



Control Number: 48203



Item Number: 12

Addendum StartPage: 0

PUC DOCKET NO. 48203

**APPLICATION OF AQUA TEXAS,
INC. TO AMEND A WATER
CERTIFICATE OF CONVENIENCE
AND NECESSITY IN FORT BEND
COUNTY**

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§

**PUBLIC UTILITY COMMISSION
OF TEXAS**

2018 AUG 31 AM 11:25
FILING CLERK

APPLICANT'S SUPPLEMENTAL APPLICATION INFORMATION

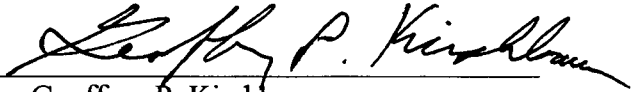
COME NOW, Aqua Texas, Inc. ("Aqua Texas") and files this supplemental application information. In support thereof, Aqua Texas would show the following.

Commission Staff has inquired about the status of Texas Commission on Environmental Quality ("TCEQ") plans and specifications approval letters for the public drinking water system facilities planned for the Certificate of Convenience and Necessity ("CCN") No. 13203 amendment service area that is the subject of this docket ("Application"). In response, as a supplement to the Application, Aqua Texas submits the documents attached hereto as **Exhibit A**.

PRAYER

Aqua Texas, Inc. respectfully requests inclusion of the attached documents as a supplemental part of the Application record and, ultimately, a Commission order approving the Application. The Applicant further requests such other relief to which it is justly entitled at law or in equity.

Respectfully submitted,

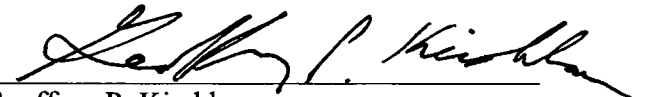
By: 

Geoffrey P. Kirshbaum
State Bar No. 24029665
TERRILL & WALDROP
810 West 10th Street
Austin, Texas 78701
Tel: (512) 474-9100
Fax: (512) 474-9888
gkirshbaum@terrillwaldrop.com

ATTORNEY FOR AQUA TEXAS, INC.

CERTIFICATE OF SERVICE

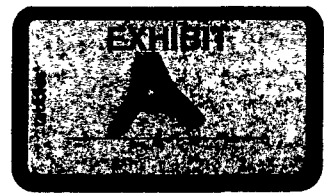
I certify that a copy of this document will be served on all parties of record on August 31, 2018 in accordance with P.U.C. Procedural Rule 22.74.


Geoffrey P. Kirshbaum

Bryan W. Shaw, Ph.D., P.E., *Chairman*
Toby Baker, *Commissioner*
Jon Niermann, *Commissioner*
Stephanie Bergeron Perdue, *Interim Executive Director*



PWS_0790423_CO_20180511_Plan Ltr



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

May 11, 2018

Mr. D. Ray Young, P.E.
Water Engineers, Inc.
17230 Huffmeister Road, Suite A
Cypress, TX 77429

Re: Lakes of Mission Grove - Public Water System ID № 0790423
Proposed Water Plant № 2
Engineer Contact Telephone: (281) 373-0500
Plan Review Log № P-03132018-098
Fort Bend County, Texas

CN600789705; RN104424429

Dear Mr. Young:

On March 13, 2018, the Texas Commission on Environmental Quality (TCEQ) received planning material with your letter dated March 8, 2018 for the proposed Water Plant № 2. Based on our review of the information submitted, the project generally meets the minimum requirements of Title 30 Texas Administrative Code (TAC) Chapter 290 - Rules and Regulations for Public Water Systems and is **conditionally approved for construction** if the project plans and specifications meet the following requirements:

1. Your engineering report noted that the project site is located within 100-year flood zone and the proposed well shall conform to 30 TAC §290.41(c)(3)(K). In accordance with 30 TAC §290.42(a)(2), the water treatment plant and all pumping units shall be located in well-drained areas **not subject to flooding** and away from seepage areas or where the groundwater water table is near the surface. Please **ensure** compliance with this rule for the proposed liquid chlorine equipment and service pumps
2. Lakes of Mission Grove water system shall **not provide water supply** to the proposed Deer Run Meadows Subdivision, which will receive water from the proposed Water Plant № 2, until and unless the application to amend its existing certificate of convenience and necessity is approved by the Public Utility Commission of Texas.
3. 30 TAC §290.42(f)(1)(B) requires day tanks to be provided to minimize the possibility of severely overfeeding liquid chemicals from bulk storage facilities. Day tanks will not be required if adequate process control instrumentation and procedures are employed to prevent chemical overfeed incidents. Please provide day tanks for chemical feeds or have written procedures for adequate process control instrumentation.
4. Please note, dechlorination of disinfecting water shall be in strict accordance with current American Water Works Association (AWWA) Standard C655-09 or most recent.

5. A copy of the recorded deed and map demonstrating that the public water system owns all of or a portion of real property within 150 feet of the well shall be obtained, in accordance with 30 TAC §290.41(c)(1)(F)(iv)(I)-(II). For any real property within 150 feet of the well not owned by the public water system, a sanitary control easement or sanitary control easements as filed at the county courthouse (bearing the county clerk's stamp) shall be obtained, as described in 30 TAC §290.41(c)(1)(F). Please provide a copy of the recorded deed and a map showing all land owned by the public water system within 150 feet of the well and for any land within 150 feet of the well not owned by the public water system provide copies of all recorded sanitary control easements with the well completion materials.
6. Three corrosive indices (Langelier Saturation Index, Ryznar Stability Index and Aggressive Index) will be used to calculate corrosivity of the water from new source(s). Corrosive or aggressive water could result in aesthetic problems, increased levels of toxic metals, and deterioration of household plumbing and fixtures. If the water appears to be corrosive, the system will be required to conduct a study and submit an engineering report that addresses corrosivity issues or may choose to install corrosion control treatment before use may be granted. All changes in treatment require submittal of plans and specifications for approval by TCEQ.

Texas Water Code Section 36.0015 allows for the creation of groundwater conservation districts (GCDs) as the preferred method of groundwater management. GCDs manage groundwater in many counties and are authorized to regulate production and spacing of water wells. **Public water systems drilling wells within an existing GCD are responsible for meeting the GCD's requirements.** The authorization provided in this letter does not affect GCD authority to manage groundwater or issue permits.

The design engineer or water system representative is required to notify the Plan Review Team in writing by fax at (512) 239-6972 or by emailing jonathan.pi@tceq.texas.gov and cc: vera.poe@tceq.texas.gov at least 48 hours before the well casing pressure cementing begins. If pressure cementing is to begin on Monday, then they must give notification on the preceding Thursday. If pressure cementing is to begin on Tuesday, then they must give notification on the preceding Friday.

The TCEQ does not approve this well for use as a public water supply at this time. We have enclosed a copy of the "Public Well Completion Data Checklist for Interim Approval (Step 2)". We provide this checklist to help you in obtaining approval to use this well.

The submittal consisted of 16 sheets of engineering drawings, technical specifications and an engineering report. The proposed project consists of:

- One (1) public water supply well drilled to 490 feet with 420 linear feet (lf) of 8.625-inch or 10.75-inch outside diameter (o.d.) schedule 40 steel casing and pressure-cemented 385 lf with 5 lf of bentonite plug;
- 60 lf of 8.625-inch or 10.75-inch o.d. stainless steel screen, 10 lf of 8.625-inch or 10.75-inch o.d. blank steel liner, with no underream and 100 lf of gravel pack;
- The well is rated for 365 gallons per minute (gpm) yield with a 40 horsepower submersible pump set at 190 feet deep. The design capacity of the pump is 365 gpm at 250 feet total dynamic head for based or alternate bid;

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- One (1) 212,361 gallon AWWA Standard D103 factory coated bolted steel ground storage tank;
- One (1) 5,072 gallon American Society of Mechanical Engineers Section VIII Division 1 welded steel hydropneumatic tank;
- Four (4) 375 gpm service pumps with 25 horsepower at 150 feet total dynamic head each;
- Sodium hypochlorite disinfection equipment consisting of two (2) positive displacement, peristaltic metering pumps capable of delivering 52.5 gallons per day each, two (2) 75 gallon high density polyethylene (HDPE) chemical tank with two (2) 100 gallon HDPE secondary containments;
- Intruder-resistant fence and all-weather access road; and
- All necessary yard pipes, valves and appurtenances.

This approval is for the construction of the above listed items only. Any wastewater components contained in this design were not considered.

The Lakes of Mission Grove public water system provides water treatment.

The project is located nearby the northwest corner of the intersection of Farm to Market (F.M.) Road 723 and F.M. Road 359, in Fort Bend County, Texas.

An appointed engineer must notify the TCEQ's Region 12 Office in Houston at (713) 767-3500 when construction will start. Please keep in mind that upon completion of the water works project, the engineer or owner will notify the commission's Water Supply Division, in writing, as to its completion and attest to the fact that the completed work is substantially in accordance with the plans and change orders on file with the commission as required in 30 TAC §290.39(h)(3).

Please refer to the Plan Review Team's Log No P-03132018-098 in all correspondence for this project.

Please complete a copy of the most current Public Water System Plan Review Submittal form for any future submittals to TCEQ. Every blank on the form must be completed to minimize any delays in the review of your project. The document is available on TCEQ's website at the address shown below. You can also download the most current plan submittal checklists and forms from the same address.

<https://www.tceq.texas.gov/drinkingwater/udpubs.html>

For future reference, you can review part of the Plan Review Team's database to see if we have received your project. This is available on TCEQ's website at the following address:

<https://www.tceq.texas.gov/drinkingwater/planrev.html/#status>

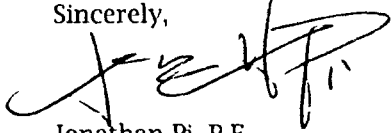
You can download the latest revision of 30 TAC Chapter 290 - Rules and Regulations for Public Water Systems from this site.

Mr. D. Ray Young, P.E.
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If you have any questions concerning this letter or need further assistance, please contact Mr. Jonathan Pi, P.E. at (512) 239-6968 or by email at jonathan.pi@tceq.texas.gov or by correspondence at the following address:

Plan Review Team, MC-159
Texas Commission on Environmental Quality
P.O. Box 13087
Austin, Texas 78711-3087

Sincerely,



Jonathan Pi, P.E.
Plan Review Team
Plan and Technical Review Section
Water Supply Division
Texas Commission on Environmental Quality



Vera Poe, P.E., Team Leader
Plan Review Team
Plan and Technical Review Section
Water Supply Division
Texas Commission on Environmental Quality

VP/JPI/db

Enclosure: "Public Well Completion Data Checklist for Interim Approval (Step 2)"

cc: Lakes of Mission Grove/Aqua Texas, Inc., Attn: Mr. Scot Foltz, 1106 Clayton Lane, Suite 400W, Austin, TX 78723-2476

Public Well Completion Data Checklist For Interim Approval (Step 2)

Texas Commission on Environmental Quality
Water Supply Division
Plan Review Team MC-159
P.O. Box 13087, Austin, Texas 78711-3087

Public Water System I.D. No. _____
TCEQ Log No. P- _____

The following list is a brief outline of the "Rules for Public Water Systems", 30 TAC Chapter 290 regarding proposed Water Supply Well Completion. Failure to submit the following items may delay project approval. Copies of the rules may be obtained from **Texas Register, 1019 Brazos St, Austin, TX, 78701-2413, Phone: (512) 463-5561** or downloaded from the website:

<http://www.tceq.texas.gov/rules/indxpathdf.html>

Any well proposed as a source of water for a public water supply **must have plans approved for construction** by TCEQ. Please include the well construction approval letter with your submittal of well completion data listed below must be submitted for TCEQ evaluation. Based on this submitted data, interim approval may be given for use of the well.

1. ☐ Site map(s) at appropriate scales showing the following: [§290.41(c)(3)(A)]
 - ☐ (i) Final location of the well with coordinates;
 - ☐ (ii) Named roadways;
 - ☐ (iii) All property boundaries within 150 feet of the final well location and the property owners' names;
 - ☐ (iv) Concentric circles with the final well location as the center point with radii of 10 foot, 50 foot, 150 foot, and ¼ mile;
 - ☐ (v) Any site improvements and existing buildings;
 - ☐ (vi) Any existing or potential pollution hazards; and
 - ☐ (vii) Map must be scalable with a north arrow.
2. ☐ A copy of the recorded deed of the property on which the well is located showing the Public Water System (PWS) as the landowner, and/or any of the following:
[§290.41(c)(1)(F)(iv)]
 - ☐ (i) Sanitary control easements (filed at the county courthouse and bearing the county clerk's stamp) covering all land within 150 feet of the well not owned by the PWS (for a sample easement see TCEQ Form 20698);
 - ☐ (ii) For a political subdivision, a copy of an ordinance or land use restriction adopted and enforced by the political subdivision which provides an equivalent or higher level of sanitary protection to the well as a sanitary control easement; and/or
 - ☐ (iii) A copy of a letter granting an exception to the sanitary control easement rule issued by TCEQ's Technical Review and Oversight Team.
3. ☐ Construction data on the completed well: [§290.41(c)(3)(A)]
 - ☐ (i) Final installed pump data including capacity in gallons per minute (gpm), total dynamic head (tdh) in feet, motor horsepower, and setting depth;
 - ☐ (ii) Bore hole diameter(s) (must be 3" larger than casing OD) and total well depth;
 - ☐ (iii) Casing size, length, and material (e.g. 200 lf of 12" PVC ASTM F480 SDR-17);
 - ☐ (iv) Length and material of any screens, blanks, and/or gravel packs utilized;

- ☐ (v) Cementing depth and pressure method (one of the methods in latest revision of AWWA Standard A-100, Appendix C, excluding the dump bailer and tremie methods);
 - ☐ (vi) Driller's geologic log of strata penetrated during the drilling of the well;
 - ☐ (vii) Cementing certificate; and
 - ☐ (viii) Copy of the official State of Texas Well Report (some of the preceding data is included on the Well Report).
4. ☐ A U.S. Geological Survey 7.5-minute topographic quadrangle map (include quadrangle name and number) or a legible copy showing the location of the completed well; [§290.41(c)(3)(A)]
5. ☐ Record of a 36-hour continuous pump test on the well showing stable production at the well's rated capacity. Include the following: [§290.41(c)(3)(G)]
- ☐ (i) Test pump capacity in gpm, tdh in feet, and horsepower of the pump motor;
 - ☐ (ii) Test pump setting depth;
 - ☐ (iii) Static water level (in feet); and
 - ☐ (iv) Draw down (in feet).
6. ☐ Three bacteriological analysis reports for samples collected on three successive days showing raw well water to be free of coliform organisms. Reports must be for samples of raw (untreated) water from the disinfected well and submitted to a laboratory accredited by TCEQ, accredited to perform these test; and [§290.41(c)(3)(F)(i)]
7. ☐ Chemical analysis reports for well water samples showing the water to be of acceptable quality for the most problematic contaminants listed below. Reports must come from a laboratory accredited by TCEQ; accredited to perform these test. Maximum contaminant level (MCL) and secondary constituent level (SCL) units are in mg/l (except arsenic). [§290.41(c)(3)(G) and §290.104 and §290.105]

| MCL | PRIMARY | SCL | SECONDARY | SCL | SECONDARY | SCL | SECONDARY |
|-----------|----------|------|-----------|-------|------------------------|-------|-----------|
| 10 (as N) | Nitrate | 0.2 | Aluminum | 5.0 | Zinc | 300 | Sulfate |
| 1 (as N) | Nitrite | 1.0 | Copper | 1,000 | Total Dissolved Solids | 300 | Chloride |
| 10 µg/l | Arsenic | 0.3 | Iron | 2.0 | Fluoride | ≥ 7.0 | pH |
| 4.0 | Fluoride | 0.05 | Manganese | N/A | Lead | | |

| Corrosive Water Parameters | |
|---------------------------------|-------|
| Parameter | Units |
| Alkalinity as CaCO ₃ | mg/l |
| Calcium as CaCO ₃ | mg/l |
| Sodium | mg/l |

All systems located in a high-risk county (see page 3) shall submit radiological analysis reports for water samples showing the water to be of acceptable quality for the contaminants listed below. Reports must come from a TCEQ accredited laboratory for interim use of the well.

| MCL | CONTAMINANT |
|----------|----------------|
| 15 pCi/L | Gross alpha |
| 5 pCi/L | Radium-226/228 |
| 50 pCi/L | Beta particle |
| 30 µg/L | Uranium |

WHERE: pCi/L = pico curies per liter, µg/L = micrograms per liter

Please be aware when you review your radiological data that if the report has gross alpha over 15 pCi/L and individual uranium isotopes are not reported, you will have to resample or reanalyze and resubmit radionuclide results. If you see gross alpha plus radium-228 over 5 pCi/L, and don't have radium-226, you will have to resample or reanalyze and resubmit complete results.

LIST OF COUNTIES WHERE RADIONUCLIDE TESTING IS REQUIRED

Please be aware that we have added the requirement for analysis for **radionuclides** for high-risk counties. For elevated levels of any contaminants found in a test well, treatment or blending may be required.

| COUNTY | STATE CODE # |
|-----------|--------------|
| Atascosa | 007 |
| Bandera | 010 |
| Bexar | 015 |
| Bosque | 018 |
| Brazoria | 020 |
| Brewster | 022 |
| Burnet | 027 |
| Concho | 048 |
| Culberson | 055 |
| Dallam | 056 |
| Dawson | 058 |
| Erath | 072 |
| Fort Bend | 079 |
| Frio | 082 |
| Garza | 085 |
| Gillespie | 086 |
| Gray | 090 |
| Grayson | 091 |
| Harris | 101 |

| COUNTY | STATE CODE # |
|------------|--------------|
| Hudspeth | 115 |
| Irion | 118 |
| Jeff Davis | 122 |
| Jim Wells | 125 |
| Kendall | 130 |
| Kent | 132 |
| Kerr | 133 |
| Kleberg | 137 |
| Liberty | 146 |
| Llano | 150 |
| Lubbock | 152 |
| McCulloch | 154 |
| Mason | 160 |
| Matagorda | 161 |
| Medina | 163 |
| Midland | 165 |
| Montgomery | 170 |
| Moore | 171 |

| COUNTY | STATE CODE # |
|-------------|--------------|
| Parker | 184 |
| Pecos | 186 |
| Polk | 187 |
| Presidio | 189 |
| Refugio | 196 |
| San Jacinto | 204 |
| San Saba | 206 |
| Tarrant | 220 |
| Travis | 227 |
| Tyler | 229 |
| Upton | 231 |
| Val Verde | 233 |
| Victoria | 235 |
| Walker | 236 |
| Washington | 239 |
| Wichita | 243 |
| Williamson | 246 |
| Zavala | 254 |

Bryan W. Shaw, Ph.D., P.E., *Chairman*
Toby Baker, *Commissioner*
Jon Niermann, *Commissioner*
Stephanie Bergeron Perdue, *Interim Executive Director*



PWS_0790423_CO_20180523_Plan Ltr

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

May 23, 2018

Mr. Bao Linh Tran, P.E.
Costello, Inc.
9990 Richmond Avenue, Suite 450, North Building
Houston, Texas 77042

Re: Lakes of Mission Grove - Public Water System ID No. 0790423
Proposed Distribution System - Deer Run Meadows Section 1
Engineer Contact Telephone: (713) 783-7788
Plan Review Log No. P-03262018-205
Fort Bend County, Texas

CN600789705; RN104424429

Dear Mr. Tran:

On March 26, 2018, the Texas Commission on Environmental Quality (TCEQ) received planning material with your letter dated March 21, 2018 for the proposed distribution system - Deer Run Meadows Section 1. Based on our review of the information submitted, the project generally meets the minimum requirements of Title 30 Texas Administrative Code (TAC) Chapter 290 - Rules and Regulations for Public Water Systems and is **conditionally approved for construction** if the project plans and specifications meet the following requirements:

1. The hydrostatic leakage rate for polyvinyl chloride (PVC) pipe and appurtenances shall not exceed the amount allowed or recommended by formulas in American Water Works Association (AWWA) Standards C-605 as required in Title 30 TAC Section 290.44(a)(5). Please ensure that the formula for this calculation is correct and that the most current formula is in use;

$$Q = \frac{LD\sqrt{P}}{148,000}$$

Where:

- Q is the quantity of makeup water, in gallons per hour.
- L is the length of pipe section being tested, in feet.
- D is the nominal diameter of the pipe, in inches.
- P is the average test pressure during the hydrostatic test, in pounds per square inch (psi).

2. The use of pipes and pipe fittings that contain more than 0.25 % lead or solders and flux that contains more than 0.2 % lead is prohibited in the circumstances stated in 290.44(b)(1)(A) and 290.44(b)(1)(B) as required in 30 TAC Section 290.44(b)(1).
3. Separation distances and encasement requirements for installation of potable water distribution lines and wastewater collection lines, wastewater force mains and other conveyances and appurtenances must conform to 30 TAC Section 290.44(e).

The submittal consisted of 27 sheets of engineering drawings and technical specifications. The approved project consists of:

- 3,967 linear feet of 8-inch, AWWA standard C-900, DR18 PVC waterline;
- 121 linear feet of 12-inch, AWWA standard C-900, DR18 PVC waterline; and
- Various valves, fittings, and appurtenances.

This approval is for the construction of the above listed items only. Any wastewater components contained in this design were not considered.

The Lakes of Mission Grove public water supply system provides water treatment.

The project is located northwest corner of the intersection between FM 359 and FM 723 in Fort Bend County, Texas.

An appointed engineer must notify the TCEQ's Region 12 Office in Houston at (713) 767-3500 when construction will start. Please keep in mind that upon completion of the water works project, the engineer or owner will notify the commission's Water Supply Division, in writing, as to its completion and attest to the fact that the completed work is substantially in accordance with the plans and change orders on file with the commission as required in 30 TAC §290.39(h)(3).

Please refer to the Plan Review Team's Log No. P-03262018-205 in all correspondence for this project.

Please complete a copy of the most current Public Water System Plan Review Submittal form for any future submittals to TCEQ. Every blank on the form must be completed to minimize any delays in the review of your project. The document is available on TCEQ's website at the address shown below. You can also download the most current plan submittal checklists and forms from the same address.

<https://www.tceq.texas.gov/drinkingwater/udpubs.html>

For future reference, you can review part of the Plan Review Team's database to see if we have received your project. This is available on TCEQ's website at the following address:

<https://www.tceq.texas.gov/drinkingwater/planrev.html/#status>

You can download the latest revision of 30 TAC Chapter 290 - Rules and Regulations for Public Water Systems from this site.

Mr. Bao Linh Tran, P.E.
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If you have any questions concerning this letter or need further assistance, please contact Raj Khadka at 512-239-1188 or by email at Raj.Khadka@Tceq.Texas.Gov. If you are unable to contact Mr. Khadka, please contact another member of the Plan Review Team at 512-239-4691 or by correspondence at the following address:

Plan Review Team, MC-159
Texas Commission on Environmental Quality
P.O. Box 13087
Austin, Texas 78711-3087

Sincerely,

A handwritten signature in black ink, appearing to read "Vera Poe".

Vera Poe, P.E., Team Leader
Plan Review Team
Plan and Technical Review Section
Water Supply Division
Texas Commission on Environmental Quality

VP/RK/db

cc: Lakes of Mission Grove - Attn: Water Utilities Official, 1106 Clayton Lane, Suite 400W,
Austin, Texas 78723-2476

Mr. Bao Linh Tran, P.E.
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bcc: TCEQ Central Records PWS File 0790423 (Lakes of Mission Grove/ P-03262018-205)
TCEQ Region No. 12 Office - Houston