

WATER & WASTEWATER TREATMENT CONSULTANTS 17230 HUFFMEISTER ROAD, SUITE A~CYPRESS, TEXAS 77429-1643 Tel.: 281-373-0500 Fax: 281-373-1113

#### Overnight by UPS

May 26, 2021

Executive Director Water Quality Applications Team (MC 148) Texas Commission on Environmental Quality 12100 Park 35 Circle Austin, Texas 78753

Re: Crystal Springs Water Co., Inc.

Application for a New TPDES Permit White Rock Wastewater Treatment Plant

Dear Sir/Ms:

Enclosed please find the original and four copies of the Application for a New Texas Pollution Discharge Elimination System Permit for the proposed White Rock Wastewater Treatment Plant in Montgomery County.

Please contact Shelley Young, P.E. at 281-373-0500 or at <u>syoung@waterengineers.com</u> if there are any questions related to the material presented in the application.

Sincerely,

WATERENGINEERS, INC.

Shelley Young-

Encl: As noted

# APPLICATION FOR A NEW TEXAS POLLUTION DISCHARGE ELIMINATION SYSTEM PERMIT

#### FOR

## WHITE ROCK WASTEWATER TREATMENT PLANT

CRYSTAL SPRINGS WATER CO., INC. P.O. BOX 603 PORTER, TEXAS 77365

#### PREPARED BY:

# WATERENGINEERS, INC.

Water & Wastewater Treatment Consultants 17230 Huffmeister Road, Suite A, Cypress, Texas 77429 Tel: 281-373-0500 Fax: 281-373-1113

MAY 2021

# APPLICATION FOR A NEW TEXAS POLLUTION DISCHARGE ELIMNATION SYSTEM PERMIT

#### FOR

#### WHITE ROCK

#### WASTEWATER TREATMENT PLANT

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# TCEQ

## TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

# DOMESTIC WASTEWATER PERMIT APPLICATION CHECKLIST

#### Complete and submit this checklist with the application.

APPLICANT: Crystal Springs Water Co., Inc.

PERMIT NUMBER: New

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

	Y	N		Y	N
Administrative Report 1.0	$\boxtimes$		Original USGS Map	$\boxtimes$	
Administrative Report 1.1	$\boxtimes$		Affected Landowners Map	$\boxtimes$	
SPIF	$\boxtimes$		Landowner Disk or Labels	$\boxtimes$	
Core Data Form	$\boxtimes$		Buffer Zone Map	$\boxtimes$	
Technical Report 1.0	$\boxtimes$		Flow Diagram	$\boxtimes$	
Technical Report 1.1	$\boxtimes$		Site Drawing	$\boxtimes$	
Worksheet 2.0	$\boxtimes$		Original Photographs	$\boxtimes$	
Worksheet 2.1		$\boxtimes$	Design Calculations	$\boxtimes$	
Worksheet 3.0		$\boxtimes$	Solids Management Plan	$\boxtimes$	
Worksheet 3.1		$\boxtimes$	Water Balance		$\boxtimes$
Worksheet 3.2		$\boxtimes$			
Worksheet 3.3		$\boxtimes$			
Worksheet 4.0		$\boxtimes$			
Worksheet 5.0		$\boxtimes$			
Worksheet 6.0		$\boxtimes$			
Worksheet 7.0		$\boxtimes$			

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 Amend	ment Renewal			
<0.05 MGD	\$350.00	\$315.00			
≥0.05 but <0.10 MGD	\$550.00	\$515.00			
≥0.10 but <0.25 MGD ≥0.25 but <0.50 MGD	\$850.00 □ \$1,250.00 □	\$815.00 □ \$1,215.00 □			
≥0.50 but <1.0 MGD	\$1,650.00 \(\sigma\)	\$1,615.00 □			
≥1.0 MGD	\$2,050.00 🗆	\$2,015.00			
Minor Amendment (for any flow)	\$150.00 🗆				
Payment Information:					
Mailed Check/Mone	y Order Number: <u>751</u>	0			
Check/Mone	y Order Amount: <u>\$1,</u> 0	<u>650.00</u>			
Name Printe	d on Check: <u>WaterEn</u> į	gineers, Inc.			
EPAY Voucher Nur	nber:				
Copy of Payment Voucher	enclosed?	Yes 🗉			
Section 2. Type of Applic	cation (Instructio	ons Page 29)			
New TPDES		New TLAP			
☐ Major Amendment <u>with</u> Ren	ewal	Minor Amendment with Renewal			
Major Amendment without	Renewal 🗆	Minor Amendment <u>without</u> Renewal			
☐ Renewal without changes		Minor Modification of permit			
For amendments or modifications, describe the proposed changes:					
For existing permits:					
Permit Number: WQ00 <u>New</u>					

EPA I.D. (TPDES only): TXNew

Expiration Date: N/A

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

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

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

Crystal Springs Water Co., Inc.

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

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

CN: 600633655

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

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

First and Last Name: Larry Purcell

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

Title: President

**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: <a href="http://www15.tceq.texas.gov/crpub/">http://www15.tceq.texas.gov/crpub/</a>

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.):	100
Title:	

#### 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: ADMIN.03

# 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): Ms.
	First and Last Name: Shelley Young
	Credential (P.E, P.G., Ph.D., etc.): <u>P.E.</u>
	Title: Consulting Engineer
	Organization Name: <u>WaterEngineers, Inc.</u>
	Mailing Address: <u>17230 Huffmeister Road, Suite A</u>
	City, State, Zip Code: Cypress, Texas 77429
	Phone No.: <u>281-373-0500</u> Ext.: Click here to entertie Fax No.: <u>281-373-1113</u>
	E-mail Address: syoung@waterengineers.com
	Check one or both: 🗵 Administrative Contact 🗵 Technical Contact
В.	Prefix (Mr., Ms., Miss): Click hore to enter text.
	First and Last Name: Click here to enter text
	Credential (P.E, P.G., Ph.D., etc.): Thek here to enter level.
	Title: Click here to enter text.
	Organization Name: Clark here to senter texts
	Mailing Address: Click here to enter text.
	City, State, Zip Code: Click horous engatement
	Phone No.: Click here to enter text Ext.: Their here to enter text Fax No.: Click here to enter
	E-mail Address: (Lick Paragraph 1981)
	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: Larry Purcell

Credential (P.E, P.G., Ph.D., etc.): Chak have be obtained

Title: President

Organization Name: Crystal Springs Water Co., Inc.

Mailing Address: P.O. Box 603

City, State, Zip Code: Porter, TX 77365

Phone No.: <u>281-354-5141</u> Ext.: Fax No.: 281-354-6627

E-mail Address: lpwater2000@yahoo.com

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

First and Last Name: Tom Martin

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

Title: CEO

Organization Name: Crystal Springs Water Co., Inc.

Mailing Address: P.O. Box 603

City, State, Zip Code: Porter, TX 77365

Phone No.: <u>281-354-5141</u> Ext.: Make there to deliber that Fax No.: <u>281-354-6627</u>

E-mail Address: martin@juliedubros.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: Larry Purcell

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

Title: <u>President</u>

Organization Name: <u>Crystal Springs Water Co., Inc.</u>

Mailing Address: P.O. Box 603

City, State, Zip Code: Porter, TX 77365

Phone No.: <u>281-354-5141</u> Ext.: Click force to enter test. Fax No.: <u>281-354-6627</u>

E-mail Address: <a href="mailto:lpwater2000@yahoo.com">lpwater2000@yahoo.com</a>

## 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: Larry Purcell

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

Title: President

Organization Name: Crystal Springs Water Co., Inc.

Mailing Address: P.O. Box 603

City, State, Zip Code: Porter, TX 77365

Phone No.: 281-354-5141 Ext.: Fax No.: 281-354-6627

E-mail Address: lpwater2000@yahoo.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): Ms.

First and Last Name: <u>Shelley Young</u> Credential (P.E, P.G., Ph.D., etc.): <u>P.E.</u>

Title: Consulting Engineer

Organization Name: WaterEngineers, Inc.

Mailing Address: 17230 Huffmeister Road, Suite A

City, State, Zip Code: Cypress, Texas 77429

Phone No.: 281-373-0500 Ext.: Fax No.: 281-373-1113

E-mail Address: syoung@waterengineers.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:

☐ Fax

☐ Regular Mail

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

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

First and Last Name: <u>Shelley Young</u> Credential (P.E., P.G., Ph.D., etc.): P.E.

Title: Consulting Engineer

Organization Name: WaterEngineers, Inc.

Phone No.: <u>281-373-0500</u> Ext.: Link from the first text

E-mail: syoung@waterengineers.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: R. B. Tullis Branch Library

Location within the building: <u>Reference Desk</u>

Physical Address of Building: 21569 US Highway 59

City: New Caney County: Montgomery

Contact Name: Librarian

Phone No.: 281-577-8968 Ext.: Class Flore to the Phone No.: 281-577-8968

#### 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? Spanish
Se	ection 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. $RN\underline{New}$
	Search the TCEQ's Central Registry at <a href="http://www15.tceq.texas.gov/crpub/">http://www15.tceq.texas.gov/crpub/</a> to determine if the site is currently regulated by TCEQ.
B.	Name of project or site (the name known by the community where located):
	White Rock Wastewater Treatment Plant
C.	Owner of treatment facility: <u>Crystal Springs Water Co., Inc.</u>
	Ownership of Facility: $\square$ Public $\boxtimes$ Private $\square$ Both $\square$ Federal
D.	Owner of land where treatment facility is or will be:
	Prefix (Mr., Ms., Miss): Crystal Springs Water Co., Inc.
	First and Last Name: <u>Larry Purcell</u>
	Mailing Address: P.O. Box 603
	City, State, Zip Code: Porter, TX 77365
	Phone No.: 281-354-5141 E-mail Address: lpwater2000@yahoo.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:
E.	Owner of effluent disposal site:
	Prefix (Mr., Ms., Miss): <u>N/A</u>
	First and Last Name:
	Mailing Address:
	City, State, Zip Code:
	Phone No.: E-mail Address:
	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:

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: (Tiek December 1987)
	Mailing Address: Click them to enter text
	City, State, Zip Code: Click here to cateriost
	Phone No.: The E-mail Address:
	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: The transfer of the first
Se	ection 10. TPDES Discharge Information (Instructions Page 34)
A.	Is the wastewater treatment facility location in the existing permit accurate?
	□ Yes □ No
	If <b>no</b> , <b>or a new permit application</b> , please give an accurate description:
	Approximately 0.25 mile north of the intersection of FM 2090 and Crockett Martin Road in Conroe, Texas 77306
	in Combe, Texas 77 300
В.	Are the point(s) of discharge and the discharge route(s) in the existing permit correct?
	Yes No
	If <b>no</b> , <b>or a new or amendment permit application</b> , 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:
	To an unnamed tributary of Caney Creek, thence to Caney Creek in Segment No. 1010 of
	the San Jacinto River Basin.
	City nearest the outfall(s): <u>Conroe</u>
	County in which the outfalls(s) is/are located: Montgomery
	Outfall Latitude: <u>30.26325</u> Longitude: <u>-95.301942</u>
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 <b>yes</b> , indicate by a check mark if:
	<ul><li>Authorization granted</li><li>Authorization pending</li></ul>
	For <b>new and amendment</b> applications, provide copies of letters that show proof of contact and the approval letter upon receipt.

	Attachment: (The Relieve for an interference)
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
Se	ction 11. TLAP Disposal Information (Instructions Page 36)
5350 5350 53400	
A.	For TLAPs, is the location of the effluent disposal site in the existing permit accurate?
	□ Yes □ No
	If <b>no</b> , <b>or</b> a <b>new or amendment permit application</b> , provide an accurate description of the disposal site location:
В.	City nearest the disposal site: The harmon enter text.
C.	County in which the disposal site is located: Thek here to enter lead
	Disposal Site Latitude: Click here to onter text.  Longitude: Click here to onter text.
E.	For <b>TLAPs</b> , describe the routing of effluent from the treatment facility to the disposal site:
	Click here to enter test.
F.	For <b>TLAPs</b> , please identify the nearest watercourse to the disposal site to which rainfall runoff might flow if not contained:
	Click here to enjet text
Se	ction 12. Miscellaneous Information (Instructions Page 37)
Α	Is the facility located on or does the treated effluent cross American Indian Land?
A.	Yes No
D	If the existing permit contains an onsite sludge disposal authorization, is the location of the
Б.	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.
	The free in order pate
С.	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:
_	De servicione for a traction
υ.	Do you owe any fees to the TCEQ?
	□ Yes ⊠ No
	If <b>yes</b> , provide the following information:
	Account number: Mak hard to the hard to th
Е.	Do you owe any penalties to the TCEQ?
	□ Yes ⊠ No
	If <b>yes</b> , please provide the following information:
	Enforcement order number: Thek here to alles tage! Amount past due: Click here to alles tage!
Se	ection 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: <u>Core Data Form, Proof of Application Fee</u>

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

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

Permit Number: New

Applicant: Crystal Springs Water Co., Inc.

Certification:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

I further certify that I am authorized under 30 Texas Administrative Code § 305.44 to sign and submit this document, and can provide documentation in proof of such authorization upon request.

Signatory name (typed or printed): Larry Purcell

Signatory title: President

Signature: Corny Purcell (Use blue ink)	Date: 5-20-2021
Subscribed and Sworn to before me by the said_ on this	Larry Purcell May ,20,21. of There ,20,22.
Notary Public Notary Public	BECKY J. MIXON  otary Public, State of Texas  comm. Expires 06-06-2022  Notary ID 3191058

## **DOMESTIC ADMINISTRATIVE REPORT 1.1**

The following information is required for new and amendment applications.

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

Α.		cate by a check mark that the landowners map or drawing, with scale, includes the owing information, as applicable:
	$\boxtimes$	The applicant's property boundaries
	$\boxtimes$	The facility site boundaries within the applicant's property boundaries
	$\boxtimes$	The distance the buffer zone falls into adjacent properties and the property boundaries of the landowners located within the buffer zone
		The property boundaries of all landowners surrounding the applicant's property (Note: if the application is a major amendment for a lignite mine, the map must include the property boundaries of all landowners adjacent to the new facility (ponds).)
		The point(s) of discharge and highlighted discharge route(s) clearly shown for one mile downstream
	$\boxtimes$	The property boundaries of the landowners located on both sides of the discharge route for one full stream mile downstream of the point of discharge
		The property boundaries of the landowners along the watercourse for a one-half mile radius from the point of discharge if the point of discharge is into a lake, bay, estuary, or affected by tides
		The boundaries of the effluent disposal site (for example, irrigation area or subsurface drainfield site) and all evaporation/holding ponds within the applicant's property
		The property boundaries of all landowners surrounding the effluent disposal site
		The boundaries of the sludge land application site (for land application of sewage sludge for beneficial use) and the property boundaries of landowners surrounding the applicant's property boundaries where the sewage sludge land application site is located
		The property boundaries of landowners within one-half mile in all directions from the applicant's property boundaries where the sewage sludge disposal site (for example, sludge surface disposal site or sludge monofill) is located
В.	⊠ addı	Indicate by a check mark that a separate list with the landowners' names and mailing resses cross-referenced to the landowner's map has been provided.
C.	Indi	cate by a check mark in which format the landowners list is submitted:
		Readable/Writeable CD
D.		ride the source of the landowners' names and mailing addresses: <u>Montgomery County</u> raisal <u>District</u>
E.		equired by <i>Texas Water Code § 5.115</i> , is any permanent school fund land affected by this lication?
		□ Yes ⊠ No

	If <b>y</b> e	es, provide the location and foreseeable impacts and effects this application has on the l(s):
G	acti	on 2. Oviginal Photographs (Instructions Page 44)
Pr	ovide	on 2. Original Photographs (Instructions Page 44) original ground level photographs. Indicate with checkmarks that the following ation is provided.
	$\boxtimes$	At least one original photograph of the new or expanded treatment unit location
	No. of the control of	At least two photographs of the existing/proposed point of discharge and as much area downstream (photo 1) and upstream (photo 2) as can be captured. If the discharge is to an open water body (e.g., lake, bay), the point of discharge should be in the right or left edge of each photograph showing the open water and with as much area on each respective side of the discharge as can be captured.
		At least one photograph of the existing/proposed effluent disposal site
		A plot plan or map showing the location and direction of each photograph
S	ecti	on 3. Buffer Zone Map (Instructions Page 44)
	Buff info	er zone map. Provide a buffer zone map on 8.5 x 11-inch paper with all of the following rmation. The applicant's property line and the buffer zone line may be distinguished by g dashes or symbols and appropriate labels.
	•	The applicant's property boundary; The required buffer zone; and Each treatment unit; and The distance from each treatment unit to the property boundaries.
В.		er zone compliance method. Indicate how the buffer zone requirements will be met.
	D	☑ Ownership
		Restrictive easement
		Nuisance odor control
		1 Variance
C.		uitable site characteristics. Does the facility comply with the requirements regarding nitable site characteristic found in 30 TAC § 309.13(a) through (d)?
		Yes No

# TEXAS COMMISSION ON ENVIRONMENTAL QUALITY SUPPLEMENTAL PERMIT INFORMATION FORM (SPIF)

# FOR AGENCIES REVIEWING DOMESTIC TPDES WASTEWATER PERMIT APPLICATIONS

TCEQ USE ON	LY:				
		Maior Am	nendment	Minor Amendment	New
	-	_		umber:	
	ete Date:				
Agency Receivi	ing SPIF:				
Texas H	Historical Commissi	on	U.S.	Fish and Wildlife	
Texas P	arks and Wildlife D	epartment	U.S.	Army Corps of Engineer	rs
<u>This form appli</u>	<u>es to TPDES permit</u>	t application	<mark>is only.</mark> (Inst	tructions, Page 53)	
each agency as r addressed or fu	required by the TCE	Q agreement needed, you	: with EPA. I I will be con	CEQ will mail a copy of the same of the items are not tacted to provide the integral ddressed.	ot completely
be provided with application will	h this form separate	ely from the ninistratively	administrati	cation form. Each attack ive report of the applica vithout this form being o	tion. The
The following ap	oplies to all applicat	ions:			
1. Permittee: <u>Cr</u>	ystal Springs Water	Co., Inc.			
Permit No. W	Q00 <u>New</u>		EPA ID	No. TX <u>New</u>	
Address of tl and county):	ne project (or a loca	tion descrip	tion that inc	ludes street/highway, ci	ity/vicinity,
	ely 0.25 mile north ntgomery County, T		section of FN	1 2090 and Crockett Mai	rtin Road in

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

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

First and Last Name: <u>Shelley Young</u> Credential (P.E, P.G., Ph.D., etc.): <u>P.E.</u>

Title: Consulting Engineer

Mailing Address: 17230 Huffmeister Road, Suite A

City, State, Zip Code: Cypress, Texas 77429

Phone No.: <u>281-373-0500</u> Ext.: Fax No.: <u>281-373-1113</u>

E-mail Address: <a href="mailto:syoung@waterengineers.com">syoung@waterengineers.com</a>

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

please list the owner of the property.
<u>N/A</u>

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.

Into an unnamed tributary of Caney Creek; thence to Caney Creek in Segment 1010 of the San Jacinto River Basin.

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):
	Area is currently wooded and undeveloped. Property will be cleared for development. Some minor excavation will occur for the construction of the wastewater treatment facilities.
7.	Describe existing disturbances, vegetation, and land use:
	See No. 6 above
	E FOLLOWING ITEMS APPLY ONLY TO APPLICATIONS FOR NEW TPDES PERMITS AND MAJOR MENDMENTS TO TPDES PERMITS
8.	List construction dates of all buildings and structures on the property:
	None
9.	Provide a brief history of the property, and name of the architect/builder, if known.
	The property is undeveloped and heavily wooded.



# 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): <u>0.250</u>

2-Hr Peak Flow (MGD): <u>1.00</u>

Estimated construction start date: 5/2022

Estimated waste disposal start date: 12/2022

#### B. Interim II Phase

Design Flow (MGD): <u>0.500</u>

2-Hr Peak Flow (MGD): <u>2.00</u>

Estimated construction start date: 3/2024

Estimated waste disposal start date: 10/2024

#### C. Final Phase

Design Flow (MGD): <u>0.750</u>

2-Hr Peak Flow (MGD): <u>3.00</u>

Estimated construction start date: <u>3/2026</u>

Estimated waste disposal start date: 1/2027

# D. Current operating phase: N/A-new permit

Provide the startup date of the facility: N/A

# 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:

Phase I flow will enter the conventional activated sludge with nitrification process through a bar screen into, thence to an anoxic zone, thence to the aeration basin, thence to the clarifier, thence to the chlorine contact chamber for disinfection and discharge. Sludge from the bottom of the clarifier is either returned to the anoxic zone or wasted to the digester. Phase II will be an exact duplicate of Phase I with flow first going through a flow splitter box. Dechlorination will also be added in Phase II. Phase III will add a third identical unit with flow being split three ways.

Port or pipe diameter at the discharge point, in inches: 24

#### **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	Dimensions (L x W x D)
	Units	
See Attachment		
TECH.01		

#### C. Process flow diagrams

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

**Attachment: TECH.02** 

# 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: TECH.03** 

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

The White Rock WWTP will serve the White Rock Subdivision as well as several other residential developments planned for the immediate area, with an ultimate 3,000 equivalent single family connections.

# Section 4. Unbuilt Phases (Instructions Page 52)

Is the applicati	on for a renew	val of a permit t	that contains a	ın unbuilt phase or	
phases?					
Yes 🗆	No 🗵				
				ot been constructe	d
within f <u>iv</u> e yea	rs of being aut	thorized 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.

executive director recommending demai of the unbunt phase of phases.
Click here, to enter text,

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 $\square$ No $\boxtimes$
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.
Section 6. Permit Specific Requirements (Instructions Page 53)
For applicants with an existing permit, check the <i>Other Requirements</i> or <i>Special Provisions</i> of the permit.
A. Summary transmittal
Have plans and specifications been approved for the existing facilities and each proposed phase? Yes $\square$ No $\boxtimes$
If yes, provide the date(s) of approval for each phase: Not yet submitted
Provide information, including dates, on any actions taken to meet a requirement or provision pertaining to the submission of a summary transmittal letter. Provide a copy of an approval letter from the TCEQ, if applicable.
N/A
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 <i>Other Requirements</i> or <i>Special Provisions</i> 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 $\square$ No $\boxtimes$
If yes, provide information below on the status of any actions taken to meet the conditions of an <i>Other Requirement</i> or <i>Special Provision</i> .

### 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.

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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.
Tick here in enter text.
4. Grease and decanted liquid disposal
Note: A registration or permit is required for grease disposal. Grease shall not be combined with treatment plant sludge. For more information, contact the TCEQ Municipal Solid Waste team at 512-239-0000.
Describe how the decant and grease are treated and disposed of after grit separation.
Clickhere to enter text
E. Stormwater management
1. Applicability
Does the facility have a design flow of 1.0 MGD or greater in any phase?
Yes □ No ⊠
Does the facility have an approved pretreatment program, under 40 CFR Part
403?

Yes □ No ⊠
If <b>no to both of the above</b> , 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 $\square$ No $\square$
If yes, please provide MSGP Authorization Number and skip to Subsection F, Other Wastes Received:  TXR05 or TXRNE
If no, do you intend to seek coverage under TXR050000?
Yes □ No □
3. Conditional exclusion
Alternatively, do you intend to apply for a conditional exclusion from permitting based TXR050000 (Multi Sector General Permit) Part II B.2 or TXR050000 (Multi Sector General Permit) Part V, Sector T 3(b)?  Yes  No  No
If yes, please explain below then proceed to Subsection F, Other Wastes
Received:
4. Existing coverage in individual permit
Is your stormwater discharge currently permitted through this individual TPDES or TLAP permit?  Yes  No
If yes, provide a description of stormwater runoff management practices at

the site that are authorized in the wastewater permit then skip to Subsection

F, Other Wastes Received.

5. Zero stor	mwater discharge
Do you intend other means?	to have no discharge of stormwater via use of evaporation or
Yes 🗆	No 🗒
If yes, explain	below then skip to Subsection F. Other Wastes Received.
Water State of State	

Note: If there is a potential to discharge any stormwater to surface water in the state as the result of any storm event, then permit coverage is required under the MSGP or an individual discharge permit. This requirement applies to all areas of facilities with treatment plants or systems that treat, store, recycle, or reclaim domestic sewage, wastewater or sewage sludge (including dedicated lands for sewage sludge disposal located within the onsite property boundaries) that meet the applicability criteria of above. You have the option of obtaining coverage under the MSGP for direct discharges, (recommended), or obtaining coverage under this individual permit.

## 6. Request for coverage in individual permit

Are you requesting coverage of stormwater discharges associated with your treatment plant under this individual permit?

Yes □ No □

If yes, provide a description of stormwater runoff management practices at the site for which you are requesting authorization in this individual wastewater permit and describe whether you intend to comingle this discharge with your treated effluent or discharge it via a separate dedicated stormwater outfall. Please also indicate if you intend to divert stormwater to the treatment plant headworks and indirectly discharge it to water in the state.

Clinatiese trensertesi.
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 $\boxtimes$ No $\square$
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 $\square$ No $\boxtimes$
If yes, attach sewage sludge solids management plan. See Example 5 of the instructions.
In addition, provide the date that the plant started accepting sludge or is anticipated to start accepting sludge, an estimate of monthly sludge
acceptance (gallons or millions of gallons), an estimate of the BOD <sub>5</sub>
concentration of the sludge, and the design BOD <sub>5</sub> concentration of the influent from the collection system. Also note if this information has or has not changed since the last permit action.
flick here to enter text.

Note: Permits that accept sludge from other wastewater treatment plants

may be required to have influent flow and organic loading monitoring. 2. Acceptance of septic waste Is the facility accepting or will it accept septic waste? No ⊠ Yes 🗆 If yes, does the facility have a Type V processing unit? Yes 🗖 No 🗇 If yes, does the unit have a Municipal Solid Waste permit? Yes 🗆 No □ If yes to any of the above, provide a the date that the plant started accepting septic waste, or is anticipated to start accepting septic waste, an estimate of monthly septic waste acceptance (gallons or millions of gallons), an estimate of the BOD<sub>5</sub> concentration of the septic waste, and the design BOD<sub>5</sub> concentration of the influent from the collection system. Also note if this information has or has not changed since the last permit action. 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 ves, 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. Chek have to enter fext.

# 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

Pollytant	Average	Max	No. of	Sample	Sample
Pollutant	Conc.	Conc.	Samples	Туре	Date/Time
CBOD <sub>5</sub> , 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					
E.coli (CFU/100ml) freshwater					
Entercocci (CFU/100ml)					
saltwater					
Total Dissolved Solids, mg/l					
Electrical Conductivity,					
μmohs/cm, †					

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

<sup>\*</sup>TPDES permits only

Table 1.0(3) - Pollutant Analysis for Water Treatment Facilities

Dollutont	Average	Max	No. of	Sample	Sample
Pollutant	Conc.	Conc.	Samples	Туре	Date/Time
Total Suspended Solids, mg/l					
Total Dissolved Solids, mg/l					
pH, standard units					
Fluoride, mg/l					
Aluminum, mg/l					
Alkalinity (CaCO <sub>3</sub> ), mg/l					

# Section 8. Facility Operator (Instructions Page 60)

Facility Operator Name: Larry Purcell

Facility Operator's License Classification and Level:  $\underline{C}$ 

Facility Operator's License Number: <u>WW0013058</u>

# 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

Page 12 of 79

<sup>†</sup>TLAP permits only

	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.					
	Other: Click here to rings text.					
В.	Sludge disposal site					
Dispo	sal site name: <u>Mt. Houston MUD WWTP</u>					
TCEQ	permit or registration number: <u>WQ0011154001</u>					
Count	y where disposal site is located: <u>Harris</u>					
C.	Sludge transportation method					
Metho	od of transportation (truck, train, pipe, other): <u>truck</u>					
Name	of the hauler: <u>Magna Flow Environmental</u>					
Haule	r registration number: <u>21484</u>					
Sludg	e is transported as a:					
	Liquid $oxed{\boxtimes}$ semi-liquid $oxed{\square}$ semi-solid $oxed{\square}$ solid $oxed{\square}$					

# 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 Yes 🗆	beneficial use? No ⊠					
sludge for	If yes, are you requesting to continue this authorization to land apply sewage sludge for beneficial use?  Yes No					
Sewage Slu	ne completed <b>Application for Permit fo</b> <pre>idge (TCEQ Form No. 10451) attached</pre> tions for details)? No <pre>No</pre>	o <b>r Benefici</b> to this per	al Land Use of mit application (see			
B. Slud	ge processing authorization					
	xisting permit include authorization fo , storage or disposal options?	r any of the	e following sludge			
_	Composting	Yes 🗆	No ⊠			
Market	ing and Distribution of sludge	Yes 🗆	No ⊠			
Sludge	Surface Disposal or Sludge Monofill	Yes 🗆	No ⊠			
Tempo	rary 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 <b>Domestic Wastewater Permit Application: Sewage Sludge Technical Report (TCEQ Form No. 10056)</b> attached to this permit application?  Yes No						
Section 1	1. Sewage Sludge Lagoons (I	nstructio	ns Page 61)			
Does th	nis facility include sewage sludge lagoo	ns?				
Yes □	No ⊠					
If yes, o	complete the remainder of this section.	If no, prod	ceed to Section 12.			
A. Loca	tion information					
each map,	ing maps are required to be submitted provide the Attachment Number. inal General Highway (County) Map:	as part of	the application. For			
Atta	chment: Their here to an or teste.					
<ul> <li>USDA Natural Resources Conservation Service Soil Map:</li> </ul>						
Attachment: Chek have to enter fext.						

•	Federal Emergency Management Map:
	Attachment: Chek note to enter text.
•	Site map:
	Attachment: They have to enter treet
Discu	ss 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
Attac	hment: Figur Brace to 122 (18 102)
NAME OF TAXABLE PARTY OF TAXABLE PARTY.	ctive structures:
В.	Temporary storage information
are in	de the results for the pollutant screening of sludge lagoons. These results addition to pollutant results in Section 7 of Technical Report 1.0. itrate Nitrogen, mg/kg:
T	otal Kjeldahl Nitrogen, mg/kg: The here to easer text
T	otal Nitrogen (=nitrate nitrogen + TKN), mg/kg: (110k here to enter text)
Pl	hosphorus, mg/kg: Click hors to color text
Po	otassium, mg/kg: Chek here to enter text
_	H, standard units: (Nick here to enter text)
A	mmonia Nitrogen mg/kg: Ches bere to earlie 1637
А	rsenic: Click hars so en ter ical.

Cadmium: Click lacre to enter text.
Chromium: Clink here to answer text
Copper: Ches have to enter text
Lead: Click here in entanties:
Mercury: The house of the second second
Molybdenum: The lateral acceptance of the la
Nickel:
Selenium: Carlo de la companya de la
Zinc:
Total PCBs:
Provide the following information:  Volume and frequency of sludge to the lagoon(s): Click here to enter text
Total dry tons stored in the lagoons(s) per 365-day period:
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 $1x10^{-7}$ cm/sec? Yes $\square$ No $\square$
If yes, describe the liner below. Please note that a liner is required.
thek bere to enter town
D. Site development plan
Provide a detailed description of the methods used to deposit sludge in the
lagoon(s):
(1) there to suitartext

Attach the following documents to the application.

• Plan view and cross-section of the sludge lagoon(s)

Attachment: Thek hore to enter the til

• Copy of the closure plan

Attachment: Chek here to enter text.

• Copy of deed recordation for the site

Attachment:

• Size of the sludge lagoon(s) in surface acres and capacity in cubic feet and gallons

Attachment:

 Description of the method of controlling infiltration of groundwater and surface water from entering the site

Attachment: Thek here to enser test.

Procedures to prevent the occurrence of nuisance conditions

Attachment: Clark home to early feet.

### E. Groundwater monitoring

Is groundwater monitoring currently conducted at this site, or are any wells available for groundwater monitoring, or are groundwater monitoring data otherwise available for the sludge lagoon(s)?

Yes □ No □

If groundwater monitoring data are available, provide a copy. Provide a profile of soil types encountered down to the groundwater table and the depth to the shallowest groundwater as a separate attachment.

Attachment: Click here to enter text.

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

### A. Additional authorizations

Does the permittee have additional authorizations for this facility, such as reuse authorization, sludge permit, etc?

Yes □ No ⊠

If yes, provide the TCEQ authorization number and description of the authorization:

B. Permittee enforcement status
Is the permittee currently under enforcement for this facility? Yes $\square$ No $\boxtimes$
Is the permittee required to meet an implementation schedule for compliance or enforcement?  Yes □ No ☒
If yes to either question, provide a brief summary of the enforcement, the implementation schedule, and the current status:

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

### A. RCRA hazardous wastes

Has the facility received in the past three years, does it currently receive, or will it receive RCRA hazardous waste?

Yes □ No ⊠

### B. Remediation activity wastewater

Has the facility received in the past three years, does it currently receive, or will it receive CERCLA wastewater, RCRA remediation/corrective action wastewater or other remediation activity wastewater?

Yes □ No ⊠

### C. Details about wastes received

If yes to either Subsection A or B above, provide detailed information concerning these wastes with the application.

Attachment: Click here to enter 1981.

### 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:
  - o 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
  - o 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: <u>N/A New Permit</u>
Title: Click here to enter test
Signature:
Date:

### **DOMESTIC TECHNICAL REPORT 1.1**

The following is required for new and amendment applications

### Section 1. Justification for Permit (Instructions Page 66)

### A. Justification of permit need

Provide a detailed discussion regarding the need for any phase(s) not currently permitted. Failure to provide sufficient justification may result in the Executive Director recommending denial of the proposed phase(s) or permit.

Crystal Springs Water Co., Inc. will provide wastewater utility services to the proposed White Rock Community single family home subdivision, as well as additional residential subdivisions planned in the immediate area, and some light commercial development.. No other facilities are in the area or are willing or have the capacity to serve the proposed development. See TECH.06 - Development Schedule

### B. Regionalization of facilities

Provide the following information concerning the potential for regionalization of domestic wastewater treatment facilities:

### 1. Municipally incorporated areas

If the applicant is a city, then Item 1 is not applicable. Proceed to Item 2 Utility CCN areas.

Is any portion of the proposed service area located in an incorporated city?

Yes □ No ⊠ Not Applicable □

If yes, within the city limits of: Thek bere to enter text

If yes, attach correspondence from the city.

Attachment: Thek have to enter text

If consent to provide service is available from the city, attach a justification for the proposed facility and a cost analysis of expenditures that includes the cost of connecting to the city versus the cost of the proposed facility or expansion attached.

Attachment: Click here to enter text.

### 2. Utility CCN areas

Is any portion of the proposed service area located inside another utility's CCN area?

Yes □

No ⊠

If yes, attach a justification for the proposed facility and a cost analysis of expenditures that includes the cost of connecting to the CCN facilities versus the cost of the proposed facility or expansion.

Attachment:

### 3. Nearby WWTPs or collection systems

Are there any domestic permitted wastewater treatment facilities or collection systems located within a three-mile radius of the proposed facility?

Yes ⊠

No □

If yes, attach a list of these facilities that includes the permittee's name and permit number, and an area map showing the location of these facilities.

**Attachment: TECH.05** 

If yes, attach copies of your certified letters to these facilities and their response letters concerning connection with their system.

**Attachment:** TECH.05

Does a permitted domestic wastewater treatment facility or a collection system located within three (3) miles of the proposed facility currently have the capacity to accept or is willing to expand to accept the volume of wastewater proposed in this application?

Yes 🗆

No 🖾

If yes, attach an analysis of expenditures required to connect to a permitted wastewater treatment facility or collection system located within 3 miles versus the cost of the proposed facility or expansion.

Attachment: Click here to enter text!

### Section 2. Organic Loading (Instructions Page 67)

Is this facility in operation?

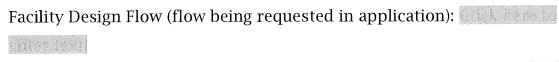
Yes 🗆

No ⊠

If no, proceed to Item B, Proposed Organic Loading.

**If yes**, provide organic loading information in Item A, Current Organic Loading

### A. Current organic loading



Average Influent Organic Strength or  $BOD_5$  Concentration in mg/l:

Average Influent Loading (lbs/day = total average flow X average  $BOD_5$  conc. X 8.34):

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

Trovide the bourse of the average organic s	erengen or boby controller entroller
4 (* 4	
Clies tells to enter text:	

### B. Proposed organic loading

This table must be completed if this application is for a facility that is not in operation or if this application is to request an increased flow that will impact organic loading.

Table 1.1(1) - Design Organic Loading

Source	Total Average Flow (MGD)	Influent BOD <sub>5</sub> Concentration (mg/l)
Municipality		
Subdivision	0.250 / 0.500 / 0.750	300 / 300 / 300
Trailer park - transient		
Mobile home park		
School with cafeteria and showers		
School with cafeteria,		

Source	Total Average Flow (MGD)	Influent BOD <sub>5</sub> Concentration (mg/l)
no showers		
Recreational park, overnight use		
Recreational park, day use		
Office building or		
factory		
Motel		
Restaurant		
Hospital		
Nursing home		
Other		
TOTAL FLOW from all	0.250 / 0.500 / 0.750	
sources		
AVERAGE BOD₅ from all sources		300 / 300 / 300

# Section 3. Proposed Effluent Quality and Disinfection (Instructions Page 68)

### A. Existing/Interim I Phase Design Effluent Quality

Biochemical Oxygen Demand (5-day), mg/l: 10

Total Suspended Solids, mg/l:  $\underline{15}$ 

Ammonia Nitrogen, mg/l: <u>3</u>

Total Phosphorus, mg/l: N/A

Dissolved Oxygen, mg/l: 4.0

Other: E. Coli 126 mpn/100 ml

### B. Interim II Phase Design Effluent Quality

Biochemical Oxygen Demand (5-day), mg/l: 10

Total Suspended Solids, mg/l: 15

Ammonia Nitrogen, mg/l: 3

Total Phosphorus, mg/l: N/A

Dissolved Oxygen, mg/l: 4.0

Other: E. Coli 126 mpn/100 ml

### C. Final Phase Design Effluent Quality

Biochemical Oxygen Demand (5-day), mg/l: 10

Total Suspended Solids, mg/l: 15

Ammonia Nitrogen, mg/l: <u>3</u>

Total Phosphorus, mg/l: N/A

Dissolved Oxygen, mg/l: 4.0

Other: <u>126 mpn/100 ml</u>

### D. Disinfection Method

Identify the proposed method of disinfection.

- Chlorine: <u>1-4</u> mg/l after <u>20</u> minutes detention time at peak flow Dechlorination process: <u>sodium bisulfite addition in phase II</u>
- Ultraviolet Light: The Repertment of the seconds contact time at peak flow
- Other: Charlibers to enter text.

### Section 4. Design Calculations (Instructions Page 68)

Attach design calculations and plant features for each proposed phase. Example 4 of the instructions includes sample design calculations and plant features.

Attachment: <u>TECH.01</u>

### Section 5. Facility Site (Instructions Page 68)

# A. 100-year floodplain Will the proposed facilities be located above the 100-year frequency flood level? Yes □ No ☑ If no, describe measures used to protect the facility during a flood event. Include a site map showing the location of the treatment plant within the 100-year frequency flood level. If applicable, provide the size and types of protective structures. All WWTP equipment and tops of wall will be above the 100 year frequency flood level.

Provide the source(s) used to determine 100-year frequency flood plain.

FEMA Flood Map 48339C0425G	

For a new or expansion of a facility, will a wetland or part of a wetland be filled?

Yes □ No ⊠

**If yes**, has the applicant applied for a US Corps of Engineers 404 Dredge and Fill Permit?

Yes □ No □

If yes, provide the permit number: Click here to content to a

If **no,** provide the approximate date you anticipate submitting your application to the Corps: Make the submitting your

### **B.** Wind rose

Attach a wind rose. **Attachment**: <u>TECH.03</u>

# Section 6. Permit Authorization for Sewage Sludge Disposal (Instructions Page 69)

### A. Beneficial use authorization

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

Yes □ No ⊠

**If yes**, attach the completed Application for Permit for Beneficial Land Use of Sewage Sludge (TCEQ Form No. 10451)\_\_\_\_

Attachment: They have to ensure text

### B. Sludge processing authorization

Identify the sludge processing, storage or disposal options that will be conducted at the wastewater treatment facility:

- ☐ Sludge Composting
- Marketing and Distribution of sludge
- ☐ Sludge Surface Disposal or Sludge Monofill

**If any of the above** sludge options are selected, attach a completed DOMESTIC WASTEWATER PERMIT APPLICATION: SEWAGE SLUDGE TECHNICAL REPORT (TCEQ Form No. 10056).

Attachment: The horn to out on text

# Section 7. Sewage Sludge Solids Management Plan (Instructions Page 69)

Attach a solids management plan to the application.

Attachment: <u>TECH.04</u>

The sewage sludge solids management plan must contain the following information:

- Treatment units and processes dimensions and capacities
- Solids generated at 100, 75, 50, and 25 percent of design flow
- Mixed liquor suspended solids operating range at design and projected actual flow
- Quantity of solids to be removed and a schedule for solids removal
- Identification and ownership of the ultimate sludge disposal site
- For facultative lagoons, design life calculations, monitoring well locations and depths, and the ultimate disposal method for the sludge from the facultative lagoon

An example of a sewage sludge solids management plan has been included as Example 5 of the instructions.

### **DOMESTIC 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  No
If yes, provide the following: Owner of the drinking water supply:
Distance and direction to the intake:
Attach a USGS map that identifies the location of the intake.
Attachment: Circle transfer lexe
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:
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).
(lick larges) and that

C. Sea gra	sses
_	any sea grasses within the vicinity of the point of discharge?
Y	es 🗆 No 🗖
	ovide the distance and direction from the outfall(s).
Section 3. C	lassified Segments (Instructions Page 73)
September 2016 of the second street, and the second	ge directly into (or within 300 feet of) a classified segment?
Y	es □ No ⊠
If yes, this W	orksheet is complete.
If no, comple	te Sections 4 and 5 of this Worksheet.
	Description of Immediate Receiving Waters (actions Page 75)
	he immediate receiving waters: <u>Unnamed tributary of Caney Creek</u>
A. Receivi	ng water type
	ne appropriate description of the receiving waters.
⊠ Strea	um
□ Fresl	nwater Swamp or Marsh
□ Lake	or Pond
Sur	face area, in acres: Mick have to outer text)
Ave	rage depth of the entire water body, in feet: Chak have to entire
	rage depth of water body within a 500-foot radius of discharge at, in feet:

Man-made Channel or Ditch

 $\boxtimes$ 

	Open Bay
	Tidal Stream, Bayou, or Marsh
	Other, specify: The bare to enter that
B. Fl	ow characteristics
followin characte	am, man-made channel or ditch was checked above, provide the ag. For existing discharges, check one of the following that best erizes the area <i>upstream</i> of the discharge. For new discharges, erize the area <i>downstream</i> 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
	he method used to characterize the area upstream (or downstream for chargers). USGS flow records
	Historical observation by adjacent landowners
	Personal observation
$\boxtimes$	Other, specify: <u>Drainage ditch not yet constructed</u>
C. D	ownstream perennial confluences
List the three m	names of all perennial streams that join the receiving water within iles downstream of the discharge point. <u>ney Creek</u>
D. D	ownstream characteristics
Do the r	receiving water characteristics change within three miles downstream of harge (e.g., natural or man-made dams, ponds, reservoirs, etc.)?  Yes $\square$ No $\boxtimes$

TCEQ-10054 (06/01/2017) Domestic Wastewater Permit Application, Technical Reports

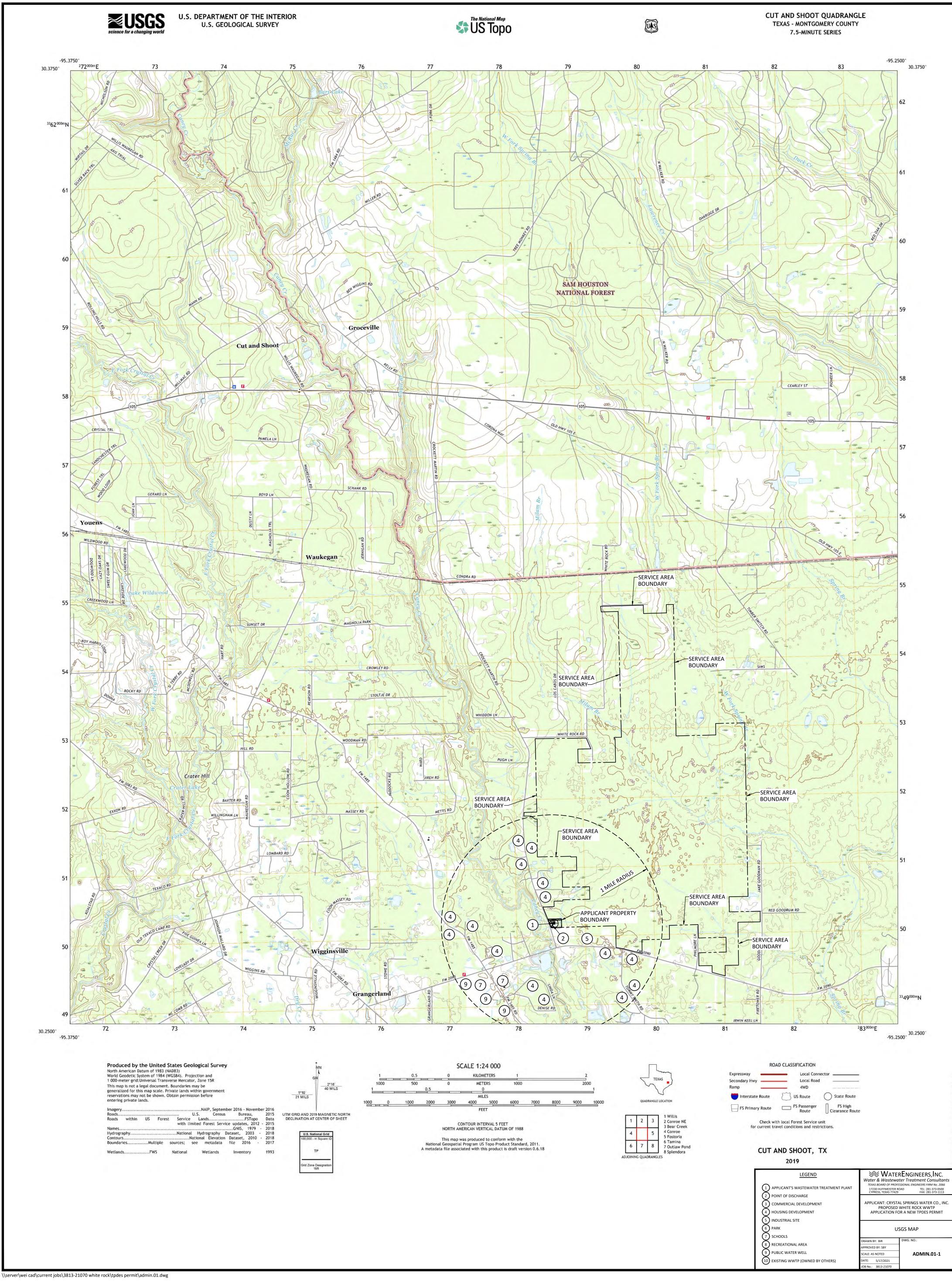
If yes, discuss how.

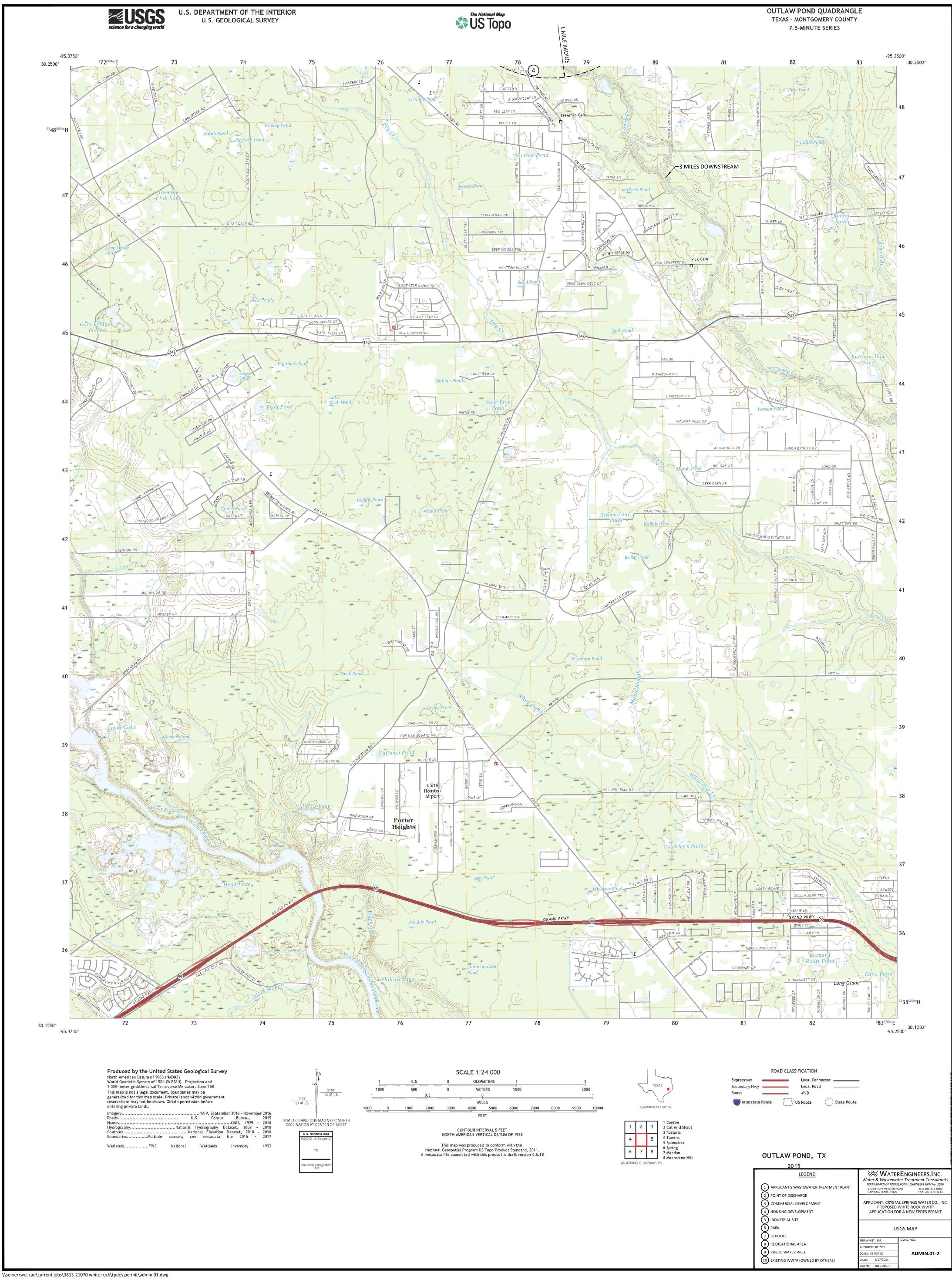
	Herald enter text		
E. N	Normal dry weather charac	teristi	cs
Provide conditi	9	e wate	r body during normal dry weather
The u	nnamed tributary is dry dur	ing no	ormal dry weather conditions.
Date an	nd time of observation: <u>05/1</u>	.3/202	21 @ 15:03
Was the	e water body influenced by	storm	water runoff during observations?
	Yes □ No ⊠		
	n 5. General Characteri Page 74)	stics	of the Waterbody (Instructions
A. U	J <b>pstream influences</b>		
		-	m of the discharge or proposed ollowing? Check all that apply.
	Oil field activities		Urban runoff
	Upstream discharges		Agricultural runoff
	Septic tanks	$\boxtimes$	Other(s), specify <u>None, currently.</u>
B. Waterbody uses			
Observ	ed or evidences of the follow	wing u	ises. Check all that apply.
	Livestock watering		Contact recreation
	Irrigation withdrawal		Non-contact recreation
	Fishing		Navigation

	Domestic water supply		Industrial water supply
	Park activities	$\boxtimes$	Other(s), specify <u>unknown</u>
C. V	Vaterbody aesthetics		
	ck one of the following that eiving water and the surroun		describes the aesthetics of the area.
	Wilderness: outstanding na area; water clarity exceptio		beauty; usually wooded or unpastured
$\boxtimes$	•		e vegetation; some development lwellings); water clarity discolored
	Common Setting: not offende be colored or turbid	sive;	developed but uncluttered; water may
	Offensive: stream does not developed; dumping areas;		nce aesthetics; cluttered; highly er discolored

# ATTACHMENT ADMIN.01 USGS Topographic Map

(Reference Administrative Report 1.0, Page 11, Question 13)





## **Proof of Payment**

(Reference Administrative Report 1.0, Page 11, Question 13)

### WATER QUALITY PERMIT

### PAYMENT SUBMITTAL FORM

Use this form to submit the Application Fee, if the mailing the payment.

- Complete items 1 through 5 below.
- Staple the check or money order in the space provided at the bottom of this document.
- Do not mail this form with the application form.
- Do not mail this form to the same address as the application.
- Do not submit a copy of the application with this form as it could cause duplicate permit entries.

### Mail this form and the check or money order to:

BY REGULAR U.S. MAIL

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

Austin, Texas 78711-3088

BY OVERNIGHT/EXPRESS MAIL

Texas Commission on Environmental Quality

Financial Administration Division Cashier's Office, MC-214 12100 Park 35 Circle

Austin, Texas 78753

Fee Code: WQP Waste Permit No: New

1. Check or Money Order Number: 7510

2. Check or Money Order Amount: \$1,650.00

3. Date of Check or Money Order: 5/25/2021

4. Name on Check or Money Order: WaterEngineers, Inc.

5. APPLICATION INFORMATION

Name of Project or Site: White Rock Wastewater Treatment Plant

Physical Address of Project or Site: No physical address has been assigned as of this date

If the check is for more than one application, attach a list which includes the name of each Project or Site (RE) and Physical Address, exactly as provided on the application.

Staple Check or Money Order in This Space

WATERENGINEERS, INC.

17230 HUFFMEISTER RD., SUITE A
CYPRESS, TEXAS 77429
281-373-0500

PAY
TO THE

TCEQ \$ \*\*1,650.00

One Thousand Six Hundred Fifty and 00/100\*\*\*\*\*\*\*\*\*\*\*\*\*\*

TCEQ

12100 PARK 35 CIRCLE MC-214 AUSTIN, TX 78753-1808

**МЕМО** 

NEW TPDES PERMIT - WHITE ROCK WWTP



Shellas James MP

5/25/2021

7510

DOLLARS

6

"OO7510" (111301125A) 000316131.0"

### **Core Data Form**

(Reference Administrative Report 1.0, Page 4, Section 3C)



# **TCEQ Core Data Form**

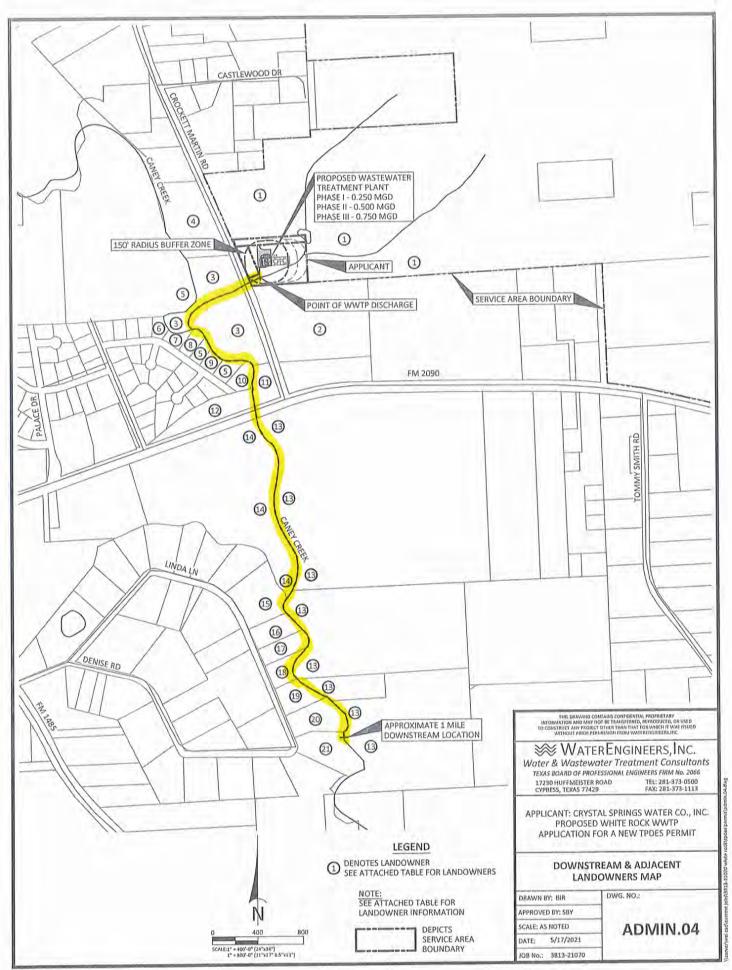
For detailed instructions regarding completion of this form, please read the Core Data Form Instructions or call 512-239-5175.

New Pe     New Pe     New Pe     New Pe     New Pe	rmit, Reg	istration or Autho	orization (Core D	Data Form sl	hould be s	ubmitte	ed with	the p	program applicatio	n.)			
Renewa	al (Core	Data Form shoul	d be submitted i	with the rene	ewal form)	1000	Othe	Ve le					
2. Customer Reference Number (if issued) Follow th						CIT	3. Reg	ulate	d Entity Referen	ce Number	(if issued)		
CN 6000	for CN or RN numbers in Central Registry**			RN									
CTION	II: Cı	istomer In	<u>formation</u>										
4. General Customer Information 5. Effective Date for Customer I							tion U	pdat	es (mm/dd/yyyy)				
☐ New Cus ☐Change i		ame (Verifiable v	the state of the s	Update to Clecretary of S				ller o	☐ Change in f Public Accounts)		Entity Ownership		
The Custo	omer Na	me submitte	d here may b	be update	d auton	natica	lly ba	sed	on what is cu	rrent and	active with the		
Texas Sec	cretary	of State (SOS	) or Texas C	omptrolle	er of Pul	blic A	ссои	nts (	CPA).				
. Custome	r Legal N	ame (If an individ	ual, print last nam	e first: eg: Do	e, John)		<u>If ne</u>	w Cu	stomer, enter previ	ous Custom	er below:		
Cevetal S	nringe V	Water Co., Ir	20										
7. TX SOS/C		CONTRACTOR OF		Tax ID (11 digits)			9. Federal Tax ID (9 digits)			10. DUNS Number (if applicable)			
00456316	CINDOLUNIA	1100000000	17420905										
1. Type of	Custome	☐ Individual			Partnership: ☐ General ☐ Limited								
Sovernment	: City	County  Federa	I ☐ State ☐ Other		Sole Pro	prietor	ship		Other:				
<b>12. Number of Employees</b> ⊠ 0-20  ☐ 21-100  ☐ 101-250  ☐ 251-500					501 and higher			13. Independently Owned and Operated?  ⊠ Yes □ No					
	er Role (F	Proposed or Actual	) – as it relates to	the Regulate	d Entity list	ted on th	is form	. Plea	se check one of the	following:			
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	P.O. 1	Box 603				-							
5. Mailing						_							
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6. Country	Mailing I	nformation (if or	ıtside USA)			17. E-N	lail Ad	ldres	S (if applicable)				
				-749		lpwat	er20	00@	yahoo.com				
18. Telepho	19. Extension or Code					20. Fax Number	r (if applicable)						
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of organiz	ational	ntity Name su endings suci Name (Enter nam	h as Inc, LP,	or LLC.)				2870		100000			

23. Street Address	s of											
the Regulated Entity: (No PO Boxes)		- In					TX ZIP		1	0.2	715 - 4	
		City	Conroe		State			ZIP	773	06	ZIP+4	
24. County		Montgo						1.0051-0-F	CS. SEPTEMBER			
		E	nter Physical I	Locatio	n Descripti	on if no s	street	address	is provi	ded.	CV CONTINUES	ALLEY C
25. Description to Physical Location:		100	cimately 0.2 Conroe, Mo					ction of	FFM 2	2090 and	l Crockett N	<b>Martin</b>
26. Nearest City									State		Nea	rest ZIP Code
Conroe									TX		773	06
27. Latitude (N)	ın Deci	mal:	30.26431	4	28. Longitude					Decimal:	95.29808	3
Degrees		Minutes		Secon	Seconds		Degrees			Minutes		Seconds
30	30 15 51.53 -95			-95			17	53.10				
29. Primary SIC Co	<b>ode</b> (4 d	ligits) 30	. Secondary S	SIC Cod	Code (4 digits) 31. Primary NAICS (5 or 6 digits)					de 32. Secondary NAICS Code (5 or 6 digits)		
4952					221320							
33. What is the Pri	imary E	Business of	this entity?	(Do not	repeat the SIC	or NAICS d	lescriptic	n.)				
Providing water	er and	sewer u	tility servic	es to t	he reside	ntial su	ıbdiv	isions				
1.0 (4) (4.04 (4.04 ) )						. 1	P.O. B	ox 603				
34. Mailing												
Address:		City	Porte	r	State	T	х	ZIP		77365	ZIP + 4	
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	Lat 9998 545	one Numbe	r		37. Extens	27 27 11 12 12 12 12 12 12 12 12 12 12 12 12	1 Al. 1		11 11 11 11 11 11	3. Fax Nun	nber (if applica	able)
		354-5141								( 281	1)354-6627	
9. TCEQ Programs	and ID	Numbers C	heck all Program	ns and w	rite in the per	rmits/regist	tration r	numbers th	nat will be	affected by	the updates sub	mitted on this
rm. See the Core Data				ance.	1000				111000			
☐ Dam Safety		Districts			☐ Edwards Aquifer		Emissions II			ry Air	☐ Industrial Hazardous Waste	
			-	-			-	B	01	~ .	T DING	
☐ Municipal Solid Waste ☐ Sludge		☐ New Source Review Air ☐ Storm Water			OSSF  Title V Air		☐ Petroleum S		n Storage	a rank	☐ PWS	
							Tires				Used Oil	
		Mosto Water			DW-1			W-t Di-			Other:	
☐ Voluntary Cleanup					☐ Wastewater Agriculture			Water Rig	ints		U Other:	-
		New	Charles Zen	4			4	_				
ECTION IV:	Prej	parer In	formation	<u>n</u>								
10. Name: Shel	lley Y	oung					41. Tit	le: (	Consu	lting En	gineer	
12. Telephone Numi	ber	43. Ext	t./Code	44. Fax	Number		45. E	-Mail Ad	dress			
281)373-0500	)			(281	) 373-111	13	syo	ung@v	vatere	ngineers	.com	
ECTION V:	Autl	norized	Signature					,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		1001110	-100.00	
6. By my signature lignature authority to dentified in field 39.	below.	I certify, to	the best of my	knowle	dge, that the pecified in S	informat ection II,	ion pro Field	ovided in 6 and/or a	this forms requir	n is true an	nd complete, an updates to the I	d that I have D numbers
Company:	WaterE	ngineers, In	C.			Job Ti	itle:	Engine	er			
Name(In Print) : Shelley Young									Pho	one:	(281) 373-500	0500
Signature: Shulles IA				100	240					٥٠	5/111	12001

# Affected Landowner Map and List

(Reference Administrative Report 1.1, Page 13, Section 1)



### TABLE "ADMIN.04"

### SHEA HOMES HOUSTON, LLC

### **Denbury West Wastewater Treatment Plant**

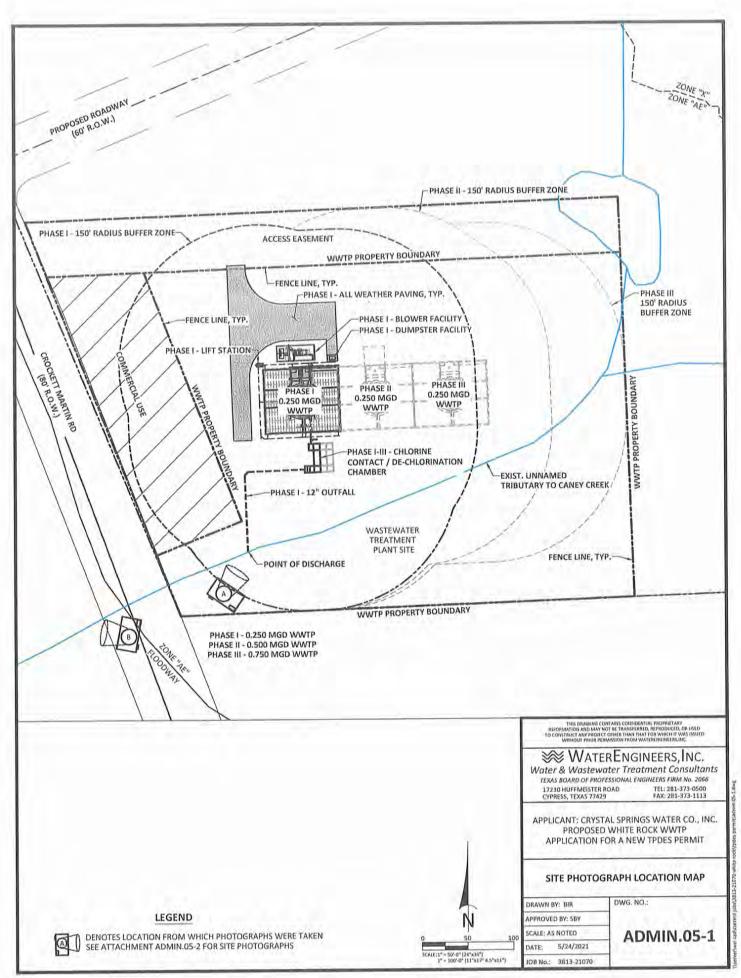
# Adjacent & Downstream Land Ownership Table Source: Montgomery County Appraisal District

Tract No.	Title Owner & Address
(See Attachment "ADMIN.04" Map)	
	PINE ROCK ACRES
1	P O BOX 603
	PORTER TX 77365
	TEE TOTAL ENGINEERING
2	EXPECTATIONS INC
-	25710-A FM 2100
	HUFFMAN TX 77336
	PTECH DRILLING TUBULARS
3	13618 POPLAR CIRCLE #302
	CONROE TX 77304
	BERNARDINO & MARIA GUZMAN
4	3900 HIGHLINE OAKS W
'	CONROE TX 77306
	ROGER KOEPPE
5	13022 PALACE
j	CONROE TX 77306
	JAMES SIMS III
6	1717 BAYRAM
Č	HOUSTON TX 77055
	MEHARBANOO ALI
7	4050 BISSONNET
,	HOUSTON TX 77005
	BRYAN COCKRELL
8	NO ADDRESS KNOWN
	ALEJANDRO DELREAL
9	18524 SUMMER HILLS
	PORTER TX 77365
	JOHN WILSON
10	3741 WALDEN ESTATES UNIT A204
	MONTGOMERY 77356
	BEVERLY BRYANT
11	131 COVT DR
	POINT BLANK TX 77364

12	FM 2090 RIGHT OF WAY
	AKHLAK AHMED & ABDUL MAJID
13	13706 SHADOW FALLS CT
	HOUSTON TX 77059
	KLINE BUDD
14	17278 FM 2090
	CONROE TX 77306
	MARIANA GRODZKA
15	516 ½ MARTIN
	HOUSTON TX 77018

# **Photographs**

(Reference Administrative Report 1.1, Page 14, Section 2)









₩ WATER ENGINEERS, INC. Water & Wastewater Treatment Consultants TEXAS BOARD OF PROFESSIONAL ENGINEERS FIRM No. 2066 17230 HUFFMEISTER ROAD TEL: 281-373-0500 CYPRESS, TEXAS 77429 FAX: 281-373-1113

APPLICANT: CRYSTAL SPRINGS WATER CO., INC.
PROPOSED WHITE ROCK WWTP
APPLICATION FOR A NEW TPDES PERMIT

SITE PHOTOGRAPHS DWG. NO.:

DRAWN BY: BIR

APPROVED BY: SBY

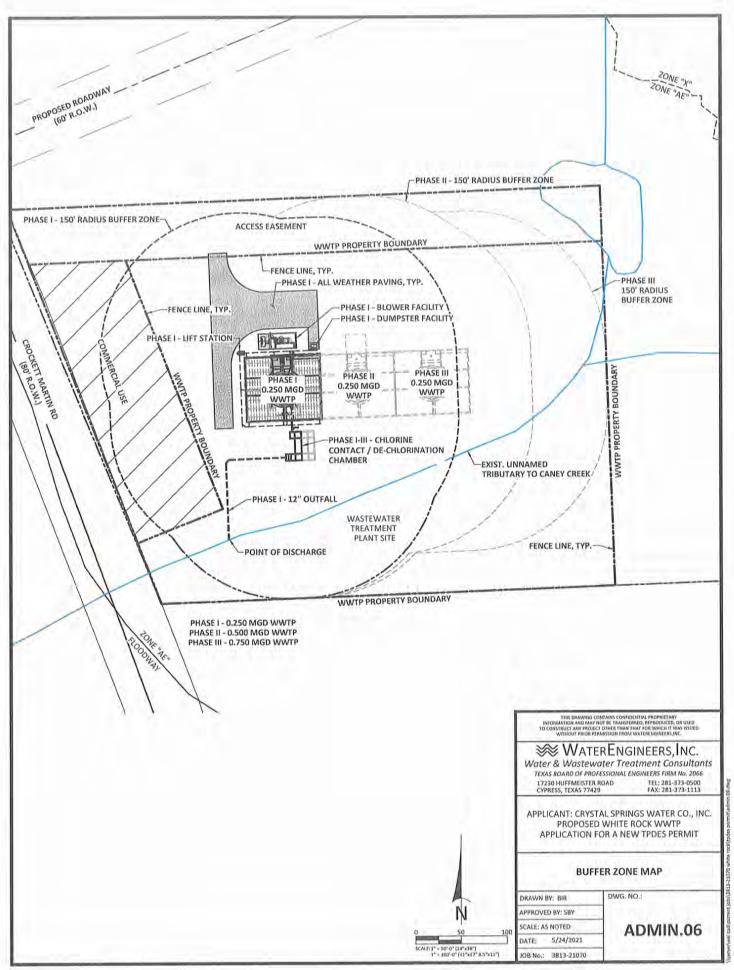
SCALE: AS NOTED

DATE: 5/25/2021 JOB No.: 3813-21070 **ADMIN.05-2** 

\*\* SEE ADMIN.05-1 FOR LOCATION IN WHICH PHOTOGRAPHS WERE TAKEN

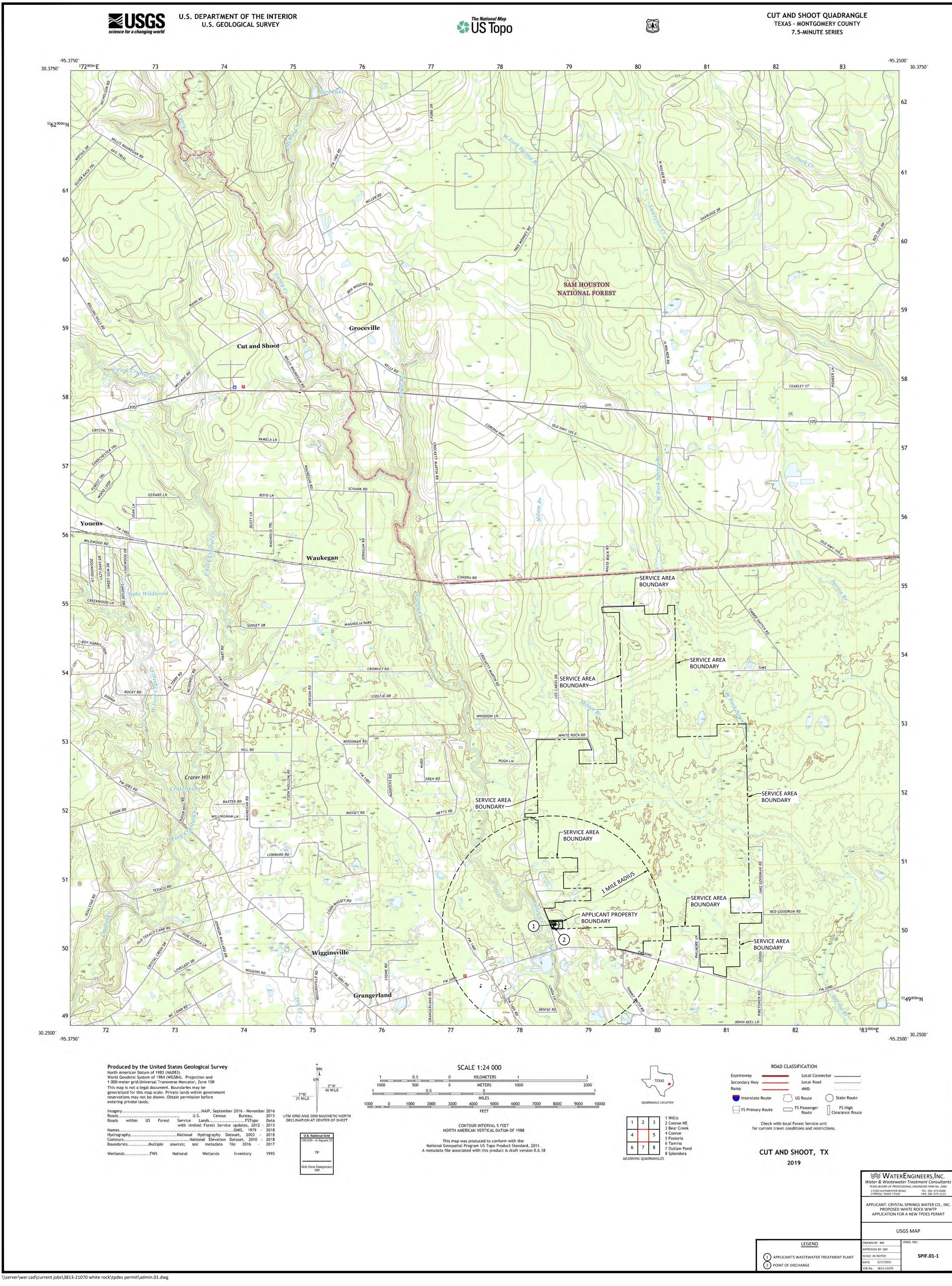
# **Buffer Zone Map**

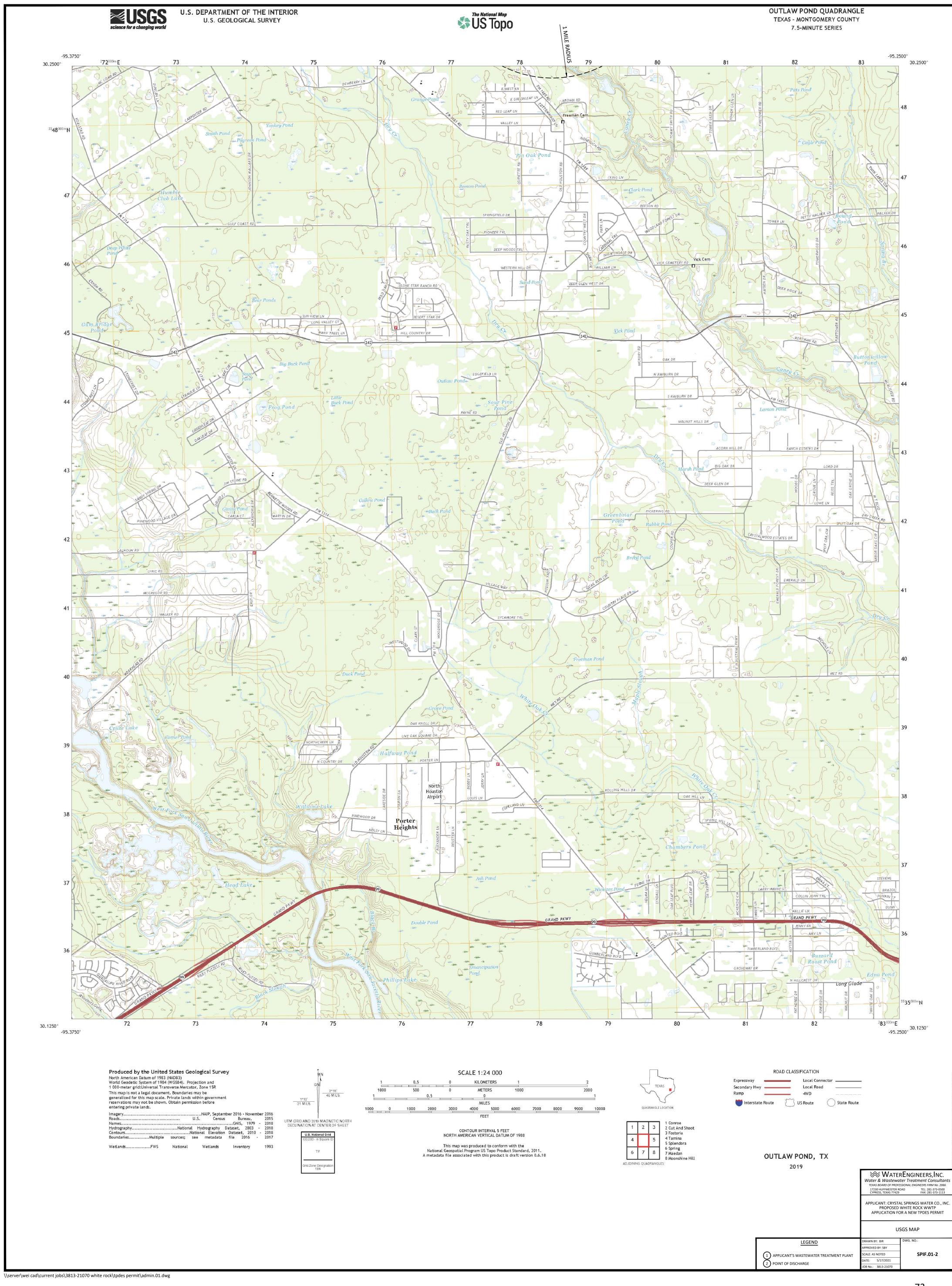
(Reference Administrative Report 1.1, Page 14, Section 3A)



# ATTACHMENT SPIF.01 USGS Topographic Map

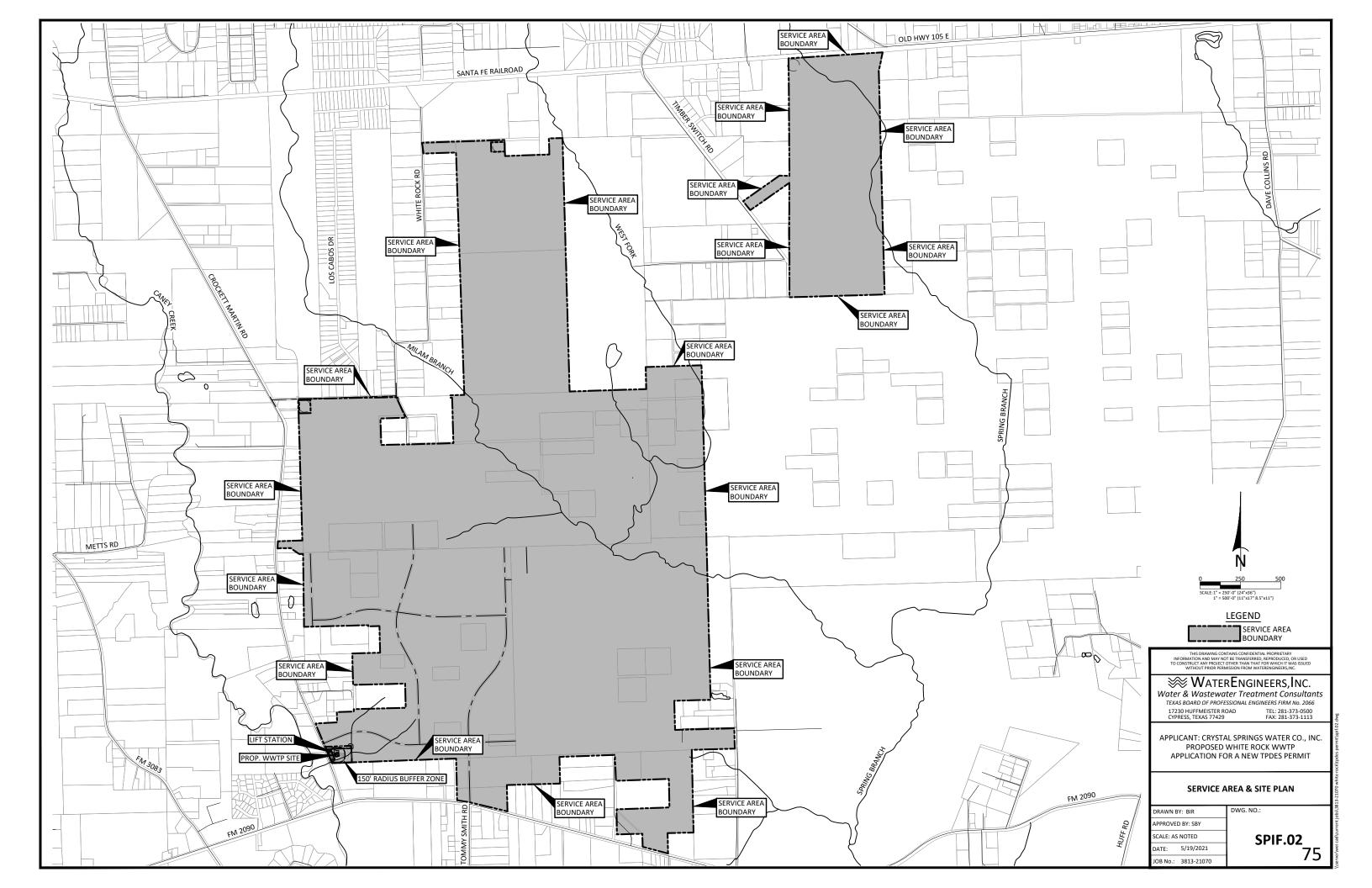
(Reference Supplemental Permit Information Form, Pg 16, Question 5)





# ATTACHMENT SPIF.02 Site Drawing

(Reference Supplemental Permit Information Form, Pg 16, Question 5)



# ATTACHMENT TECH.01 Design & Loading Criteria Table And Design Features for Reliability

(Reference Technical Report Page 2, Question 2b)

PH/ PHA	TECH.01 DESIGN & LOADING C WHITE ROCK WV ASE I - 250,000 GPD CA SE 2 - 500,000 GPD CA SE 3 - 750,000 GPD CA	/TP PACITY (4Q) APACITY (4Q)		
Parameter	WWTP # 1 Value	WWTP # 2 Value	WWTP#3 Value	Composite Value
INFLUENT CONDITIONS % of Flow to Each Plant	33.3%	33,3%	33.3%	
Average Dally Flow, mgd	0,250	0.250	0.250	0.750
Ratio Average/Peak Flow Peak 2-Hour Flow, mgd	1.000	1.000	1.000	3.00
Peak 2-Hour Flow, gpm	094,444	694,444	894 444	300
BOD, mg/l BOD, lb/day	200 626	300 626	300 626	1,877
TREATMENT UNITS	10	10	12	13
Tank Wall Height, ft Tank Freeboard, ft	12	12	1.5	1.5
Side Water Depth, II	10,5	10.5	10.5	10.5
ACTIVATED SLUDGE PLANT Anoxic/Selector Zone				
Min, Design Detention, hrs Required Volume, cu ft	2,786	2,785	2,785	
Required Volume, Gallons	20,833	20,833	20,833	
Anoxic Basin Depth, fl Required Anoxic Basin Surface Area, sti fl	10,5 265	10.5	10,5	
Actual Anoxic Busin Surface Area, sq II	329	320	329	10.00
Actual Anoxic Busin Volume, cu fl Detention, hours	3,455	3.455 2.48	3,465 2,48	10,364
Air Supply, scfm/1000 cu li	20	20	20	
Air Supply, sofm Aeralion Basin Oxic Zones	69	69	69	203
Aeration Basin Loading, th BOD/1000 ou ft	35	35	35	
Aeration Basin Volume, cu ff Aeration Basin Depth, ff	17,871	17,871	17,871	
Reg'd Aeration Basin Surface Area, sq ft	1,727	1,727	1,727	A share
Actual Aeration Basin Surface Area, sq fl Actual Aeration Basin Volume, cu fl	1,524 15,773	1,524	1,524	4,572.0 47,320.3
Aeration Basin Loading, # BOD/1000 of	39.7	30.7	39.7	
Total Aerated Volume (Anoxic + Aerobic), cu fi Total Aeration Basin Loading, # BOD/1600 cf	19,228 32.5	19 238	19,228	57,683,
Detention, hours	13.81	13.81	13.81	
O2 Req'd @ 2.2, # O2/lb BOD Correction Factor for Fine Bubble	1,376 0.45	1,376	1,376 0.45	
Air Diffuser Submergence, ft	9,60	9.60	9.60	
Air Diffuser Efficiency, %/ ft sub Air Diffuser eff., %	0.017 16.3%	0.017 16.3%	0.017	
Required Aeration Basin Air Flow Rate, scfm	685	685	685	
Mixed Liquor Temperrature, deg C Air Supply Temperature Correction Factor	1,268	1.268	30 1.268	
Corrected Air Supply Rate, scfm	869	869	869	2,60
No. of Tube Diffuser Membranes (36.4" long) Active membrane surface area/diffuser, sq fl	86 2.54	8G 2.54	86 2,54	
Diffuser air flow, scfm/SF of membrane	3.98	3.98	3.98	
Air Supply, sefm/1000 ct R.S. Airlift Air, sefm	43 40	38 40	38 40	12
Skimmer Airlift Air, scfm	5	5	5	1
Clarifler Selected Internal Diameter, ft	35	35	35	
Side Water Depth, ft	11.22	11,22	11,22	200
Total Area sq ft Total Volume, cu fl	962 10,795	962 10,795	10,795	2,88 32,38
Avg. SOR, gpd/sq ft	260	260	260	26
Peak SOR, gpd/sq ft Avg. Detention, hr	1,039	7.75	1,039 7.75	1,03
Peak Detention, hr	1.94	1.94	1.94	1.9
Max Qr @ 400 mgd/sf, mgd Max Qp + Qr, mgd	0.385 1.385	0.385 1.385	0.385	1.15 4.15
CHLORINATION				
Min, Detention, min. Side Water Depth, fi	20 10.50	10.50	10.50	
Minimum Volume, cu ft	1,857	1,857	1,857	
Min. Surface Area, sq II Actual Surface Area, sq II	177 216	177	168	
Actual Volume, cu ft	2,268	1,764	1,764	5,79
Detention @ Qp, minutes Air Supply @ 10 scfm/1000 cf	24.4	21.7	20,8	20,
DECHLORINATION				
Min. Detention, sec Side Water Depth, It	30	30	30 9	
Minimum Volume, cu ft	46	46	46	13
Min. Surface Area, sq ft Actual Surface Area, sq ft	5 24	5 24	5 24	1 2
Actual Volume, cu ft	216	216	216	2)
Detention 級 Qp, seconds Air Supply 函 10 sofm/1000 cf	140	70 2,2	47	2
AEROBIC DIGESTION				19
Reg'd Loading, cu ft/# BOD Reguired Volume, cu ft	22.5 14.074	22.5 14.074	22.5 14.074	
Basin Depth, ft	10.5	10.5	10,5	
Min. Surface Area, sq fl Actual Surface Area, sq fl	1,340	1,340 1,476	1,340 1,476	4,42
Total Actual Volume, cu fl	15,498	15,498	15,498	46,49
Loading, cu ft/# BOD Air Supply Rate, scfm/1000 cu ft	24.8 30	24.8	24.8 30	24.
Total Air Supply, cfm	465	465	465	1,39
No. diffuser membranes (2/diffuser) Airflow/diffuser membrane, scfm	80 5.81	80 5.81	80 5.81	
AIR BLOWERS				140
Anoxic Basin, scfm Oxic Basins, scfm	69 869	69 688	89 869	2,60
RAS Airlift, scfm	40	40	40	12
Soum Airlift, sofm	5 23	5 18	5 18	1 5
Chlorine Contact Basin, sofm Dechlorination Contact Basin, sofm				2
Aerobic Digester Basin, scfm	465 1,470	465 1,465	465 1,465	1,39
Total Air Supply Required, sofm No. of Blowers	2	1	1	
Capacity, sofm Firm Capacity, sofm	1,500 1,500	1,500 1,500	1,500	4,50 4,50
FUCH VARIABLE SCIENT	1,500	1,000	1,000	5.3

### DESIGN FEATURES FOR RELIABILITY

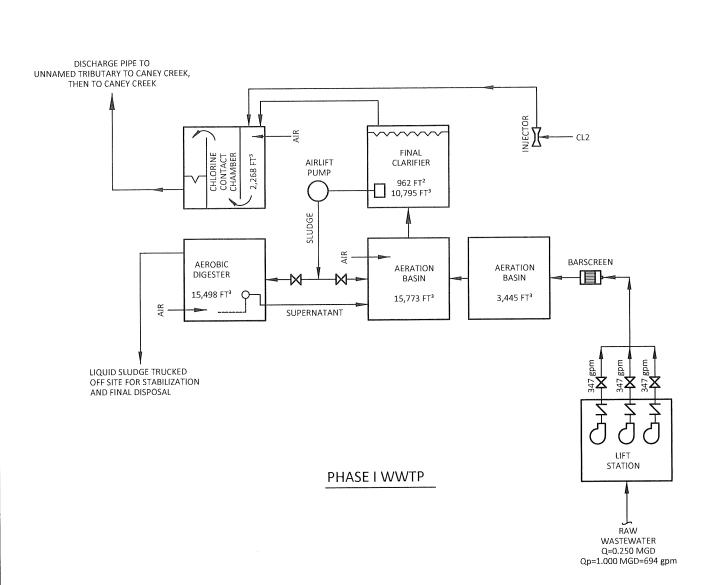
The White Rock Wastewater Treatment Plant facilities will be designed to provide a high degree of mechanical reliability consistent with TCEQ Design Criteria. The following describe design features that will be incorporated at the facilities to prevent bypassing or overflows of untreated wastewater:

- A. No infiltration/inflow is anticipated since the collection system will be new and not subject to the effects of age and deterioration at this time.
- B. The electrical service that will serve the White Rock WWTP is reliable with most outages lasting less than 2-4 hours. However, Crystal Springs Water Co., Inc. plans to purchase a generator to operate necessary plant components during extended outages.
- C. All mechanical units, such as influent pumps, blowers and chemical feed pumps will be installed with spare units in the event a piece of equipment is out of service for repairs.
- D. Plant units will be maintained per TCEQ standards and repaired as quickly as possible should failure occur.
- E. The facilities will include an auto-dialer that will call the operator in case of power outages, blower malfunctions, lift station malfunctions or high water alarm situations.

# ATTACHMENT TECH.02

## **Process Flow Diagram**

(Reference Technical Report Page 2, Question 2c)



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TO CONSTRUCT ANY PROJECT OTHER THAN THAT FOR WHICH IT WAS ISSUED
WITHOUT PRIOR PERMISSION FROM WATERENGINEERS,INC.

### ₩ WaterEngineers,Inc.

Water & Wastewater Treatment Consultants TEXAS BOARD OF PROFESSIONAL ENGINEERS FIRM No. 2066 17230 HUFFMEISTER ROAD TEL: 281-373-0500 CYPRESS, TEXAS 77429 FAX: 281-373-1113

APPLICANT: CRYSTAL SPRINGS WATER CO., INC. PROPOSED WHITE ROCK WWTP APPLICATION FOR A NEW TPDES PERMIT

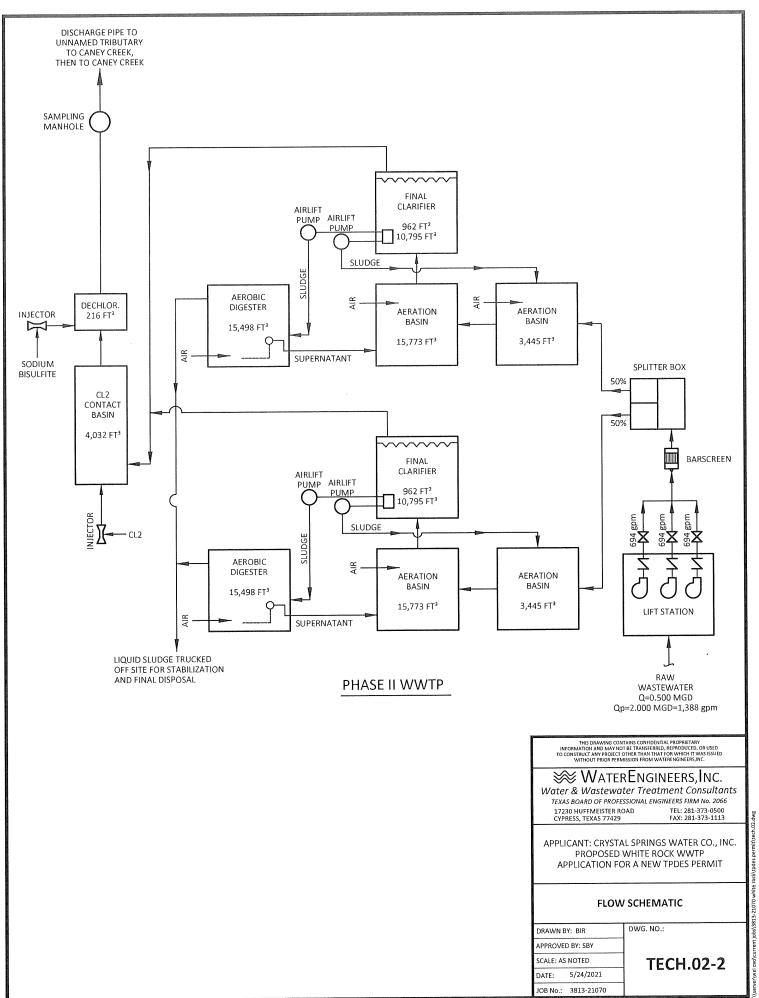
### FLOW SCHEMATIC

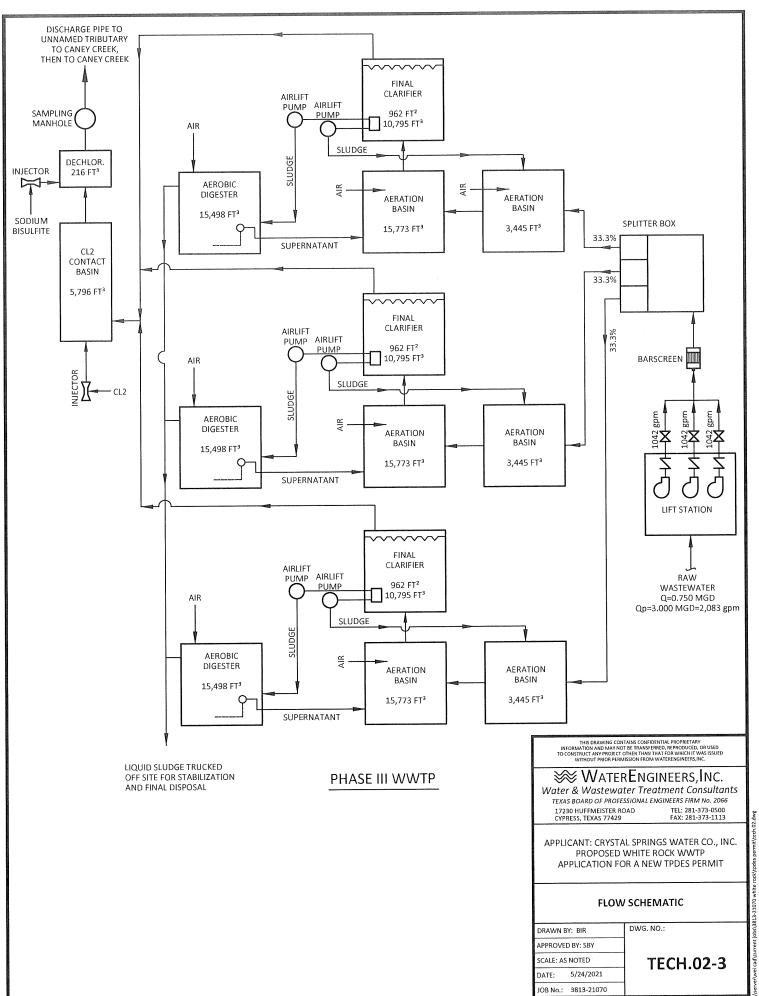
DRAWN BY: BIR
APPROVED BY: SBY
SCALE: AS NOTED
DATE: 5/24/2021

JOB No.: 3813-21070

DWG. NO.:

TECH.02-1





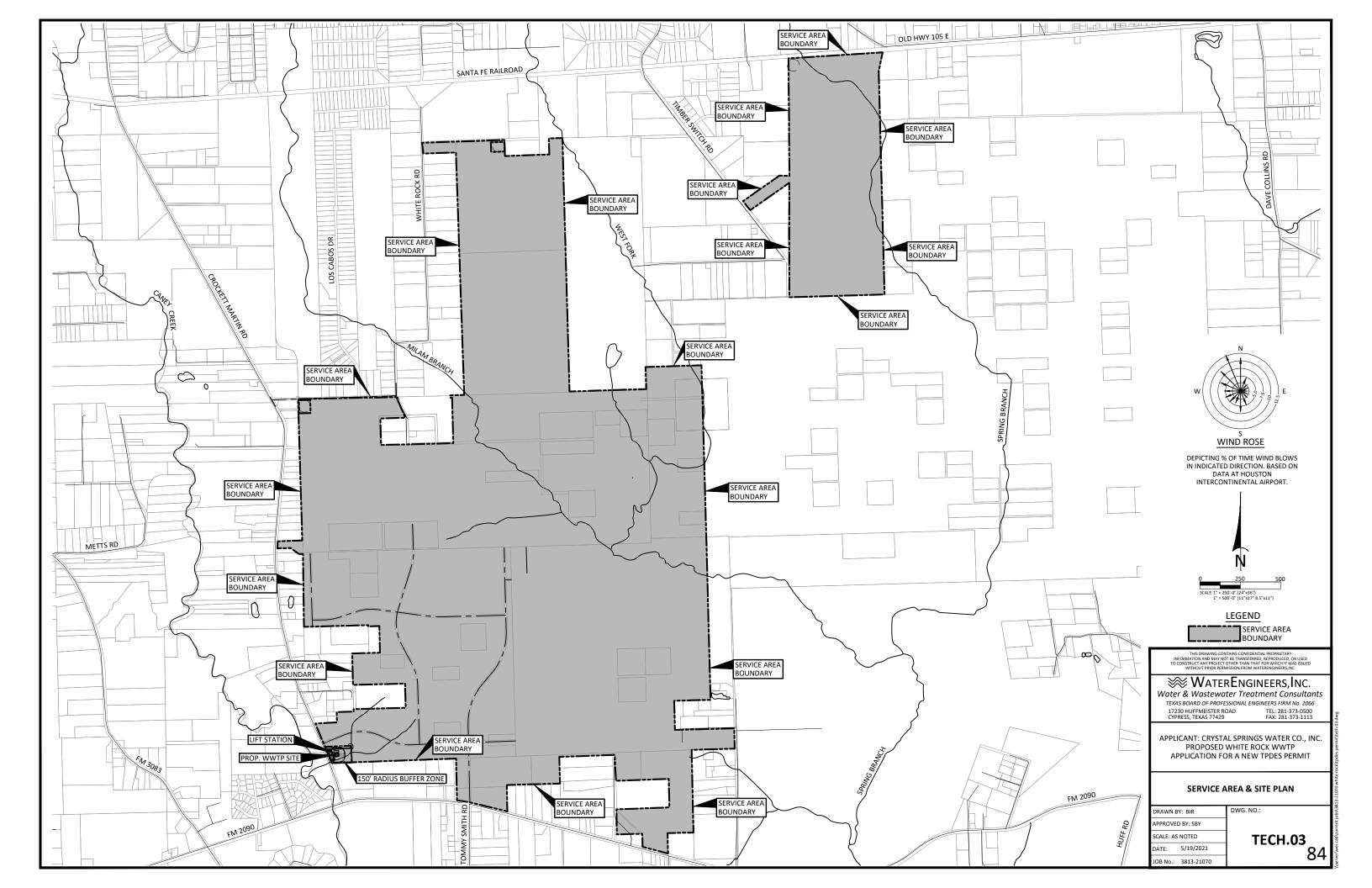
### **ATTACHMENT TECH.03**

### **Site Drawing**

(Reference Technical Report Page 3, Question 3)

### (Including Wind Rose)

(Reference Technical Report Page 24, Question 5B)



# ATTACHMENT TECH.04

## **Solids Management Plan**

(Reference Technical Report Page 24, Question 7)

### ATTACHMENT TECH.04 SLUDGE MANAGEMENT PLAN

### 1. Type of Wastewater Treatment Process Used

The White Rock Wastewater Treatment Plant (WWTP) will use the activated sludge with nitrification process. Solids analyses have been made based upon a spreadsheet calculation set up using sludge kinetic calculations developed by Dr. Ross McKinney and published in *Notes on Activated Sludge*, 1971, by Brian L. Goodman. Tables TECH.04-01, TECH.04-02 and TECH.04-03 show the process design and sludge generation calculations for the design flows of 250,000 gpd, 500,000 gpd and 750,000 gpd.

### 2. Dimensions and Capacities

The Phase I treatment facility will have two digester tanks with a total volume of 15,498 cu. ft., a surface area of 1,476 sq. ft. and a 10.5 ft. side water depth. The Phase I digester will provide a total design flow loading of 22.5 cu. ft./1b BOD. The Phase II treatment facility will be identical to Phase I with both phases providing a total volume of 30,996 cu. ft., surface area of 2,952 sq. ft. and a 10.5 ft. side water depth. The Phase II digester will provide a total design flow loading of 22.5 cu. ft./lb BOD. The Phase III/Final Phase treatment facility will add a third identical plant. The total volume between the three plants will be 46,494 cu. ft., surface area of 4,428 sq. ft. and a 10.5 ft. side water depth. The Phase III/Final Phase digesters will provide a total design flow loading of 22.5 cu. ft./lb BOD.

#### 3. Sludge Generation Calculations

Sludge generation calculations showing the amount of solids generated at 100%, 75%, 50% and 25% of design flows are included in Attachments TECH.04-01, TECH.04-02 and TECH.04-03. These are the solids that must be wasted from the activated sludge process and that must be stabilized in the aerobic digester. The results are summarized in the following table:

Phase	Solids @ 100% Qavg, lb/day	Solids @ 75% Qavg, lb/day	Solids @ 50% Qavg, lb/day	Solids @ 25% Qavg, lb/day
Phase I	471	354	236	118
Phase II	943	707	472	236
Phase III/Final	1,414	1,061	708	354

### 4. Operating Range of Mixed Liquor Suspended Solids

The calculations that predict the mixed liquor suspended solids in the activated sludge process are located in the following table:

		d Solids % Flow		d Solids 6 Flow	Predicted @50%		Predicte @25%	d Solids 6 Flow
	sludge age, days	MLSS mg/l	sludge age, days	MLSS mg/l	sludge age, days	MLS S mg/l	sludge age, days	MLSS mg/l
Phase I	8.5	3,441	11.25	3,418	17	3,445	34	3,447
Phase II	8.5	3,441	11.25	3,418	17	3,445	34	3,447
Phase III	8.5	3,441	11.25	3,418	17	3,445	34	3,447

#### 5. Solids Removal Procedures

The removal of waste activated sludge from the activated sludge process is achieved by wasting sludge from the bottom of the clarifier into the aerobic digester using the waste sludge airlift pump. In order to thicken solids prior to putting them into the digester, the air lift is turned off for approximately one hour prior to wasting. Periodically (two to three times a week) the air supply to the aerobic digester is shut off, allowing solids to settle to the bottom of the digester. Then the supernatant liquor is decanted with an adjustable decant airlift pump and returned to the aeration basin. After a sufficient period of digestion and/or the digester is full, sludge is removed from the digester by a vacuum truck by hooking the truck hose to the piping connection and opening the shut off valve.

### 6. Quantity of Solids to Be Removed and Solids Removal Schedule

The quantity of solids to be removed at the various plant loadings are presented in the following table. These quantities shown in the tabulation are *monthly* quantities based upon an influent BOD of 300 mg/l and TSS of 200 mg/l. If the strength of the influent wastewater varies significantly, solids removal quantities will be different.

		% Flow acity	@ 75 % Flow Capacity		@ 50 % Flow Capacity		@ 25 % Flow Capacity	
Phase	% Solids	Gal/ Month	% Solids	Gal/ Month	% Solids	Gal/ Month	% Solids	Gal/ Month
Phase I	2.0	68,419	2.0	51,340	2.0	34,237	2.0	17,125
Phase II	2.0	136,839	2.0	102,679	2.0	68,474	2.0	34,251
Phase III	2.0	205,258	2.0	154,019	2.0	102,711	2.0	51,376

### 7. Identification of Disposal Site

The disposal of sludge from the WWTP is contracted to sludge management and disposal contractor, Magna-Flow Environmental., who transports liquid sludge from the digester to other wastewater treatment facilities for further processing. Solids documentation is assured by measuring the volume of each sludge withdrawal and measuring the sludge solids concentrations. All required data is included in the annual sludge report to the TCEQ.

#### **ATTACHMENT TECH.04-1**

# PROCESS DESIGN AND SLUDGE GENERATION CALCULATIONS PHASE I - 250,000 GPD CAPACITY (4Q) WHITE ROCK WWTP

INFLUENT CONDITIONS				
Design Flow Rate, mgd 0.25		Aeration Vol, cu	ft	19,228
Infl. BOD, mg/l 300		Clarifier Diamete		35
Infl. TSS, mg/l 240		Clarifier Side Wa		11.22
Infl. VSS, mg/l 192		Clarifier Surface	•	962
BOD Loading, lb/day 626		Clarifier Volume		10,795
BOD Load, #/1000 cu ft 32.5		Temperature, de		20
		, ,	-	
Actual Plant Loading, %	1	0.75	0.5	0.25
Actual Flow Rate, mgd	0.25	0.1875	0.125	0.0625
BOD Loading, #/Day	626	469	313	156
Ret. Sludge Rate, gpd/sq ft	250	250	250	250
Ret. Sludge Flow, mgd	0.24	0.24	0.24	0.24
t = Aeration Time, days	0.58	0.77	1.15	2.30
ts = Sludge Age, Days	8.5	11.25	17	34
Km = BOD Removal Metabolic Factor	360	360	360	360
Ks = Synthesis Factor	250	250	250	250
Ke = Endogenous Metabolism Factor	0.282	0.213	0.141	0.071
F = Effl Soluble BOD	1.442	1.082	0.723	0.362
Ma = Active Mass	901	895	903	904
Me = Endogenous Mass	519	516	520	521
Mi = Inert Organic Mass	993	986	993	993
Mii = Inert Inorganic Mass	1,028	1,021	1,029	1,029
Mt = Total Mass, mg/l	3,441	3,418	3,445	3,447
Total Mass in Aeration Basin, lb	4,128	4,100	4,132	4,135
Lb BOD/Lb MLSS/Day	0.152	0.114	0.076	0.038
Effl TSS, mg/l	6.9	6.8	6.9	6.9
Effl BOD, mg/l	2.6	2.2	1.9	1.5
Sludge Accumulation, lb/day	486	364	243	122
TSS Lost In Effluent, lb/day	14	11	7	4
Waste Sludge, lb/day	471	354	236	118
Return Sludge Conc, mg/l	7,018	6,082	5,235	4,343
Waste Sludge Conc, mg/l	7,018	6,082	5,235	4,343
Waste Sludge Flow, gpd	8,052	6,973	5,403	3,258
AEROBIC DIGESTER	45 400			
Volume, cu ft	15,498	22.0	40 G	99.1
Design Loading, cu ft/lb BOD	24.8	33.0 6.082	49.6 5.235	4,343
Incoming Sludge Conc, mg/l	7,018	6,082	5,235 20,000	4,343 20,000
Thick Sludge Conc, mg/l	20,000 41.0	20,000 55	20,000 82	20,000 164
Detention, Days	41.0 471	354	236	118
Infl Total Solids, lb/day	123	93	62	31
Infl Active Mass, lb/Day	123	93 7	5	2
Effl Active Mass, lb/Day	91	68	46	23
Active Mass Red., lb/day	380	285	190	95
Digester Effl Solids, lb/day	1,522	1,522	1,523	1,523
Sludge Disposed, lb/mg	0.76	0.76	0.76	0.76
Sludge Disposed, tons/mg	2,281	1,711	1,141	571
Sludge Hauled, gal/day Sludge Hauled, gal/month	68,419	51,340	34,237	17,125
Siduge Hadied, gal/month	00,-110	01,040	01,201	,

#### **ATTACHMENT TECH.04-02**

# PROCESS DESIGN AND SLUDGE GENERATION CALCULATIONS PHASE II - 500,000 GPD CAPACITY (4Q) WHITE ROCK WWTP

INICI LICAT CONDITIONS				
INFLUENT CONDITIONS  Design Flow Rate, mgd 0.500	١	Aeration Vol, o	nu ft	38,456
Design Flow Rate, mgd 0.500 Infl. BOD, mg/l 300		Clarifier Diame		35
Infl. TSS, mg/l 240		Clarifier Side \		10.5
Infl. VSS, mg/l 192		Clarifier Surfac		1,924
BOD Loading, lb/day 1,251		Clarifier Volum		21,590
BOD Load, #/1000 cu ft 32.5		Temperature,		20
555 Edda, #/ 1000 60 ft 52.6	•	, omporator,	g <del>-</del>	
Actual Plant Loading, %	1	0.75	0.5	0.25
Actual Flow Rate, mgd	0.5	0.375	0.25	0.125
BOD Loading, #/Day	1251	938	626	313
Ret. Sludge Rate, gpd/sq ft	250	250	250	250
Ret. Sludge Flow, mgd	0.48	0.48	0.48	0.48
t = Aeration Time, days	0.58	0.77	1.15	2.30
ts = Sludge Age, Days	8.5	11.25	17	34
Km = BOD Removal Metabolic Factor	360	360	360	360
Ks = Synthesis Factor	250	250	250	250
Ke = Endogenous Metabolism Factor	0.282	0.213	0.141	0.071
F = Effl Soluble BOD	1.442	1.082	0.723	0.362
Ma = Active Mass	901	895	903	904
Me = Endogenous Mass	519	516	520	521
Mi = Inert Organic Mass	993	986	993	993
Mii = Inert Inorganic Mass	1,028	1,021	1,029	1,029
Mt = Total Mass, mg/l	3,441	3,418	3,445	3,447
Total Mass in Aeration Basin, lb	8,256	8,199	8,265	8,269
Lb BOD/Lb MLSS/Day	0.152	0.114	0.076	0.038
Effl TSS, mg/l	6.9	6.8	6.9	6.9
Effl BOD, mg/l	2.6	2.2	1.9	1.5
Sludge Accumulation, lb/day	971	729	486	243
TSS Lost In Effluent, lb/day	29	21	14	7
Waste Sludge, lb/day	943	707	472	236
Return Sludge Conc, mg/l	7,018	6,082	5,235	4,343
Waste Sludge Conc, mg/l	7,018	6,082	5,235	4,343
Waste Sludge Flow, gpd	16,103	13,947	10,805	6,517
-	,	,	,	,
AEROBIC DIGESTER	20.000			
Volume, cu ft	30,996	າາ	50	99
Design Loading, cu ft/lb BOD	25 7.019	33		4,343
Incoming Sludge Conc, mg/l	7,018	6,082	5,235	
Thick Sludge Conc, mg/l	20,000	20,000	20,000 82	20,000 164
Detention, Days	41	55 707	82 472	236
Infl Total Solids, lb/day	943	707 185	472 124	236 62
Infl Active Mass, lb/day	247	185 15	10	5
Effl Active Mass, lb/Day	20	15 137	91	46
Active Mass Red., lb/day	182 761	137 571	381	190
Digester Effl Solids, lb/day	761	571 1 522	1,523	1,523
Sludge Disposed, lb/mg	1,522	1,522	0.76	0.76
Sludge Disposed, tons/mg	0.76	0.76		1,142
Sludge Hauled, gal/day	4,561	3,423	2,282 68,474	34,251
Sludge Hauled, gal/month	136,839	102,679	00,474	J <del>1</del> ,201

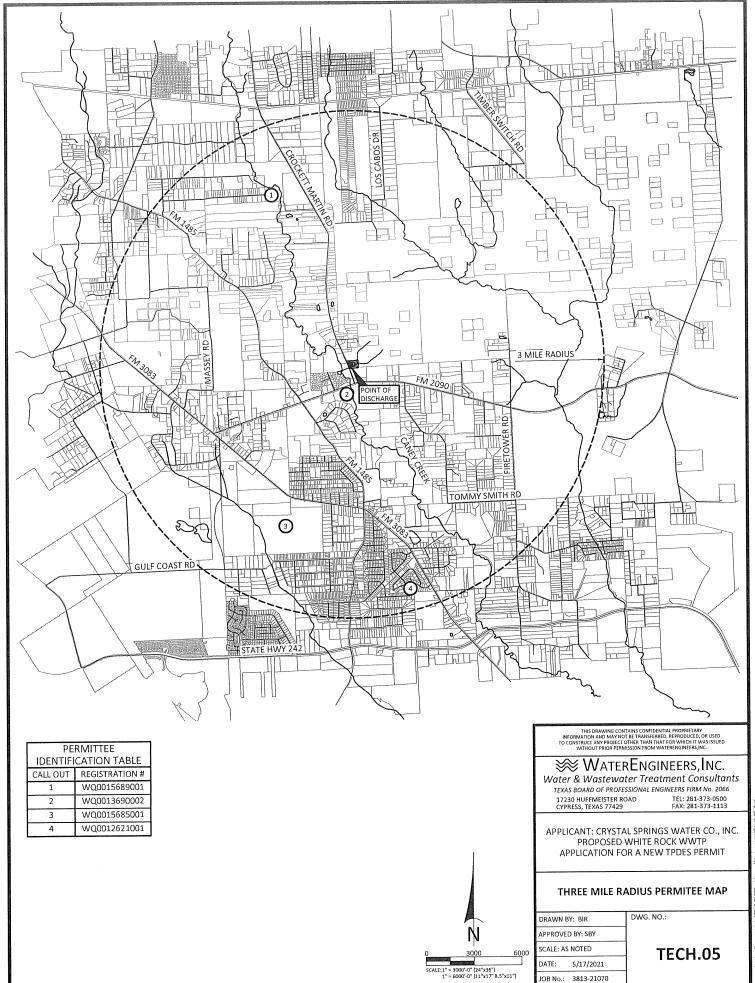
### ATTACHMENT TECH.04-03

# PROCESS DESIGN AND SLUDGE GENERATION CALCULATIONS PHASE III - 750,000 GPD CAPACITY (4Q) WHITE ROCK WWTP

INFLUENT CONDITIONS Design Flow Rate, mgd 0.750 Infl. BOD, mg/l 300 Infl. TSS, mg/l 240 Infl. VSS, mg/l 192 BOD Loading, lb/day 1,877 BOD Load, #/1000 cu ft 32.5		Aeration Vol, concluding Clarifier Diamer Clarifier Side Work Clarifier Surfact Clarifier Volume Temperature, concluding Clarifier Volume Clar	ter, ft, each /all Depth, ft e Area, sq ft e, cu ft	57,684 35 10.5 2,886 32,385 20
Actual Plant Loading, % Actual Flow Rate, mgd BOD Loading, #/Day Ret. Sludge Rate, gpd/sq ft Ret. Sludge Flow, mgd t = Aeration Time, days ts = Sludge Age, Days Km = BOD Removal Metabolic Factor Ks = Synthesis Factor Ke = Endogenous Metabolism Factor F = Effl Soluble BOD Ma = Active Mass Me = Endogenous Mass Mi = Inert Organic Mass Mii = Inert Inorganic Mass Mii = Total Mass, mg/l Total Mass in Aeration Basin, lb Lb BOD/Lb MLSS/Day Effl TSS, mg/l Effl BOD, mg/l Sludge Accumulation, lb/day	1 0.75 1877 250 0.72 0.58 8.5 360 250 0.282 1.442 901 519 993 1,028 3,441 12,384 0.152 6.9 2.6	0.75 0.5625 1407 250 0.72 0.77 11.25 360 250 0.213 1.082 895 516 986 1,021 3,418 12,299 0.114 6.8 2.2	0.5 0.375 938 250 0.72 1.15 17 360 250 0.141 0.723 903 520 993 1,029 3,445 12,397 0.076 6.9 1.9	0.25 0.1875 469 250 0.72 2.30 34 360 250 0.071 0.362 904 521 993 1,029 3,447 12,404 0.038 6.9 1.5
TSS Lost In Effluent, Ib/day Waste Sludge, Ib/day Return Sludge Conc, mg/l Waste Sludge Conc, mg/l Waste Sludge Flow, gpd	43 1414 7,018 7,018 24,155	32 1061 6,082 6,082 20,920	22 708 5,235 5,235 16,208	11 354 4,343 4,343 9,775
AEROBIC DIGESTER Volume, cu ft Design Loading, cu ft/lb BOD Incoming Sludge Conc, mg/l Thick Sludge Conc, mg/l Detention, Days Infl Total Solids, lb/day Infl Active Mass, lb/day Effl Active Mass, lb/Day Active Mass Red., lb/day Digester Effl Solids, lb/day Sludge Disposed, lb/mg Sludge Disposed, tons/mg Sludge Hauled, gal/month	46,494 25 7,018 20,000 41 1,414 370 29 273 1,141 1,522 0.76 6,842 205,258	33 6,082 20,000 55 1,061 278 22 205 856 1,522 0.76 5,134 154,019	50 5,235 20,000 82 708 186 15 137 571 1,523 0.76 3,424 102,711	99 4,343 20,000 164 354 93 7 68 286 1,523 0.76 1,713 51,376

# ATTACHMENT TECH.05 Map and List of Facilities within 3 Miles And Service Request Correspondence

(Reference Technical Report Page 20, Section 1.B.3)





WATER & WASTEWATER TREATMENT CONSULTANTS
17230 HUFFMEISTER ROAD, SUITE A~CYPRESS, TEXAS 77429-1643
Tel.: 281-373-0500 FAX: 281-373-1113

May 12, 2021

Crockett Martin Corp. 11166 Crockett Martin Road Conroe, Texas 77306

Re:

TCEO Waste Discharge Permit No. WQ0015689001

#### Dear Permittee:

We are writing to you on behalf of Crystal Springs Water Co., Inc. regarding a proposed wastewater treatment plant project to serve a proposed subdivision in Montgomery County, located in the northeast quadrant of the intersection of FM 2090 and Crockett Martin Road as shown on the attached map. The proposed wastewater system will serve approximately 3,000 equivalent single family connections. Crystal Springs Water Co., Inc. is in the process of applying for a new TCEQ Wastewater Discharge Permit for 750,000 gpd.

We are required to contact all existing TCEQ Wastewater Discharge Permittees within a 3 mile radius of the project to inquire if an existing permit holder is willing to provide the wastewater treatment capacity needed. According to TCEQ records, you are a permittee having an existing wastewater treatment plant located within three miles of the project and have a TCEQ Waste Discharge Permit. If we find a wastewater treatment plant permit holder within three miles that has the required capacity available or will expand their facility to make it available, we will conduct a feasibility study to determine if it is cost effective to obtain service from them.

We will appreciate receiving a response from you indicating if 750,000 gpd of wastewater treatment capacity in your facility is available, and if so, under what terms. A handwritten reply on a copy of this letter will be adequate. You may email your response to me at <a href="mailto:syoung@waterengineers.com">syoung@waterengineers.com</a> or fax to (281) 373-1113. Please feel free to call me at 281-373-0500 if you have any questions. Thank you for your assistance.

Sincerely,
WATERENGINEERS, INC.

Shelley Young, P.E.

cc: Crystal Springs Water Co., Inc.

	REPLY ()
Date of Reply: 5-12-2021	Signature: A Kay Young
Name of Permittee: Crockett Martin Corp	Printed Name: D. RAY YOUNG
Capacity Available (Yes / 10)?	Title: CONSULTING ENGINEER
Terms (if available)	Address: 17230 HUFFMEISTEF RO, SteA
	SUPPRESS TEXAS 77429
	Telephone: 28/-373-0500
	Email: deray @ waterengineers, com



WATER & WASTEWATER TREATMENT CONSULTANTS
17230 HUFFMEISTER ROAD, SUITE A~CYPRESS, TEXAS 77429-1643
TEL: 281-373-0500 FAX: 281-373-1113

May 12, 2021

Cert. Mail Receipt 7020 2450 0000 8285 0409

Conroe I.S.D. 3205 West Davis Conroe, Texas 77304

Re:

TCEQ Waste Discharge Permit No. WQ0013960002

Dear Permittee:

We are writing to you on behalf of Crystal Springs Water Co., Inc. regarding a proposed wastewater treatment plant project to serve a proposed subdivision in Montgomery County, located in the northeast quadrant of the intersection of FM 2090 and Crockett Martin Road as shown on the attached map. The proposed wastewater system will serve approximately 3,000 equivalent single family connections. Crystal Springs Water Co., Inc. is in the process of applying for a new TCEQ Wastewater Discharge Permit for 750,000 gpd.

We are required to contact all existing TCEQ Wastewater Discharge Permittees within a 3 mile radius of the project to inquire if an existing permit holder is willing to provide the wastewater treatment capacity needed. According to TCEQ records, you are a permittee having an existing wastewater treatment plant located within three miles of the project and have a TCEQ Waste Discharge Permit. If we find a wastewater treatment plant permit holder within three miles that has the required capacity available or will expand their facility to make it available, we will conduct a feasibility study to determine if it is cost effective to obtain service from them.

We will appreciate receiving a response from you indicating if 750,000 gpd of wastewater treatment capacity in your facility is available, and if so, under what terms. A handwritten reply on a copy of this letter will be adequate. You may email your response to me at <a href="mailto:syoung@waterengineers.com">syoung@waterengineers.com</a> or fax to (281) 373-1113. Please feel free to call me at 281-373-0500 if you have any questions. Thank you for your assistance.

Sincerely,
WATERENGINEERS, INC.
Shelley Young, P.E.

cc: Crystal

Crystal Springs Water Co., Inc.

			-
	5/18/2021	REPLY  Digitally signed by John Marshall Schroeder, but to generate the control of the control o	
Date of Reply:		Marshall Cohrondo	<u>-</u>
Name of Permitte	ce: Conroe ISD	Printed Name.	_
Capacity Availab	NT -	Title: Director of Maintenance	& Custodial
Terms (if availab	-	Address: 3205 West Davis	
Terms (II availao	(c)	Conroe, Texas 77304	
		Telephone: 832-592-8890	
		Email: mschroeder@conroeisd.net	4



WATER & WASTEWATER TREATMENT CONSULTANTS 17230 HUFFMEISTER ROAD, SUITE A~CYPRESS, TEXAS 77429-1643 Tel.: 281-373-0500 Fax: 281-373-1113

May 12, 2021

Grangerland Development LLC 1400 Woodloch Forest Drive, Suite 200 The Woodlands, Texas 77380

Re:

TCEQ Waste Discharge Permit No. WQ0015685001

Dear Permittee:

Sincerely,

We are writing to you on behalf of Crystal Springs Water Co., Inc. regarding a proposed wastewater treatment plant project to serve a proposed subdivision in Montgomery County, located in the northeast quadrant of the intersection of FM 2090 and Crockett Martin Road as shown on the attached map. The proposed wastewater system will serve approximately 3,000 equivalent single family connections. Crystal Springs Water Co., Inc. is in the process of applying for a new TCEQ Wastewater Discharge Permit for 750,000 gpd.

We are required to contact all existing TCEQ Wastewater Discharge Permittees within a 3 mile radius of the project to inquire if an existing permit holder is willing to provide the wastewater treatment capacity needed. According to TCEQ records, you are a permittee having an existing wastewater treatment plant located within three miles of the project and have a TCEQ Waste Discharge Permit. If we find a wastewater treatment plant permit holder within three miles that has the required capacity available or will expand their facility to make it available, we will conduct a feasibility study to determine if it is cost effective to obtain service from them.

We will appreciate receiving a response from you indicating if 750,000 gpd of wastewater treatment capacity in your facility is available, and if so, under what terms. A handwritten reply on a copy of this letter will be adequate. You may email your response to me at <a href="mailto:syoung@waterengineers.com">syoung@waterengineers.com</a> or fax to (281) 373-1113. Please feel free to call me at 281-373-0500 if you have any questions. Thank you for your assistance.

Shelley Young, P.E.	V.			
cc: Crystal Springs	Water Co., Inc.			
Date of Reply: 5/	12/21	REPLY Signature:	Ryan Wode	

Date of Reply:5/12/21	Signature: Ryan Wode  Printed Name: Ryan Wade
Name of Permittee: MCMUD No. 164	Printed Name: Ryan Wade
Capacity Available (Yes / No)? No	Title: Division Manager
Terms (if available)	Address: 2445 Technology Forest Dr.
Terms (if available)	The Woodlands, TX 77316
	Telephone: 832-823-2208
	Email: rwade@elevationlandsolutions.co

### **WATERENGINEERS, INC.**

WATER & WASTEWATER TREATMENT CONSULTANTS
17230 HUFFMEISTER ROAD, SUITE A~CYPRESS, TEXAS 77429-1643
TEL: 281-373-0500 FAX: 281-373-1113

May 12, 2021

Crystal Springs Water Co., Inc. P.O. Box 603 Porter, Texas 77365

Re: TCEQ Waste Discharge Permit No. WQ0012621001

Dear Permittee:

We are writing to you on behalf of Crystal Springs Water Co., Inc. regarding a proposed wastewater treatment plant project to serve a proposed subdivision in Montgomery County, located in the northeast quadrant of the intersection of FM 2090 and Crockett Martin Road as shown on the attached map. The proposed wastewater system will serve approximately 3,000 equivalent single family connections. Crystal Springs Water Co., Inc. is in the process of applying for a new TCEQ Wastewater Discharge Permit for 750,000 gpd.

We are required to contact all existing TCEQ Wastewater Discharge Permittees within a 3 mile radius of the project to inquire if an existing permit holder is willing to provide the wastewater treatment capacity needed. According to TCEQ records, you are a permittee having an existing wastewater treatment plant located within three miles of the project and have a TCEQ Waste Discharge Permit. If we find a wastewater treatment plant permit holder within three miles that has the required capacity available or will expand their facility to make it available, we will conduct a feasibility study to determine if it is cost effective to obtain service from them.

We will appreciate receiving a response from you indicating if 750,000 gpd of wastewater treatment capacity in your facility is available, and if so, under what terms. A handwritten reply on a copy of this letter will be adequate. You may email your response to me at <a href="mailto:syoung@waterengineers.com">syoung@waterengineers.com</a> or fax to (281) 373-1113. Please feel free to call me at 281-373-0500 if you have any questions. Thank you for your assistance.

Sincerely,
WATER ENGINEERS, INC.

Shelley Young, P.E.

cc: Crystal Springs Water Co., Inc.

REPLY

Date of Reply: 5-13-2021

Name of Permittee: Coundry West W. W.T.

Capacity Available (Yes No)! No

Terms (if available)

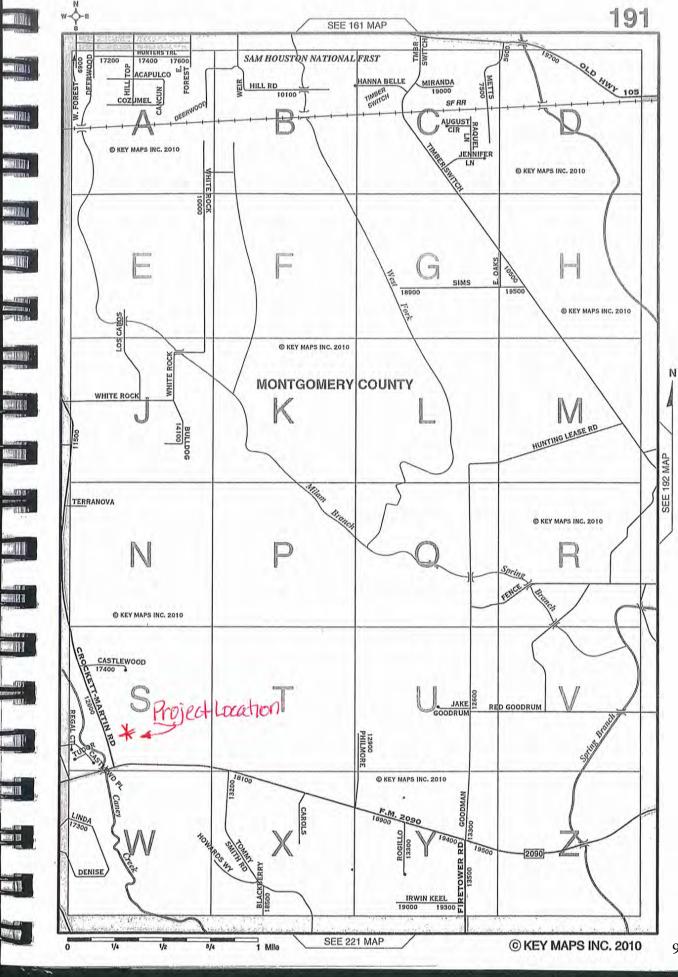
Title: Mgr.

Address: 23449 Huny 59 North

Purcen To 77365

Telephone: 281-354-5136

Email: LPwater 20w & Yahos. Com



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### **ATTACHMENT TECH.06**

## **Development Schedule**

(Reference Technical Report Page 19, Section 1.A)

# CRYSTAL SPRINGS WATER CO., INC. WHITE ROCK WASTEWATER TREATMENT PLANT WQ00 NEW

### DEVELOPMENT SCHEDULE

### NUMBER OF ESFC

YEAR	r connections		
			GALLONS
	ANNUAL	TOTAL	TO WWTP
End 2022	240	240	60000 1ST 0.250 mgd WWTP constructed by end of 2022
End 2023	240	480	120000
End 2024	240	720	180000
End 2025	240	960	240000 2nd 0.250 mgd WWTP begins construction in 2025
End 2026	240	1200	300000
End 2027	240	1440	360000
End 2028	240	1680	420000
End 2029	240	1920	480000 Final 0.250 mgd WWTP (for total of 0.750 mgd)
End 2030	240	2160	540000 begins construction in 2029
End 2031	240	2400	600000
End 2032	240	2640	660000
End 2033	240	2880	720000
End 2034	120	3000	750000

### syoung@waterengineers.com

From: syoung@waterengineers.com
Sent: Monday, July 12, 2021 2:24 PM

To: 'Erwin Madrid'

Subject: RE: Application for Proposed Permit No. WQ0016005001 – Notice of Deficiency Letter

Attachments: ADMIN.04~Downstream.doc; Labels.docx

Hi Erwin,

Please find attached a revised landowner list and a file with the revised labels. I will send hard copies of the list and a new CD by overnight mail.

Additionally, the viewing location listed in the portion of the NORI is incorrect. The correct location is:

R. B. Tullis Branch Library21569 US Highway 59New Caney, Texas in Montgomery County

Regards, Shelley

Shelley B. Young, P.E. WaterEngineers, Inc. 17230 Huffmeister Rd. Cypress, TX ~ 77429 tel: 281-373-0500 fax: 281-373-1113 www.waterengineers.com

The contents of this e-mail and any attachment(s) are confidential, and the property of WaterEngineers, Inc.

From: Erwin Madrid < Erwin. Madrid@tceq.texas.gov>

**Sent:** Friday, July 9, 2021 12:16 PM **To:** syoung@waterengineers.com

Subject: Application for Proposed Permit No. WQ0016005001 - Notice of Deficiency Letter

Importance: High

The attached Notice of Deficiency letter was mailed on <u>July 9, 2021</u>, requesting additional information needed to declare the application administratively complete. Please mail an original and two copies (with a cover letter) of the complete response by <u>August 8, 2021</u>.

Thank you,

Erwin Madrid License & Permit Specialist V ARP Team | Water Quality Division 512-239-2191 Texas Commission on Environmental Quality

### TABLE "ADMIN.04"

### CRYSTAL SPRINGS WATER CO., INC. White Rock Wastewater Treatment Plant

# Adjacent & Downstream Land Ownership Table Source: Montgomery County Appraisal District

Tract No. (See Attachment "ADMIN.04" Map)	Title Owner & Address
	PINE ROCK ACRES
1	P O BOX 603
	PORTER TX 77365
	TEE TOTAL ENGINEERING
2	EXPECTATIONS INC
	25710-A FM 2100
	HUFFMAN TX 77336
	PTECH DRILLING TUBULARS
3	13618 POPLAR CIRCLE #302
	CONROE TX 77304
	BERNARDINO & MARIA GUZMAN
4	3900 HIGHLINE OAKS W
	CONROE TX 77306
	ROGER KOEPPE
5	13022 PALACE
	CONROE TX 77306
	JAMES SIMS III
6	1717 BAYRAM
	HOUSTON TX 77055
	MEHARBANOO ALI
7	4050 BISSONNET
	HOUSTON TX 77005
	BRYAN COCKRELL
8	NO ADDRESS KNOWN
	ALEJANDRO DELREAL
9	18524 SUMMER HILLS
	PORTER TX 77365
	JOHN WILSON
10	3741 WALDEN ESTATES UNIT A204
	MONTGOMERY 77356
	BEVERLY BRYANT
11	131 COVT DR
	POINT BLANK TX 77364
12	FM 2090 RIGHT OF WAY

	T
	AKHLAK AHMED & ABDUL MAJID
13	13706 SHADOW FALLS CT
	HOUSTON TX 77059
	KLINE BUDD
14	17278 FM 2090
	CONROE TX 77306
	MARIANA GRODZKA
15	516 ½ MARTIN
	HOUSTON TX 77018
	ELIZABETH PERRY
16	2805 NEWMAN ST
	HOUSTON TX 77098
	MICHAEL COOPER
17	2214 ZAVALA ST
	HOUSTON TX 77085
	WILLIAM & TYRA HODGE
18	17615 LINDA LN
	CONROE TX 77306
	PATRICIA HOWARD
19	17641 LINDA LN
	CONROE TX 77306
	LAURA ARMILLA
20	17685 LINDA LN
	CONROE TX 77306
	CREATIVE CONSTRUCTION LLC
21	P O BOX 484
	SHELBYVILLE TX 75973-0484

PINE ROCK ACRES P O BOX 603 PORTER TX 77365 TEE TOTAL ENGINEERING EXPECTATIONS INC 25710-A FM 2100 HUFFMAN TX 77336 PTECH DRILLING TUBULARS 13618 POPLAR CIRCLE #302 CONROE TX 77304

BERNARDINO & MARIA GUZMAN 3900 HIGHLINE OAKS W CONROE TX 77306 ROGER KOEPPE 13022 PALACE CONROE TX 77306 JAMES SIMS III 1717 BAYRAM HOUSTON TX 77055

MEHARBANOO ALI 4050 BISSONNET HOUSTON TX 77005 ALEJANDRO DELREAL 18524 SUMMER HILLS PORTER TX 77365 JOHN WILSON 3741 WALDEN ESTATES UNIT A204 MONTGOMERY 77356

BEVERLY BRYANT 131 COVT DR POINT BLANK TX 77364 AKHLAK AHMED & ABDUL MAJID 13706 SHADOW FALLS CT HOUSTON TX 77059 KLINE BUDD 17278 FM 2090 CONROE TX 77306

MARIANA GRODZKA 516 ½ MARTIN HOUSTON TX 77018 ELIZABETH PERRY 2805 NEWMAN ST HOUSTON TX 77098 MICHAEL COOPER 2214 ZAVALA ST HOUSTON TX 77085

WILLIAM & TYRA HODGE 17615 LINDA LN CONROE TX 77306 PATRICIA HOWARD 17641 LINDA LN CONROE TX 77306 LAURA ARMILLA 17685 LINDA LN CONROE TX 77306

CREATIVE CONSTRUCTION LLC P O BOX 484 SHELBYVILLE TX 75973-0484

### syoung@waterengineers.com

From: syoung@waterengineers.com

Sent: Friday, December 17, 2021 9:36 AM

To: 'Sonia Bhuiya'

Cc: 'Firoj Vahora'; 'rebeccajo3@yahoo.com'

Subject: RE: WQ0016005001 CRYSTAL SPRINGS WATER COMPANY, INC.

Attachments: UPDATED SITE PLAN.pdf

Hi Sonia,

We are in receipt of a protest letter for the above referenced permit. The protestants' primary concern is that the treatment plant is located in the flood plain. When we submitted the application we were aware that it was in the flood plain, but the design was going to be such that all equipment and top of wall of the plant was above the flood plain level. After submittal of the application, a topographic survey was prepared that indicated the location was further into the flood plain that originally thought. The decision to move the plant location out of the flood plain was made. This decision moved the location 400'-500' to the east (see the attached updated site plan). The discharge location is staying the same and will be piped from the plant via a 15" outfall pipe to the original location.

This information should be helpful during the response to comments phase. I see that the comment period ended yesterday. Can you give me a schedule/timeline of how the application will proceed?

Please let me know if you need any additional information.

Regards, Shelley

Shelley B. Young, P.E. WaterEngineers, Inc. 17230 Huffmeister Rd. Cypress, TX ~ 77429 tel: 281-373-0500 fax: 281-373-1113

www.waterengineers.com

The contents of this e-mail and any attachment(s) are confidential, and the property of WaterEngineers, Inc.

From: Sonia Bhuiya <sonia.bhuiya@tceq.texas.gov>

**Sent:** Friday, October 15, 2021 2:26 PM **To:** syoung@waterengineers.com

Subject: RE: WQ0016005001 CRYSTAL SPRINGS WATER COMPANY, INC.

Sorry, I missed your e-mail.

Attached are revived pages for your review.

If the above draft permit is acceptable, please email your acceptance.

Please provide the information October 19, 2021.

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