MUNICIPAL WATER AUTHORITY OF ALIQUIPPA
2023 ANNUAL DRINKING WATER QUALITY REPORT
PWSID #: 5040006

Este informe contiene información importante acerca de su agua potable. Haga que alguien lo traduzca para usted, ó hable con alguien que lo entienda. (This report contains important information about your drinking water. Have someone translate it for you, or speak with someone who understands it.)

WATER SYSTEM INFORMATION:
This report shows our water quality and what it means. If you have any questions about this report or concerning your water utility, please contact the Municipal Water Authority of Aliquippa at 724-375-5525. We want you to be informed about your water supply. If you want to learn more, please attend any of our regularly scheduled meetings. They are held on the 3rd Wednesday of each month.

SOURCE(S) OF WATER:

Source ID	Source Name	Type	Source Code
001	Old Radial Collector	Collector	Ground
004	Well #23	Vertical	Ground
005	Well #26	Vertical	Ground
006	Well #27	Vertical	Ground
007	Well #28	Vertical	Ground
008	Radial Collector #2	Collector	Ground
009	Well #25	Vertical	Ground
010	Center Interconnect	Interconnect (Emergency)	Purchased Surface

A *Source Water Protection Plan* was completed and approved by the PA Department of Environmental Protection (Pa. DEP) on May 11, 2017. The Plan identifies our source as potentially most susceptible to accidental spills from traffic along the railways, roads, and river. Overall, our source has high risk of significant contamination.

Copies of the complete report are available for review at the Municipal Water Authority of Aliquippa office located at 160 Hopewell Avenue, Aliquippa, PA 15001.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the *Safe Drinking Water Hotline* (800-426-4791).

MONITORING YOUR WATER:
We routinely monitor for contaminants in your drinking water according to federal and state laws. The following tables show the results of our monitoring for the period of January 1 to December 31, 2023. The State allows us to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data is from prior years in accordance with the Safe Drinking Water Act. The date has been noted on the sampling results table.

DEFINITIONS:

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

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 allow for a 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 the benefits of the use of disinfectants to control microbial contaminants.

Minimum Residual Disinfectant Level (MinRDL) - The minimum level of residual disinfectant required at the entry point to the distribution system.

Level 1 Assessment – A Level 1 assessment is a study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system.

Level 2 Assessment – A Level 2 assessment is a very detailed study of the water system to identify potential problems and determine (if possible) why an E. coli MCL violation has occurred and / or way total coliform bacteria have been found in our water system on multiple occasions.

ppb = parts per billion, or micrograms per liter (µg/L)

ppm = parts per million, or milligrams per liter (mg/L)

Treatment Technique (TT) - A required process intended to reduce the level of a contaminant in drinking water.

MUNICIPAL WATER AUTHORITY OF ALIQUIPPA
2023 ANNUAL DRINKING WATER QUALITY REPORT
PWSID #: 5040006

DETECTED SAMPLE RESULTS:

Chemical Contaminants								
Contaminant	**MCL in CCR Units**	**MCLG**	**Level Detected**	**Range of Detections**	**Units**	**Sample Date**	**Violation Y/N**	**Sources of Contamination**
Barium	2	2	0.0166	N/A – single sample	ppm	8/25/21	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Nitrate	10	10	0.67	N/A – single sample	ppm	2/28/23	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Haloacetic Acids (HAAs)	60	N/A	12.9	10.4 – 12.9	ppb	7/11/23	N	By-product of drinking water disinfection.
Total Trihalomethanes (TTHMs)	80	N/A	52.2	35.4 – 52.2	ppb	7/11/23	N	By-product of drinking water chlorination.
Chlorine (15 samples each month)	MRDL = 4	MRDLG = 4	1.35	0.98 – 1.34	ppm	Monthly 2023	N	Water additive used to control microbes.

*EPA's MCL for fluoride is 4 ppm. However, Pennsylvania has set a lower MCL to better protect human health.

Entry Point Disinfectant Residual							
Contaminant	**Minimum Disinfectant Residual**	**Lowest Level Detected**	**Range of Detections**	**Units**	**Sample Date**	**Violation Y/N**	**Sources of Contamination**
Chlorine	1.36*	1.25	1.25 – 1.86	ppm	Daily 2023	N	Water additive used to control microbes.

*Pubic Water Supply Permit No. 0418511GWR-A1, issued on 7/26/18, established minimum disinfectant residual of 1.36 mg/l to provide 4-log treatment of viruses for groundwater sources.

Lead and Copper							
Contaminant	**Action Level (AL)**	**MCLG**	**90th Percentile Value**	**Units**	**# of Sites Above AL of Total Sites**	**Violation Y/N**	**Sources of Contamination**
Lead	15	0	22.04	ppb	5 of 34	Y	Corrosion of household plumbing; Erosion of natural deposits.
Copper	1.3	1.3	0.274	ppm	0 of 34	N	Corrosion of household plumbing; Erosion of natural deposits; Leaching from wood preservatives.

OTHER VIOLATIONS:

Unaccounted for Water: The Authority had a volume of unaccounted for water in 2023 of approximately 45%, a decrease of 2% from 2022. The Authority continues to actively work to reduce this loss of water via an aggressive leak detection / repair and valve replacement programs. To help pay for the increased expenditures associated with these programs, the Authority implemented a significant rate increase effective January 1, 2016 across the board to all customers.

IRON & MANGANESE:

Iron and Manganese are secondary contaminant levels (MCLs) under the Safe Drinking Water Act (SDWA). On several occasions since 2016, samples taken within the Authority's distribution system have exceeded the secondary MCLs for Iron and Manganese. These violations constitute public nuisances under the SDWA. To provide more effective Iron & Manganese removal as a temporary corrective measure, the Authority added approximately 1,700 cubic feet of Purolite SSTC60 Ion Exchange resin into the existing filters at the water treatment plant (WTP) on December 11, 2019. As a permanent corrective measure to completely eliminate Iron & Manganese from the distribution system, the Authority has authorized the planning, design and construction of a new WTP consisting of Greensand Pressure Filters. Construction is ongoing with an anticipated completion date of June 2024.

MUNICIPAL WATER AUTHORITY OF ALIQUIPPA
2022 ANNUAL DRINKING WATER QUALITY REPORT
PWSID #: 5040006

On December 19, 2019, PaDEP issued an Administrative Order requiring the Authority to immediately commence weekly sampling for iron and manganese at the Entry Point and monthly sampling at ten (10) sites within the distribution system.

Entry Point Iron & Manganese				
Contaminant	**No. of Samples**	**Range of Detections**	**Units**	**Sample Date**
Iron	51	0-0.08	ppm	Weekly 2023
Manganese	51	0-0.03	ppm	Weekly 2023

Distribution System Point Iron & Manganese				
Contaminant	**No. of Samples**	**Range of Detections**	**Units**	**Sample Date**
Iron	183	0-0.77	ppm	Monthly 2023
Manganese	183	0-0.27	ppm	Monthly 2023

EDUCATIONAL INFORMATION:

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity. Contaminants that may be present in source water include:

- Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- Inorganic contaminants, such as salts and metals, which can be naturally-occurring or result from urban stormwater run-off, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.
- Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems.
- Radioactive contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, EPA and DEP prescribes 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 for public health.

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's *Safe Drinking Water Hotline* (800-426-4791).

Information about Lead

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. The Municipal Water Authority of Aliquippa is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at *http://www.epa.gov/safewater/lead*.

For more information, please contact the Authority's General Manager, Robert J. Bible, P.E. at 724-375-5525.

Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.

This notice is being sent to you from the Municipal Water Authority of Aliquippa.
PWS ID#: 5040006 Date distributed: May 2024