

2017

Annual Drinking Water Quality Report

We're pleased to present to you this year's *Annual Drinking Water Quality Report*. This report is designed to inform you about the quality water and services we deliver to you every day. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to ensuring the quality of your water.

Sources of Water:

Our sources are five drilled wells, four located east of the Borough of Walnutport in Lehigh Township and one located within the Borough.

Need More Information?

If you have any questions about this Report or concerning your water utility, please contact:

Walnutport Authority Water and Sewer

Mr. Carlton Miller

417 Lincoln Avenue
Walnutport, PA 18088
(610) 767-7887

Public Water Supply Identification
(PWSID) Number is 3480032

We want our valued customers to be informed about their Water Utility. If you want to learn more, please attend any of our regularly scheduled meetings. They are held on the second Tuesday of every month at 7:00 p.m. at the Walnutport Borough Hall.

We look forward to continuing to serve the residents and businesses of our community.



Know the Health Risks

All sources of drinking water are subject to potential contamination by contaminants that are naturally occurring or manmade. All drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants.

The sources of drinking water (both tap 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 materials 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 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 byproducts of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff and 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, the EPA and DEP prescribe regulations which limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration and DEP regulations establish limits for contaminants in bottled water which must provide the same protection for public health. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline at 1-800-426-4791 or visiting the EPA Office of Water website at www.epa.gov/OGWDW. MCLs are set at very stringent levels for health effects.

Unregulated contaminants are those for which EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is warranted.

To understand the possible health effects described for many regulated constituents, 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.

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 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 at 1-800-426-4791.

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 advice from your health care provider.

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. The Walnutport 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>.



Impurities Detected by the Walnutport Authority

The Walnutport Authority routinely monitors for constituents in your drinking water according to federal and state laws. This table shows monitoring results for the period of January 1 to December 31, 2017. This table shows only the contaminants that were detected and the levels at which they were detected.

There were many other contaminants that were not detected in the sample collected for analysis. Remember that the presence of certain constituents does not necessarily pose a health risk. All drinking water may be reasonably expected to contain at least small amounts of some constituents.

We're proud that our drinking water meets or exceeds Federal and State requirements.

Chemical Contaminants								
Contaminant	MCL in CCR Units	MCLG	Highest Level Detected	Range of Detections	Units	Sample Date	Violation Y/N	Sources of Contamination
Chlorine	MRDL=4	4 ⁽¹⁾	0.93	0.12 - 0.93	ppm	2017	N	Water additive used to control microbes
Nitrate	10	10	6.02	6.02	ppm	2017	N	Runoff from fertilizer use
Haloacetic Acids (HAA5)	60	n/a	10.75 ⁽²⁾	6.0 - 13.4	ppb	2017	N	By-product of drinking water disinfection
TTHMs(total Trihalomethanes)	80	n/a	7.85 ⁽²⁾	3.4 - 11.8	ppb	2017	N	By-product of drinking water disinfection

(1) MRDLG

(2) Highest Running Annual Average

Entry Point Disinfectant Residual							
Contaminant	Min. Required Disinfectant Residual	Lowest Level Detected	Range of Detections	Units	Sample Date	Violation Y/N	Sources of Contamination
Chlorine-EP 101	0.4	1	1.0 - 1.3	ppm	2/1/2017*	N	Water additive used to control microbes.
Chlorine-EP 103	0.8	1.1	1.1 - 1.7	ppm	3/22/2017*	N	Water additive used to control microbes
Chlorine-EP 105	0.7	1.2	1.2 - 1.5	ppm	4/3/2017*	N	Water additive used to control microbes

Microbial					
Contaminant	TT	MCLG	Assessments/ Corrective Actions	Violation Y/N	Sources of Contamination
Total Coliform Bacteria	Any system that has failed to complete all the required assessments or correct all identified sanitary defects, is in violation of the treatment technique requirement	N/A	See detailed description under "Detected Contaminants Health Effects Language and Corrective Actions" section	N	Naturally present in the environment

Lead and Copper (2016)

Contaminant	Action Level (AL)	MCLG	90th Percentile Value	Units	# of Sites Above AL of Total Sites	Violation Y/N	Sources of Contamination
Lead	15	0	0	ppb	0	N	Corrosion of household plumbing.
Copper	1.3	1.3	0.705	ppm	0	N	Corrosion of household plumbing.

Notes:

The PA DEP allows us to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Items not sampled for in 2017 are noted with the last year of sampling.

** The Action Level (AL) for Lead and Copper serves as a trigger for water systems to take additional treatment steps if exceeded in more than 10% of tap water samples. The Action Level for Lead is 15 ug/L, and the Action Level for Copper is 1.3 mg/L. No Action Levels were exceeded in the 2016 sampling, and Lead was not detected during the 2016 sampling.*

Definitions

In the tables in this report you will find many terms and abbreviations you might not be familiar with. To help you better understand these terms we've provided the following definitions:

Action Level (AL)

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

MCL - Maximum Contaminant Level

The "Maximum Allowed" is 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.

mg/l - Milligrams per liter or Parts per million (ppm)

One milligram per liter or one part per million (ppm) corresponds to one minute in two years or a single penny in \$10,000.

MCLG - Maximum Contaminant Level Goal

The "Goal" is 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 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 contamination.

pCi/l - Picocuries per liter

Picocuries per liter is a measure of the radioactivity in water.

ug/l - Micrograms per liter

One microgram per liter corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.

Level 1 Assessment

A Level 1 assessment is a study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system.

Level 2 Assessment

A Level 2 assessment is a very detailed study of the water system to identify potential problems and determine (if possible) why an *E. coli* MCL violation has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions.

Treatment Technique (TT)

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



We at the Walnutport Authority work around the clock to provide top quality water to every tap. We ask that all our customers help us protect our water sources, which are the heart of our community, our way of life and our children's future.

Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other potentially-harmful, bacteria may be present or that a potential pathway exists through which contamination may enter the drinking water distribution system. We found coliforms indicating the need to look for potential problems in water treatment or distribution. When this occurs, we are required to conduct assessment(s) to identify problems and to correct any problems that were found during these assessments.

During the past year, we were required to conduct one Level 1 Assessment, and this Level 1 assessment was completed. No corrective actions were required and no treatment technique was violated during this assessment.

Thank you for allowing us to continue providing your family with clean, quality water this year. In order to maintain a safe and dependable water supply, we sometimes need to make improvements that will benefit all of our customers. These improvements are sometimes reflected as rate structure adjustments. Thank you for understanding.

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.)



Undetected Impurities Tested for by Walnutport Authority

Inorganic Chemicals (2015)

Antimony
Arsenic
Asbestos (2012)
Barium
Beryllium
Cadmium
Chromium
Cyanide (Free)
Fluoride
Lead (2016)
Mercury
Nickel
Nitrite (2017)
Selenium
Thallium

Synthetic Organic Chemicals (2017)

1,2 dibromo, 3-chloroprop
2,3,7,8-tcdd (Dioxin)
2,4 – D
2,4,5 – TP Silvex
Alachlor
Atrazine
Benzo(a)pyrene
Carbofuran
Chlorodane
Dalapon
Di (2-ethylhexyl) adipate
Di (2-ethylhexyl) phthalate
Dinoseb
Diquat
Endothall
Endrin
Ethylene Dibromide (EDB)
Glyphosate
Heptachlor
Heptachlor Epoxide
Hexachlorobenzene

Hexachlorocyclopentadiene
Lindane
Methoxychlor
Oxymal (Vydate)
PCBs
Pentachlorophenol
Piclorem
Simazine
Toxaphene

Volatile Organic Chemicals (2017)

1,1,1-Trichloroethane
1,1,2-Trichloroethane
1,1-Dichloroethylene
1,2,4-Trichlorobenzene
1,2-Dichloroethane
1,2-Dichloropropane
Benzene
Carbon Tetrachloride
Chlorobenzene
cis-1,2-Dichloroethylene
Dichloromethane
Ethylbenzene
o-Dichlorobenzene
para-Dichlorobenzene
Styrene
Tetrachloroethylene
Toluene
trans-1,2-Dichloroethylene
Trichloroethylene
Vinyl Chloride
Xylenes (Total)

Microbiological Contaminants (2017)

Fecal Coliform and E. Coli

Radiologicals (2015)

Combined Uranium
Gross Alpha
Gross Beta
Radium (226 & 228)

Notes: Contaminants in *Italics* Not Regulated by EPA.

Not all contaminants are sampled for every year, according to DEP regulations. Those contaminants not sampled for in 2017 are noted with the last year of sampling.