

# 2008 WATER QUALITY REPORT FOR City of Sidney

This report contains important information regarding the water quality in our water system. The source of our water is ground water. Our groundwater is drawn from the alluvial aquifer(s).

Our water quality testing shows the following results:

CONTAMINANT	MCLG	MCL	DETECTED LEVEL	DATE SAMPLED	RANGE OF DETECTION	VIOLATION	SOURCE
Lead (ppb)	0	AL=15	3	2008	0-18	NO	Corrosion of household plumbing systems; erosion of natural deposits
Chlorine (ppm)	MRDLG =4.0	MRDL=4.0	1.0	2008	0-2.11	NO	Water additive used to control microbes
Copper (ppm)	1.3	AL=1.3	0.94	2008	0.03-1.34	YES	Corrosion of household plumbing systems; Erosion of natural deposits
Barium (ppm)	2	2	.24	2005	NA	NA	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Fluoride (ppm)	4	4	.3	2005	NA	NA	Water additive which promotes strong teeth; Erosion of natural deposits; Discharge from fertilizer and aluminum factories
Sodium (ppm)	N/A	N/A	14.9	2008	NA	NA	Erosion of natural deposits; Added to water during treatment process
Nitrate [as N] (ppm)	10	10	6.3	2008	6.2-6.3	NO	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
TTHM (ppb) [Total trihalomethanes]	N/A	80	10.0	2004	NA	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
- RAA – Running Annual Average
- IDSE – Initial Distribution System Evaluation
- 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. Sidney Water Supply 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>.

## **CONTAMINANT VIOLATIONS**

Copper. Copper is an essential nutrient but some people who drink water containing copper in excess of the action level over a relatively short amount of time could experience gastrointestinal distress. Some people who drink water containing copper in excess of the action level over many years could suffer liver or kidney damage. People with Wilson's Disease should consult their personal doctor. We received the violation in October of 2008 when we did our biyearly lead and copper testing. We are playing with our caustic soda trying to reduce these high copper numbers. If this continues to be a problem we may have to switch over to a orthophosphate to lower the corrosiveness of the water.

## **ADDITIONAL HEALTH INFORMATION**

Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant you should ask advice from your health care provider.

Infants and young children are typically more vulnerable to lead in drinking water than the general population. It is possible that lead levels at your home may be higher than at other homes in the community as a result of materials used in your home's plumbing. If you are concerned about elevated lead levels in your home's water, you may wish to have your water tested and flush your tap for 30 seconds to 2 minutes before using tap water. Additional information is available from the Safe Drinking Water Hotline (800-426-4791).

## **OTHER VIOLATIONS**

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## **SOURCE WATER ASSESSMENT INFORMATION**

The Sidney Water Supply water supply obtains its water from the alluvial aquifer. The alluvial aquifer was determined to be highly susceptible to contamination because the characteristics of the aquifer and overlying materials allow contaminants to move through the aquifer fairly quickly. The wells will be most susceptible to activities such as dry cleaners, gas stations, industrial sites, and municipal wastewater dischargers. A detailed evaluation of your source water was completed by the IDNR, and is available from City of Sidney Water Supply at (712)374-2223.

## **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)374-2223 or the local police. We appreciate your help!

### **CONTACT INFORMATION**

For questions regarding this information, please contact City Hall at (712)374-2223 during the following hours: 7:00 AM-4:30 PM Monday through Friday.

Decisions regarding the water system are made at the City Council meetings held on the 2<sup>nd</sup> Monday of each month at 6:00 p.m. at City Hall and are open to the public.