

## **Water Quality Report 2009. For Cedar Crest Farms Public Water System # 1090158**

This report contains important information about your drinking water. If you do not understand it, please have someone translate it for you. Landlords, businesses, schools and other property owners are encouraged to share this water quality report with their tenants and employees.

**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 residents of Cedar Crest Farms, Doylestown Township and Wyndham, New Britain Township. As such, the Authority is providing each customer the following Water Quality Report. This report is to apprise you of our 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 sent 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 monitoring results of 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 DTMA water source is an interconnection the Authority maintains with the North Wales Water Authority (NWWA) on the corner of Bristol and Upper State Roads, Doylestown Township. The NWWA provides surface water drawn from the Delaware River in Point Pleasant and treated at the Forest Park Water Treatment Plant located adjacent the Neshaminy Creek in Chalfont. Basic treatment processes include odor and taste control, filtration and disinfection.

The DTMA also provides well water to approximately 2,400 connections located in Buckingham, Doylestown, New Britain and Plumstead Township, and the New Britain and Doylestown Boroughs. An inter-municipal agreement with our neighboring municipalities allows for these diverse water services.

The Authority Board is comprised of five Doylestown Township residents who are appointed to five year terms by the Doylestown Township Board of Supervisors and operates under the Pennsylvania Municipality Authorities Act. The Authority maintains a close relationship with the Board of Supervisors. However, the Authority is an independent agency supported solely by tap-in fees for system expansion and customer usage charges for system operations. The Authority meets the third Thursday of the month as needed. All meetings are open to the general public beginning at 4 pm.

Questions regarding this report may be directed by mail to the Authority office at 425 Wells Road, Doylestown, Pennsylvania 18901 or by phone at 215-348-9915 or to the attention of the Authority's Water Superintendent, Scott Miele.

Doylestown Township Municipal Authority.

<b>WATER QUALITY TABLE</b>						
<b>Contaminants Units</b>	<b>Violation Yes / No</b>	<b>Level Detected</b>	<b>Range Detected</b>	<b>MCL in CCR Units</b>	<b>MCLG</b>	<b>Major Sources in Drinking Water</b>
<b>INORGANIC CONTAMINANTS</b>						
̄Copper (ppm) 2007	No	0.225	0 – 0.641	AL = 1.3	1.3	Corrosion of household plumbing systems; leaching from wood preservatives.
̄Lead (ppb) 2007	No	0	0 – 0.004	AL = 15	0	Corrosion of household plumbing systems; erosion of natural deposits.
<b>̄Naturally occurring levels of lead and copper in the source water are non-detectable. This table represents the level detected in the 90<sup>th</sup> percentile of homes monitored in accordance with US-EPA Lead and Copper Rule. None of the homes exceeded the Action Level (AL)</b>						
Barium (ppm) 2009	No	0.0162	N/A	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits.
Nitrate (ppm) 2009	No	2.67	0 – 4.40	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.
Nickel (ppb) 2009	No	0.8	N/A	100	100	Byproduct of various industrial processes, erosion of natural deposits.
Fluoride (ppm) 2009	No	0.0212	0 – 0.063	4	4	Erosion of natural deposits, water additive which promotes strong teeth. Discharge from fertilizer and aluminum factories.
<b>MICROBIOLOGICAL CONTAMINANTS</b>						
<b>Contaminant</b>	<b>Violation</b>	<b>Level Detected</b>	<b>Range</b>	<b>MCLG</b>	<b>MCL</b>	
Total Coliform Bacteria 2009	No	0	N/A	0	0	Presence of Coliform bacteria in 5% of monthly samples.
Fecal Coliform and E.coli Bacteria 2009	No	0	N/A	0	0	See below*
<b>*A routine sample and repeat sample are total Coliform positive, and one is also fecal Coliform or E.coli positive.</b>						
<b>RADIOACTIVE CONTAMINANTS</b>						
<b>Contaminant</b>	<b>Violation</b>	<b>Level Detected</b>	<b>Range</b>	<b>MCLG</b>	<b>MCL</b>	
Gross Alpha (pCi/L) 2008	No	3.09	2.36 – 3.82	0	15	
Uranium (ug/L) 2008	No	7.39	3.39 – 11.40	0	30	
<b>DISINFECTANTS &amp; DISINFECTION BY - PRODUCTS</b>						
<b>There is convincing evidence that addition of disinfectant is necessary for control of microbial contaminants.</b>						
Chlorine (as CL2) (ppm) 2009	No	0.41	0.10 – 1.31	4	4	Water additive used to control microbes.
Haloacetic Acids (HAA5) (ppb) 2009	No	11.18	3.3 – 21.5	60	0	By-product of drinking water chlorination.
Total Trihalomethanes (TTHM) (ppb) 2009	No	23.54	9.03 – 40.4	80	0	By-product of drinking water chlorination.
<b>Monitoring results for HAA5 and TTHM are from North Wales Water Authority (NWWA).</b>						

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 can pick-up 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.
- **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.
- **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.
- **Picocurie per liter (pCi/L):** A measure of radioactivity in water.

In the following list, 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:

- **N/A:** Not Applicable

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

Infants and young children are typically more vulnerable to lead in drinking water than the general population. It is possible that lead levels at your home may be higher than at other homes in the community as a result of materials used in your home's plumbing. If you are concerned about elevated lead levels in your home's water, you may wish to have your water tested and flush your tap for 2 minutes or more before using tap water. Additional information is available from the Safe Drinking Water Hotline @ (800) 426-4791.

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.

Currently, 93% of our water comes from the Delaware River and 7% comes from groundwater sources. The water coming from the Delaware River is treated at Forest Park Water Plant (FPW), a water treatment facility that is jointly owned by North Wales Water Authority (NWWA) and North Penn Water Authority (NPWA). Surface water, may contain disease causing organisms such as Giardia and Cryptosporidium. Forest Park Water Plant monitors its source water (before treatment) at the Forest Park Water Treatment Plant (FPW). Monthly monitoring in 2009 detected Giardia in nine out of twelve samples. Monitoring for Cryptosporidium detected five out of twelve samples. FPW treatment processes are designed to remove or inactivate Giardia and Cryptosporidium with a high level of certainty. Current available test methods do not allow FPW to determine if the organisms are dead or if they are incapable of causing disease. Generally, healthy individuals can in a few weeks overcome any infection; however, immune-compromised individuals are at greater risk of developing a life threatening illness and should consult their doctor regarding appropriate precautions to take to avoid infection.

Doylestown Township Municipal Authority routinely monitors for contaminants in your drinking water in accordance with federal and state laws. The tables in this report show the results of the monitoring for the period of January 1<sup>st</sup> to December 31<sup>st</sup>, 2009. All drinking water, including bottled drinking water may be reasonably expected to contain at least small amounts of some contaminants. It's important to remember that the presence of these contaminants does not necessarily pose a health risk.

Some people may be 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. 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 or visit the EPA website at: [www.epa.gov/safewater/wot/index.html](http://www.epa.gov/safewater/wot/index.html).

#### How can I get involved with protecting our water sources?

"Water is life" and we can all play an important role in protecting and conserving life's most sustaining resource. First, be aware of what goes down the drain, be it sanitary or storm drain, can alter the potential for keeping our water sources free of contamination. Secondly, conserve water by washing clothes or dishes when you have full loads; use water saving devices and make timely repair of plumbing leaks. Other water conservation suggestions:

Spring time: Install rain barrels or cisterns in your yard to collect rain water for summer time garden use.

Spring time: Create mini basins around trees and shrubs to allow for ground water recharge.

Summer time: Water your lawn or garden before sunrise and avoid excess evaporation loss.

Summer time: Keep drinking water in the refrigerator and save time waiting for cool tap water.

Fall: Check household plumbing for leaks. Make repairs to save water and dollars.

Winter time: When snow falls, place on lawn for melt down and ground water recharge.

Winter time: Use deicing materials sparingly. It helps to keep our streams clean.