
# WILKINSBURG-PENN JOINT WATER AUTHORITY
## 2200 Robinson Boulevard, Pittsburgh, PA 15221
## PWS ID 5020056
# 2020
# WATER QUALITY REPORT

The Wilkinsburg-Penn Joint Water Authority (WPJWA) is pleased to present our 2020 Water Quality Report. *Este informe contiene informacion muy importante sobre su agua berber. Traduzcalo 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 "2020 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 WATER ASSESSMENT

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."

A Source Water Assessment of WPJWA's intake water (located on the Allegheny River) was completed in May 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 on the PA DEP website at: http://www.depgreenport.state.pa.us/elibrary/GetFolder?FolderID=4492 and then selecting "Wilkinsburg-Penn Joint Water Authority pdf" file in the list or by writing to the PA DEP, 400 Waterfront Dr., Pittsburgh, PA 15222. 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 Wilkinsburg-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.

## EDUCATIONAL INFORMATION

The sources of drinking water (both tap and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs and wells. As water travels over the surface of 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 human activity. 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 activities.

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. FDA and DEP regulations establish limits for contaminants in bottled water which must provide the same protection of public health.

Drinking water, including bottled water, may be reasonably 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 of chemicals can be obtained by calling the US EPA's *Safe Drinking Water Hotline* at (800) 426-4791, or by online form at: http://www.epa.gov/ground-water-and-drinking-water/forms/contact-us-about-ground-water-and-drinking-water or by mail at EPA Office of Ground Water and Drinking Water, 1200 Pennsylvania Ave, N.W. (Mail Code 4606M), Washington, DC 20460.

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. As this report shows, 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.

In 2020, WPJWA collected a total of 2,427 samples with an average of 202 samples collected each month at 59 sample sites located in every municipality we serve. Each sample was analyzed for free and total chorine disinfectant level, pH and bacterial analysis. Further, WPJWA collected an additional 332 samples with an average of 28 samples per month with enhanced chemical analysis that ensures that our corrosion control treatment system is working properly. Lastly, our water treatment filtration plant is staffed with certified water treatment operators 24 hours a day, 365 days per year. Samples of the entire treatment process from raw water entering the treatment plant to finished water leaving the plant to our distribution system are collected and analyzed each hour of each day of the year. As you can see, treating and providing our customers with safe drinking water is our #1 priority and will remain so in the future.

## SPECIAL MESSAGE FOR PEOPLE WITH SEVERELY WEAKEND IMMUNE SYSTEMS

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 health care providers. EPA/CDC guidelines on appropriate means to

lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available online at: https://nepis.epa.gov/Exe/ZyPURL.cgi?Dockey=200024LD.TXT, or by mail at EPA Office of Ground Water and Drinking Water, 1200 Pennsylvania Ave, N.W. (Mail Code 4606M), Washington, DC 20460.

## SECURITY OF YOUR WATER SYSTEM

All of the Authority's impounded potable water is housed in secure, covered reservoirs and tanks. Authority vehicles are in our service areas and all of our divisions are staffed 24 hours a day and 7 days a week. Our SCADA (Supervisory Control and Data Acquisition) system monitors water quality, availability and security of our production, treatment and storage facilities. You can be of assistance in maintaining the security and safety of our water system by being aware of the fire hydrants, tanks and reservoirs located in your neighborhood. If you should see suspicious activity happening to any of our facilities, hydrants or water lines, please report it immediately by contacting 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 and then selecting the "CCR Water Quality" button on the Home page.

## 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 with important and timely information (e.g.: 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 FREQUENTY ASKED QUESTIONS (FAQs)

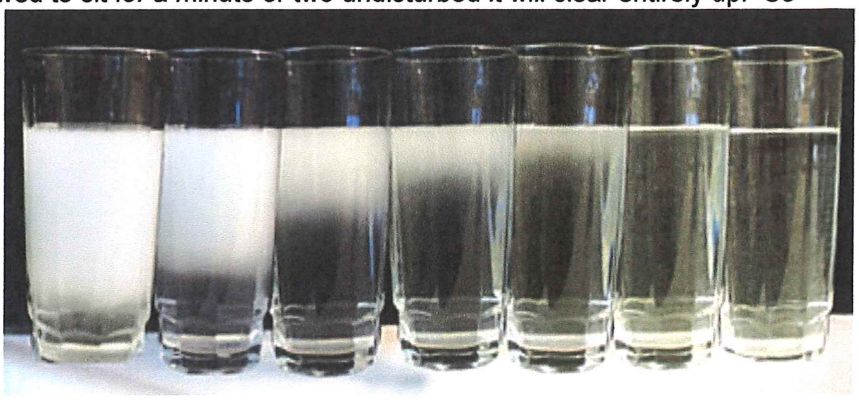
WPJWA is currently developing a FAQ informational page on our website. Please check back on our website at www.wpjwa.com later in the year to view this information. In the meantime, information about our top three most frequently asked questions will be presented here:

- ***Why does my water suddenly appear discolored and/or rusty?***

  Water may become discolored when certain actions disrupt the flow of water in the water distribution mains. Examples of these disruptions can be main line water breaks, the opening of fire hydrants to fight fires or for routine, scheduled hydrant flushing activities. Though these events are temporary, and in most cases quite harmless, it can lead to staining of laundry and automatic ice makers. Our hydrant flushing schedule is posted on our website or can be obtained by calling our main office phone number (412) 243-6200. Please avoid using your washing machine and your automatic ice makers at this time. If the disruption is a result of water line break, you can be assured that our distribution crews are working around the clock and as quickly as possible to restore normal water service.

- ***Why does my water appear white and/or milky, especially in the winter months?***

  Milky water is caused by tiny air bubbles in water and is completely harmless. The air bubbles are a result of dissolved oxygen leaving the water. In fact, if that water is allowed to sit for a minute or two undisturbed it will clear entirely up. So what is happening here? Cold water is capable of holding more dissolved oxygen than warm water. The colder the water, the more dissolved oxygen it can carry. Further, water delivered to each home is under pressure so when the water is warmed as it travels around the home's plumbing, that dissolved oxygen wants to leave the water but cannot since the water is under pressure in the plumbing. Once a faucet is opened, that trapped dissolved oxygen can now freely leave the water and the result is white or milky colored water. This effect is exactly what happens when you open a carbonated soft drink in that the dissolved carbon



dioxide gas leaves the container as the pressure is removed. Also, the warmer the soft drink is, the more "fizzy" the drink appears to be. So the easiest way to prevent this in your tap water is to simply let the water sit undisturbed for a moment in an open container and the air bubbles will naturally disappear just like in the picture above.

Sometimes air can be introduced to the water line if there has been a water main break or the home has had recent plumbing repairs. In these cases, air under pressure is forcibly ejected and the plumbing fixtures will spurt or make noises when the fixture is opened. If you experience conditions like these that are not a result of recent home plumbing repairs and don't resolve after a minute or two call customer service at(412) 243-6200 and report the problem..

***Why does my water have a chemical or bleach taste and/or odor and is there anything I can do to remove it?***

Nearly all odors that customers report as "bleach-like", "chemical" or even "medicinal" are due to WPJWA adding chlorine in the water as a disinfectant. The Authority is required to maintain certain levels of chlorine in our treatment process, in the finished water leaving the filtration plant and at each and every one of our customer's taps. Further, disinfection by chlorine is one of the most important steps we take in ensuring our water is microbiologically safe in the prevention of water-borne diseases. The World Health Organization has stated that the adoption of chlorinating the public drinking water a century ago has been one of the most significant advances in public health protection worldwide.

For certain individuals that are sensitive to the taste and odor of chlorine in the water can lessen or even remove it by:

- Placing water in a glass or in another type of open container in the refrigerator for several hours or overnight. This will allow the chlorine to dissipate and taste fresh. Better yet, keep a pitcher of water on hand in the refrigerator at all times so the water is ready to drink whenever you want it
- Add a few drops of lemon or lime juice and/or a fresh slice of your favorite fruit to the water.
- Look into an approved home water treatment device. This can be as simple as an activated carbon pitcher or end of faucet device to an under sink reverse osmosis unit. Whatever device you use ensure it is manufactured specifically to improve the taste and odor of the water, the device is from a reputable company, and ensure to follow all of the manufacture's installation and maintenance instructions. Failure to do this will reduce the effectiveness of the device and may even lower the water quality.

## 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 Wilkinsburg-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. Click on the "Facts on Lead" info found in the "Other Customer Notifications" heading.

## DEFINITION OF TERMS USED

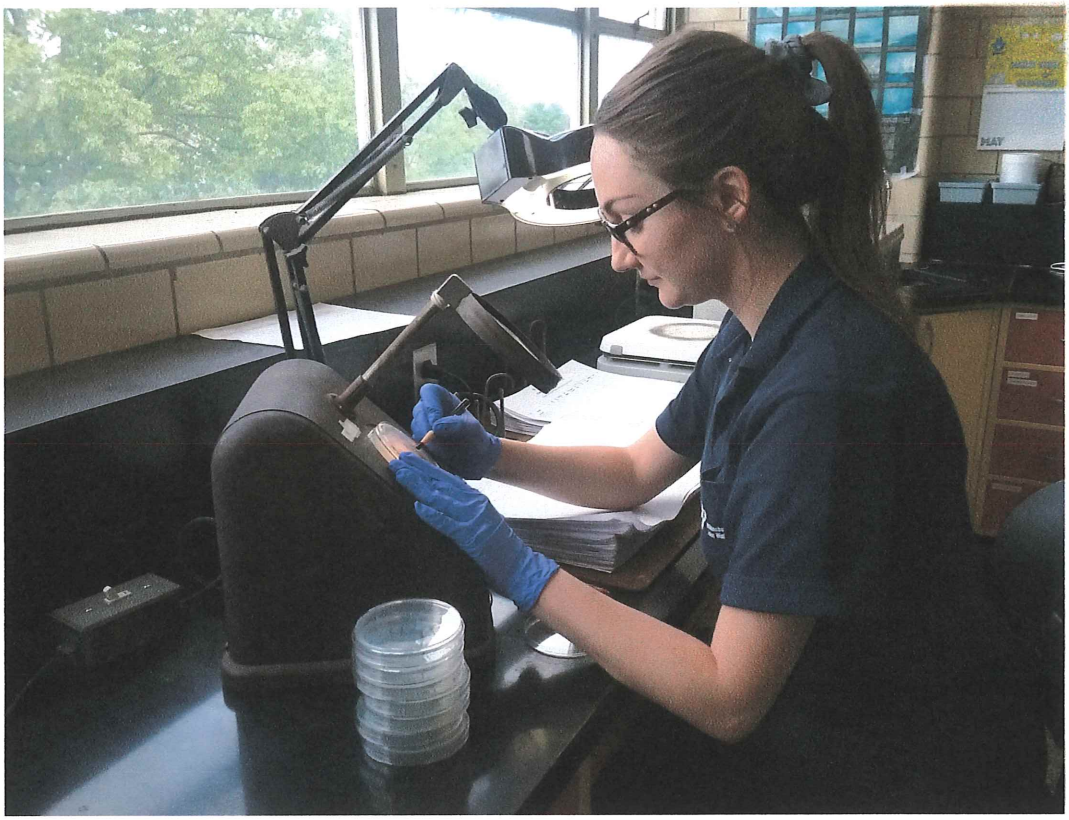
Action Level (AL) -- The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

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. 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 benefits of the use of disinfectants to control microbial contaminants.

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

Minimum Reporting Level (MRL) - For UCMR 3 and 4 analyses (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 and 4 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 and 4 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 method/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 intended to reduce the level of a contaminant in drinking water.

Unregulated Contaminant Monitoring Rule 3 and 4(UCMR 3 and UCMR 4) – 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 and cyanotoxins. You can learn more about UCMR 3 by accessing http://water.epa.gov/lawsregs/rulesregs/sdwa/ucmr/ucmr3 and UCMR 4 http://www.epa.gov/dwucmr/fourth-unregulated-contaminant-monitoring-rule 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 Louis Ammon, Laboratory Manager, at (412) 243-6254.

# WPJWA WATER QUALITY REPORT - 2020 PWS ID# 5020056

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

**NOT LISTED:** Other chemicals and compounds which were tested during their required monitoring period and not found to exceed federal or state laws. These analyses were performed to ensure the quality of the water produced.

| CONTAMINANT (Units) | VIOLATION? 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 | 0.035<br>100.00% (lowest percentage attained) | 0.018 - 0.076 | Soil Runoff |
| Total Coliform Bacteria | N | 5% of monthly samples are positive | 0 | 0.00%<br>highest % of positive samples / mo | 0.00% | Naturally present in the environment |
| Chlorine (ppm) - entry point | N | Minimum = 0.20<br><0.20 for no more than 4 consecutive hours | MRDLG = 4 | 0.23 Min. | 0.23 - 0.84 | Water additive used to control pathogens |
| - distribution | N | MRDL = 4 | MRDLG = 4 | 1.87 Max. | 0.37-0.52 Mo. Avg. | |
| Fluoride (ppm) | N | 2 | 2 | 0.60 | 0.60 | Water additive for strong teeth |
| Nitrate (ppm) | N | 10 | 10 | 0.51 | 0.51 | Fertilizer runoff; sewage, naturally occuring |
| Trihalomethanes (ppb) | N | 80 (LRAA) | N/A | 58.93 (LRAA) annual | 10.80-117.00 | By-product of drinking water chlorination |
| Haloacetic Acids 5 (ppb) | N | 60 (LRAA) | N/A | 22.00 (LRAA) annual | 0.00-48.90 | By-product of drinking water chlorination |
| Total Organic Carbon (ppm)<br>Running Annual Average Performance Ratio | N | TT<br>>=1.00 | N/A | 1.40<br>1.09 | 1.10 - 1.90<br>1.00-1.89 | Naturally present in the environment. |
| Barium (ppm) | N | 2.0 | 2.0 | 0.03 | 0.03 | Discharge from drilling waste, Discharge from metal refineries , Erosion of natural deposits |
| Nickel (ppm) | N | None | None | 0.00209 | 0.00209 | Erosion of natural deposits; Discharge from refineries and factories; Runoff from landfills |
| Lead (ppb) 2019 | N | AL = 15 | 0 | 90th percentile<br>12.86 ( a ) | Sites above AL<br>3 out of 51<br>Range ( 0 - 39.6 ) | Corrosion of household plumbing systems; erosion of natural deposits |
| Copper (ppm) 2019 | N | AL = 1.3 | 1.3 | 0.1286 ( a ) | 0 out of 51<br>Range ( 0 - 0.219 ) | Corrosion of household plumbing systems; erosion of natural deposits |
| LT2 Cryptosporidium<br>Allegheny River 2015-2017 | N | TT | | 0.018 cysts ( b ) | 0-0.0625 | Naturally present in the environment; Sewage discharges; Runoff from farm animal pastures |
| **UCMR 3 (ppb) 2015-2016** | | | | | | |
| **Entry point to Disribution system** | | | | | | |
| Chromium | NA | MRL= 0.2 | | 0.2 | 0.2-0.3 | Naturally occuriing 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 occuring element; used in medicine |
| Strontium | NA | MRL= 0.3 | | 97.0 | 70.6-123.3 | Naturally occuriing element; used for making face plate glass in CRT telelvisions |
| Molybdenum | NA | MRL= 1.0 | | ND | ND | Naturally occuriing element found in ores and present in plants, animals and bacteria |
| Vanadium | NA | MRL= 0.2 | | ND | ND | Naturally occuring 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 occuriing 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 occuriing element; used for making face plate glass in CRT telelvisions |
| Molybdenum | NA | MRL= 1.0 | | ND | ND | Naturally occuriing element found in ores and present in plants, animals and bacteria |
| Vanadium | NA | MRL= 0.2 | | ND | ND | Naturally occuring element; used as a catalyst |
| Chlorate | NA | MRL= 20 | | ND | ND | Agricultural defoliant or desiccant |

| UCMR 4 (ppb) 2018-2019 | | | | | | |
|---|---|---|---|---|---|---|
| **Entry point to Distribution system** | | | | | | |
| ***Cyanotoxins: ( c )*** | | | | | | |
| Total Microcystins | NA | MRL= 0.3 | | ND | ND | Toxins from cyanobacterial or Harmful algal |
| Microcysin LA | NA | MRL= 0.008 | | ND | ND | blooms |
| Microcysin LF | NA | MRL= 0.006 | | ND | ND | " |
| Microcysin LR | NA | MRL= 0.02 | | ND | ND | " |
| Microcysin LY | NA | MRL= 0.009 | | ND | ND | " |
| Microcysin RR | NA | MRL= 0.006 | | ND | ND | " |
| Microcysin YR | NA | MRL= 0.02 | | ND | ND | " |
| nodularin | NA | MRL= 0.005 | | ND | ND | " |
| anatoxin-a | NA | MRL= 0.03 | | ND | ND | " |
| cylindrospermopsin | NA | MRL= 0.09 | | ND | ND | " |
| ***Metals: ( d )*** | | | | | | |
| Germanium | NA | MRL= 0.3 | | ND | ND | Naturally occurring, used in producing electronics |
| Manganese | N | MRL= 0.4 | | 2.6 | 1.1-3.8 | Naturally occurring, used in steel production |
| ***Pesticides: ( d )*** | | | | | | |
| alpha-hexachlorocyclohexane | NA | MRL= 0.01 | | ND | ND | Formerly used as an insecticide |
| chlorpyrifos | NA | MRL= 0.03 | | ND | ND | Insecticide, acaricide and miticide |
| dimethipin | NA | MRL= 0.2 | | ND | ND | Herbicide and plant growth regulator |
| ethpprop | NA | MRL= 0.03 | | ND | ND | Insecticide |
| oxyfluorfen | NA | MRL= 0.05 | | ND | ND | Herbicide |
| profenofos | NA | MRL= 0.3 | | ND | ND | Insecticide and acaricide |
| tebuconazole | NA | MRL= 0.2 | | ND | ND | Fungicide |
| total permethrin (cis- & trans-) | NA | MRL= 0.04 | | ND | ND | Insecticide |
| tribufos | NA | MRL= 0.07 | | ND | ND | Insecticide and cotton defoliant |
| ***Alcohols: ( d )*** | | | | | | |
| 1-butanol | NA | MRL= 2.0 | | ND | ND | Solvent, food additive chemical production |
| 2-methoxyethanol | NA | MRL= 0.4 | | ND | ND | Used in cosmetics, perfumes, fragrances & lotions |
| 2-propen-1-ol | NA | MRL= 0.5 | | ND | ND | Used in flavorings, perfumes and other chemicals |
| ***Semivolatile Chemicals: ( d )*** | | | | | | |
| butylated hydroxyanisole | NA | MRL= 0.03 | | ND | ND | Used as a food additive (antioxidant) |
| o-toluidine | NA | MRL= 0.007 | | ND | ND | Used in dyes, rubber and pharmaceuticals |
| quinoline | NA | MRL= 0.02 | | ND | ND | Used in pharmaceuticals, flavors, and chemical |
| | | | | | | intermediates |
| **Entry point 105 (Purchased water from the Monroeville Water Authority)** | | | | | | |
| ***Cyanotoxins: ( c )*** | | | | | | |
| Total Microcystins | NA | MRL= 0.3 | | ND | ND | Toxins from cyanobacterial or Harmful algal |
| Microcysin LA | NA | MRL= 0.008 | | ND | ND | blooms |
| Microcysin LF | NA | MRL= 0.006 | | ND | ND | " |
| Microcysin LR | NA | MRL= 0.02 | | ND | ND | " |
| Microcysin LY | NA | MRL= 0.009 | | ND | ND | " |
| Microcysin RR | NA | MRL= 0.006 | | ND | ND | " |
| Microcysin YR | NA | MRL= 0.02 | | ND | ND | " |
| nodularin | NA | MRL= 0.005 | | ND | ND | " |
| anatoxin-a | NA | MRL= 0.03 | | ND | ND | " |
| cylindrospermopsin | NA | MRL= 0.09 | | ND | ND | " |
| ***Metals: ( d )*** | | | | | | |
| Germanium | NA | MRL= 0.3 | | ND | ND | Naturally occurring, used in producing electronics |
| Manganese | N | MRL= 0.4 | | 1.8 | 0.0-3.9 | Naturally occurring, used in steel production |
| ***Pesticides: ( d )*** | | | | | | |
| alpha-hexachlorocyclohexane | NA | MRL= 0.01 | | ND | ND | Formerly used as an insecticide |
| chlorpyrifos | NA | MRL= 0.03 | | ND | ND | Insecticide, acaricide and miticide |
| dimethipin | NA | MRL= 0.2 | | ND | ND | Herbicide and plant growth regulator |
| ethpprop | NA | MRL= 0.03 | | ND | ND | Insecticide |
| oxyfluorfen | NA | MRL= 0.05 | | ND | ND | Herbicide |
| profenofos | NA | MRL= 0.3 | | ND | ND | Insecticide and acaricide |
| tebuconazole | NA | MRL= 0.2 | | ND | ND | Fungicide |
| total permethrin (cis- & trans-) | NA | MRL= 0.04 | | ND | ND | Insecticide |
| tribufos | NA | MRL= 0.07 | | ND | ND | Insecticide and cotton defoliant |
| ***Alcohols: ( d )*** | | | | | | |
| 1-butanol | NA | MRL= 2.0 | | ND | ND | Solvent, food additive chemical production |
| 2-methoxyethanol | NA | MRL= 0.4 | | 0.42 | 0.00 - 0.42 | Used in cosmetics, perfumes, fragrances & lotions |
| 2-propen-1-ol | NA | MRL= 0.5 | | ND | ND | Used in flavorings, perfumes and other chemicals |
| ***Semivolatile Chemicals: ( d )*** | | | | | | |
| butylated hydroxyanisole | NA | MRL= 0.03 | | ND | ND | Used as a food additive (antioxidant) |
| o-toluidine | NA | MRL= 0.007 | | ND | ND | Used in dyes, rubber and pharmaceuticals |
| quinoline | NA | MRL= 0.02 | | ND | ND | Used in pharmaceuticals, flavors, and chemical intermediates |

| | | | | | | |
|---|---|---|---|---|---|---|
| **Distribution System: ( e )** | | | | | | |
| ***Haloacetic Acids Group (HAA) (HAA 6 Br, Not included in the HAA 5 analysis above):*** | | | | | | |
| Bromochloroacetic Acid | NA | NA | | 1.79 | 0.38 - 4.30 | By-product of drinking water chlorination |
| Bromodichloroacetic Acid | NA | NA | | 2.04 | 0.00 - 5.30 | By-product of drinking water chlorination |
| Chlorodibromoacetic Acid | NA | NA | | 0.13 | 0.00 - 0.75 | By-product of drinking water chlorination |
| Tribromoacetic Acid | NA | NA | | ND | ND | By-product of drinking water chlorination |
| **Allegheny River: ( d )** | | | | | | |
| ***TOC (UCMR 4 only)(ppm)*** | NA | NA | | 2.354 | 1.981 - 2.767 | Naturally present in the environment. |
| ***Bromides*** | NA | NA | | 0.04 | 0.02 - 0.05 | Wastewater from oil and gas extraction and |

( a) All Samples were taken from a targeted sample pool of Tier 1 sites which have or reported to have known lead water lines.
( b ) As a result of this testing, the Authority attained the highest PADEP cryptosporium bin classification of 1.
( c ) 8 samples collected biweekly (fortnightly).
( d ) 4 samples collected quarterly.
( e ) An average of 8 samples collected over 4 quarters (32 total samples per each parameter)

**In addition to the analyses reported above, the Authority has collected numerous other required samples as listed below. All of these analyses were tested below the minimum reporting (detection) level of the testing method:**

**Annual Inorganic Analysis:**
Antimony, Arsenic, Asbestos, Berylium, Cadmium, Chromium, Cyanide, Mercury, Nitrite, Selenium, Thallium

**Annual Volatile Organic Analyses:**
1,1,1 Trichloroethane, 1,1,2 Trichloroethane, 1,1 Dichloroethene, 1,2,4 Trichlorobenzene, 1,2 Dichlorobenzene, 1,2 Dichloroethane, 1,2 Dichloropropane, Benzene, Carbon Tetrachloride, Chlorobenzene, Ethyl benzene, Methylene Chloride, Styrene, Tetrachloroethene, Toluene, Trichloroethene, Vinyl Chloride, Xylenes (total) 1,4 Dichlorobenzene, cis-1,2-Dichloroethene, trans-1,2-Dichloroethene, m,p-Xylene, o-Xylene

**Triennial Synthetic Organic Analyses (2 rounds of testing quarterly in 2020):**
Endrin, Lindane, Methoxychlor, Toxaphene, Dalapon, Diquat, Endthall, Glyphosate, Di (2-Ethylhexyl) Adipate, Oxymal (Vydate), Simazine, Di (2-Ethylhexyl) Phthalate, Piclorem, Dinoseb, Hexchlorocyclopentadiene, Carbofuran, Atrazine, Alachlor, 2,3,7,8 TCDD (Dioxin), Heptachlor, Heptachlor Epoxide, 2,4 - D, 2,4,5 - TP Silvex, Hexachlorobenzene, Benzo(A)pyrene, Pentachlorophenol, PCBs, 1,2-Dibromo, 3-chlororpropane, Ethylene Dibromide (EDB), Chlorodane.

**Radiological Analysis :**
Gross Alpha Particle Activity, Combined Uranium, Gross Beta Particle Activity
Radium 226, Radium 228 (2017)