**Sources and Protection of your Drinking Water**

### SOURCES

The sources of drinking water — both tap 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. As with all surface waters, the Ohio EPA has classified the Ohio River as highly susceptible to potential contamination. The Ohio EPA has also classified the portion of the Great Miami Aquifer that supplies water to the wall fields for the Miller Treatment Plant as highly susceptible to contamination. It does not have an overlying, protective clay layer, the ground water from this aquifer has low levels of nitrate, and there are also potential contaminant sources nearby. 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 stormwater 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 agricultural, urban stormwater runoff and residential uses;
- 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
- Radioactive contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities.

### PROTECTION

GCWW has helped establish two source water protection programs:

**PROTECTION OF THE OHIO RIVER IN THE CINCINNATI AREA**

GCWW has partnered with the Northern Kentucky Water District and the Ohio River Valley Water Sanitation Commission (ORSANCO) to create a source water protection program for the Ohio River near Cincinnati. ORSANCO maintains 16 monitoring stations strategically placed along the Ohio River to detect and warn treatment plants about spills. GCWW participates as one of the monitoring stations for this program.

**PROTECTION OF THE GREAT MIAMI BURIED VALLEY AQUIFER**

The Ground Water Consortium — Hamilton to New Baltimore area, comprised of seven public and industrial ground water producers/suppliers in southwest Ohio, maintains a network of early warning monitoring stations, works with facilities that store hazardous substances to minimize the risk of spills, and educates the public on what they can do to protect ground water.

For more information about source water protection or to find out what you can do to help, call GCWW at (513) 591-7700. email info@gcww.cincinnati-oh.gov or visit cincinnati-oh.gov/water
GCWW is proud to say that our water meets or exceeds every health standard developed by both the USEPA and Ohio EPA. In order to ensure that tap water is safe to drink, USEPA regulations prescribe that 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 shall provide the same protection for public health.

The tables below show the substances detected in GCWW drinking water while performing the most up-to-date monitoring required by the EPA. 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. Because of this, some of our data, though accurate, is more than one year old. For a complete listing of GCWW test results, call (513) 597-1700 and press “O”.

### REGULATED CONTAMINANTS

Substances subject to a Maximum Contaminant Level (MCL), Action Level (AL) or Treatment Technique (TT). These standards protect drinking water by limiting the amount of certain substances that can adversely affect public health and are known or anticipated to occur in public water systems.

### Typical Sources of Contaminants

For more details, visit www.epa.gov/safewater/lead.html

### UNREGULATED CONTAMINANTS

Substances for which EPA requires monitoring to determine where certain substances occur and whether to regulate those substances.

### FREQUENTLY ASKED QUESTIONS

#### IF THERE ARE REPORTED CONTAMINANTS, HOW CAN MY WATER BE SAFE?

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. However, 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 healthcare provider.

More information about contaminants and potential health effects can be obtained by calling the Federal Environmental Protection Agency’s (USEPA) Safe Drinking Water Hotline at (800) 426-4791.

#### WHAT IS CRYPTOSPORIDIUM?

Cryptosporidium (Cryptosporidium) is a microscopic organism, that when ingested, can result in diarrhea, fever and other gastrointestinal symptoms. Cryptosporidium in surface waters and comes from animal and human waste. GCWW routinely tests for Cryptosporidium and did not detect it in our finished water in 2014. GCWW also tested for Cryptosporidium in the Ohio River surface water and it was not found in 14 samples during 2014. USEPA/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 at (800) 426-4791.

#### IS THERE LEAD IN MY WATER?

There is no detectable lead in our drinking water as it leaves our treatment plants. 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 or components associated with service lines and home plumbing. GCWW 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 3 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. A list of laboratories certified in the State of Ohio to test for lead may be found at http://www.epa.ohio.gov/ddagh or by calling (614) 644-2752. Information on lead in drinking water, testing methods and steps you can take to reduce your exposure is available from the Safe Drinking Water Hotline at (800) 426-4791 or at www.epa.gov/safeewater/lead.

#### SOMETIMES MY WATER IS REDDISH-BROWN, IS THIS SAFE?

The reddish-brown color can be caused by rust from corrosion of GCWW’s pipes, the pipes in your home, or from corrosion in your home’s water heater. This is not a health concern; the water meets or exceeds all health-based regulations. If you have rusty water, try running cold water for several minutes. If you have questions, or your laundry is stained from rusty water, call GCWW at (513) 597-1700. We will deliver laundry aid to remove the rust. Do NOT put starched laundry in the dryer.

#### WHY IS DRINKING WATER SOMETIMES LOOK CLOUDY?

Cloudy water that clears quickly from the bottom up is caused by tiny air bubbles in the water similar to gas bubbles in soda. After a while, the bubbles rise to the top and disappear. This cloudiness occurs more often in the winter when drinking water is cold. Air does not affect the safety of water.

#### WHY IS FLUORIDE ADDED TO MY WATER?

Fluoride is added to the water to protect teeth as required by state law. According to the American Dental Association, persons who drink fluoridated water have a 20% to 40% reduction in the number of cavities that would have occurred without fluoride. Some home filtration devices remove fluoride. Bottled water may not contain fluoride.

#### WHAT IS THE AMOUNT OF SODIUM IN MY WATER?

GCWW has tested for sodium in treated water as it leaves the treatment plants and has found 24 mg (milligrams) per liter in the Miller water and 17 mg per liter in the Bolton water. There are approximately 4 cups in a liter.

#### HOW HARD IS GCWW’S WATER?

Hard water is water that contains more minerals such as calcium and magnesium. Ground water tends to have higher mineral content than surface water because minerals are present in the rocks and aquifer. Water from GCWW’s Miller Plant has an average hardness of 146 milligrams per liter or 9 grains per gallon. Water from the Bolton Plant averages 148 milligrams per liter or 9 grains per gallon. Hardness does not affect the safety of water.

### Only Tapwater Delivers

How often do you think about your tap water? If you’re like most, probably not often. And yet tap water delivers so many things that other water cannot deliver.

#### PUBLIC HEALTH PROTECTION

Everyone has an important job to do. Ours is to make sure the highest quality water flows from your tap because a safe water supply is critical to protecting public health. In the United States, water utilities monitor for more than 100 contaminants and must meet close to 90 regulations for water safety and quality. Those water standards are among the world’s most stringent.

#### SPILL PROTECTION

In 2014, several major spills occurred in the Ohio River or its tributaries, including a chemical spill that contaminated the drinking water supply for Chillicothe, WV. GCWW’s drinking water was unaffected by these threats because of its ability to shut down intakes and rely on stored and supplemental water until the spill had passed. GCWW also has its own advanced treatment system to remove contaminants and bring you safe, high quality water.

#### FIRE PROTECTION

A well-maintained water system is critical in protecting our communities from the ever-present threat of fire. Water flowing to fire hydrants and home faucets is transported by the same system of water mains, pumping and storage tanks. A reliable water system that provides adequate pressure and volume to the fire hydrants that guard your home or business is our priority.

### 2014 Report

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