

2019 Annual Drinking Water Quality Report

TIPTON COMMUNITY SERVICES DISTRICT

We test the drinking water quality for many constituents as required by State and Federal Regulations. This report shows the results of our monitoring for the period of January 1 – December 31, 2019 and may include earlier monitoring data.

**Este informe contiene información muy importante sobre su agua de beber.
Tradúzcalo ó hable con alguien que lo entienda bien.**

We are pleased to provide you with this year's Annual Water Quality Report. We want to keep you informed about the excellent water and services we have delivered to you over the past year. Our goal is and always has been, to provide you with a safe and dependable supply of drinking water. Our water source comes from two wells. Each well is being chlorinated continuously in an effort to prevent any bacteriological problems.

A source water assessment was conducted for the water supply wells of the Tipton Community Services District water system in February 2003. The sources are considered most vulnerable to the following activities associated with contaminants detected in the water supply: fertilizer, pesticide and/or herbicide applications. The sources are considered most vulnerable to the following activities not associated with any detected contaminants: automobile repair shops; junk and/or scrap and/or salvage yards; sewer collection systems; automobile gas stations; historic gas stations; underground storage tanks – confirmed leaking tanks. A copy of the complete assessment may be viewed at the District office. If you would like a summary of the assessment sent to you or if you have any questions about this report or concerning your water utility, please contact Mr. Johnny Price, Maintenance Supervisor at 559/752-4182.

You may also write to Mr. Price at Tipton Community Services District, P. O. Box 266, Tipton, CA 93272. We want our customers to be informed about their water utility. If you want to learn more, please attend any of our regularly scheduled meetings. They are held the first Wednesday of each month at 6:00 p.m., at 263 S. Graham Rd. in Tipton.

The following are definitions of some of the TERMS USED IN THIS REPORT:

Maximum Contaminant Level (MCL): The highest level of a contaminant that is allowed in drinking water. Primary MCLs are set as close to the PHGs (or MCLGs) as is economically and technologically feasible. Secondary MCLs are set to protect the odor, taste, and appearance of drinking water.

Maximum Contaminant Level Goal (MCLG): The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs are set by the U.S. Environmental Protection Agency (USEPA).

Public Health Goal (PHG): The level of a contaminant in drinking water below which there is no known or expected risk to health. PHGs are set by the California Environmental Protection Agency.

Maximum Residual Disinfectant Level (MRDL): The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

Maximum Residual Disinfectant Level Goal (MRDLG): The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

Primary Drinking Water Standards (PDWS): MCLs and MRDLs for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.

Secondary Drinking Water Standards (SDWS): MCLs for contaminants that affect taste, odor, or appearance of the drinking water. Contaminants with SDWSs do not affect the health at the MCL levels.

Treatment Technique (TT): A required process intended to reduce the level of a contaminant in drinking water.

Regulatory Action Level (AL): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.

Variations and Exemptions: State Board permission to exceed an MCL or not comply with a treatment technique under certain conditions.

Level 1 Assessment: A Level 1 assessment is a study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system.

Level 2 Assessment: A Level 2 assessment is a very detailed study of the water system to identify potential problems and determine (if possible) why an *E. coli* MCL violation has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions.

N/A: Not applicable

ND: not detectable at testing limit

ppm: parts per million or milligrams per liter (mg/L)

ppb: parts per billion or micrograms per liter (µg/L)

ppt: parts per trillion or nanograms per liter (ng/L)

ppq: parts per quadrillion or picogram per liter (pg/L)

pCi/L: picocuries per liter (a measure of radiation)

In general, sources of drinking water (both tap water and bottled water) may include rivers, lakes, streams, ponds, reservoirs, springs and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and, in some cases, radioactive material and can pick up substances resulting from the presence of animals or from human activity.

Constituents that may be present in source water to contamination levels include:

- *Microbial contaminants*, such as viruses and bacteria that may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife.

- *Inorganic contaminants*, such as salts and metals, that can be naturally-occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming.
- *Pesticides and herbicides*, which may come from a variety of sources such as agriculture, urban stormwater runoff and residential uses.
- *Organic chemical contaminants*, including synthetic and volatile organic chemicals, that are byproducts of industrial processes and petroleum production and can also come from gas stations, urban stormwater runoff, agricultural application, and septic systems.
- *Radioactive contaminants*, which can be naturally occurring or the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, the U. S. Environmental Protection Agency (USEPA) and the State Water Resources Control Board – Division of Drinking Water (DDW) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. DDW regulations also establish limits for contaminants in bottled water that must provide the same protection for public health.

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. Tipton Community Service District is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at <http://www.epa.gov/safewater/lead>.

The tables below and on the following page list all of the drinking water constituents that were detected during the most recent samplings for the constituent. The presence of these constituents in the water does not necessarily indicate that the water poses a health risk. The DDW requires us to monitor for certain constituents less than once per year because the concentrations of these constituents are not expected to vary significantly from year to year. Some of the data, though representative of the water quality, are therefore more than one year old.

TEST RESULTS (A)

Lead and Copper Rule	No. of samples collected	MCLG	Action Level	90 th percentile level detected	No. Sites Exceeding Action Level	Number of Schools Requesting Lead Sampling	Typical Source of Contamination
Lead (ppb) 2018	10	2	15	ND	0	1	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits
Copper (ppm) 2018	10	0.17	1.3	ND	0	N/A	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives

Radioactive Contaminants						
Constituent	MCL	PHG (MCLG)	Sample Date	Average Level Detected	Range (B)	Likely Source of Contamination
Gross Alpha Activity (pCi/L) (B)	15	N/A	2011 & 2017	2.84	2.65 to 3.02	Erosion of natural deposits

SAMPLING RESULTS FOR SODIUM AND HARDNESS						
Constituent	MCL	PHG [MCLG]	Sample Date	Average Level Detected	Range	Likely Source of Contamination
Hardness (ppm)	None	None	9/10/2019	27	17 to 37	Generally found in ground and surface water
Sodium (ppm)	None	None	9/10/2019	69	54 to 83	Generally found in ground and surface water

DETECTION OF CONTAMINANTS WITH A PRIMARY DRINKING WATER STANDARD

Constituent	MCL	PHG [MCLG]	Sample Date	Average Level Detected	Range (B)	Likely Source of Contamination
Arsenic (ppb)	10	0.004	2019	5.7	ND to 9.7(C)	Erosion of natural deposits; runoff from orchards; glass and electronics production wastes
Fluoride (ppm)	2	1	9/10/2019	0.09	ND to 0.17	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Nitrate as N (ppm)	10	10	2019	9.8	4.4 to 20 (D)	Runoff and leaching from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits

DETECTION OF CONTAMINANTS WITH A SECONDARY DRINKING WATER STANDARD

Constituent	MCL	Sample Date	Average Level Detected	Range	Likely Source of Contamination
Chloride (ppm)	500	9/10/2019	19	15 to 23	Runoff/leaching from natural deposits; seawater influence
Specific Conductance (μ S/cm)	1600	9/10/2019	370	290 to 450	Substances that form ions when in water; seawater influence
Sulfate (ppm)	500	9/10/2019	13	11 to 15	Runoff/leaching from natural deposits; industrial wastes
Total Dissolved Solids (TDS) (ppm)	1000	9/10/2019	225	170 to 280	Runoff/leaching from natural deposits
Turbidity (Units)	5	9/10/2019	0.40	0.17 to 0.63	Soil runoff

DETECTION OF SYNTHETIC ORGANIC CONTAMINANTS INCLUDING PESTICIDES & HERBICIDES

Constituent	MCL	PHG [MCLG]	Sample Date	Average Level Detected	Range	Likely Source of Contamination
Trichloropropane (E) (1,2,3-TCP) (ppt)	5	0.7	2/21/2019	ND	N/A	Discharge from industrial and agricultural chemical factories; leaching from hazardous waste sites; used as cleaning and maintenance solvent, paint and varnish remover, and cleaning and degreasing agent; byproduct during the production of other compounds and pesticides.

(A) Results reported due to regulatory requirement or detection of a constituent.

(B) Results reported include amounts that are less than the State Water Resources Control Board – Division of Drinking Water (DDW) required detection level for this constituent.

(C) **ABOUT ARSENIC:** While your drinking water meets the current EPA standard for arsenic, it does contain low levels of arsenic. The standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. The California State Water Resources Control Board – Division of Drinking Water (DDW) continues to research the health effects of low levels of arsenic, which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.

(D) **ABOUT NITRATE:** Nitrate in drinking water at levels above 10 mg/L (as N) is a health risk for infants of less than six months of age. Such nitrate levels in drinking water can interfere with the capacity of the infant's blood to carry oxygen, resulting in a serious illness; symptoms include shortness of breath and blueness of the skin. Nitrate levels as N that are above 10 mg/L may also affect the ability of the blood to carry oxygen in other individuals, such as pregnant women and those with certain specific enzyme deficiencies. If you are caring for an infant, or you are pregnant, you should ask advice from your health care provider.

In September, 2019, two Nitrate samples were collected from Well 2. The State Water Board determined that the Water System failed to comply with primary drinking water standards. Monthly public notification began by December 31, 2019 and will continue monthly until the State Water Board determines the nitrate contamination is resolved.

(E) **ABOUT 1,2,3-TCP:** Some people who drink water containing 1,2,3-trichloropropane (1,2,3-TCP) in excess of MCL over many years may have an increased risk of getting cancer. 1,2,3-TCP had a notification level (NL) of 5 ppt until December 14, 2017, when the MCL of 5 ppt became effective. We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not your drinking water meets health standards.

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Well #2	MCL	DLR	Units	DHS Code	2/10/17	3/9/17	4/26/17	7/7/17	7/7/17	8/2/17	8/7/17	9/12/17	9/12/17	9/27/17	9/27/17	12/4/17	12/18/17
Nitrate (as Nitrogen)	10	0.4	mg/L	00618						13.00	9.44	8.30	15.10	14.00	12.10	12.00	
Nitrate (NO3)	45	2	mg/L	71850	8.90	5.60	5.80	3.80	3.10	4.40	5.00	1.30	<2.0=ND	2.60	3.40	6.80	
Arsenic (As)	10	2	ug/L	01002													

Well #2	MCL	DLR	Units	DHS Code	2/15/18	6/17/18	8/16/18	11/27/18	2/21/19	6/13/19	9/10/19	9/11/19	10/24/19	11/21/19	12/9/19	1/7/20	2/6/20	3/5/20
Nitrate (as Nitrogen)	10	0.4	mg/L	00618			8.40				13.00	11.00	16.00	11.00	20.00	16.00	21.00	16.00
Nitrate (NO3)	45	2	mg/L	71850														
Arsenic (As)	10	2	ug/L	01002	ND	3.30	4.00	8.90	8.40	5.30	2.10							ND

Well #2	MCL	DLR	Units	DHS Code	4/2/20	5/5/20	6/2/20	7/2/20	8/3/20	8/19/20	8/28/20	9/2/20	9/9/20	9/16/20				
Nitrate (as Nitrogen)	10	0.4	mg/L	00618	18.00	17.00	13.00	10.00	8.60	7.30	9.30	6.40	7.00	7.50				
Nitrate (NO3)	45	2	mg/L	71850														
Arsenic (As)	10	2	ug/L	01002		ND			4.40									

Well #4	MCL	DLR	Units	DHS Code	2/10/17	3/9/17	4/26/17	7/7/17	7/7/17	8/2/17	8/7/17	9/12/17	9/12/17	9/27/17	9/27/17	12/4/17	12/18/17
Nitrate (as Nitrogen)	10	0.4	mg/L	00618						3.30	5.51	4.60	3.50	3.10	5.80	8.20	
Nitrate (NO3)	45	2	mg/L	71850													
Arsenic (As)	10	2	ug/L	01002	10.00	9.30	8.10	8.00	7.00	6.30	6.60	6.70	9.00	3.70	4.90	11.00	8.10

Well #4	MCL	DLR	Units	DHS Code	2/15/18	6/17/18	8/16/18	11/27/18	2/21/19	6/13/19	9/10/19	9/11/19	11/21/19	2/6/20	6/5/20	8/3/20	9/2/20
Nitrate (as Nitrogen)	10	0.4	mg/L	00618			4.60				4.70		4.40		3.90		
Nitrate (NO3)	45	2	mg/L	71850													
Arsenic (As)	10	2	ug/L	01002	4.10	5.70	6.10	2.30	<2.0=ND	7.10	8.70	9.70	9.30	8.60	11.00	5.60	

Well #5	MCL	DLR	Units	DHS Code	8/11/20	8/20/20	9/2/20										
Nitrate (as Nitrogen)	10	0.4	mg/L	00618	2.20	< 1.80											
Nitrate (NO3)	45	2	mg/L	71850													
Arsenic (As)	10	2	ug/L	01002	7.80		9.10										