

Doylestown Township Municipal Authority

PWS # 1090128

Water Quality Report

2022

Doylestown Township Municipal Authority
425 Wells Road · Doylestown, PA 18901

Water Quality Report 2022

This Water Quality Report is available at

<https://www.doylestownpa.org/water-quality-reports/>

This report contains important information about your drinking water.
If you do not understand it, please have someone translate it to you.
Este informe contiene información muy importante sobre su agua beber.
Tradúzcalo ó hable con alguien que lo entienda bien.

Dear Customer:

The Doylestown Township Municipal Authority (DTMA) owns and operates a public water system in Doylestown Township and portions of adjoining municipalities. In addition to providing public water to Doylestown Township, DTMA provides service to the Cross Keys Place Shopping Center in Plumstead Township, the Fountainville Center in New Britain Township, portions of New Britain Borough and select residential developments.

This report is to apprise you of efforts to provide our customers with water that meets or exceeds water quality standards under the Safe Drinking Water Act (SDWA). It will be available to all customers on an annual basis no later than July of the ensuing year. The report contains information regarding the water system operation, water sources, treatment, and monitoring results for contaminant testing as required by permit under the Federal Safe Drinking Water Act, the Pennsylvania Department of Environmental Protection and the Delaware River Basin Commission.

DTMA routinely monitors for over seventy contaminants as required by permit under state and federal laws. The results of the water monitoring program are presented in the attached report. The report will show results from the period January 1, 2022 through December 31, 2022. Should you have any questions regarding this report, please call Executive Director, Keith Hass at **215-348-9915** or email Khass@doylestownpa.org or attend the Authority public meeting on the third Thursday of the month beginning at 3:30 p.m.

All drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. It is important to remember that the presence of these contaminants do not necessarily pose a health risk. DTMA distributes groundwater pumped from ten (10) wells within Doylestown Township and may receive groundwater via an interconnection with Doylestown Borough and a blend of surface and groundwater via an interconnection with North Penn Water Authority (NPWA). For 2022, NPWA provided 5.9% of source water distributed by DTMA and Doylestown Borough provided 1.83% of source water distributed by DTMA.

All sources of drinking water are subject to potential contaminants that are naturally occurring or man-made. More information about contaminants and potential health effects can be obtained by calling the:

Environmental Protection Agency
Safe Drinking Water Hotline

1-800-426-4791

www.epa.gov/your-drinking-water

Or the

PA DEP

717-772-4018

www.depweb.state.pa.us

Important Health Information

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons with cancer, undergoing chemotherapy, persons who have undergone organ transplants, people with the 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** or by visiting the EPA web site at www.epa.gov/your-drinking-water.

While your drinking water meets EPA's standards for arsenic, it does contain low levels of arsenic. EPA's standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. EPA continues to research the health effects of low levels of arsenic which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.

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. DTMA 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 website at www.epa.gov/your-drinking-water.

Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than 6 months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant, you should ask advice from your health care provider.

PFAS chemicals are among a family of man-made compounds that have been used for decades as ingredients to make products that resist heat, oil, stains, grease, and water. PFAS chemicals can be found in industrial and consumer products such as clothing, carpeting, food packaging, non-stick cookware, firefighting foam, personal car products, adhesives, metal plating, wire manufacturing and many other uses. In 2022, these compounds were not included on either the US EPA's or PA DEP's Safe Drinking Water Act Primary or Secondary listing of contaminants. In January 2023, PA DEP set new drinking water standards for PFOA and PFOS, two contaminants that are part of the larger group of PFAS chemicals. The new regulations set a MCL of 14 ppt for PFOA and a MCL of 18 ppt for PFOS. In March 2023, the US EPA

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proposed the first national drinking water standard for PFOA and PFOS. The proposal would regulate PFOA and PFOS, at an MCL of 4.0 ppt. EPA anticipates finalizing the rule by the end of 2023. Water systems will then be required to meet the MCLs after a specified implementation time frame, which EPA has not yet determined.

PFOA and PFOS have been detected in the DTMA wells at very low levels. PFAS has also been detected in private wells in Doylestown Township. DTMA is being proactive to ensure that we meet any existing and future proposed regulations related to PFAS. For more information on the presence of these chemical compounds in the local water supply please visit the PADEP website for the Easton Road PFC Site. DTMA is monitoring the current regulatory environment and evaluating potential treatment options if necessary. If there are any questions, please call the office at **215-348-9915**.

In order to insure 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 establish limits for contaminants in bottled water, which must provide the same level of protection to the public's health. The State allows us to monitor for some contaminants less than once per year. This is because the concentrations do not change frequently. Some of our data, though representative, is more than one year old.

As water travels over the surface of land or through the ground, it dissolves naturally occurring minerals. In addition, water can pick substances resulting from the presence of animal or human activity.

Substances That May Be Present in Source Water

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

Table Definitions

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|---|--|
| Parts per million (ppm) or milligrams per liter (mg/L) | One part per million corresponds to a single penny in \$10,000. |
| Parts per billion (ppb) or micrograms per liter (ug/L) | One part per billion corresponds to a single penny in \$10,000,000. |
| Parts per trillion (ppt) | One part per trillion corresponds to a single penny in \$10,000,000,000. |

Table Definitions (Continued)

| | |
|---|--|
| Action Level (AL) | The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow. |
| Treatment Technique (TT) | A required process intended to reduce the level of a contaminant in drinking water. |
| Maximum Contaminant Level (MCL) | The highest level of a contaminant that is allowed in drinking water. MCL's are set close to the MCLG's 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. MCLG's 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. MRDLG's do not reflect the benefits of the use of disinfectants to control microbial contaminant. |
| N/A | Not Applicable |
| Picocurie per liter (pCi/L) | A measure of radioactivity in water. |
| Mrem/year | Millirems per year (a measure of radiation absorbed by the body). |
| Million Fibers per Liter (MFL) | A measure of asbestos in water. |
| 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 why total coliform bacteria have been found in our water system on multiple occasions. |

Source Water Assessment

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Source Water Assessment of our sources was completed by the PA Department of Environmental Protection (PA DEP). The assessment has found that our sources are potentially most susceptible to agricultural activities and transportation corridors (spills, road salt) and residential activities. Overall, our sources have varied risk of contamination. A summary report of the Assessment is available on the Source Water Assessment & Protection web page at: <http://www.dep.state.pa.us/deputate/water/wc/Subjects/SrceProt/SourceAssessment/default.htm>. Complete reports were distributed to municipalities, water suppliers, local planning agencies and PADEP offices. Copies of the complete report are available for review at the PA DEP Southeast Regional Office Records Management Unit at **484-250-5900**.

Table of Contaminants

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| Contaminant | MCL | MCLG | Highest Level Detected | Range of Detections | Units | Sample Date | Violation Y/N | Sources of Contamination |
|-------------------------------------|-----|------|------------------------|---------------------|-------|-------------|---------------|---|
| INORGANIC CONTAMINANTS (IOC) | | | | | | | | |
| Arsenic | 10 | 0 | 6.0 | 0-6.0 | ppb | 2021 & 2022 | No | Erosion of natural deposits. Runoff from orchards; Runoff from glass & electronics waste. |
| Barium | 2 | 2 | 0.91 | 0.018-0.91 | ppm | 2021 & 2022 | No | Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits. |
| Bromate | 10 | 0 | 2.8 | 1.1-2.8 | ppb | 2022 | No | By-product of drinking water chlorination |
| Fluoride | 2 | 2 | 0.151 | 0-0.151 | ppm | 2021 & 2022 | No | Erosion of natural deposits. |
| Chromium | 100 | 100 | 1 | 0-1 | ppb | 2021 & 2022 | No | Discharge from steel and pulp mills; Erosion of natural deposits |
| Cyanide | 200 | 200 | 7 | 0-7 | ppb | 2021 & 2022 | No | Discharge from steel/metal factories; Discharge from plastic and fertilizer factories |
| Asbestos Distribution | 7 | 7 | 0.17 | 0-0.17 | MFL | 2020 | No | Erosion of Natural deposits. |
| Free Chlorine Distribution | 4 | 4 | 1.23 | 0.55-1.23 | ppm | 2022 | No | Water additive used to control microbes. |
| Nitrates | 10 | 10 | 4.98 | 0.30-4.98 | ppm | 2022 | No | Runoff from fertilizer use; Leaching from septic tanks; Erosion of natural deposits. |

VOLATILE CONTAMINANTS (VOC)

| | | | | | | | | |
|----------------------------|---|---|-----|-------|-----|------|----|--|
| Tetrachloroethylene | 5 | 0 | 3.6 | 0-3.6 | ppb | 2022 | No | Discharge from factories and dry cleaners. |
|----------------------------|---|---|-----|-------|-----|------|----|--|

RADIOLOGICAL CONTAMINANTS

| | | | | | | | | |
|-------------------------|----|---|------|-----------|-------|------|----|------------------------------|
| Gross Alpha | 15 | 0 | 7.49 | 0-7.49 | pCi/L | 2020 | No | Erosion of natural deposits. |
| Combined Uranium | 30 | 0 | 5.50 | 0-5.50 | pCi/L | 2020 | No | Erosion of natural deposits. |
| Radium 226 | 5 | 0 | 1.55 | 0.06-1.55 | pCi/L | 2020 | No | Erosion of natural deposits. |
| Radium 228 | 5 | 0 | 0 | 0 | pCi/L | 2020 | No | Erosion of natural deposits. |

| Contaminant | Action Level (AL) | MCLG | 90 th Percentile | Units | # of Sites Above AL | Sample Date | Violation Y/N | Sources of Contamination |
|--|-------------------|------|-----------------------------|-------|---------------------|-------------|---------------|---|
| LEAD & COPPER - Tested at Customers' Taps | | | | | | | | |
| Lead | 15 | 0 | 1.0 | ppb | 0 out of 20 | 2022 | No | Corrosion of household plumbing system. |
| Copper | 1.3 | 1.3 | 0.69 | ppm | 0 out of 20 | 2022 | No | Corrosion of household plumbing system. |

| Contaminant | MCL | Minimum Disinfectant Residual | Lowest Level Detected | Range of Detections | Units | Sample Date | Violation Y/N | Sources of Contamination |
|-----------------------------------|-----|-------------------------------|-----------------------|---------------------|-------|-------------|---------------|--|
| Free Chlorine Entry Points | 4 | 0.40 | 0.41 | 0.41-2.0 | ppm | 2022 | No | Water additive used to control microbes. |

DISINFECTION BYPRODUCTS & DISINFECTION RESIDUALS

| | | | | | | | | |
|-----------------------------------|---|------|------|----------|-----|------|----|--|
| Free Chlorine Entry Points | 4 | 0.40 | 0.41 | 0.41-2.0 | ppm | 2022 | No | Water additive used to control microbes. |
|-----------------------------------|---|------|------|----------|-----|------|----|--|

| Contaminant | MCL | MCLG | Highest Level Detected | Range of Detections | Units | Sample Date | Violation Y/N | Sources of Contamination |
|--------------------------------------|-----|------|------------------------|---------------------|-------|-------------|---------------|--|
| Total Trihalomethanes (TTHMs) | 80 | N/A | 35.7* | 9.38-63.6 | ppb | 2022 | No | By-product of drinking water disinfection. |
| Haloacetic Acids (HAAs) | 60 | N/A | 17.6* | 4.8-23.4 | ppb | 2022 | No | By-product of drinking water disinfection. |

*Compliance is based on a running annual average of quarterly results. This value represents the highest running annual average result, not a single sample result.

Perfluorinated Compounds (PFAS) — There are some contaminants for which the Environmental Protection Agency (EPA) develops health advisories (HA) but has yet to establish regulatory limits for compliance by public water suppliers. The HA provides technical information on health effects. Perfluorooctanoic acid (PFOA) and perfluorooctanesulfonic acid (PFOS) are included in those contaminants that currently are not regulated. PFOA & PFOS have a combined HA level of 70 parts per trillion (ppt). These chemicals are among a family of manmade chemicals that have been used for decades as ingredients to make products that resist heat, oil, stains, and grease (e.g., non-stick pots and pans). In addition, PFAS compounds were used in foam products for firefighting. In 2022, DTMA sampled for PFOA & PFOS at our North, Central and South water systems.

| Contaminant | HAL (Combined) | Level Detected | Water System - North/Central/South | Units | Sample Date |
|---------------------------------|----------------|----------------|------------------------------------|-------|-------------|
| PFOA & PFOS AT WELLS | | | | | |
| PFOS / PFOA | 70 | 10/11 | North | ppt | 2022 |
| PFOS / PFOA | 70 | 14/17 | Central | ppt | 2022 |
| PFOS / PFOA | 70 | 5/6 | South | ppt | 2022 |

This is a list of VOLATILE CONTAMINANTS sampled for and return results of "NON-DETECT" — 1,1,2-TRICHLOROETHANE, CHLOROBENZENE, BENZENE, TOLUENE, ETHYLBENZENE, STYRENE, 1,2,4-TRICHLOROBENZE, cis-1,2-DICHLOROETHYLENE, XYLENES (TOTAL), DICHLOROMETHANE, o-DICHLOROBENZENE, PARA-DICHLOROBENZENE, VINYL CHLORIDE, 1,1-DICHLOROETHYLENE, trans-1,2-DICHLOROETHYLENE, 1,2-DICHLOROETHANE, 1,1,1-TRICHLOROETHANE, CARBON TETRACHLORIDE, 1,2-DICHLOROPROPANE, TRICHLOROETHYLENE.

This is a list of SYNTHETIC ORGANIC CONTAMINANTS sampled for and return results of "NON-DETECT" — ENDRIN, LINDANE, METHOXYCHLOR, TOXAPHENE, DALAPON, DIQUAT, ENDOTHALL, GLYPHOSATE, DI (2-ETHYLHEXYL) ADIPATE, OXYMAL (VYDATE), SIMAZINE, DI (2-ETHYLHEXYL) PHTHALATE, PICLOREM, DINOSEB, HEXACHLOROCYCLOPENTADIENE, 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-CHLOROPROP, ETHYLENE DIBROMIDE (EDB), CHLORDANE.

This is Inorganic Contaminants sampled for and return results of "NON-DETECT" — Asbestos at Entry Points.