

Municipality of West Milton

Drinking Water Quality Report for 2014

PWS ID: OH5501711

The Municipality of West Milton obtains water from the City of Troy and adds fluoride for dental health and additional chlorine is added to insure proper disinfection throughout West Milton's distribution system. Details of the City of Troy's water source and test results can be found in this report. **The Municipality of West Milton has a current, unconditioned license to operate our water system.**

The West Milton Water Treatment Plant treated 120.8016 million gallons of clean, clear drinking water in 2014 and conducted sampling for bacteria and radioactive contaminants as well as routine testing for Fluoride and Chlorine residual. *Listed below are the detected contaminants.*

Substances That Could Be in Water

To ensure that tap water is safe to drink, the U.S. EPA prescribes regulations limiting the amount of certain contaminants in water provided by public water systems. U.S. Food and Drug Administration 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 these contaminants does not necessarily indicate that the water poses a health risk. 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, in some cases, radioactive material, and substances resulting from the presence of animals or from human activity. Substances 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, or wildlife;

Inorganic Contaminants, such as salts and metals, which can be naturally occurring or may result from urban storm water runoff, 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 runoff, and residential uses;

Organic Chemical Contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production and may also come from gas stations, urban storm water runoff, and septic systems;

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

For more information about contaminants and potential health effects, call the U.S. EPA's Safe Drinking Water Hotline at (800) 426-4791.

Water Quality Results for 2014

Regulated Contaminants

SUBSTANCE	MAX DETECTED	RANGE DETECTED	MCL	MCLG	SOURCE OF CONTAMINANT
Fluoride (ppm)	1.35 ppm	.835—1.35 ppm	4 ppm	4 ppm	additive for strong teeth
Total Chlorine	1.84 ppm	0.49—1.84 ppm	4 ppm	4 ppm	water disinfectant
Lead	17.4 ppb	0.0—17.4ppb	<5.0 ppb	0 ppb	household plumbing
Copper	92.5 ppb	0.0—92.5 ppb	1300 ppb	1300 ppb	household plumbing
Haloacetic Acids	8.289 ppb	1.393—3.991 ppb	60 ppb	N/A	by-product of disinfection
Total Trihalomethanes	41.78 ppb	31.62—33.38 ppb	80 ppb	N/A	by-product of disinfection

***EPA required health 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 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).”*

*** IMPORTANT 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 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) or www.epa.gov/safewater/hotline/.

LEAD AND DRINKING WATER 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. West Milton 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 you may wish to have it tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the SAFE WATER HOTLINE (800)426-4791 or www.epa.gov/safewater/lead.

The Village of West Milton does triennial sampling for both lead and copper. The next sampling for both lead and copper is 2016

***public participation**

Public participation and comments are encouraged at regular council meetings of the West Milton Municipal council, which meets the second Tuesday of each month at 7:30 P.M. at the Municipal building, 701 S. Miami Street. In addition, council conducts a workshop, generally the fourth Tuesday of each month at 7:30 P.M. at the Municipal Building. For more information on public meetings, contact the Municipal offices @698-1500, extension 100. For questions regarding this report or West Milton’s water quality, please contact Tim Swartztrauber @ 698-4884.

Susceptibility Analysis Statement from Ohio EPA

The City of Troy’s drinking water comes from a buried valley aquifer which provides limited protection from contaminants infiltrating into the aquifer. Because of this setting, the aquifer that supplies drinking water to the City of Troy is considered to be susceptible to contamination. The available data indicates that very low levels of tetrachloroethylene and trihalomethane have been detected periodically in the water supply. The city’s water supply currently meets drinking water quality standards for all parameters analyzed. The city has developed a comprehensive wellhead protection program to manage potential sources of contamination in the protection area, to minimize any impacts to the aquifer.

BILLING INFORMATION 698-1500-extension 108

WATER TREATMENT 698-4884

THE FOLLOWING WAS OBTAINED FROM THE CITY OF TROY’S 2014 WATER QUALITY REPORT

Where Does My Water Come From?

City of Troy and West Milton customers are supplied by two well fields which draw from the Great Miami Buried Valley Aquifer (GMBVA). This is an enormous water-bearing sand and gravel formation associated with the Great Miami River. The GMBVA extends from north of Troy to the Ohio River, ranging from 30 to 300 feet in depth and from 1 to 3 miles wide. This aquifer is replenished by underground sources, precipitation, and riverbed filtration. The GMBVA is recognized as a “Sole Source Aquifer (SSA)” by the US EPA. This designation applies to aquifers serving as the sole or principal source of drinking water for an area. Troy uses 10 production wells to pump water from this aquifer to the Water Treatment Plant (WTP), located at 300 E. Staunton Rd.

Water Treatment Process

The treatment process begins as well water, with a hardness near 400 ppm, is pumped to the treatment plant on Staunton Road. The water first enters a clarifier, where lime and soda ash are added to reduce hardness, alkalinity, and iron. The lime raises the pH and causes small mineral particles to conglomerate and become heavy enough for settling and removal. This treated water flows to a second clarifier for further settling and removal. The softened water is next stabilized by the addition of carbon dioxide, and chlorine is added as a disinfectant. The water is then filtered through very fine layers of anthracite coal and silicate sand, further removing small, suspended particles. Finally, clean, clear drinking water emerges. This finished water, with a hardness reduced by 70%, flows through the 4 MG WTP reservoir, is pumped to sanitized pipelines and water towers, and then flows to your home or business. Troy has an efficient water treatment operation. Our plant design enables gravity flow to move water through the entire treatment process, greatly minimizing power usage. Leftover calcium carbonate sludge from the softening process is automatically removed and stored in large lagoons, and converted back to usable lime through an agreement with the City of Dayton. Chlorine usage is strictly regulated at levels necessary for public health. In 2014, our treatment facility provided approximately 1.344 billion gallons of drinking water to our customers in Troy, Miami County, and West Milton.

Sampling Results

During the past year we have taken hundreds of water samples in order to determine the presence of any radioactive, biological, inorganic, volatile organic or synthetic organic contaminants. The table below shows only those contaminants that were detected in the water. The state requires us to monitor for certain substances less than once per year because the concentrations of these substances do not change frequently. In these cases, the most recent sample data are included, along with the year in which the sample was taken. The Safe Drinking Water Act requires the US EPA to issue a list of up to 30 new unregulated contaminants, every five years, for which community systems must monitor. We completed the third round of this testing in 2014, performing many additional tests on our water. The intent of this rule is to provide data to help EPA evaluate potential future drinking water regulations. Any UCMR3 detections are shown in the data tables in this report. Contact us for more information on this program.

REGULATED SUBSTANCES

SUBSTANCE UNIT OF MEASURE	YEAR SAMPLED	MCL [MRDL]	MCLG [MRDLG]	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Barium (ppm)	2014	2	2	0.0563	NA	No	Erosion of natural deposits
cis-1,2-Dichloroethylene ¹ (ppb)	2014	70	70	0.085	0–0.51	No	Discharge from industrial chemical factories
Chlorine ² (ppm)	2014	[4]	[4]	0.79	0.22–1.01	No	Water additive used to control microbes
Fluoride ³ (ppm)	2014	4	4	0.46	NA	No	Erosion of natural deposits;
Haloacetic Acids [HAA] Stage 24 (ppb)	2014	60	NA	4.50	1.9–4.5	No	By-product of drinking water disinfection
Nitrate (ppm)	2014	10	10	0.22	NA	No	Runoff from fertilizer use;
TTHMs [Total Trihalomethanes] Stage 24 (ppb)	2014	80	NA	23.63	12.7–35.0	No	By-product of drinking water chlorination needed to kill harmful organisms.
Tetrachloroethylene ¹ (ppb)	2014	5	0	0.215	0–0.96	No	Discharge from factories

SECONDARY SUBSTANCES

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	SMCL	MCLG	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Total Dissolved Solids [TDS] (ppm)	2014	500	NA	260	NA	No	Runoff/leaching from natural deposits

UNREGULATED SUBSTANCES

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AMOUNT DETECTED	RANGE LOW-HIGH	TYPICAL SOURCE
Bromodichloromethane (ppb)	2014	6.1	4–10.7	By-product of disinfection, component of The Total Trihalomethanes (TTHMs) shown above in Regulated Substance table
Bromoform (ppb)	2014	2	1.5–3.2	
Chloroform (ppb)	2014	4.5	2.2-11.1	
Dibromochloromethane (ppb)	2014	6.1	4.6–10.1	

UNREGULATED CONTAMINANT MONITORING RULE 3 (UCMR3) RESULTS

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AMOUNT DETECTED	RANGE LOW-HIGH	TYPICAL SOURCE
Chromium-6 WTP (ppb)	2014	0.027	0–0.053	Plants, soil, water
Chromium-6 Distribution System (ppb)	2014	0.026	0–0.052	Plants, soil, water
Molybdenum–WTP (ppb)	2014	8.66	8.55–8.78	Rocks and soil
Molybdenum-Distribution System (ppb)	2014	9.34	8.5–10.1	Rocks and soil
Strontium–WTP (ppb)	2014	732	280–1,183	Air, dust, soil
Strontium- Distribution System (ppb)	2014	882	306–1,458	Air, dust, soil
Vanadium-Distribution System (ppb)	2014	0.119	0–0.238	Minerals, fossil fuel Deposits

Definitions

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

MCL (Maximum Contaminant Level): 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.

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 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.

NA: Not applicable

ppb (parts per billion): One part substance per billion parts water (or micrograms per liter).

ppm (parts per million): One part substance per million parts water (or milligrams per liter).

SMCL (Secondary Maximum Contaminant Level): SMCLs are established to regulate the aesthetics of drinking water like taste and odor.

¹ The value of 0.79 as the Amount Detected is the highest quarterly running annual average of the TOTAL CHLORINE measured in the routine bacteria samples taken 30 times a month from the City of Troy distribution system, January 1, 2014-December 31, 2014.

² This is the amount of fluoride naturally occurring in the City of Troy raw well water, and remains in the finished water after treatment. The City of Troy does not add fluoride during the treatment process.

³ Amount Detected is highest compliance value from Quarterly Locational Running Annual Averages. Values derived from all samples April 2013-December 2014.

⁴ Unregulated Substances Amount Detected values are averages of all 2014 sampling.

TIP TOP TAP

The most common signs that your faucet or sink is affecting the quality of your drinking water are discolored water, sink or faucet stains, a buildup of particles, unusual odors or tastes, and a reduced flow of water. The solutions to these problems may be in your hands.

Kitchen sink and drain

Hand washing, soap scum buildup, and the handling of raw meats and vegetables can contaminate your sink. Clogged drains can lead to unclean sinks and backed up water in which bacteria (i.e., pink and black colored slime growth) can grow and contaminate the sink area and faucet, causing a rotten egg odor. Disinfect and clean the sink and drain area regularly. Also, flush regularly with hot water.

Faucets, screens, and aerators

Chemicals and bacteria can splash and accumulate on the faucet screen and aerator, which are located on the tip of faucets and can collect particles like sediment and minerals resulting in a decreased flow from the faucet. Clean and disinfect the aerators or screens on a regular basis. Check with your plumber if you find particles in the faucet's screen as they could be pieces of plastic from the hot water heater's dip tube. Faucet gaskets can break down and cause black, oily slime. If you find this slime, replace the faucet's gasket with a higher-quality product. White scaling or hard deposits on faucets and shower heads may be caused by hard water or water with high levels of calcium carbonate. Clean these fixtures with vinegar or use water softening to reduce the calcium carbonate levels for the hot water system.

Water filtration/treatment devices

A smell of rotten eggs can be a sign of bacteria on the filters or in the treatment system. The system can also become clogged over time so regular filter replacement is important.

(Remember to replace your refrigerator filters!)