

Kennett Square Municipal WATER WORKS

2017 CONSUMER CONFIDENCE REPORT #1150108

IS MY WATER SAFE?

Your tap water met all U.S. Environmental Protection Agency (EPA) and state drinking water health standards. The Borough of Kennett Square vigilantly safeguards its water supplies and once again we are proud to report that our system has not violated a maximum contaminant level or any other water quality standard. If you have a specific concern or question regarding this report, water conservation or water quality, you may contact Joseph Scalise during normal business hours at 610-444-6020. If you would like to contact Chester Water Authority please call their customer service Department at 1-800-793-2323



WHERE DOES MY WATER COME FROM?

The water you drink comes from three (3) sources. Groundwater from the Borough's wells produces approximately 60% of your water and surface water from an interconnection with Chester Water Authority (CWA) which supplements the remainder from their Octoraro Treatment Plant. This report represents the water quality of both water sources.

DO I NEED TO TAKE SPECIAL PRECAUTIONS?

Some people may be more 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. EPA/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Water Drinking Hotline (800-426-4791).



INFORMATION ABOUT LEAD

If present, elevated levels of lead can cause serious health problems, especially for pregnant women & young children. Lead in drinking water is primarily from materials & components associated with service lines and home plumbing. The Borough of Kennett Square 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 or at <http://www.epa.gov/safewater/lead>.

IS FLUORIDE IN MY WATER?

The Borough does not add fluoride to the potable water system however Chester Water Authority does add fluoride and there is a small amount of fluoride naturally contained in the water from our wells. Therefore, depending on where you are located in the distribution system, your water will have varying fluoride levels and the amount may vary depending on the day. Properties located in the southeast portion of the Borough will normally have the greatest levels of fluoride present in their water and properties in the northeast section of the Borough and along North Walnut Road in Kennett and East Marlborough Townships are expected to contain the lowest levels of fluoridated water.

6 IIA O Oxygen 15.9994 1s ² 2s ² 2p ⁴ 13.6181	9 VIIA F Fluorine 18.9984032 1s ² 2s ² 2p ⁵ 17.4228	10 Ne Neon 20.1797 1s ² 2s ² 2p ⁶ 21.5645
	17 VIIA Cl Chlorine 35.453 1s ² 2s ² 2p ⁶ 3s ² 3p ⁵	18 VIII Ar Argon 39.948 1s ² 2s ² 2p ⁶ 3s ² 3p ⁶

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DRINKING WATER QUALITY

The table below lists all of the drinking water contaminants that we detected during the time frame indicated. The presence of contaminants in the water does not necessarily indicate that the water poses a health risk. The data presented in this table represents results from the combination of water supplied by both Chester Water Authority and the Borough of Kennett Square except for the Entry Point Sample results. The State allows us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not change frequently.

2017 Detected Results						
Contaminant (units)	MCLG	MCL	Result	Range of Results	Violation	Source of Substance
Nitrate (ppm)	10	10	7.46	6.27-7.59	No	Source Water contaminant from fertilizer use
Nitrate in drinking water above 10 ppm is a health risk for infants less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods because of rainfall or agricultural activity. If you are caring for an infant, you should ask for advice from your health care provider						
Haloacetic Acids (ppb)	N/A	average of 60	4.81	0-14.8	No	By-product of drinking water chlorination
Distribution System Chlorine Residual (ppm)	MRDLG 4	MRDL 4	1.13	0.90-1.65	No	water additive used to control microbes
Total Trihalomethanes (ppb)	N/A	average of 80	8.3	.7-20.1	No	By-product of drinking water chlorination
THM - Bromoform (ppb)	N/A	N/A	0.1	0 - 0.5	No	By-product of drinking water chlorination
THM - Chloroform (ppb)	N/A	N/A	5.1	.7-14.5	No	By-product of drinking water chlorination
THM - Bromodichloromethane (ppb)	N/A	N/A	1.8	0-3.8	No	By-product of drinking water chlorination
THM - Chlorodibromomethane (ppb)	N/A	N/A	1.1	0-1.7	No	By-product of drinking water chlorination
Entry Point Contaminant (units)		Minimum Disinfectant Residual	Lowest Level Detected	Range of Detections	Violation	Source of Substance
EP 101 Chlorine Residual (ppm)		0.75	1.06	1.06 - 1.42	No	water additive used to control microbes
EP 102 Chlorine Residual (ppm)		0.4	0.09	0.09 - 1.47	No	water additive used to control microbes

Most Recent Detected Results						
Year - Contaminant (units)	MCLG	MCL	Result	Range of Results	Violation	Source of Substance
2014 - Carbon Tetrachloride (ppb)	0	5	0.5	0.5	No	Discharge from chemical plants and other industrial activities
2012 - Barium (ppb)	N/A	2	0.033	0.033	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
2014 - Fluoride (ppm)	2	2	0.17	0.17	No	Water additive that promotes strong teeth
2016-Gross Alpha[pCi/L]	N/A	15	1.145	0 - 4.58	No	erosion of natural deposits
2016-Combined Uranium[pCi/L]	N/A	30	0.852	0 - 1.36	No	erosion of natural deposits
2016-Radium 226[pCi/L]	N/A	5	0.099	0 - 0.395	No	erosion of natural deposits
2016-Radium 228[pCi/L]	N/A	5	0.103	0 - 0.41	No	erosion of natural deposits
Borough of Kennett Square Lead and Copper (2016) - Only required every 3 years						
Substance	MCLG	Action Level (AL)	90th Percentile Value	Samples above AL	Violation	Source of Substance
Copper (ppm)	1.3	1.3	0.352	0 of 20	No	Home Water Pipes
Lead (ppb)	0	15	0	0 of 20	No	Home Water Pipes

Chester Water Authority
2017 WATER QUALITY RESULTS
(PWS ID # 1230004)

The following water quality tables show the quality of your drinking water compared to the standards set by the US EPA and the PA DEP in 2017. Although we test your water for more than 100 substances per year, only the substances that were detected in 2017 are shown in the table below. The US EPA and PA DEP allow us to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data, therefore, is more than one year old. For data that is more than 1 year old, the year of the most recent monitoring results is shown in the table.

TURBIDITY - is a measure of the clarity or cloudiness of the water. We monitor it because it is a good indicator of the effectiveness of our filtration system.

	MCLG	MCL	Result	Range of Results	Violation	Source of Substance
Turbidity (NTU)	NA	TT = 1 NTU for a single measurement	0.09	0.02 - 0.09	No	Soil Runoff
	NA	TT = at least 95% of monthly samples less than or equal to 0.3 NTU	100%	NA	No	Soil Runoff

MICROBIOLOGICAL

	MCLG	MCL	Highest Result	Violation	Source of Substance
Total Coliforms	0	TT = 1 NTU for a single measurement	0	No	Naturally present in the environment

LEAD AND COPPER (2016)

	MCLG	AL	90 th Percentile	Samples > AL	Violation	Source of Substance
Copper (ppm)	1.3	1.3	0.24	0	No	Corrosion of household plumbing
Lead (ppb)	0	15	9.5	5	No	Corrosion of household plumbing

INORGANIC CHEMICALS

	MCLG	MCL	Highest Result	Range of Results	Violation	Source of Substance
Barium (ppm)	2	2	0.03	NA	No	Erosions of natural deposits
Fluoride (ppm)	2	2	0.8	0.3 - 0.8	No	Water additive that promotes strong teeth
Nitrate (ppm)	10	2	7.7	1.4 - 7.7	No	Source water contaminant from fertilizer use

SYNTHETIC ORGANIC CHEMICALS

	MCLG	MCL	Highest Result	Range of Results	Violation	Source of Substance
Atrazine (ppb)	3	3	0.46	ND - 0.46	No	Runoff from herbicide used on row crops

ENTRY POINT DISINFECTION RESIDUALS

	Minimum Disinfectant Residual	Lowest Level Detected	Range of Detections	Violation	Source of Substance
Chloramine (ppm)	0.2	2.5	2.5 - 3.1	No	Water additives to control microbes

Chester Water Authority

2017 WATER QUALITY RESULTS

(PWS ID # 1230004)

Educational Information:

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's (EPA) Safe Drinking Water Hotline (800-426-4791). The sources of drinking water (both tap water & bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, & wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals &, in some cases, radioactive material, & can pick up substances resulting from the presence of animals or from human activity. Microbial contaminants, such as viruses & bacteria that may come from sewage treatment plants, septic systems, agricultural livestock operations, & wildlife. Inorganic contaminants, such as salts and metals, which can be naturally-occurring or result from urban stormwater runoff, industrial, or domestic wastewater discharges, oil & gas production, mining, or farming. Pesticides & herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff, & residential uses. Organic Chemical Contaminants, including synthetic & volatile organic chemicals, which are by-products of industrial processes & petroleum production, & can also come from gas stations, urban stormwater runoff, & septic systems. Radioactive contaminants, which can be naturally-occurring or be the result of oil and gas production & mining activities. In order to ensure that tap water is safe to drink, EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. Food & Drug Administration (FDA) regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

DISTRIBUTION DISINFECTION RESIDUALS						
	MRDLG	MRDL	Highest Result	Range of Results	Violation	Source of Substance
Chloramine (ppm)	0.2	2.0	2.4	1.9 - 2.4	No	Water additives to control microbes

DISINFECTION BY-PRODUCTS						
	MCLG	MCL	Highest Result	Range of Results	Violation	Source of Substance
Total Trihalomethanes (ppb)	NA	80	54	20 - 93	No	By-product of drinking water chlorination
Haloacetic Acids (ppb)	NA	60	46	23 - 70	No	By-product of drinking water disinfection

TOTAL ORGANIC CARBON (TOC)							
	MCLG	MCL	% Removal Required	% Removal Achieved	Number of Quarters Out of Compliance	Violation	Source of Substance
TOC (ppm)	NA	TT	25 - 45	35 - 55	0	No	Naturally present in the environment

WATER DEFINITIONS & ABBREVIATIONS:

MCLG: Maximum Contaminant Level Goal: The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

N/A: Not applicable

ND: Not detected

MCL: (Maximum Contaminant Level) The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

NTU: (Nephelometric turbidity unit) A measure of water clarity.

ppm: (parts per million): or one milligrams per liter (mg/L), or one in a million.

MRDLG: Maximum Residual Disinfection Level Goal. The level of a drinking water disinfectant which there is no known or expected risk to health. MRDLGs do not reflect the benefits of using disinfectants to control microbial contaminants.

ppb: (parts per billion) or one micrograms per liter (µg/L), or one in a billion.

AL: (Action Level) The concentration of a contaminant in which, if exceeded, triggers treatment or other requirements that a water system must follow.

MRDL: Maximum residual disinfectant level. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

TT: Treatment Technique

For additional information, please visit:

[HTTP://WWW.CHESTERWATER.COM/WATERQUALITY/CCR2017.PDF](http://www.chesterwater.com/waterquality/ccr2017.pdf)