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ATTORNEYS AT LAW

1984 * Celebrating 30th Years * 2014
Mr. Hill's direct line: (512) 322-5855
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September 12, 2014

Richard A. Hyde, P.E.
Executive Director
Texas Commission on Environmental Quality
12100 Park 35 Circle, Suite 4214
Austin, Texas 78711-3087

TEXAS
COMMISSION
ON ENVIRONMENTAL
QUALITY
2014 SEP 12 PM 4:50
CHIEF CLERK'S OFFICE
VIA HAND DELIVERY

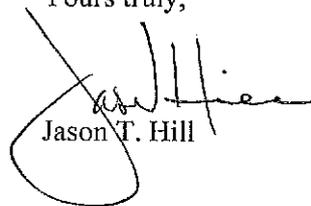
Re: Petition to Revoke TPDES Permit No. WQ0014415003

Dear Mr. Hyde:

The City of Mission respectfully submits the enclosed Petition to Revoke TPDES Permit No. WQ0014415003 pursuant to Title 30, Section 305.66 of the Texas Administrative Code. By delivery of this letter and the enclosed documents, the City requests that the Executive Director's office file the petition with the Commissioners of the Texas Commission on Environmental Quality, in accordance with Subsection 305.66(d).

The City appreciates your attention to this matter. You and your staff should not hesitate to contact me at (512) 322-5855 or James Aldredge at (512) 322-5859 with any questions or concerns.

Yours truly,


Jason T. Hill

JTH/gjb
Enclosure
Copies: Chief Clerk
Bob Galligan
Rudy Salinas

TPDES PERMIT NO. WQ0014415003

PETITION BY THE CITY OF
MISSION TO REVOKE TEXAS
POLLUTION DISCHARGE
ELIMINATION SYSTEM PERMIT NO.
WQ0014415003

§
§
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§
§

BEFORE THE TEXAS COMMISSION

ON

ENVIRONMENTAL QUALITY

CHIEF CLERKS OFFICE

2014 SEP 12 PM 4: 51

TEXAS
COMMISSION
ON ENVIRONMENTAL
QUALITY

PETITION TO REVOKE TPDES PERMIT

TO THE HONORABLE COMMISSIONERS:

TPDES Permit No. WQ0014415003 (the "Permit") was issued to the Agua Special Utility District in error. Good cause exists for its revocation pursuant to title 30, Section 305.66 of the Texas Administrative Code. The City of Mission respectfully submits this petition through the Executive Director under subsection 305.66(d) of the TCEQ's rules, and the City would show the following in support of its request that the TCEQ revoke the Permit.

I. BACKGROUND

On September 24, 2012, Agua Special Utility District ("Agua SUD") submitted an application to the TCEQ's Water Quality Division for a new permit to construct a wastewater treatment plant and to discharge 7.55 million gallons of wastewater per day into waters of the State (the "Application").¹ Agua SUD made various representations to the TCEQ indicating that the proposed facility would be located in, or near, Palmview, Texas, including the following:

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

City or Town in which the outfall(s) is or will be located ***Palmview***"²

These material misrepresentations were made to TCEQ after the general manager of Agua SUD signed the following oath:

¹ A copy of the Application is attached hereto as Appendix A.

² Agua SUD's sworn statements are noted in bold italics. Appendix A at 11-12.

I, *Frank Flores General Manager* 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.³

The TCEQ's Applications Review and Processing Team declared the Application administratively complete on November 9, 2012. On November 29, 2012, the Chief Clerk mailed Notice of Receipt of Application and Intent to Obtain Water Quality Permit ("NORP") to interested persons and landowners as identified in the Application, including to the mayor and chief health official of the City of Palmview. The NORI was published in a newspaper of general circulation in Hidalgo County on November 19, 2012. The Chief Clerk mailed Notice of Application and Preliminary Decision for TPDES Permit for Municipal Wastewater New ("NAPD") to interested persons and landowners as identified in the Application, including to the mayor and health official of the City of Palmview, on February 7, 2014.⁴ The NAPD was published in a newspaper of general circulation in Hidalgo County on March 26, 2013. The comment period for the Application ended on April 29, 2013. No comments were submitted to the TCEQ. The Executive Director signed TPDES Permit No. WQ0014415003 on May 17, 2013. No motions to overturn the Executive Director's decision to issue the Permit were submitted to the TCEQ.

The chief clerk included the generic reference to the "City of Mission" on its list of landowners attached to the mailed notice for the Application. Agua SUD correctly identified the City of Mission as the owner of a one-acre parcel of property located near the proposed discharge route within one mile downstream of the proposed discharge point. Contrary to statements in the

³ Appendix A at 14.

⁴ A copy of the chief clerk's mailing list along with an internal TCEQ document evidencing TCEQ's belief that notice of the facility should be mailed to the City of Palmview is attached hereto as Appendix B.

Application, however, the location Agua SUD proposed to construct the wastewater treatment plant now authorized by the Permit is within the corporate limits of the *City of Mission*.⁵ This was also true at all relevant times of the administrative and technical review of the Application.⁶ No reading of the Application would reveal that the proposed facility was intended to be located within the City of Mission's corporate boundaries, or that it was intended to be located near the City of Mission's corporate boundaries. Agua SUD never supplemented the Application or otherwise alerted TCEQ staff of Agua SUD's misrepresentation of the proposed plant location.

The City of Mission served notice of this petition, and a true and correct copy of the same, on the general manager of Agua SUD by certified mail on August 28, 2014.⁷

II. APPLICABLE RULES

The chief clerk is required to mail notice of TPDES permit applications to "the mayor and health authorities of the city or town in which the facility is or will be located..."⁸ This did not happen because of Agua SUD's misrepresentations in the Application. TCEQ rules make clear that a TPDES permit does not become a vested right, and that such a permit may be revoked for good cause at any time by the Commission after it provides an opportunity for a public hearing on the matter.⁹ Good cause includes the permittee's failure in the application to disclose fully all relevant facts, or the permittee's misrepresentation of relevant facts at any time.¹⁰ The Commission may revoke an original permit if the Commission finds, after notice and hearing, that the applicant made a false or misleading statement in the formal application.¹¹ A person affected by the issuance of a

⁵ A map illustrating the location of the proposed facility relative to the City's jurisdictional limits is attached hereto as Appendix C.

⁶ The property on which Agua SUD indicated in the Application to be the proposed plant site has been within the corporate limits of the City of Mission since it was annexed on January 11, 2010.

⁷ The City's notice letter to Agua SUD's general manager and a USPS mail receipt showing delivery of the letter are attached hereto as Appendix D.

⁸ 30 Tex. Admin. Code § 39.413, .551(c).

⁹ *Id.* § 305.66(a).

¹⁰ *Id.*

¹¹ *Id.* § 305.66(f).

permit may initiate proceedings for revocation by forwarding a petition to the Executive Director to be filed with the Commission.¹²

III. ARGUMENT

Good cause exists to revoke the Permit. Agua SUD misrepresented relevant facts to the TCEQ and the general public through Agua SUD's false and misleading statements in the formal Application.¹³ Notice of the Application was fundamentally and incurably deficient because it was not mailed to the mayor and health authorities of the City of Mission as required by TCEQ's rules.¹⁴ The TCEQ should provide notice and an opportunity for a public hearing on the revocation of the Permit.¹⁵

The City of Mission is affected by the issuance of the Permit because the waste discharge authorized in the Permit will take place within the City's jurisdiction. The proper City authorities were unaware of the Application until well after it was issued by the Executive Director. Even though there are indications that the chief clerk mailed notice to the "City of Mission" generally, any such notice would have nevertheless failed TCEQ's substantive rules governing the issuance of the Permit—*i.e.*, it was neither served on the Mayor of the City of Mission, nor was it served on the City of Mission's health authorities. Agua SUD's misrepresentations deprived the City of any meaningful opportunity to consider the significance of the requests made in the Application, submit comments on the Application, and request a contested case hearing on the Application. These are opportunities that the City of Mission was entitled to under TCEQ rules.

The public interest protected by the rule requiring that the mayor and health authorities of the City receive notice of the Application has, therefore, not been served. To the knowledge and belief of the Mayor and health authorities of the City of Mission, Agua SUD has not begun construction on

¹² *Id.* § 305.66(d).

¹³ *See* 30 Tex. Admin. Code § 305.66(f).

¹⁴ *See id.* § 39.413, .551(c).

¹⁵ *See id.* § 305.66(a).

the planned wastewater treatment plant. The City of Mission is greatly concerned that its residents could be significantly harmed by the discharge of waste within its city limits. In turn, the TCEQ was harmed by Agua SUD's false and misleading statements because the TCEQ did not have the proper opportunity to hear comments from the City's health authorities regarding the effects the proposed facility would have on public health in the City. Because of Agua SUD's material misrepresentations in the Application, TCEQ staff review of the Application could not have assured, and does not today serve to assure, that public health will be protected by the Permit.

The location of the proposed facility was within the jurisdiction of the City of Mission prior to Agua SUD's submission of the Application to the TCEQ. Agua SUD knew, or should have known through minimal diligence, during the administrative and technical review of the Application the true location of the proposed facility relative to the City's jurisdiction. Agua SUD failed to disclose this material fact to TCEQ at any point before, or since, TCEQ issued the Permit.

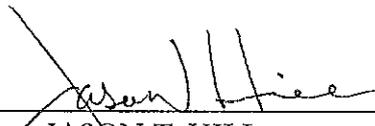
IV. CONCLUSION

For the foregoing reasons, the City of Mission respectfully requests that the TCEQ issue notice, and provide an opportunity for a public hearing on, this petition to revoke TPDES Permit No. WQ0014415003, as provided for in title 30 Section 305.66 of the Texas Administrative Code. Following such a hearing, the TCEQ should find that good cause exists to revoke the Permit.

Respectfully submitted,

**LLOYD GOSSELINK ROCHELLE &
TOWNSEND, P.C.**

816 Congress Avenue, Suite 1900
Austin, Texas 78701
(512) 322-5800 (t)
(512) 874-3955 (f)

By: 

JASON T. HILL
State Bar No. 24046075
JAMES ALDREDGE
State Bar No. 24058514

JONES GALLIGAN KEY & LOZANO, LLP

2300 West Pike Boulevard
Weslaco, Texas 78596
(956) 968-5402 (t)
(956) 968-9402 (f)

ROBERT J. GALLIGAN
State Bar No. 07590500
RUDY SALINAS, JR.
State Bar No. 24027948

**ATTORNEYS FOR PETITIONER
CITY OF MISSION**

APPENDIX A

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
TCEQ DOMESTIC WASTEWATER PERMIT APPLICATION
DOMESTIC ADMINISTRATIVE REPORT

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

Applicant Agua Special Utility District

Permit Number _____

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

Please indicate by a check mark the amount submitted for the application fee:

Flow	New/Major Amendment	Renewals
< .05 MGD	<input type="checkbox"/> \$350.00	<input type="checkbox"/> \$315.00
≥ .05 but < .10 MGD	<input type="checkbox"/> \$550.00	<input type="checkbox"/> \$515.00
≥ .10 but < .25 MGD	<input type="checkbox"/> 850.00	<input type="checkbox"/> \$815.00
≥ .25 but < .50 MGD	<input type="checkbox"/> \$1,250.00	<input type="checkbox"/> \$1,215.00
≥ .50 but < 1.0 MGD	<input type="checkbox"/> \$1,650.00	<input type="checkbox"/> \$1,615.00
≥ 1.0 MGD	<input checked="" type="checkbox"/> \$2,050.00	<input type="checkbox"/> \$2,015.00
Minor Amendment (any flow)	<input type="checkbox"/> \$115.00	

* All facilities are designated as minors until formally classified as a major by EPA.

For Commission Use Only:		
Segment Number: _____	County: <u>Hidalgo</u>	Expiration Date: <u>New</u>
Proposed/Current Permit Number: <u>14415-003</u>	Region: <u>15</u>	

TX0133841

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DOMESTIC ADMINISTRATIVE REPORT 1.0

The following is required for all applications--Renewal, New, And Amendment

Type of application:

- New TPDES
- Major amendment with Renewal
- Renewal of existing permit
- New TLAP
- Major Amendment without Renewal
- Minor amendment to permit
- Minor modification to permit

If applying for an amendment to a permit, please describe the request in detail.

1. APPLICANT INFORMATION (Instructions, Page 18)

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

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

Agua Special Utility District

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

If the applicant is currently a customer with TCEQ, what is the Customer Number (CN)?

Search for your CN at:

<http://www12.tceq.state.tx.us/crpub/index.cfm?fuseaction=cust.CustSearch>

CN 603402322 ✓

What is the name and title of the person signing the application?

(The person must be an executive official meeting signatory requirements in TAC 305.43(a).)

Prefix: Mr.

(Mr. Ms, Miss)

First/Last Name: Frank Flores

Suffix: _____

Title: General Manager

Credential: Class B Surface Water License

What is the applicant's mailing address as recognized by the **US Postal Service**?

You may verify the address at: <http://zip4.usps.com/zip4/welcome.jsp>

Organization Name: Agua Special Utility District

Mailing Address: 3120 N. Abram Rd. ✓

Internal Routing (Mail Code, Etc.): _____

City: Palmview

State: TX

ZIP Code: 78572

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Water Quality Applications Team

Mailing Information if outside USA

Territory: _____ Country Code: _____ Postal Code: _____
Phone No.: (956) 585-2459 Extension: _____
Fax No.: (956) 585-1188 E-mail Address: f.flores@aguasud.com

Indicate the type of Customer:

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

Independent entity

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

Number of Employees:

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

Customer Business Tax and Filing Numbers

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

State Franchise Tax ID Number: (NOT APPLICABLE)
TX SOS Charter (filing) Number: 0021653601
Federal Tax ID: 17416600166
DUNS Number (if known): UNKNOWN

b. Co-Permittee information (complete only if the operator must be a co-permittee)

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

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

If the operator is currently a customer with TCEQ, what is the Customer Number (CN)? Search for your CN at:

<http://www12.tceq.state.tx.us/crpub/index.cfm?fuseaction=cust.CustSearch>

CN _____

What is the name and title of the person signing the application?

(The person must be an executive official meeting signatory requirements in TAC 305.43(a).)

Prefix: _____
(Mr. Ms, Miss)



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Water Quality Applications Team

First/Last Name: _____
Suffix: _____
Title: _____ Credential: _____

What is the applicant's mailing address as recognized by the **US Postal Service**?
You may verify the address at: <http://zip4.usps.com/zip4/welcome.jsp>
Organization Name: _____

Mailing Address: _____
Internal Routing (Mail Code, Etc.): _____
City: _____ State: TX ZIP Code: _____

Mailing Information if outside USA
Territory: _____ Country Code: _____ Postal Code: _____
Phone No.: _____ Extension: _____
Fax No.: _____ E-mail Address: _____

Indicate the type of Customer:

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

Independent entity

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

Number of Employees:

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

Customer Business Tax and Filing Numbers

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

State Franchise Tax ID Number: _____
TX SOS Charter (filing) Number: _____
Federal Tax ID: _____
DUNS Number (if known): _____

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

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Water Quality Applications Team

c. Individual information (complete only if the facility owner or co-permittee is an individual)

What is the Legal Name of the owner/co-permittee applying for this permit?

If the owner/co-permittee is currently a customer with TCEQ, what is the Customer Number (CN)? Search for your CN at:

<http://www12.tceq.state.tx.us/crpub/index.cfm?fuseaction=cust.CustSearch>

CN _____

What is the name and title of the person signing the application?

(The person must be the individual. See signatory requirements in TAC 305.43(a).)

Prefix: _____

(Mr. Ms, Miss)

First/Last Name: _____

Suffix: _____

State Identification Number: _____

Date of Birth: _____

Assumed business or professional name: _____

Business name: _____

What is the applicant's mailing address as recognized by the **US Postal Service**?

You may verify the address at: <http://zip4.usps.com/zip4/welcome.jsp>

Mailing Address: _____

Internal Routing (Mail Code, Etc.): _____

City: _____ State: _____ ZIP Code: _____

Mailing Information if outside USA

Territory: _____ Country Code: _____ Postal Code: _____

Phone No.: _____ Extension: _____

Fax No.: _____ E-mail Address: _____

2. BILLING CONTACT (Instructions Page 21)

a. Billing Contact and Address Information

*The permittee is responsible for paying the annual fee. The annual fee will be assessed to permits **active on September 1 of each year**. TCEQ will send a bill to the address provided in this section. The permittee is responsible for terminating the permit when it is no longer needed.*

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

Permittee Co-permittee No, fill out this section

Prefix: _____

(Mr. Ms, Miss)

First/Last Name: _____

Suffix: _____

Title: _____ Credential: _____

Organization Name: _____

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Billing Mailing Address: _____
Internal Routing (Mail Code, Etc.): _____
City: _____ State: TX ZIP Code: _____
Mailing Information if outside USA.
Territory: _____ Country Code: _____ Postal Code: _____
Phone No.: _____ Extension: _____
Fax No.: _____ E-mail Address: _____

3. APPLICATION CONTACT INFORMATION (Instructions, Page 21)

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

a. Application Contact

Prefix: Mr. _____
(Mr. Ms, Miss)
First/Last Name: Frank Flores
Suffix: _____
Title: General Manager Credential: Class B Surface Water License
Organization Name: Agua Special Utility District
Mailing Address: 3120 N. Abram Rd.
Internal Routing (Mail Code, Etc.): _____
City: Palmview State: TX ZIP Code: 78572
Mailing Information if outside USA.
Territory: _____ Country Code: _____ Postal Code: _____
Phone No.: (956) 585-2459 Extension: _____
Fax No.: (956) 585-1188 E-mail Address: f.flores@aguasud.com
Check on or both: Administrative contact Technical Contact

b. Application Contact

Prefix: Mr. _____
(Mr. Ms, Miss)
First/Last Name: Dario Guerra III, P.E.
Suffix: _____
Title: Project Manager Credential: Professional Engineer
Organization Name: S & B Infrastructure, LTD
Mailing Address: 5408 N. 10th St.
Internal Routing (Mail Code, Etc.): _____
City: McAllen State: TX ZIP Code: 78504
Mailing Information if outside USA.
Territory: _____ Country Code: _____ Postal Code: _____
Phone No.: (956) 926-5000 Extension: _____
Fax No.: (956) 994-0427 E-mail Address: dvguerra@sbinfra.com

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Check on or both: Administrative contact Technical Contact

4. DMR CONTACT INFORMATION (Instructions Page 22)

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

Prefix: Mr.
(Mr. Ms, Miss)
First/Last Name: Jose Villegas
Suffix: _____
Title: Water & Wastewater Superintendent Credential: Class B Wastewater License
Organization Name: Agua Special Utility District
Mailing Address: 3120 N. Abram Rd.
Internal Routing (Mail Code, Etc.): _____
City: Palmview State: TX ZIP Code: 78572
Mailing Information if outside USA.
Territory: _____ Country Code: _____ Postal Code: _____
Phone No.: (956) 584-8474 Extension: _____
Fax No.: (956) 585-1188 E-mail Address: jvillegas@aguasud.com



Did you know you can submit DMR data on line?

Go to Sign up now at:

<http://www.tceq.state.tx.us/permitting/steers/steers.html>

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

5. PERMIT CONTACT INFORMATION (Instructions, Page 22)

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

Prefix: Mr.
(Mr. Ms, Miss)
First/Last Name: Frank Flores
Suffix: _____
Title: General Manager Credential: Class B Surface Water License
Organization Name: Agua Special Utility District
Mailing Address: 3120 N. Abram Rd.
Internal Routing (Mail Code, Etc.): _____
City: Palmview State: TX ZIP Code: 78572
Mailing Information if outside USA.
Territory: _____ Country Code: _____ Postal Code: _____
Phone No.: (956) 585-2459 Extension: _____
Fax No.: (956) 585-1188 E-mail Address: f.flores@aguasud.com

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Water Quality Applications Team

Prefix: Mr.
 (Mr. Ms, Miss)
 First/Last Name: Dario Guerra III, P.E.
 Suffix:
 Title: Project Manager Credential: Professional Engineer
 Organization Name: S & B Infrastructure, LTD
 Mailing Address: 5408 N. 10th St.
 Internal Routing (Mail Code, Etc.):
 City: McAllen State: TX ZIP Code: 78504
 Mailing Information if outside USA.
 Territory: Country Code: Postal Code:
 Phone No.: (956) 926-5000 Extension:
 Fax No.: (956) 585-1188 E-mail Address: dvguerra@sbinfra.com

6. NOTICE INFORMATION (Instructions, Page 22)

a. Individual publishing the notices

Prefix: Mr.
 (Mr. Ms, Miss)
 First/Last Name: Frank Flores
 Suffix:
 Title: General Manager Credential: Class B Surface Water License
 Organization Name: Agua Special Utility District
 Mailing Address: 3120 N. Abram Rd.
 Internal Routing (Mail Code, Etc.):
 City: Palmview State: TX ZIP Code: 78572
 Mailing Information if outside USA.
 Territory: Country Code: Postal Code:
 Phone No.: (956) 585-2459 Extension:
 Fax No.: (956) 585-1188 E-mail Address: f.flores@aguasud.com

b. Method for receiving Notice of Receipt and Intent to Obtain a Water Quality Permit Package

Indicate by a check mark the preferred method for receiving the first notice and instructions:

- E-mail Address: _____
- Fax No.: _____
- Overnight/Priority mail: (self addressed, prepaid envelope required)
- Regular Mail:

Mailing Address: 3120 N. Abram Rd.
 Internal Routing (Mail Code, Etc.):
 City: Palmview State: TX ZIP Code: 78572

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Water Quality Applications Team

c. Contact in the Notice

Prefix: Mr.
(Mr, Ms, Miss)
First/Last Name: Frank Flores
Suffix: _____
Title: General Manager Credential: Class B Surface Water License
Organization Name: Agua Special Utility District
Phone No.: (956) 585-2459 Extension: _____

d. Public Place Information

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

Public Building name: Palmview City Hall
Location within the building: Conference Room
Physical address of building: 400 W. Veterans Blvd.
City: Palmview County: Hidalgo
Contact Name: Frank Flores, General Manager
Phone No.: (956) 585-2459 Extension: _____

e. Bilingual Notice Requirements:

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

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

1. Is a bilingual education program required by the Texas Education Code at the nearest elementary or middle school to the facility or proposed facility?
 Yes No (If No, an alternative language notice publication is not required; skip to item 4. FACILITY INFORMATION.)
2. Are the students who attend either the elementary school or the middle school enrolled in a bilingual education program at that school?
 Yes No
3. Do the students at these schools attend a bilingual education program at another location?
 Yes No
4. Would the school be required to provide a bilingual education program but the school has waived out of this requirement under 19 TAC §89.1205(g)?
 Yes No

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Water Quality Applications Team

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

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

7. REGULATED ENTITY AND PERMITTED SITE INFORMATION (Instructions Page 24)

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

<http://www12.tceq.state.tx.us/crpub/index.cfm?fuseaction=regent.RNSearch>

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

TCEQ issued RE Reference Number (RN): RN 103932661

- a. State/TPDES Permit No.: _____ Expiration date: _____
EPA Identification No. (TPDES Permits only): TX
- b. Name of project or site (the name known by the community where located):
East Agua Wastewater Plant
- c. Is the facility located in Bexar, Comal, Hays, Kinney, Medina, Travis, Uvalde, or Williamson County? Yes No (If Yes, additional information concerning protection of the Edwards Aquifer may be required.)
- d. Is the location of the facility used in the existing permit correct? Yes No

Does the site have a physical address?

If Yes, complete Section A for a physical address.

If No (the location description is not accurate or this is a new permit application, complete), complete Section B for site location information.

Section A: Enter the physical address for the site.

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

Physical Address of Project or Site:

Street Number: _____ Street Name: _____
City: _____ ZIP Code: _____

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Section B: Enter the site location information.

If no physical address (Street Number & Street Name), provide a written location access description to the site:

Approximately 1 Mile South of West Loop 374 on Goodwin Road on the east side of Goodwin Road in Hidalgo County, south of Palmview, Texas

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

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

Palmview, TX

- f. ZIP Code where the site is located: 78572

- g. County where the site is located Hidalgo

- h. Latitude: 26 Degrees 12 Minutes 35 Seconds Longitude: 98 Degrees 23 Minutes 43 Seconds

- i. In your own words, briefly describe the primary business of the Regulated Entity:

(Do not repeat the SIC and NAICS code)

Wastewater treatment facility

- j. Owner of treatment facility: Agua Special Utility District

Ownership of Facility: Public Private Both Federal

- k. Owner of land where treatment facility is/will be: Agua Special Utility District

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

- l. Owner of effluent disposal site: Agua Special Utility District

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

- m. Owner of sewage sludge disposal site:

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

8. DISCHARGE/ DISPOSAL INFORMATION (Instructions, Page 27)

- a. Is the point of discharge and discharge route in the existing permit correct?

Yes No

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

The discharge route is through a 24 inch pipe south into an unnamed drainage ditch that is part of the Hidalgo County Drainage Ditch No. 1 district and thence to the Rio Grande River in segment #2302

b. City or Town in which the outfall(s) is or will be located Palmview

c. County the outfall(s) is located: Hidalgo

d. Outfall Latitude: 26 Degrees 12 Minutes 29 Seconds Longitude: 98 Degrees 23 Minutes 45 Seconds

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

f. If a TLAP, is the location of the effluent disposal site in the existing permit accurate?
 Yes No If no, or a new or amendment permit application, please give an accurate description.

g. City or Town in which the disposal site is or will be located _____

h. County the disposal site is located: _____

i. Outfall Latitude: _____ Longitude: _____

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

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

l. Is the location of the sewage sludge disposal site in the existing permit accurate?
 Yes No If no, or a new permit application, please give an accurate description.

- m. Provide an **original** full size USGS Topographic Map with all required information. Indicate by a check mark that the information is provided.
- Applicant's property boundary
 - Treatment facility boundaries
 - Labeled point of discharge and highlighted discharge route
 - Sewage sludge disposal site
 - Effluent disposal site boundaries
 - New and future construction
 - 1 mile radius and 3 miles downstream information
 - All ponds

n. Is/will the treated wastewater discharge to a city, county, or state highway right-of-way, or a flood control district drainage ditch? Yes No

If Yes, indicate by a check mark if:

Authorization granted Authorization pending

(For new and amendments, provide copies of letters that show proof of contact and the approval letter upon receipt.)

o. Is the facility located on or does the treated effluent cross American Indian Land?

Yes No

9. MISCELLANEOUS INFORMATION (Instructions, Pages 30)

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

None _____

b. Do you owe fees to the TCEQ? Yes No

If yes, please provide:

Account number: _____ Amount past due: _____

c. Do you owe any penalties to the TCEQ? Yes No

If yes, please provide:

Enforcement order number _____ Amount past due _____

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10. SIGNATURE PAGE (Instructions, Page 31)

Permit Number: _____

Applicant: Agua Special Utility District

Certification:

I, Frank Flores General Manager
Typed or printed name *Title*

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

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

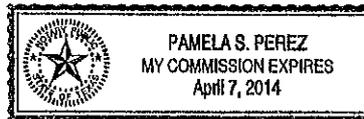
Signature: *Francisco "Frank" Flores* Date: 9/17/2012
(Use blue ink)

Subscribed and Sworn to before me by the said Francisco "Frank" Flores
on this 17th day of September, 2012.

My commission expires on the 7th day of April, 2014.

Pamela S. Perez
Notary Public
Hidalgo
County, Texas

[SEAL]



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

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DOMESTIC ADMINISTRATIVE REPORT 1.1

The following is required for new and amendment applications.

1. AFFECTED LANDOWNER INFORMATION (Instructions, Page 32)

a. Indicate by a check mark that the landowners map or drawing, with scale, includes the following, as applicable.

- The applicant's property boundaries
- The facility site boundaries within the applicant's property boundaries
- The distance the buffer zone falls into adjacent properties and the property boundaries of the landowners located within the buffer zone
- The property boundaries of all landowners surrounding the applicant's property
- The point(s) of discharge and highlighted discharge route clearly shown for one mile downstream
- The property boundaries of the landowners located on both sides of the discharge route for one full stream mile downstream of the point of discharge
- The property boundaries of the landowners along the watercourse for a one-half mile radius from the point of discharge if the point of discharge is into a lake, bay estuary, or affected by tides
- The boundaries of the effluent disposal site (for example, irrigation area or sub surface drainfield site), all evaporation/holding ponds within the applicant's property
- The property boundaries of all landowners surrounding the applicant's property boundaries where the effluent disposal site is located
- The boundaries of the sludge land application site (for land application of sewage sludge for beneficial use) and the property boundaries of landowners surrounding the applicant's property boundaries where the sewage sludge land application site is located
- The property boundaries of landowners within one-half mile in all directions from the applicant's property boundaries where the sewage sludge disposal site (for example, sludge surface disposal site or sludge monofill) is located

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

- Read/Writeable CD or Disk 4 sets of labels

c. Check if a separate list with the landowners' names and mailing address cross-referenced to the landowners map has been provided.

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

Hidalgo County Appraisal District

- e. As required by Texas Water Code §5.115, is any permanent school fund land affected by this application? Yes No

If yes, provide the location and foreseeable impacts and effects this application has on the land(s). None

2. BUFFER ZONE MAP (Instructions, Page 34)

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

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

- b. How will the buffer zone requirement be met?

- Ownership
- Restrictive easement
- Nuisance odor control
- Variance

- c. Does the facility comply with the requirements regarding unsuitable site characteristic found in 30 TAC §309.13(a) through (d)?

- Yes No

3. ORIGINAL PHOTOGRAPHS (Instructions, Page 37)

Provide original ground level photographs. Indicate by checking that the following information is provided.

- At least one original photograph of the new or expanded treatment unit location
- At least two photographs of the existing/proposed point of discharge and as much area downstream (photo 1) and upstream (photo 2) as can be captured.
- If the discharge is to an open water body (e.g., lake, bay), the point of discharge should be in the right or left edge of each photograph showing the open water and with as much area on each respective side of the discharge as can be captured.
- At least one photograph of the existing/proposed effluent disposal site
- A plot plan or map showing the location and direction of each photograph

**TCEQ DOMESTIC WASTEWATER PERMIT APPLICATION
DOMESTIC TECHNICAL REPORT 1.0**

**THE FOLLOWING IS REQUIRED FOR ALL APPLICATIONS;
RENEWAL, NEW, AND AMENDMENT**

1. PERMITTED AND/OR PROPOSED FLOWS (Instructions, Page 39)

PERMITTED AND/OR PROPOSED FLOW:	Existing/Interim I Phase	Interim II Phase	Final Phase
Design Flow (MGD)	NA	NA	7.55
2-Hr Peak Flow (MGD)	NA	NA	30.2
Date construction estimated to commence	NA	NA	August 2012
Date waste disposal estimated to commence	NA	NA	August 2014

Phase currently in operation: None

2. NAICS and SIC CODE (Instructions, Page 39)

Provide the appropriate SIC Code: 4952 and NAICS code: 22132

3. TREATMENT UNITS (Instructions, Page 40)

- a. Provide a detailed description of the treatment process. Include the type of treatment plant, mode of operation, and all treatment units. Start with the plant's head works and finish with the point of discharge. Include all sludge processing and drying units. If more than one phase exists or is proposed in the permit, a description of each phase must be provided.**

The plant will be an activated sludge plant utilizing the sequential batch reactor system. Influent wastewater will pass through a screen and grit removal unit thence into four sequencing batch reactors. After the sequencing batch reactors, the wastewater will flow to an ultraviolet disinfection chamber. Sludge digestion will occur in a combined thickener/aerobic digester structure.

Port or pipe diameter at the discharge point: 30 inches

- b. Provide the startup date of the current treatment facility:** 08/01/2014

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

Yes No

(If yes, provide the date(s) of approval for each phase) Wastewater treatment facility

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- c. For applicants with an existing permit: Check the Other Requirements page(s) of the existing permit and provide information (including dates) on any actions taken to meet an Other Requirement pertaining to the submission of a summary submittal letter if applicable.

- d. Have the buffer zone requirements been met? Yes No

- e. For applicants with an existing permit: Check the Other Requirements page(s) of the existing permit and provide information (including dates) on any actions taken to meet the conditions of an Other Requirement pertaining to the buffer zone if applicable.

- f. Provide flow diagrams for the existing facilities and/or each proposed phase of construction. Indicate by a check mark that the required information is included.

- g. Provide the type and dimensions (length, width, height) of each **treatment unit and for all phases.**

TREATMENT UNITS	# OF UNITS	DIMENSIONS (L x W x D)
Screen and Grit Removal Unit	1	53' x 9 x 15'
Sequencing Batch Reactors	4	135' x 78' x 18'
Digester	1	32' x 32' x 20'
Ultraviolet Disinfection Chamber	1	69' x 14' x 17'

4. POLLUTANT ANALYSIS OF TREATED EFFLUENT (Instructions, Page 40)

Provide an analysis of the treated effluent for the following pollutants (data must be taken within 1 year of the date of application submission: (Not required for new permit applications unless the facility is in operation))

For discharges from **water treatment plants** provide the following pollutant analysis: Total Suspended Solids, Total Dissolved Solids, pH, aluminum, and fluoride instead of the table below.

POLLUTANT	CONCENTRATION		NUMBER OF SAMPLES	TYPE OF SAMPLE	SAMPLE DATE/TIME
	AVG.	MAX.			
(1) CBOD ₅ , mg/l					
(2) Total Suspended Solids, mg/l					
(3) Ammonia-Nitrogen, mg/l					
(4) Nitrate-Nitrogen, mg/l					
(5) Total Kjeldahl Nitrogen, mg/l					
(6) Sulfate, mg/l					
(7) Chloride, mg/l					
(8) Total Phosphorus, mg/l					
(9) pH, standard units					
(10) Dissolved Oxygen, mg/l					
(11) Chlorine Residual, mg/l					
(12) <i>E. coli</i> (colonies/100ml) freshwater discharge					
(13) Enterococci (colonies/100ml) saltwater discharge					
(14) Total Dissolved Solids, mg/l					
(15) Elec. Conductivity, umhos/cm					
(16) Oil and Grease, mg/l					

5. FACILITY OPERATOR (Instructions, Page 41)

Provide the name and operator certification number for the facility operator:

Jose Villescás Class B Wastewater Certificate No. WW0002546

6. SEWAGE SLUDGE MANAGEMENT AND DISPOSAL (Instruction, Page 41)

a. Please check the current sludge disposal method or methods. More than one method can be checked.

- Permitted landfill
- Permitted or Registered land application site for beneficial use
- Land application for beneficial use authorized in the wastewater permit
- Permitted sludge processing facility
- Marketing and distribution as authorized in the wastewater permit
- Composting as authorized in the wastewater permit
- Permitted surface disposal site (sludge monofill)
- Surface disposal site (sludge monofill) authorized in the wastewater permit
- Transported to another permitted wastewater treatment plant (see item below)
- written statement/contractual agreement from the facility accepting the sludge is attached
- Other method (provide description):

b. Provide the following information for the sludge site:

Disposal site name: BFI Regional Disposal Facility

TCEQ Permit or Registration Number: MSW-1948

County where the site is located: Hidalgo

c. Provide the following:

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

Name of the hauler: Waste Management Services

Hauler Registration Number: 20889

Transported in: liquid semi-liquid semi-solid solid state

Land application for: Reclamation Soil Conditioning

7. PERMIT AUTHORIZATION FOR SEWAGE SLUDGE DISPOSAL (Instructions, Page 41)

a. 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 renewal application (see the instructions for details): Yes No

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

- | | | |
|---|------------------------------|--|
| Sludge Composting | <input type="checkbox"/> Yes | <input checked="" type="checkbox"/> No |
| Marketing and Distribution of sludge | <input type="checkbox"/> Yes | <input checked="" type="checkbox"/> No |
| Sludge Surface Disposal or Sludge Monofill | <input type="checkbox"/> Yes | <input checked="" type="checkbox"/> No |
| Temporary storage of sludge in sludge lagoons | <input type="checkbox"/> Yes | <input checked="" type="checkbox"/> 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 renewal application. Yes No

8. SEWAGE SLUDGE SOLIDS MANAGEMENT PLAN (Instructions, Page 42)

Does the facility discharge in the Lake Houston watershed? Yes No

Does the facility accept sludge from other domestic wastewater treatment facilities?
 Yes No

If yes to either question, is the required solids management plan attached? Yes No

9. SEWAGE SLUDGE LAGOONS (Instructions, Page 43)

a. Location information

Indicate by a check mark that the following required maps are submitted as part of the application and that they contain the required information?

- Original General Highway (County) Map
- USDA Natural Resources Conservation Service Soil Map
- Federal Emergency Management Map
- Site map

Indicate by a check mark if any of the following existing within the area used/proposed for the lagoons:

- 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 these

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

b. Temporary storage information

Provide the results of the following in addition to the pollutants listed in the Technical Report 1.0

Pollutant	mg/kg
Nitrate Nitrogen	
Total Nitrogen	
Phosphorus	
Potassium	
pH (Standard Units)	
Ammonia Nitrogen	

Provide the following information:

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

Total dry tons stored in the sludge lagoon(s) per 365-day period: _____

Total dry tons stored in the sludge lagoon(s) over the life of the unit: _____

c. Facility information

Does the active/proposed sludge lagoon(s) have a liner with a maximum hydraulic conductivity of 1×10^{-7} cm/sec? Yes No

If yes, describe the liner: Please note that lining is required.

d. Site Development Plan

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

In addition to the detailed description, please indicate by a check mark that the following information is provided:

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

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.

10. AUTHORIZATIONS/REQUIREMENTS/COMPLIANCE/ENFORCEMENT
(Instructions, Page 44)

a. Does the permittee have additional authorizations for this facility, such as reuse authorization, sludge permit, etc? Yes No

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

b. Is the permittee currently under enforcement? Yes No

Is the permittee required to meet any implementation schedule for compliance or enforcement? Yes No

If yes to either question for item 10, provide a brief summary of the enforcement and/or implementation schedule, and a status update:

The discharge route is through a 24 inch pipe south into an unnamed drainage ditch that is part of the Hidalgo County Drainage Ditch No. 1 district and thence to the Rio Grande River in segment #2302

11. UNBUILT PHASES (Instructions, Pages 44)

Is the application for 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.

Cameron

12. SITE DRAWING (Instructions, Page 45)

Provide a site drawing for the facility. Indicate by a check mark that it contains 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
- If sludge disposal authorized in the permit, the boundaries of the land application or disposal site

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

13. RCRA/CERCLA/OTHER WASTES (Instructions, Page 45)

- a. Does the facility receive, will it receive, or has it received RCRA hazardous waste in the past three years? Yes No

- b. Does the facility receive, will it receive, or has it received in the past three years, CERCLA wastewater, RCRA remediation/corrective action wastewater or other remediation activity wastewater? Yes No

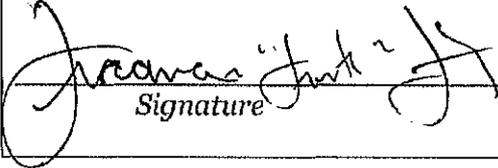
- c. If yes to either a. or b., is a detailed attachment with information concerning these wastes provided? Yes No

14. LABORATORY ACCREDITATION:

Effective July 1, 2008, all laboratory tests performed must meet the requirements of 30 TAC Chapter 25, Environmental Testing Laboratory Accreditation and Certification with the following general exemptions:

- i. The laboratory is an in-house laboratory and is:
 - 1. periodically inspected by the TCEQ; or
 - 2. located in another state and is accredited or inspected by that state; or
 - 3. performing work for another company with a unit located in the same site;OR
 - 4. performing pro bono work for a governmental agency or charitable organization.
- ii. The laboratory is accredited under federal law.
- iii. The data are needed for emergency-response activities, and a laboratory accredited under the Texas Laboratory Accreditation Program is not available.
- iv. 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 Instructions, Page 21, for a list of designated representatives who may sign the certification.

CERTIFICATION:	
I, <u>Frank Flores</u> <i>Typed or Printed Name</i>	<u>District mgr.</u> <i>Title</i>
certify that all laboratory tests submitted with this application meet the requirements of 30 TAC Chapter 25, Environmental Testing Laboratory Accreditation and Certification.	
<u></u> <i>Signature</i>	<u>September 18, 2012</u> <i>Date</i>

DOMESTIC TECHNICAL REPORT 1.1

THE FOLLOWING IS REQUIRED FOR NEW AND AMENDMENT APPLICATIONS

1. PERMITTED AND/OR PROPOSED FLOWS (Instructions, Page 46)

a. Complete the following chart.

PERMITTED AND /OR PROPOSED FLOW:	Initial/existing Phase	Intermediate Phase	Final Phase
Design Flow (MGD)	NA	NA	7.55
2-Hr Peak Flow (MGD)	NA	NA	30.2
Construction estimated to start	NA	NA	August 2012
Date waste disposal to start	NA	NA	August 2014

Phase currently in operation: None

b. Provide a detailed discussion regarding the need for the proposed permit or proposed phase(s). Failure to provide sufficient justification may result in the Executive Director recommending denial of the proposed phase(s) or permit.

c. Provide the following information concerning regionalization of domestic wastewater treatment facilities:

1. If the applicant is a city, check N/A and proceed to item 2: N/A

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

Yes No

If yes, within the city limits of: Palmview, TX

If yes, is correspondence from the city is attached: Yes No

If consent to provide service is available from the city, is 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? Yes No

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

Yes No

If yes, check if 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 is attached.

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

Yes No

If yes, is a list of these facilities that includes the permittee's name and permit number, and an area map showing the location of these facilities attached? Yes No

a. If yes, are copies of your certified letters to these facilities and their response letters concerning connection with their system attached? Yes No

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

Yes No

If yes, is an analysis of expenditures required to connect to a permitted wastewater treatment facility or collection system located within 3 miles versus the cost of the proposed facility or expansion attached? Yes No

2. PROPOSED ORGANIC LOADING (Instructions, Page 47)

a. Is this a new permit application? Yes No

b. If no, and the application is to amend an existing permit, provide the following information.

Facility Design Flow (flow being requested in application) _____

Average Organic Strength or BOD₅ Concentration in mg/l _____

Average Loading (lbs/day=total average flow x average BOD₅ conc. X 8.345) _____

Provide the source of the average organic strength or BOD₅ concentration _____

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

c. If yes to question 2.a, this table must be completed.

SOURCE	TOTAL AVERAGE FLOW, (MGD)	ORGANIC STRENGTH BOD ₅ CONCENTRATION, (mg/l)
Municipality	1.70	200.00
Subdivision	1.70	200.00
Trailer Park-Transient	0.00	0.00
Mobile Home Park	0.10	300.00
School with cafeteria and showers	0.12	300.00
School with cafeteria, no showers	0.08	300.00
Recreational Park, overnight use	0.00	0.00
Recreational Park, day use	0.00	0.00
Office Building of Factory	0.01	300.00
Motel	0.01	300.00
Restaurant	0.02	300.00
Hospital	0.00	0.00
Nursing Home	0.01	300.00
Other	0.05	200.00
	Total Flow: 3.79	Average BOD ₅ : 209.00

3. PROPOSED EFFLUENT QUALITY / PROPOSED DISINFECTION (Instructions, Page 48)

Phase:	<u>Initial/existing</u>	<u>Intermediate</u>	<u>Final</u>
BOD ₅ , mg/l	10	NA	UNK
TSS, mg/l	10	NA	UNK
NH ₃ -N, mg/l	2	NA	UNK
Total P, mg/l	NA	NA	NA
DO, mg/l	NA	NA	NA
Other: _____	NA	NA	NA

Check the proposed method of disinfection.

- Chlorine: _____ mg/l after _____ minutes detention time at peak flow
- Ultraviolet: ³ _____ seconds contact time at peak flow
- Other: _____
- Dechlorination process: _____

4. DESIGN CALCULATIONS (Instructions, Page 48)

- Indicate by a check mark that design calculations and plant features for each proposed phase are provided.

Example 4 and Example 5 of the instructions includes example design calculations and plant features.

5. FACILITY SITE (Instructions, Page 48)

- a. Will the proposed facilities be located above the 100-year frequency flood level?

Yes No

If no, describe measures used to protect the facility. Include a site map showing the location of the treatment plant within the 100-year frequency flood level. If applicable, provide the size of dikes or other protective structures.

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

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 U.S. Corps of Engineers 404 Dredge and Fill permit?

Yes No

If yes, provide the permit number: _____

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

6. AUTHORIZATION FOR SEWAGE SLUDGE DISPOSAL (Instructions, Page 48)

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

Yes No

If yes, is the completed **APPLICATION FOR PERMIT FOR BENEFICIAL LAND USE OF SEWAGE SLUDGE (TCEQ Form No. 10451)** attached to this permit application (see the instructions for details):

Yes No

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

Sludge Composting	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Marketing and Distribution of sludge	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Sludge Surface Disposal or Sludge Monofill	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> 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

7. SEWAGE SLUDGE SOLIDS MANAGEMENT PLAN (Instructions, Page 49)

Provide a sewage sludge solids management plan. Indicate by a check mark that it contains the following:

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

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

**DOMESTIC TECHNICAL REPORT WORKSHEET 2.0
RECEIVING WATERS**

THE FOLLOWING IS REQUIRED FOR ALL TPDES PERMIT APPLICATIONS

1. DOMESTIC DRINKING WATER SUPPLY (Instructions, Page 52)

Is there a surface water intake for domestic drinking water supply located within 5 (five) miles downstream from the point/proposed point of discharge? Yes No

If yes, identify:

Owner of the drinking water supply: _____

Distance and direction to the intake: _____

Check if the location of the intake on the USGS topographic map has been identified and labeled.

2. DISCHARGE INTO TIDALLY AFFECTED WATERS (Instructions, Page 52)

a. Width of the receiving water at the outfall? _____ feet

b. Are there oyster reefs in the vicinity of the discharge? Yes No

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

c. 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):

3. CLASSIFIED SEGMENT (Instructions, Page 52)

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

Yes No

If yes, stop here. Worksheets 2.0 and 2.1 are complete. **If no,** complete items 4 and 5.

4. DESCRIPTION OF IMMEDIATE RECEIVING WATERS (Instructions, Page 53)

Name of the immediate receiving waters: _____

a. Check the appropriate description of the receiving waters

Stream

Open Bay

Freshwater Swamp or Marsh

Tidal Stream, Bayou, or Marsh

Lake or Pond

Surface area: _____ acres

Average depth of the entire water body: _____ feet

Average depth of water body within a 500-foot radius of the discharge point: _____ feet

Man-made Channel or Ditch

Other: _____

b. If a man-made channel, ditch or stream was checked above, provide the following. 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 landowner(s)
- personal observation
- other, specify: Class B Surface Water License

c. List the name(s) of all perennial streams that join the receiving water within three miles downstream of the discharge point.

None

d. 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.

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

Approximately 1 Mile South of West Loop 374 on Goodwin Road on the east side of Goodwin Road in Hidalgo County, south of Palmview, Texas

Date and time of observation: 10/10/2010 3:00 p.m.

Was water body influenced by storm water runoff during observations? Yes No

5. GENERAL CHARACTERISTICS OF WATER BODY (Instructions, Page 53)

a. Is the receiving water upstream of the discharges or proposed discharge site influenced by (check as appropriate)?

- oil field activities
- urban runoff
- upstream discharges
- agricultural runoff
- septic tanks
- others, specify below

b. Uses of water body observed or evidences of (check as appropriate).

- | | | |
|---|---|--|
| <input type="checkbox"/> livestock watering | <input type="checkbox"/> contact recreation | <input type="checkbox"/> irrigation withdrawal |
| <input type="checkbox"/> non contact recreation | <input type="checkbox"/> fishing | <input type="checkbox"/> navigation |
| <input type="checkbox"/> domestic water supply | <input type="checkbox"/> industrial water supply | |
| <input type="checkbox"/> picnic park activities | <input checked="" type="checkbox"/> others, specify below | |

c. Check one of the following to best describe 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 common; some development evident (from fields, pastures, dwellings); water clarity discolored
- Common Setting: not offensive, developed but uncluttered; water may be colored or turbid
- Offensive: stream does not enhance aesthetics; cluttered; highly developed; dumping areas; water discolored

**DOMESTIC WORKSHEET 6.0
INDUSTRIAL WASTE CONTRIBUTION**

1. ALL POTWs (Instructions, Page 70)

- a. Provide the number of each of the following types of industrial users that discharge to your POTW and the flows from each.

Type of industrial user	Number of industrial users	Average Flows in MGD
CIUs	None	
SIUs - Non-categorical	None	
Other IUs	None	

- b. In the past three years, has your POTW experienced treatment plant interference as defined in the Definitions section of the instructions?

Yes No If yes, identify all dates, duration, description of interference, probable cause(s) and possible source(s).

- c. In the past three years, has your POTW experienced pass through as defined in the Definitions section of the instructions?

Yes No If yes, identify all dates, duration, description of pollutants passing through the treatment plant, probable cause(s) and possible source(s).

- d. Does your POTW have, or is it required to develop an approved pretreatment program?

Yes No If yes, answer all questions in item 2, but skip item 3 questions. If no, skip item 2 and answer all questions in item 3 for each significant industrial user.

2. POTWs WITH APPROVED PROGRAMS OR THOSE REQUIRED TO DEVELOP A PROGRAM (Instructions, Page 70)

- a. Have there been any substantial modifications to the POTW's approved pretreatment program that have not been approved according to 40 CFR Section 403.18?

Yes No If yes, identify on a separate attachment all substantial and nonsubstantial modifications that have not been submitted to the Approval Authority (TCEQ).

- b. List all parameters measured above the MAL in the POTW's effluent annual monitoring scans during the last three years.

Pollutant	Concentration	MAL	Units	Date

- c. Has an IU caused or contributed to any problems (e.g., interferences, pass through) at your POTW in the past three years?

Yes No

If yes, identify the industry, describe each episode, including dates, duration, description of problems, and probable pollutants. Submit a separate attachment if necessary.

3. SIGNIFICANT INDUSTRIAL USER (SIU) INFORMATION (Instructions, Page 71)

a. Company Name: _____ SIC Code: _____
 Telephone number: _____ Fax number: (956) 585-1188
 Contact name: _____
 Street No.: 3120 Street name: N. Abram Street type: Road
 City: _____ State: Palmview Zip Code: _____

- b. Describe the industrial processes of other activities that affect or contribute to the SIU's discharge.

c. Provide a description of the principal product(s).

--

d. Flow rate information:

Flow information	Gallons per day discharged	Continuous, batch or intermittent discharge
Process wastewater		
Non-process wastewater		

e. Pretreatment Standards: Indicate whether the SIU is subject to the following.

Technically based local limits as defined in the Definitions section of the instructions:

Yes No

Categorical pretreatment standards (40 CFR Parts 405-471): Yes No

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

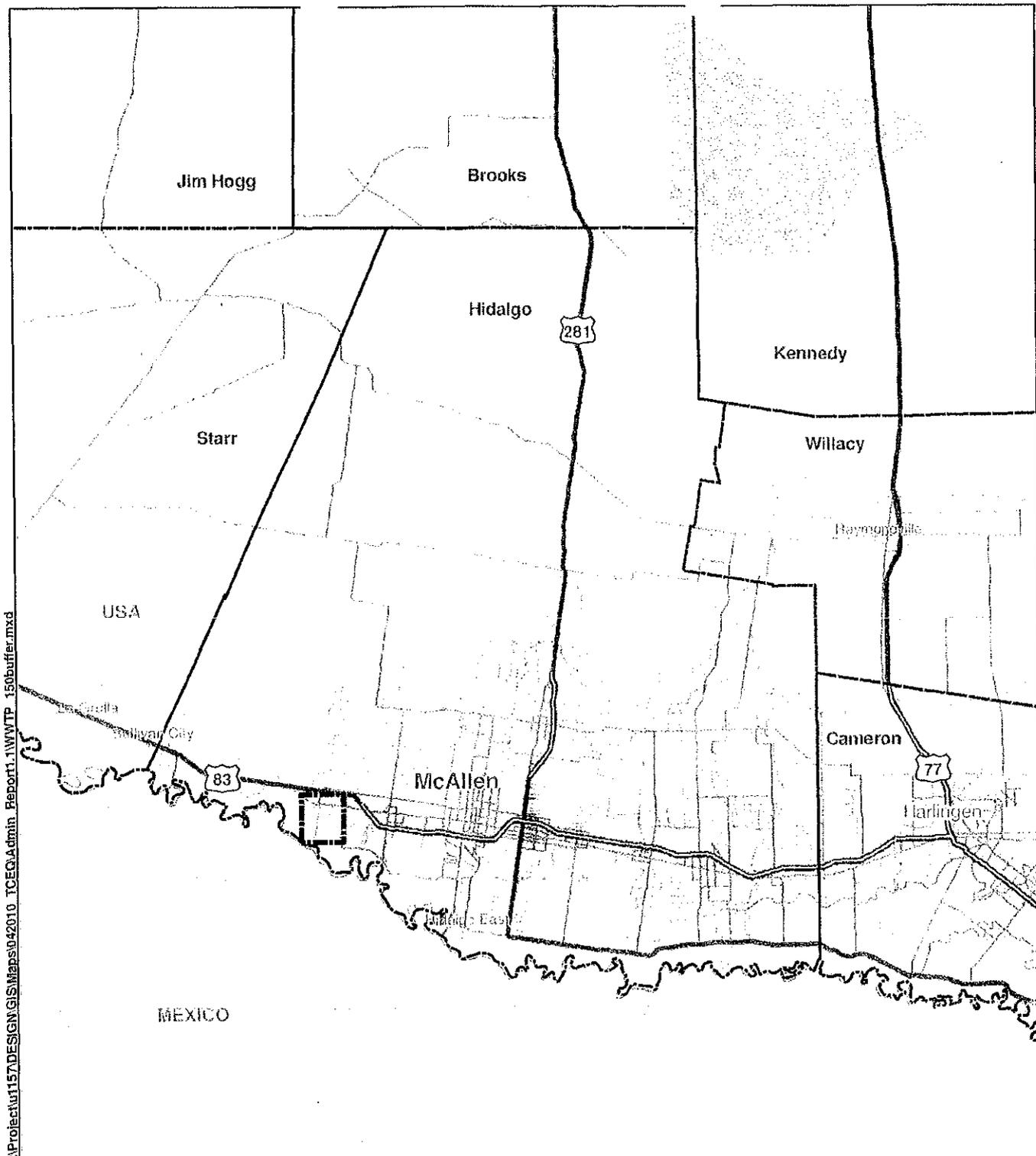
Category in 40 CFR	Subcategory in 40 CFR			

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

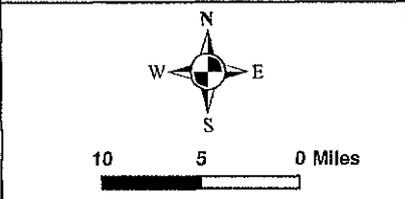
Yes No

If yes, identify the SIU, describe each episode, including dates, duration, description of problems, and probable pollutants. Provide a separate attachment if necessary.

--



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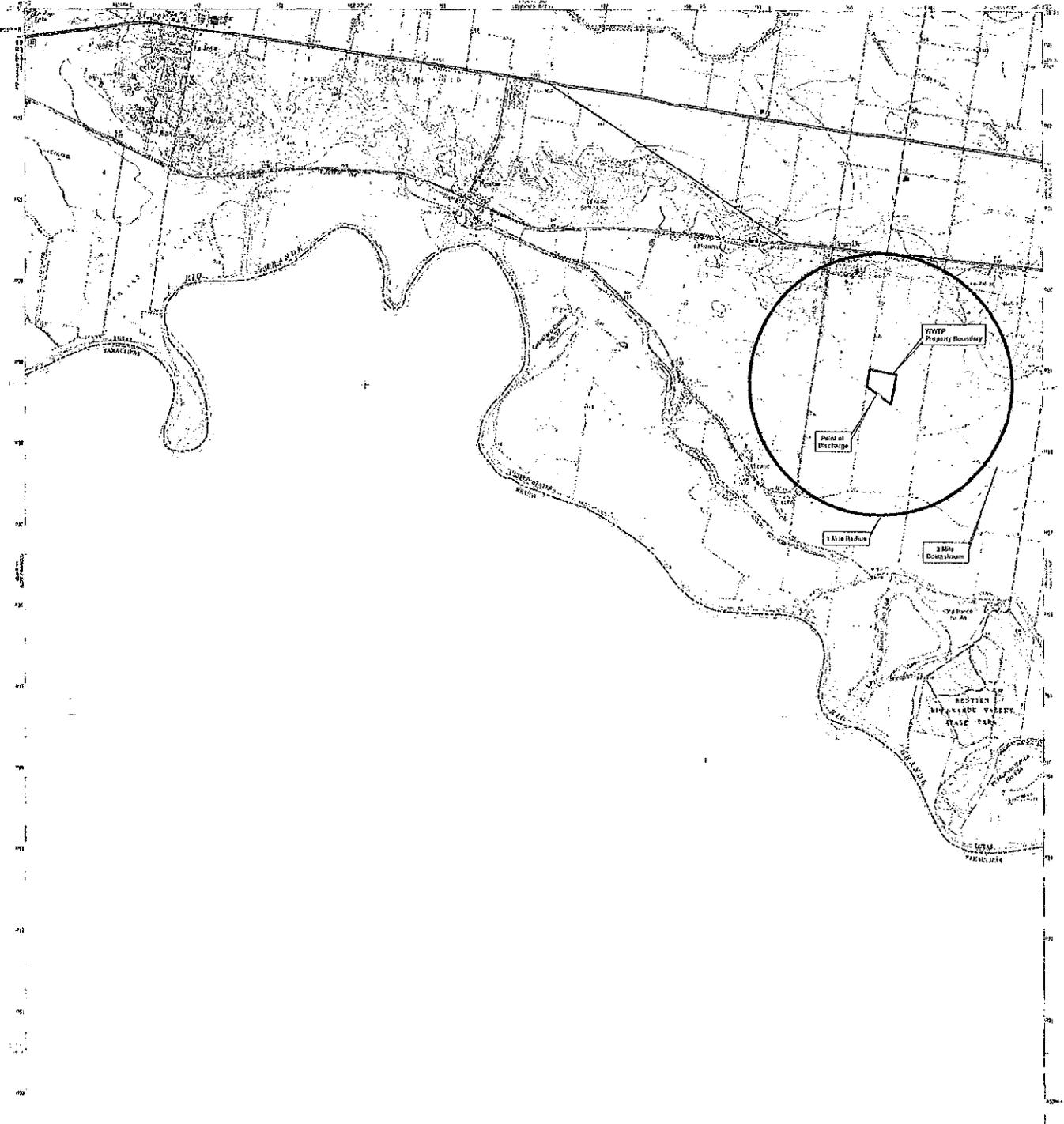
Sources: USDA NAIP - Hidalgo County 2008 Aerial

Legend

 Project Area

**AGUA SUD East
WWTP
General Highway Map**

**Hidalgo County
State of Texas**



Mapes made and published by the Geological Survey
Series 1925 and 1926/1928
The hydrographic series is published in 15-minute squares
and 15-minute squares are published in 15-minute squares
A 15-minute square is 15 minutes of longitude by 15 minutes of latitude
The hydrographic series is published in 15-minute squares
The hydrographic series is published in 15-minute squares
The hydrographic series is published in 15-minute squares



SCALE 1:100,000
CONTOUR INTERVAL 3 FEET
NATIONAL GEOGRAPHIC SURVEY OF 1920
THIS MAP COPIES WITH MINOR MAP CORRECTIONS
FOR SALE BY U. S. GEOLOGICAL SURVEY, WASHINGTON, D. C. 20540
A 15-MINUTE HYDROGRAPHIC MAP AND SERIES T. 20540 R. 100 PLATES



LA JOYA, TEX.
1925
2054-122



3 Mile Downstream

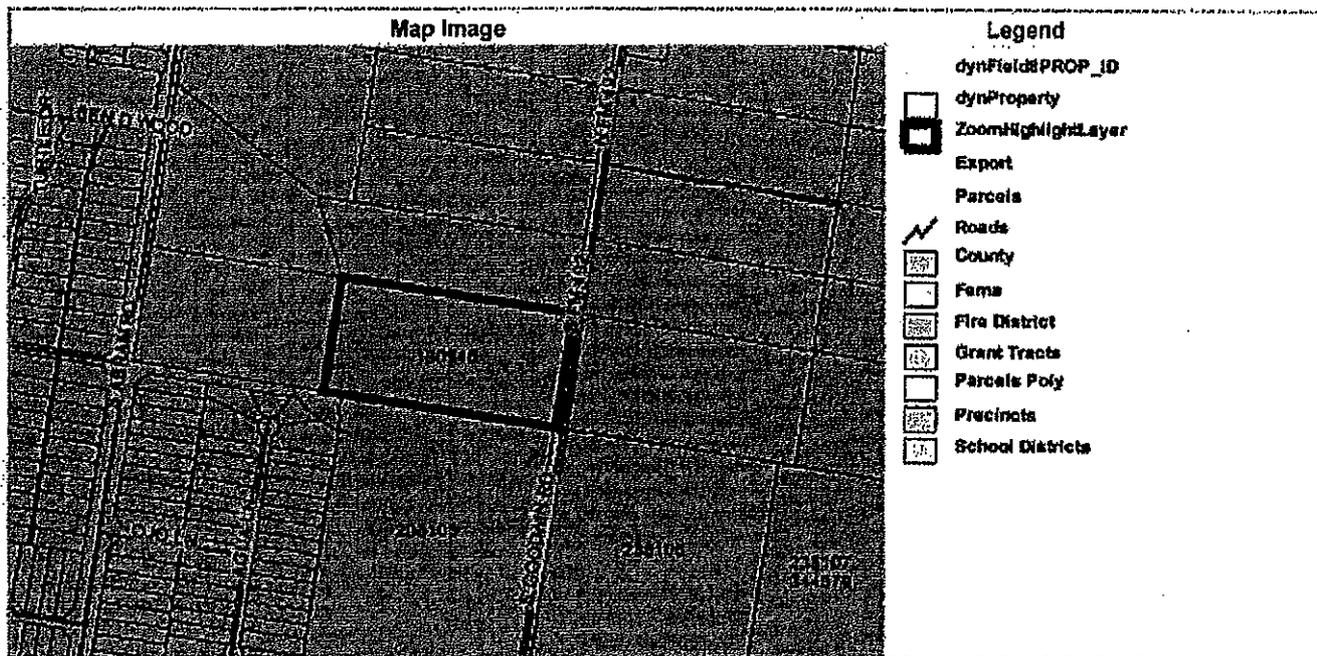
Map of the ...
Scale 1:50,000
Geological Survey
Washington, D.C.

SCALE 1:50,000
CONTAINS INTERVALS & FEET
VERTICAL INTERVALS & FEET

LEGEND
Geological Survey
Washington, D.C.

Hidalgo CAD

Property Search Results > Property ID 180946 J.L. BATES LP for Year 2010



Property Details

Account

Property ID: 180946
 Geo. ID: G6900-01-001-0002-00
 Type: Real
 Legal Description: GOODWIN #1 LOT 2 BLK 1 15.29AC

Location

Address: GOODWIN RD
 Neighborhood:
 Mapsc0:
 Jurisdictions: CAD, DR1, GHD, HCTIR, JCC, R05, SLJ, SST

Owner

Name: J.L. BATES LP
 Address: 101 ASH ST, HQ068
 SAN DIEGO, CA 92101-3017

Property

Appraised Value: \$6,407

Hidalgo CAD

Property Search Results > Property ID 238105 FRONTERA GENERATION LTD PRTRNSHP for Year 2010



Map Image

Legend

- dynField\$PROP_ID
- dynProperty
- PropHighlight
- Export
- Parcels
- Roads
- County
- Ferna
- Fire District
- Grant Tracts
- Parcels Poly
- Precincts
- School Districts

Property Details

Account

Property ID: 238105
 Geo. ID: M4950-00-000-0002-00
 Type: Real
 Legal Description: MISSION FARMS ESTATE LOT 2 40AC GR 39.37AC NET

Location

Address: DOFFIN RD
 Neighborhood: MISSION FARMS ESTATE
 Mapsco:
 Jurisdictions: CAB, CAD, DR1, GHD, HCTIR, JCC, R05, SLJ, SST

Owner

Name: FRONTERA GENERATION LTD PRTRNSHP
 Address: ATTN: CLAUDE DEMARS
 TECO ENERGY 12 GREENWAY PLAZA STE 600
 HOUSTON, TX 77046-0813

Property

Appraised Value: \$187,008

Website version: 1.2.2.0

Database last updated on: 4/14/2010 4:21 AM

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Hidalgo CAD

Property Search Results > Property ID 180958 GOODWIN ACQUISITIONS LP for Year 2010



Map Image

Legend

- dynField\$PROP_ID
- dynProperty
- Zoom+HighlightLayer
- Export
- Parcels
- Roads
- County
- Fema
- Fire District
- Grant Tracts
- Parcels Poly
- Precinals
- School Districts

Property Details

Account

Property ID: 180958
 Geo. ID: G5900-01-002-0001-00
 Type: Real
 Legal Description: GOODWIN #1 LT 1 BLK 2 15.29 AC

Location

Address: GOODWIN RD
 Neighborhood:
 Mapaco:
 Jurisdictions: CAD, DR1, GHD, HCTIR, JCC, R05, SLJ, SST

Owner

Name: GOODWIN ACQUISITIONS LP
 Address: 3504 WARE RD
 OFC 4
 MCALLEN, TX 78501

Property

Appraised Value: \$4,205

Hidalgo CAD

Property Search Results > Property ID 238106 J.L. BATES L.P. for Year 2010



Map Image	Legend
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Property Details

Account

Property ID: 238106
 Geo. ID: M4950-00-000-0003-00
 Type: Real
 Legal Description: MISSION FARMS ESTATE LOT 3 39.98AC

Location

Address: DOFFIN RD
 Neighborhood: MISSION FARMS ESTATE
 Mapsco:
 Jurisdictions: CAB, CAD, DR1, GHD, HCTIR, JCC, R05, SLJ, SST

Owner

Name: J.L. BATES L.P.
 Address: 101 ASH ST HQ06B
 SAN DIEGO, CA 92101-3017

Property

Appraised Value: \$16,752

Hidalgo CAD

Property Search Results > Property ID 180959 GOODWIN ACQUISITIONS LP for Year 2010



Map Image

Legend

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- dynProperty
- ZoomHighlightLayer
- Export
- Parcels
- Roads
- County
- Fema
- Fire District
- Grant Tracts
- Parcels Poly
- Precincts
- School Districts

Property Details

Account

Property ID: 180959
 Geo. ID: G5900-01-002-0002-00
 Type: Real
 Legal Description: GOODWIN #1 LT 2 BLK 2 15.29 AC

Location

Address: GREENE RD
 Neighborhood:
 Mapsco:
 Jurisdictions: CAD, DR1, GHD, JCC, R05, SLJ, SST

Owner

Name: GOODWIN ACQUISITIONS LP
 Address: 3504 WARE RD
 OFC 4
 MCALLEN, TX 78501

Property

Appraised Value: \$4,205

Hidalgo CAD

Property Search Results > Property ID 344579 U S FISH & WILDLIFE SERVICE for Year 2010



Map image

Legend

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- dynProperty
- PropHighlight
- Export
- Parcels
- Roads
- County
- Fema
- Fire District
- Grant Tracts
- Parcels Poly
- Preclncts
- School Districts

Property Details

Account

Property ID: 344579
 Geo. ID: M4950-00-000-0005-01
 Type: Real
 Legal Description: MISSION FARMS ESTATE 2.50AC A TRIANGULAR TRACT- E526.15'-N414.04'-S1804.3' LOT 5

Location

Address: DOFFIN RD
 Neighborhood: MISSION FARMS ESTATE
 Mapsco:
 Jurisdictions: CAD, CMS, DR1, GHD, JCC, R05, SLJ, SST, THMS1, TMS1

Owner

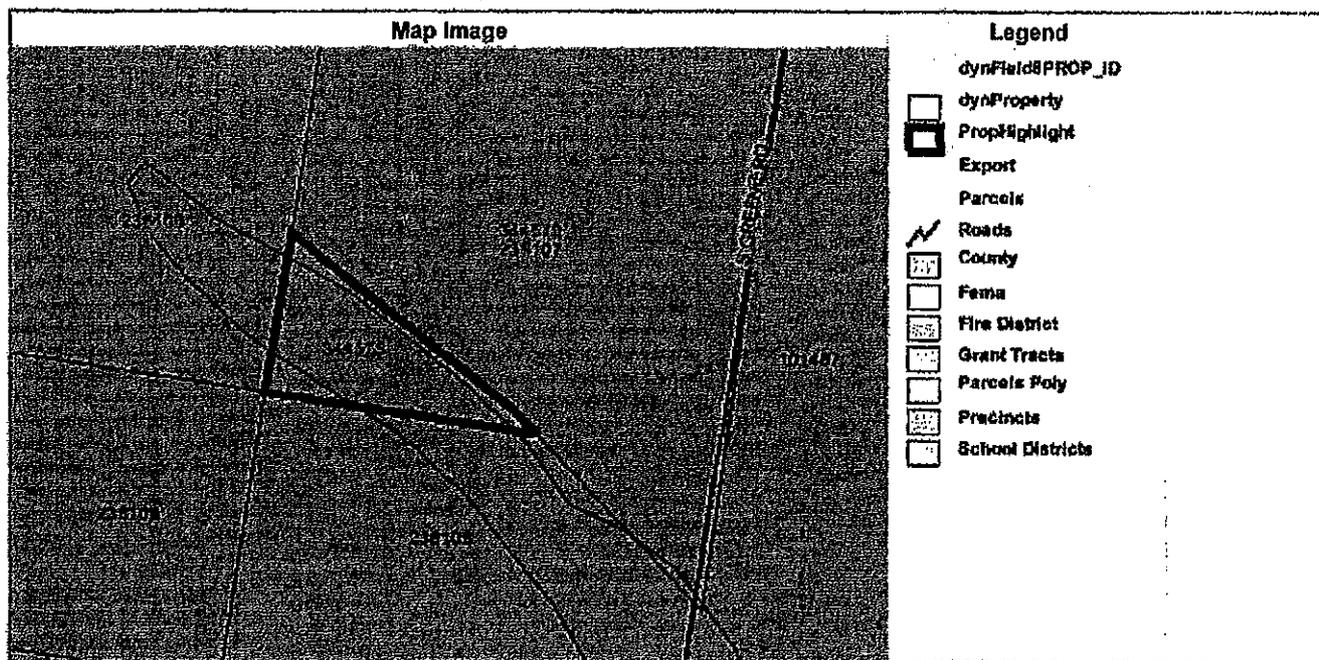
Name: U S FISH & WILDLIFE SERVICE
 Address: PO BOX 1306
 ALBUQUERQUE, NM 87103-1306

Property

Appraised Value: \$64,793

Hidalgo CAD

Property Search Results > Property ID 344578 MAYFAIR FARMS for Year 2010



Property Details	
Account	
Property ID:	344578
Geo. ID:	M4950-00-000-0004-01
Type:	Real
Legal Description:	MISSION FARMS ESTATE 3.86AC AN IRR TR-E785.47'- W1871.57'-S442.48'-LOT 4 3.86AC
Location	
Address:	DOFFIN RD
Neighborhood:	MISSION FARMS ESTATE
Mapaco:	
Jurisdictions:	CAD, DR1, GHD, HCTIR, JCC, R05, SLJ, SST
Owner	
Name:	MAYFAIR FARMS
Address:	14901 N WARE RD EDINBURG, TX 78541
Property	
Appraised Value:	\$1,617

Website version: 1.2.2.0

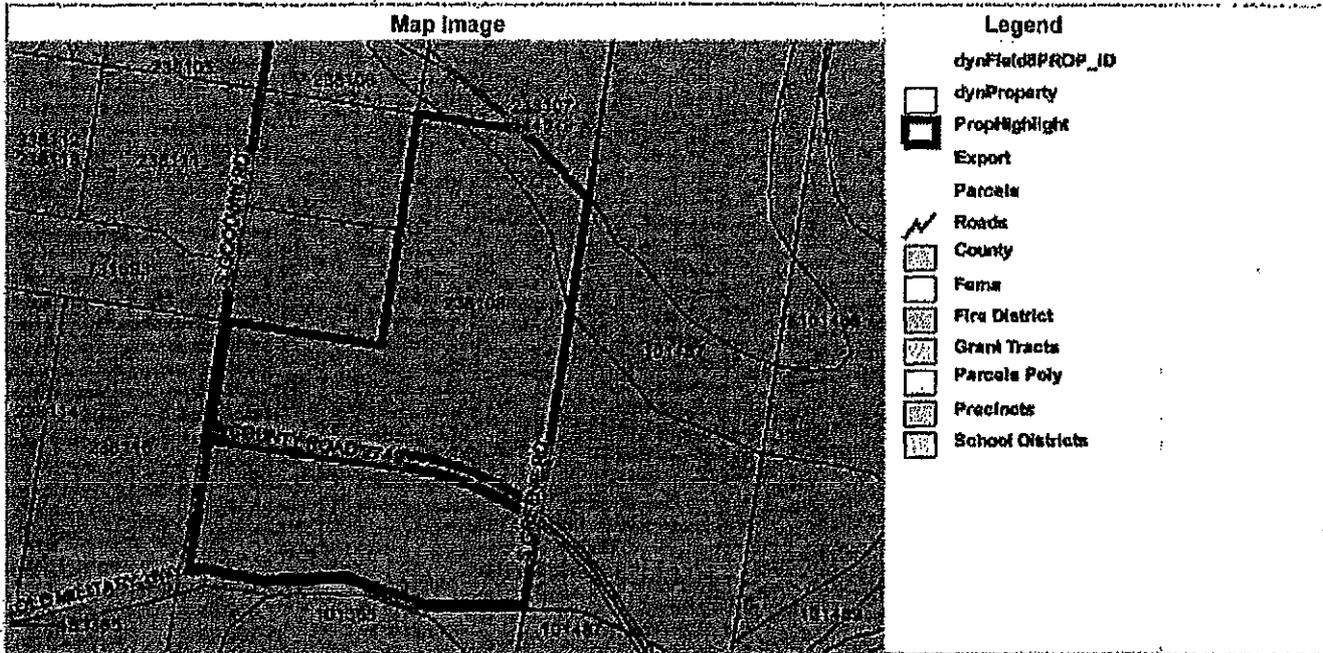
Database last updated on: 4/14/2010 4:21 AM

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Hidalgo CAD

Property Search Results > Property ID 238108 BENTSEN PALM LTD for Year 2010



Property Details

Account

Property ID: 238108
 Geo. ID: M4950-00-000-0005-00
 Type: Real
 Legal Description: MISSION FARMS ESTATE LT5 EXC 2.50AC A TRI TR-E526.15' -N414.04'-S1604.3 LT11-42.01AC, LT12 48.16AC 134.28GR 128.9ACNT

Location

Address: DOFFIN RD
 Neighborhood: MISSION FARMS ESTATE
 Mapsco:
 Jurisdictions: CAD, CMS, DR1, GHD, HCTIR, JCC, R05, SLJ, SST, THMS1, TMS1

Owner

Name: BENTSEN PALM LTD
 Address: 2500 S BENSEN PALM DR
 # 267 B
 MISSION, TX 78572

Property

Appraised Value: \$54,009

Hidalgo CAD

Property Search Results > Property ID 101487 MAYFAIR FARMS for Year 2010



Map Image

Legend

- dynProperty
- PropHighlight
- Export
- Parcels
- Roads
- County
- Fema
- Fire District
- Grant Tracts
- Parcels Poly
- Precincts
- School Districts

Property Details

Account

Property ID: 101487
Geo. ID: 10049-00-014-0023-00
Type: Real
Legal Description: PORCION 49 W 150 AC LT 23 SH 14 AGREED PT & LT 27 SH 14-275AC 425AC GR 403.60AC NET

Location

Address:
Neighborhood:
Mapsc0:
Jurisdictions: CAD, CMS, DR1, GHD, HCTIR, JCC, R05, SLJ, SST, THMS1, TMS1

Owner

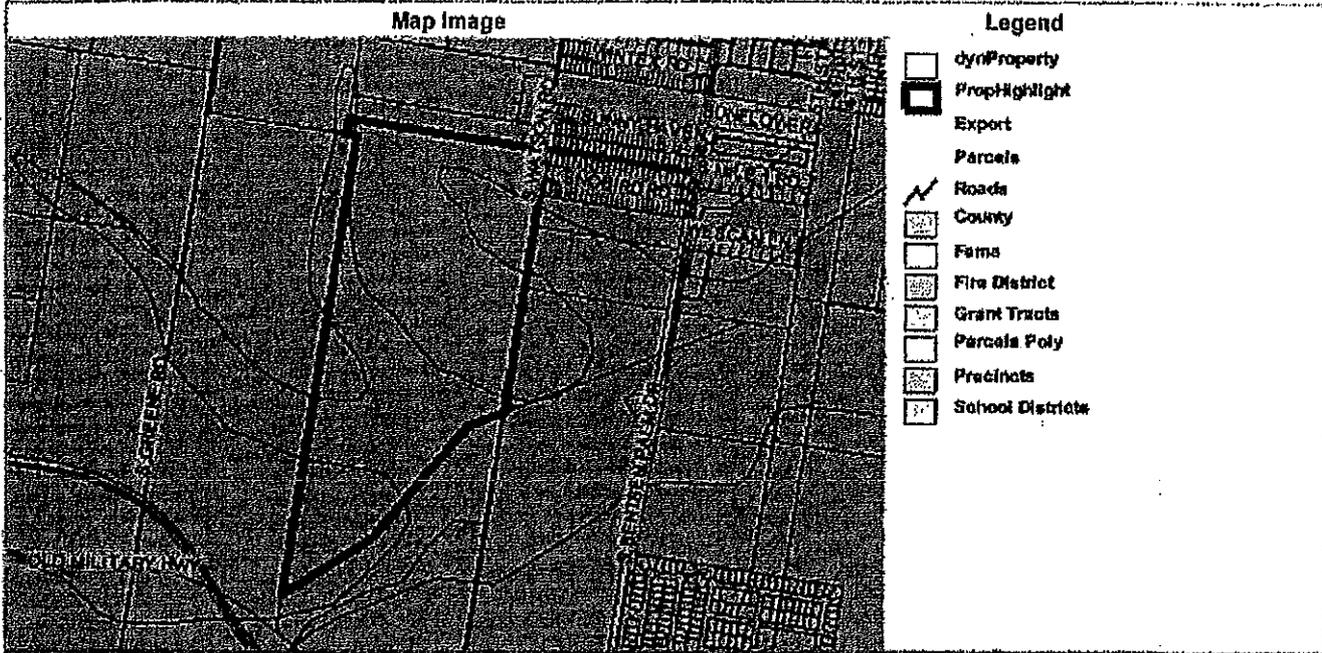
Name: MAYFAIR FARMS
Address: 14901 N WARE RD
EDINBURG, TX 78541

Property

Appraised Value: \$169,108

Hidalgo CAD

Property Search Results > Property ID 101486 U S FISH & WILDLIFE SERVICE for Year 2010



Property Details

Account

Property ID: 101486
 Geo. ID: 10040-00-014-0022-00
 Type: Real
 Legal Description: PORCION 49 LT 22 SH 14 33.83 AC

Location

Address:
 Neighborhood:
 Mapscs:
 Jurisdictions: CAD, DR1, GHD, JCC, R05, SLJ, SST

Owner

Name: U S FISH & WILDLIFE SERVICE
 Address: PO BOX 1306
 ALBUQUERQUE, NM 87103-1306

Property

Appraised Value: \$84,575

Hidalgo CAD

Property Search Results > Property ID 101489 U S FISH & WILDLIFE SERVICE for Year 2010



Map Image	Legend
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Property Details

Account

Property ID: 101489
 Geo. ID: 10049-00-014-0025-00
 Type: Real
 Legal Description: PORCION 49 LT 25 SH 14 R/S OF SH 14 30.69 AC

Location

Address:
 Neighborhood:
 Mapsco:
 Jurisdictions: CAD, DR1, GHD, HCTIR, JCC, R05, SLJ, SST

Owner

Name: U S FISH & WILDLIFE SERVICE
 Address: PO BOX 1306
 ALBUQUERQUE, NM 87103-1306

Property

Appraised Value: \$76,725

Website version: 1.2.2.0

Database last updated on: 4/14/2010 4:21 AM

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Hidalgo CAD

Property Search Results > Property ID 124617 BENTSEN PALM LTD for Year 2010



Map Image	Legend
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Property Details	
Account	
Property ID:	124617
Geo. ID:	B2550-02-000-0022-00
Type:	Real
Legal	BENTSEN GROVES #2 LT 22 SE 9.25; LT 23 40.10, EXC NW 0.24AC, LT 24-40.10, LT 25-34.85, LT 26-9.77AC 133.83AC GR
Description:	126.68AC NET
Location	
Address:	BENTSEN PALM DR
Neighborhood:	BENTSEN GROVES #2
Mapsc0:	
Jurisdictions:	CAD, CMS, DR1, GHD, HCTIR, JCC, R05, SLJ, SST, THMS1, TMS1
Owner	
Name:	BENTSEN PALM LTD
Address:	2500 S BENSEN PALM DR # 267 B MISSION, TX 78672
Property	
Appraised Value:	\$53,037

Website version: 1.2.2.0

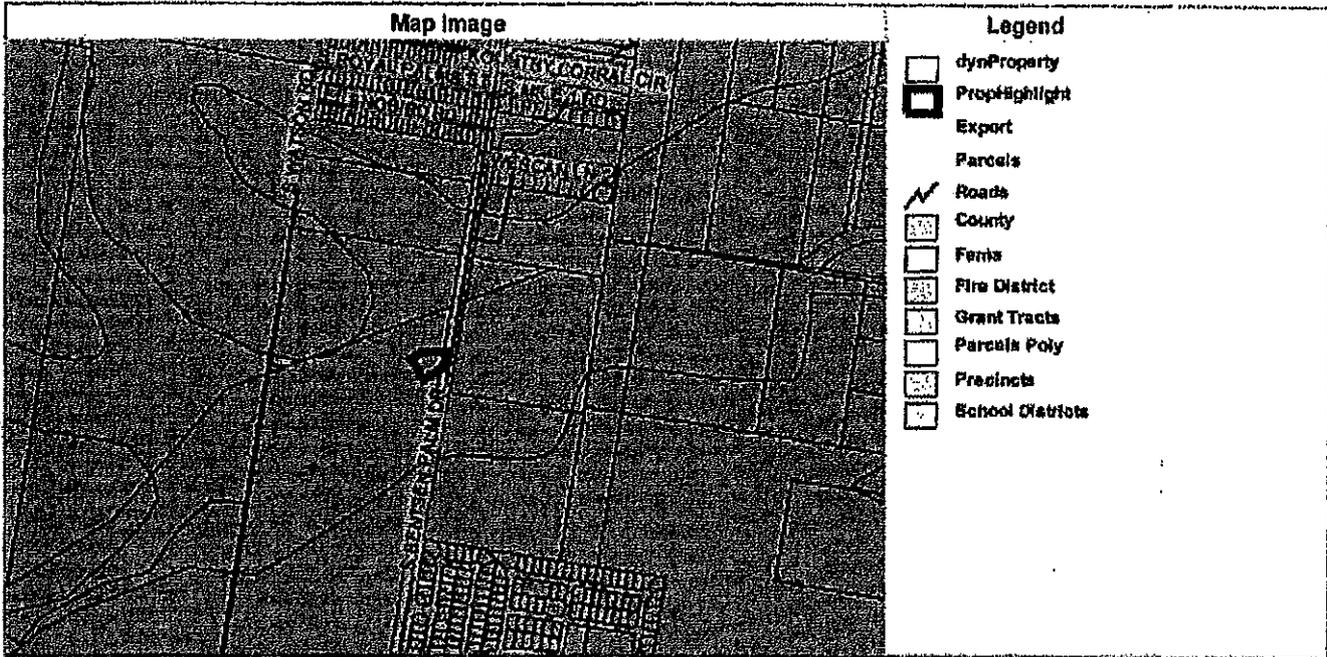
Database last updated on: 4/14/2010 4:21 AM

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Hidalgo CAD

Property Search Results > Property ID 693665 CITY OF MISSION for Year 2010



Property Details

Account

Property ID: 693665
 Geo. ID: B2550-02-000-0022-03
 Type: Real
 Legal Description: BENTSEN GROVES #2 BNG AN IRR TR SE COR FOR WATER TOWER SITE 1.0AC

Location

Address: BENTSEN PALM DR
 Neighborhood: BENTSEN GROVES #2
 Mapsco:
 Jurisdictions: CAD, CMS, DR1, GHD, HCTIR, JCC, R05, SLJ, SST, THMS1, TMS1

Owner

Name: CITY OF MISSION
 Address: 1201 E 8TH ST
 MISSION, TX 78572-5812

Property

Appraised Value: \$32,400

Hidalgo CAD

Property Search Results > Property ID 124622 J.L. BATES L.P. for Year 2010



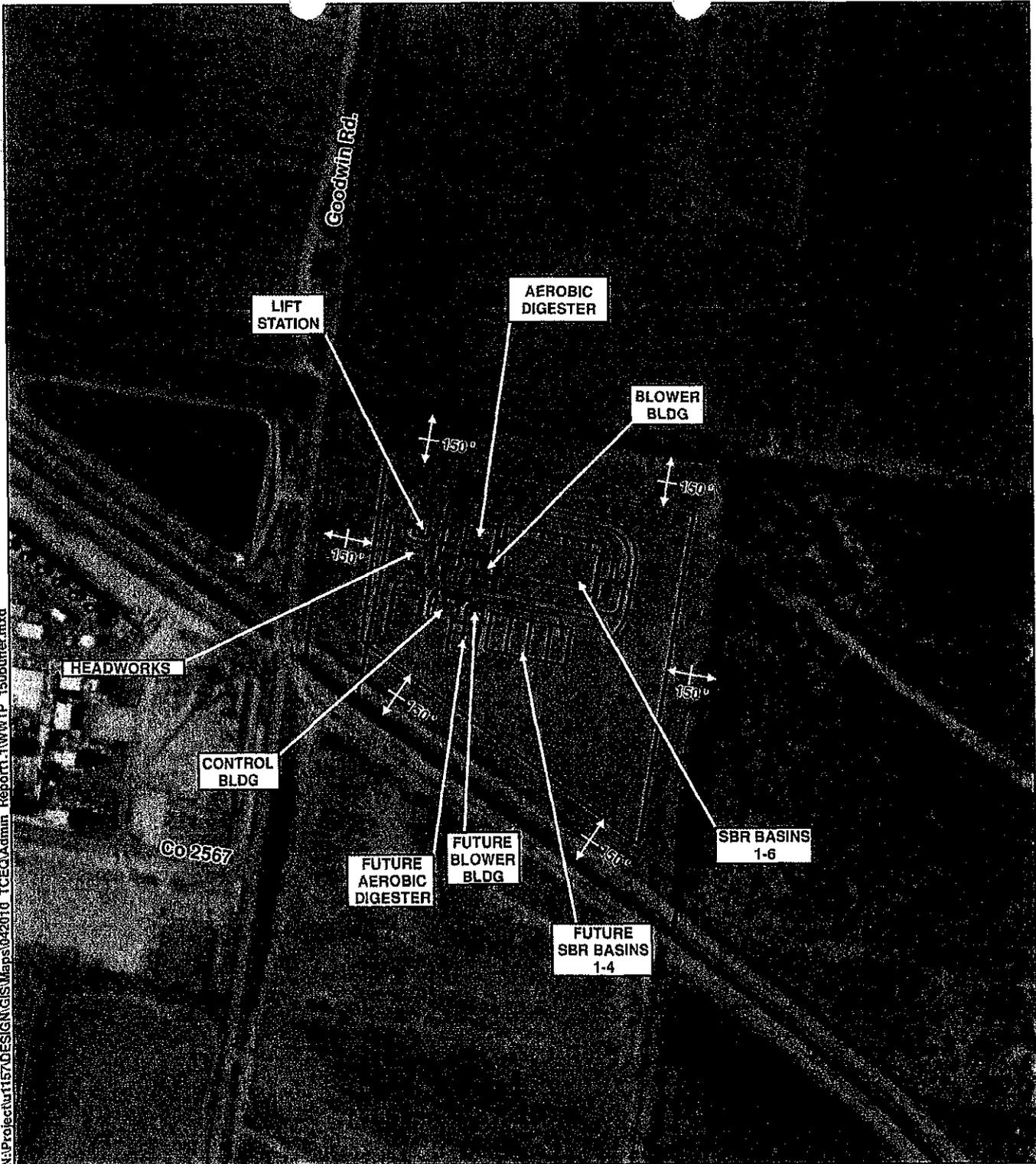
Map Image

Legend

- dynProperty
- PropHighlight
- Export
- Parcels
- Roads
- County
- Fema
- Fire District
- Grant Tracts
- Parcels Poly
- Precincts
- School Districts

Property Details	
Account	
Property ID:	124622
Geo. ID:	B2660-02-000-0034-01
Type:	Real
Legal Description:	BENTSEN GROVES #2 NW 3.50AC OF LOT 34
Location	
Address:	BENTSEN PALM DR
Neighborhood:	BENTSEN GROVES #2
Mapsc:	
Jurisdictions:	CAD, CMS, DR1, GHD, JCC, R05, SLJ, SST
Owner	
Name:	J.L. BATES L.P.
Address:	101 ASH ST HQ06B SAN DIEGO, CA 92101-3017
Property	
Appraised Value:	\$68,072

N:\Project\1157\DESIGN\GIS\Maps\042010 ICEC\Admin Report\1\WWTP 1500buffer.mxd



500 250 0 Feet

Sources: USDA NAIP - Hidalgo County 2008 Aerial

Legend

- WWTP Facility
- WWTP Property Boundary

**AGUA SUD East
WWTP Buffer Map**

**Hidalgo County
State of Texas**

N:\Project\1157\DESIGN\GIS\Maps\042010_ICEQ\PhotoMap\WWTP_PhotoMap.mxd



500 250 0 Feet

Sources: USDA NAIP - Hidalgo County 2008 Aerial

Legend

-  WWTP Property Boundary
-  Proposed WWTP Location Pictures
-  Proposed Outfall Location Pictures

AGUA SUD East WWTP Photo Map

Hidalgo County
State of Texas

AGUA SUD East WWTP Proposed Location



Photo 1: AGUA SUD East
WWTP Site looking east



Photo 2: AGUA SUD East
WWTP Site looking northeast

AGUA SUD East WWTP Proposed Outfall



Photo 1: Area downstream from proposed point of discharge

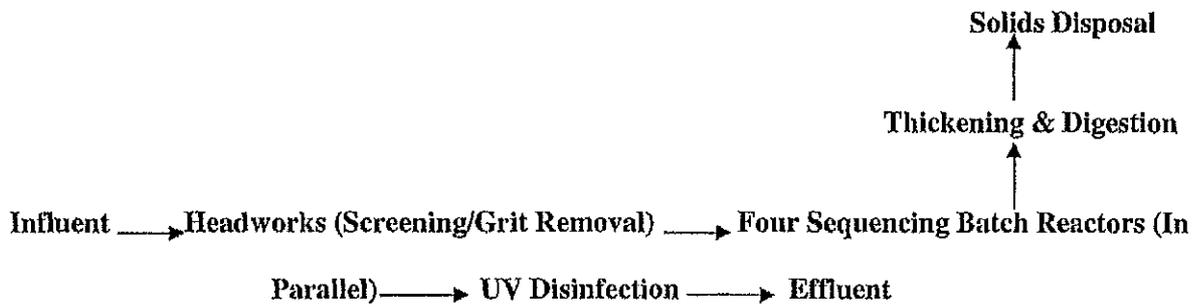


Photo 2: Area upstream from proposed point of discharge

DOMESTIC TECHNICAL REPORT 1.0

3.d. Attachment

FLOW DIAGRAM



**SLUDGE MANAGEMENT PLAN
EAST LA JOYA PLANT**

Dimensions and capacities:

Aerobic digester

TCEQ Minimum SRT: 15 Days
 Digester volume: 107,742 cubic feet
 Influent Loading: 8,674 lb/day
 Sludge Production: 0.75 lb/lb BOD₅
 Wasted Sludge: 6,180 lb/day
 Percent Solids: 3%

SRT: 30 Days
 Digester dimensions: 6 "L" shaped units:
 each @ 29.25 ft x 15 ft x 16.5 ft
 + @ 38 ft x 16 ft x 16.5 ft

CBOD₅ Removal Influent concentration = 200 mg/l
 Effluent concentration = 10 mg/l
 Net Removal = 190 mg/l
 Efficiency = 95%

Thickener

Thickener Floor Loading: 4.2 lb wasted sludge / sf
 Surface Area: 1,472 sf
 Dimensions: 3 @ 25 ft dia. x 14.5 ft d

Pre-Mix Basin

Dimensions: 25 ft x 6 ft x 14.5 ft

<u>Solids generated</u>	<u>100% flow</u>	<u>75% flow</u>	<u>50% flow</u>	<u>25% flow</u>
Pounds BOD ₅ /day removed	8,240	6,180	4,120	2,060
Pound of dry sludge produced	5,109	3,832	2,555	1,277
Pounds of wet sludge produced	170,300	127,725	85,150	42,575
Volume of wet sludge produced	20,382 gal	15,287 gal	10,191 gal	5,096 gal

MLSS operating range = 4700 mg/l @ low water level

Sludge will be wasted from the SBR units to the thickener at the end of each decant period. Sludge will be pre-thickened in a gravity thickener and the supernatant returned to the headworks. The sludge will be pumped from the thickener into one of the two aerobic

digester units. Sludge overflow from this aerobic digester will return to the thickener and/or to the second aerobic digester unit for further processing to the final condition before being removed to the dewatering unit.

<u>Removal schedule (days)</u>	<u>100 % flow</u>	<u>75 % flow</u>	<u>50 % flow</u>	<u>25 % flow</u>
Days between sludge removal	30	45	60	120

Sludge will be removed daily from the secondary digester unit to a sludge holding tank (3 day capacity) then removed to be dewatered by a belt filter press located on the plant site. The dewatered sludge will be hauled daily to a landfill permitted to take the sludge. Alternate sludge disposal methods including beneficial reuse will be investigated once the plant is in operation.



QUESTION - 3:

Population projections are based on anticipated growth rates as furnished by Texas Water Development Board. Table provides the projected wastewater demand for the next 20-years based on the yearly population growth rate.

Existing & Projected Wastewater Demand - 2008-2028						
Index Growth for Palmview, TX.						
	2008	2010	2015	2020	2025	2028
<i>i</i> =	1.043016	1.043016	1.034335	1.034335	1.028226	1.028226
Population	36,062	39,231	46,444	54,984	63,195	68,699
Connections	7,722	8,401	9,945	11,774	13,532	14,711
Wastewater Demand	3,966,820	4,315,410	5,108,840	6,048,240	6,951,450	7,556,890
Peak Flow	15,867,280	17,261,640	20,435,360	24,192,960	27,805,800	30,227,560

Current Treatment Requirement - Year 2008				
	Current Connections	Current Population	Capacity Requirement (gallons)	Peak Flow (gallons)
North	2107	9840	1082366	4329464
South	3529	16480	1812847	7251389
Central	2086	9742	1071578	4286313
TOTAL (Year 2008)	7722	36062	3966791	15867166
Future Treatment Requirement - Year 2028				
	Projected Population	Projected Connections	Capacity Requirement (gallons)	Peak Flow (gallons)
North	18745	4014	2061950	8247800
South	31395	6723	3453450	13813800
Central	18559	3974	2041490	8165960
TOTAL (Year 2028)	67516	14711	7556890	30227560

Table: Wastewater Demand Projections



QUESTION – 4:

TREATMENT SYSTEM DESCRIPTION:

A 7.55 MGD wastewater treatment plant will be built in the City of Palmview. The addition of the treatment plant will accommodate the entire project area, and Agua SUD will not have to pump wastewater to the City of Mission wastewater treatment plant or McAllen wastewater treatment plant. The various facilities proposed for this plant are as described below:

Plant Lift and Headworks:

With one redundant pump, the plant lift will use six (6) submersible pumps to transfer the peak flow to the preliminary and subsequent process units. The pump controller will stage and alternate pump operation. The wet well will be circular with the submersible pump surrounding an intake channel. The intake channel will be baffled to minimize mixing and release of hydrogen sulfide gases. Wastewater will be lifted to the preliminary units for processing.

All of the preliminary units will be elevated. Wastewater will flow through channels (one channel for bypass operation) to the bar screen and de-gritting equipment. Screening is provided by automatically controlled bar screen with a 3/8" opening. Screenings and grit will be transferred to a roll-off located below the structure. A pista type de-gritting equipment will be used to remove inorganic grit. Parshall flumes will be located in the intake channels to measure inflow data.

Odor and corrosion is a significant problem with Rio Grande Valley wastewater treatment. For a well designed aerated wastewater and sludge treatment process, 90% of the odor and corrosion problems are confined to the plant lift and headworks. The AGUA SUD wwtp will include equipment to capture hydrogen sulphide and other odorous gases from the wet well and the preliminary units for processing through a bio-filter.

Sequential Batch Reactor:

A detailed description of the process is provided in the following pages. The preliminary process calculations are provided in table. Facility is to be designed for 7.55 MGD flow.

Combined Sludge Thickener and Aerobic Digester:

Sludge digestion will occur in a combined thickener/aerobic digester structure. Aerobic digester will promote the benefits from a series of "stirred aerobic reactors" that stabilizes sludge to acceptable class B limits. Sludge will be thickened in a gravity thickener that is integral with the structure. This feature will allow sludge to be continuously re-circulated between the digestion units and the thickener. As a result sludge will be thickened to approximately 3% while it will remain fresh to avoid odors. The digester units also provide storage to facilitate the processing of sludge to the de-watering unit.

Sludge De-Watering Unit:

Belt-filter press will be used to de-water sludge. The unit will have a large gravity section to promote early settling and to provide additional thickening before the sludge enters the roller units. Sludge will

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be dewatered to a 17% to 20% concentration. The unit will include a conveyor unit to transfer de-watered sludge to the disposal roll-off units.

Sludge Disposal:

AGUA SUD will use a sludge disposal contractor to dispose of treated sludge. A contractor will remove and apply treated and de-watered sludge to agricultural land that has been permitted by TCEQ. This method of sludge disposal is generally more cost effective than land fill of sludge or operation of land disposal sites by the utility. It is possible, however, that cities will regionalize on sludge disposal in future.

Control Building:

AGUA SUD wwtp includes a building that serves several purposes:

- It provides a reception area for the public.
- It provides an office for management and personnel support.
- It provides space for office a wastewater laboratory.
- It provides space for electrical and instrumentation control.

The building will include paved entrances and parking lot. Standby electrical generator will be located near the building.

Miscellaneous, Landscaping, Fencing, and Site Drainage:

All piping and hydraulic control will be sized for the peak flow condition. All return and waste pumping of sludge from the aeration basin will be with hydrostal pumps with stainless steel impellers. For sludge re-circulation at the digester, air-lift pumps will be used. For the sludge transfer to the belt filter press, progressive cavity pumps will be used.

AGUA SUD wants to be good neighbor and the permit process will dictate it. As part of this design, landscape berms with trees and turf will be located on the perimeter of the site. A wet well and pump station for non-potable effluent re-use will be incorporated in the design. There are many opportunities for effluent with this project that will be very beneficial to the area.

The site area will be drained through an internal storm sewer system. All roads will be designed for access during an intense storm. Security fencing with a control gate will be provided.

Disinfection Chambers:

The emergence of UV radiation as an important disinfection alternative may be attributed to the drawbacks of conventional chlorination, improvements in the UV technology, and advances in EPA's understanding of the UV process. The major problems with chlorination are effluent toxicity and safety. AGUA SUD is familiar with chlorine contact chamber operation; the effluent toxicity is not a major problem considering the amount of contamination in the Resaca discharge point. Any residual chlorine will in turn disinfect the Resaca. Depending on the AGUA SUD level of comfort either UV radiation or chlorine contact chambers can be employed for disinfection.

New Wastewater Treatment Plant – SBR (sequential batch reactor)

Activated sludge is the most widely used biological wastewater treatment process. During the early stages of the development of this process, plants were operated using fill-and-draw or batch feed

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methods, researchers firmly established the concept of operating a single reactor basin using repetitive cycles of aeration, settlement and discharge of treated effluent.

SBR is a combination of a biological selector and variable volume process reactor. The process operates with a single sludge in a single reactor basin to accomplish both biological treatment and solids-liquid separation. A simple repeated sequence of aeration and non-aeration is used to provide aerobic, anoxic and anaerobic process conditions, which in combination with the aeration intensity, favor nitrification, denitrification and biological phosphorus removal.

Each reactor basin is divided by baffle walls into three sections (Zone 1: Selector, Zone 2: Secondary Aeration, Zone 3: Main Aeration). For typical domestic wastewater treatment applications, these sections are in the approximate proportions of 5%, 10% and 85%. Sludge biomass is continuously recycled from Zone 3 to the Zone 1 selector to remove the readily degradable soluble substrate and favor the growth of the floc-forming microorganisms. System design is such that the sludge return rate causes an approximate daily cycling of biomass in the main aeration zone through the selector zone. The mechanisms of zone 1 and the internal sludge recycle eliminate the requirement for separate fill-ratio selectivity, anoxic and anaerobic mixing periods. The selector is self regulating for any load condition and operates under anoxic conditions during aerobic periods and anaerobic reaction conditions during non-aerated periods. Polishing denitrification and enzymatic transfer of available substrate during enhanced biological phosphorus removal is also achieved in the selector zone. The complete-mix nature of the main reactor provides flow and load balancing and a tolerance to shock or toxic loading, and the process prevents solids washout during peak or wet weather hydraulic surges.

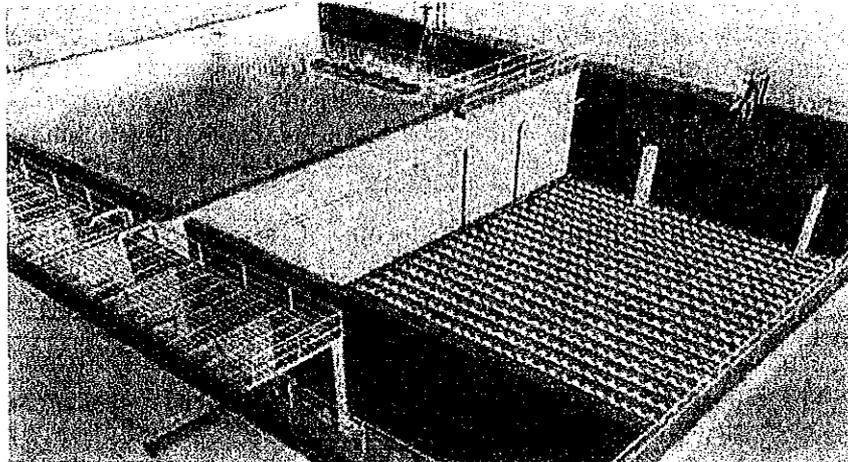


Fig 3-1: Typical SBR system

The system uses a simple repeated time-based sequence, which incorporates: Fill-Aeration, Fill-Settle and Decant. Completion of these three operations in a sequence described above constitutes a cycle



which is then repeated. The sequence above can also include a Fill, Fill-Mix, Fill-React, and React if required.

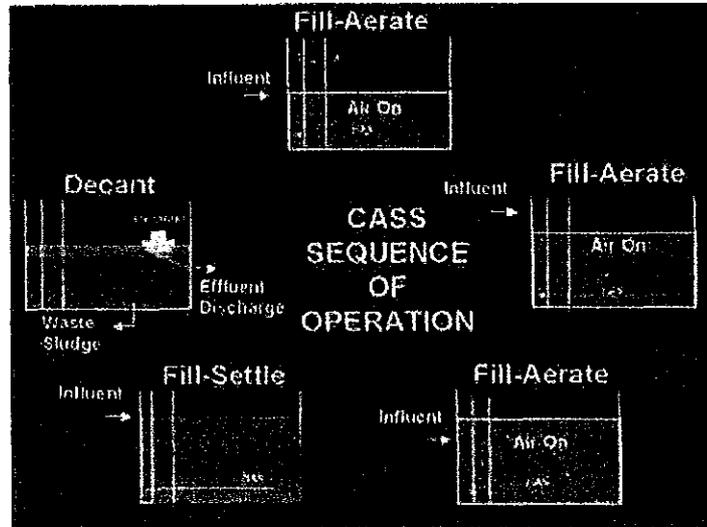


Fig 3-2: General operation sequence in SBR

PROCESS DESCRIPTION:

During the period of a cycle, the liquid level inside the reactor basin rises from a set bottom water level in response to a varying influent wastewater flow rate. Aeration ceases at a predetermined period of the cycle to allow the biomass to flocculate and settle under quiescent conditions. After a specific settling period, the treated effluent supernatant is removed (decanted), using a moving weir decanter. This operation returns the liquid level in the reactor basin to the bottom water level. Surplus solids are wasted as required to maintain the biomass MLSS at the required level. Solids wasting after settling enable waste sludge concentrations in excess of 10,000mg/L to be removed.

Fill-Aeration: This operation refers to the air-on time of the process cycle. During this period, influent is received into the basin through the selector zone where it contacts with the sludge biomass recycled from the main aeration zone. Complete-mix reaction conditions occur in zone 3 during this variable volume operational period.

Fill-Settle: This operation refers to the air-off time period when quiescent settling conditions are created in zone 3 for solids-liquid separation. The activated sludge solids form a sludge-level interface, which progressively falls, towards the floor of the basin. The flocs adhere together and the mass settles as a blanket leaving a clear supernatant.

At the end of the aeration period, the sludge is at a uniform concentration. During the initial settling period, the sludge undergoes internal flocculation due to the residual mixing energy within the basin. As this energy dissipates the sludge interface forms and settles as a blanket. Dense solids fall through

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the formed mass to settle on the basin floor. Zone settling velocity is a function of the initial solids concentration, basin depth, total area of the basin and nature of the biological solids. A top water level solids concentration of 3500mg/l will typically settle to form a layer of sludge having a mean concentration of approximately 10,000mg/l.

SBR facilities are sized and configured to operate with inflow into the basin during the settle phase of cycle. Biomass is returned from the main aeration zone to the selector zone to promote selectivity and create anoxic/anaerobic conditions.

Decant: Inflow to the basin undergoing decanting (effluent withdrawal) is interrupted and directed to an alternate basin in a multi-basin facility or stored in a pump well in a single basin facility. The weir trough of the decanter is situated above top water level for both aeration and settling phases to prevent the accidental discharge of mixed liquor suspended solids. When operated during the decant phase of the cycle, the decanter travels down at an initial fast speed. Interaction with the liquid level is detected by a level indicator float switch which then causes the decanter to proceed at its design rate of travel producing a constant rate of discharge of treated effluent from the basin. On reaching designated bottom water level, the decanter is reversed to travel back to its rest position at the initial fast speed.

Idle: In practice, decanting will always be less than the allocated time available. This residual time is designated as idle and can be used as a period of inflow without aeration or reaction. The idle sequence begins 4 minutes after the decanter has traveled in the reverse up direction and finishes at the end of the designated decant period. Biomass is recycled from zone 3 to the selector zone to promote selectivity and create anoxic/anaerobic conditions.

PLANT DESIGN FEATURES

A. EMERGENCY POWER REQUIREMENTS

The treatment facility will incorporate an on- site automatically starting generator capable of continuously operating all critical wastewater treatment system units. The fuel tank will be sized for a run time greater than the longest power outage in the power records. This generator will provide sufficient power for the following units:

1. Influent Lift Station Pumps
2. Mechanical Bar Screen
3. SBR Basin aeration system
4. Return Activated Sludge Pump
5. UV system
6. Effluent Metering Station
7. Lighting Panels and Control Equipment

An automatic transfer switch will be included to transfer electrical loads to the generator during an outage.

B. ALARM FEATURES

The plant will be equipped with a Supervisory Control and Data Acquisition (SCADA) system to monitor the operation of all critical treatment units. The control room will include a computer with



graphic display of the treatment units that will indicate status and alarm conditions. The computer system will include an auto-dialer to alert plant personnel of the following conditions:

1. Power Outage
2. Influent Lift Station Wet Well High Level
3. Bar Screen Channel High Level
4. SBR Overload
5. Equipment Failure
6. UV system Status

The auto-dialer will store prerecorded messages concerning each alarm condition and the procedure to be followed and will call up to 8 different phone numbers until the alarm condition is acknowledged. The influent lift station and SBR will also be equipped with local alarm lights for high level and high torque respectively.

C. DESIGN FEATURES FOR RELIABILITY AND OPERATING FLEXIBILITY

1. INFLUENT LIFT STATION:

The influent lift station will include three submersible pumps sized to meet peak flow pumping capacity with the largest unit out of service. Level switches will automatically start and stop the pumps based on influent flows and rising and falling wet well levels. High wet well level will result in an alarm condition.

2. BAR SCREEN:

The mechanical bar screen structure will include a bypass channel with a manual screen for use when needed. Slide gates will be used to isolate each channel as required.

3. GRIT CHAMBER:

The grit chamber will include a bypass channel and slide gates to allow the chamber to be taken out of service for maintenance and repair.

4. AERATION BASINS:

Six SBR basins will be included, each capable of continuous operation. Piping and valves will be included to allow each unit to be individually isolated for draining, cleaning or repairs.

D. OVERFLOW PREVENTION

The following design features will be used to prevent the overflow of wastewater from treatment units.

1. The plant design includes a peaking factor of 4.0 to insure adequate hydraulic capacity.
2. The influent lift station will be designed with the capacity to pump peak flow with the largest single pump out of service.
3. The plant hydraulic design, including piping, channels, weirs, troughs and other features, will be sized to allow the 2-hour peak flow to pass through the plant without exceeding minimum freeboard requirements with any single treatment unit out of service.

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TABLE: SBR – PRELIMINARY DESIGN DATA – 7.5 MGD WWTP

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TABLE E-7: SBR - PRELIMINARY DESIGN DATA

DESIGN CALCULATIONS
 BOD Removal and Nitrification Process

Design Parameters - Normal Operation

A. Influent Conditions

Average Daily Flow	7.55 MGD		
Peak Dry Weather Flow	19.6 MGD	Factor:	2.600
Peak Wet Weather Flow	26.425 MGD	Factor:	3.5
BOD ₅ (20°C)	200 mg/l		
Suspended Solids	200 mg/l		
NH ₃ -N	25 mg/l		
Alkalinity (Minimum Requirement)	150 mg/l		
Waste Water Temperature	50 - 68 °F		
Ambient Air Temperature	20 - 90 °F		
Site Elevation	0 ft		

B. Effluent Conditions

	SBR		Permit
BOD ₅ (20°C)	10 mg/l		10 mg/l
Suspended Solids	10 mg/l		15 mg/l
NH ₃ -N	2 mg/l		3 mg/l

C. ICEAS™ Process Design Criteria

F / M	0.084	BOD ₅ / MLSS / day	
SVI (after 30 minutes settling)	150	ml/g	
SVI	22	ft ³ /lb	
Y (Sludge Yield - MLSS/BODremoved)	0.55		
Number of ICEAS Basins	6		
Top Water Level	16	ft	
Buffer Zone	3	ft	
Solids Fraction in Waste Sludge	0.0085	0.85% Solids	8500 mg/l
Sludge Pumping Time	12	min/cycle	

CYCLE	AERATION	SETTLE	DECANT	TOTAL
Normal	120 min	60 min	50 min	230 min
Storm	90 min	45 min	50 min	185 min

BOD Load

$$BOD_L = \frac{Q_{adf} \times BOD_{in} \times 8.34}{1E+06}$$

where BOD_L = BOD Load (lb/day)
 Q_{adf} = Average Dry Weather Flow per basin (gal/day)
 BOD_{in} = Influent BOD concentration (mg/l)
 $1.E+06$ = conversion (l/mg)
 8.34 = conversion (lb/gal)

$$BOD_L = \frac{1,258,333 \times 200 \times 8.34}{1E+06}$$

$BOD_L =$	2099 lb/day/basin
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Mass of Biomass for BOD Removal

$$M_{bod} = \frac{BOD_L}{F / M}$$

where M_{bod} = Mass of Biomass for BOD Removal (lb/day/basin)
 F / M = Food to Microorganism ratio (day^{-1})

$$M_{bod} = \frac{2,099}{0.081}$$

$M_{bod} =$	25,912 lb/basin
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Nitrogen Load

$$DN = \frac{[(NH_3in - NH_3out) - ((BODin - BODout) \times Y \times Ns)] \times Q \times 8.34}{1E+06}$$

where
 DN = Net Nitrogen Load (lb/day/basin)
 NH₃in = Influent Ammonia Concentration (mg/l)
 NH₃out = Effluent Ammonia required (mg/l)
 BODout = Effluent BOD required (mg/l)
 Y = Sludge Yield (MLSS / BOD removed)
 Ns = Sludge Nitrogen content (N / sludge)

$$DN = \frac{[(25 - 3) - ((200 - 10) \times 0.75 \times 0.075)] \times 1,258,333 \times 8.34}{1E+06}$$

DN = 126.20 lb/day/basin

Mass of Biomass Required for Nitrification

$$Mnit = \frac{DN \times 10^3}{K \times Ta \times 0.7}$$

where
 Mnit = Mass of Biomass for Nitrification (lb/day/basin)
 10³ = conversion (mg/g)
 K = Nitrification Rate (mg NH₃ -N/g MLVSS/hr)
 Ta = Time of Aeration (hr/day)
 0.7 = Fraction of MLSS which is volatile

$$Mnit = \frac{126.20 \times 1000}{1.2 \times 12 \times 0.7}$$

Mnit = 15,023 lb/day/basin

Design Mass of Biomass

The Design Mass of Biomass is the larger of the BOD Removal Mass and the Nitrification Mass:

Mbod = 25,912 lb/day/basin

Mnit = 15,023 lb/day/basin

Mbio = 25,912 lb/day/basin

Volume of Biomass

Vbio = Mbio x SVI

where Vbio = Volume of Biomass (ft³/basin)
Mbio = Mass of Biomass (lb/day/basin)
SVI = Sludge Volume Index (ft³/lb)

Vbio = 25,912 x 2.4

Vbio = 62,190 ft ³ /basin

Maximum Volume Above Bottom Water Level

Peak Dry Weather Flow:

$$V_{bwld} = \frac{PDWF \times (NCT - NDT)}{24 \times 7.48}$$

where V_{bwld} = Maximum Volume Above BWL at Peak Dry Weather Flow (ft³/basin)
PDWF = Peak Dry Weather Flow (gal/day)
NCT = Normal Cycle Time (hr/cycle)
NDT = Decant Time (hr/cycle)
7.48 = conversion (gal/ft³)

$$V_{bwld} = \frac{3,266,667 \times (4 \text{ hour} - 1 \text{ hour})}{24 \text{ hour} \times 7.48}$$

$V_{bwld} = 54,590 \text{ ft}^3/\text{basin}$

Peak Wet Weather Flow:

$$V_{bwls} = \frac{PWWF \times (SCT - SDT)}{24 \times 7.48}$$

where V_{bwls} = Maximum Volume Above BWL at Peak Wet Weather (Storm) Flow (ft³/basin)
PWWF = Peak Wet Weather Flow (gal/day)
SCT = Storm Cycle Time (hr/cycle)
SDT = Storm Decant Time (hr/cycle)
7.48 = conversion (gal/ft³)

$$V_{bwls} = \frac{4,404,167 \times (3 - 0.75)}{24 \times 7.48}$$

$V_{bwls} = 55,199 \text{ ft}^3/\text{basin}$

$MVAB = 55,199 \text{ ft}^3/\text{basin}$

Decant Rates

Average Dry Weather Flow:

$$\text{ADR} = \frac{\text{MVAB} \times 7.48}{\text{NDT}} + \frac{Q}{1,440}$$

where ADR = Average Decant Rate (gal/min)
NDT = Normal Decant Time (min/cycle)

$$\text{ADR} = \frac{55,199 \times 7.48}{60 \text{ min}} + \frac{1,258,333}{1,440}$$

ADR = 7,755 gal/min

Peak Wet Weather Flow:

$$\text{PDR} = \frac{\text{MVAB} \times 7.48}{\text{SDT}} + \frac{\text{PWWF}}{1,440}$$

where PDR = Peak Decant Rate (gal/min)
SDT = Storm Decant Time (min/cycle)

$$\text{PDR} = \frac{55,199 \times 7.48}{45 \text{ min}} + \frac{4,404,167}{1,440}$$

PDR = 12,234 gal/min

Decanter Sizing
2 Decanters per Basin

Average Dry Weather Flow:

$$DL_a = \frac{ADR}{2 \times \text{Weir Loading Rate} \times 7.48}$$

where DL_a = Decanter Length for Average Dry Weather Flow (ft)
 20 = Weir Loading Rate (ft³/min/ft of decanter weir)

$$DL_a = \frac{2}{2 \times 20 \times 7.48} \times 7,755$$

$DL_a = 25.92 \text{ ft}$

Peak Wet Weather Flow:

$$DL_p = \frac{PDR}{2 \times \text{Weir Loading Rate} \times 7.48}$$

where DL_p = Decanter Length for Peak Wet Weather (Storm) Flow (ft)
 25 = Weir Loading Rate (ft³/min/ft of decanter weir)

$$DL_p = \frac{12,234}{2 \times 25 \times 7.48}$$

$DL_p = 32.71 \text{ ft}$

Design Decanter Length = 35.0 ft
--

Basin Working Volume

$$BWV = MVAB + V_{bio}$$

where MVAB = Maximum Volume Above BWL (ft³/basin)
 V_{bio} = Volume of Biomass (ft³/basin)

$$BWV = 55,199 + 62,190$$

BWV = 117,389 ft ³

Basin Area

$$BA = \frac{BWV}{TWL - BZ}$$

where BA = Basin Area (ft²)
 BWV = Basin Working Volume
 TWL = Top Water Level (ft)
 BZ = Buffer Zone (ft) (Safety Factor) 3.0

$$BA = \frac{117,389}{15 - 3}$$

BA = 9,782 ft ² each

Sludge Depth

$$SD = \frac{V_{bio}}{BA}$$

where SD = Sludge Depth (ft)

$$SD = \frac{62,190}{9,782}$$

SD = 6.36 ft

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Decanter Draw Down

$$DD = \frac{MVAB}{BA}$$

where DD = Draw Down (ft)
MVAB = Maximum Volume Above BWL (ft³)

$$DD = \frac{55,199}{9,782}$$

DD = 5.64 ft

Bottom Water Level

$$BWL = SD + BZ$$

where BWL = Bottom Water Level (ft)

$$BWL = 6.36 + 3.00$$

BWL = 9.36 ft

Top Water Level

$$TWL = BWL + DD$$

where TWL = Top Water Level (ft)

$$TWL = 9.36 + 5.64$$

TWL = 15.00 ft
Verified

Hydraulic Retention Time

$$HRT = \frac{BA \times MAFD \times 7.48}{Q_{adf}}$$

where HRT = Hydraulic Retention Time (days)
 BA = Basin Area (ft²)
 MAFD = Maximum Average Flow Depth (ft)

$$MAFD = \frac{Q_{adf} \times ((CT \times 60) - DT)}{BA \times 60 \times 24 \times 7.48} + BWL$$

$$MAFD = \frac{1,258,333 \times ((4 \times 60) - 60)}{9782 \times 60 \times 24 \times 7.48} + 9.36$$

MAFD =	11.51 ft
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$$HRT = \frac{9,782 \times 11.51 \times 7.48}{1,258,333}$$

HRT =	0.67 days
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MLSS Concentration at Bottom Water Level

$$MLSS = \frac{M_{bod} \times 1E+06}{BWL \times BA \times 62.42}$$

where MLSS = Mixed Liquor Suspended Solids concentration at Bottom Water Level (mg/l)
 M_{bod} = Mass of Biomass (lb/day/basin)
 62.42 / 1E+06 = conversion (lb/mg x l/ft³)

$$MLSS = \frac{25,912 \times 1E+06}{9.36 \times 9,782 \times 62.42}$$

MLSS =	4,535 mg/l
Concentration within limits	

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Mass of Sludge Produced

$$DM = \frac{Q_{adf} \times (BOD_{in} - BOD_{out}) \times Y_{obs} \times 8.34}{1E+06}$$

where DM = Mass of Sludge Produced (lb/day/basin)
 Y_{obs} = Observed Sludge Yield (MLSS / BOD_{removed})

$$DM = \frac{1,258,333 \times (200 - 10) \times 0.75 \times 8.34}{1E+06}$$

DM = 1,495 lb/day/basin

Volume of Sludge Produced

$$V_{ws} = \frac{DM}{SF_{ws} \times 8.34}$$

where V_{ws} = Volume of Waste Sludge (gal/day/basin)
 SF_{ws} = Solids Fraction in Waste Sludge
 8.34 = density (lb/gal)

$$V_{ws} = \frac{1,495}{0.0085 \times 8.34}$$

V _{ws} = 21,096 gal/day/basin
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Mean Cell Residence Time

$$MCRT = \frac{Mbod}{DM + ((Q_{adf} - V_{ws}) \times TSS_{out} \times 8.34 / 1E+06)}$$

where Mbod = Mass of Biomass (lb/basin)
 TSSout = Suspended Solids In Effluent (mg/l)
 8.34E-06 = conversion (lb/mg x l/gal)

$$MCRT = \frac{25,912}{1,495 + ((1258333 - 21096) \times 10 \times 8.34 / 1E+06)}$$

MCRT = 16.21 days

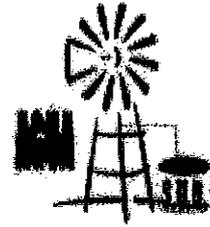
Waste Sludge Pump Capacity

$$WSP = \frac{V_{ws} \times CT}{24 \times SPT}$$

where WSP = Waste Sludge Pump Capacity(gal/min)
 SPT = Sludge Pumping Time (min/cycle)

$$WSP = \frac{21,096 \times 4}{24 \times 12}$$

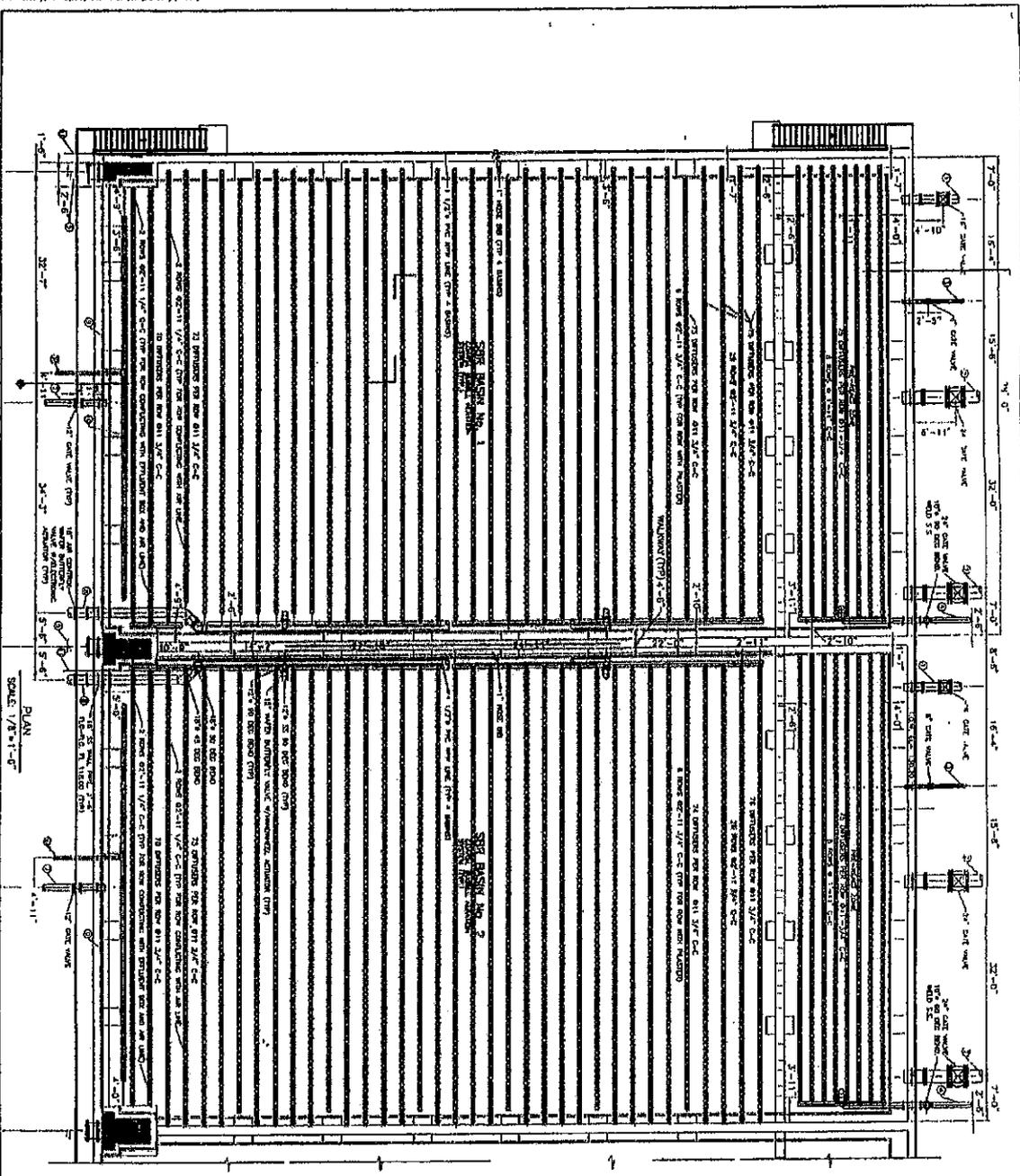
WSP = 293.0 gal/min



QUESTION – 5:

The interior walls are designed to withstand the variation in these hydrostatic forces. The pilasters will be designed to withstand the horizontal pressure from contained liquid(wastewater). It integrates with the vertical walls and concrete will be poured monolithically with the vertical walls. Please see the structural sheets.

The actuator mechanism decants the SBR basins. The decanter details are provided in the mechanical sheets. The specifics of the AUMA decant actuator are also provided.

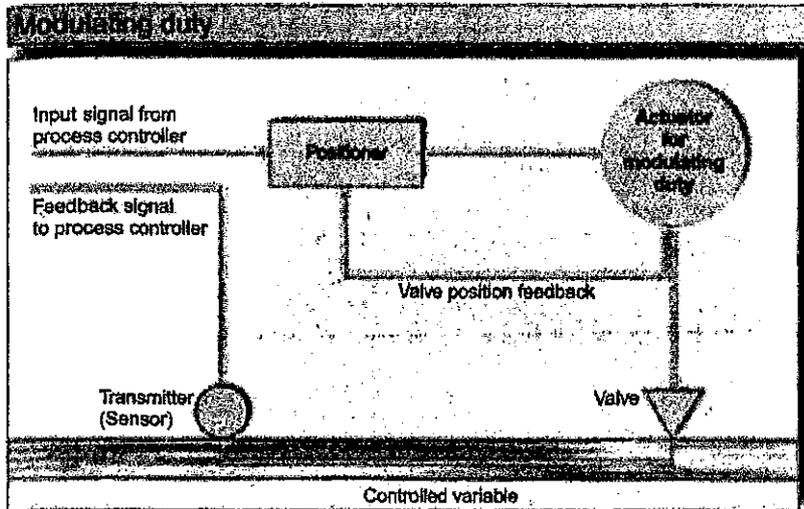


- KEY NOTES**
1. SEE MECHANICAL DRAWING NO. 1 FOR SBR NO. 1 AND SBR NO. 2 FOR SBR NO. 2.
 2. SEE MECHANICAL DRAWING NO. 1 FOR SBR NO. 1 AND SBR NO. 2 FOR SBR NO. 2.
 3. SEE MECHANICAL DRAWING NO. 1 FOR SBR NO. 1 AND SBR NO. 2 FOR SBR NO. 2.
 4. SEE MECHANICAL DRAWING NO. 1 FOR SBR NO. 1 AND SBR NO. 2 FOR SBR NO. 2.
 5. SEE MECHANICAL DRAWING NO. 1 FOR SBR NO. 1 AND SBR NO. 2 FOR SBR NO. 2.
 6. SEE MECHANICAL DRAWING NO. 1 FOR SBR NO. 1 AND SBR NO. 2 FOR SBR NO. 2.
 7. SEE MECHANICAL DRAWING NO. 1 FOR SBR NO. 1 AND SBR NO. 2 FOR SBR NO. 2.
 8. SEE MECHANICAL DRAWING NO. 1 FOR SBR NO. 1 AND SBR NO. 2 FOR SBR NO. 2.
 9. SEE MECHANICAL DRAWING NO. 1 FOR SBR NO. 1 AND SBR NO. 2 FOR SBR NO. 2.
 10. SEE MECHANICAL DRAWING NO. 1 FOR SBR NO. 1 AND SBR NO. 2 FOR SBR NO. 2.
 11. SEE MECHANICAL DRAWING NO. 1 FOR SBR NO. 1 AND SBR NO. 2 FOR SBR NO. 2.
 12. SEE MECHANICAL DRAWING NO. 1 FOR SBR NO. 1 AND SBR NO. 2 FOR SBR NO. 2.
 13. SEE MECHANICAL DRAWING NO. 1 FOR SBR NO. 1 AND SBR NO. 2 FOR SBR NO. 2.
 14. SEE MECHANICAL DRAWING NO. 1 FOR SBR NO. 1 AND SBR NO. 2 FOR SBR NO. 2.
 15. SEE MECHANICAL DRAWING NO. 1 FOR SBR NO. 1 AND SBR NO. 2 FOR SBR NO. 2.
 16. SEE MECHANICAL DRAWING NO. 1 FOR SBR NO. 1 AND SBR NO. 2 FOR SBR NO. 2.
 17. SEE MECHANICAL DRAWING NO. 1 FOR SBR NO. 1 AND SBR NO. 2 FOR SBR NO. 2.
 18. SEE MECHANICAL DRAWING NO. 1 FOR SBR NO. 1 AND SBR NO. 2 FOR SBR NO. 2.
 19. SEE MECHANICAL DRAWING NO. 1 FOR SBR NO. 1 AND SBR NO. 2 FOR SBR NO. 2.
 20. SEE MECHANICAL DRAWING NO. 1 FOR SBR NO. 1 AND SBR NO. 2 FOR SBR NO. 2.



	
This submittal is prepared by the Engineer/Architect for the Client's use. It is not to be used for any other purpose without the written consent of the Engineer/Architect.	
PROJECT NO. 100-100-100 DATE: 10/10/10	
SBR BASIN MECHANICAL PLAN EASTIA JOYA WASTEWATER TREATMENT PLANT By: <i>Shahar Gajjar</i> Checked by: <i>Shahar Gajjar</i> DANNENBAUM ENGINEERING CORPORATION 1000 10th Street, Suite 1000 San Francisco, CA 94103 (415) 774-1111 www.danneng.com	
DRAWN BY: <i>Shahar Gajjar</i> CHECKED BY: <i>Shahar Gajjar</i> DATE: 10/10/10	PROJECT NO. 100-100-100 DRAW NO. 100-100-100-100 M-5

Functions

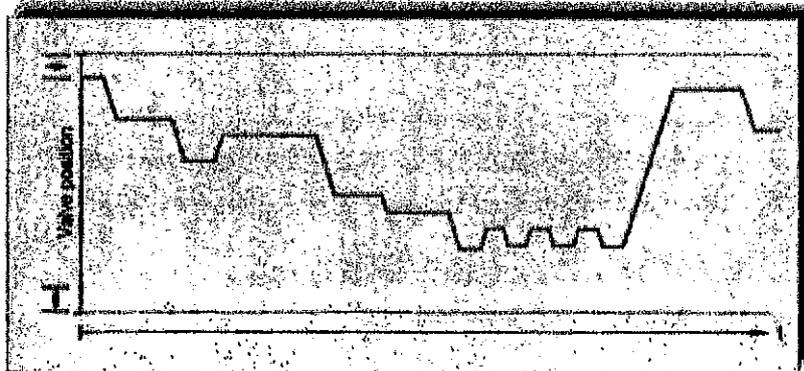


Types of duty for multi-turn actuators for modulating service (SAR, SARFM, SARExC)

AUMA multi-turn actuators SAR for modulating service are rated for intermittent duty S4 - 25%. Special versions for S4 - 50% and S5 - 25% are also available.

The controlled variable in a modulating application is affected by many influences. A change of the reference input signal, pressure fluctuation in the pipeline and temperature variations influence the process in such a way that a frequent adjustment of the MOV is required. For sensitive modulating applications the starts may be in intervals of a few seconds.

Therefore high demands are placed on multi-turn actuators for this duty. Mechanical components and the motor must be designed appropriately to withstand a large number of operations with no decline in the required modulating accuracy.



Typical characteristics for modulating duty

Comparison short-time and intermittent duty

Short-time duty

S2

The operation time at a constant load is short, so that thermal equilibrium is not reached. The pause is long enough for the machine to cool down to ambient temperature. The duration of the short-time operation is limited to 15 min or 30 min.

Intermittent duty

Type of duty according to IEC 34-1

S4

The duty is a sequence of identical cycles which consist of starting time, operation time with constant load and rest period. The rest period allows the machine to cool down so that thermal equilibrium is not reached. The relative on-time at S4 - 25 % or S4 - 50 % is limited to 25 % and 50 % respectively.

S5

Similar to S4, but with additional braking time. The braking is carried out electrically, e.g. by reverse current.

Permissible number of starts

Size	Number of starts max.	
	SAN	SANExC
07.1	1200	900
07.5	1200	900
10.1	1200	900
14.1	1200 ¹⁾	900 ¹⁾
14.5	1200 ¹⁾	900 ¹⁾
16.1	900 ¹⁾	600 ¹⁾
25.1	300	-
30.1	300	-

1) for higher output speeds reduced number of starts, refer to technical data sheet.

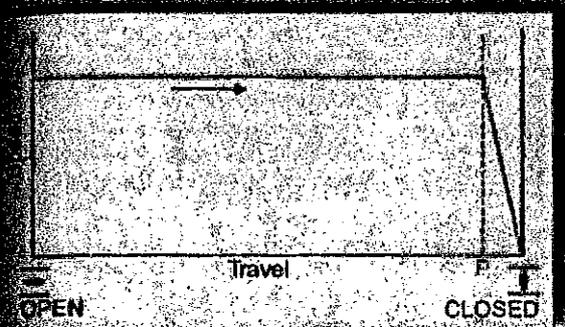
Functions

Depending on the design of the valve to be operated, the seating in the end positions either has to be limit seating, i.e. by measuring the valve travel command, or torque seating, i.e. after reaching a defined torque. For this purpose,

the actuator is equipped with two independent measuring systems, i.e. limit switching and torque switching.

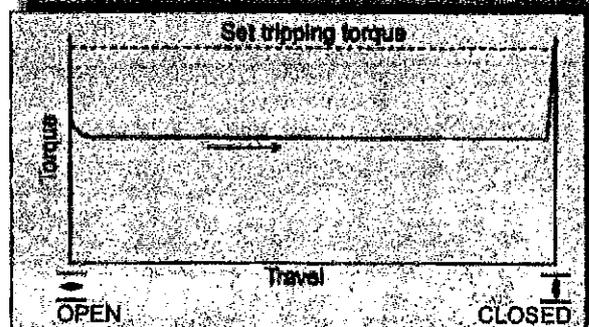
The type of seating has to be taken in account both when setting the actuator and in the actuator control. However, the processing of signals for the two types of seating differs.

Limit seating



When the actuator runs at nominal output speed up to the set tripping point P. Depending on output speed, actuator speed and valve type, the combination has sufficient inertia to move the actuator further in the direction of the end position (overrun) after the motor has been switched off. In addition, the overrun also depends on the load. By selecting an earlier tripping point P, the overrun can be accounted for in case of limit seating.

Torque seating



After starting from the end position OPEN, the actuator runs in the direction CLOSE. At the end position CLOSED the torque increases within the valve seat until the actuator is automatically switched off after reaching the set value.

Operating range of tripping torque / Torques for modulating duty

Two-turn actuators for open-close duty - minimum and maximum tripping torques

Size SA	07.1	07.5	10.1	14.1	14.5	16.1	25.1	30.1	35.1	45.1	48.1
min. [ft lb]	7	15	30	70	150	290	465	825	1,900	3,700	7,400
max. [ft lb]	20	45	85	185	370	740	1,500	2,950	5,900	11,800	23,600
min. [Nm]	10	20	40	100	200	400	630	1,250	2,500	5,000	10,000
max. [Nm]	30	60	120	250	500	1,000	2,000	4,000	8,000	16,000	32,000

One-turn actuators for modulating duty - minimum and maximum tripping torques - Torques for modulating duty

Size SAR	07.1	07.5	10.1	14.1	14.5	16.1	25.1	30.1
min. [ft lb]	10	20	45	88	185	370	740	1,500
max. [ft lb]	20	45	88	185	370	740	1,500	2,950
min. [Nm]	15	30	60	120	250	500	1,000	2,000
max. [Nm]	30	60	120	250	500	1,000	2,000	4,000
Torque for modulating duty [ft lb]	10	20	45	88	150	300	600	1,200
[Nm]	15	30	60	120	200	400	800	1,600

Torques are reduced at some higher output speeds. Refer to separate data sheets.

Functions

Overload protection against torque peaks

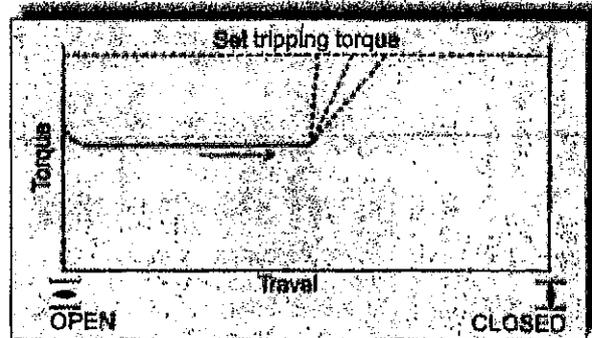
Torque switches, used for torque seating at the end positions (see page 10), serve as overload protection for the entire valve travel, even in the case of limit seating.

If excessive torque builds-up in the actuator at an intermediate position, perhaps due to an obstruction in the valve, the torque switch will trip after reaching the set tripping torque.

After the controls have processed the torque switch signal accordingly, the motor will be switched off. As a result, valve and actuator are protected from damage.

If the limit switch signals are processed accordingly in the controls, a normal torque switch trip can be distinguished from a trip in an intermediate

position (fault) caused by an unintended overload.



Non-intrusive setting (option)

If the actuator is equipped with a magnetic limit and torque transmitter (see page 14) and integral controls AUMATIC (see page 23) the actuator can be set non-intrusively. This means that the parameters can be set without having to open the actuator. This offers several advantages:

- No tools are required for setting.
- The actuator does not need to be opened again after the electrical connection is completed. The electronic and mechanical components in the housing are well protected from ingress of water and dust.
- The actuator can be set in potentially explosive atmospheres, without affecting the explosion protection.

Analog torque sensing (option)

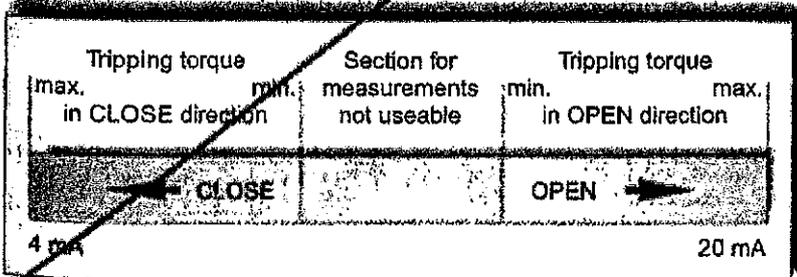
If the actuator is equipped with analog torque sensing, the required torque can be constantly displayed. The torque signal is available as 4 - 20 mA current signal.

The maximum values 4 mA and 20 mA are only reached when the torque switching is set to the maximum possible tripping torque.

If the actuator is equipped with magnetic limit and torque transmitter and integral controls, this function is always included. The current torque requirement can also be displayed at the actuator controls.

Running indication (option)

A blinker switch is available as an option and can be used for running indication. The contacts are available on the AUMA plug & socket terminal connection.



Rating of blinker switch			
Type of current	Switch rating load		
	30 V	125 V	250 V
AC	5 A	5 A	5 A
DC	2 A	0.5 A	0.4 A

Output speeds

For a large range of available output speeds, almost every required switching time can be achieved with multi-turn actuators.

Output speed is determined by the gear speed and the gear reduction. Therefore it is necessary to calculate the output speed when placing in order.

Multi-turn actuators with output type A, stem nut (refer to page 10 for max. permissible stem velocity at output speed) must be observed:

- globe valves max. 20 in/min (500 mm/min)
- globe valves max. 10 in/min (250 mm/min)
- max. 54 rpm

For higher velocities or output speeds it is strongly recommended to use a spring loaded stem nut, output drive type AF (see page 26).

Self-locking

AUMA multi-turn actuators SA 07.1 – SA 16.1 are self-locking¹⁾ up to speed 108 rpm. In addition SA 35.1 speeds 32 (38 at 60 hz) and 45 (54) in addition to SA 40.1 speed 32 (38) are not self-locking. These non self-locking multi-turn actuators have a double start worm/ worm wheel.

After the torque switch has tripped, the sliding worm will be able to move back to its initial position by action of the springs. This allows the torque switch to be released. If the control system provides continuous signals, this will

result in a constant switching on and off of the motor (Pumping effect).

Remedy:

- for SA 07.1 to SA 16.1, use of Integral actuator controls or
- 'capturing' the off signal with an auxiliary contactor or relay.

1) self-locking under normal operation conditions; a self-locking gear set does not ensure a safe stopping after an operation. If this is required, a brake motor must be used.

Output speeds for multi-turn actuators for open-close duty

Actuator	Max. stem velocity		3-phase AC motor 32 - 15 min / 52 - 30 min		1-phase AC motor 32 - 15 min		DC motor 32 - 15 min (rpm)
	(ft./min)	(mm)	50 Hz (rpm)	60 Hz (rpm)	50 Hz (rpm)	60 Hz (rpm)	
07.1	20	30	4 - 180	4.8 - 216	4 - 180	4.8 - 216	4 - 180
07.1	45	60	4 - 180	4.8 - 216	4 - 180	4.8 - 216	4 - 180
07.1	88	120	4 - 180	4.8 - 216	4 - 180	4.8 - 216	4 - 180
07.1	160	200	4 - 180	4.8 - 216	4 - 180	4.8 - 216	4 - 180
07.1	370	600	4 - 180	4.8 - 216	4 - 180	4.8 - 216	4 - 180
07.1	740	1000	4 - 180	4.8 - 216	4 - 180	4.8 - 216	4 - 180
07.1	1500	2000	4 - 90	4.8 - 108	-	-	-
07.1	2000	3000	4 - 90	4.8 - 108	-	-	-
07.1	5000	8000	4 - 45	4.8 - 54	-	-	-
07.1	11000	16000	4 - 22	4.8 - 27	-	-	-
07.1	23000	32000	4 - 11	4.8 - 13	-	-	-

Actuator torque has reduced torque at highest speeds

Output speeds for multi-turn actuators for modulating duty

Actuator	Torque for modulating duty max.		3-phase AC motor ¹⁾		1-phase AC motor ²⁾	
	(ft. lb)	(Nm)	50 Hz (rpm)	60 Hz (rpm)	50 Hz (rpm)	60 Hz (rpm)
07.1	10	15	4 - 45	4.8 - 54	4 - 45	4.8 - 54
07.1	30	30	4 - 45	4.8 - 54	4 - 45	4.8 - 54
07.1	45	60	4 - 45	4.8 - 54	4 - 11	4.8 - 13
07.1	88	120	4 - 45	4.8 - 54	4 - 11	4.8 - 13
07.1	150	200	4 - 45	4.8 - 54	-	-
07.1	300	400	4 - 45	4.8 - 54	-	-
07.1	600	800	4 - 11	4.8 - 13	-	-
07.1	1200	1600	4 - 11	4.8 - 13	-	-

Actuator duty S4 - 25 % ED

design principle

② Control unit

Depending on the type of valve the actuator must be switched off in the end position by limit or torque switching.

For this purpose two independent measuring systems (limit switching and torque switching) are provided within the control unit. They measure the travel and the torque demanded at the output drive, respectively.

The switches signal to the actuator controls as the set tripping points have been reached, which then de-energize the motor.

The control unit may optionally be equipped with a magnetic limit and torque transmitter. This transmitter converts the mechanical parameters limit and torque into continuous electronic signals. In combination with the integral controls AJMATIC tripping points and tripping torques can be set non-intrusively, i.e. without using tools or opening the control unit.

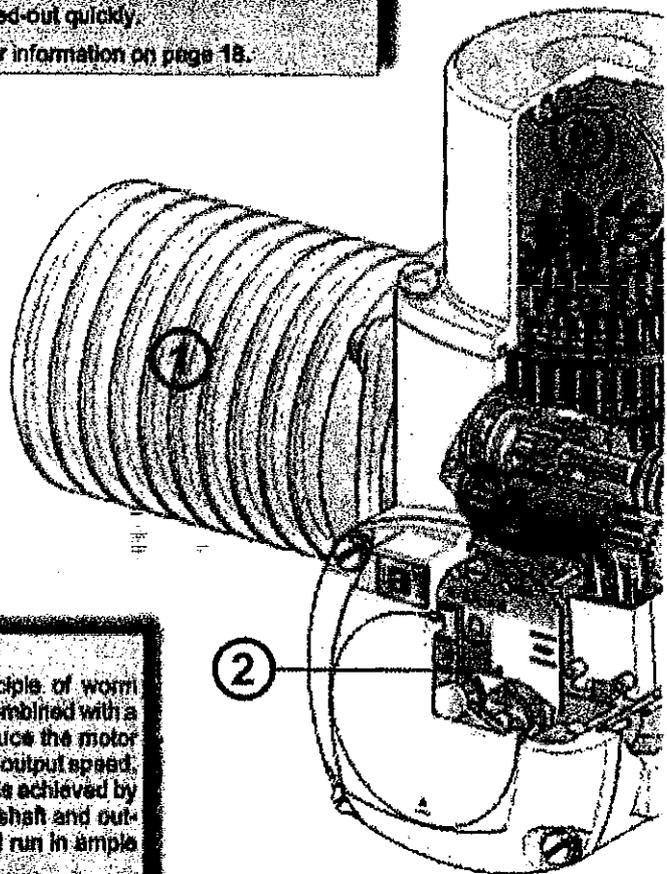
① Motor

High starting torque is frequently required to unseat valves. The motors developed by AJMA are designed to provide high starting torque to fulfill this requirement.

Besides the commonly used 3-phase AC motors - single phase motors and DC motors are available up to size 18.1.

The motor is connected via an internal plug and socket connector up to size SA 18.1 at 26 rpm. This enables the motor to be changed-out quickly.

Further information on page 18.



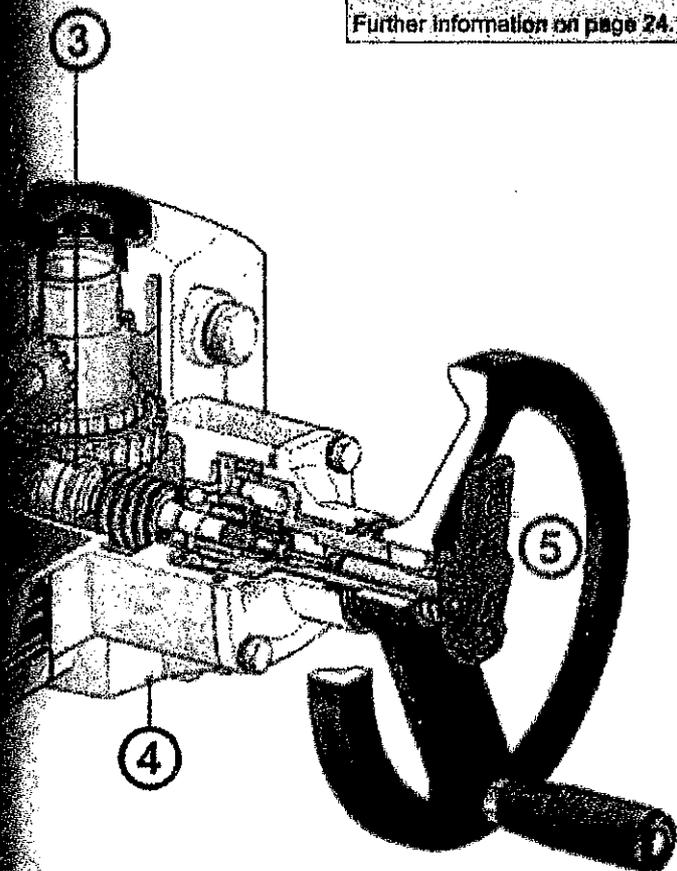
③ Gearing

The well proven principle of worm gearing, sometimes combined with a planetary gear, is used to reduce the motor speed to the required actuator output speed. Self-locking (refer to page 12) is achieved by the worm gearing. The worm shaft and output shaft with the worm wheel run in ample sized bearings.

The worm is free to move along the worm shaft and is positioned between two stacks of springs. The worm moves in proportion with the torque. This axial displacement, as a measure of the torque, is transmitted to the control unit via a simple lever and gear mechanism.

The gear housing is filled with lubricant. This results in maintenance free service for a long period of time.

6 Electrical connection
The connection for motor and controls up to size 16.1 are made on a 50-pole AUJA plug/ socket connector. On larger sizes, the motor is connected to terminals in the actuator.
If the plug/ socket is disconnected for maintenance work, the wiring remains undisturbed.
Explosion-proof actuators type SAFM and SARFM are also provided with the plug/ socket connector. Explosion-proof actuators type SAExC and SARExC are provided with a special plug/ socket connector.
Further information on page 24.



5 Manual operation
For commissioning or in an emergency the multi-turn actuator can be operated with the handwheel. By operating the red change-over lever the motor drive is disconnected and the manual drive engaged. Since disconnection between the motor and drive shaft is made before the self-locking worm/ worm wheel, easy change over to manual drive is possible even if the actuator has been operated at full rated torque.
When starting the motor the manual drive is automatically disengaged. During electric operation the handwheel does not rotate.

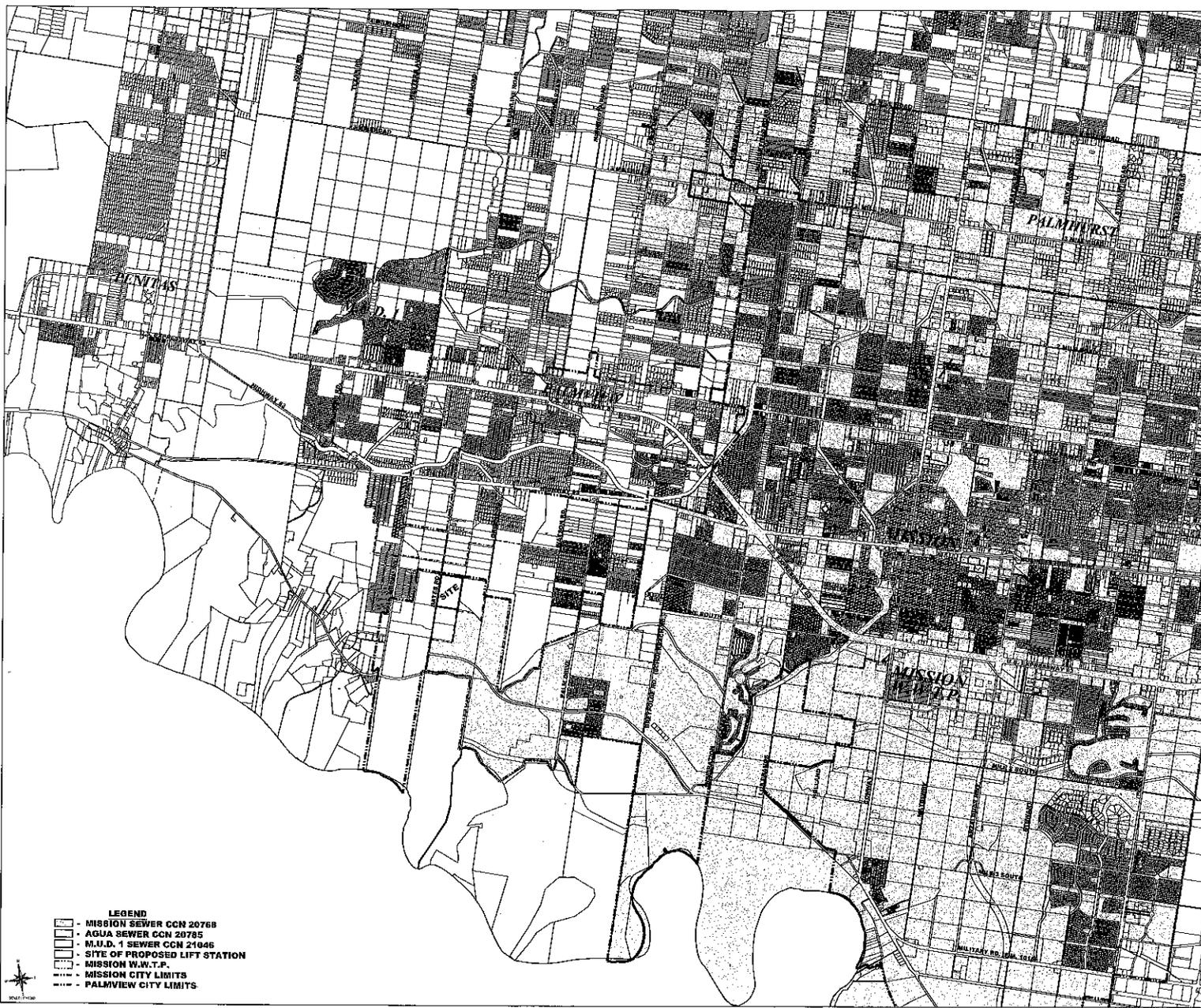
4 Valve attachment
The mounting flange is according to MSS SP-102 or EN ISO 5210.
Various output drive types are available. Therefore it is possible to adapt to different types of valves.
Further information on page 26.

APPENDIX B

**AGUA SUD WWTP EAST
Landowner Information Table**

No.	Owner Name	Address	Legal Description
1	J.L. BATES L.P.	101 ASH ST, HQ068, SAN DIEGO.CA 92101-3017	GOODWIN #1 LOT 2 BLK 1 15.29AC
2	FRONTERA GENERATION LTD PRTNRSHIP	ATTN: CLAUDE DEMARS TECO ENERGY 12 GREENWAY PLAZA STE 600 HOUSTON, TX 77046-0813	MISSION FARMS ESTATE LOT 2 40AC GR 39.37AC NET
3	GOODWIN ACQUISITIONS LP	3504 WARE RD OFC 4 MCALLEN, TX 78501	GOODWIN #1 LT 1 BLK 2 15.29 AC
4	J.L. BATES L.P.	101 ASH ST HQ06B SAN DIEGO. CA 92101-3017	MISSION FARMS ESTATE LOT 3 39.98AC
5	GOODWIN ACQUISITIONS LP	3504 WARE RD OFC 4 MCALLEN, TX 78501	GOODWIN #1 LT 2 BLK 2 15.29 AC
6	U.S. FISH & WILDLIFE SERVICE	PO BOX 1306 ALBUQUERQUE, NM 87103- 1306	MISSION FARMS ESTATE 2.50AC A TRIANGULAR TRACT-E526.15'-N414.04'- S1604.3 LOT 5
7	MAYFAIR FARMS	14901 N WARE RD EDINBURG, TX 78541	MISSION FARMS ESTATE 3.86AC AN IRR TR-E785.47'- W1871.57'-S442.48'-LOT 4 3.86AC
8	BENTSEN PALM LTD	2500 S BENTSEN PALM DR # 267 B MISSION, TX 78572	MISSION FARMS ESTATE LT5 EXC 2.50AC A TRI TR- E526.15' - N414.04' -S1604.3 LT11-42.01AC,LT12 48.15AC 134.28GR 128.9ACNT
9	MAYFAIR FARMS	14901 N WARE RD EDINBURG, TX 78541	PORCION 49 W 150 AC LT 23 SH 14 AGREED PT & LT 27 SH 14-275AC 425AC GR 403.60AC NET
10	U.S. FISH & WILDLIFE SERVICE	PO BOX 1306 ALBUQUERQUE, NM 87103-1306	PORCION 49 LT 22 SH 14 33.83 AC
11	U.S FISH & WILDLIFE SERVICE	PO BOX 1306 ALBUQUERQUE, NM 87103-1306	PORCION 49 LT 25 SH 14 30.69 AC
12	BENTSEN PALM LTD	2500 S BENTSEN PALM DR # 267 B MISSION, TX 78572	BENTSEN GROVES #2 LT 22 SE 9.25; LT23 40.10, EXC NW 0.24AC, LT24-40.10, LT 25- 34.85, LT 26-9.77AC 133.83AC GR 126.58AC NET
13	CITY OF MISSION	1201 E 8 TH ST MISSION, TX 78572-5812	BENTSEN GROVES #2 BNG AN IRR TR SE COR FOR WATER TOWER SITE 1.0AC
14	J.L. BATES L.P.	101 ASH ST HQ06B SAN DIEGO. CA 92101-3017	BENTSEN GROVES #2 NW 3.50AC OF LOT 34

APPENDIX C



- LEGEND**
- MISSION SEWER CCN 20768
 - - - AGUA SEWER CCN 20785
 - M.U.D. 1 SEWER CCN 21046
 - SITE OF PROPOSED LIFT STATION
 - MISSION CITY LIMITS
 - - - PALMVIEW CITY LIMITS



APPENDIX D

Lloyd
Gosselink
ATTORNEYS AT LAW

1984 ♦ Celebrating 30th Years ♦ 2014
Mr. Hill's direct line: (512) 322-5855
jhill@lglawfirm.com

816 Congress Avenue, Suite 1900
Austin, Texas 78701
512.322.5800 p
512.472.0532 f
lglawfirm.com

August 28, 2014

Francisco Flores, General Manager
Agua Special Utility District
3120 North Abram Road
Palmview, Texas 78572

Certified Mail R.R.R. No. 70091410000024603065

Re: Petition to Revoke TPDES Permit No. WQ0014415003

Dear Mr. Flores:

The City of Mission intends to file a petition for revocation of Texas Pollution Discharge Elimination System Permit No. WQ0014415003 pursuant to Title 30, Section 305.66 of the Texas Administrative Code 15 days from the date of this notice. I have enclosed a copy of the petition that the City will file at that time.

Sincerely,


Jason T. Hill

JTH/gjb
Enclosure
Copies: Bob Galligan
Rudy Salinas

03 SEP 2014 PM 11

First-Class Mail
Postage & Fees Paid
USPS
Permit No. G-10

* Sender: Please print your name, address, and ZIP+4 in this box *

LLOYD GOSSELINK
ROCHELLE & TOWNSEND, P.C.
816 CONGRESS AVE., SUITE 1900
AUSTIN, TX 78701

3631-0

gjb

Certified Mail Provides:

3631-0
gjb

- A mailing receipt
- A unique identifier for your mailpiece
- A record of delivery kept by the Postal Service for two years

Important Reminders:

- Certified Mail may ONLY be combined with First-Class Mail® or Priority Mail®.
- Certified Mail is *not* available for any class of International mail.
- NO INSURANCE COVERAGE IS PROVIDED with Certified Mail. For valuables, please consider Insured or Registered Mail.
- For an additional fee, a *Return Receipt* may be requested to provide proof of delivery. To obtain Return Receipt service, please complete and attach a Return Receipt (PS Form 3811) to the article and add applicable postage to cover the fee. Endorse mailpiece "Return Receipt Requested". To receive a fee waiver for a duplicate return receipt, a USPS® postmark on your Certified Mail receipt is required.
- For an additional fee, delivery may be restricted to the addressee or addressee's authorized agent. Advise the clerk or mark the mailpiece with the endorsement "Restricted Delivery".
- If a postmark on the Certified Mail receipt is desired, please present the article at the post office for postmarking. If a postmark on the Certified Mail receipt is not needed, detach and affix label with postage and mail.

IMPORTANT: Save this receipt and present it when making an inquiry.

PS Form 3800, August 2006 (Reverse) PSN 7530-02-000-9047

U.S. Postal Service		CERTIFIED MAIL RECEIPT	
(Domestic Mail Only, No Insurance Coverage Provided)			
For delivery information visit our website at www.usps.com			
OFFICIAL USE			
Postage	\$	90	Postmark Here SEP 3 2014
Certified Fee		3.30	
Return Receipt Fee (Endorsement Required)		2.70	
Restricted Delivery Fee (Endorsement Required)			
Total Postage & Fees	\$	7.90	
Item To:	Francisco Flores GM		
Street, Apt. No., or PO Box No.	Agua Special Utility Dist.		
City, State, ZIP+4	3120 North Abram Rd., Palmview, TX 78572		

SENDER COMPLETE THIS SECTION

- Complete Items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:
Francisco Flores, Gen. Manager
Agua Special Utility Dist.
3120 North Abram Rd.
Palmview, TX 78572

COMPLETE THIS SECTION ON DELIVERY

- A. Signature Agent
[Signature] Addressee
- B. Received by (Printed Name) Date of Delivery
9/2/14
- D. Is delivery address different from item 1? Yes
If YES, enter delivery address below: No

3. Service Type
 Certified Mail Express Mail
 Registered Return Receipt for Merchandise
 Insured Mail C.O.D.

4. Restricted Delivery? (Extra Fee) Yes

2. Article Number (Transfer from service label) 7009 1410 0000 2460 3065