

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

Water Quality Report 2019

This Water Quality Report is available at
<https://www.doylestownpa.org/water-quality-reports/>

Cedar Crest Farms

Public Water System

PWS # 1090158

Water Quality Report

2019



**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 residents of Doylestown Township, Cedar Crest Farms. 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). 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.

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, 2019 through December 31, 2019. Should you have any questions regarding this report, please call Water Superintendent, Scott Miele at **215-348-9915** or **Smiele@doylestownpa.org** or attend the Authority meeting which is held at 425 Wells Road, Doylestown PA 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. The source water is an interconnection the Authority maintains with North Wales Water Authority (NWWA) on the corner of Bristol and Upper State Roads. The NWWA provides surface water drawn from the Delaware River and treated at the Forest Park Water Treatment Plant located in Chalfont.

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

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**.

Substances That May Be Present in Source Water

The sources of drinking water, including bottles and tap water, lakes, rivers, streams, ponds, reservoirs, springs and wells. As water travels over the surface of land or through the ground, it dissolves naturally occurring minerals. In some cases, radioactive materials and substances resulting from the presence of animal or human activity. Contaminants that may be present in source water may include:

- **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.
- **Alpha emitters:** Certain minerals are radioactive and may emit a form of radiation. Some people who drink water containing alpha emitters in excess of the MCL, over many years may have an increased risk of getting cancer.
- **Organic chemical contaminants:** Including synthetic or volatile organic chemicals, which are byproducts of industrial processes, petroleum production or mining activities.
- **Nitrate:** Nitrate in drinking water at levels above 10ppm 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 agriculture activities. If you are caring for an infant, you should ask for advice from your health care provider.
- **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.
- **Arsenic:** Some people who drink water containing arsenic in excess of the MCL over many years, could experience skin damage or problems with their circulatory system, and may have an increased risk of getting cancer.

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

(Continued)

(Continued)

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

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.

Table Definitions

In the list below, you will find terms and abbreviations you may not be familiar with. To help you better understand these terms, we've provided the following 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.
Parts per trillion (ppt):	One part per trillion corresponds to a single penny in \$10,000,000,000.
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.
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.

Table Definitions (Continued)

Picocurie per liter (pCi/L)	A measure of radioactivity in water.
Variations & Exemptions (V/E)	State or EPA permission not to meet an MCL or Treatment technique under certain conditions.
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

- North Wales Water Authority PWS # 1460048

A Source Water Assessment of our sources was completed by the PA Department of Environmental Protection (PA DEP). 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 is available for review at the PA DEP Southeast Regional Office Records Management Unit at **484-250-5900**.

Transportation corridors, boating, auto repair, eutrophic conditions in Lake Galena, wastewater treatment, on-lot waste disposal and runoff from non-point sources such as residential developments, farms and golf courses are the most significant potential sources of contamination within the watersheds that contribute water to the surface water intakes. Roads, receive a high ranking due to the locations (near streams and reservoirs) and possible release of a variety of substances from accidents. Nutrients may contaminate the water sources as a result of eutrophication in Lake Galena, malfunctioning on-lot waste disposal or discharges and overflows from wastewater treatment plants. The boating permitted on Lake Galena could yield cumulative amounts of petroleum products entering the source water in a short amount of time. Auto repair shops also pose a threat of releasing petroleum products such as BTEX and MTBE. The list also includes Stormwater runoff. During the course of a storm, many contaminants can be picked up from industrial facilities and streets. Pesticides and herbicides can come from golf courses, field croplands, and lawns.

Contaminants	MCL	MCLG	Test Value	Major Sources in Drinking Water	Violation Y/N
INORGANIC CONTAMINANTS					
Barium 2019	2 ppm	2 ppm	0.014 ppm Range: N/A	Erosion of natural deposits.	No
Nitrate 2019	10 ppm	10 ppm	0.425 ppm Range: 0 - 0.982 ppm	Erosion of natural deposits. Runoff from fertilizer use. Leaching from septic tanks.	No
RADIOLOGICAL CONTAMINANTS					
Gross Alpha 2017	15 pCi/L	0 ppb	0.24 pCi/L Range: N/A	Erosion of natural deposits.	No
Combined Uranium 2017	30 ppb	0 ppb	6.04 ppb Range: 3.17 - 13.23	Erosion of natural deposits.	No
Combined Radium 226/228 2017	5 pCi/L	0 pCi/L	2.67 pCi/L Range: 2.51 - 2.84	Erosion of natural deposits.	No
Contaminants	Action Level (AL)	MCLG	Test Value	Major Sources in Drinking Water	Violation Y/N
LEAD AND COPPER					
Copper 2019	AL=1.3 ppm	1.3 ppm	90% Percentile	Corrosion of household plumbing systems. Erosion of natural deposits.	No
			DTMA 0.26 ppm		
Lead 2019	AL=15 ppb	0 ppb	90% Percentile	Corrosion of household plumbing systems. Erosion of natural deposits.	No
			DTMA 0.00 ppm		
Number of sites over Action Level (AL) for Lead: 0 of 5			Number of sites over Action Level (AL) for Copper: 0 of 5		
Contaminants	MCL	MCLG	Test Value	Major Sources in Drinking Water	Violation Y/N
DISINFECTION BYPRODUCTS (DBPS), PRECURSORS AND DISINFECTANT RESIDUALS					
Distribution System Free Chlorine (mg/L) 2019	MRDL= 4.0 ppm	MRDLG= 4.0 ppm	High: 0.86 ppm Low: 0.42 ppm	Water additive used to control microbes.	No
Chlorine Residual (mg/L) Entry Points 2019	0.4 ppm	0.4 ppm	1.50 ppm Range: 1.01 - 1.70 ppm	Water additive used to control microbes.	No
Haloacetic Acids 2019	60 ppb	N/A	DTMA: 11.44 ppb	Byproduct of drinking water chlorination.	No
			NWWA Range: 6.2 - 7.77 ppb		
Total Trihalomethanes 2019	80 ppb	N/A	DTMA: 23.3 ppb	Byproduct of drinking water chlorination.	No
			NWWA Range: 4.36 - 20.7 ppb		
UNREGULATED CONTAMINANTS-PERFLUORINATED COMPOUNDS (NWWA)					
Perfluorooctansulfonic Acid (PFOS) (ppt)			Level Detected: 1.2 ppt	Range: 0 - 2.5 ppt	
Perfluorooctanoic Acid (PFOA) (ppt)			Level Detected: 3.1 ppt	Range: 2.1 - 4.2 ppt	

The US-EPA Health Advisory Limit (HAL) is 70 parts per trillion (ppt) for individual or combined for PFOS & PFOA. Data presented in the above table is from monthly monitoring of finished drinking water performed at the Forest Park Treatment plant during 2019.

Sources of Contamination: Manmade chemicals used in fire fighting foams, cleaners, cosmetics, greases and lubricants, paints, polishes, adhesives and photographic films.

More information may be obtained from the following:
 Environmental Protection Agency, Safe Drinking Water Hotline:
 1-800-426-4791 • www.epa.gov/your-drinking-water
 PA Department of Environmental Protection:
 717-772-4018 • www.depweb.state.pa.us

**“When the well is dry,
 we know the worth of water”**
BENJAMIN FRANKLIN (1706-1790)
Poor Richard's Almanac 1746