



Scioto County Regional Water District #1

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2013 ANNUAL WATER QUALITY REPORT

326 Robert Lucas Rd.
P.O. Box 310
Lucasville, OH 45648

Meeting the Standards

We are pleased to present this year's Annual Water Quality Report (Consumer Confidence Report) as required by the Safe Drinking Water Act (SDWA). This report is designed to provide details about where your water comes from, what it contains, and how it compares to standards set by regulatory agencies. This report is an overview of your water quality for 2013. We are committed to providing you with information because informed customers are our best allies. If you have any questions regarding the information contained in this report, please contact our Lab Chief, Mark Shonkwiler, at 740-259-2301. More information is provided on our website at: www.water1.org. Water 1 is governed by a seven member board. The board meetings are the third Thursday of each month at 7:00p.m. in the conference room at 326 Robert Lucas Rd. Lucasville, Ohio 45648.

Source & Treatment

The water we supply comes from nine wells located in the Teays Valley Aquifer near St. Rt. 348. The water is pumped from wells and is softened using lime. The water is then stabilized using carbon dioxide to prevent excessive buildup inside pipes. Chlorine is added to the water to kill any bacteria that may be present. The water then moves through nine filters, which remove any remaining particulate matter that may be present in the water. Fluoride is added to the water, as required. Finally, chlorine is added one more time to guarantee adequate amounts will remain in the water throughout the distribution system.

Who needs to take special precautions?

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 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 (1-800-426-4791).

Lead & Drinking Water

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. Scioto County Regional 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>.

Contaminant Monitoring

The EPA requires regular sampling to ensure drinking water safety. All contaminants required to be analyzed in 2013 did not exceed any maximum contaminant levels set by the EPA. We are pleased to inform our customers that there were no violations in 2013 and we currently have an unconditioned license to operate our water system.

Pay Your Water Bill Online

Our water district offers "Automated Bill Pay". This program enables our customers to have their water bills withdrawn directly from their checking account. To register for online bill pay, the form is available in our office or can be found online at: www.water1.org. You may cancel automated payments anytime, and there are no fees for this service.

Boil Advisory Information

For the most up to date boil advisory information, check our website at www.water1.org. Also, any other important information concerning the quality of your water will be posted.

Sources of Contamination

The sources of drinking water both tap water and bottled water includes 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, USEPA 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 calling the Environmental Protection Agency's Safe Drinking Water Hotline (1-800-426-4791).



Our Commitment  Our Profession

Table of Detected Contaminants

	MCLG	MCL	Level Found	Range of Detections	Violation	Year Sampled	Typical Source of Contamination
Residual Disinfectants							
Chlorine (ppm)	MRDLG = 4	MRDL = 4	1.22	0.32 - 1.61	No	2013	Water additive to control microbes
Inorganic Contaminants							
Lead (ppm)	0	Action Limit = 15	0	0 - 0	No	2011	Corrosion of household plumbing systems; erosion of natural deposits
	Zero out of thirty samples were found to have lead levels in excess of the action level of 0.015ppm						
Copper (ppm)	1.3	Action Limit = 1.3	0.059	0 - 0.075	No	2011	Corrosion of household plumbing systems; erosion of natural deposits, leaching from wood preservatives.
	Zero out of thirty samples were found to have copper levels in excess of the action level of 1.3 ppm						
Nitrate (ppm)	10	10	0.29	0.29 - 0.29	No	2013	Runoff from fertilizer use; erosion of natural deposits
Fluoride (ppm)	4	4	1.11	0.83 - 1.11	No	2013	Water additive which promotes strong teeth; erosion of natural deposits
Volatile Organic Contaminants							
Total Trihalomethanes (ppb)	N/A	80	49.9	30.7 - 55.5	No	2013	By-product of drinking water chlorination
Five Haloacetic Acids (ppb)	N/A	60	11.3	9.1 - 11.9	No	2013	
IDSE TTHM (ppb)	N/A	N/A	N/A	10.4 - 56.8	N/A	2009	
IDSE HAA5 (ppb)	N/A	N/A	N/A	4.9 - 13.0	N/A	2009	
Radiological Contaminants							
Gross Alpha (pCi/L)	0	15	3.93	N/A	No	2013	Erosion of natural deposits

Ohio EPA recently completed a study of Scioto County Regional Water Authority's source of drinking water, to identify potential contaminant sources and provide guidance on protecting the drinking water source. According to this study, the aquifer (water rich zone) that supplies water to the water district has a high susceptibility to contamination. This determination is based on the following:

- the presence of a relatively thin protective layer of soil overlying the aquifer;
- the depth to water in the aquifer is 10 to 15 ft below the ground surface;
- the presence of numerous and significant potential contaminant sources in the protection area.

This susceptibility means that under currently existing conditions, the likelihood of the aquifer becoming contaminated is relatively high. This likelihood can be minimized by implementing appropriate protective measures. More information about source water assessment or what consumers can do to help protect the aquifer is available by calling (740) 259-2301.

Here are some descriptions of abbreviations to help you better understand the table in this newsletter. These are standard abbreviations, and are used by labs throughout the country.

- Parts per million (ppm) or Milligrams per Liter (mg/L) - one part per million corresponds to one minute in two years.
- Parts per billion (ppb) or Micrograms per Liter (µg/L) - one part per billion corresponds to one minute in 2,000 years.
- Less than = <
- MCLGs - (Maximum Contaminant Level Goal) allow for a margin of safety.
- MCL - Maximum Contaminant Level (The highest level of contaminant allowed in drinking water) MCLs are set as close to the MCLGs as feasible using the best available technology.
- MRDL - Maximum residual disinfectant level (The highest level of a disinfectant allowed in drinking water).
- Maximum Contaminant Level Goal (MCLG) is the level of contaminant in drinking water below which there is no known or expected risk to health.
- MCL's are set at very stringent levels. To understand the possible health effects described for many regulated contaminants, a person would have to drink 2 liters of water every day at the MCL level for a lifetime to have a one-in-a-million chance of having the described health effect.
- 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 contaminants.

IDSE Monitoring

Under 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 an elevated disinfection byproduct concentrations. The locations selected for the IDSE may be used for compliance monitoring under Stage 2 DBPR, beginning 2013. Disinfection byproducts are the result of 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. 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. It can also 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 can 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 the result of oil and gas production and mining activities. In order to ensure that tap water is safe to drink, the 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. 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 can be particularly at risk of 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 microbiological contaminants are available from the **Safe Drinking Water Hotline 1-800-426-4791**