pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF SAFE DRINKING WATER

2021 ANNUAL DRINKING WATER QUALITY REPORT

PWSID #: 5020019 NAME: Hampton Shaler Water Authority (HSWA)

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.)

WATER SYSTEM INFORMATION:

This report shows our water quality and what it means. If you have any questions about this report or concerning your water utility, please contact Ian Ferguson, Plant Manager, at 412-486-4867. We want you to be informed about your water supply. If you want to learn more, please attend any of our regularly scheduled meetings. They are held the fourth Monday of each month at the HSWA Office 3101 McCully Road, Allison Park, PA 15101, unless otherwise noted on our website at https://hswa-pa.org/.

SOURCES OF WATER:

Our water sources are primarily twelve (12) ground water wells from a large glacial outwash aquifer beneath the Allegheny River and surrounding area. The wells provide water to the water treatment plant which is rated for up to nine million gallons of water per day. The well sources are very high quality, requiring only a minimum of treatment techniques. The water treatment processes are monitored at the plant throughout all shifts. The HSWA water treatment plant supplies approximately 98.2% of the water required by our customers. The remaining 1.8% of the supply is purchased from West View Water Authority (WVWA). WVWA obtains its supply from the Ohio River and processes it through their plant on Neville Island. The interconnection with WVWA is in the southwest corner of Hampton Township / northwest corner of Shaler Township. HSWA also has emergency interconnections with Pittsburgh Water Sewer Authority; West View Water Authority; and Fox Chapel Water Authority. These emergency connections can fully supply the distribution system, if needed.

A Source Water Assessment of our source(s) was completed by the PA Department of Environmental Protection (PA DEP). The Assessment has found that our sources are potentially most susceptible to accidents and spills of various types from major roadways, rail corridor, and barge traffic; former scrap yard; spills, accidents or storm water runoff from the industrial park; spills and runoff from local auto repair shops, truck terminals, metalworking and machine shops. Overall, our sources have moderate risk of significant contamination. A summary report of the Assessment is available on the Source Water Assessment Summary Reports eLibrary web page: www.elibrary.dep.state.pa.us/dsweb/View/Collection-10045. Complete reports were distributed to municipalities, water supplier, local planning agencies and PA DEP offices. Copies of the complete report are available for review at the PA DEP Southwest District Regional Office, Records Management Unit at (412) 442-4000. Subsequent to the DEP source water assessment, HSWA has completed a Wellhead Protection Program and updates the program annually.

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).

HSWA Customers Served with Water from West View Water Authority (WVWA)

Some customer in the northwestern portion of Shaler Township and the southwestern part of Hampton Township previously received water provided by West View Water Authority, pertinent water quality results from WVWA can be found in this report. The streets served with WVWA water, while the Sample Road Interconnect is intermittently in operation, include:

SHALER TOWNSHIP: Greenfield Road (Fox Meadow Court to Pin Oak Drive), Fox Meadow Court, upper Pin Oak Drive (Greenfield Road to Calmwood Drive), Calmwood Drive, Peters Drive (Calmwood Drive to Belladonna Drive)

HAMPTON TOWNSHIP: Ashland Court, California Drive, Center Avenue, Circle Drive, Ducan Avenue (township line to Bryant Road), Ferguson Road, Forest Avenue, Gray Ridge Drive, Highland Avenue, Isabella Drive, Laurel Lane, Linwood Drive, Ohio Drive, Parke Drive, Rosemonte Drive, Scenic Court, Wallace Road, Walters Road, and Wyland Avenue.

The full West View Water Authority Consumer Confidence Report can be found at westviewwater.org/confidence-report-5/

Customers residing at even numbered addresses 3818 – 3890 Dolphin Drive, addresses 2100 and 2101 Coventry Drive and 4131 Wallace Road are Hampton Township addresses but are connected to WVWA main water lines, but metered and billed by HSWA. These customers should refer to WVWA CCR.

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, 2021. 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.

DEFINITIONS:

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.

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.

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 (µg/L)

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

DETECTED SAMPLE RESULTS:

Chemical Contaminants Hampton Shaler Water Authority

Contaminant	MCL in CCR Units	MCLG	Level Detected	Range of Detections	Units	Sample Date	Violation Y/N	Sources of Contamination
Nitrate	10	10	0.29	0.28-0.30	ppm	2021	No	Runoff from fertilizer use; Leaching from septic tanks; sewage; Erosion of natural deposits
Cis-1,2 Dichloroethylene	70	70	1.05	1.00-1.10	ppb	2021	No	Discharge from industrial chemical factories
Tetrachloroethylene	5	0	0.91	0.86 - 0.95	ppb	2021	No	Discharges from factories and dry cleaners
TTHMs	80	NA	33.8	13.5 – 77.0	ppb	2021	No	By- product of drinking water chlorination
HAAs	60	NA	7.23	0 – 17.7	ppb	2021	No	By- product of drinking water disinfection
Chlorine (Distribution)	4	4	0.68	0.46 – 0.68	ppm	2021	No	Water additive used to control microbes

Chemical Contaminants West View Water Authority

Contaminant	MCL in CCR Units	MCLG	Level Detected	Range of Detections	Units	Sample Date	Violation Y/N	Sources of Contamination
Barium	2	2	0.034	0.034	ppm	2021	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Fluoride *	2	2	0.533	0.533	ppm	2021	No	Erosion of natural deposits; Water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Nitrate	10	10	1.06	1.06	ppm	2021	No	Runoff from fertilizer use; Leaching from septic tanks; sewage; Erosion of natural deposits

Nitrite	1	1	<0.100	<0.005	ppm	2021	No	Runoff from fertilizer use; Leaching from septic tanks; sewage; Erosion of natural deposits
Cyanide (free)	200	200	72	72	ppb	2019	No	Discharge from steel/metal factories; Discharge from plastic and fertilizer factories
Di(2-ethylhexyl) adipate	400	400	<1.5	<1.5	ppb	2018	No	Discharge from industrial chemical factories
Di(2-ethylhexyl) phthalate	6	0	<1.5	<1.5	ppb	2018	No	Discharges from rubber and chemical factories
TTHMs	80	NA	63.5	18 - 84	ppb	2021	No	By- product of drinking water chlorination
HAAs	60	NA	18.2	6 - 31	ppb	2021	No	By- product of drinking water disinfection
Chlorine (Distribution Zone A)	4	4	1.6	1.0 - 1.6	ppm	2021	No	Water additive used to control microbes
Chlorine (Distribution Zone B)	4	4	1.6	0.7 - 1.6	ppm	2021	No	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 (HSWA)	0.60	0.31	0.31-1.12	ppm	4/23/2021	No	Water additive used to control microbes.
Chlorine (WVWA)	0.20	1.4	1.4 - 2.1	ppm	2021	No	Water additive used to control microbes.

Lead and Copper Hampton Shaler Water Authority

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	2.15	ppb	0 of 30	No	Corrosion of household plumbing systems; erosion of natural deposits
Copper	1.3	1.3	0.209	ppm	0 of 30	No	Corrosion of household plumbing systems; Erosion of natural deposits; leaching from wood preservatives

Microbial 2019 Hampton Shaler Water Authority					
Contaminants	**MCL**	**MCLG**	**Results**	**Violation Y/N**	**Sources of Contamination**
Total Coliform Bacteria	5% of monthly samples are positive	0	<1% 1 positive sample (1 in Sept. out of 847 samples for year 2021	No	Naturally present in the environment.
E. coli Bacteria	5% of monthly samples are positive	0	No positive samples	No	Human or animal fecal waste.

Turbidity NTU – West View Water Authority					
Contaminant	**MCL / Unit**	**Highest Detect**	**Lowest %**	**Violation Y/N**	**Major Sources**
Turbidity	TT = 1 NTU for a single measurement and TT = 95% of monthly samples <0.3 NTU	0.070	99.97% August 2021	No	Soil Runoff

Total Organic Carbon (TOC) – West View Water Authority							
Contaminant	***Unit***	***% Removal Required***	**% Removal Achieved**	**# Quarters out of Compliance**	**Sample Date**	**Violation Y/N**	**Sources of Contamination**
Total Organic Carbon	% Removed	25-35%	35 - 55%	0	2021	No	Naturally present in the environment

Unregulated Contaminants Hampton Shaler Water Authority							
Contaminant	***Detect Limit***	***Average Level Detected***	**Range of Detections**	**Units**	**Sample Date**	**Violation Y/N**	**Sources of Contamination**
HAA5	NA	7.23	0 – 17.7	ppb	2021	No	By-product of drinking water chlorination
HAA6Br	NA	8.15	4.89-12.05	ppb	2020	No	By-product of drinking water chlorination
HAA9	NA	13.6	9.24-20.95	ppb	2020	No	By-product of drinking water chlorination
Manganese	0.4	NA 2.7	1.2 2.0-3.4	ppb	2020	No	Naturally occurring element; used in steel production, fertilizer, batteries and fireworks
Calcium		75.1	50 – 115.6	ppm	2021	No	Naturally occurring element
Orthophosphate		3.86	0.53 – 74.0	ppm	2021	No	Water additive for corrosion control

Unregulated Contaminants West View Water Authority							
Contaminant	**Detect Limit**	**Average Level Detected**	**Range of Detections**	**Units**	**Sample Date**	**Violation Y/N**	**Sources of Contamination**
Bromide	1	0.72	0-2.3	ppm	2019	No	Naturally occurring element; used in hydraulic fracturing to extract natural gas from shale
Strontium	0.3	110	110	ppb	2015	No	Naturally occurring element; used in making CRT televisions

Chromium, Hexavalent	0.03	0.05	0.04-0.06	ppb	2015	No	Naturally occurring element; used in making steel and other alloys
Manganese	0.4	1.62	1.62	ppb	2018	No	Naturally occurring element; used in steel production, fertilizer, batteries and fireworks
HAA6BR	NA	11.0	4.1-24.3	ppb	2018	No	By-product of drinking water chlorination
HAA9	NA	21.8	12.0-42.0	ppb	2018	No	By-product of drinking water chlorination

DETECTED CONTAMINANTS HEALTH EFFECTS LANGUAGE AND CORRECTIVE ACTIONS:

TTHMs (Total trihalomethanes) (ppb) 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.

OTHER VIOLATIONS:

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 run-off, 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).

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. Hampton Shaler 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. For a nominal cost, HSWA will test your water for lead content – contact Ian Ferguson, HSWA Plant Manager, at 412-486-4867 for further information on testing. 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.*

OTHER INFORMATION:

Hampton Shaler Water Authority has had no detections of Synthetic Organic Contaminants (SOCs) and Inorganic Contaminants (IOCs). Additionally, Hampton Shaler Water Authority has met the requirements for corrosion control treatment techniques as required in the issued permit in 2020 from the Pennsylvania Department of Environmental Protection.