

# Lead in Drinking Water

Lead can enter drinking water when service pipes, fittings, fixtures, solder and flux that contain lead corrode by a chemical reaction with the water, especially where the water has high acidity or low mineral content. The most common problem is with brass or chrome-plated brass faucets and fixtures with lead solder, from which significant amounts of lead can enter into the water, especially with hot water.

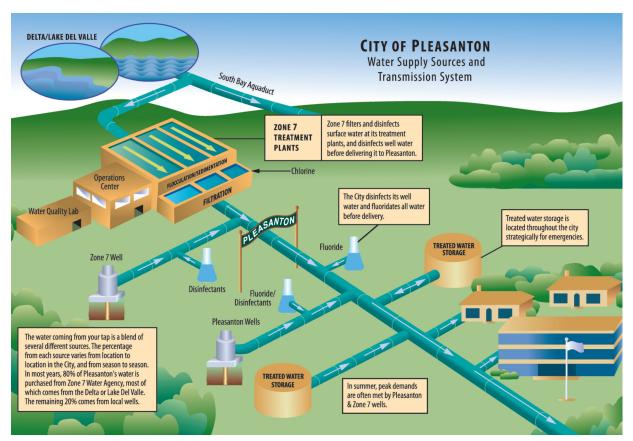
To address corrosion of lead and copper into drinking water, the Environmental Protection Agency (EPA) issued the Lead and Copper Rule (LCR) under the authority of the Safe Drinking Water Act of 1974 (SDWA). The LCR contains all of the regulatory requirements for monitoring, tracking, treatment and reporting to prevent lead and copper from contaminating drinking water.

The City of Pleasanton tests between 30 and 60 single family homes built between 1982 and 1986 once every 3 years to comply with the EPA Lead and Copper Rule. Pleasanton source water is analyzed for lead and copper on a regular schedule specified by the State Water Resource Control Board (SWRCB). The most recent sample results are included on the 2015 Water Quality Results table in section 7 of this report.

For more details on Lead in Drinking Water for the City of Pleasanton, please visit the city website: www.cityofpleasantonca.gov

For more general information about Lead in Drinking Water and the Environment, please visit the EPA website: www.epa.gov/lead

For water conservation tips, programs and rebates available to assist you both inside and outside your home or business. To learn more, please visit the City's website at www.pleasantonwaterconservation.com or call the Water Conservation Hotline: (925) 931-5504.



# Pleasanton's Water Sources

Zone 7 Water Agency, the Valley's water wholesaler, provides wholesale treated water to four major Valley water retailers, delivers untreated water to a number of agricultural customers, and monitors flood control measures and coordinates groundwater management resources in the Tri-Valley area. Approximately 80% of Pleasanton's water is purchased from Zone 7 and is comprised of treated surface water blended with some local groundwater. The remaining 20% comes from local groundwater pumped from wells owned and operated by the City of Pleasanton. All water sources are disinfected and fluoridated before delivery to our customers.

#### **Imported Surface Water**

The State Water Project (SWP) delivers water to Zone 7. The SWP water originates from the Feather River watershed, where it is stored behind the Oroville Dam before being released into the Sacramento River/San Joaquin Delta. This water is pumped from the Delta by the Department of Water Resources (DWR) to the South Bay Aqueduct (SBA) system, which then flows to the Tri-Valley area. The SBA continues through Alameda County and into Santa Clara County.

#### **Local Surface Water**

Lake Del Valle, our local water storage reservoir, is operated and maintained by the DWR as a water supply reservoir, local flood control resource and recreation area. The water stored at Lake Del Valle comes from local

rainfall and from the SWP. Water from Zone 7's two surface treatment plants (Del Valle and Patterson Pass) undergoes several stages of treatment in order to comply with the State Water Resources Control Board (State Board), Division of Drinking Water.

#### **Local Groundwater**

Groundwater comes from wells and springs. Both the City and Zone 7 use the local groundwater to increase the volume of drinking water available, especially during the hot summer months, when demand for water rises. On any given summer day, over half of the water being delivered in the City may be groundwater. In August 2009, Zone 7 began operating a demineralization plant that will help soften a portion of the groundwater delivered to certain parts of our service area.

# **3** Water Quality is Our Top Priority

The City of Pleasanton is pleased to distribute this report to its water customers. It provides important information about where your water comes from and the work we perform each day to assure the water delivered to your tap is safe to drink. It also provides data about what is in your water and how water quality tests on your drinking water compare to federal and

state drinking water standards during calendar year 2015.

#### Pleasanton's Water Quality Goal

The City's goal is to continuously provide a dependable supply of high quality drinking water to its customers. To accomplish this, the treated surface water delivered to customers is continuously monitored at Zone 7's two local water treatment plants. These plants also perform specific chemical and biological tests every four hours to check the purification process. All groundwater sources comply with State Board testing regulations. In addition, there are 48 sampling points located throughout the City's water distribution system that are monitored and tested daily, weekly and monthly by the City, to assure your drinking water continuously complies with all federal and state drinking water standards. If you have questions regarding the quality of the water supplied to you by the City, this report should provide most of the answers. We appreciate the time you take to read this report and welcome any additional questions or comments you may have regarding your water supply. For further information on Pleasanton's water quality or water supplies, call the City's Water Quality Lab at 925-931-5510, or email your questions to us through the City's web page at www.cityofpleasantonca.gov

## Chemicals & Minerals in Water

The sources of drinking water (both tap and bottled water) 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. Drinking water, including bottled waters, 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 Safe Drinking Water Hotline at 800-426-4791. The disinfectant, Chloramine (a combination of chlorine and ammonia), is used to disinfect both Zone 7 and the City's water. This disinfectant is utilized to protect public health by destroying disease-causing organisms that may be present in water supplies. Chloramines, at the low levels used, will not cause any health problems for the general public. However, aquarium owners and home dialysis patients must take special precautions before chloraminated water can be used in aquariums or home kidney dialysis machines, due to the very small amount of ammonia present in the water.

#### **Important Health Information**

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised people 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. The 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 US EPA Safe Drinking Water Hotline at 800-426-4791 or www.cdc.gov/healthywater/drinking.

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.

The City of Pleasanton 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, 800-426-4791, or at http://www.epa.gov/lead.

### Definition of Terms

The following terms are used in the water industry to define contaminant levels. Pleasanton's drinking water is tested at the levels in the table to the far right. **AL** — Action Level: The concentration of a contaminant that, if exceeded, triggers treatment or other requirements that a water system must follow.

**MCL** – Maximum Contaminant Level: The highest level of a contaminant that is allowed in drinking water.

**MCLG** – Maximum Contaminant Level Goal: The level of contaminant below which there is no known or expected risk to health—set by the USEPA.

**MRDL** — Maximum Residual Disinfectant Level: The highest level of a disinfectant that is allowed in drinking water.

**MRDLG** – Maximum Residual Disinfectant Level Goal: The level of a disinfectant below which there is no known or expected risk to health.

**NA** – Not Applicable

ND — Not Detected: Concentration not found above Minimum Reporting Limit (MRL) or Detection Limit for Purpose of Reporting (DLR) set by the State Board. PHG — Public Health Goal: 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 EPA.

**TT** – Treatment Technique: A required process for reducing contaminant levels. **Turbidity** – A measure of the cloudiness of the water. Turbidity levels are a good indicator of the effectiveness of the treatment plant's filtration system.

*The following contaminants may also be found in drinking water:* 

**TTHMs** (Total Trihalomethanes): TTHMs are by-products of drinking water disinfected with chlorine compounds. Some people who use water containing TTHMs in excess of the MCL, over many years, may experience liver, kidney, or central nervous system problems and may have an increased risk of getting cancer. In 2015, the Locational Running Annual Average (LRAA) of Pleasanton's designated sample locations in the distribution system were under the MCL of 80 ppb.

**MTBE** (Methyl Tertiary Butyl Ether): Pleasanton's well water sources were monitored for MTBE in 2014, and it was not detected (next monitoring in 2017). MTBE was not detected in any of Zone 7's sources in the past year. The current detection limit for reporting purposes is 3 parts per billion (ppb).

**Nitrate**: If found in drinking water at levels above 45 mg/L 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 above 45 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.

Table Units	
mg/L	Milligrams per Liter or parts per million
μg/L	Micrograms per Liter or parts per billion
μS/cm	Microsiemens per Centimeter
NTU	Nephelometric Turbidity Unit

## **Understanding the Summary**

Primary Drinking Water Standards (PDWS) are set after considerable research and data have been analyzed by health experts. These standards, called Maximum Contaminant Levels (MCLs) are set by USEPA and strictly enforced by the State Water Resources Control Board (State Board), Division of Drinking Water. Primary MCLs are set as close to the Public Health Goals (PHGs) (or Maximum Contaminant Level Goals—MCLGs) as is economically and technologically feasible.

Secondary Standards are based upon qualities of water such as taste, odor, color or clarity of the water. These standards, called Secondary Maximum Contaminant Levels (SMCLs) set limits on substances that may influence customer-acceptance of the water and are established by the State Board.

Detected Contaminants: The table at right shows the level of each detected regulated contaminant, the average level of each detected contaminant (Average), and, if more than one sample was collected, the range of levels found during the 2015 calendar year (Range).

In addition to the regulated contaminants, Zone 7 and the City monitor additional "unregulated contaminants" as required. Unregulated contaminant monitoring helps EPA and State Board to determine where certain contaminants occur and whether the contaminants need to be regulated in the future.

In order to ensure that tap water is safe to drink, USEPA and the State Board prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. The limits for contaminants in bottled water provide the same level of protection.

Contaminants that may be present in source water include the following: microbial contaminants, such as viruses and bacteria, may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.

Inorganic contaminants, such as salts and metals, can be naturally occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.

Pesticides and herbicides may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses.

Organic chemical contaminants, including synthetic and volatile organic chemicals, are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff, and septic systems.

Radioactive contaminants can be naturally occurring or be the result of oil and gas production and mining activities.

Pleasanton sampling frequency meets, and for some parameters, is more frequent than State Board requirements. The State Board allows monitoring for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Hence, some of our data, though representative, may have been sampled prior to 2015.

A Drinking Water Source Assessment and Protection Program (DWSAP) was conducted for the City of Pleasanton Wells #5, #6 and #8 in December 2002. No contaminants have been detected in the City's groundwater supply. However, all groundwater sources are considered vulnerable to activities located near the drinking water supply source. DWSAP is updated whenever new water sources are added.

A completed copy of the assessment may be viewed at the City Water Quality Laboratory, 3333 Busch Road, Pleasanton, CA 94566. You may request a summary of the assessment be sent to you by contacting Susan Clough at (925) 931-5510.



Photo Courtesy of Department of Water Resources

# 2015 Water Quality Results

The following is a list of contaminants that may be found in drinking water and their sources. Also included in the table below is a summary of all chemical analyses required by the USEPA and the State Board for Pleasanton's water supply during calendar year 2015<sup>1</sup>.

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WATER SUPPLY SOURCES			ZONE 7 WATER AGENCY <sup>2</sup>				CITY OF PLEASANTON <sup>3</sup>		
Contaminants (units)	MCL	PHG MCLG*	Treated Surface Water		Groundwater		Groundwater		Sources
Tl.: J.c. (AITH)	TT=1 NTU Maximum	NA	Highest Level Found=0.28 NTU		Not Applicable		Not Applicable		Soil runoff
Turbidity (NTU)	TT=95% of Samples ≤ 0.3 NTU	NA	% of samples ≤ 0.3 NTU=100		Not Applicable		Not Applicable		Soil runoff
Total Organic Carbon	TT=Quaterly RAA Removal Ratio ≥ 1.0	NA	Lowest Quarterly RAA Ratio=1.7		Not Applicable		Not Applicable		Runoff/leaching from natural deposits
Inorganic Chemicals			Average	Range	Average	Range	Average	Range	
Barium (μg/L)	1000	2000	ND	ND	187	220-260	213	170-250	Erosion of natural deposits
Chromium Total (µg/L)	50	100*	ND	ND	ND	ND-10	ND	ND	Erosion of natural deposits
Chromium VI (μg/L)	10	0.02	ND	NA	8	5–11	4.7	4.5-5.2	Erosion of natural deposits
Fluoride (mg/L) (Naturally Occurring)	2	1	ND	ND-0.1	ND	ND-0.1	0.1	0.1	Erosion of natural deposits
Nitrate (as N) (mg/L)	10	10	ND	ND-1.5	3.6	3.5-5.0	2.3	1.9-2.9	Erosion of natural deposits
Regulated Contaminants with Secondary MCLs, established by the State Board DDW									
Color	15	_	0	0-2.5	0	0	ND	ND	Naturally occurring organic materials
Conductivity (µS/cm)	1600	_	774	570-1003	888	673-1011	860	730-950	Substances that form ions in water
Chloride (mg/L)	500	-	162	96-226	85	52-116	88	66-100	Runoff/leaching from natural deposits
Sulfate (mg/L)	500	_	42	25-55	61	38-82	53	46-59	Runoff/leaching from natural deposits
Total Dissolved Solids (mg/L)	1000	_	427	311-600	524	392-614	483	420-530	Runoff/leaching from natural deposits
Turbidity (NTU)	5	_	NA	NA	ND	ND-0.3	ND	ND-0.12	Soil runoff
Additional Parameters, included to assist consumers in making health or economic decisions, i.e. low sodium diet, water softening, etc.									
Alkalinity (as CaCO3)(mg/L)	_	-	86	65–112	275	210-276	257	220-290	Runoff/leaching from natural deposits
Boron (µg/L)	_	_	230	130-300	497	220-680	390	330-430	Runoff/leaching from natural deposits
Hardness (as CaCO3) (mg/L)	-	_	133	108-158	371	290-403	357	290-400	Runoff/leaching from natural deposits
Potassium (mg/L)	-	-	4	2–5	1	1–2	1	ND-2	Runoff/leaching from natural deposits
Sodium (mg/L)	-	_	98	63-142	53	33-72	46	39-51	Runoff/leaching from natural deposits
pH (Units)	_	_	8.1	7.6-8.3	7.6	7.3-7.7	7.6	7.5-7.8	Runoff/leaching from natural deposits
Silica (mg/L)	_	_	9	2-17	24	24-27	25	24-26	Runoff/leaching from natural deposits

<b>DISTRIBUTION SYSTEM SAMPLING RESULTS</b> —Disinfection by-products, disinfectant residuals, fluoridation							
Contaminants (units)	MCL	PHG MCLG* MRDLG**		City of Pleas		Sources	
			Highest Locational Running Range of Individual Annual Average Samples Collected in 201		Range of Individual Samples Collected in 2014	Þ	
Total Trihalomethanes (TTHMs) (µg/L)	80	NA	67		ND-94 <b>6</b>	By-product of drinking water chlorination	
Haloacetic Acids (HAA5) (μg/L)	60	NA	30 ND-43			By-product of drinking water chlorination	
			Highest % of Monthy Positive Samples				
Total Coliform Bacteria	More than 5% of monthly samples are positive	0	0.81%			Naturally present in the environment	
			Running Annual Range of Month Average (RAA) Average		Range of Monthly Average		
Chloramines as Chlorine (mg/L)	Maximum Residual Disinfectant Level (MRDL)=4.0	4**	1.5		1.4–1.6	Drinking water disinfectant added for treatment	
Fluoride (mg/L)5	2	1	0.8		0.7-0.9	Water additive that promotes strong teeth	
EPA/State Lead Copper Rule — Monitored at Customers Tap — 20134			No. Collected	90th Percentile	No. of Samples > Action Level		
EPA Lead Study (μg/L)	AL=15	0.2	40 ND		0	Internal corrosion of household plumbing	
EPA Copper Study (mg/L)	AL=1.3	0.3	40 .36		0	Internal corrosion of household plumbing	
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<sup>1</sup> Pleasanton and Zone 7 also test for a number of additional constituents in the water supply sources. Test results for all of these constituents were non-detected and therefore not included in the table. A complete list of all constituents tested during 2015 is available upon request. <sup>2</sup> Zone 7 Water Agency supplies surface and groundwater to the City of Pleasanton. For more information regarding this source, call 925-447-0533. <sup>3</sup> The City of Pleasanton owns and operates three groundwater wells for drinking water purposes. For more information on this source, please call 925-931-5510. <sup>4</sup> Tested every 3 years; next scheduled testing in September 2016. <sup>5</sup> The City treats the water delivered to your tap by adding fluoride to the naturally occurring level in order to help prevent dental caries in consumers. The fluoride levels in the treated water are maintained within a range of 0.6 to 1.2 ppm, as required by the State Board regulations. <sup>6</sup> High TTHM was caused by Delta WQ in June 2015.

# Your Water Meets All Safe Drinking Water Standards

The technical and analytical water quality information presented in this report is required by State health

regulations. These regulations require water sup-

pliers to inform customers about where their water comes from; what is in their water; and any violation of safe drinking water standards that may have occurred during this past reporting period. This report provides results of all tests required to be performed on Pleasanton's water supplies during 2015. We are happy to report that all 2015 water quality tests confirmed that water delivered to your tap met all applicable federal and state drinking water standards without any violations.

This report also includes information regarding steps taken by the City and Zone 7 to improve drinking water delivered to customers in 2015, and opportunities for the public to participate in decisions that affect their drinking water quality. Phone numbers and web page addresses of the City and other public agencies responsible for water billing, delivery, supply, and water quality are also presented herein.

This report contains important information about your drinking water.

Translate it, or speak with someone who understands it.

Este informe contiene informacion muy importante sobre su agua beber.

Traduzcalo o hable con alguien que lo entienda bien.

此份有關你的食水報告,內有重要資料和訊息,請找
他人為你翻譯及解釋清楚。

यह सूचना महत्वपूर्ण है ।
कृपा करके किसी से :सका अनुवाद करायें ।

은 인을 취해 보열인을 사용하십시요.

Mahalaqa ang impormasyong ito. Mangyaring ipasalin ito.

#### Included in this report:

- 1. Lead in Drinking Water
- 2. Pleasanton's Water Sources
- 3. Water Quality is Our Top Priority
- 4. Chemicals & Minerals in Water
- 5. Definition of Terms
- 6. Understanding the Summary
- 7. 2015 Water Quality Results
- 8. Your Water Meets All Safe Drinking Water Standards
- 9. Public Involvement & Contact Information

## 22 Public Involvement

Zone 7, the Valley's water wholesaler, and the City of Pleasanton encourage citizens who would like to become involved in local water issues and water quality topics to attend Zone 7's regular board meetings, which are held the third Wednesday of each month at 7:00 p.m. at the Zone 7 offices in Livermore at 100 North Canyons Parkway. These meetings are open to the public. Agendas and other pertinent information on these meetings are available on the Zone 7 web site at www.zone7water.com. For further assistance, please refer to the contact information below:

#### **Contact Information**

Contact information	
Water Quality Information M-F 7:00 AM-3:30 PM Susan Clough, sclough@cityofpleasantonca.gov	925-931-5510
Para informacion en español, llamar al telefono	925-931-5500
Utility Billing Information/Water Conservation Material & Programs M-F 7:30 AM-4:30 PM	925-931-5500
Emergency Water Service M-F 7:00 AM-3:30 PM	925-931-5500
After hours and weekends, call Pleasanton Police Dispatch	925-931-5100
Zone 7 Water Agency M-F 8:00 AM-5:00 PM www.zone7water.com	925-454-5000
Alameda County Household Hazardous Waste Collection Sites M-F 8:30 AM-5:00 PM www.household-hazwaste.org	800-606-6606
EPA Safe Drinking Water Hotline www.epa.gov/drink/hotline/index.cfm	800-426-4791
EPA National Radon Hotline	800-767-7236

To view the Water Quality Report online, please visit www.cityofpleasantonca.gov/pdf/awqr15.pdf

**Saving Water Saves Money!** Households can save hundreds of dollars a year on utility and water bills by using energy-efficient appliances or by simply using existing appliances more efficiently.



www.sosradon.org

For any further questions you may have regarding the City's water supplies or quality, you can contact us by visiting the

City's web site at www.cityofpleasantonca.gov

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