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.

Cryptosporidium

The City of Sidney Water Department monitored for Cryptosporidium in the source water from April, 2008 through March 2010. Cryptosporidium was detected in 9 samples of 24 collected from the raw water. It was not detected in the finished water. Cryptosporidium is a microbial pathogen found in surface water throughout the U.S. Although filtration removes cryptosporidium, the most commonly used filtration methods cannot guarantee 100% removal. Monitoring of source water indicates the presence of these organisms. Current test methods do not enable us to determine if the organisms are dead or if they are capable of causing disease. Symptoms of infection include nausea, diarrhea, and abdominal cramps. Most healthy individuals can overcome the disease. However, immuno-compromised people are at greater risk of developing life-threatening illness. We encourage immuno-compromised individuals to consult their doctor regarding appropriate precautions to take to avoid infection. Cryptosporidium must be ingested to cause disease, and it may be spread through means other than drinking water.

Initial Distribution System Evaluation (IDSE)

Under the Stage 2 Disinfectants/Disinfection Byproducts Rule (D/DBPR), our public water system is 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 byproducts are the result of providing continuous disinfection of your drinking water and form when disinfectants combine with organic matter naturally occurring in the source water. Disinfection byproducts are grouped into two categories, Total Trihalomethanes (TTHM) and Haloacetic Acids (HAA5). USEPA sets standards for controlling the levels of disinfectants and disinfectant byproducts in drinking water, including both TTHMs and HAA5s.

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 part per million corresponds to one second in approximately 11.5 days

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

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

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

IDSE: Initial Distribution System Evaluation

Ways You Can Conserve Water

- Turn water off while shaving or brushing teeth
- Fix leaking faucets, pipes, toilets, etc.
- Wash only full loads of laundry
- Soak dishes before washing
- Take shorter showers

Water Trivia

- There is more fresh water in the atmosphere than in all of the rivers on the planet combined.
- Water is the only substance naturally found on earth in three forms: solid, liquid, gas.
- Water can dissolve more substances than any other liquid including sulfuric acid.
- The first water pipes in the US were made from fire charred bored logs.
- One gallon of water weighs 8.34 pounds.

FOR MORE INFORMATION about your drinking water and for opportunities to get involved, please contact Larry F. Broughton, Superintendent, by calling (937) 498-8180 or writing to 201 West Poplar Street, Sidney, Ohio 45365. Also, you are welcome and encouraged to attend the next public meeting on the Annual Water Quality Report on July 18, 2013 at 3:00 p.m. The meeting will take place at the Water Treatment Plant, located at 880 East Court Street. This report can be viewed on the on the City's website at www.sidneyoh.com

CITY OF SIDNEY—DRINKING WATER REPORT
2012 CONSUMER CONFIDENT REPORT

The City of Sidney has been providing clean, potable drinking water from its present facility since 1979. As a City customer, you are our most precious resource and we take our commitment of being your drinking water supplier very serious. We have a current, unconditioned license to operate our water system. As shown in this annual report, which covers the 2012 calendar year, Sidney's drinking water surpassed the strict regulations of both the State of Ohio and the United States Environmental Protection Agency (EPA). The EPA requires all public water suppliers to provide each customer an annual report, in order for you to evaluate our progress.

Source Water

The City of Sidney's public water system uses surface water drawn from Tawawa Creek and the Great Miami River as well as ground water pumped from four water supply wells. The intake system includes low head dams on the Great Miami River and Tawawa Creek and is designed to permit the selection of water from any source or any combination of sources. Surface waters are by their nature susceptible to contamination, and numerous potential contaminant sources along their banks make them more so. The protection areas around Tawawa Creek, the Great Miami River and the well field include a moderate number of potential contaminant sources, including agricultural run-off, inadequate 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.

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:

I. Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife;
II. 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;
III. Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses;
IV. 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 stormwater runoff, and septic systems; and
V. Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.

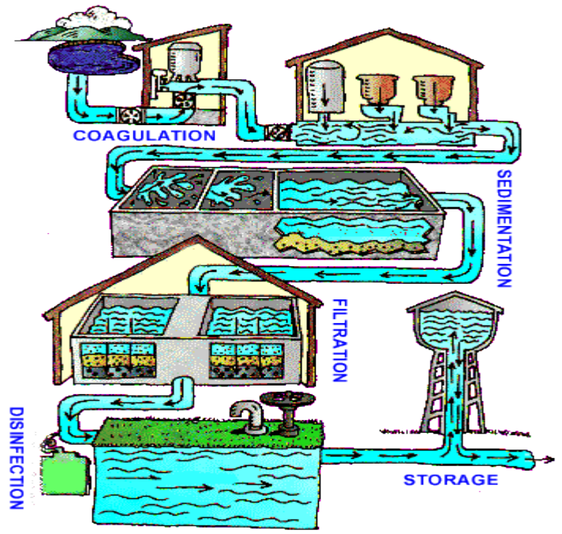
Historically, the Sidney public water system has effectively treated this source water to meet drinking water quality standards. The potential for water quality impacts can be further decreased by implementing measures to protect Tawawa Creek, the Great Miami River and the local aquifer. More detailed information is provided in the City of Sidney's Drinking Water Source Assessment Report or the City of Sidney's Wellhead Protection Program.

Together, these sources of information aid our staff in locating potential sources of contamination within our community and our watershed. The City of Sidney offers residents a chance to monitor the water level in the Great Miami River from their own homes. Please visit our web site at www.sidneyoh.com and click on "River Flood Action Plan".

Treatment & Staff

The City's Water Treatment Plant capacity of 10 million gallons per day still meets present and future needs. The processes used to treat the water include; powdered activated carbon to control odors, herbicides and pesticides; coagulation to remove sediments; disinfection to kill viruses and microbial contaminants; and filtration to remove other harmful contaminants.

The Water Treatment Plant is staffed 24 hours a day, 365 days per year, by a total of 8 personnel. All personnel operating the treatment plant are required to be licensed by the State of Ohio EPA. Water plant personnel are also certified by Ohio Environmental Protection Agency for the purpose of performing chemical and bacteriological testing, making us the only certified laboratory in Shelby County. We also perform testing and calibration of analytical equipment for surrounding communities.



Typical Water Treatment Process

Coagulation removes dirt and other particles suspended in water. Alum and other chemicals are added to water to form tiny sticky particles called "floc" which attract the dirt particles. The combined weight of the dirt and the alum (floc) become heavy enough to sink to the bottom during sedimentation. The heavy particles (floc) settle to the bottom and the clear water moves to filtration. The water passes through filters, some made of layers of sand, gravel and charcoal that help remove even smaller particles. A small amount of chlorine is added or some other disinfection method is used to kill any bacteria that may be in the water. Water is placed in a closed tank or reservoir in order for disinfection to take place. The water then flows through pipes to homes and businesses in the community.

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. Food and Drug Administration regulations establish limits on bottled water which must provide the same protection for public health.
The 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 date, though accurate, is more than one year old.

Contaminant	Unit	MCL	MCLG	Level Detected	Range Detected	Violation (Yes/No)	Year Sampled	Potential Source of Contamination
Microbiological Contaminants								
+Turbidity	NTU	TT	NA	0.24 (Highest single sample) (All below MCL)	0.03 – 0.24	No	2012	Soil Runoff
*Total Organic Carbon	ppm	TT	NA	3.1 (Lowest running annual average)	2.0 – 3.7	No	2012	Naturally Present in the Environment.

+ 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 and shall not exceed 1 NTU at any time.

*The value reported under "Level Detected" for Total Organic Carbon (TOC) is the lowest running annual average ratio between the 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 indicates a violation of the TOC removal requirements. The value reported under the "Range" for TOC is the lowest monthly ratio to the highest monthly ratio.

Contaminant	Unit	MCL	MCLG	Level Detected	Range Detected	Violation (Yes/No)	Year Sampled	Potential Source of Contamination
Inorganic Contaminants								
*Lead	ppm	15=AL	0	<5.0 (90th percentile) 30 of 30 samples were below AL	<5.0	No	2011	Corrosion of household plumbing systems.
*Copper	ppm	1.3=AL	1.3	<0.05 (90th percentile) 30 of 30 samples were below AL	<0.02 - 0.024	No	2011	Corrosion of household plumbing systems.

Lead and Copper samples were taken from specific sites within the distribution system and may not represent what is in your particular home. The 90th percentile indicates that 90% of the samples were equal to or less than the number on the chart.

Fluoride	ppm	4	4	1.08 (maximum monthly average)	0.82 - 1.23	No	2012	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Nitrate	ppm	10	10	4.92 (Highest single sample)	0.44 - 4.92	No	2012	Runoff from fertilizer use; leaching from septic tanks, sewage; Erosion of natural deposits
Synthetic Organic Compounds (SOC's)								
Atrazine	ppb	3	3	1.37 (Highest single sample)	<0.3 - 1.37	No	2012	Runoff from herbicide used on row crops

Contaminant	Unit	MCL	MCLG	Level Detected	Range Detected	Violation (Yes/No)	Year Sampled	Potential Source of Contamination
Residual Disinfection								
Total Chlorine	ppm	4	4	1.9 (Highest single sample)	0.5 - 1.9	No	2012	Water additive used to control microbes
Disinfection Byproducts								
Contaminant	Unit	MCL	MCLG	Level Detected	Range Detected	Violation (Yes/No)	Year Sampled	Potential Source of Contamination
Total Trihalomethanes (TTHM's)	ppb	80	0	51.5 Highest Compliance Value (Running annual average)	19.3 - 106.4	No	2012	By-product of drinking water chlorination
Haloacetic Acids (HAA5's)	ppb	60	0	16.8 Highest Compliance Value (Running annual average)	3.2 - 35.0	No	2012	
IDSE Total Trihalomethanes (TTHM's)	ppb	80	0	NA	35.4 - 84.7	No	2008	
IDSE Haloacetic Acids (HAA5's)	ppb	60	0	NA	4.5 - 19.2	No	2008	

TTHM & HAA5 samples were taken from specific sites within the distribution system and may not represent what is in your particular home. The IDSE TTHM & HAA5 samples required by USEPA, under the Stage 2 Disinfectants/Disinfection Byproducts Rule (D/DBPR) rule.

Unregulated Contaminants

Contaminant	Unit	MCL	MCLG	Level Detected	Range Detected	Violation (Yes/No)	Year Sampled	Potential Source of Contamination
Monochloroacetic Acid	ppb	NA	NA	<2.0 (Annual average)	<2.0 - <2.0	No	2012	By-product of drinking water chlorination
Dichloroacetic Acid	ppb	NA	0	12.9 (Annual average)	6.3 - 24.8	No	2012	
Trichloroacetic Acid	ppb	NA	30.0	3.4 (Annual average)	1.1 - 9.0	No	2012	
Dibromoacetic Acid	ppb	NA	NA	2.2 (Annual average)	<1.0 - 3.7	No	2012	
Chloroform	ppb	NA	NA	32.2 (Annual average)	8.0 - 69.7	No	2012	
Bromoform	ppb	NA	0	0.7 (Annual average)	0.5 - 1.2	No	2012	
Bromodichloromethane	ppb	NA	0	12.9 (Annual average)	6.5 - 24.2	No	2012	
Dibromochloromethane	ppb	NA	60.0	5.9 (Annual average)	4.1 - 11.4	No	2012	
Sulfate	ppm	NA	NA	49.0 (Annual average)	37.0 - 60.3	No	2012	Erosion of Natural Deposits

National Secondary Drinking Water Regulations are non-enforceable guidelines regulating contaminants that may cause cosmetic effects (such as skin or tooth discoloration) or aesthetic effects (such as taste, odor, or color) in drinking water.		
Contaminant	Secondary Standard mg/l	Sidney mg/l
Chloride	250	22.7
Color	15 (color units)	0 (color units)
Corrosivity	Non-corrosive	Non-corrosive
Odor	3 (TON)	0 (TON)
PH	7.0 – 10.5	9.3
Total Dissolved Solids	500	141 - 259
The data below represents contaminants analyzed for which there is no MCL.		
Contaminant		Sidney mg/l
Total Alkalinity		48
Total Hardness		98
Non-Carbonate Hardness		50
Magnesium		6