

CITY OF COLTON WATER DEPARTMENT

Consumer Confidence Report for 2013

Estimado cliente –

Este informe contiene información muy importante sobre su agua potable. Por favor encuentre alguien que se lo pueda traducir.

Introduction

The City of Colton Water Department is pleased to present the latest Consumer Confidence Report. This report is designed to keep you informed about the quality of water and services that, through our efforts, are delivered to you every day. We are committed to ensuring the quality of your water. Our constant and main goal is to provide you with a safe and dependable supply of drinking water. We want to help you understand the measures we continuously take to improve the water treatment process and protect the water system resources. These resources consist of thirteen (13) wells, which draw water from three (3) underlying groundwater basins (Colton/Rialto Basin, Bunker Hill Basin and North Riverside Basin). Another source, if needed, is the City of San Bernardino's water supply, which is treated groundwater from the Bunker Hill Basin.

Assessment Information

In September 2002, an assessment was completed of the drinking water from all sources to the City. The report is a vulnerability assessment of potential sources of contaminants for each water source. If you would like to request a summary of the assessments, please contact John Ahearn, City of Colton Water Quality Specialist, at (909-370-6164).

Routine Water Testing / Ensuring Tap Water Safety

City of Colton Water Department staff routinely monitor the drinking water for contaminants. These tests are conducted according to Federal and State laws/regulations. On the following page, you will find a Monitoring Table showing the results for the period covering January 1 to December 31, 2013.

In order to ensure that tap water is safe to drink, the U.S. Environmental Protection Agency (EPA) and the State Department of Public Health (CDPH) prescribe regulations that limit the amount of certain contaminants in water that is provided by public water systems. The same protection is provided by CDPH regulations that establish limits for contaminants in bottled water.

Common Contaminants

Sources of drinking water (both tap & 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 human activity. Contaminants that may be present in source water before we treat it 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 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 or residential uses.
- **Radioactive contaminants**, which can be naturally-occurring or be the result of oil and gas production and mining activities.
- **Organic chemical contaminants**, including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff, and septic systems.

Obtaining Contaminant Information

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

Possible Vulnerability

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons with cancer who are undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly persons, and infants can be particularly at risk of infection. If any of these apply to you, please seek advice from your health care provider regarding the drinking of water. US EPA/CDC guidelines on appropriate means to lessen the risk of infection from Cryptosporidium and other microbiological contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).

Effects of Radon

Radon is a radioactive gas that one cannot see, taste or smell. Radon can move up through the ground and into a home through the cracks and holes in the foundation. Radon can build up to high levels in all types of homes. Radon can also enter indoor air when released from tap water during showering, washing dishes, and other household activities. Compared to Radon entering the home through soil, in most cases it will be a small source of Radon entering the home through tap water use. Radon can lead to lung cancer. Drinking water containing Radon may also cause increased risk of stomach cancer. You can test the air in your home if you are concerned. Testing is inexpensive and easy. Should the level of Radon in your home be 4 picocuries per liter of air (pCi/L) or higher, there are simple ways to fix it that are not too costly. For additional information, call the State Radon Program office or EPA's Radon Hotline (1-800-SOS-RADON).

Effects of Nitrate

Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. Nitrate 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 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(s), or if you are pregnant, please seek advice from your health care provider.

Effects of Perchlorate

The Dept. of Public Health set the Maximum Contaminate Level (MCL) for Perchlorate at 6 ppb. As a result, the City of Colton has completed installation of two (2) treatment systems for three (3) wells that were impacted by this new level. These systems remove perchlorate to below detection levels, ensuring that the water served never exceeds the State MCL. Drinking water containing Perchlorate in excess of the MCL may cause effects associated with hypothyroidism. Perchlorate interferes with the production of thyroid hormones, which are required for normal pre/postnatal development in humans, as well as normal body metabolism.

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Effects of Lead

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 Colton 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 to the Safe Drinking Water Hotline or at [hppt://www.epa.gov/safewater/lead](http://www.epa.gov/safewater/lead).

Contacts Regarding Questions or Concerns

If you have any questions concerning your water quality or about this report, please contact John Ahearn, Water Quality Specialist for the City of Colton (909-370-6164). For more information, please visit the City's website at <http://www.ci.colton.ca.us>, **City Departments, Public Utilities**. The City Council Meeting Agendas/Minutes are also accessible on the website and contain detailed reports of some of the information offered here. You can also attend Utilities Commission Meetings held every second Monday of the month (except October and November, when they are held on the third Monday) at City Hall.

YOUR WATER IS SAFE!

The City of Colton is proud that your drinking water meets or exceeds all Federal and State requirements. Though we have learned through monitoring and testing that some contaminants have been detected, the EPA has determined that your water IS SAFE at these levels. Please refer to the following page, which shows that the City's water system did not have any violations.

Key to Abbreviations and Footnotes

AL Action Levels are health-based advisory levels for chemicals in drinking water for which there are no formal regulatory standards or MCL's.
N/A Not Applicable **NC** Non – Corrosive **ND** Monitored but not detected **NS** No Standard has been set
NTU Nephelometric Turbidity Units, a measure of suspended material in water **pCi/L** PicoCuries per liter, a measure of radioactivity
mg/l Milligrams per liter, or parts per million **ug/l** Micrograms per liter, or parts per billion **TON** Threshold Odor Number
TT Treatment Technique (See Definitions) **Umhos** Micromhos, a measure of total mineral content < Less than *The State allows for less than annual monitoring for certain constituents because the concentrations do not change frequently. Therefore, the data, though representative, is more than a year old. ** A positive Langlier Index indicates that the water is non – corrosive
*** An aggressiveness index greater than 10 indicates that the water is not aggressive (corrosive) **** For systems collecting 40 or more samples, if more than 5.0 percent of samples collected are total coliform positive, then the MCL is violated.

Definitions

Public Health Goal

The level of contaminant in drinking water below which there is no known or expected health risks. PHG's are set by the California Environmental Protection Agency.

Maximum Contaminant Level (MCL)

The highest level of a contaminant that is allowed in drinking water. Primary MCL's are set as close to PHG's (or MCLG's) as is technologically and economically feasible. Secondary MCL's are set to protect the odor, taste, and appearance of drinking water.

Primary Drinking Water Standards

MCL's for contaminants that affect health, along with their monitoring and reporting requirements, and water treatment requirements.

Treatment Technique (TT)

A required process intended to reduce the level of a contaminant in drinking water

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 the control of microbial contaminants.

Maximum Residual Disinfectant Level Goal (MRDLG)

The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for the control of microbial contaminants.

Water Quality Terms

Clarity

Cloudiness or turbidity in water is caused by tiny particles such as clay, silt or other suspended mater. Clarity is regulated because minute particles can shield bacteria from the disinfection process.

Radionuclides

Radioactivity in water originates from both natural sources and human activities. In most low risk areas, potential exposure to radiation in water is a fraction of the background exposure from all other natural sources.

Primary Standards

Were established to protect the consumer from health hazards associated with bacteria and chemicals.

Secondary Standards

The measure of aesthetic qualities such as taste, odor and color, which do not affect health.

CITY OF COLTON - WATER DEPARTMENT

MONITORING TABLE FOR JANUARY 1 - DECEMBER 31, 2013

Contaminant	Violation Y / N	TEST RESULTS			UNIT MEASURE	STATE MCL MRDL	STATE PHG MRDLG	YEAR TESTED*	LIKELY SOURCE OF CONTAMINANT
		Minimum	Maximum	Average					
INORGANIC CHEMICALS - PRIMARY STANDARDS									
Fluoride	N	0.25	0.84	0.43	mg/l	2	1	2013	Erosion of natural deposits, water additive for dental hygiene, discharge from fertilizer and aluminum factories
Nitrate (as NO3)	N	0	31	9.8	mg/l	45	45	2013	Runoff / leaching from fertilizer use, septic tanks, sewage, and erosion of natural deposits
Nitrate+Nitrite as Nitrogen	N	0	7.8	2.2	mg/l	10	10	2011	Runoff / leaching from fertilizer use, septic tanks, sewage, and erosion of natural deposits
CHEMICAL PARAMETERS - SECONDARY STANDARDS									
Chloride	N	7.4	66	17.8	mg/l	500	NS	2013	Runoff / leaching from natural deposits; seawater influence
Corrosivity (Langlier Index)**	N	33	0.61	0.46	units	NC	NS	2011	Natural or industrial-influenced balance of hydrogen, carbon & oxygen in water, affected by temperature and other factors.
Aggressiveness Index ***	N	12	12	12	units	NS	NS	2011	
Iron	N	0	250	33.8	ug/l	300	NS	2013	Leaching from natural deposits
Manganese	N	0	70	16	ug/l	50	NS	2013	Leaching from natural deposits
Specific Conductance	N	390	790	500	umhos	1600	NS	2013	Substances that form ions in water; seawater influence
Sulfate	N	25	83	49	mg/l	500	NS	2013	Runoff / leaching from natural deposits, industrial wastes
Total Dissolved Solids	N	250	460	315	mg/l	1000	NS	2013	Runoff / leaching from natural deposits
PHYSICAL PARAMETERS									
Odor - Threshold	N	1	1	1	TON	3	NS	2011	Naturally occurring organic materials
pH	N	7.7	7.9	7.8	units	NS	NS	2011	
Turbidity	N	0	1.7	0.37	NTU	5	N/A	2011	Turbidity is monitored because it is a good indicator of water quality. High turbidity can hinder disinfectant effectiveness.
RADIONUCLIDES									
Gross Alpha Particle Activity	N	0	6.2	3.8	pCi/L	15	NS	2013	Erosion of natural deposits
Radon 222	N	229	458	333.3	pCi/L	NS	NS	2000	Erosion of natural deposits
Uranium	N	0	9	1.7	pCi/L	20	0.43	2013	Erosion of natural deposits
VOLATILE ORGANIC CHEMICALS (VOC's)									
Tetrachloroethylene	N	ND	ND	ND	ug/l	5	0.06	2013	Leaching from PVC pipes, discharge from factories, dry cleaners and auto shops (metal degreaser)
ADDITIONAL PARAMETERS									
Alkalinity	N	150	220	184	mg/l	NS	NS	2013	
Bicarbonate Alkalinity	N	180	260	223	mg/l	NS	NS	2013	
Calcium	N	29	89	57	mg/l	NS	NS	2013	
Total Hardness	N	110	280	195	mg/l	NS	NS	2013	
Magnesium	N	7	14	10	mg/l	NS	NS	2013	
Potassium	N	2	4	3	mg/l	NS	NS	2013	
Sodium	N	12	130	33	mg/l	NS	NS	2013	
Boron	N	0	240	46	mg/l	NS	NS	2013	
DISTRIBUTION SYSTEM									
Microbiological-Total Coliform Bacteria	N	ND	ND	ND	Presence of coliform bacteria in 5% of monthly samples****		2013	Naturally present in the environment	
Total Trihalomethanes	N	0	9.6	6	ug/l	80	NS	2013	By-product of drinking water chlorination
Haloacetic Acids	N	0	3.4	0.7	ug/l	60	NS	2013	By-product of drinking water chlorination
Chlorine	N	0.54	0.94	0.71	mg/l	4	4	2013	Drinking water disinfectant added for treatment
REGULATED CONTAMINANTS(Perchlorate)									
Perchlorate	N	0	2.5	0.2	ug/l	6	6	2013	Component of explosives, fireworks, matches, and solid rocket fuels.

LEAD AND COPPER

The Lead & Copper Rule became effective in 1993. The City of Colton has performed eight rounds of sampling. The last round was performed in August 2013. Next round is scheduled for 2016. All samples are taken from the first draw of morning water. The first two rounds were from 60 single-family residences with copper pipe with lead solder installed since 1982. The 1998, 2001, 2004, 2007, 2010 & 2013 sampling included only 30 single-family residences due to favorable results in the previous sampling round. The next round is scheduled for August 2016. The 2013 results were:

Contaminant	90th Percentile Result	Unit Measurement	MCL	PHG	LIKELY SOURCE OF CONTAMINANT
LEAD	0	ug/l	AL 15	2	Internal corrosion of household plumbing systems, discharge from industrial mfg, erosion of natural deposits
COPPER	180	ug/l	AL 1300	300	Internal corrosion of household plumbing systems, erosion of natural deposits.