Downingtown Municipal Water Authority – PWSID 1150026

2023 Annual Drinking Water Quality Report

Este informe contiene información importante acerca de su agua potable.
Haga que alguien lo traduzca para usted, ó hable con alguien que lo entienda.
This report contains important information about your drinking water.
Have someone translate it for you, or speak with someone who understands it.

Owners of multiple family dwellings, commercial businesses, public housing, or similar situations, are encouraged to post and/or distribute this report. Additional copies are available and can be obtained at Downingtown Municipal Water Authority operations center or by calling (610) 269-5362.

This report is also available online at www.dtownwater.com.

DMWA water meets or exceeds all State and Federal Safe Drinking Water Act standards.

Water System Information:

Downingtown Municipal Water Authority (DMWA) is pleased to present to you this year's Annual Drinking Water Quality Report. This brochure is a snapshot of last year's water quality. Included are details about where your water comes from, what it contains, and how it compares to Environmental Protection Agency (EPA) and Pennsylvania Department of Environmental Protection (PA DEP) state standards. We are committed to providing you with information because informed customers are our best allies. The Authority's staff of professionals is dedicated to ensuring that our customers receive a safe, economical, and continuous supply of water.

It is important for our valued customers to be informed about their water quality. If you have any questions about this report or regarding your water utility, please contact DMWA, at **(610) 269-5362** or visit our website at **www.dtownwater.com**. If you want to learn more about DMWA, please attend any of our regularly scheduled Board of Directors meetings. Meetings are held on **the first Monday of every month at the Authority's operations center located at 100 Water Plant Way. Meetings begin at 7:00 p.m.**

Where does my water come from?

The raw water we treat comes from Marsh Creek Lake and the East Branch of the Brandywine Creek and a groundwater supply well that was placed into service in July of 2014. Each day we produce approximately 1.6 million gallons of high-quality drinking water for our customers. Our raw water quality can be affected by the seasonal algae growth and vegetation decay in the Marsh Creek Lake and East Branch Brandywine Creek watershed. Occasionally, higher than normal algae/organic-laden raw water can cause short-term taste and odor (T/O) problems in our treated water. DMWA is implementing a long-range plan to improve its water system, in order to alleviate the T/O and other potential water quality issues.

How is my water treated?

The DMWA's water treatment plant uses conventional treatment processes consisting of chemical pre-treatment, coagulation, sedimentation, filtration and disinfection, along with corrosion control treatment and fluoridation (for dental protection). More information can be obtained from DMWA's website. **www.dtownwater.com**.

How is the drinking water quality?

The DMWA routinely monitors for quality in your drinking water according to Federal and State laws. The Table contained herein shows the results of our monitoring for the period of January 1st to December 31st, 2023. Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some impurities. The presence of impurities does not necessarily indicate that water poses a health risk. More information about impurities and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline at 800-426-4791.

A Source Water Assessment of our Brandywine Creek source was completed by the PA Department of Environmental Protection (PA DEP). The assessment found that our source is potentially susceptible to transportation corridors, railroads and bridges, auto repair shops, storm water runoff, wastewater treatment, on-lot waste disposal, and lakes. Overall, our source has little to moderate risk of significant contamination. A summary report of the Assessment is available on the Source Water Assessment Summary Reports library web page:

http://www.depgreenport.state.pa.us/elibrary/GetFolder?FolderID=4505. Complete reports were distributed to municipalities, water supplier, local planning agencies and PADEP offices. Copies of the complete report are available for review at the Pa. DEP Regional Office, Records Management Unit at (484) 250-5900.

People with Special Health Concerns

Some people may be more vulnerable to the 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 risks from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means lessen the risk of infection by Cryptosporidium and other microbiological contaminants are available from the Safe Drinking Water Hotline (800-426-4791)

How do drinking water sources become polluted?

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 result from urban storm water runoff, industrial or domestic wastewater discharges, oil or gas production, mining, or farming.
- Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses.
- Organic chemical contaminants, including synthetic or volatile organic chemicals which may include pesticides and herbicides which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses or by-products of industrial processes and petroleum production, gas stations, or septic systems.
- 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, EPA and DEP prescribe regulations which limit the amount of certain contaminants in water provided by public water systems. FDA and DEP 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 (800-426-4791).

Monitoring Your Water:

DMWA routinely monitors for contaminants in your drinking water according to federal and state laws. The following tables show the results of our monitoring for the period of **January 1 to December 31, 2023**. DEP requires us to monitor for some contaminants less than once per year as the concentrations of these contaminants do not change frequently. Some of our data is from prior years in accordance with the *Safe Drinking Water Act*. The date has been noted on the sampling results table.

DETECTED SAMPLE RESULTS

Downingtown Municipal Water Authority – PWSID 1150026

Contaminant	Violation Y/N	Level detected	Range of Detections and/or Sample	MCLG/ MRDLG	MCLG/ MRDLG in CCR units	Likely Source of Contamination	Potential Health Effects
Microbiological Contaminants							
Turbidity (NTU)	N	0.080 100.0% ≤ 0.3 NTU	0.015-0.080	N/A N/A	TT <1 NTU TT = 95% of samples ≤ 0.3 NTU	Soil runoff	Turbidity has no health effects. However, turbidity can interfere with dis- infection and provide a medium for microbial growth. Turbidity may indicate the presence of disease-causing organisms. These organisms include bacteria, viruses, and parasites that can cause symptoms such as nausea, cramps, diarrhea, and associated headaches.
Disinfection Byproducts							
HAA5 Haloacetic Acids (ppb)	N	23.4	9.7-30.8	N/A	60	By-product of drinking water disinfection	Some people who drink water containing haloacetic acids in excess of the MCL over many years may have an increased risk of getting cancer.
TTHM's Total Trihalo-methanes (ppb)	N	31.8	12.8-55.5	N/A	80	By-product of drinking water disinfection	Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer.
Inorganic Contaminants							
Distribution Chlorine	N	1.87	1.43-1.87	0.2	0.2	Water additive used to control microbes	Some people who use water containing chlorine well in excess of the MRDL could experience irritating effects to their eyes and nose. Some people who drink water containing chlorine well in excess of the MRDL could experience stomach discomfort.
Nitrate as nitrogen (ppm)	N	2.23	2.18-2.28	10	10	Runoff from fertilizer use; leaching from septic tanks; sewage; erosion of natural deposits	Infants below the age of six months who drink water containing nitrate in excess of the MCL could become seriously ill and, if untreated, may die. Symptoms include shortness of breath and blue-baby syndrome.
Fluoride	N	0.48	0.42-0.53	2	2	Water additive which promotes strong teeth	At low levels, fluoride can prevent cavities, but children drinking water containing more than 2 mg/L of fluoride may develop cosmetic discoloration of their permanent teeth (dental fluorosis).

Disinfectants							
Treatment Plant Chlorine	N	1.16	1.16-3.37	4	4	Water additive used to control microbes	Some people who use water containing chlorine well in excess of the MRDL could experience irritating effects to their eyes and nose. Some people who drink water containing chlorine well in excess of the MRDL could experience stomach discomfort.
Secondary Contaminants							
Manganese	N	0.005	0-0.016	0.050	0.050	Naturally present in the environment	Concentrations in exceedance of the MCL can cause discoloration of water fixtures and cause drinking water to have a bitter taste.
Total Organic Carbon							
TOC	N	Range of removal required 25-50	Range of % Removal Achieved N/A TOC <2.0	Number of quarters out of compliance 0		Naturally present in the environment	TOC has no health effects. However, it provides a medium for the formation of disinfection byproducts including Trihalomethanes and Haloacetic Acids. Drinking water containing these byproducts in excess of the MCL may lead to adverse health effects, liver or kidney problems, or nervous system effects, and may lead to an increased risk of getting

Lead and Copper – *Tested at Customers' Taps*								
	Action Level (AL)	MCLG	90th Percentile Value	Units	# of Sites Above AL of Total Sites	Sample Date	Violation Yes/No	Sources of Contamination
Lead	*90% of homes must test less than 15 ppb*	0	2	ppb	0 of 20	2022	No	Corrosion of household plumbing systems
Copper	*90% of homes must test less than 1.3 ppm*	1.3	0.223	ppm	0 of 20	2022	No	Corrosion of household plumbing systems

What does this Table mean?

Test results from analysis of DMWA system water quality samples show that your water meets all US EPA and Commonwealth of Pennsylvania health-based drinking water standards. Neither Maximum Contaminant Levels (MCLs) nor limits associated with Treatment Techniques (TTs) were exceeded.

Reporting Violations:

During the third quarter of 2023, DMWA received a failure to monitor violation due to the contracted certified laboratory not submitting Volatile Organic Compound testing results in the specified time window. Results have since been submitted and compliance achieved.

DMWA is a member of the EPA's Partnership for Safe Water Program (an association of water utilities and government) which is committed to voluntarily provide drinking water of a quality far better than required by Federal regulations. In 2017, DMWA is one of the three (3) authorities in Pennsylvania that received a national award for maintaining active Phase III Director's Award Status for 15 years.

Glossary

Action Level (AL)

The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

Maximum Contaminant Level (MCL)

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.

Maximum Contaminant Level Goal (MCLG)

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.

Maximum Residual Disinfectant Level (MRDL)

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.

Maximum Residual Disinfectant Level Goal (MRDLG)

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 contamination.

Nephelometric Turbidity Unit (NTU)

Nephelometric turbidity unit is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

Non-Detects (ND)

Laboratory analysis indicates that the contaminant is not present at a detectable level.

Not Applicable (N/A)

Parts per million (ppm)

One part per million is equivalent to a single penny in ten thousand dollars.

Parts per billion (ppb)

One part per billion is equivalent to a single penny in ten million dollars.

Picocuries per liter (pCi/L)

Picocuries per liter is a measure of radioactivity in water.

Recommended Upper Limit (RUL)

The RUL is suggested by EPA for secondary contaminants. EPA recommends secondary standards to water systems but does not require systems to comply.

Treatment Technique (TT)

A treatment technique is a required process
intended to reduce the level of a contaminant in drinking water.

Information about 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. Downingtown Municipal Water Authority 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 or at **http://www.epa.gov/safewater/lead**.

Information about Nitrate:

Nitrate in drinking water at levels above 10 ppm is a health risk for infants of 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.

Special Considerations Regarding Children, Pregnant Women, Nursing Mothers, and Others

Children may receive a slightly higher amount of a contaminant present in the water than do adults, on a body weight basis, because they may drink a greater amount of water per pound of body weight than do adults. For this reason, reproductive or developmental effects are used for calculating a drinking water standard if these effects occur at lower levels than other health effects of concern. If there is insufficient toxicity information for a chemical (for example, lack of data on reproductive or developmental effects), an extra uncertainty factor may be incorporated into the calculation of the drinking water standard, thus making the standard more stringent, to account for additional uncertainties regarding these effects. In the cases of lead and nitrate, effects on infants and children are the health endpoints upon which the standards are based.

How DMWA Is Protecting the Water You Drink

Lead in drinking water typically comes from the corrosion of drinking water service lines and household plumbing materials. Lead is typically not present in drinking water sources like rivers and groundwater. DMWA adds orthophosphate to the water during the treatment process. Orthophosphate acts as a corrosion inhibitor by forming a protective film on the interior of pipes. This film protects the pipe material from the corrosive effects of water, which reduces/eliminates the potential for lead leaching into the water. The typical phosphate levels found in a liter of drinking water are about one hundred times lower than the phosphate levels found in the average American diet. For example, a person would have to drink ten to fifteen liters of water to equal the amount of phosphates in just one can of soda. People concerned about their health and phosphates added as a corrosion inhibitor to the drinking water, should contact their medical care provider.

To enhance water quality, DMWA performs bi-annual hydrant flushing program which takes place in the spring and fall of each year. This flushing program helps improve water quality by removing any possible build-up of mineral deposits from the inside of water distribution pipes. DMWA also has a water main replacement program to improve the quality of water that we deliver to our customers. Old unlined cast iron mains, that can affect water quality and restrict flow, are identified to be replaced. These projects are scheduled when Penn DOT or our member municipalities are doing work on the roads to reduce inconvenience to the community.

Since 9/11/01, DMWA has been proactive in taking steps to ensure the security of your drinking water. It is very important that any suspected vandalism, terrorism or suspicious activity be reported to your regional PADEP Water Supply Office IMMEDIATELY at 800-541-2050 (24-hour hotline).

For more information about...

Water quality - call the U.S. Environmental Protection Agency's Safe Drinking Water Hotline, 800-426-4791

Website: www.epa.gov/safewater/

Pennsylvania Department of Environmental Protection, Southeast Region

Phone: 484-250-5900

Website: www.depweb.state.pa.us/

Local drinking water quality - contact the Downingtown Municipal Water Authority at Phone: 610-269-5362

e-mail: info@dtownwater.com Website: **www.dtownwater.com**.

Downingtown Municipal Water Authority

Board Members

Chairman – Anthony Gazzerro

Vice Chairman - Alexander D. Rakoff

Secretary - Anthony D'Addezio

Treasurer – Vito Taraschi

Administrative Staff

Executive Director - Stephen Sullins

Operations Manager - Dennis King

Water Quality

Water Quality & Environmental Compliance Specialist - Mark Agostini

Solicitor

Max O'Keefe – Lamb McErlane

Engineer

Matt Bush – JMR Engineering

Office

Hours: Monday-Friday

8am-5pm

Office Manager - Jeanie Zaplitny

Customer Service Specialist - Stephanie Fusaro

Emergency Contact

(610) 425-2668