

# 2010 WATER QUALITY REPORT

## FOR

### City of Walnut

This report contains important information regarding the water quality in our water system. The source of our water is groundwater. Our groundwater is drawn from the Middle Ordovician (Galena, Decorah, St. Peter) aquifer.

Our water quality testing shows the following results:

CONTAMINANT	MCLG	MCL	DETECTED LEVEL	DATE SAMPLED	RANGE OF DETECTION	VIOLATION	SOURCE
Alpha emitters (pCi/L)	0	15	10.9	10/20/08		No	Erosion of natural deposits
Combined radium (pCi/L)	0	5	2.7	10/20/08		No	Erosion of natural deposits
Fluoride (ppm)	4	4	3.00	8/12/08		No	Water additive which promotes strong teeth; Erosion of natural deposits; Discharge from fertilizer and aluminum factories
Lead (ppb)	0	AL=15	2	9/30/09	ND – 2	No	Corrosion of household plumbing systems; erosion of natural deposits
Copper (ppm)	1.3	AL=1.3	0.10	9/30/09	ND – 0.14	No	Corrosion of household plumbing systems; Erosion of natural deposits
Sodium (ppm)	N/A	N/A	410	4/15/08		No	Erosion of natural deposits; Added to water during treatment process
Nitrate [as N] (ppm)	10	10	ND	2009		No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Chlorine (ppm)	MRDLG=4.0	MRDL=4.0	1.1	2009 RAA	.71 – 1.32	No	Water additive used to control microbes
TTHM (ppb) [Total Trihalomethanes]	N/A	80	2	7/30/07	N/A	No	By-products of drinking water disinfection

Note: Contaminants with dates indicate results from the most recent testing done in accordance with regulations.

#### 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.
- ppb -- parts per billion.
- ppm -- parts per million.
- pCi/L – picocuries per liter
- N/A – Not applicable
- ND -- Not detected

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

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

- 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.

## **GENERAL INFORMATION**

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 water posed a health risk. More information about contaminants or potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline (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 microbial contaminants are available from the Safe Drinking Water Hotline (800-426-4791). 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. City of Walnut 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 from the Safe Drinking Water Hotline or at <http://www.epa.gov/safewater/lead>.

## **ADDITIONAL HEALTH INFORMATION**

Fluoride in children's drinking water at levels of approximately 1 mg/L reduces the number of dental cavities. However, some children exposed to levels of fluoride greater than about 2.0 mg/L may develop dental fluorosis. Dental fluorosis, in its moderate and severe forms, is a brown staining and/or pitting of the permanent teeth.

Because dental fluorosis occurs only when developing teeth (before they erupt from the gums) are exposed to elevated fluoride levels, households without children are not expected to be affected by this level of fluoride.

Families with children under the age of nine are encouraged to seek other sources of drinking water for their children to avoid the possibility of staining and pitting.

Your water supplier can lower the concentration of fluoride in your water so you will still receive the benefits of cavity prevention while the possibility of stained and pitted teeth is minimized. Removal of fluoride may increase your water costs. Treatment systems are also commercially available for home use. Information on such systems is available at the address given by your public water supply. Low fluoride bottled drinking water that would meet all standards is also commercially available.

## **SOURCE WATER ASSESSMENT INFORMATION**

The City of Walnut water supply obtains its water from the Middle Ordovician (Galena, Decorah, St. Peter) aquifer. The Middle Ordovician (Galena, Decorah, St. Peter) aquifer was determined to be not susceptible to contamination because the characteristics of the aquifer and overlying materials prevent easy access of contaminants to the aquifer. The wells will not be susceptible to most contaminant sources except through pathways to the aquifer such as abandoned or poorly maintained wells. A detailed evaluation of your source water was completed by the IDNR, and is available from City Hall at 712-784-3443.

## **OTHER INFORMATION**

Our water utility is making every effort to protect the water system from potential security threats. You, as customers, can also help. If you see any suspicious activity near the water tower, treatment plant, wells or fire hydrants, please contact us at 712-784-3711 or the local police/sheriff department. We appreciate your assistance in protecting the water system.

## **CONTACT INFORMATION**

For questions regarding this information, please contact Jim Blum at 712-784-3711 during the following hours: 7 am - noon or 1pm-4pm. Decisions regarding the water system are made at the City Council meetings held on the first Thursday of each month at 5 p.m. at City Hall and are open to the public.

The 2010 Water Quality Report is available at City Hall and will not be mailed to individual customers.