

2020

City of Sidney, Ohio Drinking Water Consumer Confidence Report 2024



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City of Sidney
Drinking Water Consumer Confidence Report for 2024

What is the source of your drinking water?

The City of Sidney's public water system receives its water from both ground water and surface water sources. The surface water sources are drawn from intakes on Tawawa Creek and the Great Miami River. The ground water sources comes from two wellfields; one wellfield along the Great Miami River and the other from the Washington Township wellfield. Having multiple sources of water allows for the selection of water from any source, or combination of sources, to achieve the required volume and best quality.

Surface waters are, by their nature, susceptible to contamination, and numerous potential contaminant sources along their banks further increasing potential risk of contamination. The aquifer that supplies the Washington Township wellfield has a shallow depth to ground water ratio. The potential contaminant sources within the protection areas for Tawawa Creek, the Great Miami River and the wells along the Great Miami River includes sources such as agricultural run-off, septic systems, and road and rail bridge crossings. As a result, the drinking water supplied to the City of Sidney's public water system is considered to have a high susceptibility to contamination.

This susceptibility means that under current conditions, the likelihood of the source becoming contaminated is relatively high. However, this risk can be minimized by implementing appropriate protective measures. Historically, the Sidney public water system has effectively treated this source water to meet drinking water quality standards. For more information about the source water assessment or to learn what consumers can do to help protect the aquifer, contact Seth Epley at 937-498-8180.

What are Sources of Contamination to 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 treatment plants, septic systems, agricultural livestock operations, and wildlife; (B) Inorganic contaminants, such as salts and metals, which can be naturally-occurring or result from urban storm 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 byproducts of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff, and septic systems; and (E) Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, the United States Environmental Protection Agency (USEPA) prescribes regulations, which limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration (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 USEPA Safe Drinking Water Hotline (1-800-426-4791).

Who Needs To Take Special Precautions?

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 immune system disorders, some elderly, and infants can be particularly at risk from infection. These people should seek advice about drinking water from their health care providers. USEPA/Center for Disease Control and Prevention (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)

About your drinking water

The USEPA requires regular sampling to ensure drinking water safety. The City of Sidney conducted sampling for bacteria, inorganics, synthetic organic, volatile organic, nitrate, total organic carbon, total microcystins, cyanobacteria and disinfection byproducts during 2024. Samples were collected for 44 different contaminants, most of which were not detected in the City of Sidney water supply. The Ohio EPA requires 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.

In 2024, The City of Sidney had an unconditioned license to operate our water system.

Table of Detected Contaminants

How to read the Water Quality Data Table: EPA establishes the safe drinking water regulations that limit the amount of contaminants allowed in drinking water. The table shows the concentrations of detected substances in comparison to regulatory limits. Substances that were tested for, but not detected, are not included in this table.

Listed on the following page is information on those contaminants that were found in the City of Sidney drinking water.

Contaminants (Units)	MCLG	MCL	Level Found	Range of Detections	Violation	Sample Year	Typical Source of Contaminants	
Disinfectant and Disinfectant By-Products								
Total Chlorine (ppm)	MRDLG = 4	MRDL = 4	1.68	1.61-1.68	No	2024	Water additive used to control microbes	
Haloacetic Acids (HAA5) (ppb)	N/A	60	20.85	10.4-30.2	No	2024	By-product of drinking water disinfection	
Total Trihalomethanes (TTHM) (ppb)	N/A	80	80.15	27.2-122	Yes	2024	By-product of drinking water disinfection	
Microbiological Contaminants								
Turbidity (NTU)	NA	TT	0.27	.05 - .92	NO	2024	Soil runoff	
Turbidity (% meeting standard)	NA	TT	100%	100%	NO	2024		
Inorganic Contaminants								
Fluoride (ppm)	4	4	1.24	.8-1.24	No	2024	Erosion of natural deposits; Water	
Barium (ppm)	2	2	0.11	NA	No	2024	Discharge of drilling wastes;	
Nitrate (ppm)	10	10	4	.49-5.64	No	2024	Run off from fertilizer use, Leaching	
Lead and Copper								
Contaminants (units)	Action Level (AL)	MCLG	Individual Results over the	90th Percentile	Violation	Year Sampled	Typical source of Contaminants	
Lead (ppb)	15 ppb	0 ppb	NA	0	No	2023	Corrosion of household plumbing systems; erosion of natural deposits	
	0 out of 30 samples were found to have lead levels in excess of the lead action level of 15 ppb.							
Copper (ppm)	1.3 ppm	1.3 ppm	NA	0.009	No	2023	Erosions of natural deposits; leaching from wood preservatives; Corrosions of household plumbing systems	
	0 out of 30 sampleswere found to have copper levels in excess of the copper action level of 1.3 ppm.							
Total Organic Carbon (TOC)								
MCL	Minimum ratio of % removal to		Level Found	Range of Monthly Ratios		Violation	Year Sampled	Typical Source of Contaminant
TT	1		2.91	2.72-5.01		No	2024	Naturally present in the environment.

Turbidity

Turbidity is a measure of the cloudiness of water and is an indication of the effectiveness of our filtration system. The Turbidity limit set by the EPA is 0.3 NTU in 95% of the daily samples for the month and shall not exceed 1 NTU at any time. As reported above, the City of Sidney's highest recorded turbidity result for 2024 was 0.27 NTU and lowest monthly percentage of samples meeting the turbidity limits was 100%.

Violations

The City of Sidney received a violation notice for exceeding the maximum contaminant level (MCL) standard of 0.080 mg/L as established in the Ohio Administrative Code (OAC) section 3745-81 for TTHM. Compliance with the MCL is based on a rolling 12-month average. The rolling average for TTHM during the Fourth Quarter of 2024 time period was 0.088 mg/L. The notice of violation was received on November 4, 2024.

Some people who drink water containing trihalomethanes in excess of the MCL, over many years, may experience problems with their liver, kidneys, or central nervous systems and may have an increased risk of getting cancer. The City of Sidney is taking steps to address this issue, which includes increased flushing of key sections of the distribution system, optimizing water tower turnover rates, exploring additional process control testing and evaluating source water conditions to help prevent future exceedance from occurring.

Nitrate

Nitrate in drinking water at levels above 10 ppm is a health risk for infants less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant, you should ask advice from your health care provider.

Lead Educational Information

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 Sidney Water Treatment Plant 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 at 800-426-4791 or at <http://www.epa.gov/safewater/lead>.

The City of Sidney, like many other communities, was required to develop a service line inventory detailing the type of water service line (e.g., lead, galvanized, or unknown) for each property connected to the water system. A service line is the pipe that connects a home or building's interior plumbing to the City's water main. While the City has completed the initial inventory, efforts are still underway to identify all unknown service lines within the community.

You, as a customer, can help with this process by reporting the customer-owned portion of the service line. To do so, you can contact the City Water Department at 937-498-8117 or by email at serviceline@sidneyoh.com. For guidance on how to identify your service line material, please visit the City's website at www.sidneyoh.com.

The City's service line inventory report is available for review at the Service Center, located at 415 S. Vandemark Road, from 8:00 am to 4:00 pm, Monday through Friday. Customers can also call the Water Department at 937-498-8117 to inquire about the service line material type recorded for their property.

PFAS Information

Per- and polyfluoroalkyl substances (PFAS) are a group of man-made chemicals applied to many industrial, commercial and consumer products to make them waterproof, stain resistant, or nonstick. PFAS are also used in products like cosmetics, fast food packaging, and a type of firefighting foam called aqueous film forming foam (AFFF) which are used mainly on large spills of flammable liquids, such as jet fuel. PFAS are classified as contaminants of emerging concern, meaning that research into the harm they may cause to human health is still ongoing. All testing to date has shown no detections that require further analysis. For more information on PFAS, including the health effects of PFAS, PFAS in drinking water, water testing and treatment, and other PFAS activities in Ohio, visit the Ohio PFAS webpage here: pfas.ohio.gov. For more information on PFAS and your health, contact the ODH Health Assessment Section at BEH@odh.ohio.gov or at (614) 728-9452.

How Do I Participate in Decisions Concerning My Drinking Water?

Public participation and comment are encouraged at regular meetings of City Council which meets regularly on the second and fourth Monday of each month at 5:30 pm in the Council Chambers at City Hall located at 201 W. Poplar Street. Comments and concerns can also be directed to the WTP Superintendent, at (937) 498-8180; or the Utilities Director, at (937) 498-8152.

Definitions of some terms contained within this report.

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 contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

Maximum Residual Disinfectant Level (MRDL): The highest residual disinfectant level allowed.

Maximum Residual Disinfectant Level Goal (MRDLG): The level of residual disinfectant below which there is no known or expected risk to health.

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.

Parts per Million (ppm): Units of measure for concentration of a contaminant. A ppm corresponds to one second in approximately 11.5 days.

Parts per Billion (ppb): Units of measure for concentration of a contaminant. A ppb corresponds to one second in 31.7 years.

Practical Quantitation Limit (PQL): The value that we refer to as the detection limit and is the value at which we can distinguish the difference between two results with 99% confidence. Any value generated by the method which is below the PQL will be included on the lab report as result of < PQL.

The “<” symbol: A symbol which means less than. A result of <5 means that the lowest level that could be detected was 5 and the contaminant in that sample was not detected.

Picocuries per liter (pCi/L): A common measure of radioactivity.

LRAA: Locational Running Annual Average.

ND: Non-detect (below detectible limit)

Microcystins: Liver toxins produced by a number of cyanobacteria. Total microcystins are the sum of all the variants/congeners (forms) of the cyanotoxin microcystin.

Cyanobacteria: Photosynthesizing bacteria, also called blue-green algae, which naturally occur in marine and freshwater ecosystems, and may produce cyanotoxins which at sufficiently high concentrations can pose a risk to public health.

PFAS: Per- and polyfluoroalkyl substances (PFAS) are a group of man-made chemicals applied to many industrial, commercial and consumer products to make them waterproof, stain resistant, or nonstick. PFAS are also used in products like cosmetics, fast food packaging, and a type of firefighting foam called aqueous film forming foam (AFFF) which are used mainly on large spills of flammable liquids, such as jet fuel. PFAS are classified as contaminants of emerging concern, meaning that research into the harm they may cause to human health is still ongoing.

Backflow Prevention and Cross-Connection Control

Protecting our Public Water System

What is a cross-connection?

Any physical connection created between a possible source of contamination and any drinking water system piping.

What is backflow?

It is the flow through a cross-connection from a possible source of contamination back into the drinking water system. It occurs when a cross-connection is created and a pressure reversal, either as backsiphonage or backpressure, occurs in the water supply piping.

Why be concerned?

- ALL cross-connections pose a potential health risk.
- Backflow can be a health hazard for your family or other consumers if contaminated water enters your water supply plumbing system and is used for drinking, cooking or bathing. Chemical burns, fires, explosions, poisonings, illness and death have all been caused by backflow through cross-connections.
- Backflow occurs more often than you think.
- You are legally responsible for protecting your water supply plumbing from backflow that may contaminate drinking water, either your own or someone else's. This includes complying with the plumbing code and not creating cross-connections.

What causes backsiphonage?

Backsiphonage occurs when there is a loss of pressure in a piping system. This can occur if the water supply pressure is lost or falls to a level lower than the source of contamination. This condition, which is similar to drinking from a glass with a straw, allows liquids to be siphoned back into the distribution system

What causes backpressure?

Backpressure occurs when a higher opposing pressure is applied against the public water system's pressure. This condition allows undesirable gases or liquids from another system to enter the drinking water supply. Any pumping system (such as a well pump) or pressurized system (such as steam or hot water boilers) can exert backpressure when cross-connected with the public water system.

What are some common backflow hazards that threaten the homeowner and other consumers?

- Hose connections to chemical solution aspirators to feed lawn and shrub herbicides, pesticides or fertilizers.
- Lawn irrigation systems.
- Chemically treated heating systems.
- Hose connections to a water outlet or laundry tub.
- Swimming pools, hot tubs, spas.
- Private and/or non-potable water supplies located on the property.
- Water-operated sump drain devices.

- Feed lots/livestock holding areas or barnyards fed through pipes or hoses from your water supply plumbing.

What are examples of cross-connection and backflow scenarios?

- Soapy water or other cleaning compounds backsiphon into the water supply plumbing through a faucet or hose submerged in a bucket or laundry basin.
- Pool water backsiphons into the water supply plumbing through a hose submerged in a swimming pool.
- Fertilizers/pesticides backsiphon into the water supply plumbing through a garden hose attached to a fertilizer/pesticide sprayer.
- Chemicals/pesticides and animal feces drawn into the water supply plumbing from a lawn irrigation system with submerged nozzles.
- Bacteria/chemicals/additives in a boiler system backsiphon into the water supply plumbing.
- Unsafe water pumped from a private well applies backpressure and contaminates the public water supply through a connection between the private well discharge and the potable water supply plumbing

What can I do?

- Be aware of and eliminate cross-connections.
- Maintain air gaps. Do not submerge hoses or place them where they could become submerged.
- Use hose bib vacuum breakers on fixtures (hose connections in the basement, laundry room and outside).
- Install approved, testable backflow preventers on lawn irrigation systems.

Do not create a connection between an auxiliary water system (well, cistern, body of water) and the water supply plumbing.

What must be done to protect the public water system?

The public water supplier must determine potential and actual hazards. If a hazard exists at a customer's public water supply service connection, the customer will be required to install and maintain an appropriate backflow preventer* at the meter and/or at the source of the hazard.

*Check with your water supplier to verify which backflow preventer is required before purchase or installation.

Who is responsible?

In Ohio, the responsibility for preventing backflow is divided. In general, state and local plumbing inspectors have authority over plumbing systems within buildings while Ohio EPA and water suppliers regulate protection of the distribution system at each service connection.

Water customers have the ultimate responsibility for properly maintaining their plumbing systems. It is the homeowner's or other customer's responsibility to ensure that cross-connections

are not created and that any required backflow preventers are tested yearly and are in operable condition.

What is the law?

Ohio Administrative Code Chapter 3745-95 requires the public water supplier to protect the public water system from cross-connections and prevent backflow situations. The public water supplier must conduct cross-connection control inspections of their water customers' property to evaluate hazards. Local ordinances or water department regulations may also exist and must be followed in addition to state regulations. If a potential or actual cross-connection contamination hazard is identified, the customer will be required to eliminate the hazard and/or install an appropriate backflow preventer at the service connection and/or at the hazard.

Special Conditions

Auxiliary Water Systems

What is an auxiliary water system?

It is any water system on or available to your property other than the public water system. Used water or water from wells, cisterns or open reservoirs that are equipped with pumps or other sources of pressure, including gravity are examples.

What protection is required?

- The auxiliary water system must be completely separated from water supply plumbing served by a public water system; and
- An approved backflow preventer must be installed at the service connection (where the public water system connects to the customer's plumbing system).
OR
- The auxiliary water system must be eliminated.

Are there exceptions?

At their discretion, the water supplier may waive the requirement for a backflow preventer at the service connection if all the following conditions are met:

- All components of the auxiliary water system, including pumps, pressure tanks and piping, are removed from the premises, which are defined as all buildings, dwellings, structures or areas with water supply plumbing connected to the public water system.
- The possibility of connecting the auxiliary water system to the water supply plumbing is determined by the water supplier to be extremely low.
- No other hazards exist.
- The customer enters into a contract with the water supplier, as described below.

The contract will require the customer:

- To understand the potential hazard of a cross-connection.

- To never create a cross-connection between the auxiliary water system and the public water system.
- To allow an inspector to survey their property for hazards as long as the contract is in effect.
- To face loss of service and other penalties if the contract is violated.

The water supplier must perform an annual inspection of the customer's contract-regulated property to verify the conditions have not changed, which would warrant installation of a backflow preventer. The water supplier must, by law, do everything reasonably possible to protect the water system from contamination.

Booster Pumps

What is the concern?

Booster pumps connected to plumbing systems or water mains can cause backsiphonage by reducing the water mains. The following requirements are in place to help prevent backsiphonage:

- Booster pumps, not used for fire suppression, must be equipped with a low suction cut-off switch that is tested and certified every year;
- Alternately, when a booster pump is necessary for one-, two- and three-family dwellings, it is preferred that the booster pump draw from a surge tank filled through an air gap;
- Booster pumps, used in a fire suppression system, must be equipped with either a low suction throttling valve on the discharge side or be equipped with a variable speed suction limiting control system. Low-pressure cut-off devices will suffice for fire pumps installed prior to August 8, 2008, until a significant modification is warranted, at which point the minimum pressure sustaining method must be updated. Each of these methods must be tested and certified each year.

Contacts

Questions concerning backflow prevention and cross-connection control may be directed to the Shelby County Health Department **(937) 498-7249**, the City of Sidney Utilities Director **(937) 498-8152**, or the Ohio EPA District Office that services Shelby County **(937) 285-6357**.

Questions regarding internal plumbing in the home may be directed to your local plumbing authority or to the Ohio Department of Commerce, Plumbing Administrator, at **(614) 644-3153**.