



City of Bucyrus Water Consumer Confidence Report 2010

Overview

The City of Bucyrus is pleased to present its Water Quality Report for the year 2010. This report is designed to inform you about the quality of your water. Included are details about where your water comes from, what it contains, and how it compares to federal and state EPA standards. We have a current, and unconditional license to operate our water system.

Where Does My Drinking Water Come From?

The source of drinking water for the City of Bucyrus is surface water provided by two upground reservoirs –the Outhwaite, located on St. Rt. 98 N and the Riley, located on Kiess Road, just south of St. Rt. 98. As water levels in the reservoirs are depleted through usage, water from the Sandusky River is pumped into them at periodic intervals. For the purposes of source water assessments, in Ohio all surface waters are considered to be susceptible to contamination. By their nature surface waters are readily accessible and can be contaminated by chemicals and pathogens which may rapidly arrive at the public water intake with little warning or time to prepare. The City of Bucyrus' drinking water source protection area contains potential contaminant sources such as agriculture, a hazardous waste landfill, new home construction, junk yards, roadways, and railways.

The City of Bucyrus' public water system treats the water to meet drinking water quality standards, but no single treatment technique can address all potential contaminants. The potential for water quality impacts can be further decreased by implementing measures to protect the Sandusky River. More detailed information is provided in the City of Bucyrus' Drinking Water Source Assessment report, which can be obtained by calling the water plant superintendent, Donald Fox, at (419) 562-7951.

How to Read These Tables

The City of Bucyrus routinely monitors for contaminants in your water in accordance with applicable federal and state regulations. The tables on the following pages show the results of our monitoring for the period January 1 to December 31, 2010.

For some contaminants the State of Ohio allows us to monitor on less than a yearly basis. For these contaminants the data presented is from the most recent testing done in compliance with the regulations and the date the testing was completed is noted in the tables.

For most contaminants the EPA has set in place MCLs. These MCLs are set at very stringent levels and only after exhaustive testing and study. Comparing the level of a contaminant detected in our water (column 3 in the table) with its corresponding MCL (column 2), you will note that our water exceeds federal and state requirements in every category. In fact, we are proud to report that for 2010, as in past years, our water has never violated an MCL or any other water quality standard. We remain dedicated to continuing this record in the coming years.

Substances That May Be Present in 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 include: (A) Microbial contaminants, such as viruses and bacteria, which may come from sewage plants, septic tanks, agricultural livestock operations, and wildlife; (B) Inorganic contaminants, such as salts and metals, which can be naturally occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming; (C) Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses; (D) 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; (E) Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.

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

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 Environmental Protection Agency's Safe Drinking Water Hotline (800-426-4791).

Special Health Information

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 the advice of 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 at 800-426-4791.

How Do I Learn More ?

Water treatment has become an increasingly challenging and complex technology. It is our belief that a well-informed consumer is our best ally in supporting our efforts to upgrade and improve our system and to insure the highest possible standards in our water. If you should have questions concerning this report, please contact the plant superintendent, Donald Fox, at (419) 562-7951. Issues affecting water quality may be addressed at regularly scheduled meetings of Bucyrus City Council, which are held the first and third Tuesday of every month at Bucyrus City Hall, 500 S. Sandusky Ave.

Table of Detected Contaminants

Contaminants (units)	MCLG	MCL	Level Found	Range of Detection	Violation	Year of Sample	Typical Source of Contaminants
Microbiological Contaminants							
Turbidity (NTU)	NA	TT	.19	.02 - .19	NO	2010	Soil runoff.
Turbidity (% meeting Standard)	NA	TT	100%	NA	NO	2010	
TOC compliance ratio	NA	TT	2.4	2.3 – 3.6	NO	2010	Naturally present in the environment.
Inorganic Contaminants							
Barium (ppm)	2	2	.011	NA	NO	2010	Discharge from drilling wastes and refineries. Erosion of natural deposits.
Lead (ppb) ¹	0	AL = 15	< 2.0	NA	NO	2008	Corrosion of household plumbing systems.
Zero out of 30 samples was found to have lead levels in excess of the lead action level of 15 ppb.							
Copper (ppm)	1.3	AL = 1.3	.023	NA	NO	2008	Corrosion of household plumbing systems.
Zero out of 30 samples was found to have copper levels in excess of the copper action level of 1.3 ppm.							
Nitrate (ppm)	10	10	1.02	BDL – 1.02	NO	2010	Runoff from fertilizer use. Leaching of septic tanks. Erosion of natural deposits.
Fluoride (ppm)	4	4	1.14	.88 – 1.34	NO	2010	Erosion of natural deposits. Water additive which promotes strong teeth.
Volatile Organic Contaminants							
Total Trihalomethanes TTHMs (ppb)	0	80	39.3	19.8 – 62.7	NO	2010	By-product of drinking water chlorination.
Haloacetic Acids HAA5s (ppb)	NA	60	18.1	6.5 – 34.2	NO	2010	By-product of drinking water chlorination.
IDSE TTHMs ² (ppb)	NA	NA	NA	20.8 – 95.2	NO	2009	By-product of drinking water chlorination.
IDSE HAA5s ² (ppb)	NA	NA	NA	9.8 – 23.3	NO	2009	By-product of drinking water chlorination.
Bromoform (ppb)	NA	NA	BDL	NA	NO	2010	By-product of drinking water chlorination.
Chloroform (ppb)	NA	NA	11.8	NA	NO	2010	By-product of drinking water chlorination.
Bromodichloromethane (ppb)	NA	NA	5.0	NA	NO	2010	By-product of drinking water chlorination.
Chlorodibromomethane (ppb)	NA	NA	1.46	NA	NO	2010	By-product of drinking water chlorination.
Residual Disinfectants							
Total Chlorine (ppm)	MRDL= 4	MRDL = 4	1.6	1.2 – 1.7	NO	2010	Water additive to control microbes.

¹ 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 Bucyrus public water system 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>.

² Under the Stage 2 Disinfectants/Disinfection Byproducts Rule (D/DBPR), our public water system was required by USEPA to conduct an evaluation of our distribution system. This is known as an Initial Distribution System Evaluation (IDSE), and is intended to identify locations in our distribution system with elevated disinfection byproduct concentrations. The locations selected for the IDSE may be used for compliance monitoring under Stage 2 DBPR, beginning in 2012. Disinfection byproducts are the result of providing continuous disinfection of your drinking water and form when disinfectants combine with organic matter naturally occurring in the source water. Disinfection byproducts are grouped into two categories, Total Trihalomethanes (TTHM) and Haloacetic Acids (HAA5). USEPA sets standards for controlling the levels of disinfectants and disinfection byproducts in drinking water, including both TTHMs and HAA5s.

Definitions of terms used in this report:

Turbidity	A measure of the cloudiness in water. We measure it because it is a good indicator of the effectiveness of our filtration system. The turbidity limit set by the EPA is 0.3 NTU in 95% of daily samples and shall not exceed 1.0 NTU at any time.
MCL	Maximum Contaminant Level: The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to MCLGs as feasible using the best available technology.
MCLG	Maximum Contaminant Level Goal: 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.
MRDL	Maximum Residual Disinfectant Level: 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.
MRDLG	Maximum Residual Disinfectant Level Goal: The level of 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.
TOC	Total Organic Carbon: The value reported under "Level found" for Total Organic Carbon (TOC) is the lowest ratio between the percentage of TOC actually removed to the percentage of TOC required to be removed. A value of greater than one (1) indicates that the water is in compliance with TOC removal requirements. A value of less than one (1) indicates a violation of the TOC removal requirements.
AL	Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
TT	Treatment Technique: A required process intended to reduce the level of a contaminant in drinking water.
NTU	Nephelometric Turbidity Unit: A measure of the clarity of water.

NA	Not applicable.
ppm	Parts per million. One part per million corresponds to one penny in one million.
ppb	Parts per billion. One part per billion corresponds to one penny in one billion.
BDL	Below Detectable Levels
<	Symbol for less than.