

2011 Consumer Confidence Report

Water System Name: City of Portola

Report Date: June 25, 2012

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

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

Type of water source(s) in use: Groundwater

Name & location of source(s): Water for the City of Portola in 2011 originates from three sources know as Willow Creek Springs, the Corporation Yard Well, and the Commercial Street Well.

Drinking Water Source Assessment: An assessment was completed between July 2002 and August 2003. A copy can be obtained by calling the Department of Public Health at (530) 224-4800. The Commercial Street Well was found to be the most vulnerable to the following activities associated with detected contaminants: contractor or government agency equipment storage yard; sewer collection systems. Our sources were found to be most vulnerable to the following activities not associated with any detected contaminants: Managed Forests, photo processing/printing; railroad yard/maintenance/fueling areas; septic systems; utility stations-maintenance areas.

Time and place of regularly scheduled board meetings for public participation: Second and Fourth Wednesday of the month

For more information, contact: Todd Roberts Phone: (530) 832-6809

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.

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.

Treatment Technique (TT): A required process intended to reduce the level of a contaminant in drinking water.

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

Variances 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, 5, 7, and 8 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.

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	1	0	More than 1 sample in a month with a detection	0	Naturally present in the environment
Fecal Coliform or <i>E. coli</i>	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 th percentile level detected	No. sites exceeding AL	AL	PHG	Typical Source of Contaminant
Lead (ppb) 2009	10	2.0	0	15	0.2	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits
Copper (ppb) 2009	10	37	0	1300	300	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives

TABLE 3 – SAMPLING RESULTS FOR SODIUM AND HARDNESS

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant
Sodium (ppm)	2005-2008		5.5-45	none	none	Salt present in the water and is generally naturally occurring
Hardness (ppm)	2005-2008		58-122	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	Level Detected	Range of Detections	MCL [MRDL]	PHG (MCLG) [MRDLG]	Typical Source of Contaminant
Aluminum (ppb)	2005-2008		ND – 118.9	1,000	600	Erosion of natural deposits; residue from some surface water treatment processes
Arsenic (ppb)	2011		ND – 22*	10	0.004	Erosion of natural deposits; runoff from orchards; glass and electronic production waste
Fluoride (ppm)	2005-2008		ND – 0.26	2.0	1.0	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Gross Alpha (pCi/L)	2001-2007		1.04 – 10.2	15	0	Erosion of natural deposits.
Nitrate ppm	2011		0.26 – 1.4	10	10	Runoff and leaching from fertilizer use; leaching from septic tanks, sewage and erosion of natural deposits
Uranium (pCi/L)	2007		0.745 – 8.11	20	0.43	Erosion of natural deposits.

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

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant
Chloride (ppm)	2005 - 2008		ND – 13.0	500	---	Runoff/leaching from natural deposits; seawater influence
Color (units)	2007		3.0 – 4.0	15	---	Naturally occurring organic materials
Iron (ppb)	2006-2008		ND – 533.3	300	---	Leaching from natural deposits; industrial wastes
Specific Conductance (µS/cm)	2005-2008		168 – 375	1600	---	Substances that form ions when in water; seawater influence
Total Dissolved Solids (ppm)	2005-2008		120 – 229	1000	---	Runoff/leaching from natural deposits
Turbidity (NTU)	2008		ND – 6.07	5	---	Soil runoff
Zinc (ppb)	2005-2009		ND – 70.0	5000	---	Runoff/leaching from natural deposits; industrial wastes.

*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).

Summary Information for Violation of a MCL, MRDL, AL, TT, or Monitoring and Reporting Requirement

VIOLATION OF A MCL, MRDL, AL, TT, OR MONITORING AND REPORTING REQUIREMENT				
Violation	Explanation	Duration	Actions Taken to Correct the Violation	Health Effects Language
Arsenic	The Corporation Yard Well's running annual average exceeded the MCL during the 4 th calendar quarter of 2011.	October 2011 – December 2011	Lake Davis WTP placed on-line in May 2012	Some people who drink water containing arsenic in excess of the MCL over many years may experience skin damage or circulatory system problems, and may have an increased risk of getting cancer.

For Water Systems Providing Ground Water as a Source of Drinking Water

TABLE 7 – SAMPLING RESULTS SHOWING FECAL INDICATOR-POSITIVE GROUND WATER SOURCE SAMPLES					
Microbiological Contaminants (complete if fecal-indicator detected)	Total No. of Detections	Sample Dates	MCL [MRDL]	PHG (MCLG) [MRDLG]	Typical Source of Contaminant
<i>E. coli</i>	3	September, October, December	0	(0)	Human and animal fecal waste

Summary Information for Fecal Indicator-Positive Ground Water Source Samples

SPECIAL NOTICE OF FECAL INDICATOR-POSITIVE GROUND WATER SOURCE SAMPLES
E.coli was detected in the water from Willow Creek Springs. This water is continuously disinfected to inactivate microbiological organisms that may be present in the water. No E.coli was detected in any water samples collected from the distribution system.