

# 2011 Water Quality Report

## City of Perris Water System

*We test the drinking water quality for many constituents as required by state and federal regulations. This report shows the results of our monitoring for the period of January 1 - December 31, 2011.*

**Este informe contiene información muy importante sobre su agua potable. Tradúzcalo ó hable con alguien que lo entienda bien.**

### About This Report:

The City of Perris is proud to provide its' 2011 Water Quality Report which contains valuable information about the quality of its drinking water and efforts made to continue providing the highest quality water to the community it serves. **In 2011, the City of Perris drinking water met all drinking water health standards of the United States Environmental Protection Agency (USEPA) and the State of California Department of Public Health (CDPH).**

### Sources of Water Supply:

Water supplied to The City of Perris comes from both ground and surface water, and is supplied by the Eastern Municipal Water District (EMWD) and their Mills Filtration Plant. The Henry J Mills Filtration Plant treats imported surface water supplied solely from Northern California through the State Water Project (SWP). Water from the Mills Filtration Plant is blended with several other EMWD water sources. The blended water quality and any contaminant levels found to be present are also listed in this report for contaminants which are of the most health risk. **The 2011 Consumer Confidence Report for EMWD water supplied to the City of Perris can be obtained by calling (951) 928-3777 or at [www.emwd.org](http://www.emwd.org).**

### Source Assessment Information:

EMWD completed a source water assessment in December 2002 of its production well and surface water supplies. Groundwater supplies are considered vulnerable to various urban and agricultural land uses.

Urban land uses that can create contaminants include automobile gas stations and repair shops, transportation corridors, furniture manufacturing and repair facilities, sewer collection systems, and sand and gravel mining operations. Agricultural land uses include irrigated truck crops with application of pesticides and herbicides.

### Contact Information:

The City of Perris encourages public participation in decisions that may affect the quality of the water supply. The City Council meets every second Tuesday and the last Tuesday of each month. Questions for the water system may be directed to Daryl Hartwill, Public Works Department Manager (951) 657-3280.

Este informe contiene informacion importante con respect a su calidad del agua. Si usted desea obtener informacion en espanol, visitenos en [www.cityofperris.org](http://www.cityofperris.org) o llame (951) 657-3280.

## 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.

**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).

**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 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.

**NTU:** Nephelometric Turbidity Units

**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 SDWS do not affect the health at the MCL levels.

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

**Variations and Exemptions:** Department permission to exceed an MCL or not comply with a treatment technique under certain conditions.

**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)

**ppq:** parts per quadrillion or picogram per liter (pg/L)

**pCi/L:** picocuries per liter (a measure of radiation)

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.

**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 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.
- *Organic chemical contaminants*, including synthetic and volatile organic chemicals, that are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, agricultural application, and septic systems.
- *Radioactive contaminants*, that 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, the USEPA and the state Department of Public Health (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 provide the same protection for public health.

Tables 1, 2, 3, 4, and 5 list all of the drinking water contaminants that were detected during the most recent sampling for the constituent. 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 do not change frequently. Some of the data, though representative of the water quality, are more than one year old.

**Fluoride:** All drinking water naturally contains some fluoride. Fluoride levels in drinking water are limited under California state regulations at a maximum level 2.0 parts per million (ppm).

The City of Perris Water System fluoride levels are below the regulation limit and are within the range of 0.25 to 0.77 ppm.

TABLE 1 – SAMPLING RESULTS SHOWING THE DETECTION OF COLIFORM BACTERIA					
Microbiological Contaminants (complete if bacteria detected)	Highest No. of Detections	No. of months in violation	MCL	MCLG	Typical Source of Bacteria
Total Coliform Bacteria	(In a mo.) 0	0	More than 1 sample in a month with a detection	0	Naturally present in the environment
Fecal Coliform or <i>E. coli</i>	(In the year) 0	0	A routine sample and a repeat sample detect total coliform and either sample also detects fecal coliform or <i>E. coli</i>	0	Human and animal fecal waste

TABLE 2 – SAMPLING RESULTS SHOWING THE DETECTION OF LEAD AND COPPER						
Lead and Copper (complete if lead or copper detected in the last sample set)	No. of samples collected	90 <sup>th</sup> percentile level detected	No. sites exceeding AL	AL	PHG	Typical Source of Contaminant
Lead (ppb) 09/2009	20	ND	0	15	0.2	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits
Copper (ppm) 09/2009	20	.22	0	1.3	0.3	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives

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 Perris 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 and 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 or at <http://www.epa.gov/safewater/lead>.

**TABLE 3 – SAMPLING RESULTS FOR SODIUM AND HARDNESS**

Chemical or Constituent (and reporting units)	Sample Date	Average Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant
Sodium (ppm)	2011	32	28 - 37	none	none	Salt present in the water and is generally naturally occurring
Hardness (ppm)	2011	65	48 - 98	none	none	Sum of polyvalent cations present in the water, generally magnesium and calcium, and are usually naturally occurring

\*Any violation of an MCL or AL is asterisked. Additional information regarding the violation is provided later in this report.

**TABLE 4 – DETECTION OF CONTAMINANTS WITH A PRIMARY DRINKING WATER STANDARD**

Chemical or Constituent (and reporting units)	Sample Date	Average Detected	Range of Detections	MCL [MRDL]	PHG (MCLG) [MRDLG]	Typical Source of Contaminant
Aluminum ppb	2011	84	ND - 100	1000	600	Erosion of natural deposits; residual from some surface water treatment processes.
Fluoride ppm	2011	0.7	0.2 - 0.8	2.0	1	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Nitrate (as N) ppm	2011	0.5	ND - 0.7	10	10	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
Uranium pCi/L	2011	1	ND - 1	20	0.43	Erosion of natural deposits
Total Trihalomethanes (TTHM) ppb	2011	40.6	15.7 – 75.0	80	NA	By-product of drinking water disinfection
Haloacetic Acids (five) (HAA5) ppb	2011	13.9	1.2 – 34.6	60	NA	By-product of drinking water disinfection
Total Chlorine Residual ppm	2011	1.10	0.95 – 1.44	[4.0]	[4.0]	Drinking water disinfectant added for treatment.
Bromate ppb	2011	4.5	ND - 7.6	10	0.1	By-product of drinking water disinfection
Control of DBP precursors (TOC) ppm	2011	2.1	1.4 – 2.9	TT	NA	Various natural and man-made sources

“The California Department of Public Health (CDPH) has determined that a number of DBPs are a health concern at certain levels of exposure. Drinking water containing these byproducts in excess of the MCL may lead to adverse health effects, liver or kidney problems, or nervous system effects, and may lead to an increased risk of cancer.”

**TABLE 5 – DETECTION OF CONTAMINANTS WITH A SECONDARY DRINKING WATER STANDARD**

Chemical or Constituent (and reporting units)	Sample Date	Average Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant
Aluminum ppb	2011	84	ND – 100	200	600	Erosion of natural deposits; residual from some surface water treatment processes

Chemical or Constituent (and reporting units)	Sample Date	Average Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant
Color Units	2011	<3.0	ND - <3.0	15	NA	Naturally-occurring organic materials
Odor-Threshold Ton	2011	.92	ND – 1	3	NA	Naturally-occurring organic materials
Turbidity NTU	2011	.02	ND – 0.4	5	NA	Soil runoff
Total Dissolved Solids (TDS) ppm	2011	170	150 – 190	1000	NA	Runoff/leaching from natural deposits
Specific Conductance μS/cm	2011	300	230 – 480	1600	NA	Substances that form ions when in water; seawater influence
Chloride ppm	2011	32	27 – 38	500	NA	Runoff/leaching from natural deposits; seawater influence
Sulfate ppm	2011	32	22-42	500	NA	Runoff/leaching from natural deposits; industrial wastes

Chemical or Constituent (and reporting units)	Sample Date	Average Detected	Range of Detections	Notification Level	Health Effects Language
Boron ppb	2011	130	130	1000	The babies of some pregnant women who drink water containing boron in excess of the notification level may have an increased risk of developmental effects, based on studies in laboratory animals.
Chromium VI ppb	2011	0.14	0.14	NA	NA

\*Any violation of an MCL, MRDL, or TT is asterisked. Additional information regarding the violation is provided later in this report.

### Additional General Information on Drinking Water

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 USEPA’s Safe Drinking Water Hotline (1-800-426-4791).

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).

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