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# FOXCHAPEL

## A U T H O R I T Y

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**PWS ID NO. 5020040**

### ***Annual Drinking Water Quality Report For Year 2017***

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 of the water and services we deliver to you every day. 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. Our water is purchased from Pittsburgh Water and Sewer Authority (**PWSA**) and is treated surface water from the Allegheny River. A Source Water Assessment of this source was completed in 2002. A summary report is available at [www.dep.state.pa.us](http://www.dep.state.pa.us) (search: "Source Water Assessment"). Complete reports are available for review at the PADEP Southwest Regional Office 412-442-4000. The PWSA Water Treatment Plant is located on the north shore of the Allegheny River at the eight (8) mile marker and is directly across from the Waterworks Mall on Freeport Road.

***If you would like to receive a printed copy of your Annual Drinking Water Quality Report, please contact our office at 412-963-0212 or email: [info@foxchapelwater.com](mailto:info@foxchapelwater.com).***

We are pleased to report that our drinking water meets or exceeds all federal, state, and local requirements. If you have any questions about your water utility, please contact Mr. Mark Nicely, Manager at (412) 963-0212. 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 Board Meetings. They are held on the last Tuesday of every month at 7:00 PM at the Authority Office located at 255 Alpha Drive, O'Hara Township. If you have any questions about this report or would like your water tested, please feel free to contact Don Kendrick, Water Quality Supervisor at (412) 963-0212.

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

#### **IMPORTANT HEALTH INFORMATION**

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 (from their health care providers) about drinking the water. 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 1-800-426-4791**

*or*

**EPA's website at [www.epa.gov/safewater/hfacts.html](http://www.epa.gov/safewater/hfacts.html).**

During 2017 the Authority personnel repaired 92 major water breaks, 12 service line leaks and performed 25 preventive maintenance jobs. Our service department made 11 new service connections, which brings our total connections to 5488. Our crews also performed main line valve maintenance on 684 valves to insure proper operation in the event of a water break. We also performed a system wide flush on 644 fire hydrants and 200 blow offs to assist with water quality and fire protection.

During the past year the Authority personnel replaced the water lines on portions of Edgewood Road.

Over the past several years the Authority has installed mixers in each of its five storage facilities to reduce stratification of the water column and improve water quality. In addition the Wise Hill Tank was repainted in 2016 and the North Tank was done in 2017 at a total cost of approximately \$1,300,000. During the North Tank repainting project it was necessary to purchase supplemental water from Harmar Water Authority and Hampton Shaler Water Authority. Please see the test results for both suppliers below.

The Authority has an aggressive Cross Connection Control Program in place which requires all Commercial, Industrial and Municipal service connections to be in compliance with the backflow program. All new connections and repairs to existing connections must also be in compliance. Our program requires all existing homes to be brought into compliance when they are sold. For more information about our backflow program contact Don Kendrick at 412-963-0212.

All sources of drinking water are subject to potential contamination by constituents that are naturally occurring or man made. Those constituents 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. 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. Fox Chapel 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>.

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 before it is treated include:

*Microbial contaminants*, such as disease causing viruses and bacteria which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.

*Inorganic chemical 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 and residential uses.

*Radioactive contaminants*, which are naturally occurring or be the result of oil and gas production and mining activities

*Organic chemical contaminants*, including synthetic and volatile chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff and septic systems.

*Nitrates*: As a precaution, we always notify physicians and health care providers in this area if there is ever a higher than normal level of nitrates in the water supply.

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. Our water is treated according to EPA's regulations. Food and Drug Administration regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

Fox Chapel Authority routinely monitors for constituents in your drinking water according to Federal and State laws. The tables below show the results of monitoring for the period of January 1<sup>st</sup> to December 31<sup>st</sup>, 2017

### FCA TEST RESULTS

#### Lead and Copper Rule

Contaminant (Unit of measurement)	Violation Yes / No	Level Detected	Range	MCLG	MCL	Likely Source of Contamination
Copper (ppm)	No	90 <sup>th</sup> percentile = .115	No sites above AL out of 35 sampled	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits.
Lead (ppb)	No	90 <sup>th</sup> Percentile = 13.5	Three sites above AL out of 35 sampled	0	AL=15	Corrosion of household plumbing systems, erosion of natural deposits

#### Volatile Organic Contaminants

Contaminant (Unit of measurement)	Violation Yes / No	Level Detected	Range	MCLG	Sample Date	MCL	Likely Source of Contamination
Total Trihalomethanes (ppb)	No	56	10-78	n/a	2017	80	By-product of drinking water chlorination
Haloacetic Acids (ppb)	No	17	5-23	n/a	2017	60	By-product of drinking water chlorination

#### Disinfectant Residual

Contaminant (Unit of measurement)	Level Detected	Range	MRDLG	Sample Date	MCL/MR DL	Violation Y/N	Sources of Contamination
Total Chlorine Residual in Distribution System (ppm)	(a)0.78	0.23-0.78	4	2017	4	No	Water additive used to control microbes.

### PWSA TEST RESULTS

Contaminant (Unit of measurement)	Violation Yes / No	Level Detected	Range	MCLG	MCL	Likely Source of Contamination
<b>Inorganic Chemical Contaminants</b>						
Nitrate (ppm)	No	0.74	0.47-.074	10	10	Runoff from fertilizers; leaching from sewage; natural deposits
Barium (ppm)	No	0.03	(b)	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
<b>TOC Removal</b>						
Total Organic Carbon (TOC) (% removal) (c)	No	No Quarters out of compliance	39.2% to 52.2%	M/A	TT = 35%	Naturally present in the environment
<b>Inorganic Chemical Contaminants</b>						
Fluoride (ppm)	No	0.780	(b)	2	2	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories

#### Footnotes:

(a) Highest concentration of total chlorine detected.

(b) Only one sample required.

(c) Adequate removal of TOC may be necessary to control unwanted formation of disinfection byproducts.

## HARMAR WATER AUTHORITY TEST RESULTS

Chemical Contaminant	MCL	MCLG	Highest Level Detected	Range of Detections	Units	Date Sampled	Violation Y/N	Sources of Contamination
Nitrate	10	10	1.44	(a)	ppm	9/8/17	N	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.
Haloacetic Acids (HAA)	60	N/A	7	(a)	ppb	9/8/17	N	Byproduct of drinking water chlorination.
TTHM (Total Trihalomethanes)	80	N/A	5	(a)	ppb	9/8/17	N	Byproduct of drinking water chlorination.
Trichloroethylene	5	0	0.6	(a)	ppb	9/8/17	N	Discharge from metal degreasing sites and other factories
Chlorine Distribution	MRDL =4	MRDLG =4	1.06 (November)	0.38-1.06	ppm	2017	N	Water additive used to control microbes.
Fluoride	2*	4	0.27	(a)	ppm	8/11/15	N	Water additive which promotes strong teeth.
Thallium	2	0.5	1	(a)	ppb	6/9/15	N	Leaching from ore-processing sites; Discharge from electronics, glass, and drug factories
Uranium	30	0	2.4	(a)	ug/l	7/14/15	N	Erosion of natural deposits.

### Entry Point Disinfectant Residual

Contaminant	Minimum Disinfectant Residual	Lowest Level Detected	Range of Detections	Units	Lowest Sample Date	Violation Y/N	Sources of Contamination
Chlorine 2017	0.5	0.59	0.59-1.11	ppm	1/1/17	N	Water additive used to control microbes.

Contaminant	Action Level (AL)	MCLG	90 <sup>th</sup> Percentile Value	Units	# of Sites Above AL	Violation Y/N	Sources of Contamination
Lead (2016)	15	0	2.9	ppb	1 out of 11	N	Corrosion of household plumbing systems, Erosion of natural deposits.
Copper (2016)	1.3	1.3	0.49	ppm	0 out of 11	N	Corrosion of household Plumbing Systems, Erosion of natural deposits; Leaching from wood preservatives.

Footnote; (a) only one sample required.

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

For more information on Harmar Water Authority please see their web site

[www.harmarwater.com](http://www.harmarwater.com)

# HAMPTON SHALER WATER AUTHORITY TEST RESULTS

## Inorganic Contaminants (IOCs)

Contaminant (unit of measurement) <i>Year of Data</i>	Violation Yes/No	HSWA Detected Level	PWSA Detected Level	West View Detected Level	MCL	MCLG	Major Sources in Drinking Water
Fluoride (ppm) <i>2015</i>	No	ND	0.830 <i>2016</i>	0.7 <i>2016</i>	2	2	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Nitrate (ppm) <i>2015</i>	No	0.39	0.82 <i>2016</i>	0.7 <i>2016</i>	10	10	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Nitrite (ppm) <i>2015</i>	No	ND	ND <i>2016</i>	ND <i>2016</i>	1	1	Runoff from fertilizer use; Leaching from septic tanks; sewage; Erosion of natural deposits.
Nickel (ppb) <i>2015</i>	No	ND	ND <i>2016</i>	1.7 <i>2016</i>	100	100	Manufacturing by-product from fertilizer use.
Barium (ppm) <i>2015</i>	No	ND	0.043 <i>2016</i>	0.036 <i>2016</i>	2	2	Discharge of drilling waste and metal refineries; erosion of natural deposits.

## Synthetic Organic Contaminants (SOCs)

Contaminant (unit of measurement) <i>Year of Data</i>	Violation Yes/No	HSWA Detected Level	PWSA Detected Level	West View Detected Level	MCL	MCLG	Major Sources in Drinking Water
Di(2-ethylhexyl) phthalate (ppb) <i>2017</i>	No	ND <i>2017</i>	ND <i>2014</i>	ND <i>2016</i>	6	0	Discharge from rubber and chemical factories.

## Lead and Copper

Contaminant (unit of measurement) <i>Year of Data</i> Water Supplier	Violation Yes/No	90 <sup>th</sup> Percentile Value	No. of Sites Above Action Level	Action Level (AL)	MCLG	Major Sources in Drinking Water
Lead (ppb) <i>2016</i> HSWA	No	2	No sites above AL	15	0	Corrosion of household plumbing systems; Erosion of natural deposits
Copper (ppm) <i>2016</i> HSWA	No	0.189	No sites above AL	1.3	0	Corrosion of household plumbing systems; Erosion of natural deposits

## Disinfection Byproducts (DBPs)

Contaminant (unit of measurement) <i>Year of Data</i> Water Supplier	Violation Yes/No	Average of Results	Range	MCL in CCR Units	MCLG	Major Sources in Drinking Water
(TTHMs) Total Trihalomethanes (ppb) <i>2017</i> HSWA	No	36.8	19 – 72	80	N/A	Byproduct of drinking water disinfection
(HAAs) Haloacetic Acids (ppb) <i>2017</i> HSWA	No	11	0 - 23	60	N/A	Byproduct of drinking water disinfection

## HAMPTON SHALER WATER AUTHORITY TEST RESULTS cont.

### Entry Point Disinfectant Residual (Water Leaving the Treatment Plant)

Contaminant (unit of measurement) <i>Year of Data</i> Water Supplier	Violation Yes/No	Minimum Disinfectant Residual Required	Lowest Level Detected	Range of Detections	Major Sources In Drinking Water
Chlorine (ppm) 2017 HSWA	No	0.60	0.60	0.60 – 1.07	Water additive used to control microbes

### Disinfectant Residuals (Distribution System)

Contaminant (unit of measurement) <i>Year of data</i> Water Supplier	Violation Yes/No	Highest Monthly Average	Lowest Monthly Average	MRDL	MRDLG	Major Sources in Drinking Water
Chlorine (ppm) 2017 HSWA	No	0.71 December	0.40 August	4	4	Water additive used to control microbes

### Microorganisms

Contaminant <i>Year of data</i>	MCL	MCLG	HSWA (780 Samples Collected in 2017)	Sample Date of <i>Positive</i> Sample(s)	Violation	Typical Source
<b>Total Coliform</b> 2017	5% of monthly samples	0	<1%	1/19/17 6/19/17 7/24/17	No	Naturally present in the environment
<b>E. coli</b> 2017	are positive	0	0	None positive for E. coli	No	Human or animal fecal waste

### Unregulated Contaminants

Contaminant (unit of measurement) <i>Year of Data</i> Water Supplier	MRL	HSWA Range of Detection & <i>Average</i>	West View Range of Detection & <i>Average</i>	PWSA Range of Detection & <i>Average</i>	Violation Yes/No	Major Sources in Drinking Water
Strontium (ppb) 2015	0.3	135 – 159  <i>147</i>	117 – 258  <i>181.6</i>	96 – 181  <i>136</i>	No	Naturally-occurring element; used in making CRT televisions
Chromium, Hexavalent (ppb) 2015	0.03	0.0 – 0.1  <i>0.04</i>	0.054 – 0.13  <i>0.09</i>	0.12 – 0.87  <i>0.45</i>	No	Naturally-occurring element; used in making steel and other alloys

*Hampton Shaler Water Authority and Pittsburgh Water and Sewer Authority had no detections of Volatile Organic Compounds in 2017.*

*Hampton Shaler Water Authority, and Pittsburgh Water and Sewer Authority had no detections of Radiological Contaminants during the most recent monitoring periods.*

For more information on Hampton Shaler Water Authority please see their web site  
[www.hswa-pa.org](http://www.hswa-pa.org)

# IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER

## Availability of Monitoring Data for Unregulated Contaminants (UCMR3) for Fox Chapel Authority

Our water system has sampled for a series of unregulated contaminants. Unregulated contaminants are those that don't yet have a drinking water standard set by EPA. The purpose of monitoring for these contaminants is to help EPA decide whether the contaminants should have a standard. As our customers, you have a right to know that these data are available. If you are interested in examining the results, please contact Don Kendrick at 412-963-0212 or stop by our office at 255 Alpha Drive, Pittsburgh, Pa 15238.

This notice is being sent to you by Fox Chapel Authority. State Public Water System ID#: 5020040.

UCMR3 TEST RESULTS							
Chemical Contaminants							
Contaminant	Average Level Detected	Range of Detection	Units	Sample Date	MCL/ MCLG	Violation Y/N	Major Source in Drinking Water
Chlorate	64	60 -68	ppb	2014	NA	NA	Byproduct of Drinking Water Disinfection
Chromium	0.38	0.00 – 0.38	ppb	2014	NA	NA	Discharge from Steel & Plating Mills & Wood Preservation
Chromium 6	0.33	0.22 – 0.38	ppb	2014	NA	NA	Discharge from Steel & Plating Mills & Wood Preservation
Strontium	86	62 – 110	ppb	2014	NA	NA	Comes from Bedrock Aquifers that are rich in Strontium Minerals
Vanadium	1.2	0 – 1.2	ppb	2014	NA	NA	Drainage of Fossil Fuel Disposal Sites

## GLOSSARY

In the following table 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.

**Less Than (<)** – This sign indicates that the sample result is actually below the stated number.

**Maximum Contaminant Level** - 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** - 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 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.

**Millirems per year (mrem/yr.)** – A measure of radiation absorbed by the body.

**Nephelometric Turbidity Unit (NTU)** – A measure of turbidity, or the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

**Non Applicable (NA)** – Does not apply.

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

**Parts per billion (ppb) or Micrograms per liter (ug/l)** - one part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.

**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.

**Picocuries per liter (pCi/L)** – A measure of the radioactivity in water.

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

**Turbidity**- A measure of the clarity of water.

Thank you for allowing us to continue providing your family with safe, high quality water this year. We at the Fox Chapel 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.

Since a number of federal acts passed, such as the Public Health, Security and Bioterrorism Preparedness and Response Act and the Homeland Security Act, small US water systems serving more than 3,300 persons are now actively involved in security issues. We ask that our customers who live near our remote tank sites, pumping facilities and fire hydrants to notify the Authority if they notice any suspicious activity and we will be happy to investigate.

## **WATER CONSERVATION**

Water-saving plumbing fixtures and appliances are cost effective, providing permanent long-term economic advantages. Low-flow toilets, showerheads and faucet aerators save valuable water and energy used to heat water without requiring a change in personal use habits.

A dripping faucet is more than annoying; it's expensive. Even small leaks can waste significant amounts of water. Hot water leaks are not only a waste of water, but also of the energy needed to heat the water. Leaks inside a toilet can waste up to 200 gallons of water a day. Toilet leaks can be detected by adding a few drops of food coloring to water in the toilet tank. If the colored water appears in the bowl, the tank is leaking. Repair leaking faucets and toilets.

Use Water-Saving Plumbing Fixtures/Appliances

### Bathroom

The Federal Energy Act of January 1994 limited all new manufactured toilets to 1.6 gallons per flush. If the toilet was manufactured before 1994, place a plastic gallon container in the toilet tank to save water with each flush. Install low-flow showerheads that use no more than 2.5 gallons per minute at maximum flow. Install low-flow faucets that use no more than 2.2 gallons per minute at maximum flow.

### Kitchen/Laundry

Replace the more common, less efficient, top loading clothes washer with a high-efficiency, front-loading washer that uses about 30 percent less water and 40 to 50 percent less energy. Operate the clothes washer and dishwasher only when they are fully loaded. Install low-flow aerators on all faucets.

Change Water Use Habits

### Water Saving Tips Inside the Home

Turn the faucet off while brushing teeth. Use a glass of water for rinsing teeth.

When shaving, use a sink filled with rinse water. Do not let the faucet flow.

Take short showers instead of baths and consider bathing small children together.

Do not use the toilet as a trash can.

If the shower has a single hand control or shut off valve, turn off the flow while soaping or shampooing.

Refrigerate a bottle of drinking water instead of letting a faucet flow until the water is cold enough to drink.

Turn the faucet off while cleaning vegetables. Rinse them in the sink with the drain closed or in a pan.

When washing dishes by hand, do not leave the faucet flowing for rinsing. Instead, use a dish rack and spray device to rinse them. If there are two sinks, fill one with soapy water and one with rinse water.

Fill the sink with water to pre-rinse dishes before putting them in the dishwasher.

### Water Saving Tips Outside the Home

Use a broom, not a hose, to clean driveways, steps and sidewalks.

Wash the car with water from a bucket. If a hose is used, control the flow with an automatic shut off nozzle.

Water the lawn only when needed. If grass does not spring back after walking on it, it probably needs water.

Water the lawn or garden during the coolest part of the day. Do not water on windy days.

Set sprinklers to water the lawn or garden only. Do not water the street or sidewalk.

Use soaker hoses and trickle irrigation systems to reduce the amount of water used by 20 to 50 percent.

Mulch around shrubs and garden plants to reduce evaporation from the soil and inhibit weeds.

In landscaping, use native plants that require less care and water than ornamental varieties.

Cover the swimming pool to prevent evaporation.

Adjust the lawn mower to a higher setting to provide natural ground shade and to promote water retention by the soil.