May 2021
RG-545

Compliance Notebook for Community Public Water Systems

Program Support and Environmental Assistance Division

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

printed on
recycled paper

Compliance Notebook for Community Public Water Systems

PWS Name _____

Address _____

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Contact Name _____

Contact Information _____

Prepared by
Small Business and Local Government Assistance
Program Support and Environmental Assistance Division

RG-545
Published May 2021

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Published and distributed
by the
Texas Commission on Environmental Quality
P.O. Box 13087
Austin TX 78711-3087

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How to Use This Notebook

This compliance notebook is for owners and operators of community public water systems supplying drinking water from **groundwater or purchased treated water** sources. It is not intended for systems that treat surface water or groundwater under the direct influence of surface water, or that use chlorine dioxide or ozone for first disinfection.

Use this notebook as a template to organize your system's records and show compliance with requirements. There are log sheets, links to applicable forms, references to regulations, record retention timeframes, and other technical guidance included in each section. The log sheets are suggested templates to help you collect required information. **Place records from your system in their appropriate section to keep them organized.**

If you have an approved exception or treat for a maximum contaminant level (such as using reverse osmosis), you may have other monitoring and recordkeeping requirements not covered in this notebook. Add those records to this notebook as needed. The information in this document may be subject to change with policy and rule changes.

Where to Find More Information

- Request records from TCEQ by contacting the **Central Records Section** at (512) 239-2900 or cfrreq@tceq.texas.gov.
- Search for TCEQ forms[1] using a keyword, form number, or subject.
- Search Texas Drinking Water Watch[2] for analytical results, schedules, certain violations, information on drinking water quality, and public water system compliance with state and federal regulations.
- Review the following TCEQ publications:
  - *You're a Public Water System…Now What?*[3] (TCEQ publication RG-496). Guidance for following PWS rules and regulations.
  - *Managing Small Public Water Systems*[4] (TCEQ publication RG-501). Technical guidance for owners and operators of small public water systems.

1. www.tceq.texas.gov/search_forms.html
2. www.tceq.texas.gov/goto/dww-inst
3. www.tceq.texas.gov/goto/rg496
4. www.tceq.texas.gov/goto/rg501

Find applicable rules in the following subchapters of Title 30, Texas Administrative Code (30 TAC), Chapter 290:

- **Chapter 290 Subchapter D:** Rules and Regulations for Public Water Systems
- **Chapter 290 Subchapter F:** Drinking Water Standards Governing Drinking Water Quality and Reporting Requirements for Public Water Systems
- **Chapter 290 Subchapter H:** Consumer Confidence Reports

This document is a general guide to laws and regulations about public water systems and an aid to minimize potential health risks. It does not replace those laws and regulations, which take priority over any information supplied here.

Local governments and other state and federal agencies may have more rules and requirements. As the owner or operator of the water system, you must ensure compliance with all applicable laws and regulations.

If you receive compensation for water or serve other residential or industrial connections, you may have other requirements not covered in this guide. If you have questions or need more information about public water system requirements, please refer to the Small Business and Local Government Assistance (SBLGA) webpage[5] or call the SBLGA Hotline at 800-447-2827.

5. www.texasenvirohelp.org

Rule Citations

The rules that apply to public water systems are listed below. Rule citations are from 30 TAC[6] Chapter 290 unless otherwise stated.

Definitions
- 290.38
- 290.103

General Provisions
- 290.39

Water Sources
- 290.41

Water Treatment
- 290.42

Water Storage
- 290.43

Water Distribution
- 290.44

Minimum Water System Capacity Requirements
- 290.45

Minimum Acceptable Operating Practices for Public Water Systems (includes Recordkeeping)
- 290.46

Appendix (example forms and guidelines: assessment of cross-connection hazards, boil water notices, and more)
- 290.47

Inorganic Contaminants
- 290.106

Organic Contaminants
- 290.107

Radionuclides Other than Radon
- 290.108

Microbial Contaminants
- 290.109

Disinfectant Residuals
- 290.110

Disinfection Byproducts
- 290.113 *(Stage 1, TTHM and HAA5)*
- 290.115 *(Stage 2, TTHM and HAA5)*

Groundwater Corrective Actions and Treatment Levels
- 290.116

Regulation of Lead and Copper
- 290.117

Secondary Constituent Levels
- 290.118

Monitoring Plans
- 290.121

Public Notification
- 290.122

Consumer Confidence Reports
- 290 Subchapter H

Drought Contingency Plans for Municipal Uses
- 30 TAC 288.20

6. www.tceq.texas.gov/goto/view-30tac

Definitions

§290.38(15) Community water system: A public water system which has a potential to serve at least 15 residential service connections on a year-round basis or serves at least 25 residents on a year-round basis.

§290.38(36) Human consumption: Uses by humans in which water can be ingested into or absorbed by the human body. Examples of these include, but are not limited to drinking, cooking, brushing teeth, bathing, washing hands, washing dishes, and preparing foods.

§290.38(58) Nontransient, noncommunity water system: A public water system that is not a community water system and regularly serves at least 25 of the same persons at least six months out of the year.

§290.38(71) Public Water System: A system for the provision to the public of water for human consumption through pipes or other constructed conveyances, which includes all uses described under the definition for drinking water. Such a system must have at least 15 service connections or serve at least 25 individuals at least 60 days out of the year.

This term includes: any collection, treatment, storage, and distribution facilities under the control of the operator of such system and used primarily in connection with such system, and any collection or pretreatment storage facilities not under the control which are used primarily in connection with such system.

Two or more systems with each having a potential to serve less than 15 connections or less than 25 individuals but owned by the same person, firm, or corporation and located on adjacent land will be considered a public water system when the total potential service connections in the combined systems are 15 or greater or if the total number of individuals served by the combined systems total 25 or greater at least 60 days out of the year.

Without excluding other meanings of the terms “individual” or “served,” an individual is deemed to be served by a water system if he lives in, uses as his place of employment, or works in a place to which drinking water is supplied from the system.

§290.38(84) Transient, noncommunity water system: A public water system that is not a community water system and serves at least 25 persons at least 60 days out of the year, yet by its characteristics, does not meet the definition of a nontransient, noncommunity water system.

System Information

Include

- Contact information for:
  - Emergency contact
  - Responsible official
  - Accredited laboratory
- List of licensed backflow prevention assembly testers (if applicable)
- System capacities
- Connection and population served

Instructions

Keep personnel and system information up to date.

- Send an email to PWSINVEN@tceq.texas.gov to update TCEQ of changes to points of contact, facilities, and activity.
- See current information in the Texas Drinking Water Watch[7] database.

Notes

Samples for microbial contaminants must be analyzed by a National Environmental Laboratory Accreditation Program (NELAP) laboratory approved by TCEQ for the accredited microbial analyses and methods in the drinking water matrix.

- See TCEQ's list of accredited laboratories.[8]

Attachment

1. *System Information Log Sheet*

7. www.tceq.texas.gov/goto/dww
8. www.tceq.texas.gov/goto/certified_labs

Notes

System Information Log Sheet

Revision Date:

PWS Name		PWS ID	

Responsible Official

Name		Title	
Phone		Alt Phone	
Mailing Address			

Emergency Contact

Same as Responsible Official? Yes☐ No☐

Name		Title	
Phone		Alt Phone	

Accredited Laboratory

Name			
Phone		Fax	
Mailing Address			

Water Operator Information

Name		License Class	
Phone		License Number	
Name		License Class	
Phone		License Number	
Name		License Class	
Phone		License Number	

Additional water operators should be included in your annual Operator Notice Form.

Number of Connections and Population

Connections		Population	

Refer to 30 TAC §290.38 for definitions of "connection" and "population."

System Capacities

(include measurement units)

Wells

Name and Location	Capacity

Ground Storage Tanks

Name and Location	Capacity

Elevated Storage Tanks

Name and Location	Capacity

Pressure Tanks

Name and Location	Capacity

Service Pumps

Name and Location	Capacity

Refer to 30 TAC §290.38(79) for the definition of "service pump."

Daily or Weekly Monitoring Records

Applicable Regulations: 30 TAC 290.46(d) and 30 TAC 290.46(f)(3)(A) and (B)

Record Water and Chemical Use

Record the volume of water treated and distributed at your system. Get this number from your well flow meter or master meter reading.

Record the amount of chemical(s) used, such as chlorine or chloramines used to disinfect the water.

Measure Disinfectant Residual Levels

Measure and record the disinfectant residual concentration in the distribution system.

- Rotate sampling locations to best represent the water throughout your system.

The residual disinfectant concentration in water throughout your distribution system must be at least:

- 0.2 mg/L free chlorine
- 0.5 mg/L chloramine (measured as total chlorine)

Keep Records

How often you record this information depends on your system's size. If your system can potentially serve:

- **at least** 750 people or 250 connections, record **daily**.
- **fewer than** 750 people or 250 connections, record **every 7 days**.

Keep water and chemical use data for **at least 2 years**.

Keep residual reading data for **at least 3 years**.

Attachments

1. *Disinfectant Residual, Water Use, and Chemical Use Log Instructions*
2. *Disinfectant Residual, Water Use, and Chemical Use Log Sheet*

Notes

Disinfectant Residual, Water Use, and Chemical Use Log Instructions

Why should I use this log?

Use this log to track your system's water use, chemical use, and disinfectant residual readings and keep them organized.

How do I use it?

Record sampling dates and your:

- Sampling location(s)[9]
- Well flow meter readings[10]
- Disinfectant residual readings
- Amount of water and chemical(s) used

When do I use it?

If your system can potentially serve:

- **at least** 750 people or 250 connections, record **daily**.
- **fewer than** 750 people or 250 connections, record **every 7 days**.

Do I send it to TCEQ?

No, you do not need to send this to TCEQ. Keep it with your records for inspections.

How long should I keep it?

Keep completed logs in your records for **at least three years**.

What if I need help?

If you have questions about how to fill out the log or the public water system program, please contact Small Business and Local Government Assistance by phone at 800-447-2827, or by email at TexasEnviroHelp@tceq.texas.gov.

9. Rotate sampling locations throughout the distribution system.
10. Include the unit of measurement given by your well flow meter so you can convert water usage to gallons.

Notes

Disinfectant Residual, Water Use, and Chemical Use Log Sheet

Date	Meter Reading	Water Used (gallons)	Chemical Name	Scale Reading	Amount of Chemical Used	Disinfectant Residual (mg/L)	Disinfectant Residual Sampling Location

Disinfectant Residual, Water Use, and Chemical Use Log Sheet (continued)

Date	Meter Reading	Water Used (gallons)	Chemical Name	Scale Reading	Amount of Chemical Used	Disinfectant Residual (mg/L)	Disinfectant Residual Sampling Location

Monthly Monitoring and Operating Records

Include

- Coliform sampling results (see page 19)
- Flushing events records (see page 21)

Instructions

Update these records at least once **every month**. Find more information about each record on the pages listed above.

Notes

Coliform Sampling Results

Applicable Regulations: 30 TAC 290.44(f), 30 TAC 290.46(f)(3)(C), and 30 TAC 290.109(d)

Sample for Coliforms

The Revised Total Coliform Rule (RTCR) protects public health by reducing potential pathways for fecal and microbial contamination into public drinking water systems. Take *at least* the minimum number of distribution coliform samples routinely required each month and send to a NELAP accredited laboratory for analysis.

- The number of samples is based on the maximum population served on any given day during the month.
  - See the figure in 30 TAC §290.109(d)(2)(A)(iii)[11] for requirements.
  - See Coliform Sampling for Public Water Systems[12] for sampling guidance.
- If a routine sample is positive for coliforms, you must take at least 3 repeat samples from that tank within 24 hours of notification.
  - See the diagram RTCR Repeat Sampling Requirements[13] for guidance.

Contact your laboratory to get the Microbial Reporting Form (MRF) and coliform sample bottles.

- See TCEQ's list of accredited laboratories.[14]
- See TCEQ's instructions on completing the MRF.[15]

Keep Records

Keep copies of these records for **at least 5 years**:

- Completed Microbial Reporting Forms
- Sample results

11. www.tceq.texas.gov/goto/rtcr-samples
12. www.tceq.texas.gov/goto/rg-421
13. www.tceq.texas.gov/goto/rtcr-repeats
14. www.tceq.texas.gov/goto/certified_labs
15. www.tceq.texas.gov/goto/mrfins

Notes

Flushing Events Records

Applicable Regulations: 30 TAC 290.44(f), 30 TAC 290.46(f)(3)(A), and 30 TAC 290.46(l)

Flush Dead-End Mains

If you have physical dead-ends, flush them at least once a month. The "Flushing Events Log Instructions" on page 23 describe other reasons to flush dead-end mains.

You may want to collect other data when flushing, such as:

- Length of flushing
- Volume of water flushed
- Beginning and ending residual

Keep Records

Keep records on flushing data for **at least 2 years**.

Attachments

1. *Flushing Events Log Instructions*
2. *Flushing Events Log Sheet*

Notes

Flushing Events Log Instructions

Why should I use this log?

If your system has physical dead-ends, you must flush mains regularly. Use this log to track these events and show compliance with the rule.

How do I use it?

Record the date and time of flushing events at dead-end mains. To help with water loss audits, record the volume of water flushed and disinfectant residual readings at the start and end of each event.

When do I use it?

Flush dead-end mains:

- At monthly intervals
- If disinfectant residuals fall below the minimum levels
- As needed (if you receive water quality complaints from customers)

Do I send it to TCEQ?

No, you do not need to send this to TCEQ. Keep it with your records for inspections.

How long should I keep it?

Keep completed logs in your records for **at least two years**.

What if I need help?

If you have questions about how to fill out the log or the public water system program, please contact Small Business and Local Government Assistance by phone at 800-447-2827, or by email at TexasEnviroHelp@tceq.texas.gov.

Notes

Flushing Events Log Sheet

Location	Reason	Date	Time	Volume	Starting Residual	Ending Residual

Notes

Quarterly Operating Records

Include

- Data on your disinfectant residual analyzers (see page 29)
- Copies of disinfectant level quarterly operating reports (see page 37)

Instructions

Update records in this section at least once **every 3 months**. Find more information about each record on the pages listed above.

Notes

Disinfectant Residual Analyzer Records

Applicable Regulations: 30 TAC 290.46(f)(3)(B) and 30 TAC 290.46(s)(2)(C)

Verify Analyzer Accuracy

Verify the accuracy of manual disinfectant residual analyzers at least once **every 90 days** using chlorine solutions of known concentrations.

Keep Records

Keep logs of verification dates for at **least 3 years**.

Attachments

1. *Disinfectant Residual Analyzer Verification Log Instructions*
2. *Disinfectant Residual Analyzer Data Sheet*
3. *Disinfectant Residual Analyzers Verification Log Sheet*

Notes

Disinfectant Residual Analyzer Verification Log Instructions

Why should I use this log?

You must check that your disinfectant residual analyzer is properly calibrated at least once every 90 days. Use this log to track these verifications and show compliance. If your analyzer is not properly calibrated, contact the manufacturer for instructions.

How do I use it?

On the data sheet, include information about your analyzer equipment and standards, including the date your standards expire. There are several tables for entering new standard information when old ones expire.

In the log sheet, record:

- Date you verified the analyzer's calibration
- Known standard concentrations
- Allowable range for each standard
- Concentration measured by the analyzer
- Whether it passed or failed verification

If the analyzer fails one or more measurements, try to find out why. Contact the manufacturer for help.

When do I use it?

At least once every 90 days.

Do I send it to TCEQ?

No, you do not need to send this to TCEQ. Keep it with your records for inspections.

How long should I keep it?

Keep completed logs in your records for **at least three years**.

What if I need help?

If you have questions about how to fill out the log or the public water system program, please contact Small Business and Local Government Assistance by phone at 800-447-2827, or by email at TexasEnviroHelp@tceq.texas.gov.

Notes

Disinfectant Residual Analyzer Data Sheet

Analyzer Information

Manufacturer	
Model	
Serial Number	

Standard Information

Lot Number	
Serial Number	
Expiration Date	

Lot Number	
Serial Number	
Expiration Date	

Lot Number	
Serial Number	
Expiration Date	

Lot Number	
Serial Number	
Expiration Date	

Lot Number	
Serial Number	
Expiration Date	

Lot Number	
Serial Number	
Expiration Date	

Notes

Disinfectant Residual Analyzer Verification Log Sheet

Date:			Inspector's Initials:	
Standard	**Known Concentration (mg/L)**	**Allowable Range (see manufacturer's certificate)**	**Measured Concentration (mg/L)**	**Status**
Blank				Pass / Fail
Std 1				Pass / Fail
Std 2				Pass / Fail
Std 3				Pass / Fail

Date:			Inspector's Initials:	
Standard	**Known Concentration (mg/L)**	**Allowable Range (see manufacturer's certificate)**	**Measured Concentration (mg/L)**	**Status**
Blank				Pass / Fail
Std 1				Pass / Fail
Std 2				Pass / Fail
Std 3				Pass / Fail

Date:			Inspector's Initials:	
Standard	**Known Concentration (mg/L)**	**Allowable Range (see manufacturer's certificate)**	**Measured Concentration (mg/L)**	**Status**
Blank				Pass / Fail
Std 1				Pass / Fail
Std 2				Pass / Fail
Std 3				Pass / Fail

Notes

Disinfectant Level Quarterly Operating Reports (DLQORs)

Applicable Regulations: 30 TAC 290.46(f)(3)(B) and 30 TAC 290.110(e)

Report Disinfectant Levels

Submit your DLQORs to TCEQ every 3 months.

Visit our Disinfectant Residual Reporting for Public Water Systems[16] webpage to find:

- The DLQOR form
- Instructions for completing the paper form or submitting electronically

Keep Records

Keep copies of DLQORs for at least **3 years**.

16. www.tceq.texas.gov/goto/dlqor

Notes

Annual Operating Records

Include

- Tank inspection records (see page 41)
- Copies of water operator notice forms (see page 47)

Instructions

Update records in this section at least once **each year**. Find more information about each record on the pages listed above.

Notes

Tank Inspection Records

Applicable Regulations: 30 TAC 290.46(f)(3)(D) and 30 TAC 290.46(m)(1)

Inspect Your Tanks

Inspect each of your ground, elevated, and pressure tanks annually. You can have water system personnel check the tanks or hire a contracted inspection service.

Ground and elevated storage tank inspections must make sure:

- The tank is watertight.
- Roof hatches are closed and locked.
- Vents are in place and properly screened.
- Interior and exterior coating systems continue to protect all metal surfaces.
- Flap valves and gasketing protect against insects, rodents, and other vermin.

Pressure tank inspections must make sure:

- The tank is watertight.
- The air to water ratio is kept at the proper level.
- The pressure release device and pressure gauge work properly.
- Exterior coating systems continue to protect all metal surfaces.

Check the interior surface of pressure tanks with an inspection port every five years.

Keep Records

Keep tank inspection logs for **at least 5 years**.

Attachments

1. *Water Tank Inspection Log Instructions*
2. *Water Tank Inspection Log Sheet*

Notes

Water Tank Inspection Log Instructions

Why should I use this log?

You must examine your ground, elevated, and pressure storage tanks at least once every year to make sure they are in good working condition. Inspect tanks no later than one year after the last time you checked them. Use this log to track inspections and show compliance with the rule.

How do I use it?

Record:

- Date of inspection
- Name of inspector
- Location of the tank
- Description of the tank
- Date of last interior pressure tank inspection
- Tank exterior and interior conditions, noting any problems
- Exterior and interior coating materials and the date they were applied

When do I use it?

At least once each year, within a year of the last examination.

Do I send it to TCEQ?

No, you do not need to send this to TCEQ. Keep it with your records for inspections.

How long should I keep it?

Keep completed logs in your records for **at least five years**.

What if I need help?

If you have questions about how to fill out the log or the public water system program, please contact Small Business and Local Government Assistance by phone at 800-447-2827, or by email at TexasEnviroHelp@tceq.texas.gov.

Notes

Water Storage Tank Inspection Log Sheet

Location:	
Description:	
Exterior Coating Date and Material:	
Interior Coating Date and Material:	

Tank Exterior

Feature	Check For	OK	Problem	N/A
Foundation	Settling, cracks, deterioration			
Protective coating	Rust, pitting, corrosion, leaks			
Water level indicator	Working, cable access, opening is protected			
Overflow pipe	Working, sealed, flap valve cover is accessible			
Access ladder	Loose bolts or rungs			
Roof	Rust, holes along seams, ponding water			
Roof hatch	Proper design, locked, hinge bolts secured, gasket in good condition			
Air vents	Proper design, screened, sealed edges and seams			
Cathodic protection anode plates	Secured and sealed			
Pressure tank status	Pressure release device, pressure gauge, air to water volume device			

Tank Interior

Feature	Check For	OK	Problem	N/A
Water quality	Insects, floating debris, sediment on bottom			
Protective coating	Rust, pitting, corrosion, scaling			

Date Pressure Tank Interior Last Inspected:

Comments

Name of Inspector:	

Date of Inspection:	

Notes

Operator Notice Form

Applicable Regulations: 30 TAC 30 TAC 290.46(p)(2)

Update Operator Information

Provide a list of water operators and operating companies associated with your system **each year**.

Submit the Operator Notice form[17] by:

- Email to PWSInven@tceq.texas.gov.
- Fax to 512-239-6050.
- Mail to:

  Water Supply Division, MC-155
  Texas Commission on Environmental Quality (TCEQ)
  P.O. Box 13087
  Austin, TX 78711-3087

Keep Records

Keep a copy for your records and update it each year.

17. www.tceq.texas.gov/goto/20913

Notes

Well Meter Calibration Records

Applicable Regulations: 30 TAC 290.46(f)(3)(D) and 30 TAC 290.46(s)(1)

Verify Well Meter Accuracy

Verify that well meters are properly calibrated at least once every 3 years. If they are not, contact the manufacturer for help.

Keep Records

Keep verification and calibration records for **at least 3 years**.

Notes

Consumer Confidence Reports (CCRs)

Applicable Regulations: 30 TAC 290, Subchapter H and 30 TAC 290.46(f)(3)(C)

Generate and Complete CCRs

CCRs, also known as "annual water quality reports" or "drinking water quality reports," summarize information about your water system from the previous calendar year. Yours must include:

- Source(s) of water used
- Educational health information
- Public participation opportunities
- Water system's contact information
- Compliance with drinking water rules
- Chemical and bacteriological contaminants

You must generate a CCR and make it available to your customers by July 1 every year.

- Find more information about CCRs[18], including how to generate and complete them, on our website.
- Contact other community public water systems to request a copy of their CCR if you would like an example.

Keep Records

Keep copies of your CCRs and Certificates of Delivery sent to TCEQ for **at least 5 years**.

18. www.tceq.texas.gov/goto/ccr

Notes

Lead and Copper Records

Applicable Regulations: 30 TAC 290.46(f)(3)(F) and 30 TAC 290.117

Monitor and Report Lead and Copper

All community and nontransient, noncommunity water systems are subject to Lead and Copper Rule monitoring requirements.

Find more information about the lead and copper program[19] on our website, including:

- System schedules for current and upcoming monitoring periods
- Sampling instructions and guidance
- Number of samples required
- Lead and copper forms
- Laboratory information

Keep Records

Keep copies of:

- Lead consumer notices (Form TCEQ-20680)
- Lead and copper rule chain of custody forms (Form TCEQ-20683)
- Material survey[20] and sample site selection form (Form TCEQ-20467)
- Certification you informed the resident of proper sampling procedures
- Designation of any substitute site not used in previous monitoring periods
- Tap water monitoring results with the location of each site and date of collection

Keep all records for **at least 12 years**.

19. www.tceq.texas.gov/goto/lead-copper
20. Keep a copy of your material survey with your monitoring plan.

Notes

Chemical Analysis Results

Applicable Regulations: 30 TAC 290.46(f)(3)(E) and 30 TAC 290 Subchapter F

Sample for Other Contaminants

You do not take these samples yourself. A TCEQ contractor collects samples based on a sampling schedule set by TCEQ. You work with the sampler and pay for the lab analysis.

- Find out how to get your sample schedules[21] on our website.

Keep Records

Know your schedule and keep copies of all chemical analysis results for **at least 10 years**.

Notes

Find inorganic contaminants[22] and their maximum contaminant levels (MCLs) in 30 TAC 290.106.

Find organic contaminants and their MCLs in 30 TAC 290.107.

- Synthetic organic chemical contaminants[23]
- Volatile organic chemical contaminants[24]

Find radionuclides[25] and their detection limits in 30 TAC 290.108.

Find secondary constituents[26] and their MCLs in 30 TAC 290.118.

21. www.tceq.texas.gov/goto/dwwins
22. www.tceq.texas.gov/goto/pws-ioc
23. www.tceq.texas.gov/goto/pws-soc
24. www.tceq.texas.gov/goto/pws-voc
25. www.tceq.texas.gov/goto/pws-rad
26. www.tceq.texas.gov/goto/pws-secondaries

Notes

Public Notice Records

Applicable Regulations: 30 TAC 290.46(f)(3)(B), 30 TAC 290.46(q), and 30 TAC 290 Subchapter F

Provide Boil Water and Public Notices

Some violations require you to give public notice, such as monitoring, reporting, treatment technique, or maximum contaminant level violations. **We will send a letter when you need to give notice for a violation**, so make sure we have the correct mailing address.

- Find public notice templates and certificate of delivery forms[27] on our website. Each template includes instructions for use.

Enact a **boil water notice** if you have:

- Water outages
- Failure to keep adequate disinfectant residuals
- Microbiological samples containing *Escherichia coli* (*E. coli*)
- Low distribution pressure (below 20 pounds per square inch [psi])
- Other conditions that may have compromised the drinking water supply

Use the special precautions flowchart[28] in 30 TAC 290.47(e) to decide what to do if you lose distribution pressure.

Keep Records

Keep all notice records for **at least 3 years**.

27. www.tceq.texas.gov/goto/pws/notices/index.html
28. www.tceq.texas.gov/goto/pws-bwn-flowchart

Notes

Maintenance Records

Applicable Regulations: 30 TAC 290.46(f)(3)(A) and 30 TAC 290.46(m)

Maintain Your System

You must maintain your facilities and equipment, so they stay in good working condition and keep a neat appearance.

Keep Records

Include:

- Maintenance records for equipment and facilities
- Dates you cleaned storage tanks and other facilities

Keep these records for **at least 2 years**.

Attachments

1. *Facility Cleaning Log Instructions*
2. *Facility Cleaning Log Sheet*

Notes

Facility Cleaning Log Instructions

Why should I use this log?

You must keep your water system facilities and equipment in good working condition. Use this log to track cleaning activities and show compliance with the rules.

How do I use it?

Write the name or description of the equipment and the date it was cleaned. Include any comments or concerns you may need to address in the future.

When do I use it?

When you clean any facilities or equipment.

Do I send it to TCEQ?

No, you do not need to send this to TCEQ. Keep it with your records for inspections.

How long should I keep it?

Keep completed logs in your records for **at least two years**.

What if I need help?

If you have questions about how to fill out the log or the public water system program, please contact Small Business and Local Government Assistance by phone at 800-447-2827, or by email at TexasEnviroHelp@tceq.texas.gov.

Notes

Facility Cleaning Log Sheet

Date	Facility Description	Comments

Notes

Distribution Map

Applicable Regulations: 30 TAC 290.46(n)(2)

Map Your Distribution System

Keep an accurate and up-to-date map of your distribution system that shows valves and mains. Make sure it is easy to find during emergencies and inspections.

- Include a copy with the system's sample siting plan.

Keep Records

Update your map as necessary and keep **permanently**.

Notes

Plant Operations Manual

Applicable Regulations: 30 TAC 290.42(l)

Develop a Plant Operations Manual

Create a plant operations manual and keep it up to date for review and reference. Include:

- Routine maintenance and repair procedures
- Manufacturer's manuals for all equipment, if available
- Protocols to use if a natural or manufactured catastrophe occurs
- Telephone numbers of water system personnel, system officials, and local, state, and federal agencies to contact in an emergency

Find a plant operations manual template[29] on our website.

Keep Records

Update your manual as necessary and keep **permanently**.

29. www.tceq.texas.gov/goto/dwopmanual

Notes

Monitoring Plans

Include

- Monitoring plan (see page 71)
- Sample siting plan (see page 73)
- Nitrification action plan (see page 75)
- Lab approval form (see page 77)

Instructions

Update records in this section as needed. Find more information about each record on the pages listed above.

Notes

Monitoring Plan

Applicable Regulations: 30 TAC 290.121

Develop a Monitoring Plan

Create a chemical and microbiological monitoring plan and keep it updated. It must:

- Identify all sampling locations.
- Describe the sampling frequency.
- Specify the analytical procedures and laboratories you will use for compliance.

Our How to Develop a Monitoring Plan for a PWS[30] guide can help you create one. Find a monitoring plan template[31] on our website.

Keep Records

Update your plan as necessary and keep **permanently**.

30. www.tceq.texas.gov/goto/rg-384
31. www.tceq.texas.gov/goto/monitoringplan

Notes

Sample Siting Plan

Applicable Regulations: 30 TAC 290.109(d)(6)

Create a Sample Siting Plan

List the locations you will collect distribution coliform samples in your sample siting plan. It must include:

- All routine and repeat microbial (coliform) sampling sites
- Your sample collection schedule
- A distribution system map (or series of maps) that shows the locations of all:
  - Distribution system valves and mains
  - Routine microbial sample sites
  - Water main sizes
  - Entry point source locations
  - Water storage facilities
  - Pressure plane boundaries

Find a sample siting plan template[32] on our website. Sampling must represent water throughout the distribution system.

Keep Records

Update your plan as necessary and keep **permanently**.

32. www.tceq.texas.gov/goto/rtcr-siting-plan

Notes

Nitrification Action Plan

Applicable Regulations: 30 TAC 290.46(z)

Create a Nitrification Action Plan (if applicable)

If you use chloramines (chlorine and ammonia) as a disinfectant or buy water that is chloraminated, you must have a nitrification action plan (NAP).

Find NAP guidance[33] and a NAP template spreadsheet[34] on our website.

Keep Records

Update your plan as necessary and keep **permanently**.

33. www.tceq.texas.gov/goto/napguide
34. www.tceq.texas.gov/goto/20918

Notes

Lab Approval Form

Applicable Regulations: 30 TAC 290.119(a)

Get Your Onsite Lab Approved (if applicable)

You must get TCEQ approval to analyze the following onsite:

- Turbidity
- pH
- Temperature
- Total organic carbon (TOC)
- UV
- Alkalinity
- Disinfectant
- Chlorite (at entry point)
- Calcium
- Phosphate

Find the lab approval form[35] on our website.

Keep Records

Keep a copy of your lab approval **permanently**.

35. www.tceq.texas.gov/goto/10450

Notes

Plans and Specifications

Include

- Engineering reports, plans and specs, and approval letters (see page 81)
- Letters granting exceptions to rule and supporting data (see page 83)
- Well completion data (see page 85)
- Any supporting documentation

Instructions

Update records in this section as needed.

Notes

Engineering Reports and Plan Approval Letters

Applicable Regulations: 30 TAC 290.39(d)-(e) and 30 TAC 290.46(n)

Get Your System Approved

Your water source, distribution, storage, and treatment facilities need TCEQ approval before you install or use them. A Texas-licensed professional engineer (PE) must prepare a report and submit plans and specifications for your system.

Any significant changes to your system also need approval; for example: drilling a new well or installing a new ground storage tank.

Find forms and checklists for submitting plans and specifications[36] on our website.

Send plans and specifications to:

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

Keep Records

Keep copies of any engineering reports, plans and specifications, and plan approval letters **permanently**.

36. www.tceq.texas.gov/goto/pwsplans

Notes

Letters Granting Exceptions to Rule

Applicable Regulations: 30 TAC 290.39(l)

Exception Request Instructions

We consider requests for exceptions to rule on an individual basis. You must show the exception will not compromise public health or cause a loss of service or water quality.

Send exception request forms[37] (TCEQ-20659) with supporting documentation to:

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

Keep Records

Include copies of:

- any letters granting exception to rule.
- results of any monitoring or special studies required by a granted exception.

Keep all records **permanently**.

37. www.tceq.texas.gov/goto/20659

Notes

Well Completion Data

Applicable Regulations: 30 TAC 290.39(d)-(e) and 30 TAC 290.46(n)

Gather Data on Your Well

Before placing a well into service, send well completion data to TCEQ for review and approval. Documentation includes:

- Well driller's log
- Recorded deed(s)
- Chemical analysis
- Well location map
- 36-hour pump test
- Cementing certificate
- Microbiological test results
- Sanitary Control easement(s)
- Well material characterization
- Plugging reports for any abandoned wells
- USGS 7.5-minute topographical quadrangle map

Keep Records

Keep copies of any records listed above **permanently**.

Notes

NSF Certifications

Applicable Regulations: 30 TAC 290.39(e)(6)(E) and 30 TAC 290.42(j)

Check Chemical and Media Standards

All chemicals and process media used to treat water at your system must conform to:

- ANSI/NSF Standard 60 for Drinking Water Treatment Chemicals
- ANSI/NSF Standard 61 for Drinking Water System Components

Search for NSF-certified treatment chemicals and system parts on the NSF website.

- NSF-certified treatment chemical search[38]
- NSF-certified system parts search[39]

Keep Records

Keep certifications for as long as you use the chemical or media at your system.

38. info.nsf.org/Certified/PwsChemicals/
39. info.nsf.org/Certified/PwsComponents/index.asp?standard=061

Notes

Plumbing Ordinance/Service Agreements

Applicable Regulations: 30 TAC 290.46(i)

Adopt an Ordinance or Service Agreement

You must adopt one of the following:

- A plumbing ordinance
- Plumbing regulations
- Service agreements

These give you the authority to implement a cross-connection control program. Whichever you choose, it must include enforcement actions to prevent cross-connections and other unacceptable plumbing practices.

A plumbing ordinance is a formal enactment by a local government, adopted by the governing body of that government (for example, city council).

- View a sample plumbing ordinance in Appendix I of *Establishing and Managing an Effective Cross-Connection Control Program*[40] (TCEQ publication RG-478).

Service agreements are agreements between public water systems and their customers.

- View a sample service agreement[41] in 30 TAC 290.47(b).

Keep Records

Keep copies of any active plumbing ordinance or service agreements **permanently**.

40. www.tceq.texas.gov/assistance/goto/rg-478
41. www.tceq.texas.gov/assistance/goto/serviceagreement

Notes

Backflow Prevention Assembly Records

Applicable Regulations: 30 TAC 290.44(h), 30 TAC 290.46(f)(3)(B), and 30 TAC 290.47(f)

Test Backflow Prevention Assemblies

Test all *required* backflow prevention assemblies **when installed**. Test those installed to protect against health hazards **annually**.

- Make sure a **licensed** backflow prevention assembly tester performs the tests.
- Use our licensing search[42] to find a licensed tester.

Find more information about cross-connection control and backflow prevention[43] on our website.

Keep Records

Keep original copies of completed backflow prevention assembly test and maintenance reports[44] (Form TCEQ-20700) for **at least 3 years**.

42. www.tceq.texas.gov/goto/lic_reg_search
43. www.tceq.texas.gov/goto/cc
44. www.tceq.texas.gov/goto/20700

Notes

Customer Service Inspection Reports

Applicable Regulations: 30 TAC 290.46(f)(3)(E) and 30 TAC 290.46(j)

Inspect Your System

Customer service inspections examine water distribution facilities to find and prevent:

- Cross-connections
- Potential contaminant hazards
- Illegal lead materials

They are not plumbing inspections as defined and regulated by the Texas State Board of Plumbing Examiners (TSBPE).

Conduct customer service inspections (CSIs):

- before supplying continuous water service to new construction, or
- on existing service areas:
  - when you have reason to believe that cross-connections or other potential contaminant hazards exist.
  - after any material improvement, correction, or addition to water distribution facilities.

Only licensed customer service inspectors, plumbing inspectors, or water supply protection specialists may complete customer service inspection certifications.

- Use our licensing search[45] to find a licensed customer service inspector.

Keep Records

Keep copies of completed customer service inspection reports[46] (TCEQ-20699) for at least 10 years. We recommend keeping them **permanently**.

- You may need a new CSI if you cannot show you had one at a connection before supplying continuous water service or that adequate protection is in place.

45. www.tceq.texas.gov/goto/lic_reg_search
46. www.tceq.texas.gov/goto/20699

Notes

Purchase Water Contract(s)

Applicable Regulations: 30 TAC 290.45(f)

Draw Up Contracts (if applicable)

You must have these if your system buys treated water from another PWS to meet all or part of your production, storage, service pump, or pressure maintenance capacity requirements.

Keep Records

Keep copies of any purchase water contracts **permanently**.

Notes

Notices of Violation and Corrective Actions Taken

Applicable Regulations: 30 TAC 290.46(f)(3)(B)

Instructions

Keep copies of any notices of violation issued by TCEQ and documents showing corrective actions taken for **at least 3 years**.

Notes

Sanitary Survey Compliance Records

Comprehensive Compliance Investigations (CCIs)

Applicable Regulations: 30 TAC 290.46(f)(3)(E)

Instructions

TCEQ will conduct regular sanitary surveys of your system. We may also call them "comprehensive compliance investigations" or "CCIs."

Keep any written reports, summaries, or communications about your system's sanitary surveys for **at least 10 years**.

Notes

Groundwater Rule Compliance Records

Applicable Regulations: 30 TAC 290.46(f)(3)(D), 30 TAC 290.109, and 290.116

Collect Raw Water Samples

If you serve groundwater and a routine distribution sample tests positive for coliforms, you must collect raw water samples unless you have TCEQ's approval to use 4-log virus treatment.

- If you buy treated groundwater from another PWS, you must also notify your water seller of the positive sample within 24 hours.

You must take corrective actions if we find significant deficiencies during a sanitary survey or if a raw groundwater source sample tests positive for *E. coli*.

Keep Records

Include copies of:

- Documents showing compliance with a state-approved corrective action plan and schedule
- Notice sent to water seller(s) of the coliform-positive distribution sample, if applicable

If you use 4-log treatment, include records of:

- The lowest daily residual disinfectant concentration
- Date and duration of any failure to maintain minimum disinfectant residual for more than four hours

Keep all records for at least **5 years**.

Notes

Revised Total Coliform Rule Records

Applicable Regulations: 30 TAC 290.46(f)(3)(D) and 30 TAC 290.109

Assess Your System

You may have to assess your system if you:

- Receive multiple total coliform-positive samples
- Have a combination of *E. coli* and total coliform-positive samples
- Do not collect all required repeat samples after a total coliform-positive distribution sample

The assessment helps you find any sanitary defects and determine if you need to make any corrective actions. You want to remove pathways for microbial contamination to enter your distribution system.

Keep Records

Keep copies of completed assessment forms and corrective action documentation for **at least 5 years**.

Notes

Drought Contingency Plan

Applicable Regulations: 30 TAC 288.20

Develop a Drought Contingency Plan (DCP)

Municipal retail public water suppliers must develop and implement updated DCPs every five years. We may request to review it during an inspection.

- If you have 3,300 or more connections, send a copy of your plan to TCEQ.

Find more information about drought contingency plans[47] on our website.

Keep Records

Keep a copy of your DCP **permanently** and **update it every 5 years**.

47. www.tceq.texas.gov/goto/drought_plan

Notes

Emergency Preparedness Plan (EPP)

Applicable Regulations: 30 TAC 290.39(c)(4), 30 TAC 290.46(f)(5), and 30 TAC 290.47(g)

Develop an EPP (if applicable)

Water systems in **Harris and Fort Bend counties** that are "affected utilities" must have an approved EPP. If you are:

- a new system, you must have an approved EPP before serving water to customers.
- an existing water system, submit an EPP for TCEQ's review within 90 days of receiving notice that you are an affected utility.

An affected utility is a retail public utility, exempt utility, or provider or conveyor of potable or raw water service that services more than one customer.[48]

Send EPPs to:

Drinking Water Special Functions Section, MC-155
Texas Commission on Environmental Quality
P.O. Box 13087
Austin, Texas 78711-3087

Find more information on emergency preparedness plans[49] and an EPP template[50] on our website.

Keep Records

Keep a copy of your approved EPP **permanently**.

48. 30 TAC 290.38(1)
49. www.tceq.texas.gov/goto/eppfaq
50. www.tceq.texas.gov/goto/20536

Notes

Complaints

Applicable Regulations: 30 TAC 290.46(f)(3)(A)

Track Complaints

Include:

- Logs with the date, location, and nature of water quality, pressure, or outage complaints you receive
- Results of any following investigation and corrective action

Keep Records

Keep all records for **at least 2 years**.

Attachments

1. *Complaint Log Instructions*
2. *Complaint Log Sheet*

Notes

Complaint Log Instructions

Why should I use this log?

Use this log to track customer complaints and your responses to show compliance with the rules.

How do I use it?

Write the date, location, and customer's complaint. Include any results from the complaint investigation.

When do I use it?

When you receive complaints from customers.

Do I send it to TCEQ?

No, you do not need to send this to TCEQ. Keep it with your records for inspections.

How long should I keep it?

Keep completed logs in your records for **at least two years**.

What if I need help?

If you have questions about how to fill out the log or the public water system program, please contact Small Business and Local Government Assistance by phone at 800-447-2827, or by email at TexasEnviroHelp@tceq.texas.gov.

Notes

Complaint Log Sheet

Date	Location	Complaint	Investigation Results