

STATE OF CALIFORNIA

ANNUAL
COMPLIANCE
REPORT

2016



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**STATE WATER RESOURCES CONTROL BOARD
DIVISION OF DRINKING WATER
ANNUAL COMPLIANCE REPORT OF PUBLIC WATER SYSTEMS
CALENDAR YEAR 2016**

EXECUTIVE SUMMARY

The State Water Resources Control Board (SWRCB) is designated as a primacy agency by the U.S. Environmental Protection Agency (USEPA), and is granted the regulatory and enforcement authority over drinking water standards and public water systems in California. Within the SWRCB, the Division of Drinking Water (DDW) oversees enforcement of drinking water standards and requirements over public water systems (PWSs) in California.

Each calendar quarter, DDW submits data from the State's Safe Drinking Water Information System (SDWIS/STATE), to the USEPA's Safe Drinking Water Information System (SDWIS/FED). The data submitted includes: public water system inventory information; incidents of violation of federally adopted maximum contaminant levels (MCLs), maximum residual disinfectant levels (MRDLs), monitoring and reporting (M/R), and treatment techniques (TT); violations concerning public and consumer notification; and information on enforcement activity related to these violations. In addition, the SWRCB provides USEPA with this Annual Compliance Report, which presents an evaluation of a portion of the violation data listed above, that USEPA has identified for inclusion in this report.

Violation information included in this Annual Compliance Report is specifically derived from the data held in SDWIS/FED for the period of January 1, 2016, through December 31, 2016. The data tables used in this report are available at the website listed below. These data tables can be used to search for specific water systems or to sort violations by County.

A copy of this 2016 Annual Compliance Report (and associated data tables) will be available to the public by contacting the SWRCB's Division of Drinking Water at (916) 449-5600, or through the SWRCB website at:

http://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/Publications.shtml

The appendices to the 2016 Annual Compliance Report tabulate violations by the following categories: rule family, individual contaminant, and by County. Table 1 lists the number of violations and estimated population impacted by the categories of MCL or treatment technique violations plus specific monitoring and reporting violations for 2016. The violation data is used by DDW in establishing priorities and focusing resources to resolve compliance problems.

The goal of the State Water Board is to have all public water systems operating in full compliance with drinking water requirements and providing safe drinking water pursuant to the California Safe Drinking Water Act.

Table 1: Comparison of Data between 2015 and 2016

Part A: Violations with potential direct public health impacts						
MCL and TT Violation Category	Year 2015		Year 2016		Change between 2015 and 2016	
	MCL & TT Violations	Impacted Population	MCL & TT Violations	Impacted Population	MCL & TT Violations	Impacted Population
Inorganic Contaminants	232	129,545	756	138,830	+528	+9,285
Synthetic Organic Contaminants (SOCs)	4	14,163	3	120	-1	-14,043
Volatile Organic Contaminants (VOCs)	0	0	3	200	+3	+200
Radionuclide Rule	26	52,411	77	11,418	+48	-40,993
Total Coliform Rule (acute and non-acute)	419	443,064	522	425,554	+167	-17,510
Disinfectants/ Disinfection Byproducts Rule	74	381,063	149	221,309	+76	-159,754
Surface Water Treatment Rules	42	558,159	253	197,374	+211	-360,785
Groundwater Rule	1	420	1*	3,987,622*	0	+3,987,202
Lead and Copper Rule (LCR)	12	10,494	19	12,250	+7	+1,756
Totals	810	1,589,319	1,783	4,994,677	+973	+3,405,358
Part B: Violations related to keeping the public informed						
PN Violation Category	Year 2015		Year 2016		Change between 2015 and 2016	
	PN Violations	Number of PWS	PN Violations	Number of PWS	PN Violations	Number of PWS
Public Notification Rule	52	42	29	20	-23	-22
Consumer Confidence Report Notification	337	258	361	276	+24	+18
Variances and Exemptions	N/A	N/A	N/A	N/A	N/A	N/A
Totals	389	300	390	296	+1	-4

*See discussion in Section 4.8 regarding this violation and corrective actions taken

SECTION 1: INTRODUCTION

This report provides information based on the State of California's Water Resources Control Board (SWRCB) Division of Drinking Water records on public drinking water system violation data for calendar year 2016. This report is provided to the U.S. Environmental Protection Agency (USEPA) and to the public as required by the federal Safe Drinking Water Act, sections 1414(c)(3)(A)(i) – (ii). The Federal Safe Drinking Water Act (SDWA) requires states to report public water system violations of primary drinking water standards through an electronic reporting protocol and through this report for each calendar year. This report does not contain information on domestic water supplies such as private wells or state small water systems that do not meet the definition of a public water system.

THE DRINKING WATER PROGRAM OVERVIEW

The State of California was first granted primary enforcement responsibility (primacy) of the SDWA for public water systems on June 2, 1978, by the federal government. The State's Drinking Water Program was transferred in its entirety from the California Department of Public Health to the SWRCB on July 1, 2014. The SWRCB's Division of Drinking Water (DDW) oversees implementation of the SDWA over public water systems (PWSs) within California. The SWRCB has further delegated regulatory authority through a delegation agreement with County Environmental Health Departments. DDW has 24 District Offices under the Field Operations Branch that cover specific areas for enforcement of public water systems. A map showing the areas served by each district can be found at http://www.waterboards.ca.gov/drinking_water/programs/documents/ddwem/DDWdistrictofficesmap.pdf. Currently, 30 Counties in California have retained primacy as a Local Primacy Agency (LPA) under delegation agreements issued and signed in 2014, and amended in 2017. These 30 LPAs oversee SDWA compliance of small PWSs that serve fewer than 200 service connections within their Counties.

Currently, DDW and LPAs together regulate a total of 7,588 PWSs in California. LPAs are responsible for regulatory oversight of approximately 4,089 small PWSs in 30 Counties. This regulatory responsibility includes tasks such as issuance of operating permits, conducting sanitary surveys, monitoring for compliance with regulations, and taking enforcement actions to compel compliance when violations are identified, and reporting on those actions taken.

A PWS is defined as a system for the provision of water for human consumption through pipes or other constructed conveyances that has 15 or more service connections or regularly serves at least 25 individuals daily at least 60 days out of the year. PWSs are divided into three principle classifications: community water systems (CWS), nontransient noncommunity water systems (NTNC), and transient noncommunity water systems (TNC). Wholesale water systems are also regulated as public water systems although they may not serve water directly to individual customers or service connections.

Community water systems serve cities, towns and other areas with at least 15 service connections or 25 yearlong residents. Examples include water districts, cities, mutual water companies, mobile home parks and farm labor housing.

Nontransient noncommunity systems are systems that provide water to the same non-residential users daily for at least 180 days out of the year but are not classified as CWSs. Examples include day cares, schools, and places of employment.

Transient noncommunity systems are systems that provide water for a population that is transient in nature (i.e., not 25 or more of the same people for more than 180 days per year). Examples include campgrounds, parks, ski resorts, roadside rest areas, churches, gas stations and motels. A wholesale water system means an entity that supplies water to one or more public water systems for resale. These wholesale water systems are regulated as public water systems.

Table 2 provides a count of the number of PWSs in California by type, as extracted from the SDWIS/State. Table 3 provides the number of CWSs in California by size group, and provides information on the total population served by those CWSs.

**Table 2: Number of Water Systems by System Classification
(As of June 2017)**

Type of Water System	Count
Community Water Systems (CWS)	2,924
Non-Transient, Non-Community (NTNC)	1,467
Transient, Non-Community (TNC)	3,147
Wholesale Water Systems	50
Total number of water systems statewide	7,588

**Table 3: Number of Community Water Systems (CWSs) Statewide
(As of June 2017)**

Number of Service Connections	Typical Population Served	Number of Systems	Sum of Actual Population Served
3,300 or more	10,000 or more	437	38,779,174
1,000 to 3,299	3,000 to 10,000	245	1,416,341
500 to 999	1,500 to 3,000	158	336,966
100 to 499	300 to 1,500	553	346,667
25 to 99	75 to 300	864	129,926
Fewer than 25	25 to 75	667	29,551
Total number of systems		2,924	41,038,625

Under the 1974 federal SDWA and subsequent reauthorizations in 1986 and 1996, USEPA sets national limits on contaminant levels in drinking water for human consumption to protect the health of users. These limits are known as maximum contaminant levels (MCL) and maximum residual disinfectant levels (MRDL). For some regulations, treatment techniques (TT) or action level (AL) have been established in lieu of an MCL as a means to control levels of specific

contaminants in drinking water. Water systems are also regulated as to the frequency of monitoring and the reporting (M/R) of water quality or rule compliance. Systems can incur a violation for failure to collect required samples during a monitoring period (*monitoring violations*) or failure to report sample results or rule compliance in the required manner (*reporting violations*).

The SDWA requires PWSs to notify their consumers when a drinking water standard has been violated, including MCL, TT, AL and M/R requirements. This notification is required to include:

- A clear and understandable explanation of the nature of the violation
- The potential adverse health effects from the violation
- The steps that the water system is undertaking to correct the violation
- The possible use of alternative water supplies available during the violation

Each quarter, the SWRCB submits data to the Safe Drinking Water Information System (SDWIS/FED), a database maintained by USEPA. The data submitted include:

- Water system inventory information
- MCL, MRDL, M/R, and TT violations for regulated contaminants
- Violations concerning public and consumer notification
- Enforcement actions associated to these violations
- 90th% data for the Lead and Copper Rule

There are three basic types of violations that a water system can incur:

- **Violation of a Maximum Contaminant Level (MCL):** Primary drinking water standards have been adopted by SWRCB for contaminants that may be found in drinking water supplies in California and are necessary to protect the public from acute and chronic health risks associated with consuming water. These limits are known as MCLs.
- **Violation of a Treatment Technique (TT):** Treatment techniques and performance standards have been adopted as a means to provide safe drinking water in instances where adoption of a specific MCL may be impractical or impossible. Treatment technique violations are a proven means to reduce the risk from various contaminants by closely controlling the treatment processes.
- **Violation of a Monitoring and Reporting Requirement (M/R):** A water system is required to monitor and verify that the levels of contaminants present in the drinking water supplies do not exceed an MCL. A monitoring violation occurs when a water system fails to have its water tested as required within a compliance period. A reporting violation occurs when a water system fails to report test results in a timely fashion to the regulatory agency, or fails to provide certification that mandated information was provided to the public, such as through the issuance of a public notice or the annual Consumer Confidence Report. A water system that fails to perform required monitoring for a group of chemicals (such as synthetic organic chemicals or volatile organic chemicals) would incur a violation of Monitoring and Reporting Requirements for each of the individual chemicals within this group.

SECTION 2: VIOLATION CATEGORY SUMMARY

The 2016 Annual Compliance Report lists violations by the following categories:

1. Inorganic contaminants
2. Synthetic organic contaminants
3. Volatile organic contaminants
4. Radionuclide Rule
5. Total Coliform Rule
6. Disinfectants and Disinfection Byproducts Rule
7. Surface Water Treatment Rules
8. Groundwater Rule
9. Lead and Copper Rule
10. Public Notification Rule
11. Consumer Confidence Report notification requirements
12. Variances and exemptions

SECTION 3: REVIEW OF 2016 VIOLATION DATA

Summary Data Tables for Calendar Years 2014, 2015, and 2016

There are four tables in the report that summarize the violation data for the 2016 calendar year as well as for calendar years 2014 and 2015. These tables include:

Table 4 Number of violations by category for maximum contaminant levels/treatment techniques and monitoring/reporting requirements

Table 5 Number and population of water systems with violations of maximum contaminant levels, maximum residual disinfectant levels and treatment techniques

Table 6 Number and population of water systems with violations of monitoring and reporting requirements

Violation Information in the Appendices

Appendix B summarizes violations by Rule Family.

Appendix C summarizes violations by individual contaminant. It provides number of violations and numbers of water systems by contaminant.

Appendix D lists individual water system violations of the Arsenic MCL by county sorted by water system number. The table also provides the population affected by these violations.

Appendix E lists individual water system violations of the Nitrate MCL by county sorted by water system number. The table also provides the population affected by these violations.

Appendix F lists individual water system violations of the Nitrate-Nitrite MCL by county sorted by water system number. The table also provides the population affected by these violations.

Table 4: Number of Violations by Category for Maximum Contaminant Levels / Treatment Techniques (MCL/TT) and/or Monitoring / Reporting Requirements (M/R)

No	Category	2014		2015		2016	
		MCL/TT	M/R	MCL/TT	M/R	MCL/TT	M/R
1	Inorganic contaminants	798	172	232	105	756	146
2	Synthetic Organic Contaminants (SOCs)	11	0	4	0	3	64
3	Volatile Organic Contaminants (VOCs)	3	2	0	0	3	47
4	Radionuclide Rule	73	7	26	15	77	10
5	Total Coliform Rule (TCR)	617	710	419	614	522	568
6	Disinfectants and Disinfection Byproducts Rule (DBPR)	164	47	74	25	149	62
7	Surface Water Treatment Rules (SWTR, IESWTR, LT2SWTR)	86	4	42	1	253	16
8	Groundwater Rule	2	25	1	35	1	30
9	Lead and Copper Rule (LCR)	1	93	12	561	19	541
10	Public Notification Rule	N/A	3	N/A	52	N/A	29
11	Consumer Confidence Report notification requirements	N/A	80	N/A	337	N/A	361
12	Variances and Exemptions	N/A	0	N/A	N/A	N/A	N/A

Table 5: Number and Population of PWSs with Violations of Maximum Contaminant Levels (MCLs), Maximum Residual Disinfectant Levels (MRDLs), and/or Treatment Techniques (TT)

No	Category	2014		2015		2016	
		No. of PWSs	Population	No. of PWSs	Population	No. of PWSs	Population
1	Inorganic Contaminants	296	206,654	232	129,545	264	138,830
2	Synthetic Organic Contaminants (SOCs)	6	15,602	4	14,163	2	120
3	Volatile Organic Contaminants (VOCs)	2	250	0	0	1	200
4	Radionuclide Rule	28	23,865	26	52,411	28	11,418
5	Total Coliform Rule (TCR)	442	620,245	419	443,064	433	425,554
6	Disinfectants And Disinfection Byproducts Rule (DBPR)	62	214,665	74	381,063	59	221,309
7	Surface Water Treatment Rules (SWTR, IESWTR, LT2SWTR)	31	20,766	42	558,159	49	197,374
8	Groundwater Rule	2	27,360	1	420	1*	3,987,622*
9	Lead And Copper Rule (LCR)	1	3,441	11	10,494	18	12,250

*See discussion in Section 4.8 regarding this violation and corrective actions taken.

Table 6: Number and Population of Public Water Systems (PWSs) with Violations of Monitoring and Reporting Requirements (M/R)

No	Category	2014		2015		2016	
		No. of PWSs	Population	No. of PWSs	Population	No. of PWSs	Population
1	Inorganic Contaminants	153	131,814	74	93,551	115	41,087
2	Synthetic Organic Contaminants (SOCs)	0	0	0	0	4	1,990
3	Volatile Organic Contaminants (VOCs)	1	225	0	0	7	2,520
4	Radionuclide Rule	3	616	9	1,153	8	2,621
5	Total Coliform Rule (TCR)	508	1,169,357	441	265,737	443	215,646
6	Disinfectants and Disinfection Byproducts Rule (DBPR)	23	290,764	16	95,957	33	145,006
7	Surface Water Treatment Rules (SWTR, IESWTR, LT2ESWTR)	2	600	1	500	10	100,356
8	Groundwater Rule	24	670,578	33	1,169,843	28	302,059
9	Lead and Copper Rule (LCR)	91	139,394	501	Incorrect data in prior year report	476	511,127
10	Public Notification Rule	2	1,206	42	60,543	20	24,724
11	Consumer Confidence Report notification requirements	69	75,935	258	140,167	276	81,838
12	Variations and Exemptions	0	0	N/A	N/A	N/A	N/A

SECTION 4: DISCUSSION OF VIOLATION TYPES AND CONTAMINANTS

This section contains summary information on violations of federal MCLs entered into SWRCB's data system. More specific information on the water provided by a drinking water supplier can be obtained by requesting a copy of the Consumer Confidence Report (CCR) that all CWS and NTNC water systems are required to issue to their customers annually. To obtain a copy of a CCR, customers may contact the public water system serving the area. Many public water systems also post their CCR to the internet. The SWRCB also provides access to the CCRs received from PWSs on the Public Drinking Water Watch site, located at the following link, <https://sdwis.waterboards.ca.gov/PDWW/>. The Public Drinking Water Watch site also provides access to water system contact information, water quality data and violation and enforcement information for a water system. Instructions on how to access Public Drinking Water Watch are provided in Appendix B. When a system has violated a drinking water standard or a monitoring or reporting requirement, the public water system is required to issue a public notice to their consumers, copies of which should also be available from the public water system upon request.

4.1 Inorganic Contaminants

Community and nontransient noncommunity water systems are required to meet primary drinking water standards and monitoring and reporting requirements for 18 inorganic contaminants. Additionally, transient noncommunity water systems must monitor and comply with the MCLs for nitrate and nitrite. A total of 760 violations of inorganic contaminant MCLs were recorded for the year, as summarized below:

Contaminant	Violation Category	No. of Violations	No. of PWSs
Arsenic	MCL	384	127
Cadmium	MCL	8	2
Fluoride	MCL	26	10
Mercury	MCL	3	1
Nitrate	MCL	285	108
Nitrate-Nitrite	MCL	50	16
Selenium	MCL	0	0

Arsenic accounted for over half of all inorganic chemical MCL violations. The major sources of arsenic in drinking water are from erosion of natural deposits. Other sources of arsenic may include runoff from orchards, and wastes from glass and electronics production. Some people who drink water containing arsenic in excess of the MCL for many years could experience skin damage or problems with their circulatory system, and may have an increased risk for cancer. In California, the drinking water standard for arsenic was lowered to 0.010 milligrams per liter (mg/L) as of November 28, 2008.

Nitrate (including Nitrate + Nitrite combined) accounted for 335 of the total violations of inorganic chemical MCLs. Nitrate and nitrite are commonly found in fertilizers used in farming and gardening. Nitrates are also found in sewage and waste from humans, animals, and some industrial processes, and may be found due to erosion of natural deposits. Contamination from

nitrate and nitrite is usually the result of these activities. There are few mineral deposits containing naturally occurring nitrate or nitrite in California.

Excessive levels of nitrate and nitrite in drinking water can cause serious illness and, in rare cases, even death in infants less than six months of age. This is a result of interference with the oxygen carrying capacity of the infant's blood, called "Blue Baby Syndrome" or "Methemoglobinemia." This is an acute disease in that symptoms can develop rapidly. Symptoms of nitrate exposure in infants include shortness of breath and a marked blueness of the skin. As infants mature, changes in the digestive system naturally occur that prevent the conversion of nitrates to nitrites, hence reducing the risk of health effects.

High nitrate levels may also affect the oxygen-carrying ability of the blood of pregnant women. Expert medical advice and an alternate source of drinking water are recommended if one suspects nitrate levels may be a cause for concern. Local and state health authorities are the best sources for information concerning alternate sources of drinking water. SWRCB has set the drinking water standard at 10 mg/L nitrate (measured as nitrogen, or 'N') and 1 mg/L for nitrite (measured as N) to protect against the risk of these adverse effects. Drinking water that meets the drinking water standard is associated with little to no risk for nitrate or nitrite toxicity and is considered safe with respect to those compounds.

Fluoride accounted for 26 of the total violations of inorganic chemical MCLs. Major sources of naturally occurring fluoride in drinking water are from erosion of natural deposits. Sources of fluoride associated with human activities include discharges from fertilizer and aluminum processing facilities. Because fluoride also has a beneficial effect in preventing dental caries (tooth decay), some communities may add fluoride to their drinking water (fluoridation). Some people who drink water containing fluoride in excess of the federal MCL of 4 mg/L over many years may get bone disease, including pain and tenderness of the bones. Children under 9 years of age who drink water containing fluoride in excess of the state MCL may get mottled teeth (a brownish staining of the teeth called "dental fluorosis"). To protect people from the adverse effects of dental fluorosis, the SWRCB has set the California MCL at 2 mg/L. Where fluoridation is practiced, fluoride concentrations are maintained at the optimal level for reduction of dental caries which is well below the state MCL.

Mercury accounted for 3 of the total violations of inorganic chemical MCLs, all of which occurred in one water system. In the United States, mercury compounds are manufactured in small amounts for specialty uses, such as chemical and pharmaceutical applications. Mercury may also be present from erosion of natural deposits or runoff from landfills and cropland. Mercury exposure at levels above the MCL of 0.002 mg/L in drinking water over many years may result in mental disturbances, or impaired physical coordination, speech and hearing.

Cadmium accounted for 8 of the total violations of inorganic chemical MCLs. Cadmium in drinking water may come from internal corrosion of galvanized pipes, erosion of natural deposits, discharge from electroplating and industrial chemical factories and metal refineries, or runoff from waste batteries and paints. Some people who drink water containing cadmium in excess of the MCL of 0.005 mg/L over many years may experience kidney damage.

4.2 Synthetic Organic Contaminants

Community and nontransient noncommunity water systems are required to meet primary drinking water standards and monitoring and reporting requirements for up to 33 synthetic

organic contaminants (SOCs). Waivers from monitoring can be granted. In 2016, there were a total of four (4) SOC MCL violations involving four different water systems. All SOC violations were for dibromochloropropane (DBCP) MCL exceedances.

Contaminant	Violation Category	No. of Violations	No. of PWSs
Dibromochloropropane (DBCP)	MCL, Average	3	2

DBCP was banned from use in 1978, but is still found in some groundwater sources as a result of prior use as a soil fumigant in soybeans, cotton, vineyards, tomato and orchard crops. Some people who drink water containing DBCP in excess of the MCL for many years could experience reproductive difficulties and may have an increased cancer risk. SWRCB has set the drinking water standard for DBCP at 0.0002 mg/L to reduce these risks.

4.3 Volatile Organic Contaminants

Community and nontransient noncommunity water systems are required to meet primary drinking water standards and monitoring and reporting requirements for 27 volatile organic contaminants (VOCs). There were three (3) VOC violations in 2016, all for violation of the trichloroethylene (TCE) MCL. All of these violations occurred in one water system.

Contaminant	Violation Category	No. of Violations	No. of PWSs
Trichloroethylene	MCL, Average	3	1

Trichloroethylene is found in waters as a result of discharge from metal degreasing sites and factories. Some people who use water containing TCE in excess of the MCL over many years may experience liver problems and may have an increased risk of getting cancer. The SWRCB has established the drinking water standard for TCE at 0.005 mg/L to reduce these risks.

4.4 Radionuclide Rule

Community and nontransient noncommunity water systems are required to meet primary drinking water standards and monitoring and reporting requirements for six alpha-emitting radionuclide contaminants under the Radionuclide Rule. Monitoring for beta particle and photon radioactivity is required only if the SWRCB determines that a source of water supply is vulnerable based on proximity to a nuclear facility. During 2016, there were 74 MCL violations identified for radionuclide contaminants, involving 28 public water systems. All radionuclide MCL violations were for uranium, an alpha-emitter.

Contaminant	Violation Category	No. of Violations	No. of PWSs
Combined Uranium	MCL, Average	77	28

The major source of uranium in drinking water is from erosion of natural deposits. Some people who drink water containing uranium in excess of the MCL over many years may have kidney problems or an increased risk of getting cancer. The SWRCB has set the drinking water standard for uranium at 20 pCi/L to protect against the risk of these adverse health effects. USEPA has set a federal drinking water standard for uranium at 30 ug/L, which equivalent to the state MCL.

4.5 Total Coliform Rule (TCR)

Total Coliform Rule (TCR) violations identify the presence of coliform bacteria contamination at a level above the MCL in the drinking water distribution systems or a failure of a water system to conduct the required water quality monitoring for coliform bacteria in the water distribution system. TCR MCL and monitoring/reporting violations for 2016 are summarized below:

Type of Violation	Violation Category	No. of Violations	No. of PWSs
Acute ¹ MCL violations	MCL	50	44
Non-acute MCL violations	MCL	472	389
Monitoring, Routine	M/R	482	364
Monitoring, Repeat	M/R	86	79

¹Under the TCR, an MCL violation is considered to be acute when sample results indicate the presence of fecal coliform or *E. coli* bacteria.

Under the TCR, results are reported on a presence/absence basis. CWSs are required to routinely sample between one sample per month and 120 samples per week, depending on the size of the system. NTNC and TNC systems are generally on a monthly or quarterly sampling frequency. A public water system is in violation of the total coliform MCL when any of the following occurs:

- For a public water system which collects at least 40 samples per month, more than 5.0 percent of the samples collected during any month are total coliform-positive; or
- For a public water system which collects fewer than 40 samples per month, more than one sample collected during any month is total coliform-positive; or
- Any repeat sample is fecal coliform-positive or *E. coli*-positive; or
- Any repeat sample following a fecal coliform-positive or *E. coli*-positive routine sample is total coliform-positive.

The SWRCB considers the Total Coliform Rule, and the monitoring requirements under the Rule, to be one of the most important requirements for ensuring the protection of public health. The failure to monitor under the TCR is therefore considered a priority violation for DDW and LPAs to address via enforcement action.

Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other potentially-harmful bacteria may be present. If total coliform bacteria are found in a water sample, laboratories are required to then analyze the same sample for fecal coliform or *E. coli* bacteria. The presence of fecal coliform and *E. coli* are considered serious because they usually are associated with direct contamination by sewage or animal wastes. The presence of these bacteria in drinking water indicates that the water may be contaminated with organisms

that can cause disease, and pose a potentially acute (or immediate) health risk. Disease symptoms may include diarrhea, cramps, nausea, and possibly jaundice, and associated headaches and fatigue. Because many of these symptoms can be mild or are flu-like, you should consult with your physician to determine if they are the result of a water-borne disease or other more common diseases (e.g. cold, flu or other bacterial or viral illnesses that are not water-borne). When fecal coliform or *E. coli* are found in drinking water systems, the customers are notified to boil their drinking water until further sampling demonstrates that the water is safe to drink with respect to bacterial quality.

4.6 Disinfectants and Disinfection Byproducts Rule (DBPR)

SWRCB has set primary drinking water standards and monitoring requirements for three disinfectants and four disinfection byproduct contaminants, which can form when chemical disinfectants are added to drinking water. To protect users from the acute health risk from microbial pathogens, SWRCB often requires public water systems to install disinfection facilities. However, disinfectants can also react with naturally-occurring organic matter present in water, or other chemicals, to form disinfection byproducts (DBPs).

The following is the summary of DBPR violations for 2016:

Contaminant	Violation Category	No. of Violations	No. of PWSs
Five Haloacetic Acids (HAA5)	MCL	48	12
Total Trihalomethanes	MCL	92	38
Total Organic Carbon	Treatment Technique Precursor Removal	0	0
Chlorine - Maximum Residual Disinfectant Level	Non-Acute MRDL	0	0
Treatment Technique	No Certified Operator	9	9

The SWRCB has determined that a number of DBPs are a health concern when there is long-term exposure and has adopted MCLs for total trihalomethanes (TTHM), five haloacetic acids (HAA5), chlorite and bromate. During 2016, there were 48 violations of the HAA5 MCL and 92 violations of the TTHM MCL. The MCL for TTHM is 0.080 mg/L and for HAA5 the MCL is 0.060 mg/L. There were no violations of the bromate or chlorite MCLs.

TTHMs and HAA5s are byproducts of drinking water disinfection, and are found primarily in some treated surface water systems, but have been found to develop in some disinfected groundwater systems. Some people who drink water containing TTHMs in excess of the MCL over many years may experience liver, kidney or nervous system problems and may have an increased risk of getting cancer. HAA5 also present a cancer risk to some people who drink water containing concentrations in excess of the MCL over many years.

Under the DBPR, enforceable standards, called Maximum Residual Disinfectant Levels (MRDL), have also been set for three common disinfectants. These include standards for chlorine, chloramine and chlorine dioxide disinfectant residuals in the distributions system. There were no MRDL violations in 2016.

Total organic carbon (TOC) is derived from the breakdown of natural and manmade carbon based compounds. In surface water, it may be present due to the breakdown of natural plant debris. TOC has no health effects of its own. However, organic carbon provides a medium for the formation of disinfection by products. It is considered a “precursor” to DBP formation. In the treatment of water containing elevated TOC, adding additional amounts of coagulant or lime to coagulation or softening treatment trains, respectively, can reduce the amount of TOC in the filtered water and thereby lower DBP levels in finished water. The DBPR includes this treatment technique for systems using surface water or groundwater under the direct influence of surface water that use conventional treatment. The PWSs subject to the DBPR are required to remove a percentage of TOC from the raw water. Failure to meet this percent reduction on a running annual average basis results in a violation of the TOC reduction requirements. There were no violations related to percent reduction of total organic carbon in 2016.

As a requirement of the DBPR, California is required to maintain an operator certification program for PWSs using a surface water source or a groundwater source under the direct influence of surface water. There were nine (9) violations related to Operator Certification Rule in 2016.

4.7 Surface Water Treatment Rules

The surface water treatment rules include the Surface Water Treatment Rule (SWTR), Interim Enhanced Surface Water Treatment Rule (IESWTR), Long-term 1 Enhanced Surface Water Treatment Rule (LT1ESWTR), Long-term 2 Enhanced Surface Water Treatment Rule (LT2ESWTR), and Filter Backwash Rule. These rules establish monitoring and reporting requirements, treatment techniques, performance standards, and turbidity standards to be met by water systems using surface water as a drinking water source. As used in this report, the term “surface water” is to include groundwater that has been determined to be under the direct influence of surface water, and which is subject to these rules. The following is the summary of violations of the surface water treatment rules:

Rule Violated	Violation Type	Violation Category	No. of Violations	No. of PWSs
SWTR	TT	Failure to Filter (SWTR)	189	23
SWTR	TT	Treatment Technique (SWTR and GWR)	41	15
LT2ESWTR	TT	Failure to Filter (SWTR)	1	1
LT1ESWTR	TT	Monthly Turbidity Exceedance (Enhanced SWTR)	22	10
LT1ESWTR	M/R	Monitoring, Turbidity (Enhanced SWTR)	4	4
SWTR	M/R	Monitoring of Treatment (SWTR-filter/GWR)	12	6

Treatment techniques and performance standards are used to establish water quality objectives instead of the MCLs for microbiological contaminants that may be found in surface waters, including *Giardia lamblia*, *Cryptosporidium parvum*, *Legionella*, heterotrophic plate count bacteria, and viruses. Water systems that use surface water are required to provide multiple levels of treatment (termed ‘multi-barrier’ treatment) to protect against adverse health effects from microbiological contaminants. All multi-barrier treatment systems must include the use of a SWRCB approved filtration technology as a first barrier, and a reliable disinfection system, as a

second barrier. Some systems can avoid filtration by meeting special requirements including rigorous standards on their source waters quality and watershed controls. However, these systems must still disinfect their water.

There were a total of 253 systems that had violations of the various surface water treatment rules performance or treatment technique requirements. Of these, there were 189 violations of the SWTR filtration requirements (failure to filter) by 23 water systems. There were also 16 violations of the SWTR and LT2ESWTR monitoring and reporting requirements from a total of 10 water systems.

The recycling of filter backwash water for reprocessing at the headwork's of a treatment plant is a conservation practice implemented by some water systems. The SWTR established requirements governing the way certain backwash streams are handled at water systems' surface water filtration plants and establishes reporting and recordkeeping requirements for filter back-wash recycling practices to allow better evaluations and impacts of recycling practices on overall treatment plant performance. There were no violations of the filter backwash recycling requirements in 2016.

4.8 Groundwater Rule

The purpose of the Groundwater Rule (GWR) is to reduce the occurrence of disease associated with disease-causing microorganisms in drinking water derived from groundwater. The GWR establishes a risk-based approach to target ground water systems that are vulnerable to fecal contamination. Ground water systems that are identified as being at risk of fecal contamination must take corrective action to reduce potential illness from exposure to microbial pathogens.

The GWR applies to all PWSs that use groundwater, such as wells and springs, as a source of drinking water. Special monitoring of the source water must be completed in response to total coliform contamination in the distribution system (triggered source monitoring). California has chosen to use *E. coli* monitoring as the indicator of fecal contamination. A summary of violations of the GWR for 2016 is provided below:

Violation Category	No. of Violations	No. of PWSs
Triggered Source Monitoring*	28	26
Failure to Notify Other PWS	1	1
Monitoring of Treatment (SWTR- Unfiltered/GWR)	1	1
Treatment Technique (SWTR and GWR)	1**	1

*Collection of a source coliform sample as part of a repeat sample set when a distribution system routine sample is total-coliform positive.

**See discussion below regarding LADWP GWR treatment technique violation

During 2016, the single GWR treatment technique failure was a violation by Los Angeles Department of Water and Power (LADWP). Table 1 notes this treatment technique violation with a population of 3,987,622 people served. The LADWP Consumer Confidence Report provides the following information on this violation:

"In January 2016, a six-hour lapse in treatment at the 99th Street Wells Water Treatment Facility resulted in a violation of the Groundwater Rule. The 99th Street facility treats water served to customers in the Green Meadows and Watts neighborhoods. An automated alarm sounded to alert the water treatment operator, but it was missed, resulting in delayed response. When the problem was discovered at approximately 1:00 a.m., LADWP staff responded to the site and fixed the treatment equipment. Public notification was issued to all customers served by the facility. More safeguards are in place to prevent this from happening again. For complete details, visit www.ladwp.com/waterquality/Tier2TreatmentViolation or call (213) 367-0921."

Public notification by direct mailing was issued to all customers served by the facility as required by the SWRCB-DDW. Instructions were also provided to customers to fulfill Secondary Notification requirements to schools, multi-family residences, and business as required by SWRCB-DDW.

4.9 Lead and Copper Rule

The Lead and Copper Rule (LCR) requires collection of first draw samples from single family residences that are at risk of containing lead pipes or copper pipe with lead solder, or which may be served by a lead service line. Samples are often drawn by volunteer residents that live in these targeted areas. Public water systems are required to meet specific action levels for lead and copper, based on the calculated 90th percentile of all sample results taken during the sampling period.

The presence of lead or copper at concentrations above their respective action level is not in itself a violation, but triggers actions to be taken by the water system. If a lead or copper action level is exceeded, the PWS must take specified steps to evaluate the need for corrosion control treatment and, for a lead action level exceedance, must conduct public education on the effects of lead and ways the public can reduce lead exposure. The action level for lead is 0.015 mg/L, and copper has an action level of 1.3 mg/L, based on the 90th percentile concentration in all samples collected during a sampling period.

Lead and copper are typically present in drinking water systems due to leaching of the plumbing materials. People can protect themselves from the majority of the impacts from leached metals by flushing their water faucet before taking water for consumption, and by ensuring that all faucets used for drinking water meet California requirements for low lead content. A Fact Sheet provided at the link below provides information on requirements for low lead plumbing products in California:

<http://www.dtsc.ca.gov/PollutionPrevention/upload/Lead-in-Plumbing-Fact-Sheet.pdf>

The following is the summary of LCR violations for 2016. All of the violations tabulated below are based on failure to take appropriate actions as identified in the Lead and Copper Rule.

Violation Type	Violation Category	No. of Violations	No. of PWSs
TT	Maximum Permissible Level (MPL) Non-Compliance**	7	7
TT	Public Education	5	5
TT	OCCT/SOWT Study/Recommendation	1	1
TT	OCCT/SOWT Treatment Installation/ demonstration	6	5
M/R	Follow-up Or Routine LCR Tap Monitoring	371	327
M/R	Initial Sampling for Lead and Copper	163	142
M/R	Initial, Follow-up, or Routine Source Water Monitoring	7	7

** (TT) Treatment Technique violation when source water treatment is installed, and the PWS has exceeded a designated maximum permissible level of lead or copper.

OCCT – Optimized Corrosion Control Treatment

SOWT – Source Water Treatment

Lead is generally present in drinking water as a result of internal corrosion of household water plumbing or from lead service lines. It may also be present due to discharges from industrial manufacturers or erosion of natural deposits. Infants and children who drink water containing lead at concentrations above the action level may experience delays in their physical or mental development. Children may show slight deficits in attention span and learning abilities. Adults who drink water with lead above the action level over many years may develop kidney problems or high blood pressure.

The major sources of copper in drinking water are from internal corrosion of household plumbing systems, erosion of natural deposits, and leaching from wood preservatives. Copper is an essential nutrient, but some people who drink water containing copper in excess of the action level over a relatively short amount of time may experience gastrointestinal distress. Some people who drink water containing copper in excess of the action level over many years may suffer liver or kidney damage. People with Wilson's Disease should consult their personal doctor.

4.10 Public Notification

Water suppliers are required to notify SWRCB or LPA regulatory staff and the persons served by the water system whenever any of the following occurs: the water supplied to the consumers exceeds the MCLs for coliform bacteria, inorganic chemicals, turbidity, disinfection by-products, radioactivity, organic chemicals; the PWS fails to comply with a prescribed treatment technique (TT) established in lieu of an MCL; the PWS fails to conduct monitoring and reporting required by regulation, permit or order; or the PWS violates any schedule prescribed pursuant to a variance or exemption. A violation occurs when there is a failure to provide the required notice to the public by the required date. There were 29 violations for failure to provide the required notice to the public in 2016.

Violation Category	No. of Violations	No. of PWSs
PN Violation for National Primary Drinking Water Regulations (NPDWRs or primary standards) violation	29	20

4.11 Consumer Confidence Report Violations

All CWS and NTNC water systems are required to provide to their customers a report each year of the quality of the water served by their water system during the prior calendar year. Each year's Consumer Confidence Report (CCR) is also to include information on the source of drinking water, the levels of any detected contaminants, and compliance with drinking water regulations. A clear and understandable explanation of the nature of the violation, its potential adverse health effects, steps that the PWS is undertaking to correct the violation and the possibility of alternative water supplies available during the violation must be included. During 2016, the SWRCB reported 361 violations for failure to complete the CCR for the calendar year 2015.

Violation Category	No. of Violations	No. of PWSs
CCR Complete Failure to Report	361	276
CCR Inadequate Reporting	0	0

4.12 Variances and Exemptions Violations

SWRCB is authorized under the Federal SDWA to issue variances and exemptions from meeting drinking water standards to public water systems under special circumstances. There were no violations associated with variances or exemptions in 2016.

SECTION 5: ENFORCEMENT ACTIVITIES

Enforcement action is an essential element of the SWRCB regulatory program to bring all public water systems into full compliance with drinking water standards and regulations to ensure that the public receives a safe and reliable supply of drinking water. Carrying out an enforcement program is a requirement of the primacy delegation from USEPA. The SWRCB may take a variety of enforcement actions depending on the type of violation and recurrence of a violation, and include both formal and informal enforcement actions. Issuance of progressively stringent enforcement actions is the means used to bring an unresponsive water system into compliance.

SWRCB's enforcement strategy for public water systems that violate a primary drinking water maximum contaminant level includes issuance of formal enforcement actions in a timely manner. The California Health and Safety Code (CHSC) section 116655(a) specifies that "Whenever the State Board determines that any person has violated or is violating this chapter, or any permit, regulation, or standard issued or adopted pursuant to this chapter, the director may issue an order doing any of the following:

- (1) Directing compliance forthwith
- (2) Directing compliance in accordance with a time schedule set by the State Board
- (3) Directing that appropriate preventive action be taken in the case of a threatened violation"

CHSC section 116655(b) allows the SWRCB to specify in the enforcement order any of the following requirements:

- (1) That the existing plant, works, or system be repaired, altered or added to
- (2) That purification or treatment works be installed
- (3) That the source of water supply be changed
- (4) That no additional service connection be made to the system
- (5) That the water supply, the plant, or the system be monitored
- (6) That a report on the condition and operation of the plant, works, system, or water supply be submitted to the state board

Formal enforcement actions available to SWRCB include citations, compliance orders, permit amendments, and revocation or suspension of an existing operating permit. The CHSC also authorizes assessing civil penalties up to \$25,000 per day for each day a drinking water standard violation occurs, or placing a water system into receivership. Aggressive enforcement action is a key element of the SWRCB overall regulatory strategy to bring all public water systems into full compliance with drinking water standards and regulations.

SECTION 6: CONCLUSION

Overall, water systems in California have a high rate of compliance with drinking water standards. However, there are many communities that have to deal with serious water quality problems and ongoing violations. The SWRCB is the primacy agency responsible for the administration and enforcement of the SDWA requirements in California. The implementation of the program includes a range of activities and authorities including issuing operating permits, conducting inspections, monitoring for compliance with regulations, and taking enforcement action to compel compliance when violations are identified.

SECTION 7: ADDITIONAL INFORMATION

The SWRCB is focused on making the information on drinking water systems publicly accessible. A copy of this and prior year Annual Compliance Reports, and the data set from which the information was derived, are available to the public by contacting the SWRCB Division of Drinking Water at (916) 449-5600 or via the following page of SWRCB website:

http://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/Publications.shtml

A copy of each formal enforcement action issued by SWRCB since 2013 is available at:

http://www.waterboards.ca.gov/drinking_water/programs/DWPEenforcementActions.shtml

All enforcement actions issued by LPAs are also posted on this page. Enforcement actions are grouped by county, regardless of regulatory jurisdiction.

Safe Drinking Water Plan for California

In 1993, the Drinking Water Program of the California Department of Health Services (CDHS) (now CDPH) submitted to the Legislature the report entitled, "Drinking Water into the 21st Century: Safe Drinking Water Plan for California." In 1996, the California Legislature enacted Senate Bill (SB) 1307, which amended CHSC section 116355 to require a periodic update of the original Plan.

CDPH assembled a team of experts that conducted extensive reviews and analyses, resulting in a draft plan that included an overview of drinking water regulation, reviews and plans for drinking water quality/monitoring and threats, treatment technologies, funding aspects and financial assistance, and a focus on the challenges faced by small drinking water systems. Following the July 1, 2014, transition of the Drinking Water Program to the SWRCB, the draft plan's recommendations and implementation plan were enhanced based on the synergies and resources resulting from incorporation of the program into the State Water Board.

The 2015 Safe Drinking Water Plan for California includes the SWRCB's assessment of the overall quality of the state's drinking water, the identification of specific water quality problems, an analysis of the known and potential health risks that may be associated with drinking water contamination in California, and specific recommendations to improve drinking water quality. The 2015 Safe Drinking Water Plan for California is available at:

http://www.waterboards.ca.gov/drinking_water/safedrinkingwaterplan/index.shtml

Human Right to Water (HR2W)

On September 12, 2012, Assembly Bill (AB) 685 was signed into law, making California the first state in the nation to legislatively recognize the human right to water (HR2W). The statute recognizes that “every human being has the right to safe, clean, affordable, and accessible water adequate for human consumption, cooking, and sanitary purposes” and requires applicable agencies to consider the HR2W statute when establishing policies, regulations, or grant criteria. On February 16, 2016, the SWRCB adopted a resolution identifying the HR2W as a top priority and core value of the State Water Board and Regional Water Quality Control Boards (collectively the Water Boards). The resolution stated the Water Boards will work “to preserve, enhance, and restore the quality of California's water resources and drinking water for the protection of the environment, public health, and all beneficial uses, and to ensure proper water resource allocation and efficient use, for the benefit of present and future generations.” One of the many activities required under the SWRCB's resolution is for Water Board “staff to work with relevant stakeholders and develop performance measures for the evaluation of the board's progress towards the realization of the human right to water, evaluate that progress, and explore ways to make that information more readily available to the public.” The **Human Right to Water Portal** was created to provide the public a clearing house of information related to the HR2W and public drinking water systems. Here, Californians can find out if their public water system is in compliance with the drinking water standards, and how to get in contact with their water system.

http://waterboards.ca.gov/water_issues/programs/hr2w/index.shtml

APPENDIX A: DEFINITIONS

☐ **Public Water System (PWS)**

A public water system (water system) is defined as 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 water systems:

- Community water systems (CWS) is a water system serving facilities such as cities, towns, mobile home parks,
- Non-transient non-community (NTNC) is a water system serving facilities such as schools, factories or other facilities that serve the same group of non-resident users at least 180 days out of the year,
- Transient non-community (TNC) is a water system serving facilities such as restaurants, parks, rest stops, campgrounds and other facilities that serve a transient population for at least 60 days out of the year.

For purposes in this report, the term 'water system' refers to a public water system of any of the three types unless otherwise specified.

☐ **Primary Drinking Water Standards**

Primary Drinking Water Standards are laws and regulations that apply to public water systems and are intended to:

- 1) Set maximum levels for specific contaminants that in the judgment of the SWRCB may have an adverse effect on the health of persons drinking the water.
- 2) Establish treatment techniques that are adopted by the SWRCB in lieu of a maximum contaminant level.
- 3) Establish monitoring and reporting requirements as specified by the SWRCB that pertain to either maximum contaminant levels, treatment techniques, or other aspects of operating a public water system.

☐ **Maximum Contaminant Level (MCL)**

Maximum Contaminant Levels are health protective drinking water standards to be met by public water systems. The MCLs take into account not only chemicals' health risks but also factors such as their detectability and treatability, as well as costs of treatment. Health & Safety Code §116365(a) requires SWRCB to establish a contaminant's MCL at a level as close to its PHG as is technologically and economically feasible, placing primary emphasis on the protection of public health

☐ **Maximum Residual Disinfectant Level (MRDL)**

Limits have been set for residual disinfectant levels in drinking water to reduce the risk of exposure to disinfectants formed, when a water system adds chemical disinfectant for either primary or residual treatment. These limits are known as MRDLs.

Treatment Techniques (TT)

For some contaminants, treatment techniques have been established in lieu of an MCL to control unacceptable levels of certain contaminants. For example, treatment techniques have been established for the treatment of surface waters in order to control the levels of viruses, bacteria, and other pathogens. Other treatment technique regulations are intended to establish operating parameters for other types of water treatment, where direct measurement of a contaminant is neither practical, nor cost effective.

Variations and Exemptions

SWRCB is authorized under the Federal SDWA to issue variations and exemptions from meeting drinking water standards to water systems under special circumstances. A variance is allowed in situations where the characteristics of a raw water source make it not feasible or too costly for a water system to meet the MCL with the installation of the best available technology, treatment techniques, or other approved method. The approval of any variance must ensure adequate protection of human health. Additionally, the variance is reviewed by SWRCB not less than every five years to determine whether continuation of the variance is appropriate and necessary.

An exemption from an MCL and/or treatment technique is allowed in situations where a water system is in noncompliance as the result of compelling factors and the exemption will not result in an unreasonable risk to public health. Any water system that receives an exemption must achieve compliance with the MCL or treatment technique as expeditiously as practicable, but not later than three years after the applicable compliance date.

Monitoring and Reporting (M/R)

A water system is required to monitor and verify that the levels of contaminants present in the water do not exceed the MCL. A monitoring violation occurs when a water system fails to have its water tested as required or fails to report test results correctly to the regulatory agency.

Significant Monitoring or Reporting Violations

For this report, significant monitoring or reporting violations are defined as when no samples were taken or no results, were reported.

Significant Public Notification Violations

Unless otherwise directed by SWRCB, water suppliers are required to notify SWRCB and the persons served by the water system whenever any of the following occurs: the water supplied to the consumers exceeds the MCLs for coliform bacteria, inorganic chemicals, turbidity, trihalomethanes, radioactivity, organic chemicals; or the water supplier fails to comply with a prescribed treatment technique established in lieu of an MCL; or the water supplier violates any schedule prescribed pursuant to a variance or exemption. A significant public notification violation occurs when there is a failure to provide the required notification.

Consumer Confidence Report (CCR) Notification

All community water systems and non-transient non-community water systems are required to deliver to their customers an annual CCR, summarizing water quality data collected during the

year. The report is to include educational material, provide information on the source water(s), levels of any detected contaminants, and any compliance issues with the drinking water regulations.

□ **Significant Consumer Notification Violations**

For this report, a significant consumer notification violation is incurred if a community or non-transient non-community water system completely fails to provide its customers the required annual consumer confidence report.

APPENDIX B: SUMMARY OF VIOLATIONS BY RULE FAMILY

Rule Family	Contaminant or Rule	Violation Category	No. of Violations	No. of Water Systems
Inorganics	Arsenic	Maximum Contaminant Level Violation	384	127
Inorganics	Arsenic	Monitoring, Regular	9	9
Inorganics	Arsenic	Monitoring, Check/Repeat/Confirmation	0	0
Inorganics	Asbestos	Maximum Contaminant Level Violation, Single Sample	2	2
Inorganics	Inorganic Chemicals	Maximum Contaminant Level Violation, Average	37	14
Inorganics	Inorganic Chemicals	Monitoring, Regular	20	10
Inorganics	Inorganic Chemicals	Monitoring, Check/Repeat/Confirmation	0	0
Inorganics	Nitrates	Maximum Contaminant Level Violation, Single Sample	270	101
Inorganics	Nitrates	Maximum Contaminant Level Violation, Average	17	14
Inorganics	Nitrates	Monitoring, Regular	93	80
Inorganics	Nitrates	Notification, State	0	0
SOC	Dibromochloropropane	Maximum Contaminant Level Violation, Average	3	2
VOC	Trichloroethylene	Maximum Contaminant Level Violation, Average	3	1
Radiological	Uranium	Maximum Contaminant Level Violation, Average	77	28
Radiological	Radionuclides	Monitoring, Regular	10	8
TCR	Total Coliform Rule	Notification, State	0	0
TCR	Total Coliform Rule	Maximum Contaminant Level Violation, Acute (TCR)	50	44
TCR	Total Coliform Rule	Maximum Contaminant Level Violation, Monthly (TCR)	472	389
TCR	Total Coliform Rule	Monitoring, Routine Major (TCR)	403	291
TCR	Total Coliform Rule	Monitoring, Routine Minor (TCR)	79	73
TCR	Total Coliform Rule	Monitoring, Repeat Major (TCR)	49	43
TCR	Total Coliform Rule	Monitoring, Repeat Minor (TCR)	37	36
DBP	Stage 1 Disinfectants and Disinfection Byproducts Rule	Treatment Technique No Certif. Operator	9	9

Rule Family	Contaminant or Rule	Violation Category	No. of Violations	No. of Water Systems
DBP	Stage 1 Disinfectants and Disinfection Byproducts Rule	Monitoring and Reporting (DBP)	0	0
DPB	Stage 1 Disinfectants and Disinfection Byproducts Rule	Treatment Technique Precursor Removal	0	0
DBP	Stage 2 Disinfectants and Disinfection Byproducts Rule	Maximum Contaminant Level Violation, Average	140	50
DBP	Stage 2 Disinfectants and Disinfection Byproducts Rule	Monitoring and Reporting (DBP)	8	5
DBP	Stage 2 Disinfectants and Disinfection Byproducts Rule	Monitoring, Routine (IDSE)	54	28
SWTR	Long Term 1 Enhanced Surface Water Treatment Rule	Record Keeping	3	3
SWTR	Long Term 1 Enhanced Surface Water Treatment Rule	Treatment Tech. No Prior State Approval	1	1
SWTR	Long Term 1 Enhanced Surface Water Treatment Rule	Monthly Turbidity Exceed (Enhanced SWTR)	22	10
SWTR	Long Term 2 Enhanced Surface Water Treatment Rule	Failure to Filter (SWTR)	1	1
SWTR	Miscellaneous	Notification, Public	2	1
SWTR	Miscellaneous	Variance/Exemption/Other Compliance	2	2
SWTR	Surface Water Treatment Rule	Monitoring of Treatment (SWTR-Filter)	12	6
SWTR	Surface Water Treatment Rule	Treatment Technique (SWTR and GWR)	41	15
SWTR	Surface Water Treatment Rule	Failure to Filter (SWTR)	189	23
Ground Water Rule	Ground Water Rule	Failure to Conduct Assessment Monitoring	1	1
Ground Water Rule	Ground Water Rule	Sanitary Survey (TCR)	0	0
Ground Water Rule	Ground Water Rule	Monitoring of Treatment (SWTR-Unfiltered/GWR)	1	1
Ground Water Rule	Ground Water Rule	Monitoring, Source Water (GWR)	28	26

Rule Family	Contaminant or Rule	Violation Category	No. of Violations	No. of Water Systems
Ground Water Rule	Ground Water Rule	Treatment Technique (SWTR and GWR)	1	1
Ground Water Rule	Ground Water Rule	Failure to Notify Other PWS	1	1
LCR	Lead and Copper Rule	Initial Tap Sampling for Pb and Cu	163	142
LCR	Lead and Copper Rule	Follow-up Or Routine LCR Tap M/R	371	327
LCR	Lead and Copper Rule	Water Quality Parameter M/R	0	0
LCR	Lead and Copper Rule	Initial, Follow-up, or Routine Source Water M/R	7	7
LCR	Lead and Copper Rule	OCCT/SOWT Treatment Installation/Demonstration	6	5
LCR	Lead and Copper Rule	MPL Non-Compliance	7	7
LCR	Lead and Copper Rule	Public Education	5	5
Public Notice	Public Notice Rule	Public Notification Violation for NPDWR Violation	29	20
Public Notice	Public Notice Rule	Public Notification Violation without NPDWR Violation	0	0
CCR	Consumer Confidence Rule	Consumer Confidence Report Complete Failure to Report	361	276
CCR	Consumer Confidence Rule	Consumer Confidence Report Inadequate Reporting	0	0

APPENDIX C: SUMMARY OF VIOLATIONS BY INDIVIDUAL CONTAMINANT

Contaminant	Rule Family	Violation Category	No. of Violations	No. of Water Systems
1,2-DIBROMO-3-CHLOROPROPANE	Synthetic Organic Chemicals	Maximum Contaminant Level Violation	3	2
Arsenic	Inorganic Chemicals	Maximum Contaminant Level Violation	384	127
Arsenic	Inorganic Chemicals	Monitoring and Reporting	9	9
CARBON, TOTAL	Stage 1 Disinfectants and Disinfection Byproducts Rule	Treatment Technique Violation	0	0
Cadmium	Inorganic Chemicals	Maximum Contaminant Level Violation	8	2
Chlorine	Stage 1 Disinfectants and Disinfection Byproducts Rule	Monitoring and Reporting	0	0
Coliform (TCR)	Total Coliform Rules	Monitoring and Reporting	568	414
Coliform (TCR)	Total Coliform Rules	Maximum Contaminant Level Violation	586	434
Coliform (TCR)	Total Coliform Rules	Other Violation	0	0
Combined Uranium	Radionuclides	Maximum Contaminant Level Violation	74	28
Combined Uranium	Radionuclides	Monitoring and Reporting	5	5
Consumer Confidence Rule	Consumer Confidence Rule	Other Violation	361	276
E. COLI	Groundwater Rule	Monitoring and Reporting	26	24
ENTEROCOCCI	Groundwater Rule	Monitoring and Reporting	2	2
Fluoride	Inorganic Chemicals	Monitoring and Reporting	3	2
Fluoride	Inorganic Chemicals	Maximum Contaminant Level Violation	26	10
Gross Alpha, Excl. Radon and U	Radionuclides	Monitoring and Reporting	3	2
Groundwater Rule	Groundwater Rule	Monitoring and Reporting	1	1
Groundwater Rule	Groundwater Rule	Treatment Technique Violation	1	1
Groundwater Rule	Groundwater Rule	Other Violation	5	5
Interim Enhanced Surface Water Treatment Rule	Surface Water Treatment Rules	Treatment Technique Violation	33	12
Interim Enhanced Surface Water Treatment Rule	Surface Water Treatment Rules	Other Violation	3	3
Lead	Lead and Copper Rule	Treatment Technique Violation	7	7
Lead and Copper Rule	Lead and Copper Rule	Treatment Technique Violation	12	11
Lead and Copper Rule	Lead and Copper Rule	Monitoring and Reporting	541	455

Contaminant	Rule Family	Violation Category	No. of Violations	No. of Water Systems
Long Term 2 Enhanced Surface Water Treatment Rule	Surface Water Treatment Rules	Treatment Technique Violation	1	1
Mercury	Inorganic Chemicals	Maximum Contaminant Level Violation	3	1
Nitrate	Inorganic Chemicals	Other Violation	0	0
Nitrate	Inorganic Chemicals	Maximum Contaminant Level Violation	285	108
Nitrate	Inorganic Chemicals	Monitoring and Reporting	93	80
Nitrate-Nitrite	Inorganic Chemicals	Maximum Contaminant Level Violation	50	16
Nitrate-Nitrite	Inorganic Chemicals	Monitoring and Reporting	5	4
Nitrite	Inorganic Chemicals	Monitoring and Reporting	19	19
Public Notice	Public Notice Rule	Other Violation	29	20
Selenium	Inorganic Chemicals	Monitoring and Reporting	1	1
Selenium	Inorganic Chemicals	Maximum Contaminant Level Violation	0	0
Stage 1 Disinfectants and Disinfection Byproducts Rule	Stage 1 Disinfectants and Disinfection Byproducts Rule	Treatment Technique Violation	9	9
Stage 2 Disinfectants and Disinfection Byproducts Rule	Stage 2 Disinfectants and Disinfection Byproducts Rule	Monitoring and Reporting	2	2
Surface Water Treatment Rule	Surface Water Treatment Rules	Treatment Technique Violation	230	35
Surface Water Treatment Rule	Surface Water Treatment Rules	Monitoring and Reporting	12	6
Trichloroethylene	Volatile Organic Chemical	Maximum Contaminant Level Violation	3	1
TTHM	Stage 2 Disinfectants and Disinfection Byproducts Rule	Maximum Contaminant Level Violation	92	38
TTHM	Stage 2 Disinfectants and Disinfection Byproducts Rule	Monitoring and Reporting	31	30
Total Haloacetic Acids (HAA5)	Stage 2 Disinfectants and Disinfection Byproducts Rule	Monitoring and Reporting	29	28
Total Haloacetic Acids (HAA5)	Stage 2 Disinfectants and Disinfection Byproducts Rule	Maximum Contaminant Level Violation	48	22
-	Groundwater Rule	Other Violation	5	5
-	Miscellaneous	Other Violation	4	3

APPENDIX D: SUMMARY OF ARSENIC MCL VIOLATIONS BY COUNTY*Status in SDWIS/Fed for 2016 as of June 22, 2017*

County	PWS ID	PWS Name	Pop. Served	No. of Violations
Contra Costa	CA0707602	BEACON WEST	45	2
Contra Costa	CA0707615	DOUBLETREE RANCH WATER SYSTEM	49	3
Fresno	CA1000053	LANARE COMMUNITY SERVICES DIST	660	4
Fresno	CA1000071	LAKEVIEW IMPROVEMENT ASSOICATION #1	160	3
Fresno	CA1000072	SHAVER LAKE POINT #2	202	4
Fresno	CA1000369	ZONNEVELD DAIRY - CEDAR	70	3
Fresno	CA1000584	TRUE ORGANIC PRODUCTS	40	4
Fresno	CA1000602	BAKER COMMODITIES INC.	60	4
Fresno	CA1000604	JOHANN DAIRY	60	4
Fresno	CA1009051	CANTUA CREEK VINEYARDS, IV, LLC.	50	4
Fresno	CA1010039	CARUTHERS COMM SERV DIST	2503	4
Kern	CA1500378	MAHER MUTUAL WATER COMPANY	150	4
Kern	CA1500424	LANDS OF PROMISE MUTUAL WATER ASSOCIATIO	190	4
Kern	CA1500436	HUNGRY GULCH WATER SYSTEM	33	4
Kern	CA1500442	SUNSET APARTMENTS WATER SYSTEM	37	4
Kern	CA1500455	WILLIAM FISHER MEMORIAL WATER COMPANY	56	4
Kern	CA1500458	R.S. MUTUAL WATER COMPANY	67	3
Kern	CA1500461	FOUNTAIN TRAILER PARK WATER	68	4
Kern	CA1500493	EL ADOBE POA, INC.	200	4
Kern	CA1500521	BOULDER CANYON WATER ASSOCIATION	28	4
Kern	CA1500525	LAKEVIEW RANCHOS MUTUAL WATER COMPANY	120	4
Kern	CA1500571	LUCKY 18 ON ROSAMOND, LLC	73	4
Kern	CA1500585	OASIS PROPERTY OWNERS ASSOCIATION	100	2
Kern	CA1502154	LAKESIDE SCHOOL	800	4
Kern	CA1502231	ROSAMOND SCHOOL WATER SYSTEM	950	4
Kern	CA1502383	NORD ROAD WATER ASSOCIATION	32	4
Kern	CA1502569	FIRST MUTUAL WATER SYSTEM	35	4
Kern	CA1502620	POND MUTUAL WATER COMPANY	48	4
Kern	CA1502724	QUAIL VALLEY WATER DIST-EASTSIDE SYSTEM	109	4
Kern	CA1502744	60TH STREET ASSOC. WATER SYSTEM	44	2
Kern	CA1503664	SOLEDAD MOUNTAIN PROJECT WATER SYSTEM	51	3
Kern	CA1510001	ARVIN COMMUNITY SERVICES DIST	20499	4
Kern	CA1510002	BORON CSD	2253	4
Kern	CA1510016	RAND COMMUNITIES WATER DISTRICT	450	4

County	PWS ID	PWS Name	Pop. Served	No. of Violations
Kern	CA1510024	GREENFIELD COUNTY WD	8500	4
Kern	CA1510052	NORTH EDWARDS WD	600	4
Kings	CA1600008	CENTRAL UNION ELEMENTARY	320	1
Kings	CA1600048	KETTLEMAN CITY ELEMENTARY	350	1
Kings	CA1600050	CENTRAL VALLEY MEAT CO INC	280	3
Kings	CA1600601	KWRA MRF	53	4
Kings	CA1610009	KETTLEMAN CITY CSD	1450	4
Los Angeles	CA1900038	LANCASTER PARK MOBILE HOME PARK	61	2
Los Angeles	CA1900100	METTLER VALLEY MUTUAL	135	2
Los Angeles	CA1900520	THE VILLAGE MOBILE HOME PARK	50	2
Los Angeles	CA1900961	WINTERHAVEN MOBILE ESTATES	56	2
Los Angeles	CA1910246	LAND PROJECTS MUTUAL WATER CO.	1500	4
Madera	CA2000150	LIBERTY HIGH SCHOOL	1340	3
Madera	CA2000527	YOSEMITE FORKS EST MUTUAL	110	2
Madera	CA2000538	CEDAR VALLEY MUTUAL WATER CO	137	2
Madera	CA2000550	MD#06 LAKE SHORE PARK	130	1
Madera	CA2000551	MD#07 MARINA VIEW HEIGHTS	200	2
Madera	CA2000552	MD#24 TEAFORD MEADOW LAKES	150	3
Madera	CA2000561	MD#08 NORTH FORK WATER SYSTEM	264	1
Madera	CA2000612	NORTH FORK UNION SCHOOL	350	2
Madera	CA2000619	COLD SPRING GRANITE CO RAYMOND	43	2
Madera	CA2000641	ALMADEN - MADERA	60	1
Madera	CA2000737	MD#42 STILL MEADOW	100	1
Madera	CA2000785	VALLEY TEEN RANCH	50	1
Madera	CA2000866	AGRILAND FARMING CO INC	60	2
Madera	CA2010007	HILLVIEW WC-OAKHURST/SIERRA LAKES	2740	3
Madera	CA2010012	HILLVIEW WATER CO-RAYMOND	294	3
Mariposa	CA2210937	MARIPOSA COUNTY PUBLIC WORKS DEPARTMENT	135	3
Merced	CA2400165	FOSTER FARMS DELHI FEEDMILL COLLIER ROAD	200	3
Merced	CA2400170	HILMAR CHEESE COMPANY	1000	1
Merced	CA2400248	YOSEMITE VALLEY BEEF PACKING CO INC	45	1
Mono	CA2600622	SIERRA EAST MOBILE HOME COMMUNITY	50	4
Mono	CA2610003	BRIDGEPORT PUD	850	2
Monterey	CA2700536	CORRAL DE TIERRA ESTATES WC	45	4
Monterey	CA2700612	LAGUNA SECA WC	162	4
Monterey	CA2700799	VISTA DEL TORO WS	87	3
Monterey	CA2701221	WASHINGTON SCHOOL WS	250	4
Monterey	CA2701926	MORO RD WS #09	210	4

County	PWS ID	PWS Name	Pop. Served	No. of Violations
Monterey	CA2701959	TIERRA VISTA MWC	57	4
Monterey	CA2702009	LAGUNA SECA RECREATION WS	500	4
Monterey	CA2702030	CYPRESS COMMUNITY CHURCH WS	200	4
Monterey	CA2702550	GRANGE HALL WS	25	4
Plumas	CA3210011	PLUMAS EUREKA CSD	325	2
Riverside	CA3301380	SAINT ANTHONY TRAILER PARK	300	4
Riverside	CA3301482	ORTEGA OAKS RV PARK&CAMPGROUND	25	1
Riverside	CA3303092	MECCA ARCO TRAVEL CENTER	47	4
Riverside	CA3303100	OASIS GARDENS WATER CO.	314	4
Sacramento	CA3400103	B & W RESORT MARINA	100	4
Sacramento	CA3400138	LOCKE WATER WORKS CO [SWS]	80	4
Sacramento	CA3400149	RANCHO MARINA	250	4
Sacramento	CA3400164	VIEIRA'S RESORT, INC	150	4
Sacramento	CA3400332	OXBOW MARINA (SWS)	200	4
Sacramento	CA3400433	EDGEWATER MOBILE HOME PARK	40	2
San Benito	CA3500823	BEST ROAD MWC	133	2
San Bernardino	CA3600025	BAR-LEN MWC	124	3
San Bernardino	CA3600036	CALICO GHOST TOWN	1000	3
San Bernardino	CA3600062	CALLIER WATER SYSTEM	1000	3
San Bernardino	CA3600196	CSA 70 W-4 PIONEERTOWN	625	3
San Bernardino	CA3600504	KNOLL ENTERPRISES	500	3
San Bernardino	CA3601015	IRONWOOD CAMP	1000	4
San Bernardino	CA3610705	US ARMY - FORT IRWIN	16000	2
San Diego	CA3701010	WARNER UNIFIED SCHOOL DISTRICT	250	4
San Diego	CA3701793	TWIN LAKES RESORT	200	3
San Joaquin	CA3900579	CENTURY MOBILE HOME PARK	50	1
San Joaquin	CA3901169	MUSD-NILE GARDEN SCHOOL	804	2
San Joaquin	CA3901213	AVALOS, SILVIA	30	2
San Joaquin	CA3901334	BJJ COMPANY LLC	40	2
Santa Barbara	CA4210009	CUYAMA COMMUNITY SERVICES DISTRICT	820	2
Sierra	CA4600019	SIERRA CO. W.W.D #1 CALPINE	225	3
Solano	CA4800561	SNUG HARBOR RESORT	337	4
Solano	CA4800596	UPCO	240	1
Sonoma	CA4900575	LOCH HAVEN MUTUAL WATER COMPANY	42	3
Sonoma	CA4900643	MOUNT WESKE ESTATES MUTUAL WATER COMPANY	26	3
Stanislaus	CA5000033	COBLES CORNER	50	3
Stanislaus	CA5000051	MOBILE PLAZA PARK	125	4
Stanislaus	CA5000077	CERES WEST MHP	161	3
Stanislaus	CA5000085	GREEN RUN MOBILE ESTATES	100	3

County	PWS ID	PWS Name	Pop. Served	No. of Violations
Stanislaus	CA5000086	COUNTRYSIDE MHP	60	4
Stanislaus	CA5000218	COUNTRY VILLA APTS	30	3
Stanislaus	CA5000273	GRATTON SCHOOL	110	3
Stanislaus	CA5000389	MONTEREY PARK TRACT CSD	186	2
Stanislaus	CA5000484	UNITED PALLET SERVICES INC WATER SYSTEM	45	3
Stanislaus	CA5000498	PATCHETTS FORD MERCURY	35	1
Stanislaus	CA5000570	INTERSTATE TRUCK CENTER VALLEY PETERBILT	25	3
Stanislaus	CA5010008	HUGHSON, CITY OF	6082	3
Stanislaus	CA5010009	KEYES COMMUNITY SERVICES DIST.	4805	4
Tehama	CA5200550	NEW ORCHARD MOBILE HOME PARK LLC	125	2
Tehama	CA5201137	MILLSTREAM MOBILE HOME PARK	80	2
Tulare	CA5400670	TRIPLE R MUTUAL WATER CO	400	4
Tulare	CA5403054	PFFJ, LLC	32	4
Tulare	CA5410009	PIXLEY PUBLIC UTIL DIST	3310	4
Tulare	CA5410050	ALPAUGH COMMUNITY SERVICES DISTRICT	1026	2
Yolo	CA5700514	BOGLE FAMILY LIMITED PARTNER	69	1

APPENDIX E: SUMMARY OF MCL VIOLATIONS FOR NITRATE BY COUNTY

Status in SDWIS/Fed for 2016 as of June 22, 2017

County	PWS ID	PWS Name	Pop. Served	No. of Violations
Fresno	CA1000112	FAIRMONT SCHOOL	483	4
Fresno	CA1000207	CENTRAL WEST ARTS CENTER	56	3
Fresno	CA1000369	ZONNEVELD DAIRY - CEDAR	70	2
Fresno	CA1000452	RAY MOLES FARMS (MARKS AVE)	90	6
Fresno	CA1000465	BATTH DEHYDRATOR	200	1
Fresno	CA1000505	RAY & LARRY MOLES (HENDERSON RD)	56	4
Fresno	CA1000625	EAST REEDLEY STORE	25	2
Kern	CA1500393	RAINBIRD VALLEY MUTUAL WATER COMPANY	238	4
Kern	CA1500459	LAKE OF THE WOODS MOBILE VILLAGE	78	4
Kern	CA1500464	LAKE ISABELLA KOA CAMPGROUND	280	4
Kern	CA1502012	HECK CELLARS WATER SYSTEM	47	1
Kern	CA1502194	SIERRA VISTA RESTAURANT	50	2
Kern	CA1502413	BRADY S MINI MART	202	4
Kern	CA1502680	ORANGE GROVE RV PARK	200	4
Kern	CA1503515	SUN PACIFIC SHIPPERS-MARICOPA WATER SYS.	100	4
Kern	CA1510023	LAKE OF THE WOODS MWC	945	5
Lake	CA1700604	REEL IN RESORT	200	1
Los Angeles	CA1900894	ACTON FOUR SQUARE CHURCH	50	1
Los Angeles	CA1907036	NEW APOSTOLIC CHURCH	45	3
Madera	CA2010012	HILLVIEW WATER CO-RAYMOND	294	3
Mariposa	CA2210907	MUSD - CATHEYS VALLEY ELEMENTARY SCHOOL	80	1
Merced	CA2400013	SENSIENT NATURAL INGREDIENTS LLC	400	1
Merced	CA2400078	TURLOCK GOLF & COUNTRY CLUB	360	4
Merced	CA2400089	HAGAMAN COUNTY PARK	360	3
Merced	CA2400134	BUHACH PRESCHOOL (KINDERCARE)	110	2
Merced	CA2400166	FOSTER FARMS CHICKEN LIVEHAUL (SYCAMORE)	100	2
Merced	CA2400245	DELHI KINGDOM HALL	350	1
Merced	CA2400255	CLASSIC YAM WATER SYSTEM	60	2
Merced	CA2400331	QUAIL H FARMS WATER SYSTEM	30	7
Merced	CA2400333	YAGI BROTHERS PRODUCE INC.	45	2
Merced	CA2400334	CALIFORNIA SWEET POTATO GROWERS COOP	26	2
Merced	CA2400336	DOREVA PRODUCE	45	2
Monterey	CA2700738	SAN MIGUEL WS #01	100	4

County	PWS ID	PWS Name	Pop. Served	No. of Violations
Monterey	CA2700771	SPRINGFIELD WATER COMPANY	200	8
Monterey	CA2701036	APPLE AVE WS #03	60	4
Monterey	CA2701063	RIVER RD WS #25	65	4
Monterey	CA2701241	ENCINAL RD WS #01	41	4
Monterey	CA2701542	GONZALES GAS STATION WS	200	4
Monterey	CA2701726	SPENCE RD WS #05	25	2
Monterey	CA2702466	SAN VICENTE MWC	90	5
Monterey	CA2702549	HARRISON RD WS #09	10	12
Monterey	CA2702624	UNI-KOOL WS	180	1
Riverside	CA3301140	CHUCKWALLA VALLEY RACEWAY WATER SYSTEM	150	3
Riverside	CA3301330	INDIAN OAKS TRAILER PARK	96	1
Riverside	CA3301529	RAMONA WATER COMPANY	250	1
San Benito	CA3500916	KINGDOM HALL OF JEHOVAH'S WITNESSES	500	1
San Bernardino	CA3600391	HILLCREST MOBILE ESTATES	900	1
San Bernardino	CA3600768	INSTITUTE OF MENTAL PHYSICS	100	1
San Bernardino	CA3601137	LIZZE ENTERPRISES	25	2
San Diego	CA3700934	PAUMA VALLEY MUTUAL WATER COMPANY	120	2
San Diego	CA3700936	RANCHO ESTATES MUTUAL WATER CO.	200	2
San Diego	CA3701341	QUIET OAKS MOBILE HOME PARK	120	4
San Diego	CA3701995	WILLOWSIDE TERRACE WATER ASSOCIATION	100	2
San Diego	CA3702754	RANCHO CORRIDO RV RESORT	350	3
San Joaquin	CA3900649	GLENWOOD MOBILE HOME PARK	100	2
San Joaquin	CA3900779	BETHANY TEMPLE WATER SYSTEM	65	1
San Joaquin	CA3901164	JIMCO TRUCK PLAZA WATER SYSTEM	150	4
San Joaquin	CA3901182	FINLEYS	25	2
San Joaquin	CA3901387	STOCKTON BAPTIST CHURCH	25	2
San Luis Obispo	CA4000722	FIERO LANE WATER COMPANY, INC.	250	2
Santa Clara	CA4300996	VALLEY VIEW RANCHES	45	1
Solano	CA4800807	SELF-SERVE PETROLEUM	1210	2
Solano	CA4800820	EB STONE	43	3
Sonoma	CA4900568	VALLEY FORD WATER ASSOCIATION	40	3
Sonoma	CA4901074	VALLEY FORD HOTEL	50	1
Stanislaus	CA5000389	MONTEREY PARK TRACT CSD	186	4
Stanislaus	CA5000426	LIBERTY BAPTIST CHURCH	65	2
Stanislaus	CA5000499	RATTO BROS, INC	100	3
Tulare	CA5400507	VISALIA/ SEQUOIA SOUTH KOA	150	3
Tulare	CA5400541	PORTERVILLE CITRUS RAYO	100	4
Tulare	CA5400548	KINGS INN MOTEL	182	3

County	PWS ID	PWS Name	Pop. Served	No. of Violations
Tulare	CA5400558	SAUCELITO ELEMENTARY SCHOOL	98	2
Tulare	CA5400616	LEMON COVE WATER CO	200	4
Tulare	CA5400651	BEVERLY GRAND MUTUAL WATER	108	4
Tulare	CA5400709	SEQUOIA UNION SCHOOL	400	4
Tulare	CA5400735	RODRIGUEZ LABOR CAMP	110	4
Tulare	CA5400763	GIUMARRA VINEYARDS CAMP 5 & 6	130	1
Tulare	CA5400795	WAUKENA ELEMENTARY SCHOOL	230	3
Tulare	CA5400805	SOULTS MUTUAL WATER CO	120	4
Tulare	CA5400810	AKAL TRAVEL PLAZA	200	1
Tulare	CA5400964	SIERRA VISTA ASSN	44	4
Tulare	CA5401003	EAST OROSI CSD	700	3
Tulare	CA5401082	VENTURA COASTAL, LLC - VISALIA DIVISION	75	6
Tulare	CA5402013	SUN PACIFIC SHIPPERS LP - EXETER	200	4
Tulare	CA5402030	WAUKENA MARKET	100	1
Tulare	CA5402041	PENNY WISE MOTEL	25	3
Tulare	CA5402043	MONSON MARKET	30	3
Tulare	CA5402046	WATERMAN INDUSTRIES LLC	127	3
Tulare	CA5402047	GLEANINGS FOR THE HUNGRY	31	4
Tulare	CA5402056	PEOPLE'S FOOD AND DELI INC.	100	2
Tulare	CA5403010	VISALIA CITRUS PACKERS-WOODLAKE	150	4
Tulare	CA5403013	PRINCE MART	27	1
Tulare	CA5403022	APTCO LLC	150	4
Tulare	CA5403041	FAMILY TREE FARMS	30	2
Tulare	CA5403046	VISALIA CITRUS PACKING-ORANGE COVE	70	3
Tulare	CA5403048	JD HEISKELL HOLDINGS LLC	60	3
Tulare	CA5403053	NS MINI MART	140	1
Tulare	CA5403076	CENTRAL CAL TRISTEZA ERAD	28	2
Tulare	CA5403081	PETERS FRUIT FARMS, INC	125	4
Tulare	CA5403106	EXETER-IVANHOE CITRUS ASSOCIATION	60	4
Tulare	CA5403110	SIERRA MUTUAL WATER CO	39	3
Tulare	CA5403122	PC FOOD MART	500	3
Tulare	CA5403140	MONARCH NUT CO	400	3
Tulare	CA5403205	PENA'S DISPOSAL SERVICES	98	2
Tulare	CA5403210	HAPPY APPLES	25	1
Yolo	CA5700649	WESTUCKY WATER ASSOC	33	1
Yolo	CA5700757	GRASSLAND PARK HOST WELL (OLD YOLO BOWME)	50	1
Yolo	CA5700788	NORTH DAVIS MEADOWS	314	3

**APPENDIX F: SUMMARY OF MCL VIOLATIONS FOR
COMBINED NITRATE - NITRITE
BY COUNTY**

Status in SDWIS/Fed for 2016 as of June 22, 2017

County	PWS ID	PWS Name	Pop. Served	No. of Violations
KERN	CA1500409	BROCK MUTUAL WATER COMPANY	511	4
KERN	CA1500494	WILSON ROAD WATER COMMUNITY	66	4
KERN	CA1500575	SAN JOAQUIN ESTATES MUTUAL WATER COMPANY	165	4
KERN	CA1500584	GOOSELAKE WATER COMPANY	90	1
KERN	CA1500588	SON SHINE PROPERTIES	438	4
KERN	CA1502017	WHEELER FARMS HEADQUARTERS	25	4
KERN	CA1502033	GOLDEN STATE VINTNERS-FRANZIA MCFARLAND	50	4
KERN	CA1502229	RIO BRAVO GREELEY SCHOOL WATER SYSTEM	887	4
KERN	CA1502273	FARMLAND RESERVE, INC.	80	4
KERN	CA1502398	FARMER JOHN EGG RANCH #2	30	4
KERN	CA1502699	EAST WILSON ROAD WATER COMPANY	35	4
KERN	CA1503194	PARADISE WATER SYSTEM	31	3
SAN BERNARDINO	CA3600391	HILLCREST MOBILE ESTATES	900	1
TULARE	CA5400666	DEL ORO GRANDVIEW GARDENS DISTRICT	347	2
TULARE	CA5400682	PLAINVIEW MWC - CENTRAL WATER	138	1
TULARE	CA5410007	LSID - TONYVILLE	500	2

APPENDIX G: ACCESSING PUBLIC DRINKING WATER WATCH

How to Access Public Drinking Water Watch

State Water Resources Control Board
Division of Drinking Water

This document is intended to be a quick reference to assist the public and other stakeholders in accessing the Division of Drinking Water's Public Drinking Water Watch.

[Access the Drinking Water Watch web page](#)

The Drinking Water Watch website is located at: <https://sdwis.waterboards.ca.gov/PDWW/>.

Enter the URL into a web browser's address bar.



[Search for Public Water Systems \(PWS\)](#)

To search for a PWS, enter any combination of the fields circled below, then click **Search for Water Systems**. For this example, we are searching for water systems in Fresno County. If you know the Water System's 7-digit Water System Number or the name of the public water system that you are interested in, you may enter one or the other in the first two rows, respectively. The Water System Name field will also allow the user to search on partial text strings.

Public Water Supply Systems Search Parameters

Water System No.	<input type="text"/>
Water System Name	<input type="text"/>
Principal County Served	FRESNO ▾
Water System Type	All ▾
Primary Source Water Type	All ▾
Point of Contact Type	None ▾

Sample Search Parameters

Sample Class	Click to select a value... ▾
Sample Collection Date Range <small>(The Sample Search always produces results for the last 2 years, unless you provide a specific date range.)</small>	12/8/2013  To 12/8/2015 

[Click Here for the County Map of CALIFORNIA](#)