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City of Fostoria
213 S. Main St.
Fostoria, OH 44830



CITY OF FOSTORIA

PWS ID# OH7400411

2009 Annual Water Quality Report

City of Fostoria
419-435-2793
PWS ID #OH7400411

What's the Quality of My Water?

The City of Fostoria 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, 2009. The City of Fostoria's drinking water supply strived to comply with 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.

In 2009 our water department distributed 747.83 million gallons of water to our customers. We have a current, unconditioned license to operate our water system. The City of Fostoria's public water system uses surface water drawn from the East Branch of the Portage River. The system also has three groundwater wells that serve as a back up water source for the city.

Historically, the Fostoria public water system has treated the source water effectively to meet drinking water standards. The potential for water quality impacts can be further decreased by implementing measures to protect the East Branch of the Portage River and the local aquifer. We have a completed Source Water Assessment Plan that shows our susceptibility to contamination as HIGH. Surface waters are by their nature susceptible to contamination, and numerous potential sources along their banks make them more so. The protection areas around the East Branch of the Portage River and the well field include some urbanized areas and contain a moderate number of potential contaminant sources including agricultural run-off, inadequate septic systems, leaking underground storage tanks, and road and rail bridge crossings. **If a system is rated highly susceptible, it does not mean a customer is or will be consuming contaminated drinking water. The rating reflects the potential for contamination of source water, not the existence of contamination.** More detailed information is provided in the City of Fostoria's Source Water Assessment Report, which can be obtained by contacting Ron Fauls, Water Plant Superintendent, by phoning (419) 435-2793, faxing (419) 435-2354, or by writing to this address: 213 S. Main Street; Fostoria, OH 44830.

Your water is treated by using disinfection and filtration to remove or reduce harmful contaminants that may come from the source water. The water is treated with a six step process. Chemicals are mixed with the raw water to minimize odor, taste, and organic compounds. Aluminum sulfate is added to coagulate water (solid particles clump together). Then the "clumped" particles are allowed to settle. The water is then filtered to remove particles that did not settle. Water is chlorinated to disinfect. The last treatment process is the addition of fluoride compounds to promote strong and healthy teeth.

If you have any questions about this report or concerning your water quality, please contact Ron Fauls, Water Plant Superintendent, by calling (419) 435-2793, faxing (419) 435-2354, or by writing to this address: 213 S. Main Street; Fostoria, OH 44830. We want our valued customers to be informed about their water quality. You can attend regular City Council meetings on the first and third Tuesdays of each month at 7:30 p.m. in the Municipal Building at 213 S. Main Street.

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

In order to ensure that tap water is safe to drink, 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.

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 Fostoria 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>.

2009 Monitoring Results for the City of Fostoria

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).

Contaminant	Unit	MCLG Health Goal	MCL EPA's Limits	Highest Level Detected	Range Detected	Violation (YES / NO)	Year 2 Sampled	Potential Source of Contamination
Microbiological Contaminants								
Total organic carbon	ppm	NA	TT	2.08 LARA	1.96 - 2.32	NO	2009	Naturally present in the environment.
The value reported under "Level Found" for Total Organic Carbon (TOC) is the annual running average of the ratio between 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 system is in compliance with TOC removal requirements. A value of less than one (1) indicates a violation of the TOC removal requirements.								
Turbidity ¹	NTU	NA	TT = 1 NTU	3.27 highest	0.04 - 3.27	YES	2009	Soil Runoff.
			95% of samples must be less than 0.3 NTU	97.69% met 0.3 NTU limits				
Inorganic Contaminants								
Barium	ppm	2	2	0.023	NA	NO	2009	Discharge of drilling wastes. Discharge from metal refineries. Erosion of natural deposits.
Copper	ppm	1.3	1.3 = AL	0.037 (90th percenitle)	All sites below AL	NO	2008	Corrosion of household plumbing systems. Erosion of natural deposits. Leaching from wood preservatives.
Fluoride	ppm	4	4	0.96 average	0.79 - 1.22	NO	2009	Erosion of natural deposits. Water additive to promote strong teeth. Discharge from fertilizer and aluminum factories.
Lead	ppb	0	15 = AL	less than 2.0 (90th percentile)	One site above AL	NO	2008	Corrosion of household plumbing systems. Erosion of natural deposits.
Nitrate	ppm	10	10	2.23	0.34 - 2.23	NO	2009	Runoff from fertilizer use. Leaching from septic tanks, sewage. Erosion of natural deposits.
Residual Disinfectants								
Chlorine	ppm	MRDLG = 4	MRDL = 4	1.24 HQA	1.01 - 1.26	NO	2009	Water additive used to control microbes.
Volatile Organic Contaminants								
1, 2, 4 - Trichlorobenzene	ppb	70	70	1.4	NA	NO	2009	Discharge from textile-finishing factories.
Haloacetic Acids (HAA5)	ppb	NA	60	16.5 HARA	11.0 - 18.1	NO	2009	Byproduct of drinking water chlorination.
Total Trihalomethanes (TTHMs)	ppb	0	80	43.9 HARA	25.1 - 57.9	NO	2009	Byproduct of drinking water chlorination.
IDSE HAA5 ³	ppb	NA	NA	NA	7.7 - 18.0	NO	2009	Byproduct of drinking water chlorination.
IDSE TTHM ³	ppb	NA	NA	NA	13.9 - 63.6	NO	2009	Byproduct of drinking water chlorination.

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 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 can also come from gas stations, urban storm water runoff, and septic systems. *Radioactive contaminants*, which can be naturally occurring or be the result of oil and gas production and mining activities.

NOTES:

¹Turbidity 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 turbidity limit set by the EPA is (0.3 NTU) in 95% of the daily samples and shall not exceed 1.0 NTU at any time.

²The 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, are more than one year old.

³Under the Stage 2 Disinfectants/Disinfection By-products 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 by-products are the result of providing continuous disinfection of your drinking water and from when disinfectants combine with organic matter naturally-occurring in the source water. Disinfection by-products are grouped into two categories, Total Trihalomethanes (TTHM) and Haloacetic Acids (HAA5). USEPA sets standards for controlling the levels of disinfectants and disinfectant by-products in drinking water, including both TTHMs and HAA5s.

VIOLATION INFORMATION:

On February 9, 2009, the turbidity of the combined filter effluent exceeded 1 NTU which is a treatment technique violation. Public notification of a boil advisory was issued as soon as practical and within 24 hours of discovering the violation. On February 10, 2009, the boil advisory was rescinded upon attaining compliance and verification data was collected from representative consumer taps throughout the distribution system.

Mechanical failure and operator error resulted in exceeding the turbidity limits. To prevent future violations, the water plant's filter control system has been replaced with an entirely new computerized control system. Operators have been trained, and they are proficient using the new control system. Turbidity has remained in compliance since February, 2009.

Turbidity has no health effects. However, turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease-causing organisms. These organisms include bacteria, viruses, and parasites that can cause such symptoms as nausea, cramps, diarrhea, and associated headaches.

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 or 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 or 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 (or AL): The concentration of a contaminant, which, if exceeded, triggers treatment or other requirements, which a water system must follow. **Treatment Technique (or 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 (or Nephelometric Turbidity Units): A measure of clarity.

NA: Not applicable.

ND: Not detectable at testing limits.

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

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

HARA: Highest Annual Rolling Average.

LARA: Lowest Annual Running Average.

HQA: Highest Quarterly Average.

IDSE: Initial Distribution System Evaluation.

CDC: Centers for Disease Control.

EPA: Environmental Protection Agency.

Non-Regulated Substances: Unregulated contaminant monitoring helps EPA to determine where certain contaminants occur and whether it needs to regulate those contaminants. All results are from the 2009 monitoring year, unless otherwise noted ².

Substance	Unit	Average Detected
Bromodichloromethane	ppb	4.9
Chloroform	ppb	20.0
Dibromochloromethane	ppb	1.6