



City of Wimberley
The Blue Hole Wastewater Treatment Facility
Renewal Permit Application



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
**DOMESTIC WASTEWATER PERMIT APPLICATION
 CHECKLIST**



Complete and submit this checklist with the application.

APPLICANT: City of Wimberley

PERMIT NUMBER: W00013321001

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 type="checkbox"/>	<input checked="" type="checkbox"/>	Affected Landowners Map	<input type="checkbox"/>	<input checked="" type="checkbox"/>
SPIF	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Landowner Disk or Labels	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Core Data Form	<input type="checkbox"/>	<input type="checkbox"/>	Buffer Zone Map	<input type="checkbox"/>	<input checked="" 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 type="checkbox"/>	<input checked="" type="checkbox"/>	Site Drawing	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Worksheet 2.0	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Original Photographs	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Worksheet 2.1	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Design Calculations	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Worksheet 3.0	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Solids Management Plan	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Worksheet 3.1	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Water Balance	<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 checked="" type="checkbox"/>	<input 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:
 Name Printed on Check: [Click here to enter text.](#)
 EPAY Voucher Number: 427776, 427777
 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 <i>with</i> Renewal | <input type="checkbox"/> Minor Amendment <i>with</i> Renewal |
| <input type="checkbox"/> Major Amendment <i>without</i> Renewal | <input type="checkbox"/> Minor Amendment <i>without</i> Renewal |
| <input checked="" type="checkbox"/> Renewal without changes | <input type="checkbox"/> Minor Modification of permit |

For amendments or modifications, describe the proposed changes:

For existing permits:

Permit Number: WQ0013321001
 EPA I.D. (TPDES only): TX0135445

Expiration Date: February 1, 2020

Section 3. Facility Owner (Applicant) and Co-Applciant 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?

City of Wimberley

(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: 603592239

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): Ms.

First and Last Name: Rebecca Minnick

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

Title: Mayor Pro-tem

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?

N/A

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

If the co-applicant is currently a customer with the TCEQ, what is the Customer Number (CN)? You may search for your CN on the TCEQ website at:

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

CN:

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: [COW Core Data Form 2019](#)

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: Shawn Cox

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

Title: City Administrator

Organization Name: city of Wimberley

Mailing Address: 221 Stillwater

City, State, Zip Code: Wimberley, TX 78676

Phone No.: 512-847-0025 Ext.: 22 Fax No.:

E-mail Address: scox@cityofwimberley.com

Check one or both: Administrative Contact Technical Contact

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

First and Last Name: Jesse L. Kennis II

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

Title: Senior Operations Manager

Organization Name: Inframark

Mailing Address: 151 Trinity Hills Drive

City, State, Zip Code: Austin, TX, 78737

Phone No.: 512.820.7442 Ext.: Fax No.:

E-mail Address: Jesse.Kennis@inframark.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.

First and Last Name: Shawn Cox
Credential (P.E, P.G., Ph.D., etc.): [REDACTED]
Title: City Administrator
Organization Name: City of Wimberley
Mailing Address: 221 Stillwater
City, State, Zip Code: Wimberley, TX 78676
Phone No.: 512-847-0025 Ext.: 22 Fax No.: 512-547-0422
E-mail Address: scox@cityofwimberley.com

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

First and Last Name: Laura Calcote
Credential (P.E, P.G., Ph.D., etc.): [REDACTED]
Title: City Secretary
Organization Name: City of Wimberley
Mailing Address: 221 Stillwater
City, State, Zip Code: Wimberley, TX, 78676
Phone No.: 512-847-0025 Ext.: 26 Fax No.: 512-847-0422
E-mail Address: lcalcote@cityofwimberley.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): Mr.
First and Last Name: Shawn Cox
Credential (P.E, P.G., Ph.D., etc.): [REDACTED]
Title: City Administrator
Organization Name: City of Wimberley
Mailing Address: 221 Stillwater
City, State, Zip Code: Wimberley, TX, 78676
Phone No.: 512-547-0025 Ext.: 22 Fax No.: [REDACTED]
E-mail Address: scox@cityofwimberley.com

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

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

Prefix (Mr., Ms., Miss): Mr.
First and Last Name: Jesse L. Kennis II
Credential (P.E, P.G., Ph.D., etc.): Click here to enter text.
Title: Senior Operations Manager
Organization Name: Inframark
Mailing Address: 151 Trinity Hills Drive
City, State, Zip Code: Austin, TX 78737
Phone No.: 512.820.7442 Ext.: Click here to enter text. Fax No.: Click here to enter text.
E-mail Address: Jesse.Kennis@inframark.com

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: Shawn Cox
Credential (P.E, P.G., Ph.D., etc.): Click here to enter text.
Title: City Administrator
Organization Name: City of Wimberley
Mailing Address: 221 Stillwater
City, State, Zip Code: Wimberley, TX, 78676
Phone No.: 512-847-0025 Ext.: 22 Fax No.: Click here to enter text.
E-mail Address: scox@cityofwimberley.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.
First and Last Name: Shawn Cox

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

Title: City Administrator

Organization Name: City of Wimberley

Phone No.: 512-847-0025 Ext.: 22

E-mail: scox@cityofwimberley.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: City of Wimberley City Hall

Location within the building: Office of the City Secretary

Physical Address of Building: 221 Stillwater

City: Wimberley

County: Hays

Contact Name: Shawn Cox

Phone No.: 512-847-0025 Ext.: 22

E. Bilingual Notice Requirements:

This information **is required** for **new, major amendment, and renewal applications**. It is not required for minor amendment or minor modification 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?

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. RN101610350

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):

The Blue Hole Wastewater Treatment Facility

C. Owner of treatment facility: City of Wimberley

Ownership of Facility: Public Private Both Federal

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

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

First and Last Name: Shawn Cox

Mailing Address: 221 Stillwater

City, State, Zip Code: Wimberley, TX 78676

Phone No.: 512-847-0025

E-mail Address: scox@cityofwimberley.com

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.](#)

E. Owner of effluent disposal site:

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

First and Last Name: Shawn Cox

Mailing Address: 221 Stillwater

City, State, Zip Code: Wimberley, TX 78676

Phone No.: 512-847-0025 x22

E-mail Address: scox@cityofwimberley.com

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:

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:

City nearest the outfall(s): Wimberley

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

Outfall Latitude: 30.0042

Longitude: -98.0839

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.

N/A

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:

- B. City nearest the disposal site: Wimberley

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

- D. Disposal Site Latitude: 30.0042 Longitude: -98.0839

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

F. The effluent is pumped to eleven pressure dosed absorption beds in the Existing/Interim I and proposed Interim II Phases only.

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

Cypress Creek

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.

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:

D. Do you owe any fees to the TCEQ?

- Yes No

If yes, provide the following information:

Account number:

Amount past due:

E. Do you owe any penalties to the TCEQ?

- Yes No

If yes, please provide the following information:

Enforcement order number:

Amount past due:

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: TCEQ ePay Voucher

Section 14. Signature Page (Instructions Page 39)

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

Permit Number: WQ0013321001

Applicant: City of Wimberley

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.

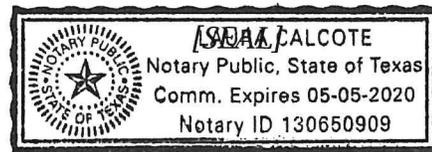
Signatory name (typed or printed): Rebecca Minnick

Signatory title: Mayor Pro-tem

Signature:  Date: 8/5/19
(Use blue ink)

Subscribed and Sworn to before me by the said Rebecca Minnick
on this 5th day of August, 2019.
My commission expires on the 5th day of May, 2020.

Laura Calcote
Notary Public



Hays
County, Texas

RECEIVED
AUG 05 2019
Water Quality Applications Team

**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: City of Wimberley

Permit No. WQ00 13321001

EPA ID No. TX 0135445

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

333 Blue Hole Ln. Wimberley. TX 78676. approximately one-mile northeast of the intersection of Ranch-to-Market Road 12 and Ranch-to Market Road 3237. in Hays County. Texas 78676.

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

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

First and Last Name: Shawn Cox

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

Title: City Administrator

Mailing Address: 221 Stillwater

City, State, Zip Code: Wimberley, TX, 78676

Phone No.: 512-847-0025 Ext.: 22 Fax No.: 512-847-0422

E-mail Address: scox@cityofwimberley.com

2. List the county in which the facility is located: Hays
3. If the property is publicly owned and the owner is different than the permittee/applicant, please list the owner of the property.

N/A

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

Effluent is discharged to Deer Creek, thence to the Upper Blanco River, Segment No. 1813 of the Guadalupe River Basin (Final Phase only).

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):

Approximately one acre of land will be impacted by the construction of the facility. The area will be disturbed to a depth of 1.5 ft for treatment units and up to 6 ft for piping. Disturbance of existing vegetation will be typical of a wastewater treatment plant construction.

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

Vegetation consisting of various grasses and juniper trees.

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:

N/A

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

N/A

TCEQ ePay Receipt

Transaction Information

Trace Number: 582EA000353955
Date: 08/01/2019 09:34 AM
Payment Method: CC - Authorization 000000164C
Amount: \$315.00
ePay Actor: Shawn Cox

Payment Contact Information

Name: Monica Alcala
Company: City Of Wimberley
Address: 221 Stillwater, Wimberley, TX 78676
Phone: 512-847-0025

Cart Items

Voucher	Fee Description	AR Number	Amount
427776	WW PERMIT - FACILITY WITH FLOW < .05 MGD - RENEWAL		\$300.00
427777	30 TAC 305.53B WQ RENEWAL NOTIFICATION FEE		\$15.00

TCEQ ePay Voucher Receipt

Transaction Information

Voucher Number: 427776
Trace Number: 582EA000353955
Date: 08/01/2019 09:34 AM
Payment Method: CC - Authorization 000000164C
Amount: \$300.00
Fee Type: WW PERMIT - FACILITY WITH FLOW < .05 MGD - RENEWAL
ePay Actor: Shawn Cox

Payment Contact Information

Name: Monica Alcala
Company: City Of Wimberley
Address: 221 Stillwater, Wimberley, TX 78676
Phone: 512-847-0025

Site Information

Site Name: THE BLUE HOLE WASTEWATER TREATMENT FACILITY
Site Address: 333 BLUE HOLE LANE, WIMBERLEY, TX 78676
Site Location: WIMBERLEY BLUE HOLE PARK

Customer Information

Customer Name: CITY OF WIMBERLEY
Customer Address: 221 STILLWATER, WIMBERLEY, TX 78676

Other Information

Program Area ID: 0013321001

TCEQ ePay Voucher Receipt

Transaction Information

Voucher Number:	427777
Trace Number:	582EA000353955
Date:	08/01/2019 09:34 AM
Payment Method:	CC - Authorization 000000164C
Amount:	\$15.00
Fee Type:	30 TAC 305.53B WQ RENEWAL NOTIFICATION FEE
ePay Actor:	Shawn Cox

Payment Contact Information

Name:	Monica Alcala
Company:	City Of Wimberley
Address:	221 Stillwater, Wimberley, TX 78676
Phone:	512-847-0025

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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): 0.00945

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

Estimated construction start date: N/A

Estimated waste disposal start date: N/A

B. Interim II Phase

Design Flow (MGD): 0.00945

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

Estimated construction start date: February 2018

Estimated waste disposal start date: February 2020

C. Final Phase

Design Flow (MGD): 0.075

2-Hr Peak Flow (MGD): 0.300

Estimated construction start date: February 2018

Estimated waste disposal start date: February 2020

D. Current operating phase: Existing/Interim I

Provide the startup date of the facility: 06/01/2009

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:

See Attachment C

Port or pipe diameter at the discharge point, in inches: 12

B. Treatment Units

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

Table 1.0(1) - Treatment Units

Treatment Unit Type	Number of Units	Dimensions (L x W x D)
See Attachment D		

C. Process flow diagrams

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

Attachment: E

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: E

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

The current wastewater treatment facility serves only two customers: the Deer Creek Nursing Home and Rehabilitation Center, and the Blue Hole Regional Park. The expanded Final Phase will also serve the downtown area of the City of Wimberley.

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.

See Attachment A.1

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.

The City anticipates that either the Interim II Phase or Final Phase will be constructed within the next five years (See Attachment A. 1 for additional information). If the Final Phase facilities are constructed, the City will prepare a closure plan for the existing facilities if necessary.

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: April 24, 2009

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.

The permit requires a summary transmittal letter for the Final Phase. However, the Final Phase has not been constructed. See Attachment A.1 for additional information regarding existing and proposed phases.

B. Buffer zones

Have the buffer zone requirements been met?

Yes No

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

N/A

C. Other actions required by the current permit

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

Yes No

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

(1.) The permittee is required to obtain representative soil samples from the root zones of the land application area receiving wastewater between the months of December and February each year. Results of these analyses are submitted to the TCEO each year. (2.) The permittee is required to apply for a Chapter 210 Use of Reclaimed Water Authorization within 90 days of permit issuance. The permittee did apply for the Chapter 210 authorization and it was granted. The authorization number is R13321001.

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.

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.

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.

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 N/A

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

TXR05 [REDACTED] or TXRNE [REDACTED]

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

Yes No N/A

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 N/A

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

N/A

4. Existing coverage in individual permit

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

Yes No N/A

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.

N/A

5. Zero stormwater discharge

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

Yes No N/A

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

N/A

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 N/A

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.

N/A

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 BOD₅ concentration of the sludge, and the design BOD₅ concentration of the influent from the collection system. Also note if this information has or has not changed since the last permit action.

N/A

Note: Permits that accept sludge from other wastewater treatment plants

may be required to have influent flow and organic loading monitoring.

2. *Acceptance of septic waste*

Is the facility accepting or will it accept septic waste?

Yes No

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

Yes No N/A

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

Yes No N/A

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 BOD₅ concentration of the septic waste, and the design BOD₅ concentration of the influent from the collection system. Also note if this information has or has not changed since the last permit action.

N/A

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.

N/A

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 ₅ , mg/l					
Total Suspended Solids, mg/l					
Ammonia Nitrogen, mg/l					
Nitrate Nitrogen, mg/l					
Total Kjeldahl Nitrogen, mg/l					
Sulfate, mg/l					
Chloride, mg/l					
Total Phosphorus, mg/l					
pH, standard units					
Dissolved Oxygen*, mg/l					
Chlorine Residual, mg/l					
<i>E.coli</i> (CFU/100ml) freshwater					
Enterococci (CFU/100ml) saltwater					
Total Dissolved Solids, mg/l					
Electrical Conductivity, μ mohs/cm, †					

Pollutant	Average Conc.	Max Conc.	No. of Samples	Sample Type	Sample Date/Time
Oil & Grease, mg/l					
Alkalinity (CaCO ₃)*, mg/l					

*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					
Total Dissolved Solids, mg/l					
pH, standard units					
Fluoride, mg/l					
Aluminum, mg/l					
Alkalinity (CaCO ₃), mg/l					

Section 8. Facility Operator (Instructions Page 60)

Facility Operator Name: Jesse L. Kennis II

Facility Operator's License Classification and Level: A Wastewater

Facility Operator's License Number: WW0016426

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. **See Attachment H.1**
- Other:

B. Sludge disposal site

Disposal site name: See Attachment H.2

TCEQ permit or registration number:

County where disposal site is located:

C. Sludge transportation method

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

Name of the hauler: Leinneweber Services

Hauler registration number: 25107

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 N/A

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 N/A

Section 11. Sewage Sludge Lagoons (Instructions Page 61)

Does this facility include sewage sludge lagoons?

Yes No N/A

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:

- USDA Natural Resources Conservation Service Soil Map:

Attachment:

- Federal Emergency Management Map:

Attachment: [REDACTED]

- Site map:

Attachment: [REDACTED]

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: [REDACTED]

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:

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: [REDACTED]

Total Kjeldahl Nitrogen, mg/kg: [REDACTED]

Total Nitrogen (=nitrate nitrogen + TKN), mg/kg: [REDACTED]

Phosphorus, mg/kg: [REDACTED]

Potassium, mg/kg: [REDACTED]

pH, standard units: [REDACTED]

Ammonia Nitrogen mg/kg: [REDACTED]

Arsenic: [REDACTED]

Cadmium:

Chromium:

Copper:

Lead:

Mercury:

Molybdenum:

Nickel:

Selenium:

Zinc:

Total PCBs:

Provide the following information:

Volume and frequency of sludge to the lagoon(s):

Total dry tons stored in the lagoons(s) per 365-day period:

Total dry tons stored in the lagoons(s) over the life of the unit:

C. Liner information

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

Yes No

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

D. Site development plan

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

Attach the following documents to the application.

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

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: [REDACTED]

**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:

Reclaimed water authorization no. RI3321001.

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 N/A

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

N/A

Section 13. RCRA/CERCLA Wastes (Instructions Page 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: N/A

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: Rebecca Minnick

Title: Mayor Pro-tem

Signature: 
Date: 8/5/19

DOMESTIC TECHNICAL REPORT WORKSHEET 2.0

RECEIVING WATERS

The following is required for all TPDES permit applications

Section 1. Domestic Drinking Water Supply (Instructions Page 73)

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

Yes No

If yes, provide the following:

Owner of the drinking water supply: N/A

Distance and direction to the intake: N/A

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

Attachment: N/a

Section 2. Discharge into Tidally Affected Waters (Instructions Page 73)

Does the facility discharge into tidally affected waters?

Yes No

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

A. Receiving water outfall

Width of the receiving water at the outfall, in feet: N/A

B. Oyster waters

Are there oyster waters in the vicinity of the discharge?

Yes No

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

N/A

C. Sea grasses

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

Yes No

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

N/A

Section 3. Classified Segments (Instructions Page 73)

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

Yes No

If yes, this Worksheet is complete.

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

Section 4. Description of Immediate Receiving Waters (Instructions Page 75)

Name of the immediate receiving waters: Deer Creek

A. Receiving water type

Identify the appropriate description of the receiving waters.

- Stream
- Freshwater Swamp or Marsh
- Lake or Pond

Surface area, in acres:

Average depth of the entire water body, in feet:

Average depth of water body within a 500-foot radius of discharge point, in feet:

- Man-made Channel or Ditch

- Open Bay
- Tidal Stream, Bayou, or Marsh
- Other, specify:

B. Flow characteristics

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

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

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

- USGS flow records
- Historical observation by adjacent landowners
- Personal observation
- Other, specify:

C. Downstream perennial confluences

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

Blanco River

D. Downstream characteristics

Do the receiving water characteristics change within three miles downstream of the discharge (e.g., natural or man-made dams, ponds, reservoirs, etc.)?

- Yes No

If yes, discuss how.

Approximately 0.95 miles downstream from the outfall, the receiving water characteristics change from intermittent to perennial at the confluence of Deer Creek and Blanco River.

E. Normal dry weather characteristics

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

Dry Drainage Bed

Date and time of observation: July 24, 2019 @ 5:30 PM

Was the water body influenced by stormwater runoff during observations?

Yes No

Section 5. General Characteristics of the Waterbody (Instructions Page 74)

A. Upstream influences

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

- Oil field activities
- Urban runoff
- Upstream discharges
- Agricultural runoff
- Septic tanks
- Other(s), specify

B. Waterbody uses

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

- Livestock watering
- Contact recreation
- Irrigation withdrawal
- Non-contact recreation
- Fishing
- Navigation

Domestic water supply

Industrial water supply

Park activities

Other(s), specify

[Click here to enter](#)

C. Waterbody aesthetics

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

Wilderness: outstanding natural beauty; usually wooded or unpastured area; water clarity exceptional

Natural Area: trees and/or native vegetation; some development evident (from fields, pastures, dwellings); water clarity discolored

Common Setting: not offensive; developed but uncluttered; water may be colored or turbid

Offensive: stream does not enhance aesthetics; cluttered; highly developed; dumping areas; water discolored

DOMESTIC 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 type="checkbox"/> Irrigation | <input checked="" 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): | |

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

For existing authorizations, provide Registration Number: WQ0013321001

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
Rangeland (bermuda and rye grass)	2.16	9,450	N*

* Existing/Interim Phase I. See Attachment A.1

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
N/A				

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

Attachment: N/A

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.

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

FEMA - Preliminary DFIRM Issued: 04/07/2017 Link:
<http://maps.riskmap6.com/TX/Hays/>

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

NIA - disposal at this site is subsurface.

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: NIA -There are no crops harvested on the property. Bermuda and rye are regularly maintained.

- 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: I.1

- 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
See Attachment I.2			Choose an item.	
			Choose an item.	
			Choose an item.	
			Choose an item.	
			Choose an item.	

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

Attachment: I.2

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: J

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: N/A

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: K.1

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: K.2

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
See Attachment K.3				

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: N/A

Significant IUs - non-categorical:

Number of IUs: 0

Average Daily Flows, in MGD: N/A

Other IUs:

Number of IUs: 0

Average Daily Flows, in MGD: N/a

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.

N/A

C. Treatment plant pass through

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

Yes No

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

N/A

D. Pretreatment program

Does your POTW have an approved pretreatment program?

Yes No

If yes, complete Section 2 only of this Worksheet.

Is your POTW required to develop an approved pretreatment program?

Yes No

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

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

Section 2. POTWs with Approved Programs or Those Required to Develop a Program (Instructions Page 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 N/A

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

N/A

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 N/A

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

N/A

C. Effluent parameters above the MAL

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

Table 6.0(1) - Parameters Above the MAL

Pollutant	Concentration	MAL	Units	Date
N/A				

D. Industrial user interruptions

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

Yes No N/A

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

N/A

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

A. General information

Company Name: N/A

SIC Code: [REDACTED]

Telephone number: [REDACTED] Fax number: [REDACTED]

[REDACTED]

Contact name: [REDACTED]

Address: [REDACTED]

City, State, and Zip Code: [REDACTED]

B. Process information

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

N/A

C. Product and service information

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

N/A

D. Flow rate information

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

Process Wastewater:

Discharge, in gallons/day: N/A

Discharge Type: Continuous Batch Intermittent

Non-Process Wastewater:

Discharge, in gallons/day: N/A

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 N/A

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

Yes No N/A

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

Category:
Subcategories:

Category:
Subcategories:

Category:
Subcategories:

Category:
Subcategories:

Category:
Subcategories:

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 N/A

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

<u>N/A</u>

WORKSHEET 7.0

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY CLASS V INJECTION WELL INVENTORY/AUTHORIZATION FORM

Submit to:
TCEQ
IUC Permits Team
Radioactive Materials Division
MC-233
PO Box 13087
Austin, Texas 78711-3087
512-239-6466

For TCEQ Use Only
Reg. No. _____
Date Received _____
Date Authorized _____

Section 1. General Information (Instructions Page 102)

1. TCEQ Program Area

Program Area (PST, VCP, IHW, etc.): TLAP

Program ID: WQ0013321001

Contact Name: Firoj Vahora

Phone Number: 512-239-4540

2. Agent/Consultant Contact Information

Contact Name: Shawn Cox

Address: 221 Stillwater

City, State, and Zip Code: Wimberley, TX, 78676

Phone Number: 512-847-0025

3. Owner/Operator Contact Information

Owner

Operator

Owner/Operator Name: City of Wimberley

Contact Name: Shawn Cox

Address: 221 Stillwater

City, State, and Zip Code: Wimberley, Tx, 78676

Phone Number: 512-847-0025

4. Facility Contact Information

Facility Name: The Blue Hole Wastewater Treatment Facility

Address: 333 Blue Hole Lane

City, State, and Zip Code: Wimberley, Tx, 78676

Location description (if no address is available): N/A

Facility Contact Person: Shawn Cox

Phone Number: 512-847-0025

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

Latitude: 30' 00' 14" N Longitude: 98' 05' 00" W

Method of determination (GPS, TOPO, etc.): ArcGIS

Attach topographic quadrangle map as attachment A. **See attachment 7A.**

6. Well Information

Type of Well Construction, select one:

- Vertical Injection
- Subsurface Fluid Distribution System
- Infiltration Gallery
- Temporary Injection Points
- Other, Specify:

Number of Injection Wells: N/A

7. Purpose

Detailed Description regarding purpose of Injection System:

Disposal of treated wastewater for the facility during the Existing/Interim I and Interim II phases.

Attach a Site Map as Attachment B (Attach the Approved Remediation Plan, if appropriate.) **See attachment 7B.**

8. Water Well Driller/Installer

Water Well Driller/Installer Name: N/A

City, State, and Zip Code: N/A

Phone Number: N/A

License Number: N/A

Section 2. Proposed Down Hole Design

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

Table 7.0(1) -Down Hole Design Table N/A

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

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

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

System(s) Dimensions: N/A - Existing subsurface fluid distribution system

System(s) Construction: N/A - Existing subsurface fluid distribution system

Section 4. Site Hydrogeological and Injection Zone Data

1. Name of Contaminated Aquifer: N/A
2. Receiving Formation Name of Injection Zone: Alluvial
3. Well/Trench Total Depth: 7'-6"
4. Surface Elevation: 900' - 920'
5. Depth to Ground Water: 800'-805' - State Well Number 5764705
6. Injection Zone Depth: 7'-6"
7. Injection Zone vertically isolated geologically? Yes No

Impervious Strata between Injection Zone and nearest Underground

Source of Drinking Water:

Name: N/A

Thickness: N/A

8. Provide a list of contaminants and the levels (ppm) in contaminated aquifer
Attach as Attachment E. N/A
9. Horizontal and Vertical extent of contamination and injection plume
Attach as Attachment F. N/A
10. Formation (Injection Zone) Water Chemistry (Background levels) TDS, etc.
Attach as Attachment G. N/A
11. Injection Fluid Chemistry in PPM at point of injection
Attach as Attachment H. **See attachment 7H**
12. Lowest Known Depth of Ground Water with < 10,000 PPM TDS: N/A
13. Maximum injection Rate/Volume/Pressure: 0.1 gal/sqft/day: 9,450 gpd: 5.45 psi
14. Water wells within 1/4 mile radius (attach map as Attachment I): N/A - no water wells within ¼ mile radius.
15. Injection wells within 1/4 mile radius (attach map as Attachment J): N/A -no injection wells within ¼ mile radius.
16. Monitor wells within 1/4 mile radius (attach drillers logs and map as Attachment K): N/A -no monitoring wells within ¼ mile radius.
17. Sampling frequency: Effluent is sampled for flow and BOD daily.
18. Known hazardous components in injection fluid: N/A

Section 5. Site History

1. Type of Facility: Wastewater Treatment Facility
2. Contamination Dates: N/A
3. Original Contamination (VOCs, TPH, BTEX, etc.) and Concentrations (attach as Attachment L): N/A
4. Previous Remediation: N/A

Attach results of any previous remediation as attachment M

NOTE: Authorization Form should be completed in detail and authorization given by the TCEQ before construction, operation, and/or conversion can

begin. Attach additional pages as necessary.

Class V Injection Well Designations

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



City of Wimberley

The Blue Hole Wastewater Treatment Facility

Renewal Permit Application

Table of Attachments

No.	Description	Reference
A.1	Justification for Proposed Phases	Admin Report – Sec. 2
A.2	TCEQ Issued Permit – October 2, 2017	Admin Report – Sec. 2
A.3	Core Data Form	Admin Report – Sec. 3
B	USGS Map	Admin Report – Sec. 13.D
SPIF-1	Supplemental Permit Information Form	
SPIF-2	Supplemental Permit Information Form	
C	Treatment Process Description	Tech. Report 1.0 – Sec. 2.A
D	Treatment Units	Tech. Report 1.0 – Sec. 2.B
E	Process Flow Diagrams	Tech. Report 1.0 – Sec. 2.C
F	Site Drawing	Tech. Report 1.0 – Sec. 3
G	Analytical Results	Tech. Report 1.0 – Sec. 7
H.1	Sludge Contract Agreement	Tech. Report 1.0 – Sec. 9.A
H.2	Sludge Disposal Site	Tech. Report 1.0 – Sec. 9.B
I.1	Well Map	Worksheet 3.0 – Sec. 6
I.2	Well Map Data	Worksheet 3.0 – Sec. 6
J	Groundwater Technical Report	Worksheet 3.0 – Sec. 7
K.1	Soil Map	Worksheet 3.0 – Sec. 8.A
K.2	Soil Analysis	Worksheet 3.0 – Sec. 8.B
K.3	USDA Soil Series Information	Worksheet 3.0 – Sec. 8.B
7A	USGS Quadrangle Map	Worksheet 7.0 – Sec. 1-5
7B	Site Drawing	Worksheet 7.0 – Sec. 1-7
7H	Injection Fluid Chemistry	Worksheet 7.0 – Sec. 4-11



Attachment A.1
Justification for Proposed Phases
Admin Report – Sec. 2

**ATTACHMENT A.1
CITY OF WIMBERLEY
THE BLUE HOLE WASTEWATER TREATMENT FACILITY
TPDES PERMIT RENEWAL**

JUSTIFICATION FOR PROPOSED PHASES

The following information was provided for the City's Minor Amendments in 2017, which was ultimately issued on October 2, 2017.

The City of Wimberley owns and operates The Blue Hole Wastewater Treatment Facility (WWTF) to manage wastewater generated within its service area under Texas Pollutant Discharge Elimination System (TPDES) Permit No. WQ0013321001. The permit was issued June 14, 2016 and contains two phases. The WWTF currently operates in the Existing/Interim Phase. Under the Existing/Interim Phase, the City is authorized to treat up to 15,000 gallons per day (gpd) and to dispose of the effluent through subsurface irrigation with an application rate of 0.16 gallons per square foot per day. This phase includes a single grab limit for BOD₅ of 35 mg/L. The Existing/Interim Phase is a continuation of operations that were authorized under previous TPDES permits. The historic application rate in permits issued prior to the current permit was greater than the currently accepted standard. As such, an expiration date of 365 days after permit issuance was included for the Existing/Interim Phase.

The current permit includes a Final Phase that must be in operation at the end of the 365-day period for the Existing/Interim Phase. Under the Final Phase, the WWTF is authorized to treat and discharge up to 75,000 gpd with effluent quality limits of 5 mg/L CBOD₅, 5 mg/L TSS, 2 mg/L NH₃-N, and 0.5 mg/L Total Phosphorus. The City is constructing the Final Phase facilities; however, the construction of these facilities will not be complete in time to meet the expiration of the Interim Phase. As a result, the City seeks a Minor Amendment to the permit to facilitate the transition to the Final Phase.

Under the Minor Amendment, the City will agree to reduce the volume of wastewater treated during the Existing/Interim I Phase such that the application rate doesn't exceed 0.1 gallons per square foot per day. This equates to a flow of 9,450 gpd.

The new permit will have three phases, Existing/Interim I (i.e., the phase currently in operation), an Interim II Phase, and a Final Phase. The Existing/Interim I Phase will have a flow limit of 9,450 gpd and maintain the same effluent quality. This phase should expire on the permit expiration date or when the City notifies TCEQ that it is ready to move to the Interim II Phase.

The Interim II Phase will include the same flow and quality limits as the Existing/Interim I Phase with the addition of chlorine disinfection. The City seeks to change the land use designation of the existing effluent disposal field such that public access may be allowed. The Interim II Phase would become effective upon completion of construction of the disinfection facilities and should expire on the permit expiration date or when the City notifies TCEQ that it is ready to move to the Final Phase.

The Final Phase will remain the same as in the existing permit. This phase will become effective upon completion of the facilities necessary to treat the wastewater and upon notification to TCEQ that the City intends to move to the Final Phase. The City anticipates that either the Interim II Phase or Final Phase will be constructed. The decision to continue with the

existing subsurface disposal system or build the new treatment facility and discharge to surface waters has not been finalized.

Changes to the Existing/Interim I Phase and the addition of the Interim II Phase were presented to the TCEQ on January 19, 2017. The TCEQ agreed with the approach presented therein and that the permit application should be for minor amendment. The response letter from TCEQ, dated January 30, 2017, is attached for reference. See Attachment A.2.

The WWTF for the Existing/Interim I and Interim II Phases is located at the following coordinates: 30.0042, -98.0849. The WWTF for the Final Phase will be located at the following coordinates: 30.0042, -98.0839.



Attachment A.2
TCEQ Issued Permit – October 2, 2017
Admin Report – Sec. 2



TPDES PERMIT NO. WQ0013321001
[For TCEQ office use only - EPA I.D.
No. TX0135445]

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

This minor amendment supersedes and replaces TPDES Permit No. WQ0013321001 issued on June 14, 2016, and is issued pursuant to 30 TAC § 305.62(c)(2).

PERMIT TO DISCHARGE WASTES
under provisions of
Section 402 of the Clean Water Act
and Chapter 26 of the Texas Water Code

City of Wimberley

whose mailing address is

P.O. Box 2027
Wimberley, Texas 78676

is authorized to treat and discharge wastes from the The Blue Hole Wastewater Treatment Facility, SIC Code 4952

located approximately one mile northeast of the intersection of Ranch-to-Market Road 12 and Ranch-to-Market Road 3237, in Hays County, Texas 78676. The existing wastewater treatment facility and disposal site are located approximately 500 feet to the west of the proposed facility within the same property. (Attachment A)

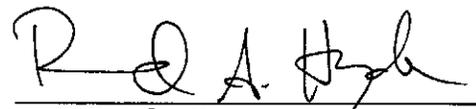
Interim I and II phases: The Blue Hole Wastewater Treatment Facility is an activated sludge process plant operated in the extended aeration mode in the Interim I and II phases. Treatment units in the Interim I Phase include an equalization basin, an aeration basin, a final clarifier, sludge holding tank, and effluent pumps. Treatment units in the Interim II Phase will include the Interim I package plant and a chlorine contact chamber. The permittee is authorized to dispose of treated domestic wastewater effluent at a volume not to exceed a daily average flow of 0.009450 million gallons per day (MGD) to eleven (11) pressure dosed absorption beds with a total surface area of 94,500 square feet of non-public access land in the Interim I phase and public access land in the Interim II phase. Application rates shall not exceed 0.10 gallons per square foot per day.

Final phase: to Deer Creek; thence to Upper Blanco River in Segment No. 1813 of the Guadalupe River Basin

only according to effluent limitations, monitoring requirements, and other conditions set forth in this permit, as well as the rules of the Texas Commission on Environmental Quality (TCEQ), the laws of the State of Texas, and other orders of the TCEQ. The issuance of this permit does not grant to the permittee the right to use private or public property for conveyance of wastewater along the discharge route described in this permit. This includes, but is not limited to, property belonging to any individual, partnership, corporation, or other entity. Neither does this permit authorize any invasion of personal rights nor any violation of federal, state, or local laws or regulations. It is the responsibility of the permittee to acquire property rights as may be necessary to use the discharge route.

This permit shall expire at midnight, **February 1, 2020**.

ISSUED DATE: October 2, 2017


For the Commission

INTERIM I EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS
Outfall 001

During the period beginning upon the date of issuance and lasting through completion and operation of the chlorination system, the permittee is authorized to discharge subject to the following effluent limitations:

Conditions of the Interim I Phase: No discharge of pollutants into water in the state is authorized.

A. Effluent Limitations

- Character: Treated Domestic Sewage Effluent
- Volume: Daily Average Flow – 0.009450 MGD from the treatment system
- Quality: The following effluent limitations shall be required:

<u>Parameter</u>	<u>Effluent Concentrations</u>	
	(Not to Exceed)	
	<u>Daily Average</u> mg/l	<u>Single Grab</u> mg/l
Biochemical Oxygen Demand (5-day)	N/A	35

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.

INTERIM II EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS
Outfall 001

During the period beginning upon the date of completion and operation of the chlorination system and lasting through commencement of discharge to surface waters in the final phase from the facility, the permittee is authorized to discharge subject to the following effluent limitations:

Conditions of the Interim II Phase: No discharge of pollutants into water in the state is authorized.

A. Effluent Limitations

- Character: Treated Domestic Sewage Effluent
- Volume: Daily Average Flow – 0.009450 MGD from the treatment system
- Quality: The following effluent limitations shall be required:

<u>Parameter</u>	<u>Effluent Concentrations</u>	
	<u>(Not to Exceed)</u>	
	<u>Daily Average</u> mg/l	<u>Single Grab</u> mg/l
Biochemical Oxygen Demand (5-day)	N/A	35

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

The effluent shall be chlorinated in a chlorine contact chamber to a residual of 1.0 mg/l with a minimum detention time of 20 minutes. If the effluent is to be transferred to a holding pond or tank, re-chlorination prior to the effluent being delivered into the irrigation system will be required. A trace chlorine residual shall be maintained in the effluent at the point of irrigation application.

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
Chlorine Residual	Five/week	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.

FINAL EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

Outfall Number 001

1. During the period beginning upon commencement of discharge to surface waters from the facility and lasting through the date of expiration, the permittee is authorized to discharge subject to the following effluent limitations:

The daily average flow of effluent shall not exceed 0.075 million gallons per day (MGD), nor shall the average discharge during any two-hour period (2-hour peak) exceed 208 gallons per minute (gpm).

<u>Effluent Characteristic</u>	<u>Discharge Limitations*</u>			<u>Min. Self-Monitoring Requirements</u>	
	Daily Avg. mg/l (lbs/day)	7-day Avg. mg/l	Daily Max. mg/l	Single Grab mg/l	Report Daily Avg. & Max. Single Grab Measurement Frequency* Sample Type
Flow, MGD	Report	N/A	Report	N/A	Continuous Totalizing meter
Carbonaceous Biochemical Oxygen Demand (5-day)	5 (3.1)	10	20	30	One/week Grab
Total Suspended Solids	5 (3.1)	10	20	30	One/week Grab
Ammonia Nitrogen	2 (1.2)	5	10	15	One/week Grab
Total Phosphorus	0.5 (0.3)	1	2	3	One/week Grab
<i>E. coli</i> , CFU or MPN/100 ml	126	N/A	N/A	399	Five/week Grab

* Discharge Limitations and Measurement Frequency are only applicable when discharging to surface waters.

2. The permittee shall utilize an Ultraviolet Light (UV) system for disinfection purposes. An equivalent method of disinfection may be substituted only with prior approval of the Executive Director.

3. The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units and shall be monitored once per month by grab sample.

4. There shall be no discharge of floating solids or visible foam in other than trace amounts and no discharge of visible oil.

5. Effluent monitoring samples shall be taken at the following location(s): Following the final treatment unit.

6. The effluent shall contain a minimum dissolved oxygen of 6.0 mg/l and shall be monitored once per week by grab sample.

DEFINITIONS AND STANDARD PERMIT CONDITIONS

As required by Title 30 Texas Administrative Code (TAC) Chapter 305, certain regulations appear as standard conditions in waste discharge permits. 30 TAC § 305.121 - 305.129 (relating to Permit Characteristics and Conditions) as promulgated under the Texas Water Code (TWC) §§ 5.103 and 5.105, and the Texas Health and Safety Code (THSC) §§ 361.017 and 361.024(a), establish the characteristics and standards for waste discharge permits, including sewage sludge, and those sections of 40 Code of Federal Regulations (CFR) Part 122 adopted by reference by the Commission. The following text includes these conditions and incorporates them into this permit. All definitions in TWC § 26.001 and 30 TAC Chapter 305 shall apply to this permit and are incorporated by reference. Some specific definitions of words or phrases used in this permit are as follows:

1. Flow Measurements

- a. Annual average flow - the arithmetic average of all daily flow determinations taken within the preceding 12 consecutive calendar months. The annual average flow determination shall consist of daily flow volume determinations made by a totalizing meter, charted on a chart recorder and limited to major domestic wastewater discharge facilities with one million gallons per day or greater permitted flow.
- b. Daily average flow - the arithmetic average of all determinations of the daily flow within a period of one calendar month. The daily average flow determination shall consist of determinations made on at least four separate days. If instantaneous measurements are used to determine the daily flow, the determination shall be the arithmetic average of all instantaneous measurements taken during that month. Daily average flow determination for intermittent discharges shall consist of a minimum of three flow determinations on days of discharge.
- c. Daily maximum flow - the highest total flow for any 24-hour period in a calendar month.
- d. Instantaneous flow - the measured flow during the minimum time required to interpret the flow measuring device.
- e. 2-hour peak flow (domestic wastewater treatment plants) - the maximum flow sustained for a two-hour period during the period of daily discharge. The average of multiple measurements of instantaneous maximum flow within a two-hour period may be used to calculate the 2-hour peak flow.
- f. Maximum 2-hour peak flow (domestic wastewater treatment plants) - the highest 2-hour peak flow for any 24-hour period in a calendar month.

2. Concentration Measurements

- a. Daily average concentration - the arithmetic average of all effluent samples, composite or grab as required by this permit, within a period of one calendar month, consisting of at least four separate representative measurements.
 - i. For domestic wastewater treatment plants - When four samples are not available in a calendar month, the arithmetic average (weighted by flow) of all values in the previous four consecutive month period consisting of at least four measurements shall be utilized as the daily average concentration.

- ii. For all other wastewater treatment plants - When four samples are not available in a calendar month, the arithmetic average (weighted by flow) of all values taken during the month shall be utilized as the daily average concentration.
- b. 7-day average concentration - the arithmetic average of all effluent samples, composite or grab as required by this permit, within a period of one calendar week, Sunday through Saturday.
- c. Daily maximum concentration - the maximum concentration measured on a single day, by the sample type specified in the permit, within a period of one calendar month.
- d. Daily discharge - the discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling. For pollutants with limitations expressed in terms of mass, the daily discharge is calculated as the total mass of the pollutant discharged over the sampling day. For pollutants with limitations expressed in other units of measurement, the daily discharge is calculated as the average measurement of the pollutant over the sampling day.

The daily discharge determination of concentration made using a composite sample shall be the concentration of the composite sample. When grab samples are used, the daily discharge determination of concentration shall be the arithmetic average (weighted by flow value) of all samples collected during that day.

- e. Bacteria concentration (*E. coli* or Enterococci) - Colony Forming Units (CFU) or Most Probable Number (MPN) of bacteria per 100 milliliters effluent. The daily average bacteria concentration is a geometric mean of the values for the effluent samples collected in a calendar month. The geometric mean shall be determined by calculating the n th root of the product of all measurements made in a calendar month, where n equals the number of measurements made; or, computed as the antilogarithm of the arithmetic mean of the logarithms of all measurements made in a calendar month. For any measurement of bacteria equaling zero, a substituted value of one shall be made for input into either computation method. If specified, the 7-day average for bacteria is the geometric mean of the values for all effluent samples collected during a calendar week.
 - f. Daily average loading (lbs/day) - the arithmetic average of all daily discharge loading calculations during a period of one calendar month. These calculations must be made for each day of the month that a parameter is analyzed. The daily discharge, in terms of mass (lbs/day), is calculated as (Flow, MGD x Concentration, mg/l x 8.34).
 - g. Daily maximum loading (lbs/day) - the highest daily discharge, in terms of mass (lbs/day), within a period of one calendar month.
3. Sample Type
- a. Composite sample - For domestic wastewater, a composite sample is a sample made up of a minimum of three effluent portions collected in a continuous 24-hour period or during the period of daily discharge if less than 24 hours, and combined in volumes proportional to flow, and collected at the intervals required by 30 TAC § 319.9 (a). For industrial wastewater, a composite sample is a sample made up of a minimum of three effluent portions collected in a continuous 24-hour period or during the period of daily discharge if less than 24 hours, and combined in volumes proportional to flow, and collected at the intervals required by 30 TAC § 319.9 (b).

- b. Grab sample - an individual sample collected in less than 15 minutes.
4. Treatment Facility (facility) - wastewater facilities used in the conveyance, storage, treatment, recycling, reclamation and/or disposal of domestic sewage, industrial wastes, agricultural wastes, recreational wastes, or other wastes including sludge handling or disposal facilities under the jurisdiction of the Commission.
5. The term "sewage sludge" is defined as solid, semi-solid, or liquid residue generated during the treatment of domestic sewage in 30 TAC Chapter 312. This includes the solids that have not been classified as hazardous waste separated from wastewater by unit processes.
6. Bypass - the intentional diversion of a waste stream from any portion of a treatment facility.

MONITORING AND REPORTING REQUIREMENTS

1. Self-Reporting

Monitoring results shall be provided at the intervals specified in the permit. Unless otherwise specified in this permit or otherwise ordered by the Commission, the permittee shall conduct effluent sampling and reporting in accordance with 30 TAC §§ 319.4 - 319.12. Unless otherwise specified, effluent monitoring data shall be submitted each month, to the Enforcement Division (MC 224), by the 20th day of the following month for each discharge which is described by this permit whether or not a discharge is made for that month. Monitoring results must be submitted online using the NetDMR reporting system available through the TCEQ website unless the permittee requests and obtains an electronic reporting waiver. Monitoring results must be signed and certified as required by Monitoring and Reporting Requirements No. 10.

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

2. Test Procedures

- a. Unless otherwise specified in this permit, test procedures for the analysis of pollutants shall comply with procedures specified in 30 TAC §§ 319.11 - 319.12. Measurements, tests, and calculations shall be accurately accomplished in a representative manner.
- b. All laboratory tests submitted to demonstrate compliance with this permit must meet the requirements of 30 TAC § 25, Environmental Testing Laboratory Accreditation and Certification.

3. Records of Results

- a. Monitoring samples and measurements shall be taken at times and in a manner so as to be representative of the monitored activity.

- b. Except for records of monitoring information required by this permit related to the permittee's sewage sludge use and disposal activities, which shall be retained for a period of at least five years (or longer as required by 40 CFR Part 503), monitoring and reporting records, including strip charts and records of calibration and maintenance, copies of all records required by this permit, records of all data used to complete the application for this permit, and the certification required by 40 CFR § 264.73(b)(9) shall be retained at the facility site, or shall be readily available for review by a TCEQ representative for a period of three years from the date of the record or sample, measurement, report, application or certification. This period shall be extended at the request of the Executive Director.
- c. Records of monitoring activities shall include the following:
 - i. date, time and place of sample or measurement;
 - ii. identity of individual who collected the sample or made the measurement.
 - iii. date and time of analysis;
 - iv. identity of the individual and laboratory who performed the analysis;
 - v. the technique or method of analysis; and
 - vi. the results of the analysis or measurement and quality assurance/quality control records.

The period during which records are required to be kept shall be automatically extended to the date of the final disposition of any administrative or judicial enforcement action that may be instituted against the permittee.

4. Additional Monitoring by Permittee

If the permittee monitors any pollutant at the location(s) designated herein more frequently than required by this permit using approved analytical methods as specified above, all results of such monitoring shall be included in the calculation and reporting of the values submitted on the approved self-report form. Increased frequency of sampling shall be indicated on the self-report form.

5. Calibration of Instruments

All automatic flow measuring or recording devices and all totalizing meters for measuring flows shall be accurately calibrated by a trained person at plant start-up and as often thereafter as necessary to ensure accuracy, but not less often than annually unless authorized by the Executive Director for a longer period. Such person shall verify in writing that the device is operating properly and giving accurate results. Copies of the verification shall be retained at the facility site and/or shall be readily available for review by a TCEQ representative for a period of three years.

6. Compliance Schedule Reports

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of the permit shall be submitted no later

than 14 days following each schedule date to the Regional Office and the Enforcement Division (MC 224).

7. Noncompliance Notification

- a. In accordance with 30 TAC § 305.125(9) any noncompliance which may endanger human health or safety, or the environment shall be reported by the permittee to the TCEQ. Except as allowed by 30 TAC § 305.132, report of such information shall be provided orally or by facsimile transmission (FAX) to the Regional Office within 24 hours of becoming aware of the noncompliance. A written submission of such information shall also be provided by the permittee to the Regional Office and the Enforcement Division (MC 224) within five working days of becoming aware of the noncompliance. For Publicly Owned Treatment Works (POTWs), effective September 1, 2020, the permittee must submit the written report for unauthorized discharges and unanticipated bypasses that exceed any effluent limit in the permit using the online electronic reporting system available through the TCEQ website unless the permittee requests and obtains an electronic reporting waiver. The written submission shall contain a description of the noncompliance and its cause; the potential danger to human health or safety, or the environment; the period of noncompliance, including exact dates and times; if the noncompliance has not been corrected, the time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance, and to mitigate its adverse effects.
 - b. The following violations shall be reported under Monitoring and Reporting Requirement 7.a.:
 - i. Unauthorized discharges as defined in Permit Condition 2(g).
 - ii. Any unanticipated bypass that exceeds any effluent limitation in the permit.
 - iii. Violation of a permitted maximum daily discharge limitation for pollutants listed specifically in the Other Requirements section of an Industrial TPDES permit.
 - c. In addition to the above, any effluent violation which deviates from the permitted effluent limitation by more than 40% shall be reported by the permittee in writing to the Regional Office and the Enforcement Division (MC 224) within 5 working days of becoming aware of the noncompliance.
 - d. Any noncompliance other than that specified in this section, or any required information not submitted or submitted incorrectly, shall be reported to the Enforcement Division (MC 224) as promptly as possible. For effluent limitation violations, noncompliances shall be reported on the approved self-report form.
8. In accordance with the procedures described in 30 TAC §§ 35.301 - 35.303 (relating to Water Quality Emergency and Temporary Orders) if the permittee knows in advance of the need for a bypass, it shall submit prior notice by applying for such authorization.
9. Changes in Discharges of Toxic Substances

All existing manufacturing, commercial, mining, and silvicultural permittees shall notify the Regional Office, orally or by facsimile transmission within 24 hours, and both the Regional Office and the Enforcement Division (MC 224) in writing within five (5) working days, after

becoming aware of or having reason to believe:

- a. That any activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant listed at 40 CFR Part 122, Appendix D, Tables II and III (excluding Total Phenols) which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":
 - i. One hundred micrograms per liter (100 µg/L);
 - ii. Two hundred micrograms per liter (200 µg/L) for acrolein and acrylonitrile; five hundred micrograms per liter (500 µg/L) for 2,4-dinitrophenol and for 2-methyl-4,6-dinitrophenol; and one milligram per liter (1 mg/L) for antimony;
 - iii. Five (5) times the maximum concentration value reported for that pollutant in the permit application; or
 - iv. The level established by the TCEQ.
- b. That any activity has occurred or will occur which would result in any discharge, on a nonroutine or infrequent basis, of a toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":
 - i. Five hundred micrograms per liter (500 µg/L);
 - ii. One milligram per liter (1 mg/L) for antimony;
 - iii. Ten (10) times the maximum concentration value reported for that pollutant in the permit application; or
 - iv. The level established by the TCEQ.

10. Signatories to Reports

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

11. All POTWs must provide adequate notice to the Executive Director of the following:

- a. Any new introduction of pollutants into the POTW from an indirect discharger which would be subject to CWA § 301 or § 306 if it were directly discharging those pollutants;
- b. Any substantial change in the volume or character of pollutants being introduced into that POTW by a source introducing pollutants into the POTW at the time of issuance of the permit; and
- c. For the purpose of this paragraph, adequate notice shall include information on:
 - i. The quality and quantity of effluent introduced into the POTW; and
 - ii. Any anticipated impact of the change on the quantity or quality of effluent to be discharged from the POTW.

PERMIT CONDITIONS

1. General

- a. When the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in an application or in any report to the Executive Director, it shall promptly submit such facts or information.
- b. This permit is granted on the basis of the information supplied and representations made by the permittee during action on an application, and relying upon the accuracy and completeness of that information and those representations. After notice and opportunity for a hearing, this permit may be modified, suspended, or revoked, in whole or in part, in accordance with 30 TAC Chapter 305, Subchapter D, during its term for good cause including, but not limited to, the following:
 - i. Violation of any terms or conditions of this permit;
 - ii. Obtaining this permit by misrepresentation or failure to disclose fully all relevant facts; or
 - iii. A change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge.
- c. The permittee shall furnish to the Executive Director, upon request and within a reasonable time, any information to determine whether cause exists for amending, revoking, suspending or terminating the permit. The permittee shall also furnish to the Executive Director, upon request, copies of records required to be kept by the permit.

2. Compliance

- a. Acceptance of the permit by the person to whom it is issued constitutes acknowledgment and agreement that such person will comply with all the terms and conditions embodied in the permit, and the rules and other orders of the Commission.
- b. The permittee has a duty to comply with all conditions of the permit. Failure to comply with any permit condition constitutes a violation of the permit and the Texas Water Code or the Texas Health and Safety Code, and is grounds for enforcement action, for permit amendment, revocation, or suspension, or for denial of a permit renewal application or an application for a permit for another facility.
- c. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit.
- d. The permittee shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal or other permit violation that has a reasonable likelihood of adversely affecting human health or the environment.
- e. Authorization from the Commission is required before beginning any change in the permitted facility or activity that may result in noncompliance with any permit requirements.

- f. A permit may be amended, suspended and reissued, or revoked for cause in accordance with 30 TAC §§ 305.62 and 305.66 and TWC§ 7.302. The filing of a request by the permittee for a permit amendment, suspension and reissuance, or termination, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition.
 - g. There shall be no unauthorized discharge of wastewater or any other waste. For the purpose of this permit, an unauthorized discharge is considered to be any discharge of wastewater into or adjacent to water in the state at any location not permitted as an outfall or otherwise defined in the Other Requirements section of this permit.
 - h. In accordance with 30 TAC § 305.535(a), the permittee may allow any bypass to occur from a TPDES permitted facility which does not cause permitted effluent limitations to be exceeded or an unauthorized discharge to occur, but only if the bypass is also for essential maintenance to assure efficient operation.
 - i. The permittee is subject to administrative, civil, and criminal penalties, as applicable, under TWC §§ 7.051 - 7.075 (relating to Administrative Penalties), 7.101 - 7.111 (relating to Civil Penalties), and 7.141 - 7.202 (relating to Criminal Offenses and Penalties) for violations including, but not limited to, negligently or knowingly violating the federal CWA §§ 301, 302, 306, 307, 308, 318, or 405, or any condition or limitation implementing any sections in a permit issued under the CWA § 402, or any requirement imposed in a pretreatment program approved under the CWA §§ 402 (a)(3) or 402 (b)(8).
3. Inspections and Entry
 - a. Inspection and entry shall be allowed as prescribed in the TWC Chapters 26, 27, and 28, and THSC § 361.
 - b. The members of the Commission and employees and agents of the Commission are entitled to enter any public or private property at any reasonable time for the purpose of inspecting and investigating conditions relating to the quality of water in the state or the compliance with any rule, regulation, permit or other order of the Commission. Members, employees, or agents of the Commission and Commission contractors are entitled to enter public or private property at any reasonable time to investigate or monitor or, if the responsible party is not responsive or there is an immediate danger to public health or the environment, to remove or remediate a condition related to the quality of water in the state. Members, employees, Commission contractors, or agents acting under this authority who enter private property shall observe the establishment's rules and regulations concerning safety, internal security, and fire protection, and if the property has management in residence, shall notify management or the person then in charge of his presence and shall exhibit proper credentials. If any member, employee, Commission contractor, or agent is refused the right to enter in or on public or private property under this authority, the Executive Director may invoke the remedies authorized in TWC § 7.002. The statement above, that Commission entry shall occur in accordance with an establishment's rules and regulations concerning safety, internal security, and fire protection, is not grounds for denial or restriction of entry to any part of the facility, but merely describes the Commission's duty to observe appropriate rules and regulations during an inspection.

4. Permit Amendment and/or Renewal

- a. The permittee shall give notice to the Executive Director as soon as possible of any planned physical alterations or additions to the permitted facility if such alterations or additions would require a permit amendment or result in a violation of permit requirements. Notice shall also be required under this paragraph when:
 - i. The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in accordance with 30 TAC § 305.534 (relating to New Sources and New Dischargers); or
 - ii. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants that are subject neither to effluent limitations in the permit, nor to notification requirements in Monitoring and Reporting Requirements No. 9;
 - iii. The alteration or addition results in a significant change in the permittee's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan.
- b. Prior to any facility modifications, additions, or expansions that will increase the plant capacity beyond the permitted flow, the permittee must apply for and obtain proper authorization from the Commission before commencing construction.
- c. The permittee must apply for an amendment or renewal at least 180 days prior to expiration of the existing permit in order to continue a permitted activity after the expiration date of the permit. If an application is submitted prior to the expiration date of the permit, the existing permit shall remain in effect until the application is approved, denied, or returned. If the application is returned or denied, authorization to continue such activity shall terminate upon the effective date of the action. If an application is not submitted prior to the expiration date of the permit, the permit shall expire and authorization to continue such activity shall terminate.
- d. Prior to accepting or generating wastes which are not described in the permit application or which would result in a significant change in the quantity or quality of the existing discharge, the permittee must report the proposed changes to the Commission. The permittee must apply for a permit amendment reflecting any necessary changes in permit conditions, including effluent limitations for pollutants not identified and limited by this permit.
- e. In accordance with the TWC § 26.029(b), after a public hearing, notice of which shall be given to the permittee, the Commission may require the permittee, from time to time, for good cause, in accordance with applicable laws, to conform to new or additional conditions.
- f. If any toxic effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is promulgated under CWA § 307(a) for a toxic pollutant which is present in the discharge and that standard or prohibition is more stringent than any limitation on the pollutant in this permit, this permit shall be

modified or revoked and reissued to conform to the toxic effluent standard or prohibition. The permittee shall comply with effluent standards or prohibitions established under CWA § 307(a) for toxic pollutants within the time provided in the regulations that established those standards or prohibitions, even if the permit has not yet been modified to incorporate the requirement.

5. Permit Transfer

- a. Prior to any transfer of this permit, Commission approval must be obtained. The Commission shall be notified in writing of any change in control or ownership of facilities authorized by this permit. Such notification should be sent to the Applications Review and Processing Team (MC 148) of the Water Quality Division.
- b. A permit may be transferred only according to the provisions of 30 TAC § 305.64 (relating to Transfer of Permits) and 30 TAC § 50.133 (relating to Executive Director Action on Application or WQMP update).

6. Relationship to Hazardous Waste Activities

This permit does not authorize any activity of hazardous waste storage, processing, or disposal that requires a permit or other authorization pursuant to the Texas Health and Safety Code.

7. Relationship to Water Rights

Disposal of treated effluent by any means other than discharge directly to water in the state must be specifically authorized in this permit and may require a permit pursuant to TWC Chapter 11.

8. Property Rights

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

9. Permit Enforceability

The conditions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstances, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

10. Relationship to Permit Application

The application pursuant to which the permit has been issued is incorporated herein; provided, however, that in the event of a conflict between the provisions of this permit and the application, the provisions of the permit shall control.

11. Notice of Bankruptcy

- a. Each permittee shall notify the Executive Director, in writing, immediately following the filing of a voluntary or involuntary petition for bankruptcy under any chapter of Title 11 Bankruptcy) of the United States Code (11 USC) by or against:

- i. the permittee;
 - ii. an entity (as that term is defined in 11 USC, § 101(14)) controlling the permittee or listing the permit or permittee as property of the estate; or
 - iii. an affiliate (as that term is defined in 11 USC, § 101(2)) of the permittee.
- b. This notification must indicate:
- i. the name of the permittee and the permit number(s);
 - ii. the bankruptcy court in which the petition for bankruptcy was filed; and
 - iii. 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 use and disposal and 30 TAC §§ 319.21 - 319.29 concerning the discharge of certain hazardous metals.
3. Domestic wastewater treatment facilities shall comply with the following provisions:
 - a. The permittee shall notify the Municipal Permits Team, Wastewater Permitting Section (MC 148) of the Water Quality Division, in writing, of any facility expansion at least 90 days prior to conducting such activity.
 - b. The permittee shall submit a closure plan for review and approval to the Municipal Permits Team, Wastewater Permitting Section (MC 148) of the Water Quality Division, for any closure activity at least 90 days prior to conducting such activity. Closure is the act of permanently taking a waste management unit or treatment facility out of service and includes the permanent removal from service of any pit, tank, pond, lagoon, surface impoundment and/or other treatment unit regulated by this permit.
4. The permittee is responsible for installing prior to plant start-up, and subsequently maintaining, adequate safeguards to prevent the discharge of untreated or inadequately treated wastes during electrical power failures by means of alternate power sources, standby generators, and/or retention of inadequately treated wastewater.

5. Unless otherwise specified, the permittee shall provide a readily accessible sampling point and, where applicable, an effluent flow measuring device or other acceptable means by which effluent flow may be determined.
6. The permittee shall remit an annual water quality fee to the Commission as required by 30 TAC Chapter 21. Failure to pay the fee may result in revocation of this permit under TWC § 7.302(b)(6).
7. Documentation

For all written notifications to the Commission required of the permittee by this permit, the permittee shall keep and make available a copy of each such notification under the same conditions as self-monitoring data are required to be kept and made available. Except for information required for TPDES permit applications, effluent data, including effluent data in permits, draft permits and permit applications, and other information specified as not confidential in 30 TAC §§ 1.5(d), any information submitted pursuant to this permit may be claimed as confidential by the submitter. Any such claim must be asserted in the manner prescribed in the application form or by stamping the words confidential business information on each page containing such information. If no claim is made at the time of submission, information may be made available to the public without further notice. If the Commission or Executive Director agrees with the designation of confidentiality, the TCEQ will not provide the information for public inspection unless required by the Texas Attorney General or a court pursuant to an open records request. If the Executive Director does not agree with the designation of confidentiality, the person submitting the information will be notified.

8. Facilities that generate domestic wastewater shall comply with the following provisions; domestic wastewater treatment facilities at permitted industrial sites are excluded.
 - a. Whenever flow measurements for any domestic sewage treatment facility reach 75% of the permitted daily average or annual average flow for three consecutive months, the permittee must initiate engineering and financial planning for expansion and/or upgrading of the domestic wastewater treatment and/or collection facilities. Whenever the flow reaches 90% of the permitted daily average or annual average flow for three consecutive months, the permittee shall obtain necessary authorization from the Commission to commence construction of the necessary additional treatment and/or collection facilities. In the case of a domestic wastewater treatment facility which reaches 75% of the permitted daily average or annual average flow for three consecutive months, and the planned population to be served or the quantity of waste produced is not expected to exceed the design limitations of the treatment facility, the permittee shall submit an engineering report supporting this claim to the Executive Director of the Commission.

If in the judgment of the Executive Director the population to be served will not cause permit noncompliance, then the requirement of this section may be waived. To be effective, any waiver must be in writing and signed by the Director of the Enforcement Division (MC 169) of the Commission, and such waiver of these requirements will be reviewed upon expiration of the existing permit; however, any such waiver shall not be interpreted as condoning or excusing any violation of any permit parameter.

- b. The plans and specifications for domestic sewage collection and treatment works associated with any domestic permit must be approved by the Commission and failure to secure approval before commencing construction of such works or making a discharge is a violation of this permit and each day is an additional violation until approval has been secured.
 - c. Permits for domestic wastewater treatment plants are granted subject to the policy of the Commission to encourage the development of area-wide waste collection, treatment, and disposal systems. The Commission reserves the right to amend any domestic wastewater permit in accordance with applicable procedural requirements to require the system covered by this permit to be integrated into an area-wide system, should such be developed; to require the delivery of the wastes authorized to be collected in, treated by or discharged from said system, to such area-wide system; or to amend this permit in any other particular to effectuate the Commission's policy. Such amendments may be made when the changes required are advisable for water quality control purposes and are feasible on the basis of waste treatment technology, engineering, financial, and related considerations existing at the time the changes are required, exclusive of the loss of investment in or revenues from any then existing or proposed waste collection, treatment or disposal system.
9. Domestic wastewater treatment plants shall be operated and maintained by sewage plant operators holding a valid certificate of competency at the required level as defined in 30 TAC Chapter 30.
10. For Publicly Owned Treatment Works (POTWs), the 30-day average (or monthly average) percent removal for BOD and TSS shall not be less than 85%, unless otherwise authorized by this permit.
11. Facilities that generate industrial solid waste as defined in 30 TAC § 335.1 shall comply with these provisions:
 - a. Any solid waste, as defined in 30 TAC § 335.1 (including but not limited to such wastes as garbage, refuse, sludge from a waste treatment, water supply treatment plant or air pollution control facility, discarded materials, discarded materials to be recycled, whether the waste is solid, liquid, or semisolid), generated by the permittee during the management and treatment of wastewater, must be managed in accordance with all applicable provisions of 30 TAC Chapter 335, relating to Industrial Solid Waste Management.
 - b. Industrial wastewater that is being collected, accumulated, stored, or processed before discharge through any final discharge outfall, specified by this permit, is considered to be industrial solid waste until the wastewater passes through the actual point source discharge and must be managed in accordance with all applicable provisions of 30 TAC Chapter 335.
 - c. The permittee shall provide written notification, pursuant to the requirements of 30 TAC § 335.8(b)(1), to the Environmental Cleanup 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 Registration, Review, and Reporting Division. No person shall dispose of industrial solid waste, including sludge or other solids from wastewater treatment processes, prior to fulfilling the deed recordation requirements of 30 TAC § 335.5.
- e. The term “industrial solid waste management unit” means a landfill, surface impoundment, waste-pile, industrial furnace, incinerator, cement kiln, injection well, container, drum, salt dome waste containment cavern, or any other structure vessel, appurtenance, or other improvement on land used to manage industrial solid waste.
- f. The permittee shall keep management records for all sludge (or other waste) removed from any wastewater treatment process. These records shall fulfill all applicable requirements of 30 TAC § 335 and must include the following, as it pertains to wastewater treatment and discharge:
 - i. Volume of waste and date(s) generated from treatment process;
 - ii. Volume of waste disposed of on-site or shipped off-site;
 - iii. Date(s) of disposal;
 - iv. Identity of hauler or transporter;
 - v. Location of disposal site; and
 - vi. Method of final disposal.

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

- 12. For industrial facilities to which the requirements of 30 TAC § 335 do not apply, sludge and solid wastes, including tank cleaning and contaminated solids for disposal, shall be disposed of in accordance with THSC § 361.

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SLUDGE PROVISIONS

The permittee is authorized to dispose of sludge only at a Texas Commission on Environmental Quality (TCEQ) authorized land application site or co-disposal landfill. **The disposal of sludge 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 Sewage Sludge. This provision does not authorize the permittee to land apply sludge on property owned, leased or under the direct control of the permittee.**

SECTION I. REQUIREMENTS APPLYING TO ALL SEWAGE SLUDGE LAND APPLICATION

A. General Requirements

1. The permittee shall handle and dispose of sewage sludge 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.
2. In all cases, if the person (permit holder) who prepares the sewage sludge supplies the sewage sludge to another person for land application use or to the owner or lease holder of the land, the permit holder shall provide necessary information to the parties who receive the sludge to assure compliance with these regulations.
3. The 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 disposal practice.

B. Testing Requirements

1. Sewage sludge 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 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 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 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 Remediation Support Division and the Regional Director (MC Region 11) 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, Registration, Review, and Reporting 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 11) and the Compliance Monitoring Team (MC 224) of the Enforcement Division by September 30th of each year. Effective September 1, 2020, the permittee must submit this annual report using the online electronic reporting system available through the TCEQ website unless the permittee requests and obtains an electronic reporting waiver.

2. Sewage sludge 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.

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 pathogen requirements.

- a. For sewage sludge to be classified as Class A with respect to pathogens, the density of fecal coliform in the sewage sludge 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 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.

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 with respect to pathogens, the density of fecal coliform in the sewage sludge 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%.

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.

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 sewage sludge may be classified a Class A sewage sludge 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 criteria for sewage sludge.

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, the following site restrictions must be met if Class B sludge is land applied:

- i. Food crops with harvested parts that touch the sewage sludge/soil mixture and are totally above the land surface shall not be harvested for 14 months after application of sewage sludge.
- ii. Food crops with harvested parts below the surface of the land shall not be harvested for 20 months after application of sewage sludge when the sewage sludge remains on the land surface for 4 months or longer prior to incorporation into the soil.
- iii. Food crops with harvested parts below the surface of the land shall not be harvested for 38 months after application of sewage sludge when the sewage sludge remains 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 sewage sludge.
- v. Animals shall not be allowed to graze on the land for 30 days after application of sewage sludge.
- vi. Turf grown on land where sewage sludge is applied shall not be harvested for 1 year after application of the sewage sludge 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 sewage sludge.

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

ix. Land application of sludge 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 sewage sludge shall be injected below the land surface within eight hours after being discharged from the pathogen treatment process.

- Alternative 10-
- i. Sewage sludge 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 sewage sludge that is 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 sewage sludge (*) 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 sewage sludge 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 treatment process or processes at the facility: preliminary operations (e.g., sludge grinding and degritting), thickening (concentration), stabilization, anaerobic digestion, aerobic digestion, composting, conditioning, disinfection (e.g., beta ray irradiation, gamma ray irradiation, pasteurization), dewatering (e.g., centrifugation, sludge drying beds, sludge lagoons), heat drying, thermal reduction, and methane or biogas capture and recovery.

Identify the nature of material generated by the facility (such as a biosolid for beneficial use or land-farming, or sewage sludge 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 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>	<u>Cumulative Pollutant Loading Rate (pounds per acre)*</u>
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>	<u>Monthly Average Concentration (milligrams per kilogram)*</u>
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 pathogen reduction requirements as defined above in Section I.B.3.

C. Management Practices

1. Bulk sewage sludge shall not be applied to agricultural land, forest, a public contact site, or a reclamation site that is flooded, frozen, or snow-covered so that the bulk sewage sludge enters a wetland or other waters in the State.
2. Bulk sewage sludge not meeting Class A requirements shall be land applied in a manner which complies with Applicability in accordance with 30 TAC § 312.41 and the Management Requirements in accordance with 30 TAC § 312.44.
3. Bulk sewage sludge 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 sewage sludge sold or given away. The information sheet shall contain the following information:
 - a. The name and address of the person who prepared the sewage sludge that is sold or given away in a bag or other container for application to the land.
 - b. A statement that application of the sewage sludge 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 sewage sludge 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 sewage sludge is 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 sewage sludge is 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 sewage sludge 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 sewage sludge.
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 sewage sludge disposal practice.

E. Record keeping Requirements

The sludge 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 sewage sludge 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 sludge, 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 sewage sludge is 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 sewage sludge or a sewage sludge 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 indefinitely. If the permittee supplies the sludge to another person who land applies the sludge, the permittee shall notify the land applier of the requirements for record keeping found in 30 TAC § 312.47 for persons who land apply:
 - a. A certification statement that all applicable requirements (specifically listed) have been met, and that the permittee understands that there are significant penalties for false certification including fine and imprisonment. See 30 TAC § 312.47(a)(4)(A)(ii) or 30 TAC § 312.47(a)(5)(A)(ii), as applicable, and to the permittee’s specific sludge treatment activities.
 - b. The location, by street address, and specific latitude and longitude, of each site on which sludge is applied.
 - c. The number of acres in each site on which bulk sludge is applied.
 - d. The date and time sludge is 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 report annually to the TCEQ Regional Office (MC Region 11) and Compliance Monitoring Team (MC 224) of the Enforcement Division, by September 30th of each year the following information. Effective September 1, 2020, the permittee must submit this annual report using the online electronic reporting system available through the TCEQ website unless the permittee requests and obtains an electronic reporting waiver.

1. Identify in the following categories (as applicable) the sewage sludge treatment process or processes at the facility: preliminary operations (e.g., sludge 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 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 disposal dry weight (lbs/acre) at each disposal site.
11. The concentration (mg/kg) in the sludge of each pollutant listed in Table 1 (defined as a monthly average) as well as the applicable pollutant concentration criteria (mg/kg) listed in Table 3 above, or the applicable pollutant loading rate limit (lbs/acre) listed in Table 2 above if it exceeds 90% of the limit.
12. Level of pathogen reduction achieved (Class A, Class AB or Class B).
13. Alternative used as listed in Section I.B.3.(a. or b.). Alternatives describe how the pathogen reduction requirements are met. If Class B sludge, 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 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 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 sewage sludge is applied.
 - c. The date and time bulk sewage sludge is applied to each site.
 - d. The cumulative amount of each pollutant (i.e., pounds/acre) listed in Table 2 in the bulk sewage sludge applied to each site.
 - e. The amount of sewage sludge (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
DISPOSED IN A MUNICIPAL SOLID WASTE LANDFILL**

- A. The permittee shall handle and dispose of sewage sludge in accordance with 30 TAC § 330 and all other applicable state and federal regulations to protect public health and the environment from any reasonably anticipated adverse effects due to any toxic pollutants that may be present. The permittee shall ensure that the sewage sludge meets the requirements in 30 TAC § 330 concerning the quality of the sludge disposed in a municipal solid waste landfill.
- B. If the permittee generates sewage sludge and supplies that sewage sludge 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 disposal practice.
- D. Sewage sludge 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 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 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 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 Remediation Support Division and the Regional Director (MC Region 11) 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, Registration, Review, and Reporting 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 11) and the Compliance Monitoring Team (MC 224) of the Enforcement Division by September 30 of each year.

- E. Sewage sludge 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 report annually to the TCEQ Regional Office (MC Region 11) and Compliance Monitoring Team (MC 224) of the Enforcement Division by September 30th of each year the following information. Effective September 1, 2020, the permittee must submit this annual report using the online electronic reporting system available through the TCEQ website unless the permittee requests and obtains an electronic reporting waiver.

1. Identify in the following categories (as applicable) the sewage sludge treatment process or processes at the facility: preliminary operations (e.g., sludge 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 production in dry tons/year.
4. Amount of sludge disposed in a municipal solid waste landfill in dry tons/year.
5. Amount of sludge transported interstate in dry tons/year.
6. A certification that the sewage sludge 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 TRANSPORTED TO ANOTHER FACILITY FOR FURTHER PROCESSING

These provisions apply to sludge that is transported to another wastewater treatment facility or facility that further processes sludge. These provisions are intended to allow transport of sludge to facilities that have been authorized to accept sludge. These provisions do not limit the ability of the receiving facility to determine whether to accept the sludge, 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 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 may only be transported using a registered transporter or using an approved pipeline.

B. Record Keeping Requirements

1. For sludge transported by an approved pipeline, the permittee must maintain records of the following:
 - a. the amount of sludge 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.
2. For sludge 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 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 11) and Compliance Monitoring Team (MC 224) of the Enforcement Division, by September 30th of each year. Effective September 1, 2020, the permittee must submit this annual report using the online electronic reporting system available through the TCEQ website unless the permittee requests and obtains an electronic reporting waiver.

1. Identify in the following categories (as applicable) the sewage sludge treatment process or processes at the facility: preliminary operations (e.g., sludge 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 production;
3. the amount of sludge transported;
4. the owner of each receiving facility;
5. the location of each receiving facility; and
6. the date(s) of disposal at each receiving facility.

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SPECIAL PROVISIONS FOR THE INTERIM I AND INTERIM II PHASES:

1. This permit is granted subject to the policy of the Commission to encourage the development of areawide 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 areawide system, should such be developed; to require the delivery of the wastes authorized to be collected in, treated by or discharged from the system, to an areawide system; or to effectuate the Commission’s policy in any other particular. 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 Category D license or higher. The facility must be operated a minimum of five days per week by the licensed chief operator or an operator holding the required level of license or higher. The licensed chief operator or operator holding the required level of license or higher must be available by telephone or pager seven days per week. Where shift operation of the wastewater treatment facility is necessary, each shift which does not have the on-site supervision of the licensed chief operator must be supervised by an operator in charge who is licensed not less than one level below the category for the facility.

3. The permittee shall maintain and operate the treatment facility in order to achieve optimum efficiency of treatment capability. This shall include required monitoring of effluent flow and quality as well as appropriate grounds and building maintenance.
4. The permittee shall obtain representative soil samples from the root zones of the land application area receiving wastewater. Composite sampling techniques shall be used. Each composite sample shall represent no more than 2.16 acres with no less than two (2) cores per dosing bed 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.

Samples shall be analyzed 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 N KCl soil extract	1	mg/kg (dry weight basis)

Total Kjeldahl Nitrogen (TKN)	For determination of Organic plus Ammonium Nitrogen. Procedures that use Mercury (Hg) are not acceptable.	20	mg/kg (dry weight basis)
Total Nitrogen	= TKN plus Nitrate-nitrogen		mg/kg (dry weight basis)
Plant-available: Phosphorus	Mehlich III with inductively coupled plasma	1 (P)	mg/kg (dry weight basis)
Plant-available: Potassium (K)	May be determined in the same Mehlich III extract with inductively coupled plasma	5 (K)	mg/kg (dry weight basis)
Amendment addition, e.g., gypsum			Report in short tons/acre 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 11) and the Enforcement Division (MC 224), no later than the end of September of each sampling year. If wastewater is not applied in a particular year, the permittee shall notify the same TCEQ offices and indicate that wastewater has not been applied on the approved land irrigation site(s) during that year.

5. The irrigation system shall be inspected on a weekly basis when the irrigation system is in operation. Any areas with problems such as surface runoff, surficial erosion and stressed or damaged vegetation will be recorded in the field log kept on-site and corrective measures will be initiated within 24 hours of discovery.
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. Bermuda grass and ryegrass 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 wastewater from the irrigated land.
7. 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.
8. 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).

9. The permittee shall provide facilities for the protection of its wastewater treatment facilities from a 100-year flood.
10. The permittee shall pump and haul wastewater from the facility to prevent the discharge of treated or untreated wastewater if complete shutdown of the wastewater treatment facility becomes necessary or if the storage capacity is exceeded.
11. Standby generator(s) will be provided for the lift station at the plant.
12. Wastewater shall not be applied for irrigation during rainfall events or when the ground is frozen or saturated.
13. The permittee shall maintain Bermuda and ryegrass on the disposal site. Application rates shall not exceed 0.1 gallons per square foot per day. The permittee is responsible for providing equipment to determine application rates and maintaining accurate records of the volume of effluent applied. These records shall be made available for review by the Texas Commission on Environmental Quality and shall be maintained for at least three years.
14. The permittee shall install a moisture sensing device at the topographic low in approximately each third (a sub-area) of the 2.16-acre application site. Each moisture sensing device will be installed at twelve inches below the irrigation lateral that will shut off supply of irrigation effluent to the irrigation sub-area when saturated conditions are detected.
15. Prior to construction of the chlorination system for the Interim II phase of the treatment facility, the permittee shall submit to the TCEQ Wastewater Permitting Section (MC 148) a summary transmittal letter for the chlorination system in accordance with the requirements in 30 TAC § 217.6(d). If requested by the Wastewater Permitting Section, the permittee shall submit plans and specifications and a final engineering design report which comply with 30 TAC Chapter 217, Design Criteria for Domestic Wastewater Systems. The permittee shall clearly show how the treatment system will meet the permitted effluent limitations required on Page 2a of this permit. A copy of the summary transmittal letter shall be available at the plant site for inspection by authorized representatives of the TCEQ.
16. The permittee shall notify the TCEQ Regional Office (MC Region 11) 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 chlorination facility on Notification of Completion Form 20007.

OTHER REQUIREMENTS FOR THE FINAL PHASE

1. The permittee shall employ or contract with one or more licensed wastewater treatment facility operators or wastewater system operations companies holding a valid license or registration according to the requirements of 30 TAC Chapter 30, Occupational Licenses and Registrations and in particular 30 TAC Chapter 30, Subchapter J, Wastewater Operators and Operations Companies.

This Category C facility must be operated by a chief operator or an operator holding a Category C license or higher. The facility must be operated a minimum of five days per week by the licensed chief operator or an operator holding the required level of license or higher. The licensed chief operator or operator holding the required level of license or higher must be available by telephone or pager seven days per week. Where shift operation of the wastewater treatment facility is necessary, each shift that does not have the on-site supervision of the licensed chief operator must be supervised by an operator in charge who is licensed not less than one level below the category for the facility.

2. The facility is not located in the Coastal Management Program boundary.
3. The permittee is hereby placed on notice that this permit may be reviewed by the TCEQ after the completion of any new intensive water quality survey on Segment No. 1813 of the Guadalupe River Basin and any subsequent updating of the water quality model for Segment No. 1813, to determine if the limitations and conditions contained herein are consistent with any such revised model. The permit may be amended, pursuant to 30 TAC § 305.62, as a result of such review. The permittee is also hereby placed on notice that effluent limits may be made more stringent at renewal based on, for example, any change to modeling protocol approved in the TCEQ Continuing Planning Process.
4. The permittee shall comply with the requirements of 30 TAC § 309.13 (a) through (d). In addition, by ownership of the required buffer zone area, the permittee shall comply with the requirements of 30 TAC § 309.13(e).
5. The permittee shall provide facilities for the protection of its wastewater treatment facility from a 100-year flood.
6. Standby generator(s) will be provided for the lift station at the plant.
7. Prior to construction of the Final phase treatment facility, the permittee shall submit to the TCEQ Wastewater Permitting Section (MC 148) a summary transmittal letter in accordance with the requirements in 30 TAC Section 217.6(c). If requested by the Wastewater Permitting Section, the permittee shall submit plans, specifications and a final engineering design report which comply with 30 TAC Chapter 217, Design Criteria for Domestic Wastewater Systems. The permittee shall clearly show how the treatment system will meet the final permitted effluent limitations required on Page 2b of this permit.
8. The permittee shall notify the TCEQ Regional Office (MC Region 11) 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 Final phase facilities on Notification of Completion Form 20007.
9. In accordance with 30 TAC §319.9, a permittee that has at least twelve months of uninterrupted compliance with its bacteria limit may notify the commission in writing of its compliance and request a less frequent measurement schedule. To request a less frequent schedule, the permittee shall submit a written request to the TCEQ Wastewater Permitting Section (MC 148) for each phase that includes a different monitoring frequency. The request must contain all of the reported bacteria values (Daily Avg. and Daily Max/Single Grab) for the twelve consecutive months immediately prior to the request. If the Executive Director finds that a less frequent measurement schedule is protective

of human health and the environment, the permittee may be given a less frequent measurement schedule. For this permit, 5/week may be reduced to 3/week. **A violation of any bacteria limit by a facility that has been granted a less frequent measurement schedule will require the permittee to return to the standard frequency schedule and submit written notice to the TCEQ Wastewater Permitting Section (MC 148).** The permittee may not apply for another reduction in measurement frequency for at least 24 months from the date of the last violation. The Executive Director may establish a more frequent measurement schedule if necessary to protect human health or the environment.

**ADDITIONAL REQUIRMENTS BASED ON SETTLEMENT AGREEMENT EFFECTIVE
SEPTEMBER 30, 2015**

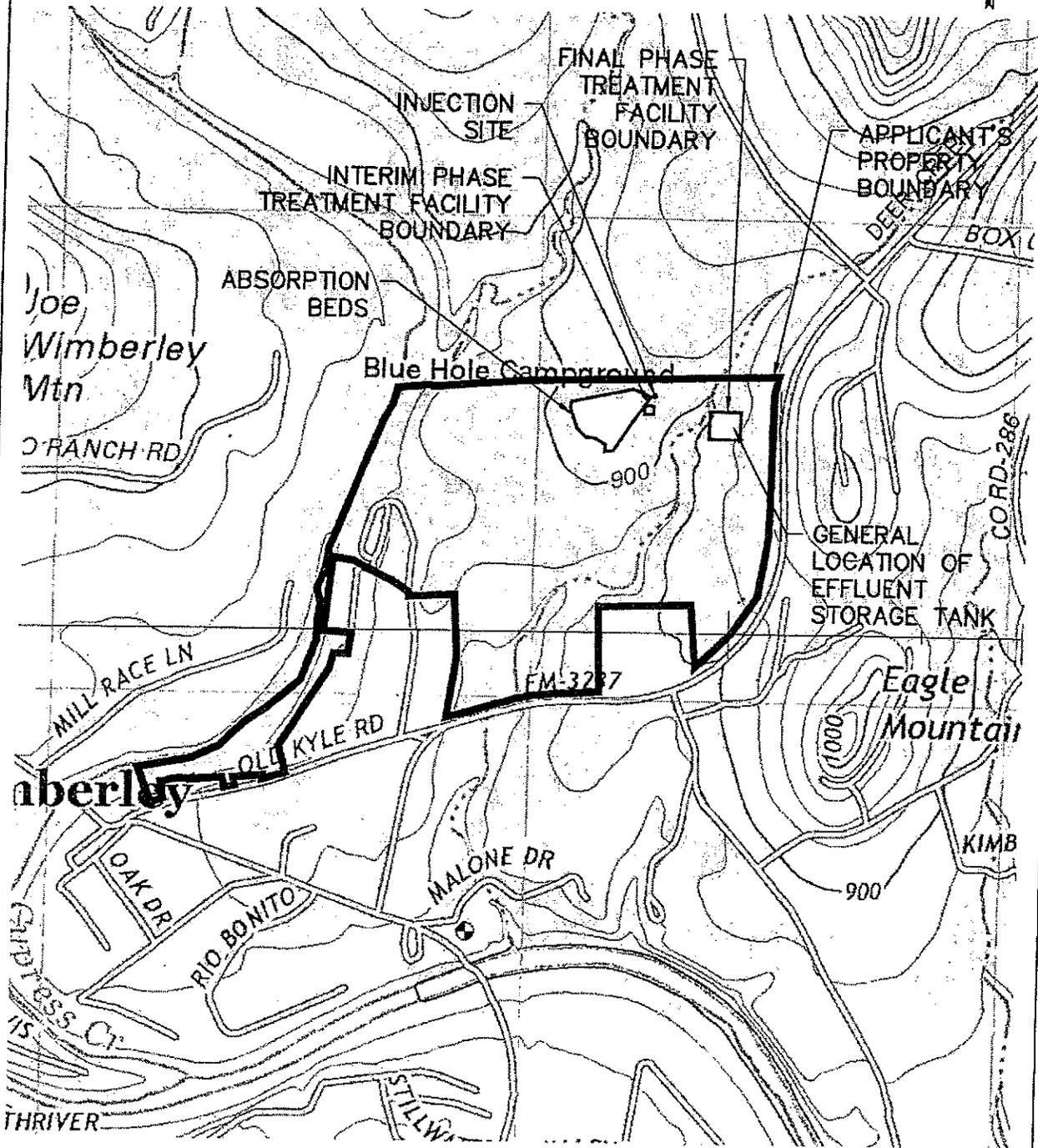
1. Within 90 days from permit issuance, the permittee shall apply for a Chapter 210 Use of Reclaimed Water authorization in order to use the treated effluent to irrigate the Blue Hole Regional Park and other potential uses of reclaimed water. If the Chapter 210 authorization is granted, the permittee shall maintain records of daily irrigation volume. 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.
2. The permittee shall provide an effluent storage tank with a minimum capacity of 500,000 gallons at the time of completion of the Final Phase of this permit. (See Attachment A for the general location of the effluent storage tank.)
3. The permittee shall limit the pounds of total phosphorus in the effluent discharged to 1.5 pounds per month, based on the total of each instantaneous measurement of flow and concentration made during the month.
4. The permittee shall conduct quarterly sampling of Cypress Creek and the Blanco River at three locations: in Cypress Creek where runoff tributary from soccer fields enters the creek, and in the Blanco River above Deer Creek and below Deer Creek. (See Attachment B for the general sampling locations.) The permittee shall use an independent entity of its choice for sampling and analysis. The permittee shall analyze for total phosphorus, ammonia, total kjeldahl nitrogen (TKN), nitrate, nitrite, chlorophyll-a, and dissolved oxygen. The results shall be posted to the City's website within 15 days of the date the permittee receives the results.
5. The permittee shall sample and analyze the effluent for total phosphorus, ammonia, TKN, nitrate, and nitrite on each day there is effluent discharge to Deer Creek. The city shall maintain the results in accordance with its record retention policy.
6. The permittee shall sample and analyze the effluent for emerging contaminants: caffeine, isophorone, camphor, phenol, N,N-diethyl-meta-toluamide (DEET), HHCb, triethyl citrate, methyl salicylate, and triphenyl phosphate once a calendar year. These results shall be posted to the City's website annually on or before the end of January of the following year.
7. The permittee shall sample and analyze the effluent for toxic heavy metals listed in the Texas Surface Water Quality Standards (30 Texas Administrative Code Chapter 307) and enumerated in Attachment C once a calendar year. These results shall be posted on the permittee's website annually on or before the end of January of the following year.
8. The TCEQ will not receive or review any reports of results of the analyses required by Additional Requirements 4, 5, 6, or 7.

CONTRIBUTING INDUSTRIES AND PRETREATMENT REQUIREMENTS FOR THE FINAL PHASE

1. The following pollutants may not be introduced into the treatment facility:
 - a. Pollutants which create a fire or explosion hazard in the publicly owned treatment works (POTW), including, but not limited to, waste streams with a closed-cup flash point of less than 140° Fahrenheit (60° Celsius) using the test methods specified in 40 CFR § 261.21;
 - b. Pollutants which will cause corrosive structural damage to the POTW, but in no case shall there be discharges with a pH lower than 5.0 standard units unless the works are specifically designed to accommodate such discharges;
 - c. Solid or viscous pollutants in amounts which will cause obstruction to the flow in the POTW, resulting in Interference;
 - d. Any pollutant, including oxygen-demanding pollutants (e.g., biological oxygen demand), released in a discharge at a flow rate and/or pollutant concentration which will cause Interference with the POTW;
 - e. Heat in amounts which will inhibit biological activity in the POTW, resulting in Interference, but in no case shall there be heat in such quantities that the temperature at the POTW treatment plant exceeds 104° Fahrenheit (40° Celsius) unless the Executive Director, upon request of the POTW, approves alternate temperature limits;
 - f. Petroleum oil, nonbiodegradable cutting oil, or products of mineral oil origin in amounts that will cause Interference or Pass Through;
 - g. Pollutants which result in the presence of toxic gases, vapors, or fumes within the POTW in a quantity that may cause acute worker health and safety problems; and
 - h. Any trucked or hauled pollutants except at discharge points designated by the POTW.
2. The permittee shall require any indirect discharger to the treatment works to comply with the reporting requirements of Sections 204(b), 307, and 308 of the Clean Water Act, including any requirements established under 40 CFR Part 403 [*rev. Federal Register/ Vol. 70/ No. 198/ Friday, October 14, 2005/ Rules and Regulations, pages 60134-60798*].
3. The permittee shall provide adequate notification to the Executive Director, care of the Wastewater Permitting Section (MC 148) of the Water Quality Division, within 30 days subsequent to the permittee's knowledge of either of the following:
 - a. Any new introduction of pollutants into the treatment works from an indirect discharger which would be subject to Sections 301 and 306 of the Clean Water Act if it were directly discharging those pollutants; and
 - b. Any substantial change in the volume or character of pollutants being introduced into the treatment works by a source introducing pollutants into the treatment works at the time of issuance of the permit.

Any notice shall include information on the quality and quantity of effluent to be introduced into the treatment works and any anticipated impact of the change on the quality or quantity of effluent to be discharged from the POTW.

Revised July 2007



**ATTACHMENT A
 CITY OF WIMBERLEY
 WASTEWATER TREATMENT PLANT
 TPDES PERMIT No. WQ0013321001
 FACILITY LOCATION**

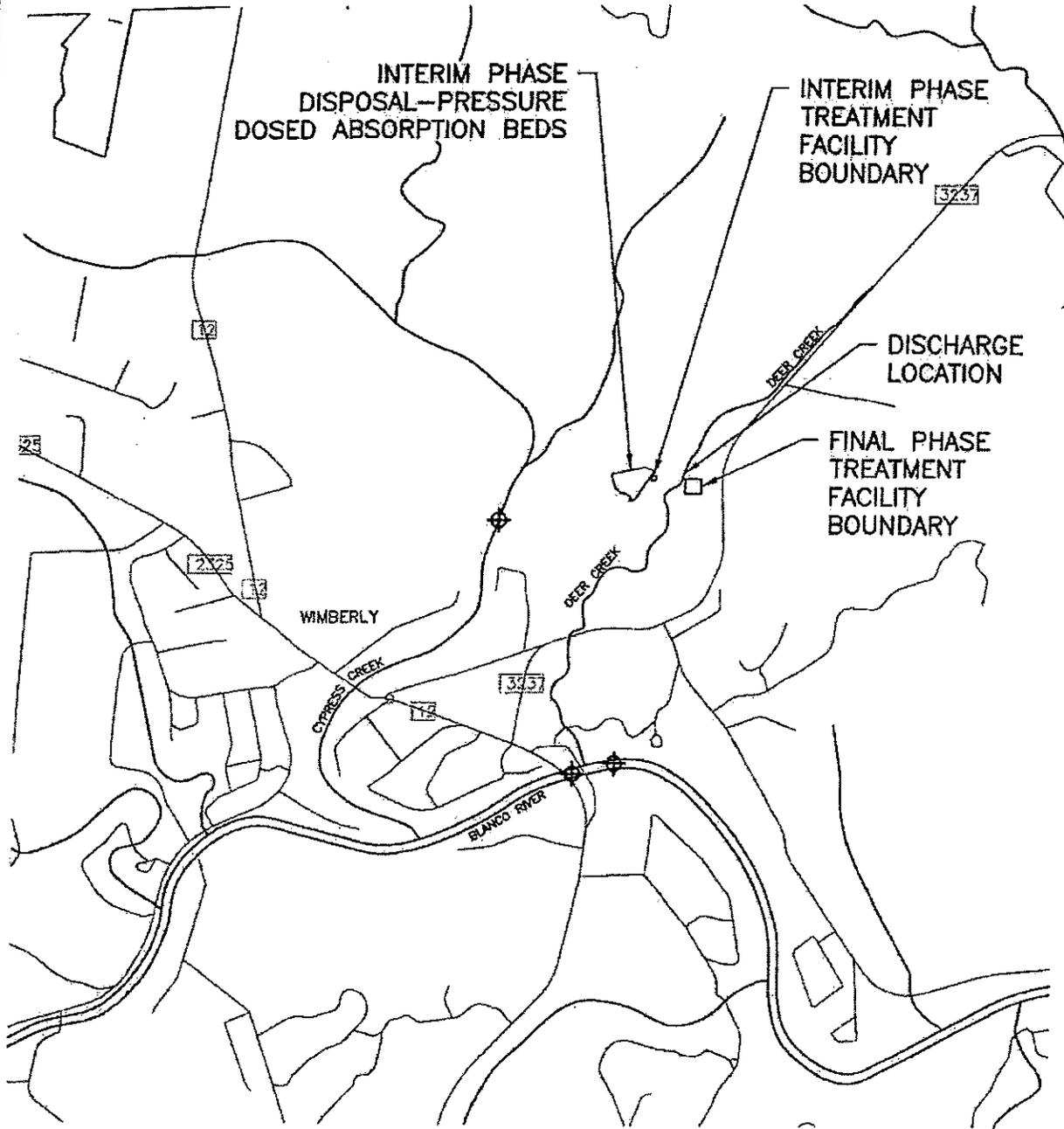
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LEGEND

◆ SAMPLING LOCATIONS

ATTACHMENT B
CITY OF WIMBERLEY
WASTEWATER TREATMENT PLANT
TPDES PERMIT No. WQ0013321001
MONITORING LOCATION MAP

TEXAS REGISTERED ENGINEERING FIRM F-13
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ATTACHMENT C

The toxic metals that are listed in 30 Texas Administrative Code Chapter 307: Texas Surface Water Quality Standards are as follows:

1. Aluminum
2. Antimony
3. Arsenic
4. Barium
5. Cadmium
6. Chromium (+3)
7. Chromium (+6)
8. Chromium (total)
9. Copper
10. Lead
11. Mercury
12. Nickel
13. Selenium
14. Silver
15. Thallium
16. Zinc



Attachment A.3
Core Data Form
Admin Report – Sec. 3



TCEQ Use Only

TCEQ Core Data Form

For detailed instructions regarding completion of this form, please read the Core Data Form Instructions or call 512-239-5175.

SECTION I: General Information

1. Reason for Submission (If other is checked please describe in space provided.)		
<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
2. Customer Reference Number (if issued)	Follow this link to search for CN or RN numbers in Central Registry**	3. Regulated Entity Reference Number (if issued)
CN 603592239		RN 101610350

SECTION II: Customer Information

4. General Customer Information		5. Effective Date for Customer Information Updates (mm/dd/yyyy)		
<input type="checkbox"/> New Customer		<input 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)				
The Customer Name submitted here may be updated automatically based on what is current and active with the Texas Secretary of State (SOS) or Texas Comptroller of Public Accounts (CPA).				
6. Customer Legal Name (If an individual, print last name first: eg: Doe, John)			If new Customer, enter previous Customer below:	
City of Wimberley				
7. TX SOS/CPA Filing Number	8. TX State Tax ID (11 digits)	9. Federal Tax ID (9 digits)	10. DUNS Number (if applicable)	
		74-2971396		
11. Type of Customer:	<input type="checkbox"/> Corporation	<input type="checkbox"/> Individual	Partnership: <input type="checkbox"/> General <input type="checkbox"/> Limited	
Government: <input checked="" type="checkbox"/> City <input type="checkbox"/> County <input type="checkbox"/> Federal <input type="checkbox"/> State <input type="checkbox"/> Other	<input type="checkbox"/> Sole Proprietorship		<input type="checkbox"/> Other:	
12. Number of Employees		13. Independently Owned and Operated?		
<input checked="" type="checkbox"/> 0-20 <input type="checkbox"/> 21-100 <input type="checkbox"/> 101-250 <input type="checkbox"/> 251-500 <input type="checkbox"/> 501 and higher		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
14. Customer Role (Proposed or Actual) – as it relates to the Regulated Entity listed on this form. Please check one of the following:				
<input checked="" type="checkbox"/> Owner <input type="checkbox"/> Operator <input type="checkbox"/> Owner & Operator				
<input type="checkbox"/> Occupational Licensee <input type="checkbox"/> Responsible Party <input type="checkbox"/> Voluntary Cleanup Applicant <input type="checkbox"/> Other:				
15. Mailing Address:	221 Stillwater			
	City	Wimberley	State	TX
	ZIP	78676	ZIP + 4	
16. Country Mailing Information (if outside USA)			17. E-Mail Address (if applicable)	
			scox@cityofwimberley.com	
18. Telephone Number		19. Extension or Code		20. Fax Number (if applicable)
(512) 847-0025		22		() -

SECTION III: Regulated Entity Information

21. General Regulated Entity Information (If 'New Regulated Entity' is selected below this form should be accompanied by a permit application)	
<input type="checkbox"/> New Regulated Entity <input type="checkbox"/> Update to Regulated Entity Name <input type="checkbox"/> Update to Regulated Entity Information	
The Regulated Entity Name submitted may be updated in order to meet TCEQ Agency 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.)	
The Blue Hole Wastewater Treatment Facility	

23. Street Address of the Regulated Entity: <i>(No PO Boxes)</i>	333 Blue Hole Lane						
	City	Wimberley	State	TX	ZIP	78676	ZIP + 4
24. County	Hays						

Enter Physical Location Description if no street address is provided.

25. Description to Physical Location:							
26. Nearest City	Wimberley			State	TX	Nearest ZIP Code	78676
27. Latitude (N) In Decimal:	Degrees		Minutes	Seconds	28. Longitude (W) In Decimal:	Degrees	
	30'	00'	14" N		98'	05'	00" W
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)			
		22132		221320			
33. What is the Primary Business of this entity? <i>(Do not repeat the SIC or NAICS description.)</i>							
Treatment of Domestic Wastewater							
34. Mailing Address:	221 Stillwater						
	City	Wimberley	State	TX	ZIP	78676	ZIP + 4
35. E-Mail Address:	scox@cityofwimberley.com						
36. Telephone Number	37. Extension or Code		38. Fax Number <i>(if applicable)</i>				
(512) 847-25	22		() -				

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"/> Waste Water	<input type="checkbox"/> Wastewater Agriculture	<input type="checkbox"/> Water Rights	<input type="checkbox"/> Other:
	WQ0013321001			

SECTION IV: Preparer Information

40. Name:	Shawn Cox			41. Title:	City Administrator		
42. Telephone Number	43. Ext./Code	44. Fax Number	45. E-Mail Address				
(512) 847-0025	22	() -	scox@cityofwimberley.com				

SECTION V: Authorized Signature

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

Company:	City of Wimberley		Job Title:	City Administrator			
Name <i>(In Print)</i> :	Shawn Cox			Phone:	(512) 847-25		
Signature:				Date:	08/01/2019		

RECEIVED
AUG 05 2019
Water Quality Applications Team



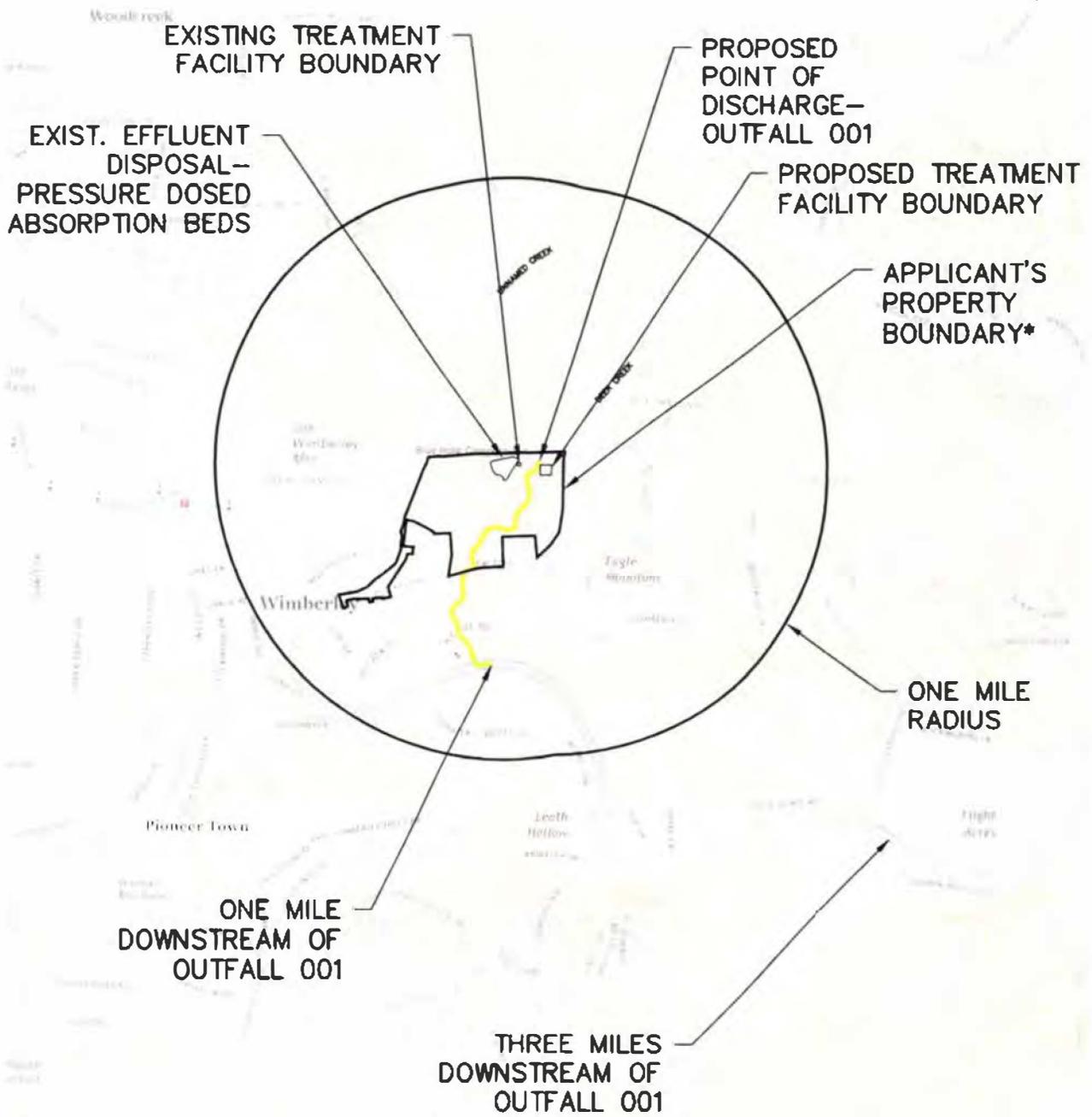
Attachment B
USGS Map
Admin Report – Sec. 13.D



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*BLUE HOLE REGIONAL PARK
IS CONTAINED WITHIN THE
APPLICANT'S PROPERTY
BOUNDARY

ATTACHMENT B
CITY OF WIMBERLEY
THE BLUE HOLE WASTEWATER TREATMENT FACILITY
RENEWAL PERMIT APPLICATION
USGS MAP

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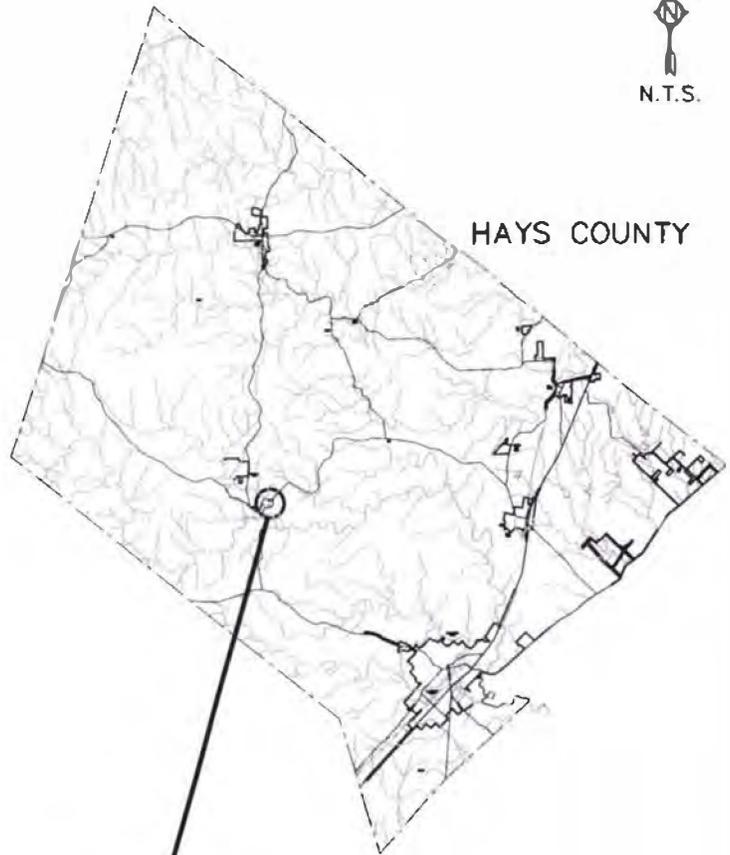


SPIF-1
Supplemental Permit Information Form

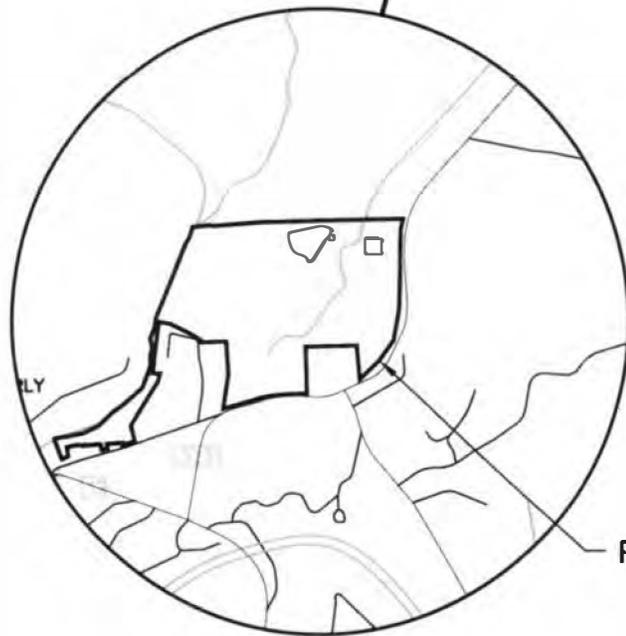


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HAYS COUNTY



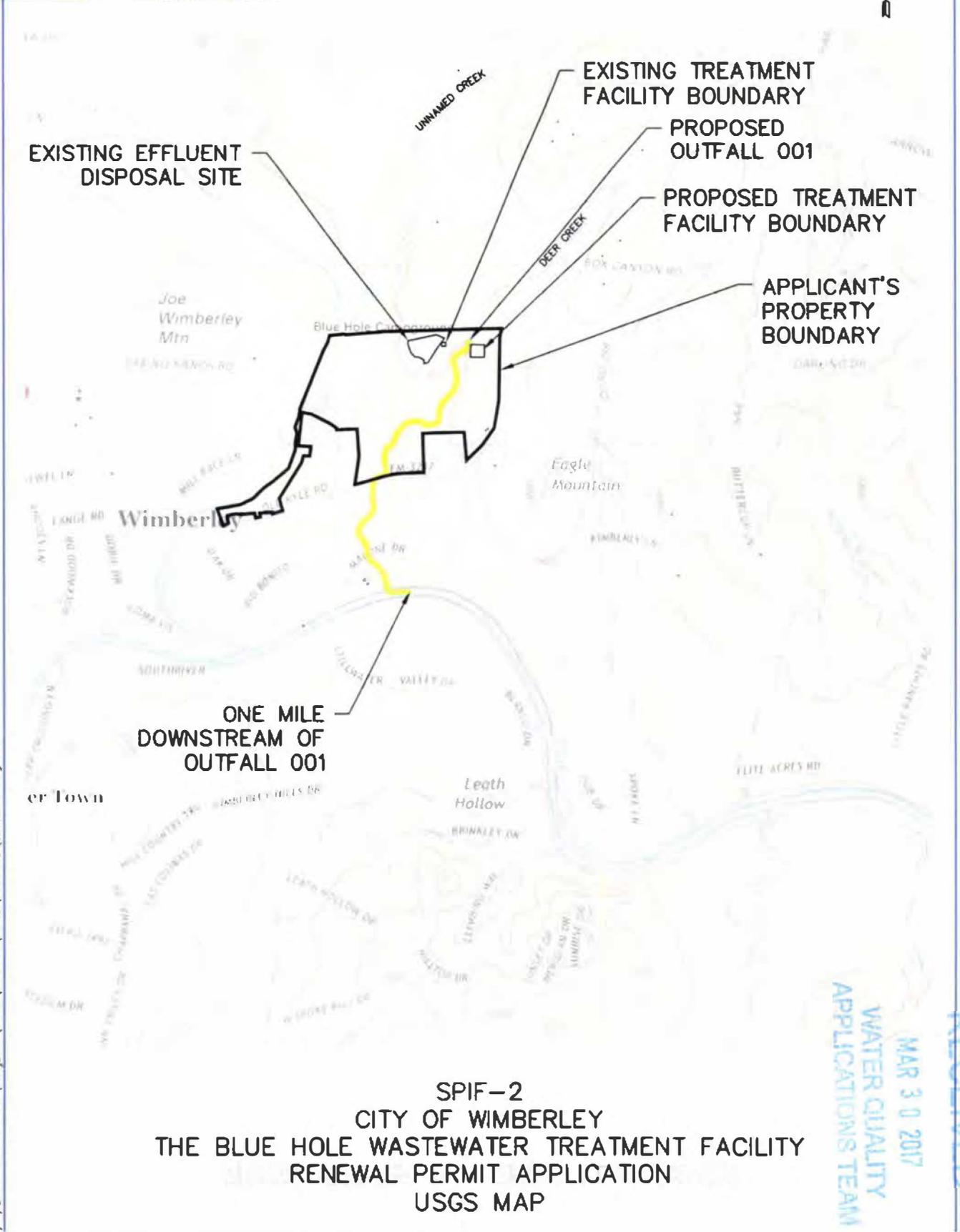
PROJECT SITE

RECEIVED
MAR 30 2017
WATER QUALITY
APPLICATIONS TEAM

SPIF-1
CITY OF WIMBERLEY
THE BLUE HOLE WASTEWATER TREATMENT FACILITY
RENEWAL PERMIT APPLICATION
GENERAL LOCATION MAP



SPIF-2
Supplemental Permit Information Form



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SPIF-2
CITY OF WIMBERLEY
THE BLUE HOLE WASTEWATER TREATMENT FACILITY
RENEWAL PERMIT APPLICATION
USGS MAP

RECEIVED
MAR 30 2017
WATER QUALITY
APPLICATIONS TEAM



Attachment C
Treatment Process Description
Tech. Report 1.0 – Sec. 2.A

**ATTACHMENT C
CITY OF WIMBERLEY
THE BLUE HOLE WASTEWATER TREATMENT FACILITY
RENEWAL PERMIT APPLICATION**

TREATMENT PROCESS DESCRIPTION

Existing/Interim I Phase

The Blue Hole Wastewater Treatment Facility is an activated sludge package plant that operates in the extended aeration mode. The package plant process units include an equalization basin, aeration basin, clarifier, sludge holding tank, and effluent pumps.

Effluent is disposed of in a subsurface soil absorption bed. Sludge is hauled by a registered transporter to a TCEQ-registered sludge disposal site or authorized wastewater treatment plant for further processing.

Interim II Phase

The Blue Hole Wastewater Treatment Facility in the Interim II Phase will be an activated sludge package plant operated in the extended aeration mode. The existing package plant will remain in operation and chemical disinfection via sodium hypochlorite addition will be utilized. A chlorine contact basin will be added to the end of the existing package plant. Effluent and sludge disposal will remain the same as the Existing/Interim I Phase.

Final Phase

The Blue Hole Wastewater Treatment Facility in the Final Phase will include a new membrane bioreactor (MBR) packaged wastewater treatment plant. The old activated sludge package plant will be decommissioned and all wastewater flow will be delivered to the new MBR plant for treatment. The MBR plant will include an influent screening system, influent equalization basin, pre-anoxic zone, aerobic zone, post-anoxic zone, membrane system, sludge storage system, and a post equalization basin. Ultraviolet disinfection of the final effluent will be utilized. Aluminum sulfate will be added to reduce phosphorus concentrations. Biological odor control will capture and treat all odorous air sources.

Effluent will be discharged to Deer Creek. Sludge is hauled by a registered transporter to a TCEQ-registered sludge disposal site or authorized wastewater treatment plant for further processing.

In addition to the treatment facility, reclaimed water pumps and a 500,000 gallon storage tank will be available to deliver treated effluent to the adjacent recreational fields. During wet weather conditions, effluent can be stored in the tank until the fields become less saturated.



Attachment D
Treatment Units
Tech. Report 1.0 – Sec. 2.B

**ATTACHMENT D
CITY OF WIMBERLEY
THE BLUE HOLE WASTEWATER TREATMENT FACILITY
RENEWAL PERMIT APPLICATION**

LIST OF TREATMENT UNITS

Existing/Interim I Phase (0.01 MGD Phase)		
Description	No.	Equipment/Capacity
Inlet Box with Bar Screen and Bar Rack	1	0.75" Manually Cleaned Coarse Screen, 45° Sloped Bar Rack
Equalization Basin	1	4,712 gallons; 12' x 5', 10.5' SWD
Aeration Basin	1	31,102 gallons; 12' x 33', 10.5' SWD
Clarifier	1	7,191 gallons; 12' Diameter, 8.5' SWD
Sludge Holding Tank	1	4,712 gallons; 12' x 5', 10.5' SWD

**ATTACHMENT D
CITY OF WIMBERLEY
THE BLUE HOLE WASTEWATER TREATMENT FACILITY
RENEWAL PERMIT APPLICATION**

LIST OF TREATMENT UNITS

Interim II Phase (0.01 MGD Phase)		
Description	No.	Equipment/Capacity
Inlet Box with Bar Screen and Bar Rack	1	0.75" Manually Cleaned Coarse Screen, 45° Sloped Bar Rack
Equalization Basin	1	4,712 gallons; 12' x 5', 10.5' SWD
Aeration Basin	1	31,102 gallons; 12' x 33', 10.5' SWD
Clarifier	1	7,191 gallons; 12' Diameter, 8.5' SWD
Chlorine Contact Basin	1	834 gallons; 9.5' x 9.5', 10' SWD
Sludge Holding Tank	1	4,712 gallons; 12' x 5', 10.5' SWD

**ATTACHMENT D
CITY OF WIMBERLEY
THE BLUE HOLE WASTEWATER TREATMENT FACILITY
RENEWAL PERMIT APPLICATION**

LIST OF TREATMENT UNITS

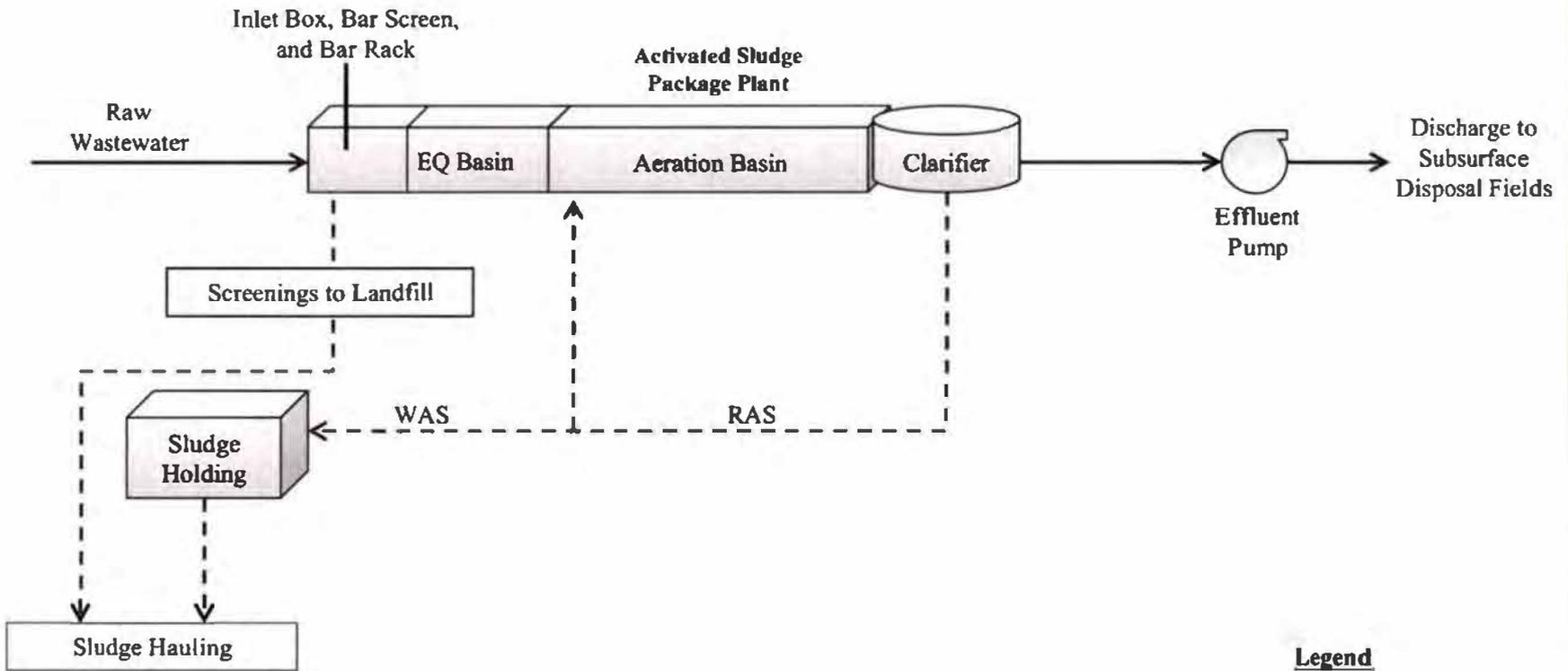
Final Phase (0.075 MGD Phase)		
Description	No.	Equipment/Capacity
Automatic Fine Screening Unit	2	Rotary fine screen, perforation diameter 0.25"
Equalization Tank:		
Train A	1	7,500 gallons; 12' x 9', 10' SWD
Train B	1	7,500 gallons; 12' x 9', 10' SWD
Aeration Tank (Including Pre and Post Anoxic Zones):		
Train A	1	35,558 gallons; 12' x 40', 10' SWD
Train B	1	35,558 gallons; 12' x 40', 10' SWD
Membrane Tank:		
Train A	1	8,890 gallons; 12' x 10', 10' SWD
Train B	1	8,890 gallons; 12' x 10', 10' SWD
Post Equalization Basin:		
Train A	1	7,500 gallons; 12' x 9', 10' SWD
Train B	1	7,500 gallons; 12' x 9', 10' SWD
Sludge Holding Tank:		
Train A	1	8,890 gallons; 12' x 10', 10' SWD
Train B	1	8,890 gallons; 12' x 10', 10' SWD
Beneficial Reuse of Effluent:		
Effluent Holding Tank	1	500,000 gallons; 60' Diameter, 24' SWD



Attachment E
Process Flow Diagrams
Tech. Report 1.0 – Sec. 2.C

ATTACHMENT E
CITY OF WIMBERLEY
THE BLUE HOLE WASTEWATER TREATMENT FACILITY
RENEWAL PERMIT APPLICATION

PROCESS FLOW DIAGRAM: Existing/Interim I Phase

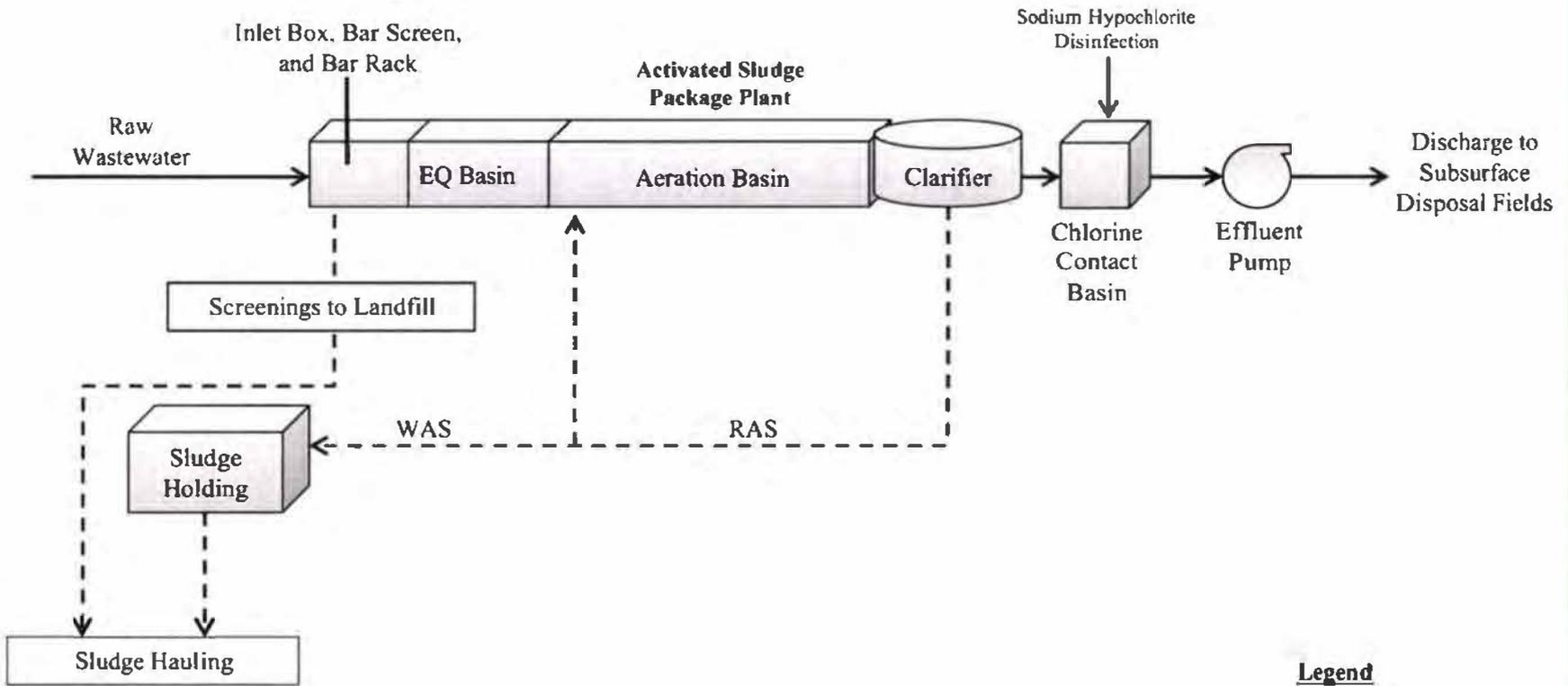


Legend

— Liquids
 - - - Solids
 RAS – Return Activated Sludge
 WAS – Waste Activated Sludge

ATTACHMENT E
CITY OF WIMBERLEY
THE BLUE HOLE WASTEWATER TREATMENT FACILITY
RENEWAL PERMIT APPLICATION

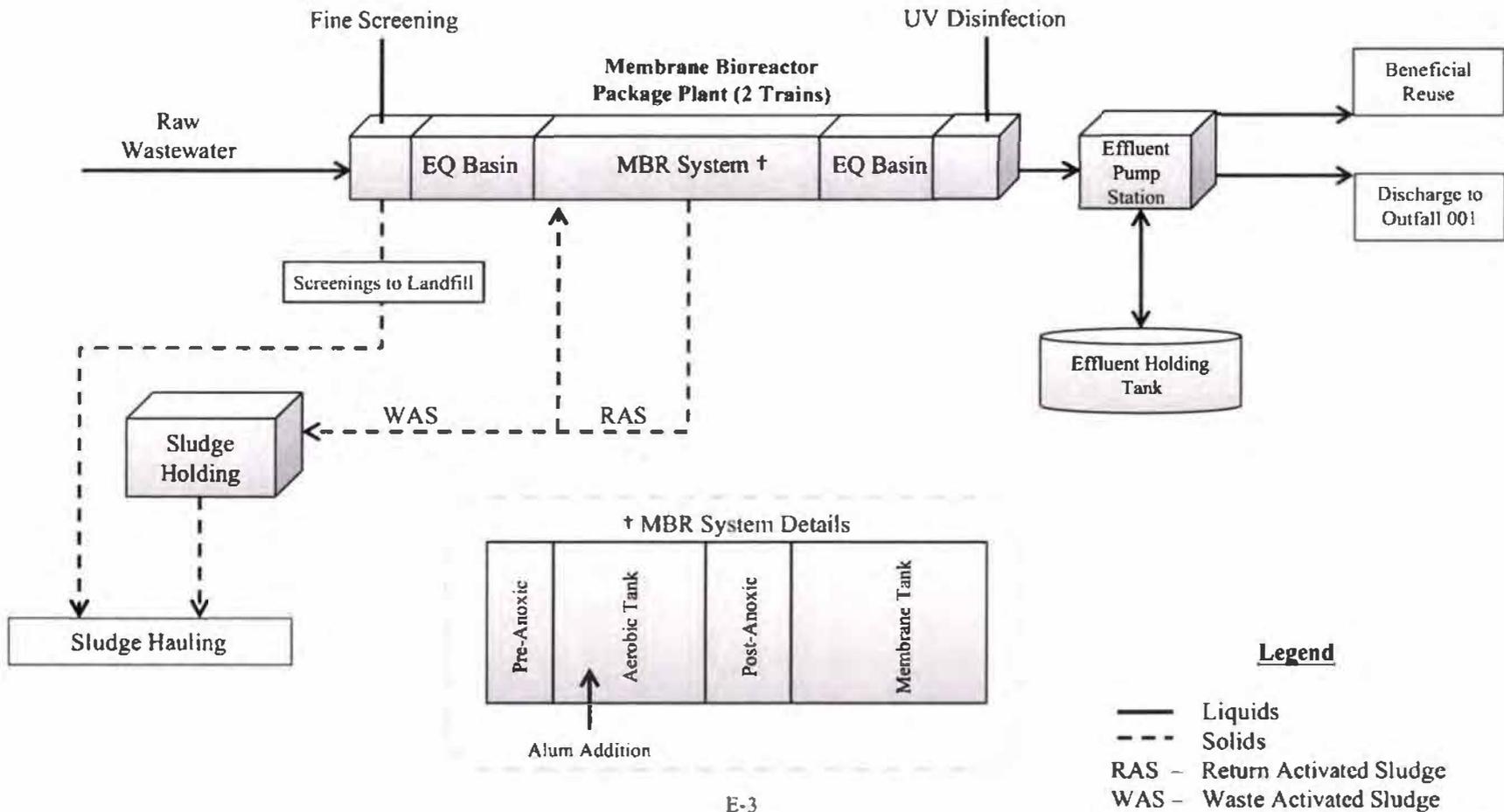
PROCESS FLOW DIAGRAM: Interim II Phase



- Legend**
- Liquids
 - - - Solids
 - RAS – Return Activated Sludge
 - WAS – Waste Activated Sludge

ATTACHMENT E
CITY OF WIMBERLEY
THE BLUE HOLE WASTEWATER TREATMENT FACILITY
RENEWAL PERMIT APPLICATION

PROCESS FLOW DIAGRAM: Final Phase



TEXAS REGISTERED ENGINEERING FIRM F-13

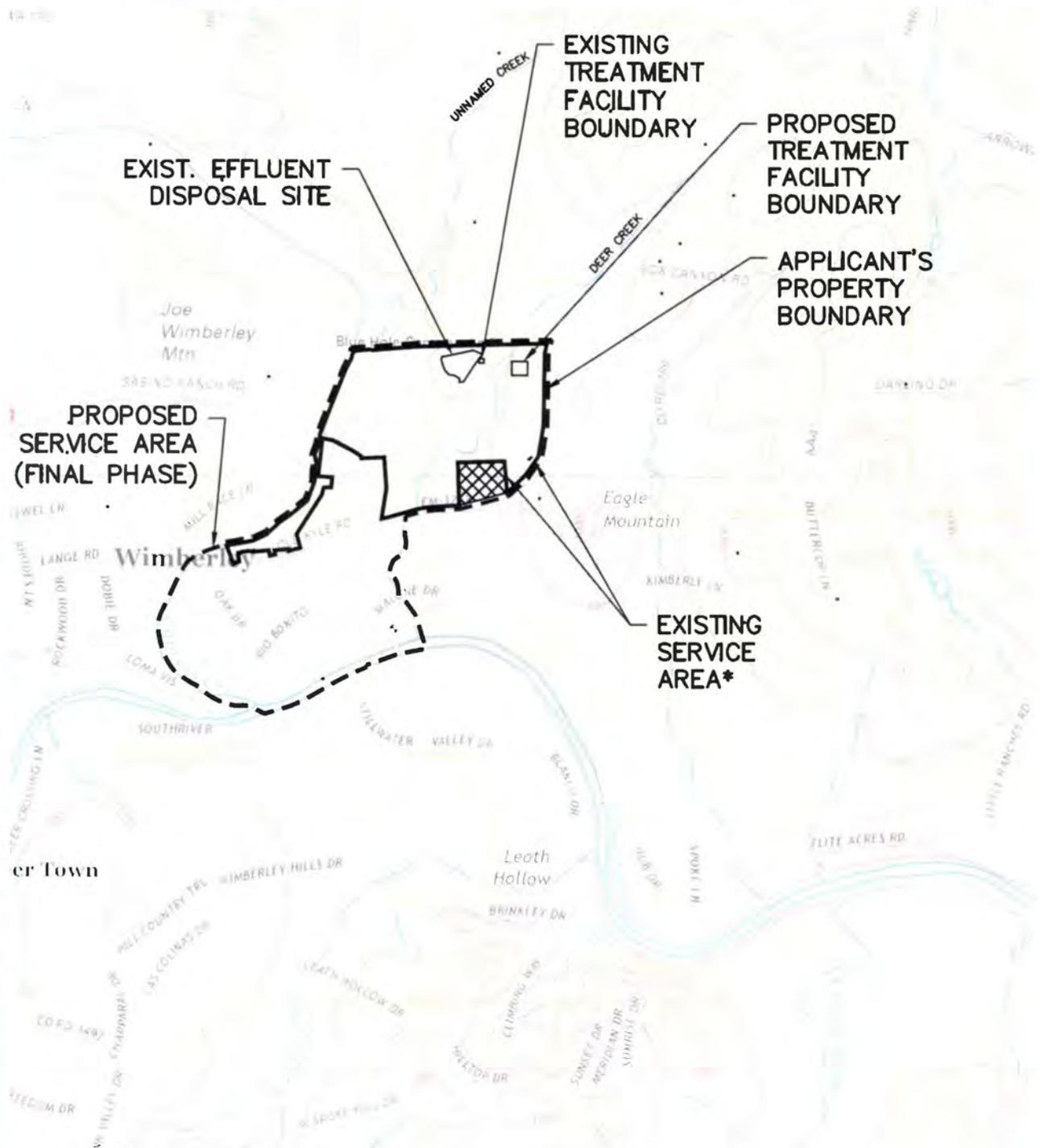


Attachment F
Site Drawings
Tech. Report 1.0 – Sec. 3



ALAN PLUMMER
ASSOCIATES, INC.

ENVIRONMENTAL
ENGINEERS AND SCIENTISTS



* THE EXISTING SERVICE AREA INCLUDES FACILITIES WITHIN THE APPLICANT'S PROPERTY BOUNDARY AND THE HATCHED AREA.

**ATTACHMENT F
CITY OF WIMBERLEY
THE BLUE HOLE WASTEWATER TREATMENT FACILITY
MINOR AMENDMENT PERMIT APPLICATION
SITE DRAWING**

TEXAS REGISTERED ENGINEERING FIRM F-13
3/9/2017 10:22 AM M:\Projects\1732\003-01\2-0 Wkt Prod\2-1 ACAD\FIGURES\ATT F -- Site drawing.dwg Brlaud



Attachment G
Analytical Results
Tech. Report 1.0 – Sec. 7

This information will be submitted to the TCEQ when available.



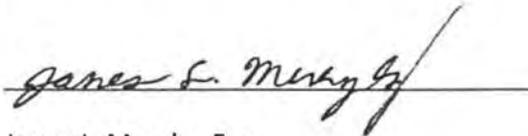
Attachment H.1
Sludge Contract Agreement
Tech. Report 1.0 – Sec. 9.A

May 30, 2014

SLUDGE ACCEPTANCE STATEMENT

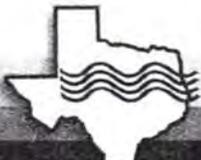
The Guadalupe-Blanco River Authority Lockhart Wastewater Treatment Plant No. 2 Facility will accept and process the sludge generated at the City of Wimberley Water Reclamation Facility, which is authorized to operate pursuant to Texas Pollutant Discharge Elimination System (TPDES) permit WQ0013321001. Processed sludge will be disposed of in accordance with the requirements specified in the TPDES Permit No. WQ0010210002.

Signed: _____



James L. Murphy, Esq.

Executive Manager of Water Resources and Utility Operations
Guadalupe-Blanco River Authority



Main Office: 933 East Court Street ~ Seguin, Texas 78155
830-379-5822 ~ 800-413-4130 ~ 830-379-9718 fax ~ www.gbra.org

GBRA

Guadalupe-Blanco River Authority
flowing solutions

Micro Dirt Inc. /dba Texas Organic Recovery

15500 Goforth Rd., Creedmoor Texas, 78610

T.C.E.Q. Registration # 42016

SLUDGE ACCEPTANCE STATEMENT

Mark Van Sickle and Micro Dirt Inc./dba Texas Organic Recovery Composting Facility will accept and process the sludge generated at the City of Wimberley Water Reclamation Facility, which is authorized to operate pursuant to Texas Pollutant Discharge Elimination System (TPDES) permit WQ0013321001. Processed sludge will be disposed of in accordance with the requirements specified in the Texas Organic Recovery registration #42016 Composting facility.

Date: 6-9-14

Signed: 

Title: General Manager



Attachment H.2
Sludge Disposal Site
Tech. Report 1.0 – Sec. 9.B

**ATTACHMENT H.2
CITY OF WIMBERLEY
THE BLUE HOLE WASTEWATER TREATMENT FACILITY
RENEWAL PERMIT APPLICATION
SLUDGE DISPOSAL SITE**

Sludge generated at The Blue Hole Wastewater Treatment Facility is hauled off-site for disposal or further treatment and use. Transported sludge is taken to either of the following sludge sites:

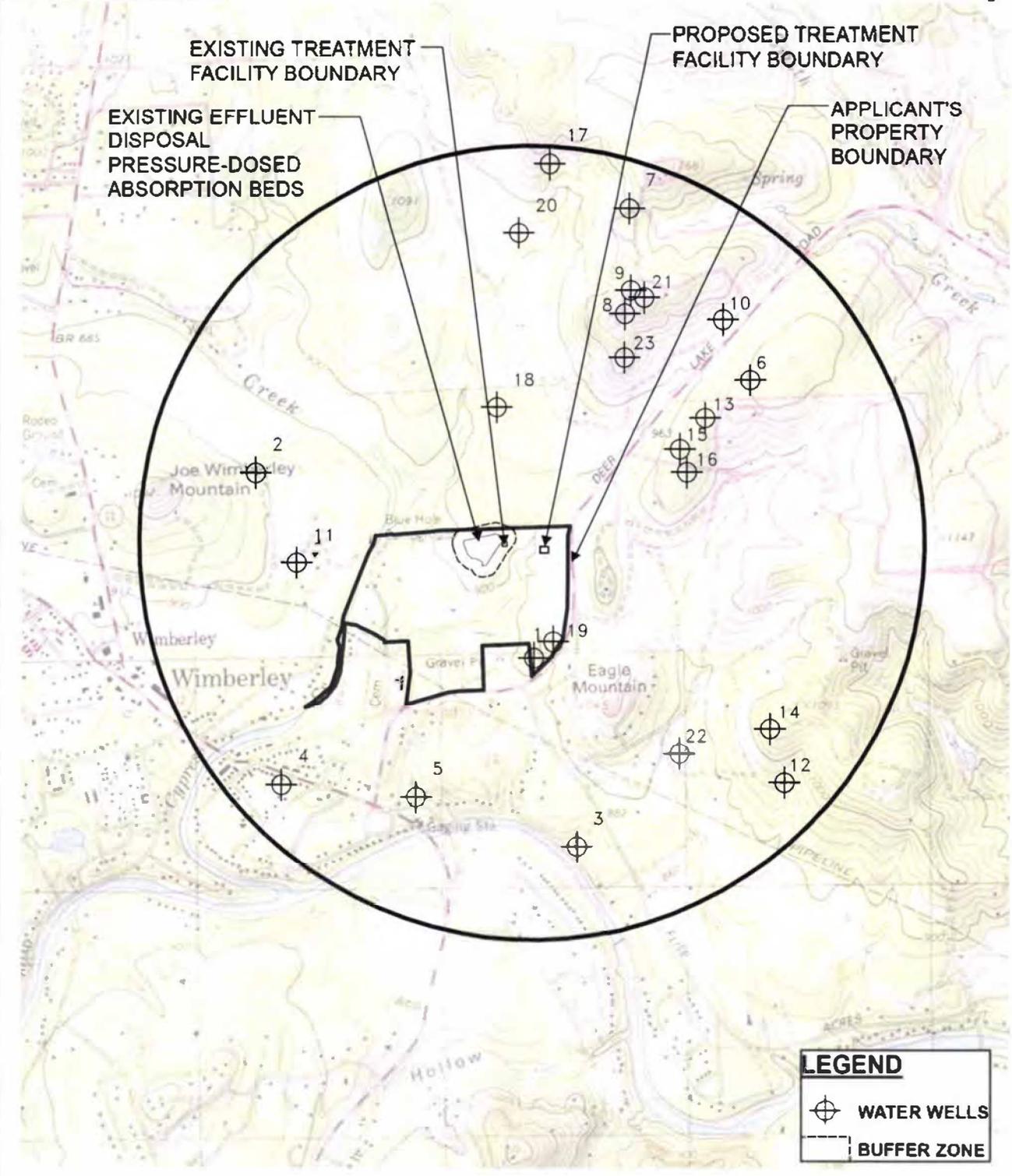
Site Name: Micro Dirt, Inc. (Texas
Organic Recovery)
TCEQ Permit or Registration Number:
42016
County: Travis

Site Name: Guadalupe-Blanco River
Authority Lockhart Wastewater
Treatment Facility
TCEQ Permit or Registration Number:
WQ001021002
County: Caldwell

The sludge is hauled to the landfills via truck by Leinneweber Services (TCEQ Permit Number 25107).



Attachment I.1
Well Map
Worksheet 3.0 – Sec. 6



LEGEND	
	WATER WELLS
	BUFFER ZONE

**ATTACHMENT I.1
 CITY OF WIMBERLEY
 THE BLUE HOLE WASTEWATER TREATMENT FACILITY
 RENEWAL PERMIT APPLICATION
 WELL MAP**



Attachment I.2
Well Map Data
Worksheet 3.0 – Sec. 6

**ATTACHMENT I.2
CITY OF WIMBERLEY
THE BLUE HOLE WASTEWATER TREATMENT FACILITY
RENEWAL PERMIT APPLICATION**

WATER WELL DATA

Map ID	Well Report ID	Well Use	Producing? Y/N	Open, cased, capped, or plugged?	Proposed Best Management Practice
1	78354	Withdrawal of Water	N	Plugged	-
2	28133	Withdrawal of Water	N	Plugged	-
3	30330	Withdrawal of Water	N	Plugged	-
4	12534	Withdrawal of Water	N	Plugged	-
5	158326	Domestic	N	Plugged	-
6	86080	Domestic	Y	Cased	-
7	103041	Domestic	Y	Cased	-
8	111291	Domestic	Y	Cased	-
9	111299	Domestic	Y	Cased	-
10	112488	Domestic	Y	Cased	-
11	118116	Domestic	Y	Cased	-
12	166538	Domestic	Y	Cased	-
13	184641	Domestic	Y	Cased	-
14	196762	Domestic	Y	Cased	-
15	254926	Domestic	Y	Cased	-
16	262588	Domestic	Y	Cased	-
17	276640	Domestic	Y	Cased	-
18	281232	Irrigation	Y	Cased	-
19	298339	Irrigation	Y	Cased	-
20	355469	Irrigation	Y	Cased	-
21	363781	Domestic	Y	Cased	-
22	377307	Domestic	Y	Cased	-
23	421994	Domestic	Y	Cased	-

STATE OF TEXAS PLUGGING REPORT for Tracking #78354

Owner: GARY STADLER	Owner Well #: No Data
Address: 25427 WINDING CREEK CT. MAGNOLIA, TX 77355	Grid #: 57-64-7
Well Location: 211 BLUE HOLE WIMBERLEY, TX 78676	Latitude: 30° 00' 00" N
Well County: Hays	Longitude: 098° 05' 02" W
	Elevation: No Data

Well Type: **Withdrawal of Water**

Drilling Information

Company: No Data	Date Drilled: No Data
Driller: UNKNOWN	License Number: No Data

	Diameter (in.)	Top Depth (ft.)	Bottom Depth (ft.)
Borehole:	4		25

Plugging Information

Date Plugged: **11/17/2011** Plugger: **AARON GLASS**
 Plug Method: **Tremmie pipe cement from bottom to top**

Casing Left in Well:			Plug(s) Placed in Well:		
Dia (in.)	Top (ft.)	Bottom (ft.)	Top (ft.)	Bottom (ft.)	Description (number of sacks & material)
4	0	15	0	25	15 CEMENT

Certification Data: The driller certified that the driller plugged this well (or the well was plugged 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 reports(s) being returned for completion and resubmittal.

Company Information: **CENTEX PUMP & SUPPLY, INC.**
 2520 HWY. 290 WEST
 DRIPPING SPRINGS, TX 78620

Driller Name: **AARON GLASS** License Number: **4227**

Comments: **No Data**

STATE OF TEXAS PLUGGING REPORT for Tracking #28133

Owner:	Willett/Curtis Ranch	Owner Well #:	No Data
Address:	1421 Castleton Rd. N. Columbus, OH 43220	Grid #:	57-64-7
Well Location:	15500 R.R. 12 Wimberley, TX 78676	Latitude:	30° 00' 25" N
Well County:	Hays	Longitude:	098° 05' 44" W
		Elevation:	No Data

Well Type: **Withdrawal of Water**

Drilling Information

Company: No Data	Date Drilled: No Data
Driller: No Data	License Number: No Data

	Diameter (in.)	Top Depth (ft.)	Bottom Depth (ft.)
Borehole:	5		167

Plugging Information

Date Plugged: **12/21/2004** Plugger:

Plug Method: **Tremmie pipe bentonite from bottom to 2 feet from surface, cement top 2 feet**

Casing Left in Well:			Plug(s) Placed in Well:		
Dia (in.)	Top (ft.)	Bottom (ft.)	Top (ft.)	Bottom (ft.)	Description (number of sacks & material)
6	0	16	0	10	3
			10	167	7 benseal

Certification Data: The driller certified that the driller plugged this well (or the well was plugged 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 reports(s) being returned for completion and resubmittal.

Company Information: **Whisenant & Lyle Water Services**
P.O. Box 525
Dripping Springs, TX 78620

Driller Name: **William McGowan** License Number: **54609**

Comments: **No Data ^AH**

STATE OF TEXAS PLUGGING REPORT for Tracking #30330

Owner: James Carruthers	Owner Well #: 1
Address: 209 Flite Acres RD Wimberley, TX 78676	Grid #: 68-08-2
Well Location: 209 Flite Acres RD Wimberley, TX 78676	Latitude: 29° 59' 35" N
Well County: Hays	Longitude: 098° 04' 56" W
	Elevation: No Data

Well Type: **Withdrawal of Water**

Drilling Information

Company: No Data	Date Drilled: No Data
Driller: na	License Number: No Data

Borehole: **No Data**

Plugging Information

Date Plugged: **3/6/2006** Plugger: **David E. Jolander**
 Plug Method: **Tremmie pipe bentonite from bottom to 2 feet from surface, cement top 2 feet**

Casing Left in Well:

Plug(s) Placed in Well:

No Data

Top (ft.)	Bottom (ft.)	Description (number of sacks & material)
0	20	6 bags neat cement
20	96	15 sacks benseal

Certification Data: The driller certified that the driller plugged this well (or the well was plugged 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 reports(s) being returned for completion and resubmittal.

Company Information: **Jolander Well Drilling**
4601 FM 2325
Wimberley, TX 78676

Driller Name: **David E. Jolander** License Number: **3053**

Comments: **No Data**

STATE OF TEXAS PLUGGING REPORT for Tracking #12534

Owner: DAVID & SANDY CALKINS	Owner Well #: No Data
Address: P.O. BOX 497 WIMBERLEY, TX 78676	Grid #: 68-08-1
Well Location: 13811 RR 12 WIMBERLEY, TX	Latitude: 29° 59' 44" N
Well County: Hays	Longitude: 098° 05' 41" W
	Elevation: No Data

Well Type: **Withdrawal of Water**

Drilling Information

Company: No Data	Date Drilled: No Data
Driller: No Data	License Number: No Data

	<i>Diameter (in.)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
Borehole:	6		28

Plugging Information

Date Plugged: **6/10/2003** Plugger: **DAVID JOLANDER**
 Plug Method: **Tremmie pipe bentonite from bottom to 2 feet from surface, cement top 2 feet**

Casing Left in Well:	Plug(s) Placed in Well:						
<table border="1" style="margin: auto;"> <tr> <th style="text-align: center;"><i>Dia (in.)</i></th> <th style="text-align: center;"><i>Top (ft.)</i></th> <th style="text-align: center;"><i>Bottom (ft.)</i></th> </tr> <tr> <td style="text-align: center;">6</td> <td style="text-align: center;">0</td> <td style="text-align: center;">28</td> </tr> </table>	<i>Dia (in.)</i>	<i>Top (ft.)</i>	<i>Bottom (ft.)</i>	6	0	28	No Data
<i>Dia (in.)</i>	<i>Top (ft.)</i>	<i>Bottom (ft.)</i>					
6	0	28					

Certification Data: The driller certified that the driller plugged this well (or the well was plugged 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 reports(s) being returned for completion and resubmittal.

Company Information: **JOLANDER WELL DRILLING**
4601 FM 2325
WIMBERLEY, TX 78676

Driller Name: **DAVID JOLANDER** License Number: **3053**

Comments: **CEMENTED OFF OLD 6" WELL, PRESSURE GROUTED 28" DEEP. 245 GAL. BENTONITE ON BOTTOM, 50 GAL. CEMENT ON TOP. ENTERED BY WLS**

STATE OF TEXAS WELL REPORT for Tracking #86080

Owner: **BEN HUNT for TIM SHAW** Owner Well #: **No Data**
Address: **1006 South Rainbow Ranch Rd.** Grid #: **57-64-8**
Wimberley, TX 78676
Well Location: **Box Canyon** Latitude: **30° 00' 36" N**
Wimberley, TX 78676 Longitude: **098° 04' 28" W**
Well County: **Hays** Elevation: **No Data**

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

Drilling Start Date: **4/24/2006** Drilling End Date: **4/24/2006**

	<i>Diameter (in.)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
Borehole:	9	0	50
	6	50	870

Drilling Method: **Air Rotary**

Borehole Completion: **Straight Wall**

	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>	<i>Description (number of sacks & material)</i>
Annular Seal Data:	0	50	17

Seal Method: **Slurry**

Sealed By: **Driller**

Distance to Property Line (ft.): **50+**

Distance to Septic Field or other
concentrated contamination (ft.): **100+**

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

Method of Verification: **Owner**

Surface Completion: **Surface Sleeve Installed**

Water Level: **No Data**

Packers: **6 PVC & Burlap at 50', 300', 500', 700', 800', 810'**

Type of Pump: **Submersible**

Well Tests: **Jetted** Yield: **100+ GPM**

Water Quality:

Strata Depth (ft.)	Water Type
30	Glen Rose

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: **Western Water Wells**
500 Southland Drive
Burnet, TX 78611

Driller Name: **Frank Glass**

License Number: **1313**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing:
BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description
0	1	Top soil
1	50	Crystal lime & clay
50	160	Blue lime & brown lime
160	315	Gray lime
315	350	Brown lime
350	475	Gray lime
475	600	Gray & brown lime
600	800	Tan lime & white
800	840	Dark brown lime
840	870	Tan lime fractures

Dia. (in.)	New/Used	Type	Setting From/To (ft.)
4.5"	New	Plastic	+2-870

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) 463-7880

STATE OF TEXAS WELL REPORT for Tracking #103041

Owner: BEN HUNT for JAMES JONES	Owner Well #: No Data
Address: 1006 S. Rainbow Ranch Rd. Wimberley, TX 78676	Grid #: 57-64-8
Well Location: 1671 FM 3237 Wimberley, TX 78676	Latitude: 30° 00' 59" N
Well County: Hays	Longitude: 098° 04' 46" W
	Elevation: No Data

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

Drilling Start Date: **12/12/2006** Drilling End Date: **12/12/2006**

	Diameter (in.)	Top Depth (ft.)	Bottom Depth (ft.)
Borehole:	9	0	50
	6	50	600

Drilling Method: **Air Rotary**

Borehole Completion: **Straight Wall**

	Top Depth (ft.)	Bottom Depth (ft.)	Description (number of sacks & material)
Annular Seal Data:	0	60	10

Seal Method: **Slurry**

Sealed By: **Western Water Wells**

Distance to Property Line (ft.): **50+**

Distance to Septic Field or other concentrated contamination (ft.): **100+**

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

Method of Verification: **Owner**

Surface Completion: **Surface Sleeve Installed**

Water Level: **No Data**

Packers: **4 PVC & Burlap at 60', 300', 450', 480'**

Type of Pump: **Submersible**

Well Tests: **Jetted Yield: 75+ GPM**

Water Quality:

Strata Depth (ft.)	Water Type
40	Glen Rose

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: **Western Water Wells LLC**
500 Southland Drive
Burnet, TX 78611

Driller Name: **Frank Glass**

License Number: **1313**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

Top (ft.)	Bottom (ft.)	Description
0	1	Top soil
1	55	Caliche
55	90	Blue lime
90	280	Gray lime
280	300	Brown lime
300	400	Gray lime
400	415	Brown lime
415	480	Gray lime
480	560	White lime porous
560	600	Brown lime

Casing:
BLANK PIPE & WELL SCREEN DATA

Dia. (in.)	New/Used	Type	Setting From/To (ft.)
4.5"	New	Plastic	+2-600 40 & 17
60'	Screen		

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**Texas Department of Licensing and Regulation
P.O. Box 12157
Austin, TX 78711
(512) 463-7880**

STATE OF TEXAS WELL REPORT for Tracking #111291

Owner: Paul Dunn	Owner Well #: No Data	
Address: PO BOX 2709 WIMBERLEY, TX 78676	Grid #: 57-64-8	
Well Location: HWY 3237 LOT#45 WIMBERLRY, TX 78676	Latitude: 30° 00' 45" N	
Well County: Hays	Longitude: 098° 04' 47" W	
	Elevation: No Data	

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

Drilling Start Date: **12/12/2006** Drilling End Date: **12/15/2006**

	<i>Diameter (in.)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
Borehole:	8	0	900

Drilling Method: **Air Rotary**

Borehole Completion: **Open Hole**

	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>	<i>Description (number of sacks & material)</i>
Annular Seal Data:	0	20	5
	520	540	5

Seal Method: **Hand Mixed**

Sealed By: **Kutscher Drilling**

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

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

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

Method of Verification: **Not Installed**

Surface Completion: **Surface Sleeve Installed**

Water Level: **380 ft. below land surface on 2006-12-15** Measurement Method: **Unknown**

Packers: **2 Rubber Packers 540' & 560'**

Type of Pump: **No Data**

Well Tests: **Estimated** Yield: **20 GPM with 520 ft. drawdown after .75 hours**

Water Quality:	Strata Depth (ft.)	Water Type
	No Data	Cow Creek

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: Kutscher Drilling, Ltd
 3810 Hunter Road
 San Marcos, TX 78666

Driller Name: Daniel Kutscher **License Number:** 54746

Comments: TWDB assigned SWN 5764808

Lithology:
 DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing:
 BLANK PIPE & WELL SCREEN DATA

From (ft)	To (ft)	Description
0	10	Top Soil
10	20	Gray Limestone
20	120	Yellow Limestone
120	140	Dark Gray Limestone
140	420	Light Gray Limestone
420	460	Light Gray Brown Limestone
460	500	Gray Limestone (30 GPM @ 470) (500 Upper/Lower Glenrose)
500	740	Light Gray Limestone
740	820	Dark Gray Limestone (Cow Creek 800-820)
820	880	White Limestone
880	900	Dary Gray Shale

Dia. (in.)	New/Used	Type	Setting From/To (ft.)
5"	ID	PVC SDR #21	0 to 560

IMPORTANT NOTICE FOR PERSONS HAVING WELLS DRILLED CONCERNING CONFIDENTIALITY

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**Texas Department of Licensing and Regulation
P.O. Box 12157
Austin, TX 78711
(512) 463-7880**

STATE OF TEXAS WELL REPORT for Tracking #111299

Owner: Paul Dunn	Owner Well #: No Data	
Address: PO BOX 2709 WIMBERLEY, TX 78676	Grid #: 57-64-8	
Well Location: HWY 3237 LOT#7 WIMBERLRY, TX 78676	Latitude: 30° 00' 48" N	Longitude: 098° 04' 46" W
Well County: Hays	Elevation: No Data	

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

Drilling Start Date: **12/27/2006** Drilling End Date: **12/29/2006**

	<i>Diameter (in.)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
Borehole:	8	0	860

Drilling Method: **Air Rotary**

Borehole Completion: **Open Hole**

	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>	<i>Description (number of sacks & material)</i>
Annular Seal Data:	0	20	5
	520	540	5

Seal Method: **Hand Mixed**

Sealed By: **Kutscher Drilling**

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

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

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

Method of Verification: **Not Installed**

Surface Completion: **Surface Sleeve Installed**

Water Level: **380 ft. below land surface on 2006-12-29** Measurement Method: **Unknown**

Packers: **Rubber 540' & 550'**

Type of Pump: **No Data**

Well Tests: **Estimated** Yield: **30 GPM with 480 ft. drawdown after unspecified hours**

Water Quality:

Strata Depth (ft.)

No Data

Water Type

Good

Chemical Analysis Made: Yes

Did the driller knowingly penetrate any strata which contained injurious constituents?: Unknown

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: Kutscher Drilling, Ltd
3810 Hunter Road
San Marcos, TX 78666

Driller Name: Daniel Kutscher License Number: 54746

Comments: TWDB assigned SWN 5764807

Lithology:

DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing:

BLANK PIPE & WELL SCREEN DATA

Table with 3 columns: Top (ft.), Bottom (ft.), Description. Rows include Top Soil, Yellow Limestone, Dark Gray Limestone, Light Gray Limestone (500 20GPM), Light Brown Limestone, Light Gray Limestone, Light Light Gray Limestone, Gray Limestone (10 GPM), Dark Gray Limestone, Light Brown Limestone, Dark Gray Schale 20GPM.

Table with 4 columns: Dia. (in.), New/Used, Type, Setting From/To (ft.). Row: 5" New PVC SDR#21 560'

IMPORTANT NOTICE FOR PERSONS HAVING WELLS DRILLED CONCERNING CONFIDENTIALITY

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**Texas Department of Licensing and Regulation
P.O. Box 12157
Austin, TX 78711
(512) 463-7880**

STATE OF TEXAS WELL REPORT for Tracking #112488

Owner: **Paul Dunn** Owner Well #: **Common Area**
Address: **WIMBERLEY, TX 78676** Grid #: **57-64-8**
Well Location: **HWY 3237 Common Area** Latitude: **30° 00' 44" N**
WIMBERLRY, TX 78676 Longitude: **098° 04' 32" W**
Well County: **Hays** Elevation: **No Data**

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

Drilling Start Date: **5/11/2007** Drilling End Date: **5/11/2007**

	<i>Diameter (in.)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
Borehole:	9	0	400

Drilling Method: **Air Rotary**

Borehole Completion: **Open Hole**

Annular Seal Data: **No Data**

Seal Method: **Hand Mixed**

Sealed By: **Kutscher Drilling**

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

Distance to Septic Field or other
concentrated contamination (ft.): **200+**

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

Method of Verification: **Wheel**

Surface Completion: **Surface Sleeve Installed**

Water Level: **210 ft. below land surface on 2007-05-11** Measurement Method: **Unknown**

Packers: **Rubber Packers 170' and 190'**

Type of Pump: **Submersible**

Well Tests: **Estimated** Yield: **8-10 GPM with 190 ft. drawdown after .75 hours**

Water Quality:

<i>Strata Depth (ft.)</i>	<i>Water Type</i>
No Data	Good

Chemical Analysis Made: **Unknown**

Did the driller knowingly penetrate any strata which contained injurious constituents?: **Unknown**

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: **Kutscher Drilling, Ltd**
3810 Hunter Road
San Marcos, TX 78666

Driller Name: **Daniel Kutscher** License Number: **54746**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing:
BLANK PIPE & WELL SCREEN DATA

<i>Top (ft.)</i>	<i>Bottom (ft.)</i>	<i>Description</i>	<i>Dia. (in.)</i>	<i>New/Used</i>	<i>Type</i>	<i>Setting From/To (ft.)</i>
0	10	Yellow Clay	4.5"	N	PVC	SDR# 17 0 to 200'
10	20	Gray Clay				
20	30	Yellow Clay				
30	100	Gray Limestone & Clay				
100	180	Light Gray Limestone & Clay				
180	220	Gray Limestone & Clay				
220	300	Light Gray Limestone & Clay				
300	400	Gray Limestone & Clay				

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STATE OF TEXAS WELL REPORT for Tracking #112488

Owner:	Paul Dunn	Owner Well #:	Common Area
Address:	WIMBERLEY, TX 78676	Grid #:	57-64-8
Well Location:	HWY 3237 Common Area WIMBERLRY, TX 78676	Latitude:	30° 00' 44" N
Well County:	Hays	Longitude:	098° 04' 32" W
		Elevation:	No Data

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

Drilling Start Date: **5/11/2007** Drilling End Date: **5/11/2007**

	<i>Diameter (in.)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
Borehole:	9	0	400

Drilling Method: **Air Rotary**

Borehole Completion: **Open Hole**

Annular Seal Data: **No Data**

Seal Method: **Hand Mixed**

Sealed By: **Kutscher Drilling**

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

Distance to Septic Field or other
concentrated contamination (ft.): **200+**

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

Method of Verification: **Wheel**

Surface Completion: **Surface Sleeve Installed**

Water Level: **210 ft. below land surface on 2007-05-11** Measurement Method: **Unknown**

Packers: **Rubber Packers 170' and 190'**

Type of Pump: **Submersible**

Well Tests: **Estimated** Yield: **8-10 GPM with 190 ft. drawdown after .75 hours**

	<i>Strata Depth (ft.)</i>	<i>Water Type</i>
Water Quality:	No Data	Good

Chemical Analysis Made: **Unknown**

Did the driller knowingly penetrate any strata which contained injurious constituents?: **Unknown**

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: **Kutscher Drilling, Ltd**
3810 Hunter Road
San Marcos, TX 78666

Driller Name: **Daniel Kutscher** License Number: **54746**

Comments: **No Data**

<i>Lithology:</i>			<i>Casing:</i>			
DESCRIPTION & COLOR OF FORMATION MATERIAL			BLANK PIPE & WELL SCREEN DATA			
<i>Top (ft.)</i>	<i>Bottom (ft.)</i>	<i>Description</i>	<i>Dia. (in.)</i>	<i>New/Used</i>	<i>Type</i>	<i>Setting From/To (ft.)</i>

<i>Top (ft.)</i>	<i>Bottom (ft.)</i>	<i>Description</i>
0	10	Yellow Clay
10	20	Gray Clay
20	30	Yellow Clay
30	100	Gray Limestone & Clay
100	180	Light Gray Limestone & Clay
180	220	Gray Limestone & Clay
220	300	Light Gray Limestone & Clay
300	400	Gray Limestone & Clay

<i>Dia. (in.)</i>	<i>New/Used</i>	<i>Type</i>	<i>Setting From/To (ft.)</i>
4.5"	N	PVC SDR# 17	0 to 200'

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STATE OF TEXAS WELL REPORT for Tracking #118116

Owner: Scott Johnson	Owner Well #: No Data	
Address: 602 Sabino Ranch Wimberley, TX 78676	Grid #: 57-64-7	
Well Location: Scott Johnson Wimberley, TX 78676	Latitude: 30° 00' 13" N	
Well County: Hays	Longitude: 098° 05' 38" W	
	Elevation: No Data	
Type of Work: New Well		Proposed Use: Domestic

Drilling Start Date: **3/13/2007** Drilling End Date: **3/16/2007**

	Diameter (in.)	Top Depth (ft.)	Bottom Depth (ft.)
Borehole:	8	0	760

Drilling Method: **Air Rotary**

Borehole Completion: **Open Hole**

	Top Depth (ft.)	Bottom Depth (ft.)	Description (number of sacks & material)
Annular Seal Data:	0	20	Cement
	160	180	Cement

Seal Method: **Hand Mixed**

Sealed By: **Kutscher Drilling**

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

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: **180 ft. below land surface on 2007-03-16** Measurement Method: **Unknown**

Packers: **Rubber Packers 180' and 200'**

Type of Pump: **Submersible**

Well Tests: **Estimated** Yield: **30 GPM with 280 ft. drawdown after .75 hours**

	Top Depth (ft.)	Bottom Depth (ft.)
Plug Information:	760' to 514'	

Water Quality:

Strata Depth (ft.)	Water Type
No Data	Good

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: **Kutscher Drilling, Ltd**
3810 Hunter Road
San Marcos, TX 78666

Driller Name: **Daniel Kutscher**

License Number: **54746**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing:
BLANK PIPE & WELL SCREEN DATA

From (ft)	To (ft)	Description
0	20	Yellow Limestone
20	60	Blue Limestone (5GPM at 40)
60	90	Light Brown Limestone
90	240	Blue Limestone (120-140 25 GPM)
240	270	Light Brown Limestone
270	440	Light Gray Limestone (440 Water)
440	470	Light Brown
470	520	Dark Gray
520	580	Green Shell
580	680	Dark Gray Limestone
680	720	Light Gray Limestone
720	760	Tan With Red Limestone (Some Water)

Dia. (in.)	New/Used	Type	Setting From/To (ft.)
5"	New	SDR#21 PVC	0 to 220

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P.O. Box 12157
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(512) 463-7880**

STATE OF TEXAS WELL REPORT for Tracking #166538

Owner: Kevin McGar	Owner Well #: 1	
Address: 412 Buttercup Lane Wimberley, TX 78676	Grid #: 68-08-2	
Well Location: 412 Buttercup Lane Wimberley, TX 78676	Latitude: 29° 59' 43" N	
Well County: Hays	Longitude: 098° 04' 24" W	
	Elevation: No Data	

Type of Work: New Well	Proposed Use: Domestic
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Drilling Start Date: **1/19/2009** Drilling End Date: **1/20/2009**

	<i>Diameter (in.)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
Borehole:	9.875	0	20
	6.875	20	460

Drilling Method: **Air Rotary**

Borehole Completion: **Open Hole**

	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>	<i>Description (number of sacks & material)</i>
Annular Seal Data:	0	20	9 sacks neat ce

Seal Method: **Pumped**

Sealed By: **Driller**

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

Distance to Septic Field or other
concentrated contamination (ft.): **290**

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

Method of Verification: **tape**

Surface Completion: **Surface Sleeve Installed**

Water Level: **292 ft. below land surface on 2009-01-20** Measurement Method: **Unknown**

Packers: **rubber 20ft**

Type of Pump: **No Data**

Well Tests: **Estimated** **Yield: 12 GPM**

Water Quality:

Strata Depth (ft.)	Water Type
2	good

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: **Jolander Well Drilling Co**
4601 FM 2325
Wimberley, TX 78676

Driller Name: **David E. Jolander**

License Number: **3053**

Apprentice Name: **Kurtis B. Jolander**

Apprentice Number: **58081**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing:
BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description
0	4	soft caliche
4	21	brown caliche
21	109	hard dark gray limestone
109	111	hard dark gray clay
111	347	real white limestone
347	349	brown limestone broken
349	460	real hard white limestone

Dia. (in.)	New/Used	Type	Setting From/To (ft.)
4 1/2	new	pvc	+1-460
4 1/2	new	pvc screen	430-450

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STATE OF TEXAS WELL REPORT for Tracking #184641

Owner: Sierra Classic Homes	Owner Well #: No Data
Address: 722 Pin Oak, Suite 205 Kyle, TX 77494	Grid #: 57-64-8
Well Location: 1530 FM 3237 Wimberley, TX 78676	Latitude: 30° 00' 31" N
Well County: Hays	Longitude: 098° 04' 35" W
	Elevation: No Data

Type of Work: New Well	Proposed Use: Domestic
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Drilling Start Date: **8/13/2004** Drilling End Date: **8/16/2004**

	<i>Diameter (in.)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
Borehole:	8	0	540

Drilling Method: **Air Rotary**

Borehole Completion: **Open Hole**

	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>	<i>Description (number of sacks & material)</i>
Annular Seal Data:	0	30	6
	265	285	4

Seal Method: **Hand Mixed**

Sealed By: **Driller**

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

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: **240 ft. below land surface on 2004-08-16** Measurement Method: **Unknown**

Packers: **2 rubber packers, 285' and 300'**

Type of Pump: **No Data**

Well Tests: **Estimated** Yield: **10 GPM with 300 ft. drawdown after .75 hours**

Water Quality:	Strata Depth (ft.)	Water Type
	No Data	good

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: **Kutscher Drilling Ltd**
3810 Hunter Road
San Marcos, TX 78666

Driller Name: **Daniel Kutscher** License Number: **54746**

Comments: **\$scd**

Lithology: DESCRIPTION & COLOR OF FORMATION MATERIAL			Casing: BLANK PIPE & WELL SCREEN DATA			
Top (ft.)	Bottom (ft.)	Description	Dia. (in.)	New/Used	Type	Setting From/To (ft.)
0	8	caliche	5 N		PVC SDR21	0-300
8	55	gray limestone				
55	110	tan broken limestone/yellow clay				
110	240	gray limestone/shale				
240	270	broken limestone (water)				
270	470	gray limestone/shale				
470	540	broken limestone (water)				

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Texas Department of Licensing and Regulation
P.O. Box 12157
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(512) 463-7880

STATE OF TEXAS WELL REPORT for Tracking #196762

Owner:	FRED & BARBARA STOCKBAUER	Owner Well #:	No Data
Address:	7506 LATTA DRIVE AUSTIN, TX 78749	Grid #:	68-08-2
Well Location:	1100 BUTTERCUP DRIVE WIMBERLEY, TX 78676	Latitude:	29° 59' 50" N
Well County:	Hays	Longitude:	098° 04' 26" W
		Elevation:	No Data

Type of Work: New Well	Proposed Use: Domestic
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Drilling Start Date: **9/30/2009** Drilling End Date: **9/30/2009**

	Diameter (in.)	Top Depth (ft.)	Bottom Depth (ft.)
Borehole:	8.75	0	50
	6.5	50	650

Drilling Method: **Air Rotary**

Borehole Completion: **CASED**

	Top Depth (ft.)	Bottom Depth (ft.)	Description (number of sacks & material)
Annular Seal Data:	0	50	4 VOLCLAY
	0	50	6 CEMENT

Seal Method: **Slurry**

Sealed By: **Driller**

Distance to Property Line (ft.): **N/A**

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

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

Method of Verification: **WELL DRILLED FIRST**

Surface Completion: **Surface Sleeve Installed**

Water Level: **387.6 ft. below land surface on 2009-10-07** Measurement Method: **Unknown**

Packers: **4 BURLAP,PVC,RUBBER 50',460',480',500'**

Type of Pump: **Submersible**

Well Tests: **Jetted** **Yield: 55 GPM**

Water Quality:	Strata Depth (ft.)	Water Type
	60	MIDDLE TRINITY

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: **CENTRAL TEXAS DRILLING, INC.**
2520 HWY. 290 WEST
DRIPPING SPRINGS, TX 78620

Driller Name: **AARON GLASS** License Number: **4227**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing:
BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description
0	2	ROCK & TOP SOIL
2	90	CALICHE
90	95	BLUE/GRAY LIMESTONE
95	210	GRAY LIMESTONE
210	350	GRAY & TAN LIMESTONE
350	380	TAN LIMESTONE
380	435	GRAY/TAN LIMESTONE
435	460	GRAY LIMESTONE W/CLAY
460	490	TAN/GRAY/BROWN LIMESTONE
490	530	GRAY/TAN LIMESTONE
530	585	TAN/WHITE LIMESTONE
585	620	GRAY/TAN LIMESTONE
620	625	TAN/BROWN LIMESTONE
625	645	BROWN LIMESTONE
645	650	TAN LIMESTONE

Dia. (in.)	New/Used	Type	Setting From/To (ft.)
5"	N	SDR17 PVC	+3 TO 650
5"	N	SDR17 PVC SLOT	540 TO 560 .032
5"	N	SDR17 PVC SLOT	580 TO 600 .032
5"	N	SDR17 PVC SLOT	620 TO 640 .032

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STATE OF TEXAS WELL REPORT for Tracking #254926

Owner: Andrea Guardione / Sierra Classic	Owner Well #: No Data	
Address: 121111 RR #12 Wimberley, TX 78676	Grid #: 57-64-8	
Well Location: 201 Box Canyon Wimberley, TX 78676	Latitude: 30° 00' 27" N	
Well County: Hays	Longitude: 098° 04' 39" W	
	Elevation: No Data	
Type of Work: New Well		Proposed Use: Domestic

Drilling Start Date: **11/11/2005** Drilling End Date: **11/14/2005**

	Diameter (in.)	Top Depth (ft.)	Bottom Depth (ft.)
Borehole:	8	0	500

Drilling Method: **Air Rotary**

Borehole Completion: **Open Hole**

	Top Depth (ft.)	Bottom Depth (ft.)	Description (number of sacks & material)
Annular Seal Data:	0	30	5
	225	245	5

Seal Method: **Hand Mixed**

Sealed By: **Driller**

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

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

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

Method of Verification: **septic not installed**

Surface Completion: **Surface Sleeve Installed**

Water Level: **250 ft. below land surface on 2005-11-14** Measurement Method: **Unknown**

Packers: **2 Rubber Packers 270 & 245 feet**

Type of Pump: **No Data**

Well Tests: **Estimated** Yield: **5 - 6 GPM with 250 ft. drawdown after 0.75 hours**

Water Quality:

Strata Depth (ft.)	Water Type
No Data	Good

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: **Kutscher Drilling Ltd**
3810 Hunter Road
San Marcos, TX 78666

Driller Name: **Daniel Kutscher**

License Number: **54746**

Comments: **\$mew**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing:
BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description
0	10	Top Soil / Broken Rock
10	20	Yellow Limestone
20	30	Black
30	80	Yellow Limestone
80	200	Blue / Gray
200	260	Gray Clay
260	320	Gray (Glenrose)
320	360	Gray Clay
360	440	Gray (Glenrose)
440	460	Water 3-6 GPM
460	500	Water 5-6 GPM

Dia. (in.)	New/Used	Type	Setting From/To (ft.)
5	New	PVC SDR#21	0 - 300

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STATE OF TEXAS WELL REPORT for Tracking #262588

Owner: Jerry Langston	Owner Well #: 1	
Address: PO Box 52 Wimberley, TX 78676	Grid #: 57-64-8	
Well Location: 222 Box Canyon Wimberley, TX 78676	Latitude: 30° 00' 24" N	
Well County: Hays	Longitude: 098° 04' 38" W	
	Elevation: 1043 ft. above sea level	

Type of Work: New Well	Proposed Use: Domestic
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Drilling Start Date: **5/9/2011** Drilling End Date: **6/18/2011**

	<i>Diameter (in.)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
Borehole:	7.875	0	500

Drilling Method: **Air Rotary**

Borehole Completion: **Straight Wall**

	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>	<i>Description (number of sacks & material)</i>
Annular Seal Data:	0	60	14ptld/2hplg

Seal Method: **Pressure Grout**

Sealed By: **Driller**

Distance to Property Line (ft.): **70+**

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

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

Method of Verification: **measured**

Surface Completion: **Surface Sleeve Installed**

Water Level: **289 ft. below land surface on 2011-05-12** Measurement Method: **Unknown**

Packers: **6Mil poly 60'**
6Mil poly 240'
6Mil poly -Shale packer 440'

Type of Pump: **Submersible** Pump Depth (ft.): **440**

Well Tests: **Jetted** Yield: **20+ GPM**

Water Quality:

Strata Depth (ft.)

440-500

Water Type

Good

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: Whisenant & Lyle Water Services, Inc.

PO Box 525
Dripping Springs, TX 78620

Driller Name: Martin Lingle

License Number: 54813

Comments: SWN 5764817 assigned by TWDB 8/6/14.

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing:
BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description
1	10	Brown limestone
10	12	Brown sand sandstone
12	20	Brown Limestone
20	22	Gray limestone
22	23	Brown limestone
23	27	Gray Shale
27	37	Brown limestone
37	41	Tan limestone
41	65	Brown limestone
65	67	Brown gray limestone
67	238	Gray limestone
238	257	Tan Brown limestone
257	400	Light gray limestone
400	430	Dark gray limestone
430	440	Tan limestone
440	500	Brown tan white limestone

Dia. (in.)	New/Used	Type	Setting From/To (ft.)
4.5	New	PVC-SDR 171B	+2-440'
4.5	New	PVC-17-slotted .035	440'-500'

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) 463-7880**

STATE OF TEXAS WELL REPORT for Tracking #276640

Owner:	VAN WHITFIELD/ENDRES JOB	Owner Well #:	No Data
Address:	19027 WINDSOR LAKE DRIVE HOUSTON, TX 77094	Grid #:	57-64-8
Well Location:	1370 CALICHE RD. WIMBERLEY, TX 78676	Latitude:	30° 01' 05" N
Well County:	Hays	Longitude:	098° 04' 58" W
		Elevation:	No Data
Type of Work: New Well		Proposed Use: Domestic	

Drilling Start Date: **1/4/2012** Drilling End Date: **1/4/2012**

	Diameter (in.)	Top Depth (ft.)	Bottom Depth (ft.)
Borehole:	9	0	100
	6.5	100	450

Drilling Method: **Air Rotary**

Borehole Completion: **CASED**

	Top Depth (ft.)	Bottom Depth (ft.)	Description (number of sacks & material)
Annular Seal Data:	0	100	12 CEMENT
	0	100	4 VOLCLAY

Seal Method: **PRESSURE TRIMMIE
CEMENT**

Sealed By: **Driller**

Distance to Property Line (ft.): **N/A**

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

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

Method of Verification: **WELL DRILLED
FIRST**

Surface Completion: **Surface Sleeve Installed**

Water Level: **252 ft. below land surface on 2012-01-04** Measurement Method: **Unknown**

Packers: **4 BURLAP, PVC 100',350',370',390'**

Type of Pump: **Submersible**

Well Tests: **Jetted** **Yield: 100+ GPM**

Water Quality:

Strata Depth (ft.)	Water Type
60	MIDDLE TRINITY

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: **CENTEX PUMP & SUPPLY, INC.**
2520 HWY. 290 WEST
DRIPPING SPRINGS, TX 78620

Driller Name: **AARON GLASS**

License Number: **4227**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing:
BLANK PIPE & WELL SCREEN DATA

From (ft)	To (ft)	Description
0-2		TOP SOIL
2-22		CALICHE
22-25		BLUE/GRAY LIMESTONE
25-170		GRAY LIMESTONE
170-250		GRAY/TAN LIMESTONE
250-280		TAN/GRAY LIMESTONE
280-320		TAN/GRAY LIMESTONE W/CLAY
320-340		GRAY LIMESTONE
340-350		TAN LIMESTONE
350-390		GRAY/TAN LIMESTONE W/CLAY
		STRIPS
390-400		GRAY/TAN LIMESTONE
400-450		TAN LIMESTONE

Dia. (in.)	New/Used	Type	Setting From/To (ft.)
5"	N	SDR17 PVC	+3 TO 450
5"	N	SDR17 PVC SLOT	410 TO 450 .032

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**Texas Department of Licensing and Regulation
P.O. Box 12157
Austin, TX 78711
(512) 463-7880**

STATE OF TEXAS WELL REPORT for Tracking #281232

Owner: NAPD	Owner Well #: 1	
Address: P.O. Box 1988 Wimberley, TX 78676	Grid #: 57-64-7	
Well Location: 14895 Winters Mill Pkwy. Wimberley, TX 78676	Latitude: 30° 00' 33" N	
Well County: Hays	Longitude: 098° 05' 07" W	
	Elevation: 923 ft. above sea level	

Type of Work: Reconditioning	Proposed Use: Irrigation
-------------------------------------	---------------------------------

Drilling Start Date: **2/7/2012** Drilling End Date: **2/9/2012**

	Diameter (in.)	Top Depth (ft.)	Bottom Depth (ft.)
Borehole:	10	0	560

Drilling Method: **Air Rotary**

Borehole Completion: **Straight Wall**

	Top Depth (ft.)	Bottom Depth (ft.)	Description (number of sacks & material)
Annular Seal Data:	0	60	2h1pg21pt1nd

Seal Method: **Pos. Displacement**

Sealed By: **Driller**

Distance to Property Line (ft.): **500+**

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: **170 ft. below land surface on 2012-02-08** Measurement Method: **Unknown**

Packers: **No Data**

Type of Pump: **Submersible** Pump Depth (ft.): **483**

Well Tests: **Jetted** Yield: **100+ GPM**

	<i>Strata Depth (ft.)</i>	<i>Water Type</i>
Water Quality:	480/560	Good

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: **Whisenant & Lyle Water Services**
P.O. Box 525
Dripping Springs, TX 78620

Driller Name: **Martin Lingle** **License Number:** **54813**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing:
BLANK PIPE & WELL SCREEN DATA

<i>Top (ft.)</i>	<i>Bottom (ft.)</i>	<i>Description</i>
0	3	topsoil
3	5	white limestone
5	18	white brown limestone
18	19	brown clay
19	21	brown white limestone
21	25	dark brown limestone
25	35	white gray limestone
35	38	dark limestone
38	90	light gray limestone
90	110	light gray white limestone
110	160	gray limestone
160	245	dark gray limestone
245	295	light gray limestone
295	345	white gray limestone
345	390	white red clay
390	460	red tan gray limestone
400	560	white tan limestone

<i>Dia. (in.)</i>	<i>New/Used</i>	<i>Type</i>	<i>Setting From/To (ft.)</i>
6.9	New	PVC-SDR 171B +2/480	
6.9	New	PVC-17 Slotted .035 480/560	

IMPORTANT NOTICE FOR PERSONS HAVING WELLS DRILLED CONCERNING CONFIDENTIALITY

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Texas Department of Licensing and Regulation
P.O. Box 12157
Austin, TX 78711
(512) 463-7880

STATE OF TEXAS WELL REPORT for Tracking #298339

Owner:	City of Wimberley	Owner Well #:	No Data
Address:	P.O. Box 2027 Wimberley, TX 78676	Grid #:	57-64-8
Well Location:	221 Stillwater Wimberley, TX 78676	Latitude:	30° 00' 02" N
Well County:	Hays	Longitude:	098° 04' 59" W
		Elevation:	No Data
Type of Work: Reconditioning		Proposed Use: Irrigation	

Drilling Start Date: **6/29/2012** Drilling End Date: **7/12/2012**

Borehole: **No Data**

Drilling Method:

Borehole Completion: **Straight Wall**

	Top Depth (ft.)	Bottom Depth (ft.)	Description (number of sacks & material)
Annular Seal Data:	-2	20	6Prtd
	280	315	1bns13prtln

Seal Method: **Pressure Grout**

Sealed By: **Driller**

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

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

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

Method of Verification: **No Data**

Surface Completion: **Unknown**

Water Level: **131 ft. below land surface on No Data** Measurement Method: **Unknown**

Packers: **K-Packer/6MIL Poly 315'**

Type of Pump: **Submersible** Pump Depth (ft.): **378**

Well Tests: **No Test Data Specified**

	<i>Strata Depth (ft.)</i>	<i>Water Type</i>
Water Quality:	360/390	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: **Whisenant & Lyle Water Services**
P.O. Box 525
Dripping Springs, TX 78620

Driller Name: **Fred Smith** **License Number:** **54437**

Comments: **This is state well #5764806.**
Amended 10-3-12 Ref#10742

Report Amended on 10/3/2012 by Request #10742

<i>Lithology:</i>		<i>Casing:</i>					
DESCRIPTION & COLOR OF FORMATION MATERIAL		BLANK PIPE & WELL SCREEN DATA					
<i>From (ft)</i>	<i>To (ft)</i>	<i>Description</i>		<i>Dia. (in.)</i>	<i>New/Used</i>	<i>Type</i>	<i>Setting From/To (ft.)</i>
No Data		New PVC-SDR 17IB +2'1320'					

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Texas Department of Licensing and Regulation
P.O. Box 12157
Austin, TX 78711
(512) 463-7880

STATE OF TEXAS WELL REPORT for Tracking #355469

Owner: Ben Hunt/ Joseph Bryant	Owner Well #: No Data
Address: 14896 Winters Mill Pkwy Wimberly, TX 78676	Grid #: 57-64-7
Well Location: 14896 Winters Mill Pkwy Wimberly, TX 78676	Latitude: 30° 00' 56" N
Well County: Hays	Longitude: 098° 05' 03" W
	Elevation: No Data

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

Drilling Start Date: **4/1/2012** Drilling End Date: **4/1/2012**

	Diameter (in.)	Top Depth (ft.)	Bottom Depth (ft.)
Borehole:	12	0	100
	9	100	500

Drilling Method: **Air Rotary**

Borehole Completion: **Straight Wall**

	Top Depth (ft.)	Bottom Depth (ft.)	Description (number of sacks & material)
Annular Seal Data:	0	100	25 Cement

Seal Method: **Pressure Trimme**

Distance to Property Line (ft.): **50+**

Sealed By: **Frank Glass- Associated
Drilling**

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

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

Method of Verification: **Owner**

Surface Completion: **Surface Sleeve Installed**

Water Level: **No Data**

Packers: **PVC & Burlap 100 & 400'**

Type of Pump: **Submersible**

Well Tests: **Jetted Yield: 200+ GPM**

Water Quality:

Strata Depth (ft.)
40

Water Type

Glen Rose

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: **Associated Drilling**
P.O. Box 673
Dripping Springs, TX 78620

Driller Name: **Frankie Glass: Assoc Drilling** License Number: **1313**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing:
BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description
0	3	Topsoil
3	25	Caliche
25	75	Gray Limestone
75	190	Brown & Gray Limestone
190	200	Dark Gray Limestone
200	340	Gray & Brown Limestone
340	410	Brown Limestone
410	500	White & Tan Limestone

Dia. (in.)	New/Used	Type	Setting From/To (ft.)
6.9	New	PVC	+2-460 SDR-17
6.9	New	Perf PVC	460-500 SDR-17

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P.O. Box 12157
Austin, TX 78711
(512) 463-7880

STATE OF TEXAS WELL REPORT for Tracking #363781

Owner:	Dale and Sandy Faulkner	Owner Well #:	No Data
Address:	1914 Jourdan Way Sugar Land, TX 77479	Grid #:	57-64-8
Well Location:	445 Inspiration Tr. Wimberley, TX 78676	Latitude:	30° 00' 47" N
Well County:	Hays	Longitude:	098° 04' 44" W
		Elevation:	No Data

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

Drilling Start Date: **4/29/2014** Drilling End Date: **4/29/2014**

	Diameter (in.)	Top Depth (ft.)	Bottom Depth (ft.)
Borehole:	9	0	50
	6.25	50	650

Drilling Method: **Air Rotary**
 Borehole Completion: **cased; Straight Wall**

	Top Depth (ft.)	Bottom Depth (ft.)	Description (number of sacks & material)
Annular Seal Data:	1	50	5cmt 3gel

Seal Method: **hand poured**

Sealed By: **ADC**

Distance to Property Line (ft.): **50+**

Distance to Septic Field or other concentrated contamination (ft.): **100+**

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

Method of Verification: **owner / tape**

Surface Completion: **Surface Sleeve Installed**

Water Level: **349 ft. below land surface on 2014-04-29** Measurement Method: **Unknown**

Packers: **burlap,plastic,rubber @ 510,490,50**

Type of Pump: **Submersible** Pump Depth (ft.): **0**

Well Tests: **Jetted** Yield: **50-60 GPM**

	Top Depth (ft.)	Bottom Depth (ft.)
Plug Information:	n/a	

STATE OF TEXAS WELL REPORT for Tracking #377307

Owner: Will Naylor	Owner Well #: 1	
Address: 370 Buttercup Lane Wimberley, TX 78676	Grid #: 68-08-2	
Well Location: 370 Buttercup Lane Winberley, TX 78676	Latitude: 29° 59' 47" N	
Well County: Hays	Longitude: 098° 04' 40" W	
	Elevation: No Data	

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

Drilling Start Date: **9/26/2014** Drilling End Date: **9/30/2014**

	Diameter (in.)	Top Depth (ft.)	Bottom Depth (ft.)
Borehole:	9.875	0	80
	7	80	420

Drilling Method: **Air Rotary**

Borehole Completion: **Open Hole**

	Top Depth (ft.)	Bottom Depth (ft.)	Description (number of sacks & material)
Annular Seal Data:	-1	60	9 bags benseal
	60	80	6 bags cement

Seal Method: **Pumped**

Sealed By: **David E Jolander**

Distance to Property Line (ft.): **80**

Distance to Septic Field or other concentrated contamination (ft.): **2000**

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

Method of Verification: **tape**

Surface Completion: **Surface Slab Installed**

Water Level: **281 ft. below land surface on 2014-09-30** Measurement Method: **Unknown**

Packers: **rubber 80 ft**

Type of Pump: **Submersible**

Well Tests: **Estimated** Yield: **14 GPM**

STATE OF TEXAS WELL REPORT for Tracking #421994

Owner: Ben Fuchs	Owner Well #: No Data
Address: 205 Blanco Dr Wimberley, TX 78676	Grid #: 57-64-8
Well Location: 444 Lomax Ln Wimberley, TX 78676	Latitude: 30° 00' 39.3" N
Well County: Hays	Longitude: 098° 04' 47.2" W
	Elevation: No Data

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

Drilling Start Date: **4/22/2016** Drilling End Date: **4/25/2016**

	<i>Diameter (in.)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
Borehole:	9.78	0	60
	6.34	60	400

Drilling Method: **Air Rotary**

Borehole Completion: **Open Hole**

Annular Seal Data: **No Data**

Seal Method: **Tremie**

Sealed By: **Driller**

Variance Number: **no**

Distance to Property Line (ft.): **120**

Distance to Septic Field or other concentrated contamination (ft.): **2000**

Distance to Septic Tank (ft.): **2000**

Method of Verification: **tape**

Surface Completion: **Surface Sleeve Installed**

Surface Completion by Driller

Water Level: **150 ft. below land surface on 2016-04-25** Measurement Method: **Electric Line**

Packers: **Rubber at 60 ft.
Rubber at 210 ft.**

Type of Pump: **No Data**

Well Tests: **Estimated Yield: 12 GPM**

Water Quality:

Strata Depth (ft.)	Water Type
20	good

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: Jolander Well Drilling Co
4601 FM 2325
Wimberley, TX 78676

Driller Name: David E. Jolander

License Number: 3053

Comments: No Data

Lithology:

DESCRIPTION & COLOR OF FORMATION MATERIAL

Top (ft.)	Bottom (ft.)	Description
0	1	top soil
1	4	cap rock
4	21	caliche
21	45	gray limestone
45	60	tan limestone
60	140	light gray limestone
140	200	tan limestone
200	360	light gray limestone
360	400	dark gray limestone

Casing:

BLANK PIPE & WELL SCREEN DATA

Dia (in.)	Type	Material	Sch./Gage	Top (ft.)	Bottom (ft.)
5	Blank	New Plastic (PVC)	40	1	400
5	Screen	New Plastic (PVC)	40	340	400

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P.O. Box 12157
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(512) 463-7880



Attachment J
Groundwater Technical Report
Worksheet 3.0 – Sec. 7

ATTACHMENT J

CITY OF WIMBERLEY THE BLUE HOLE WASTEWATER TREATMENT FACILITY TPDES PERMIT RENEWAL

GROUNDWATER QUALITY TECHNICAL REPORT

The Blue Hole Wastewater Treatment Facility (WWTF) discharges to a subsurface disposal area with a maximum depth of 7.5 feet below grade. The WWTF is authorized to dispose of up to 15,000 gallons of effluent per day in the current phase of operation (i.e., Existing/Interim I Phase). This permit amendment will reduce the daily disposal volume to a maximum of 9,450 gallons per day for the current phase. This equates to a maximum of 0.1 gallons per square foot per day.

Five water wells are located within a 0.5 mile radius of the disposal area. These wells are identified in the table below. The Map ID column corresponds with the map in Application Attachment I.1. Well drillers logs and information for the wells are located in Application Attachment I.2. There are no monitoring wells located on or around the site, thus groundwater analyses are not available.

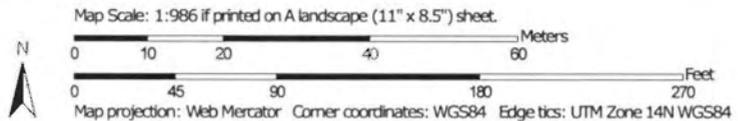
Map ID	Well Report ID	Well Use	Producing? Y/N	Open, cased, capped, or plugged?
1	78354	Withdrawal of Water	N	Plugged
15	254926	Domestic	Y	Cased
16	262588	Domestic	Y	Cased
18	281232	Irrigation	Y	Cased
19	298339	Irrigation	Y	Cased

The WWTF does not have effluent storage ponds or treatment ponds. The WWTF is required to use soil moisture sensors in the disposal area to limit disposal during periods of saturation from precipitation.



Attachment K.1
Soil Map
Worksheet 3.0 – Sec. 8.A

ATTACHMENT K.1
CITY OF WIMBERLEY
THE BLUE HOLE WASTEWATER TREATMENT FACILITY
SOIL MAP



**ATTACHMENT K.1
CITY OF WIMBERLEY
THE BLUE HOLE WASTEWATER TREATMENT FACILITY
SOIL MAP**

MAP LEGEND

Area of Interest (AOI)		 Spoil Area	
 Area of Interest (AOI)		 Stony Spot	
Soils		 Very Stony Spot	
 Soil Map Unit Polygons		 Wet Spot	
 Soil Map Unit Lines		 Other	
 Soil Map Unit Points		 Special Line Features	
Special Point Features		Water Features	
 Blowout		 Streams and Canals	
 Borrow Pit		Transportation	
 Clay Spot		 Rails	
 Closed Depression		 Interstate Highways	
 Gravel Pit		 US Routes	
 Gravelly Spot		 Major Roads	
 Landfill		 Local Roads	
 Lava Flow		Background	
 Marsh or swamp		 Aerial Photography	
 Mine or Quarry			
 Miscellaneous Water			
 Perennial Water			
 Rock Outcrop			
 Saline Spot			
 Sandy Spot			
 Severely Eroded Spot			
 Sinkhole			
 Slide or Slip			
 Sodic Spot			

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:20,000.

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: Comal and Hays Counties, Texas
Survey Area Data: Version 12, Sep 22, 2016

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

Date(s) aerial images were photographed: Feb 6, 2011—Apr 18, 2011

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.

ATTACHMENT K.1
CITY OF WIMBERLEY
THE BLUE HOLE WASTEWATER TREATMENT FACILITY
SOIL MAP

Map Unit Legend

Comal and Hays Counties, Texas (TX604)			
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
BID	Brackett-Rock outcrop-Comfort complex, 1 to 8 percent slopes	0.6	20.5%
GrC	Gruene clay, 1 to 5 percent slopes	2.4	79.5%
Totals for Area of Interest		3.0	100.0%



Attachment K.2
Soil Analysis
Worksheet 3.0 – Sec. 8.B

This information will be submitted to the TCEQ when available.



Attachment K.3
USDA Soil Series Information
Worksheet 3.0 – Sec. 8.B

**ATTACHMENT K.3
CITY OF WIMBERLEY
THE BLUE HOLE WASTEWATER TREATMENT FACILITY
RENEWAL PERMIT APPLICATION**

USDA SOIL SERIES INFORMATION

Soil Types	Soil Series	Depth from Surface	Permeability	Available Water Capacity	Curve Number
BtD	Bracket	0-6	Moderate	0.09-0.13-0.16	--
		6-17	Moderate	0.09-0.13-0.16	--
		17-62	Moderate	--	--
	Rock Outcrop	0-80	N/A	--	--
	Comfort	0-4	Slow	0.07-0.11-0.15	--
		4-11	Slow	0.05-0.07-0.08	--
11-20		Slow	--	--	
GrC	Gruene	0-13	Moderately Slow	0.12-0.15-0.18	--
		13-22	Moderately Slow	--	--
		22-80	Moderately Slow	-0.13-	--

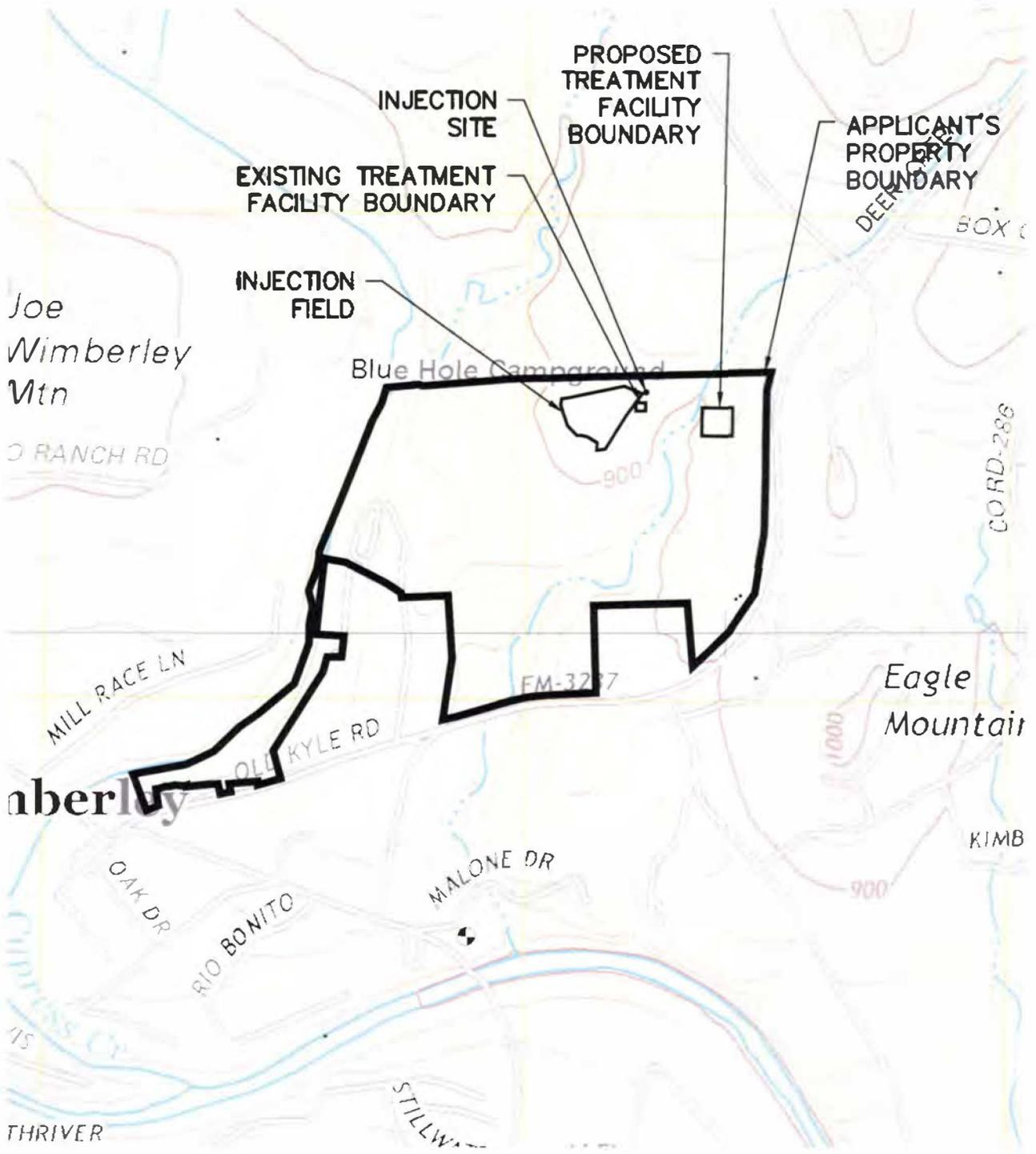


Attachment 7A
USGS Quadrangle Map
Worksheet 7.0 – Sec. 1-5



ALAN PLUMMER
ASSOCIATES, INC.

ENVIRONMENTAL
ENGINEERS AND SCIENTISTS

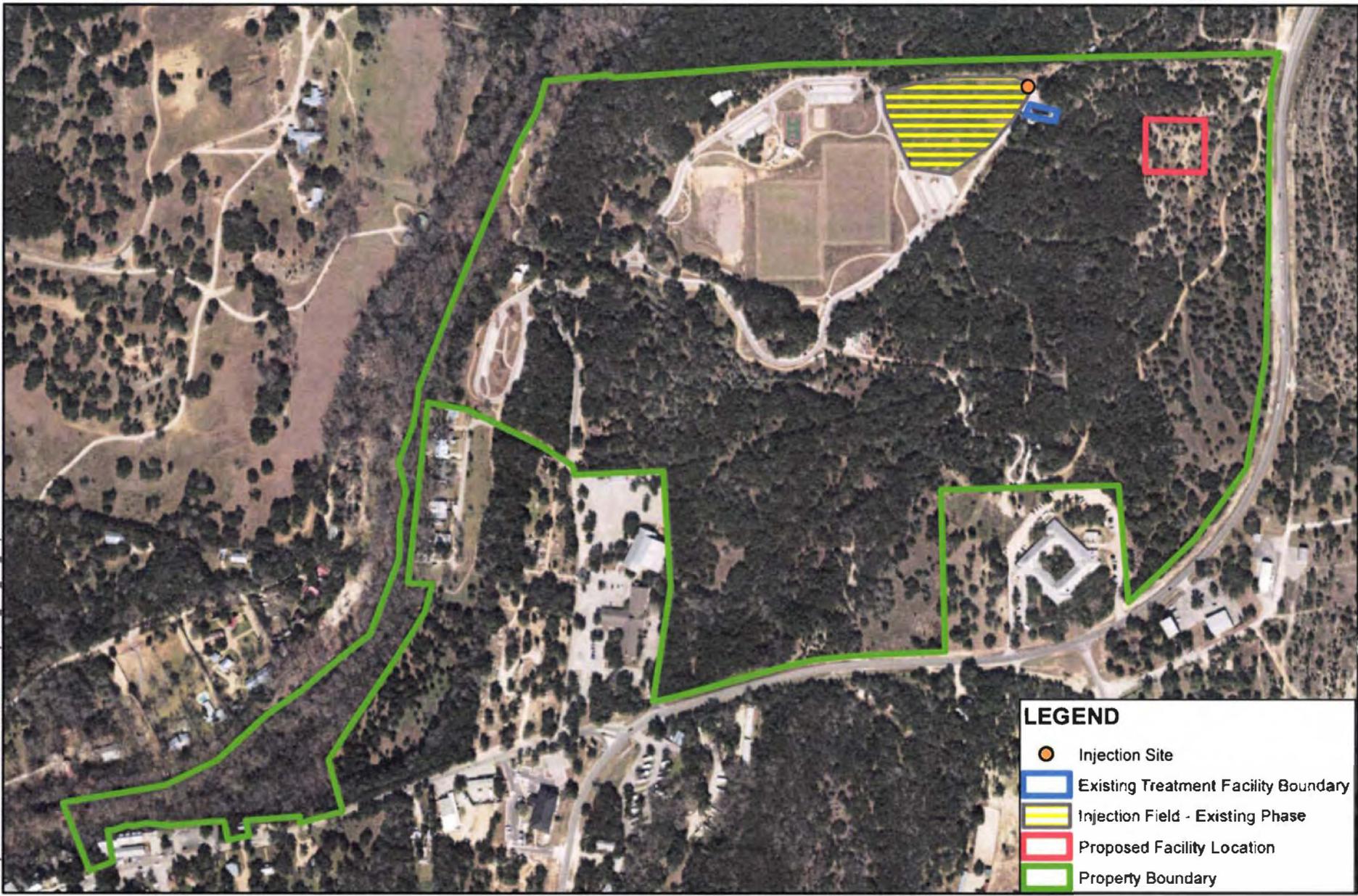


ATTACHMENT 7A
CITY OF WIMBERLEY
THE BLUE HOLE WASTEWATER TREATMENT FACILITY
RENEWAL PERMIT APPLICATION
USGS QUADRANGLE MAP

TEXAS REGISTERED ENGINEERING FIRM F-13
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Attachment 7B
Site Drawing
Worksheet 7.0 – Sec. 1-7



LEGEND

-  Injection Site
-  Existing Treatment Facility Boundary
-  Injection Field - Existing Phase
-  Proposed Facility Location
-  Property Boundary

TEXAS REGISTERED ENGINEERING FIRM F-13
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**ATTACHMENT 7B
CITY OF WIMBERLEY
THE BLUE HOLE WASTEWATER TREATMENT FACILITY
RENEWAL PERMIT APPLICATION
SITE DRAWING**



Attachment 7H
Injection Fluid Chemistry
Worksheet 7.0 – Sec. 4-11

This information will be submitted to the TCEQ when available.