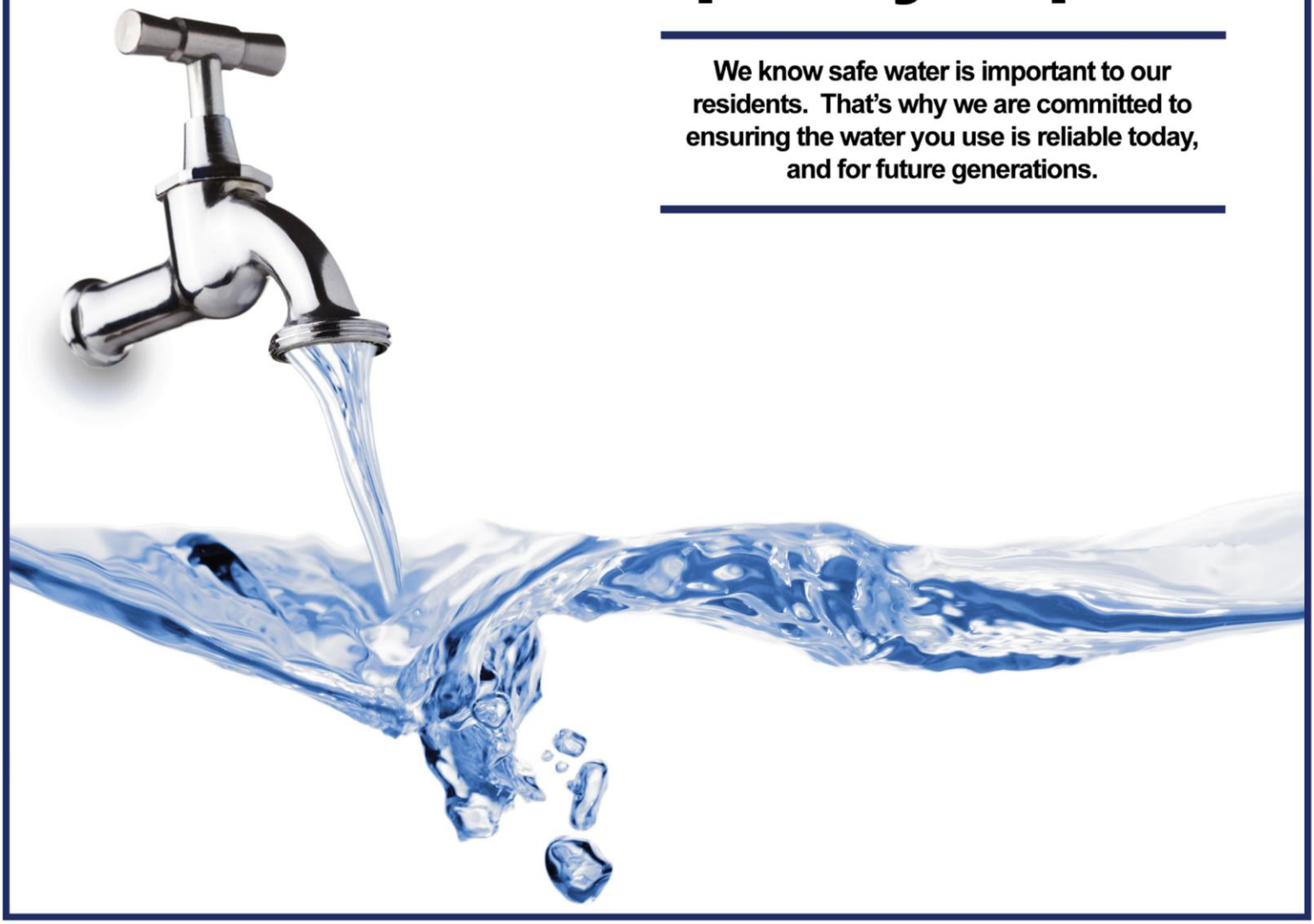
South Whitehall Township

SWTA Main System PWSID 3390065
SWTA Consecutive System PWSID 3390087

annual water quality report

We know safe water is important to our residents. That's why we are committed to ensuring the water you use is reliable today, and for future generations.



annual 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. It outlines information concerning the SWTA Main System and the SWTA consecutive system. Our constant goal is to provide you with a 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.

The South Whitehall Township Authority has nine active wells located within the township. Four draw from the Beekmantown Group of aquifers and five draw from the Allentown Formation aquifers. In addition, we purchase treated surface water from the Lehigh County Authority Allentown Division, who took over operation of City of Allentown in August 2013, and have an emergency interconnection with Lehigh County Authority Suburban Division.

PADEP Conducted a Source Water Assessment in 2004 and found that our water sources are potentially susceptible to contamination from several sources including Auto repair shops, Gas service stations and underground storage tanks. A summary of the source water report along with reports of other water supplies in the Lehigh Valley can be found at http://www.elibrary.dep.state.pa.us/dsweb/View/Collection-10089.

Este informe contiene informacion muy importante sobre su agua beber. Traduzcalo o hable con alguin quo lo entienda bien.

I'm pleased to report that our drinking water meets federal and state requirements.

If you have any questions about this report or concerning your water utility, please contact Mike Elias at the South Whitehall Township Water Department via email eliasm@southwhitehall.com or call 610-398-0401. You are also welcome to attend a Board of Authority meeting scheduled every month on the first and third Wednesday at 7:00 p.m.

South Whitehall Township Water Department routinely monitors for constituents in your drinking water according to Federal and State laws. This table shows the results of our monitoring for the period of January 1st to December 31st, 2019. All drinking water, including bottled drinking water, may be reasonably expected to contain at least small amounts of some constituents. It's important to remember that the presence of these constituents does not necessarily pose a health risk.

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 (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. South Whitehall Township 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*.

annual water quality report

South Whitehall Township Wells Water Quality Data

Contaminant (Units)	Violation Yes/No	Level Detected	Range	MCL	MCLG	Major Sources in Drinking Water
Inorganic Contaminants						
Arsenic (ppb) Sampled in 2018	No	0.4	ND to 0.4	10	0	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes
Barium (ppm) Sampled in 2018	No	0.067	0.013 to 0.067	2	2	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Chromium (ppb) Sampled in 2018	No	1.0	0.3 to 1.0	100	100	Discharge from steel and pulp mills; Erosion of natural deposits
Cyanide (ppb) Sampled in 2018	No	1	ND to 1	200	200	Discharge from steel/metal factories; Discharge from plastic and fertilizer factories
Chlorine (ppm)	No	1.77	1.46 to 1.77	4	4	Water additive used to control microbes.
Fluoride (ppm) Sampled 2015 through 2019	No	0.604	ND to 0.604	2	2	Water additive to promote strong teeth
Nickel (ppb) Sampled in 2018	No	0.4	ND to 0.4	NA	NA	Leaching from metals in contact with drinking water. The MCL for Nickel was remanded by EPA.
Nitrate (ppm)	No	3.83	ND to 4.37	10	10	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Thallium (ppb) Sampled in 2018	No	0.03	ND to 0.03	2	0.5	Leaching from ore-processing sites; Discharge from electronics, glass, and drug factories
Organic Contaminants						
TTHM Total Trihalomethanes (ppb)	No	32.5	7.0 to 42.4	80	N/A	By-product of drinking water chlorination
Haloacetic Acids (HAA) (ppb)	No	12.3	ND to 12.3	60	N/A	By-product of drinking water chlorination
Radiological Contaminants						
Alpha emitters (pCi/L) Sampled in 2017	No	3.55	ND to 3.55	15	0	Erosion of natural deposits

We had no detections for Synthetic Organic Compounds

annual water quality report

Microbial (related to Assessments/Corrective Actions regarding TC positive results)					
Contaminants	**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.

Entry Point Disinfectant Residual							
Contaminant	Minimum Disinfectant Residual	Lowest Level Detected	Range of Detections	Units	Sample Date	Violation Yes/No	Sources of Contamination
Chlorine EP 101	0.88	1.36	1.36 to 2.51	ppm	2019	No	Water additive used to control microbes.
Chlorine EP 102	0.88	1.03	1.03 to 3.25	ppm	2019	No	Water additive used to control microbes.
Chlorine EP 104	1.2	1.29	1.29 to 2.41	ppm	2019	No	Water additive used to control microbes.
Chlorine EP 106	0.88	1.33	1.33 to 2.27	ppm	2019	No	Water additive used to control microbes.
Chlorine EP 110	0.95	0.99	0.99 to 2.76	ppm	2019	No	Water additive used to control microbes.
Chlorine EP 111	0.40	1.12	1.12 to 2.72	ppm	2019	No	Water additive used to control microbes.
Chlorine EP 1113	1.20	1.63	1.63 to 2.32	ppm	2019	No	Water additive used to control microbes.

Lead and Copper (Sampled in 2019)							
Contaminant	**Action Level (AL)**	**MCLG**	**90th Percentile Value**	**Units**	**# of Sites Above AL of Total Sites**	**Violation Of TT Yes/No**	**Sources of Contamination**
Copper	1.3	1.3	0.096	ppm	0	No	Corrosion of household plumbing
Lead	15	0	5	ppb	1	No	Corrosion of household plumbing.

Unregulated Contaminants (Sampled in 2014)	Reported Level (Average)	Range of Results
Chlorate (ppb)	97.95	23.2 to 604
Hexavalent Chromium (ppb)	0.32	0.14 to 0.78
Chromium (ppb)	0.565	0.27 to 1.2
Strontium (ppb)	139.9	66.3 to 269
Molybdenum, Total (ppb)	1.18	1.1 to 1.9
Vanadium (ppb)	0.24	0.24
1,4-Dioxane (ppb)	0.089	0.076 to 0.099

annual water quality report

LCA Water Quality Data

Contaminant (Units)	Violation Yes/No	Level Detected	Range	MCL	MCLG	Major Sources in Drinking Water
Inorganic Contaminants						
Chlorine (ppm)	No	1.3	0.75 to 1.3	4	4	Water additive used to control microbes.
Fluoride (ppm) Sampled in 2015 and 2019	No	0.53	ND to 0.53	2	2	Water additive to promote strong teeth
Organic Contaminants						
TTHM Total Trihalomethanes (ppb)	No	37.9	Only 1 sample taken	80	N/A	By-product of drinking water chlorination
Haloacetic Acids (HAA) (ppb)	No	6.31	Only 1 sample taken	60	N/A	By-product of drinking water chlorination

Lead and Copper (Sampled in 2019)							
Contaminant	**Action Level (AL)**	**MCLG**	**90th Percentile Value**	**Units**	**# of Sites Above AL of Total Sites**	**Violation Of TT Yes/No**	**Sources of Contamination**
Copper	1.3	1.3	0.297	ppm	0	No	Corrosion of household plumbing
Lead	15	0	2	ppb	0	No	Corrosion of household plumbing.

Unregulated Contaminants Sampled in 2014	Reported Level (Average)	Range of Results
Chlorate (ppb)	0.565	0.27 to 1.2
Hexavalent Chromium (ppb)	0.32	0.14 to 0.78
Strontium (ppb)	139.9	66.3 to 269
Vanadium (ppb)	0.24	0.24
1,4-Dioxane (ppb)	0.089	0.076 to 0.099
Metachlor Ethane Sulfonic Acid (ppb)	97.95	23.2 to 604

In the tables, 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:

Parts per million (ppm) or Milligrams per liter (mg/l) – one part per million corresponds to one minute in two years or a single penny in $10,000.

Parts per billion (ppb) or Micrograms per liter – one part per billion corresponds to one minute in 2,000 years, or a single penny in $10,000,000.

Action Level (AL) –the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

annual water quality report

Maximum Contaminant Level (MCL) – The "Maximum Allowed" (MCL) 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.

Maximum Contaminant Level Goal (MCLG) – The "Goal" (MCLG) 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.

Maximum Residual Disinfectant Level (MRDL) - The highest level of a disinfectant that is 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.

Non-Detects (ND) - laboratory analysis indicates that the contaminant is not present at a detectable level.

Unregulated Contaminants: contaminants 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.

annual water quality report

Additional Information

We are pleased to announce that your water meets or exceeds all Federal and State requirements, and as you can see we had no violations from contaminated water or any other issues in 2019.

We have learned through our monitoring and testing that some constituents have been detected. These contaminants are listed in the table above. The state allows us to monitor for some contaminants less than once a year because the concentrations of these contaminants do not change frequently. Some of our data, though representative, is more than one year old.

All sources of drinking water are subject to potential contaminants that are naturally occurring or manmade. Those contaminants can be microbes, organic or inorganic chemicals, or radioactive materials. 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 Environmental Protection Agency's Safe Drinking Water Hotline at 1-800-426-4791.

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 and 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 and volatile organic chemicals, which are byproducts of industrial process and petroleum production and mining activities.

-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 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.

Detected Contaminants Health Effects Language and Corrective Actions

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. We were not required to complete any corrective actions.