2022

PWSID# 5020012

City of Duquesne
12 South Second Street – Duquesne, PA 15110
P: 412-466-8535

ANNUAL DRINKING WATER QUALITY REPORT

Este informe continue 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).

WATER SYSTEM INFORMATION:

The City of Duquesne Water Department is pleased to present our 2022 Consumer Confidence Report (CCR). This report shows our water quality and what it means. The potable water provided to the City of Duquesne is produced by the Municipal Authority of Westmoreland County (MAWC) and Pennsylvania American Water (PAW) meets and exceeds the water quality standards adopted by the Pennsylvania Department of Environmental Protection (PA DEP) and the U.S. Environmental Protection Agency (US EPA). MAWC tests our water using advanced technologies at numerous intervals in the treatment process to ensure the quality of our drinking water. Furthermore, the City of Duquesne Water Department provides additional daily testing of water quality. The City of Duquesne Water Department 2022 Water Quality Report provides information about our system, the quality of our water and related health information. MAWC, PAW and City of Duquesne staff are a team of dedicated employees who work diligently to deliver one of the finest drinking waters available at a reasonable cost. If you have any questions about this report or concerning your water quality, please contact us at 412-466-8535. You can access the report on our website: www.duquesnepa.us/utilities.

WATER QUALITY REPORT

You can request or attain a hard copy of the 2022 Water Quality Report by calling Jaqui Daniels at the City of Duquesne Water Department 412-351-8535, or visiting the City of Duquesne website at www.duquesnepa.us/utilities. Copies will also be available at public sites throughout the City of Duquesne (i.e. City Hall). We want you to be informed about your water supply. If you want to learn more, please attend any of our regularly scheduled meetings. As of January 2022, the City of Duquesne council meetings are in person at City Hall. Please check online for up to date information. All meetings begin at 6:30p.m., the first and fourth Tuesday of every month in Council Chambers, 2nd floor, City Hall, 12 S. Second Street, Duquesne, PA.

SOURCE OF WATER SUPPLY

Our water source is the Municipal Authority of Westmoreland County (MAWC), which draws water from the Youghiogheny River, which means our water is classified as a "surface water supply". We are pleased to report that our drinking water meets federal and state requirements. City of Duquesne technical operators are on call 24 hours a day.

MONITORING OF YOUR WATER SYSTEM:

The MAWC and PAW monitor your drinking water according to PA DEP and US EPA law. The following, "DUQUESNE CCR DATA- 2022," and "2022-Water Quality Results for CCR-PAW-Pittsburgh-5020039 (Hays Mine to Aldrich)" show the results for the period of January 1st to December 31, 2022.

DEFINITIONS OF TERMS USED

In this table you will find many terms and abbreviations you might not be familiar with. To help you better understand these terms we have provided the following definitions:

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.

DUQUESNE CCR DATA

2022

CONTAMINANT	MCL	LEVEL		RANGE	DATE TESTED
*Lead	0.015mg/L	0.000	90th Percentile	0.000-0.004 mg/L	2022
*Copper	1.3mg/L	0.140	90th Percentile	0.015 - 0.190 mg/L	2022
Total Trihalomethanes	0.08mg/L	0.081 mg/L	(LRAA)	0.032 - 0.094 mg/L	2022
Total Haloacetic Acids	0.06mg/L	0.048 mg/L	(LRAA)	0.018 - 0.062 mg/L	2022
Free Chlorine Residual					
Max Duq Distribution System		1.90 mg/L			2022
Range Duq Distribution System		0.27 - 1.90 mg/L			2022

LRAA =locational running annual average (*highest annual running average for individual sample point*)

Microbial

CONTAMINANT	DETECTED	MCLG	Assessments/Corrective Actions	Violation Y/N	Source of Contamination
Total Coliform Bacteria	1	N/A		NO	

(a) MCL for <40 samples = >1 pos.

2022

Water Quality Results for CCR – PAW – Pittsburgh - 5020039 (Hays Mine and Aldrich)

LEAD AND COPPER MONITORING - At least 50 tap water samples are collected at customers' taps every 3-years								
Substance (with units)	Year Sampled	Compliance Achieved	MCLG	Action Level (AL)	90th Percentile	No. of Homes Sampled	Homes Above Action Level	Typical Source
Lead (ppb)	2022	Yes	0	0.015	0.0038	51	2	Corrosion of household plumbing systems.
Copper (ppm)	2022	Yes	1.3	1.3	0.1830	51	0	Corrosion of household plumbing systems.

REVISED TOTAL COLIFORM RULE - At least 240 samples collected each month in the distribution system						
Substance (with units)	Year Sampled	Compliance Achieved	MCLG	MCL	Highest Percentage	Typical Source
Total Coliform [1]	2022	Yes	0	*TT = Less than 5% of monthly samples are positive	1%	Naturally present in the environment.
E. Coli [2]	2022	Yes	0	MCL = No confirmed samples	0%	Human and animal fecal waste.

NOTE: Coliforms are bacteria that are naturally present in the environment and are used as an indicator of the general bacteriological quality of the water. We are reporting the highest percentage of positive samples / highest number of positive samples in any month.

1 - The Treatment Technique for Total Coliforms requires that if the maximum percentage OR number of total coliform positive samples are exceeded a system assessment must be conducted, any sanitary defects identified, and corrective actions completed. Additional Level 1 Assessments or Level 2 Assessments are required depending on the circumstances.

2 - The Treatment Technique for E. Coli requires that for any total coliform positive routine sample with one or more total coliform positive check samples and an E. coli positive result for any of the samples a Level 2 Assessment must be conducted, any sanitary defects identified, and corrective actions completed. The E. Coli MCL is exceeded if routine and repeat samples are total coliform-positive and either is E. coli-positive, or the system fails to take repeat samples following an E. coli-positive routine sample, or the system fails to analyze total coliform-positive repeat samples for E. coli..

DISINFECTION BYPRODUCTS - Collected in the Distribution System							
Substance (with units)	Year Sampled	Compliance Achieved	MCLG	MCL	Highest LRAA	Range Detected	Typical Source
Total Trihalomethanes (TTHMs) (ppb)	2022	Yes	NA	80	68.1	28.1 - 54.9	By-product of drinking water disinfection.
Haloacetic Acids (HAAs) (ppb)	2022	Yes	NA	60	21.6	2.80 – 30.6	By-product of drinking water disinfection.

NOTE: Compliance is based on the running annual average at each location (LRAA). The Highest LRAA reflects the highest average at any location and the Range Detected reflects all samples used to calculate the running annual averages.

DISINFECTION BY-PRODUCTS PRECURSOR REMOVAL - Collected at the surface water treatment plant									
Substance (units)	Source	Year Sampled	Compliance Achieved	MCLG	MCL	Range of % Removal Required	Range of % Removal Achieved	Number of Quarters Out of Compliance	Typical Source
Total Organic Carbon (ppm)	Hays Mine	2022	Yes	NA	TT	35%	18.4% - 41.9%	0	Naturally present in the environment.
Total Organic Carbon (ppm)	Aldrich	2022	Yes	NA	TT	35%	22.7% - 49.3%	0	Naturally present in the environment.
Total Organic Carbon (ppm)	PWSA	2022	Yes	NA	TT	35%	37.1% - 38.6%	0	Naturally present in the environment

NOTE: If required removal was not met, compliance was achieved based on the approved alternate criteria.

DISINFECTANT RESIDUAL MONITORING - Collected at the water treatment facility entry points and the distribution system									
Substance (units)	Source	Year Sampled	Compliance Achieved	MRDLG	MRDL	Minimum Required Chlorine Residual	Compliance Result	Range Detected	Typical Source
Entry Point Chlorine Residual (ppm)[1]	Hays Mine	2022	Yes	4	4	0.20	1.09	1.09 – 2.84	Water additive used to control microbes.
Entry Point Chlorine Residual (ppm)[1]	Aldrich	2022	Yes	4	4	0.20	0.63	0.63 – 3.54	Water additive used to control microbes.
Entry Point Chlorine Residual (ppm)[1]	PWSA	2022	Yes	4	4	0.20	0.76	0.76 - 1.29	Water additive used to control microbes
Distribution System Chlorine Residual (ppm)[2]	PAW - Pittsburgh	2022	Yes	4	4	0.2	2.27	1.14 – 2.27	Water additive used to control microbes.

1 – Result represents the lowest residual entering the distribution system from the surface water treatment plant.
2 – Result represents the highest monthly average of chlorine residuals measured throughout the distribution system.

TURBIDITY – Continuous monitoring at the surface water treatment plant								
Substance (with units)	Source	Year Sampled	Compliance Achieved	MCLG	MCL	Highest Single Measurement and Lowest Monthly % of Samples ≤0.3 NTU	Sample Date of Highest and Lowest Compliance Result	Typical Source
Turbidity (NTU)	Hays Mine	2022	Yes	0	TT: Single result >1 NTU	0.63	11/19/22	Soil runoff.
		2022	Yes	NA	TT: At least 95% of samples ≤0.3 NTU	99.9%	NA	Soil runoff.
Turbidity (NTU)	Aldrich	2022	Yes	0	TT: Single result >1 NTU	0.10	08/30/22	Soil runoff.
		2022	Yes	NA	TT: At least 95% of samples ≤0.3 NTU	100%	NA	Soil runoff.
Turbidity (NTU)	PWSA	2022	Yes	0	TT: Single result >1 NTU	0.13	06/09/22	Soil runoff.
		2022	Yes	NA	TT: At least 95% of samples ≤0.3 NTU	100%	NA	Soil runoff.

OTHER REGULATED SUBSTANCES - Collected at the water treatment facilities and in the distribution system								
Substance (units)	Source	Year Sampled	Compliance Achieved	MCLG	MCL	Highest Compliance Result	Range Detected	Typical Source
Nitrate (ppm)	PAW – Hays Mine	2022	Yes	10	10	0.93	Single Sample	Runoff from fertilizer use; industrial or domestic wastewater discharges; erosion of natural deposits.
Nitrate (ppm)	PAW – Aldrich	2022	Yes	10	10	0.67	Single Sample	Runoff from fertilizer use; industrial or domestic wastewater discharges; erosion of natural deposits.
Distribution Nitrate (ppm)	PAW – Hays Mine	2022	Yes	10	10	1.89	0.48 – 1.89	Runoff from fertilizer use; industrial or domestic wastewater discharges; erosion of natural deposits.
Nitrate (ppm)	PWSA	2022	Yes	10	10	0.835	0.38 – 0.84	Runoff from fertilizer use; industrial or domestic wastewater discharges; erosion of natural deposits.
Barium (ppm)	PWSA	2022	Yes	10	10	0.027	Single Sample	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits.
Fluoride (ppm)	PAW – Hays Mine	2022	Yes	2	2	0.83	0.45 – 0.83	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories.
Fluoride (ppm)	PAW – Aldrich	2022	Yes	2	2	1.01	0.64 – 1.01	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories.
Fluoride (ppm)	PWSA	2022	Yes	2	2	0.80	Single Sample	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories.
Sodium (ppm)[1]	PAW – Hays Mine	2022	NA	NA	NA	34.5	Single Sample	Sodium is a natural constituent of raw water, but its concentration can be increased by pollution sources such as rock salt treatment, run-off, and detergents.
Sodium (ppm)[1]	PAW – Aldrich	2022	NA	NA	NA	16.1	Single Sample	Sodium is a natural constituent of raw water, but its concentration can be increased by pollution sources such as rock salt treatment, run-off, and detergents.
Gross Beta Particles (pCi/L)	PAW – Hays Mine	2022	Yes	50	50	2.09	ND – 2.09	Decay of natural and manmade deposits.
Gross Beta Particles (pCi/L)	PAW – Aldrich	2022	Yes	50	50	2.15	ND – 2.15	Decay of natural and manmade deposits.

1 - For healthy individuals, the sodium intake from water is not important because a much greater intake of sodium takes place from salt in the diet. However, sodium levels above the recommended upper limit of 20 ppm may be of concern to individuals on a sodium restricted diet.

SECONDARY CONTAMINANTS & OTHER MONITORING - Collected at the water treatment facilities				
Substance (with units)	**Year Sampled**	**SMCL**	**Average Result**	**Typical Source**
Hays Mine - pH	2022	6.5 – 8.5	7.3	pH is an expression of the acidic or basic condition of a liquid (scale 0 to14), with neutral being 7. Adjusted to maintain optimal corrosion control.
Aldrich - pH	2022	6.5 – 8.5	7.7	
Hays Mine - Iron (ppm) [1]	2022	0.3	<0.02	Corrosion of pipes; leaching of iron salts from soil and rocks, and industrial pollution. Essential dietary trace nutrient
Aldrich - Iron (ppm) [1]	2022	0.3	<0.01	
Hays Mine - Manganese (ppm) [1]	2022	0.05	<0.02	Naturally-occurring elemental metal; largely used in aluminum alloy production. Essential dietary trace nutrient.
Aldrich - Manganese (ppm) [1]	2022	0.05	<0.02	
Hays Mine - Hardness (ppm)	2022	NA	93	Represents the total concentration of calcium and magnesium ions, reported as calcium carbonate.
Aldrich - Hardness (ppm)	2022	NA	96	

1 – Secondary contaminants with SMCLs are primarily established to address aesthetic concerns.

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 form materials and components associated with service lines and home plumbing. The City of Duquesne Water Department is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components.

STEPS YOU CAN TAKE TO REDUCE YOUR EXPOSURE TO LEAD IN YOUR WATER

1. Run **your water to flush out lead.** Run water for 30 seconds to 2 minutes to flush lead from interior plumbing or until it becomes cold or reaches a steady temperature before using it for drinking or cooking, if it hasn't been used for several hours.

2. Use cold water for cooking and preparing baby formula. Do not cook with or drink water from the hot water tap; lead dissolves more easily into hot water. Do not use water from the hot water tap to make baby formula.

3. Do not boil water to remove lead. Boiling water will not reduce lead.

4. Look for alternative sources or treatment of water. You may want to consider purchasing bottled water or a water filter. Read the package to be sure the filter is approved to reduce lead or contact NSF International at 800-NSF-8010 or **www.nsf.org** for information on performance standards for water filters. Be sure to maintain and replace a filter device in accordance with the manufacturer's instructions to protect water quality.

5. Test your water for lead. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at **http://www.epa.gov/safewater/lead.** At this time, the City of Duquesne does not conduct testing, but we are in the process of identifying resources we can refer you to.

6. Get your child's blood tested. Contact your local health department or healthcare provider to find out how you can get your child tested for lead, if you are concerned about exposure.

7. Identify and replace plumbing fixtures containing lead. New brass faucets, fittings, and valves, including those advertised as "lead-free," may contribute lead to drinking water. The law currently allows end-use brass fixtures, such as faucets, with up to 8% lead to be labeled as "lead-free."

If you suspect you have a LEAD service line you would like to tested, please contact the City of Duquesne Water Department by calling 412-466-8535 (Monday through Friday 9:00 am to 4:00 pm).

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: 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.

SPECIAL MESSAGE FOR PEOPLE WITH SEVERLY WEAKENED IMMUNE SYSTEM

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.

Please keep us informed of your current phone number by calling 412-466-8535.