STANDARD OPERATING PROCEDURE
Loss of Pressure in All or Parts of the Distribution System or No Chlorine Residual
(This Includes Service Lines from Main to Meter)

Loss of Pressure in All or Parts of the Distribution System

1. Restoring Pressure/Service as quickly as possible is important; **BUT**
2. **Public Health Protection MUST be the Number One priority**
3. When responding to a no water call, please stop in distribution before you go to the plant to determine if there is positive pressure or greater than 20 psi in distribution.
4. Did the pressure drop below 20 psi during the low pressure event, outage or repair?

- NO – Documented pressure was 20 psi or greater. Complete the repair/restore normal pressure. No additional flushing or bacti sample is required if pressure remained above 20.
  (Please document pressure from distribution if at all possible and if not, from the plant. *If it is below 30 psi at the plant you must go out in distribution to your farthest sample site or high point in the system to document that you have 20 psi or greater **before** you restore normal pressure. Otherwise, you must assume that pressure dropped below 20 psi and you must flush and collect a bacti.*)

- YES - Pressure dropped below 20 psi (or I was not able to document that it was above 20).

  Did the distribution system **lose positive pressure** or did affected area lines fully or partially de-water?
  *Unless we have documented positive pressure readings **IN THE DISTRIBUTION SYSTEM (or you opened a faucet and had flow)**, we will assume that we lost positive pressure and immediately issue a BWN.*

  (Dewatering occurs when a line is depressurized for a line replacement; as a result of a line break; or is opened (not under pressure) to repair a leak.)

  a. NO, lines were not fully or partially dewatered and, we did not lose positive pressure.

  (We must document this condition by observing some positive pressure in the main; i.e. water will still come out of the tap, pressure gauge indicates positive pressure or, for small, flat systems, pressure reading at plant 10 psi or greater.)

  i. Flush the affected area until there is a normal chlorine residual.
  ii. Collect a "special" bacti sample; get it to the lab the same day (**within 4 to 6 hours max).**
  iii. Bacti sample results were GOOD (no colfiorm bacteria found). No further action required.

  If we cannot adequately flush the lines, and collect a sample and get it to the lab the same day (within 6 hours), we must issue a Boil Water Notice Immediately!

Loss of Pressure in All or Parts of the Distribution System (continued)

b. YES, lines were fully or partially dewatered or we did not document positive pressure.

Contact Supervisor immediately to issue a BWN!

(If supervisor is not available, contact Larry Mitchell at 512-748-6284.)

i. After repairs have been completed, flush the affected area until water is clear and you get a chlorine residual greater than 0.5 ppm free (preferably 1.0 or greater) or 0.8 ppm total.
ii. Collect a "special" bacti sample and get it to the lab as soon as possible, the same day if possible.
iii. Bacti sample results were GOOD (no colfiorm bacteria found). LIFT the BWN.
iv. Bacti sample results were Coliform Found. **Contact Supervisor immediately**. LEAVE BOIL WATER ORDER IN PLACE!
v. Flush the affected area again thoroughly, ensure that you have a chlorine residual greater than 1.0 ppm and collect another "special" bacti sample and get it to the lab as soon as possible. Repeat until a Good Sample Result is received.

No Measurable or Low Chlorine Residual

1. Did a sample collected by the operator or a contract sample collector[1] indicate no measurable chlorine residual?

- Yes. **Contact supervisor immediately and issue a BWN**. No disinfectant residual or even a low disinfectant residual in distribution may indicate a condition that may threaten the safety of the drinking water.

a) Check for residual in the ground storage tank. If no residual or low residual, add the appropriate amount of HTH or bleach to restore the residual to at least 1.0 ppm. Make repairs or disinfection equipment adjustments. Flush the affected area thoroughly and be sure that you have a chlorine residual greater than 1.0 ppm in distribution. Collect a "special" bacti sample and get it to the lab as soon as possible.
b) Bacti sample results were GOOD (no colfiorm bacteria found). Lift the BWN.
c) Bacti sample results were Coliform Found. Contact Supervisor immediately. LEAVE BOIL WATER ORDER IN PLACE!
d) Flush the system again thoroughly, ensure that you have a chlorine residual greater than 1.0 ppm and collect another "special" bacti sample and get it to the lab as soon as possible. Repeat until a Good Sample Result is received. Then Lift the BWN.

No Measurable or Low Chlorine Residual (continued)

- No. There was a residual, but less than 0.2 ppm free or 0.5 ppm total chlorine.

  a) After repairs to the disinfection equipment have been completed and HTH or bleach has been added to the GST, flush the affected area until water is clear and you get a chlorine residual greater than 0.5 ppm free (preferably 1.0 or greater) or 0.8 ppm total.
  b) Collect a "special" bacti sample; get it to the lab the same day (**within 4 to 6 hours**).
  c) Bacti sample results were GOOD (no colfiorm bacteria found). No BWN necessary.
  d) Bacti sample results were Coliform Found. **Contact Supervisor immediately**. ISSUE BOIL WATER ORDER and follow procedures for BWN.
  e) Flush the affected area again thoroughly, ensure that you have a chlorine residual greater than 1.0 ppm and collect another "special" bacti sample and get it to the lab as soon as possible. Repeat until a Good Sample Result is received. Then Lift the BWN.

The health and safety of our customers must be our highest priority!

If the operator encounters any other situation where it appears that the safety of the water may have been compromised or E-coli or fecal coliform positive bacti sample, he must immediately issue a BWN; then flush thoroughly; obtain adequate residuals and take a sample.

[1]Chlorine residuals should be verified immediately before making any adjustments at each entry point and multiple locations in the distribution system including the site sampled by the contract sample collector, if known. If any single sample collected by Aqua staff is confirmed as having no measurable chlorine residual or samples cannot be collected then follow the BWN procedure. If all confirmation samples are found to have measurable amounts of chlorine contact your supervisor for direction on issuing the BWN.

Appendix

TCEQ Certification of BWN Delivery

BWN Checklist for Data Submission

PWS_ _____ _CO_ _____ _BWN have

Texas Commission on Environmental Quality

CERTIFICATE OF DELIVERY OF PUBLIC NOTICE TO CUSTOMERS: Boil Water Notice

Public Water System (PWS) name: _____

PWS ID: _____ Date of violation(s) or situation(s) _____

Type of Total Coliform Rule Ground Water Rule violation(s) or situation:

____ Boil Water Notice (BWN) due to: loss of pressure, line break, water outage, or any condition requiring a BWN (includes Rescind Notice)

____ Treatment technique violation (Ground Water or Surface Water Treatment Rule)

30 TAC 290.46(q)(1) requires that your PWS make an adequate, good-faith effort to reach <u>all</u> consumers served by the system by appropriate methods (check all below that apply):

COMMUNITY WATER SYSTEM (perform one of the following):

____Provide a copy of the Boil Water Notice to the radio and television stations serving the area surrounding the public water system

____Publish BWN in local newspaper

____Deliver BWN directly to each customer

____Post BWN in conspicuous places within the affected area

NONCOMMUNITY WATER SYSTEM (perform one of the following):

____Deliver BWN directly to customers, or

____Post BWN in public places within the area served by the system

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

Certified by: (print name): _____ Title: _____ Date of Delivery to Customers: _____ Phone: _____

Signature: _____ Date: _____

Fax to (512) 239-3666 or mail a copy of this completed form, <u>AND</u> copies of the Public Notices given to your customers to: TCEQ – Public Drinking Water Section MC – 155, Attn: Public Notice. P. O. Box 13087 Austin, TX 78711-3087

BWN Checklist for Data Submission to the Aqua Compliance Group

____ Notified the compliance group of the BWN and the reason for it

____ Updated info-stream with the BWN information both initial and rescind

____ Notified local TCEQ office, either done in field office or contacted compliance to do it
- If you notify the local TCEQ office of the BWN, please copy Larry Mitchell and Scot Foltz on the email.
- Compliance can notify local TCEQ if requested. Be sure to get positive confirmation for your request.

____ Boil water notice wording swift reach calls, initial call and rescind call

____ Boil water notice customer door hanger if used and no call done

____ Photos of boil water signs both initial and rescind

____ TCEQ form for certification of delivery to customers

____ Bacti result which allowed us to lift the boil water notice.

Please scan and send this form to Larry Mitchell with the BWN data. If you will not get the bacti result for a couple days or longer, please send all the other data and send the bacti result separate.

Appendix E

Drought Contingency Plan

Drought, Demand, and Critical System Capacity Triggers

Drought, Demand & Critical System Capacity Stage Triggers

Water System Supply Contamination or Outage: In the event of system supply contamination or system outage, Aqua Texas may immediately implement the response measures of **Stage IV**. Notification to TCEQ shall be made immediately by calling (512) 239-4691, or electronic mail at *watermon@tceq.state.tx.us*. The appropriate regional office shall also be notified.

If any single demand based trigger condition is met for a given restriction stage then most restrictive stage triggered will be evaluated for implementation. Notify your supervisor and the Drinking Water Compliance Coordinator if any trigger is exceeded.

Demand Based Triggers:

Trigger	Stage I Mandatory	Stage II Mandatory	Stage III Mandatory	Stage IV Mandatory
Percent of water treatment capacity reached for 3 or more days in a week	75 %	85 %	90 %	95 %
Total daily demand as % of pumping capacity for 3 or more days in a week	75 %	85 %	90 %	95 %
Storage capacity	Storage Tank Level drops within 4 ft. of low level lock out 3 or more days in a week.	Storage does not refill prior to 6 pm or tank drops within 3 ft. of low level lock out 3 or more days in a week.	Low level lock out is reached more than once in a week.	Low level lock out is reached more than twice in a week.
Well Pump Runs ___ hours per day more than 3 days per week	16 hrs	18 hrs	20 hrs	22 hrs

Supply or water demand management measures including, but not limited to, pro rata curtailment of water deliveries to or diversions by wholesale water customers as provided in with Texas Water Code §11.039 may be implemented by the Vice President of Operations.

Supply Based Triggers - For those systems where Aqua Texas pumps water from a ground water district or purchases water from wholesalers, the district or wholesale supplier will formally notify Aqua Texas of one or more precipitating events triggering a stage of the district or wholesaler's drought contingency plan. Upon enactment of a stage in the district, authority or wholesaler's drought contingency plan, Aqua Texas will correspondingly implement the same or equivalent stage in its service area. Aqua Texas can modify its plan to match the watering schedules, daily watering hours or other specific restrictions of a wholesaler, district or other authority if asked to do so. Aqua Texas will notify customers of any changes in days, hours or other provisions prior to enforcing provisions of the plan. When Aqua Texas must self-regulate to comply with ground water permit limitations, water restrictions may be enacted to ensure compliance with permit limits.

Specific triggers for systems utilizing water managed by LCRA as a source are included in Appendix B of the Aqua User Drought Contingency Plan. These triggers shall supersede any other criteria listed above when the criterion within Appendix B initiates a more restrictive water conservation stage.

Appendix F

Flood Response Guidance

Standard Operation Procedure for Flood Event Monitoring/Response, Ground Water Sources

I. Purpose

This document is intended to provide guidance Aqua Operations Staff for evaluating and responding to possible contamination of source water wells during flood events. Recommendations for evaluating baseline water quality of wells in floodplains or is otherwise susceptible to flooding are also provided.

Note: This guidance is not intended to address water systems that use ground water under the direct influence of surface water (GWUDI).

II. Procedure

Before Flood Events

Public water systems with ground water sources located in floodplains or otherwise is subject to flooding should periodically (e.g. semi-annually) samples from each well to test for pH and conductivity and make a visual determination of turbidity in order to establish a baseline for comparison. Regularly inspecting each well is also recommended for indicators of well integrity, such as:

- secure well vents - are there signs of cracking or leaking?
- secure well caps - are they water tight?
- water level ports - are they plugged and water tight?
- general wellhead condition - signs of cracking of concrete pad or potential leaking of annular space?

When flooding is forecast

- ensure you have an adequate supply of total coliform sample bottles to allow for timely sampling during flood event,
- ensure there is sufficient disinfection treatment chemicals for several days incase roadways become impassable by vehicular traffic.
- as a precaution, it is recommended that minimum chlorine residuals be increased to 2.0 mg/L free chorine or 3.0 total chlorine.
- inspection reports and sampling results should be maintained so they are available for reference,

During Flood Events

1. When flood waters reach the wellhead, take the well offline, if feasible.

2. When any well in use is inundated with flood water, immediately issue a boil water advisory.

3. If taking the well offline is not feasible, the following actions are required based on the level of treatment provided and prior history of well contamination by flood waters:

A. **Systems with <u>no history</u> of positive raw water bacteria sample results and are <u>not</u> in a Karst aquafer:**
   - increase chlorine residual to at least 2 mg/l free chlorine or 3 mg/l total chlorine throughout the distribution system;
   - inspect the wellhead as soon it can safely be accessed and daily thereafter for signs of damage

• collect bacteria samples from each well and distribution.
• for systems utilizing a GST (with top fill & bottom outlet, only)

If any well sample is E.coli positive and any distribution samples is total coliform positive then issue a boil water notice immediately. The boil advisory should not be lifted until the floodwaters have receded from the all of the wellheads in a wellfield, raw water E.coli negative samples from the source water and total coliform negative samples from the distribution are received.

• for systems without a GST, well & pressure tank only systems or GST with common inlet/outlet

If any well sample is E.coli positive then issue a boil water notice immediately. The boil advisory should not be lifted until the floodwaters have receded from the all of the wellheads in a wellfield and raw water and distribution total coliform negative samples are received.

• contact compliance staff as soon as possible to consult about the severity of the situation and further requirements or guidance.

B. Systems with a history of positive raw water bacteria sample results or are in a Karst aquafer, the following actions are required:

• contact compliance staff as soon as possible to consult about the severity of the situation
• issue precautionary boil water advisory
• increase chlorine residual to at least 2 mg/l free chlorine or 3 mg/l total chlorine throughout the distribution system;
• conduct daily monitoring and inspections for the following indicators of well integrity as soon as you can safely gain access:

- increased chlorine demand
- change in water turbidity (visual determination based on comparison with pre-flood conditions)
- change in pH or conductivity
- signs of well damage or other reasons to question the integrity of the well;

• If contamination is confirmed by E.coli positive sample result(s), contact the operations supervisor and compliance staff.
• continue daily monitoring of conditions until flood waters recede.

At the Conclusion of Flood Event

1. If a boil water advisory was issued but evidence of well contamination was not found, i.e. negative total coliform bacteria samples were obtained, the water use advisory can be lifted once floodwaters have receded from the all of the wellheads.
2. If a boil water advisory was issued and evidence of well contamination was found, such as E.coli positive sample results, the advisory should remain in effect until the raw water and finished water are demonstrated to be free of bacteria. The following criteria are recommended for making this demonstration.

• Make any needed repairs to any affected well; ensure the well pump will operate properly. Pump water from the well at the wellhead to remove contaminated water and sediments.
• Disinfect each well where contamination was found.
• Obtain two consecutive total coliform/E.coli bacteria negative samples, taken at least 24 hours apart, from each well and the distribution system as indicated above in 3.A. or 3.B.
• Flush each dead end in the distribution system with at least three times the volume of water in the dead end.

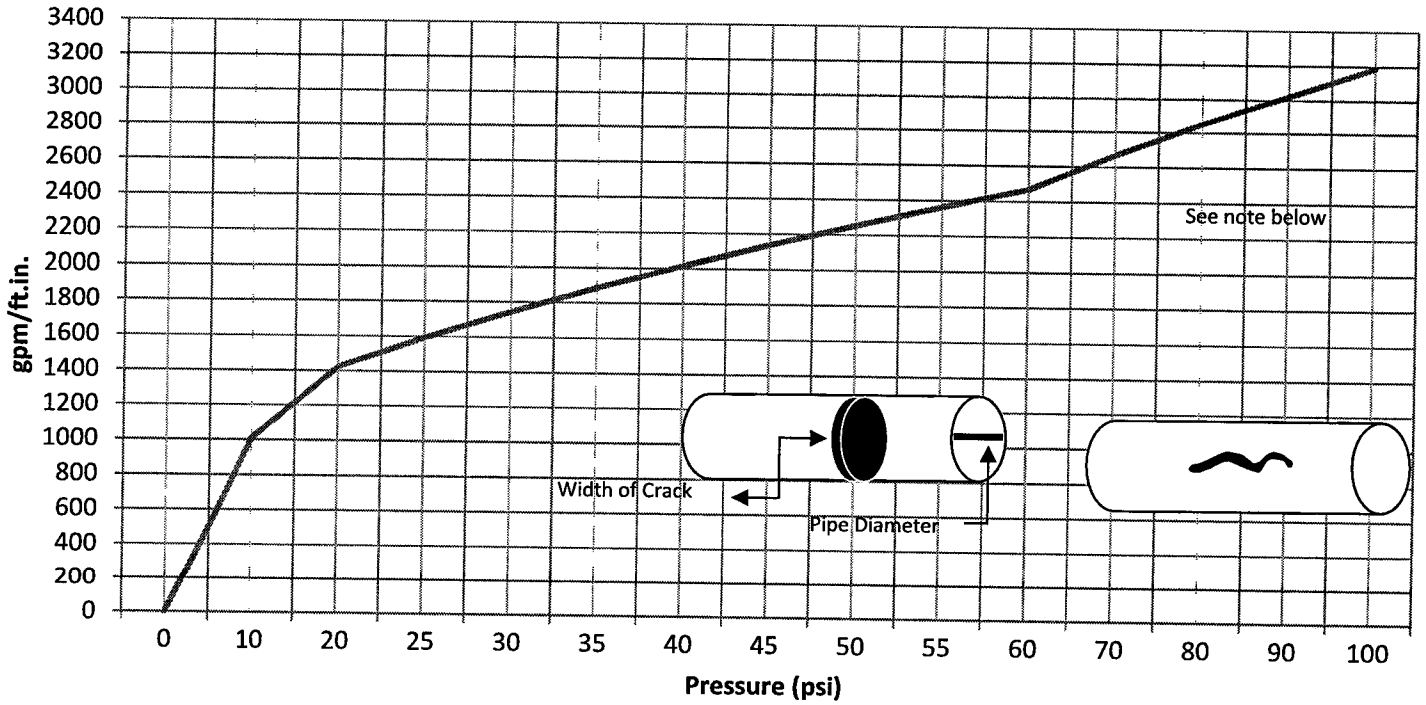
Appendix G

Water Loss Estimation Guidance

Based on TWDB Guidance Documents

Rectangular & Radial Break

Gallons Lost = gpm/ft.in. X Break Length (ft.) X Break Width (in.) X Hours Leaking X 60



Example:

A crack is found 3 inches long and averages about 1/16 of an inch in witdth on a pipe with a pressure of 50 psi and is estimated to have been leaking for one day.

Loss = 2250 gpm/ft.in. X (3 in. / 12 in/ft) X 1/16 in. X 24 hrs X 60

Loss = 50,625 Gallons

Note: The length on a radial crack is the distance around the pipe (curcumfernce) or Pipe Diameter multiplied by 3.14

Water Loss from Hole in Pipes

Hole Size = 1/16 in.

PSI	GPM	GPD
0	0	-
5	0.18	263
10	0.26	371
15	0.32	455
20	0.36	525
25	0.41	587
30	0.45	643
35	0.48	695
40	0.52	743
45	0.55	788
50	0.58	830
55	0.60	871
60	0.63	910
65	0.66	947
70	0.68	983
75	0.71	1,017
80	0.73	1,050
85	0.75	1,083
90	0.77	1,114
95	0.79	1,145
100	0.82	1,174

Hole Size = 1/8 in.

PSI	GPM	GPD
0	0	-
5	0.73	1,050
10	1.03	1,486
15	1.26	1,819
20	1.46	2,101
25	1.63	2,349
30	1.79	2,573
35	1.93	2,779
40	2.06	2,971
45	2.19	3,151
50	2.31	3,322
55	2.42	3,484
60	2.53	3,639
65	2.63	3,788
70	2.73	3,931
75	2.83	4,068
80	2.92	4,202
85	3.01	4,331
90	3.09	4,457
95	3.18	4,579
100	3.26	4,698

Hole Size = 1/4 in.

PSI	GPM	GPD
0	0	-
5	2.92	4,202
10	4.13	5,942
15	5.05	7,278
20	5.84	8,404
25	6.52	9,396
30	7.15	10,293
35	7.72	11,117
40	8.25	11,885
45	8.75	12,606
50	9.23	13,288
55	9.68	13,936
60	10.11	14,556
65	10.52	15,150
70	10.92	15,722
75	11.30	16,274
80	11.67	16,808
85	12.03	17,325
90	12.38	17,827
95	12.72	18,316
100	13.05	18,791

Hole Size = 3/8 in.

PSI	GPM	GPD
0	0	-
5	6.57	9,454
10	9.28	13,370
15	11.37	16,375
20	13.13	18,909
25	14.68	21,140
30	16.08	23,158
35	17.37	25,014
40	18.57	26,741
45	19.70	28,363
50	20.76	29,897
55	21.78	31,356
60	22.74	32,751
65	23.67	34,088
70	24.57	35,375
75	25.43	36,616
80	26.26	37,817
85	27.07	38,981
90	27.85	40,111
95	28.62	41,210
100	29.36	42,281

Hole Size = 1/2 in.

PSI	GPM	GPD
0	0	-
5	11.67	16,808
10	16.51	23,770
15	20.22	29,112
20	23.34	33,615
25	26.10	37,583
30	28.59	41,170
35	30.88	44,469
40	33.01	47,539
45	35.02	50,423
50	36.91	53,150
55	38.71	55,745
60	40.43	58,223
65	42.08	60,601
70	43.67	62,888
75	45.21	65,096
80	46.69	67,231
85	48.12	69,300
90	49.52	71,309
95	50.88	73,263
100	52.20	75,166

Hole Size = 3/4 in.

PSI	GPM	GPD
0	0	-
5	26.26	37,817
10	37.14	53,482
15	45.49	65,501
20	52.52	75,634
25	58.72	84,562
30	64.33	92,633
35	69.48	100,055
40	74.28	106,963
45	78.79	113,451
50	83.05	119,588
55	87.10	125,425
60	90.97	131,002
65	94.69	136,352
70	98.26	141,499
75	101.71	146,465
80	105.05	151,269
85	108.28	155,924
90	111.42	160,445
95	114.47	164,841
100	117.45	169,123

Hole Size = 1 in.

PSI	GPM	GPD
0	0	-
5	46.69	67,231
10	66.03	95,078
15	80.87	116,447
20	93.38	134,461
25	104.40	150,332
30	114.36	164,680
35	123.52	177,875
40	132.05	190,157
45	140.06	201,692
50	147.64	212,602
55	154.85	222,978
60	161.73	232,893
65	168.34	242,403
70	174.69	251,554
75	180.82	260,383
80	186.75	268,922
85	192.50	277,198
90	198.08	285,235
95	203.51	293,051
100	208.79	300,664

Hole Size = 1 1/4 in.

PSI	GPM	GPD
0	0	-
5	72.95	105,048
10	103.17	148,560
15	126.35	181,948
20	145.90	210,095
25	163.12	234,894
30	178.69	257,313
35	193.01	277,930
40	206.33	297,120
45	218.85	315,143
50	230.69	332,190
55	241.95	348,404
60	252.71	363,896
65	263.02	378,755
70	272.95	393,052
75	282.53	406,848
80	291.80	420,191
85	300.78	433,123
90	309.50	445,680
95	317.98	457,892
100	326.24	469,787

Hole Size = 1 1/2 in.

PSI	GPM	GPD
0	0	-
5	105.05	151,269
10	148.56	213,926
15	181.95	262,005
20	210.10	302,537
25	234.89	338,247
30	257.31	370,531
35	277.93	400,219
40	297.12	427,852
45	315.14	453,806
50	332.19	478,353
55	348.40	501,701
60	363.90	524,010
65	378.75	545,407
70	393.05	565,995
75	406.85	585,861
80	420.19	605,075
85	433.12	623,697
90	445.68	641,778
95	457.89	659,365
100	469.79	676,494

Example

A 1/4 inch hole is found on a pipe with a pressure of 50 psi and is estimated to have been leaking for one week.

Loss = 13,288 GPD X 7 days

Loss = 93,016 Gallons

Appendix H

Tank Inspection Procedures

Potable Water Storage Tank Inspection Procedures

Background

All storage tanks utilized within the public water system must have an annual inspection completed. The inspection results need to be recorded and maintained for not less than five years in accordance with Texas Administrative Code 290.46.

TAC 290.46

> *(m) Maintenance and housekeeping. 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.*
>
> > *(1) Each of the system's ground, elevated, and pressure tanks shall be inspected annually by water system personnel or a contracted inspection service.*
> >
> > > *(A) Ground and elevated storage tank inspections must determine that the vents are in place and properly screened, the roof hatches closed and locked, flap valves and gasketing provide adequate protection against insects, rodents, and other vermin, the interior and exterior coating systems are continuing to provide adequate protection to all metal surfaces, and the tank remains in a watertight condition.*
> >
> > > *(B) Pressure tank inspections must determine that the pressure release device and pressure gauge are working properly, the air-water ratio is being maintained at the proper level, the exterior coating systems are continuing to provide adequate protection to all metal surfaces, and the tank remains in watertight condition. Pressure tanks provided with an inspection port must have the interior surface inspected every five years.*
> >
> > > *(C) All tanks shall be inspected annually to determine that instrumentation and controls are working properly.*
> >
> > *(2) When pressure filters are used, a visual inspection of the filter media and internal filter surfaces shall be conducted annually to ensure that the filter media is in good condition and the coating materials continue to provide adequate protection to internal surfaces.*

TCEQ has prepared an inspection form to record the results of the inspection and shall be used on all Aqua Texas tank inspections.

Procedure

Annual Inspections

1. All tank inspections shall be conducted in a manner as to ensure the safety and welfare of all staff. Tank inspections shall not be conducted if any of the following conditions exists:
   - Ambient temperature is less than 40 degrees or greater than 95 degrees Fahrenheit
   - Wet conditions, whether from rain, dew, condensation or other sources of moisture which may cause slippery conditions on ladders or tank surfaces.
   - If lighting or thunder have been observed in the area or appear imminent.

- Any other condition exists creating a hazardous condition that cannot be eliminated or corrected prior to conducting the inspection.

2. Obtain an inspection form for each tank to be inspected and complete the top portion prior to conducting the physical inspection.
3. Inspect each item required making note of any issues that could affect the tanks structural integrity or sanitary condition.
4. Ensure the tank inspection form is fully completed. There should be no blank lines.
5. Print and Sign your name on the line "Name of Inspector"
6. Provide a copy to the Drinking Water Compliance Coordinator and file original at the operations field office. If repairs or other corrective actions are required notify your supervisor immediately and provide a copy of the inspection report.

Cleanliness and Cleaning

The inspector shall conduct all his work in a clean and sanitary manner. Any time exterior repairs are done that could affect the quality of the water in a facility or work is done in a storage facility interior, the storage facility must be cleaned and disinfected before it is returned to service in accordance with ANSI/AWWA Standard C652-92 for Disinfection of Water-Storage Facilities. If the tank must be returned to service before a total coliform negative sample can be obtained a precautionary boil water notice shall be issued.

Pressure Tank Interior Inspections

Interior pressure tank inspections must be planned and conducted in such a manner as to minimize service disruption. When more than one tank is available in the system, each tank will be inspected while the other remains in service to maintain system pressure. If only one tank is available then temporary facilities should be utilized to maintain system pressure whenever possible. If it is necessary to depressurize the system to conduct the inspection then a precautionary boil water notice shall be issued until the system is returned to normal operation, flushed and total coliform negative samples are obtained.

POTABLE WATER STORAGE TANK
Inspection Form

Section 290.46(f)(3)(D)(ii) of the Texas Commission on Environmental Quality's *Rules and Regulations for Public Water Systems* requires documentation of annual ground. elevated, and pressure storage tank maintenance inspections. [See also 290.46(m)(1) and 290.46(m)(2)]

	Location:
Description:	
Date & Material of Exterior Coating System:	
Date & Material of Interior Coating System:	

Exterior of Tank

O.K.	Problem	NA	Description
			Foundation: settling, cracks, deterioration
			Protective Coating: rust, pitting, corrosion, leaks
			Water Level Indicator: operable. cable access opening protected
			Overflow Pipe: flap valve cover accessible, operable. sealed
			Access Ladder: loose bolts or rungs
			Roof: low spots for ponding water. holes along seams. rust
			Air Vents: proper design, screened. sealed edges and seams
			Cathodic Protection Anode Plates: secured and sealed
			Roof Hatch: proper design, locked, hinge bolts secured, gasket
			Pressure Tank Operational Status: pressure release device, pressure gauge, air-water volume device

Interior of Tank

O.K.	Problem	NA	Description
			Water Quality: insects, floating debris. sediment on the bottom
			Protective Coating: rust, corrosion. scaling

Date:	**Last Inspection of Pressure Tank Interior**

Comments

Name of Inspector:
Date of Inspection:

PWS / 1460137 / MR / /DLQOR

DISINFECTANT LEVEL QUARTERLY OPERATING REPORT (DLQOR)

FOR GROUNDWATER OR PURCHASED-WATER PUBLIC WATER SYSTEMS-ANY SIZE

Select Quarter: 2nd - Apr/May/Jun Select Year: 2015

PWS Name: webbway	PWS ID: 1460137

Type of Disinfectant Used in Distribution System*: Chlorine (Free)

* If you used chloramines and free chlorine at any time during this quarter, select both.

First Month of Quarter: Monthly Summary

Month: April Was the PWS active this month? (•) YES ( ) NO

Average of all disinfectant residuals for this month	Number of residuals collected this month	Number below MIN for this month	Number with NO residual for this month
1.40 mg/L	5 readings	0 readings 0.0 %	0 readings 0.0 %

Second Month of Quarter: Monthly Summary

Month: May Was the PWS active this month? (•) YES ( ) NO

Average of all disinfectant residuals for this month	Number of residuals collected this month	Number below MIN for this month	Number with NO residual for this month
1.59 mg/L	8 readings	0 readings 0.0 %	0 readings 0.0 %

Third Month of Quarter: Monthly Summary

Month: June Was the PWS active this month? (•) YES ( ) NO

Average of all disinfectant residuals for this month	Number of residuals collected this month	Number below MIN for this month	Number with NO residual for this month
1.30 mg/L	9 readings	0 readings 0.0 %	0 readings 0.0 %

Quarterly Summary and Certification

Average of all disinfectant residuals for this quarter	Lowest residual for this quarter	Highest residual for this quarter
1.43 mg/L	0.60 mg/L	2.00 mg/L

☒ I certify that I am familiar with the information contained in this report and that, to the best of my knowledge, the information is true, complete, and accurate.

Name: adrian wade (Enter Name) Adrian Wade (Signature) Today's Date: 7/8/15

Title: supervisor Phone Number: (832) 562-0790

License #: Email address: aewade@aquaamerica.com

Complete this form for the previous quarter at the beginning of April, July, October, and January; and submit in time for it to be received by the TCEQ by the 10th of the month. Always print and sign form, and keep a copy with your records for TCEQ review.

Step 1: Print Copy (For your own records)

Step 2: Print to Mail

Sign and Mail to: TCEQ / PDW MC-155 Attn: DLQOR PO Box 13087 Austin, TX 78711-3087

Click the button below to start over or to reset to enter data for a different system. Clear Form

DLQOR

TCEQ-20067 (Revised 02/26/2015)