

2010 Annual Water Quality Report



City of Bexley
PWS ID# 2500103

City of Bexley

559-4270

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What's the Quality of My Water?

The City of Bexley is pleased to share this water quality report with you. It describes to you, the customer, the quality of your drinking water. This report covers January 1 through December 31, 2010. The City of Bexley's water supply surpassed the strict regulations of both the State of Ohio and the U.S. Environmental Protection Agency (EPA), which requires all water suppliers to prepare reports like this every year.

Bexley relies on purchased, pre-treated water from the City of Columbus. The purchased water enters Bexley through two master meters. The City of Columbus has three water sources. The City of Bexley utilizes water from the Hap Cremean Water Plant (HCWP), which uses surface water from the Hoover Reservoir on the Big Walnut Creek. Your water is treated using disinfection and filtration to remove or reduce harmful contaminants that may come from the source water. We have a current, unconditioned license to operate our water system.

The City of Columbus water system, Hap Cremean Water Plant (HCWP), uses surface water from the Big Walnut Creek. This source of water has a relatively high susceptibility to contamination from spills or releases of chemicals. The Big Walnut Creek is susceptible because it is more accessible and less protected from spills than groundwater sources. Potential contaminant sources include industrial activities, storm water run-off from developing areas and a heavily traveled transportation network running alongside and over the water bodies. Run-off from agricultural fields is also a concern in the Big Walnut Creek watershed.

The City of Columbus treats the water to meet drinking water quality standards, but no single treatment protocol can address all potential contaminants. The City has been proactive in pursuing measures to further protect its source waters. More detailed information is provided in the City of Columbus' Drinking Water Source Assessment Report, which can be viewed by calling the Watershed Manager at (614) 645-1721.

FOR MORE INFORMATION about your drinking water and for opportunities to get involved, please contact the Bexley Water Department by calling 559-4270 or by writing to this address: 2242 East Main Street, Bexley, OH 43209. Also, you are welcome and encouraged to attend City Council Meetings on the 2nd and 4th Tuesday of each month at 7 PM at Bexley City Hall in the City Council Chambers (2242 East Main Street). Find out more on the Internet at <http://www.bexley.org>.

**Mayor, John M. Brennan; Water Department Manager, Janet Mercurio;
Service Director, Bill Harvey**

The U.S. Environmental Protection Agency (EPA) wants you to know:

In order to ensure that tap water is safe to drink, the EPA prescribes regulations that 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 that 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 EPA's Safe Drinking Water Hotline (1-800-426-4791).

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:

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 run-off, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.

Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water run-off, and residential uses.

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 run-off, and septic systems.

Radioactive contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities.

2010 Monitoring Results for City of Bexley

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 (1-800-426-4791).

Substances Detected	Unit	MCLG Health Goal	MCL EPA's Limits	Highest Level & Range Detected	Violation (Yes / No)	Year ¹ Sampled	Potential Source
The following results are from tests completed by the City of Columbus, Hap Cremean Water Plant (HCWP)							
Fluoride	ppm	4	4	1.16 0.67 - 1.16	NO	2010	Water additive to promote strong teeth.
Nitrate	ppm	10	10	1.5 ND - 1.5	NO	2010	Agricultural fertilizer run-off.
Simazine	ppb	4	4	0.22 average ND - 0.42	NO	2010	Agricultural herbicide run-off.
Atrazine	ppb	3	3	0.24 average ND - 0.63	NO	2010	Agricultural herbicide run-off.
Total Organic Carbon ³	TT	NA	TT (removal ratio >1)	2.12 LAA 1.71 - 2.97	NO	2010	Naturally present in the environment.
Turbidity ⁴	NTU	NA	TT	0.23 highest	NO	2010	Soil run-off.
				0.02 - 0.23			
				100% of samples met NTU limits			

The following results are from tests completed by the City of Bexley.

Total Chlorine	ppm	4 (MRDLG)	4 (MRDL)	1.41 HARA 0.37 - 2.0	NO	2010	Water additive used to control microbes.
Total Trihalomethanes ² (TTHMs)	ppb	0	80	78.9 HARA 42.1 - 95.7	NO	2010	By-product of drinking water disinfection.
Total Haloacetic Acids (HAA5)	ppb	NA	60	47.8 HARA 11.4 - 59.2	NO	2010	By-product of drinking water disinfection.

Lead and Copper is monitored at home taps.

Contaminant	Unit	MCLG Health Goal	MCL EPA's Limits	Level Detected	Range Detected	Violation (Yes / No)	Year ¹ Sampled	Potential Source of Contamination
Inorganic Contaminants								
Copper	ppm	1.3	1.3 = AL	0.048 (90th percentile)	ND - 0.12	NO	2008	Corrosion of household plumbing systems. Erosion of natural deposits. Leaching from wood preservatives.
				All sites below AL				
Lead	ppb	0	15 = AL	ND (90th percentile)	ND - 3.3	NO	2008	Corrosion of household plumbing systems. Erosion of natural deposits.
				All sites below AL				

Columbus' water is regularly tested for organisms that could be harmful to people – including Cryptosporidium (Crypto), which is a microscopic organism that, when ingested, can result in diarrhea, fever and other gastrointestinal symptoms. Crypto comes from animal waste in the watershed and may be found in our source water. While it is sometimes found in Ohio rivers and streams, Cryptosporidium has NEVER been found in our finished water.

Unregulated and Secondary Contaminants:

Unregulated contaminant monitoring helps the EPA to determine where certain contaminants occur and whether it needs to regulate those contaminants.

Substance	Unit	HCWP (Average and Range)	Year Sampled
pH	su	7.9 7.7 - 8.0	2009
Hardness	ppm	110 99 - 127	2009
Sodium	ppm	19 16 - 26	2009
Chloroform	ppb	28	2010
Bromodichloromethane	ppb	9.1	2010
Dibromochloromethane	ppb	1.7	2010

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 Bexley 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>.

NOTES

¹The state allows us to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data, though accurate, is more than one year old.

²Some people who drink water, containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidney or central nervous system, and may have an increased risk of getting cancer.

³The value reported under "Level Found" for Total Organic Carbon (TOC) is the lowest annual average ratio between the percentage of TOC actually removed and the percentage of TOC required to be removed. A value of greater than one (1) indicates that the water system is in compliance with TOC removal requirements. A value of less than one (1) indicates a violation of the TOC removal requirements.

⁴Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of the effectiveness of our filtration system. The EPA has two requirements: 1) that the maximum level found must be less than 1, and 2) that the level must be under 0.3 NTUs 95% of the time.

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.

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.

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

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

90th Percentile: 90% of samples are equal to or less than the number in the chart.

NTU (Nephelometric Turbidity Units): A measure of clarity.

NA: Not applicable.

SU: Standard Unit.

ND: Not detectable at testing limits.

PPB (parts per billion): micrograms per liter (ug/l).

PPM (parts per million): milligrams per liter (mg/l).

HARA: Highest Annual Rolling Average.

CDC: Centers for Disease Control.

EPA: Environmental Protection Agency.

LAA: Lowest Annual Average.

HCWP: Hap Cremean Water Plant.