Associated Check List

Checklist Name	Unit Name
PWS EMERGENCY POWER INITIATIVE	EPI 1110095
PWS INVESTIGATION - EQUIPMENT	EMS 1110095
MONITORING AND SAMPLING revised 06/2013	
PWS STANDARD FIELD	CCI 1110095

Investigation Comments:

INTRODUCTION

On September 9, 2015, Ms. Ariel Yeh, Texas Commission on Environmental Quality (TCEQ) Environmental Investigator, conducted a Comprehensive Compliance Investigation (CCI) at Laguna Tres Subdivision (Laguna Tres). Texas Rain is the contracted water operating company. The purpose of the investigation was to determine compliance with applicable public water system rules and regulations.

The investigator contacted Mr. Michael Halder, Texas Rain Operator, on August 27, 2015, to schedule the investigation. In addition, a records request form, which listed the documents to be reviewed during the investigation, was sent to the water system.

On September 9, 2015, the investigator, Ms. Merissa Green and Ms. Daniela Hill, both TCEQ Environmental Investigators, arrived at the Texas Rain Office and met with Mr. Halder to begin the investigation. The Texas Water Development Board Financial Assistance Program form was provided to the water system and the Area of Concern (AOC) policy was explained. An exit interview was conducted with Mr. Halder on the day of the investigation and a TCEQ Exit Interview Form was signed by Mr. Halder.

A Notice of Violation (NOV) with additional issues was sent to the water system as a result of the investigation.

GENERAL FACILITY AND PROCESS INFORMATION

Laguna Tres is a community water system that serves a total of 233 connections and an approximate population of 699 individuals based on three persons per connection. It consists of seven active groundwater wells that supply one pump station and one pressure plane. The water system also provides treated water to Laguna Vista Subdivision (PWS ID 1110095) during emergencies.

The Pump Station is located at 116 Granada Calle, Granbury, Hood County. Water pumped from the wells is disinfected with gas chlorine prior to entering the ground storage tank. Two service pumps pump water from storage to the distribution system. One pressure tank provides the necessary pressure maintenance.

See the investigation attachments for a copy of the Water System Diagram, Water System Summary Sheet, and PWS Database Printout for further information.

Exception/Alternative Capacity Requirement

N/A

BACKGROUND

The most recent Comprehensive Compliance Investigation (CCI), Investigation Number 1022814, was conducted on August 2, 2012. Several alleged violations were cited and a Notice of Violation (NOV) was issued to Laguna Vista on September 17, 2012, as a result of the investigation.

A file record review (FRR) investigation, Investigation Number 1075382, was conducted on March 18, 2013, in response to compliance documentation submitted by the water system. The submitted documentation was not sufficient to resolve all the outstanding violations, and therefore, a Notice of Enforcement (NOE) was issued to Laguna Vista on April 4, 2013. The effective date of the Administrative Order (TCEQ Docket Number 2013-1658-PWS-E) was May 8, 2014.

A Focused Investigation, Investigation Number 1122201, was conducted on September 13, 2013, to determine the

compliance status of the water system focusing on the water distribution system. A NOV was issued to the water system on October 31, 2013, as a result of the investigation. The violation was resolved during a FRR, Investigation Number 1159599, conducted on April 7, 2014.

Several complaints have been lodged against Laguna Vista within the past five years. Incident Number 157509 was received on July 5, 2011, regarding low pressure and/or an outage in water service. A focused investigation, Investigation Number 944200, was conducted in response to the complaint and resulted in an NOE being issued to the water system. The effective date of the Administrative Order (TCEQ Docket Number 2011-1845-PWS-E) was April 8, 2012. In a letter dated April 11, 2012, a Notice of Compliance with Agreed Order was sent to the water system.

Incident Number 181686 was received on April 16, 2013, regarding high chlorine levels in the water. The public water system responded to the complaint and it did not appear that the running annual average maximum residual disinfectant level (MRDL) was exceeded. Therefore, no violations were noted as a result of the complaint.

Incident Number 186134 was received on July 29, 2013, regarding a boil water notice and concerns about the water service. A sec
Incident Number 181686 was received on April 16, 2013, regarding high chlorine levels in the water. The public water system responded to the complaint and it did not appear that the running annual average maximum residual disinfectant level (MRDL) was exceeded. Therefore, no violations were noted as a result of the complaint.

Incident Number 186134 was received on July 29, 2013, regarding a boil water notice and concerns about the water service. A second complaint of similar nature was received on August 7, 2013, and associated to the same incident. A focused investigation, Investigation Number 1114684, was conducted in response to the complaints on August 8, 2013. An Additional Issue was noted as a result of the investigation.

Incident Number 186707, associated with a total of 27 complaints, was received during August and September 2013. The complaints were regarding the ongoing status of the boil water notice and problems with the water system operating company. A focused investigation, Investigation Number 1116383, was conducted in response to the complaints on August 30, 2013. Two violations and an Additional Issue were noted as a result of the investigation.

Incident Number 193201 was received on January 13, 2014, regarding a foul odor in the water. A complaint investigation, Investigation Number 1146783, was conducted in response to the complaint on January 14, 2014. No violations were noted.

Incident Number 207444 was received on December 10, 2014, regarding water quality. A complaint investigation, Investigation Number 1222167, was conducted in response to the complaint on January 6, 2015. No violations were noted.

Incident Number 217515 was received from July 20 to August 24, 2015, regarding low pressure and/or an outage in water service. A complaint/Reconnaissance investigation, Investigation Number 1274453, was conducted in response to the complaints and resulted in an NOE being issued to the water system on August 26, 2015. The effective date of the Administrative Order is pending.

ADDITIONAL INFORMATION

Record Review

During the investigation, the following records were reviewed: well drillers logs for Well #2 and Well #3, plant operations manual, drought contingency plan, monitoring plan, distribution map, customer service agreement, customer complaints records, NSF certifications, monthly operating reports, flushing records, and bacteriological sampling records for the previous twelve months.

The following records were not available for review during the investigation: well drillers log for Well #1, the annual tank inspection forms and the well meter calibration records. Mr. Halder stated that they had the tank inspection forms and the well meters calibration records and would be submitted later. These items were noted as a records request. Mr. Halder also stated that they had an updated drought contingency plan, which would also be submitted later. During the investigation, a copy of the monitoring plan and plant operations manual

were available for review; however, they were dated 2009 and did not contain the most recent water system information.

On September 29, 2015, photographs were received at the TCEQ Regional Office. The photographs verified that the vegetation was trimmed and the wellhead was sealed; therefore, the violations were resolved. Documentation for the intruder resistance fence and the SCBA was not received; therefore, the violations remained outstanding.

For information on the licensed operator employed by the water system, see the Certification and Employment Report.

Capacity

During the investigation, the water system capacities were evaluated. The following production capacities were measured for Well #3 and the emergency interconnection:

- Well #3 production capacity without the interconnection: 54 gallons per minute (gpm)
- Well #3 production capacity with the interconnection: 32 gpm
- Interconnection capacity with Well #3: 72 gpm
- Interconnection capacity without the booster pump: 60 gpm

According to 30 Texas Administrative Code (TAC) 290.45(b)(1)(C)(i), the system must have a total well capacity of 0.6 gpm per connection. Based on the number of connections, the water system is required to provide a total production capacity of 128.4 gpm. During the investigation, the total production provided by the wells was 90 gpm. The water supply from the emergency interconnection with Laguna Tres cannot be counted toward the production capacity. This is a 30% deficiency. The same violation was noted during the previous complaint investigation (Investigation Number 1274453) conducted from July 21 to August 17, 2015, and was under enforcement action. This will be noted as an Additional Issue.

According to 30 TAC 290.45(b)(1)(C)(ii), the system is required to provide a total storage capacity of 200 gallons per connection, and based on the number of connections, the water system must provide at least 0.0424 million gallon (MG) of storage. The water system provided 0.045 MG during the investigation. The water system was operating at approximately 94% of its minimum required production capacity. This will be noted as an Additional Issue.

Specific facility information and capacity calculations such as tank volumes pump capacities, etc. can be found in the Public Water System Database Sheet attached to this CCI report.

Field Monitoring Activities

The disinfectant residual and distribution pressure were measured at 722 Aqua Vista with a residual of 0.52 milligrams per liter (mg/L) free chlorine and a pressure of 84 pounds per square inch (psi).

Attachments

1) Water System Diagram, Water System Summary Sheet, and PWS Database Printout
2) Certification and Employment Report
3) Exit Interview Form
4) Water System Correspondence

NOV Date 10/29/2015 Method WRITTEN

OUTSTANDING ALLEGED VIOLATION(S)
ASSOCIATED TO A NOTICE OF VIOLATION

Track Number: 585878 Compliance Due Date: 11/23/2015

Violation Start Date: Unknown

30 TAC Chapter 290.42(e)(4)(A)

Alleged Violation:

Investigation: 1282846 Comment Date: 10/09/2015
Failure to have a full-face self-contained breathing apparatus or supplied air respirator readily accessible outside the chlorinator room.

30 TAC 290.42(e)(4)(A) states that when chlorine gas is used, a full-face self-contained breathing apparatus or supplied air respirator that meets Occupational Safety and Health Administration (OSHA) standards for construction and operation, and a small bottle of fresh ammonia solution (or approved equal) for testing for chlorine leakage shall be readily accessible outside the chlorinator room and immediately available to the operator in the event of an emergency.

During the investigation, it was noted that a full-face self-contained breathing apparatus or supplied air respirator is not readily accessible outside the gas chlorinator room.

Recommended Corrective Action: Submit documentation to the regional office verifying that a SCBA or supplied air respirator is readily accessible outside the chlorinator room.

Track Number: 585879 **Compliance Due Date: 11/23/2015**
Violation Start Date: Unknown

30 TAC Chapter 290.41(c)(3)(O)

Alleged Violation:

Investigation: 1282846 Comment Date: 10/09/2015
Failure to maintain an intruder-resistant fence or locked building around Well #2 (G1110095B).

30 TAC 290.41(c)(3)(O) states that all completed well units shall be protected by intruder-resistant fences, the gates of which are provided with locks or shall be enclosed in locked, ventilated well houses to exclude possible contamination or damage to the facilities by trespassers. The gates or well house shall be locked during periods of darkness and when the plant is unattended.

During the investigation, an intruder-resistant fence was observed around Well #2; however, the fence was damaged by a recent storm and could not properly secured the well.

Recommended Corrective Action: Submit documentation verifying that Well #2 is secured by an intruder-resistant fence or a locked building.

ALLEGED VIOLATION(S) NOTED AND RESOLVED
ASSOCIATED TO A NOTICE OF VIOLATION

Track Number: 585875 **Resolution Status Date: 10/9/2015**
Violation Start Date: Unknown **Violation End Date:** 9/29/2015

30 TAC Chapter 290.46(n)

Alleged Violation:

Investigation: 1282846 Comment Date: 10/09/2015
Failure to maintain a copy of the well driller log for Well #1 (G1110095A).

30 TAC 290.46(n) states that copies of well completion data such as well material setting data, geological log, sealing information (pressure cementing and surface protection), disinfection information, microbiological sample results, and a chemical analysis report of a representative sample of water from the well shall be kept on file for as long as the well remains in service.

During the investigation, a copy of the well driller log for Well #1 was not available for review.

Recommended Corrective Action: Submit a copy of the well driller log for Well #1 to the regional office.

Resolution: On September 29, 2015, a copy of the well driller log for Well #1 was received at the TCEQ D/FW Regional Office.

Track Number: 585876 **Resolution Status Date:** 10/9/2015

Violation Start Date: Unknown **Violation End Date:** 9/29/2015

30 TAC Chapter 290.46(m)

Alleged Violation:

Investigation: 1282846 Comment Date: 10/09/2015

Failure to utilize good maintenance and housekeeping practices to ensure the public water system are in good working condition and/or properly upkeep the general appearance of the system's facilities equipment.

30 TAC 290.46(m) states that good maintenance and housekeeping practices should be utilized to ensure the public water system are in good working condition and/or properly upkeep the general appearance of the system's facilities equipment. The maintenance and housekeeping practices used by a public water system shall ensure the good working condition and general appearance of the system's facilities and equipment. The grounds and facilities shall be maintained in a manner so as to minimize the possibility of the harboring of rodents, insects, and other disease vectors, and in such a way as to prevent other conditions that might cause the contamination of the water.

During the investigation, overgrowing vegetation was observed at Well #1 site and at the pump station.

Recommended Corrective Action: Submit documentation to the regional office verifying that the vegetation at Well #1 site and at the pump station was trimmed.

Resolution: On September 29, 2015, photographs were received at the TCEQ D/FW Regional Office. The photographs verified that the vegetation was trimmed.

Track Number: 585877 **Resolution Status Date:** 10/9/2015

Violation Start Date: Unknown **Violation End Date:** 9/29/2015

30 TAC Chapter 290.41(c)(3)(K)

Alleged Violation:

Investigation: 1282846 Comment Date: 10/09/2015

Failure to seal the wellhead for Well #2 (G1110095B).

290.41(c)(3)(K) states that wellheads and pump bases shall be sealed by a gasket or sealing compound and properly vented to prevent the possibility of contaminating the well water. A well casing vent shall be provided with an opening that is covered with 16-mesh or finer corrosion-resistant screen, facing downward, elevated and located so as to minimize the drawing of contaminants into the well. Wellheads and well vents shall be at least two feet above the highest known watermark or 100-year flood elevation, if available, or adequately protected

from possible flood damage by levees.

During the investigation, it was noted that the wellhead for Well #2 was not properly sealed.

Recommended Corrective Action: Submit documentation to the regional office verifying that the wellhead for Well #2 is properly sealed.

Resolution: On September 29, 2015, photographs were received at the TCEQ D/FW Regional office. The photographs verified that the wellhead was properly sealed.

Additional Issues

Description Item 6

Additional Comments

During the comprehansive compliance investigation on September 9, 2015, it was noted that the water system was operating at approximately 94% of its minimum required total storage capacity. A retail public utility that possesses a certificate of public convenience and necessity that has reached 85% of its capacity as compared to the most restrictive criteria of the commission's minimum capacity requirements in 30 TAC 291.93(3) shall submit to the executive director a planning report that clearly explains how the retail public utility will provide the expected service demands to the remaining areas within the boundaries of its certified area. Please submit an adequate planning report to the TCEQ D/FW Region Office within 90 days.

Description Item 7

Additional Comments

During the comprehensive compliance investigation on September 9, 2015, it was noted that the water system could not provide a total well capacity of 0.6 gpm per connection. Based on the number of connections, the water system is required to provide 128.4 gpm of water to the customer. The water system was providing 90 gpm during the investigation. This is a 30% deficiency. However, the same violation was noted and referred to enforcement during a complaint investigation (Investigation Number 127453) conducted from July 21 to August 17, 2015. The water system shall work with the Enforcement Division to achieve compliance.

Signed _____ Date 10/19/15
Environmental Investigator

Signed _____ Date 10/20/15
Supervisor

Attachments: (in order of final report submittal)

___Enforcement Action Request (EAR)
X Letter to Facility (specify type) : NOV
Investigation Report
___Sample Analysis Results
___Manifests
___Notice of Registration

___Maps, Plans, Sketches
___Photographs
4 Correspondence from the facility
X Other (specify) :
1) Datasheet
2) Certificate
3) Elf

PUBLIC WATER SYSTEM DATA

Name of System:	Laguna Vista Subdivision		
CCN Number:	11983	**PWS ID:**	1110095
Classification:	Not Applicable	**Type:**	Community
Region Number:	4		

Interconnect with Other PWS:	Yes	**Name of PWS I/C:**	Laguna Tres
Type I/C:	Emergency		

Retail Service Connections:	214	**Retail Meters:**	214
Retail Population:	642		

Wholesale Master Meters:	0	**Wholesale Service Connections:**	0
Wholesale Population:	0		

Total Well Capacity:	90 GPM 0.130 MGD
Raw Capacity:	0 GPM 0 MGD

Total Elevated Storage:	0 MG	**Total Storage Capacity:**	0.045 MG
Pressure Tank Capacity:	0.005		

Maximum Daily Usage:	n/a MGD	**Date:**	09/09/9999
Average Daily Usage:	0.053 MGD	**Time Period:**	09/01/2014to 08/31/2015
Wholesale Contract:	No	**Maximum Purchase Rate :**	
No. of Samples Required:	1	**No. of Samples Submitted:**	1
No. of Raw Samples Required:	0	**No. of Raw Samples Submitted:**	0
Non-Comm Dates of Operation:	09/09/9999 to 09/09/9999		

WATER STORAGE TANKS

Type	Capacity	Material	Location
HD	0.005 MG	ST	Water Plant - 402 Aqua Vista Drive
GR	0.045 MG	ST	Water Plant - 402 Aqua Vista Drive

WATER SOURCES

ID Num	Source Code	Owner's Des.	Location	Status	Pump Type	Tst GPM	Est. Ind GPM	Tst/Est Date
1	G1110095C	WELL #3	Bonita Drive	O	sub	54	0	09-SEP-15
1	G1110095A	WELL #1	Aqua Vista Dr.	O	sub	23	0	09-SEP-15

1	G1110095B	WELL #2	Bonita Court	O	sub	13	0	09-SEP-15

SERVICE PUMPS

Pump Number	Pump	Location
1	15 HP/ 300 GPM	Water Plant - 402 Aqua Vista Drive
2	15 HP/ 300 GPM	Water Plant - 402 Aqua Vista Drive
3	3 HP/ 60 GPM	Water Plant - 402 Aqua Vista Drive

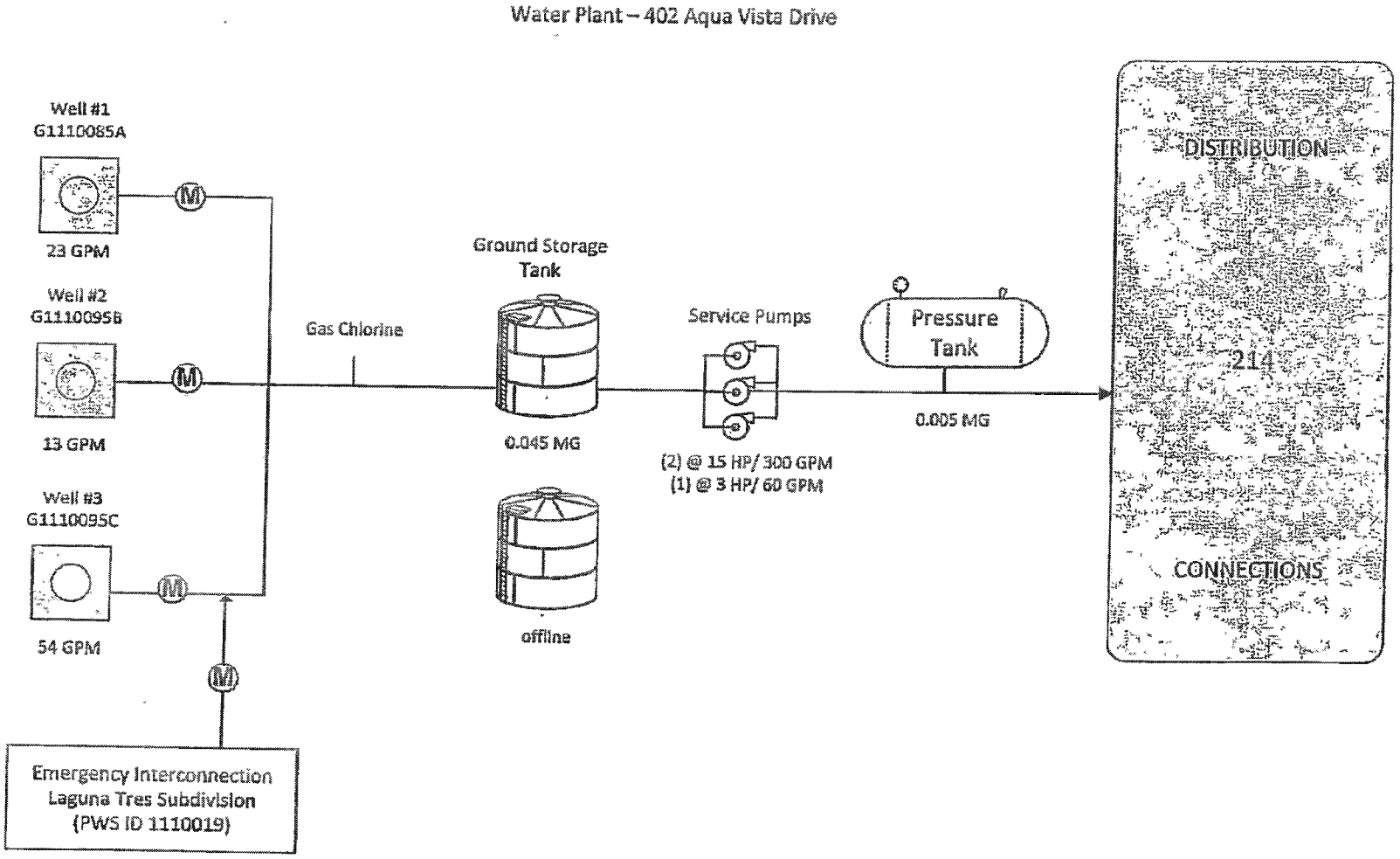
SYSTEM CAPACITIES

Pressure Plane Number: 1 **Name:** Laguna Vista Subdivion

System Capacities				Required	Provided
Well Production	0.6	GPM Conn X 214	Conn = 128.4	GPM	90
Elevated Pressure Storage	20	Gal/Conn X 214	Conn = 0.00424	MG	0.005
Ground/Total Storage	200	Gal/Conn X 214	Conn = 0.0424	MG	0.045
Service Pump Capacity	2.0	GPM/Conn X 214	Conn = 428	GPM	660
Service Pump Peaking Factor		MDD/1440 X	**	GPM	
Tested PSI: 84 Tested CL2: 0.52 Free Location: 722 Aqua Vista					

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
PUBLIC WATER SYSTEM DIAGRAM

Laguna Vista Subdivision
PWS ID# 1110095
Investigator: Ariel Yeh
Investigation Date: 09/09/2015



0000059

Texas Commission on Environmental Quality	Office of Water	Public Drinking Water Section
County Map of TX	Water System Search	Office of Compliance and Enforcement

09/04/2015
02:09:50

Texas Commission on Environmental Quality
DWW Water System Summary Sheet

PWS ID	PWS Name	Central Registry RN
TX1110095	LAGUNA VISTA SUBDIVISION	RN101276806

Organization/Customer *	Central Registry CN
LAGUNA TRES INC	CN600695985

*Regulatory mail will be addressed to this organization/person

All Water System Contacts

Type	Contact	Communication	
		Electronic Type	Value
		Phone Type	Value
AC - Administrative Contact - PRESIDENT	THOMAS, HARVEY, IKE PO BOX 2337 GRANBURY, TX 76048-7337 Laguna Tres	BUS - Business	682-498-8062
		BUS - Business	817-279-1444
		MOB - Mobile	817-219-4700
OW - Owner	~~JUSRYN COMPANY~~ INC PO BOX 2337 GRANBURY, TX 76048-7337		
PWS - Public Water System Contact - ~~OFFICE MANAGER~~ Operator	~~JACOB, DEBORAH~~ Heather Richard ~~PO BOX 2337~~ 2004 Southwest ~~GRANBURY, TX 76048-7337~~ Granbury	Electronic Type	Value
		~~Phone Type~~ Phone	~~Value~~ 817-504-1417
		~~BUS - Business~~	~~682-498-8062~~
PWS - Public Water System Contact - ~~OWNER~~ Operator	~~HIGGINS, JERRY J~~ Long, Greg 2004 SOUTHWEST PKWY GRANBURY, TX 76048-5672	Electronic Type	Value
		Phone Type	Value
		~~FAX - Facsimile~~	~~817-579-8444~~
		MOB - Mobile	~~817-408-0186~~ 817-371-3207

Operator Grade	Number
WATER OPERATIONS COMPANY	1
GROUND WATER TREATMENT OPERATOR Grade ~~B~~ C	~~1~~ 2

Water Operator Licenses		
License Holder:	HIGGINS, JERRY J JR	
CURRENT	Class: B - GROUND WATER TREATMENT OPERATOR	WG0001972
License Holder:	TEXAS RAIN ~~HOLDING~~ COMPANY INC	
CURRENT	~~Class:~~ NONE - WATER OPERATIONS COMPANY	WC0000077

Owner Type	Owner Type Options: COUNTY, DISTRICT, FEDERAL GOVERNMENT,

Investor Owned	INVESTOR OWNED, MUNICIPALITY, NATIVE AMERICAN, PRIVATE, STATE GOVERNMENT, WATER SUPPLY CORPORATION

System Type	System Type Options: COMMUNITY, TRANSIENT/NON-COMMUNITY, NON-PUBLIC, NON-TRANSIENT/NON-COMMUNITY
C - Community	

Population Type	Population Served	# of Connect	# I/C w/other PWS
Residential	621 642	207 214	8 1

Total Product (MGD)	Average Daily Consump.	Max Daily Demand (MGD)	Total Storage (MG)	Elev. Storage (MG)	Service Pump Cap.	Max.Purchase Cap. (MGD/GPM)	Pressure Tank Cap. (MG)
0.130	0.053	-	0.045	-	660 GPM	—	0.005

Activity Status	Deactivation Date	Reason
A - ACTIVE		

Last Survey Date	Surveyor	Survey Type	Region	County
08/02/2012	MERISSA LUDWIG	Sanitary Survey	ARLINGTON	HOOD
06/25/2009	IMRAN A KHAWAJA	Sanitary Survey	ARLINGTON	HOOD
03/05/2007	BRANDON COOPER	Sanitary Survey	ARLINGTON	HOOD
09/09/2015	ARIEL YEH			

(Treatment Plant)

Entry Point	EP Name/Source Summation (Activity Status)	Plant Name (Activity Status)	Plant Num	Chemical Mon Type	Chem Sample Point	Distribution Mon Type	Dist Sample Point
EP001	TRT-TAP / Ground Water(A)	PLANT - AQUA VISTA DR (A)	TP7907		NO		NO

Train:	Unnamed

(Treatments)

Disinfection Zone	Treatment Sequence	Objective	Process	Treatment
null	null	D	403	GASEOUS CHLORINATION, PRE

(Active Sources)

Source Number	Source Name (Activity Status)	Operational Status	Source Type	Depth	Tested GPM	Rated GPM

G1110095A	1 - 402 AQUA VISTA DR (A)	P	G	170	19 GPM 33	30 GPM

Drill Date		Source Summary				
04/02/1986		TWIN MOUNTAIN -				
GPS Latitude (decimal)	GPS Longitude (decimal)	GPS Elevation	GPS Date	Seller		
32.499872	-97.803085	0	05/11/2009	Not Purchasing		
Source Number	Source Name (Activity Status)	Operational Status	Source Type	Depth	Tested GPM	Rated GPM
G1110095C	3 - HWY 51 (A)	P	G	205	66 GPM 54	80 GPM

Drill Date		Source Summary				
04/10/1997		TWIN MOUNTAIN -				
GPS Latitude (decimal)	GPS Longitude (decimal)	GPS Elevation	GPS Date	Seller		
32.49799	-97.797578	0	05/11/2009	Not Purchasing		
Source Number	Source Name (Activity Status)	Operational Status	Source Type	Depth	Tested GPM	Rated GPM
G1110095B	2 - BONITA DR (A)	P	G	220	16 GPM 13	36 GPM

Drill Date		Source Summary		
07/27/1989		TWIN MOUNTAIN -		
GPS Latitude (decimal)	GPS Longitude (decimal)	GPS Elevation	GPS Date	Seller
32.500753	-97.798539	0	05/11/2009	Not Purchasing

(Inactive/Offline Sources)			
SourceNumber	Name	Status	Depth

Code Explanations
Monitoring Type Codes: (GW) GROUNDWATER , (GUP) GROUNDWATER UNDER THE INFLUENCE - PURCHASED , (SWP) SURFACE WATER - PURCHASED , (GU) GROUNDWATER UNDER THE INFLUENCE OF SURFACE WATER , (N) NO SOURCES , (SW) SURFACE WATER
Activity Status Codes: (A) ACTIVE , (D) DELETED/DISSOLVED , (I) INACTIVE , (P) PROPOSED ,
Operational Status Codes: (E) EMERGENCY , (I) INTERIM/PEAK (O) OTHER , (P) PERMANENT , (S) SEASONAL
Source Types: (G) GROUND WATER , (S) SURFACE WATER , (U) GROUND WATER UNDER THE INFLUENCE

- End of Report -

At the time of your query this data was the most current information available from our database, which is in real time. Every effort was made to retrieve it according to your query. Thank-you for

using DWW.

Add emergency interconnection w/ Laguna Tres Subdivision (PWS ID 1110019)

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

June 8, 2016

Mr. Phillip Barnett, P.E.
Barnett Engineering Inc
P.O. Box 2230
Weatherford, TX 76086-7230

Re: Laguna Tres Subdivision - Public Water System ID No. 1110019
As-Built Wells No. 9 and No. 10 (formerly identified as Well No. 3 and No. 4) Engineer
Contact Telephone: (817) 599-4278
Plan Review Log No. P-04052016-019
Hood County, Texas

CN: 600695985; RN: 101275451

Dear Mr. Barnett:

On April 05, 2016, the Texas Commission on Environmental Quality (TCEQ) received planning material with your letter dated October 17, 2014 for the above referenced water wells. Based on our review, we are **unable to approve** the proposed projects at this time.

Please provide additional information showing how the following requirements of the Title 30 Texas Administrative Code (TAC) Chapter 290 - Rules and Regulations for Public Water Systems will be met:

1. 30 TAC §290.39(d)(1): Plans, specifications, and related documents will not be considered unless they have been prepared under the direction of a licensed professional engineer. All engineering documents must have engineering seals, signatures, and dates affixed in accordance with the rules of the Texas Board of Professional Engineers. Please note that the Texas Board of Engineers Rules 137.33 and 137.77 have been changed to require that all engineering documents released, issued, or submitted by or for a registered engineering firm, including preliminary documents, must clearly indicate the engineering firm name and firm registration number. It is both the responsibility of the professional engineer that signs and seals a document and the firm that releases the document to verify that the firm name and number appear on the engineering work. No engineering firm number or seal was provided on the as-built drawing of the water system pipelines to facility.

2. An as-built Engineering Report for the two water well, prepared following the "Draft As-Built Plan Submittal Criteria" (attached) will be necessary to substantiate conformance with Title 30 Texas Administrative Code (TAC) Chapter 290. This report shall be prepared, signed and sealed by a licensed Texas Professional Engineer, then submitted to the TCEQ for review and comment.

3. The cementing certificate (Form w-15) shows that 20 feet of 10 ¾ inch surface casing was installed in both wells. Please revise the as-built drawing and have the licensed driller file amended State of Texas Well reports for Water Well Nos. 9, and 10 to show surface casing installed.

4. Please have the licensed driller file amended State of Texas Well Reports for Well Nos. 9, and 10 indicating that plans were not approved by TCEQ prior to construction.

5. Please have the licensed driller file amended State of Texas Well Reports for Well Nos. No. 9, and 10 to correct the owner well number.

6. The latitude and longitude list on the State of Texas Well Report (drilled by Blue Sky Water Well Drilling and Service) for well No. 9 is 87 feet west from the actual well location in google earth. The latitude and longitude list on the pump setting invoice (Associated Well Services, Inc.) appears to be in the same location as the well location in google earth. Please have the licensed driller file an amended State of Texas Well Report for Well No. 9 to correct the latitude, and the longitude.

7. The latitude and longitude list on the State of Texas Well Report (drilled by Blue Sky Water Well Drilling and Service) for well No. 10 is 1,200 feet south west from the actual well location in google earth. The latitude and longitude list on the pump setting invoice (Associated Well Services, Inc.) appears to be in the same location as the well location in google earth. Please have the licensed driller file an amended State of Texas Well Report for Well No. 10 to correct the latitude, and the longitude.

8. For each well location please include documentation in the engineering report showing that the installed pipe and related products both above ground (well head pipping, valves, fittings and related appurtenances) and underground (well collection lines) conforms to American National Standards Institute/National Sanitation Foundation (ANSI/NSF) Standard 61. Photographs of the existing pipe both above ground and below ground showing the NSF 61 mark will suffice.

9. For each well location please include documentation in the engineering report showing that any existing plastic pipe installed in the system both above ground and below ground bears the National Sanitation Foundation Seal of Approval (NSF-pw). Photographs of the National Sanitation Foundation Seal on both above ground and below ground plastic pipe will suffice.

10. All completed well units shall be protected by intruder-resistant fences, the gates of which are provided with locks or shall be enclosed in locked, ventilated well houses to exclude possible contamination or damage to the facilities by trespassers. The gates or well houses shall be locked during periods of darkness and when the plant is unattended as required in 30 Texas Administrative Code (TAC) Section 290.41(c)(3)(O). An intruder-resistant fence is defined as a fence six feet or greater in height, constructed of wood, concrete, masonry, or metal with three strands of barbed wire extending outward from the top of the fence at a 45 degree angle with the smooth side of the fence on the outside wall. In lieu of the barbed wire, the fence must be eight feet in height. The fence must be in good repair and close enough to surface grade to prevent intruder passage. **Please include documentation in the engineering report showing that the current fencing around the two wells is eight feet in height or six feet with three strands of barb wire at a 45 degree angle.**

11. The casing shall extend a minimum of 18 inches above the elevation of the finished floor of the pump room or natural ground surface and a minimum of one inch above the sealing block or pump motor foundation block when provided as required by 30 TAC §290.41(c)(3)(B). **Please include photographs with a tape measure in the engineering report showing that the well casing for both wells is in compliance with the above rule.**

12. In all cases, a concrete sealing block extending at least three feet from the well casing in all directions, with a minimum thickness of six inches and sloped to drain away at not less than 0.25 inches per foot shall be provided around the wellhead as required in 30 TAC Section 290.41(c)(3)(J). It does not appear from the photographs that the either well has a sealing block. **Please include photographs with a tape measure in the engineering report showing that the well casing for both wells is in compliance with the above rule.**

13. Please clarify if the wells are located in the 100-year flood zone and ensure that wellhead and well vents shall be at least two feet above the highest known watermark or 100-year flood elevation, if available, or adequately protected from possible flood damage by levees if the proposed well is located in the 100-year flood zone as required in 30 TAC §290.41(c)(3)(K)

14. A well casing vent shall be provided with an opening that is covered with 16-mesh or finer corrosion-resistant screen, facing downward, elevated and located so as to minimize the drawing of contaminants into the well. Wellheads and well vents shall be at least two feet above the highest known watermark or 100-year flood elevation, if available, or adequately protected from possible flood damage by levees as required in 30 TAC Section 290.41(c)(3)(K). **Please include photographs in a signed and sealed engineering report showing the 16-mesh screen.**

15. All pollution hazards, present or potential, must be identified within ¼ mile of the well including abandoned or inoperative wells and existing/potential pollution hazards in accordance with 30 TAC §290.41(c)(1)(A) thru (F). The pollution hazard report provided referenced item 8 of the draft "as built' plan submittal criteria. Please attach a copy of the language listed in item no. 8 to the pollution hazard report or address each individual item listed in 30 TAC §290.41(c)(1)(A) thru (F) in a report or letter sealed by the engineer. Please include a separate report for each well location.

16. Please have the pump test revised to include the date of the test, and the name of the company that performed the test.

17. The pump installation invoice (Associated Well Services, Inc.) and the 36 hour pump test shows the depth of the well to be 220 feet with the intake of the pump at 211 feet deep. Additionally the pump installation invoice shows that 210 linear feet of 2-inch galvanized pipe was installed. The as-built drawing and the State of Texas Well Report shows the well to be 180 feet deep. Please explain the discrepancies in the depth of the well and how the pump intake can be at 213.7 feet when the well is only 180 feet deep.

18. Please provide copies of the cementing certificate that are legible. Additionally please have the licensed driller change the well numbers to correct the well owner's new numbers.

19. Please provide sanitary control easements (filed at the county courthouse and bearing the county clerk's stamp) covering all land within 150 feet of the wells not owned by the public water system (for a sample easement see TCEQ Form 20698). The special warranty deed provided was in the name of W. Michael Thomas, and Harvey IKE Thomas and not the public water systems name.

20. On August 28, 2015 TCEQ approved As-built Well No. 8 (formerly identified as Well No. 2) for use with the condition that the State of Texas Well Report be revised and filed with the Texas Department of Licensing and Regulations to reflect the correct well number. Please provide a copy of the revised report.

21. The submittal did not include a chemical analysis. Please provide a chemical analysis reports for each water well. The water samples must show 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

22. If you are unable to show compliance with TCEQ requirements, please be advised that you may request exceptions in Exception must be requested in writing and must be substantiated by carefully documented data, including how granting the exception will not compromise the public health or result in a degradation of service or water quality. The request for an exception shall **precede** the submission of engineering plans and specifications or well completion for a proposed project for which an exception is being requested. Please submit the exception approval letter with the plans and specifications for a proposed project.

For information about the exception process, please go to the URL below:

http://www.tceq.texas.gov/drinkingwater/trot/exception

Please note that an "Exception Request Form", available at the URL listed below, must be completed for all exception submittals.

http://www.tceq.texas.gov/assets/public/permitting/watersupply/pdw/TCEQ-20659_Exception_Request_Submittal_Form.docx

If after having reviewed the information available at the webpages above, you still have questions regarding the exception process, please call (512) 239-4691 and ask to speak to a member of the Technical Review and Oversight Team (TROT) about exceptions.

The As-built well completion data consisted of the following:

- State of Texas Well Report for well No. 3 (Tracking No. 182633);
- State of Texas Well Report for well No. 4 (Tracking No. 182587);
- Well No. 9 36-hour pumping test results showing the well produces 35 gallons per minute (gpm);
- Well No. 10 36-hour pumping test results showing the well produces 18 gallons per minute (gpm);
- Three bacteriological sampling results for Well No. 9 showing no coliform contamination on August 23, 2015, August 24, 2015, and August 25, 2015 by Upper Leon River Municipal Water District;
- Three bacteriological sampling results for Well No. 10 showing no coliform contamination on August 23, 2015, August 24, 2015, and August 25, 2015 by Upper Leon River Municipal Water District;
- Two sheet of as-built engineering drawings;
- Well No. 9, One (1) existing water well drilled to 215 feet, with 20 l.f. of 10 ¾ inch surface casing, 155 lf of 6-inch polyvinyl chloride (PVC) casing cemented to a depth of 153 feet, and 60 lf of pvc screen. The intake of the 5 hp submersible pump is set at 192.7 feet;
- Well No. 10: One (1) existing water well drilled to 180 feet, with 20 l.f. of 10 ¾ inch surface casing, 140 lf of 6-inch PVC casing pressure cemented to a depth of 134, and 40 lf of pvc screen. The intake of the 5 hp submersible pump is set at 213.7 feet; and,
- Unknown type and unknown length of 4-inch PVC pipe.

Proposed water treatment will be provided by the Laguna Tres Subdivision public water supply system.

We will retain these documents for **100 calendar days** from the date of this letter. Revisions or additional information must be submitted to the TCEQ (Utilities Technical Review Team, MC-159) within that time or the entire package must be resubmitted for review.

Please refer to the Utilities Technical Review Team's Log No. P-04052016-019 in all correspondence for this project. This will help complete our review and prevent it from being considered a new project.

Please Note: In order to determine if a new source of water or a new treatment process results in corrosive or aggressive finished water that may endanger human health, we are requesting additional sampling and analysis of lead, alkalinity (as calcium carbonate), calcium (as calcium carbonate) and sodium in addition to the required chemical test results for public water system new sources. We are requiring these additional sampling results as listed in our currently revised checklists (Public Well Completion Data Checklist for Interim Use - Step 2 and Membrane Use Checklist - Step 2) which can be found on TCEQ's website at the following address:

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

Please include these additional sampling results in well completion submittals, membrane use submittals, and other treatment process submittals.

New surface water sources will need to also include lead, total dissolved solids, pH, alkalinity (as calcium carbonate), chloride, sulfate, calcium (as calcium carbonate) and sodium with the analysis required in 30 TAC Section 290.41(e)(1)(F).

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 the 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.

If you have any questions please contact Brian D. Dickey at (512)239-0963 or by email at brian.dickey@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,

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/BDD/av

cc: Laguna Tres Subdivision, Attn: Mr. Harvey Ike Thomas, P.O. Box 2337, Granbury, TX 76048-7337

bcc: TCEQ Central Records PWS File 1110019
TCEQ Region No. 4 Office Arlington

PWS_1110019_CO_20160620_Plan Ltr

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

June 20, 2016

Mr. Tracy E. Strevey, III, P.E.
Baird Hampton And Brown Inc
6300 Ridglea Place Ste 700
Fort Worth, TX 76102

Re: Laguna Tres Subdivision - Public Water System ID No. 1110019
Proposed 120,000 Gallon Ground Storage Tank
Engineer Contact Telephone: (817) 338-1277
Plan Review Log No. P-04122016-048
Hood County, Texas

CN: 600695985; RN: 101275451

Dear Mr. Strevey:

On April 12, 2016, the Texas Commission on Environmental Quality (TCEQ) received planning material with your letter dated February 22, 2016 for the proposed ground storage tank. Based on our review of the information submitted, we are **unable to approve** the proposed project at this time. Please provide additional information showing how the requirements of Title 30 Texas Administrative Code (TAC) Chapter 290 - Rules and Regulations for Public Water Systems will be met:

1. As required by Title 30 TAC §290.39(d)(1), plans, specifications, and related documents will not be considered unless they have been prepared under the direction of a licensed professional engineer. All engineering documents must have engineering seals, signatures, and dates affixed in accordance with the rules of the Texas Board of Professional Engineers". Please note that the Texas Board of Engineers Rules 137.33 and 137.77 have been changed to require that all engineering documents released, issued, or submitted by or for a registered engineering firm, including preliminary documents, must clearly indicate the engineering firm name and firm registration number. It is both the responsibility of the professional engineer that signs and seals a document and the firm that releases the document to verify that the firm name and number appear on the engineering work. No engineering firm name and number was provided on the **engineering plans for the 120,000 gallon ground storage tank**. Please make sure that the any plans submitted show all required appurtances identified on the water storage tank construction checklist. A copy of the water storage tank construction checklist is available on TCEQ's website at the address shown below.

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

2. Please complete a copy of the most current Public Water System Plan Review Submittal form. 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.

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

3. Please provide a sealed engineering report addressing the topics identified in 30 TAC §290.39(e)(1) in order to ensure that the minimum capacity requirements of 30 TAC §290.45 are met.

4. Title 30 TAC §290.39(e)(2) requires all plans and drawings submitted may be printed on any of the various papers which give distinct lines. All prints must be clear, legible and **assembled to facilitate review.** The plan sheets provided for the 120,000 gallon ground storage tank were to small and the writing was illegible.

5. Title30 TAC §290.43(c) requires water storage tanks to be covered and designed, fabricated, erected, tested, and disinfected in strict accordance with current American Water Works Association (AWWA) standards. They also shall be provided with the minimum number, size and type of roof vents, manways, drains, sample connections, access ladders, overflows, liquid level indicators, and other appurtenances as specified in the Rules. The roof of all tanks shall be designed and erected so that no water ponds at any point on the roof and, in addition, no area of the roof shall have a slope of less than 0.75 inch per foot. Please address all items listed on the water storage tank construction checklist in the signed and sealed engineering report. .

6. Any storage tank that does not meet AWWA standards must have an exception.

7. Exceptions to the above rules must be requested in writing and must be substantiated by carefully documented data. The request for an exception shall precede the submission of engineering plans and specifications for a proposed project for which an exception is being requested as required in 30 TAC Section 290.39 (l)(1). Written exception request must be submitted to the TCEQ's Technical Review and Oversight Team (TROT) at the following address:

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

   For information about the exception process, please go to the URL below:

   http://www.tceq.texas.gov/drinkingwater/trot/exception

   Please note that an "Exception Request Form" must be completed for all exception submittals.

   If after you have reviewed the information available at the webpage above you have a question regarding the exception process, please call (512) 239-4691 and ask to speak to a member of the TROT about exceptions.

The submittal consisted of 35 sheets of engineering drawings. The proposed project consists of:

- 120,000 gallon ground storage tank.

The Laguna Tres Subdivision public water supply system provides water treatment.

The project is located in Hood County, Texas.

We will retain these documents for **100 calendar days** from the date of this letter. Revisions or additional information must be submitted to the TCEQ (Plan Review Team, MC-159) within that time or the entire package must be resubmitted for review. Please refer to the Plan Review Team's Log No. **P-04122016-048** in all correspondence for this project.

Please Note: In order to determine if a new source of water or a new treatment process results in corrosive or aggressive finished water that may endanger human health, we are requesting additional sampling and analysis of lead, alkalinity (as calcium carbonate), calcium (as calcium carbonate) and sodium in addition to the required chemical test results for public water system new sources. We are requiring these additional sampling results as listed in our currently revised checklists (Public Well Completion Data Checklist for Interim Use - Step 2 and Membrane Use Checklist - Step 2) which can be found on TCEQ's website at the following address:

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

Please include these additional sampling results in well completion submittals, membrane use submittals, and other treatment process submittals.

New surface water sources will need to also include lead, total dissolved solids, pH, alkalinity (as calcium carbonate), chloride, sulfate, calcium (as calcium carbonate) and sodium with the analysis required in 30 TAC Section 290.41(e)(1)(F).

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.

If you have any questions please contact Brian D. Dickey at (512)239-0963 or by email at brian.dickey@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,

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

VP/BDD/av

cc: Laguna Tres Subdivision, Attn: Mr. Harvey Ike Thomas, P.O. Box 2337, Granbury, TX 76048-7337

bcc: TCEQ Central Records PWS File 1110019 (Laguna Tres Subdivision)
TCEQ Region No. 4 Office - Arlington
TCEQ Region No. 4 Office - Jeff.Tate@tceq.texas.gov
TCEQ PWSINV, MC-155

PWS_1110095_CO_20160622_Plan Ltr

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

June 22, 2016

Mr. Tracy E. Strevey, III, P.E.
Baird Hampton And Brown Inc
6300 Ridglea Place Ste 700
Fort Worth, TX 76102

Re: Laguna Vista Subdivision - Public Water System ID No. 1110095
Proposed Waterline and Interconnection with Laguna Tres Subdivision (PWS ID No. 1110019)
Engineer Contact Telephone: (817) 338-1277
Plan Review Log No. P-04122016-047
Hood County, Texas

CN: 600695985; RN: 101275451

Dear Mr. Strevey:

On September 11, 2013 the Texas Commission on Environmental Quality (TCEQ) authorized the emergency construction of a water line and interconnect between the Laguna Vista subdivision and the Laguna Tres Subdivision. Sealed construction drawings, specifications, a report on existing capacities of the two public water systems, and a wholesale water contract was to be provided within 30 days. On April 12, 2016, the TCEQ received your response to the notice of enforcement for public water supply file record review investigation at Laguna Vista Subdivision. Based on our review of the information submitted, we are **unable to approve** the proposed project at this time. Please provide additional information showing how the requirements of Title 30 Texas Administrative Code (TAC) Chapter 290 - Rules and Regulations for Public Water Systems will be met:

1. Please complete a copy of the most current Public Water System Plan Review Submittal form. 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.

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

2. As required by Title 30 TAC §290.39(d)(1), plans, specifications, and related documents will not be considered unless they have been prepared under the direction of a licensed professional engineer. All engineering documents must have engineering seals, signatures, and dates affixed in accordance with the rules of the Texas Board of Professional Engineers". Please note that the Texas Board of Engineers Rules 137.33 and 137.77 have been changed to require that all engineering documents released, issued, or submitted by or for a registered engineering firm, including preliminary documents, must clearly indicate the engineering firm name and firm registration number. It is both the responsibility of the professional engineer that signs and seals a document and the firm that releases the document to verify that the firm name and number appear on the engineering work. The cover letter containing the calculations did not include the firm number and was not signed and sealed. In future submittals please insure that all documents are properly signed and sealed and contain the firms ID number.

3. An as-built Engineering Report addressing all TCEQ rule citations listed on the water distribution construction checklist (attached to the September 11, 2013 TCEQ plan review letter Log No. P-09062013-025) will be necessary to substantiate conformance with Title 30 Texas Administrative Code (TAC) Chapter 290. This report shall be prepared, signed and sealed by a licensed Texas Professional Engineer, then submitted to the TCEQ for review and comment. The letter was attached to the submittal.

4. Please address the topics identified in 30 TAC §290.39(e)(1) in the engineering report to ensure that the minimum capacity requirements of 30 TAC §290.45 are met. Please insure the engineering report address the existing capacities (wells, pressure tank, ground storage tanks, and booster pumps) at each water plant. Please note Well Nos. 9, and 10 have not been approved and can not be included until they are approved. Please include in the engineering report documentation (pump test, or region investigation report) supporting all claimed pumping capacities.

5. The record drawings state that all material and construction shall conform to the NCTOG standard specifications for public water works construction and JCSUD requirements. Additionally the record drawings indicate that the project is for an emergency interconnect City of Granbury, Hood County. Please revise the record drawings to properly identify the project as an interconnect between Laguna Tres Subdivision and Laguna Vista Subdivision.

6. Please include documentation in the engineering report showing that the pipe both above ground and underground conforms to American National Standards Institute/National Sanitation Foundation (ANSI/NSF) Standard 61. Photographs of the existing pipe both above ground and below ground showing the NSF 61 mark will suffice.

7. Please include documentation in the engineering report showing that any existing plastic pipe installed in the system both above ground and below ground bears the National Sanitation Foundation Seal of Approval (NSF-pw). Photographs of the National Sanitation Foundation Seal on both above ground and below ground plastic pipe will suffice.

8. Please provide adequate cross-connection protection to prevent the unchlorinated/untreated water from the Laguna Tres raw water line from entering the Laguna Vista public water system.

9. Please include in the engineering report the type of pipe installed with total linear feet and size.

10. Sheet No. C4 shows the proposed 8-inch water line connecting onto the existing 4-inch water line along State Highway 51 at Chapparal Road (sta 46+50). However, on sheets C5 and C6 the profile view shows the proposed 8-inch waterline connecting on to a 4-inch water line at Granada Calle Street (sta 64 + 69.96). Please explain the discrepancies and revise the plans as needed.

11. If you are unable to show compliance with TCEQ requirements, please be advised that you may request exceptions in Exception must be requested in writing and must be substantiated by carefully documented data, including how granting the exception will not compromise the public health or result in a degradation of service or water quality. The request for an exception shall precede the submission of engineering plans and specifications or well completion for a proposed project for which an exception is being requested. Please submit the exception approval letter with the plans and specifications for a proposed project.

For information about the exception process, please go to the URL below:

http://www.tceq.texas.gov/drinkingwater/trot/exception

Please note that an "Exception Request Form", available at the URL listed below, must be completed for all exception submittals.

http://www.tceq.texas.gov/assets/public/permitting/watersupply/pdw/TCEQ-20659_Exception_Request_Submittal_Form.docx

If after having reviewed the information available at the webpages above, you still have questions regarding the exception process, please call (512) 239-4691 and ask to speak to a member of the Technical Review and Oversight Team (TROT) about exceptions.

The submittal consisted of 8 sheets of record engineering drawings. The proposed project consists of:

- Approximately 4,170 linear feet of 8-inch unknown type water line; and,
- Various valves, fittings, and appurtenances.

The Laguna Vista Subdivision public water supply system provides water treatment.

The project is located along State Highway 51 in Hood County, Texas.

We will retain these documents for **100 calendar days** from the date of this letter. Revisions or additional information must be submitted to the TCEQ (Plan Review Team, MC-159) within that time or the entire package must be resubmitted for review. Please refer to the Plan Review Team's Log No. **P-04122016-047** in all correspondence for this project.

Please Note: In order to determine if a new source of water or a new treatment process results in corrosive or aggressive finished water that may endanger human health, we are requesting additional sampling and analysis of lead, alkalinity (as calcium carbonate), calcium (as calcium carbonate) and sodium in addition to the required chemical test results for public water system new sources. We are requiring these additional sampling results as listed in our currently revised checklists (Public Well Completion Data Checklist for Interim Use - Step 2 and Membrane Use Checklist - Step 2) which can be found on TCEQ's website at the following address:

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

Please include these additional sampling results in well completion submittals, membrane use submittals, and other treatment process submittals.

New surface water sources will need to also include lead, total dissolved solids, pH, alkalinity (as calcium carbonate), chloride, sulfate, calcium (as calcium carbonate) and sodium with the analysis required in 30 TAC Section 290.41(e)(1)(F).

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.

If you have any questions please contact Brian D. Dickey at (512)239-0963 or by email at brian.dickey@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,

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

VP/BDD/av

cc: Laguna Tres Subdivision, Attn: Mr. Harvey Ike Thomas, P.O. Box 2337, Granbury, TX 76048-7337

bcc: TCEQ Central Records PWS File 1110095 (Laguna Vista Subdivision)
TCEQ Region No. 4 Office - Arlington
TCEQ Region No. 4 Office - Jeff.Tate@tceq.texas.gov
TCEQ PWSINV, MC-155
TCEQ Leila Terada, MC-159