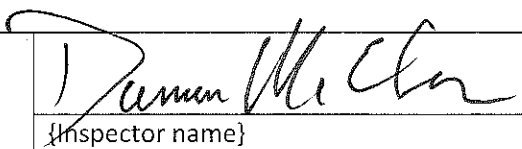
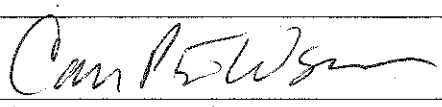


**Region 6 Compliance Assurance and Enforcement Division
INSPECTION REPORT**

Inspection Date(s):	June 28, 2018		
Media:	Drinking Water		
Regulatory Program(s)	SDWA		
Company Name:	Weston Water Supply Corporation (WSC)		
Facility Name:	Weston WSC		
Facility Physical Location:	Weston Water Supply Office, 406 Chicken Street		
(city, state, zip code)	Weston, Texas 75097		
Mailing address:	Weston Water Supply, 406 Chicken Street		
(city, state, zip code)	Weston, Texas 75097		
County:	Collin		
Facility Contact:	Shannon Burns, Office Manager	972-382-2445	
	westonwater@gmail.com		
Facility Contact:	Mark Patterson, Contract Operator	903-429-3008	
	patproserv@aol.com		
PWS ID	TX0430050		
FRS ID	110013280840		
Central Registry RN No.	RN101452472		
Personnel participating in the inspection:			
Name	Company, Title	Phone	Email
Shannon Burns	Weston Water, Office Manager	972-382-2445	westonwater@gmail.com
Mark Patterson	Patterson Professional LLC., Contract Operator	903-744-2599	patproserv@aol.com
Jessica Moore	EPA R6, Inspector	214-665-6495	moore.jessica@epa.gov
Damon McElroy	EPA R6, Inspector	214-665-7159	mcelroy.damon@epa.gov
EPA Lead Inspector Signature/Date			7/26/2018
	{Inspector name}		Date
Supervisor Signature/Date			7/26/18
	{Supervisor name}		Date

Section I – INTRODUCTION

PURPOSE OF THE INSPECTION

EPA Region 6 inspectors Jessica Moore and Damon McElroy arrived at Weston Water at 9:30 AM on June 28, 2018, for an announced compliance evaluation inspection (CEI) of the Weston WSC PWS. Credentials were presented. I informed the group that this was an EPA audit to determine compliance with the facility's ability to provide safe drinking water under the regulatory authority and conditions of the Safe Drinking Water Act (SDWA). Further, the inspection captured the following audited elements:

- 1) Sources
- 2) Pumps and pumping facilities
- 3) Water treatment
- 4) Distribution
- 5) Monitoring
- 6) Operations & Management
- 7) Operator certification
- 8) Water storage Tanks

This EPA inspection report will be also provided to TCEQ for any further inspection or enforcement action.

FACILITY DESCRIPTION

The Weston WSC PWS is a ground water system (GWS) that serves about 740 residents via 244 service connections. Operations and maintenance (O&M) is conducted seven days per week that includes calibrating the chorine dose at the Weston WSC well site. O&M is provided by a contract operator (Patterson Professional Services, LLC.). Weston WSC has the following primary infrastructure (Reference Photos in Appendix 1):

- 1) Well site:
 - a) Well #2 groundwater (GW) source and submersible pump system (350 GPM capacity) transmitting GW from Well #2 to the on-site 60K gallon GST (ground storage tank).
 - b) Raw water sample tap.
 - c) 60K gallon on-site GST.
 - d) Pump house with two 400 GPM booster pumps [transmits finished water from 60K gallon GST to 30K gallon EST (elevated storage tank) located at another site.
 - e) Finished water sample tap (to distribution & EST).
 - f) Gas chlorination disinfection system in Chlorine Room.
 - g) Gas chlorine Injection point on water line prior to 60K gallon GST.
 - h) SCADA system for booster pump operation, pump alarms, GST high and low-level indication and alarm.
- 2) Emergency Marilee SUD purchased water source.

- 3) Emergency North Collin SUD purchased water source.
- 4) 30K gallon EST site:
 - a) 30K gallon EST in use.
 - b) SCADA system in use.
 - c) Abandoned wellhouse to be removed.
 - d) Abandoned chlorine room to be removed.
 - e) Abandoned and plugged Well #1 to be removed.
 - f) Abandoned steel GST to be removed.
 - g) Abandoned propane tank to be removed.
- 5) Map of known assets.
- 6) Weston Water Supply Office Building.

Section II – OBSERVATIONS

I observed the following sanitary survey characteristics regarding this PWS:

A. Sources

The source of the Weston WSC is Well # 2 ground water from the Woodbine Aquifer. This “minor” aquifer is in northeast Texas. The aquifer overlies the Trinity Aquifer and consists of sandstone interbedded with shale and clay. Well # 2 has a 350 GPM capacity with 8” steel casing and a reported screen depth of about 850 feet. Well #2 is the only active well for Weston WSC. Redundancy comes from two emergency connections at two separate control valves (as listed above). The Well #2 system was observed to include:

- Well head with sanitary seal, reference Photo #8.
- Sanitary seal; recommend replacing sanitary seal gasket per manufacturer’s recommendations.
- Submersible pump at 350 GPM that pumps the source water to the 60K gallon GST.
- Gas Cl injection point prior to the GST.
- Control valve.
- Foot valve.
- Blow off valve.
- Well sounder with airline and pressure gauge to measure well depth or water surface elevation.
- Pressure gauge glass observed to be cracked and broken and needs to be replaced.
- Flow meter.
- Raw water sample tap.
- Air vent with screen.
- Electrical supply in sealed conduit.
- Sufficient concrete pad(s).
- Well is insulated but otherwise exposed to the weather.

- Well #2 produces water that has sample results that confirm the GW, via a file review, complies with SDWA and TCEQ's Primary and Secondary standards. Reference EPA web-address for more Primary and Secondary standards information: <https://www.epa.gov/dwstandardsregulations>.

B. Pumps and pumping facilities

Pumping facilities were observed to consist of the following:

- Well House #2.
- Two booster pumps at 400 GPM capacity each, piping and appurtenances as shown in Photo # 4.
- The booster pump(s) transmit water from the GST to the 30K gallon EST.
- Appurtenances include:
 - Pressure gauges on the suction and discharge side of the booster pump system.
 - Adequate alarms via SCADA.
 - Pump controls in good shape and protected from the elements.
 - Each pump is equipped with a check valve (i.e. back flow prevention).
- No cross connections were observed.
- Pump capacities or system capacity is adequate (per previous TCEQ capacity analysis referencing TCEQ DWW a.k.a. drinking water watch).

C. Water Treatment (Disinfection)

The current disinfectant goal is about 1.5 ppm total chlorine at the entry point and no less than 1.0 ppm at all points in the distribution system. The Injection point is prior to GST. The system uses gas chlorine (ref. Photo # 6) via 150 lb. cylinders. One of these cylinders was observed to be unsecured. The Chlorine room door is broken and needs to be replaced with a new door with crash bar or as required by Texas state law (TAC & TWC).

D. Distribution

The distribution system consists of PVC and has adequate FHs (fire hydrants) and control valves. The system has not reportedly lost pressure in the last five years.

E. Monitoring

The system is monitored via SCADA as mentioned above. Chlorine feed is calibrated and dosed every day. The tank level and level indicator is also checked daily. The booster pumps are monitored daily. TCEQ has a contract to collect samples and measure results at the endpoint to the DS as well as DBP (disinfectants and disinfection by-product) sites. Weston WSC is responsible for LCR (Lead and Copper Rule) sampling and RTRC (revised Total Coliform Rule) sampling with TCEQ approved sample plans.

F. Management & Operations

Management is provided by Shannon Burns, Weston Water Office Manager. Both operations and maintenance is provided via contract by Patterson Professional LLC.

G. Operator certification

Patterson Professional reportedly has six sufficiently certified operators on staff.

H. Water storage facilities

Weston WSC was observed to have adequate storage in good condition via one steel 60K gallon GST and one 30K gallon steel EST. These tanks are reportedly inspected by a certified tank inspector every three years and inspected by Patterson Professional at least once per year. Finished water flows into the top of the GST and out the bottom. Whereas finished water flows in and out the same pipe of the EST at the bottom of the tank.

Section III – CONCERNS

- 1) Weston WSC needs to demolish and remove abandoned Well No. 1 well-house and chlorine room at the EST site.
- 2) Confirm Weston WSC needs to abandon existing Well No. 1 per Texas law (16 TAC Chapter 76.1004 well plugging specifications) and submit a State of Texas Plugging Report. Reference web-address: <https://www.tceq.texas.gov/agency/other-jurisdiction/abandoned-wells.html>.
- 3) Confirm abandoned Well No. 1 piping, including to GST, is cut plugged and abandoned to prevent any cross connections.
- 4) Confirm need to remove abandoned steel GST located at EST site and plug from DS as appropriate to prevent any cross contamination or cross connection.
- 5) Need to remove SCADA equipment currently in existing abandoned building and move to new SCADA building (ref. Photos # 16 & 20).
- 6) Abandoned valves under particle board: confirm need to cut, plug, and abandon valves as needed to prevent any cross connections. Need to properly fill hole with compacted soil and grade to existing ground surface elevation, ref. Photo No. 17.
- 7) Confirm need to remove abandoned propane tank located at EST site.
- 8) One of the 150 lb. gas chlorine cylinders was observed to be unsecured at the well site.
- 9) Confirm SCADA electrical supply at Well No. 2 site that was observed spliced and open to the environment needs to be placed in existing sealed conduit.
- 10) Pressure gauge glass observed to be cracked and broken and needs to be replaced at Well No. 1 site at GST, ref. Photo 9.

Section IV – RECOMMENDATIONS

- Confirm need to replace broken Chlorine room door with a new door with crash bar as required by TCEQ.
- Recommend replacing the Well No. 2 sanitary seal gasket per manufacturer's recommendations, and create an SOP for this activity.
- Recommend calibrating gas chlorine cylinder scales per manufacturers recommendations and creating resulting SOP.
- Inspect well level pressure gauge and verify it needs to be replaced at well head.
- Remove tree overgrowth at EST Site fence.

Section V -SUGGESTIONS

- Suggest using design plans and specifications by licensed engineer to address above concerns Nos. 1 to 7.
- Pipe from GST to booster pumps - suggest replacing with new insulation, reference Photo 11.
- EST overflow flap valve. Confirm need for a concrete pad.
- Develop and implement an asset management plan with work order system to operate at the lowest possible cost.

Section VI – FOLLOW UP

No information was received by EPA after exiting the Facility on 06/28/2018.

Section VI – LIST OF APPENDICES

Appendix 1 – Photo Log –22 photos taken 06/28/18.

Appendix 2 – Opening conference sign-in sheet.

Appendix 1

Photograph Log



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 1

Location: Weston Water– City Office & Well Site at 406 Chicken Street, Weston, TX 75097		
City of Weston	Collin County	State: Texas



Photo File Name: DSCN0295

Date of Photo: 06/28/2018

Time of Photo: 10:09

Photographer: DLM

Description: Weston WSC Utility Office



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 2

Location: Weston Water– City Office & Well Site at 406 Chicken Street, Weston, TX 75097		
City of Weston	Collin County	State: Texas



Photo File Name: DSCN0296

Date of Photo: 06/28/2018

Time of Photo: 10:15

Photographer: DLM

Description: Well site, outside view.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 3

Location: Weston Water– City Office & Well Site at 406 Chicken Street, Weston, TX 75097		
City of Weston	Collin County	State: Texas



Photo File Name: DSCN0297

Date of Photo: 06/28/2018

Time of Photo: 10:16

Photographer: DLM

Description: Well site inside view: 60K gallon GST to left, and pump house to right.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 4

Location: Weston Water– City Office & Well Site at 406 Chicken Street, Weston, TX 75097		
City of Weston	Collin County	State: Texas



Photo File Name: DSCN0298

Date of Photo: 06/28/2018

Time of Photo: 10:16

Photographer: DLM

Description: Well House for booster pumps (two) with piping and appurtenances from GST to 30K gallon Elevated Storage Tank (located at another site).



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 5

Location: Weston Water– City Office & Well Site at 406 Chicken Street, Weston, TX 75097		
City of Weston	Collin County	State: Texas



Photo File Name: DSCN0300

Date of Photo: 06/28/2018

Time of Photo: 10:20

Photographer: DLM

Description: Chlorine dose from well to GST at 1.39 Mg/l (ppm). Injection point prior to GST.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 6

Location: Weston Water– City Office & Well Site at 406 Chicken Street, Weston, TX 75097		
City of Weston	Collin County	State: Texas



Photo File Name: DSCN0301

Date of Photo: 06/28/2018

Time of Photo: 10:21

Photographer: DLM

Description: Disinfection Room. Three 150 lb. gas chlorine cylinders. Need to secure one unsecured cylinder as shown in photo to left. Recommend calibrating Cl cylinder scales per manufacturers recommendations and creating resulting SOP.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 7

Location: Weston Water– City Office & Well Site at 406 Chicken Street, Weston, TX 75097		
City of Weston	Collin County	State: Texas



Photo File Name: DSCN0302

Date of Photo: 06/28/2018

Time of Photo: 10:21

Photographer: DLM

Description: Chlorine room door. Need to replace broken door with a new door with crash bar as required by Texas state law (TAC & TWC).



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 8

Location: Weston Water– City Office & Well Site at 406 Chicken Street, Weston, TX 75097		
City of Weston	Collin County	State: Texas



Photo File Name: DSCN0303

Date of Photo: 06/28/2018

Time of Photo: 10:25

Photographer: DLM

Description: Well head and system (raw water sample tap, control valve and blow off valve, flow meter, electrical to submersible pump etc.) to GST.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 9

Location: Weston Water– City Office & Well Site at 406 Chicken Street, Weston, TX 75097		
City of Weston	Collin County	State: Texas



Photo File Name: DSCN0306

Date of Photo: 06/28/2018

Time of Photo: 10:27

Photographer: DLM

Description: Airline Pressure Gauge to measure the water level or draw down level in the well. Confirm Pressure gauge needs replaced.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 10

Location: Weston Water– City Office & Well Site at 406 Chicken Street, Weston, TX 75097		
City of Weston	Collin County	State: Texas



Photo File Name: DSCN0307

Date of Photo: 06/28/2018

Time of Photo: 10:30

Photographer: DLM

Description: GST overflow with flap gate and concrete pad.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 11

Location: Weston Water– City Office & Well Site at 406 Chicken Street, Weston, TX 75097		
City of Weston	Collin County	State: Texas



Photo File Name: DSCN0308

Date of Photo: 06/28/2018

Time of Photo: 10:32

Photographer: DLM

Description: Pipe from GST to booster pumps. Recommend replacing with new insulation.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 12

Location: Weston Water– City Office & Well Site at 406 Chicken Street, Weston, TX 75097		
City of Weston	Collin County	State: Texas



Photo File Name: DSCN0309

Date of Photo: 06/28/2018

Time of Photo: 10:41

Photographer: DLM

Description: 30K Galloon EST Site.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 13

Location: Weston Water– City Office & Well Site at 406 Chicken Street, Weston, TX 75097		
City of Weston	Collin County	State: Texas



Photo File Name: DSCN0310

Date of Photo: 06/28/2018

Time of Photo: 10:11

Photographer: DLM

Description: 30K Galloon EST Site view two.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 14

Location: Weston Water– City Office & Well Site at 406 Chicken Street, Weston, TX 75097		
City of Weston	Collin County	State: Texas



Photo File Name: DSCN0311

Date of Photo: 06/28/2018

Time of Photo: 10:43

Photographer: DLM

Description: EST overflow flap valve. Confirm needs concrete pad.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 15

Location: Weston Water– City Office & Well Site at 406 Chicken Street, Weston, TX 75097		
City of Weston	Collin County	State: Texas



Photo File Name: DSCN0312

Date of Photo: 06/28/2018

Time of Photo: 10:44

Photographer: DLM

Description: Tree overgrowth example at EST Site,



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 16

Location: Weston Water– City Office & Well Site at 406 Chicken Street, Weston, TX 75097		
City of Weston	Collin County	State: Texas



Photo File Name: DSCN0313

Date of Photo: 06/28/2018

Time of Photo: 10:45

Photographer: DLM

Description: Abandoned Well house. Need to demolish and remove well house and chlorine room. Need to abandon existing well per Texas law (16 TAC Chapter 76.1004 well plugging specifications) and submit a State of Texas Plugging Report. Reference web-address: <https://www.tceq.texas.gov/agency/other-jurisdiction/abandoned-wells.html>. Confirm well piping, including to GST, is cut plugged and abandoned to prevent any cross connections. Need to remove SCADA equipment currently in existing building and move to new SCADA building. Recommend using design plans and specifications by licensed engineer.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 17

Location: Weston Water– City Office & Well Site at 406 Chicken Street, Weston, TX 75097		
City of Weston	Collin County	State: Texas



Photo File Name: DSCN0314

Date of Photo: 06/28/2018

Time of Photo: 10:46

Photographer: DLM

Description: Abandoned valves under particle board. Need to cut plug and abandon valves as needed to prevent any cross connections. Need to properly fill hole with compacted soil and grade to existing ground surface elevation. Recommend using design plans and specifications by licensed engineer.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 18

Location: Weston Water– City Office & Well Site at 406 Chicken Street, Weston, TX 75097		
City of Weston	Collin County	State: Texas



Photo File Name: DSCN0315

Date of Photo: 06/28/2018

Time of Photo: 10:46

Photographer: DLM

Description: Need to remove abandoned propane tank.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 19

Location: Weston Water– City Office & Well Site at 406 Chicken Street, Weston, TX 75097		
City of Weston	Collin County	State: Texas



Photo File Name: DSCN0316

Date of Photo: 06/28/2018

Time of Photo: 10:47

Photographer: DLM

Description: Abandoned Well House side view.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 20

Location: Weston Water– City Office & Well Site at 406 Chicken Street, Weston, TX 75097		
City of Weston	Collin County	State: Texas



Photo File Name: DSCN0318

Date of Photo: 06/28/2018

Time of Photo: 10:49

Photographer: DLM

Description: Abandoned well house inside view with existing SCADA as shown. Need to remove SCADA equipment currently in existing building (to be demolished) and move to new SCADA building. Recommend using design plans and specifications by licensed engineer.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 21

Location: Weston Water– City Office & Well Site at 406 Chicken Street, Weston, TX 75097		
City of Weston	Collin County	State: Texas



Photo File Name: DSCN0319

Date of Photo: 06/28/2018

Time of Photo: 10:49

Photographer: DLM

Description: Existing and abandoned well system needs to be removed. Need to abandon existing well per Texas law (16 TAC Chapter 76.1004 well plugging specifications) and submit a State of Texas Plugging Report. Reference web-address: <https://www.tceq.texas.gov/agency/other-jurisdiction/abandoned-wells.html> Confirm well piping, including to GST, is cut plugged and abandoned to prevent any cross connections.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 22

Location: Weston Water– City Office & Well Site at 406 Chicken Street, Weston, TX 75097		
City of Weston	Collin County	State: Texas



Photo File Name: DSCN0319

Date of Photo: 06/28/2018

Time of Photo: 10:54

Photographer: DLM

Description: Abandoned GST to be removed shown to right of photo.

Appendix 2

Opening conference sign-in sheet.



United States Environmental Protection Agency
Region 6 – Water Enforcement Branch
1445 Ross Avenue, Suite 1200
Dallas, Texas 75202-2733



DATE: June 28, 2018

TIME: 9:30

SUBJECT: Weston WSC (PWS ID: TX 0430050) EPA Region 6 Drinking Water
Inspection – Collin County

MEETING ATTENDEES

NAME	COMPANY	PHONE NO.	EMAIL
Mack Patterson	Patterson Professional	903 744-2599	pattprosed@aol.com
Shannon Burns	Weston Water Supply Corp	972-382-2445	westonwater@gmail.com
Damon McElroy	EPA R6	214-665-7159	mcElroy.Damon@epa.gov
Jessica Moore	EPA R6	214-665-6495	jmoore.jessica@epa.gov