

Swanecreek Water District # 1 2021 Drinking Water Consumer Confidence Report

To comply with the Safe Drinking Water Act, Swanecreek Water District 1 has prepared the following report on monitoring performed on its drinking water. The purpose of this report is to advance consumers understanding of drinking water and heighten awareness of the need to protect water resources. Included within this report are general health information; water quality test results; and how to participate in decisions concerning your drinking water and contacts. We have a current, unconditioned license to operate our water system.

Swanecreek Water District 1 Water Source

Swanecreek Water District 1 purchases its drinking water from Fulton County. Fulton County receives its water from the City of Toledo. The City of Toledo draws its water from Lake Erie. Water is then treated at Toledo's water treatment plant. From there it is distributed to the customers through a piping network. Swanecreek Water District 1 receives the finished water via 12-inch main at Rd 5 and F, where it is metered and redistributed throughout Swanecreek Water District 1. In an effort to maintain and supply the customers with the safest possible product, Swanecreek Water District 1 conducts daily monitoring of the disinfectant levels in the water at a representative location.

Sources of Drinking Water Contamination

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 water 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 ensure 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 call the Environmental Protection Agency's Safe Drinking Water Hotline (1-800-426-4791).

Source Water Susceptibility

The Ohio EPA has completed a Source Water Assessment for the City of Toledo, which uses surface water drawn from Lake Erie. By their nature, all surface waters are considered to be susceptible to contamination from chemicals and pathogens. The time it would take for a contaminant to travel from our source water to our drinking water intake is relatively short. Although the water system's main intake is located offshore, its proximity to the following increases the susceptibility of the source water to contamination: municipal sewage treatment plants; industrial wastewater; combined sewer overflows; septic system discharges; open water dredge disposal operations; runoff from agricultural and urban areas; oil and gas production; mining operations; accidental releases and spills especially from commercial shipping operations and recreational boating. The City of Toledo treats its water to meet and even surpass drinking water quality standards, but no single treatment protocol can address all potential contaminants. The potential for water quality impacts can be further decreased by implementing measures to protect Lake Erie. More detailed information is provided in the City of Toledo's Drinking Water Source Assessment Report, which can be obtained by calling 419-936-3021 or at <https://toledo.oh.gov/services/public-utilities/water-treatment/drinking-water-quality-information/> or contact Ohio EPA at 419-373-3097.

Your Health and Drinking Water

Some people may be more vulnerable to contaminants in drinking water than the general population- Immunocompromised 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 infections by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).

Swanecreek Water District 1 Water Quality

EPA establishes the safe drinking water regulations that limit the amount of contaminants allowed in drinking water. The tables below show the concentrations of detected substances in comparison to regulatory limits. Substances that were tested for, but not detected, are not included in the tables below. EPA requires Swanecreek Water District 1 to conduct regular water sampling for disinfectant, bacteria, lead, copper and disinfections byproducts to ensure drinking water safety. Listed below are the contaminants that were found in Swanecreek Water District 1 drinking water.

Contaminant (Unit)	MCLG	MCL	Level Found	Range of Detection	Sites >AL	Violation	Sample Year	Likely Source of Contamination
Volatile Organic								
TTHM (ppb)	NA	80	40.0	70-89	NA	No	2021	By-product of drinking water disinfection
HAA5 (ppb)	NA	60	5	8.9-11.9	NA	No	2021	By-product of drinking water disinfection
Inorganic								
Lead (ppb)	0	AL 15	<4 90 th percentile	<4	1	No	2021	Corrosion of household plumbing system; Erosion of natural deposits
	0 out of 5 samples were found to have lead levels in excess of the lead action level of 15 ppb.							
Copper (ppm)	1.3	AL 1.3	0.044 90 th percentile	<0.004 – 0.047	0	No	2021	Corrosion of household plumbing system; Erosion of natural deposits
	0 out of 5 samples were found to have copper levels in excess of the copper action level of 1.3 ppm.							
Residual Disinfectant								
Total Chlorine (ppm)	MRDLG 4.0	MRDL 4.0	1.08	0.93 – 1.13	NA	No	2021	Additive used to control microbes

In addition to Swancreek Water District 1 sampling, Fulton County conducts regular water sampling of its water prior to delivery to Swancreek Water District 1 for disinfectant and bacteria. During the sampling period of 2021, contaminants were not found in Fulton County drinking water. Furthermore, City of Toledo conducts regular water sampling of its water prior to delivery to Fulton County for disinfectant, disinfections byproducts, bacteria, inorganic, radiological, synthetic organic, and volatile organic contaminants. Listed below are the contaminants that were found in Toledo drinking water.

Contaminant (Unit)	MCLG	MCL	Level Found	Range of Detection	Violation	Sample Year	Likely Source of Contamination
Inorganic							
Fluoride (ppm)	4	4	1.12	1.04 – 1.19	No	2021	Erosion of natural deposits; water additive which promotes strong teeth; and discharge from fertilizer and aluminum factories
Nitrate (ppm)	10	10	2.88	<0.2 – 2.88	No	2021	Runoff from fertilizer use; erosion of natural deposits; leaching from septic tanks
Chlorite (ppm)	0.8	1.0	0.18	<0.10 – 0.19	No	2021	By-product of drinking water disinfection
Sodium (ppm)	NA	NA	15.96	10.76 – 26.35	No	2021	Erosion of natural deposits
Microbiological							
Turbidity (NTU)	NA	TT	0.11	0.04-0.22	No	2021	Soil runoff, suspended matters in lake water
TOC	NA	TT	2.07	1.87 – 2.63	No	2021	Naturally present in the environment
Other							
Microcystin (ppb)	Threshold - Note Below		ND	ND	No	2020	Toxin produced by harmful algal blooms
PFAS	See Note Below		ND	ND	No	2020	Man-made chemicals
Chlorine Dioxide (ppm)	0.8	0.8	0.3	<0.2 – 0.3	No	2021	Additive used to control microbes
Alpha (pCi/l)	0	15	<3	NA	No	2018	Erosion of natural deposits
Radium (pCi/l)	0	5	<1	NA	No	2018	Erosion of natural deposits
Atrazine (ppb)	3	3	0.18	NA	No	2017	Runoff from herbicide used on row crops
Simazine (ppb)	4	4	ND	NA	No	2016	Runoff from herbicide used on row crops

The City of Toledo participated in EPA Unregulated Contaminant Monitoring Rule (UCMR 4) to monitor for contaminants for which EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is warranted. In 2018, Toledo water system participated in the fourth round of the Unregulated Contaminant Monitoring Rule (UCMR 4), results shown below. Information about these contaminants can be found at <https://www.epa.gov/dwucmr/fourth-unregulated-contaminant-monitoring-rule>.

Contaminant (Unit)	MCLG	MCL	Level Found	Range of Detection	Violation	Sample Year	Sample Location
Manganese (ppb)	NA	NA	0.478	<0.4 – 0.777	No	2018	Distribution System
Haloacetic Acids (HAA5) (ppb)	NA	NA	12.9	5.26 – 17.54	No	2018	Distribution System
Haloacetic Acids (HAA6br) (ppb)	NA	NA	11.22	1.72 – 14.37	No	2018	Distribution System
Haloacetic Acids (HAA9) (ppb)	NA	NA	20.81	9.4 – 26.47	No	2018	Distribution System

Definitions

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.

MCL – Maximum Contaminant Level: 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.

PPM – Parts per Million or Milligram per Liter (mg/l): are units of measure for concentration of a contaminant.

PPB – Parts per Billion or Micrograms per Liter (ug/l) are units of measure for concentration of a contaminant.

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

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

> – A symbol, which means greater than or number of samples above an Action Level.

ND – Not Detectable

pCi/l – Picocuries per Liter (measure of radioactivity)

NTU – Nephelometric Turbidity Unit: is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

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

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.

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.

TTHM – Total Trihalomethanes. The level detected is the highest annual average. MCL compliance is based on the highest annual average.

HAA5 – Haloacetic Acids. The level detected is the highest annual average. MCL compliance is based on the highest annual average.

TOC – Total Organic Carbon.

Turbidity

Turbidity is a measure of the cloudiness of water and is an indication of the effectiveness of the Toledo's filtration system. The turbidity limit set by the EPA is 0.3 NTU in 95% of the daily samples and shall not exceed 1 NTU at any time. In 2021, 100% of the daily samples were below 0.3 NTU.

TOC

The value reported under "Level Found" for TOC is the lowest running annual average ratio between the percent of TOC actually removed to the percent of TOC required to be removed. A value of greater than 1.0 indicates that the water system is in compliance with TOC removal requirements. A value of less than 1.0 indicates a violation of TOC removal requirements.

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 the drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short period of time because of rainfall or agricultural activity. If you are caring for an infant, you should ask advice from your health care provider.

Microcystin

Microcystin is a toxin produced by harmful algal blooms. Microcystins: Liver toxins produced by a number of cyanobacteria. Total microcystins are the sum of all the variants/congeners (forms) of the cyanotoxin microcystin. The following thresholds were developed by the United States Environmental Protection Agency (USEPA). The 0.3 ppb Do Not Drink Advisory Threshold is for children 6 and under. While the 1.6 ppb Do Not Drink Advisory Threshold is for anyone 6 and older. For information on Harmful Algal Bloom Response Strategy go to http://epa.ohio.gov/Portals/28/documents/habs/2020_PWS_HAB_Response_Strategy.pdf

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. In 2020, Toledo water system was sampled as part of the State of Ohio's Drinking Water PFAS Sampling Initiative. Six PFAS compounds were sampled, and none were detected in the finished drinking water. For more information about PFAS, please visit <http://pfas.ohio.gov>.

Bacteriological

The total coliform regulation is based on the presence and absence of total coliform. A public water system is in compliance if the following criteria are met:

- A. No more than 5% of samples collected during the month can be positive.
- B. No resamples collected during the month can be positive.

Swanecreek Water District 1 had no positive samples collected out of 12 total samples through the year 2021.

Total Trihalomethanes & Haloacetic Acids

Some people who drink water containing Trihalomethanes (TTHM) & Haloacetic Acids (HAA5) 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. Based on the 2021 samples, Swancreek Water District 1 has maintained the TTHM & HAA5 below the MCL levels.

Lead

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. Swancreek Water District 1 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>.

License to Operate

In 2021, we had an unconditional license to operate our water system.

Drinking Water Concerns

Public interest and participation in our community's decisions affecting drinking water is encouraged. Regular Swancreek Water District meetings occur on the second and fourth Thursday of each month, at Swancreek Township Office at 6:30 p.m. The office is located at 5565 County Road D, Delta, OH 43515. For more information about this Consumer Confidence Report or water quality, please contact Swancreek Water District at (419) 822-3656.