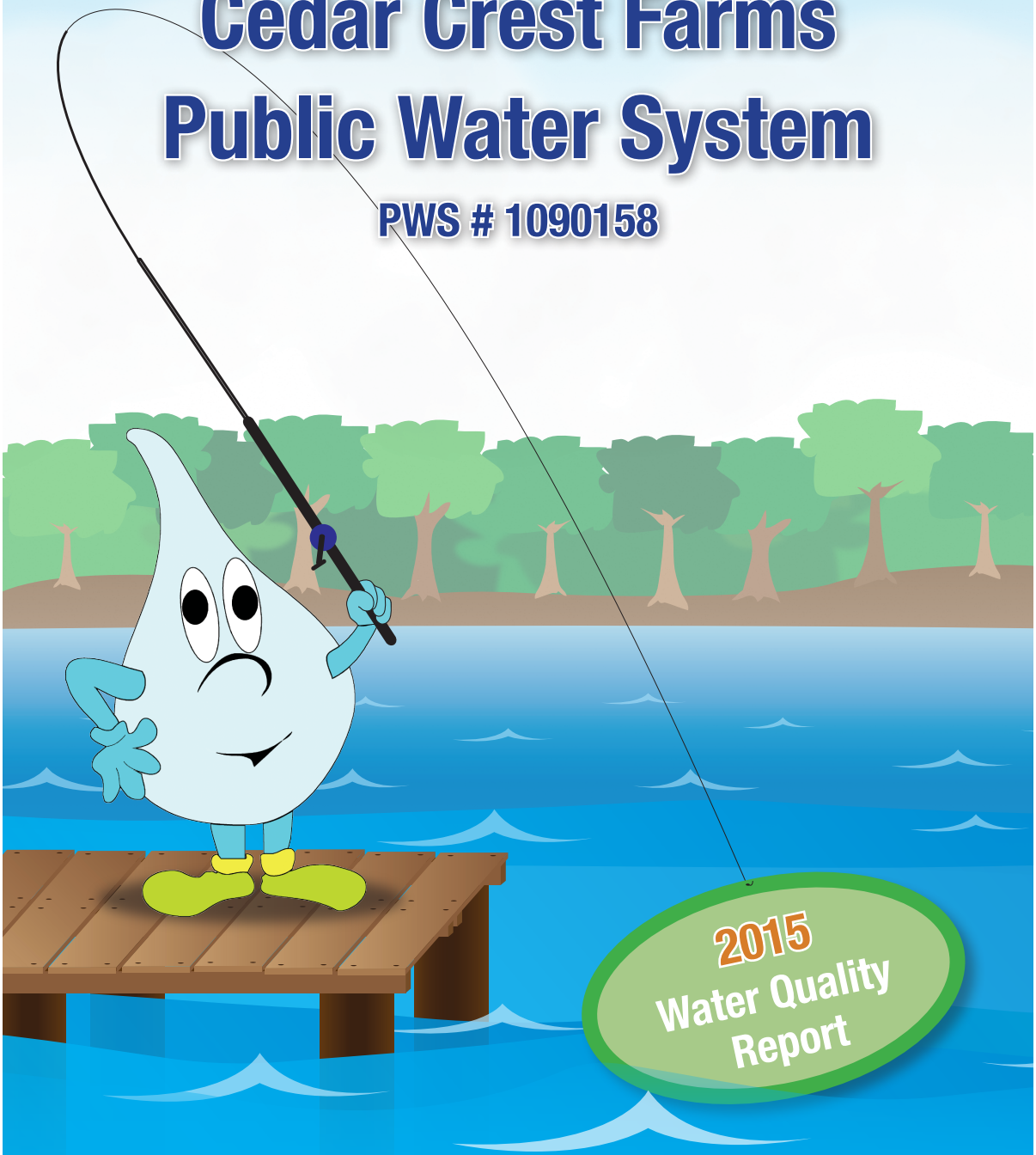
Cedar Crest Farms Public Water System

PWS # 1090158



2015 Water Quality Report

This Water Quality Report is available at
http://www.doylestownpa.org/ccr/pdf

2015 Water Quality Report

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 to you.

Este infrome 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). 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, 2015 through December 31, 2015. Should you have any questions regarding this report, please call Water Superintendent, Scott Miele at 215-348-9915 or attend the Authority meeting which is held at 425 Wells Road, Doylestown PA on the third Thursday of the month beginning at 4:00pm.

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's Safe Drinking Water Hotline @ 1-800-426-4791.

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 Cryptosproridium 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/safewater/dwhealth.

Water Quality Table

WATER QUALITY TABLE

INORGANIC CONTAMINANT (REGULATED AT WATER SOURCE)

Contaminant	MCL in CCR Units	MCLG	Level Detected	Range of Detections	Units	Sample Date	Violation Y/N	Source of Contaminant
Barium	2	2	0.266*	0.020 – 0.508*	ppm	2015	N	Discharge of drilling waste: discharge from metal refineries: erosion of natural deposits.
Nitrate	10	10	2.168*	0 – 3.96*	ppm	2015	N	Runoff from fertilizer use; leaching from septic tanks, sewage: erosion of natural deposits.
Copper[1]	AL=1.3	1.3	0.425[1]	0.19 – 0.584*[1]	ppm	2013	N	Discharge from steel & pulp mills; erosion of natural deposits.
Lead[1]	AL=15	0	0[1]	0-0.0106*[1]	ppb	2013	N	Erosion of natural deposits; discharge from factories & refineries; runoff from landfills, cropland.

[1] Naturally occurring levels of lead and copper in the source water are non-detectable. This table represents the level detected in the 90% percentile of homes monitored in accordance with US-EPA Lean and Copper Rule. None of homes monitored exceeded the Action Level (AL).

*Denotes North Wales Water Authority

WATER QUALITY TABLE

INORGANIC CONTAMINANT (REGULATED AT WATER SOURCE)

Contaminant	MCL in CCR Units	MCLG	Level Detected	Range of Detections	Units	Sample Date	Violation Y/N
Arsenic*	10	0	0.09*	0 – 0.5*	ppb	2015	N
Antimony*	6	6	0.007*	0 – 0.07*	ppb	2015	N
Chromium*	100	100	0.08*	0 – 0.2*	ppb	2015	N
Cyanide*	200	200	0.2*	0 – 1.0*	ppb	2015	N

DISINFECTION BYPRODUCTS (DBP's), BYPRODUCTS PRECURSORS AND DISINFECTION RESIDUALS

Contaminant	MCL in CCR Units	MCLG	Average Detected	Range of Detections	Units	Sample Date	Violation Y/N	Source of Contaminant
Total Trihalomethanes (TTHM's)	80	0	27.0 25.98*	N / A 8.59-51.10*	ppb	2015	N	By-product of drinking water chlorination.
Haloacetic Acids (HAA)	60	0	7.8 5.96*	N / A 2.77-16.10*	ppb	2015	N	By-product of drinking water chlorination.
Chlorine (Distribution)	MRDL 4	MRDLG 4	0.48	0.10 – 1.32*	ppm	2015	N	Water additive to control microbes.
Bromate	10	0	1.9*	1.4 – 2.8*	ppb	2015	N	By –product of drinking water disinfection.

ENTRY POINT DISINFECTION RESIDUAL (LEAVING THE WELLS)

Contaminant	Minimum Disinfection Residual	Lowest Level Detected	Range of Detection	Units	Sample Date	Violation Y/N	Source of Contaminant
Chlorine (Leaving the Plant)	0.50*	.485*	0.10-1.32*	ppm	2015	N	Water additive to control microbes.

*Denotes North Wales Water Authority

WATER QUALITY TABLE

RADIOLOGICAL CONTAMINANTS (REGULATED AT WATER SOURCE)

Contaminant	MCL in CCR Units	MCLG	Level Detected	Range of Detections	Units	Sample Date	Violation Y/N	Source of Contaminant
Gross Alpha	15	0	2.73*	0 - 7.41*	pCi/L	2015	N	Erosion of natural deposits.
Uranium	30	0	1.95*	0 – 9.45*	ug/L	2015	N	Erosion of natural deposits.
Combined Radium 226 / 228	5	0	.576*	0 – 2.67*	pCi/L	2015	N	Erosion of natural deposits.

MICROBIAL (REGULATED IN DISTRIBUTION SYSTEM)

Contaminant	MCL	MCLG	Level Detected	Range	Violation Y/N	Source of Contaminant
Total Coliform Bacteria 2015	For systems that collect <40 samples/month: More than 1 positive monthly sample. For systems that collect >40 samples/month: 5% of monthly samples are positive.	0	N/A	N/A	N	Naturally present in the environment.
Fecal Coliform and E.col 2015	For systems that collect <40 samples/month: More than 1 positive monthly sample. For systems that collect >40 samples/month: 5% of monthly samples are positive.	0	N/A	N/A	N	Human and animal fecal waste.
Turbidity	Treatment Technique (TT)	N/A	0.02*	0.02 – 0.04*	N	Soil Run-off

*Denotes North Wales Water Authority

Unless otherwise noted, data presented in table above is from calendar year 2015

Unregulated Contaminant Monitoring 3 in accordance with the US-EPA UCMR3 Monitoring Rule. The purpose of the UCMR3 Rule is to assist the EPA in determining the occurrence of unregulated contaminants in drinking water and if future regulation is warranted. For 2015 the DTMA and NWWA monitored for and ***detected*** the following:

Unregulated Contaminants DETECTED by DTMA & NWWA* 2015

Contaminant. Unit of Measurement	Level Detected	Range	Source	Use or Environmental Source
Chlorate (ppb)	148	87 - 190	NWWA	Agricultural defoliant; disinfection byproduct; and used in production of chlorine dioxide.
Manganese (ppb)	4.9	0 – 7.20	NWWA	Manganese is a naturally occurring element used in a variety of applications including use in steel production. It is an essential nutrient fond in vitamin/mineral supplement and in fortified foods.
Chromium – 6 (ppb)	0.02	0 – 0.12	NWWA	Naturally occurring elements; used in making steel and other alloys; chromium-3 or -6 forms are used for chrome plating, dyes and pigments, leather tanning and wood preservation.
Molybdenum (ppb)	1.0	0 – 1.4	NWWA	Naturally occurring element found in ores and present in plants, animals and bacteria; commonly used form molybdenum trioxide used as a chemical agent.
Strontium (ppb)	132	91 – 131	NWWA	Naturally occurring element; historically, commercial use of strontium has been in the faceplate glass of cathode-ray tube televisions to block x-ray emissions.
Vanadium (ppb)	0.1	0 – 0.4	NWWA	Naturally occurring elemental metal; used as vanadium pentoxide which is a chemical intermediate and a catalyst.

Definition of Key Terms

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.

In 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:

- **N/A: Not Applicable**

- **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**.**

Definition of Key Terms (continued)

- **The high Maximum Contaminant Level (MCL):** The 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.

- **Variances & Exemptions (V/E):** State or EPA permission not to meet an MCL or Treatment technique under certain conditions

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.

"When the well is dry, we know the worth of water".

— Benjamin Franklin (1706-1790)
Poor Richard's Almanac, 1746

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, pregnant women 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, have your water tested and until tested, flush your tap for 5 minutes or more before using. Additional information is available from the Safe Drinking Water Hotline @ (800) 426-4791.

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.

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

Doylestown Township
Municipal Authority

425 Wells Road
Doylestown, Pa. 18901