

Scioto County Regional Water District No. 1

Annual Report

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Another Successful Year

We work hard to insure the quality and safety of your ground water supply, and we are pleased to announce in 2008 we had no violations of contaminant levels or water quality standards. This newsletter is a summary concerning the quality of water provided to you, and the hard work our employees perform to provide excellent water. All information provided in this newsletter is based on the results of many tests performed between January 1st and December 31st 2008. If you have any questions regarding this newsletter, please contact our Plant Superintendent, Rich Bradford at 259-2301. We want our customers to be informed about their utility. If you want to learn more about Water 1, please visit our website at www.water1.org. Our company is governed by a seven member board that meets on the third Thursday of every month at 7:00 p.m. The meetings are held in the conference room at 326 Robert Lucas Road, Lucasville, Ohio.

What's In It?

Over the last few years, there has been a lot of debate in the media about the quality of tap water, as well as bottled water. Water 1 is proud of the quality of water and service it provides to its customers. The water provided by the district is first pumped from nine wells located in the Scioto River Aquifer near St. Rt. 348. As the water enters the treatment process, it is softened using a lime slurry. Next, the water is stabilized using Carbon Dioxide, which helps to reduce buildup in pipes. Chlorine is added to the water to help kill any bacteria or other contaminants that may be present. Next, the water is filtered using nine filters, which have several different layers of sand and gravel. These filters remove any remaining particulate matter that may be present in the water. Before sending the water to customers, fluoride is added in order to help strengthen customers' teeth. The last step before the water enters the distribution system is the addition of more chlorine. This ensures that the right amount of chlorine will remain in the water throughout the system. The water is tested throughout each step of the process. Water 1 has seven people certified in our lab to perform chemical tests and four certified to run bacteria tests. Our plant is monitored by a computer system which helps the operators regulate chemical adjustments and equipment control, while constantly monitoring the water levels and pressures throughout the distribution system.

40 Years of Service

2009 marks the 40th full year of operations for Scioto County Regional Water District No. 1. The idea of a rural water system for Scioto County began in the mid-1960's when a small group of people recognized the urgent need for potable water and took action. This group contracted an engineering firm and completed preliminary studies to determine its feasibility. After consulting with the Farmers Home Administration (FHA), it was suggested the proposed water district be governed by an Authority. Therefore an eleven member board was appointed.

Through a series of public meetings and door to door canvassing, customers were located and taps fees were collected, in order to meet the requirement of FHA. Happy to see community members taking action, the FHA awarded a \$2,272,000 loan to help the idea become a reality. Construction began on what is now known as Water 1 in June of 1967. After eighteen months of construction and testing, the district began serving customers in 1969.

Known for its quality of service Water 1 has grown to supply over 6,000 homes and businesses, as well as two other water systems with over 1 billion gallons of quality water each year. The water district currently employs 24 full time employees and 4 part-time employees. These employees operate and maintain a 4.3 MGD water treatment plant, two well fields, ten pump stations, 15 storage tanks and hundreds of miles of water line.

In an effort to continue improving its performance and efficiency, the water district is constantly making upgrades. In 2008 district employees completed a project involving eleven miles of new large diameter water line and a pump station. This project makes it possible to move large amounts of water throughout our distribution system.

Over the next year several projects are planned. In 2009 one of the two well fields will be able to operate on backup power during emergencies such as flood conditions or ice storms, the water treatment plant will have an automatic backup generator, a proposed pump station will increase pressure in the Lucasville area and upgrades at the #1 Pump Station and to the High Service pumps will allow for more efficient operations and a higher flow capacity.

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 systems 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**.

Table of Detected Contaminants

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Range of Disinfectants							
Chlorine (ppm)	MRDLG =4	MRDL =4	1.21	0.83-1.54	No	2008	Water additive to control microbes
Inorganic Contaminants							
Lead (ppb)	0	Action Limit=15	<5.0	NA	No	2008	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 15 ppb						
Copper (ppb)	1,300	Action Limit =1,300	<50	NA	No	2008	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 1,300 ppb						
Nitrate (ppm)	10	10	0.23	NA	No	2008	Runoff from fertilizer use; erosion of natural deposits
Fluoride (ppm)	4	4	1.33	0.85-1.33	No	2008	Water additive which promotes strong teeth; erosion of natural deposits.
Volatile Organic Contaminants							
Total Trihalomethanes (ppb)	NA	80	26.6	NA	No	2008	By-product of drinking water chlorination
Five Haloacetic Acids (ppb)	NA	60	4.7	NA	No	2008	
IDSE TTHM (ppb)	NA	NA	NA	10.4-37.0	NA	2008	
IDSE HAA5 (ppb)	NA	NA	NA	8.9-10.9	NA	2008	

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) - one part per million corresponds to one minute in two years.

Parts per billion (ppb) - one part per billion corresponds to one minute in 2,000 years.

Less than = <

Maximum Contaminant Level Goal (MCLG) is the level of contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin or safety.

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.

All 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 the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the

Safe Drinking Water Hotline

1-800-426-4791.

IDSE Monitoring

Under state 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 and elevated disinfection byproduct concentrations. The locations selected for the IDSE may be used for compliance monitoring under Stage 2 DBPR, beginning 2012. 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.