

## 2022 Water Quality Report

*Este informe contiene informacion muy importante sobre su agua de 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.)

We're pleased to present to you this year's Water Quality Report. This report is designed to inform you about the quality water and services we deliver to you every day. Our constant goal is to provide you with a dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to ensuring the quality of your water. Our primary water source is a well field composed of eight vertical wells approximately 65 feet deep located near the Ohio River in Coraopolis. Although our wells tap the non-artesian aquifer found in the alluvial deposits of the Ohio River, the wells were determined not to be under the direct influence of the river. We also purchase water from the Moon Township Municipal Authority (MTMA) to supply the higher elevations of the borough including Euclid Avenue and the top of Montour Street (Grace Street), please refer to the [MTMA report](#) for more information. From time to time, we also purchase water from MTMA for the entire CWSA system. In 2022 that was primarily done around the Thanksgiving and Christmas periods.

We are pleased to report that our drinking water meets all federal and state requirements.

**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 microbiological contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).**

We have a source water assessment report available from our office that provides more detailed information such as potential sources of contamination. A summary of our water system's susceptibility to potential sources of contamination is as follows:

In 2003, the PA Department of Environmental Protection (PADEP) completed a Source Water Assessment of the aquifer, which supplies water to the Coraopolis Filtration Plant. The assessment has found that the aquifer is potentially most susceptible to contamination from transportation corridors, junk yards/scrap yards, combined sewer overflows, auto repair, machine shops, and former chemical disposal sites. Overall, the aquifer for Coraopolis is vulnerable to VOC (volatile organic compounds) contamination that requires our diligence. Summary reports of the Assessment are available at the Coraopolis Memorial Library and are also available on the PADEP website at <http://www.dep.state.pa.us/dep/deputate/watermgt/wc/Subjects/SrceProt/SourceAssessment/default.htm>. Complete reports were distributed to municipalities, water supplier, local planning agencies and PADEP offices. Copies of the complete report are available for review at the PA. DEP Southwest Regional Office, Records Management Unit at (412) 442-4000.

If you have any questions about this report or concerning your water utility, please contact **Richard Deems at 412-264-3003 between the hours 7 a.m. and 3 p.m.** We want our valued customers to be informed about their water utility. Effective January 2005 Borough Council gave the Coraopolis Water & Sewer Authority (CWSA) full operation and ownership of the water, sanitary sewage collection and storm systems. If you want to learn more, please attend any of our regularly scheduled authority meetings. They are held on the **third Tuesday of each month at 6:00 pm** at the Coraopolis Borough Municipal Building.

CWSA routinely monitors for constituents in your drinking water according to Federal and State laws. The tables on the following pages show the results of our monitoring for the period of January 1<sup>st</sup> to December 31<sup>st</sup>, 2022.

In the following tables you will find many terms and abbreviations you might not be familiar with. To help you better understand these terms we've 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.

**Entry Point** – The point where potable water first enters the distribution system

**Parts per million (ppm) or Milligrams per liter (mg/l)** - One part per million corresponds to one minute in two years or a single penny in \$10,000.

**Parts per billion (ppb) or Micrograms per liter** - One part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.

**Parts per Trillion (ppt) or Nanograms per liter (ng/L)** - One part per trillion corresponds to one second in nearly 32,000 years or one grain of sand in an Olympic size swimming pool.

**Picocuries per liter (pCi/L)** – a measure of radioactivity

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

**Maximum Contaminant Level (MCL)** - The “Maximum Allowed” (MCL) is 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 “Goal” (MCLG) is 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 contamination.

**Method Detection Limit (MDL)** – The minimum measured concentration of a substance that can be reported with 99% confidence that the measured concentration is distinguishable from method blank results.

**Non-Detects (ND)** - Laboratory analysis indicates that the contaminant is not present at a detectable level.

**Not Applicable (N/A)** – Not applicable.

**NTU** – Nephelometric Turbidity Units. Turbidity is a measure of the cloudiness of the water

**90<sup>th</sup> Percentile** – The highest concentration of lead or copper in tap water that is exceeded by 10% of the sites sampled during the monitoring period. This value is compared to the lead and copper action levels (AL) to determine whether an (AL) has been exceeded.

### Lead and Copper (CWSA distribution system)

| Contaminant<br>(Unit of Measurement) | Year Tested | Violation Yes/No | 90 <sup>th</sup> Percentile Value | Action Level (AL) | MCLG | # of Sites Above AL of Total Sites | Major Sources in Drinking Water  |
|--------------------------------------|-------------|------------------|-----------------------------------|-------------------|------|------------------------------------|--|
| Lead (ppb)                           | 2022        | No               | 1.81                              | 15                | 0    | 1 of 21                            | Corrosion of household plumbing systems; erosion of natural deposits                                   |
| Copper (ppm)                         | 2022        | No               | 0.35                              | 1.3               | 1.3  | 0 of 21                            | Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives |

## Entry Point Disinfection Residual

| Contaminant<br>(Unit of Measurement) | Treatment Plant | Year Tested | Violation Yes/No | Minimum Disinfectant Residual Required | Lowest Level Detected (a) | Range of Detections | Major Sources in Drinking Water         |
|--------------------------------------|-----------------|-------------|------------------|--|---------------------------|---------------------|---|
| Free Chlorine (ppm)                  | CWSA            | 2022        | No               | 0.42                                   | 0.94                      | 0.94 – 1.8          | Water additive used to control microbes |
|                                      | MTMA            | 2022        | No               | 0.2                                    | 0.41                      | 0.41 – 1.92         |   |

## Chemical Contaminants

| Contaminant<br>(Unit of Measurement) | Source | Year Tested | Violation Yes/No | Level Detected | Range       | MCL      | MCLG      | Major Sources in Drinking Water   |
|--------------------------------------|--------|-------------|------------------|----------------|-------------|----------|-----------|---|
| Fluoride (ppm)                       | MTMA   | 2022        | No               | 0.44           | 0.11 - 0.78 | 2 (c)    | 0.6       | Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories |
|                                      | CWSA   | 2021        | No               | 0              | (b)         |          |           |   |
| Barium (ppm)                         | CWSA   | 2021        | No               | 0.03           | 0.03-0.04   | 2        | 2         | Discharge from drilling waste.  |
|                                      | MTMA   | 2022        | No               | 0.06           | (b)         |          |           |   |
| Chromium (ppb)                       | CWSA   | 2021        | No               | 2              | 2 - 3       | 100      | 100       | Discharge from steel and pulp mills; Erosion of natural deposits  |
| Nitrate (ppm)                        | CWSA   | 2022        | No               | 1.01           | 0.75 - 1.34 | 10       | 10        | Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits                               |
|                                      | MTMA   | 2022        | No               | 0.7            | (b)         |          |           |   |
| cis-1,2-Dichloroethylene (ppb)       | CWSA   | 2022        | No               | 5              | 4.5 – 6     | 70       | 70        | Discharge from industrial chemical factories  |
| 1,1-Dichloroethylene (ppb)           | CWSA   | 2022        | No               | 0.6            | 0.5 – 0.7   | 7        | 7         | Discharge from industrial chemical factories  |
| 1,1,1-Trichloroethane (ppb)          | CWSA   | 2022        | No               | 1.9            | 1.6 – 2.1   | 200      | 200       | Discharge from metal degreasing sites and other factories   |
| Tetrachloroethylene (ppb)            | CWSA   | 2022        | No               | 0.8            | 0.7 - 0.8   | 5        | 0         | Discharge from factories and dry cleaners   |
| Dichloromethane (ppb)                | MTMA   | 2022        | No               | 0.9            | (b)         | 5        | 0         | Discharge from pharmaceutical and chemical factories  |
| Haloacetic Acids (ppb)               | CWSA   | 2022        | No               | 5.1            | 0 – 8.6     | 60       | N/A       | By-product of drinking water disinfection   |
| Total Trihalomethanes (ppb)          | CWSA   | 2022        | No               | 48.8           | 30.2 – 61.4 | 80       | N/A       | By-product of drinking water disinfection   |
| Free Chlorine (d) (ppm)              | CWSA   | 2022        | No               | 0.78           | 0.78 - 1.23 | MRDL = 4 | MRDLG = 4 | Water additive used to control microbes   |

## Total Organic Carbon (TOC)

| Contaminant<br>(Unit of Measurement) | Source | Year Tested | Violation Yes/No | Level Detected | Range   | MCL | MCLG | Major Sources in Drinking Water       |
|--------------------------------------|--------|-------------|------------------|----------------|---------|-----|------|---------------------------------------|
| TOC (% Removal)<br>(Acc) (e)         | MTMA   | 2022        | No               | 35             | 13 - 44 | TT  | 25   | Naturally present in the environment. |

## Microbial Contaminants

| Contaminant<br>(Unit of Measurement) | Source | Year Tested | Violation Yes/No | Level Detected | Range       | MCL   | Major Sources in Drinking Water |
|--------------------------------------|--------|-------------|------------------|----------------|-------------|-------|---------------------------------|
| Turbidity (NTU)<br>MTMA EntryPoint   | MTMA   | 2022        | No (f)           | 0.05           | 0.02 - 0.12 | < 0.3 | Soil runoff                     |

### Footnotes:

- (a) The reported values are the lowest daily values leaving the treatment plant
- (b) Only one sample required
- (c) EPA's MCL for fluoride is 4 ppm. However, Pennsylvania has set a lower MCL to better protect human health. Note; CWSA does not add fluoride to the water in addition to what is naturally occurring. The MTMA discontinued Fluoridation of the Public Water Supply on December 2<sup>nd</sup>, 2022.
- (d) The monthly average of all chlorine samples from the distribution system.
- (e) Total Organic Carbon (TOC): The TOC quarterly monitoring samples meet the Alternative Compliance Criteria (Acc) requirement is for 25-35% removal. The organic carbon removal occurs at the MTMA water treatment plant and is the difference between Raw and Finish water.
- (f) 95% of all NTU samples taken at the entry point to the distribution system must be below 0.3, a value less than 95% constitutes a TT violation. Any measurement in excess of 1 NTU is a TT violation.

## Unregulated Contaminants

### PFAS

In March of 2021 representatives from the Department of Environmental Protection (DEP) conducted sampling for the presence of eighteen per- and polyfluoroalkyl substances (PFAS) in the drinking water supply. This was done as part of the Pennsylvania's PFAS Action Teams statewide sampling plan. Currently there is not an MCL for these contaminants. EPA has established a combined lifetime health advisory limit for PFOS and PFOA of 70 ng/L or parts per trillion. DEP has proposed a limit of 14ppt for PFOA and 18ppt for PFOS. Last year sum of those results for CWSA water is 5.9 ng/L and 3.8 ng/L for MTMA water. For more information about PFAS please refer to the PA DEP website [https://www.dep.pa.gov/Citizens/My-Water/drinking\\_water/PFAS/Pages/default.aspx](https://www.dep.pa.gov/Citizens/My-Water/drinking_water/PFAS/Pages/default.aspx)

| Sample Collected from Entry Point 101 |                      |      |
|---------------------------------------|----------------------|------|
| Contaminant                           | Sample Result (ng/L) |      |
|                                       | CWSA                 | MTMA |
| Perfluorooctane sulfonate (PFOS)      | 5.9                  | 3.8  |
| Perfluorooctanoic acid (PFOA)         | ND                   | ND   |
| Perfluorobutanesulfonic acid (PFBS)   | 6.0                  | ND   |
| Perfluorohexanesulfonic acid (PFHxS)  | 4.5                  | ND   |

## MTBE

Through voluntarily sampling we have found MTBE, a gasoline additive, has been found in our source water. In 2022 the range of testing results were between 0.7 and 0.9 PPB with an average of 0.8 PPB. There currently has been no limit set by EPA for this contaminant. However, a level of 20–40 PPB has been recommended as a taste and odor threshold. For more information about MTBE please refer to the EPA website <http://www.epa.gov/mtbe/>. We will continue to monitor for MTBE

### [What does this data mean?](#)

As you can see by the table, our system had no water quality violations. We're proud that your drinking water meets Federal and State requirements. However, we have learned through our monitoring and testing that some constituents have been detected and will be diligent in monitoring for these contaminants.

All sources of drinking water are subject to potential contaminants that are naturally occurring or man-made. Those contaminants can be microbes, organic or inorganic chemicals, or radioactive materials. 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 the 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 at 1-800-426-4791.

Nationally, 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 runoff, 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 byproducts or industrial process and petroleum production and mining activities.

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. FDA regulations also establish limits for contaminants in bottled water that must provide the same protection for public health.

### [Reporting Violation:](#)

We completed the required entry point chlorine sampling for August 2022; however, we were late in submitting the entry point results to DEP. The results were submitted immediately upon notification by DEP and we returned to compliance.

### [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. Coraopolis Water & Sewer 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 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>.

**CWSA supports full lead service line replacements. It is our policy that if a customer replaces their portion of water service line, we will replace our side if it is found to be lead. Likewise, customers are strongly encouraged to replace their side if CWSA discovers lead on a homeowner's side while replacing the authority portion. Leaking lead lines must be replaced and repairs are not permitted.**