

Doylestown Township Municipal Authority

PWS # 1090128

Water Quality Report

2018



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 for the benefit of Doylestown Township residents. It also owns and operates the public water systems of the Cross Keys Place Shopping Center in Plumstead Township and the Fountainville Center in New Britain Township. 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). This report 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.

The Authority 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, 2018 through December 31, 2018. Should you have any questions regarding this report, please call Water Superintendent, Scott Miele at **215-348-9915** or attend the Authority meeting on the third Thursday of the month beginning at 3:30 pm.

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. Locally, DTMA distributes groundwater pumped from 12 wells within Doylestown Township and may receive groundwater via an interconnection with Doylestown Borough (DBWD) and a blend of surface and groundwater via an interconnection with North Penn Water Authority (NPWA).

For 2018, North Penn Water Authority provided 4.3% of source water distributed by DTMA and Doylestown Borough provided 4.0% of source water distributed by DTMA. The water provided by NPWA is a blend of surface and ground water. Cryptosporidium and Giardia are microbial pathogens found in surface water throughout the U.S. NPWA monitoring of their source water (before treatment) at NPWA's Forest Park Water indicated the presence of Cryptosporidium in 3 out of 9 samples (2017) collected. Giardia was detected in 5 out of 9 samples (2017) collected. FPW treatment processes are designed to remove or inactivate these pathogens with a high level of certainty. Current available test methods do not allow NPWA to determine if the organisms are dead or if they are capable of causing disease.

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 contacting the:

Environmental Protection Agency's Safe Drinking
Water Hotline at **1-800-426-4791**
www.epa.gov/your-drinking-water

Or the PA DEP at **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.

PFOA and PFOS (PFAS) chemical compounds have been in the national and local news the last few years. In 2016, the EPA determined the maximum amount of PFOA and PFOS in drinking water should be 70 parts per trillion. This Health Advisory Level (HAL) was set by the EPA after reviewing the available data and health effects of PFAS. A HAL is not an enforceable regulation. It is guidance for water utilities to follow based upon available science. The EPA, PADEP, and lawmakers continue to analyze health data and may be proposing enforceable, maximum contaminant level (MCL) regulations in the future.

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. 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.

The average PFAS level in the DTMA wells is 18 ppt. This is well below the current HAL. 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**.

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 Hotline at <http://www.epa.gov/safewater/lead>.

(Continued)

Important Health Information (Continued)

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.

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, are 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 up 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 be 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

| | |
|---|---|
| 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. |
| PPT | Parts per Trillion or nanograms per liter. |
| PPQ | Parts per Quadrillion or pictograms per liter. |
| NTU | Nephelometric turbidity is a measure of the clarity of water. |
| Action Level (AL) | The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow. |

Table Definitions (Continued)

| | |
|---|--|
| 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. |
| Picocurie per Liter (pCi/L) | A measure of radioactivity in water. |
| Mrem/year | Millirems per year (a measure of radiation absorbed by the body). |
| 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 bacterial 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

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 little to high risk of significant 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 supplier, 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**.

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Table of Contaminants (Unless otherwise noted, all data is from 2018)

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| Contaminants | MCL | MCLG | Test Value | Major Sources in Drinking Water | Violation Y/N |
|---|-------------------|----------------|--|--|---------------|
| INORGANIC CONTAMINANTS *North Penn Water Authority/ **Doylestown Borough | | | | | |
| Arsenic 2018 | 10 ppb | N/A | Range: 5.2 ppb - 5.6 ppb* DTMA - 5.2 ppb *NPWA - 5.6 ppb | Erosion of natural deposits. Discharge from refineries and factories. | No |
| Barium - 2018 | 2 ppm | 2 ppm | DTMA - 0.48 ppm **Doylestown Boro. - 0.801 ppm *NPWA - 0.51 ppm | Erosion of natural deposits. | No |
| Fluoride - 2018 | 2 ppm | 2 ppm | DTMA - 0.00 ppm *NPWA - 0.106 ppm | Erosion of natural deposits. Discharge from fertilizer and aluminum factories. | No |
| Nitrates - 2018 | 10 ppm | 10 ppm | DTMA Range: 1.05 ppm - 4.69 ppm DTMA 4.69 ppm *NPWA 4.52 ppm **Doy. Boro. 5.0 ppm | Erosion of natural deposits. Runoff from fertilizer use. Leaching from septic tanks. | No |
| VOLATILE CONTAMINANTS | | | | | |
| Tetrachloroethylene 2018 | 5 ppb | 5 ppb | DTMA Range: 0.6 - 2.0 ppb DTMA - 2.0 ppb *NPWA - 0.666 ppb | Discharge from factories and dry cleaners. | No |
| RADIOLOGICAL CONTAMINANTS *North Penn Water Authority | | | | | |
| Gross Alpha - 2017 | 15 pCi/L | 0 pCi/L | Range: 3.33 pCi/L - 7.86 pCi/L 7.86pCi/L | Erosion of natural deposits. | No |
| Combined Uranium - 2017 | 30 pCi/L | 0 pCi/L | 2017 DTMA - 4.16 pCi/L NPWA* - 5.50 pCi/L | Erosion of natural deposits. | No |
| Radium 226 - 2017 | 5 pCi/L | 0 pCi/L | Range: 1.18 pCi/L - 2.44 pCi/L 2.44 pCi/L | Erosion of natural deposits. | No |
| Radium 228 - 2017 | 5 pCi/L | 0 pCi/L | Range: 1.07 pCi/L - 1.18 pCi/L | Erosion of natural deposits. | No |
| SYNTHETIC ORGANIC CONTAMINANTS | | | | | |
| Di2-ethyhexylphthalate | 6 ppb | 0 | Doylestown Borough** (2017) 0.60 ppb | Discharge from rubber/chemical factories. | No |
| DISINFECTION BYPRODUCTS (DBPS), PRECURSORS AND DISINFECTANT RESIDUALS | | | | | |
| Free Chlorine Distribution (2018) | MRDL= 4.0 ppm | MRDLG= 4.0 ppm | Avg. High: 0.68 ppm Avg. Low: 0.47 ppm | Water additive used to control microbes. | No |
| 2018 Haloacetic Acids | 60 ppb | N/A | 2018 DTMA 6.4 ppb NPWA* 12.3 ppb Doy. Boro.** N/A | Byproduct of drinking water chlorination. | No |
| 2018 Total Trihalomethanes | 80 ppb | N/A | 2018 DTMA 19.2 ppb NPWA* 31.7 ppb Doy. Boro.** 11.5 ppb | Byproduct of drinking water chlorination. | No |
| GROUND WATER TREATMENT RULE (GWTR) | | | | | |
| Free Chlorine at Entry Point (2018) | Min. RDL= 0.2 ppm | N/A | 2018 High/Low 1.60 ppm - 0.23 ppm | Water additive used to control microbes. | |
| LEAD AND COPPER RULE *North Penn Water Authority/ **Doylestown Borough | | | | | |
| Copper - 2018 | 1.3 ppm | 1.3 ppm | 90% Percentile DTMA 0.707 ppm (2018) NPWA* 0.698 ppm (2017) Doy. Boro.** N/A (2016) | Corrosion of household plumbing systems. Erosion of natural deposits. | No |
| Lead - 2018 | 15 ppb | 0 ppb | 90% Percentile DTMA 0 (2018) NPWA* 2.0 ppm (2017) Doy. Boro.** 2.4 ppm (2016) | Corrosion of household plumbing systems. Erosion of natural deposits. | No |
| Number of sites above AL for Lead: 0 of 21 | | | Number of sites above AL for Copper: 0 of 21 | | |
| Pennsylvania DEP allows public water systems to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of the data presented on this table, though representative, may be more than one year old. In these cases, the calendar year in which water sample were tested for these contaminants is shown in parenthesis. | | | | | |



Tier 3 Public Notice FAILURE TO MONITOR

A monitoring violation occurs when the correct number of samples is not taken. Although there are other reasons a supplier would receive a monitoring violation, this situation is the most common. This event constitutes a Tier 3 violation. Tier 3 notices must meet the content, format, and multilingual requirements.

Title

Public notices for Tier 3 violations and situations should have an attention-getting title. For example, "IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER" is better than "PUBLIC NOTICE".

In order to meet the multilingual requirements, you must include, at a minimum, information in Spanish regarding the importance of the notice. The department will notify you if, and when, you need to include information in any other language.

What Should I do?

You may need to modify the template for a notice for individual monitoring violations. The template presents violations in a table; however, you may write out an explanation for each violation if you wish. For any monitoring violation for volatile organic compounds (VOCs) or other groups, you may list the group name in the table, but you must provide the name of every chemical in the group on the notice, e.g., in a footnote.

You may need to modify the notice if you had any monitoring violations for which monitoring later showed a maximum contaminant level or other violation. In such cases, you should refer to the public notice you issued at that time.

Corrective Actions (What happened? What is being done? When do you expect to return to compliance?)

In your notice, describe corrective actions you took or are taking. Listed below are some steps commonly taken by water systems with monitoring violations. Use one or more of the following actions, if appropriate, or develop your own:

- We have since taken the required samples, as described in the last column of the table above. The samples showed we are meeting drinking water standards.
 - We have since taken the required samples, as described in the last column of the table above. The sample for [contaminant] exceeded the limit. [Describe corrective action; use information from public notice prepared for violating the limit].
- We plan to take the required samples soon, as described in the last column of the table above.

Contact Information

Provide your name, business address and phone number or those of a designee of the public water system as a source for additional information concerning the notice.

Mandatory Statement to Encourage Distribution of the Notice to Others

Use the **mandatory** statement provided in *italics* on the following template to encourage notice recipients to distribute the notice to others, where applicable. You may not change this wording.

Template Form Field Instructions

When you place your cursor in the blank form fields in the following template, look at the bottom, left corner of your computer (just above the START button) for instructions on the information you should enter in that field. For example, if you place your cursor over the first blank form field in the template, the instructions will read "Insert system name."

IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER FAILURE TO MONITOR

**ESTE INFORME CONTIENE INFORMACIÓN IMPORTANTE ACERCA DE SU AGUA POTABLE. HAGA QUE
ALGUIEN LO TRADUZCA PARA USTED, O HABLE CON ALGUIEN QUE LO ENTIENDA.**

Monitoring Requirements Not Met for Doylestown Twp. Municipal Authority

Our water system violated several drinking water standards over the past year. Even though these were not emergencies, as our customers, you have a right to know what happened and what we did to correct these situations.

We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not our drinking water meets health standards. During 2018 we did not and therefore cannot be sure of the quality of our drinking water during that time.

What should I do?

There is nothing you need to do at this time.

The table below lists the contaminant(s) we did not properly test for during the last year, how often we are supposed to sample for Haloacetic Acids and how many samples we are supposed to take, how many samples we took, when samples should have been taken, and the date on which follow-up samples were (or will be) taken.

| Contaminant | Required sampling frequency | Number of samples taken | When all samples should have been taken | When samples were or will be taken |
|------------------|-----------------------------|-------------------------|---|------------------------------------|
| Haloacetic Acids | Annual (Aug 13) | 5 | August 13 +/- | Sept. 22,2018 |
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| | | | | |

What happened? What was done?

Missed Req. sampling frequency (August 13) but did sample one month later (Septemeber 22)

For more information, please contact Scott Miele, Water Superintendent DTMA at 215-348-9915 x1063.

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 by Doylestown Twp. Municipal Authority.

PWS ID#: 1090128

Date distributed: July 1st, 2019