

# **State of Texas**

***Public Drinking Water Program  
2017  
Annual Compliance Report***



**Texas Commission on Environmental Quality (TCEQ)**

**Office of Water**

**Water Supply Division**

**July 1, 2018**

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# Introduction

The Texas Commission on Environmental Quality (TCEQ) administers the Public Drinking Water Program in Texas under primacy authority from the United States Environmental Protection Agency (EPA). Section 1414(c)(3) of the Safe Drinking Water Act (SDWA) requires that each state that has been granted primacy prepare an annual report on violations of national primary drinking water regulations within the state, make the report readily available to the public, and submit it to the EPA. The TCEQ 2017 Annual Compliance Report fulfills this responsibility for Texas, and includes violations of maximum contaminant levels (MCLs), maximum residual disinfectant levels (MRDLs), treatment technique requirements, variances and exceptions, significant monitoring and consumer notification violations.

Each quarter, primacy States submit data to the Federal Safe Drinking Water Information System (SDWIS/FED), an automated database maintained by EPA. This report is based on data retrieved from the Texas installation of SDWIS/STATE. This report contains data from the following time periods:

- The beginning date of a given violation compliance period on or before December 31, 2017.
- The ending date of a given violation compliance period on or after January 1, 2017.

By using these criteria, some violations which began prior to calendar year 2017 are included in this report.

## Definitions and Terms

The following are definitions and terms used in this report.

**Public Water System** A public water system (PWS), as defined by the State of Texas, is a system that provides water via piping or other constructed conveyances for human consumption to at least 15 service connections or serves at least 25 people for at least 60 days each year. There are three types of PWSs:

**Community PWSs** such as towns or other communities where people live.

**Non-Transient Non-Community PWSs** such as schools or factories where people work but do not live.

**Transient Non-Community systems** such as rest stops, parks, and restaurants where people frequently come and go.

For this report, the acronym PWS means systems of all types unless specified in greater detail.

**Maximum Contaminant Level** - Under the Safe Drinking Water Act (SDWA), the EPA sets national limits on contaminant levels in drinking water to ensure that the water is safe for human consumption. These limits are known as Maximum Contaminant Levels (MCLs).

**Maximum Residual Disinfection Level** - The EPA sets national limits on residual disinfection levels in drinking water to reduce the risk of exposure to disinfectant byproducts formed when PWSs add chemical disinfection for either primary or residual treatment. These limits are known as Maximum Residual Disinfectant Levels (MRDLs).

**Treatment Techniques** - For some regulations, the EPA establishes treatment techniques (TTs) in lieu of an MCL to control unacceptable levels of certain contaminants. For example, treatment techniques have been established for viruses, bacteria, and turbidity.

**Variances and Exemptions** - The State of Texas does not grant variances or exemptions.

**Monitoring** - A PWS is required to monitor and verify that the levels of contaminants present in the water do not exceed the MCL. If a PWS fails to have its water tested as required or fails to report test results correctly to the primacy agent, a monitoring/reporting violation occurs.

**Sampling** - The TCEQ collects chemical compliance samples for PWSs using a third-party contractor, Antea USA. The samples collected include inorganic and organic chemicals, disinfection by products and radionuclides. These samples are collected either at the entry point or in the distribution system. Using a third party to collect samples ensures greater quality assurance, unbiased sample results and a very high collection rate. In 2015, 99.9% of samples scheduled were collected, or the sample sites were accounted for as inactive or unavailable for sampling. The PWSs comply with the chemical compliance sampling requirement by paying the lab analysis expense.

PWSs are required to collect additional compliance samples. All public water systems are responsible for the routine collection of bacteriological samples and disinfection residual data from their distribution system.

Most water systems must perform sampling for compliance for the Lead and Copper Rule. Systems that utilize a ground water source must monitor their raw well water when applicable. Systems that utilize surface water or ground water under the influence of surface water must monitor routinely for turbidity and are also required to perform source water monitoring for Cryptosporidium. Also, systems that use specific treatments (such as chlorine dioxide or ozone) in their drinking water production are required to perform specialized monitoring.

**Significant Monitoring Violations** - For this report, significant monitoring violations are defined as any significant monitoring violation that occurred during the calendar year of the report. A significant monitoring violation, with rare exceptions, occurs when no samples were taken or no results were reported during a compliance period.

**Consumer Notification** - Every Community water system is required to deliver to its customers a brief annual water quality report, referred to as the Consumer Confidence Report (CCR). This report is to include some educational material, and will provide information on the source water, the levels of any detected contaminants, and compliance with drinking water regulations.

**Significant Consumer Notification Violations** - For this report, a significant public notification violation occurred if a community water system completely failed to provide its customers the required annual water quality report. This type of violation is designated as “CCR Failure to Report” in SDWIS/STATE.

**Public Notification** - Public Notification is intended to ensure that consumers will always know if there is a problem with their drinking water. These notices immediately alert consumers if there is a serious problem with their drinking water that may pose a risk to public health. They also notify customers if their water does not meet drinking water standards or the water system fails to test its water.

## Public Water Systems in Texas

As of June 22nd, 2018, the State of Texas regulated 6,992 PWSs, providing drinking water to 27,821,327 customers.

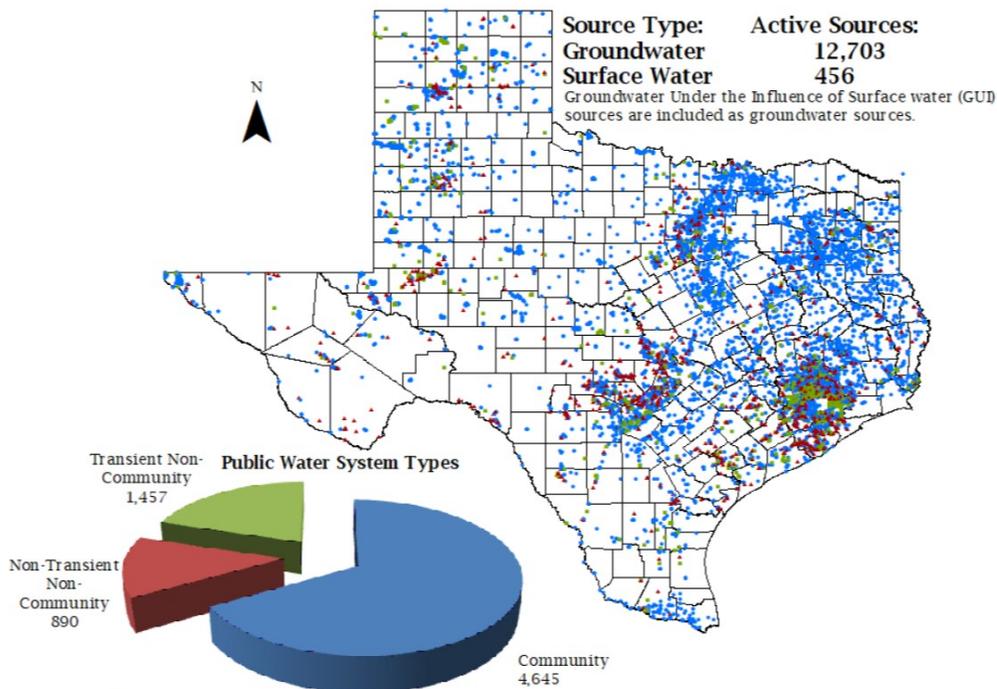
- Approximately 27,032,674 people receive drinking water from 4,645 Community water systems.
- Approximately 282,652 people receive drinking water from 1,457 Transient Non-Community water systems.

- Approximately 506,001 people receive drinking water from 890 Non-Transient Non-Community water systems.

## Drinking Water Sources

Sources for drinking water within Texas include both groundwater and surface water originating from numerous aquifers, rivers, and reservoirs throughout the state. An illustration of public drinking water sources in Texas is shown below in Figure 1.

**Figure 1. Active PWS Sources in Texas**



Primary source types for PWSs in Texas include the following:

**Groundwater (GW)** - wells that withdraw water from aquifers

**Purchased Groundwater (GWP)** - water purchased from another PWS where the source is one or more wells

**Surface Water (SW)** - intakes that withdraw water from creeks, rivers, streams, lakes, and reservoirs

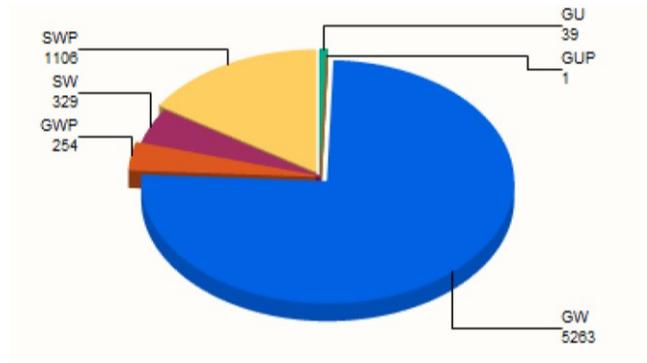
**Purchased surface water (SWP)** - water is purchased from another PWS where the source is one or more intakes

**Groundwater Under the Influence of Surface Water (GU)** - wells that withdraw water from aquifers where surface water may be present

**Purchased Groundwater Under the Influence of Surface Water (GUP)** - water is purchased from another PWS where the source is one or more aquifers where surface water may be present

The number of PWSs by primary source type are included in Figure 2.

**Figure 2. Number of PWSs by Source Type**



## Public Water System Size

The EPA defines water system size based on the following population classifications:

- Very small systems - serve 25 to 500 people
- Small systems - serve 501 to 3,300 people
- Medium systems - serve 3,301 to 10,000 people
- Large systems - serve 10,001 to 100,000 people
- Very Large systems - serve more than 100,000 people

The population served by public water systems in Texas is shown in Table 1 below.

Population	EPA Classification	Number of PWS	Total Population Served
25-50	Very Small	4,199	672,383
501-3,300	Small	1,764	2,564,293
3,301-10,000	Medium	689	3,913,265
10,001 - 100,000	Large	304	7,994,065
Over 100,000	Very Large	36	12,677,321
	<b>Total</b>	<b>6,992</b>	<b>27,821,327</b>

## 2017 Compliance Results

Annual compliance information was determined using the State of Texas Safe Drinking Water Information System (SDWIS) State, version 3.33.

# Health-Based Standards

In 1974 Congress passed the Safe Drinking Water Act. This law requires EPA to determine the level of contaminants in drinking water at which no adverse health effects are likely to occur. These non-enforceable health goals, based solely on possible health risks and exposure over a lifetime, with an adequate margin of safety, are called maximum contaminant level goals (MCLG). Contaminants are any physical, chemical, biological or radiological substances or matter in water. EPA sets MCLGs based on the best available science to prevent potential health problems.

For most contaminants, EPA sets an enforceable regulation called a maximum contaminant level (MCL) based on the MCLG. MCLs are set as close to the MCLGs as possible, considering cost, benefits and the ability of PWSs to detect and remove contaminants using suitable treatment technologies. When there is no reliable method that is economically and technically feasible to measure a contaminant at particularly low concentrations, a treatment technique is set rather than an MCL. A treatment technique is an enforceable procedure or level of technological performance which PWSs must follow to ensure control of a contaminant. States may set a more stringent MCL or treatment technique level for pathogens and indicators in drinking water than EPA.

Health based contaminants are those that may pose an acute or long-term risk to human health if they are found in drinking water. These contaminants include: fecal coliform bacteria, E. coli, turbidity, nitrate, nitrite, chlorine dioxide, inorganic chemicals, organic chemicals, disinfection byproducts, radionuclides and disinfectants.

Total coliforms, fecal coliforms, E. coli and turbidity are indicators that inadequately treated water may contain disease causing organisms. Pathogens include various types for bacteria, viruses, protozoan parasites and other organisms. Indicators are physical, chemical, or other parameters whose presence at a level outside of specified limits may reflect a problem in the treatment process or in the integrity of the distribution system.

These pathogens can cause diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a special health risk for infants, young children, and people with severely compromised immune systems.

Nitrate and nitrite contamination can occur from several sources: the natural decay of organic materials such as leaves and crop residue, use of commercial fertilizers, contamination by human sewage and wastes from farm animals, and the nitrification of ammonia in the treatment and distribution system. Excessive levels of nitrate and nitrite in drinking water can cause serious illness and sometimes death in infants less than six months of age and may also cause adverse health effects in pregnant women through the risk of miscarriage and in people with specific metabolic diseases.

Chlorine dioxide is a chemical added to drinking water for the purposes of microbial disinfection and oxidation of dissolved organic carbon to reduce formation of disinfection byproducts. Some infants, young children, and pregnant women who drink water containing chlorine dioxide in excess of the Maximum Residual Disinfection Level (MRDL) could experience nervous system effects.

Inorganic contaminants can leach into drinking water after dissolving from naturally occurring minerals in the ground, or from runoff from industrial sources or landfills. Lead and copper enter drinking water primarily through plumbing materials. Exposure to lead and copper may cause health problems ranging from stomach problems to brain damage. Lead and copper levels are controlled by treatment techniques and regulated by action level.

Organic contaminants come from petroleum solvents, paint removers, degreasers, cleaning fluids, pesticides, gasoline, electrical transformers, manufacturing processes, chemical production, byproducts from disinfection, the production of plastics, agricultural runoff,

improper waste disposal, and improper handling and storage techniques. These contaminants may damage organs such as the heart, liver, and kidneys, damage the central nervous and immune systems, and cause cancer.

Disinfection byproducts are organic chemicals that form from adding disinfectant to water containing organic matter. Trihalomethane, haloacetic acids, chlorite, and bromate are byproducts of disinfection. These contaminants may damage organs such as the kidneys and liver, damage the cardiovascular system and central nervous system, and are sometimes associated with high blood pressure and cancer.

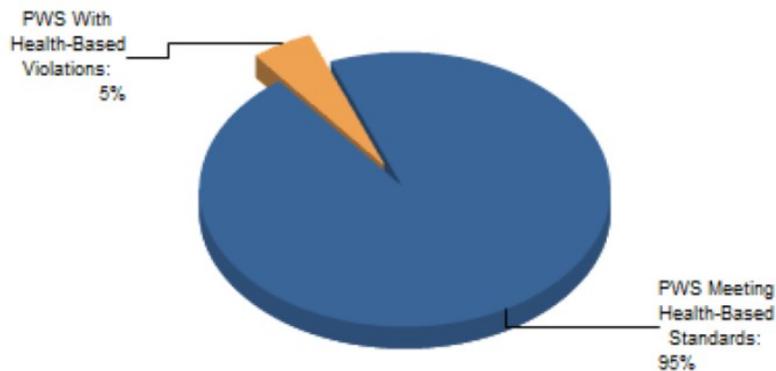
Radionuclides include radium and uranium, which occur naturally in some ground water due to geological formations, particularly in deeper aquifers. Radionuclide contaminants may cause cancer.

Disinfectants are chemicals added to drinking water during treatment to provide disinfection at the treatment plant and in the distribution system. If disinfectants are not dosed and managed appropriately, they may cause health effects from chlorine and chloramines which can include irritating effects to the eyes and nose, stomach discomfort, and (chloramine only) anemia. Chlorine dioxide can cause nervous system effects and anemia.

## Health Based Standards Results

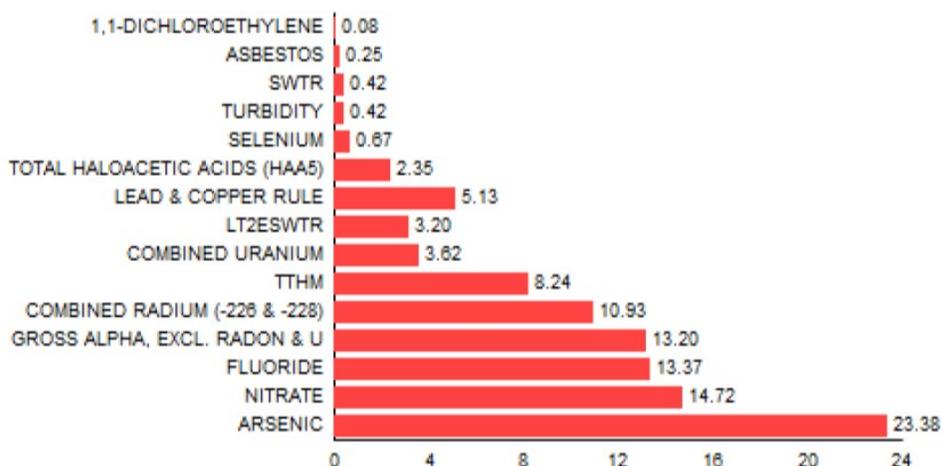
For 2017, health-based standards were met by 95% of the 6,992 PWS in the State of Texas. The percentage of total population served by PWS meeting health-based standards was 98%. Figure 3 below shows the percentage of PWSs in compliance with health-based standards.

**Figure 3. Percent of PWSs in Compliance with Health-Based Standards**



Maximum Contaminant Level and Treatment Technique Rule violations, as a percentage of total health-based violations, are shown in Figure 4 below.

**Figure 4. Percent of Health-Based Standard Violations, by Contaminant/Rule**



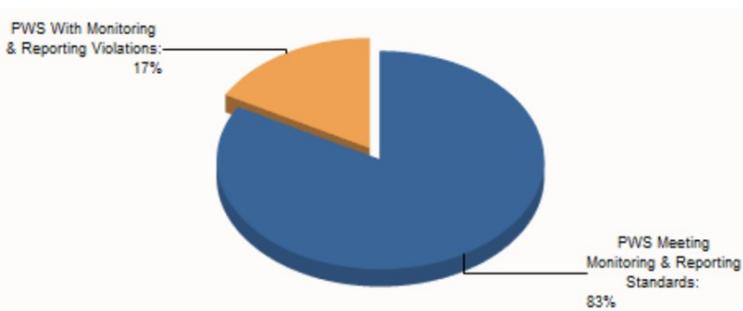
## Significant Monitoring and Reporting Violation

Monitoring and Reporting regulations provide a mechanism to ensure that Public Water Systems (PWS) evaluate contaminants in order to meet health based standards. When a system does not monitor for contaminants in accordance with associated compliance periods, consumers and primacy agencies do not know whether the water being served is meeting health-based standards.

For 2017, 83% of the 6,992 PWSs in Texas complied with major monitoring and reporting regulations. The total population served by PWSs meeting monitoring and reporting regulations is 92%.

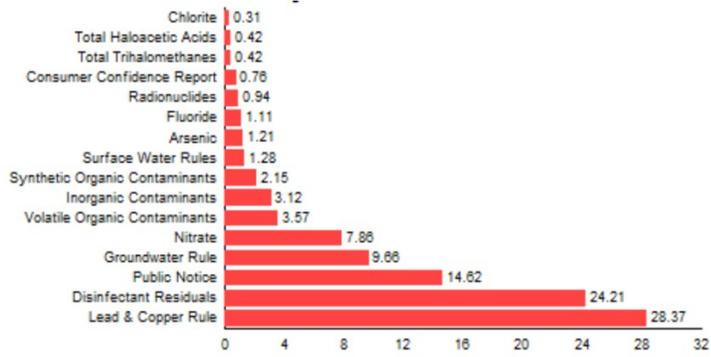
Figure 5 below shows the percent of PWSs in compliance with monitoring and reporting regulations.

**Figure 5. Percent of PWS in Compliance with Monitoring and Reporting Regulations**



Of the 17% of PWSs with monitoring and reporting violations, the percent by contaminant and rule are shown in Figure 6 below.

**Figure 6. Percent of Monitoring and Reporting Violations by Contaminant or Rule**



# Appendix A: Summary of Violations by Rule and Type

A summary of the number of violations by rule and type is shown below. This table summarizes the total violations, violations resolved, and violations remaining unresolved for the report period.

Rule	Violation Name	Total Violations	Resolved Violations	Unresolved Violations
CCR	CCR REPORT	280	264	16
DBP	MCL, LRAA	176	50	126
DBP	MONITORING, ROUTINE (DBP), MAJOR	1,020	268	752
DBP	MRDL, NON-ACUTE (CHL.DIOXIDE)	1	1	0
GWR	MONITOR GWR TRIGGERED/ADDITIONAL, MAJO	259	24	235
GWR	MONITOR GWR TRIGGERED/ADDITIONAL, MINO	54	7	47
IOC Group M/R	MONITORING, ROUTINE MAJOR	34	0	34
IOC Individual M/R	MONITORING, ROUTINE MAJOR	383	2	381
IOC MCL	MCL, AVERAGE	463	18	445
IOC MCL	MCL, SINGLE SAMPLE	183	8	175
LCR	FOLLOW-UP OR ROUTINE TAP M/R (LCR)	389	65	324
LCR	INITIAL TAP SAMPLING (LCR)	15	0	15
LCR	INITIAL/FOLLOW-UP/ROUTINE SOWT M/R (LCR)	20	13	7
LCR	LEAD CONSUMER NOTICE (LCR)	1,081	764	317
LCR	OCCT/SOWT RECOMMENDATION/STUDY (LCR)	100	47	53
LCR	PUBLIC EDUCATION (LCR)	29	22	7
LCR	WATER QUALITY PARAMETER M/R (LCR)	511	6	505
PN	PUBLIC NOTICE RULE LINKED TO VIOLATION	2,872	2,252	620
RTCR	LEVEL 1 ASSESS, MULTIPLE TC POS (RTCR)	6	6	0
RTCR	LEVEL 1 ASSESS, TC POS RT NO RPT (RTCR)	5	0	5
RTCR	LEVEL 2 ASSESSMENT, 2ND LEVEL 1(RTCR)	7	0	7
RTCR	MCL, E. COLI, POS E COLI (RTCR)	6	4	2
RTCR	MONITORING, ROUTINE, MAJOR (RTCR)	1,392	367	1,025
RTCR	MONITORING, ROUTINE, MINOR (RTCR)	109	56	53
Rad	MCL, AVERAGE	344	14	330
Rad	MONITORING, ROUTINE MAJOR	42	0	42
SOC M/R	MONITORING, ROUTINE MAJOR	148	8	140
SWTR	FAILURE MAINTAIN MICROBIAL TREAT.(LT2)	30	1	29
SWTR	FAILURE TO FILTER (SWTR)	2	0	2
SWTR	FAILURE TO PROVIDE LT2 TREATMENT	14	7	7

Rule	Violation Name	Total Violations	Resolved Violations	Unresolved Violations
SWTR	LOW CT GREATER THAN 4 HOURS	10	7	3
SWTR	MONITORING, ROUTINE (IESWTR/LT1), MAJOR	162	88	74
SWTR	MONITORING, RT MAJOR (LT2-FILTERED)	2	0	2
SWTR	MONTHLY COMB FLTR EFFLUENT (IESWTR/LT1)	38	32	6
SWTR	SINGLE COMB FLTR EFFLUENT (IESWTR/LT1)	18	16	2
SWTR	TX CFE TURBIDITY ABOVE 5.0 NTU	4	2	2
VOC MCL	MCL, AVERAGE	1	0	1
VOC M/R	MONITORING, ROUTINE MAJOR	108	2	106

Rule Abbreviations:

- CCR Consumer Confidence Report
- PN Public Notice Rule
- Chem Chemical (Inorganics and Organics)
- Rad Radionuclides
- DBP Disinfection By-Products
- TCR Total Coliform Rule
- GWR Groundwater Rule
- RTCR Revised Total Coliform Rule
- HAA5 Haloacetic Acids
- TTHM Total Trihalomethanes
- LCR Lead and Copper Rule
- SWTR Surface Water Treatment Rule

## Synthetic Organic Compounds

Contaminant	MCL/MRDL	MCLs/MRDLS Violations	MCLs/MRDLS PWS in Violation	Significant M/R Violations	Significant M/R PWS in Violation
1,2-Dibromo-3-Chloropropane	3x10-8mg/L	0	0	18	12
2,4,5-TP	0.05mg/L	0	0	21	15
2,4-D	0.07mg/L	0	0	21	15
Alachlor	0.002mg/L	0	0	82	69
Atrazine	0.003mg/L	0	0	82	69
Benzo(a)pyrene	0.0002mg/L	0	0	82	69
Carbofuran	0.04mg/L	0	0	19	13
Chlordane	0.002mg/L	0	0	82	69
Dalapon	0.2mg/L	0	0	21	15
Di(2-Ethylhexyl) Adipate	0.4mg/L	0	0	82	69
Di(2-Ethylhexyl) Phthalate	0.006mg/L	0	0	82	69
Dinoseb	0.007mg/L	0	0	21	15
Endrin	0.002mg/L	0	0	82	69
Ethylene Dibromide	0.00005mg/L	0	0	18	12

Contaminant	MCL/MRDL	MCLs/MRDLs Violations	MCLs/MRDLs PWS in Violation	Significant M/R Violations	Significant M/R PWS in Violation
Heptachlor	0.0004mg/L	0	0	82	69
Heptachlor Epoxide	0.0002mg/L	0	0	82	69
Hexachlorobezene	0.001mg/L	0	0	82	69
Hexachlorocyclopentadiene	0.05mg/L	0	0	82	69
Methoxychlor	0.04mg/L	0	0	82	69
Oxamyl	0.2mg/L	0	0	19	13
Pentachlorophenol	0.001mg/L	0	0	82	69
Picloram	0.5mg/L	0	0	21	15
Simazine	0.004mg/L	0	0	82	69
Toxaphene	0.003mg/L	0	0	82	69
<b>Subtotal</b>		<b>0</b>	<b>0</b>	<b>140</b>	<b>73</b>

## Volatile Organic Compounds

Contaminant	MCL/MRDL	MCLs/MRDLs Violations	MCLs/MRDLs PWS in Violation	Significant M/R Violations	Significant M/R PWS in Violation
1,1,1-Trichloroethane	0.2mg/L	0	0	106	94
1,1,2-Trichloroethane	0.005mg/L	0	0	106	94
1,1-Dichloroethylene	0.007mg/L	1	1	106	94
1,2,4-Trichlorobenzene	0.07mg/L	0	0	106	94
1,2-Dichloroethane	0.005mg/L	0	0	106	94
1,2-Dichloropropane	0.005mg/L	0	0	106	94
Benzene	0.005mg/L	0	0	106	94
Carbon Tetrachloride	0.005mg/L	0	0	106	94
CIS-1,2-Dichloroethylene	0.07mg/L	0	0	106	94
Dichloromethane	0.005mg/L	0	0	106	94
Ethylbenzene	0.7mg/L	0	0	106	94
O-Dichlorobenzene	0.6mg/L	0	0	106	94
Styrene	0.1mg/L	0	0	106	94
Tetrachloroethylene	0.005mg/L	0	0	106	94
Toulene	1mg/L	0	0	106	94
Trans-1,2-Dichloroethylene	0.1mg/L	0	0	106	94
Trichloroethylene	0.005mg/L	0	0	106	94
Vinyl Chloride	0.002mg/L	0	0	106	94
Xylenes, Total	10mg/L	0	0	106	94
<b>Subtotal</b>		<b>1</b>	<b>1</b>	<b>106</b>	<b>94</b>

## Inorganic Compounds

Contaminant	MCL/MRDL	MCLs/MRDLs Violations	MCLs/MRDLs PWS in Violation	Significant M/R Violations	Significant M/R PWS in Violation
Antimony, Total	0.006 MG/L	0	0	0	0
Arsenic	0.01 MG/L	278	72	28	10
Asbestos	7 MFL	3	2	31	28
Barium	2 MG/L	0	0	0	0
Beryllium, Total	0.04 MG/L	0	0	0	0
Cadmium	0.05 MG/L	0	0	0	0
Chromium	0.1 MG/L	0	0	2	2
Cyanide	0.2 MG/L	0	0	36	36
Fluoride	4 MG/L	156	41	25	25
Mercury	0.002 MG/L	0	0	0	0
Nitrate	10 MG/L	175	56	223	157
Nitrate-Nitrite	10 MG/L	0	0	0	0
Nitrite	1 MG/L	0	0	32	24
Selenium	0.05 MG/L	8	3	4	1
Thallium, Total	0.002 MG/L	0	0	0	0
<b>Subtotal</b>		<b>620</b>		<b>381</b>	<b>185</b>

Inorganic compounds are often sampled as on or more group and Monitoring/Reporting violations are considered group violations. There were two inorganic compound groups with violations in 2017:

- The Metals group contains the following: Arsenic; Antimony, Total; Barium; Cadmium; Chromium; Mercury; Selenium; Thallium; Total; Beryllium, Total.
- The Minerals group contains the following: Fluoride.
- Violations by group:
  - Metals: There were 19 violations for 18 PWSs.
  - Minerals: There were 15 violations for 14 PWSs.

## Radionuclides

Contaminant	MCL/MRDL	MCLs/MRDLs Violations	MCLs/MRDLs PWS in Violation	Significant M/R Violations	Significant M/R PWS in Violation
Combined Radium (-226 & -228)	5 PCI/L	130	28	42	26
Combined Uranium	30 UG/L	43	12	42	26
(Excluding Radon & Uranium)	15 Pci/L	157	38	42	26
<b>Subtotal</b>		<b>330</b>	<b>49</b>	<b>42</b>	<b>26</b>

## Revised Total Coliform Rule

Rule	MCL/MRDL	MCLs/MRDLS Violations	MCLs/MRDLS PWS in Violation	TT Violations	TT PWS in Violation	Significant M/R Violation	Significant M/R PWS in Violation
Level 1 Assessment, Multiple Total Coliform Positive (RTCR)				0	0		
Level 1 Assessment, Total Coliform Positive Routine No Repeat (RTCR)				5	5		
Level 2 Assessment, 2nd Level 1 (RTCR)				7	4		
MCL, E. Coli, Positive E. Coli (RTCR)	Presence	2	2				
Monitoring, Routine Major (RTCR)						1025	340
Monitoring, Routine Minor (RTCR)						53	28
<b>Subtotal</b>		<b>2</b>	<b>2</b>	<b>12</b>	<b>6</b>	<b>108</b>	<b>366</b>

## Surface Water Treatment Rules

Violation Type	TT Violations	TT PWS in Violation	Significant M/R Violations	Significant M/R PWS in Violation
Failure to Maintain Microbial Treatment (LT2)	29	3		
Failure to Filter (SWTR)	2	2		
Failure to Provide LT2 Treatment	7	2		
Low CT Greater Than 4 Hours	3	3		
Monitoring, Routine (IESWTR/LT1), Major	0	0	74	10
Monitoring, Routine Major (LT2-Filtered)	0	0	2	1
Monthly Combined Filter Effluent (IESWTR/LT1)	6	3		
Single Combined Filter Effluent (IESWTR/LT1)	2	1		
TX CFE Turbidity Above 5.0 NTU	2	1		
<b>Subtotal</b>	<b>51</b>	<b>9</b>	<b>76</b>	<b>11</b>

## Disinfectants and Disinfection By-Products Rule

Contaminant	MCL/MRDL	MCLs/MRDLs Violations	MCLs/MRDLs PWS in Violation	Significant M/R Violations	Significant M/R PWS in Violation
Bromate Carbon, Total	0.010 mg/L				
Disinfectant Residual	Chlorine (Free) 0.2, Chloramine 0.5; Total 0.5 mg/l			659	384
Chlorine Dioxide	0.8 mg/L			0	0
Chlorite	1.0 mg/L			9	7
Total Haloacetic Acid (HAA5)	0.060 mg/L	28	11	42	39
Trihalomethanes (TTHM)		98	43	42	39
<b>Subtotal</b>		<b>126</b>	<b>43</b>	<b>752</b>	<b>416</b>

## Lead and Copper Rule

Contaminant	MCL/MRDL	MCLs/MRDLs Violations	MCLs/MRDLs PWS in Violation	Significant M/R Violations
Follow-Up Tap Sampling			324	273
Initial Tap Sampling (LCR)			15	15
Initial/Follow-Up/Routine SOWT M/R (LCR)			7	7
Lead Consumer Notice (LCR)			317	276
Water Quality Parameter M/R (LCR)			505	176
Public Education (LCR)	7	7		
OCCT/SOWT Recommendation Study	53	34		
<b>Subtotal</b>	<b>60</b>	<b>39</b>	<b>1168</b>	<b>706</b>

## Groundwater Rule

Contaminant	Significant M/R Violations	Significant M/R PWS in Violation
Monitor GWR Triggered/Additional Major	235	189
Monitor GWR Triggered/Additional Minor	47	37
<b>Subtotal</b>	<b>282</b>	<b>219</b>

## Consumer Confidence Rule

Rule	Significant M/R Violations	Significant M/R PWS in Violation
Consumer Confidence Rule	16	10
<b>Subtotal</b>	<b>16</b>	<b>10</b>

## Public Notice Rule

Rule	Significant M/R Violations	Significant M/R PWS in Violation
Public Notice Rule	620	16 2
<b>Subtotal</b>	<b>620</b>	<b>16</b> <b>2</b>

Obtaining a Copy of the 2017 Public Drinking Water Annual Compliance Report

As required by the Safe Drinking Water Act, the State of Texas has made the 2017 Public Drinking Water Annual Compliance Report available to the public. Interested parties can obtain a copy of the 2017 Annual Public Water Systems Compliance Report for Texas by accessing the TCEQ website at <http://www.tceq.texas.gov>

For additional information about this report contact: Texas Commission on Environmental Quality at:

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