City of Commerce
2011 Water Quality Report

Annual Drinking Water Quality Report

We're pleased to present to you this year's Annual Water Quality Report. This report is designed to inform you about the quality of water and services we deliver to you every day. Our constant goal is to provide you with a safe and dependable supply of drinking water. We have a source water protection plan available from our office that shows the vulnerability of our system as MEDIUM. The plan also provides more information such as potential sources of contamination. Our water source is groundwater from the Roubidoux aquifer.

This report shows our water quality and what it means. If you have any questions about this report or concerning your water utility, please contact Jeb Jones at 675-4373. The City of Commerce address is P.O. Box 99, Commerce, OK 74339. We want our valued customers to be informed about their water utility. You are welcome to attend any of our regularly scheduled City Council meetings. They are held the first Tuesday of the month at City Hall.

The City of Commerce routinely monitors for constituents in your drinking water according to federal and state laws. The following table shows the results of our monitoring for the period of January 1 to December 31, 2011. (Some of our data may be more than one year old because the state allows us to monitor for some contaminants less often than once per year.) We are pleased to report that we did not violate any of the standards as set by EPA!

DEFINITIONS:

- *Maximum Contaminant Level* (MCL) - The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.
- *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 allow for a margin of safety.
- *Action Level* (AL) - the concentration of a contaminant, which, if exceeded, triggers treatment or other requirements, which a water system must follow.
- *Parts per million (ppm) or Milligrams per liter (mg/l)* - one part of contaminant per million parts of water.
- *Parts per billion (ppb) or Micrograms per liter (ug/l)* - one part of contaminant per billion parts of water.
- *Pico curies per liter (pCi/L)* - picocuries per liter are a measure of the radioactivity in water.
- *Non-Detects (ND)* – Laboratory analysis indicates that the constituent is not present.

MCLs are set at very stringent levels. To understand the possible health effects described for many regulated constituents, a person would have to drink 2 liters of water every day at the MCL level for a lifetime to have a one-in-a-million chance of having the described health effect.

All sources of drinking water are subject to potential contamination by constituents that are naturally occurring or are man-made. Those constituents can be microbes, organic or inorganic chemicals, or radioactive materials. 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 Environmental Protection Agency's Safe Drinking Water Hotline at 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. EPA/CDC guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbiological contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

In our continuing efforts to maintain a safe and dependable water supply it may be necessary to make improvements in your water system. The costs of these improvements may be reflected in the rate structure. Rate adjustments may be necessary in order to address these improvements. Please call our office if you have any questions about this report.

City of Commerce
P.O. Box 99

WATER QUALITY DATA

MICROBIOLOGICAL CONTAMINANTS

3 samples throughout the system are tested on a monthly basis.

Substance	MCL	Maximum Level Detected	EPA MCLG (EPA Goal)	2011 Violations	Sources of Contaminant
Total Coliform Bacteria	One sample per month testing coliform positive	0 samples tested coliform positive for 2011.	No monthly samples testing coliform positive	None	Naturally present in the environment

RADIONUCLIDES

Substance	MCL	Range of Levels Detected	Maximum Level Detected	2011 Violations	Possible Sources of Contaminant
Alpha Emitters 12/17/2009	15 pCi/L	9.27 – 9.27	9.27 pCi/L	None	Geology, erosion of natural deposits
Beta/Photon Emitters 12/17/2009	4 mrem/yr	4.62 - 4.62	4.62 ug/l	None	Geology, erosion of natural deposits
Combined Radium (-226&-228) 12/17/2009	5.0 pCi/L	2.22 – 2.22	2.22 pCi/l	None	Geology, erosion of natural deposits

INORGANIC CONTAMINANTS

Substance	MCL	Range of Levels Detected	Maximum Level Detected	EPA MCLG (EPA Goal)	2011 Violations	Sources of Contaminant
Fluoride Sampled 12/3/2007	4 ppm	0 – 0.43	0.43 ppm	4 ppm	None	Erosion of natural deposits; water additive which promotes strong teeth
Barium Sampled 12/3/2007	2 ppm	0.0263 – 0.0525	0.0525 ppm	2 ppm	None	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Nitrate 3/22/10	10 ppm	0 – 0.1	0.1 ppm	10 ppm	None	Runoff from fertilizer use, septic tanks or sewage, erosion of natural deposits
Arsenic 12/14/2010	10 ug/L	0 - <0.2	<0.2 ug/L	0 ug/L	None	Geology, erosion of natural deposits

LEAD AND COPPER (Regulated at Customer Tap)

Substance	Action Level *	90% Sample Detected	2011 Violations	Sources of Contaminant
Copper 8/26/2010	1.3 mg/L	0.0166 mg/L	None	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of home water pipes
Lead 8/26/2010	15 ug/L	< 0.5 ug/L	None	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of home water pipes
Lead Exceedence				1 sample of 10 exceeded lead action level.

* Action Level – 90% of samples must be below this level.

TOTAL TRIHALOMETHANES

Substance	MCL	Maximum level detected		2011 Violations	Sources of Contaminant
Total THM 8/11/2009	80 ug/L	4.0 ug/L		None	Byproduct of Chlorination

TOTAL HALOACETIC ACIDS

Substance	MCL	Maximum level detected		2011 Violations	Sources of Contaminant
Total HAA5 8/11/2009	60 ug/L	6.0 ug/L		None	Byproduct of Chlorination