



2010 Consumer Confidence Report

About This Report

The goal of the Division of Water is to ensure that any contaminants in your drinking water are restricted below a level at which there is no known health risk.

The City of Gahanna has prepared the following report to provide information to you, the consumer, on the quality of our drinking water. Included within this report is general health information, water quality test results, how to participate in decisions concerning your drinking water and water system contacts.

Gahanna receives its drinking water from the City of Columbus' Hap Cremean Water Plant (HCWP). The water source is the Hoover Reservoir.

Water Quality Assurance

The City of Columbus' Water Quality Assurance Laboratory (WQAL) is a large modern water lab with a long history of distinguished public service starting under the noted water quality chemist Charles Hoover. The lab continues to deliver that tradition of excellence and technical innovation in the ongoing use of state of the art equipment for water analysis, while continuing to research the latest advancements in water treatment techniques.

The WQAL performs water quality monitoring and treatment research to ensure that Columbus drinking water meets or is better than all federally mandated Safe Drinking Water Act (SDWA) standards. The WQAL also provides water quality information to the water treatment plants and to master meter cities, such as Gahanna, regarding water quality.

To maintain compliance with current SDWA regulations, WQAL activities were directed at developing information regarding new and upcoming rules. These include the Unregulated Contaminant Monitoring Rule (UCMR), Stages 1 and 2 of the Disinfectant/Disinfection Byproducts Rule (D/DBP) and the Long Term 2 Enhanced Surface Water treatment rule (LT2ESWTR). Additionally, the lab has been closely involved in planning the improvement of watershed and water distribution system surveillance and detection measures for security concerns in the wake of the 9/11 attacks and their associated heightened security protocols.

As with the WQAL staff, the State of Ohio licenses and certifies the water plant operators who are charged with running and maintaining each of the water treatment plants. The operators also perform the critical task of treatment and process monitoring to insure the highest level of water quality leaving the plant.

What are sources of contamination to drinking water?

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.

Contaminants that may be present in source water include: (A) Microbial contaminants, such as viruses and bacteria, which may come from sewage 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 agricultural, 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, USEPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. FDA regulations 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 Environmental Protection Agency's Safe Drinking Water Hotline at 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. Immune-compromised individuals such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune systems 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.

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 at 1-800-426-4791.

The City of Gahanna has a current, unconditioned license to operate our water system.

Newborns and Nitrate.

Nitrate in drinking water at levels above 10ppm 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. Local television, radio and print media will be notified within 24 hours if the level of nitrate rises above 10ppm. The media will similarly be notified once the level decreases. If you are caring for an infant, you should ask advice from your healthcare provider.

None of the water supplied to Gahanna by Columbus' Hap Cremean Water Plant exceeded the nitrate MCL in 2010.

Lead in the Home

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. City of Gahanna 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 1-800-426-4791 or online at www.epa.gov/safewater/lead.

What's NOT in Your Water

Reports on TV and in the press often raise concerns about the health risks associated with the presences of certain minerals, chemicals or other contaminants in your food or water. The City of Gahanna Division of Water along with the City of Columbus Division of Water perform thousands of tests each year to ensure drinking water quality. Many substances, for which the Divisions test, never appear in this report because they are not found in the drinking water. For example, there are 51 volatile organic chemicals as well as arsenic, perchlorate, asbestos, MTBE, radium 228 and ammonia (just to name a few) that are NOT found in your drinking water.

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.

Uni-Directional Waterline Flushing

The Gahanna Department of Public Service is continuing another year of uni-directional waterline flushing. This innovative technique allows the city to clean waterlines using less water while achieving proven results. The technique includes closing specific valves on each waterline to allow the water to flow quickly through the pipes and exit a specified hydrant. The fast moving water cleans out the waterlines and provides better quality drinking water. This method is endorsed and encouraged by the OhioEPA.

Definitions

Hap Cremean Water Plant (HCWP)	Serves OSU and northern residents, including Gahanna residents. The water source is the Hoover Reservoir.
Action Level (AL)	The concentration of a contaminate, which if exceeded, triggers treatment or other requirements that a water system must follow.
Maximum Contaminant Level Goal (MCLG)	The level of a contaminant in drinking water, below which there is no known or expected health risk. MCLGs allow for a margin of safety.
Maximum Contaminated Level (MCL)	The highest level of contaminant that is allowed in drinking water. MCLs are set as close to the MCLG as feasible using the best available treatment technology.
Secondary MCL (SMCL)	A non-enforceable numerical limit set by the USEPA for a contaminant on the basis of aesthetic effects to prevent an undesirable taste, odor or appearance.
N/A	Not Applicable
ND	No defect
NTU	Nephelometric Turbidity Unit (a measure of particles held in suspension in water).
Parts per Billion (ppb) or Micrograms per Liter (ug/L)	Are units of measurement for concentration of a contaminant. A part per billion corresponds to one second in roughly 31.7 years.
Parts per Million (ppm) or Milligrams per Liter (mg/L)	Are units of measurement for concentration of a contaminant. A part per million corresponds to one second in roughly 11.5 days.
pCi/L	Picocuries per liter (a measure of radiation).
MRDL / MRDLG	Maximum Residual Disinfectant Level / Maximum Residual Disinfectant Level Goal
The ">" symbol	This symbol means "greater than"
The "<" symbol	This symbol means "less than"
Treatment Technique (TT)	A required process intended to reduce the level of contaminant in drinking water. For Total Organic Carbon (TOC) the level must be above 1. For Turbidity the level must be under 0.3 NTU 95% of the time.
Turbidity	Is a measurement of the cloudiness of the water. Turbidity is monitored because it is a good indication of water quality and the effectiveness of the treatment process.

PRIMARY DRINKING WATER STANDARDS

HAP Cremean Water Plant

Substances we detected	When we checked	What's Allowed? (MCL)	What's the goal?(MCLG)	Level Found	Range of detection	Violation?	Where did it come from?
Fluoride (ppm)	2010	4	4	1.16	0.67 - 1.16	No	Water Additive - protects teeth
Nitrate (ppm)	2010	10	10	1.5	<0.5 - 1.5	No	Agricultural fertilizer runoff
Simazine (ppb)	2010	4	4	0.22	< 0.10 - 0.42	No	Agricultural herbicide runoff
Atrazine (ppb)	2010	3	3	0.24	< 0.10 - 0.63	No	Agricultural herbicide runoff
Alachlor (ppb)	2010	2	0	ND	ND	No	Agricultural herbicide runoff
Metolachlor (ppb)	2010	No set level	No goal set	ND	ND	No	Agricultural herbicide runoff
Metribuzin (ppb)	2010	No set level	No goal set	ND	ND	No	Agricultural herbicide runoff
Chloroform (ppb)	2010	No set level	70	28	N/A	No	By-product of drinking water disinfection
Bromodichloromethane (ppb)	2010	No set level	0	9.1	N/A	No	By-product of drinking water disinfection
Dibromochloromethane (ppb)	2010	No set level	60	1.7	N/A	No	By-product of drinking water disinfection
Bromoform (ppb)	2010	No set level	0	< 0.5	N/A	No	By-product of drinking water disinfection
Total Organic Carbon	2010	TT(removal ratio > 1)	No goal set	2.12	1.71 - 3.08	No	Naturally present in environment
Turbidity (NTU)	2010	TT (<1 NTU) TT (% mtg Std)	No goal set No goal set	0.29 100%	0.4 - 0.29 100 - 100%	No	Soil Runoff

City of Gahanna

Substances we detected	When we checked	What's Allowed? (MCL)	What's the goal?(MCLG)	Level Found	Range of detection	Violation?	Where did it come from?
Total Trihalomethanes (ppb)	2010	80	<80	55	31 - 84	No	By-product of drinking water disinfection
Total Haloacetic Acids (ppb)	2010	60	<60	29	6 - 56	No	By-product of drinking water disinfection
Total Chlorine	2010	4 (MRDL)	4 (MRDLG)	1.46	1.27 - 1.67	No	Disinfectant
Total Coliform Bacteria	2010	Present in <5% of monthly samples	0%	0.00%	N/A	No	Bacteria present in environment

Substances we detected	When we checked	Action Level (AL)	What's the goal?(MCLG)	Concentration at 90th percentile	# of sites above AL	Are we within compliance?	Where did it come from?
Lead (ppb)	2009	15	0	< 5.0	0 out of 33	Yes	Corrosion of household plumbing
Copper (ppm)	2009	1.3	<1.3	0.051	0 out of 33	Yes	Corrosion of household plumbing

The Initial Distribution System Evaluation (IDSE) is for establishing future regulatory monitoring sites (12 month study beginning October 2007)¹

Substances we detected	When we checked	MCL	MCLG	Range in the Water Distribution System for Gahanna	Violation?	Where did it come from?
IDSE TTHM (ppb)	2008	N/A	N/A	18 - 104	N/A	By-product of drinking water disinfection
IDSE THAA (ppb)	2008	N/A	N/A	22 - 57	N/A	By-product of drinking water disinfection

¹Under the Stage 2 Disinfectants/Disinfection Byproducts Rule (D/DBPR), our public water system was required by the 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 set standards for controlling the levels of disinfectants and disinfectant byproducts in drinking water, including both THMs and HAA5s.

Questions?

If you have questions regarding any of the information contained in this report or for more information on your drinking water contact, City of Gahanna, Water Resource Engineer, Jeff Feltz at 614-342-4005.

This report can also be found on our website at: www.gahanna.gov just click on "Consumer Confidence".

Source Water Assessment Information

A high-quality source water supply allows the Division of Water to provide consumers with quality water at a reasonable cost. Protecting our raw water sources requires investments to secure the needs of a growing population, now and in the future. As part of its on-going efforts to maintain regulatory compliance and monitor our water supply, the City of Columbus' Division of Water has completed a Source Water Assessment process. Below is a synopsis of the results:

The City of Columbus water systems uses surface water from the Scioto River and Big Walnut Creek, as well as ground water pumped from sand and gravel deposits of the

Scioto River Valley. All three sources of water have a relatively high susceptibility to contamination from spills or releases of chemicals. The ground water pumped at the Parsons Avenue plant is susceptible (compared to other ground water systems) because there is no significant clay overlaying and protecting the aquifer deposits. The Scioto River and Big Walnut Creek are even more susceptible because they are more accessible and less protected from spills.

The drinking water source protection areas for the City of Columbus' three water sources contain numerous potential contaminant sources, especially the protection area for the Dublin Road Water Treatment Plant (extending along the Scioto River). These include industrial activities, storm water runoff from developing areas, and a heavily traveled transportation network running

alongside and over the water bodies. Runoff from agricultural fields is a concern in both the Scioto River and Big Walnut Creek watersheds.

The City of Columbus treats the water to meet drinking water quality standards, but no single treatment protocol can address all potential contaminants. The City has been proactive in pursuing measures to further protect its source waters. These include land stewardship programs and incentive-driven programs to reduce erosion and run-off or pesticides and fertilizers into the Scioto River and Big Walnut Creek and their reservoirs. More detailed information is provided in the City of Columbus' Drinking Water Source Assessment Report, which can be viewed by calling the Watershed section at 614-645-1721

City of Gahanna
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200 South Hamilton Road
Gahanna, Ohio 43230

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