Administrative Package Cover Page

This file contains the following documents:

1. Summary of application (in plain language)
2. First Notice (NORI-Notice of Receipt of Application and Intent to Obtain a Permit)
3. Application Materials

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

San Antonio Water System (CN600529069) operates the Salado Creek Water Recycling Center (RN100851518), a wastewater treatment facility. The facility is located at 13496 Blue Wing Road in the City of San Antonio, in Bexar County, Texas 78223. This permit application is for renewal to discharge treated domestic wastewater at the following Outfall:

- Outfall 001 = 46 million gallons per day

The facility is not currently discharging wastewater. The permit is being renewed for a potential future treatment facility and discharge at this location.

The facility transfers all wastewater flows to the Steven M. Clouse Water Recycling Center (WRC) for further treatment. The only treatment process at the Salado Creek WRC is screening of sewage, which removes large solids such as sticks, rags, and plastic material from the water. The facility also has four large rectangular tanks called flow equalization basins that are used to temporarily store sewage during storm events before transfer to the Steven M. Clouse facility. Facilities not currently used at Salado Creek WRC include grit removal chambers, which remove inorganic particles like sand or gravel, and facilities to add air to keep solids suspended in the water.

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

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

PERMIT NO. WQ0010137008

APPLICATION. San Antonio Water System, 2800 U.S. Highway 281 North, San Antonio, Texas 78212, has applied to the Texas Commission on Environmental Quality (TCEQ) to renew Texas Pollutant Discharge Elimination System (TPDES) Permit No. WQ0010137008 (EPA I.D. No. TX0052647) to authorize the discharge of treated wastewater at a volume not to exceed an annual average flow of 46,000,000 gallons per day. The domestic wastewater treatment facility is located at 13496 Blue Wing Road, in the city of San Antonio, in Bexer County, Texas, 78223. The discharge route is from the plant site directly to the Upper San Antonio River. TCEQ received this application on February 14, 2025. The permit application will be available for viewing and copying at San Antonio Water System, Administrative Building-First Floor, 2800 U.S. Highway 281 North, San Antonio, Texas prior to the date this notice is published in the newspaper. The application, including any updates, and associated notices are available electronically at the following webpage: https://www.tceq.texas.gov/permitting/wastewater/pending-permits/tpdes-applications. This link to an electronic map of the site or facility's general location is provided as a public courtesy and not part of the application or notice. For the exact location, refer to the application. https://gisweb.tceq.texas.gov/LocationMapper/?marker=-98.429214,29.284387&level=18

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

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

OPPORTUNITY FOR A CONTESTED CASE HEARING. After the deadline for submitting public comments, the Executive Director will consider all timely comments and prepare a response to all relevant and material, or significant public comments. **Unless the application**

is directly referred for a contested case hearing, the response to comments, and the Executive Director's decision on the application, will be mailed to everyone who submitted public comments and to those persons who are on the mailing list for this application. If comments are received, the mailing will also provide instructions for requesting reconsideration of the Executive Director's decision and for requesting a contested case hearing. A contested case hearing is a legal proceeding similar to a civil trial in state district court.

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

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

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

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

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

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

AGENCY CONTACTS AND INFORMATION. All public comments and requests must be submitted either electronically at **https://www14.tceq.texas.gov/epic/eComment/**, or in writing to the Texas Commission on Environmental Quality, Office of the Chief Clerk, MC-105,

P.O. Box 13087, Austin, Texas 78711-3087. Please be aware that any contact information you provide, including your name, phone number, email address and physical address will become part of the agency's public record. For more information about this permit application or the permitting process, please call the TCEQ Public Education Program, Toll Free, at 1-800-687-4040 or visit their website at www.tceq.texas.gov/goto/pep. Si desea información en Español, puede llamar al 1-800-687-4040.

Further information may also be obtained from San Antonio Water System at the address stated above or by calling Ms. Olga Galindo, Executive Administrative Assistant, at (210) 233-3830.

Issuance Date: March 13, 2025

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

February 14, 2025

Ms. Floramie Welch
Environmental Analyst III
San Antonio Water System
2800 U.S. Highway 281 North
San Antonio, Texas 78212

RE: Application to Renew Permit No.: WQ0010137008 (EPA I.D. No. TX0052647)
Applicant Name: San Antonio Water System (CN600529069)
Site Name: Salado Creek Water Recycling Plant (RN100851518)
Type of Application: Renewal without changes

VIA EMAIL

Dear Ms. Welch:

We have received the application for the above referenced permit, and it is currently under review. Your attention to the following item(s) are requested before we can declare the application administratively complete. Please submit responses to the following items via email.

1. General Information Renewal-Amendment, Item 6.7) Is the daily average discharge at your facility of 5 MGD or more? "YES" The application indicates as “NO”. However, as per 5.1) and the existing permit the discharged at the facility is 46 MGD. Please provide the names of all the counties located within 100 statute miles downstream of the point(s) of discharge.
Counties: Bexar, Wilson, Karnes, Goliad, Victoria, and Refugio

2. The following is a portion of the NORI which contains information relevant to your application. Please read it carefully and indicate if it contains any errors or omissions. The complete notice will be sent to you once the application is declared administratively complete.

   APPLICATION. San Antonio Water System, 2800 U.S. Highway 281 North, San Antonio, Texas 78212, has applied to the Texas Commission on Environmental Quality (TCEQ) renew Texas Pollutant Discharge Elimination System (TPDES) Permit No. WQ0010137008 (EPA I.D. No. TX0052647) to authorize the discharge of treated wastewater at a volume not to exceed an annual average flow of 46,000,000 gallons per day. The domestic wastewater treatment facility is located at 13496 Blue Wing Road, in the city of San Antonio, in Bexer County, Texas Texas, 78223. The discharge route is from the plant site directly to the Upper San Antonio River. TCEQ received this application on February 14, 2025. The permit application will be available for viewing and copying at San Antonio Water System, Administrative Building-First Floor, 2800 U.S. Highway 281 North, San Antonio, Texas prior to the date this notice is published in the newspaper. The application, including any updates, and associated notices are available electronically at the following webpage: https://www.tceq.texas.gov/permitting/wastewater/pending-permits/tpdes-applications. This

link to an electronic map of the site or facility's general location is provided as a public courtesy and not part of the application or notice. For the exact location, refer to the application. https://gisweb.tceq.texas.gov/LocationMapper/?marker=-98.429214,29.284387&level=18

Further information may also be obtained from San Antonio Water System at the address stated above or by calling Ms. Olga Galindo, Executive Administrative Assistant, at (210) 233-3830.

Please submit the complete response, addressed to my attention by February 28, 2025. If you should have any questions, please do not hesitate to contact me by phone at (512) 239-4912 or by email at abesha.michael@tceq.texas.gov.

Sincerely,

Abesha Michael

Abesha Michael
Applications Review and Processing Team (MC148)
Water Quality Division
Texas Commission of Environmental Quality

Enclosure(s)

cc: Mr. Tad Eaton, Environmental Analyst III, San Antonio Water System, 3495 Valley Road, San Antonio, Texas 78221

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

February 14, 2025

Re: Confirmation of Submission of the Renewal without changes for Public Domestic Wastewater Authorization.

Dear Applicant:

This is an acknowledgement that you have successfully completed Renewal without changes for the Public Domestic Wastewater authorization.

ER Account Number: ER046829
Application Reference Number: 752711
Authorization Number: WQ0010137008
Site Name: Salado Creek Water Recycling Plant
Regulated Entity: RN100851518 - Salado Creek Water Recycling
Customer(s): CN600529069 - San Antonio Water System

Please be aware that TCEQ staff may contact your designated contact for any additional information.

If you have any questions, you may contact the Applications Review and Processing Team by email at WQ-ARPTeam@tceq.texas.gov or by telephone at (512) 239-4671.

Sincerely,
Applications Review and Processing Team
Water Quality Division

Texas Commission on Environmental Quality

Update Domestic or Industrial Individual Permit

WQ0010137008

Site Information (Regulated Entity)

What is the name of the site to be authorized?	SALADO CREEK WATER RECYCLING PLANT
Does the site have a physical address?	Yes
Physical Address	
Number and Street	13496 BLUE WING RD
City	SAN ANTONIO
State	TX
ZIP	78223
County	BEXAR
Latitude (N) (##.######)	29.284387
Longitude (W) (-###.######)	-98.429214
Primary SIC Code	4952
Secondary SIC Code	
Primary NAICS Code	221320
Secondary NAICS Code	
Regulated Entity Site Information	
What is the Regulated Entity's Number (RN)?	RN100851518
What is the name of the Regulated Entity (RE)?	SALADO CREEK WATER RECYCLING
Does the RE site have a physical address?	Yes
Physical Address	
Number and Street	13496 BLUE WING RD
City	SAN ANTONIO
State	TX
ZIP	78223
County	BEXAR
Latitude (N) (##.######)	
Longitude (W) (-###.######)	
Facility NAICS Code	
What is the primary business of this entity?	DOMESTIC

San Ant-Customer (Applicant) Information (Owner)

How is this applicant associated with this site?	Owner
What is the applicant's Customer Number (CN)?	CN600529069
Type of Customer	City Government
Full legal name of the applicant:	
Legal Name	San Antonio Water System
Texas SOS Filing Number	
Federal Tax ID	742632530
State Franchise Tax ID	
State Sales Tax ID	
Local Tax ID	

DUNS Number	57582603
Number of Employees	501+
Independently Owned and Operated?	Yes
I certify that the full legal name of the entity applying for this permit has been provided and is legally authorized to do business in Texas.	Yes
Responsible Authority Contact	
Organization Name	San Antonio Water System
Prefix	
First	ANDREA
Middle	
Last	BEYMER
Suffix	
Credentials	PE
Title	EXECUTIVE VICE PRESIDENT-CHIEF OPERATING OFFICER
Responsible Authority Mailing Address	
Enter new address or copy one from list:	
Address Type	Domestic
Mailing Address (include Suite or Bldg. here, if applicable)	2800 US HIGHWAY 281 N
Routing (such as Mail Code, Dept., or Attn:)	
City	SAN ANTONIO
State	TX
ZIP	78212
Phone (###-###-####)	2102335490
Extension	
Alternate Phone (###-###-####)	
Fax (###-###-####)	
E-mail	ANDREA.BEYMER@SAWS.ORG

Billing Contact

Responsible contact for receiving billing statements:	
Select the permittee that is responsible for payment of the annual fee.	CN600529069, San Antonio Water System
Organization Name	SAN ANTONIO WATER SYSTEM
Prefix	
First	FLORAMIE
Middle	
Last	WELCH
Suffix	
Credentials	PE
Title	ENVIRONMENTAL ANALYST III
Enter new address or copy one from list:	
Mailing Address	
Address Type	Domestic
Mailing Address (include Suite or Bldg. here, if applicable)	2800 US HIGHWAY 281 N
Routing (such as Mail Code, Dept., or Attn:)	
City	SAN ANTONIO
State	TX
ZIP	78212

Phone (###-###-####)	2102333744
Extension	
Alternate Phone (###-###-####)	
Fax (###-###-####)	
E-mail	Floramie.Welch@saws.org

Application Contact

Person TCEQ should contact for questions about this application:	
Same as another contact?	
Organization Name	SAN ANTONIO WATER SYSTEM
Prefix	
First	FLORAMIE
Middle	
Last	WELCH
Suffix	
Credentials	
Title	ENVIRONMENTAL ANALYST III
Enter new address or copy one from list:	
Mailing Address	
Address Type	Domestic
Mailing Address (include Suite or Bldg. here, if applicable)	2800 US HIGHWAY 281 N
Routing (such as Mail Code, Dept., or Attn:)	
City	SAN ANTONIO
State	TX
ZIP	78212
Phone (###-###-####)	2102333744
Extension	
Alternate Phone (###-###-####)	
Fax (###-###-####)	2102334797
E-mail	Floramie.Welch@saws.org

Technical Contact

Person TCEQ should contact for questions about this application:	
Same as another contact?	
Organization Name	SAN ANTONIO WATER SYSTEM
Prefix	MR
First	TAD
Middle	
Last	EATON
Suffix	
Credentials	
Title	DIRECTOR TREATMENT OPERATIONS
Enter new address or copy one from list:	
Mailing Address	
Address Type	Domestic
Mailing Address (include Suite or Bldg. here, if applicable)	3495 VALLEY RD

Routing (such as Mail Code, Dept., or Attn:)	
City	SAN ANTONIO
State	TX
ZIP	78221
Phone (###-###-####)	2102333190
Extension	
Alternate Phone (###-###-####)	
Fax (###-###-####)	
E-mail	TAD.EATON@SAWS.ORG

DMR Contact

Person responsible for submitting Discharge Monitoring Report Forms:

Same as another contact?	Billing Contact
Organization Name	SAN ANTONIO WATER SYSTEM
Prefix	
First	FLORAMIE
Middle	
Last	WELCH
Suffix	
Credentials	
Title	ENVIRONMENTAL ANALYST III
Enter new address or copy one from list:	

Mailing Address:

Address Type	Domestic
Mailing Address (include Suite or Bldg. here, if applicable)	2800 US HIGHWAY 281 N
Routing (such as Mail Code, Dept., or Attn:)	
City	SAN ANTONIO
State	TX
ZIP	78212
Phone (###-###-####)	2102333744
Extension	
Alternate Phone (###-###-####)	
Fax (###-###-####)	
E-mail	Floramie.Welch@saws.org

Section 1# Permit Contact

Permit Contact#: 1

Person TCEQ should contact throughout the permit term.

1) Same as another contact?	Application Contact
2) Organization Name	SAN ANTONIO WATER SYSTEM
3) Prefix	
4) First	FLORAMIE
5) Middle	
6) Last	WELCH
7) Suffix	
8) Credentials	

9) Title	ENVIRONMENTAL ANALYST III
Mailing Address	
10) Enter new address or copy one from list	
11) Address Type	Domestic
11.1) Mailing Address (include Suite or Bldg. here, if applicable)	2800 US HIGHWAY 281 N
11.2) Routing (such as Mail Code, Dept., or Attn:)	
11.3) City	SAN ANTONIO
11.4) State	TX
11.5) ZIP	78212
12) Phone (###-###-####)	2102333744
13) Extension	
14) Alternate Phone (###-###-####)	
15) Fax (###-###-####)	
16) E-mail	FLORAMIE.WELCH@SAWS.ORG

Owner Information

Owner of Treatment Facility	
1) Prefix	
2) First and Last Name	
3) Organization Name	SAN ANTONIO WATER SYSTEM
4) Mailing Address	2800 US HWY 281 NORTH
5) City	SAN ANTONIO
6) State	TX
7) Zip Code	78212
8) Phone (###-###-####)	2107047297
9) Extension	
10) Email	FLORAMIE.WELCH@SAWS.ORG
11) What is ownership of the treatment facility?	Public
Owner of Land (where treatment facility is or will be)	
12) Prefix	
13) First and Last Name	
14) Organization Name	SAN ANTONIO WATER SYSTEM
15) Mailing Address	2800 US HWY 281 NORTH
16) City	SAN ANTONIO
17) State	TX
18) Zip Code	78212
19) Phone (###-###-####)	2107047297
20) Extension	
21) Email	FLORAMIE.WELCH@SAWS.ORG
22) Is the landowner the same person as the facility owner or co-applicant?	Yes

General Information Renewal-Amendment

1) Current authorization expiration date:	10/15/2025
2) Current Facility operational status:	Inactive
3) Is the facility located on or does the treated effluent cross American Indian Land?	No

4) What is the application type that you are seeking?	Renewal without changes
5) Current Authorization type:	Public Domestic Wastewater
5.1) What is the proposed total flow in MGD discharged at the facility?	46
5.2) Select the applicable fee	>= 1.0 MGD - Renewal - $2,015
6) What is the classification for your authorization?	TPDES
6.1) What is the EPA Identification Number?	TX0052647
6.2) Is the wastewater treatment facility location in the existing permit accurate?	Yes
6.3) Are the point(s) of discharge and the discharge route(s) in the existing permit correct?	Yes
6.4) City nearest the outfall(s):	SAN ANTONIO
6.5) County where the outfalls are located:	BEXAR
6.6) Is or will the treated wastewater discharge to a city, county, or state highway right-of-way, or a flood control district drainage ditch?	No
6.7) Is the daily average discharge at your facility of 5 MGD or more?	No
7) Did any person formerly employed by the TCEQ represent your company and get paid for service regarding this application?	No

Public Notice Information

Individual Publishing the Notices	
1) Prefix	
2) First and Last Name	FLORAMIE WELCH
3) Credential	
4) Title	ENVIRONMENTAL ANALYST III
5) Organization Name	SAN ANTONIO WATER SYSTEM
6) Mailing Address	2800 US HIGHWAY 281 N
7) Address Line 2	
8) City	SAN ANTONIO
9) State	TX
10) Zip Code	78212
11) Phone (###-###-####)	2102333744
12) Extension	
13) Fax (###-###-####)	
14) Email	FLORAMIE.WELCH@SAWS.ORG
Contact person to be listed in the Notices	
15) Prefix	
16) First and Last Name	OLGA GALINDO
17) Credential	
18) Title	EXECUTIVE ADMINISTRATIVE ASSISTANT
19) Organization Name	SAN ANTONIO WATER SYSTEM
20) Phone (###-###-####)	2102333830
21) Fax (###-###-####)	
22) Email	OLGA.GALINDO@SAWS.ORG
Bilingual Notice Requirements	
23) Is a bilingual education program required by the Texas Education Code at the elementary or middle school nearest to the facility or proposed facility?	No

Section 1# Public Viewing Information

County#: 1

1) County	BEXAR
2) Public building name	SAN ANTONIO WATER SYSTEM
3) Location within the building	ADMINISTRATIVE BUILDING, FIRST FLOOR
4) Physical Address of Building	2800 US HWY 281 NORTH
5) City	SAN ANTONIO
6) Contact Name	FLORAMIE WELCH
7) Phone (###-###-####)	2102333744
8) Extension	
9) Is the location open to the public?	Yes

Plain Language

1) Plain Language

[File Properties]

File Name	LANG_2025_SCWRC_TPDES_APPLICATION_PLAIN_LANGUAGE.pdf
Hash	89C45F623516BA99AB19AFEBF03557AED0AFAA3610109AE3601D2697EA52832B
MIME-Type	application/pdf

Supplemental Permit Information Form

1) Supplemental Permit Information Form (SPIF)

[File Properties]

File Name	SPIF_2025_SC_TPDES_APPLICATION_SPIF_AND_USGS_MAP.pdf
Hash	8523279AC1AACC33FF4D165940A5C1AB1E0D37E53AC40B23AC4562FFEFCC4E9D
MIME-Type	application/pdf

Domestic Attachments

1) Attach an 8.5"x11", reproduced portion of the most current and original USGS Topographic Quadrangle Map(s) that meets the 1:24,000 scale.

[File Properties]

File Name	MAP_2025_SC_TPDES_APPLICATION_USGS_OUTFALL_MAP.pdf
Hash	81C0BA07C921327C1E427BBC668EA11A9EBDB5C85D39A3B1C06B62286CDA0ADE
MIME-Type	application/pdf

2) I confirm that all required sections of Technical Report 1.0 are complete and will be included in the Technical Attachment.	Yes
2.1) I confirm that Worksheet 2.0 (Receiving Waters) is complete and included in the Technical Attachment.	Yes
2.2) Are you planning to include Worksheet 2.1 (Stream Physical Characteristics) in the Technical Attachment?	Yes
2.3) Are you planning to include Worksheet 4.0 (Pollutant Analyses Requirements) in the Technical Attachment?	Yes
2.4) Are you planning to include Worksheet 5.0 (Toxicity Testing Requirements) in the Technical Attachment?	Yes

2.5) I confirm that Worksheet 6.0 (Industrial Waste Contribution) is complete and included in the Technical Attachment.	Yes
2.6) Are you planning to include Worksheet 7.0 (Class V Injection Well Inventory/Authorization Form) in the Technical Attachment?	Yes

2.7) Technical Attachment

[File Properties]

File Name	TECH_2025_SC_TPDES_APPLICATION_TECHNICAL_REPORT1.0.pdf
Hash	61F1C2E513AED80E14BC71E109EFF8DDDAD9C7A4CDD7D663B099D7D8FA299BDD
MIME-Type	application/pdf

3) Buffer Zone Map

[File Properties]

File Name	BUFF_ZM_2025_SC_TPDES_APPLICATION_FACILITY_MAP.pdf
Hash	64859AAD02CB4008FB8C82DDA65C1D61960F8BC1EB1CA32C3291C6B1A410C1B8
MIME-Type	application/pdf

4) Flow Diagram

[File Properties]

File Name	FLDIA_2025_SC_TPDES_APPLICATION_FACILITY_MAP.pdf
Hash	64859AAD02CB4008FB8C82DDA65C1D61960F8BC1EB1CA32C3291C6B1A410C1B8
MIME-Type	application/pdf

5) Site Drawing

[File Properties]

File Name	SITEDR_2025_SC_TPDES_APPLICATION_FACILITY_MAP.pdf
Hash	64859AAD02CB4008FB8C82DDA65C1D61960F8BC1EB1CA32C3291C6B1A410C1B8
MIME-Type	application/pdf

6) Design Calculations

[File Properties]

File Name	DES_CAL_2025_SC_TPDES_APPLICATION_DESIGN_CALCULATION_NOT_APPLICABLE.pdf
Hash	688A695D4E06E380E1E4E8BE3E971BF347F7018C5ACE9AA5150DF234CDD51FF0
MIME-Type	application/pdf

7) Solids Management Plan

[File Properties]

File Name	SMP_2025_SC_TPDES_APPLICATION_SLUDGE_MANAGEMENT_PLAN.pdf
Hash	8106936432EE132F537110A7283CA7BAE1F543F7C01B15B33410882DDA98F728
MIME-Type	application/pdf

8) Water Balance

[File Properties]

File Name	WB_2025_SC_TPDES_APPLICATION_WATER_BALANCE_CALCULATION_NOT_APPLICABLE.pdf
Hash	D52E1A57CEC6392B469EC3296D94DC43846AACDFB494DE6296958AB7E8D55E8B
MIME-Type	application/pdf

9) Other Attachments

[File Properties]

File Name	OTHER_2025_SC_TPDES_APPLICATION_CORE_DATA_FORM_SIGNED.pdf
Hash	6A316C105187878701B189267334A0D409973F2EEFB0457FD973D7ADFBC8BF5F
MIME-Type	application/pdf

Certification

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

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.

1. I am Andrea L Beymer, the owner of the STEERS account ER109765.
2. I have the authority to sign this data on behalf of the applicant named above.
3. I have personally examined the foregoing and am familiar with its content and the content of any attachments, and based upon my personal knowledge and/or inquiry of any individual responsible for information contained herein, that this information is true, accurate, and complete.
4. I further certify that I have not violated any term in my TCEQ STEERS participation agreement and that I have no reason to believe that the confidentiality or use of my password has been compromised at any time.
5. I understand that use of my password constitutes an electronic signature legally equivalent to my written signature.
6. I also understand that the attestations of fact contained herein pertain to the implementation, oversight and enforcement of a state and/or federal environmental program and must be true and complete to the best of my knowledge.
7. I am aware that criminal penalties may be imposed for statements or omissions that I know or have reason to believe are untrue or misleading.
8. I am knowingly and intentionally signing Update Domestic or Industrial Individual Permit WQ0010137008.
9. My signature indicates that I am in agreement with the information on this form, and authorize its submittal to the TCEQ.

OWNER Signature: Andrea L Beymer OWNER

Customer Number:	CN600529069
Legal Name:	San Antonio Water System
Account Number:	ER109765
Signature IP Address:	155.190.8.7
Signature Date:	2025-02-13
Signature Hash:	C423E8859533AB71455727BB3A021D974AD956169CC1B36BD7325C5AD21BE9D0
Form Hash Code at time of Signature:	3CB5A753526655B677BD518DD680200447D56C5B253936EE61CB67EBD37E2F71

Fee Payment

Transaction by:	The application fee payment transaction was made by ER046829/Floramie Welch
Paid by:	The application fee was paid by ALISSA R LOCKETT
Fee Amount:	$2000.00
Paid Date:	The application fee was paid on 2025-02-14
Transaction/Voucher number:	The transaction number is 582EA000651963 and the voucher number is 749844

Submission

Reference Number:	The application reference number is 752711
Submitted by:	The application was submitted by ER046829/Floramie Welch
Submitted Timestamp:	The application was submitted on 2025-02-14 at 08:01:49 CST
Submitted From:	The application was submitted from IP address 155.190.8.7
Confirmation Number:	The confirmation number is 629486

Steers Version:	The STEERS version is 6.86
Permit Number:	The permit number is WQ0010137008

Additional Information

Application Creator: This account was created by Floramie Welch

TCEQ Use Only

TCEQ Core Data Form

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

SECTION I: General Information

1. Reason for Submission (*If other is checked please describe in space provided.*)

☐ New Permit, Registration or Authorization (*Core Data Form should be submitted with the program application.*)

☒ Renewal (*Core Data Form should be submitted with the renewal form*) ☐ Other

2. Customer Reference Number (*if issued*)	Follow this link to search for CN or RN numbers in Central Registry**	3. Regulated Entity Reference Number (*if issued*)
CN 600529069		RN 100851518

SECTION II: Customer Information

4. General Customer Information | **5. Effective Date for Customer Information Updates** (mm/dd/yyyy)

☐ New Customer ☒ Update to Customer Information ☐ Change in Regulated Entity Ownership
☐ Change in Legal Name (Verifiable with the Texas Secretary of State or Texas Comptroller of Public Accounts)

The Customer Name submitted here may be updated automatically based on what is current and active with the Texas Secretary of State (SOS) or Texas Comptroller of Public Accounts (CPA).

6. Customer Legal Name (*If an individual, print last name first: eg: Doe, John*) — *If new Customer, enter previous Customer below:*

SAN ANTONIO WATER SYSTEM (SAWS)

7. TX SOS/CPA Filing Number	8. TX State Tax ID (11 digits)	9. Federal Tax ID (9 digits)	10. DUNS Number (*if applicable*)
	17426325308	74-2632530	057582603

11. Type of Customer: ☐ Corporation ☐ Individual Partnership: ☐ General ☐ Limited
Government: ☒ City ☐ County ☐ Federal ☐ Local ☐ State ☐ Other ☐ Sole Proprietorship ☐ Other:

12. Number of Employees
☐ 0-20 ☐ 21-100 ☐ 101-250 ☐ 251-500 ☒ 501 and higher

13. Independently Owned and Operated?
☐ **Yes** ☒ **No**

14. Customer Role (Proposed or Actual) – *as it relates to the Regulated Entity listed on this form. Please check one of the following*

☐ Owner ☐ Operator ☒ Owner & Operator
☐ Occupational Licensee ☐ Responsible Party ☐ VCP/BSA Applicant ☐ Other:

15. Mailing Address:								
	2800 US HIGHWAY 281 NORTH							
	City	SAN ANTONIO	State	TX	ZIP	78212	ZIP + 4	3106

16. Country Mailing Information (*if outside USA*)	17. E-Mail Address (*if applicable*)

18. Telephone Number	19. Extension or Code	20. Fax Number (*if applicable*)

(210) 704-7297		( ) -

SECTION III: Regulated Entity Information

21. General Regulated Entity Information *(If 'New Regulated Entity" is selected, a new permit application is also required.)*

☐ New Regulated Entity ☐ Update to Regulated Entity Name ☒ Update to Regulated Entity Information

The Regulated Entity Name submitted may be updated, in order to meet TCEQ Core Data Standards (removal of organizational endings such as Inc, LP, or LLC).

22. Regulated Entity Name *(Enter name of the site where the regulated action is taking place.)*

SALADO CREEK WATER RECYCLING CENTER (SCWRC)

23. Street Address of the Regulated Entity: *(No PO Boxes)*	13496 BLUE WING ROAD							
	City	SAN ANTONIO	**State**	TX	**ZIP**	78223	**ZIP + 4**	
24. County	BEXAR							

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

25. Description to Physical Location:					
26. Nearest City			**State**		**Nearest ZIP Code**

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

27. Latitude (N) In Decimal:	29.275560		**28. Longitude (W) In Decimal:**	-98.428978	
Degrees	Minutes	Seconds	Degrees	Minutes	Seconds
29	16	32.0160	98	25	44.3208

29. Primary SIC Code (4 digits)	**30. Secondary SIC Code** (4 digits)	**31. Primary NAICS Code** (5 or 6 digits)	**32. Secondary NAICS Code** (5 or 6 digits)
4952		221320	

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

MUNICIPAL WASTEWATER TREATMENT/RECYCLING

34. Mailing Address:	**2800 US HIGHWAY 281 NORTH**							
	City	**SAN ANTONIO**	**State**	**TX**	**ZIP**	**78221**	**ZIP + 4**	**3106**
35. E-Mail Address:								

36. Telephone Number	**37. Extension or Code**	**38. Fax Number** *(if applicable)*
(210) 704-7297		( ) -

39. TCEQ Programs and ID Numbers Check all Programs and write in the permits/registration numbers that will be affected by the updates submitted on this form. See the Core Data Form instructions for additional guidance.

☐ Dam Safety	☐ Districts	☐ Edwards Aquifer	☐ Emissions Inventory Air	☐ Industrial Hazardous Waste
☐ Municipal Solid Waste	☐ New Source Review Air	☐ OSSF	☐ Petroleum Storage Tank	☐ PWS
☐ Sludge	☐ Storm Water	☐ Title V Air	☐ Tires	☐ Used Oil
☐ Voluntary Cleanup	☒ Wastewater	☐ Wastewater Agriculture	☐ Water Rights	☐ Other:
	WQ0010137008			

SECTION IV: Preparer Information

40. Name:	FLORAMIE WELCH	41. Title:	ENVIRONMENTAL ANALYST III

42. Telephone Number	43. Ext./Code	44. Fax Number	45. E-Mail Address
(210) 233-3744		( ) -	FLORAMIE.WELCH@SAWS.ORG

SECTION V: Authorized Signature

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

Company:	SAN ANTONIO WATER SYSTEM (SAWS)	Job Title:	VICE PRESIDENT, TREATMENT OPERATIONS
Name *(In Print)*:	ALISSA LOCKETT, P.E.	Phone:	(210) 233- ~~3104~~ 3401
Signature:	Alissa Lockett	Date:	2-11-2025

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

San Antonio Water System (CN600529069) operates the Salado Creek Water Recycling Center (RN100851518), a wastewater treatment facility. The facility is located at 13496 Blue Wing Road in the City of San Antonio, in Bexar County, Texas 78223. This permit application is for renewal to discharge treated domestic wastewater at the following Outfall:

- Outfall 001 = 46 million gallons per day

The facility is not currently discharging wastewater. The permit is being renewed for a potential future treatment facility and discharge at this location.

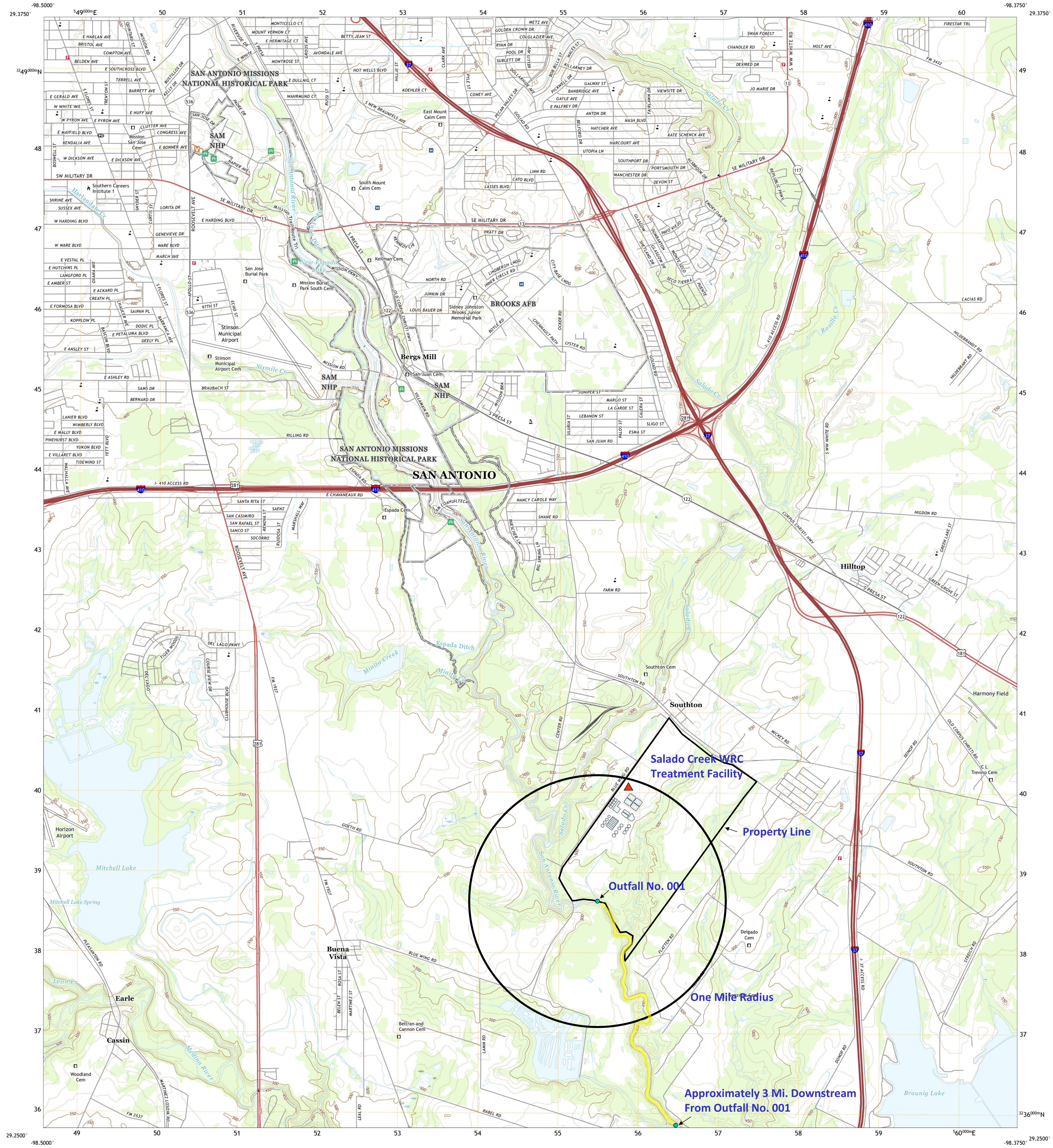
The facility transfers all wastewater flows to the Steven M. Clouse Water Recycling Center (WRC) for further treatment. The only treatment process at the Salado Creek WRC is screening of sewage, which removes large solids such as sticks, rags, and plastic material from the water. The facility also has four large rectangular tanks called flow equalization basins that are used to temporarily store sewage during storm events before transfer to the Steven M. Clouse facility. Facilities not currently used at Salado Creek WRC include grit removal chambers, which remove inorganic particles like sand or gravel, and facilities to add air to keep solids suspended in the water.

![USGS logo] USGS science for a changing world

U.S. DEPARTMENT OF THE INTERIOR
U.S. GEOLOGICAL SURVEY

The National Map US Topo

SOUTHTON QUADRANGLE
TEXAS - BEXAR COUNTY
7.5-MINUTE SERIES



Produced by the United States Geological Survey
North American Datum of 1983 (NAD83)
World Geodetic System of 1984 (WGS84). Projection and
1 000-meter grid:Universal Transverse Mercator, Zone 14R
This map is not a legal document. Boundaries may be generalized for this map scale. Private lands within government reservations may not be shown. Obtain permission before entering private lands.

Imagery....................NAIP, September 2016 - November 2016
Roads....................U.S. Census Bureau, 2015 - 2019
Names....................GNIS, 1979 - 2022
Hydrography....................National Hydrography Dataset, 2003 - 2021
Contours....................National Elevation Dataset, 2021
Boundaries....................Multiple sources; see metadata file 2019 - 2021

Wetlands....................FWS National Wetlands Inventory Not Available

MN GN
0°17′ 5 MILS
4°6′ 73 MILS
UTM GRID AND 2019 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET

U.S. National Grid
100,000 - m Square ID
NT
Grid Zone Designation
14R

SCALE 1:24 000
KILOMETERS 1 0.5 0 1 2
METERS 1000 500 0 1000 2000
MILES 1 0.5 0 1
FEET 1000 0 1000 2000 3000 4000 5000 6000 7000 8000 9000 10000

CONTOUR INTERVAL 10 FEET
NORTH AMERICAN VERTICAL DATUM OF 1988

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

TEXAS
QUADRANGLE LOCATION

ADJOINING QUADRANGLES
1 San Antonio West
2 San Antonio East
3 Martinez
4 Terrell Wells
5 Elmendorf
6 Thelma
7 Losoya
8 Saspamco

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

SOUTHTON, TX
2022

NSN. 7643016398400
NGA REF NO. USGSX24K42348

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

SUPPLEMENTAL PERMIT INFORMATION FORM (SPIF)

FOR AGENCIES REVIEWING DOMESTIC OR INDUSTRIAL TPDES WASTEWATER PERMIT APPLICATIONS

TCEQ USE ONLY:

Application type: ____Renewal ____Major Amendment ____Minor Amendment ____New

County: _____ Segment Number: _____

Admin Complete Date: _____

Agency Receiving SPIF:

_____ Texas Historical Commission _____ U.S. Fish and Wildlife

_____ Texas Parks and Wildlife Department _____ U.S. Army Corps of Engineers

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

Complete this form as a separate document. TCEQ will mail a copy to each agency as required by our agreement with EPA. If any of the items are not completely addressed or further information is needed, we will contact you to provide the information before issuing the permit. Address each item completely.

Do not refer to your response to any item in the permit application form. Provide each attachment for this form separately from the Administrative Report of the application. The application will not be declared administratively complete without this SPIF form being completed in its entirety including all attachments. Questions or comments concerning this form may be directed to the Water Quality Division's Application Review and Processing Team by email at WQ-ARPTeam@tceq.texas.gov or by phone at (512) 239-4671.

The following applies to all applications:

1. Permittee: San Antonio Water System

   Permit No. WQ00 10137008 EPA ID No. TX0052647

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

   13496 Blue Wing Road, San Antonio TX 78223.

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

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

First and Last Name: Floramie Welch

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

Title: Environmental Analyst III

Mailing Address: 2800 US Hwy 281 North

City, State, Zip Code: San Antonio, TX 78212

Phone No.: 210 233 3744 Ext.: Click here to enter text Fax No.: Click here to enter text

E-mail Address: Floramie.Welch@saws.org

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

N/A

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

Outfall 001- Directly to the Upper San Antonio River in Segment No. 1911 of the San Antonio 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

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

N/A

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

N/A

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

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

N/A

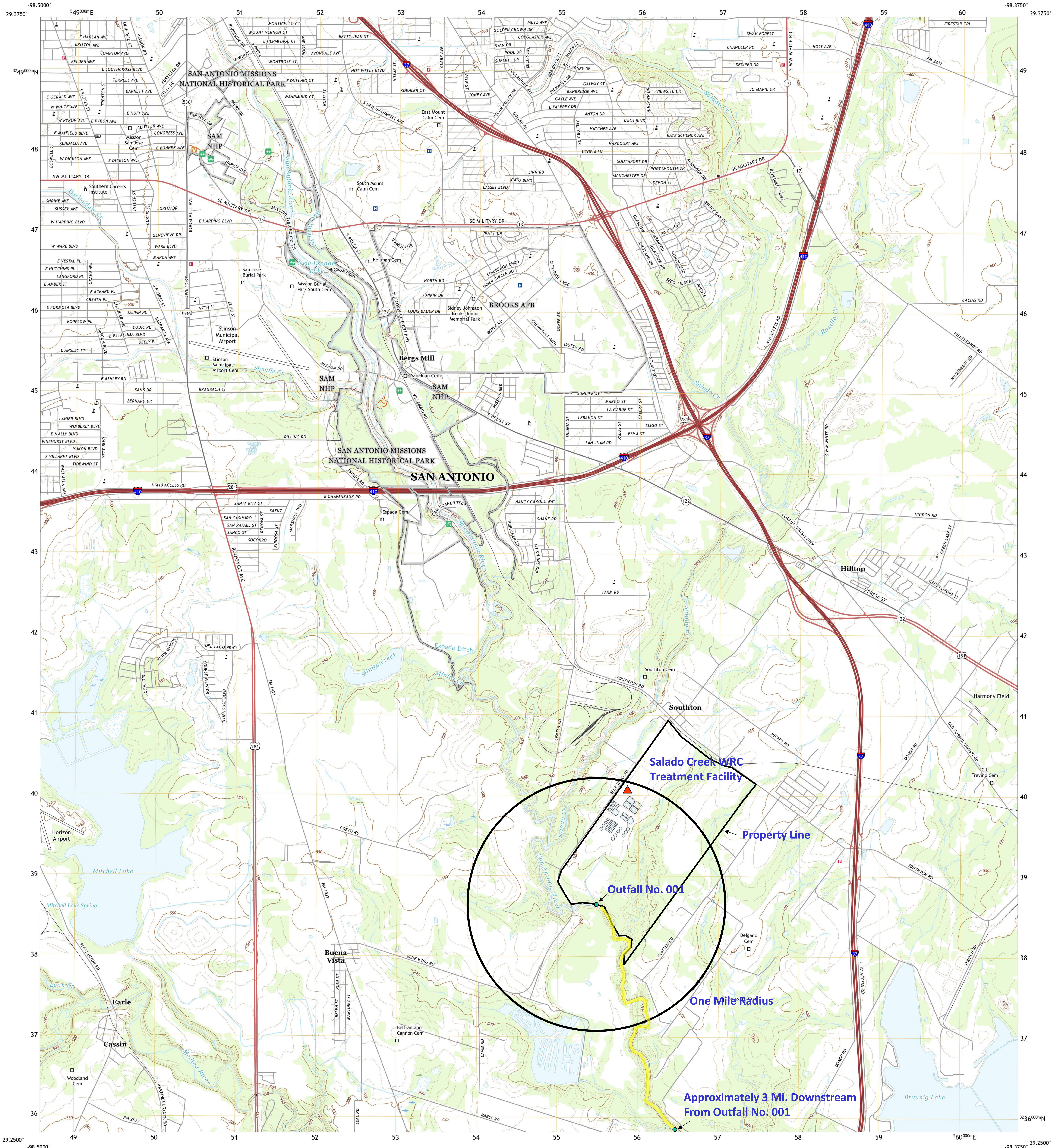
4. Provide a brief history of the property, and name of the architect/builder, if known.

N/A

U.S. DEPARTMENT OF THE INTERIOR
U.S. GEOLOGICAL SURVEY

The National Map
US Topo

SOUTHTON QUADRANGLE
TEXAS - BEXAR COUNTY
7.5-MINUTE SERIES



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North American Datum of 1983 (NAD83)
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Boundaries....Multiple sources; see metadata file 2019 - 2021

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MN
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4°6′
73 MILS
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UTM GRID AND 2019 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET

U.S. National Grid
100,000 - m Square ID
NT
Grid Zone Designation
14R

SCALE 1:24 000
KILOMETERS 1 0.5 0 1 2
METERS 1000 500 0 1000 2000
MILES 1 0.5 0 1
FEET 1000 0 1000 2000 3000 4000 5000 6000 7000 8000 9000 10000

CONTOUR INTERVAL 10 FEET
NORTH AMERICAN VERTICAL DATUM OF 1988

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

TEXAS
QUADRANGLE LOCATION

1	2	3
4		5
6	7	8

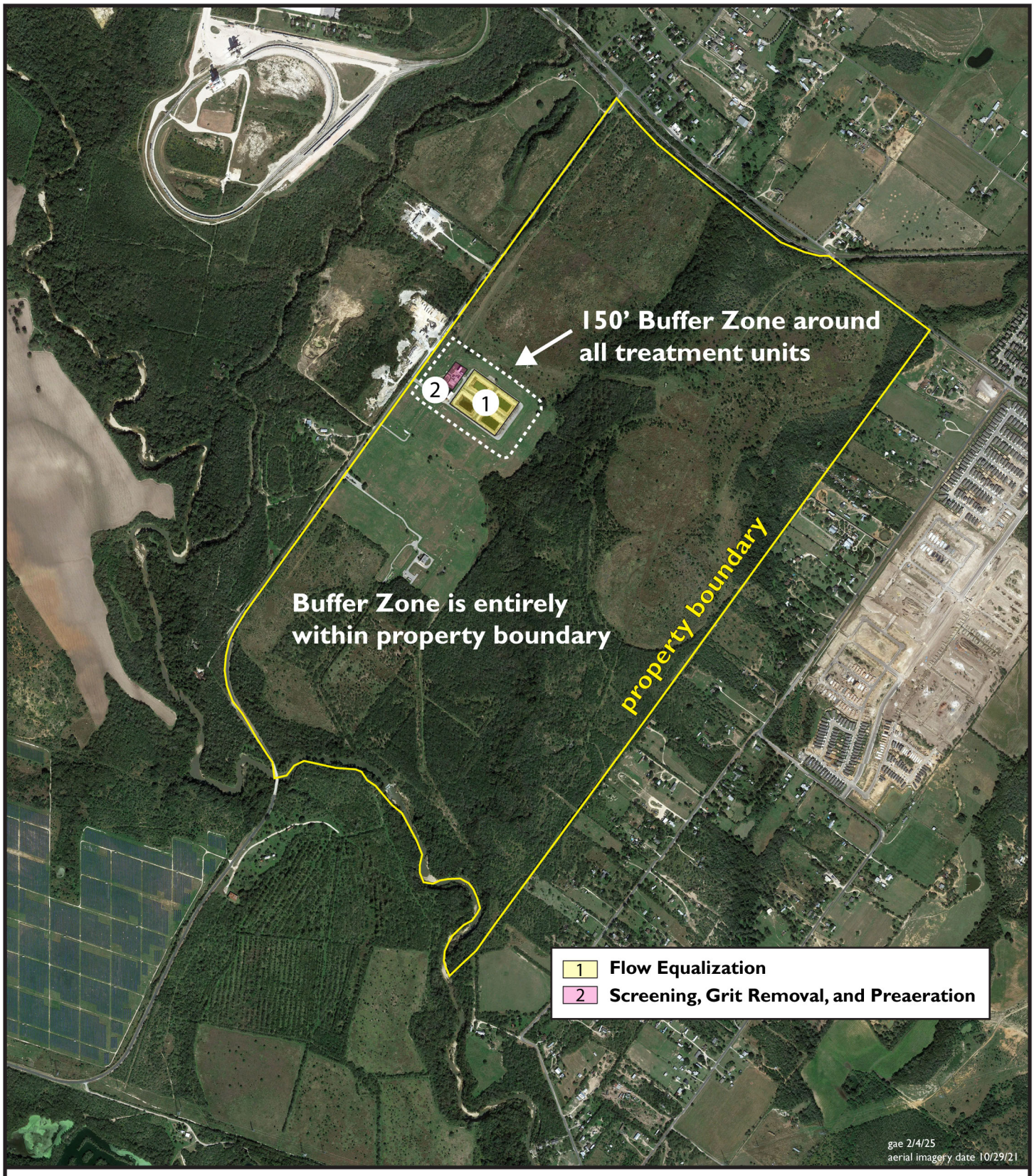
ADJOINING QUADRANGLES

1 San Antonio West
2 San Antonio East
3 Martinez
4 Terrell Wells
5 Elmendorf
6 Thelma
7 Losoya
8 Saspamco

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

SOUTHTON, TX
2022

NSN. 7643016398400
NGA REF NO. USGSX24K42348



Buffer Zone Map
Salado Creek Water Recycling Center
TPDES Permit No. 0010137008

N

feet

0 1,000 2,000

San Antonio Water System

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

DOMESTIC WASTEWATER PERMIT APPLICATION TECHNICAL REPORT 1.0

For any questions about this form, please contact the Domestic Wastewater Permitting Team at 512-239-4671.

The following information is required for all renewal, new, and amendment applications.

Section 1. Permitted or Proposed Flows (Instructions Page 43)

A. Existing/Interim I Phase

Design Flow (MGD): 46

2-Hr Peak Flow (MGD): 92

Estimated construction start date: N/A

Estimated waste disposal start date: Existing

B. Interim II Phase

Design Flow (MGD): N/A

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

Estimated construction start date: N/A

Estimated waste disposal start date: NA/

C. Final Phase

Design Flow (MGD): 46

2-Hr Peak Flow (MGD): 92

Estimated construction start date: N/A

Estimated waste disposal start date: Existing

D. Current Operating Phase

Provide the startup date of the facility: 1971

Section 2. Treatment Process (Instructions Page 43)

A. Current Operating Phase

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, a description of *each phase* must be provided**.

Preliminary treatment with fine screens, grit removal, and pre-aeration. Flow equalization basins utilized for excess flow storage. See Appendix 1 for SCWRC Treatment Flow Diagram.

B. Treatment Units

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

Table 1.0(1) - Treatment Units

Treatment Unit Type	Number of Units	Dimensions (L x W x D)
Flow Equalization Basins	4	306' x 219' x 19'
Fine Screens	2	5' x 17.7' x ¼"
Fine Screens	2	3.75' x 17.7' x ¼"
Aerated Grit Chambers	3	40' x 33' x 13'
Pre-Aeration Chambers	3	44' x 24' 17'

C. Process Flow Diagram

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

Attachment: See Appendix 1 for SCWRC Treatment Flow Diagram.

Section 3. Site Information and Drawing (Instructions Page 44)

Provide the TPDES discharge outfall latitude and longitude. Enter N/A if not applicable.

- Latitude: 29.275560
- Longitude: -98.428978

Provide the TLAP disposal site latitude and longitude. Enter N/A if not applicable.

- Latitude: N/A
- Longitude: N/A

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: Attachment 2 - SCWRC Treatment Facility Boundary Map

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

N/A.

Collection System Information **for wastewater TPDES permits only**: Provide information for each **uniquely owned** collection system, existing and new, served by this facility, including satellite collection systems. **Please see the instructions for a detailed explanation and examples.**

Collection System Information

Collection System Name	Owner Name	Owner Type	Population Served
N/A	N/A	Choose an item.	N/A
		Choose an item.	
		Choose an item.	
		Choose an item.	

Section 4. Unbuilt Phases (Instructions Page 45)

Is the application for a renewal of a permit that contains an unbuilt phase or phases?

☐ Yes ☒ No

If yes, does the existing permit contain a phase that has not been constructed **within five years** of being authorized by the TCEQ?

☐ Yes ☐ No

If yes, provide a detailed discussion regarding the continued need for the unbuilt phase. **Failure to provide sufficient justification may result in the Executive Director recommending denial of the unbuilt phase or phases**.

N/A

Section 5. Closure Plans (Instructions Page 45)

Have any treatment units been taken out of service permanently, or will any units be taken out of service in the next five years?

☐ Yes ☒ No

If yes, was a closure plan submitted to the TCEQ?

☐ Yes ☐ No

If yes, provide a brief description of the closure and the date of plan approval.

N/A

Section 6. Permit Specific Requirements (Instructions Page 45)

For applicants with an existing permit, check the Other Requirements or Special Provisions of the permit.

A. Summary transmittal

Have plans and specifications been approved for the existing facilities and each proposed phase?

☒ Yes ☐ No

If yes, provide the date(s) of approval for each phase: 10-15-2020

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**.

Attachment 3 - SCWRC Permit No. WQ0010137008 2020 Approval Letter

B. Buffer zones

Have the buffer zone requirements been met?

☒ Yes ☐ No

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

N/A

C. Other actions required by the current permit

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

☐ Yes ☒ No

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

N/A

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.

N/A

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 512-239-2335. 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.

N/A

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 512-239-2335.

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

N/A

E. Stormwater management

1. *Applicability*

Does the facility have a design flow of 1.0 MGD or greater in any phase?

☒ Yes ☐ No

Does the facility have an approved pretreatment program, under 40 CFR Part 403?

☒ Yes ☐ No

If no to both of the above, then skip to Subsection F, Other Wastes Received.

2. *MSGP coverage*

Is the stormwater runoff from the WWTP and dedicated lands for sewage disposal currently permitted under the TPDES Multi-Sector General Permit (MSGP), TXR050000?

☒ Yes ☐ No

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

TXR05 P891 or TXRNE Click to enter text.

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

☐ Yes ☐ No

3. *Conditional exclusion*

Alternatively, do you intend to apply for a conditional exclusion from permitting based TXR050000 (Multi Sector General Permit) Part II B.2 or TXR050000 (Multi Sector General Permit) Part V, Sector T 3(b)?

☐ Yes ☒ No

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

N/A

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.

N/A

5. Zero stormwater discharge

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

☐ Yes ☒ No

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

N/A

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

6. Request for coverage in individual permit

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

☐ Yes ☒ No

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

intend to divert stormwater to the treatment plant headworks and indirectly discharge it to water in the state.

N/A

Note: Direct stormwater discharges to waters in the state authorized through this individual permit will require the development and implementation of a stormwater pollution prevention plan (SWPPP) and will be subject to additional monitoring and reporting requirements. Indirect discharges of stormwater via headworks recycling will require compliance with all individual permit requirements including 2-hour peak flow limitations. All stormwater discharge authorization requests will require additional information during the technical review of your application.

F. Discharges to the Lake Houston Watershed

Does the facility discharge in the Lake Houston watershed?

☐ Yes ☒ No

If yes, attach a Sewage Sludge Solids Management Plan. See Example 5 in the instructions.
N/A

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

1. Acceptance of sludge from other WWTPs

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

☐ Yes ☒ No

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

In addition, provide the date the plant started or is anticipated to start accepting sludge, an estimate of monthly sludge acceptance (gallons or millions of gallons), an estimate of the BOD_5 concentration of the sludge, and the design BOD_5 concentration of the influent from the collection system. Also note if this information has or has not changed since the last permit action.

N/A

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

2. Acceptance of septic waste

Is the facility accepting or will it accept septic waste?

☐ Yes ☒ No

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

☐ Yes ☐ No

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

☐ Yes ☐ No

If yes to any of the above, provide the date the plant started 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_5 concentration of the septic waste, and the design BOD_5 concentration of the influent from the collection system. Also note if this information has or has not changed since the last permit action.

N/A

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

3. ***Acceptance of other wastes (not including septic, grease, grit, or RCRA, CERCLA or as discharged by IUs listed in Worksheet 6)***

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

☒ Yes ☒ No

If yes, provide the date that the plant started accepting the waste, an estimate how much waste is accepted on a monthly basis (gallons or millions of gallons), a description of the entities generating the waste, and any distinguishing chemical or other physical characteristic of the waste. Also note if this information has or has not changed since the last permit action.

N/A

Section 7. Pollutant Analysis of Treated Effluent (Instructions Page 50)

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). **W*ater treatment facilities*** discharging filter backwash water, complete Table 1.0(3). Provide copies of the laboratory results sheets. **These tables are not applicable for a minor amendment without renewal.** See the instructions for guidance.

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

Table1.0(2) – Pollutant Analysis for Wastewater Treatment Facilities

Pollutant	Average Conc.	Max Conc.	No. of Samples	Sample Type	Sample Date/Time
$CBOD_5$, mg/l					
Total Suspended Solids, mg/l					
Ammonia Nitrogen, mg/l					
Nitrate Nitrogen, mg/l					
Total Kjeldahl Nitrogen, mg/l					
Sulfate, mg/l					
Chloride, mg/l					
Total Phosphorus, mg/l					
pH, standard units					
Dissolved Oxygen*, mg/l					
Chlorine Residual, mg/l					
E.coli (CFU/100ml) freshwater					
Entercocci (CFU/100ml) saltwater					
Total Dissolved Solids, mg/l					
Electrical Conductivity, µmohs/cm, †					
Oil & Grease, mg/l					
Alkalinity ($CaCO_3$)*, mg/l					

*TPDES permits only
†TLAP permits only

Table1.0(3) – Pollutant Analysis for Water Treatment Facilities

Pollutant	Average Conc.	Max Conc.	No. of Samples	Sample Type	Sample Date/Time
Total Suspended Solids, mg/l					
Total Dissolved Solids, mg/l					
pH, standard units					
Fluoride, mg/l					
Aluminum, mg/l					
Alkalinity ($CaCO_3$), mg/l					

Section 8. Facility Operator (Instructions Page 50)

Facility Operator Name: Alissa Lockett, P.E.

Facility Operator's License Classification and Level: Class A Wastewater

Facility Operator's License Number: WW0070523

Section 9. Sludge and Biosolids Management and Disposal (Instructions Page 51)

A. WWTP's Biosolids Management Facility Type

Check all that apply. See instructions for guidance

- ☐ Design flow>= 1 MGD
- ☐ Serves >= 10,000 people
- ☐ Class I Sludge Management Facility (per 40 CFR § 503.9)
- ☐ Biosolids generator
- ☐ Biosolids end user – land application (onsite)
- ☐ Biosolids end user – surface disposal (onsite)
- ☐ Biosolids end user – incinerator (onsite)

B. WWTP's Biosolids Treatment Process

Check all that apply. See instructions for guidance.

- ☐ Aerobic Digestion
- ☐ Air Drying (or sludge drying beds)
- ☐ Lower Temperature Composting
- ☐ Lime Stabilization
- ☐ Higher Temperature Composting
- ☐ Heat Drying
- ☐ Thermophilic Aerobic Digestion
- ☐ Beta Ray Irradiation
- ☐ Gamma Ray Irradiation
- ☐ Pasteurization
- ☐ Preliminary Operation (e.g. grinding, de-gritting, blending)
- ☐ Thickening (e.g. gravity thickening, centrifugation, filter press, vacuum filter)
- ☐ Sludge Lagoon
- ☐ Temporary Storage (< 2 years)
- ☐ Long Term Storage (>= 2 years)
- ☐ Methane or Biogas Recovery
- ☐ Other Treatment Process: **N/A**

C. Biosolids Management

Provide information on the *intended* biosolids management practice. Do not enter every management practice that you want authorized in the permit, as the permit will authorize

all biosolids management practices listed in the instructions. Rather indicate the management practice the facility plans to use.

Biosolids Management

Management Practice	Handler or Preparer Type	Bulk or Bag Container	Amount (dry metric tons)	Pathogen Reduction Options	Vector Attraction Reduction Option
Choose an item.	Choose an item.	Choose an item.	N/A	Choose an item.	Choose an item.
Choose an item.	Choose an item.	Choose an item.	N/A	Choose an item.	Choose an item.
Choose an item.	Choose an item.	Choose an item.	N/A	Choose an item.	Choose an item.

If "Other" is selected for Management Practice, please explain (e.g. monofill or transport to another WWTP): N/A

D. Disposal site

Disposal site name: N/A

TCEQ permit or registration number: N/A

County where disposal site is located: N/A

E. Transportation method

Method of transportation (truck, train, pipe, other): N/A

Name of the hauler: N/A

Hauler registration number: N/A

Sludge is transported as a:

Liquid ☐ semi-liquid ☐ semi-solid ☐ solid ☐

Section 10. Permit Authorization for Sewage Sludge Disposal (Instructions Page 53)

A. Beneficial use authorization

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

☐ Yes ☒ No

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

☐ Yes ☐ No

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

☐ Yes ☐ No

B. Sludge processing authorization

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

Sludge Composting	☐ Yes	☐ No
Marketing and Distribution of sludge	☐ Yes	☐ No
Sludge Surface Disposal or Sludge Monofill	☐ Yes	☐ No
Temporary storage in sludge lagoons	☐ Yes	☐ No

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

☐ Yes ☒ No

Section 11. Sewage Sludge Lagoons (Instructions Page 53)

Does this facility include sewage sludge lagoons?

☐ Yes ☒ No

If yes, complete the remainder of this section. If no, proceed to Section 12.

A. Location information

The following maps are required to be submitted as part of the application. For each map, provide the Attachment Number.

- Original General Highway (County) Map:

  Attachment: N/A
- USDA Natural Resources Conservation Service Soil Map:

  Attachment: N/A
- Federal Emergency Management Map:

  Attachment: N/A
- Site map:

  Attachment: N/A

Discuss in a description if any of the following exist within the lagoon area. Check all that apply.

☐ Overlap a designated 100-year frequency flood plain

☐ Soils with flooding classification

☐ Overlap an unstable area

☐ Wetlands

☐ Located less than 60 meters from a fault

☐ None of the above

Attachment: N/A

If a portion of the lagoon(s) is located within the 100-year frequency flood plain, provide the protective measures to be utilized including type and size of protective structures:

N/A

B. Temporary storage information

Provide the results for the pollutant screening of sludge lagoons. These results are in addition to pollutant results in *Section 7 of Technical Report 1.0.*

Nitrate Nitrogen, mg/kg: N/A

Total Kjeldahl Nitrogen, mg/kg: N/A

Total Nitrogen (=nitrate nitrogen + TKN), mg/kg: N/A

Phosphorus, mg/kg: N/A

Potassium, mg/kg: N/A

pH, standard units: N/A

Ammonia Nitrogen mg/kg: N/A

Arsenic: N/A

Cadmium: N/A

Chromium: N/A

Copper: N/A

Lead: N/A

Mercury: N/A

Molybdenum: N/A

Nickel: N/A

Selenium: N/A

Zinc: N/A

Total PCBs: N/A

Provide the following information:

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

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

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

C. Liner information

Does the active/proposed sludge lagoon(s) have a liner with a maximum hydraulic conductivity of $1x10^{-7}$ cm/sec?

☐ Yes ☐ No

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

N/A

D. Site development plan

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

N/A

Attach the following documents to the application.

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

  Attachment: N/A
- Copy of the closure plan

  Attachment: N/A
- Copy of deed recordation for the site

  Attachment: N/A
- Size of the sludge lagoon(s) in surface acres and capacity in cubic feet and gallons

  Attachment: N/A
- Description of the method of controlling infiltration of groundwater and surface water from entering the site

  Attachment: N/A
- Procedures to prevent the occurrence of nuisance conditions

  Attachment: N/A

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: N/A

Section 12. Authorizations/Compliance/Enforcement (Instructions Page 55)

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:

N/A

B. Permittee enforcement status

Is the permittee currently under enforcement for this facility?

☐ Yes ☒ No

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

☐ Yes ☒ No

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

N/A

Section 13. RCRA/CERCLA Wastes (Instructions Page 55)

A. RCRA hazardous wastes

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

☐ Yes ☒ No

B. Remediation activity wastewater

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

☐ Yes ☒ No

C. Details about wastes received

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

Attachment: N/A

Section 14. Laboratory Accreditation (Instructions Page 56)

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

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

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

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

CERTIFICATION:

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

Printed Name: **Alissa Lockett, P.E.**

Title: **Vice President, Treatment Operations**

Signature: Alissa Lockett

Date: 2-11-2025

DOMESTIC WASTEWATER PERMIT APPLICATION TECHNICAL REPORT 1.1

The following information is required for new and amendment major applications.

Section 1. Justification for Permit (Instructions Page 57)

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.

N/A

B. Regionalization of facilities

For additional guidance, please review TCEQ's Regionalization Policy for Wastewater Treatment[1].

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: N/A

If yes, attach correspondence from the city.

Attachment: N/A

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: N/A

2. *Utility CCN areas*

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

☐ Yes ☒ No

[1] https://www.tceq.texas.gov/permitting/wastewater/tceq-regionalization-for-wastewater

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: N/A

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 and collection systems that includes each permittee's name and permit number, and an area map showing the location of these facilities and collection systems.

Attachment: N/A

If yes, attach proof of mailing a request for service to each facility and collection system, the letters requesting service, and correspondence from each facility and collection system.

Attachment: N/A

If the facility or collection system agrees to provide service, attach a justification for the proposed facility and a cost analysis of expenditures that includes the cost of connecting to the facility or collection system versus the cost of the proposed facility or expansion.

Attachment: N/A

Section 2. Proposed Organic Loading (Instructions Page 59)

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

Facility Design Flow (flow being requested in application): N/A

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

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

Provide the source of the average organic strength or BOD_5 concentration.

N/A

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 BOD5 Concentration (mg/l)
Municipality		
Subdivision		
Trailer park – transient		
Mobile home park		
School with cafeteria and showers		
School with cafeteria, no showers		
Recreational park, overnight use		
Recreational park, day use		
Office building or factory		
Motel		
Restaurant		
Hospital		
Nursing home		
Other		
TOTAL FLOW from all sources		
AVERAGE BOD_5 from all sources		

Section 3. Proposed Effluent Quality and Disinfection (Instructions Page 59)

A. Existing/Interim I Phase Design Effluent Quality

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

Total Suspended Solids, mg/l: N/A

Ammonia Nitrogen, mg/l: N/A

Total Phosphorus, mg/l: N/A

Dissolved Oxygen, mg/l: N/A

Other: N/A

B. Interim II Phase Design Effluent Quality

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

Total Suspended Solids, mg/l: N/A

Ammonia Nitrogen, mg/l: N/A

Total Phosphorus, mg/l: N/A

Dissolved Oxygen, mg/l: N/A

Other: N/A

C. Final Phase Design Effluent Quality

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

Total Suspended Solids, mg/l: N/A

Ammonia Nitrogen, mg/l: N/A

Total Phosphorus, mg/l: N/A

Dissolved Oxygen, mg/l: N/A

Other: N/A

D. Disinfection Method

Identify the proposed method of disinfection.

☐ Chlorine: N/A mg/l after N/A minutes detention time at peak flow

Dechlorination process: N/A

☐ Ultraviolet Light: N/A seconds contact time at peak flow

☐ Other: N/A

Section 4. Design Calculations (Instructions Page 59)

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

Attachment: N/A

Section 5. Facility Site (Instructions Page 60)

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.

N/A

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

N/A

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: N/A

If no, provide the approximate date you anticipate submitting your application to the Corps: N/A

B. Wind rose

Attach a wind rose: N/A

Section 6. Permit Authorization for Sewage Sludge Disposal (Instructions Page 60)

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)**: N/A

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 the completed **Domestic Wastewater Permit Application: Sewage Sludge Technical Report (TCEQ Form No. 10056)**: N/A

Section 7. Sewage Sludge Solids Management Plan (Instructions Page 61)

Attach a solids management plan to the application.

Attachment: N/A

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 WASTEWATER PERMIT APPLICATION WORKSHEET 2.0: RECEIVING WATERS

The following information is required for all TPDES permit applications.

Section 1. Domestic Drinking Water Supply (Instructions Page 64)

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

☐ Yes ☒ No

If **no**, proceed it Section 2. **If yes**, provide the following:

Owner of the drinking water supply: N/A

Distance and direction to the intake: N/A

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

Attachment: N/A

Section 2. Discharge into Tidally Affected Waters (Instructions Page 64)

Does the facility discharge into tidally affected waters?

☐ Yes ☒ No

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

A. Receiving water outfall

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

B. Oyster waters

Are there oyster waters in the vicinity of the discharge?

☐ Yes ☒ No

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

N/A

C. Sea grasses

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

☐ Yes ☒ No

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

N/A

Section 3. Classified Segments (Instructions Page 64)

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

☒ Yes ☐ No

If yes, this Worksheet is complete.

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

Section 4. Description of Immediate Receiving Waters (Instructions Page 65)

Name of the immediate receiving waters: Upper San Antonio River Segment 1911

A. Receiving water type

Identify the appropriate description of the receiving waters.

☒ Stream

☐ Freshwater Swamp or Marsh

☐ Lake or Pond

Surface area, in acres: N/A

Average depth of the entire water body, in feet: N/A

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

☐ Man-made Channel or Ditch

☐ Open Bay

☐ Tidal Stream, Bayou, or Marsh

☐ Other, specify: N/A

B. Flow characteristics

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

☐ Intermittent - dry for at least one week during most years

☐ Intermittent with Perennial Pools - enduring pools with sufficient habitat to maintain significant aquatic life uses

☒ Perennial - normally flowing

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

☐ USGS flow records

☐ Historical observation by adjacent landowners

☒ Personal observation

☐ Other, specify: N/A

C. Downstream perennial confluences

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

N/A

D. Downstream characteristics

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

☐ Yes ☒ No

If yes, discuss how.

N/A

E. Normal dry weather characteristics

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

N/A

Date and time of observation: N/A

Was the water body influenced by stormwater runoff during observations?

☐ Yes ☐ No

Section 5. General Characteristics of the Waterbody (Instructions Page 66)

A. Upstream influences

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

☐ Oil field activities
☐ Upstream discharges
☐ Septic tanks
☒ Urban runoff
☒ Agricultural runoff
☐ Other(s), specify: N/A

B. Waterbody uses

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

- ☐ Livestock watering
- ☐ Irrigation withdrawal
- ☒ Fishing
- ☐ Domestic water supply
- ☐ Park activities
- ☐ Contact recreation
- ☒ Non-contact recreation
- ☐ Navigation
- ☐ Industrial water supply
- ☐ Other(s), specify: N/A

C. Waterbody aesthetics

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

- ☐ Wilderness: outstanding natural beauty; usually wooded or unpastured area; water clarity exceptional
- ☒ Natural Area: trees and/or native vegetation; some development evident (from fields, pastures, dwellings); water clarity discolored
- ☐ Common Setting: not offensive; developed but uncluttered; water may be colored or turbid
- ☐ Offensive: stream does not enhance aesthetics; cluttered; highly developed; dumping areas; water discolored

DOMESTIC WASTEWATER PERMIT APPLICATION WORKSHEET 2.1: STREAM PHYSICAL CHARACTERISTICS

Required for new applications, major facilities, and applications adding an outfall.

Worksheet 2.1 is not required for discharges to intermittent streams or discharges directly to (or within 300 feet of) a classified segment.

Section 1. General Information (Instructions Page 66)

Date of study: N/A Time of study: N/A

Stream name: N/A

Location: N/A

Type of stream upstream of existing discharge or downstream of proposed discharge (check one).

☐ Perennial ☐ Intermittent with perennial pools

Section 2. Data Collection (Instructions Page 66)

Number of stream bends that are well defined: N/A

Number of stream bends that are moderately defined: N/A

Number of stream bends that are poorly defined: N/A

Number of riffles: N/A

Evidence of flow fluctuations (check one):

☐ Minor ☐ moderate ☐ severe

Indicate the observed stream uses and if there is evidence of flow fluctuations or channel obstruction/modification.

N/A

Stream transects

In the table below, provide the following information for each transect downstream of the existing or proposed discharges. Use a separate row for each transect.

Table 2.1(1) - Stream Transect Records

Stream type at transect Select riffle, run, glide, or pool. See Instructions, Definitions section.	**Transect location**	**Water surface width (ft)**	**Stream depths (ft)** at 4 to 10 points along each transect from the channel bed to the water surface. Separate the measurements with commas.
Choose an item.	N/A	N/A	N/A
Choose an item.			
Choose an item.			
Choose an item.			
Choose an item.			
Choose an item.			
Choose an item.			
Choose an item.			
Choose an item.			
Choose an item.			

Section 3. Summarize Measurements (Instructions Page 66)

Streambed slope of entire reach, from USGS map in feet/feet: N/A

Approximate drainage area above the most downstream transect (from USGS map or county highway map, in square miles): N/A

Length of stream evaluated, in feet: N/A

Number of lateral transects made: N/A

Average stream width, in feet: N/A

Average stream depth, in feet: N/A

Average stream velocity, in feet/second: N/A

Instantaneous stream flow, in cubic feet/second: N/A

Indicate flow measurement method (type of meter, floating chip timed over a fixed distance, etc.): N/A

Size of pools (large, small, moderate, none): N/A

Maximum pool depth, in feet: N/A

DOMESTIC WASTEWATER PERMIT APPLICATION WORKSHEET 3.0: LAND DISPOSAL OF EFFLUENT

The following is required for renewal, new, and amendment permit applications.

Section 1. Type of Disposal System (Instructions Page 68)

Identify the method of land disposal:

- ☐ Surface application
- ☐ Irrigation
- ☐ Drip irrigation system
- ☐ Evaporation
- ☐ Other (describe in detail): N/A
- ☐ Subsurface application
- ☐ Subsurface soils absorption
- ☐ Subsurface area drip dispersal system
- ☐ Evapotranspiration beds

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

For existing authorizations, provide Registration Number: N/A

Section 2. Land Application Site(s) (Instructions Page 68)

In table 3.0(1), provide the requested information for the land application sites. Include the agricultural or cover crop type (wheat, cotton, alfalfa, bermuda grass, native grasses, etc.), land use (golf course, hayland, pastureland, park, row crop, etc.), irrigation area, amount of effluent applied, and whether or not the public has access to the area. Specify the amount of land area and the amount of effluent that will be allotted to each agricultural or cover crop, if more than one crop will be used.

Table 3.0(1) – Land Application Site Crops

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

Section 3. Storage and Evaporation Lagoons/Ponds (Instructions Page 68)

Table 3.0(2) – Storage and Evaporation Ponds

Pond Number	Surface Area (acres)	Storage Volume (acre-feet)	Dimensions	Liner Type
N/A	N/A	N/A	N/A	N/A

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

Attachment: N/A

Section 4. Flood and Runoff Protection (Instructions Page 68)

Is the land application site within the 100-year frequency flood level?

☐ Yes ☐ No

If yes, describe how the site will be protected from inundation.

N/A

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

N/A

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

N/A

Section 5. Annual Cropping Plan (Instructions Page 68)

Attach an Annual Cropping Plan which includes a discussion of each of the following items. If not applicable, provide a detailed explanation indicating why. **Attachment**: N/A

- Soils map with crops
- Cool and warm season plant species
- Crop yield goals
- Crop growing season
- Crop nutrient requirements
- Additional fertilizer requirements
- Minimum/maximum harvest height (for grass crops)
- Supplemental watering requirements
- Crop salt tolerances
- Harvesting method/number of harvests
- Justification for not removing existing vegetation to be irrigated

Section 6. Well and Map Information (Instructions Page 69)

Attach a USGS map with the following information shown and labeled. If not applicable, provide a detailed explanation indicating why. **Attachment**: N/A

- The boundaries of the land application site(s)
- Waste disposal or treatment facility site(s)
- On-site buildings
- Buffer zones
- Effluent storage and tailwater control facilities
- All water wells within 1-mile radius of the disposal site or property boundaries
- All springs and seeps onsite and within 500 feet of the property boundaries
- All surface waters in the state onsite and within 500 feet of the property boundaries
- All faults and sinkholes onsite and within 500 feet of the property

List and cross reference all water wells located within a half-mile radius of the disposal site or property boundaries shown on the USGS map in the following table. Attach additional pages as necessary to include all of the wells.

Table 3.0(3) – Water Well Data

Well ID	Well Use	Producing? Y/N	Open, cased, capped, or plugged?	Proposed Best Management Practice
N/A	N/A	N/A	Choose an item.	N/A
			Choose an item.	
			Choose an item.	
			Choose an item.	
			Choose an item.	

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

Attachment: N/A

Section 7. Groundwater Quality (Instructions Page 69)

Attach a Groundwater Quality Technical Report which assesses the impact of the wastewater disposal system on groundwater. This report shall include an evaluation of the water wells (including the information in the well table provided in Item 6. above), the wastewater application rate, and pond liners. Indicate by a check mark that this report is provided.

Attachment: N/A

Are groundwater monitoring wells available onsite? ☐ Yes ☒ No

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

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

Attachment: N/A

Section 8. Soil Map and Soil Analyses (Instructions Page 70)

A. Soil map

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

Attachment: N/A

B. Soil analyses

Attach the laboratory results sheets from the soil analyses. **Note**: for renewal applications, the current annual soil analyses required by the permit are acceptable as long as the test date is less than one year prior to the submission of the application.

Attachment: N/A

List all USDA designated soil series on the proposed land application site. Attach additional pages as necessary.

Table 3.0(4) – Soil Data

Soil Series	Depth from Surface	Permeability	Available Water Capacity	Curve Number
N/A	N/A	N/A	N/A	N/A

Section 9. Effluent Monitoring Data (Instructions Page 71)

Is the facility in operation?

☐ Yes ☒ No

If no, this section is not applicable and the worksheet is complete.

If yes, provide the effluent monitoring data for the parameters regulated in the existing permit. If a parameter is not regulated in the existing permit, enter N/A.

Table 3.0(5) – Effluent Monitoring Data

Date	30 Day Avg Flow MGD	BOD5 mg/l	TSS mg/l	pH	Chlorine Residual mg/l	Acres irrigated
N/A	N/A	N/A	N/A	N/A	N/A	N/A

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

N/A

DOMESTIC WASTEWATER PERMIT APPLICATION WORKSHEET 3.1: SURFACE LAND DISPOSAL OF EFFLUENT

The following is required for new and major amendment permit applications. Renewal and minor amendment permit applications may be asked for this worksheet on a case by case basis.

Section 1. Surface Disposal (Instructions Page 72)

Complete the item that applies for the method of disposal being used.

A. Irrigation

Area under irrigation, in acres: N/A

Design application frequency:

hours/day N/A **And** days/week N/A

Land grade (slope):

average percent (%): N/A

maximum percent (%): N/A

Design application rate in acre-feet/acre/year: N/A

Design total nitrogen loading rate, in lbs N/acre/year: N/A

Soil conductivity (mmhos/cm): N/A

Method of application: N/A

Attach a separate engineering report with the water balance and storage volume calculations, method of application, irrigation efficiency, and nitrogen balance.

Attachment: N/A

B. Evaporation ponds

Daily average effluent flow into ponds, in gallons per day: N/A

Attach a separate engineering report with the water balance and storage volume calculations.

Attachment: N/A

C. Evapotranspiration beds

Number of beds: N/A

Area of bed(s), in acres: N/A

Depth of bed(s), in feet: N/A

Void ratio of soil in the beds: N/A

Storage volume within the beds, in acre-feet: N/A

Attach a separate engineering report with the water balance and storage volume calculations, and a description of the lining.

Attachment: N/A

D. Overland flow

Area used for application, in acres: N/A

Slopes for application area, percent (%): N/A

Design application rate, in gpm/foot of slope width: N/A

Slope length, in feet: N/A

Design BOD_5 loading rate, in lbs BOD_5/acre/day: N/A

Design application frequency:

hours/day: N/A **And** days/week: N/A

Attach a separate engineering report with the method of application and design requirements according to *30 TAC Chapter 217*.

Attachment: N/A

Section 2. Edwards Aquifer (Instructions Page 73)

Is the facility subject to *30 TAC Chapter 213*, Edwards Aquifer Rules?

☐ Yes ☒ No

If **yes**, is the facility located on the Edwards Aquifer Recharge Zone?

☐ Yes ☐ No

If yes, attach a geological report addressing potential recharge features.

Attachment: N/A

DOMESTIC WASTEWATER PERMIT APPLICATION WORKSHEET 3.2: SURFACE LAND DISPOSAL OF EFFLUENT

The following **is required** for **new and major amendment** permit applications. Renewal and minor amendments applicants may be asked for the worksheet on a case by case basis.

NOTE: All applicants proposing new/amended subsurface disposal MUST complete and submit Worksheet 7.0. This worksheet applies to any subsurface disposal system that **does not meet** the definition of a subsurface area drip dispersal system as defined in *30 TAC Chapter 222, Subsurface Area Drip Dispersal System.*

Section 1. Subsurface Application (Instructions Page 74)

Identify the type of system:

- ☐ Conventional Gravity Drainfield, Beds, or Trenches (new systems must be less than 5,000 GPD)
- ☐ Low Pressure Dosing
- ☐ Other, specify: N/A

Application area, in acres: N/A

Area of drainfield, in square feet: N/A

Application rate, in gal/square foot/day: N/A

Depth to groundwater, in feet: N/A

Area of trench, in square feet: N/A

Dosing duration per area, in hours: N/A

Number of beds: N/A

Dosing amount per area, in inches/day: N/A

Infiltration rate, in inches/hour: N/A

Storage volume, in gallons: N/A

Area of bed(s), in square feet: N/A

Soil Classification: N/A

Attach a separate engineering report with the information required in *30 TAC § 309.20,* excluding the requirements of *§* 309.20 b(3)(A) and (B) design analysis which may be asked for on a case by case basis. Include a description of the schedule of dosing basin rotation.

Attachment: N/A

Section 2. Edwards Aquifer (Instructions Page 74)

Is the subsurface system over the Edwards Aquifer Recharge Zone as mapped by TCEQ?

- ☐ Yes ☒ No

Is the subsurface system over the Edwards Aquifer Transition Zone as mapped by TCEQ?

- ☐ Yes ☒ No

If yes to either question, the subsurface system may be prohibited by *30 TAC §213.8*. Please call the Municipal Permits Team, at 512-239-4671, to schedule a pre-application meeting.

DOMESTIC WASTEWATER PERMIT APPLICATION WORKSHEET 3.3: SUBSURFACE AREA DRIP DISPERSAL (SADDS) LAND DISPOSAL OF EFFLUENT

The following **is required** for **new and major amendment** subsurface area drip dispersal system permit applications. Renewal and minor amendments applicants may be asked for the worksheet on a case by case basis.

NOTE: All applicants proposing new/amended subsurface disposal MUST complete and submit Worksheet 7.0. This worksheet applies to any subsurface disposal system that **meets** the definition of a subsurface area drip dispersal system as defined in *30 TAC Chapter 222, Subsurface Area Drip Dispersal System.*

Section 1. Administrative Information (Instructions Page 75)

A. Provide the legal name of all corporations or other business entities managed, owned, or otherwise closely related to the owner of the treatment facility:

B. N/A Is the owner of the land where the treatment facility is located the same as the owner of the treatment facility?

☒ Yes ☐ No

If **no**, provide the legal name of all corporations or other business entities managed, owned, or otherwise closely related to the owner of the land where the treatment facility is located.

N/A

C. Owner of the subsurface area drip dispersal system: N/A

D. Is the owner of the subsurface area drip dispersal system the same as the owner of the wastewater treatment facility or the site where the wastewater treatment facility is located?

☐ Yes ☐ No

If **no**, identify the names of all corporations or other business entities managed, owned, or otherwise closely related to the entity identified in Item 1.C.

N/A

E. Owner of the land where the subsurface area drip dispersal system is located: N/A

F. Is the owner of the land where the subsurface area drip dispersal system is located the same as owner of the wastewater treatment facility, the site where the wastewater treatment facility is located, or the owner of the subsurface area drip dispersal system?

☐ Yes ☐ No

If **no**, identify the name of all corporations or other business entities managed, owned, or otherwise closely related to the entity identified in item 1.E.

N/A

Section 2. Subsurface Area Drip Dispersal System (Instructions Page

75)

A. Type of system

☐ Subsurface Drip Irrigation

☐ Surface Drip Irrigation

☐ Other, specify: N/A

B. Irrigation operations

Application area, in acres: N/A

Infiltration Rate, in inches/hour: N/A

Average slope of the application area, percent (%): N/A

Maximum slope of the application area, percent (%): N/A

Storage volume, in gallons: N/A

Major soil series: N/A

Depth to groundwater, in feet: N/A

C. Application rate

Is the facility located **west** of the boundary shown in *30 TAC § 222.83* **and** also using a vegetative cover of non-native grasses over seeded with cool season grasses during the winter months (October-March)?

☐ Yes ☐ No

If yes, then the facility may propose a hydraulic application rate not to exceed 0.1 gal/square foot/day.

Is the facility located **east** of the boundary shown in *30 TAC § 222.83* **or** in any part of the state when the vegetative cover is any crop other than non-native grasses?

☐ Yes ☐ No

If **yes**, the facility must use the formula in *30 TAC §222.83* to calculate the maximum hydraulic application rate.

Do you plan to submit an alternative method to calculate the hydraulic application rate for approval by the executive director?

☐ Yes ☐ No

Hydraulic application rate, in gal/square foot/day: N/A

Nitrogen application rate, in lbs/gal/day: N/A

D. Dosing information

Number of doses per day: N/A

Dosing duration per area, in hours: N/A

Rest period between doses, in hours: N/A

Dosing amount per area, in inches/day: N/A

Number of zones: N/A

Does the proposed subsurface drip irrigation system use tree vegetative cover as a crop?

☐ Yes ☐ No

If **yes**, provide a vegetation survey by a certified arborist. Please call the Water Quality Assessment Team at (512) 239-4671 to schedule a pre-application meeting.

Attachment: N/A

Section 3. Required Plans (Instructions Page 75)

A. Recharge feature plan

Attach a Recharge Feature Plan with all information required in *30 TAC §222.79*.

Attachment: N/A

B. Soil evaluation

Attach a Soil Evaluation with all information required in *30 TAC §222.73*.

Attachment: N/A

C. Site preparation plan

Attach a Site Preparation Plan with all information required in *30 TAC §222.75*.

Attachment: N/A

D. Soil sampling/testing

Attach soil sampling and testing that includes all information required in *30 TAC §222.157*.

Attachment: N/A

Section 4. Floodway Designation (Instructions Page 76)

A. Site location

Is the existing/proposed land application site within a designated floodway?

☐ Yes ☐ No

B. Flood map

Attach either the FEMA flood map or alternate information used to determine the floodway.

Attachment: N/A

Section 5. Surface Waters in the State (Instructions Page 76)

A. Buffer Map

Attach a map showing appropriate buffers on surface waters in the state, water wells, and springs/seeps.

Attachment: N/A

B. Buffer variance request

Do you plan to request a buffer variance from water wells or waters in the state?

☐ Yes ☐ No

If yes, then attach the additional information required in *30 TAC § 222.81(c).*

Attachment: N/A

Section 6. Edwards Aquifer (Instructions Page 76)

A. Is the SADDS located over the Edwards Aquifer Recharge Zone as mapped by TCEQ?

☐ Yes ☒ No

B. Is the SADDS located over the Edwards Aquifer Transition Zone as mapped by TCEQ?

☐ Yes ☒ No

If yes to either question, then the SADDS may be prohibited by *30 TAC §213.8*. Please call the Municipal Permits Team at 512-239-4671 to schedule a pre-application meeting.

DOMESTIC WASTEWATER PERMIT APPLICATION WORKSHEET 4.0: POLLUTANT ANALYSIS REQUIREMENTS

The following **is required** for facilities with a permitted or proposed flow of **1.0 MGD or greater**, facilities with an approved **pretreatment** program, or facilities classified as a **major** facility. See instructions for further details.

This worksheet is not required minor amendments without renewal.

Section 1. Toxic Pollutants (Instructions Page 78)

For pollutants identified in Table 4.0(1), indicate the type of sample.

Grab ☐ Composite ☐

Date and time sample(s) collected: N/A

Table 4.0(1) – Toxics Analysis

Pollutant	AVG Effluent Conc. (µg/l)	MAX Effluent Conc. (µg/l)	Number of Samples	MAL (µg/l)
Acrylonitrile				50
Aldrin				0.01
Aluminum				2.5
Anthracene				10
Antimony				5
Arsenic				0.5
Barium				3
Benzene				10
Benzidine				50
Benzo(a)anthracene				5
Benzo(a)pyrene				5
Bis(2-chloroethyl)ether				10
Bis(2-ethylhexyl)phthalate				10
Bromodichloromethane				10
Bromoform				10
Cadmium				1
Carbon Tetrachloride				2
Carbaryl				5
Chlordane*				0.2
Chlorobenzene				10
Chlorodibromomethane				10

Pollutant	AVG Effluent Conc. (µg/l)	MAX Effluent Conc. (µg/l)	Number of Samples	MAL (µg/l)
Chloroform				10
Chlorpyrifos				0.05
Chromium (Total)				3
Chromium (Tri) **(*1)**				N/A
Chromium (Hex)				3
Copper				2
Chrysene				5
p-Chloro-m-Cresol				10
4,6-Dinitro-o-Cresol				50
p-Cresol				10
Cyanide **(*2)**				10
4,4'- DDD				0.1
4,4'- DDE				0.1
4,4'- DDT				0.02
2,4-D				0.7
Demeton (O and S)				0.20
Diazinon				0.5/0.1
1,2-Dibromoethane				10
m-Dichlorobenzene				10
o-Dichlorobenzene				10
p-Dichlorobenzene				10
3,3'-Dichlorobenzidine				5
1,2-Dichloroethane				10
1,1-Dichloroethylene				10
Dichloromethane				20
1,2-Dichloropropane				10
1,3-Dichloropropene				10
Dicofol				1
Dieldrin				0.02
2,4-Dimethylphenol				10
Di-n-Butyl Phthalate				10
Diuron				0.09
Endosulfan I (alpha)				0.01

Pollutant	AVG Effluent Conc. (µg/l)	MAX Effluent Conc. (µg/l)	Number of Samples	MAL (µg/l)
Endosulfan II (beta)				0.02
Endosulfan Sulfate				0.1
Endrin				0.02
Ethylbenzene				10
Fluoride				500
Guthion				0.1
Heptachlor				0.01
Heptachlor Epoxide				0.01
Hexachlorobenzene				5
Hexachlorobutadiene				10
Hexachlorocyclohexane (alpha)				0.05
Hexachlorocyclohexane (beta)				0.05
gamma-Hexachlorocyclohexane (Lindane)				0.05
Hexachlorocyclopentadiene				10
Hexachloroethane				20
Hexachlorophene				10
Lead				0.5
Malathion				0.1
Mercury				0.005
Methoxychlor				2
Methyl Ethyl Ketone				50
Mirex				0.02
Nickel				2
Nitrate-Nitrogen				100
Nitrobenzene				10
N-Nitrosodiethylamine				20
N-Nitroso-di-n-Butylamine				20
Nonylphenol				333
Parathion (ethyl)				0.1
Pentachlorobenzene				20
Pentachlorophenol				5
Phenanthrene				10

Pollutant	AVG Effluent Conc. (µg/l)	MAX Effluent Conc. (µg/l)	Number of Samples	MAL (µg/l)
Polychlorinated Biphenyls (PCB's) **(*3)**				0.2
Pyridine				20
Selenium				5
Silver				0.5
1,2,4,5-Tetrachlorobenzene				20
1,1,2,2-Tetrachloroethane				10
Tetrachloroethylene				10
Thallium				0.5
Toluene				10
Toxaphene				0.3
2,4,5-TP (Silvex)				0.3
Tributyltin (see instructions for explanation)				0.01
1,1,1-Trichloroethane				10
1,1,2-Trichloroethane				10
Trichloroethylene				10
2,4,5-Trichlorophenol				50
TTHM (Total Trihalomethanes)				10
Vinyl Chloride				10
Zinc				5

(*1) Determined by subtracting hexavalent Cr from total Cr.

(*2) Cyanide, amenable to chlorination or weak-acid dissociable.

(*3) The sum of seven PCB congeners 1242, 1254, 1221, 1232, 1248, 1260, and 1016.

Section 2. Priority Pollutants

For pollutants identified in Tables 4.0(2)A-E, indicate type of sample.

Grab ☐ Composite ☐

Date and time sample(s) collected: N/A

Table 4.0(2)A – Metals, Cyanide, and Phenols

Pollutant	**AVG Effluent Conc. (µg/l)**	**MAX Effluent Conc. (µg/l)**	**Number of Samples**	**MAL (µg/l)**
Antimony				5
Arsenic				0.5
Beryllium				0.5
Cadmium				1
Chromium (Total)				3
Chromium (Hex)				3
Chromium (Tri) **(*1)**				N/A
Copper				2
Lead				0.5
Mercury				0.005
Nickel				2
Selenium				5
Silver				0.5
Thallium				0.5
Zinc				5
Cyanide **(*2)**				10
Phenols, Total				10

(*1) Determined by subtracting hexavalent Cr from total Cr.

(*2) Cyanide, amenable to chlorination or weak-acid dissociable

Table 4.0(2)B – Volatile Compounds

Pollutant	AVG Effluent Conc. (µg/l)	MAX Effluent Conc. (µg/l)	Number of Samples	MAL (µg/l)
Acrolein				50
Acrylonitrile				50
Benzene				10
Bromoform				10
Carbon Tetrachloride				2
Chlorobenzene				10
Chlorodibromomethane				10
Chloroethane				50
2-Chloroethylvinyl Ether				10
Chloroform				10
Dichlorobromomethane [Bromodichloromethane]				10
1,1-Dichloroethane				10
1,2-Dichloroethane				10
1,1-Dichloroethylene				10
1,2-Dichloropropane				10
1,3-Dichloropropylene [1,3-Dichloropropene]				10
1,2-Trans-Dichloroethylene				10
Ethylbenzene				10
Methyl Bromide				50
Methyl Chloride				50
Methylene Chloride				20
1,1,2,2-Tetrachloroethane				10
Tetrachloroethylene				10
Toluene				10
1,1,1-Trichloroethane				10
1,1,2-Trichloroethane				10
Trichloroethylene				10
Vinyl Chloride				10

Table 4.0(2)C – Acid Compounds

Pollutant	AVG Effluent Conc. (µg/l)	MAX Effluent Conc. (µg/l)	Number of Samples	MAL (µg/l)
2-Chlorophenol				10
2,4-Dichlorophenol				10
2,4-Dimethylphenol				10
4,6-Dinitro-o-Cresol				50
2,4-Dinitrophenol				50
2-Nitrophenol				20
4-Nitrophenol				50
P-Chloro-m-Cresol				10
Pentalchlorophenol				5
Phenol				10
2,4,6-Trichlorophenol				10

Table 4.0(2)D – Base/Neutral Compounds

Pollutant	AVG Effluent Conc. (µg/l)	MAX Effluent Conc. (µg/l)	Number of Samples	MAL (µg/l)
Acenaphthene				10
Acenaphthylene				10
Anthracene				10
Benzidine				50
Benzo(a)Anthracene				5
Benzo(a)Pyrene				5
3,4-Benzofluoranthene				10
Benzo(ghi)Perylene				20
Benzo(k)Fluoranthene				5
Bis(2-Chloroethoxy)Methane				10
Bis(2-Chloroethyl)Ether				10
Bis(2-Chloroisopropyl)Ether				10
Bis(2-Ethylhexyl)Phthalate				10
4-Bromophenyl Phenyl Ether				10
Butyl benzyl Phthalate				10
2-Chloronaphthalene				10
4-Chlorophenyl phenyl ether				10
Chrysene				5
Dibenzo(a,h)Anthracene				5
1,2-(o)Dichlorobenzene				10
1,3-(m)Dichlorobenzene				10
1,4-(p)Dichlorobenzene				10
3,3-Dichlorobenzidine				5
Diethyl Phthalate				10
Dimethyl Phthalate				10
Di-n-Butyl Phthalate				10
2,4-Dinitrotoluene				10
2,6-Dinitrotoluene				10
Di-n-Octyl Phthalate				10
1,2-Diphenylhydrazine (as Azo-benzene)				20
Fluoranthene				10

Pollutant	AVG Effluent Conc. (µg/l)	MAX Effluent Conc. (µg/l)	Number of Samples	MAL (µg/l)
Fluorene				10
Hexachlorobenzene				5
Hexachlorobutadiene				10
Hexachlorocyclo-pentadiene				10
Hexachloroethane				20
Indeno(1,2,3-cd)pyrene				5
Isophorone				10
Naphthalene				10
Nitrobenzene				10
N-Nitrosodimethylamine				50
N-Nitrosodi-n-Propylamine				20
N-Nitrosodiphenylamine				20
Phenanthrene				10
Pyrene				10
1,2,4-Trichlorobenzene				10

Table 4.0(2)E – Pesticides

Pollutant	AVG Effluent Conc. (µg/l)	MAX Effluent Conc. (µg/l)	Number of Samples	MAL (µg/l)
Aldrin				0.01
alpha-BHC (Hexachlorocyclohexane)				0.05
beta-BHC (Hexachlorocyclohexane)				0.05
gamma-BHC (Hexachlorocyclohexane)				0.05
delta-BHC (Hexachlorocyclohexane)				0.05
Chlordane				0.2
4,4-DDT				0.02
4,4-DDE				0.1
4,4,-DDD				0.1
Dieldrin				0.02
Endosulfan I (alpha)				0.01
Endosulfan II (beta)				0.02
Endosulfan Sulfate				0.1
Endrin				0.02
Endrin Aldehyde				0.1
Heptachlor				0.01
Heptachlor Epoxide				0.01
PCB-1242				0.2
PCB-1254				0.2
PCB-1221				0.2
PCB-1232				0.2
PCB-1248				0.2
PCB-1260				0.2
PCB-1016				0.2
Toxaphene				0.3

* For PCBS, if all are non-detects, enter the highest non-detect preceded by a “<”.

Section 3. Dioxin/Furan Compounds

A. Indicate which of the following compounds from may be present in the influent from a contributing industrial user or significant industrial user. Check all that apply.

☐ 2,4,5-trichlorophenoxy acetic acid

Common Name 2,4,5-T, CASRN 93-76-5

☐ 2-(2,4,5-trichlorophenoxy) propanoic acid

Common Name Silvex or 2,4,5-TP, CASRN 93-72-1

☐ 2-(2,4,5-trichlorophenoxy) ethyl 2,2-dichloropropionate

Common Name Erbon, CASRN 136-25-4

☐ 0,0-dimethyl 0-(2,4,5-trichlorophenyl) phosphorothioate

Common Name Ronnel, CASRN 299-84-3

☐ 2,4,5-trichlorophenol

Common Name TCP, CASRN 95-95-4

☐ hexachlorophene

Common Name HCP, CASRN 70-30-4

For each compound identified, provide a brief description of the conditions of its/their presence at the facility.

N/A

B. Do you know or have any reason to believe that 2,3,7,8 Tetrachlorodibenzo-P-Dioxin (TCDD) or any congeners of TCDD may be present in your effluent?

☐ Yes ☐ No

If **yes**, provide a brief description of the conditions for its presence.

N/A

C. If any of the compounds in Subsection A **or** B are present, complete Table 4.0(2)F.

For pollutants identified in Table 4.0(2)F, indicate the type of sample.

Grab ☐ Composite ☐

Date and time sample(s) collected: N/A

Table 4.0(2)F – Dioxin/Furan Compounds

Compound	Toxic Equivalency Factors	Wastewater Concentration (ppq)	Wastewater Equivalents (ppq)	Sludge Concentration (ppt)	Sludge Equivalents (ppt)	MAL (ppq)
2,3,7,8 TCDD	1					10
1,2,3,7,8 PeCDD	0.5					50
2,3,7,8 HxCDDs	0.1					50
1,2,3,4,6,7,8 HpCDD	0.01					50
2,3,7,8 TCDF	0.1					10
1,2,3,7,8 PeCDF	0.05					50
2,3,4,7,8 PeCDF	0.5					50
2,3,7,8 HxCDFs	0.1					50
2,3,4,7,8 HpCDFs	0.01					50
OCDD	0.0003					100
OCDF	0.0003					100
PCB 77	0.0001					0.5
PCB 81	0.0003					0.5
PCB 126	0.1					0.5
PCB 169	0.03					0.5
Total						

DOMESTIC WASTEWATER PERMIT APPLICATION WORKSHEET 5.0: TOXICITY TESTING REQUIREMENTS

The following **is required** for facilities with a current operating design flow of**1.0 MGD or greater**, with an EPA-approved **pretreatment** program (or those required to have one under 40 CFR Part 403), or are required to perform Whole Effluent Toxicity testing. See instructions for further details.

This worksheet is not required minor amendments without renewal.

Section 1. Required Tests (Instructions Page 88)

Indicate the number of 7-day chronic or 48-hour acute Whole Effluent Toxicity (WET) tests performed in the four and one-half years prior to submission of the application.

7-day Chronic: N/A

48-hour Acute: N/A

Section 2. Toxicity Reduction Evaluations (TREs)

Has this facility completed a TRE in the past four and a half years? Or is the facility currently performing a TRE?

☐ Yes ☐ No

If yes, describe the progress to date, if applicable, in identifying and confirming the toxicant.

N/A

Section 3. Summary of WET Tests

If the required biomonitoring test information has not been previously submitted via both the Discharge Monitoring Reports (DMRs) and the Table 1 (as found in the permit), provide a summary of the testing results for all valid and invalid tests performed over the past four and one-half years. Make additional copies of this table as needed.

Table 5.0(1) Summary of WET Tests

Test Date	Test Species	NOEC Survival	NOEC Sub-lethal
N/A	N/A	N/A	N/A

DOMESTIC WASTEWATER PERMIT APPLICATION WORKSHEET 6.0: INDUSTRIAL WASTE CONTRIBUTION

The following **is required** for **all publicly owned treatment works**.

Section 1. All POTWs (Instructions Page 89)

A. Industrial users (IUs)

Provide the number of each of the following types of industrial users (IUs) that discharge to your POTW and the daily flows from each user. See the Instructions for definitions of Categorical IUs, Significant IUs – non-categorical, and Other IUs.

If there are no users, enter 0 (zero).

Categorical IUs:

Number of IUs: N/A

Average Daily Flows, in MGD: N/A

Significant IUs – non-categorical:

Number of IUs: N/A

Average Daily Flows, in MGD: N/A

Other IUs:

Number of IUs: N/A

Average Daily Flows, in MGD: N/A

B. Treatment plant interference

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

☐ Yes ☐ No

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

N/A

C. Treatment plant pass through

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

☐ Yes ☐ No

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

N/A

D. Pretreatment program

Does your POTW have an approved pretreatment program?

☐ Yes ☒ No

If yes, complete Section 2 only of this Worksheet.

Is your POTW required to develop an approved pretreatment program?

☐ Yes ☒ No

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

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

Section 2. POTWs with Approved Programs or Those Required to Develop a Program (Instructions Page 90)

A. Substantial modifications

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

☐ Yes ☒ No

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

N/A

B. Non-substantial modifications

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

☐ Yes ☒ No

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

N/A

C. Effluent parameters above the MAL

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

Table 6.0(1) – Parameters Above the MAL

Pollutant	Concentration	MAL	Units	Date
N/A	N/A	N/A	N/A	N/A

D. Industrial user interruptions

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

☐ Yes ☐ No

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

N/A

Section 3. Significant Industrial User (SIU) Information and Categorical Industrial User (CIU) (Instructions Page 90)

A. General information

Company Name: N/A

SIC Code: N/A

Contact name: N/A

Address: N/A

City, State, and Zip Code: N/A

Telephone number: N/A

Email address: N/A

B. Process information

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

N/A

C. Product and service information

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

N/A

D. Flow rate information

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

Process Wastewater:

Discharge, in gallons/day: N/A

Discharge Type: ☐ Continuous ☐ Batch ☐ Intermittent

Non-Process Wastewater:

Discharge, in gallons/day: N/A

Discharge Type: ☐ Continuous ☐ Batch ☐ Intermittent

E. Pretreatment standards

Is the SIU or CIU subject to technically based local limits as defined in the *i*nstructions?

☐ Yes ☐ No

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

☐ Yes ☐ No

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

Category: Subcategories: N/A

Click or tap here to enter text. N/A

Category: N/A

Subcategories: N/A

Category: N/A

Subcategories: N/A

Category: N/A

Subcategories: N/A

Category: N/A

Subcategories: N/A

F. Industrial user interruptions

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

☐ Yes ☐ No

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

N/A

WORKSHEET 7.0

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

CLASS V INJECTION WELL INVENTORY/AUTHORIZATION FORM

Submit the completed form to:

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

For TCEQ Use Only
Reg. No._____
Date Received_____
Date Authorized_____

Section 1. General Information (Instructions Page 92)

1. TCEQ Program Area

Program Area (PST, VCP, IHW, etc.): N/A

Program ID: N/A

Contact Name: N/A

Phone Number: N/A

2. Agent/Consultant Contact Information

Contact Name: N/A

Address: N/A

City, State, and Zip Code: N/A

Phone Number: N/A

3. Owner/Operator Contact Information

☐ Owner ☐ Operator

Owner/Operator Name: N/A

Contact Name: N/A

Address: N/A

City, State, and Zip Code: N/A

Phone Number: N/A

4. Facility Contact Information

Facility Name: N/A

Address: N/A

City, State, and Zip Code: N/A

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

Facility Contact Person: N/A

Phone Number: N/A

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

Latitude: N/A

Longitude: N/A

Method of determination (GPS, TOPO, etc.): N/A

Attach topographic quadrangle map as attachment A.

6. **Well Information**

Type of Well Construction, select one:

- ☐ Vertical Injection
- ☐ Subsurface Fluid Distribution System
- ☐ Infiltration Gallery
- ☐ Temporary Injection Points
- ☐ Other, Specify: N/A

Number of Injection Wells: N/A

7. **Purpose**

Detailed Description regarding purpose of Injection System:

N/A

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

8. **Water Well Driller/Installer**

Water Well Driller/Installer Name: N/A

City, State, and Zip Code: N/A

Phone Number: N/A

License Number: N/A

Section 2. Proposed Down Hole Design

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

Table 7.0(1) – Down Hole Design Table

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

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

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

System(s) Dimensions: N/A

System(s) Construction: N/A

Section 4. Site Hydrogeological and Injection Zone Data

1. Name of Contaminated Aquifer: N/A

2. Receiving Formation Name of Injection Zone: N/A

3. Well/Trench Total Depth: N/A

4. Surface Elevation: N/A

5. Depth to Ground Water: N/A

6. Injection Zone Depth: N/A

7. Injection Zone vertically isolated geologically? ☐ Yes ☐ No

Impervious Strata between Injection Zone and nearest Underground Source of Drinking Water:

Name: N/A

Thickness: N/A

8. Provide a list of contaminants and the levels (ppm) in contaminated aquifer

Attach as Attachment E.

9. Horizontal and Vertical extent of contamination and injection plume

Attach as Attachment F.

10. Formation (Injection Zone) Water Chemistry (Background levels) TDS, etc.

Attach as Attachment G.

11. Injection Fluid Chemistry in PPM at point of injection

Attach as Attachment H.

12. Lowest Known Depth of Ground Water with < 10,000 PPM TDS: N/A

13. Maximum injection Rate/Volume/Pressure: N/A

14. Water wells within 1/4 mile radius (attach map as Attachment I): N/A

15. Injection wells within 1/4 mile radius (attach map as Attachment J): N/A

16. Monitor wells within 1/4 mile radius (attach drillers logs and map as Attachment K): N/A

17. Sampling frequency: N/A

18. Known hazardous components in injection fluid: N/A

Section 5. Site History

1. Type of Facility: N/A
2. Contamination Dates: N/A
3. Original Contamination (VOCs, TPH, BTEX, etc.) and Concentrations (attach as Attachment L): N/A
4. Previous Remediation (attach results of any previous remediation as attachment M): N/A

NOTE: Authorization Form should be completed in detail and authorization given by the TCEQ before construction, operation, and/or conversion can begin. Attach additional pages as necessary.

Class V Injection Well Designations

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

ATTACHMENT 1

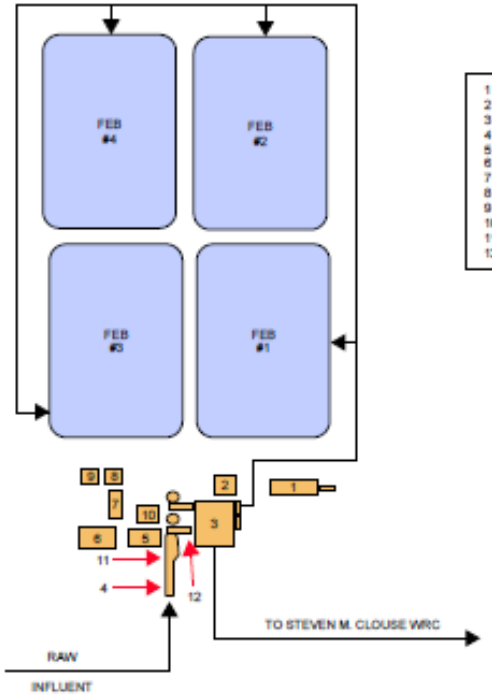
SCWRC Treatment Flow Diagram

TPDES Permit No. 10137-008

Salado Creek WRC

Flow Diagram

46 mgd

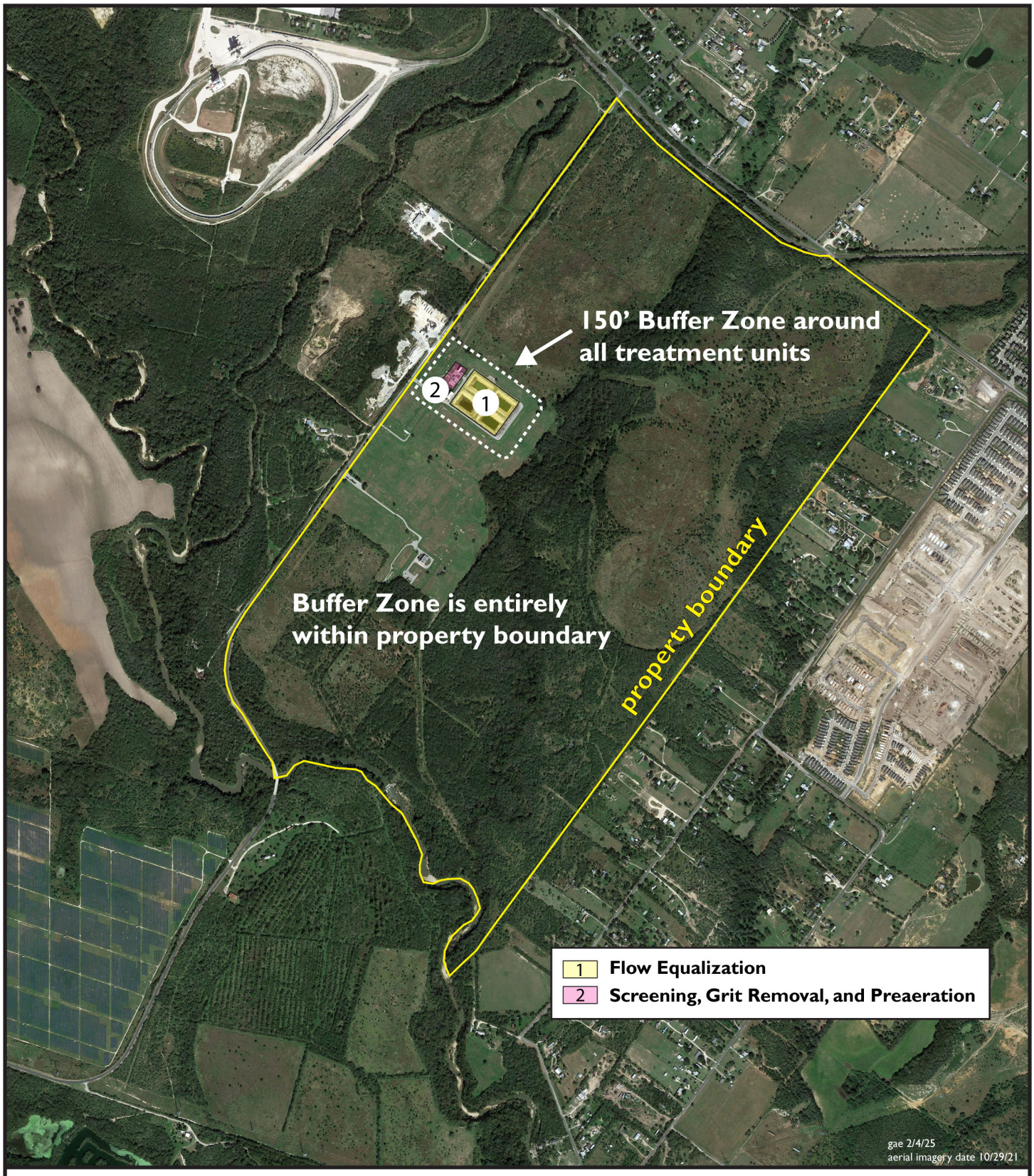


1 ODOR CONTROL CENTER
2 YARD WATER BOOSTER PUMP STATION
3 PREAERATION
4 DIVERSION STRUCTURE
5 MAGMETER VAULT
6 RETURN FLOW PUMP STATION
7 MOTOR CONTROL CENTER
8 GENERATOR
9 TRANSFORMER
10 GRIT PUMP STATION
11 BAR SCREENS
12 GRIT REMOVAL

GAE 5/14/19

ATTACHMENT 2

SCWRC Treatment Facility Boundary Map



Buffer Zone Map
Salado Creek Water Recycling Center
TPDES Permit No. 0010137008

N

feet

0 1,000 2,000

San Antonio Water System

ATTACHMENT 3

SCWRC Permit No. WQ0010137008
2020 Approval Letter

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

October 26, 2020

Olga Galindo, Executive Administrative Assistant
San Antonio Water System
2800 U.S. Highway 281 North
San Antonio, Texas 78212

RE: San Antonio Water System
Permit No. WQ0010137008

This letter is your notice that the Texas Commission on Environmental Quality (TCEQ) executive director (ED) has acted on the above-named application. According to 30 Texas Administrative Code (TAC) Section 50.135 the ED's action became effective on the date the ED signed the permit or other action. A copy of the final action is enclosed and cites the effective date.

For certain matters, a **motion to overturn**, which is a request that the commission review the executive director's action on an application, may be filed with the chief clerk. Whether a motion to overturn is procedurally available for a specific matter is determined by Title 30 of the Texas Administrative Code Chapter 50. According to 30 TAC Section 50.139, an action by the ED is not affected by a motion to overturn filed under this section unless expressly ordered by the commission.

If a motion to overturn is filed, the motion must be received by the chief clerk within 23 days after the date of this letter. An original and 7 copies of a motion must be filed with the chief clerk in person or by mail. The Chief Clerk's mailing address is Office of the Chief Clerk (MC 105), TCEQ, P.O. Box 13087, Austin, Texas 78711-3087. On the same day the motion is transmitted to the chief clerk, please provide copies to Robert Martinez, Environmental Law Division Director (MC 173), and Vic McWherter, Public Interest Counsel (MC 103), both at the same TCEQ address listed above. If a motion is not acted on by the commission within 45 days after the date of this letter, then the motion shall be deemed overruled.

You may also request **judicial review** of the ED's action. The procedure and timelines for seeking judicial review of a commission or ED action are governed by Texas Water Code Section 5.351.

Individual members of the public may seek further information by calling the TCEQ Public Education Program, toll free, at 1-800-687-4040.

Sincerely,

Bridget C. Bohac

Bridget C. Bohac
Chief Clerk

BCB/lcr

cc: Vic McWherter, TCEQ Public Interest Counsel (MC 103)

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

October 26, 2020

Ms. Olga Galindo, Executive Administrative Assistant
San Antonio Water System
2800 U.S. Highway 281 North
San Antonio, Texas 78212

Re: San Antonio Water System, TPDES Permit No. WQ0010137008
(CN600529069; RN100851518)

Dear Ms. Galindo:

Enclosed is a copy of the above referenced water quality permit issued on behalf of the Executive Director pursuant to Chapter 26 of the Texas Water Code.

Self-reporting or Discharge Monitoring Forms and instructions will be forwarded to you from the Water Quality Management Information Systems Team so that you may comply with monitoring requirements. For existing facilities, revised forms will be forwarded if monitoring requirements have changed.

Enclosed is a "Notification of Completion of Wastewater Treatment Facilities" form. Use this form (if needed) when the facility begins to operate or goes into a new phase. The form notifies the agency when the proposed facility is completed or when it is placed in operation. This notification complies with the special provision incorporated into the permit, as applicable.

Should you have any questions, please contact Ms. Sonia Bhuiya of the Texas Commission on Environmental Quality's (TCEQ) Wastewater Permitting Section at (512) 239-4671 or if by correspondence, include (MC-148) in the letterhead address below.

Sincerely,

David W Galindo

David W. Galindo, Director
Water Quality Division

DWG/SB/kb

cc: Mr. Ken Diehl, R.E.M., Environmental Protection Specialist IV
Resource Protection & Compliance, San Antonio Water System
2800 U.S. Highway 281 North, San Antonio, Texas 78212
Mr. Raymond Perez, R.E.M., Director/Production & Treatment Operations
San Antonio Water System, 2800 U.S. Highway 281 North, San Antonio, Texas 78212

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
NOTIFICATION OF COMPLETION/PHASE OF WASTEWATER TREATMENT FACILITY

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

Current Permit Information

What is the TCEQ Water Quality Permit Number?

What is the EPA I.D. Number? TX

Current Name on Permit:

Notification

Indicate the phase the facility will be operating.

- ☐ Interim Phase I Flow
- ☐ Interim Phase II Flow
- ☐ Interim Phase III Flow
- ☐ Final Phase Flow

Indicate the date that the operation began or will begin operating under the selected phase:
Month/Day/Year:

Comments:

Certification and Signature

Responsible Official Name (Print or Type):

Responsible Official Title:

Responsible Official Email:

I 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.

Signature (use blue ink): _____ Date: _____

Email completed form to: **WQ-ARPTeam@tceq.texas.gov**
or

Fax completed form to: **512-239-0884**
or mail completed form to: Texas Commission on Environmental Quality
Applications Review and Processing Team (MC-148)
P.O. Box 13087
Austin TX 78711-3087

Instructions for Notification of Completion/Phase Of Wastewater Treatment Facility

Current Permit Information

Provide your Permit Number. This number will start with WQ followed by 10 digits. The number can be found on the top right-hand corner of your issued permit.

For Texas Pollutant Discharge Elimination Permits (TPDES), provide the EPA ID number. This number will start with TX followed by 7 digits. The number can be found on the top right-hand corner of your issued permit.

Provide the current name that is on your permit. This information can be found on the first page of your permit.

Indicate the phase of operation you will be operating under. Provide the date the facility will begin operating in that phase. Date should be provided as month/day/year.

Signature Requirements

In accordance with 30 Texas Administrative Code §305.44 relating to Signatories to Applications, all applications shall be signed as follows:

For a corporation, the application shall be signed by a responsible corporate officer. For purposes of this paragraph, a responsible corporate officer means a president, secretary, treasurer, or v ice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation; or themanager of one or more manufacturing, production, or operating facilities employing more than 250 persons or having gross annual sales or expenditures exceeding $25 million (in second-quarter 1980 dollars), if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures. Corporate procedures governing authority to sign permit or post-closure order applications may provide for assignment or delegation to applicable corporate positions rather than to specific individuals.

For a partnership or sole proprietorship, the application shall be signed by a general partner or the proprietor, respectively.

For a municipality, state, federal, or other public agency, the application shall be signed by either a principal executive officer or a ranking elected official. For purposes of this paragraph, a principal executive officer of a federal agency includes the chief executive officer of the agency, or a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., regional administrator of the EPA).

TPDES PERMIT NO.
WQ0010137008
[For TCEQ office use only - EPA I.D. No. TX0052647]

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

This is a renewal that replaces TPDES Permit No. WQ0010137008 issued on January 7, 2016.

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

San Antonio Water System

whose mailing address is

2800 U.S. Highway 281 North
San Antonio, Texas 78212

is authorized to treat and discharge wastes from the Salado Creek Water Recycling Plant, SIC Code 4952

located at 13496 Blue Wing Road, in the City of San Antonio, Bexar County, Texas 78223

directly to the Upper San Antonio River in Segment No. 1911 of the San Antonio River Basin

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

This permit shall expire at midnight, **five years from the date of issuance**.

ISSUED DATE:

October 15, 2020

For the Commission

ATTACHMENT 4

Plain Language Summary

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

San Antonio Water System (CN600529069) operates the Salado Creek Water Recycling Center (RN103119020), a wastewater treatment facility. The facility is located at 13496 Blue Wing Road in the City of San Antonio, in Bexar County, Texas 78223. This permit application is for renewal to discharge treated domestic wastewater at the following Outfall:

- Outfall 001 = 46 million gallons per day

The facility is not currently discharging wastewater. The permit is being renewed for a potential future treatment facility and discharge at this location.

The facility transfers all wastewater flows to the Steven M. Clouse Water Recycling Center (WRC) for further treatment. The only treatment process at the Salado Creek WRC is screening of sewage, which removes large solids such as sticks, rags, and plastic material from the water. The facility also has four large rectangular tanks called flow equalization basins that are used to temporarily store sewage during storm events before transfer to the Steven M. Clouse facility. Facilities not currently used at Salado Creek WRC include grit removal chambers, which remove inorganic particles like sand or gravel, and facilities to add air to keep solids suspended in the water.

ATTACHMENT 5

Core Data Form

TCEQ Use Only

TCEQ Core Data Form

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

SECTION I: General Information

1. Reason for Submission *(If other is checked please describe in space provided.)*

☐ New Permit, Registration or Authorization *(Core Data Form should be submitted with the program application.)*

☒ Renewal *(Core Data Form should be submitted with the renewal form)* ☐ Other

2. Customer Reference Number *(if issued)*	Follow this link to search for CN or RN numbers in Central Registry**	3. Regulated Entity Reference Number *(if issued)*
CN 600529069		RN 100851518

SECTION II: Customer Information

4. General Customer Information | **5. Effective Date for Customer Information Updates** (mm/dd/yyyy)

☐ New Customer ☒ Update to Customer Information ☐ Change in Regulated Entity Ownership
☐ Change in Legal Name (Verifiable with the Texas Secretary of State or Texas Comptroller of Public Accounts)

The Customer Name submitted here may be updated automatically based on what is current and active with the Texas Secretary of State (SOS) or Texas Comptroller of Public Accounts (CPA).

6. Customer Legal Name *(If an individual, print last name first: eg: Doe, John)* *If new Customer, enter previous Customer below:*

SAN ANTONIO WATER SYSTEM (SAWS)

7. TX SOS/CPA Filing Number	8. TX State Tax ID (11 digits)	9. Federal Tax ID (9 digits)	10. DUNS Number *(if applicable)*
	17426325308	74-2632530	057582603

11. Type of Customer: ☐ Corporation ☐ Individual Partnership: ☐ General ☐ Limited
Government: ☒ City ☐ County ☐ Federal ☐ Local ☐ State ☐ Other ☐ Sole Proprietorship ☐ Other:

12. Number of Employees
☐ 0-20 ☐ 21-100 ☐ 101-250 ☐ 251-500 ☒ 501 and higher

13. Independently Owned and Operated?
☐ Yes ☒ No

14. Customer Role (Proposed or Actual) – *as it relates to the Regulated Entity listed on this form. Please check one of the following*

☐ Owner ☐ Operator ☒ Owner & Operator ☐ Other:
☐ Occupational Licensee ☐ Responsible Party ☐ VCP/BSA Applicant

15. Mailing Address:								
	2800 US HIGHWAY 281 NORTH							
	City	SAN ANTONIO	State	TX	ZIP	78212	ZIP + 4	3106

16. Country Mailing Information *(if outside USA)*	17. E-Mail Address *(if applicable)*

18. Telephone Number	19. Extension or Code	20. Fax Number *(if applicable)*

(210) 704-7297		( ) -

SECTION III: Regulated Entity Information

21. General Regulated Entity Information *(If 'New Regulated Entity" is selected, a new permit application is also required.)*

☐ New Regulated Entity ☐ Update to Regulated Entity Name ☒ Update to Regulated Entity Information

The Regulated Entity Name submitted may be updated, in order to meet TCEQ Core Data Standards (removal of organizational endings such as Inc, LP, or LLC).

22. Regulated Entity Name *(Enter name of the site where the regulated action is taking place.)*

SALADO CREEK WATER RECYCLING CENTER (SCWRC)

23. Street Address of the Regulated Entity: *(No PO Boxes)*	13496 BLUE WING ROAD							
	City	SAN ANTONIO	**State**	TX	**ZIP**	78223	**ZIP + 4**	
24. County	BEXAR							

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

25. Description to Physical Location:					
26. Nearest City			**State**		**Nearest ZIP Code**

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

27. Latitude (N) In Decimal:	29.275560		**28. Longitude (W) In Decimal:**	-98.428978	
Degrees	Minutes	Seconds	Degrees	Minutes	Seconds
29	16	32.0160	98	25	44.3208

29. Primary SIC Code (4 digits)	**30. Secondary SIC Code** (4 digits)	**31. Primary NAICS Code** (5 or 6 digits)	**32. Secondary NAICS Code** (5 or 6 digits)
4952		221320	

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

MUNICIPAL WASTEWATER TREATMENT/RECYCLING

34. Mailing Address:	**2800 US HIGHWAY 281 NORTH**							
	City	**SAN ANTONIO**	**State**	**TX**	**ZIP**	**78221**	**ZIP + 4**	**3106**

35. E-Mail Address:	

36. Telephone Number	**37. Extension or Code**	**38. Fax Number** *(if applicable)*
(210) 704-7297		( ) -

39. TCEQ Programs and ID Numbers Check all Programs and write in the permits/registration numbers that will be affected by the updates submitted on this form. See the Core Data Form instructions for additional guidance.

☐ Dam Safety	☐ Districts	☐ Edwards Aquifer	☐ Emissions Inventory Air	☐ Industrial Hazardous Waste
☐ Municipal Solid Waste	☐ New Source Review Air	☐ OSSF	☐ Petroleum Storage Tank	☐ PWS
☐ Sludge	☐ Storm Water	☐ Title V Air	☐ Tires	☐ Used Oil
☐ Voluntary Cleanup	☒ Wastewater	☐ Wastewater Agriculture	☐ Water Rights	☐ Other:
	WQ0010137008			

SECTION IV: Preparer Information

40. Name:	FLORAMIE WELCH	41. Title:	ENVIRONMENTAL ANALYST III

42. Telephone Number	43. Ext./Code	44. Fax Number	45. E-Mail Address
(210) 233-3744		( ) -	FLORAMIE.WELCH@SAWS.ORG

SECTION V: Authorized Signature

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

Company:	SAN ANTONIO WATER SYSTEM (SAWS)	Job Title:	VICE PRESIDENT, TREATMENT OPERATIONS
Name *(In Print)*:	ALISSA LOCKETT, P.E.	Phone:	(210) 233- ~~3104~~ 3401
Signature:	Alissa Lockett	Date:	2-11-2025

ATTACHMENT 6

Design Calculation – Not Applicable

SC Water Recycling Center WQ00010137008
Design Calculations - NOT APPLICABLE

Influent Quality Characteristics - The raw sewage characteristics used for design purposes are as follows:

Parameter Concentration

Influent Flow Characteristics - The hydraulic design of the facility must ensure that the facility will operate under the most extreme conditions anticipated. The facility process and hydraulic design for this facility are as follows:

Table EX4(1) – Design Calculations

Flow	Gallons Per Day	Gallons Per Minute
Average Daily Flow (Q_{ave})		
Peak 2-Hour Flow (Q_{pk})		

Loading	Pounds Per Day

Process Design - The treatment facility was designed to produce an effluent quality in compliance with the current permitted monthly average limits of:

$CBOD_5$ = 5 mg/L; TSS = 12 mg/L; NH_3-N = 2 mg/L

DO: 6.0 mg/L (minimum of all daily values)

Cl_2 Residual = 1.0 mg/L after 20 minutes detention time at peak flow

In order to achieve the required removal efficiencies, the plant is a two stage activated sludge process operated in the conventional mode with CBOD removal in first stage and nitrification in second stage. Operating ranges for MLSS and RAS in first stage have been 3,000 mg/L and 12,000 mg/L, respectively, and in second stage have been 2,000 mg/L and 5,500 mg/L, respectively.

Note that the original design of the two stage activated sludge process for the plant has not changed substantially since initial operation in 1987.

ATTACHMENT 7

Biosolids Management Plan

Salado Creek WRC
Sludge Operations

Introduction

There currently are no sludges generated at the Salado Creek WRC. The Steven M. Clouse Water Recycling Center (SMCWRC) now treats the solid residue previously generated in the Salado Creek sewer shed. The SMCWRC is now the centralized sludge processing facility for all the solids generated by the San Antonio Water System facilities.

Primary Sludge

No primary sludge is generated at the Salado Creek facility.

Waste Activated Sludge

No waste activated sludge is generated at the Salado Creek facility.

Sludge Digestion

No sludge digestion is performed at the Salado Creek facility.

Sludge Dewatering

No sludge dewatering is performed at the Salado Creek facility.

Final Disposal

There is no final disposal options of the sludges previously generated at the Salado Creek WRC; all flows have been transferred to the Steven M. Clouse Water Recycling Center as of July 14, 2006.

ATTACHMENT 8

Water Balance – Not Applicable

EXAMPLE 9 – Water Balance and Storage Calculation

Explanation of Tables 1 and 2

Table EX9(1)

Columns

1 Month (example calculations for each column are given for the month of January)

2 Average rainfall for previous 25 years: Data for Corsicana was obtained from the *Texas Water Oriented Data Bank* for the years 1968 through 1992. January: Average rainfall = 2.39 in

3 Average runoff: Method used to determine average runoff is found in *Soil Conservation Service Technical Note No. 210-18-TX5*. A curve number (N) of 78 is appropriate for Crockett soils (Hydrologic Group D) with continuous grass. The antecedent moisture condition for Navarro County is Type II.

$Q = (I - 0.2S)^2/(I + 0.8S)$, and $S = 1000/N - 10$ where Q = runoff in inches

I = average rainfall in inches (from Column 2); and S = potential maximum retention after runoff begins. January: $S = 1000/78 - 10 = 2.82$ in. $Q = [2.39 - 0.2(2.82)]^2/[2.39 + 0.8(2.82)] = 0.72$ in

4 Average Infiltrated Rainfall (R_i): Obtained by subtracting the average runoff from the average rainfall

January: R_i (avg) = (2.39 in) - (0.72 in) = 1.67 in

5 Evapotranspiration (ET); Data obtained from the *Texas Board of Water Engineers, Bulletin 6019: Consumptive Use of Water by Major Crops in Texas, Table 5*. For Coastal Bermuda Grass, applied 90% of the listed values for alfalfa as noted on the table. January: (905)(1.0 in) = 0.90 in.

6 Required leaching to avoid salinity buildup in soil (L): Equation is from *30 TAC 309.20, Table 1*.

$L = [C_e/(C_l - C_e)](E - R_i)$, where C_e = electrical conductivity of effluent (provided by applicant); and

C_l = maximum allowable conductivity of soil solution obtained from *30 TAC 309.20, Table 3*.

If $(E - R_i)$ is less than zero (<0), then L = 0

January: $L = [(5.4 \text{ mg/L})/(12.0 \text{ mg/L} - 5.4 \text{ mg/L})](0.9 \text{ in} - 1.67 \text{ in})$ $(E - R_i) < 0$, therefore L = 0.

7 Total Water Needs: Obtained by adding Evapotranspiration ("E," Column 5) and Required Leaching ("L," Column 6). January: 0.90 in + 0.0 in = 0.90 in

8 Effluent needed in root zone: Obtained by subtracting the average infiltrated rainfall (R_i, Column 4) from Total Water Needs (Column 7). If value is less than zero, then a value of zero is assumed.

January: 0.90 in - 1.67 in = -0.77 and -0.77 < 0, therefore the amount of effluent needed in the root zone = 0.0 in

9 Net evaporation from reservoir surface: Average evaporation data was obtained from

the *Texas Water Oriented Data Bank* for the years 1966 through 1990. Values were multiplied by the ration of the surface area of the lagoons (5.5 acres) to the irrigation surface area (58 acres). For this example, the ratio is 5.5/58 = 0.09. January: Evap. = (0.05 feet)(12 in/ft)(0.09) = 0.06 in

10 Effluent to be applied to land: Obtained by dividing the effluent need in root zone (Column 8) by the irrigation efficiency, K (assumed to be 0.85, or 85%). June: 8.8/0.85 = 10.3 in

11 Consumption from reservoir: Obtained by adding the net evaporation from the reservoir surface (Column 9) and the effluent to be applied to the land (Column 10). This is the maximum hydraulic application rate that can be applied over the irrigated area.

June: 0.39 in + 10.3 in = 10.69 inches/acre

Total annual application is 59.96 in per irrigated acre (59.96 in/ac/yr).

Table EX9(2)

Columns

12 Month

13 Effluent received for application or storage: A daily average flow to the irrigation field of 38,000 gallons was requested by the applicant and converted to inches per acre. The average application rate must be less than or equal to the consumption from reservoir (Column 11). Therefore, the maximum monthly average application rate is (59.7 in/yr)/(12 mo/yr) = 4.97 in/mo

Annual: = (38,000 gal/day)(365 days/yr)(12 in/ft)(1 ac/43,560 ft^2)(1 ft^3/7.48 gal)/(58 ac)

= 8.76 in/yr

January: = (8.76 in/yr)(1 yr/12 mo)

= 0.73 in/mo, which is less than 4.97 in/mo calculated in Column 13.

14 Worst rainfall year in the past 25 years distributed proportional to monthly averages: Rainfall data for Corsicana was obtained from the *Texas Water Oriented Data Bank* for the years 1968 through 1992 and distributed proportional to the monthly averages. The worst annual rainfall was 51.9 in which occurred in 1968.

January: (51.9 in)(6.4%) = 3.32 in

15 Worst runoff year in the past 25 years (Q): Used the rainfall figures in Column 14 and calculating worst runoff similar to average runoff as in Column 3.

January: Q = [3.32 in - 0.2(2.82)]2/[3.32 + 0.8(2.82)] = 1.36 in

16 Infiltrated rainfall (R_i): Obtained by subtracting the worst runoff year (Column 15) from the worst rainfall year (Column 14).

January: R_i (worst) = 3.32 in - 1.36 in = 1.96 in

17 Available water: Obtained by adding the amount of effluent received for application or storage (Column 13) and the infiltrated rainfall (Column 16).

January: 0.73 in + 1.96 in = 2.69 in

18 Lowest annual net evaporation in the past 25 years from the reservoir surface: Minimum annual net evaporation data was obtained from the Texas Water Oriented Data

Bank for the years 1966 through 1990 and distributed proportional to monthly averages. Values were then multiplied by the ratio of the surface are of the lagoons (5.5 acres) to the irrigation surface area (58 acres). For this example, the ratio is 5.5/58 = 0.09

19 Storage: Obtained by calculating according to *30 TAC 309.20, Table 2*.

Storage = [(Column 13 - Column 18B) - [(Column 7 - Column 16)/k]

If [(Column 7 - Column 16)/k] < 0, it is entered as zero, and Storage = (Column 13 - Column 18)

January: Storage = (0.73 - 0.04)-[(0.9 - 1.96)/0.85] = 0.69 in

20 Accumulated Storage: To allow for the worst condition, the summation of storage was obtained by adding the values obtained in Column 19, beginning with the first consecutive month of positive values. In this case, the summation was started in November. The maximum accumulated storage requirement occurred in February.

Annual: (0.62 in) + (0.67 in) + (0.69 in) + (0.71 in) = 2.69 in-ac/ac

*Table EX9(1) - Monthly Water Balance**

(Units in inches unless otherwise specified)

1	2	3	4	5	6	7	8	9	10	11
	Avg Rain	**Avg Run-off**	**Avg R_i****	**ET****	**L****	**TWN****	**Effluent Required in Root Zone**	**EFRS****	**Effluent Applied to Land**	**CFR****
JAN	2.39	0.72	1.67	0.9	0.0	0.9	0.0	0.06	0.0	0.06
FEB	2.80	0.99	1.81	1.3	0.0	1.3	0.0	0.03	0.0	0.03
MAR	2.95	1.09	1.86	3.0	0.9	3.9	2.1	0.15	2.5	2.6
APR	4.04	1.92	2.12	3.5	1.1	4.6	2.5	0.11	3.0	3.1
MAY	5.10	2.80	2.30	6.5	3.4	9.9	7.6	0.16	9.0	9.1
JUN	3.04	1.16	1.88	6.7	3.9	10.6	8.8	0.39	10.3	10.7
JUL	2.24	0.62	1.62	7.4	4.7	12.1	10.5	0.64	12.4	13.0
AUG	2.21	0.61	1.60	5.1	2.9	8.0	6.4	0.66	7.5	8.1
SEP	2.97	1.11	1.86	5.3	2.8	8.1	6.3	0.42	7.4	7.8
OCT	3.43	1.44	1.99	4.2	1.8	6.0	4.0	0.31	4.7	5.0
NOV	2.97	1.11	1.86	1.7	0.0	1.70	0.0	0.16	0.0	0.16
DEC	3.31	1.35	1.96	0.72	0.0	0.72	0.0	0.08	0.0	0.08
TOTAL	37.45	14.92	22.53	46.3	21.5	67.8	48.2	3.16	56.8	59.7

***Table EX9(1) was completed in accordance with Table 1 of 30 TAC 309.20. Refer to Appendix C for detailed explanation of calculations**.

****R_i = Infiltrated Rainfall, ET = Evapotranspiration, L = Required Leaching, TWN = Total Water Needs, EFRS = Evaporation From Reservoir Surface, RC = Consumption From Reservoir**.

*EX9(2) - Storage Volume Calculation**

(Units in inches unless otherwise specified)

12	13	14A	14B	15	16	17	18A	18B	19	20
	Effluent Applied To Land	**MRD**(%)**	**Rainfall (MAX)**	**Runoff (MAX)**	**R_i ****	**Total Avail. H_2O**	**DoM** (%)**	**Net E (MIN)**	**Storage (in-ac/ac)**	**AS (in-ac/ac)**
JAN	0.73	6.4	3.32	1.36	1.96	2.69	1.8 %	0.04	0.69	1.98
FEB	0.73	7.5	3.89	1.80	2.09	2.82	1.1%	0.02	0.71	2.69
MAR	0.73	7.9	4.10	1.97	2.16	2.86	4.7 %	0.10	-1.4	1.27
APR	0.73	10.8	5.61	3.23	2.37	3.10	3.6 %	0.08	-2.0	-0.73
MAY	0.73	13.6	7.06	4.53	2.53	3.26	4.9 %	0.11	-8.1	-8.83
JUN	0.73	8.1	4.20	2.05	2.15	2.88	12.4 %	0.27	-9.5	-18.33
JUL	0.73	6.0	3.11	1.21	1.90	2.63	20.0 %	0.44	-11.7	-30.13
AUG	0.73	5.9	3.06	1.17	1.89	2.62	20.8 %	0.45	-6.9	-37.03
SEP	0.73	7.9	4.10	1.97	2.13	2.86	13.2 %	0.29	-6.6	-43.63
OCT	0.73	9.2	4.77	2.52	2.25	2.98	9.6 %	0.21	-3.9	-47.53
NOV	0.73	7.9	4.10	1.97	2.13	2.86	5.1 %	0.11	0.62	0.62
DEC	0.73	8.8	4.57	2.35	2.22	2.95	2.6 %	0.06	0.67	1.29
TOTAL	8.76	100.0	51.9	26.1	25.8	34.5	100	2.18	------	2.69***

***Table EX9(2) was completed in accordance with Table 2 of 30 TAC 309.20. Refer to Appendix C for detailed explanation of calculations**.

****MRD = Mean Rainfall Distribution, R_i = Infiltrated Rainfall, DoM = Distribution of Mean, Net E = Net Evaporation, AS = Accumulated Storage**.

*****Storage volume requirement = 2.69 in-ac/ac, or (2.69 in-ac/ac)(58 ac)(1 ft/12 in)= 13 ac-f**

SC Water Recycling Center WQ00010137008
Design Calculations - NOT APPLICABLE

Influent Quality Characteristics - The raw sewage characteristics used for design purposes are as follows:

Parameter Concentration

Influent Flow Characteristics - The hydraulic design of the facility must ensure that the facility will operate under the most extreme conditions anticipated. The facility process and hydraulic design for this facility are as follows:

Table EX4(1) – Design Calculations

Flow	Gallons Per Day	Gallons Per Minute
Average Daily Flow (Q_{ave})		
Peak 2-Hour Flow (Q_{pk})		

Loading	Pounds Per Day

Process Design - The treatment facility was designed to produce an effluent quality in compliance with the current permitted monthly average limits of:

$CBOD_5$ = 5 mg/L; TSS = 12 mg/L; NH_3-N = 2 mg/L

DO: 6.0 mg/L (minimum of all daily values)

Cl_2 Residual = 1.0 mg/L after 20 minutes detention time at peak flow

In order to achieve the required removal efficiencies, the plant is a two stage activated sludge process operated in the conventional mode with CBOD removal in first stage and nitrification in second stage. Operating ranges for MLSS and RAS in first stage have been 3,000 mg/L and 12,000 mg/L, respectively, and in second stage have been 2,000 mg/L and 5,500 mg/L, respectively.

Note that the original design of the two stage activated sludge process for the plant has not changed substantially since initial operation in 1987.

EXAMPLE 9 – Water Balance and Storage Calculation

Explanation of Tables 1 and 2

Table EX9(1)

Columns

1 Month (example calculations for each column are given for the month of January)

2 Average rainfall for previous 25 years: Data for Corsicana was obtained from the *Texas Water Oriented Data Bank* for the years 1968 through 1992. January: Average rainfall = 2.39 in

3 Average runoff: Method used to determine average runoff is found in *Soil Conservation Service Technical Note No. 210-18-TX5*. A curve number (N) of 78 is appropriate for Crockett soils (Hydrologic Group D) with continuous grass. The antecedent moisture condition for Navarro County is Type II.

$Q = (I - 0.2S)^2/(I + 0.8S)$, and $S = 1000/N - 10$ where Q = runoff in inches

I = average rainfall in inches (from Column 2); and S = potential maximum retention after runoff begins. January: $S = 1000/78 - 10 = 2.82$ in. $Q = [2.39 - 0.2(2.82)]^2/[2.39 + 0.8(2.82)] = 0.72$ in

4 Average Infiltrated Rainfall (R_i): Obtained by subtracting the average runoff from the average rainfall

January: R_i (avg) = (2.39 in) - (0.72 in) = 1.67 in

5 Evapotranspiration (ET); Data obtained from the *Texas Board of Water Engineers, Bulletin 6019: Consumptive Use of Water by Major Crops in Texas, Table 5*. For Coastal Bermuda Grass, applied 90% of the listed values for alfalfa as noted on the table. January: (905)(1.0 in) = 0.90 in.

6 Required leaching to avoid salinity buildup in soil (L): Equation is from *30 TAC 309.20, Table 1*.

$L = [C_e/(C_l - C_e)](E - R_i)$, where C_e = electrical conductivity of effluent (provided by applicant); and

C_l = maximum allowable conductivity of soil solution obtained from *30 TAC 309.20, Table 3*.

If $(E - R_i)$ is less than zero (<0), then L = 0

January: $L = [(5.4 \text{ mg/L})/(12.0 \text{ mg/L} - 5.4 \text{ mg/L})](0.9 \text{ in} - 1.67 \text{ in})$ $(E - R_i) < 0$, therefore L = 0.

7 Total Water Needs: Obtained by adding Evapotranspiration ("E," Column 5) and Required Leaching ("L," Column 6). January: 0.90 in + 0.0 in = 0.90 in

8 Effluent needed in root zone: Obtained by subtracting the average infiltrated rainfall (R_i, Column 4) from Total Water Needs (Column 7). If value is less than zero, then a value of zero is assumed.

January: 0.90 in - 1.67 in = -0.77 and -0.77 < 0, therefore the amount of effluent needed in the root zone = 0.0 in

9 Net evaporation from reservoir surface: Average evaporation data was obtained from

the *Texas Water Oriented Data Bank* for the years 1966 through 1990. Values were multiplied by the ration of the surface area of the lagoons (5.5 acres) to the irrigation surface area (58 acres). For this example, the ratio is 5.5/58 = 0.09. January: Evap. = (0.05 feet)(12 in/ft)(0.09) = 0.06 in

10 Effluent to be applied to land: Obtained by dividing the effluent need in root zone (Column 8) by the irrigation efficiency, K (assumed to be 0.85, or 85%). June: 8.8/0.85 = 10.3 in

11 Consumption from reservoir: Obtained by adding the net evaporation from the reservoir surface (Column 9) and the effluent to be applied to the land (Column 10). This is the maximum hydraulic application rate that can be applied over the irrigated area.

June: 0.39 in + 10.3 in = 10.69 inches/acre

Total annual application is 59.96 in per irrigated acre (59.96 in/ac/yr).

Table EX9(2)

Columns

12 Month

13 Effluent received for application or storage: A daily average flow to the irrigation field of 38,000 gallons was requested by the applicant and converted to inches per acre. The average application rate must be less than or equal to the consumption from reservoir (Column 11). Therefore, the maximum monthly average application rate is (59.7 in/yr)/(12 mo/yr) = 4.97 in/mo

Annual: = (38,000 gal/day)(365 days/yr)(12 in/ft)(1 ac/43,560 ft^2)(1 ft^3/7.48 gal)/(58 ac)

= 8.76 in/yr

January: = (8.76 in/yr)(1 yr/12 mo)

= 0.73 in/mo, which is less than 4.97 in/mo calculated in Column 13.

14 Worst rainfall year in the past 25 years distributed proportional to monthly averages: Rainfall data for Corsicana was obtained from the *Texas Water Oriented Data Bank* for the years 1968 through 1992 and distributed proportional to the monthly averages. The worst annual rainfall was 51.9 in which occurred in 1968.

January: (51.9 in)(6.4%) = 3.32 in

15 Worst runoff year in the past 25 years (Q): Used the rainfall figures in Column 14 and calculating worst runoff similar to average runoff as in Column 3.

January: Q = [3.32 in - 0.2(2.82)]2/[3.32 + 0.8(2.82)] = 1.36 in

16 Infiltrated rainfall (R_i): Obtained by subtracting the worst runoff year (Column 15) from the worst rainfall year (Column 14).

January: R_i (worst) = 3.32 in - 1.36 in = 1.96 in

17 Available water: Obtained by adding the amount of effluent received for application or storage (Column 13) and the infiltrated rainfall (Column 16).

January: 0.73 in + 1.96 in = 2.69 in

18 Lowest annual net evaporation in the past 25 years from the reservoir surface: Minimum annual net evaporation data was obtained from the Texas Water Oriented Data

Bank for the years 1966 through 1990 and distributed proportional to monthly averages. Values were then multiplied by the ratio of the surface are of the lagoons (5.5 acres) to the irrigation surface area (58 acres). For this example, the ratio is 5.5/58 = 0.09

19 Storage: Obtained by calculating according to *30 TAC 309.20, Table 2*.

Storage = [(Column 13 - Column 18B) - [(Column 7 - Column 16)/k]

If [(Column 7 - Column 16)/k] < 0, it is entered as zero, and Storage = (Column 13 - Column 18)

January: Storage = (0.73 - 0.04)-[(0.9 - 1.96)/0.85] = 0.69 in

20 Accumulated Storage: To allow for the worst condition, the summation of storage was obtained by adding the values obtained in Column 19, beginning with the first consecutive month of positive values. In this case, the summation was started in November. The maximum accumulated storage requirement occurred in February.

Annual: (0.62 in) + (0.67 in) + (0.69 in) + (0.71 in) = 2.69 in-ac/ac

*Table EX9(1) - Monthly Water Balance**

(Units in inches unless otherwise specified)

1	2	3	4	5	6	7	8	9	10	11
	Avg Rain	**Avg Run-off**	**Avg R_i****	**ET****	**L****	**TWN****	**Effluent Required in Root Zone**	**EFRS****	**Effluent Applied to Land**	**CFR****
JAN	2.39	0.72	1.67	0.9	0.0	0.9	0.0	0.06	0.0	0.06
FEB	2.80	0.99	1.81	1.3	0.0	1.3	0.0	0.03	0.0	0.03
MAR	2.95	1.09	1.86	3.0	0.9	3.9	2.1	0.15	2.5	2.6
APR	4.04	1.92	2.12	3.5	1.1	4.6	2.5	0.11	3.0	3.1
MAY	5.10	2.80	2.30	6.5	3.4	9.9	7.6	0.16	9.0	9.1
JUN	3.04	1.16	1.88	6.7	3.9	10.6	8.8	0.39	10.3	10.7
JUL	2.24	0.62	1.62	7.4	4.7	12.1	10.5	0.64	12.4	13.0
AUG	2.21	0.61	1.60	5.1	2.9	8.0	6.4	0.66	7.5	8.1
SEP	2.97	1.11	1.86	5.3	2.8	8.1	6.3	0.42	7.4	7.8
OCT	3.43	1.44	1.99	4.2	1.8	6.0	4.0	0.31	4.7	5.0
NOV	2.97	1.11	1.86	1.7	0.0	1.70	0.0	0.16	0.0	0.16
DEC	3.31	1.35	1.96	0.72	0.0	0.72	0.0	0.08	0.0	0.08
TOTAL	37.45	14.92	22.53	46.3	21.5	67.8	48.2	3.16	56.8	59.7

***Table EX9(1) was completed in accordance with Table 1 of 30 TAC 309.20. Refer to Appendix C for detailed explanation of calculations**.

****R_i = Infiltrated Rainfall, ET = Evapotranspiration, L = Required Leaching, TWN = Total Water Needs, EFRS = Evaporation From Reservoir Surface, RC = Consumption From Reservoir**.

*EX9(2) - Storage Volume Calculation**

(Units in inches unless otherwise specified)

12	13	14A	14B	15	16	17	18A	18B	19	20
	Effluent Applied To Land	**MRD**(%)**	**Rainfall (MAX)**	**Runoff (MAX)**	**R_i ****	**Total Avail. H_2O**	**DoM** (%)**	**Net E (MIN)**	**Storage (in-ac/ac)**	**AS (in-ac/ac)**
JAN	0.73	6.4	3.32	1.36	1.96	2.69	1.8 %	0.04	0.69	1.98
FEB	0.73	7.5	3.89	1.80	2.09	2.82	1.1%	0.02	0.71	2.69
MAR	0.73	7.9	4.10	1.97	2.16	2.86	4.7 %	0.10	-1.4	1.27
APR	0.73	10.8	5.61	3.23	2.37	3.10	3.6 %	0.08	-2.0	-0.73
MAY	0.73	13.6	7.06	4.53	2.53	3.26	4.9 %	0.11	-8.1	-8.83
JUN	0.73	8.1	4.20	2.05	2.15	2.88	12.4 %	0.27	-9.5	-18.33
JUL	0.73	6.0	3.11	1.21	1.90	2.63	20.0 %	0.44	-11.7	-30.13
AUG	0.73	5.9	3.06	1.17	1.89	2.62	20.8 %	0.45	-6.9	-37.03
SEP	0.73	7.9	4.10	1.97	2.13	2.86	13.2 %	0.29	-6.6	-43.63
OCT	0.73	9.2	4.77	2.52	2.25	2.98	9.6 %	0.21	-3.9	-47.53
NOV	0.73	7.9	4.10	1.97	2.13	2.86	5.1 %	0.11	0.62	0.62
DEC	0.73	8.8	4.57	2.35	2.22	2.95	2.6 %	0.06	0.67	1.29
TOTAL	8.76	100.0	51.9	26.1	25.8	34.5	100	2.18	------	2.69***

***Table EX9(2) was completed in accordance with Table 2 of 30 TAC 309.20. Refer to Appendix C for detailed explanation of calculations**.

****MRD = Mean Rainfall Distribution, R_i = Infiltrated Rainfall, DoM = Distribution of Mean, Net E = Net Evaporation, AS = Accumulated Storage**.

*****Storage volume requirement = 2.69 in-ac/ac, or (2.69 in-ac/ac)(58 ac)(1 ft/12 in)= 13 ac-f**

Salado Creek WRC
Sludge Operations

Introduction

There currently are no sludges generated at the Salado Creek WRC. The Steven M. Clouse Water Recycling Center (SMCWRC) now treats the solid residue previously generated in the Salado Creek sewer shed. The SMCWRC is now the centralized sludge processing facility for all the solids generated by the San Antonio Water System facilities.

Primary Sludge

No primary sludge is generated at the Salado Creek facility.

Waste Activated Sludge

No waste activated sludge is generated at the Salado Creek facility.

Sludge Digestion

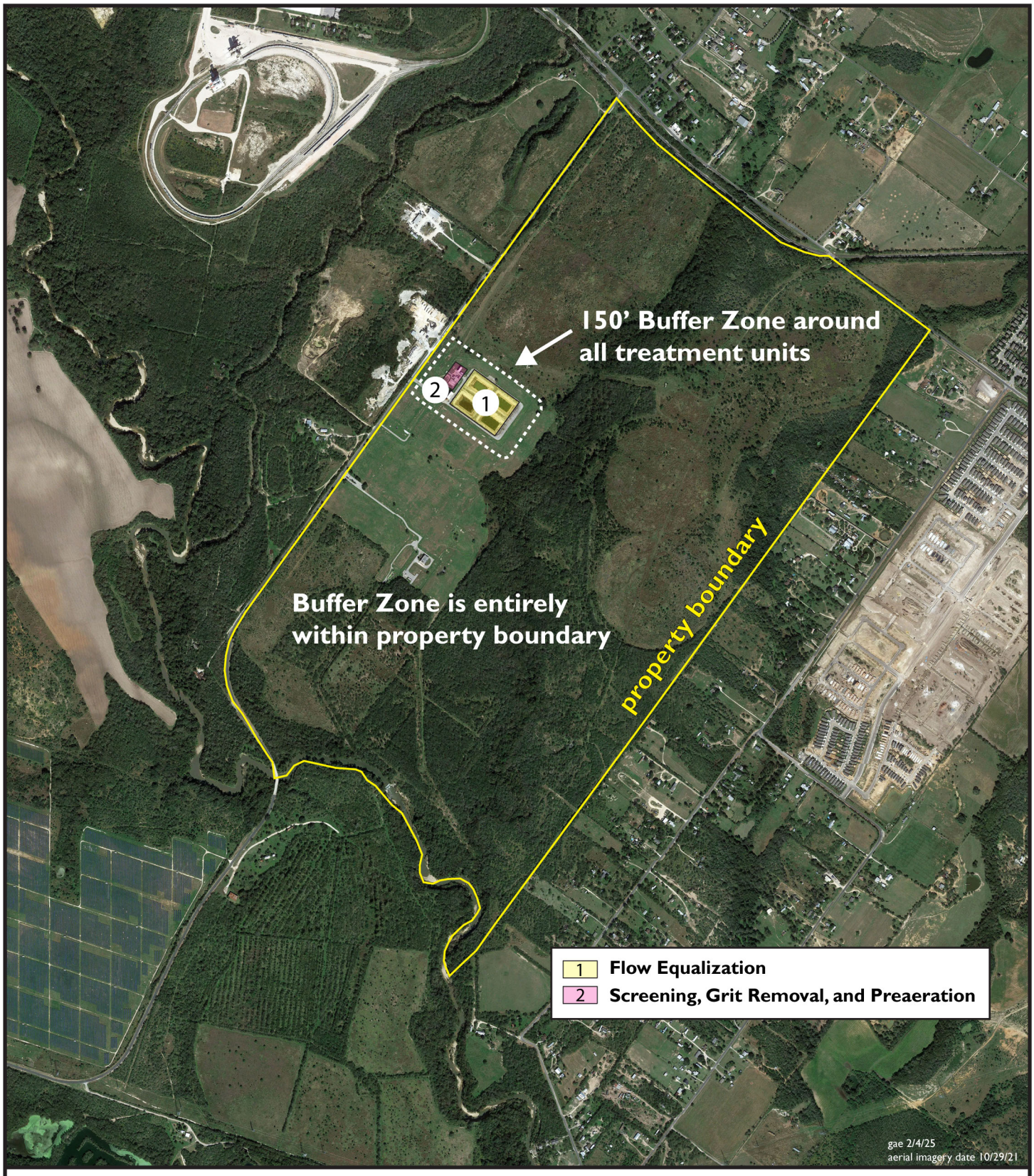
No sludge digestion is performed at the Salado Creek facility.

Sludge Dewatering

No sludge dewatering is performed at the Salado Creek facility.

Final Disposal

There is no final disposal options of the sludges previously generated at the Salado Creek WRC; all flows have been transferred to the Steven M. Clouse Water Recycling Center as of July 14, 2006.



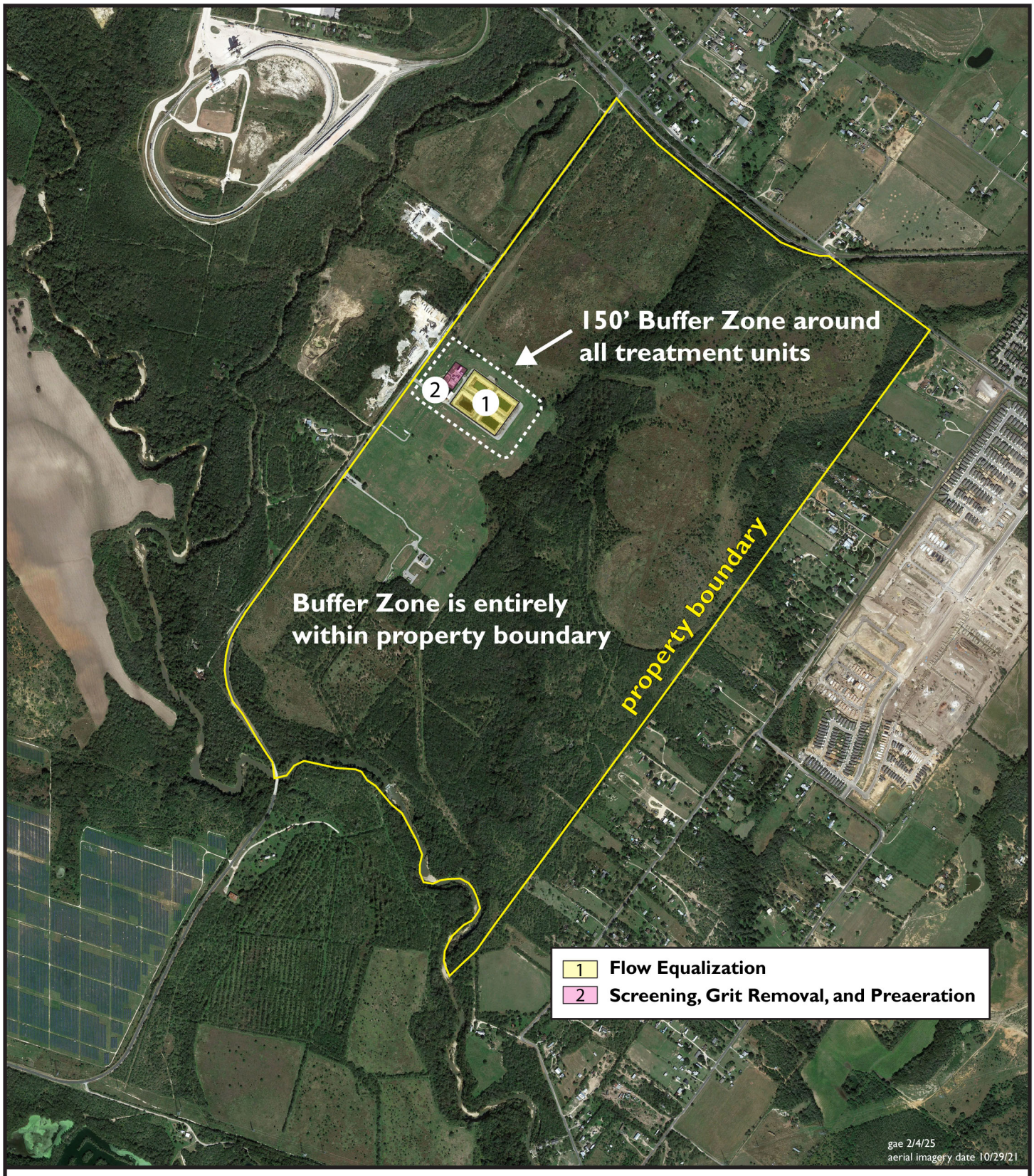
Buffer Zone Map
Salado Creek Water Recycling Center
TPDES Permit No. 0010137008

N

feet

0 1,000 2,000

San Antonio Water System



Buffer Zone Map
Salado Creek Water Recycling Center
TPDES Permit No. 0010137008

N

feet

0 1,000 2,000

San Antonio Water System