

Annual
WATER
QUALITY
REPORT

Reporting Year 2013



DELCO
WATER COMPANY

Presented By
Del-Co Water Company, Inc.

PWS ID#: 2101412

There When You Need Us

We are once again proud to present our annual water-quality report covering all testing performed between January 1 and December 31, 2013. Over the years, we have dedicated ourselves to producing drinking water that meets all state and federal standards. We continually strive to adopt new methods for delivering the best-quality drinking water to you. As new challenges to drinking water safety emerge, we remain vigilant in meeting the goals of source water protection, water conservation, and community education while continuing to serve the needs of all our water users.

Please remember that we are always available to assist you should you ever have any questions or concerns about your water.

Important Health Information

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 may be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. The U.S. EPA/CDC (Centers for Disease Control and Prevention) 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 or <http://water.epa.gov/drink/hotline>.

Source Water Assessment

The Del-Co Water Company's primary sources of water are the Olentangy River and the Alum Creek Reservoir. These surface water sources supply water to three of the system's four water treatment plants: the Olentangy Plant, the Ralph E. Scott (Alum Creek) Plant, and the Timothy F. McNamara (Old State) Plant. Surface water is by its nature susceptible to contamination, and there are numerous potential contaminant sources, including agricultural runoff, oil/gas wells, inadequate septic systems, leaking underground storage tanks, and road and rail bridge crossings. As a result, the surface water supplied to these plants is considered to have a high susceptibility to contamination.

Del-Co also obtains groundwater from its well field in Knox County, which is treated by the Thomas E. Steward Plant. In October of 2001, the Ohio EPA approved Del-Co's Wellhead/Drinking Water Source Protection Plan for this well field. The source water here is also considered to have a relatively high susceptibility to contamination due to the lack of a significant confining layer above the sand and gravel aquifer, and the presence of numerous potential contamination sources within the protection area. Historically, the Del-Co public water system has effectively treated its source waters to meet drinking water quality standards. By implementing measures to protect the Olentangy River, Alum Creek Reservoir, and the local aquifer, the potential for water quality impacts can be further decreased.

More information on Del-Co Water Company's Drinking Water Source Assessment reports may be obtained by calling the General Manager at (740) 548-7746.

Substances That Could Be in Water

To ensure that tap water is safe to drink, the U.S. EPA prescribes regulations limiting the amount of certain contaminants in water provided by public water systems. U.S. Food and Drug Administration 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 these contaminants does not necessarily indicate that the water poses a health risk.

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, in some cases, radioactive material, and substances resulting from the presence of animals or from human activity. Substances 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, or 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.

For more information about contaminants and potential health effects, call the U.S. EPA's Safe Drinking Water Hotline at (800) 426-4791.

Lead in Home Plumbing

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. We are responsible for providing high-quality drinking water, but we 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 or at www.epa.gov/safewater/lead.

Important Watering Notice

Because of excessive water usage during dry periods and the effect it has upon Del-Co's ability to meet essential health and safety needs in homes, businesses, and fire protection, Del-Co has set the following year round mandatory watering restrictions: Addresses ending with an even number may water on Sunday, Wednesday, and Friday. Addresses ending with an odd number may water on Tuesday, Thursday, and Saturday.

ABSOLUTELY NO WATERING ON MONDAYS!

We encourage customers to consider best practices for maintaining your lawn in the future, which will also reduce your water bills and conserve water. We are providing the following information: Maintaining the growth and green of your lawn during the driest period of summer will usually require approximately an inch of water each week. Lawn sprinklers placed and left for one to two hours per area should apply the one inch of water needed to saturate the soil to a depth of six to eight inches. However, watering too frequently or overwatering stimulates excessive top growth, resulting in the need for more frequent mowing. It also leads to the development of shallow roots, making the lawn more susceptible to pests, disease, and heat-drought stress. The best time to water is during the early morning, when evaporation will be limited. Watering the lawn in the evening leaves the lawn wet all night, encouraging disease.

Where Does My Water Come From?

Del-Co's primary surface water supplies are the Olentangy River and the Alum Creek Reservoir. The Olentangy River runs for 88 miles, originating in Galion and flowing through the Scioto River. The Alum Creek Reservoir is located about ten miles southeast of Delaware and covers an average of 3,400 surface acres. Del-Co also has a groundwater supply from four wells rated at 1,300 gallons per minute each. Combined, our treatment facilities provide our customers with an average of nearly thirteen million gallons of drinking water per day.

The watershed for our water supply is part of the Upper Scioto Watershed, which covers an area of roughly 450 square miles on the Olentangy River and 125 square miles on Alum Creek. An average of 38 inches of rainfall annually refills the watershed. Snowmelt also contributes to the water supply. To learn more about our watershed on the Internet, go to the U.S. EPA's Surf Your Watershed Web site at www.epa.gov/surf.

QUESTIONS?

For more information about this report, or for any questions relating to your drinking water, please call Damon Dye at (740) 548-4037 or Spencer Sheldon at (740) 548-7746.

TipTopTap

The most common signs that your faucet or sink is affecting the quality of your drinking water are discolored water, sink or faucet stains, a buildup of particles, unusual odors or tastes, and a reduced flow of water. The solutions to these problems may be in your hands.

Kitchen sink and drain

Hand washing, soap scum buildup, and the handling of raw meats and vegetables can contaminate your sink. Clogged drains can lead to unclean sinks and backed up water in which bacteria (i.e., pink and black colored slime growth) can grow and contaminate the sink area and faucet, causing a rotten egg odor. Disinfect and clean the sink and drain area regularly. Also, flush regularly with hot water.

Faucets, screens, and aerators

Chemicals and bacteria can splash and accumulate on the faucet screen and aerator, which are located on the tip of faucets and can collect particles like sediment and minerals resulting in a decreased flow from the faucet. Clean and disinfect the aerators or screens on a regular basis.

Check with your plumber if you find particles in the faucet's screen as they could be pieces of plastic from the hot water heater's dip tube. Faucet gaskets can break down and cause black, oily slime. If you find this slime, replace the faucet's gasket with a higher-quality product.

Water filtration/treatment devices

A smell of rotten eggs can be a sign of bacteria on the filters or in the treatment system. The system can also become clogged over time so regular filter replacement is important. (Remember to replace your refrigerator filters!)

Sampling Results

During the past year, we have taken thousands of water samples in order to determine the presence of specific radioactive, biological, inorganic, volatile organic, or synthetic organic contaminants. The tables below show only those contaminants that were detected in the water.

The state requires us to monitor for certain substances less often than once per year because the concentrations of these substances do not change frequently. In these cases, the most recent sample data are included, along with the year in which the sample was taken.

Note: We have a current, unconditioned license to operate our water system.

REGULATED SUBSTANCES

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	MCL [MRDL]	MCLG [MRDLG]	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Alachlor (ppb)	2013	2	0	0.6	ND–0.6	No	Runoff from herbicide used on row crops
Alpha Emitters (pCi/L)	2011	15	0	5.7	NA	No	Erosion of natural deposits
Asbestos (MFL)	2011	7	7	0.33	0.17–0.36	No	Decay of asbestos cement water mains; Erosion of natural deposits
Atrazine (ppb)	2013	3	3	0.54	0.22–0.50	No	Runoff from herbicide used on row crops
Barium (ppm)	2013	2	2	0.022	NA	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Chlorine (ppm)	2013	[4]	[4]	1.28	0.31–2.35	No	Water additive used to control microbes
Combined Radium (pCi/L)	2011	5	0	0.9	NA	No	Erosion of natural deposits
Fluoride (ppm)	2013	4	4	1.07	0.80–1.28	No	Erosion of natural deposits; Water additive that promotes strong teeth; Discharge from fertilizer and aluminum factories
Haloacetic Acids [HAAs]–Stage 2 (ppb)	2013	60	NA	48.58	14.6–56.2	No	By-product of drinking water disinfection
Nitrate (ppm)	2013	10	10	1.32	0.19–1.32	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Simazine (ppb)	2013	4	4	0.18	0.13–0.18	No	Herbicide runoff
TTHMs [Total Trihalomethanes]–Stage 2 (ppb)	2013	80	NA	62.98	24.5–81.2	No	By-product of drinking water disinfection
Total Organic Carbon [TOC]¹ (removal ratio)	2013	TT: >1	NA	1.35	1.0–2.4	No	Naturally present in the environment
Turbidity² (NTU)	2013	TT: 1 NTU	NA	0.33	0.03–0.33	No	Soil runoff
Turbidity (Lowest monthly percent of samples meeting limit)	2013	TT: 95% of all samples <0.3 NTU	NA	99	NA	No	Soil runoff

Tap water samples were collected for lead and copper analyses from sample sites throughout the community

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AL	MCLG	AMOUNT DETECTED (90TH%TILE)	SITES ABOVE AL/ TOTAL SITES	VIOLATION	TYPICAL SOURCE
Copper (ppm)	2012	1.3	1.3	0.22	0/50	No	Corrosion of household plumbing systems; Erosion of natural deposits
Lead (ppb)	2012	15	0	2.3	2/50	No	Corrosion of household plumbing systems; Erosion of natural deposits

UNREGULATED SUBSTANCES

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AMOUNT DETECTED	RANGE LOW-HIGH	TYPICAL SOURCE
Bromodichloromethane (ppb)	2013	11	NA	By-product of drinking water disinfection
Chloroform (ppb)	2013	24	NA	By-product of drinking water disinfection
Dibromochloromethane (ppb)	2013	3.9	NA	By-product of drinking water disinfection

UNREGULATED CONTAMINANT MONITORING RULE

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AMOUNT DETECTED	RANGE LOW-HIGH
Dimethoctor ESA-UCMR³ (ppb)	2008	1.1	NA

¹The value reported under Amount Detected for TOC is the lowest ratio between percentage of TOC actually removed to the percentage of TOC required to be removed. A value of greater than 1 indicates that the water system is in compliance with TOC removal requirements. A value of less than 1 indicates a violation of the TOC removal requirements.

²Turbidity is a measure of the cloudiness of the water. It is monitored because it is a good indicator of the effectiveness of the filtration system.

³This contaminant was sampled under the Unregulated Contaminant Monitoring Rule (UCMR) List 2 requirements. Unregulated contaminants are those for which the U.S. EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist the U.S. EPA in determining their occurrence in drinking water and whether future regulation is warranted. For more information on the UCMR, call Spencer Sheldon at (740) 548-7746.

Definitions

AL (Action Level): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that 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.

MFL (million fibers per liter): A measure of the presence of asbestos fibers that are longer than 10 micrometers.

MRDL (Maximum Residual Disinfectant Level): The highest level of a 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 a 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 contaminants.

NA: Not applicable

ND (Not detected): Indicates that the substance was not found by laboratory analysis.

NTU (Nephelometric Turbidity Units): Measurement of the clarity, or turbidity, of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

pCi/L (picocuries per liter): A measure of radioactivity.

ppb (parts per billion): One part substance per billion parts water (or micrograms per liter).

ppm (parts per million): One part substance per million parts water (or milligrams per liter).

removal ratio: A ratio between the percentage of a substance actually removed to the percentage of the substance required to be removed.

TT (Treatment Technique): A required process intended to reduce the level of a contaminant in drinking water.