



WILKESBURG-PENN JOINT WATER AUTHORITY

2200 Robinson Boulevard, Pittsburgh, PA 15221

PWS ID 5020056

2019

WATER QUALITY REPORT

The Wilkesburg-Penn Joint Water Authority (WPJWA) is pleased to present our 2019 Water Quality Report. *Este informe contiene informacion muy importante sobre su agua beber. 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 "2019 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 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 "Wilkesburg-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 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.

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:

- WP** Microbiological contaminants such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife.
- WP** 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.
- WP** Pesticides and herbicides which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses.
- WP** 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.
- WP** 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: 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.

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 is 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.

A MESSAGE FROM OUR EXECUTIVE DIRECTOR

To Our Valued Customers,

First and foremost, I would like to commend all of our employees for enduring the challenges of this past year and thank you our customers for your understanding and more importantly your patience. The employees of the Wilkesburg 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 Wilkesburg-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. We continue to see change in requirements for maintaining clean potable water. Change in regulations that are imposed by the Pennsylvania Department of Environmental Protection, along with requirements to meet new quality standards are outlined in this publication.

The main objective of the Wilkesburg-Penn Joint Water Authority is to provide a reliable water service to our customers while maintaining reasonable rates. We believe one method of accomplishing this objective, for a system that is well over 100 years, is through a planned System Wide Capital Improvement Program. This year, the Authority has made capital improvements in: Forest Hills, Swissvale, Pitcairn, Wilkes Township, Wilkesburg, Wilmerding, Braddock Hills, Chalfant and East Pittsburgh.

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.

Please visit our website www.wpjwa.com, for important updates and valuable information.

Nick Bianchi

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 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, add 12 drops of food coloring to your upper tank water, let the toilet rest unused for at least 1 hour. If the lower bowl water is colored, the toilet tank is leaking. Replacement of the flushing valve is usually a very easy procedure. Leaky toilets can potentially 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 potentially waste up to 2,000 gallons of water each year.
-  Installing and or replacing plumbing fixtures with low flow toilets (1.6 gallons or less per flush) and low flow fixtures (maximum of 2.5 gal /minute) will cut total water use over the long term.
-  To prevent water loss from evaporation, do not water your lawn during the hottest part of the day or when it is excessively 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 with the least amount of water loss.

Information on other ways that you can conserve water can be found at: American Water Works Association (AWWA) consumer webpage www.drinktap.org. Click on the "Water Conservation" tab with the "Water Information" drop down menu. This website also contains information about water quality, 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 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.



WPJWA WATER QUALITY REPORT - 2019

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	0.037 100.00% (lowest percentage attained)	0.021 - 0.143	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	MRDLG = 4	0.25 Min.	0.25 - 0.95	Water additive used to control pathogens
- distribution	N	<0.20 for no more than 4 consecutive hours MRDL = 4	MRDLG = 4	2.10 Max.	0.34-0.63 Mo. Avg.	
Fluoride (ppm)	N	2	2	0.75	0.75	Water additive for strong teeth
Nitrate (ppm)	N	10	10	0.75	0.75	Fertilizer runoff; sewage, naturally occurring
Trihalomethanes (ppb)	N	80 (LRAA)	N/A	49.63 (LRAA) annual	8.68-95.00	By-product of drinking water chlorination
Haloacetic Acids 5 (ppb)	N	60 (LRAA)	N/A	16.65 (LRAA) annual	0.00-34.00	By-product of drinking water chlorination
Total Organic Carbon (ppm)	N	TT	N/A	1.40	1.00 - 1.58	Naturally present in the environment.
Running Annual Average Performance Ratio		>=1.00		1.22	1.00-1.46	
Barium (ppm)	N	2.0	2.0	0.0304	0.0304	Discharge from drilling waste, Discharge from metal refineries, Erosion of natural deposits
Nickel (ppm)	N	None	None	0.00278	0.00278	Erosion of natural deposits; Discharge from refineries and factories; Runoff from landfills
Lead (ppb)	N	AL = 15	0	90th percentile 12.86 (a)	Sites above AL 3 out of 51 Range (0 - 39.6)	Corrosion of household plumbing systems; erosion of natural deposits
Copper (ppm)	N	AL = 1.3	1.3	0.1286 (a)	0 out of 51 Range (0 - 0.219)	
L12 Cryptosporidium 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 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 them 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

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 blooms
Microcystin LA	NA		MRL= 0.008	ND	ND	
Microcystin LF	NA		MRL= 0.006	ND	ND	*
Microcystin LR	NA		MRL= 0.02	ND	ND	*
Microcystin LY	NA		MRL= 0.009	ND	ND	*
Microcystin RR	NA		MRL= 0.006	ND	ND	*
Microcystin 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
ethiprop	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 106 (Purchased water from the Monroeville Water Authority)						
Cyanotoxins: (c)						
Total Microcystins	NA		MRL= 0.3	ND	ND	Toxins from cyanobacterial or Harmful algal blooms
Microcystin LA	NA		MRL= 0.008	ND	ND	
Microcystin LF	NA		MRL= 0.006	ND	ND	*
Microcystin LR	NA		MRL= 0.02	ND	ND	*
Microcystin LY	NA		MRL= 0.009	ND	ND	*
Microcystin RR	NA		MRL= 0.006	ND	ND	*
Microcystin 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
ethiprop	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
Semivolatiles 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: (a)						
Halooacetic Acids Group (HAA1/HAA 4 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 - 0.79	By-product of drinking water chlorination
Tribromoacetic Acid	NA		NA	ND	ND	By-product of drinking water chlorination
Allegheny River: (d)						
TDC (UCMR 4 only)(ppm)	NA	NA	NA	2.354	1.981 - 2.7	Naturally present in the environment.
Bromides	NA	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, Beryllium, 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 2017):

Endrin, Lindane, Methoxychlor, Toxaphene, Dalapon, Diquat, Endthall, Glyphosate, Di (2-Ethylhexyl) Adipate, Oxyal (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 (2017):

Radium 226, Radium 228



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.