



WARRINGTON TOWNSHIP SERVICE AREA – PWSID # 1090070

2019 ANNUAL DRINKING WATER QUALITY REPORT – CONSUMER CONFIDENCE REPORT

Este informe contiene información muy importante sobre su agua potable. Tradúzcalo ó hable con alguien que lo entienda bien. (This report contains important information about your drinking water. Translate it or speak with someone who understands it.)

This report includes information about where your Water comes from, what it contains and how it compares with the standards set by the Pennsylvania Department of Environmental Protection (PADEP) and the Environmental Protection Agency (EPA) Safe Drinking Water Act (SDWA). You are being provided a copy of this report in compliance with the Safe Drinking Water Act. Landlords, businesses, other property owners are strongly encouraged to share this water quality report with their tenants and employees.

OUR COMMITMENT TO QUALITY

The North Wales Water Authority takes great pride in delivering water of the highest quality to our customers. We are committed to provide drinking water which meets all state and federal Safe Drinking Water Act Requirements.

We are also available to talk to your group. You may request a visit by calling our office at 267-482-6940 or filling out a form on our website.

If you'd like to learn more about NWWA, please attend any of our regularly scheduled Board of Directors meetings. The Board meets on the 2nd and 4th Wednesdays of each month at 5:00 p.m. at the Authority Office at 200 W. Walnut Street in North Wales.

SOURCES OF WATER:

During 2019 all water supplied though the Warrington Township service area public water system was provided from North Wales Water Authority and the Forest Park Water Treatment Plant. A treatment system for Wells 1, 2, and 6 has been constructed, which will remove PFOA and PFOS to non-detectable levels. These wells were not used to supply water in 2019, however they are available to be used as supplemental source of supply during times of drought or other emergencies. Treatment systems for additional wells are planned and funding for these treatment systems is being obtained from Federal and State Agencies.

Source Water Assessments of the NWWA Forest Park Water Treatment Plant and the Warrington Township service area were completed by the PA Department of Environmental Protection in February 2003 and June 2005, respectively. The systems were found to be potentially susceptible to contamination in transportation corridors; from auto repair shops; and from storm water runoff from agricultural fields, lawn care, golf courses, and parking lots. A summary report of the Assessments is available on the Source Water Assessment Summary Reports eLibrary Web Page, www.depgreenport.state.pa.us/elibrary/GetFolder?FolderID=4499. Complete reports were distributed to municipalities, water supplier, local planning agencies and PADEP offices. Copies of the complete report are available for review at the PADEP SouthCentral Regional Office, Records Management Unit at (484)250-5910.

MONITORING YOUR WATER:

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 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 agricultural, 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 PADEP prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. We treat and monitor our water according to their regulations. FDA and PADEP 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 EPA's Safe Drinking Water Hotline at 1-800-426-4791.

OUR 2019 WATER MONITORING RESULTS:

During 2019, North Wales Water Authority conducted hundreds of tests for 90 possible drinking water contaminants. We detected no contaminant levels higher than the State and Federal Drinking Water standards allow. Similar testing was also completed by the Forest Park Treatment Plant. This arrangement results in some duplication of testing, but also provides more quality control.

The attached Tables summarize the results of monitoring for the year 2019. Dozens of other contaminants that were tested for, but not detected, are not listed. Unless otherwise noted, the data presented in the tables is from testing done from January 1, 2019 to December 31, 2019. The PADEP requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Some of our data, though representative, are more than 1 year old.

DEFINITIONS AND ABBREVIATIONS:

These are the definitions of the terms and abbreviations used in Tables 1 and 2 on the inside of this folder:

- **MCL (Maximum Contaminant Level):** The highest level of a contaminant that is allowed in drinking water. MCL's are set as close to the MCLG's as feasible using the best available treatment technology.
- **MCLG (Maximum Contaminant Level Goal):** The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLG's 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 contaminants.
- **ppm (parts per million):** one part per million corresponds to one minute in two years, a single penny in \$10,000, one ounce to 31 tons, or 1 inch in 16 miles.
- **ppb (parts per billion):** one part per billion corresponds to one second in 32 years, a single penny in \$10 million, a pinch of salt to 10 tons of potato chips, or 1 inch in 16,000 miles.
- **ppt (parts per trillion):** one part per trillion corresponds to one second in 32,000 years, a single penny in \$10 billion, a pinch of salt to 10,000 tons of potato chips, or 1 inch in 16,000,000 miles.
- **pCi/l (picocuries per liter):** picocuries per liter is a measure of the radioactivity of water.
- **NTU (Nephelometric Turbidity Unit):** nephelometric turbidity unit is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.
- **AL (Action Level):** the concentration of a contaminant, which, if exceeded, triggers treatment or other requirements, which a water system must follow.
- **TT (Treatment Technique):** a treatment technique is a required process intended to reduce the level of a contaminant in drinking water.
- **MinRDL (Minimum Residual Disinfectant Level):** The minimum level of residual disinfectant required at the entry point to the distribution system.

**2019 Water from North Wales Water Authority
Forest Park Water Treatment Plant**

DETECTED SAMPLE RESULTS:

Inorganic Chemical Contaminants								
Contaminant	MCL in CCR Units	MCLG	Level Detected	Range of Detections	Units	Sample Date	Violation Y/N	Sources of Contamination
Nitrate (as Nitrogen)	10	10	0.425	0 – 0.982	ppm	2019	No	Runoff from fertilizer, leaching from septic tanks, erosion of natural deposits
Barium	2	2	0.014	N/A	ppm	2019	No	Erosion of natural deposits. Discharge of drilling wastes; discharge from metal refineries.

Disinfectants and Disinfection Byproducts								
Contaminant	MCL	MCLG	Level Detected	Range of Detections	Units	Sample Date	Violation Y/N	Sources of Contamination
Chlorine Residual in Distribution System	4 MRDL	4 MRDLG	1.08	0.7 – 1.08	ppm	2019	No	Water additive used to control microbes.
Total Trihalomethanes (TTHM)	80	N/A	29.3	9.5 – 57.5	ppb	2019	No	Byproduct of drinking water disinfection
Haloacetic Acids (HAA5)	60	0	10.2	4.96 – 14.2	ppb	2019	No	Byproduct of drinking water disinfection
Bromate	10	0	2.8	2.0 – 3.6	ppb	2019	No	Byproduct of drinking water disinfection

Entry Point Disinfectant Residual – 2019 Results								
Contaminant	Minimum Disinfectant Residual Level MinRDL	Level Detected	Range of Detections	Units	Sample Date	Violation Y/N	Sources of Contamination	
Chlorine	0.4	1.5	0.7 – 1.08	ppm	2019	No	Water additive used to control microbes	

Note: All groundwater supply wells were out of service in 2019. All public water was provided by North Wales Water Authority from the Forest Park Water Treatment Plant.

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Microbial Contaminants							
Contaminant	MCL	MCLG	Level Detected	Sample Date	Range	Violation Y/N	Sources of Contamination
Total Coliform Bacteria	Presence of coliform bacteria in 5% or less of monthly samples	0	0	2019	N/A	No	Naturally present in the environment.
Fecal Coliform and <i>E. Coli</i> Bacteria	A routine sample and repeat sample are total coliform positive, and sample is also fecal coliform or <i>E. coli</i> positive.	0	0	2019	N/A	No	Human and animal fecal waste

Turbidity							
Contaminant	MCL	MCLG	Level Detected	Sample Date	Range	Violation Y/N	Sources of Contamination
Turbidity (in NTU)	TT= 1 NTU for a single measurement	0	0.05 NTU	2019	0.03-0.07	No	Soil runoff
	TT= at least 95% of monthly samples ≤0.3 NTU		100%	2019		No	

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	1.7	ppb	0 of 155	No	Corrosion of household plumbing
Copper	1.3	1.3	0.26	ppm	0 of 155	No	Corrosion of household plumbing

**2019 Water from North Wales Water Authority
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<i>Unregulated Chemical Contaminants – Perfluorinated Compounds</i>						
Contaminant	Health Advisory Limit (PFOS and PFOA Combined)	Level Detected	Range of Detection	Units	Sample Date	Sources of Contamination
Perflouroctanesulfonic Acid (PFOS)	70	1.2	0 – 2.5	ppt	2019	Firefighting foam and other man-made sources
Perflouroctanoic Acid (PFOA)	70	3.1	2.1 – 4.2	ppt	2019	Firefighting foam and other man-made sources

ppt – parts per trillion

In addition, during 2019, North Wales Water Authority/Forest Park Water Treatment Plant conducted testing for volatile organic chemicals, synthetic organic chemicals, and radioactive contaminants with none detected.

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. North Wales 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. 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 www.epa.gov/safewater/lead.

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 and the Center for Disease Control (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 at 1-800-426-4791 or visit the EPA website at www.epa.gov/safewater/dwhealth.

VIOLATIONS:

We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether our drinking water meets health standards. During August and September 2019, while the water system was operated by Warrington Township, they did not complete all monitoring or testing for chlorine residual levels and disinfection byproducts (Trihalomethane and Haloacetic Acids). As a result of missing these samples, we cannot be certain of the quality of the drinking water at that time. Inadequately treated water may contain disease-causing organisms. These organisms include bacteria, viruses, and parasites which can cause symptoms such as nausea, cramps, diarrhea and associated headaches.

This report shall serve as public notice of the sampling and testing omission. The North Wales Water Authority has taken corrective action to ensure future similar incidents will not occur.

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.