting, heat drying, heat treatment, and thermophilic aerobic digestion; or

Alternative 6 (PFRP Equivalent) - Sewage sludge that is used or disposed of must be treated in a process that has been approved by the U. S. Environmental Protection Agency as being equivalent to those in Alternative 5.

- b. For sewage sludge to be classified as Class AB biosolids with respect to pathogens, the density of fecal coliform in the sewage sludge must be less than 1,000 MPN per gram of total solids (dry weight basis), or the density of *Salmonella* sp. bacteria in the sewage sludge be less than three MPN per four grams of total solids (dry weight basis) at the time the sewage sludge is used or disposed. In addition, one of the alternatives listed below must be met:

Alternative 2 - The pH of the sewage sludge that is used or disposed shall be raised to above 12 std. units and shall remain above 12 std. units for 72 hours.

The temperature of the sewage sludge shall be above 52° Celsius for 12 hours or longer during the period that the pH of the sewage sludge is above 12 std. units.

At the end of the 72-hour period during which the pH of the sewage sludge is above 12 std. units, the sewage sludge shall be air dried to achieve a percent solids in the sewage sludge greater than 50%; or

Alternative 3 - The sewage sludge shall be analyzed for enteric viruses prior to pathogen treatment. The limit for enteric viruses is less than one Plaque-forming Unit per four grams of total solids (dry weight basis) either before or following pathogen treatment. See 30 TAC § 312.82(a)(2)(C)(i-iii) for specific information. The sewage sludge shall be analyzed for viable helminth ova prior to pathogen treatment. The limit for viable helminth ova is less than one per four grams of total solids (dry weight basis) either before or following pathogen treatment. See 30 TAC § 312.82(a)(2)(C)(iv-vi) for specific information; or

Alternative 4 - The density of enteric viruses in the sewage sludge shall be less than one Plaque-forming Unit per four grams of total solids (dry weight basis) at the time the sewage sludge is used or disposed. The density of viable helminth ova in the sewage sludge shall be less than one per four grams of total solids (dry weight basis) at the time the sewage sludge is used or disposed.

- c. Sewage sludge that meets the requirements of Class AB biosolids may be classified a Class A biosolids if a variance request is submitted in writing that is supported by substantial documentation demonstrating equivalent methods for reducing odors and written approval is granted by the executive director. The executive director may deny the variance request or revoke that approved variance if it is determined that the variance may potentially endanger human health or the environment, or create nuisance odor conditions.



- d. Three alternatives are available to demonstrate compliance with Class B biosolids criteria.

Alternative 1

- i. A minimum of seven random samples of the sewage sludge shall be collected within 48 hours of the time the sewage sludge is used or disposed of during each monitoring episode for the sewage sludge.
- ii. The geometric mean of the density of fecal coliform in the samples collected shall be less than either 2,000,000 MPN per gram of total solids (dry weight basis) or 2,000,000 Colony Forming Units per gram of total solids (dry weight basis).

Alternative 2 - Sewage sludge that is used or disposed of shall be treated in one of the Processes to Significantly Reduce Pathogens (PSRP) described in 40 CFR Part 503, Appendix B, so long as all of the following requirements are met by the generator of the sewage sludge.

- i. Prior to use or disposal, all the sewage sludge must have been generated from a single location, except as provided in paragraph v. below;
- ii. An independent Texas Licensed Professional Engineer must make a certification to the generator of a sewage sludge that the wastewater treatment facility generating the sewage sludge is designed to achieve one of the PSRP at the permitted design loading of the facility. The certification need only be repeated if the design loading of the facility is increased. The certification shall include a statement indicating the design meets all the applicable standards specified in Appendix B of 40 CFR Part 503;
- iii. Prior to any off-site transportation or on-site use or disposal of any sewage sludge generated at a wastewater treatment facility, the chief certified operator of the wastewater treatment facility or other responsible official who manages the processes to significantly reduce pathogens at the wastewater treatment facility for the permittee, shall certify that the sewage sludge underwent at least the minimum operational requirements necessary in order to meet one of the PSRP. The acceptable processes and the minimum operational and record keeping requirements shall be in accordance with established U.S. Environmental Protection Agency final guidance;
- iv. All certification records and operational records describing how the requirements of this paragraph were met shall be kept by the generator for a minimum of three years and be available for inspection by commission staff for review; and
- v. If the sewage sludge is generated from a mixture of sources, resulting from a person who prepares sewage sludge from more than one wastewater treatment facility, the resulting derived product shall meet one of the PSRP, and shall meet the certification, operation, and record keeping requirements of this paragraph.

Alternative 3 - Sewage sludge shall be treated in an equivalent process that has been approved by the U.S. Environmental Protection Agency, so long as all of the following requirements are met by the generator of the sewage sludge.

- i. Prior to use or disposal, all the sewage sludge must have been generated from a single location, except as provided in paragraph v. below;
- ii. Prior to any off-site transportation or on-site use or disposal of any sewage sludge generated at a wastewater treatment facility, the chief certified operator of the wastewater treatment facility or other responsible official who manages the processes to significantly reduce pathogens at the wastewater treatment facility for the permittee, shall certify that the sewage sludge underwent at least the minimum operational requirements necessary in order to meet one of the PSRP. The acceptable processes and the minimum operational and record keeping requirements shall be in accordance with established U.S. Environmental Protection Agency final guidance;
- iii. All certification records and operational records describing how the requirements of this paragraph were met shall be kept by the generator for a minimum of three years and be available for inspection by commission staff for review;
- iv. The Executive Director will accept from the U.S. Environmental Protection Agency a finding of equivalency to the defined PSRP; and
- v. If the sewage sludge is generated from a mixture of sources resulting from a person who prepares sewage sludge from more than one wastewater treatment facility, the resulting derived product shall meet one of the Processes to Significantly Reduce Pathogens, and shall meet the certification, operation, and record keeping requirements of this paragraph.

In addition to the Alternatives 1 – 3, the following site restrictions must be met if Class B biosolids are land applied:

- i. Food crops with harvested parts that touch the biosolids /soil mixture and are totally above the land surface shall not be harvested for 14 months after application of biosolids.
- ii. Food crops with harvested parts below the surface of the land shall not be harvested for 20 months after application of biosolids when the biosolids remain the land surface for 4 months or longer prior to incorporation into the soil.
- iii. Food crops with harvested parts below the surface of the land shall not be harvested for 38 months after application of biosolids when the biosolids remain on the land surface for less than 4 months prior to incorporation into the soil.
- iv. Food crops, feed crops, and fiber crops shall not be harvested for 30 days after application of biosolids.
- v. Domestic livestock shall not be allowed to graze on the land for 30 days after application of biosolids.
- vi. Turf grown on land where biosolids are applied shall not be harvested for 1 year after application of the biosolids when the harvested turf is placed on either land with a high potential for public exposure or a lawn.
- vii. Public access to land with a high potential for public exposure shall be restricted

for 1 year after application of biosolids.

viii. Public access to land with a low potential for public exposure shall be restricted for 30 days after application of biosolids.

ix. Land application of biosolids shall be in accordance with the buffer zone requirements found in 30 TAC § 312.44.

#### 4. Vector Attraction Reduction Requirements

All bulk sewage sludge that is applied to agricultural land, forest, a public contact site, or a reclamation site shall be treated by one of the following Alternatives 1 through 10 for vector attraction reduction.

Alternative 1 - The mass of volatile solids in the sewage sludge shall be reduced by a minimum of 38%.

Alternative 2 - If Alternative 1 cannot be met for an anaerobically digested sludge, demonstration can be made by digesting a portion of the previously digested sludge anaerobically in the laboratory in a bench-scale unit for 40 additional days at a temperature between 30° and 37° Celsius. Volatile solids must be reduced by less than 17% to demonstrate compliance.

Alternative 3 - If Alternative 1 cannot be met for an aerobically digested sludge, demonstration can be made by digesting a portion of the previously digested sludge with percent solids of two percent or less aerobically in the laboratory in a bench-scale unit for 30 additional days at 20° Celsius. Volatile solids must be reduced by less than 15% to demonstrate compliance.

Alternative 4 - The specific oxygen uptake rate (SOUR) for sewage sludge treated in an aerobic process shall be equal to or less than 1.5 milligrams of oxygen per hour per gram of total solids (dry weight basis) at a temperature of 20° Celsius.

Alternative 5 - Sewage sludge shall be treated in an aerobic process for 14 days or longer. During that time, the temperature of the sewage sludge shall be higher than 40° Celsius and the average temperature of the sewage sludge shall be higher than 45° Celsius.

Alternative 6 - The pH of sewage sludge shall be raised to 12 or higher by alkali addition and, without the addition of more alkali shall remain at 12 or higher for two hours and then remain at a pH of 11.5 or higher for an additional 22 hours at the time the sewage sludge is prepared for sale or given away in a bag or other container.

Alternative 7 - The percent solids of sewage sludge that does not contain unstabilized solids generated in a primary wastewater treatment process shall be equal to or greater than 75% based on the moisture content and total solids prior to mixing with other materials. Unstabilized solids are defined as organic materials in sewage sludge that have not been

treated in either an aerobic or anaerobic treatment process.

Alternative 8 - The percent solids of sewage sludge that contains unstabilized solids generated in a primary wastewater treatment process shall be equal to or greater than 90% based on the moisture content and total solids prior to mixing with other materials at the time the sludge is used. Unstabilized solids are defined as organic materials in sewage sludge that have not been treated in either an aerobic or anaerobic treatment process.

Alternative 9 -

- i. 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.

Alternative 10 -

- i. Biosolids applied to the land surface or placed on a surface disposal site shall be incorporated into the soil within six hours after application to or placement on the land.
- ii. When biosolids that are incorporated into the soil is Class A or Class AB with respect to pathogens, the 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 (TCLP) Test	- once during the term of this permit
PCBs	- once during the term of this permit

All metal constituents and fecal coliform or *Salmonella* sp. bacteria shall be monitored at the appropriate frequency shown below, pursuant to 30 TAC § 312.46(a)(1):

<u>Amount of biosolids (*) metric tons per 365-day period</u>	<u>Monitoring Frequency</u>
0 to less than 290	Once/Year
290 to less than 1,500	Once/Quarter
1,500 to less than 15,000	Once/Two Months
15,000 or greater	Once/Month

(\*) *The amount of bulk biosolids applied to the land (dry wt. basis).*

Representative samples of sewage sludge shall be collected and analyzed in accordance with the methods referenced in 30 TAC § 312.7

Identify each of the analytic methods used by the facility to analyze enteric viruses, fecal coliforms, helminth ova, *Salmonella* sp., and other regulated parameters.

Identify in the following categories (as applicable) the sewage sludge or biosolids treatment process or processes at the facility: preliminary operations (e.g., sludge or biosolids grinding and degritting), thickening (concentration), stabilization, anaerobic digestion, aerobic digestion, composting, conditioning, disinfection (e.g., beta ray irradiation, gamma ray irradiation, pasteurization), dewatering (e.g., centrifugation, sludge drying beds, sludge lagoons), heat drying, thermal reduction, and methane or biogas capture and recovery.

Identify the nature of material generated by the facility (such as a biosolid for beneficial use or land-farming, 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

<u>Pollutant</u>	Cumulative Pollutant Loading Rate (pounds per acre)*
Arsenic	36
Cadmium	35
Chromium	2677
Copper	1339
Lead	268
Mercury	15
Molybdenum	Report Only
Nickel	375
Selenium	89
Zinc	2500

Table 3

<u>Pollutant</u>	Monthly Average Concentration (milligrams per kilogram)*
Arsenic	41
Cadmium	39
Chromium	1200
Copper	1500
Lead	300
Mercury	17
Molybdenum	Report Only
Nickel	420
Selenium	36
Zinc	2800

\*Dry weight basis

**B. Pathogen Control**

All bulk sewage sludge that is applied to agricultural land, forest, a public contact site, a reclamation site, shall be treated by either Class A, Class AB or Class B biosolids pathogen reduction requirements as defined above in Section I.B.3.

**C. Management Practices**

1. Bulk biosolids shall not be applied to agricultural land, forest, a public contact site, or a reclamation site that is flooded, frozen, or snow-covered so that the bulk sewage sludge 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 five years. If the permittee supplies the sludge to another person who land applies the sludge, the permittee shall notify the land applier of the requirements for record keeping found in 30 TAC § 312.47 for persons who land apply.

1. The concentration (mg/kg) in the sludge of each pollutant listed in Table 3 above and the applicable pollutant concentration criteria (mg/kg), or the applicable cumulative pollutant loading rate and the applicable cumulative pollutant loading rate limit (lbs/ac) listed in Table 2 above.
2. A description of how the pathogen reduction requirements are met (including site restrictions for Class AB and Class B biosolids, if applicable).
3. A description of how the vector attraction reduction requirements are met.
4. A description of how the management practices listed above in Section II.C are being met.
5. The following certification statement:

“I certify, under penalty of law, that the applicable pathogen requirements in 30 TAC § 312.82(a) or (b) and the vector attraction reduction requirements in 30 TAC § 312.83(b) have been met for each site on which bulk biosolids are applied. This determination has been made under my direction and supervision in accordance with the system designed to ensure that qualified personnel properly gather and evaluate the information used to determine that the management practices have been met. I am aware that there are significant penalties for false certification including fine and imprisonment.”

6. The recommended agronomic loading rate from the references listed in Section II.C.3. above, as well as the actual agronomic loading rate shall be retained. The person who applies bulk biosolids shall develop the following information and shall retain the information at the facility site and/or shall be readily available for review by a TCEQ representative indefinitely. If the permittee supplies the sludge to another person who land applies the sludge, the permittee shall notify the land applier of the requirements for record keeping found in 30 TAC § 312.47 for persons who land apply:
  - a. A certification statement that all applicable requirements (specifically listed) have been met, and that the permittee understands that there are significant penalties for false certification including fine and imprisonment. See 30 TAC § 312.47(a)(4)(A)(ii) or 30 TAC § 312.47(a)(5)(A)(ii), as applicable, and to the permittee’s specific sludge 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 9) and the Enforcement Division (MC 224).

1. Identify in the following categories (as applicable) the sewage sludge or biosolids treatment process or processes at the facility: preliminary operations (e.g., sludge or biosolids grinding and degritting), thickening (concentration), stabilization, anaerobic digestion, aerobic digestion, composting, conditioning, disinfection (e.g., beta ray irradiation, gamma ray irradiation, pasteurization), dewatering (e.g., centrifugation, sludge drying beds, sludge lagoons), heat drying, thermal reduction, and methane or biogas capture and recovery.
2. Identify the nature of material generated by the facility (such as a biosolid for beneficial use or land-farming, or sewage sludge for disposal at a monofill) and whether the material is ultimately conveyed off-site in bulk or in bags.
3. Results of tests performed for pollutants found in either Table 2 or 3 as appropriate for the permittee's land application practices.
4. The frequency of monitoring listed in Section I.C. that applies to the permittee.
5. Toxicity Characteristic Leaching Procedure (TCLP) results.
6. PCB concentration in sludge or biosolids in mg/kg.
7. Identity of hauler(s) and TCEQ transporter number.
8. Date(s) of transport.
9. Texas Commission on Environmental Quality registration number, if applicable.
10. Amount of sludge or biosolids disposal dry weight (lbs/acre) at each disposal site.
11. The concentration (mg/kg) in the sludge 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 accordance with the method specified in both 40 CFR Part 261, Appendix II and 40 CFR Part 268, Appendix I (Toxicity Characteristic Leaching Procedure) or other method, which receives the prior approval of the TCEQ for contaminants listed in Table 1 of 40 CFR § 261.24. Sewage sludge or biosolids failing this test shall be managed according to RCRA standards for generators of hazardous waste, and the waste's disposition must be in accordance with all applicable requirements for hazardous waste processing, storage, or disposal.

Following failure of any TCLP test, the management or disposal of sewage sludge or biosolids at a facility other than an authorized hazardous waste processing, storage, or disposal facility shall be prohibited until such time as the permittee can demonstrate the sewage sludge or biosolids no longer exhibits the hazardous waste toxicity characteristics (as demonstrated by the results of the TCLP tests). A written report shall be provided to both the TCEQ Registration and Reporting Section (MC 129) of the Permitting and Registration Support Division and the Regional Director (MC Region 9) of the appropriate TCEQ field office within 7 days after failing the TCLP Test.

The report shall contain test results, certification that unauthorized waste management has stopped, and a summary of alternative disposal plans that comply with RCRA standards for the management of hazardous waste. The report shall be addressed to: Director, Permitting and Registration Support Division (MC 129), Texas Commission on Environmental Quality, P. O. Box 13087, Austin, Texas 78711-3087. In addition, the permittee shall prepare an annual report on the results of all sludge toxicity testing. This annual report shall be submitted to the TCEQ Regional Office (MC Region 9) and the Compliance Monitoring Team (MC 224) of the Enforcement Division by September 30 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 9) 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 report the following information annually to the TCEQ Regional Office (MC Region 9) and Compliance Monitoring Team (MC 224) of the Enforcement Division, 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 9) and the Enforcement Division (MC 224).

1. Identify in the following categories (as applicable) the sewage sludge or biosolids treatment process or processes at the facility: preliminary operations (e.g., sludge or biosolids grinding and degritting), thickening (concentration), stabilization, anaerobic digestion, aerobic digestion, composting, conditioning, disinfection (e.g., beta ray irradiation, gamma ray irradiation, pasteurization), dewatering (e.g., centrifugation, sludge drying beds, sludge lagoons), heat drying, thermal reduction, and methane or biogas capture and recovery.
2. the annual sludge or biosolids production;
3. the amount of sludge or biosolids transported;
4. the owner of each receiving facility;
5. the location of each receiving facility; and
6. the date(s) of disposal at each receiving facility.

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.

\*A Class D Wastewater Treatment Operator license is not renewable for operators of a facility listed in 30 TAC Section 30.342(c) and must be upgraded to a Class C Wastewater Treatment Operator license or higher prior to the expiration date of the Class D license.

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 comply with the requirements of 30 TAC Section 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 Section 309.13(e).
5. The irrigated crops include Coastal Bermudagrass and native grasses. Application rates to the irrigated land shall not exceed an agronomic rate of 2.90 acre-feet per year per acre irrigated nor a net application rate of 1.34 acre-feet per year per acre irrigated for the 15 acres. The permittee is responsible for providing equipment to determining 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 so as to prevent ponding of effluent or contamination of ground and surface waters and to prevent the occurrence of nuisance conditions in the area. Crops or other ground cover shall be established and well maintained in the irrigation area throughout the year for effluent and nutrient uptake by the crop and to prevent pathways for effluent surfacing. 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. The permittee shall erect adequate signs stating that the irrigation water is from a non-potable water supply for any area where treated effluent is stored or where there exist hose bibs or faucets. 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.
9. Spray fixtures for the irrigation system shall be of such design that they cannot be operated by unauthorized personnel.
10. The permittee shall maintain a long term contract with the owner(s) of the land application site which is authorized for use in this permit, or own the land authorized for land application of treated effluent.
11. 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 15 acres with no less than 10 to 15 subsamples representing each composite sample. Subsamples shall be composited by like sampling depth, type of crop and soil type for analysis and reporting. 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.

The permittee shall provide annual soil analyses of the land application area according to the following table:

Parameter	Method	Minimum Analytical Level (MAL)	Reporting units
pH	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	For determination of Organic plus Ammonium	20	mg/kg (dry weight basis)



(TKN)	Nitrogen. Procedures that use Mercury (Hg) are not acceptable.		
Total Nitrogen	= TKN + nitrate-nitrogen (same as, organic-nitrogen + ammonium-nitrogen + nitrate-nitrogen)		mg/kg (dry weight basis)
Plant-available: Phosphorus	Mehlich III with inductively coupled plasma	1	mg/kg (dry weight basis)
Plant-available: Potassium	May be determined in the same Mehlich III extract with inductively coupled plasma	5	mg/kg (dry weight basis)
Amendment addition, e.g., gypsum	Recommendation from analytical laboratory		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 9), the Water Quality Assessment Team (MC 150), and the Compliance Monitoring Team (MC 224) of the Enforcement Division, no later than September 1<sup>st</sup> 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.

12. Holding or storage ponds shall conform to the design criteria for stabilization ponds with regard to construction and levee design and shall maintain a minimum freeboard of two feet according to 30 TAC Chapter 217, Design Criteria for Domestic Wastewater Systems.
13. Permanent transmission lines shall be installed from the holding pond to each tract of land to be irrigated utilizing effluent from that pond.
14. Facilities for the retention of treated or untreated wastewater shall be adequately lined to control seepage. The following methods of pond lining are acceptable.
  - a. In-situ clay soils or placed and compacted clay soils meeting the following requirements:
    - 1) More than 30% passing a No. 200 mesh sieve
    - 2) Liquid limit greater than 30%
    - 3) Plasticity index greater than 15
    - 4) A minimum thickness of 2 feet
    - 5) Permeability equal to or less than  $1 \times 10^{-7}$  cm/sec (\*)
    - 6) Soil compaction will be 95% standard proctor at optimum moisture content (\*)

(\*) For new and/or modified ponds only.
  - b. Membrane lining with a minimum thickness of 40 mils, and an underdrain leak detection system.

- c. An alternate method of pond lining may be utilized with prior approval from the Executive Director.

The permittee shall furnish certification by a Texas Licensed Professional Engineer that the completed pond lining meets the appropriate criteria above prior to utilization of the facilities. The certification shall be sent to the TCEQ Regional Office (MC Region 9) and Water Quality Compliance Monitoring Team (MC 224) of the Enforcement Division.

15. 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 Waco Regional Office (MC-Region 9), 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.
16. The existing wastewater pond shall be maintained and operated in a manner that prevents unauthorized discharge to water in the state and contamination of groundwater.
17. 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.
18. 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.
19. A certified operator shall inspect the facility daily and maintain at the plant site a record of these inspections. These records shall be available at the plant site for inspection by authorized representatives of the commission for at least three years.

During this daily inspection, the appropriate analytical tests, flow measurements, determination and recording of application rates and maintenance of a cover crop shall be checked.
20. The permittee shall provide facilities for the protection of its wastewater treatment facility from a 100-year flood.
21. The permittee shall buffer all waterways and ponds.
22. The permittee shall use cultural practices to promote and maintain the health and propagation of the Coastal Bermudagrass and native grass crops and avoid plant lodging. The permittee shall harvest the crops (cut and remove it from the field) at least one time 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.

23. The physical condition of the spray irrigation fields will be monitored on a weekly basis when the fields are being utilized for the purpose of wastewater irrigation. Any areas with problems such as surface runoff, surficial erosion, stressed or damaged vegetation will be recorded in the field log kept onsite and corrective measures will be initiated within 24 hours of discovery.
24. The permittee shall notify the TCEQ Regional Office (MC Region 9) and the Applications Review and Processing Team (MC 148) of the Water Quality Division, in writing at least forty-five (45) days prior to the completion of the new facilities on Notification of Completion Form 20007.

Attachment A – Site Map  
TCEQ Permit WQ0012759001  
New Horizons Ranch and Center, Inc.



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

### DESCRIPTION OF APPLICATION

Applicant:	New Horizons Ranch and Center, Inc. TCEQ Permit No. WQ0012759001
Regulated Activity:	Domestic Wastewater Permit
Type of Application:	Renewal
Request:	Renewal with changes
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 **ten 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

New Horizons Ranch and Center, Inc. has applied to the Texas Commission on Environmental Quality (TCEQ) for a renewal of Permit No. WQ0012759001 to authorize the disposal of treated domestic wastewater at a daily average flow not to exceed 0.018 million gallons per day (MGD) via surface irrigation of 15 acres of non-public access pastureland. The facility includes two storage ponds with a total surface area of 1.26 acres and total capacity of 6.29 acre-feet for storage of treated effluent prior to irrigation. The existing wastewater treatment facility serves New Horizons Ranch and Center.

### PROJECT DESCRIPTION AND LOCATION

The New Horizons Ranch and Center Wastewater Treatment Facility consists of an activated sludge process plant using the extended aeration mode. Treatment units in the Interim phase include a bar screen, an aeration basin, final clarifiers, an aerobic digester, two holding ponds and a chlorine contact chamber. Treatment units in the Final phase will include a bar screen, an aeration basin, a aerated sludge holding tank, a final clarifier, one holding pond and a chlorine contact chamber. The facility is operating in the Interim phase.

Sludge generated from the treatment facility is hauled by a registered transporter and disposed of at a TCEQ-permitted landfill, San Angelo Landfill, MSW Permit No. 79, in Tom Green County. The draft permit also authorizes the disposal of sludge at a TCEQ-authorized land application site, co-disposal landfill, wastewater treatment facility, or facility that further processes sludge.

New Horizons Ranch and Center, Inc.

Permit No. WQ0012759001

Statement of Basis/Technical Summary and Executive Director's Preliminary Decision

The wastewater treatment facility and disposal site are located at 850 Farm-to-Market Road 574 West, near the City of Goldthwaite, Mills County, Texas 76844.

The wastewater treatment facility and disposal site are located in the drainage basin of Lower Pecan Bayou in Segment No. 1417 of the Colorado 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 effluent monitoring data for the period February 2022 through January 2024. 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 five-day biochemical oxygen demand (BOD<sub>5</sub>).

<u>Parameter</u>	<u>Average of Daily Average</u>
Flow, MGD	0.003
BOD <sub>5</sub> , mg/l	5.8

#### DRAFT PERMIT CONDITIONS

The draft permit authorizes the disposal of treated domestic wastewater effluent at a daily average flow not to exceed 0.018 MGD in the Interim phase and 0.012 MGD in the Final phase via surface irrigation of 15 acres of non-public access pastureland. The facility includes 2 storage pond with a total surface area of 3.72 acres and total capacity of 6.29 acre-feet for storage of treated effluent prior to irrigation in the Interim phase and 1 storage pond with a total surface area of 1.26 acres and total capacity of 6.29 acre-feet for storage of treated effluent prior to irrigation in the Final phase. Application rates to the irrigated land shall not exceed 2.9 acre-feet per year per acre irrigated and a net rate of 1.34 acre-feet per year per acre irrigated. The irrigated crops include Coastal Bermuda Grass and Cool Season Crops.

The effluent limitations in the draft permit, based on a daily average, are 20 mg/l biochemical oxygen demand (BOD<sub>5</sub>).

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. Sludge generated from the treatment facility is hauled by a registered transporter and disposed of at a TCEQ-permitted landfill, San Angelo Landfill, MSW Permit No. 79, in Tom Green County. The draft permit also authorizes the disposal of sludge at a TCEQ-authorized land application site, co-disposal landfill, wastewater treatment facility, or facility that further processes sludge.

#### SUMMARY OF CHANGES FROM APPLICATION

None.

New Horizons Ranch and Center, Inc.

Permit No. WQ0012759001

Statement of Basis/Technical Summary and Executive Director's Preliminary Decision

#### SUMMARY OF CHANGES FROM EXISTING PERMIT

Effluent limitations and monitoring requirements in the draft permit remain the same as the existing permit effluent limitations and monitoring requirements. The Sludge Provisions, Special Provisions, and Standard Provisions have been revised in the draft permit.

The total surface area for the storage ponds in the existing permit of 3.72 acres in the Interim phase has been updated to 1.26 acres in the Final phase due to ponds in the Interim phase being reduced to a single pond in the Final phase.

SECTION IV, REQUIREMENTS APPLYING TO SLUDGE OR BIOSOLIDS TRANSPORTED TO ANOTHER FACILITY FOR FURTHER PROCESSING, has been added to the Sludge Provisions of the draft permit to allow the transportation of sludge or biosolids to another facility.

Special Provision No. 2 in the existing permit has been updated to reflect the requirements of 30 TAC § 30.342, which does not allow renewal of a Class D operator's license for mechanical treatment plants.

Special Provisions Nos. 5, and 11 have been updated from the existing permit.

Special Provisions Nos. 15, 16, 17, 18, 22, 23, and 24 have been added to the draft permit.

A Final phase has been added to the draft permit to reduce the daily average flow from 0.018 MGD to 0.012 MGD.

The applicant's mailing address has been updated in the draft permit from 294 Medical Drive, Abilene, Texas 79601 to 147 Sayles Boulevard, Abilene, Texas 79605.

The facility address has been updated in the draft permit from located at 850 Farm-to-Market Road 574, which is one mile west-northwest of the intersection of Farm-to-Market Road 574 and Pecan Bayou in Mills County, Texas 76844 to located at 850 Farm-to-Market Road 574 West, near the City of Goldthwaite, in Mills County, Texas 76844.

The facilities SIC code has been updated from the existing permit 7041 to 4952.

The draft permit includes all updates based on the 30 TAC 312 rule change effective April 23, 2020.

#### BASIS FOR DRAFT PERMIT

The following items were considered in developing the draft permit:

1. Application received on March 4, 2024, and additional information received on April 18, 2024.
2. Existing TCEQ permit: Permit No. WQ0012759001 issued on March 30, 2015.
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 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.



New Horizons Ranch and Center, Inc.

Permit No. WQ0012759001

Statement of Basis/Technical Summary and Executive Director's Preliminary Decision

For additional information about this application, contact Garrison Layne at (512) 239-0849.

---

Garrison Layne  
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: New Horizons Ranch and Center Inc

PERMIT NUMBER: WQ0012759001

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

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

For TCEQ Use Only

Segment Number \_\_\_\_\_ County \_\_\_\_\_  
Expiration Date \_\_\_\_\_ Region \_\_\_\_\_  
Permit Number \_\_\_\_\_



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

**APPLICATION FOR A DOMESTIC WASTEWATER PERMIT  
ADMINISTRATIVE REPORT 1.0**

If you have questions about completing this form please contact the Applications Review and Processing Team at 512-239-4671.

**Section 1. Application Fees (Instructions Page 29)**

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

Flow	New/Major Amendment	Renewal
<0.05 MGD	\$350.00 <input type="checkbox"/>	\$315.00 <input checked="" type="checkbox"/>
≥0.05 but <0.10 MGD	\$550.00 <input type="checkbox"/>	\$515.00 <input type="checkbox"/>
≥0.10 but <0.25 MGD	\$850.00 <input type="checkbox"/>	\$815.00 <input type="checkbox"/>
≥0.25 but <0.50 MGD	\$1,250.00 <input type="checkbox"/>	\$1,215.00 <input type="checkbox"/>
≥0.50 but <1.0 MGD	\$1,650.00 <input type="checkbox"/>	\$1,615.00 <input type="checkbox"/>
≥1.0 MGD	\$2,050.00 <input type="checkbox"/>	\$2,015.00 <input type="checkbox"/>

Minor Amendment (for any flow) \$150.00 ☒

**Payment Information:**

Mailed Check/Money Order Number: [Click here to enter text.](#)

Check/Money Order Amount: [Click here to enter text.](#)

Name Printed on Check: [Click here to enter text.](#)

EPAY Voucher Number: [Click here to enter text.](#)

Copy of Payment Voucher enclosed? Yes ☒

**Section 2. Type of Application (Instructions Page 29)**

- |   |   |
|---|---|
| <input type="checkbox"/> New TPDES                              | <input type="checkbox"/> New TLAP                                       |
| <input type="checkbox"/> Major Amendment <u>with</u> Renewal    | <input checked="" type="checkbox"/> Minor Amendment <u>with</u> Renewal |
| <input type="checkbox"/> Major Amendment <u>without</u> Renewal | <input type="checkbox"/> Minor Amendment <u>without</u> Renewal         |
| <input type="checkbox"/> Renewal without changes                | <input type="checkbox"/> Minor Modification of permit                   |

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

**For existing permits:**

Permit Number: WQ0012759001

EPA I.D. (TPDES only): TX [Click here to enter text.](#)

Expiration Date: 9/1/2024

## Section 3. Facility Owner (Applicant) and Co-Applicant Information (Instructions Page 29)

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

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

New Horizons Ranch and Center Inc

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

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

CN: 600705727

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

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

First and Last Name: Tim Hart

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

Title: Chief Operating Officer (COO)

### 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?

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

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

CN:

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

Prefix (Mr., Ms., Miss):

First and Last Name:

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

Title:

Provide a brief description of the need for a co-permittee:

### 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.

**Attachment:** 1

## Section 4. Application Contact Information (Instructions Page 30)

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

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

First and Last Name: Tim Hart

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

Title: COO

Organization Name: New Horizons Ranch and Center Inc

Mailing Address: 147 Sayles Blvd

City, State, Zip Code: Abilene, TX 79605

Phone No.: 325-438-1852 Ext.: Click here to enter text. Fax No.: Click here to enter text.

E-mail Address: tim.hart@newhorizonsinc.com

Check one or both: ☒ Administrative Contact ☐ Technical Contact

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

First and Last Name: David Hudson

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

Title: Environmental Scientist

Organization Name: Jacob Martin Engineering

Mailing Address: 3465 Curry Lane

City, State, Zip Code: Abilene, TX 79606

Phone No.: 325-695-1070 Ext.: Click here to enter text. Fax No.: Click here to enter text.

E-mail Address: dHUDSON@jacobmartin.com

Check one or both: ☒ Administrative Contact ☒ Technical Contact

## Section 5. Permit Contact Information (Instructions Page 30)

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

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

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

First and Last Name: Michael England

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

Title: Click here to enter text.

Organization Name: New Horizons Ranch and Center Inc

Mailing Address: 147 Sayles Blvd

City, State, Zip Code: Abilene, TX 79605

Phone No.: 325-260-5118 Ext.: Click here to enter text. Fax No.: Click here to enter text.

E-mail Address: mike.england@newhorizonsinc.com

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

First and Last Name: Jeremy Still

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

Title: Click here to enter text.

Organization Name: New Horizons Ranch and Center Inc

Mailing Address: 850 FM 574 West

City, State, Zip Code: Goldthwaite, Texas 76844

Phone No.: 325-647-1008 Ext.: Click here to enter text. Fax No.: Click here to enter text.

E-mail Address: jeremy.still@newhorizonsinc.com

## Section 6. Billing Information (Instructions Page 30)

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

First and Last Name: Scott Anderson

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

Title: Click here to enter text.

Organization Name: New Horizons Ranch and Center Inc.

Mailing Address: 147 Sayles Blvd

City, State, Zip Code: Abilene, Texas 79605

Phone No.: 325-437-1852 Ext.: Click here to enter text. Fax No.: Click here to enter text.

E-mail Address: Click here to enter text.

## Section 7. DMR/MER Contact Information (Instructions Page 31)

Provide the name and complete mailing address of the person delegated to receive and submit

Prefix (Mr., Ms., Miss): [REDACTED]

First and Last Name: Wes Fromlath

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

Title: wastewater operator

Organization Name: US Water

Mailing Address: 3535 Green Meadows Dr

City, State, Zip Code: Glen Rose, TX 76043

Phone No.: 817-966-4447 or 469-887-8137 Ext.: [REDACTED] Fax No.: [REDACTED]

E-mail Address: wfromlath@uswatercorp.net

DMR data is required to be submitted electronically. Create an account at:

<https://www.tceq.texas.gov/permitting/netdmr/netdmr.html>.

## Section 8. Public Notice Information (Instructions Page 31)

### A. Individual Publishing the Notices

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

First and Last Name: Tim Hart

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

Title: COO

Organization Name: New Horizons Ranch and Center Inc

Mailing Address: 147 Sayles Blvd

City, State, Zip Code: Abilene, Texas 79605

Phone No.: 325-437-1852 Ext.: [REDACTED] Fax No.: [REDACTED]

E-mail Address: tim.hart@newhorizonsinc.com

### 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 person to be listed in the Notices

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

**C. Contact person to be listed in the Notices**

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

First and Last Name: Tim Hart

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

Title: COO

Organization Name: New Horizons Ranch and Center Inc

Phone No.: 325-437-1852 Ext.: Click here to enter text.

E-mail: tim.hart@newhorizonsinc.com

**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: New Horizons Ranch and Center main building

Location within the building: Lobby

Physical Address of Building: 850 FM 574 West

City: Goldthwaite,

County: Mills

Contact Name: Tim Hart

Phone No.: 325-347-1852 Ext.: Click here to enter text.

**E. Bilingual Notice Requirements:**

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

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

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

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

☐ Yes ☒ No

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

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

☐ Yes ☐ No



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

#### F. 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: NA

### Section 9. Regulated Entity and Permitted Site Information (Instructions Page 33)

- A. If the site is currently regulated by TCEQ, provide the Regulated Entity Number (RN) issued to this site. RN102343704

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

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

NEW HORIZONS RANCH AND CENTER INC

- C. Owner of treatment facility: NEW HORIZONS RANCH AND CENTER INC

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

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

Prefix (Mr., Ms., Miss): NEW HORIZONS RANCH AND CENTER INC

First and Last Name: NEW HORIZONS RANCH AND CENTER INC

Mailing Address: 147 Sayles BLVD

City, State, Zip Code: Abilene TX 79605

Phone No.: 325-437-1852

E-mail Address: NEW HORIZONS RANCH AND CENTER INC

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: NEW HORIZONS RANCH AND CENTER INC

- E. Owner of effluent disposal site:

Prefix (Mr., Ms., Miss): NEW HORIZONS RANCH AND CENTER INC

First and Last Name: NEW HORIZONS RANCH AND CENTER INC

Mailing Address: 147 Sayles Blvd

City, State, Zip Code: Abilene TX 79605

Phone No.: 325-437-1852

E-mail Address: Click here 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 here to enter text

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

Prefix (Mr., Ms., Miss): N/A

First and Last Name: Click here to enter text

Mailing Address: Click here to enter text

City, State, Zip Code: Click here to enter text

Phone No.: Click here to enter text E-mail Address: Click here 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 here to enter text

## Section 10. TPDES Discharge Information (Instructions Page 34)

- 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:

NA

- 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 here to enter text

City nearest the outfall(s): Click here to enter text

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

Outfall Latitude: [Click here to enter text.](#) Longitude: [Click here 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 here 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 here to enter text.](#)

## Section 11. TLAP Disposal Information (Instructions Page 36)

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

☒ Yes ☐ No

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

[Click here to enter text.](#)

- B. City nearest the disposal site: Goldthwaite, TX

- C. County in which the disposal site is located: Mills

- D. Disposal Site Latitude: 31.459388° Longitude: -98.706534°

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

Via pipeline to "big gun"

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

Pecan Bayou

## Section 12. Miscellaneous Information (Instructions Page 37)

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

☐ Yes ☒ No

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

☐ Yes ☐ No ☒ Not Applicable

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

[Click here 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:

Charles Keith ; David Hudson

D. Do you owe any fees to the TCEQ?

☐ Yes ☒ No

If yes, provide the following information:

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

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

E. Do you owe any penalties to the TCEQ?

☐ Yes ☒ No

If yes, please provide the following information:

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

Amount past due: [Click here to](#)

## Section 13. Attachments (Instructions Page 38)

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

- ☐ Lease agreement or deed recorded easement, if the land where the treatment facility is located or the effluent disposal site are not owned by the applicant or co-applicant.
- ☒ Original full-size USGS Topographic Map with the following information:
  - Applicant's property boundary
  - Treatment facility boundary
  - Labeled point of discharge for each discharge point (TPDES only)
  - Highlighted discharge route for each discharge point (TPDES only)
  - Onsite sewage sludge disposal site (if applicable)
  - Effluent disposal site boundaries (TLAP only)
  - New and future construction (if applicable)
  - 1 mile radius information
  - 3 miles downstream information (TPDES only)
  - All ponds.
- ☐ Attachment 1 for Individuals as co-applicants
- ☐ Other Attachments. Please specify: [Click here to enter text.](#)

## Section 14. Signature Page (Instructions Page 39)

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

Permit Number: WQ0012759001

Applicant: New Horizons Ranch and Center Inc


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): Michael Redden

Signatory title: CEO

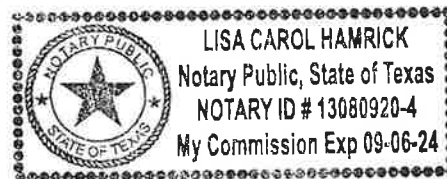
Signature:  Date: 2/6/2024  
(Use blue ink)

Subscribed and Sworn to before me by the said Michael Redden  
on this 6 day of February, 20 24.  
My commission expires on the 6 day of September, 20 24.

  
Notary Public

[SEAL]

  
County, Texas



## Section 15. Plain Language Summary (Instructions Page 40)

If you are subject to the alternative language notice requirements in [30 Texas Administrative Code §39.426](#), **you must provide a translated copy of the completed plain language summary in the appropriate alternative language as part of your application package.** For your convenience, a Spanish template has been provided below.

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

#### DOMESTIC WASTEWATER

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

New Horizons Ranch and Center Inc (CN600705727 ) operates New Horizons Ranch and Center Inc wastewater treatment plant RN102343704. a domestic wastewater treatment plant with irrigation. The facility is located at 850 FM 574 West, in Goldthwaite, Mills County, Texas 76844.

This is for a renewal of the wastewater permit with no discharge <<*For TLAP applications include the following sentence, otherwise delete:>>* This permit will not authorize a discharge of pollutants into water in the state.

Discharges from the facility are expected to contain five-day biochemical oxygen demand (BOD<sub>5</sub>), total suspended solids (TSS), and Escherichia coli. Additional potential pollutants are included in the Domestic Technical Report 1.0, Section 7. Pollutant Analysis of Treated Effluent in the permit application package. domestic wastewater is treated by an extended aeration process. The phases are: Screening, Extended aeration, Settling in clarifier followed by chlorination. Sludge from the clarifier is returned to the aeration basin for additional treatment. There is an aerobic digester.



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

### AGUAS RESIDUALES DOMÉSTICAS

*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 son representaciones federales exigibles 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. ubicado 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 solicitud de solicitud aquí. <<Para las aplicaciones 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.



## DOMESTIC ADMINISTRATIVE REPORT 1.1

The following information is required for new and amendment applications.

### Section 1. Affected Landowner Information (Instructions Page 41)

- 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:
- ☐ USB Drive      ☐ Four sets of labels
- D. Provide the source of the landowners' names and mailing addresses: [Click here to enter text.](#)
- 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 here to enter text](#)

## Section 2. Original Photographs (Instructions Page 44)

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 44)

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)?

- ☒ Yes      ☐ No

# TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

## SUPPLEMENTAL PERMIT INFORMATION FORM (SPIF)

### FOR AGENCIES REVIEWING DOMESTIC TPDES WASTEWATER PERMIT APPLICATIONS

#### TCEQ USE ONLY:

Application type: \_\_\_\_ Renewal \_\_\_\_ Major Amendment \_\_\_\_ Minor Amendment \_\_\_\_ New

County: \_\_\_\_\_ Segment Number: \_\_\_\_\_

Admin Complete Date: \_\_\_\_\_

Agency Receiving SPIF:

\_\_\_\_ Texas Historical Commission

\_\_\_\_ U.S. Fish and Wildlife

\_\_\_\_ Texas Parks and Wildlife Department

\_\_\_\_ U.S. Army Corps of Engineers

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

The SPIF must be completed as a separate document. The TCEQ will mail a copy of the SPIF to each agency as required by the TCEQ agreement with EPA. If any of the items are not completely addressed or further information is needed, you will be contacted to provide the information before the permit is issued. Each item must be completely addressed.

**Do not refer to a response of any item in the permit application form.** Each attachment must be provided with this form separately from the administrative report of the application. The application will not be declared administratively complete without this form being completed in its entirety including all attachments.

The following applies to all applications:

1. Permittee: [Click here to enter text.](#)

Permit No. WQ00 [Click here to enter text.](#)

EPA ID No. TX [Click here to enter text.](#)

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

NA

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

Prefix (Mr., Ms., Miss): [Click here to enter text.](#)

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

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

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

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

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

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

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

2. List the county in which the facility is located: [Click here to enter text.](#)
3. If the property is publicly owned and the owner is different than the permittee/applicant, please list the owner of the property.

[Click here to enter text.](#)

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

[Click here to enter text.](#)

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

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

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

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

☐ Sealing caves, fractures, sinkholes, other karst features

☐ Disturbance of vegetation or wetlands

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

[Click here to enter text.](#)

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

[Click here to enter text.](#)

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

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

[Click here to enter text.](#)

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

[Click here to enter text.](#)

THIS PAGE INTENTIONALLY LEFT BLANK

## ATTACHMENT 1

### INDIVIDUAL INFORMATION

---

#### **Section 1. Individual Information (Instructions Page 50)**

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 here to enter text.](#)

Full legal name (first, middle, last): [Click here to enter text.](#)

Driver's License or State Identification Number: [Click here to enter text.](#)

Date of Birth: [Click here to enter text.](#)

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

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

Phone Number: [Click here to enter text.](#) Fax Number: [Click here to enter text.](#)

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

CN: [Click here to enter text.](#)

#### **For Commission Use Only:**

Customer Number:

Regulated Entity Number:

Permit Number:

## 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)<br><i>(Required for all applications types. Must be completed in its entirety and signed.<br/>Note: Form may be signed by applicant representative.)</i> | <input checked="" type="checkbox"/> | Yes |                              |
| Correct and Current Industrial Wastewater Permit Application Forms<br><i>(TCEQ Form Nos. 10053 and 10054. Version dated 6/25/2018 or later.)</i>  | <input checked="" type="checkbox"/> | Yes |                              |
| Water Quality Permit Payment Submittal Form (Page 19)<br><i>(Original payment sent to TCEQ Revenue Section. See instructions for mailing address.)</i>  | <input checked="" type="checkbox"/> | Yes |                              |
| 7.5 Minute USGS Quadrangle Topographic Map Attached<br><i>(Full-size map if seeking "New" permit.<br/>8 ½ x 11 acceptable for Renewals and Amendments)</i>                                    | <input checked="" type="checkbox"/> | Yes |                              |
| Current/Non-Expired, Executed Lease Agreement or Easement Attached  | <input checked="" type="checkbox"/> | N/A | <input type="checkbox"/> Yes |
| Landowners Map<br><i>(See instructions for landowner requirements)</i>  | <input checked="" type="checkbox"/> | N/A | <input type="checkbox"/> 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<br><i>(See instructions for landowner requirements)</i>   | <input checked="" type="checkbox"/> | N/A | <input type="checkbox"/> Yes |
| Landowners Labels or USB Drive attached<br><i>(See instructions for landowner requirements)</i>   | <input checked="" type="checkbox"/> | N/A | <input type="checkbox"/> Yes |
| Original signature per 30 TAC § 305.44 – Blue Ink Preferred<br><i>(If signature page is not signed by an elected official or principle executive officer,<br/>a copy of signature authority/delegation letter must be attached)</i> | <input checked="" type="checkbox"/> |     | Yes                          |







TEXAS COMMISSION ON ENVIRONMENTAL QUALITY  
DOMESTIC WASTEWATER PERMIT APPLICATION

**DOMESTIC TECHNICAL REPORT 1.0**

The Following Is Required For All Applications  
Renewal, New, And Amendment

**Section 1. Permitted or Proposed Flows (Instructions Page 51)**

**A. Existing/Interim I Phase**

Design Flow (MGD): 0.018

2-Hr Peak Flow (MGD): 0.00625

Estimated construction start date: 1984

Estimated waste disposal start date: 1984

**B. Interim II Phase**

Design Flow (MGD): 0.012

2-Hr Peak Flow (MGD): 0.00625

Estimated construction start date: 12/2024

Estimated waste disposal start date: 3/2025

**C. Final Phase**

Design Flow (MGD): 0.012

2-Hr Peak Flow (MGD): 0.00625

Estimated construction start date: 12/2024

Estimated waste disposal start date: 3/2025

**D. Current operating phase: 0.018**

Provide the startup date of the facility: 8/2004

**Section 2. Treatment Process (Instructions Page 51)**

**A. Treatment process description**

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 in the permit, a description of *each phase* must be provided.** Process description:

The plant is an extended aeration process. The phases are: Screening, Extended aeration, Settling in clarifier followed by chlorination. Sludge from the clarifier is returned to the aeration basin for additional treatment. There is an aerobic digester

Port or pipe diameter at the discharge point, in inches: 4"

#### **B. Treatment Units**

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

***Table 1.0(1) – Treatment Units***

<b>Treatment Unit Type</b>	<b>Number of Units</b>	<b>Dimensions (L x W x D)</b>
Aeration tank	1	12' x 12' x 28'
Aerated sludge holding tank	1	12' x 12 x 8'
Hopper style clarifier tank	1	12' x 7' x 21'
Chlorine contact chamber	1	4' x 6' x 7'

### C. Process flow diagrams

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

Attachment:   3  

### Section 3. Site Drawing (Instructions Page 52)

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:   4  

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

New Horizons ranch and center. A residential treatment center in Mills County, 850 FM 574 Goldthwaite TX. A property of approximately 150 acres.

### Section 4. Unbuilt Phases (Instructions Page 52)

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.

New Horizons has never had enough flow to utilize the existing permitted flow of 18,000 gallons. At a reduced permitted flow of 12,000 the site would still meet the 75/90 rule with no anticipated additional flow. No pond liner certification has been found for the current holding ponds. As such we are proposing reconstructing the two holding ponds into one synthetically lined pond of sufficient capacity in an interim phase.

## Section 5. Closure Plans (Instructions Page 53)

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.

[Click here to enter text.](#)

## Section 6. Permit Specific Requirements (Instructions Page 53)

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: TCEQ log 0405/061

Approval 4/29/2005

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.

Plans for replacement holding pond to be sent pending approval

## **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.

Buffer zone is entirely on New Horizons property

## **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*.

Special provision #14 - there is no record that has been found for the liner certifications. This will be done as a part of the interim phase replacement pond.

## **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 here 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 512-239-0000. 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 here 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 512-239-0000.

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

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

### 4. Existing coverage in individual permit



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

Yes ☐ No ☐

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

[Click here 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 here 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 here 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, a Sewage Sludge Solids Management Plan is required. See Example 5 in the instructions.

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

***1. Acceptance of sludge from other WWTPs***

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

Yes ☐ No ☒

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

In addition, provide the date that the plant started accepting sludge 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.

Click here to enter text.

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

## ***2. Acceptance of septic waste***

Is the facility accepting or will it accept septic waste?

Yes ☐ No ☒

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

Yes ☐ No ☐

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

Yes ☐ No ☐

If yes to any of the above, provide a the date that the plant started accepting septic waste, 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.

Click here to enter text.

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

Yes ☐ No ☒

If yes, provide the date that the plant started accepting the waste, an estimate how much waste is accepted on a monthly basis (gallons or millions of gallons), a description of the entities generating the waste, and any distinguishing chemical or other physical characteristic of the waste. Also

note if this information has or has not changed since the last permit action.

[Click here to enter text.](#)

## Section 7. Pollutant Analysis of Treated Effluent (Instructions Page 58)

Is the facility in operation?

Yes ☒ No ☐

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

If **yes**, provide effluent analysis data for the listed pollutants. **Wastewater treatment facilities** complete Table 1.0(2). **Water treatment facilities** discharging filter backwash water, complete Table 1.0(3).

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

**Table 1.0(2) - Pollutant Analysis for Wastewater Treatment Facilities**

Pollutant	Average Conc.	Max Conc.	No. of Samples	Sample Type	Sample Date/Time
CBOD <sub>5</sub> , mg/l	-	3	1	Grab	1/25/24 13:05
Total Suspended Solids, mg/l	-	15	1	Grab	1/25/24 13:05
Ammonia Nitrogen, mg/l	-	0.12	1	Grab	1/25/24 13:05
Nitrate Nitrogen, mg/l	-	12.8	1	Grab	1/25/24 13:05
Total Kjeldahl Nitrogen, mg/l	-	2.00	1	Grab	1/25/24 13:05
Sulfate, mg/l	-	91.6	1	Grab	1/25/24 13:05
Chloride, mg/l	-	58.1	1	Grab	1/25/24 13:05
Total Phosphorus, mg/l	-	0.46	1	Grab	1/25/24

Pollutant	Average Conc.	Max Conc.	No. of Samples	Sample Type	Sample Date/Time
					13:05
pH, standard units	-	6.9	1	Grab	1/25/24 13:05
Dissolved Oxygen*, mg/l	NA	-	-	-	-
Chlorine Residual, mg/l	NA	-	-	-	-
<i>E.coli</i> (CFU/100ml) freshwater	NA	-	-	-	-
Enterococci (CFU/100ml) saltwater	NA	-	-	-	-
Total Dissolved Solids, mg/l	-	376	1	Grab	1/25/24 13:05
Electrical Conductivity, $\mu$ mohs/cm, †	-	600	1	Grab	1/25/24 13:05
Oil & Grease, mg/l	NA	-	-	-	-
Alkalinity (CaCO <sub>3</sub> )*, mg/l	NA	-	-	-	-

\*TPDES permits only

†TLAP permits only

**Table 1.0(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	NA				
Total Dissolved Solids, mg/l	NA				
pH, standard units	NA				
Fluoride, mg/l	NA				
Aluminum, mg/l	NA				
Alkalinity (CaCO <sub>3</sub> ), mg/l	NA				

## Section 8. Facility Operator (Instructions Page 60)

Facility Operator Name: Wesley Fromlath

Facility Operator's License Classification and Level: Wastewater C

Facility Operator's License Number: WW0068038

## Section 9. Sewage Sludge Management and Disposal (Instructions Page 60)

### A. Sludge disposal method

Identify the current or anticipated sludge disposal method or methods from the following list. Check all that apply.

- ☒ Permitted landfill
- ☐ Permitted or Registered land application site for beneficial use
- ☐ Land application for beneficial use authorized in the wastewater permit
- ☐ Permitted sludge processing facility
- ☐ Marketing and distribution as authorized in the wastewater permit
- ☐ Composting as authorized in the wastewater permit
- ☐ Permitted surface disposal site (sludge monofill)
- ☐ Surface disposal site (sludge monofill) authorized in the wastewater permit
- ☒ Transported to another permitted wastewater treatment plant or permitted sludge processing facility. If you selected this method, a written statement or contractual agreement from the wastewater treatment plant or permitted sludge processing facility accepting the sludge must be included with this application. **Facility to be determined.**
- ☐ Other: San Angelo Landfill

### B. Sludge disposal site

Disposal site name: San Angelo landfill

TCEQ permit or registration number: 632

County where disposal site is located: Tom Green

**C. Sludge transportation method**

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

Name of the hauler: Juices Septic and Grease Pumping

Hauler registration number: 24423

Sludge is transported as a:

Liquid ☐

semi-liquid ☐

semi-solid ☒

solid ☐

**Section 10. Permit Authorization for Sewage Sludge Disposal  
(Instructions Page 60)**

**A. Beneficial use authorization**

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

Yes ☐ No ☒

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

Yes ☐ No ☐

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

Yes ☐ No ☐

**B. Sludge processing authorization**

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

Sludge Composting Yes ☐ No ☒

Marketing and Distribution of sludge Yes ☐ No ☒

Sludge Surface Disposal or Sludge Monofill Yes ☐ No ☒

Temporary storage in sludge lagoons Yes ☐ No ☒

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

Yes ☐ No ☐

## Section 11. Sewage Sludge Lagoons (Instructions Page 61)

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 here to enter text.](#)

- USDA Natural Resources Conservation Service Soil Map:

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

- Federal Emergency Management Map:

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

- Site map:

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

Discuss in a description if any of the following exist within the lagoon area.

Check all that apply.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Provide the following information:

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

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

Total dry tons stored in the lagoons(s) over the life of the unit: [Click here 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?

Yes ☐ No ☐

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

[Click here to enter text.](#)

### D. Site development plan

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

[Click here to enter text.](#)

Attach the following documents to the application.

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

## Section 12. Authorizations/Compliance/Enforcement (Instructions Page 63)

### 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 here to enter text.](#)

### B. Permittee enforcement status

Is the permittee currently under enforcement for this facility?

Yes ☐ No ☒

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

Yes ☐ No ☒

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

[Click here to enter text.](#)

## Section 13. RCRA/CERCLA Wastes (Instructions Page 63)

### 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 here to enter text.](#)

## Section 14. Laboratory Accreditation (Instructions Page 64)

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

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

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

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

### CERTIFICATION:

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

Printed Name: Michael Redden

Title: CEO

Signature: \_\_\_\_\_

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



# DOMESTIC WORKSHEET 3.0

## LAND DISPOSAL OF EFFLUENT

The following is required for all permit applications  
Renewal, New, and Amendments

### Section 1. Type of Disposal System (Instructions Page 77)

Identify the method of land disposal:

- |  |  |
|--|--|
| <input type="checkbox"/> Surface application   | <input type="checkbox"/> Subsurface application                |
| <input checked="" type="checkbox"/> Irrigation   | <input type="checkbox"/> Subsurface soils absorption           |
| <input type="checkbox"/> Drip irrigation system  | <input type="checkbox"/> Subsurface area drip dispersal system |
| <input type="checkbox"/> Evaporation   |  |
| <input type="checkbox"/> Evapotranspiration beds   |  |
| <input type="checkbox"/> Other (describe in detail): <a href="#">Click here to enter text.</a> |  |

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

For existing authorizations, provide Registration Number: 102343704

### Section 2. Land Application Site(s) (Instructions Page 77)

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
Bermuda Grass – agricultural field	15	22,000	N
Cool season crops	15	22,000	N

Crop Type & Land Use	Irrigation Area (acres)	Effluent Application (GPD)	Public Access? Y/N

### Section 3. Storage and Evaporation Lagoons/Ponds (Instructions Page 77)

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

Pond Number	Surface Area (acres)	Storage Volume (acre-feet)	Dimensions	Liner Type
Existing Pond 1	to be closed for single pond		165' x 75'	Clay
Existing Pond 2	to be closed for single pond		100' x 80'	Clay
Proposed Pond 1	1.26	6.29	Approximately 281' x 200'	Synthetic

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

Attachment: 6

### Section 4. Flood and Runoff Protection (Instructions Page 77)

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.



Application fields are terraced to provide additional protection from inundation and are approximately 200' from Pecan Bayou. Application fields are on a 1210' and 1220' contour line above Pecan Bayou at approximately 1190'. WWTP is built above ground with 12' sides and ponds are bermed above the 1200' contour line.

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

Mills County is not mapped by FEMA.

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

Terraces around the property

## **Section 5. Annual Cropping Plan (Instructions Page 77)**

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:** 7

- 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 78)

Attach a USGS map with the following information shown and labeled. If not applicable, provide a detailed explanation (on a separate page) indicating why.

**Attachment:** 8

- 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 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 shown on the USGS map in the following table. Attach additional pages as necessary to include all of the wells.

**Table 3.0(3) – Water Well Data**

Well ID	Well Use	Producing? Y/N	Open, cased, capped, or plugged?	Proposed Best Management Practice
578595	Domestic	unknown	open	Limit Application Rate to necessary crop usage
622413	Domestic	unknown	open	Limit Application Rate to necessary crop usage
271566	Stock		open	Limit Application Rate to necessary crop usage
269426	Irrigation	unknown	cased	Limit Application Rate to necessary crop usage
			Choose an item.	Limit Application Rate to necessary crop usage

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

Attachment: 9

## Section 7. Groundwater Quality (Instructions Page 79)

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: 10

Are groundwater monitoring wells available onsite? Yes ☐ No ☒

Do you plan to install ground water monitoring wells or lysimeters around the land application site? Yes ☐ No ☒

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

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

## Section 8. Soil Map and Soil Analyses (Instructions Page 79)

### A. Soil map

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

Attachment: 11

### 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: NA

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
No Irrigation occurred				

Soil Series	Depth from Surface	Permeability	Available Water Capacity	Curve Number

### Section 9. Effluent Monitoring Data (Instructions Page 80)

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	BOD <sub>5</sub> mg/l	TSS mg/l	pH	Chlorine Residual mg/l	Acres irrigated
2/2022	unknown	29	46	unk	unknown	0
3/2022	unknown	22	35	6.7	unknown	0
4/2022	unknown	5	55	6.7	unknown	0
5/2022	unknown	5	12	6.7	unknown	0
6/2022	unknown	2	19	6.7	unknown	0
7/2022	unknown	4	9	6.8	unknown	0
8/2022	unknown	3	19	6.8	unknown	0

<b>Date</b>	<b>30 Day Avg Flow MGD</b>	<b>BOD<sub>5</sub> mg/l</b>	<b>TSS mg/l</b>	<b>pH</b>	<b>Chlorine Residual mg/l</b>	<b>Acres irrigated</b>
9/2022	unknown	<2	<2	6.7	unknown	0
10/2022	unknown	<2	18	6.7	unknown	0
11/2022	unknown	<2	7	6.8	unknown	0
12/2022	unknown	<2	17	6.7	unknown	0
1/2023	0.004	4	18	7.1	.98	0
2/2023	.004	8	22	7.2	1.0	0
3/2023	.006	15.5	62		1.13	0
4/2023	.006	5	55	6.7	.97	0
5/2023	.007	5	12	6.7	1.1	0
6/2023	.004	7	38	6.8	1.2	0
7/2023	.006	2	19	6.7	1.0	0
8/2023	.006	4/3	9/19	6.8/6.	1.1	0
9/2023	.0073	<2	<2	6.7	1.05	0
10/2023	.006	<2	18	6.7	1.1	0
11/2023	.0088	<2	7	6.8	2.02	0
12/2023	0.0087	2	11	7.5	1.52	0
1/2024	0.0086	3	6	7.3	1.6	0

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

[Click here to enter text.](#)



## DOMESTIC WORKSHEET 6.0

### INDUSTRIAL WASTE CONTRIBUTION

The following is required for all publicly owned treatment works (POTWs)

#### Section 1. All POTWs (Instructions Page 99)

##### A. Industrial users

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:   0  

Average Daily Flows, in MGD: [Click here to enter text.](#)

Significant IUs - non-categorical:

Number of IUs:   0  

Average Daily Flows, in MGD: [Click here to enter text.](#)

Other IUs:

Number of IUs:   0  

Average Daily Flows, in MGD: [Click here to enter text.](#)

##### B. Treatment plant interference

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

Yes ☐      No ☒

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

[Click here to enter text.](#)

### C. Treatment plant pass through

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

Yes ☐ No ☒

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

[Click here to enter text.](#)

### D. Pretreatment program

Does your POTW have an approved pretreatment program?

Yes ☐ No ☒

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

Is your POTW required to develop an approved pretreatment program?

Yes ☐ No ☐

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

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

## Section 2. POTWs with Approved Programs or Those Required to Develop a Program (Instructions Page 100)

### A. Substantial modifications

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

Yes ☐ No ☐

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



Click here to enter text.

### B. Non-substantial modifications

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

Yes ☐

No ☐

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

Click here to enter text.

### C. Effluent parameters above the MAL

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

**Table 6.0(1) – Parameters Above the MAL**

Pollutant	Concentration	MAL	Units	Date

#### **D. Industrial user interruptions**

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

Yes ☐ No ☐

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

[Click here to enter text.](#)

### **Section 3. Significant Industrial User (SIU) Information and Categorical Industrial User (CIU) (Instructions Page 100)**

#### **A. General information**

Company Name: NA

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

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

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

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

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

#### **B. Process information**

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

[Click here to enter text.](#)

#### **C. Product and service information**

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

[Click here to enter text.](#)

#### **D. Flow rate information**

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

Process Wastewater:

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

Discharge Type: ☐ Continuous ☐ Batch ☐ Intermittent

Non-Process Wastewater:

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

Discharge Type: ☐ Continuous ☐ Batch ☐ Intermittent

#### **E. Pretreatment standards**

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

Yes ☐ No ☐

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

Yes ☐ No ☐

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

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

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

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

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

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

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

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

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

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

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

#### **F. Industrial user interruptions**

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

Yes ☐

No ☐

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

Click here to enter text.



New Horizons  
Permit No.: WQ0012759001  
Mills County, Texas  
Permit Renewal  
February 2024

ATTACHMENT #1  
Core Data Form  
Domestic Administrative Report



# 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.)		
<input type="checkbox"/> New Permit, Registration or Authorization (Core Data Form should be submitted with the program application.)		
<input checked="" type="checkbox"/> Renewal (Core Data Form should be submitted with the renewal form)		<input type="checkbox"/> Other
<b>2. Customer Reference Number</b> (if issued)	<a href="#">Follow this link to search for CN or RN numbers in Central Registry**</a>	<b>3. Regulated Entity Reference Number</b> (if issued)
CN 600705727		RN 102343704

## SECTION II: Customer Information

<b>4. General Customer Information</b>		<b>5. Effective Date for Customer Information Updates</b> (mm/dd/yyyy)		3/1/2024	
<input type="checkbox"/> New Customer <input checked="" type="checkbox"/> Update to Customer Information <input type="checkbox"/> Change in Regulated Entity Ownership					
<input type="checkbox"/> Change in Legal Name (Verifiable with the Texas Secretary of State or Texas Comptroller of Public Accounts)					
<i>The Customer Name submitted here may be updated automatically based on what is current and active with the Texas Secretary of State (SOS) or Texas Comptroller of Public Accounts (CPA).</i>					
<b>6. Customer Legal Name</b> (If an individual, print last name first: eg: Doe, John)				<i>If new Customer, enter previous Customer below:</i>	
NEW HORIZONS RANCH AND CENTER INC					
<b>7. TX SOS/CPA Filing Number</b>		<b>8. TX State Tax ID</b> (11 digits)		<b>9. Federal Tax ID</b> (9 digits)	<b>10. DUNS Number</b> (if applicable)
0037345501		17515303406		75-1530340	006717527
<b>11. Type of Customer:</b>		<input checked="" type="checkbox"/> Corporation		<input type="checkbox"/> Individual	Partnership: <input type="checkbox"/> General <input type="checkbox"/> Limited
Government: <input type="checkbox"/> City <input type="checkbox"/> County <input type="checkbox"/> Federal <input type="checkbox"/> Local <input type="checkbox"/> State <input type="checkbox"/> Other		<input type="checkbox"/> Sole Proprietorship		<input type="checkbox"/> Other: 501c3	
<b>12. Number of Employees</b>				<b>13. Independently Owned and Operated?</b>	
<input type="checkbox"/> 0-20 <input type="checkbox"/> 21-100 <input checked="" type="checkbox"/> 101-250 <input type="checkbox"/> 251-500 <input type="checkbox"/> 501 and higher				<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
<b>14. Customer Role</b> (Proposed or Actual) – as it relates to the Regulated Entity listed on this form. Please check one of the following					
<input type="checkbox"/> Owner <input type="checkbox"/> Operator <input checked="" type="checkbox"/> Owner & Operator <input type="checkbox"/> Other:					
<input type="checkbox"/> Occupational Licensee <input type="checkbox"/> Responsible Party <input type="checkbox"/> VCP/BSA Applicant					
<b>15. Mailing Address:</b>		147 Sayles Blvd			
City		Abilene		State	TX
ZIP		79605		ZIP + 4	
<b>16. Country Mailing Information</b> (if outside USA)				<b>17. E-Mail Address</b> (if applicable)	
				tim.hart@newhorizonsinc.com	
<b>18. Telephone Number</b>		<b>19. Extension or Code</b>		<b>20. Fax Number</b> (if applicable)	
325-437-1852					

**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.)

NEW HORIZONS RANCH AND CENTER INC

**23. Street Address of the Regulated Entity:**

850 FM 574 West

(No PO Boxes)

City	Goldthwaite	State	TX	ZIP	76844	ZIP + 4	

**24. County**

Mills

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

**25. Description to Physical Location:****26. Nearest City**

State

Nearest ZIP Code

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

**27. Latitude (N) In Decimal:**

31.459388°

**28. Longitude (W) In Decimal:**

-98.706534°

Degrees

Minutes

Seconds

Degrees

Minutes

Seconds

**29. Primary SIC Code**

(4 digits)

**30. Secondary SIC Code**

(4 digits)

**31. Primary NAICS Code**

(5 or 6 digits)

**32. Secondary NAICS Code**

(5 or 6 digits)

4952

221320

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

Residential treatment center, childrens

**34. Mailing**

Address:

850 FM 574 West

City	Goldthwaite	State	TX	ZIP	76844	ZIP + 4	

**35. E-Mail Address:**

tim.hart@newhorizonsinc.com

**36. Telephone Number****37. Extension or Code****38. Fax Number** (if applicable)

( 325 ) 437 647-1852

( ) -

**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.




<input type="checkbox"/> Dam Safety	<input type="checkbox"/> Districts	<input type="checkbox"/> Edwards Aquifer	<input type="checkbox"/> Emissions Inventory Air	<input type="checkbox"/> Industrial Hazardous Waste
<input type="checkbox"/> Municipal Solid Waste	<input type="checkbox"/> New Source Review Air	<input type="checkbox"/> OSSF	<input type="checkbox"/> Petroleum Storage Tank	<input type="checkbox"/> PWS
<input type="checkbox"/> Sludge	<input type="checkbox"/> Storm Water	<input type="checkbox"/> Title V Air	<input type="checkbox"/> Tires	<input type="checkbox"/> Used Oil
<input type="checkbox"/> Voluntary Cleanup	<input checked="" type="checkbox"/> Wastewater	<input type="checkbox"/> Wastewater Agriculture	<input type="checkbox"/> Water Rights	<input type="checkbox"/> Other:

## SECTION IV: Preparer Information

<b>40. Name:</b>	David Hudson		<b>41. Title:</b>	Environmental Scientist
<b>42. Telephone Number</b>	<b>43. Ext./Code</b>	<b>44. Fax Number</b>	<b>45. E-Mail Address</b>	
( 325 ) 695-1070		( ) -	dhudson@jacobmartin.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.

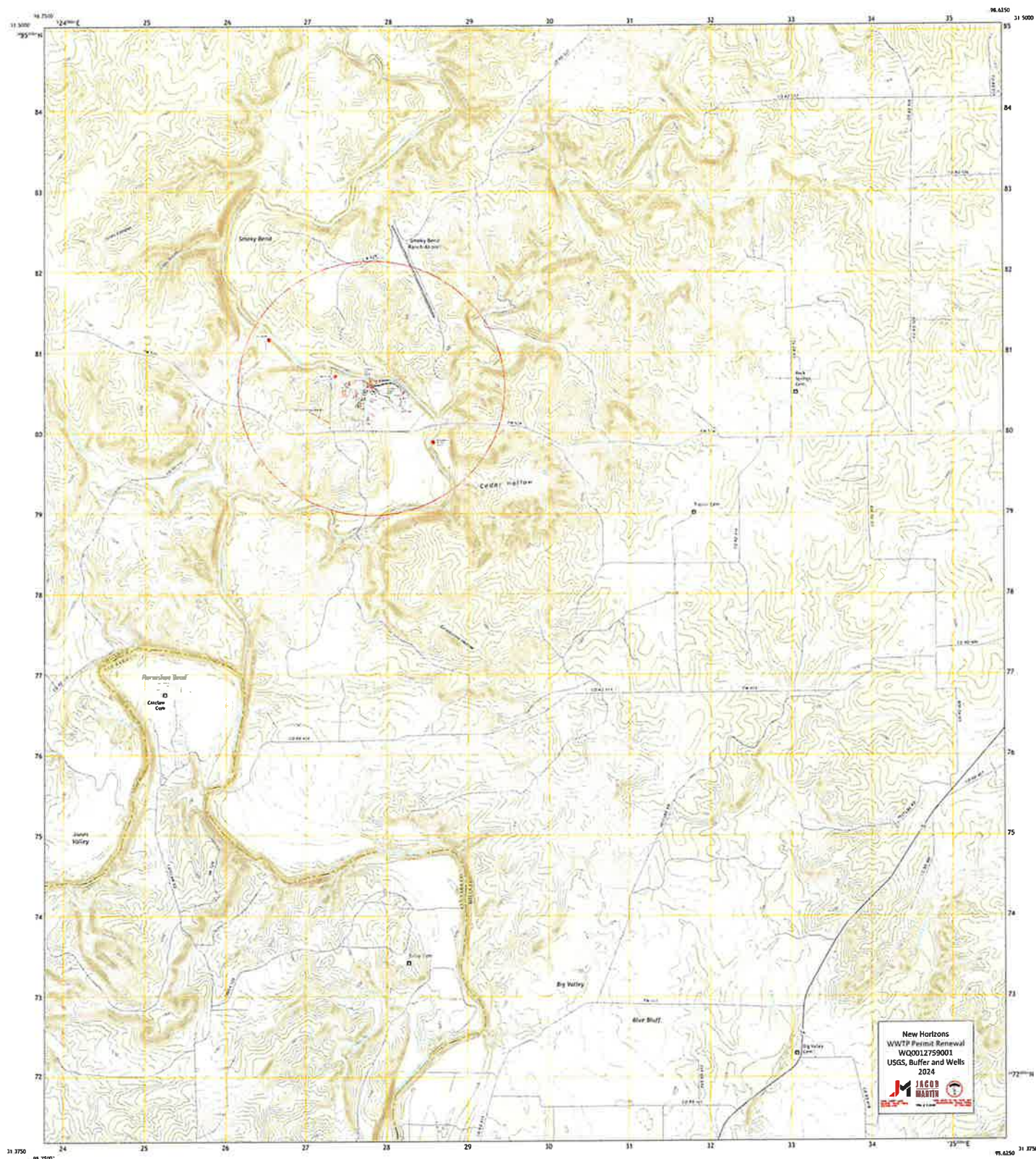
<b>Company:</b>	New Horizons Ranch and Center Inc.		<b>Job Title:</b>	CEO
<b>Name (In Print):</b>	Michael Redden		<b>Phone:</b>	( 325 ) 347- 1852
<b>Signature:</b>			<b>Date:</b>	2/6/2024

New Horizons  
Permit No.: WQ0012759001  
Mills County, Texas  
Permit Renewal  
February 2024

ATTACHMENT #1A  
Permit Renewal Application Fee  
Domestic Administrative Report

New Horizons  
Permit No.: WQ0012759001  
Mills County, Texas  
Permit Renewal  
February 2024

ATTACHMENT #2  
USGS Maps  
Domestic Administrative Report



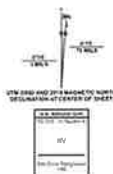
Produced by the United States Geological Survey

North American Report of 1986 (August)

World Geodetic System of 1984 (WGS-84) Projection and  
U.S. Government International Transverse Mercator, Page 148

This map is not a legal document. Statements may be  
grounded for this map are not. Private lands without government  
permissions may not be shown. Please permission before  
using or printing lands.

Inquiry ..... MAP, August 20  
Reach ..... U.S. Census Bureau.  
Alphabet .....  
Hydrography ..... National Hydrographic Office  
Contours ..... National Elevations  
Boundaries ..... multiple sources are methods file



SCALE 1:24 000



CONTOUR INTERVAL 10 FEET  
NORTH AMERICAN VERTICAL DATUM OF 1988




This map was produced to conform with the  
Horizontal Geomatics Program (H) Topographic Standard



1	2	3
4		5
6	7	8

- 1 Blanket Springs
- 2 Mullin
- 3 Lake Morris
- 4 Rensselaer
- 5 Goldsworthy
- 6 Blauvelt Mountain
- 7 Big Valley South
- 8 Top Lake Forest

**ROAD CLASSIFICATION**

Expressway		Local Connector	
Intercity Thruway		Local Road	
Bump		Trail	
 Interstate Route	 US Route	 State Route	

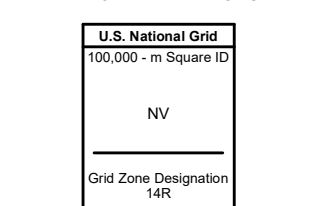
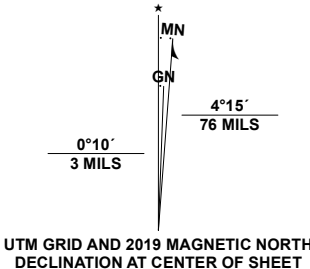
BIG VALLEY NORTH, TX  
2022



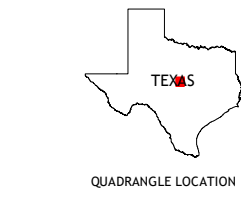


Produced by the United States Geological Survey

North American Datum of 1983 (NAD83)  
World Geodetic System of 1984 (WGS84). Projection and  
1 000-meter grid/Universal Transverse Mercator, Zone 14R  
This map is not a legal document. Boundaries may be  
generalized for this map scale. Private lands within government  
reservations may not be shown. Obtain permission before  
entering private lands.  
Imagery.....NAIP, August 2016 - November 2016  
Roads.....U.S. Census Bureau, 2015 - 2018  
Names.....GNIS, 1979 - 2015  
Hydrography.....National Hydrography Dataset, 2002 - 2018  
Contours.....National Elevation Dataset, 2021  
Boundaries.....Multiple sources; see metadata file 2019 - 2021  
Wetlands.....FWS National Wetlands Inventory Not Available



CONTOUR INTERVAL 10 FEET  
NORTH AMERICAN VERTICAL DATUM OF 1988  
This map was produced to conform with the  
National Geospatial Program US Topo Product Standard.



1	2	3
4	5	6
7	8	9

- Blanket Springs
- Mullin
- Lake Merritt
- Regency
- Goldthwaite
- Blucher Mountain
- Big Valley South
- San Saba Peak

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

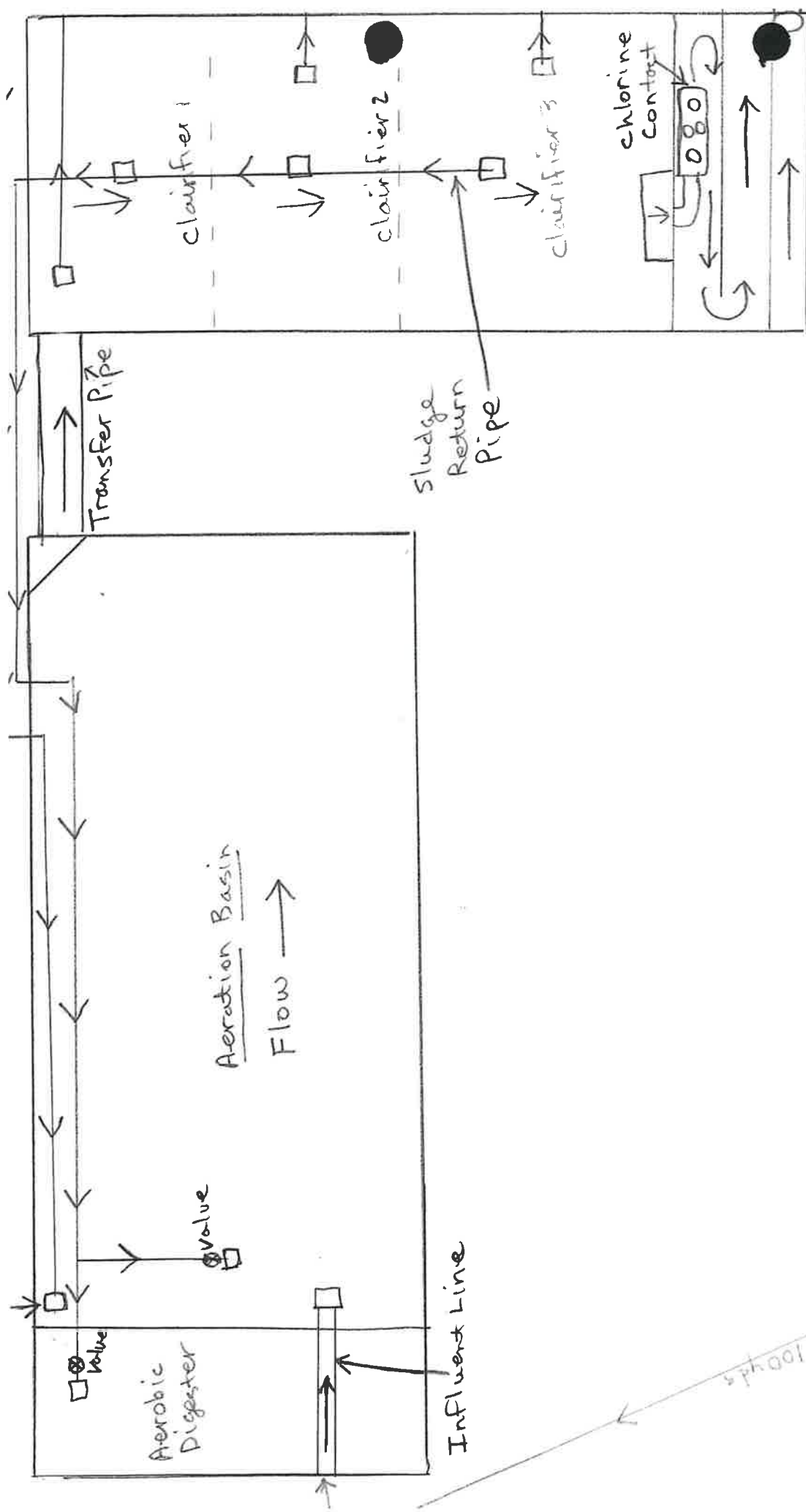
BIG VALLEY NORTH, TX  
2022





New Horizons  
Permit No.: WQ0012759001  
Mills County, Texas  
Permit Renewal  
February 2024

ATTACHMENT #3  
Flow Diagram  
Domestic Technical Report



Effluent  
Pipe  
To holding pond

## Flow Diagram for New Horizons Ranch

Original 2003 Flow Diagram for package plant

New Horizons  
Permit No.: WQ0012759001  
Mills County, Texas  
Permit Renewal  
February 2024

ATTACHMENT #4  
Facility Site Drawing  
Domestic Technical Report





New Horizons  
Permit No.: WQ0012759001  
Mills County, Texas  
Permit Renewal  
February 2024

ATTACHMENT #5  
Lab Results Sheets  
Domestic Technical Report

New Horizons  
Permit No.: WQ0012759001  
Mills County, Texas  
Permit Renewal  
February 2024

ATTACHMENT #5  
Soil Testing Lab Results Sheets  
Domestic Technical Report

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

**ANALYTICAL REPORTS****CLIENT IDENTIFICATION INFORMATION:**

NEW HORIZONS RANCH  
 P O BOX 549  
 GOLDTHWAITE, TX 76844  
 CLIENT CONTACT: MR. GREGG RODRIGUEZ / GREGGRDZ7@GMAIL.COM

**JANUARY 2023 NEW HORIZONS RANCH**

**REPORT ID:** NEWH-020524  
**LAB CONTACT:** SHAY OCHOA  
**REPORT DATE:** 2.5.24  
**PERMIT RENEWAL**

**FIELD DATA / SAMPLE DESCRIPTION**

		EFFLUENT
Collection Point		
Date/ Time Collected		1.25.24 / 13:05
Date/ Time Received by Lab		1.25.24 / 17:00
Laboratory Sample ID		2210-24
Sampling Description/Procedure		BCL SOP.119
Sample Type		Grab
Sample Matrix		Aqueous-NPW
Collector		CJA
Flow, MGD		0.001
Total Residual Chlorine, mg/L	SM 4500 Cl G	1.59
pH, SU	SM 4500-H+B	6.9
Temperature, C		12.4
Date / Time Analyzed	(Field Analysis)	1.25.24 / 13:10
Analyst Initials		CJA

**PARAMETER / UNIT / METHOD**

<b>CBOD<sub>5</sub>, mg/L</b>	SM 5210 B	<b>Q 3.</b>
Reporting Limit, mg/L		2.
Dilution Factor		1
Date / Time Analyzed		1.26.24 / 12:15
Analyst Initials		LD

<b>Total Suspended Solids, mg/L</b>	SM 2540 D	<b>15.</b>
Reporting Limit, mg/L		2.
Dilution Factor		1
Date / Time Analyzed		1.26.24 / 09:20
Analyst Initials		MH

<b>Nitrate as N, mg/L</b>	EPA 300.0	<b>12.8</b>
Reporting Limit, mg/L		0.10
Dilution Factor		10
Date / Time Analyzed		1.25.24 / 18:06
Analyst Initials		AJ

<b>Sulfate, mg/L</b>	EPA 300.0	<b>91.6</b>
Reporting Limit, mg/L		5.00
Dilution Factor		10
Date / Time Analyzed		1.25.24 / 18:06
Analyst Initials		AJ

<b>Chloride, mg/L</b>	EPA 300.0	<b>58.1</b>
Reporting Limit, mg/L		5.00
Dilution Factor		10
Date / Time Analyzed		1.25.24 / 18:06
Analyst Initials		AJ

<b>TDS, mg/L</b>	SM 2540 C	<b>376.</b>
Reporting Limit, mg/L		20.
Dilution Factor		1
Date / Time Analysis Completed		1.29.24 / 10:30
Analyst Initials		ARJ

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

**ANALYTICAL REPORT****CLIENT IDENTIFICATION INFORMATION:**

NEW HORIZONS RANCH  
P O BOX 549  
GOLDTHWAITE, TX 76844  
CLIENT CONTACT: MR. GREGG RODRIGUEZ / GREGGRDZ7@GMAIL.COM

JANUARY 2023 NEW HORIZONS RANCH

REPORT ID: NEWH-020524  
LAB CONTACT: SHAY OCHOA  
REPORT DATE: 2.5.24

**FIELD DATA / SAMPLE DESCRIPTION**

Collection Point	<b>60" WEIR</b>
Date/ Time Collected	1.25.24 / 13:05
Date/ Time Received by Lab	1.25.24 / 17:00
Laboratory Sample ID	2211-24, 2212-24

**PARAMETER / UNIT / METHOD**

<b>Electrical Conductivity, <math>\mu</math>mhos @ 25°C</b>	SM 2510 B	<b>600.</b>
Reporting Limit, $\mu$ mhos @ 25°C		10.0
Dilution Factor		1
Date Analyzed		1.29.24 / 14:30
Analyst Initials		ARJ

<b>E. coli. MPN / 100ml</b>	SM 9223 B	<b>3.</b>
Reporting Limit, MPN / 100 ml		1.
Dilution Factor		1
Date / Time Analyzed		1.25.24 / 17:00
Analyst Initials		MH

<b>NH<sub>3</sub>N, mg/L</b>	SM 4500 NH <sub>3</sub> B, D	<b>0.12</b>
Reporting Limit, mg/L		0.10
Dilution Factor		1
Date / Time Analyzed		1.25.24 / 21:50
Analyst Initials		SV

<b>TKN, mg/L</b>	SM 4500 N <sub>org</sub> B	<b>2.00</b>
Reporting Limit, mg/L		1.00
Dilution Factor		2
Date / Time Analyzed		1.31.24 / 19:00
Analyst Initials		SV

<b>Total Phosphorus, mg/L</b>	SM 4500 P B.5, E	<b>0.46</b>
Reporting Limit, mg/L		0.20
Dilution Factor		4
Date / Time Analyzed		1.31.24 / 15:35
Analyst Initials		LD

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

**ANALYTICAL REPORT****CLIENT IDENTIFICATION INFORMATION:**

NEW HORIZONS RANCH  
 P O BOX 549  
 GOLDTHWAITE, TX 76844  
 CLIENT CONTACT: MR. GREGG RODRIGUEZ / GREGGRDZ7@GMAIL.COM

**JANUARY 2023 NEW HORIZONS RANCH**

REPORT ID: NEWH-020524  
 LAB CONTACT: SHAY OCHOA  
 REPORT DATE: 2.5.24

**QC SUMMARY****BIOCHEMICAL OXYGEN DEMAND**

SM 5210 B

SETUP DATE	SETUP ID	BATCH ID		
1.26.24	B-012624-23	B-012624-23-02		
DUPLICATE	RESULT 1	RESULT 2	% DEV	
2243-24	281	316	5.9	
BOD-BLANK	CBOD-BLANK	LCS -GGA	LCS-CGGA	
Q1 0.26	Q1 0.25	192	194	

**TOTAL SUSPENDED SOLIDS**

SM 2540 D

SETUP DATE	SETUP ID	BATCH ID		
1.26.24	T-012624-16	T-012624-16-03		
SAMPLE ID:	RESULT 1	RESULT 2	% DEV	
2224-24	172	172	0.0	
BLANK, mg/L	<2	LCS % REC	99.4	

**NITRATE**

EPA 300.0

SETUP DATE	SEQUENCE ID			
1.25.24	IC-012524-10			
SAMPLE ID	RESULT 1	RESULT 2	RPD	
12930	10.9	10.9	0.0	
SPIKE ID:	RESULT 1	RESULT 2	% REC	
2131-24	0.0	106.0	106.0	
IPCS-1 % REC:	109.1	IPCS-2 % REC:	105.3	
LCS % REC:	108.8	LCSD % REC:	109.3	
BLANK, mg/L:	<0.01			

**SULFATE**

EPA 300.0

SETUP DATE	SEQUENCE ID			
1.25.24	IC-012524-10			
SAMPLE ID	RESULT 1	RESULT 2	RPD	
2131-24	36.5	36.4	0.3	
SPIKE ID:	RESULT 1	RESULT 2	% REC	
2131-24	36.5	151.7	115.2	
IPCS-1 % REC:	104.6	IPCS-2 % REC:	103.4	
LCS % REC:	106.8	LCSD % REC:	107.4	
BLANK, mg/L:	<0.50			

**CHLORIDE**

EPA 300.0

SETUP DATE	SEQUENCE ID			
1.25.24	IC-012524-10			
SAMPLE ID	RESULT 1	RESULT 2	RPD	
2131-24	41.6	41.5	0.2	
SPIKE ID:	RESULT 1	RESULT 2	% REC	
2131-24	41.6	157.1	115.5	
IPCS-1 % REC:	106.5	IPCS-2 % REC:	103.3	
LCS % REC:	106.7	LCSD % REC:	107.1	
BLANK, mg/L:	<0.50			

**TOTAL DISSOLVED SOLIDS**

SM 2540 C

DATE	SETUP ID	BATCH ID		
1.29.24	DS-012924-06	DS-012924-06-01		
SAMPLE ID:	RESULT 1	RESULT 2	% DEV	
2087-24	542	544	0.2	
SPIKE ID:	RESULT 1	RESULT 2	% REC	
2199-24 Q3	1,640	1,930	58.0	
BLANK, mg/L	<20	LCS, %REC	97.5	

**ELECTRICAL CONDUCTIVITY**

SM 2510 B

SETUP DATE	SETUP ID			
1.29.24	EC-012924-03			
SAMPLE ID	RESULT 1	RESULT 2	% DEV	
2079-24	1100	1110	0.5	
LCS % REC	99.8	LCSD % REC	99.8	
LRB, µmhos	< 5	LOQ % REC	---	



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

**ANALYTICAL REPORT****CLIENT IDENTIFICATION INFORMATION:**

NEW HORIZONS RANCH  
 P O BOX 549  
 GOLDTHWAITE, TX 76844  
 CLIENT CONTACT: MR. GREGG RODRIGUEZ / GREGGRDZ7@GMAIL.COM

JANUARY 2023 NEW HORIZONS RANCH

REPORT ID: NEWH-020524  
 LAB CONTACT: SHAY OCHOA  
 REPORT DATE: 2.5.24

**QC SUMMARY****E. COLI SM 9223 B**

SETUP DATE	SETUP ID	BATCH ID	
1.25.24	E-012524-15	E-012524-15-01	
DUPLICATE ID:	RESULT 1:	RESULT 2:	PRECISION
2185-24	>4839	>4839	QM2 0.0
2207-24	<2	<2	QM1 0.0
BLANK, MPN			PRECISION RANGE
<1			0.0-0.17

**NH3N SM 4500 NH3 B, D**

SETUP DATE:	SETUP ID:	BATCH ID:	
01.25.24	N-012524-23	N-012524-23-01	
SAMPLE ID:	RESULT 1:	RESULT 2:	% DEV:
2169-24	12.6	12.8	0.6
2178-24	22.7	22.8	0.2
SPIKE ID:	RESULT 1:	RESULT 2:	% REC:
2182-24	0.09	1.92	91.4
2182-24	0.09	1.97	93.9
BLANK, mg/L:	LCS % REC:	LCSD % REC:	
< 0.05	102.2	103.2	

**TKN SM 4500 Norg B**

SETUP DATE	SETUP ID	BATCH ID	
01.31.24	TKN-013124-05	TKN-013124-05-01	
SAMPLE ID:	RESULT 1:	RESULT 2:	% DEV
1965-24	93.5	82	6.6
2250-24	18.6	18.1	1.5
SPIKE ID:	RESULT 1:	RESULT 2:	% REC
2050-24 Q3	47.7	73.5	129.0
2050-24	47.7	67.0	96.5
BLANK, mg/L:	LCS % REC:	LCSD % REC:	
< 0.25	109.0	111.8	

**TOTAL PHOSPHORUS SM 4500 P B.5, E**

SETUP DATE	SETUP ID	BATCH ID	
1.31.24	P-013124-07	P-013124-07-01	
SAMPLE ID	RESULT 1	RESULT 2	% DEV
2384-24 Q4	0.19	0.10	29.5
2492-24	14.6	15.2	1.8
SPIKE ID:	RESULT 1	RESULT 2	% REC
2361-24	1.15	1.73	90.6
2361-24	1.15	1.68	82.8
BLANK, as P:	LCS % REC:	LCSD % REC:	
< 0.025	100.7	104.1	

**ANALYTICAL NOTES, INTERPRETATIONS, METHOD DEVIATIONS OR ENVIRONMENTAL CONDITIONS :**

NONE TO REPORT

**STATEMENT OF COMPLIANCE/NON-COMPLIANCE:**

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

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

Please contact 254.829.8001 with any questions or concerns.



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



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

**ANALYTICAL REPORT****CLIENT IDENTIFICATION INFORMATION:**

NEW HORIZONS RANCH  
P O BOX 549  
GOLDTHWAITE, TX 76844  
CLIENT CONTACT: MR. GREGG RODRIGUEZ / GREGGRDZ7@GMAIL.COM

**JANUARY 2023 NEW HORIZONS RANCH**

REPORT ID: NEWH-020524  
LAB CONTACT: SHAY OCHOA  
REPORT DATE: 2.5.24

**BCL PROJECT DATA QUALIFIERS:**

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

**ADDITIONAL NOTES:**



**BIO CHEM LAB, INC.** PHONE: 254.829.8001 FAX: 254.829.8013  
4751 TOKIO RD. WEST, TX 76844

## ANALYTICAL REPORT

## CLIENT IDENTIFICATION INFORMATION:

NEW HORIZONS RANCH  
P O BOX 549  
GOLDTHWAITE, TX 76844  
CLIENT CONTACT: MR. GREGG RODRIGUEZ / GREGGRDZ7@GMAIL.COM

JANUARY 2023 NEW HORIZONS RANCH

REPORT ID: NEWH-020524  
LAB CONTACT: SHAY OCHOA  
REPORT DATE: 2.5.24



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



BIO CHEM LAB, INC

PO BOX 356

4751 TOKIO ROAD

WEST, TX 76844-0356

E-MAIL: CUSTOMERSERVICE@BIOCHEMLABTX.COM

SERVICE • VISION • COMMUNITY • COMMITMENT

CLIENT / PROJECT: NEW HORIZON'S RANCH		CONTACT: GREGG RODRIGUEZ		COLLECTED BY: <i>Gregg Rodriguez</i>	
ADDRESS: PO BOX 549		PHONE NO.: 214.666.1865		FIELD DATA: pH <i>6.9</i> DO <i>—</i> TEMP <i>12.4</i>	
GOLDTHWAITE, TX 76844		E-MAIL: GREGGRDZ7@GMAIL.COM		DATE/TIME: <i>1/25/24 1310 CJA</i>	

Sample ID	Laboratory Use Only		Sample Name, Site Description or Case Number	Collection		Matrix	Container No. / Volume / Type	Grab / Composite	Preservation Code	Verified	Analysis Requested
	Obs Temp °C	Corr Temp °C		Date	Time						
2210-24	4.7	4.6	EFFLUENT	1/25/24	1305	NPW	1 / 2000 / P 1 / 1000 / P	GRAB	1		CBOD / TSS / NO3-N / SO4 / Cl / TDS / EC
2211-24							1 / 120 / M		1		E. COLI
2212-24							1 / 1000 / P		1,2	1.0	NH3-N / TKN / TOTAL PHOSPHORUS

## PROJECT COMMENTS / SAMPLING PROCEDURES:

TRC:

TRC - 1.57 1/25/24 1310 CJA

## Documentation of TRC / Min Correction, as needed:

DATE	TIME	RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	PLACED IN REFRIGERATOR / INITIALS (FRIDGE ID)
1/25/24	1700	<i>C. J. Rodriguez</i>	1/25/24	1700	<i>C. J. Rodriguez</i>	<i>CJA</i>

Matrix: AQ - Aqueous NPW - Non-Potable Water S - Sludge/Soil/Sediment PW - Potable Water		(1) cool to 4°C (2) H <sub>2</sub> SO <sub>4</sub> to pH<2 (3) HNO <sub>3</sub> to pH<2 (4) HCl to pH<2 (5) Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> (6) NaOH to pH>12 (7) None required (8) Other, as noted	
Container: P - Plastic AP - Amber Plastic G - Clear Glass AG - Amber Glass M - Bact / MICRO B - Whirl Pak / BAG VOA - 40 mL vial O - OTHER Describe:	CUSTODY SEALS: COOLER CONTAINERS NANO		
pH STRIPS: <i>2</i> (0-6): <i>7.25-1.15</i> (7.5-14):	SEALS INTACT: YES NO		
ADDITIONAL PRESERVATION / SAMPLE INTEGRITY NOTES:			
REQUESTED TAT: STANDARD (7-10 DAYS) BCL EXPRESS (5-6 DAYS) (1.25X) BCL PRIORITY (3-4 DAYS) (1.5X) BCL FIRE (1-2 DAYS) (2.0X) Rush service availability may depend on logistics and method.			

New Horizons  
Permit No.: WQ0012759001  
Mills County, Texas  
Permit Renewal  
February 2024

ATTACHMENT #6

Pond Liner

The ponds were re-constructed between 2003 and 2005 to the standards in place. Public Information Request filed with TCEQ. No records were found of a certification. A new pond with synthetic liner will be constructed.

New Horizons  
Permit No.: WQ0012759001  
Mills County, Texas  
Permit Renewal  
February 2024

ATTACHMENT #7  
Cropping Plan

## **ANNUAL CROPPING PLAN**

### ***Regulating the Land Disposal of Effluent Through Forage Irrigation at the New Horizons Waste Water Treatment Plant***

**Mission:** The New Horizons Wastewater treatment plant is authorized to dispose of up to 0.018 MGD in the existing permit and a proposed flow of 0.012 MGD of treated wastewater effluent through evaporation and the irrigation on 15 acres of pasture land. The irrigated acreage will be rotated through irrigation, rest, and grazing cycles in order to control the salt and nitrogen concentrations of the soil. The grass is to be used for livestock forage.

**pH:** The WWTP will strive for a neutral pH. The irrigation effluent has an average measured pH of 8.0, but in no case will the pH fall outside the range of a high 9.0 or a low of 6.0.

**Frequency/Duration:** The maximum dosing period for the irrigation field will be 24 hours; thereafter the field must be given 5 days to rest.

**Equipment:** The fields are to be irrigated with a single gun.

**Wind:** The prevailing average wind direction at the irrigation fields is South/South West (SSW).

**Crop Characteristics:** The irrigation fields consist of coastal Bermuda, and native grasses. Coastal Bermuda has a long growing season and has a moderate salt tolerance. Native grass is maintained in order to provide year round forage harvest, since it grows vigorously during the cool, wet winter months and then enters a dormant phase during the hot summer months. Native grass has a relatively good salt tolerance.

**Soil Type:** The predominant soil types in the irrigation fields are Abilene Clay Loam and Miles Fine Sandy Loam.

**Fertilizer requirements:** No supplemental fertilizer is required for the irrigation fields, since the effluent provides more than the minimum requirements for nitrogen. Additional fertilizer could be utilized by the plants, but additional soil samples are recommended to eliminate the possibility of over application of nitrogen.

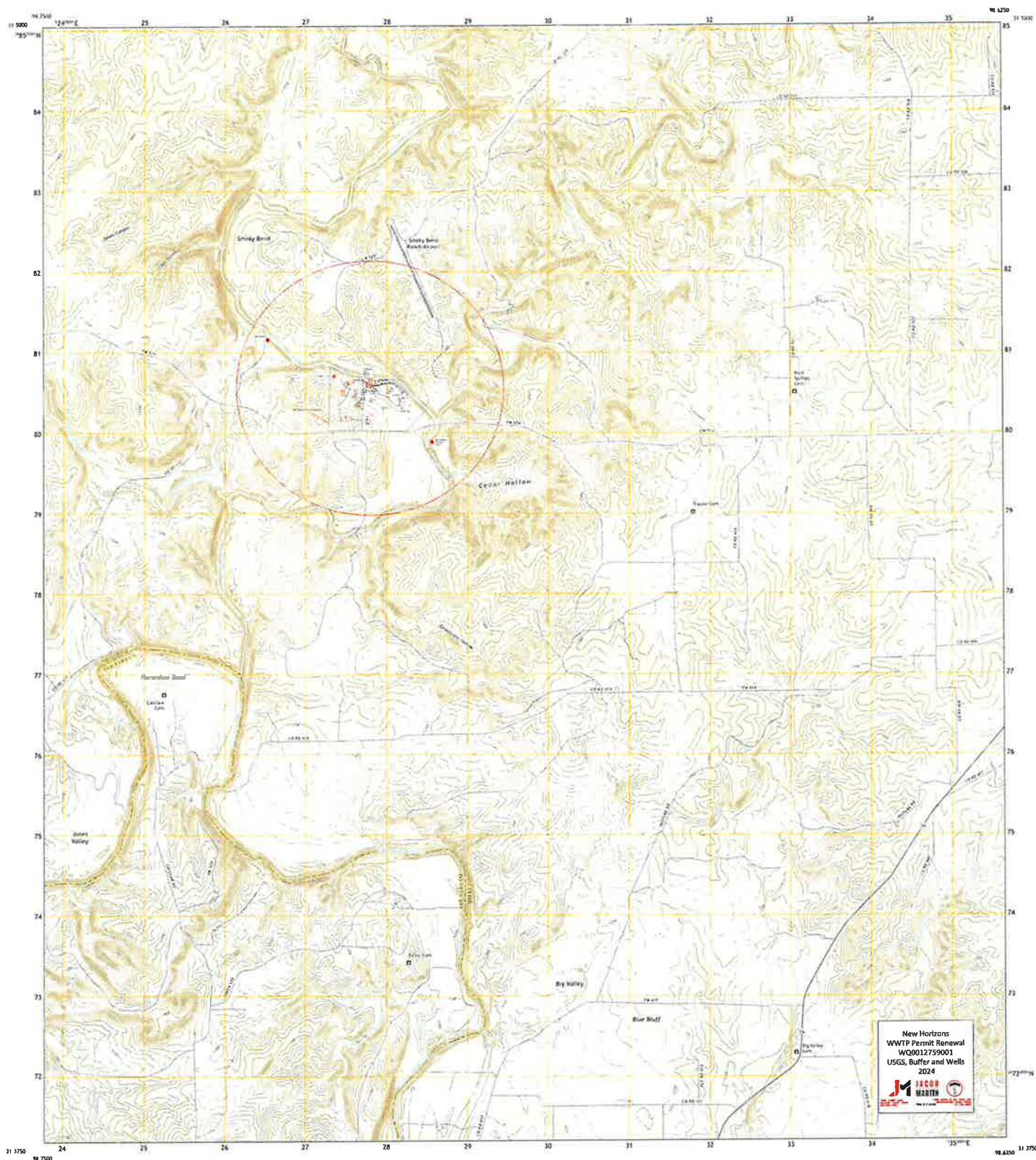
**Supplement Watering:** No additional irrigation of the crop fields is required. The effluent irrigation is sufficient to ensure vigorous growth in the spring and fall, and adequate growth in the summer and winter months.

**Harvesting:** The grass crop is to be grazed when the average blade height is between 1 and 30 inches. In no case will the harvest interval exceed 365 days. The forage grass is to be harvested according to a staggered schedule.

New Horizons  
Permit No.: WQ0012759001  
Mills County, Texas  
Permit Renewal  
February 2024

ATTACHMENT #8  
Well Map





New Horizons  
WWTP Permit Renewal  
W0001275901  
USGS, Buffer and Wells  
2024  
**JACOB MARTIN**  
Map of a Creek

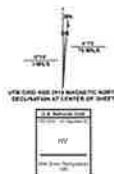
Produced by the United States Geological Survey

North American Datum of 1983 (NAD83)

This map is not a legal document. Boundaries may be generalized for map scale. Property lines and other government information may not be shown. Obtain permission before entering private lands.

Imagery	USGS, August 2014	November 2015
Base	U.S. Census Bureau	2010 - 2018
Hydrology	U.S. Geological Survey	2010 - 2015
Hydrography	National Hydrography Dataset	2001 - 2018
Contour	National Elevation Dataset	2011 - 2019
Quadrangle	USGS, 7.5-Minute Series	2011 - 2019

Boundaries: FWS, National, State, County, City, and other available



SCALE 1:24,000

1 inch = 2,000 feet

1 centimeter = 200 meters

CONTOUR INTERVAL 10 FEET

NORTH AMERICAN DATUM OF 1983

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



**ROAD CLASSIFICATION**

Expressway  
Secondary road  
Ramp

Local connector  
Local Road  
Ramp

Interstate & Road  
US Border  
State Route

BIG VALLEY NORTH, TX  
2022

New Horizons  
Permit No.: WQ0012759001  
Mills County, Texas  
Permit Renewal  
February 2024

ATTACHMENT # 9  
Well data  
Domestic Technical Report

## STATE OF TEXAS WELL REPORT for Tracking #269426

Owner:	<b>Barbara Parrish</b>	Owner Well #:	<b>No Data</b>
Address:	<b>890 FM 574 W Mullin, TX 76864</b>	Grid #:	<b>41-35-1</b>
Well Location:	<b>No Data</b>	Latitude:	<b>31° 27' 54" N</b>
Well County:	<b>Mills</b>	Longitude:	<b>098° 43' 15" W</b>
		Elevation:	<b>1237 ft. above sea level</b>
Type of Work:	<b>New Well</b>	Proposed Use:	<b>Irrigation</b>

Drilling Start Date: **10/18/2011**      Drilling End Date: **10/18/2011**

	<i>Diameter (in.)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
Borehole:	<b>6.75</b>	<b>0</b>	<b>80</b>

Drilling Method: **Air Rotary**

Borehole Completion: **Filter Packed**

	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>	<i>Filter Material</i>	<i>Size</i>
Filter Pack Intervals:	<b>10</b>	<b>80</b>	<b>Gravel</b>	<b>1/4</b>

	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>	<i>Description (number of sacks &amp; material)</i>
Annular Seal Data:	<b>0</b>	<b>3</b>	<b>1 portland</b>
	<b>3</b>	<b>10</b>	<b>2 Ben</b>

Seal Method: **Unknown**

Distance to Property Line (ft.): **No Data**

Sealed By: **Driller**

Distance to Septic Field or other  
concentrated contamination (ft.): **No Data**

Distance to Septic Tank (ft.): **No Data**

Method of Verification: **No Data**

Surface Completion: **Surface Sleeve Installed**

Water Level: **42 ft. below land surface on 2011-10-18**      Measurement Method: **Unknown**

Packers: **No Data**

Type of Pump: **No Data**

Well Tests: **Estimated**      Yield: **1/2 GPM**



Water Quality:

Strata Depth (ft.)	Water Type
No Data	No Data

Chemical Analysis Made: No

Did the driller knowingly penetrate any strata which  
contained injurious constituents?: No

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in the report(s) being returned for completion and resubmittal.

Company Information: **F&F Drilling**  
**301 Hwy 2921**  
**DeLeon, TX 76444**

Driller Name: **Jerry Fronterhouse**

License Number: **2317**

Comments: **No Data**

Lithology:  
DESCRIPTION & COLOR OF FORMATION MATERIAL

Top (ft.)	Bottom (ft.)	Description
0	22	clay and sand
22	40	sand
40	44	gravel
44	80	shale and rock

Casing:  
BLANK PIPE & WELL SCREEN DATA

Dia. (in.)	New/Used	Type	Setting From/To (ft.)
4"	new	plastic casing	0/20
4"	new	plastic slotted	20/40 0.25
4"	new	plastic casing	40/60
4"	new	plastic slotted	60/80 0.25

**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 #271566

Owner: **New Horizon**  
Address: **CR 574**  
**Goldthwaite, TX 76844**  
Well Location: **CR 574**  
**Goldthwait, TX 76844**  
Well County: **Mills**

Owner Well #: **#1**  
Grid #: **41-35-1**  
Latitude: **31° 27' 39" N**  
Longitude: **098° 42' 44" W**  
Elevation: **No Data**

Type of Work: **New Well**

Proposed Use: **Stock**

Drilling Start Date: **11/3/2011** Drilling End Date: **11/3/2011**

	<i>Diameter (in.)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
Borehole:	<b>9</b>	<b>0</b>	<b>70</b>

Drilling Method: **Air Rotary**

Borehole Completion: **Filter Packed**

	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>	<i>Filter Material</i>	<i>Size</i>
Filter Pack Intervals:	<b>30</b>	<b>70</b>	<b>Gravel</b>	<b>3/8</b>

	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>	<i>Description (number of sacks &amp; material)</i>
Annular Seal Data:	<b>-1</b>	<b>30</b>	<b>25</b>

Seal Method: **Slurry**

Distance to Property Line (ft.): **200+**

Sealed By: **Taylor Mobley**

Distance to Septic Field or other  
concentrated contamination (ft.): **N/A**

Distance to Septic Tank (ft.): **No Data**

Method of Verification: **laser**

Surface Completion: **Surface Slab Installed**

Water Level: **No Data**

Packers: **No Data**

Type of Pump: **No Data**

Well Tests: **No Test Data Specified**

Water Quality:

Strata Depth (ft.)	Water Type
No Data	No Data

Chemical Analysis Made: **No**

Did the driller knowingly penetrate any strata which  
contained injurious constituents?: **No**

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in the report(s) being returned for completion and resubmittal.

Company Information: **Leonard Water Services**

**6799 HWY 277  
Abilene, TX 79601**

Driller Name: **Scott Stone**

License Number: **54434**

Apprentice Name: **Taylor Mobley**

Apprentice Number: **58562**

Comments: **No Data**

Lithology:  
DESCRIPTION & COLOR OF FORMATION MATERIAL

Top (ft.)	Bottom (ft.)	Description
0	3	topsoil
3	32	sandy clay
32	33	gravel
33	65	brown sand stone
65	70	black shale

Casing:  
BLANK PIPE & WELL SCREEN DATA

Dia. (in.)	New/Used	Type	Setting From/To (ft.)
5 inch	new	pvc	from +4 to 60
5 inch	new	pvc factory slotted .035	from 60 to 70

**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 #578595

Owner:	<b>Robert Shive</b>	Owner Well #:	<b>No Data</b>
Address:	<b>1928 CR 4825 Athens, TX 75752</b>	Grid #:	<b>41-35-5</b>
Well Location:	<b>701 FM 574 Goldthwaite, TX 76844</b>	Latitude:	<b>31° 27' 13" N</b>
Well County:	<b>Mills</b>	Longitude:	<b>098° 41' 57" W</b>
Number of Wells Drilled:	<b>2</b>	Elevation:	<b>1210 ft. above sea level</b>

Type of Work:	<b>New Well</b>	Proposed Use:	<b>Domestic</b>
---------------	-----------------	---------------	-----------------

Drilling Start Date: **6/21/2021**      Drilling End Date: **6/22/2021**

	<i>Diameter (in.)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
Borehole:	<b>11</b>	<b>0</b>	<b>60</b>
	<b>6.25</b>	<b>60</b>	<b>260</b>

Drilling Method: **Air Rotary**

Borehole Completion: **Straight Wall**

	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>	<i>Description (number of sacks &amp; material)</i>
Annular Seal Data:	<b>0</b>	<b>60</b>	<b>Cement 12 Bags/Sacks</b>

Seal Method: **Poured**

Sealed By: **Driller**

Distance to Property Line (ft.): **100+**

Distance to Septic Field or other  
concentrated contamination (ft.): **NA**

Distance to Septic Tank (ft.): **NA**

Method of Verification: **No Data**

Surface Completion:	<b>Surface Sleeve Installed</b>	<b>Surface Completion by Driller</b>
---------------------	---------------------------------	--------------------------------------

Water Level:	<b>29 ft. below land surface on 2021-06-22</b>	Measurement Method: <b>Sonic/Radar</b>
--------------	--	--

Packers: **No Data**

Type of Pump: **No Data**

Well Tests: **Jetted**      **Yield: 2 GPM**

Water Quality:

Strata Depth (ft.)	Water Type
No Data	No Data

Chemical Analysis Made: No

Did the driller knowingly penetrate any strata which  
contained injurious constituents?: No

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in the report(s) being returned for completion and resubmittal.

Company Information: **ALDERSON WATER WELL RESCUE, LLC**

**PO BOX 366  
STAR, TX 76880**

Driller Name: **Caden Connolly**

License Number: **60094**

Comments: **No Data**

Lithology:  
DESCRIPTION & COLOR OF FORMATION MATERIAL

Top (ft.)	Bottom (ft.)	Description
0	52	Sand/River Gravel
52	68	Black Shale
68	105	Gray Sandstone
105	218	Black Shale
218	246	Gray Sandstone
246	260	Black Shale

Casing:  
BLANK PIPE & WELL SCREEN DATA

Dia (in.)	Type	Material	Sch./Gage	Top (ft.)	Bottom (ft.)
6.25	Blank	New Plastic (PVC)	SDR-27.6	0	60
4.5	Blank	New Plastic (PVC)	SDR-17	0	180
4.5	Screen	New Plastic (PVC)	SDR-17	180	260

**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 #622413

Owner:	Robert Shive	Owner Well #:	No Data
Address:	1928 CR 4825 Athens , TX 75752	Grid #:	41-35-5
Well Location:	701 Fm 574 Goldthwaite, TX 76844	Latitude:	31° 27' 12.85" N
Well County:	Mills	Longitude:	098° 41' 56.69" W
		Elevation:	No Data

Type of Work:	New Well	Proposed Use:	Domestic
---------------	----------	---------------	----------

Drilling Start Date: 7/15/2021      Drilling End Date: 7/15/2021

Borehole:	Diameter (in.)	Top Depth (ft.)	Bottom Depth (ft.)
	11	0	60
	6.25	40	265

Drilling Method: Air Rotary

Borehole Completion: Straight Wall

Annular Seal Data:	Top Depth (ft.)	Bottom Depth (ft.)	Description (number of sacks & material)
	0	3	Cement 1 Bags/Sacks
	3	60	Bentonite 12 Bags/Sacks

Seal Method: Hand Mixed

Sealed By: Driller

Distance to Property Line (ft.): 50

Distance to Septic Field or other  
concentrated contamination (ft.): 150

Distance to Septic Tank (ft.): 100

Method of Verification: No Data

Surface Completion: Surface Slab Installed

Surface Completion by Driller

Water Level:	15 ft. below land surface on 2021-07-15	Measurement Method:	Sonic/Radar
Packers:	Rubber at 120 ft.		
Type of Pump:	No Data		
Well Tests:	Jetted	Yield:	2 GPM

Water Quality:

Strata Depth (ft.)	Water Type
No Data	No Data

Chemical Analysis Made: No

Did the driller knowingly penetrate any strata which  
contained injurious constituents?: No

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in the report(s) being returned for completion and resubmittal.

Company Information: **ALDERSON WATER WELL RESCUE, LLC**  
**PO BOX 366**  
**STAR, TX 76880**

Driller Name: **Caden Connolly**

License Number: **60094**

Comments: **No Data**

Lithology:  
DESCRIPTION & COLOR OF FORMATION MATERIAL

Top (ft.)	Bottom (ft.)	Description
0	34	Sandy Loam
34	52	River Gravel
52	68	Black Shale
68	86	Grey Sandstone
86	96	Black Shale
96	152	Grey Sandstone/Shale
152	184	Black Shale
184	212	Grey Sandstone
212	228	Black Shale
228	265	Grey Sandstone/Shale

Casing:  
BLANK PIPE & WELL SCREEN DATA

Dia (in.)	Type	Material	Sch./Gage	Top (ft.)	Bottom (ft.)
6.9	Blank	New Plastic (PVC)	SDR-27.6	0	60
4.5	Blank	New Plastic (PVC)	SDR-17	0	185
4.5	Screen	New Plastic (PVC)	SDR-17	185	265

---

**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**



New Horizons  
Permit No.: WQ0012759001  
Mills County, Texas  
Permit Renewal  
February 2024

ATTACHMENT #10  
Groundwater Technical Report

## **Groundwater Technical Report**

**See attachment Water Well Map**

**TWDB well information is attached and correlated with well numbers.**

**No monitoring wells are installed.**

The wastewater plant is located West of Goldthwaite, TX in Mills County. Water wells have been commonly drilled in this area due to being near major tributaries to the Colorado River and the minor aquifer outcrop of the Cross Timbers. There are numerous historic springs and seeps in the county that no longer produce. The spring water is usually of a calcium or magnesium sulfate type, slightly saline, very hard, and alkaline. Some contamination has been caused by improper disposal of oil-field brines. But some springs and seep areas contain very high contents of natural sodium chloride. The average rainfall in the area is 26.1" per year making recharge to groundwater sources almost very limited.

The pond system has a clay liner system so that any leaching from the ponds will be very minimal to none. From the pond system the treated effluent will be pumped to an irrigation pivot and irrigated over 15 acres of pastureland. The irrigated acreage will be rotated through irrigation, rest, and harvest cycles in order to control the salt and nitrogen concentrations of the soil at a rate of 1.34 acre ft/acre/year. The irrigated field primarily consists of Frio silty clay loam, 0 to 1 percent slopes and Winters fine sandy loam, 1 to 3 percent slopes. With the growing ability of the grasses and fertile soil, soil seepage is very minimal.

Rocks of Pennsylvanian age crop out over a this part of Mills County. These rocks, which are comprised of: Strawn Group undivided, sandstone, shale, mudstone, conglomerate, siltstone, and limestone; sandstones, Capps Limestone, IPc, Ricker Station Limestone, IPrs, and Pre-Brazos River Formation undivided. Mostly shale and mudstone (silty, greenish gray to red), generally poorly exposed, underlies subdued topography farmed or cleared for grazing, fossils include plants and marine megafossils locally.

Limestone beds generally impure and discontinuous, appear more abundant near top; sandstone forms thin discontinuous sheets and small channel fills, fewer beds near the top. The upper part above Capps Limestone is equivalent to Brownwood Shale. The thickness of Strawn Group, undivided variable, is up to 1500 or 2500 feet and thins westward.

There are several wells within a mile of the site. While Mills County is known to have unconsolidated alluvial sediments furnish water to most of the rural domestic wells in the county and furnish almost all of the water is used for irrigation. Irrigation has developed in the county principally during the period since the 1940's.

Most of the irrigation development near the permitted site is in an area where the Cross Timbers Minor Aquifer tails out to the southeast. Across the county closer to Goldthwaite the Trinity Major Aquifer is well defined. Ground water in this area is influenced from terrace channel sediments which were apparently deposited as the result of a general southward migration of the Pecan Bayou river channel.

While Mills County is included in the Karst region, and substantial gypsum beds are mined and there are no known karst features at the site.

With the pond system having a certified clay liner, and the primary soil type in the area being clay loam there will be very minimal to no changes in groundwater quality due to the wastewater plant.

New Horizons  
Permit No.: WQ0012759001  
Mills County, Texas  
Permit Renewal  
February 2024

ATTACHMENT #11  
Soil Map, Soil Report



United States  
Department of  
Agriculture

**NRCS**

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 Brown and Mills Counties, Texas



January 29, 2024

# 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](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.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or a part of an individual's income is derived from any public assistance program. (Not all prohibited bases apply to all programs.) Persons with disabilities who require

alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD). To file a complaint of discrimination, write to USDA, Director, Office of Civil Rights, 1400 Independence Avenue, S.W., Washington, D.C. 20250-9410 or call (800) 795-3272 (voice) or (202) 720-6382 (TDD). USDA is an equal opportunity provider and employer.

# Contents

---

- Preface..... 2**
- How Soil Surveys Are Made..... 5**
- Soil Map..... 8**
  - Soil Map..... 9
  - Legend..... 10
  - Map Unit Legend..... 11
  - Map Unit Descriptions..... 11
    - Brown and Mills Counties, Texas..... 13
      - 79—Winters fine sandy loam, 1 to 3 percent slopes..... 13
      - FsoA—Frio silty clay loam, 0 to 1 percent slopes, occasionally flooded..... 14
- References..... 16**



# 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

## Custom Soil Resource Report

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

## Custom Soil Resource Report

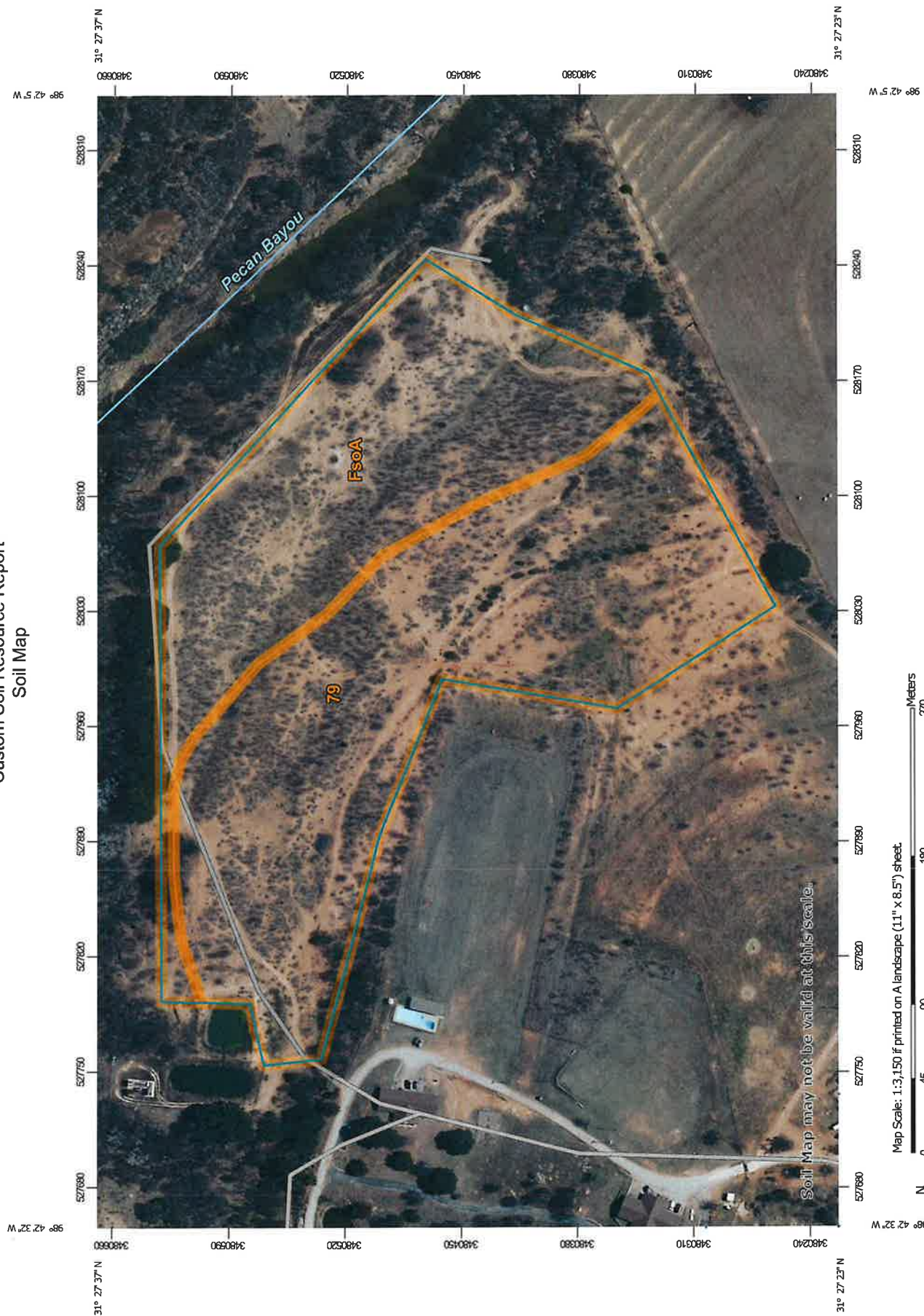
identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

# 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 LEGEND


- Area of Interest (AOI)**

 Area of Interest (AOI)
- Soils**

 Soil Map Unit Polygons

 Soil Map Unit Lines

 Soil Map Unit Points
- Special Point Features**


 Blowout

 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

 Slide or Slip


 Sodic Spot
- Water Features**

 Streams and Canals
- Transportation**

 Ralls

 Interstate Highways


 US Routes


 Major Roads

 Local Roads
- Background**

 Aerial Photography
-  Spoil Area

 Stony Spot

 Very Stony Spot

 Wet Spot

 Other

 Special Line Features

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

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.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service  
Web Soil Survey URL:  
Coordinate System: Web Mercator (EPSG:3857)

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.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Brown and Mills Counties, Texas  
Survey Area Data: Version 20, Sep 5, 2023

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jan 27, 2021—Feb 3, 2021

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
79	Winters fine sandy loam, 1 to 3 percent slopes	13.7	59.4%
FsoA	Frio silty clay loam, 0 to 1 percent slopes, occasionally flooded	9.3	40.6%
<b>Totals for Area of Interest</b>		<b>23.0</b>	<b>100.0%</b>

## 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



## Custom Soil Resource Report

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.

## Brown and Mills Counties, Texas

### 79—Winters fine sandy loam, 1 to 3 percent slopes

#### Map Unit Setting

*National map unit symbol:* f3xs  
*Elevation:* 900 to 2,100 feet  
*Mean annual precipitation:* 19 to 33 inches  
*Mean annual air temperature:* 52 to 78 degrees F  
*Frost-free period:* 210 to 245 days  
*Farmland classification:* All areas are prime farmland

#### Map Unit Composition

*Winters and similar soils:* 93 percent  
*Minor components:* 7 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

#### Description of Winters

##### Setting

*Landform:* Plains  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Parent material:* Mixed loamy alluvium

##### Typical profile

*A - 0 to 6 inches:* fine sandy loam  
*Bt1 - 6 to 10 inches:* clay loam  
*Bt2 - 10 to 36 inches:* clay  
*Bt3 - 36 to 48 inches:* clay loam  
*Btk - 48 to 65 inches:* clay loam  
*Ck - 65 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:* Medium  
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high (0.20 to 0.57 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Calcium carbonate, maximum content:* 35 percent  
*Available water supply, 0 to 60 inches:* High (about 9.3 inches)

##### Interpretive groups

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 3e  
*Hydrologic Soil Group:* C  
*Ecological site:* R080BY164TX - Tight Sandy Loam 26-33" PZ  
*Hydric soil rating:* No

## Custom Soil Resource Report

### Minor Components

#### Unnamed

*Percent of map unit:* 6 percent

*Hydric soil rating:* No

#### Unnamed, hydric

*Percent of map unit:* 1 percent

*Landform:* Depressions

*Hydric soil rating:* Yes

### FsoA—Frio silty clay loam, 0 to 1 percent slopes, occasionally flooded

#### Map Unit Setting

*National map unit symbol:* 2zh6l

*Elevation:* 840 to 1,720 feet

*Mean annual precipitation:* 27 to 32 inches

*Mean annual air temperature:* 64 to 66 degrees F

*Frost-free period:* 220 to 240 days

*Farmland classification:* All areas are prime farmland

#### Map Unit Composition

*Frio, occasionally flooded, and similar soils:* 85 percent

*Minor components:* 15 percent

*Estimates are based on observations, descriptions, and transects of the mapunit.*

#### Description of Frio, Occasionally Flooded

##### Setting

*Landform:* Flood plains

*Landform position (three-dimensional):* Tread

*Down-slope shape:* Linear

*Across-slope shape:* Linear

*Parent material:* Loamy alluvium derived from limestone and shale

##### Typical profile

*A - 0 to 22 inches:* silty clay loam

*Bk1 - 22 to 34 inches:* silty clay

*Bk2 - 34 to 80 inches:* silty clay

##### Properties and qualities

*Slope:* 0 to 1 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 (0.20 to 0.57 in/hr)

*Depth to water table:* More than 80 inches

*Frequency of flooding:* Occasional

*Frequency of ponding:* None

## Custom Soil Resource Report

*Calcium carbonate, maximum content:* 40 percent  
*Maximum salinity:* Nonsaline to very slightly saline (0.0 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):* 2e  
*Hydrologic Soil Group:* C  
*Ecological site:* R080BY151TX - Loamy Bottomland 26-33" PZ  
*Hydric soil rating:* No

### Minor Components

#### **Deleon, occasionally flooded**

*Percent of map unit:* 6 percent  
*Landform:* Flood plains  
*Landform position (two-dimensional):* Footslope, toeslope  
*Landform position (three-dimensional):* Base slope  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Ecological site:* R080BY144TX - Clayey Bottomland 26-33" PZ  
*Hydric soil rating:* No

#### **Bosque, occasionally flooded**

*Percent of map unit:* 6 percent  
*Landform:* Flood plains  
*Landform position (two-dimensional):* Footslope, toeslope  
*Landform position (three-dimensional):* Base slope  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Ecological site:* R080BY151TX - Loamy Bottomland 26-33" PZ  
*Hydric soil rating:* No

#### **Santo, frequently flooded**

*Percent of map unit:* 3 percent  
*Landform:* Flood plains  
*Landform position (two-dimensional):* Footslope, toeslope  
*Landform position (three-dimensional):* Base slope  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Ecological site:* R080BY151TX - Loamy Bottomland 26-33" PZ  
*Hydric soil rating:* No

# References

---

American Association of State Highway and Transportation Officials (AASHTO). 2004. Standard specifications for transportation materials and methods of sampling and testing. 24th edition.

American Society for Testing and Materials (ASTM). 2005. Standard classification of soils for engineering purposes. ASTM Standard D2487-00.

Cowardin, L.M., V. Carter, F.C. Golet, and E.T. LaRoe. 1979. Classification of wetlands and deep-water habitats of the United States. U.S. Fish and Wildlife Service FWS/OBS-79/31.

Federal Register. July 13, 1994. Changes in hydric soils of the United States.

Federal Register. September 18, 2002. Hydric soils of the United States.

Hurt, G.W., and L.M. Vasilas, editors. Version 6.0, 2006. Field indicators of hydric soils in the United States.

National Research Council. 1995. Wetlands: Characteristics and boundaries.

Soil Survey Division Staff. 1993. Soil survey manual. Soil Conservation Service. U.S. Department of Agriculture Handbook 18. [http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2\\_054262](http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_054262)

Soil Survey Staff. 1999. Soil taxonomy: A basic system of soil classification for making and interpreting soil surveys. 2nd edition. Natural Resources Conservation Service, U.S. Department of Agriculture Handbook 436. [http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2\\_053577](http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053577)

Soil Survey Staff. 2010. Keys to soil taxonomy. 11th edition. U.S. Department of Agriculture, Natural Resources Conservation Service. [http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2\\_053580](http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053580)

Tiner, R.W., Jr. 1985. Wetlands of Delaware. U.S. Fish and Wildlife Service and Delaware Department of Natural Resources and Environmental Control, Wetlands Section.

United States Army Corps of Engineers, Environmental Laboratory. 1987. Corps of Engineers wetlands delineation manual. Waterways Experiment Station Technical Report Y-87-1.

United States Department of Agriculture, Natural Resources Conservation Service. National forestry manual. [http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/home/?cid=nrcs142p2\\_053374](http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/home/?cid=nrcs142p2_053374)

United States Department of Agriculture, Natural Resources Conservation Service. National range and pasture handbook. <http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/landuse/rangepasture/?cid=stelpdb1043084>

## Custom Soil Resource Report

United States Department of Agriculture, Natural Resources Conservation Service. National soil survey handbook, title 430-VI. [http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/scientists/?cid=nrcs142p2\\_054242](http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/scientists/?cid=nrcs142p2_054242)

United States Department of Agriculture, Natural Resources Conservation Service. 2006. Land resource regions and major land resource areas of the United States, the Caribbean, and the Pacific Basin. U.S. Department of Agriculture Handbook 296. [http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2\\_053624](http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053624)

United States Department of Agriculture, Soil Conservation Service. 1961. Land capability classification. U.S. Department of Agriculture Handbook 210. [http://www.nrcs.usda.gov/Internet/FSE\\_DOCUMENTS/nrcs142p2\\_052290.pdf](http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_052290.pdf)