City of Sierra Madre
2013 Consumer Confidence Report

INTRODUCTION
The City of Sierra Madre is committed to keeping you informed about the quality of your drinking water. This report is provided to you annually and includes information about where your drinking water comes from, the constituents found in your drinking water and how the water quality compares with the regulatory standards. We remain dedicated to providing you with a reliable supply of high quality drinking water.

Our City Council meets on the second and fourth Tuesday of each month (except holidays) at 6:30 p.m. in the City Council Chambers located in City Hall at 232 W. Sierra Madre Blvd., Sierra Madre, CA 91024. Please feel free to participate in these meetings.

WHERE DOES MY DRINKING WATER COME FROM?
During calendar year 2013, the water supply for the City of Sierra Madre came from three sources: (1) groundwater from wells in the East Raymond Basin, (2) natural spring tunnel located in our foothills, and (3) treated surface water from Metropolitan Water District of Southern California (MWD). All water is treated with chlorine disinfection or chloramines disinfection before it is delivered to your home.

The recent drought has required the city to change water sources. Under current drought condition the ground water aquifer that has been the city's historical supply has fallen to levels where our wells can no longer meet the needs of the community. In order to meet demand, the City began importing treated surface water from MWD through an agreement with the San Gabriel Valley Municipal Water District. As the city goes from one water source to another water source there will be a transitional stage where the water clarity will not always meet the high expectations of our customers. We have implemented a distribution system flushing program to remove naturally occurring minerals from the distribution system that have been softened during this transition period and appreciate the patience offered during this period of time.

WHAT ARE WATER QUALITY STANDARDS?
In order to ensure that tap water is safe to drink, the United States Environmental Protection Agency (USEPA) and California Department of Public Health (CDPH) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. CDPH regulations also establish limits for contaminants in bottled water that provide the same protection for public health.

Drinking water standards established by USEPA and CDPH are limits for substances that may affect consumer health or aesthetic qualities of drinking water. The chart in this report shows the following types of water quality standards:

- **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.
- **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.
- **Secondary MCLs** are set to protect the odor, taste, and appearance of drinking water.
- **Primary Drinking Water Standard:** MCLs and MRDLs for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.

WHAT IS A WATER QUALITY GOAL?
In addition to mandatory water quality standards, USEPA and CDPH have set voluntary water quality goals for some contaminants. Water quality goals are often set at such low levels that they are not achievable in practice and are not directly measurable. Nevertheless, these goals provide useful guideposts and direction for water management practices. The chart in this report includes three types of water quality goals:

- **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 USEPA.
- **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.
- **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.

WHAT CONTAMINANTS MAY BE PRESENT IN SOURCES OF DRINKING WATER?
The sources of drinking water generally 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.

Contaminants that may be present in source water include:

- **Microbial contaminants,** such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife.
- **Inorganic contaminants,** such as salts and metals, which 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** that may come from a variety of sources such as agriculture, urban stormwater runoff and residential uses.
- **Radioactive contaminants** that can be naturally-occurring or can be the result of oil and gas production and mining activities.
- **Organic chemical contaminants,** including synthetic and volatile organic chemicals that are byproducts of industrial processes and petroleum production, and can also come from gasoline stations, urban stormwater runoff, agriculture application and septic systems.

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the USEPA's Safe Drinking Water Hotline (1-800-426-4791).

Your drinking water is regularly tested using CDPH approved methods to ensure its safety. The table in this report lists all the constituents **detected** in your drinking water that have Federal and State drinking water standards. **Detected** unregulated constituents and other constituents of interest are also included.

ARE THERE ANY PRECAUTIONS THE PUBLIC SHOULD CONSIDER?
Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. USEPA/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).

LEAD IN TAP WATER
If present, elevated levels of lead can cause serious 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. The City of Sierra Madre 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 U.S. Environmental Protection Agency's Safe Drinking Water Hotline or at http://water.epa.gov/drink/info/lead/index.cfm.

FLUORIDE VARIANCE
The City of Sierra Madre has been granted a Fluoride Variance from CDPH. The City of Sierra Madre first requested the variance in 1994. On June 6, 1995, CDPH conducted a public hearing in the City of Sierra Madre to determine if there was substantial public opposition to the City receiving a variance from the California drinking water standard for fluoride. CDPH found that there is not substantial community opposition to the City receiving the variance from the California drinking water standard for fluoride.

In the meantime, CDPH has raised the MCL for fluoride to 2 ppm with a PHG of 1 ppm. In 2013, the City on an average did not exceed the PHG of 1 ppm and the MCL of 2 ppm in water delivered to our customers. It should be noted that due to the fluoride concentration of our water, additional fluoride products are not necessary for children.

DRINKING WATER SOURCE ASSESSMENT
In accordance with the federal Safe Drinking Water Act, an assessment of the drinking water sources for the City of Sierra Madre was completed in November 2002. The purpose of the drinking water source assessment is to promote source water protection by identifying types of activities in the proximity of the drinking water sources which could pose a threat to the water quality. The assessment concluded that City of Sierra Madre's groundwater wells generally are not vulnerable to contamination. However, wells are located within the proximity of gasoline stations, chemical and petroleum storage facilities, automobile repair shops, and areas of fertilizer/pesticide applications, which are possible sources of contamination. You may request a summary of the assessment to be sent to you by contacting Mr. Jose Reynoso at 626-355-7135 ext 813.

Every five years, MWD is required by CDPH to examine possible sources of drinking water contamination in its State Water Project and Colorado River source waters. In 2012, MWD submitted to CDPH its updated Watershed Sanitary Surveys for the Colorado River and State Water Project, which include suggestions for how to better protect these source waters. Both source waters are exposed to stormwater runoff, recreational activities, wastewater discharges, wildlife, fires, and other watershed-related factors that could affect water quality. Water from the Colorado River is considered to be most vulnerable to contamination from recreation, urban/stormwater runoff, increasing urbanization in the watershed, and wastewater. Water supplies from Northern California's State Water Project are most vulnerable to contamination from urban/stormwater runoff, wildlife, agriculture, recreation, and wastewater. USEPA also requires MWD to complete one Source Water Assessment (SWA) that utilizes information collected in the watershed sanitary surveys. MWD completed its SWA in December 2002. The SWA is used to evaluate the vulnerability of water sources to contamination and helps determine whether more protective measures are needed. A copy of the most recent summary of either Watershed Sanitary Survey or the SWA can be obtained by calling MWD at (213) 217-6850.

QUESTIONS?
For more information or questions regarding this report, please contact Mr. Jose Reynoso at (626) 355-7135 ext 813.

Este informe contiene información muy importante sobre su agua potable. Para mas información ó traducción, favor de contactar a Mr. Jose Reynoso. Telefono: (626) 355-7135 ext 813.

2013 CITY OF SIERRA MADRE GROUNDWATER QUALITY [1]

Chemical	MCL	PHG or (MCLG)	Average Amount	Range of Detections	MCL Violations?	Most Recent Testing	Typical Source of Contaminant
Primary Drinking Water Standards--Health-Related Standards							
Organic Chemicals							
Tetrachloroethylene (ppb)	5	0.06	<0.5	ND - 0.58	No	Monthly	Industrial discharge
Trichloroethylene (ppb)	5	1.7	<0.5	ND - 1.2	No	Monthly	Industrial discharge
Inorganic Chemicals							
Fluoride (ppm)	2	1	0.96	0.65 - 1.4	No	2011	Erosion of natural deposits
Nitrate as NO3 (ppm)	45	45	13	ND - 18	No	Quarterly	Fertilizers, Septic Tanks
Secondary Standards [2]							
Chloride (ppm)	500	n/a	8.4	6.8 - 12	No	2011	Erosion of natural deposits
Odor (threshold odor number) [2]	3	n/a	1	1	No	2011/2013	Naturally present in the groundwater
Specific Conductance (µmho/cm)	1,600	n/a	300	280 - 350	No	2011	Substances that form ions in water
Sulfate (ppm)	500	n/a	17	12 - 30	No	2011	Erosion of natural deposits
Total Dissolved Solids (ppm)	1,000	n/a	230	210 - 280	No	2011	Erosion of natural deposits
Turbidity (NTU)	5	n/a	<0.1	ND - 0.25	No	2011/2013	Erosion of natural deposits
Unregulated Chemicals Requiring Monitoring							
1,2,3-Trichloropropane (ppt)	NL= 5	0.7	<5	ND - 9.6	n/a	2013	Industrial discharge
Alkalinity, total as CaCO3 (ppm)	Not Regulated	n/a	150	140 - 160	n/a	2011	Run off / leaching from natural deposits
Calcium (ppm)	Not Regulated	n/a	41	36 - 46	n/a	2011	Run off / leaching from natural deposits
Hardness, total as CaCO3 (ppm)	Not Regulated	n/a	140	120 - 150	n/a	2011	Erosion of natural deposits
Hardness, total (grains/gal)	Not Regulated	n/a	8	7 - 9	n/a	2011	Erosion of natural deposits
Magnesium (ppm)	Not Regulated	n/a	9.1	6.6 - 12	n/a	2011	Run off / leaching from natural deposits
pH (pH Units)	Not Regulated	n/a	8.3	8.2 - 8.5	n/a	2011	Hydrogen ion concentration
Potassium (ppm)	Not Regulated	n/a	1.1	0.81 - 1.8	n/a	2011	Run off / leaching from natural deposits
Sodium (ppm)	Not Regulated	n/a	20	12 - 43	n/a	2011	Erosion of natural deposits
Total Organic Carbon (ppm)	TT [3]	n/a	<0.3	ND - 0.58	n/a	Monthly	Naturally present in the groundwater

2013 CITY OF SIERRA MADRE SURFACE WATER QUALITY

Chemical	MCL	PHG or (MCLG)	Average Amount	Range of Detections	MCL Violations?	Most Recent Testing	Typical Source of Contaminant
Primary Drinking Water Standards--Health-Related Standards							
Radiologicals							
Gross Alpha Particle (pCi/L)	15	(0)	ND	ND - 3	No	2011	Erosion of natural deposits
Gross Beta Particle (pCi/L)	50	(0)	4	ND - 6	No	2011	Decay of natural and man-made deposits
Uranium (pCi/L)	20	0.43	2	1 - 2	No	2011	Erosion of natural deposits
Inorganic Chemicals							
Aluminum (ppm)	1	0.6	0.14	0.095 - 0.22	No	2013	Water treatment process residue
Fluoride (ppm) Treatment Optimal Control Range 0.7 - 1.3	2	1	0.8	0.7 - 1.0	No	2013	Treatment additive for dental health
Nitrate as NO3 (ppm)	45	45	2.2	2.2	No	2013	Runoff and leaching from fertilizer use
Secondary Standards [2]							
Aluminum (ppb)	200	600	140	95 - 220	No	2013	Water treatment process residue
Chloride (ppm)	500	n/a	88	84 - 91	No	2013	Runoff or leaching from natural deposits
Color (Color Units)	15	n/a	1	1	No	2013	Naturally-occurring organic materials
Odor (threshold odor number)	3	n/a	4	3 - 6	No	2013	Naturally-occurring organic materials
Specific Conductance (µmho/cm)	1600	n/a	870	850 - 890	No	2013	Substances that form ions in water
Sulfate (ppm)	500	n/a	180	170 - 190	No	2013	Runoff or leaching from natural deposits
Total Dissolved Solids (ppm)	1000	n/a	530	520 - 540	No	2013	Runoff or leaching from natural deposits
Unregulated Chemicals Requiring Monitoring							
Boron (ppm)	NL=1	n/a	0.15	0.15	n/a	2013	Runoff or Leaching from Natural Deposits
Alkalinity, total as CaCO3 (ppm)	Not Regulated	n/a	110	76 - 130	n/a	2013	Run off / leaching from natural deposits
Calcium (ppm)	Not Regulated	n/a	58	56 - 61	n/a	2013	Run off / leaching from natural deposits
Hardness, total as CaCO3 (ppm)	Not Regulated	n/a	240	230 - 250	n/a	2013	Erosion of natural deposits
Hardness, total (grains/gal)	Not Regulated	n/a	14	13 - 15	n/a	2013	Erosion of natural deposits
Magnesium (ppm)	Not Regulated	n/a	22	21 - 23	n/a	2013	Run off / leaching from natural deposits
N-Nitrosodimethylamine (ppt)	NL = 10	3	ND	ND - 11	No	2013	Byproduct of chloramination, industrial process
pH (pH Units)	Not Regulated	n/a	8.1	8.1	n/a	2013	Hydrogen ion concentration
Potassium (ppm)	Not Regulated	n/a	4.2	4 - 4.3	n/a	2013	Run off / leaching from natural deposits
Sodium (ppm)	Not Regulated	n/a	82	79 - 85	n/a	2013	Erosion of natural deposits
Total Organic Carbon (ppm)	TT [3]	n/a	2.4	2.1 - 2.7	n/a	2013	Naturally present in the groundwater

Turbidity - combined filter effluent Metropolitan Water District Weymouth Filtration Plant	Treatment Technique	Turbidity Measurements	TT Violation?	Typical Source of Contaminant
1) Highest single turbidity measurement	0.3 NTU	0.05	No	Soil Runoff
2) Percentage of samples less than 0.3 NTU	95%	100%	No	Soil Runoff

Turbidity is a measure of the cloudiness of the water, an indication of particulate matter, some of which might include harmful microorganisms. Low turbidity in Metropolitan's treated water is a good indicator of effective filtration. Filtration is called a **"treatment technique" (TT)**. 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.

2013 CITY OF SIERRA MADRE UNREGULATED CHEMICALS REQUIRING MONITORING

Chemical	Notification Level	PHG	Average Groundwater and Surface Water Amount	Range of Detections	Most Recent Testing
Chlorate (ppb)	800	n/a	67	ND - 130	2013
Chromium, Hexavalent (ppb)	n/a	0.02	0.55	ND - 1.4	2013
Chromium, Total (ppb)	n/a	n/a	0.19	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

2013 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	ND	ND - 15	No	Quarterly	Byproducts of chlorine disinfection
Total Trihalomethanes (ppb)	80	n/a	5.1	ND - 37	No	Quarterly	Byproducts of chlorine disinfection
Chlorine Residual (ppm)	(4)	(4)	0.92	0.14 - 2.2	No	Weekly	Drinking water disinfectant
Fluoride (ppm)	2	1	0.9	0.58- 1.8	No	Quarterly	Erosion of natural deposits
Odor (threshold odor number)[2]	3	n/a	1	1	No	Monthly	Naturally present in the groundwater
Turbidity (NTU)[2]	5	n/a	0.075	ND - 0.9	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	0.22	0 / 30	No	Corrosion of household plumbing
Lead (ppb)	15	0.2	ND	0 / 30	No	Corrosion of household plumbing

Every three years, 30 residences are tested for lead and copper at-the-tap. The most recent set of samples was collected in 2011. Lead was not detected in any sample. Copper was detected in 20 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.

2013 CITY OF SIERRA MADRE UNREGULATED CHEMICALS REQUIRING MONITORING IN THE DISTRIBUTION SYSTEM

Chemical	Notification Level	PHG	Average Amount	Range of Detections	Most Recent Testing
Chlorate (ppb)	800	n/a	92	64 - 120	2013
Chromium, Hexavalent (ppb)	n/a	0.02	0.83	0.16 - 1.5	2013
Chromium, Total (ppb)	n/a	n/a	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; **; 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; **ppt** = parts-per-trillion; **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.