

<p style="text-align: center;"><b>TABLE OF CONTENTS</b> <b>GREEN VALLEY SPECIAL UTILITY DISTRICT – SANTA CLARA CREEK No. 1</b> <b>WASTEWATER TREATMENT PLANT</b> <b>TCEQ DOMESTIC WASTEWATER PERMIT APPLICATION</b></p>
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- **TCEQ Domestic Administrative Report**

**Attachments:**

**USGS Maps 1 – 4**

**Additional USGS Map**

**One Mile Down Stream Affected Landowners**

**Half Mile Sludge Affected Landowners**

**Landowners CD**

**Photo Location Map**

**Buffer Zone Map**

**Santa Clara Creek Watershed Regional Planning Map**

**Original Photos**

- **TCEQ Domestic Technical Report**

**Attachments:**

**Technical Report**

**Initial Plant Phase – Flow Schematic**

**Letters of Support**

**Wind Rose**

**Proposed Santa Clara Wastewater Treatment Plant Map**

# TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

## TCEQ DOMESTIC WASTEWATER PERMIT

### APPLICATION DOMESTIC ADMINISTRATIVE REPORT

**Submit this checklist with the application.** Do not submit the instructions with the application. Indicate if the following are included in the application.

APPLICANT Green Valley Special Utility District

PERMIT NUMBER \_\_\_\_\_

<b>WORKSHEET</b>	Y	N		Y	N
Administrative Report 1.0	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Affected Landowner	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Administrative Report 1.1	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Map		
SPIF	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Buffer Zone Map	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Technical Report 1.0	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Flow Diagram	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Technical Report 1.1	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Site Drawing	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Worksheet 2.0	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Original Photographs	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Worksheet 2.1	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Design Calculations	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Worksheet 3.0	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Design Features	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Worksheet 3.1	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Solids Management Plan	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Worksheet 4.0	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Water Balance	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Worksheet 5.0	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Landowner Disk or	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Worksheet 6.0 (required	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Labels		
for all POTWs)			Copy of Application Fee	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Worksheet 7.0	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Check		
Original USGS Map	<input checked="" type="checkbox"/>	<input type="checkbox"/>	All Fees Owed TCEQ are	<input checked="" type="checkbox"/>	<input type="checkbox"/>
			Paid		

Please indicate the amount submitted for the application fee (check only one):

Flow	New/Major Amendment	Renewal
<0.05 MGD	<input type="checkbox"/> \$350.00	<input type="checkbox"/> \$315.00
≥0.05 but < 0.10 MGD	<input type="checkbox"/> \$550.00	<input type="checkbox"/> \$515.00
≥0.10 but < 0.25 MGD	<input type="checkbox"/> \$850.00	<input type="checkbox"/> \$815.00
≥0.25 but < 0.50 MGD	<input type="checkbox"/> \$1,250.00	<input type="checkbox"/> \$1,215.00
≥0.50 but < 1.0 MGD	<input type="checkbox"/> \$1,650.00	<input type="checkbox"/> \$1,615.00
≥ 1.0 MGD	<input checked="" type="checkbox"/> \$2,050.00	<input type="checkbox"/> \$2,015.00
Minor Amendment (any flow)	<input type="checkbox"/> \$115.00	

**A copy of the application fee check must be submitted with the application.**

FOR COMMISSION USE ONLY	
Segment Number _____	County _____
Expiration Date _____	Region _____
Proposed/Current Permit Number _____	

## DOMESTIC ADMINISTRATIVE REPORT 1.0

The following is required for all applications: Renewal, New, and Amendment

Type of application:

- |   |   |
|---|---|
| <input checked="" type="checkbox"/> New TPDES                   | <input type="checkbox"/> New TLAP                               |
| <input type="checkbox"/> Major amendment <u>with</u> renewal    | <input 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 (no changes)                   | <input type="checkbox"/> Minor modification of permit           |

If applying for an amendment or renewal with changes, describe the request in detail.

N/A

### 1. Applicant Information

(Instructions, Page 24)

#### a. Facility owner

(Owner of the facility must apply for the permit.)

*Provide the Legal Name of the entity (applicant) applying for this permit (The legal name must be spelled exactly as filed with the Texas Secretary of State, County, or in the legal document forming the entity.):*

Green Valley Special Utility District

If the applicant is currently a customer with TCEQ, provide the Customer Number (CN):  
CN: 600684294

What is the applicant's contact information and mailing address as recognized by the US Postal Service?

Phone No.: (830) 914-2330 Extension: \_\_\_\_\_

Fax No.: (830) 420-4138 E-mail Address: pallen@gvsud.org

Organization Name: Green Valley Special Utility District

Mailing Address: P.O. Box 99

Internal Routing (Mail Code, Etc.): \_\_\_\_\_

City: Marion State: TX ZIP Code: 78124

Mailing Information if outside USA

Territory: \_\_\_\_\_ Country Code: \_\_\_\_\_ Postal Code: \_\_\_\_\_

Indicate the type of Customer:

- |  |  |
|--|--|
| <input type="checkbox"/> Individual                  | <input type="checkbox"/> Sole Proprietorship-D.B.A.                        |
| <input type="checkbox"/> Limited Partnership         | <input type="checkbox"/> Corporation                                       |
| <input type="checkbox"/> Trust                       | <input type="checkbox"/> Estate  |
| <input type="checkbox"/> Federal Government          | <input type="checkbox"/> State Government                                  |
| <input type="checkbox"/> County Government           | <input type="checkbox"/> City Government                                   |
| <input checked="" type="checkbox"/> Other Government | <input checked="" type="checkbox"/> Other: <u>Special Utility District</u> |

Independent entity

☒ Yes ☐ No (If governmental entity, subsidiary, or part of a larger corporation)

Number of Employees:

☐ 0-20; ☒ 21-100; ☐ 101-250; ☐ 251-500; or ☐ 501 or higher

Customer Business Tax and Filing Numbers

*(Not applicable to individuals, governments, general partnerships or sole proprietors.  
REQUIRED for corporations and limited partnerships)*

State Franchise Tax ID Number: N/A

TX SOS Charter (filing) Number: N/A

Federal Tax ID: N/A

DUNS Number (if known): N/A

**b. Co-permittee information**

**Complete only if the operator must be a co-permittee).**

*Provide the Legal Name of the entity (operator) applying for this permit (The legal name must be spelled exactly as filed with the Texas Secretary of State, County, or in the legal document forming the entity.):*

**Operator:** N/A

If the operator is currently a customer with TCEQ, provide the Customer Number (CN)?

**CN:** N/A

Provide the co-permittee's contact information and mailing address as recognized by the **US Postal Service:**

**Organization Name:** N/A

**Mailing Address:** N/A

**Internal Routing (Mail Code, Etc.):** N/A

**City:** N/A **State:** N/A **ZIP Code:** N/A

**Mailing Information if outside USA**

**Territory:** N/A **Country Code:** N/A **Postal Code:** N/A

**Indicate the type of Customer:**

- |  |   |
|--|---|
| <input type="checkbox"/> Individual          | <input type="checkbox"/> Sole Proprietorship-D.B.A. |
| <input type="checkbox"/> Limited Partnership | <input type="checkbox"/> Corporation                |
| <input type="checkbox"/> Trust               | <input type="checkbox"/> Estate                     |
| <input type="checkbox"/> Federal Government  | <input type="checkbox"/> State Government           |
| <input type="checkbox"/> County Government   | <input type="checkbox"/> City Government            |
| <input type="checkbox"/> Other Government    | <input type="checkbox"/> Other: _____               |

**Independent entity**

☐ Yes ☐ No (If governmental entity, subsidiary, or part of a larger corporation)

**Number of Employees:**

☐ 0-20; ☐ 21-100; ☐ 101-250; ☐ 251-500; or ☐ 501 or higher

## Customer Business Tax and Filing Numbers

*(Not applicable to individuals, governments, general partnerships or sole proprietors. REQUIRED for corporations and limited partnerships)*

State Franchise Tax ID Number: N/A

TX SOS Charter (filing) Number: N/A

Federal Tax ID: N/A

DUNS Number (if known): N/A

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

N/A

## c. Individual Information

**Complete only if the facility owner or co-permittee is an individual.**

Provide the full Legal Name of the Individual (Owner/Co-permittee) applying for this permit: N/A

If the owner/co-permittee is currently a customer with TCEQ, provide the Customer Number (CN): N/A

Provide the applicant's contact information and mailing address as recognized by the **US Postal Service?**

Mailing Address: N/A

Internal Routing (Mail Code, Etc.): N/A

City: N/A State: N/A ZIP Code: N/A

Mailing Information if outside USA

Territory: N/A Country Code: N/A Postal Code: N/A

## 2. Billing Contact

**(Instructions, Page 28)**

*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. 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 TCEQ form number 20029.*

Is the billing address the same as the permittee or co-permittee?

☒ Permittee ☐ Co-permittee ☐ No, fill out this section

Prefix (Mr, Ms, Miss): \_\_\_\_\_

First/Last Name: \_\_\_\_\_

Suffix (Jr, Sr, III): N/A Title: \_\_\_\_\_ Credential: N/A

Phone No.: \_\_\_\_\_ Extension: N/A

Fax No.: \_\_\_\_\_ E-mail Address: \_\_\_\_\_

Organization Name: \_\_\_\_\_

Mailing Address: \_\_\_\_\_

Internal Routing (Mail Code, Etc.): N/A

City: \_\_\_\_\_ State: \_\_\_\_\_ ZIP Code: \_\_\_\_\_

Mailing Information if outside USA

Territory: N/A Country Code: N/A Postal Code: N/A

### 3. Application Contact Information

(Instructions, Page 28)

If TCEQ needs additional information regarding this application, who should be contacted?

#### a. First application contact

Prefix (Mr, Ms, Miss): Mr

First/Last Name: Pat Allen

Suffix (Jr, Sr, III): N/A Title: General Manager Credential: N/A

Phone No.: (830) 914-2330 Extension: N/A

Fax No.: (830) 420-4138 E-mail Address: pallen@gvsud.org

Organization Name: Green Valley Special Utility District

Mailing Address: P.O. Box 99

Internal Routing (Mail Code, Etc.): N/A

City: Marion State: TX ZIP Code: 78124

Mailing Information if outside USA

Territory: N/A Country Code: N/A Postal Code: N/A

Check one or both: ☒ Administrative contact ☒ Technical Contact

**b. Alternate application contact**

Prefix (Mr, Ms, Miss): Mr  
First/Last Name: Garry Montgomery  
Suffix (Jr, Sr, III): N/A Title: Project Manager Credential: P.E.  
Phone No.: (830) 626-3588 Extension: 153  
Fax No.: (830) 420-4138 E-mail Address: garry@rcetx.com  
Organization Name: River City Engineering, PLLC  
Mailing Address: 1011 W. County Line Road  
Internal Routing (Mail Code, Etc.): N/A  
City: New Braunfels State: TX ZIP Code: 78130  
Mailing Information if outside USA  
Territory: N/A Country Code: N/A Postal Code: N/A  
Check one or both: ☒ Administrative contact ☒ Technical Contact

**4. DMR/MER Contact Information**

**(Instructions, Page 28)**

Contact Responsible for Discharge Monitoring Reports (EPA 3320-1) or Monthly Effluent Reports. Provide the name of the person and their complete mailing address delegated to receive and submit Discharge Monitoring Report Forms.

Prefix (Mr, Ms, Miss): Mr  
First/Last Name: Pat Allen  
Suffix (Jr, Sr, III): N/A Title: General Manager Credential: N/A  
Phone No.: (830) 914-2330 Extension:   
Fax No.: (830) 420-4138 E-mail Address: pallen@gvsud.org  
Organization Name: Green Valley Special Utility District  
Mailing Address: P.O. Box 99  
Internal Routing (Mail Code, Etc.): N/A  
City: Marion State: TX ZIP Code: 78124  
Mailing Information if outside USA  
Territory: N/A Country Code: N/A Postal Code: N/A





**Did you know you can submit DMR data on line?**

Go to Sign up now at:

<http://www.tceq.texas.gov/field/netdmr/netdmr.html>

Establish an electronic reporting account when you get your permit number.

## **5. Permit Contact Information**

### **(Instructions, Page 28)**

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

Prefix (Mr, Ms, Miss): Mr.

First/Last Name: Pat Allen

Suffix (Jr, Sr, III): N/A Title: General Manager Credential: N/A

Phone No.: (830) 914-2330 Extension: N/A

Fax No.: (830) 420-4138 E-mail Address: pallen@gvsud.org

Organization Name: Green Valley Special Utility District

Mailing Address: P.O. Box 99

Internal Routing (Mail Code, Etc.): N/A

City: Marion State: TX ZIP Code: 78124

Mailing Information if outside USA

Territory: N/A Country Code: N/A Postal Code: N/A

Prefix (Mr, Ms, Miss): Mr.

First/Last Name: Garry Montgomery

Suffix (Jr, Sr, III): Jr Title: Project Manager Credential: N/A

Phone No.: (830) 626-3588 Extension: 153

Fax No.: (830) 626-3601 E-mail Address: garry@rcetx.com

Organization Name: River City Engineering, PLLC

Mailing Address: 1011 W. County Line Road

Internal Routing (Mail Code, Etc.): N/A

City: New Braunfels State: TX ZIP Code: 78130

Mailing Information if outside USA

Territory: N/A Country Code: N/A Postal Code: N/A

## 6. Notice Information

(Instructions, Page 29)

### a. Individual associated with the applicant responsible for publishing the notices

Prefix (Mr. Ms, Miss): Mr  
First/Last Name: Pat Allen  
Suffix (Jr, Sr, III): N/A Title: General Manager Credential: N/A  
Phone No.: (830) 914-2330 Extension: N/A  
Fax No.: (830) 420-4138 E-mail Address: pallen@gvsud.org  
Organization Name: Green Valley Special Utility District  
Mailing Address: P.O. Box 99  
Internal Routing (Mail Code, Etc.): N/A  
City: Marion State: TX ZIP Code: 78124

Mailing Information if outside USA

Territory: N/A Country Code: N/A Postal Code: N/A

### 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: pallen@gvsud.org  
☐ Fax No.: \_\_\_\_\_  
☐ Overnight/Priority mail: (self addressed, prepaid envelope required)  
☐ Regular Mail:  
Mailing Address: \_\_\_\_\_  
Internal Routing (Mail Code, Etc.): \_\_\_\_\_  
City: \_\_\_\_\_ State: \_\_\_\_\_ ZIP Code: \_\_\_\_\_

**c. Contact in the notice**

Prefix (Mr, Ms, Miss): Mr  
First/Last Name: Pat Allen  
Suffix (Jr, Sr, III): N/A Title: General Manager Credential: N/A  
Organization Name: Green Valley Special Utility District  
Phone No.: (830) 914-2330 Extension: N/A

**d. Public place information**

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

Public Building name: N/A  
Location within the building: N/A  
Physical address of building: N/A  
City: N/A County: N/A  
Contact Name: N/A  
Phone No.: N/A Extension: N/A

**e. Bilingual notice requirements**

**For new permit applications, major amendment and renewal applications.  
Not applicable for minor amendment or minor modification applications.**

Please call the bilingual/ESL coordinator at the nearest elementary and middle schools and obtain the following information to determine if an alternative language notice is required:

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

☐ Yes ☒ No

(If No, alternative language notice publication is not required; skip to item 7. Regulated Entity and Permitted Site Information.)

**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 N/A

**3.** Do the students at these schools attend a bilingual education program at another location?

☐ Yes ☐ No N/A

**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 N/A

**5.** If the answer is yes to 1, 2, 3, or 4, public notice in an alternative language is required. Which language is required by the bilingual program?

N/A

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

## **7. Regulated Entity and Permitted Site Information**

**(Instructions, Page 30)**

If the site of your business is part of a larger business site, a Regulated Entity Number (RN) may already be assigned for the larger site. Use the RN assigned for the larger site. Search TCEQ's Central Registry to see if the larger site may already be registered as a regulated site at:

<http://www15.tceq.state.tx.us/crpub/index.cfm?fuseaction=regent.RNSearch>

If the site is found, provide the assigned Regulated Entity Reference Number and provide the information for the site to be authorized through this application below. The site information for this authorization may vary from the larger site information.

TCEQ issued RE Reference Number (RN): RN: N/A

**a.** State/TPDES Permit No.: N/A Expiration date: N/A

EPA Identification No. (TPDES Permits only): TX N/A

**b.** Name of project or site (the name known by the community where located):  
Santa Clara Creek No. 1 - Wastewater Treatment Plant

**c.** Is the facility located in Bexar, Comal, Hays, Kinney, Medina, Travis, Uvalde, or Williamson County?

☐ Yes ☒ No

(If Yes, additional information concerning protection of the Edwards Aquifer may be required.)

**d. Site location description information**

Complete both sections, A and B. If the site does not have a physical address, check "No" in Section A and continue to Section B.

**Section A:** Site physical address.

Does the site have a physical address?

☒ Yes ☐ No

Verify the address with USPS and proceed to Section B below. If the address is not recognized as a delivery address, provide the address as identified for overnight mail delivery, 911 emergencies, or other online map tool to confirm an address.

*Physical Address of Project or Site:*

Street Number: 3930 Street Name: Linne Rd  
City: Marion, TX ZIP Code: 78124

**Section B:** Site location information.

Is the location of the facility used in the existing permit correct?

☐ Yes ☐ No N/A

If the location description is not accurate or this is a new permit application, provide a written location access description to the site:

The facility is located at the southwest corner of the Linne Road and Interstate 10 intersection, approximately 3 miles south of Marion, TX in Guadalupe County

(Ex.: located 2 miles west from intersection of Hwy 290 & IH35 accessible on Hwy 290 South)

**e.** City where the site is located or, if not in a city, what is the nearest city:

Marion, Texas

**f.** ZIP Code where the site is located: 78124

**g.** County where the site is located: Guadalupe

**h.** Latitude: 29.5253 Longitude: -98.1141

**i.** In your own words, briefly describe the primary business of the Regulated Entity:  
(Do not repeat the SIC and NAICS code)

N/A

**j.** Owner of treatment facility: Green Valley Special Utility District

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

**k.** Owner of land where treatment facility is/will be:

Green Valley Special Utility District

(If not the same as the facility owner, there must be a long term lease agreement in effect for at least six years. In some cases, a lease may not suffice - see instructions page 33.)

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

(If not the same as the facility owner, there must be a long term lease agreement in effect for at least six years.)

**m.** Owner of sewage sludge disposal site:

Green Valley Special Utility District (Same property as proposed WWTP)

(Required only if authorization is sought in the permit for sludge disposal on property owned/controlled by the applicant.)

## **8. Discharge/Disposal Information**

(Instructions, Page 34)

### **ALL permits complete the following**

**a.** Is the facility located on or does the treated effluent cross Indian Land?

☐ Yes ☒ No

**b.** Provide an **original** full size USGS Topographic Map with all applicable required information. Indicate by a check mark that the information is provided.

- ☒ Applicant's property boundary
- ☒ Treatment facility boundaries
- ☒ Labeled point of discharge and highlighted discharge route
- ☒ Onsite sewage sludge disposal site
- ☐ Effluent disposal site boundaries
- ☒ New and future construction
- ☒ 1 mile radius and 3 miles downstream information
- ☒ All ponds

**c.** 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

If **no**, or if a new onsite sludge disposal authorization is being requested for the first time in this permit application, please give an accurate description.

N/A

### **TPDES permits complete the following**

**d.** Is the point of discharge and the discharge route in the existing permit correct?

☐ Yes ☐ No N/A

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

The effluent will discharge southwest of the facility and will travel approximately into Santa Clara Creek. The flow then travels approximately 4.4 miles south within Santa Clara Creek to Lower Cibolo Creek, segment 1902, of the San Antonio River Basin.

**e.** City or Town in which the outfall(s) is or will be located

Marion, Texas is the closest City Center to point of discharge

**f.** County where outfall(s) are located: Guadalupe

**g.** Outfall - Latitude: 29.5225 Longitude: -98.1179

Use degrees-minutes-seconds to the nearest second or decimal degrees to 4 decimal places (Ex: 30 - 10' - 25" or 30.1736).

**h.** Will the treated wastewater be discharged 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 amendments, provide copies of letters that show proof of contact and the approval letter upon receipt.)

**i.** For all applications involving an average daily discharge of 5 million gallons per day or more, provide the names of all counties located within 100 statute miles downstream of the point(s) of discharge.

Guadalupe, Wilson, Karnes, Goliad

**TLAP permits complete the following** N/A

**j.** Is the location of the effluent disposal site in the existing permit accurate?

☐ Yes ☐ No

If no, or a new or amendment permit application, please give an accurate description.

N/A

**k.** City or Town in which the disposal site is or will be located: N/A

**l.** County where disposal site is located: N/A



**m.** Disposal site - Latitude: N/A Longitude: N/A

Use degrees-minutes-seconds to the nearest second or decimal degrees to 4 decimal places (Ex: 30 - 10' - 25" or 30.1736).

**n.** If a TLAP, describe the routing of effluent from the treatment facility to the effluent disposal site:

N/A

**o.** For TLAP applications please identify the nearest watercourse to the disposal site to which rainfall runoff might flow if not contained:

N/A

## 9. Miscellaneous Information

(Instructions, Pages 37)

**a.** List each person formerly employed by the TCEQ who represented your company and was paid for service regarding the application:

N/A

**b.** Do you owe fees to the TCEQ?

☐ Yes ☒ No

If yes, please provide:

Account number: N/A Amount past due: N/A

**c.** Do you owe any penalties to the TCEQ?

☐ Yes ☒ No

If yes, please provide:

Enforcement order number N/A Amount past due N/A

## 10. Signature Page

(Instructions, Page 39)

Permit Number \_\_\_\_\_  
Applicant Green Valley Special Utility District

### Certification:

I/We 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.

Print or Type Signor's Name: Dennis Dreyer

Provide Signor's Title: President

Signature (Use blue ink): Dennis Dreyer

Date: 1-15-15

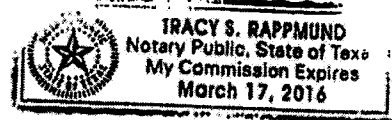
Subscribed and Sworn to before me by the said Dennis Dreyer

on this 15<sup>th</sup> day of January, 20 15.

My commission expires on the 17<sup>th</sup> day of March, 20 16.

Notary Public Signature: Tracy S. Rappmund [SEAL]

Guadalupe County, Texas



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

**TEXAS COMMISSION ON ENVIRONMENTAL QUALITY**  
**SUPPLEMENTAL PERMIT INFORMATION FORM (SPIF)**  
**FOR AGENCIES REVIEWING DOMESTIC**  
**TPDES WASTEWATER PERMIT APPLICATIONS**

<b>TCEQ USE ONLY:</b>	
Application type: _____	
_____ Renewal _____	Major Amendment _____ Minor Amendment _____ New _____
County: _____	
Admin Complete Date: _____	
Agency Receiving SPIF:	
<input type="checkbox"/> Texas Historical Commission	<input type="checkbox"/> U.S. Fish and Wildlife
<input type="checkbox"/> Texas Parks and Wildlife Department	<input type="checkbox"/> U.S. Army Corps of Engineers

**Supplemental Permit Information**

(Instructions, Page 40)

**This form applies to TPDES permit applications only.** 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 and/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: Green Valley Special Utility District
2. Permit No. WQ (EPA ID No.) TX
3. Address of the project (location description that includes street/highway, city/vicinity, & county).

The facility is located at the southwest corner of the Linne Road and Interstate 10 intersection, approximately 3 miles South Marion, TX in Guadalupe County

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

Name: Pat Allen Phone number: (830) 914-2330  
Company: Green Valley SUD Fax number: (830) 420-4138  
Street No.: 529 Street name: South Center  
Street type: Street  
P.O. Box: 99 Email: pallen@gvsud.org  
City: Marion State: TX Zip code: 78124

5. List the county in which the facility is located.

Guadalupe

6. If the property is publicly owned and the owner is different than the permittee/applicant, please list the owner of the property.

N/A

7. 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 Segment Number.

The effluent will discharge southwest of the facility and will travel approximately into Santa Clara Creek. The flow then travels approximately 4.4 miles south within Santa Clara Creek to Lower Cibolo Creek, segment 1902, of the San Antonio River Basin.

8. 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).
9. Please provide original photographs of any structures 50 years or older on the property. None Known

10. Does your project involve any of the following? If Yes, check the appropriate boxes.

- ☒ 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

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

The site will require approximately 6 surface acres to be impacted with construction activities. Depth of excavation will be minimized, only to a depth required to provide a stable base for the proposed facility.

12. Describe existing disturbances, vegetation and land use.

The Wastewater Treatment Plant site vegetation is made of up trees and assorted grasses. The site does not appear to be disturbed, having no existing roads.

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

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

All structures on the property appear to be severely dilapidated and made of sheet metal and wood timbers.

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

The property has been predominately used for agricultural purposes throughout recent history. The property is undeveloped with the exception of several dilapidated sheds and various buildings.

## DOMESTIC ADMINISTRATIVE REPORT 1.1

The following is required for new and amendment applications.

### 1. Affected Landowner Information

(Instructions, Page 41)

#### a. Landowner map components

Indicate by a check mark that the landowner map or drawing, with scale, includes the following, 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
- ☐ The point(s) of discharge and highlighted discharge route 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), all evaporation/holding ponds within the applicant's property
- ☐ The property boundaries of all landowners surrounding the applicant's property boundaries where the effluent disposal site is located
- ☐ 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. Landowner list media**

Indicate by a check mark in which format the landowners list is submitted:

☒

Read/Writeable CD or Disk

☐

4 sets of labels

**c. Cross-referenced landowner list**

Has a separate list with the landowners' names and mailing address cross-referenced to the landowners map been provided.

☒

Yes

☐

No

**d. Landowner data source**

Provide the source of the landowners' names and mailing addresses.

Guadalupe County Appraisal District

**e. School fund land**

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, foreseeable impacts, and effects this application has on the land(s).

N/A

## 2. Buffer Zone Map

(Instructions, Page 44)

### a. Buffer zone map components

Provide a buffer zone map on 8.5 x 11-inch paper. The applicant's property line and the buffer zone line may be distinguished by using dashes or symbols and appropriate labels. Indicate by a check mark that all the following information is included on the map.

- ☐ The applicant's property boundary
- ☐ The required buffer zone
- ☐ Each treatment unit
- ☐ The distance from each treatment unit to the property boundaries

### b. Buffer zone compliance method

How will the buffer zone requirement be met?

- ☐ 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

## 3. Original Photographs

(Instructions, Page 48)

- ☒ Provide original ground level photographs. Indicate by a check mark 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



# Texas Commission on Environmental Quality

## Water Quality Permit Payment Submittal Form

Use this form to submit your Application Fee only if you are mailing your payment.

- Complete items 1 through 5 below:
- Staple your check in the space provided at the bottom of this document.
- Do not mail this form with your application form.
- Do not mail this form to the same address as your application.

Mail this form and your check to:

**BY REGULAR U.S. MAIL**

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

**BY OVERNIGHT/EXPRESS MAIL**

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

Fee Code: WQP

Wastewater Permit No: WQ00

1. Check / Money Order No: Check #57180
2. Amount of Check/Money Order: \$2050.00
3. Date of Check or Money Order: February 13, 2015
4. Name on Check or Money Order: Green Valley Special Utility District
5. APPLICATION INFORMATION

If the check is for more than one application, list each Project/Site (RE) Name and Physical Address exactly as provided on the application. DO NOT SUBMIT A COPY OF THE APPLICATION WITH THIS FORM AS IT COULD CAUSE DUPLICATE PERMIT ENTRIES.

See Attached List of Sites (If more space is needed, you may attach a list.)

Project/Site (RE) Name: \_\_\_\_\_

Project/Site (RE) Physical Address: \_\_\_\_\_

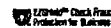
57180



**GREEN VALLEY SPECIAL  
UTILITY DISTRICT**  
P.O. BOX 99  
MARION, TEXAS 78124  
(830) 914-2330



(840) 420-2331  
P.O. Box 187  
301 W. SAN ANTONIO ST  
MARION, TEXAS 78124



88-1157-1149

DATE	AMOUNT
Feb 13, 2015	2,050.00

PAY

TO THE  
ORDER  
OF:

Two Thousand Fifty and 00/100 Dollars

TCEQ  
P.O. Box 13089  
Austin, TX 78711

VOID AFTER 90 DAYS



*David D. Allen*  
AUTHORIZED SIGNATURE

Security features Details on back

## Garry Montgomery

---

**From:** Garry Montgomery  
**Sent:** Monday, April 04, 2016 11:39 AM  
**To:** 'Larry Diamond'  
**Subject:** GVSUD - Permit No. WQ0015360001  
**Attachments:** TCEQ 2015.05.04 Part A.pdf

Larry,

Attached is Part A of our response that you requested this morning. Please let me know if you need any other information. I will send a second email with the second section and we are preparing the regionalization map now. I will send it out later today or tomorrow.

Thanks,

**Garry Montgomery, P.E., CFM, SIT**  
Engineer IV



1011 W. County Line Rd.  
New Braunfels, Texas 78130  
Office: 830-626-3588 x 153  
[garry@rcetx.com](mailto:garry@rcetx.com)  
[www.rcetx.com](http://www.rcetx.com)



May 1, 2015

Lisa Iroanya  
Municipal Permits Team  
Water Quality Division  
TEXAS COMMISSION ON ENVIRONMENTAL QUALITY  
12100 Park 35 Circle, Bldg. F  
Austin, Texas 78753

**Re: Application for Proposed Green Valley Special Utility District Wastewater Permit No. WQ0015360001 (CN600684294) (RN108208646)**

Dear Ms. Iroanya:

This letter is in response to your April 10, 2015 comments. A summary of your comments and how they were addressed are provided below.

In addition, after receiving your comments we have revised the proposed Interim Phase design flow to 2.5 MGD in lieu of 2.0 MGD. We have also removed the request for "Land Application for Beneficial Use Authorized in the Wastewater Permit" as a sludge disposal method. Instead, we are requesting to add "Permitted or Registered Land Application Site for Beneficial Use" as a sludge disposal method. Page 13 of the administrative report, and Pages 1, 12, 13, 20, 22, 24, & 26 of the technical report, along with updated USGS Maps, have been revised to reflect these changes and are also attached to this letter.

1. Item 6.d. on page 10 of the Administrative Report: The public place information was not provided. Please provide the name of the building and address of a building supported by taxpayer funds in the county of the proposed facility. Please provide this information and resubmit the corrected page.

- *Attached is revised page 10 of the Administrative report which includes the public place information.*

2. Item 7.d. Section A. on page 12 of the Administrative Report: We were unable to verify the street address of 3930 Linne Road, Marion, Texas 78124 with the US Postal Service. If this is a 911 address please state so in your response, otherwise, please confirm that the address provided is a valid address and resubmit the corrected page.

- *This is a 911 address. See attached verification letter.*

3. Signature page on page 17 of the Administrative Report: You provided a signature page that is a copy of the original. The agency requires the original, notarized, wet signatures. Please resubmit the signature page containing original, notarized, wet signatures.

- *Attached are the signed originals of the Administrative Report.*

4. Item 1.a. on page 21 of the Administrative Report 1.1: Please combine the two affected landowners' maps into one map (to scale) that shows all applicable items on page 21 of the administrative report.

- *Please see attached revised Landowners Map, with revised cross-reference list. Note that since we are withdrawing request to Land apply sludge, we have removed the 0.5 Mile buffer and associated affected land owners.*

5. Item 1.c. on page 22 of the Administrative Report 1.1: The landowner list media is was not formatted in Avery 5160 format. Please resubmit the landowner list media CD-RW labeled with the applicant name and permit number. Within the file stored on the CD- RW, identify the name and addresses of each landowner in Avery 5160 format, in capitalized font, containing no punctuation, and the appropriate two-character abbreviation used for the state. Each entity listed must be blocked and spaced as shown.

- *A revised CD-RW with landowners list in the appropriate format is attached.*

6. Item 1.c. on page 22 of the Administrative Report 1.1: The landowner's cross reference list is provided, however, with the edits to the landowners map a corrected cross reference list is required. Please resubmit the corrected cross reference list.

- *Attached is a revised cross-reference list which reflects changes made to the landowners map as requested in comment #4*

7. Item 10.a. on pages 12-13 of the Technical Report: The sewage sludge management and disposal information was not provided. Please complete this information. If the sewage sludge is transported to another wastewater treatment facility or permitted sludge processing facility a written statement or copy of a contractual agreement confirming the identified wastewater treatment facility will accept sludge is required. Please complete the missing information and submit the corrected page.

- *Please see attached pages 12 & 13 of the Technical Report.*
- *Since this permit application is for a proposed wastewater treatment plant, it is not known at this time which treatment facility or permitted sludge processing facility sludge will be hauled to. We are requesting to leave this item open, however a TCEQ Permitted Site and Hauler will be used, and a written statement and/or copy of the contractual agreement will be provided to TCEQ prior to any sludge being hauled to these facilities.*

8. Item 11. A. on page 13 of the Technical Report: You provided a sludge landowners map and checked "Land application for beneficial use authorized in wastewater permit" as the sludge disposal method. Are you requesting to include authorization to land apply sewage sludge for beneficial use? If so, please complete the Application for Permit for Beneficial Land Use of Sewage Sludge (Form No. 10451).

- *We are no longer requesting authorization to land apply sewage sludge for beneficial use as a sludge disposal method.*

9. A preliminary technical review was performed by the technical staff and it has been determined that additional information needs to be addressed before the application can be declared administratively complete or technically complete. Please provide a complete response to each item identified in Attachment 1 of this letter.

- *The preliminary technical review comments are listed below, along with how each of those comments were addressed.*

10. The following is a portion of the Notice of Receipt of Application and Intent to Obtain a Water Quality Permit. Please read it carefully and indicate if it contains any errors or omissions.

- *We take no exceptions to the portion of the Notice of Receipt of Application and Intent to Obtain a Water Quality Permit, provided the "location to be verified" and "at a location to be determined" sections are updated in accordance to our responses to comments #1 & #2.*

**Preliminary Technical Review Comments:**

- 1 Please include dates for this item. Dates of construction and completion were included in Technical Report 1.1. Include those in a new page 1 of the Technical Report.
  - *Please see attached revised Page 1 of the Technical Report.*
- 2 More details are needed in an attachment for this response. Number of LUE or connections for each phase are needed on a per year continuing. Normally this is included as a table with build-outs expected each year. If some of the expected contributions are from non-residential sources also include those. Give justification for all phases including the Final phase of 5 MGD.
  - *Please see attached LUE projections for the proposed WWTP.*
- 3 Technical Report 1.1, Item 2c - Include information for all phases not just for the initial proposed phase.
  - *See attached tables which includes information for the Initial, Interim, and Final phases. Also included is a revised page 23 of the technical report.*
- 4 There was no TCEQ Form No.10451 in my copy of the permit. Is beneficial use authorization for land adjacent to the treatment plant being requested? If it is then all Form No. 10451 with all of the required information is necessary. If it is not, then please submit a revised page 26 to indicate this.
  - *We are withdrawing our request to authorize land applying sludge for beneficial use on land adjacent to the treatment plant. Please see revised page 26 of the Technical Report.*
- 5 I only found design calculations for the proposed 5 MGD phase. Please include design calculations for each proposed phase.
  - *Please see attached design calculations for each of the proposed phases.*
- 6 I only located the flow diagram for the initial plant phase. Please submit flow diagrams for the 2 MGD propose phase and the 5 MGD proposed phase.
  - *Please see attached flow diagrams for all phases.*

7. Sewage sludge management plans are needed for each phase. I did not locate any. There are examples of plans in the TCEQ form 10053ins as Example 5.

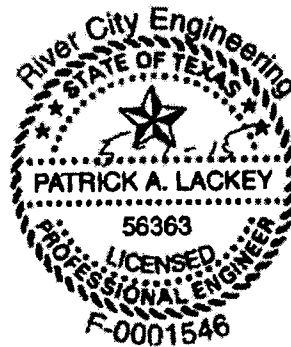
- *Please see attached Sewage Sludge Management Plan for each phase.*

Two additional copies of the complete response are attached. If you have any further questions or need additional information, please do not hesitate to contact us.

Sincerely,



Patrick A. Lackey, P.E.



**c. Contact in the notice**

Prefix (Mr. Ms, Miss): Mr  
First/Last Name: Pat Allen  
Suffix (Jr, Sr, III): N/A Title: General Manager Credential: N/A  
Organization Name: Green Valley Special Utility District  
Phone No.: (830) 914-2330 Extension: N/A

**d. Public place information**

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

Public Building name: Green Valey Special Utility District - Main Office  
Location within the building: Front Desk  
Physical address of building: 529 South Center Street  
City: Marion County: Guadalupe  
Contact Name: Pat Allen  
Phone No.: 830-914-2330 Extension: N/A

**e. Bilingual notice requirements**

**For new permit applications, major amendment and renewal applications.  
Not applicable for minor amendment or minor modification applications.**

Please call the bilingual/ESL coordinator at the nearest elementary and middle schools and obtain the following information to determine if an alternative language notice is required:

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

☐ Yes ☒ No

(If No, alternative language notice publication is not required; skip to item 7. Regulated Entity and Permitted Site Information.)

**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 ☐ N/A



*Guadalupe County*  
*Road & Bridge Department*



*Mark Green, Administrator*  
*Roger Hurt, Assistant Administrator*

2/20/2015

Green Valley Special Utility District,  
529 South Center Street (PO Box 99)  
Marion, TX 78124

**RE: ADDRESS ASSIGNMENT VERIFICATION**

To Ms/Mr. Green Valley Special Utility District

This notice is to inform you of your physical location address. The address assigned to the location is:

**3930 Linne Rd**

Please display this address on your structures and/or driveway with 3" or larger reflective numbers so emergency personnel can easily locate these structures in an emergency. **Please check with your local post office before using this new address for mailing purposes.** If you receive mail at a post office box, your mailing address will not change. In this case, the address listed above will be used for location purposes only.

If you have any questions regarding this assignment, please contact me at (830)379-9721 or (830) 379-9761

Thank you,

Senisa Blandford  
Address Coordinator

78155

2G0313-0000-00600 & 2G0313-0000-0280 (Split-out-of)

**\*\*Note: Any new driveways entering public right-of-ways need to be permitted through this office, the Texas Department of Transportation or a municipality. New driveways entering private lanes or private drives do not need a permit.\*\***

Office: (830) 379-9721  
Fax: (830) 372-3249

2605 N. Guadalupe  
Seguin, TX 78155-7356

## REQUEST FOR 911 LOCATION ADDRESS

Date:

**GUADALUPE COUNTY ROAD & BRIDGE**  
**2605 N. Guadalupe St.**  
**Seguin, TX 78155**

Phone (830) 379-9721

Fax (830) 372-3249

## Read Instructions Completely

1. Please complete Step 1 & 2 completely.
2. Directions to the site and a map are mandatory.
3. In most cases, the address will be determined based on where the driveway makes contact with the public or private road. It is important that the driveway be marked if it doesn't already exist.
4. Please provide the Guadalupe Appraisal account number so that the parcel can be located.
5. If the land has just been purchased, provide the previous owner's name.
6. Addresses are assigned on Fridays by 5:00p.m.

NOTE: If all of the steps are not filled out completely this may cause a delay in the address assignment.

Request By:

GARRY MONTGOMERY

Company Name:

Green Valley Special Utility District

Contact Person: PAT ALLEN

Purchased Date (if a recent purchase, include prior owner's name):

MURPHEY JOANN F &amp; CLAUDETTE JUNE TURK

## STEP 1:

Owner's name and address

Owner's Name: Green Valley Special Utility District

Renter's Name:

Current Mailing Address (number and street): 529 South Center Street, PO. BOX 99

City, State, Zip Code: Marion, TX 78124

Phone (area code and number):  
(830) 914-2330

Guadalupe County Appraisal District account number (if known): 70990 AND 70940

## STEP 2:

Description of Property/structure

Subdivision Name:

Unit #:

Blk:

Lot:

Acres: 65.000 AC

Street or road location: LINNE RD @ IH 10

Describe the structure to be addressed (example residence, single-wide mobile home, future home site):

FUTURE PLANT FACILITIES

Is this structure going to be your home site? NO

## STEP 3:

Directions to structure

Directions to structure

Head west on I-10 Frontage Rd, Turn left onto the ramp to Linne Rd 0.1 mi,

Turn right onto Linne Rd 0.1 mi OR Head west on I-10 Frontage Rd, Turn right onto

the Farm to Market Road 465 ramp to Marion 0.1 mi, Turn right onto Linne Rd 0.3 mi

## STEP 4:

Map to property

Draw directions to the property on reverse side. SEE ATTACHED SURVEY

## STEP 5:

Sign and date

Authorized signature

Sign here

*G. Montgomery*

Date:

02/18/2015

## FOR OFFICE USE ONLY:

Notify:

☐

Owner

☐

Post Office

☐

Other: \_\_\_\_\_

☐

ck - \_\_\_\_\_

GCAD Account Number:

2610313-0000-00600-0-00 &amp; 260313-0000-02800-0-00 (Split out of)

Map/Plat #

ASSIGNED ADDRESS:

3930 Linne Rd.

POST OFFICE CARRIER:

Seguin

ZIP CODE:

78155

ASSIGNED BY:

*Shirley Blandford*

DATE:

2/20/2015

GREEN VALLEY SUD  
SANTA CLARA CREEK NO. 1 WASTEWATER TREATMENT PLANT  
TCEQ DISCHARGE PERMIT PERMIT  
AFFECTED LANDOWNERS LIST

#	OWNER	MAILING ADDRESS
1	WEBER DEL VIN	PO BOX 95 MARION, TX 78124
2	MURPHEY JOANN F & CLAUDETTE JUNE TURK	606 SPRINGVALE SAN ANTONIO, TX 78277
3	FROBOESE LEROY E & NELLEENE	4251 S SANTA CLARA ROAD MARION, TX 78124
4	KELLER GISELA	PO BOX 846 MARION, TX 78124
5	PNR RANCH LLC	4080 LINNE ROAD SEGUIN, TX 78155
6	DEMSEY SHAWN NELSON	2982 HIDDEN MEADOW SEGUIN, TX 78155
7	KLEIN FRIEDRICH	PO BOX 95 MARION, TX 78124
8	GOLSON JACYN HOESE	5271 E FM 1518 N ST HEDWIG, TX 78152
9	WIEDNER ELMON JR	3240 GIN ROAD SEGUIN, TX 78155
10	WIEDNER ROYCE	5200 LINNE ROAD SEGUIN, TX 78155
11	CHAPLIN RICHARD L SR.	3575 GIN RD SEGUIN, TX 78155



Aluminum, mg/l					
Alkalinity (CaCO <sub>3</sub> ), mg/l					

## 9. Facility Operator

(Instructions, Page 58)

Provide the name, license classification and level, and operator license number for the facility operator:

Not known at this time, however a certified operator will be used.

## 10. Sewage Sludge Management and Disposal

(Instructions, Page 58)

### a. Sludge disposal method To Be Determined

Check the current and anticipated sludge disposal method or methods. More than one method can be checked.

- ☒ 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 (a current statement or agreement is required, see the item below)
- ☐ Written statement/contractual agreement from the wastewater treatment plant or permitted sludge processing facility accepting the sludge is attached
- ☐ Other method (provide description):  
\_\_\_\_\_

### b. Sludge disposal site

Provide the disposal site name: Not known at this time, however a TCEQ permitted site will be used.

TCEQ permit or registration number: Not Known at this time, however a TCEQ permitted site will be used.

County where disposal site is located: Not known at this time

**c. Sludge transportation method**

Provide the method of transportation (truck, train, pipe, other): Truck

Name of the hauler: Not known at this time, however a TCEQ permitted hauler will be used

Hauler registration number: Not known at this time, however a TCEQ permitted hauler will be used

Transported as: ☐ liquid ☐ semi-liquid ☒ semi-solid ☐ solid

Land application for: ☐ reclamation ☐ soil conditioning

**11. Permit Authorization for Sewage Sludge Disposal**

(Instructions, Page 58)

**a. Beneficial use authorization**

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

☐ Yes ☒ No      No Existing Permit

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

☐ Yes ☒ No      No Existing Permit

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

# 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

### 1. Permitted or Proposed Flows

(Instructions, Page 49)

**Table 1.0(1) - Existing/Interim I Phase**

Design Flow (MGD)	0.25
2-Hr Peak Flow (MGD)	0.75
Estimated construction start date	01/2016
Estimated waste disposal start date	08/2016

**Table 1.0(2) - Interim II Phase**

Design Flow (MGD)	2.5
2-Hr Peak Flow (MGD)	7.5
Estimated construction start date	01/2019
Estimated waste disposal start date	01/2020

**Table 1.0(3) - Final Phase**

Design Flow (MGD)	5.0
2-Hr Peak Flow (MGD)	15.0
Estimated construction start date	01/2044
Estimated waste disposal start date	01/2045

Current operating phase: N/A

Provide the startup date of the current phase: N/A

Provide the startup date of the facility: Pending Permit Approval

### **GREEN VALLEY SPECIAL UTILITY DISTRICT (GVSUD) PROJECTED FLOWS**

Green Valley Special Utility District (GVSUD) has a wastewater CCN area of approximately 73,175 acres. GVSUD CCN boundary generally overlaps their water CCN boundary, except for the Northeast & Northwest parts of their water CCN area. This was helpful in identifying land use and estimating EDU/connection's per year to help size the capacity and loading of the proposed plant. To project future plant capacity and EDU's/connections per year, a 10% growth rate was used. This growth rate is similar to the growth rates of nearby municipalities that provide wastewater service. This growth rate is also similar to the growth rate of GVSUD's water system in areas where wastewater service is available over the past 10 to 15 years. This growth rate, along with land use maps, was used to determine EDU/connections per year on a continuing basis. The Santa Clara Creek Watershed map provided in the permit provides locations of existing city limits and extraterritorial jurisdictions of surrounding municipalities.

The proposed initial phase is 0.25 MGD. GVSUD currently has an application for wastewater service for a proposed development on a tract of land to the west and up gradient of the proposed wastewater plant within the Santa Clara Creek Watershed. The proposed development is seeking capacity for an average flow 130,000-gpd (approx. 530 EDU's). The development of this tract is anticipated to take four years. The initial phase includes commercial/industrial developments along with other anticipated initial connections, and is anticipated to have approximately 950 EDU's (228,000-gpd).

The proposed Interim phase is for 2.5 MGD, and the Final Phase is for 5 MGD. As mentioned above, a 10% growth rate was used to determine EDU/connections to the plant on a per year basis and the results are provided below.



**Green Valley Special Utility District  
Santa Clara Creek WWTP No. 1**

<b>Year</b>	<b>Land Use</b>	<b>Projected EDU's</b>	<b>Projected Volumes (GPD)</b>
<b>Initial Phase: 0.25 MGD</b>			
2016	Residential/Commercial Land Use	205	49,200
2017	Residential/Commercial Land Use	430	103,200
2018	Residential/Commercial Land Use	660	158,400
2019	Residential/Commercial Land Use	952	228,360
<b>Phase II: 2.5 MGD</b>			
2020	Residential/Commercial Land Use	1,047	251,196
2021	Residential/Commercial Land Use	1,151	276,316
2022	Residential/Commercial Land Use	1,266	303,947
2023	Residential/Commercial Land Use	1,393	334,342
2024	Residential/Commercial Land Use	1,532	367,776
2025	Residential/Commercial Land Use	1,686	404,554
2026	Residential/Commercial Land Use	1,854	445,009
2027	Residential/Commercial Land Use	2,040	489,510
2028	Residential/Commercial Land Use	2,244	538,461
2029	Residential/Commercial Land Use	2,468	592,307
2030	Residential/Commercial Land Use	2,715	651,538
2031	Residential/Commercial Land Use	2,986	716,692
2032	Residential/Commercial Land Use	3,285	788,361
2033	Residential/Commercial Land Use	3,613	867,197
2034	Residential/Commercial Land Use	3,975	953,916
2035	Residential/Commercial Land Use	4,372	1,049,308
2036	Residential/Commercial Land Use	4,809	1,154,239
2037	Residential/Commercial Land Use	5,290	1,269,663
2038	Residential/Commercial Land Use	5,819	1,396,629
2039	Residential/Commercial Land Use	6,401	1,536,292
2040	Residential/Commercial Land Use	7,041	1,689,921
2041	Residential/Commercial Land Use	7,745	1,858,913
2042	Residential/Commercial Land Use	8,520	2,044,805
2043	Residential/Commercial Land Use	9,372	2,249,285
2044	Residential/Commercial Land Use	10,309	2,474,213
<b>Phase III: 5 MGD</b>			
2045	Residential/Commercial Land Use	11,340	2,721,635
2046	Residential/Commercial Land Use	12,474	2,993,798
2047	Residential/Commercial Land Use	13,722	3,293,178
2048	Residential/Commercial Land Use	15,094	3,622,496
2049	Residential/Commercial Land Use	16,603	3,984,746
2050	Residential/Commercial Land Use	18,263	4,383,220
2051	Residential/Commercial Land Use	20,090	4,821,542
2052	Residential/Commercial Land Use	22,099	5,303,696

Average Influent Loading (lbs/day = total average flow x average BOD<sub>5</sub> conc. X 8.34)  
730 #/D Initial Flow

Provide the source of the average organic strength or BOD<sub>5</sub> concentration.  
Engineer opinion and experience of comparable facilities.

If the increased flow will impact the existing organic strength, the following table must be completed.

**c. Proposed organic loading**

This table must be completed if applying for a new permit or if increased flow will impact organic loading.

**Table 1.1(4) - Design Organic Loading** SEE ATTACHED TABLES

Source	Total Average Flow (MGD)	Influent BOD <sub>5</sub> Concentration (mg/l)
Municipality	See Attached Tables	
Subdivision (Residential)		
Trailer park - transient		
Mobile home park		
School with cafeteria and showers		
School with cafeteria, no showers		
Recreational park, overnight use		
Recreational park, day use		
Office building or factory		
Motel		
Restaurant		
Hospital		
Nursing home		
Other		
<b>TOTAL FLOW</b>		
<b>AVERAGE BOD<sub>5</sub></b>		

**DESIGN ORGANIC LOADING - INITIAL PHASE**

<b>Source</b>	<b>Total Average Flow (MGD)</b>	<b>Influent BOD<sub>5</sub> Concentration (mg/L)</b>
Municipality		
Subdivision (Residential)	0.05	350
Trail Park - transient		
Mobile Home Park		
School with cafeteria and shower		
School with cafeteria and no shower		
Recreational park, overnight use		
Recreational Park, day use		
Office building or factory		
Motel		
Restaurant		
Hospital		
Nursing Home		
Other	0.20	350

**TOTAL FLOW**  
**AVERAGE BOD<sub>5</sub>**

**0.25**

**350**

**DESIGN ORGANIC LOADING - INTERIM PHASE**

Source	Total Average Flow (MGD)	Influent BOD <sub>5</sub> Concentration (mg/L)
Municipality		
Subdivision (Residential)	1.75	350
Trail Park - transient		
Mobile Home Park		
School with cafeteria and shower	0.25	350
School with cafeteria and no shower		
Recreational park, overnight use		
Recreational Park, day use	0.01	
Office building or factory	0.05	350
Motel		
Restaurant	0.05	
Hospital		
Nursing Home		
Other	0.39	350

**TOTAL FLOW**  
**AVERAGE BOD<sub>5</sub>**

**2.50**

**350**

**DESIGN ORGANIC LOADING - FINAL PHASE**

Source	Total Average Flow (MGD)	Influent BOD <sub>5</sub> Concentration (mg/L)
Municipality		
Subdivision (Residential)	3.90	350
Trail Park - transient		
Mobile Home Park		
School with cafeteria and shower	0.25	350
School with cafeteria and no shower		
Recreational park, overnight use		
Recreational Park, day use	0.01	350
Office building or factory	0.05	350
Motel		
Restaurant	0.05	350
Hospital		
Nursing Home		
Other	0.74	350

**TOTAL FLOW**  
**AVERAGE BOD<sub>5</sub>**

**5.00**

**350**

**b. Wind rose**

☒ Indicate by a check mark that a wind rose has been submitted.

**6. Permit Authorization for Sewage Sludge Disposal**

(Instructions, Page 67)

**a. Beneficial use authorization**

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

☐ Yes ☒ No

If yes, 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**

Are you requesting to include authorization for any of the following sludge processing, storage or disposal options at the wastewater treatment facility:

☐ Yes ☒ No

Sludge Composting

☐ Yes ☒ No

Marketing and Distribution of sludge

☐ Yes ☒ No

Sludge Surface Disposal or Sludge Monofill

If yes to any of the above sludge options and if 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

# Green Valley Special Utility District - Santa Clara Creek No. 1 Wastewater Treatment Design Calculations Initial Phase

## GIVEN

<i>Influent:</i>		<i>Effluent:</i>	
Q =	250,000 gpd	BOD <sub>5</sub> =	20 mg/l
Peaking Factor =	3	TSS <sub>eff</sub> =	20 mg/l
Q <sub>p</sub> =	750,000 gpd (Influent to Plant)	NH <sub>3</sub> N =	3 mg/l
BOD <sub>5</sub> =	350 mg/l		
TSS =	300 mg/l		
Chemical Oxygen Demand (COD) =	700 mg/l (.3-.8 (BOD/COD), used 0.55)	Chlorine Residual =	1 mg/l @ 20 min det
TKN =	50 mg/l		
NH <sub>3</sub> N =	26 mg/l		
Organic N <sub>14</sub> *C =	24 mg/l		
Alkalinity =	200 mg/l		
Winter Temp. Min. =	15 °C		
Summer Temp. Max. =	30 °C		

## ASSUME

θ <sub>c</sub> =	10	days, mean cell residence time
Y =	0.6	maximum yield coefficient, range: 0.4 - 0.8 (Metcalf & Eddy Table 8-7)
k <sub>d</sub> =	0.06	day <sup>-1</sup> , endogenous decay coefficient, range: 0.025 - 0.075 (Metcalf & Eddy Table 8-7)
a =	0.95	growth constant, range: 0.8 - 1.10
b =	0.08	growth constant
MLSS =	3000	mg/l, conc. Of suspended solids in aeration tank
MLVSS =	70%	of MLSS
MLVSS (X) =	2100	mg/l, conc. Of volatile suspended solids in aeration tank

## DESIGN CALCULATIONS

### A. BOD<sub>5</sub> Loading

$$F = \frac{8.34 \times Q \times (S_o - S)}{10^6}$$

F = 688.1 lb BOD<sub>5</sub>/day

### B. TSS Loading

$$TSS = \frac{8.34 \times Q \times (TSS_{inf} - TSS_{eff})}{10^6}$$

TSS = 583.8 lb TSS /day

### C. Aeration Basin Volume

$$1. \quad V = \frac{\theta_c \times Q \times Y \times (S_o - S)}{MLVSS(1 + k_d \times \theta_c)}$$

Minimum Aeration Basin Volume = 147,321 gal = 19,694 ft<sup>3</sup>

### 2. TCEQ Criteria

25 lbs BOD<sub>5</sub>/day/1,000 ft<sup>3</sup> (Conventional Activated Sludge w/ Nitrification)

Minimum Aeration Basin Volume = 27,522 ft<sup>3</sup>

Minimum Required Aeration Basin Volume = 27,522 ft<sup>3</sup>

Proposed Aeration Basin Volume = 31,500 ft<sup>3</sup>

Volumetric BOD Loading = 21.8 lbs/1000 ft<sup>3</sup> - day

# **Green Valley Special Utility District - Santa Clara Creek No. 1 Wastewater Treatment Design Calculations Initial Phase**

## **D. Hydraulic Retention Time (θ)**

$$\begin{aligned} \text{Hydraulic Retention Time} &= V/Q \\ \text{Hydraulic Retention Time} &= 22.62 \text{ hrs} \end{aligned}$$

## **E. Food to Mass Ratio**

$$\begin{aligned} F / M &= \frac{S_o}{\theta \times MLVSS} \\ F/M &= 0.177 \text{ lb/lb-day} \end{aligned}$$

## **F. Micro-Organism Mass in Aeration Basin**

$$\begin{aligned} M_v &= F \times \frac{\theta_c \times Y}{1 + (k_d \times \theta_c)} \\ M_v &= 2,580 \text{ lbs} \end{aligned}$$

## **G. Sludge Residence Time (SRT)**

$$\begin{aligned} SRT &= \frac{1}{a \times \left( \frac{F}{M_v} \right) - b} \\ SRT &= 5.8 \text{ days} \end{aligned}$$

## **H. Clarifier**

### **1. Weir Loading**

	20,000	gpd/lf max at peak flow
Minimum Length =	37.5	lf
Proposed Length =	50.0	lf

### **2. Surface Area**

	1,200	gpd/sf max overflow rate at peak flow
Minimum Surface Area =	625.0	ft <sup>2</sup>
Proposed Surface Area =	1,964.0	ft <sup>2</sup>

### **3. Volume/Detention Time**

	1.8	hours minimum detention time at peak flow
Minimum Volume =	7,519.6	ft <sup>3</sup>
Proposed Volume =	35,352.0	ft <sup>3</sup>

## **I. Return Activated Sludge (RAS)**

### **1. Ratio**

$$\begin{aligned} r &= \frac{MLVSS_{AER}}{(MLVSS_{SLDG} - MLVSS_{AER})} \\ \text{Assume Clarifier concentrates to } r &= 16\% \end{aligned}$$

1.5% solids = 15,000 mg/L

### **2. RAS**

$$RAS = r \times Q = 28.3 \text{ gpm}$$



**Green Valley Special Utility District - Santa Clara Creek No. 1  
Wastewater Treatment Design Calculations  
Initial Phase**

**J. Sludge Yield**

$$Volatile = Mv \times \left[ \left( a \left( \frac{F}{Mv} \right) - b \right) \right]$$

Volatile = 447.2 lbs/day  
Sludge Yield = 638.9 lbs/day

Assume Percent Solids = 1.5 %

Qsludge = 5,107 gal/day

**K. Digester**

Minimum Retention Time = 15 days

Required Digester Volume = 76,607 gal = 10,241 ft<sup>3</sup>  
Proposed Digester Volume = 95,000 gal = 12,700 ft<sup>3</sup>

**L. Oxygen Requirements**

**1. Aeration Basins**

Minimum oxygen requirement = 3,200 scf per lb BOD<sub>5</sub> per day @ 12' submergence and 20 deg C  
Minimum oxygen requirement = 1,529 scfm @ 12' submergence and 20 deg C

Diffuser Submergence Depth (ft)	Airflow Correction Factor
8	1.82
10	1.56
12	1.00
15	0.91
18	0.73
20	0.64

Diffuser Submergence Depth = 18 ft  
Correction Factor = 0.73

Minimum oxygen requirement = 1,116 scfm @ 20 deg C

**2. Digester**

Oxygen Requirement = 30 scfm per 1,000 ft<sup>3</sup>

Minimum oxygen requirement = 381 scfm

**M. Disinfection**

Chlorine Contact Basin Minimum Detention Time = 20 minutes  
Minimum Required Volume = 1,392.5 ft<sup>3</sup>  
Proposed Volume = 2,250 ft<sup>3</sup>

## INFLUENT

**Average:** 2.5 MGD  
**Peak:** 7.5 MGD

**Composition:**

**Temperatures:**

## EFFLUENT

Biological Oxygen Demand 5-day (BOD <sub>5</sub> ):	10	mg/l
Total Suspended Solids (TSS):	15	mg/l
Ammonia (NH <sub>3</sub> -N):	3	mg/l
Dissolved Oxygen:	4	mg/l