

**2017 CITY OF SIERRA MADRE GROUNDWATER QUALITY <sup>[1]</sup>**

Chemical	MCL	PHG or (MCLG)	Average Amount	Range of Detections	MCL Violations?	Most Recent Testing	Typical Source of Contaminant
<b>Primary Drinking Water Standards--Health-Related Standards</b>							
<b>Inorganic Chemicals</b>							
Fluoride (ppm)	2	1	0.87	0.6 - 1.8	No	2017	Erosion of natural deposits
Nitrate as N (ppm)	10	10	2.1	1.4 - 3.1	No	Quarterly	Fertilizers, Septic Tanks
<b>Organic Chemicals</b>							
Tetrachloroethylene (ppb)	5	0.06	0.61	ND - 1.4	No	Monthly	Industrial discharge
Trichloroethylene (ppb)	5	1.7	1.2	0.7 - 2.1	No	Monthly	Industrial discharge
<b>Radiologicals</b>							
Uranium (pCi/L)	20	0.43	1.1	ND - 1.7	No	2015*	Erosion of natural deposits
<b>Secondary Standards<sup>[2]</sup></b>							
Chloride (ppm)	500	n/a	48	12 - 68	No	2017	Erosion of natural deposits
Odor (threshold odor number)	3	n/a	1	1	No	2017	Naturally present in the groundwater
Specific Conductance (µmho/cm)	1,600	n/a	636	350 - 760	No	2017	Substances that form ions in water
Sulfate (ppm)	500	n/a	107	17 - 150	No	2017	Erosion of natural deposits
Total Dissolved Solids (ppm)	1,000	n/a	390	200 - 590	No	2017	Erosion of natural deposits
Turbidity (NTU)	5	n/a	< 0.1	ND - 0.3	No	2017	Erosion of natural deposits
<b>Unregulated Chemicals</b>							
Alkalinity, total as CaCO3 (ppm)	Not Regulated	n/a	138	130 - 150	n/a	2017	Run off / leaching from natural deposits
Calcium (ppm)	Not Regulated	n/a	80.7	44 - 99.9	n/a	2017	Run off / leaching from natural deposits
Hardness, total as CaCO3 (ppm)	Not Regulated	n/a	283	166 - 339	n/a	2017	Erosion of natural deposits
Hardness, total (grains/gal)	Not Regulated	n/a	16.6	9.7 - 19.9	n/a	2017	Erosion of natural deposits
Magnesium (ppm)	Not Regulated	n/a	19.8	13.7 - 25.7	n/a	2017	Run off / leaching from natural deposits
pH (pH Units)	Not Regulated	n/a	7.6	7.4 - 7.8	n/a	2017	Hydrogen ion concentration
Potassium (ppm)	Not Regulated	n/a	1.5	1.2 - 2	n/a	2017	Run off / leaching from natural deposits
Sodium (ppm)	Not Regulated	n/a	21	15 - 27	n/a	2017	Erosion of natural deposits
Total Organic Carbon (ppm)	TT <sup>[3]</sup>	n/a	1.12	0.47 - 3	n/a	Monthly	Naturally present in the groundwater

**2017 CITY OF SIERRA MADRE UNREGULATED CHEMICALS REQUIRING MONITORING**

Chemical	Notification Level	PHG or (MCLG)	Average Amount	Range of Detections	Most Recent Testing Next Required UCMR Sample Scheduled 2019
Chlorate (ppb)	800	n/a	67	ND - 130	2013
Chromium, Hexavalent (ppb)	n/a	0.02 <sup>[4]</sup>	0.55	ND - 1.4	2013
Chromium, Total (ppb) <sup>[5]</sup>	MCL = 50	(100)	<0.2	ND - 0.39	2013
Estriol (ppb)	n/a	n/a	<0.0008	ND - 0.0011	2013
Molybdenum, Total (ppb)	n/a	n/a	2.9	ND - 4.3	2013
Strontium, Total (ppb)	n/a	n/a	730	290 - 960	2013
Vanadium, Total (ppb)	50	n/a	4.2	2.7 - 6.6	2013

**2017 CITY OF SIERRA MADRE DISTRIBUTION SYSTEM WATER QUALITY**

Bacterial Quality	MCL	MCLG	Highest Monthly # of Positives	MCL Violation ?	Most Recent Sampling	Typical Source of Contaminant
Total Coliform Bacteria	1	0	0	No	Weekly	Naturally present in the environment

No more than one monthly sample may be positive for total coliform bacteria.

Chemical	MCL or (MRDL)	PHG or (MRDLG)	Average Amount	Range of Detections	MCL Violations?	Most Recent Sampling Date	Typical Source of Contaminant
Haloacetic Acids (ppb)	60	n/a	3.8	ND - 6.9	No	Quarterly	Byproducts of chlorine disinfection
Total Trihalomethanes (ppb)	80	n/a	24	ND - 28	No	Quarterly	Byproducts of chlorine disinfection
Chlorine Residual (ppm)	(4)	(4)	0.87	0.41 - 1.62	No	Weekly	Drinking water disinfectant
Fluoride (ppm)	2	1	1.1	0.63 - 1.8	No	Quarterly	Erosion of natural deposits
Odor (threshold odor number) <sup>[2]</sup>	3	n/a	1	1 - 2	No	Monthly	Naturally present in the groundwater
Turbidity (NTU) <sup>[2]</sup>	5	n/a	0.28	ND - 4.1	No	Monthly	Erosion of natural deposits

At-The-Tap Lead and Copper Testing	Action Level	PHG	90th Percentile Value	Sites Exceeding Action Level	AL Violations?	Typical Source of Contaminant
Copper (ppm)	1.3	0.3	0.51	1 / 31	No	Corrosion of household plumbing
Lead (ppb)	15	0.2	ND	2 / 31	No	Corrosion of household plumbing

Every three years, at least 30 residences are tested for lead and copper at-the-tap. The most recent set of samples was collected in 2017. Lead was detected in three samples, two of which exceeded the lead AL. Copper was detected in 27 samples, one of which exceeded the copper AL. An AL is the concentration of a contaminant which, if exceeded in more than 10 percent of the samples, triggers treatment or other requirements that a water system must follow. The City of Sierra Madre complies with the Lead and Copper ALs.

**2017 CITY OF SIERRA MADRE UNREGULATED CHEMICALS REQUIRING MONITORING IN THE DISTRIBUTION SYSTEM**

Chemical	Notification Level	PHG or (MCLG)	Average Amount	Range of Detections	Most Recent Testing Next Required UCMR Sample Scheduled 2019
Chlorate (ppb)	800	n/a	92	64 - 120	2013
Chromium, Hexavalent (ppb)	n/a	0.02 <sup>[4]</sup>	0.83	0.16 - 1.5	2013
Chromium, Total (ppb) <sup>[5]</sup>	MCL = 50	(100)	0.85	ND - 1.7	2013
Molybdenum, Total (ppb)	n/a	n/a	3.4	3.2 - 3.6	2013
Strontium, Total (ppb)	n/a	n/a	630	390 - 860	2013
Vanadium, Total (ppb)	50	n/a	7.3	4.9 - 9.7	2013

**MCL** = Maximum Contaminant Level; **MCLG** = Maximum Contaminant Level Goal; **MRDL** = Maximum Residual Disinfectant Level; **MRDLG** = Maximum Residual Disinfectant Level Goal; ; **n/a** = not applicable; **ND** = not detected; **NTU** = nephelometric turbidity units; **PHG** = California Public Health Goal; **ppb** = parts-per-billion; **ppm** = parts-per-million; **TT** = Treatment Technique; **µmho/cm** = micromho per centimeter; **pCi/L** = picoCuries per liter; **<** = detected but average is less than the required reporting limit

[1] This table includes groundwater quality for water sampled at City of Sierra Madre's wells and tunnel.

Results are from the most recent testing performed pursuant to state and federal drinking water regulations.

[2] Chemical is regulated by a secondary standard to maintain aesthetic qualities (taste, odor, color).

[3] A treatment technique is a required process intended to reduce the level of contaminants in drinking water

that are difficult and sometimes impossible to measure directly.

[4] There is currently no MCL for hexavalent chromium. The previous MCL of 10 ppb was withdrawn on September 11, 2017.

[5] Total chromium is regulated with an MCL of 50 ppb but was not detected, based on the detection limit for purposes of reporting of 10 ppb. Total chromium was included as part of the unregulated chemicals requiring monitoring.

\* Next required Uranium sample scheduled 2021