

WILKINSBURG-PENN JOINT WATER AUTHORITY - PWS ID 5020056 2017 WATER QUALITY REPORT

The Wilkesburg-Penn Joint Water Authority (WPJWA) is pleased to present our 2017 Water Quality Report. *Este informe contiene información muy importante sobre su agua beber. Tradúzcalo 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)* The potable water produced by the WPJWA meets and/or exceeds the water quality standards adopted by the Pennsylvania Department of Environmental Protection (PA DEP) and the U.S. Environmental Protection Agency (US EPA). We test our water using advanced technologies at numerous intervals in the treatment process to ensure the quality of our drinking water. The WPJWA's "2017 Water Quality Report" provides information about our system, the quality of our water and related health information. Our staff of dedicated employees works diligently to deliver one of the finest drinking waters available at a reasonable cost. If you have any questions, desire additional information, or would like to become involved, please contact Mr. Nick Bianchi at 412-243-6200. The Authority's Board of Directors meets on the 4th Tuesday of each month at 6:30 PM in the Authority Office located at 2200 Robinson Boulevard, Pittsburgh, PA 15221. These meetings are open to the public.

SOURCE OF WATER

The WPJWA obtains its raw water from the Allegheny River at our Nadine Intake on Allegheny River Boulevard in Verona, PA. We are classified as a "surface water supply." The quality of the Allegheny River is affected by mine acid drainage, livestock runoff, sanitary sewage runoff, industrial plant discharges, underground and river pipelines, chemical storage tanks, river barges, railroad car chemicals and combined sewer overflows. As water travels over the surface of land or through the ground, it dissolves naturally occurring minerals and can pick up bacteria and other organisms from animal and/ or human waste products. Contaminants that may be present in source water include:

- Microbiological 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 & gas production, mining and 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 by-products of industrial processes, petroleum production and can also come from gasoline stations, urban storm water runoff and septic systems.
- Radioactive contaminants, which can be naturally occurring or be the result of oil & gas production and mining activity.

In order to ensure that your tap water is safe to drink, the US EPA and the PA DEP have established regulations which limit the amount of certain contaminants in water provided by public water systems. The presence of these contaminants does not necessarily indicate that the water poses a health risk. Information about contaminants and potential health effects of chemicals detected in our drinking water are listed in this report. Further information can be obtained by calling the US EPA's Safe Drinking Water Hotline at 800-426-4791 or on the US EPA's website at <http://www.epa.gov/safewater>. Tap water from public water systems in the United States is among the safest in the world, and maintaining that quality is a priority for the WPJWA. We monitor for and control more than 100 different parameters that may affect water at the tap – from algae in the source water to the finished chlorine and pH in homeowners' faucets. We at the WPJWA consider ourselves stewards of public health and safety. In addition, many of our employees also drink and use the water that is delivered to our homes and workplaces in the communities we serve.

SOURCE WATER ASSESSMENT

A Source Water Assessment of WPJWA's intake water (located on the Allegheny River) was completed in 2002 by the PA Department of Environmental Protection (PA DEP). The Assessment has found that our source water is potentially most susceptible to road deicing materials, accidental spills along railroad tracks and leaks from submerged pipelines and storage tanks. Overall, the Allegheny River Watershed has a moderate risk of significant contamination. Summary reports are available by writing to the PA DEP, 400 Waterfront Dr., Pittsburgh, PA 15222 and may be available on the PA DEP website at: www.dep.state.pa.us (Keyword: "DEP source water"). Complete reports were distributed to municipalities, water suppliers, local planning agencies and PA DEP offices. Copies of the complete report may be available for review at the PA DEP Southwestern Regional Office, Records Management Unit at 412-442-4000.

In 2013, the Wilkesburg-Penn Joint Water Authority applied for assistance from the PA DEP Source Water Protection Technical Assistance Program. In April 2013, DEP approved the work plan and initiated the project. The project developed a source water protection plan that delineates the recharge areas for the WPJWA water source, determines transport times and pathways of potential contaminants, identifies potential sources of contamination, educates the public on the importance of source water protection, plans for pollution events and complies with the DEP Chapter 109 regulations.

SPECIAL MESSAGE FOR PEOPLE WITH SEVERELY WEAKENED IMMUNE SYSTEMS

Some people may be more vulnerable to contaminants in drinking water than the general population. If you have any of the following medical conditions, care for a person having a medical condition, or are an immuno-compromised individual, you should pay particular attention to the following information.

- Persons with cancer undergoing chemotherapy.
- Persons who have undergone organ transplants.
- People with HIV/AIDS or immune system disorders.
- Some older adults and/or infants which are particularly "at risk" from infections.

These people should seek advice about drinking water from their health care provider. The US EPA/CDC (Center for Disease Control & Prevention) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the US EPA Safe Drinking Water Hotline 800-426-4791 or the US EPA's website: <http://www.epa.gov/safewater>.

SECURITY OF YOUR WATER SYSTEM

All of the Authority's impounded potable water is housed in secure covered reservoirs and tanks. All of our divisions are staffed twenty four hours a day – seven days a week and all of our vehicles are in constant radio and/or telephone communication. Our SCADA (Supervisory Control and Data Acquisition) system monitors water quality, availability and security of our production, treatment and storage facilities. The one area that you can be of assistance in maintaining the security of our water system is by being aware of the fire hydrants, tanks and reservoirs in your neighborhood. If you should see something suspicious happening to any of our facilities, please contact the WPJWA at 412-243-6200 or your local police department.

WATER QUALITY REPORT

You can request a hard copy of our current Water Quality Report by calling 412-243-6200 and selecting Customer Service Option 4 or you can print a copy by visiting www.wpjwa.com.

A MESSAGE FROM OUR EXECUTIVE DIRECTOR

To our Valued Customers,

First and foremost, I would again like to commend all of our employees for enduring the challenges of the past year and thank you our customers for your understanding and patience. The employees of the Wilkinsburg Penn-Joint Water Authority remain dedicated and recognize our inherent responsibility to meet the demands of the public trust and confidence.

As your water provider, the Wilkinsburg-Penn Joint Water Authority faces numerous regulatory, operational, and administrative challenges. We continually face the cost of maintaining our facilities, fleet, unpredictable cost of healthcare, and the everyday responsibility of maintaining an aging water system. In addition, we continuously see requirement changes for maintaining clean potable water. This publication outlines the regulation changes imposed by the Department of Environmental Protection, along with requirements to meet the new water quality standards.

We also recognize the need to assist our customers in managing their busy, everyday lifestyles. For your convenience, the Authority has expanded our customer payment options. We now offer "Pay by Phone" using either a credit card or "E" check. You can access this service by calling our main number 412-243-6200 and choosing our "Payment by Phone" option or you can dial the service Toll Free directly at 844-303-0917. Please visit our newly designed website, www.wpjwa.com, for other payment options and useful consumer information.

The Authority's Board of Directors and our employees recognize our responsibility to meet the demands of public trust and confidence in providing service to the communities we serve. Our commitment is to provide a quality product and maintain a respectable and competitive rate.

Nick Bianchi

ADDITIONAL TESTING PERFORMED

Please find below information about additional chemical analysis performed by the Authority. The US EPA and PaDEP only require the Authority to list on our Annual Water Quality Report specific chemicals and/or chemicals that are above the method detection level.

- 1) A large series of required Synthetic Organic Chemicals (SOCs) – were collected over 2 quarters in 2017. All were below the detection limit of the analyzer at our contracted 3rd party certified laboratory
- 2) Volatile Organic Compounds (VOCs) – All 20 were found to be below the detection limit of the laboratory instrument during the years of 2013 thru 2017.
- 3) Cryptosporidium – The Authority has completed its latest round of cryptosporidium testing for the period of: March 2015 – February 2017. At the conclusion of testing in 2017, the final results have found that an average of only a small fraction of one cryptosporidium cyst (0.018 cysts) as the highest 12 month mean was found at or in our intake (source) water. Further, at the conclusion of this sampling, the Authority demonstrated that we attained the highest PaDEP bin classification of 1.
- 4) A series of required Inorganic chemicals (IOCs) were collected in April 2017. All were below detection limits, except fluoride which is reported on the data page of this report.
- 5) Required Radiological monitoring of Radium 226 and Radium 228 was collected in April 2017. Both were below detection limits.

VIOLATION

No Violations occurred during the 2017 calendar year.

WPJWA WATER QUALITY REPORT - 2017

PWS ID# 5020056

LISTED - Chemicals that were detected in WPJWA drinking water. Even though detected, all are below the allowable levels.

NOT LISTED - More than fifty other chemicals which were tested for and not found to exceed federal or state laws. These analyses were performed to ensure the quality of the water produced.

CONTAMINANT (Units)	VIOLA- TION? Y/N	MCL	MCLG	LEVEL DETECTED IN WPJWA WATER	RANGE OF DETECTIONS	MAJOR SOURCES OF CONTAMINANT
Turbidity (NTU)	N	TT=95% of samples < 0.3 NTU	0	0.038 (a) 100%	0.027 - 0.158 (a)	Soil Runoff
Total Coliform Bacteria	N	5% of monthly samples are positive	0	0.00% highest % of positive samples / mo	0.00%	Naturally present in the environment
Chlorine (ppm) - entry point	N	Minimum = 0.20 <0.20 for no more than 4 consecutive hours	MRDLG = 4	0.72 Avg.	0.21 - 0.98	Water additive used to control pathogens
- distribution	N	MRDL = 4	MRDLG = 4	0.43 Avg.	0.04-1.79	
Fluoride (ppm)	N	2	2	0.7	0.70	Water additive for strong teeth
Nitrate (ppm)	N	10	10	0.64	0.64	Fertilizer runoff; sewage, naturally occurring
Trihalomethanes (ppb)	N	80 (LRAA)	N/A	54.48 (LRAA) annual	27.10-95.70	By-product of drinking water chlorination
Haloacetic Acids (ppb)	N	60 (LRAA)	N/A	19.54 (LRAA) annual	0.00-47.90	By-product of drinking water chlorination
Total Organic Carbon (ppm)	N	TT	N/A	1.50	1.4 - 1.8	Naturally present in the environment.
Running Annual Average Performance Ratio		>1.00		1.27	1.08-1.51	
Nitrite (ppm) 2016	N	1.0	1.0	0.12	0.12	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Mercury (ppm) 2016	N	0.002	0.002	0.00015	0.0000-0.0003	Erosion of natural deposits; Discharge from refineries and factories; Runoff from landfills
Lead (ppb) 2016				90th percentile	Sites above AL	
	N	AL = 15	0	11.26 (b)	1 out of 51 Range (0 - 27.3)	Corrosion of household plumbing systems; erosion of natural deposits
Copper (ppm) 2016	N	AL = 1.3	1.3	0.083 (b)	0 out of 51 Range (0 - 0.188)	Corrosion of household plumbing systems; erosion of natural deposits
UCMR 3 (ppb) 2015-2016						
Entry point to Distribution system						
Chromium	NA	MRL= 0.2		0.2	0.2-0.3	Naturally occurring element; used for making steel and other alloys.
Chromium-6	NA	MRL= 0.03		0.06	0.05-0.06	See Chromium above
Cobalt	NA	MRL = 1.0		ND	ND	Naturally occurring element; used in medicine
Strontium	NA	MRL= 0.3		97.0	70.6-123.3	Naturally occurring element; used for making face plate glass in CRT televisions
Molybdenum	NA	MRL= 1.0		ND	ND	Naturally occurring element found in ores and present in plants, animals and bacteria
Vanadium	NA	MRL= 0.2		ND	ND	Naturally occurring element; used as a catalyst
Chlorate	NA	MRL= 20		ND	ND	Agricultural defoliant or desiccant
1,4-dioxane	NA	MRL = 0.07		ND	ND	Used as a solvent or solvent stabilizer
Volatile Organic Compounds	NA	MRL+ 0.03-0.2		ND	ND	Used for making other substances and solvents
Perfluorinated Compounds	NA	MRL = 0.01-0.09		ND	ND	Manmade chemicals used other products to make then stain, grease or water resistant
Hormones	NA	MRL= 0.0001-0.002		ND	ND	Hormones used in specific pharmaceuticals
Distribution system maximum residence time sample location						
Chromium	NA	MRL= 0.2		0.1	0.0-0.2	Naturally occurring element; used for making steel and other alloys.
Chromium-6	NA	MRL= 0.03		0.04	0.04-0.05	See Chromium above
Cobalt	NA	MRL = 1.0		ND	ND	
Strontium	NA	MRL= 0.3		82.8	77.8-87.9	Naturally occurring element; used for making face plate glass in CRT televisions
Molybdenum	NA	MRL= 1.0		ND	ND	Naturally occurring element found in ores and present in plants, animals and bacteria
Vanadium	NA	MRL= 0.2		ND	ND	Naturally occurring element; used as a catalyst
Chlorate	NA	MRL= 20		ND	ND	Agricultural defoliant or desiccant

(a) 100% of Turbidity samples met the Turbidity limits specified in the PA Safe Drinking Water Act.

(b) All samples were taken from a targeted sample pool, focused on those sites with the greatest risk of lead and/or copper leaching.

PUBLIC NOTIFICATION NEWS

As part of the requirements of the Public Notification Rule promulgated in 2009, WPJWA has entered into an agreement with *Rapid Response* to manage our public notification situations. This will enable WPJWA to get in contact with our customers in case the need presents itself (i.e. Tier 1 violation, health warning, areas of flushing, water conservation orders, etc.) in the most quick and efficient way. Please contact us with your current phone number at 412-243-6165 or at www.wpjwa.com.

CONSUMER WATER TIPS

Conserving water can save money by reducing your water bill. The following tips are great ways to start:

- Place the dishes on the dishwasher and set the controls to the maximum cycle time. Avoid pre-rinsing the dishes when using the dishwasher. When washing dishes by hand, use two basins: one for washing and one for rinsing rather than let the water run.
- The dishwasher and clothes washer should only be run when they are fully loaded.
- Many leaks found in homes result from the flushing valve in the toilet tank not sealing properly. To check for a possible leak, try adding a small amount of blue food coloring to your tank water, let it sit overnight unused, and then check the bowl contents in the morning. If the bowl water is blue, the toilet tank is leaking. Replacement of the flapper valve is usually a very easy procedure. Leaky toilets can waste as much as 200 gallons each day.
- Try cutting your shower time or install low flow shower heads (maximum of 2.5 gal /minute) in your home. Some shower heads are designed that they can even be shut off temporarily during lathering or washing hair.
- Replace washers or the "O" rings to repair leaking/dripping faucets. Dripping faucets can waste up to 2,000 gallons of water each year.
- Installing and or replacing plumbing fixtures with low flow designed fixtures (maximum of 2.5 gal /minute) will cut total water use over the long term.
- To prevent water loss from evaporation, don't water your lawn during the hottest part of the day or when it is windy. Water your lawn or garden preferably in the early morning. Also, the use of soaker hoses will apply water directly to the soil and roots of the plants.

Information on other ways that you can conserve water can be found at: www.epa.gov/safewater/publicoutreach/index.html. Another good resource is the American Water Works Association (AWWA) consumer webpage www.drinktap.org. Both sources also contain information about water quality, water information, child activities and much more.

LEAD AND DRINKING WATER

At the WPJWA, we take our responsibility to protect your health very seriously and want you to make informed decisions about your drinking water. LEAD is not present in the water when it leaves our treatment facility or in the water mains that run below the streets. However, LEAD can be present in old service lines connecting homes to the water system or in-home plumbing. WPJWA takes steps at the treatment plant to reduce the potential of LEAD dissolving into the water and ending up at the tap. WPJWA has always been in compliance with all federal regulations for LEAD. However, some risks remain.

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 Wilkesburg-Penn Joint 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 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.

If you believe your home is at risk, we encourage you to have your water tested by a certified laboratory, particularly if there are children under age 6 or pregnant women in the household. Information on certified laboratories can be found on the WPJWA website at: www.wpjwa.com.

DEFINITION OF TERMS USED

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

Locational Running Average (LRAA) – The average, computed quarterly, of all results taken at a specific monitoring location during the most recent four quarters.

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 are set to allow for an additional margin of safety.

Maximum Residual Disinfectant Level (MRDL) – The highest level of a disinfectant allowed in drinking water.

Maximum Residual Disinfectant level goal (MRDLG) -- The level of a drinking water disinfectant below which there is no known or expected risk to health.

Millirems per Year (Mrem/yr) – A measure of radiation absorbed by the human body.

Minimum Reporting Level (MRL) - For UCMR 3 analysis (see details below). The minimum limit of a chemical required to be reported to the Environmental Protection Agency (EPA). The data collected from the UCMR 3 analyses are used in assessment monitoring and may contribute to determining future regulations that will set limits on the amount of the listed UCMR 3 chemicals in the future. The MRL is not a regulatory level and is only a reporting requirement at this time.

Not Detected (ND) – The result of the analysis is below the analytical instrument detection level

NTU -- Nephelometric Turbidity Units, a regulatory measure of water clarity.

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

Parts per Billion (ppb) -- Also known as *micrograms* per liter. An equivalent comparison is one penny in 10 *million* dollars.

Parts per Million (ppm) -- Also known as *milligrams* per liter. An equivalent comparison is one penny in 10 *thousand* dollars.

Trihalomethanes (THMs) and Haloacetic Acids (HAAs) – A group of chemicals called “Disinfection Byproducts” (DBPs) that form when natural organic matter in the source water, such as leaves and algae, decompose and combine chemically with the chlorine added during the disinfection process.

Total Organic Carbon (TOC) – The measure of the carbon content of organic matter. The measure provides an indicator of how much organic matter is in the water and could potentially react with chlorine to form Disinfection Byproducts (DBPs).

Treatment Technique (TT) – A required process performed during water treatment intended to reduce the level of a certain contaminant or intermediate chemical.

Unregulated Contaminant Monitoring Rule 3 (UCMR 3) – The UCMR provides the EPA and other interested parties with scientifically valid data on the occurrence of contaminants in drinking water. These data serve as a primary source of occurrence and exposure information that the agency uses to develop regulatory decisions. Unregulated contaminants are those that do not yet have a drinking water standard set by the EPA. The UCMR specifically uses both assessment monitoring of specific chemicals and screening surveys of hormones. You can learn more about UCMR 3 by accessing <http://water.epa.gov/lawsregs/rulesregs/sdwa/ucmr/ucmr3> or contacting the Safe Drinking Water Hotline at (800) 426-4791. Further, our water system has sampled for specific chemicals that may have not been specifically listed in our water quality report. As our customers, you have a right to know that these data are available. If you are interested in examining the results, please contact Lou Ammon, Laboratory Manager, at (412) 243-6254.