

2008 Annual Water Quality Report



Marion

PWS ID: OH5100414

Este informe contiene información muy importante sobre su agua potable. Tradúzcalo o hable con alguien que lo entienda bien.

A Message from the President

Dear Ohio American Water Customer,

As a trusted leader in the industry, Ohio American Water places a strong emphasis on sharing information with our customers about the quality of the water service we provide.

One way we do this is by reporting to you annually the results of various tests that we conduct. Please review this Consumer Confidence Report (CCR), which outlines information applicable to your local water system for testing completed through December 2008. You'll find that we provide water service that surpasses or meets all federal and state water quality regulations. In fact, we often address regulations well before they go into effect.

Just as important, Ohio American Water makes the necessary investments to maintain and upgrade its facilities so that we can provide quality water service to your home 24 hours a day, seven days a week.

Our customers are our top priority. We are committed to providing the highest quality drinking water service possible now and in the years to come. In addition to this written report, you can view information about Ohio American Water and your water system on the website <http://www.oawc.com>. For more information or for any questions about this report relating to your drinking water service, please contact us at (800) 673-5999.

Sincerely,

David K. Little

President, Ohio American Water

About Ohio American Water

Ohio American Water is one of the state's largest investor-owned water resource companies, serving more than 200,000 residents in more than 59 communities. Ohio American Water has nearly a century of experience in the state and takes pride in being caretakers of this precious natural resource. We work tirelessly to ensure your water meets all standards of purity and safety. At Ohio American Water our goal is to provide our customers the highest quality of water and service so that they may enjoy and use with confidence.

About American Water

Founded in 1886, American Water is the largest investor-owned U.S. water and wastewater utility company. With headquarters in Voorhees, N.J., the company employs more than 7,000 dedicated professionals who provide drinking water, wastewater and other related services to approximately 15 million people in 32 states and Ontario, Canada. More information can be found by visiting www.amwater.com.

Investing in Marion's Future

Ohio American Water continually invests in improvements to the Marion Water System. Ohio American Water believes in its role of good citizenship and proudly contributes a substantial amount in local taxes annually and is a valuable source of revenue to the local community and its services.

Partnership for Safe Drinking Water Program

The Ohio American Water – Marion system was recently awarded the prestigious “Five-Year Director’s Award” under the Partnership for Safe Water program administered by the U.S. Environmental Protection Agency (USEPA), Ohio EPA, and other water related organizations. The award honors water utilities for achieving operational excellence, by voluntarily optimizing their treatment facility operations and adopting more stringent performance goals than those required by federal and state drinking water standards. We are proud to report that we have maintained those standards throughout 2008.



What is a Water Quality Report?

To comply with state and U.S. Environmental Protection Agency (EPA) regulations, Ohio American Water issues a report annually describing the quality of your drinking water. The purpose of this report is to raise your understanding of drinking water and awareness of the need to protect your drinking water sources. This report provides an overview of last year's (2008) water quality. It includes details about where your water comes from and what it contains.

If you have any questions about this report or your drinking water, please call our Customer Service Center at (800) 673-5999.

Source Water Information

The Marion area has three sources of raw water supply. The Little Scioto River and the Scioto River serve as surface water sources, and 17 wells provide ground water for the Marion system.

Protecting Your Water Source

Ohio American Water – Marion uses both surface water (about 56%) and ground water (about 44%). The ground water portion is pumped from an extensive carbonate aquifer via a network of 17 public water supply wells located along the Little Scioto River. Our system has a fully endorsed Wellhead Protection Plan for the well field. The surface water portion is drawn from the Little Scioto and Scioto Rivers via two separate intakes.

Although the ground water is considered less susceptible than the surface water, the public water system is assigned a single susceptibility rating based on its most vulnerable source. For the purposes of source water assessment, in Ohio all surface waters are considered to have a relatively high susceptibility to contamination. By their nature, surface waters are readily accessible and can be contaminated by chemicals and pathogens which may rapidly arrive at the public drinking water intake with little warning or time to prepare.

The protection areas upstream from the Scioto River and the Little Scioto River intakes contain potential contaminant sources. These sources include agricultural runoff, industrial source water, animal waste storage, feed lot runoff, gas lines and unsewered areas. Other potential contaminant sources are leaky underground storage tanks, cemeteries, an airport, a dairy facility, a recycling facility, above ground storage tanks, a construction and demolition debris landfill, and road and railroad crossings.

Ohio American Water treats the water to meet drinking water quality standards, but no single treatment technique can address all potential contaminants. The potential for water quality impacts can be further decreased by implementing measures to protect the well field and the Scioto and Little Scioto River watersheds upstream from the intakes. More detailed information is provided in Ohio American Water – Marion's Drinking Water Source Assessment report as well as its Wellhead Protection Plan, which can be obtained by calling (800) 673-5999.

How to Contact Us

For more information about this report, or for any questions relating to your drinking water, please call Mike Perriguet, Water Quality Supervisor, at (740) 383-0926. You can also contact Mr. Perriguet by e-mail at michael.perriguet@amwater.com.

For questions about your water bill or service issues, please call our Customer Service Center at (800) 673-5999.

To learn more about Ohio American Water, please visit our web site at www.oawc.com.

How to Read This Table

Ohio American Water conducts extensive monitoring to ensure that your water meets all water quality standards. The results of our monitoring are reported in the accompanying tables. While most monitoring was conducted in 2008, certain substances are monitored less than once per year because the levels do not change frequently. For help with interpreting this table, see the "Table Definitions" section.

Begin by reading across the table starting with the **Substance** column heading. The **Year Sampled** is usually in 2008 or the prior year. **MCLG** is the goal level for that substance (this may be lower than what is allowed). **MCL** shows the highest level of substance (contaminant) allowed. **Level Found** represents the measured amount (less is better). **Range of Detections** tells the highest and lowest amounts measured. A **Yes** under **Compliance Achieved** means the amount of the substance met government requirements. **Typical Source** tells where the substance usually originates.

Unregulated substances are measured, but maximum contaminant levels have not been established by the government.

Definitions of Terms Used in This Report

- **AL (Action Level):** The concentration of a contaminant, which, if exceeded, triggers treatment or other requirements, which a water system must follow.
- **MCL (Maximum Contaminant Level):** The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.
- **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.
- **MRDL (Maximum Residual Disinfectant Level):** The highest level of disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.
- **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 contamination.
- **mrem/year:** Millirems per year (a measure of radiation absorbed by the body).
- **NA:** Not applicable
- **NTU (Nephelometric Turbidity Units):** Measurement of the clarity, or turbidity, of the water.
- **pCi/L (picocuries per liter):** Measurement of the natural rate of disintegration of radioactive contaminants in water (also beta particles).
- **ppm (parts per million):** One part substance per million parts water, or milligrams per liter.
- **ppb (parts per billion):** One part substance per billion parts water, or micrograms per liter.
- **TT (Treatment Technique):** A required process intended to reduce the level of a contaminant in drinking water.
- **%:** means percent.
- **<:** means less than.

Water Quality Statement

We are pleased to report that during the past year, the water delivered to your home or business complied with, or was better than, all state and federal drinking water requirements. For your information, we have compiled a list in the table below indicating what substances were detected in your drinking water during 2008. Although all of the substances listed below are under the Maximum Contaminant Level (MCL) set by the EPA, we feel it is important that you know exactly what was detected and how much of the substance was present in the water.

Water Quality Results

Marion

Regulated Substances (Measured on the Water Leaving the Treatment Facility)								
Substance (units)	Year Sampled	MCLG	MCL	Level Found	Range of Detections (Low-High)	Compliance Achieved	Typical Source	
Simazine (ppb)	2008	4	4	0.2	<0.07 - 0.65	YES	Herbicide runoff	
Atrazine (ppb)	2008	3	3	1.1	<0.1 - 3.9	YES	Runoff from herbicide used on row crops	
Barium (ppm)	2008	2	2	0.007	NA	YES	Erosion of natural deposits; Discharge of drilling wastes; Discharge from metal refineries	
Beta/pton emitters (pCi/L)	2003	0	50 ¹	5.7	<4 - 5.7	YES	Decay of natural and man-made deposits	
Fluoride (ppm)	2008	4	4	1.00	0.85 - 1.10	YES	Water additive which promotes strong teeth; Erosion of natural deposits; Discharge from fertilizer and aluminum factories	
Nickel (ppb)	2008	100	100	0.7	NA	YES	Erosion of natural deposits; Discharge from electroplating, stainless steel, and alloy products, mining and refining operations	
Nitrate (ppm)	2008	10	10	5.19	0.09 - 5.19	YES	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits	
Total Organic Carbon (Removal Ratio) ²	2008	NA	TT	2	1.8 - 3.50	YES	Naturally present in the environment	
Other Compounds (Measured in the Distribution System)								
Substance (units)	Year Sampled	MCLG	MCL	Level Found	Range of Detections (Low-High)	Compliance Achieved	Typical Source	
Total trihalomethanes - TTHM (ppb)	2008	NA	80	68.3	23.7 - 143.3	YES	By-product of drinking water chlorination	
Haloacetic Acids - HAA5 (ppb)	2008	NA	60	20.8	10.0 - 34.4	YES	By-product of drinking water chlorination	
Substance (units)	Year Sampled	MRDLG	MRDL	Level Found	Range of Detections (Low-High)	Compliance Achieved	Typical Source	
Chlorine (ppm)	2008	4	4	2.3	1.7 - 2.4	YES	Water additive used to control microbes	
Turbidity - A Measure of the Clarity of the Water (Measured on the Water Leaving the Treatment Facility)								
Substance (units)	Year Sampled	MCLG	MCL	Level Found	Range of Detections (Low-High)	Compliance Achieved	Typical Source	
Turbidity (NTU) ³	2008	NA	TT	0.29	0.03 - 0.29	YES	Soil runoff	
Turbidity % meeting standards	2008	NA	TT	100.00%	100%	YES	Soil runoff	
Unregulated Substances (Measured on the Water Leaving the Treatment Facility)								
Substance (units)	Year Sampled	Level Found	Range of Detections (Low-High)	Typical Source				
Bromodichloromethane (ppb)	2004	10.2	NA	By-product of drinking water disinfection				
Chloroform (ppb)	2004	25.5	NA	By-product of drinking water disinfection				
Dibromochloromethane (ppb)	2004	3.5	NA	By-product of drinking water disinfection				
Metolachlor	2005	1.3	<0.8 - 1.3	Runoff from pre-emergent general use pesticide				
Sodium (ppm)	2008	56	NA	Naturally occurring				
Sulfate (ppm)	2008	154.8	NA	Erosion of natural deposits				
Tap Water Samples: Lead and Copper Results								
Substance (units)	Year Sampled	MCLG	Action Level	90th Percentile	Number of Samples	Number of Samples Above Action Level	Compliance Achieved	Typical Source
Copper (ppm)	2007	1.3	1.3	0.026	30	0	YES	Corrosion of household plumbing systems; Erosion of natural deposits
Lead (ppb)	2007	0	15	1	30	0	YES	Corrosion of household plumbing systems; Erosion of natural deposits

¹ The MCL for Beta/pton emitters is written as 4 mrem/year. EPA considers 50 pCi/L the level of concern for beta emitters.

² The value reported under Level Found is the lowest ratio between percentage of TOC actually removed to the percentage of TOC required to be removed. A value greater than or equal to 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 requirements.

³ Turbidity is a measure of the cloudiness of the water and is an indication of the effectiveness of the filtration process. The turbidity limit set by EPA is 0.3 NTU in 95% of the daily samples and shall not exceed 1 NTU at any time. As reported in the table, Ohio American Water - Marion District's highest recorded turbidity measurement for 2008 was 0.29 NTU and the lowest monthly percentage of samples meeting the turbidity limits was 100%.

Water Information Sources

- **Ohio American Water**
www.oawc.com
- **Ohio Environmental Protection Agency**
www.epa.state.oh.us
- **United States Environmental Protection Agency**
www.epa.gov/safewater
- **Safe Drinking Water Hotline:** (800) 426-4791
- **Centers for Disease Control and Prevention**
www.cdc.gov
- **American Water Works Association**
www.awwa.org
- **Water Quality Association**
www.wqa.org
- **National Library of Medicine/
National Institute of Health**
www.nlm.nih.gov/medlineplus

Substances Expected to be in 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:

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 may 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 agriculture, urban stormwater runoff, and residential uses.

Organic Chemical Contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and may also come from gas stations, urban stormwater runoff, and septic systems.

Radioactive Contaminants, which can be naturally occurring or may be the result of oil and gas production and mining activities.

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 for advice from your health care provider.

Cryptosporidium Information

The Ohio American Water Co. – Marion facility monitored for Cryptosporidium in the source water in 2008. Cryptosporidium was detected in one sample of nine collected from the raw water. Cryptosporidium is a microbial pathogen found in surface water throughout the United States. Although filtration removes Cryptosporidium, the most commonly used filtration methods can not guarantee 100 % removal. Monitoring of source water or finished 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 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. Effective treatment for the removal of Cryptosporidium from drinking water includes specific filtration equipment. The Ohio American Water Co. – Marion facility presently has treatment facilities that are considered effective by the EPA. The Ohio American Water Co. – Marion facility will continue to operate the filtration equipment properly to ensure the most effective removal of Cryptosporidium as possible.

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. Ohio American Water Company 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 also 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 (800) 426-4791 or at <http://www.epa.gov/safewater/lead>.

Special Health Information

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 other immune system disorders, some elderly, and infants may 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 infection by Cryptosporidium and other microbial contaminants are available from the EPA's Safe Drinking Water Hotline (800) 426-4791. For additional information regarding cryptosporidiosis (a gastrointestinal disease caused by Cryptosporidium) and how it may impact those with weakened immune systems, please contact our Customer Service Center at (800) 673-5999.

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. The U.S. 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 EPA Safe Drinking Water Hotline at (800) 426-4791.