

CITY OF LITCHFIELD 2012 DRINKING WATER QUALITY REPORT

To comply with Safe Drinking Water Act Amendments, the City of Litchfield will be annually issuing a report on monitoring performed on its drinking water. The purpose of this report is to advance consumers understanding of drinking water and heighten awareness of the need to protect precious water resources.

Contaminants and their presence in 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 water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline (800-426-4791).

Vulnerability of sub-populations: 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 systems 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).

Sources of Drinking Water: 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:

Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife.

Inorganic contaminants, such as salts and metals, which can be naturally-occurring or result from urban storm-water runoff, industrial or domestic waste-water discharges, oil and gas production, mining or farming.

Pesticides and herbicides, which may come from a variety of sources such as agriculture and residential uses.

Radioactive contaminants, which are naturally occurring.

Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm-water runoff, and septic systems.

The City of Litchfield obtains its water from four groundwater wells, numbered 3,4,5 and 6. As the water is pumped from the wells it is treated with a blended phosphate product to control iron (a cause of rusty water), and chlorine to destroy possible microbial contaminants.

The City has adopted a Well-Head Protection Program that will help prevent any activities that could contaminate these wells.

The Michigan Department of Environmental Quality (MDEQ) has implemented a Source Water Assessment Program (SWAP) to assess the susceptibility of all public water supply sources to contamination. The SWAP has determined that Well 6 has a "moderate" susceptibility to contamination. A report has not been conducted on Wells 3, 4 and 5. A summary of the SWAP findings is available at the Litchfield City Office, 221 Jonesville St.

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration regulations establish limits for contaminants in bottled water which provide the same protection for public health.

Copies of this report are available at the City Office. Copies will not be mailed to water customers.

Public input concerning our water system and other issues is allowed at City Council Meetings, held on the second Tuesday of each month at 6:30 p.m. in the Council Room at the City Office. For additional information contact:

Tony Langhann
Supt. of Public Works
(517) 542-2103
or
EPA Drinking Water Web Site
(www.epa.gov/safewater/)

WATER QUALITY DATA TABLE

The City of Litchfield routinely tests for over 150 contaminants. The following table lists all the drinking water contaminants that we detected during the **2012** calendar year. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. Unless otherwise noted, the data presented in this table is from testing done **January 1 - December 31, 2012**. The State allows us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. All of the data is representative of the water quality, but some is more than one year old. None of these contaminants were detected at levels higher than allowed by the EPA.

Terms and abbreviations used in table:

- * 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 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.
- * N/A: Not applicable ND: not detectable at testing limit
ppb: parts per billion or micrograms per liter ppm: parts per million or milligrams per liter
pCi/L: picocuries per liter (a measure of radiation).
- * Action level or AL: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
- * Treatment technique: A required process intended to reduce the level of a contaminant in drinking water.
- * 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.

Defected at the Plant		MRDL	MRDLG	MCL	MCLG	Our Water	Range of Defections	Sample Date	Violation	Typical Source of Contaminant
arsenic	N/A	N/A	10 ppb	0	2 ppb	0 - 2 ppb	4/19/2011	no	erosion of natural deposits, runoff from orchards; runoff from glass and electronic production wastes	
barium	N/A	N/A	2 ppm	2 ppm	0.04 ppm	N/A	6/3/2008	no	erosion of natural deposits	
flouride	N/A	N/A	4 ppm	4 ppm	0.12 ppm	0 - 0.12 ppm	7/9/2012	no	erosion of natural deposits	
nitrate	N/A	N/A	10 ppm	10 ppm	2.2 ppm	0 - 2.2 ppm	7/9/2012	no	runoff from fertilizer use, leaching from septic tanks, sewage	
Radionuclides										
gross alpha	N/A	N/A	15 pCi/L	0	0.9 pCi/L	0.4-0.9 pCi/L	5/9/2011 6/28/2011	no	decay of natural and man-made deposits	
radium 226	N/A	N/A	5 pCi/L	0	0.2 pCi/L	0.2 pCi/L	5/9/2011 6/28/2011	no	decay of natural and man-made deposits	
radium 228	N/A	N/A	5 pCi/L	0	0.1 pCi/L	0-0.1 pCi/L	5/9/2011 6/28/2011	no	decay of natural and man-made deposits	
Detected at consumer's homes										
lead ^{1,2}	N/A	N/A	AL 15 ppb	15 ppb	2 ppb	0 out of 10 samples were above the AL	9/5/2012	no	erosion of natural deposits, corrosion of household plumbing systems	
copper ¹	N/A	N/A	AL 1.3 ppm	1.3 ppm	0.68 ppm	0 out of 10 samples were above the AL	9/5/2012	no	erosion of natural deposits, corrosion of household plumbing systems	
total haloacetic acids	N/A	N/A	60 ppb	N/A	2 ppb	2 ppb	8/3/2010	no	chlorination by-product	
total trihalomethanes	N/A	N/A	80 ppb	N/A	7.7 ppb	2.6 - 7.7 ppb	8/3/2010	no	chlorination by-product	
chlorine	4 ppm	4 ppm	N/A	N/A	0.15 ppm	0.06 - 0.28 ppm	2 / month	no	water additive to control microbes	
Unregulated Contaminants										
sodium ³	N/A	N/A	N/A	N/A	23 ppm	0 - 23 ppm	7/9/2012	no	naturally present in groundwater	

¹ Lead and copper results list the number of samples that exceeded the action level, rather than the range detected.

² 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 Litchfield 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>.

³ Sodium is considered special monitoring-there is no MCL associated with it. Sodium monitoring is required to inform the residents and the local health department of sodium levels in the community.