## 2010 CITY OF SIERRA MADRE GROUNDWATER QUALITY [1] PHG or MCL **Most Recent Average** Range of MCL **Typical Source of Contaminant** Chemical (MCLG) Detections Violations? Testina Amount Primary Drinking Water Standards--Health-Related Standards **Organic Chemicals** ND Tetrachloroethylene (ppb) 0.06 ND No Monthly Industrial discharge Trichloroethylene (ppb) 5 1.7 ND ND No Monthly Industrial discharge Inorganic Chemicals 10 0.004 <2 ND - 2.0 No 2008 Erosion of natural deposits Arsenic (ppb) Nitrate as NO3 (ppm)[2] 45 45 12 7.4 - 22 No Monthly Fertilizers, Septic Tanks Secondary Standards<sup>l</sup> 500 n/a 9 7 - 12 No 2008 Erosion of natural deposits Chloride (ppm) Specific Conductance (µmho/cm) 1,600 n/a 391 345 - 430 No 2008 Substances that form ions in water Sulfate (ppm) 500 n/a 22 15 - 35 No 2008 Erosion of natural deposits Total Dissolved Solids (ppm) 1,000 n/a 216 192 - 242 No 2008 Erosion of natural deposits Turbidity (NTU) 0.2 0.2 - 0.3No 2008 n/a Erosion of natural deposits 5 Unregulated Chemicals Requiring Monitoring Alkalinity, total as CaCO3 (ppm) Not Regulated 162 150 - 172 2008 Run off / leaching from natural deposits n/a n/a NL = 1,000258 - 450 2003 Erosion of natural deposits Boron (ppb) 363 n/a na/ Calcium (ppm) Not Regulated 47 37 - 58 n/a 2008 Run off / leaching from natural deposits n/a Hardness, total as CaCO3 (ppm) Not Regulated n/a 151 119 - 175 n/a 2008 Erosion of natural deposits Hardness, total (grains/gal) Not Regulated n/a 6.9 - 10n/a 2008 Erosion of natural deposits Chromium, hexavalent (ppb) Not Regulated ND - 1.4 n/a 2001 Industrial waste discharge; naturally present n/a <1 5 - 13 2008 Magnesium (ppm) Not Regulated n/a n/a Run off / leaching from natural deposits pH (pH Units) Not Regulated n/a 7.5 7.4 - 7.6n/a 2008 Hydrogen ion concentration Potassium (ppm) Not Regulated n/a 1.1 0.7 - 2.0 n/a 2008 Run off / leaching from natural deposits 28 13 - 52 Not Regulated 2008 Erosion of natural deposits Sodium (ppm) n/a n/a TT [4] Total Organic Carbon (ppm) 0.3 ND - 0.6 Naturally present in the groundwater Monthly n/a n/a

## 2010 CITY OF SIERRA MADRE DISTRIBUTION SYSTEM WATER QUALITY

n/a

2003

Erosion of natural deposits

ND - 11

Bacterial Quality	MCL	MCLG	Highest Monthly # of Positives	MCL Violation ?	Most Recent Sampling	Typical Source of Contaminant		
Bacterial Quality	MICL	MICEG	Positives	Violation :	Sampling			
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		MCL Violations?	Most Recent Sampling Date	Typical Source of Contaminant
Haloacetic Acids (ppb)	60	n/a	1.1	ND - 7.7	No	Quarterly	Byproducts of chlorine disinfection
Total Trihalomethanes (ppb)	80	n/a	8.4	ND - 39	No	Quarterly	Byproducts of chlorine disinfection
Chlorine Residual (ppm)	(4)	(4)	0.6	0.2 - 1.4	No	Weekly	Drinking water disinfectant
Color (color units)[3]	15	n/a	<1	ND - 5	No	Monthly	Naturally present in the groundwater
Fluoride (ppm)	2	1	1.1	0.6 - 1.6	No	Quarterly	Erosion of natural deposits
Odor (threshold odor number)[3]	3	n/a	1	1	No	Monthly	Naturally present in the groundwater
Turbidity (NTU) <sup>[3]</sup>	5	n/a	0.1	ND - 0.6	No	Monthly	Erosion of natural deposits
					Sites		

tion evel	PHG	90th Percentile Value	Exceeding	AL Violations?	Typical Source of Contaminant
.3	0.3	0.33	0/30	No	Corrosion of household plumbing
15	0.2	11	1 / 30	No	Corrosion of household plumbing
	.3	.3 0.3	.3 0.3 90th Percentile Value	PHG   90th Percentile Value   Action   Level     3   0.3   0.33   0.730	tion vel PHG 90th Percentile Value Exceeding Action Level 3 0.3 0.33 0.30 No

Every three years, 30 residences are tested for lead and copper at-the-tap. The most recent set of samples was collected in 2008. Lead was detected in five samples, one of which exceeded the lead Action Level (AL). Copper was detected in 21 samples, none 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.

MCL = Maximum Contaminant Level; MCLG = Maximum Contaminant Level Goal; MRDL = Maximum Residual Disinfectant Level;
MRDLG = Maximum Residual Disinfectant Level Goal; NL = Notification Level; 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; < = 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] Nitrate levels are determined in the blended water served to our customers.

NL = 50

n/a

6.8

Vanadium (ppb)

- [3] Chemical is regulated by a secondary standard to maintain aesthetic qualities (taste, odor, color).
- [4] 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.