

2017

Annual Drinking Water Quality Report

Upper Hanover Authority

PWS ID#1460036

Este informe contiene informacion muy importante sobre su agua de beber. Traduzcalo o hable con alguien que lo entienda bien. (This report contains very important information about your drinking water. Translate it, or speak to someone who understands it.)

We are pleased to present to you this year's Annual 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.

To meet growth and new requirements, Upper Hanover Authority is continuously making upgrades to its water supply and distribution system. Currently our water sources consist of four wells. We also receive additional water from the Red Hill Water Authority, which consists of two wells and a spring-fed reservoir. A copy of Red Hills quality report is available upon request.

The water system is operated by five water-works operators. Three operators are certified by the Department of Environmental Protection and

are licensed to operate public water systems in the state of Pennsylvania.

The Upper Hanover Authority routinely monitors for constituents in your drinking water according to Federal and State laws. We have learned through our monitoring and testing that some of these constituents have been detected.

The EPA has determined that your water is safe at these levels. The following table shows the results of our monitoring for the period of January 1 through December 31, 2017.

All drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some constituents. The presence of these constituents does not necessarily indicate that the water poses a health risk.

Total water usage for this report year was 264,955,000 gallons.



***PLEASE READ IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER WITHIN THIS REPORT**

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

Michael Wetzel
Operations Manager
215-679-3129

We want our valued customers to be informed about their water utility!

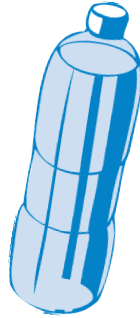
To learn more, please attend any of our regularly scheduled meetings.

6:00 p.m.
the first Thursday of each month
Upper Hanover Township Building
Pillsbury Drive and State Streets
Upper Hanover Township

Educational Information

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 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 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, EPA and DEP prescribes 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).

The following table may include terms and abbreviations with which you are not familiar. To help you better understand these terms we've provided definitions in the box below.

Definitions and Abbreviations

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 contaminants.

Minimum Residual Disinfectant Level (MinRDL): The minimum level of residual disinfectant required at the entry point to the distribution system.

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

Mrem/year = millirems per year (a measure of radiation absorbed by the body)

pCi/L = picocuries per liter (a measure of radioactivity)

ppb = parts per billion, or micrograms per liter (mg/L)



ppm = parts per million, or milligrams per liter (mg/L)

ppq = parts per quadrillion, or picograms per liter

ppt = parts per trillion, or nanograms per liter

Information About Arsenic

While your drinking water meets EPA's standard for arsenic, it does contain low levels of arsenic. EPA's standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. EPA continues to research the health effects of low levels of arsenic which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.

Information About Cryptosporidium

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 microbial contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

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. **The Upper Hanover 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.

Detected Sample Results

Chemical Contaminants

Contaminant	MCL in CCR Units	MCLG	Level Detected	Range of Detections	Units	Sample Date	Violation Y/N	Sources of Contamination
Arsenic	10	0	5	5	Mg/l	03/04/15	N	Erosion of natural deposits, runoff from orchards
Nitrate	10	10	4.68	0 - 4.68	Mg/l	07/19/17	N	Runoff from fertilizer use, leaching from septic tanks, erosion of natural deposits
TTHM	80	NA	7.58	.53 - 7.58	ppb	09/26/17	N	By-product of drinking water disinfection
HAA5	60	NA	4.30	0 - 4.30	ppb	09/26/17	N	By-product of drinking water disinfection
Dichloroethylene (Entry Point)	7	7	6.00	5.10 - 6.00	ppb	09/26/17	N	Discharge from industrial chemical factories
Dichloroethylene (Distribution)	7	7	2.45	2.45	ppb	09/26/17	N	Discharge from industrial chemical factories
Trichloroethane (Entry Point)	200	200	0.90	.80 - .90	ppb	09/26/17	N	Discharge from metal degreasing sites and other factories
Trichloroethane (Distribution)	200	200	0.35	0.35	ppb	09/26/17	N	Discharge from metal degreasing sites and other factories
Chlorine	4	4	1.12	0.64 - 1.12	ppm	2017	N	Water additive used to control microbes



EPA's MCL for fluoride is 4 ppm. However, Pennsylvania has set a lower MCL to better protect human health.

Entry Point Disinfectant Residual

Contaminant	Minimum Disinfectant Residual	Lowest Level Detected	Range of Detections	Units	Sample Date	Violation Y/N	Sources of Contamination
Chlorine E.P. #101	0.54	0.10*	0.10 - 1.30	ppm	09/25/17	N	Water additive used to control microbes
Chlorine E.P. #102	0.54	0.28*	0.28 - 1.48	ppm	01/28/17	N	Water additive used to control microbes
Chlorine E.P. #103	0.40	0.35*	0.35 - 1.31	ppm	01/02/17	N	Water additive used to control microbes
Chlorine E.P. #104	0.40	0.41	0.41 - 1.66	ppm	01/02/17	N	Water additive used to control microbes

*The minimum disinfection residual increased to a compliant level within the 4 hour window stipulated by the regulations.

Lead and Copper

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	2	ppb	0	N	Corrosion of household plumbing
Copper	1.30	1.30	0.167	ppm	0	N	Corrosion of household plumbing

**IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER
FAILURE TO MAINTAIN RECORDS**

**ESTE INFORME CONTIENE INFORMACIÓN MUY IMPORTANTE
SOBRE SU AGUA DE BEBER. TRADUZCALO O HABLE CON
ALGUIEN QUE LO ENTIENDA BIEN.**

Record Keeping Requirements Not Met for Upper Hanover Authority

Our water system violated a drinking water requirement over the past year. We incurred a record keeping violation under the Safe Drinking Water Act.

What should I do?

There is nothing you need to do at this time. You may continue to drink the water. If a situation arised where the water is no longer safe to drink, you will be notified in 24 hours.

What happened? What was done?

During the first quarter of 2018 we failed to constantly monitor the chlorine residual at one of our monitoring locations. The continuous analyzer at this location failed to automatically record residual data from 2/8/18 to 3/7/18. Manual checks were taken daily by operators and the chlorine residual was monitored by an auto dialer, which would have notified an operator if the residual had dropped below the set point of 0.59 mg/L. DEP requires a minimum residual concentration of 0.54 mg/L at this location. The continuous analyzer was repaired on March 8 and is now automatically recording data. For more information, please contact Michael R. Wetzel at 215-679-3129.

Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.

Monitoring Your Water

We routinely monitor 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, 2017. The State allows us to monitor for some contaminants less than once per year because 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.



The Upper Hanover Authority works around the clock to provide top quality water to every tap. We ask our customers to help us protect our water sources, which are the heart of our community, our way of life, and our children's future.

Please call our office if you have any questions at 215-679-3129