

MALVERN WATER SUPPLY 2013 WATER QUALITY REPORT

We are pleased to present this year's Consumer Confidence report. This report contains important information regarding the water quality in our water system. The data is from the calendar year 2013, as well as the previous four years (2009–2012).

Our water quality testing shows the following results

CONTAMINANT	MCL - (MCLG)	Compliance		Date	Violation n	Source
		Type	Value & (Range)			
Copper (ppm)	AL=1.3 (1.3)	90th	0.531 (0.0979 - 1.170)	09/30/2011	No	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
Lead (ppb)	AL=15 (0)	90th	0.00 (ND - 4)	09/30/2011	No	Corrosion of household plumbing systems; erosion of natural deposits
950 - DISTRIBUTION SYSTEM						
Chlorine (ppm)	MRDL=4.0 (MRDLG=4.0)	RAA	1.4 (0.5 – 2.2)	3/31/2012	No	Water additive used to control microbes
Total Trihalomethanes (ppb) [TTHM]	80 (N/A)	LRAA	30.00 (30-30)	9/30/2013	No	By-products of drinking water chlorination
Total Haloacetic Acids (ppb) [HAA5]	60 (N/A)	LRAA	13.00 (13-13)	9/30/2013	No	By-products of drinking water disinfection
01 - WELLS 10_11 AFTR TRTMT@WELL 10						
Alpha Emitters (pCi/L)	15 (0)	SGL	5.7	02/04/2013	No	Erosion of natural deposits
Barium (ppm)	2 (2)	SGL	0.259	10/23/2012	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Fluoride (ppm)	4 (4)	SGL	2.0 (0.4 – 2.0)	2013	No	Water additive which promotes strong teeth; Erosion of natural deposits; Discharge from fertilizer and aluminum factories
Selenium (ppb)	50 (50)	SGL	3.10	10/23/2012	No	Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines
Sodium (ppm)	N/A (N/A)	SGL	14.3	12/31/2013	No	Erosion of natural deposits; Added to water during treatment process
Nitrate [as N] (ppm)	10 (10)	SGL	7.900 (6.500 - 7.900)	12/31/2013	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits

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

DEFINITIONS

- ◆ “ppb” -- “parts per billion.”
 - ◆ “ppm” -- “parts per million.”
 - ◆ “pCi/l” -- “picocuries per liter”
 - ◆ N/A – Not applicable
 - ◆ ND—Not Detected
 - ◆ **Action Level (AL)** – The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
 - ◆ **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.
 - ◆ **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.
- ◆ **SGL** – Single Sample Result
 - ◆ **RAA** – Running Annual Average
 - ◆ **LRAA** – Locational Running Annual Average

SOURCE WATER ASSESSMENT INFORMATION

The Malvern water supply obtains its water from the West Nishnabotna River sand and gravel of 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 alluvial wells will be highly susceptible to surface contaminants such as leaking underground storage tanks, contaminant spills, and excess fertilizer application. A detailed evaluation of your source water was completed by the IDNR, and is available from Tim Snyder with PeopleService at 877-774-4311 ext. 22.

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. The City of Malvern 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

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.

Nitrate in drinking water at levels above 10 ppm is a health risk for infants below the age of six. 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.

CONTAMINANT Violations

None

CONTACT INFORMATION

For questions regarding this information, please contact: Tim Snyder with PeopleService at 877-774-4311 ext. 22 or City Hall at 624-8282 during the following hours: 8:00 a.m. - 4:00 p.m. or e-mail tsnyder@peopleservice.com. Decisions regarding the water system are made at the City Council meetings held on the second Monday of the month at 7:00 p.m. at City Hall and are open to the public.