



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

DOMESTIC SEPTAGE REGISTRATION

I. Registration No: 710926

II. Sludge Registration Issued to:

Site Operator and Landowner
Gordon Clifford Swenson
11407 Farm-to-Market Road 1625
Austin, Texas 78747

III. Sludge Site: Domestic septage will be beneficially land applied on 298.3 acres located within an approximate 401.63 acres. This site is located on County Road 483, 8,900 feet south of the intersection of U.S. Highway 97 and South Rancho Road, Nixon, in Wilson County, Texas 78140. (See Attachment A).

IV. Authorization: Domestic septage

This registration and the authorization contained herein will expire at midnight, five years from the date issued.

DATE ISSUED: July 19, 2013



For the Commission

V. Standard Provisions**A. Limitations:**

1. Domestic septage cannot be applied in excess of the maximum septage application rate based on crop nitrogen needs (i.e., the agronomic rate), which is calculated based on the total amount of nitrogen in the septage to be applied and in the soils at the application site and on the nitrogen requirements of the vegetation in the application area.
2. The maximum domestic septage application rate must be calculated using Appendix A of the "Application to Register a Site for the Beneficial Use of Domestic Septage."
3. Pathogen reductions and vector attraction reduction must be met, as per 30 TAC §312.82(c) and §312.83(b)(9), (10) or (12) respectively, for any septage applied.
4. Domestic septage can be applied only to the application area shown on Attachment B.
5. The registrant is authorized to accept domestic septage only.

B. Operation Requirements:

The operation and maintenance of this land application site must be in accordance with 30 TAC Chapter 312 and Title 40 of the Code of Federal Regulations (40 CFR) Part 503 as they relate to land application for beneficial use. All applicable local and county ordinances must also be followed.

C. Reporting Requirements:

A report will be required annually to document the use of the site. The report must include the following information:

1. Site registration number, and the location (address or latitude/longitude) of the site.
2. Total number of acres where domestic septage applications occurred.
3. Date and time of each domestic septage application.
4. The annual nitrogen requirement for each crop or the vegetation grown at the site.
5. Rate of domestic septage application (gallons/acre/year).
6. The certification statement in 30 TAC §312.47(b)(6).
7. A description of how the pathogen requirements in 30 TAC §312.82(c)(1) and (2) were met.
8. A description of how the vector attraction requirements in 30 TAC §312.83(b)(9), (10) or (12) were met.
9. Soil test reports, as per Section V.G.
10. All laboratory tests submitted to demonstrate compliance with this registration must meet the requirements of 30 TAC Chapter 25, Environmental Testing Laboratory Accreditation and Certification.

An annual report must be submitted by September 30th of each year per 30 TAC §312.48 which includes all required information above for a period covering September 1st of the previous year through August 31st of the current year. Additionally an "Annual Sludge Summary Report Form" (Attachment C) should be filled out and submitted with the annual report. Submit your report to the Water Quality Division, Municipal Permits Team (MC 148) and the TCEQ Regional Office (MC Region 13). Record retention requirements must be followed in accordance with 30 TAC §312.47(b) for domestic septage.

D. Regulated Management Conditions:

1. Domestic septage applications must not cause or contribute to the harm of a threatened or endangered species of plant, fish, or wildlife or result in the destruction or adverse modification of the critical habitat of a threatened or endangered species.
2. Domestic septage must not be applied to land that is flooded, frozen or snow-covered.
3. Domestic septage applied to the land must maintain the following buffer zones for each application area:

a. Established school, institution, business or residence	750 feet
b. Public water supply well, intake, public water supply spring or similar source, public water treatment plant, or public water supply elevated or ground storage tank	500 feet
c. Solution channels, sinkholes, or other conduits to groundwater	200 feet
d. Waters in the State of Texas - when septage is not incorporated	200 feet
e. Waters in the State of Texas - when septage is incorporated within 48 hours of application and a vegetated cover is established	33 feet
f. Private water supply well	150 feet
g. Public right of way	50 feet
h. Property boundary	50 feet
i. Irrigation conveyance canals	10 feet
4. Domestic septage must be applied to the land at an annual application rate that is equal to or less than the agronomic rate for the vegetation in the area on which the material is applied.
5. Septage cannot be applied to soils with permeation rates greater than twenty inches per hour.
6. For soils with permeability greater than 2 inches per hour and less than 20 inches per hour, the land application of domestic septage is prohibited if the soil is saturated or groundwater is present within a depth of 4 feet of the treatment zone as demonstrated through the determination of presence or absence of the perched or apparent water table. Records of monitoring data shall be maintained per 30 TAC §312.47. In the absence of groundwater monitoring, land application is prohibited during months that the most recently published soil survey data indicate that a perched or apparent water table may be present within 4 feet of the treatment zone.
7. For soils with permeability less than 2 inches per hour, the land application of domestic septage is prohibited if the soil is saturated or groundwater is present within a depth of 3 feet of the treatment zone as demonstrated through the determination of presence or absence of the perched or apparent water table. Records of monitoring data shall be maintained per 30 TAC §312.47. In the absence of groundwater monitoring, land application is prohibited during months that the most recently published soil survey data indicate that a perched or apparent water table may be present within 3 feet of the treatment zone.

8. Land application of domestic septage must not occur when the soil is water saturated as evidenced by the visible pooling of water. Regulatory support for this condition can be found at 30 TAC §312.44(h)(3).
9. Domestic septage must be applied by a method and under conditions that prevent runoff beyond the active application area and that protect the quality of the surface water and the soils in the unsaturated zone. In addition, the following conditions must be met:
 - a. Domestic septage must be applied uniformly over the surface of the land.
 - b. Domestic septage must not be applied to areas where permeable surface soils are less than 2 feet thick.
 - c. Domestic septage must not be applied during rainstorms or during periods in which surface soils are water-saturated.
 - d. Domestic septage must not be applied to any areas having a slope in excess of 8%.
 - e. Where runoff from the active application area is evident, the operator must cease further domestic septage application until the condition is corrected
10. The site operator must prevent public health nuisances. Domestic septage debris must be prevented from leaving the site. Where nuisance conditions exist, the operator must eliminate the nuisance as soon as possible.
11. Domestic septage application practices must not allow uncontrolled public access, so as to protect the public from potential health and safety hazards at the site.

E. Pathogen Control:

1. Domestic septage applied to the site must have a pH raised to 12 or higher by alkali addition and, without the addition of more alkali, remain at 12 or higher for a period of at least 30 minutes. Records that demonstrate these conditions for each load of domestic septage must be maintained at this site for five (5) years. If the alkali addition occurs in a transport vehicle, the records must also be maintained in the vehicle for one (1) month and at the offices of the transporter's company for five (5) years.
2. In addition to controlling pathogens, the following site restrictions must be met:
 - a. Food crops with harvested parts totally above the land surface in areas where domestic septage has been applied must not be harvested from the land for at least 14 months after the last application of domestic septage if any of the harvested parts contact the domestic septage or soil.
 - b. Food crops with harvested parts below the surface of the land must not be harvested from the land for at least 20 months after application of domestic septage when the material remains on the land surface for four months or longer prior to incorporation into the soil.
 - c. Food crops with harvested parts below the surface of the land must not be harvested for at least 38 months after application of domestic septage when the material remains on the land surface for less than four months prior to the incorporation into the soil.

- d. Food crops (when grown and harvested in a manner that prevents any part of the crop from contacting the soil or domestic septage), feed crops, and fiber crops must not be harvested for at least 30 days after application of domestic septage.
- e. Animals must not be allowed to graze on the land for at least 30 days after application of domestic septage.
- f. Public access to land with a high potential for public exposure must be restricted for at least one year after application of domestic septage.
- g. Public access to land with a low potential for public exposure must be restricted for at least 30 days after application of the domestic septage.

F. Vector Attraction Reduction Requirement:

Domestic septage must demonstrate vector attraction compliance by meeting one of the following compliance alternatives:

1. Alkali addition is a compliance alternative [30 TAC §312.83(b)(6)]. If this option is selected, the pH of the domestic septage must be raised to 12 or higher by alkali addition and, without the addition of more alkali, shall remain at 12 or higher for 30 minutes.
2. Domestic septage may be injected below the surface of the land [30 TAC §312.83(b)(9)]. If this alternative is used, no significant amount of the domestic septage can be present on the land surface within one hour after injection.
3. Incorporation into the soil is another compliance alternative [30 TAC §312.83(b)(10)]. If this option is used, domestic septage applied to the surface must be incorporated into the soil within six hours after application to the surface of the land.

G. Soil Sampling:

The registrant is required to notify the local TCEQ Regional Office 48 hours prior to taking annual soil samples at the registered site. Samples will need to be taken within the same 45-day period each year, or by an approved sampling plan and analyzed within 30 days of procurement. The permittee shall provide a copy of this plan to the analytical laboratory prior to sample analysis.

The registrant must monitor the soil-septage mixture for the site as follows using soil sampling requirements described in 30 TAC §312.12(b)(1)(I) and (J):

No.	PARAMETER	NOTE	FREQUENCY	SAMPLE DEPTH	
				0" - 6"	6" - 24"
1.	Nitrate Nitrogen (NO ₃ -N, mg/kg)		1 per year	X	X
2.	Ammonium Nitrogen (NH ₄ -N,		1 per year	X	X
3.	Total Nitrogen (TKN, mg/kg)	1	1 per year	X	X
4.	Phosphorus (plant available,	2	1 per year	X	X
5.	Potassium (plant available,	2	1 per year	X	X
6.	Sodium (plant available, mg/kg)	2	1 per year	X	X
7.	Magnesium (plant available,	2	1 per year	X	X
8.	Calcium (plant available, mg/kg)	2	1 per year	X	X
9.	Electrical Conductivity	3	1 per year	X	X
10.	Soil Water pH (S.U.)	4	1 per year	X	X
11.	Total Arsenic (mg/kg)	*	1 per 5 years	X	N/A
12.	Total Cadmium (mg/kg)	*	1 per 5 years	X	N/A
13.	Total Chromium (mg/kg)	*	1 per 5 years	X	N/A
14.	Total Copper (mg/kg)	*	1 per 5 years	X	N/A
15.	Total Lead (mg/kg)	*	1 per 5 years	X	N/A
16.	Total Mercury (mg/kg)	*	1 per 5 years	X	N/A
17.	Total Molybdenum (mg/kg)	*	1 per 5 years	X	N/A
18.	Total Nickel (mg/kg)	*	1 per 5 years	X	N/A
19.	Total Selenium (mg/kg)	*	1 per 5 years	X	N/A
20.	Total Zinc (mg/kg)	*	1 per 5 years	X	N/A

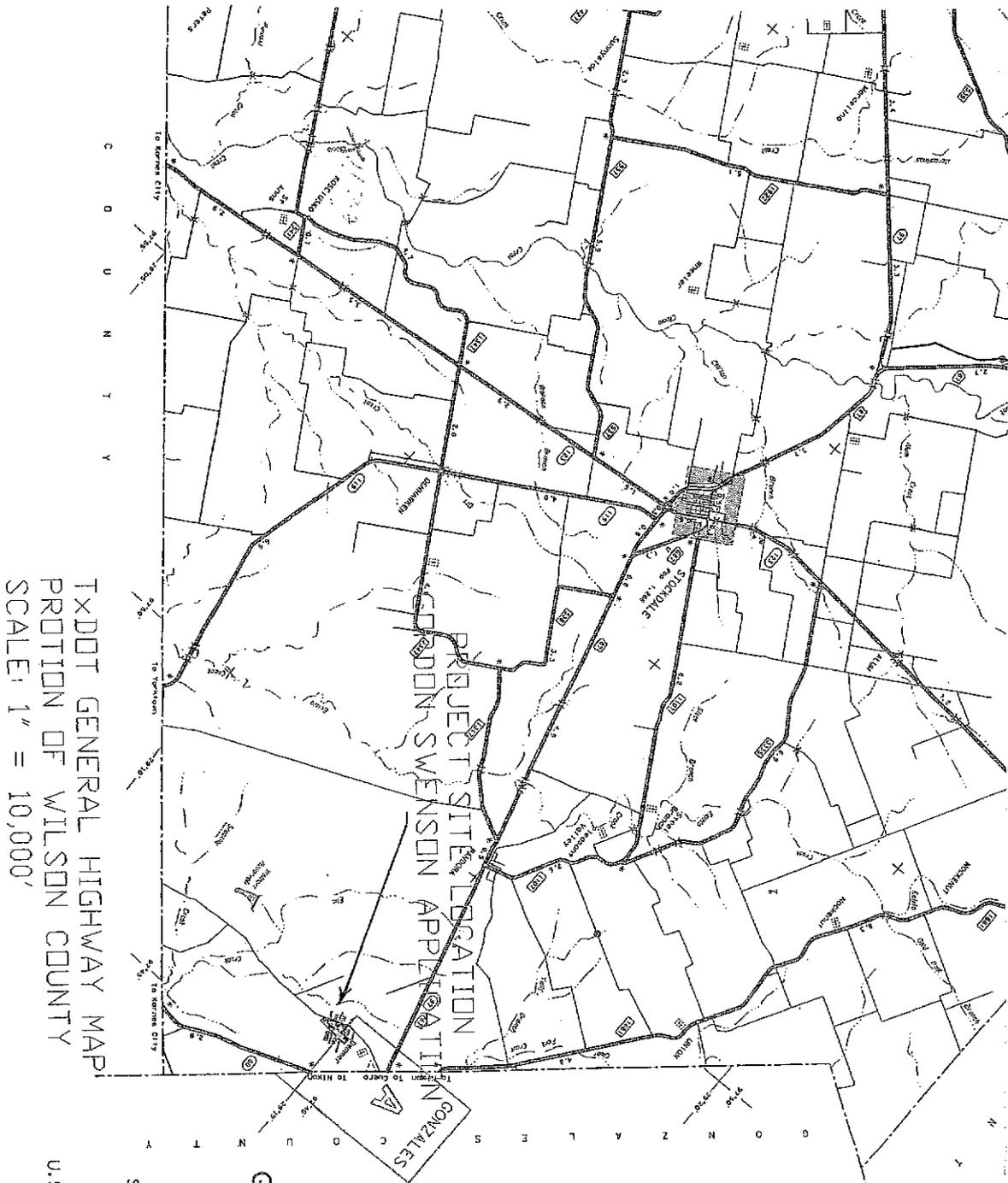
1. Determined by Kjeldahl digestion or an equivalent accepted procedure. Methods that rely on Mercury as a catalyst are not acceptable.
2. Mehlich III extraction (yields plant-available concentrations) with inductively coupled plasma.
3. Electrical Conductivity (EC) - determine from extract of 2:1 (volume/volume) water/soil mixture and expressed in ds/m (same as mmho/cm).
4. Soil pH must be analyzed by the electrometric method in "Test Methods for Evaluating Solid Waste," EPA SW-846, 40 CFR 260.11; method 9045C - determine from extract of 2:1 (volume/volume) water/soil mixture.

* Analysis for metals in soil must be performed according to methods outlined in "Test Methods for Evaluating Solid Waste," EPA SW-846; method 3050.

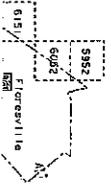
VI. Special Provisions:

- A. Annual domestic septage application rate shall not exceed 76,923 gallons/acre/year.
- B. The registrant shall perform a visual inspection and remove any debris on the site after each application of domestic septage to the land.
- C. No more than 6,800 gallons of septage shall be applied to an acre in a 48-hour period.
- D. The registrant shall comply with the requirements of 30 TAC Chapter 312 and any Best Management Practices (BMPs) proposed in the application, including the buffer requirements of 30 TAC §312.44(c) and the groundwater and surface water protection requirements of 30 TAC §312.44(g) and (h).
- E. All temporary storage sites shall be located outside of the buffers required by 312.44(c).
- F. Markers, such as flags, posting, or fencing, shall be installed to indicate required buffers in 312.44(c) during times of septage application. An elevation survey of the area, aerial photographs of the area, or other resources may be used to determine the outline of the buffered areas.

Attachment A General Highway Map

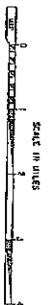


TxDOT GENERAL HIGHWAY MAP
 PORTION OF WILSON COUNTY
 SCALE: 1" = 10,000'

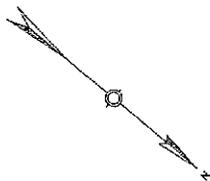
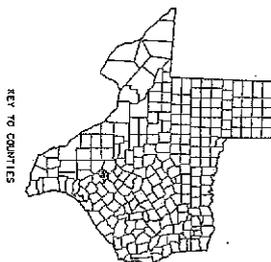


**GENERAL HIGHWAY MAP
 WILSON COUNTY
 TEXAS**

PREPARED BY THE
 STATE DEPARTMENT OF HIGHWAYS
 AND PUBLIC TRANSPORTATION
 TRANSPORTATION PLANNING DIVISION
 IN COOPERATION WITH THE
 U.S. DEPARTMENT OF TRANSPORTATION
 FEDERAL HIGHWAY ADMINISTRATION

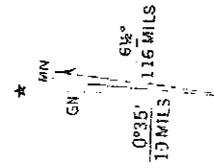
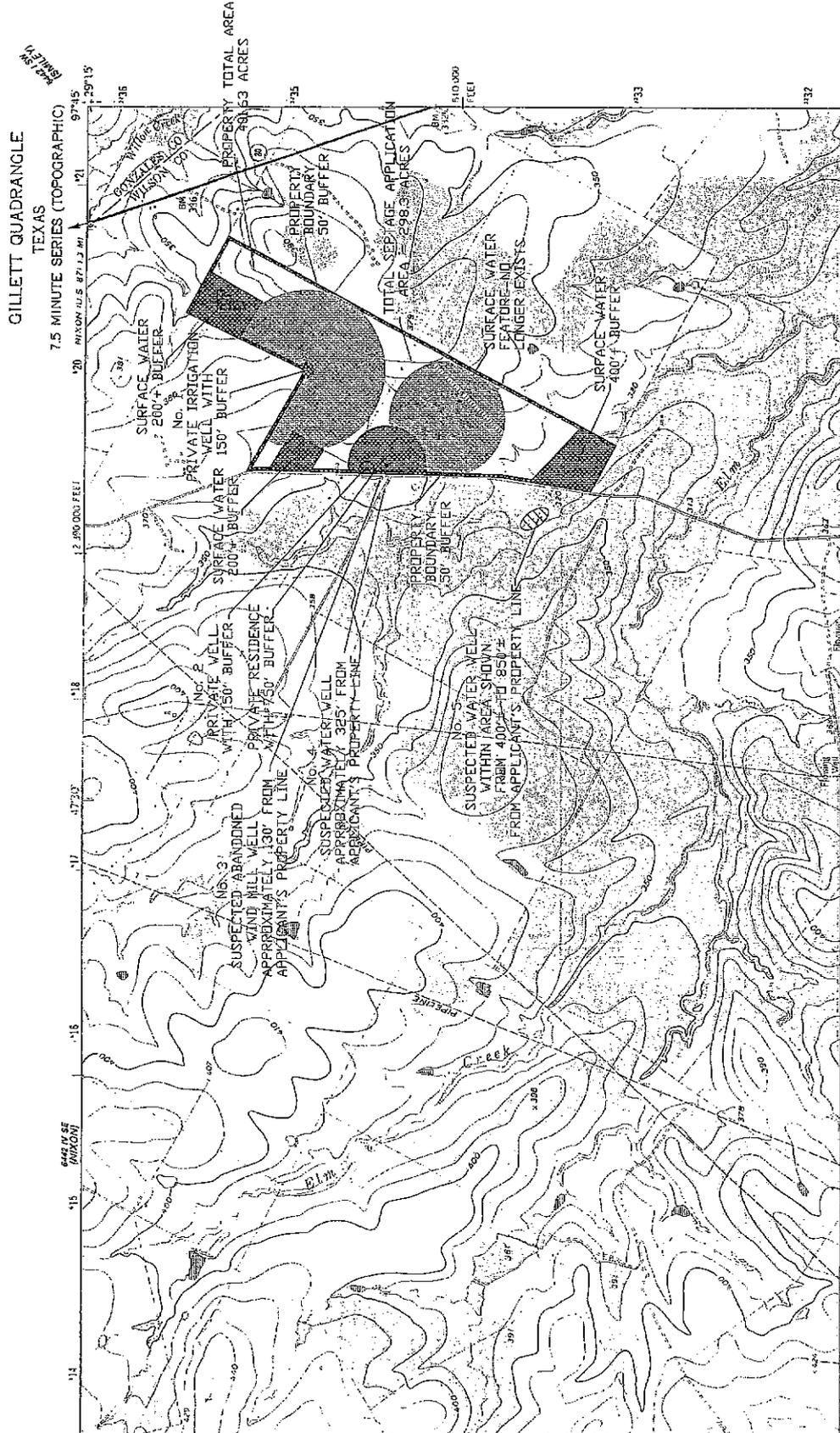


1986
 1980 CENSUS FIGURES
 HIGHWAYS REVISED TO JULY 1, 1991



Attachment B USGS Topographic Map

U.S.G.S TOPOGRAPHIC MAP
PROPERTY BOUNDARY
AND BUFFER ZONES
(SCALE: 1" = 2000')



Annual Sludge Summary Report Form (Domestic Septage Only)

Note 1: Please note that in addition to this summary form, you need submit the information required per 30 TAC 312.48.

Note 2: Please place this form at the top of your Annual Sludge Report.

Note 3. If you operate other registered/permited site, then fill-out this form for each one of those sites.

Note 4: Also send one complete copy of your report and this form to local TCEQ regional office.

For TCEQ Fiscal Year Reporting period: From September 1, _____ to August 31, _____

Registration No: _____ Date _____

Name of Registrant: _____

Mailing Address: _____

Contact Person Name Telephone No:

- a. Treated Domestic Septage: Land Applied: _____ gallons / year
- b. Acreage used for Sludge Application/disposal at this site: _____ acres
- c. Site Vegetation (such as grass type etc) and # of cuttings: _____
- d. Annual septage application rate authorized by registration to meet annual nitrogen requirement of crop/vegetation: _____
- e. Description of the process used to achieve pathogen requirements in 30 TAC §312.82 (c):

- f. Description of the process used to meet the vector attraction reduction requirements in 30 TAC§312.83(b)(9),(10), or (12): _____
- g. Have you enclosed the certification statement? Yes No
- h. Have enclosed dates and times of septage land application to this site? Yes No
- i. Have enclosed the recent soil-septage analysis? Yes No

PLEASE MAIL THE COMPLETED ANNUAL REPORT TO:

Texas Commission on Environmental Quality
Municipal Permits Team (MC 148)
Wastewater Permitting Section
P.O. Box 13087
Austin, TX 78711-3087