



Utilities Division DRINKING WATER QUALITY REPORT 2011

July 1, 2012

The City of Monrovia tests the drinking water quality for many constituents as required by State and Federal Regulations.

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.

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.

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 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).

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

ND: not detectable at testing limit

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

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

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

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

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.

This report shows the results of our monitoring during
January 1 – December 31, 2011

Este informe contiene resultados importantes sobre el agua potable. Si tiene dificultades comprendiendo los resultados, es sugerido que encuentre traducción.

Type of water source (s) in use: **Groundwater**

Name & location of source (s):

**Monrovia Wells 2-6
2655 S. Myrtle Avenue, Monrovia, CA 91016**

Web site address for Consumer Confidence Report:

<http://cityofmonrovia.org>

Time and place of regularly scheduled City Council meetings for public participation:

**Every 1st and 3rd Tuesday of the month at 7:30 p.m.
City Hall 415 S. Ivy Avenue, Monrovia, CA 91016**

For more information, contact
Shawn Igoe at (626) 256-8292



The sources of drinking water (both tap water 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. Our tap water here at the City of Monrovia is all ground water from wells in the Main San Gabriel Basin.

Contaminants that may be present in source water 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 storm water 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 storm water 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 storm water runoff, and septic systems.
- *Radioactive contaminants*, which can be naturally occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, USEPA and the state Department of Health Services (Department) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. Department regulations also establish limits for contaminants in bottled water that must provide the same protection for public health.

Tables 1 and 2 list all of the drinking water contaminants that were detected during the most recent round of sampling. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. The Department allows us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Some of the data, though representative of the water quality, are more than one year old.

TABLE 1. DISTRIBUTION SYSTEM MONITORING

MICROBIOLOGICAL CONTAMINANTS						
Microbiological Contaminants (reporting units)	Highest % Positive in any one month	No. Of months in violation	MCL	PHG (MCLG)	Typical Source of Bacteria	
Total Coliform Bacteria (% positive in a month)	0	0	5%	(0)	Naturally present in the environment	
Fecal Coliform or <i>E. coli</i> (% positive in a month)	0	0	0%	(0)	Human and animal fecal waste	
INORGANIC CONTAMINANTS						
Lead and Copper (reporting units)	No. of samples collected	90 th percentile level detected	No. Sites exceeding AL	AL	PHG (MCLG)	Typical Source of Contaminant
Lead (ppb)	31	2.2	0	15	2	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits.
Copper (ppm)	31	.31	0	1.3	0.17	Internal corrosion of household water plumbing systems; erosion of natural deposits; leaching from wood preservatives.

DISINFECTION BY PRODUCTS

Disinfection By-Product (Reporting Units)	Sample Date	Average	Range of detection	MCL or [MRDL]	PHG, (MCLG) or [MRDLG]	Typical Source of Contaminant
Total Trihalomethanes (ppb)	Quarterly	4.5	2.2-6.1	80	N/A	Typical by-product from chlorination of drinking water
Haloacetic Acids	Quarterly	N/D	N/D	60	N/A	Typical by-product from chlorination of drinking water
Chlorine (ppm)	Weekly	.94	.30-1.37	4.0	4.0	Drinking water disinfectant added for treatment

TABLE 2. SOURCE WATER MONITORING

REGULATED CONTAMINANTS WITH PRIMARY MCLS

Chemical or Constituent (reporting units)	Sample Date	Average	Range of Detections	MCL (AL)	PHG (MCLG)	Typical Source of Contaminant
Radiologicals						
Alpha Particle Activity (pCi/L)	7/2009	N/D	N/D	15	0	Erosion of natural deposits.
Volatile Organic Compound						
Trichloroethylene (TCE) (ppb)	Weekly	.85	N/D-4.8	5	.8	A typical source of TCE in ground water would be dry cleaning solvents and engine cleaning solvents.
Tetrachloroethylene (PCE) (ppb)	Weekly	.23	N/D-1.5	5	0.06	A typical source of PCE in ground water would be dry cleaning solvents and engine cleaning solvents.
1,1-Dichloroethylene (ppb)	Quarterly	N/D	N/D	6	10	Discharge from industrial chemical factories.
Inorganic Chemicals						
Nitrate as NO ₃ (ppm)	Weekly	8.95	2.8-26	45	45	Run off and leaching fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits.
Fluoride (ppm)	4/2011	.438	.38-.46	2	1	Erosion of natural deposits; discharge from fertilizer and aluminum factories

REGULATED CONTAMINANTS WITH SECONDARY MCLS

Chemical or Constituent (reporting units)	Sample Date	Average	Range of Detections	MCL (AL)	PHG (MCLG)	Typical Source of Contaminant
Chloride (ppm)	4/2011	18.6	15-22	250	None	Runoff/leaching from natural deposits; sea water influence.
Odor Threshold (units)	4/2011	1.0	1.0	3	0	Naturally occurring organic materials.
Perchlorate (ppm)	Monthly	N/D	N/D	6	4	Runoff/leaching from natural deposits; industrial wastes.
Specific Conductance	4/2011	420	350-490	1,600	None	Substance that form ions when in water; seawater influence.
Sulfate (ppm)	4/2011	26.4	19-35	250	None	Runoff/leaching from natural deposits; industrial wastes.
Total Dissolved Solids (ppm)	4/2011	262	220-300	500	None	Runoff/leaching from natural deposits.

UNREGULATED CHEMICALS REQUIRING MONITORING

Chemical or Constituent (reporting units)	Sample Date	Average	Range of Detections	MCL (AL)	PHG (MCLG)	Typical Source of Contaminant
Chromium VI (Hexavalent chromium)	10/2010	N/D	N/D	N/A	N/A	Erosion of natural deposits.

STATE CONTAMINANTS WITH NOTIFICATION LEVELS

Chemical or Constituent (reporting units)	Sample Date	Average	Range of Detections	Notif. Level	PHG (MCLG)	Typical Source of Contaminant
1,4-Dioxane (ppb)	10/2011	.24	N/D-1.2*	1	N/A	A typical source of Dioxane in ground water would be Industrial solvents.

OTHER PARAMETERS

Chemical or Constituent (reporting units)	Sample Date	Average	Range of Detections	MCL (AL)	PHG (MCLG)	Typical Source of Contaminant
Sodium (ppm)	4/2011	13.6	12-16	None	None	Generally found in ground and surface water
Hardness (ppm)	4/2011	186	160-220	None	None	Generally found in ground and surface water
PH (units)	4/2011	7.94	7.9-8.0	None	None	Erosion of natural deposits; discharge from fertilizer and aluminum deposits
Calcium (ppm)	4/2011	53	45-63	None	None	Erosion of natural deposits
Magnesium (ppm)	4/2011	13	10-16	None	None	Erosion of natural deposits
Turbidity (ppm)	4/2011	.186	.11-.34	5	None	Soil run off
Potassium (ppm)	4/2011	1.72	1.6-1.9	None	None	Erosion of natural deposits
Total Alkalinity (asCaCO ₃) (ppm)	4/2011	152	140-170	None	None	Erosion of natural deposits

*Any of the MCL, AL, or Notification Levels that where exceeded are asterisked and additional information is provided below.

Additional General Information on Drinking Water

All 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 the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the US EPA's Safe Drinking Water Hotline (1-800-426-4791).

* There was one well, with one occurrence that exceeded the Notification Level of 1, 4-Dioxane. The State Department of Public Health was notified and resample's were taken by City staff and a private company which both came back N/D. No further action was required by the State.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immune-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. US EPA/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). The Department of Health Services implemented The **Drinking Water Source Assessment and Protection Program. (DWSAP).** The DWSAP Program includes a delineation of zones around a drinking water source; an inventory of Possible Contaminating Activities (PCA) within the delineated zones; and a determination of the PCAs to which the drinking water source is vulnerable. An assessment of the drinking water sources for the City of Monrovia was completed in September 2002. The Monrovia wells are considered most vulnerable to these contaminants detected in the water supply: (TCE, PCE & NITRATE). In addition, the Monrovia wells are considered most vulnerable to these activities: (dry cleaners, junk/scrap/salvage yards, metal plating/ finishing/ fabricating and historic landfills). A copy of the completed assessment is available for viewing at the City of Monrovia Water Department office at 600 S. Mountain Ave. You may request a summary of the assessment be sent to you by contacting Shawn Igoe at (626) 256-8292.