

# ANNUAL DRINKING WATER QUALITY REPORT - 2016

## DOVER BOROUGH – PWS ID # 7670072

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

The Safe Drinking Water Act (SDWA) requires annual notification to all users about the water quality of their drinking water from the previous year. This report has been prepared and forwarded to all users. Dover Borough is committed to the delivery of water to customers that meet or exceed water quality standards.

Dover Borough Council meetings are held on the first Monday of every month at 7:00 pm if you have any questions or concerns.

Dover Borough presently obtains water from two (2) well sources and a connection with Dover Township's water system. One well (#5) is located between the end of Lewis Lane and Intermediate Avenue and the other well (#6) is located along the extension of Stony Lane near Fox Run. Approximately 60-70% of the daily usage is obtained from Dover Township.

Dover Borough monitors the well sources according to state and federal regulations. The attached table outlines the monitoring results for the calendar year 2016. Dover Township monitors and reports to their customers separately.

All well sources are treated with a chlorine solution to control coliform bacteria. Free chlorine residuals are tested daily at various points in the distribution system to insure that bacteria contaminants are not present. A phosphate compound is also added to the wells to reduce corrosion in copper piping.

The borough office maintains files on all activity with the water system and these files are available to the public by contacting Duane Grim at the borough office Monday through Friday between 7 am and 3:30 pm, at 292-6530.

**“The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity. Drinking water, including bottled water, may contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that the water poses a health risk. More information can be obtained by calling EPA’s Safe Drinking Water Hotline.”**

Contaminants that may be present in source water include:

- 1 Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- 2 Inorganic contaminants, such as salts and metals, which can be naturally-occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming.
- 3 Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.
- 4 Organic chemical contaminants, including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems.
- 5 Radioactive contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

**Lead:** 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. Dover Borough 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>.

**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 healthcare providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbiological contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).**

**The water has also been tested for Volatile Organic Chemicals (VOCs) and Synthetic Organic Chemicals (SOCs) with no contaminants present.**

### Definitions and Abbreviations

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

Maximum Contaminant Level (MCL) – The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLG 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 health risk. MCLGs allow for a high 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. MRDLGs do not reflect the benefit of the use of disinfectants to control microbial contaminants.

**Treatment Technique (TT)** – A required process intended to reduce the level of a contaminant in drinking water.

Mrem/year = millirems per year (a measure of radiation absorbed in the body)

pCi/L = picocuries per liter (a measure of radioactivity in water)

ppm = parts per million, or milligrams per liter (mg/L)

ppb = parts per billion, or micrograms per liter (ug/L)

ppq = parts per quadrillion, or picograms per liter

ppt = parts per trillion, or nanograms per liter

**Dover Borough Monitoring Results 2016**

Chemical Contaminant	MCL In CCR Units	MCLG	Level Detected	Range of Detections	Units	Violation Y/N	Sources of Contamination
Flouride (2015)	2	2	0.29	N/A	ppm	N	Erosion of natural products
Nitrate (2016)	10	10	3.68	2.1 – 3.68	ppm	N	Fertilizers and septic tanks
HAA-5 (2016)	60	60	3.0	N/A	ppb	N	By-product of drinking water disinfection
TTHM (2016)	80	80	35.3	N/A	ppb	N	By-product of drinking water chlorination
Chlorine (2016)	MRDL=4	MRDLG=4	0.65	0.13 - 0.65	ppm	N	Water additive to control microbes
Combined Uranium (2013)	30	0	7.35	4.96 – 7.35	ppb	N	Erosion of natural deposits
Gross Alpha (2013)	15	0	10.07	7.1 -10.07	pCi/L	N	Erosion of natural deposits

<b>Lead and Copper</b>							
Contaminant	Action Level (AL)	MCLG	90th Percentile Value	Units	# of Sites Above AL of Total Sites	Violation Y/N	Sources of Contamination
Lead 2016	15	0	0	ppb	0	N	Corrosion of household plumbing.
Copper 2016	1.3	1.3	0.54	ppm	0	N	Corrosion of household plumbing.

<b>Entry Point Disinfectant Residual</b>							
Contaminant	Minimum Disinfectant Residual	Lowest Level Detected	Range of Detections	Units	Sample Date	Violation Y/N	Sources of Contamination
Chlorine	0.40	0.40	0.40 –1.68	ppm	08/28/2016	N	Water additive used to control microbes.

Microbial Contaminants	MCL	MCLG	Number of Positive Samples	Violation	Typical Sources of Contamination
Total Coliform Bacteria	5% of monthly samples are positive.	0	0	N	Naturally present in the environment.

**The following are 2016 monitoring results for DOVER TOWNSHIP**

Contaminant	MCL in CCR Units	MCLG	Level Detected	Range of Detections	Units	Sample Date	Violation Y/N	Sources of Contamination
Nitrate	10	10	3.65	1.93-3.65	ppm	2016	N	Runoff from fertilizer, leaching from septic tanks, sewage, erosion of natural deposits
Halo-Acetic Acids	60	n/a	18.5	0-33	ppb	2016	N	By-product of drinking water treatment
Total Trihalomethanes	80	n/a	27.5	1-39	ppb	2016	N	By-product of drinking water treatment
Gross Alpha	15	0	12.3	3.26-12.3	pCi/L	2014	N	erosion of natural deposits
Combined Uranium	30	0	3.0	1.72-3	Ug/l	2014	N	erosion of natural deposits
Distribution Disinfectant Residual	4	4	0.884	0.569-0.884	ppm	2016	N	Water additive used to control microbes.
Nickel	N/A	N/A	6	0-6	ppb	2015	N	N/A

### ***Entry Point Disinfectant Residual***

Contaminant	Minimum Disinfectant Residual	<b>Level detected</b>	Range of Detections	Units	Sample Date	Violation Y/N	Sources of Contamination
Chlorine Residual-EP 101	0.40	0.17	0.17-1.04	ppm	2016	N	Water additive used to control microbes.
Chlorine Residual-EP 102	0.5	0.18	0.18-1.59	ppm	2016	N	Water additive used to control microbes.
Chlorine Residual-EP 103	0.6	0.31	0.31-1.15	ppm	2016	N	Water additive used to control microbes.
Chlorine Residual-EP 104	0.6	0.13	0.13-1.11	ppm	2016	N	Water additive used to control microbes.
Chlorine Residual-EP 105	0.6	0.19	0.19-0.93	ppm	2016	N	Water additive used to control microbes.
Chlorine Residual-EP 108	0.4	0.10	0.10-0.95	ppm	2016	N	Water additive used to control microbes.
Chlorine Residual-EP 109	0.5	0.12	0.12-1.26	ppm	2016	N	Water additive used to control microbes.
Chlorine Residual-EP 110	0.4	0.26	0.26-0.96	ppm	2016	N	Water additive used to control microbes.

**Lead and Copper:**

Contaminant	Action Level (AL)	MCLG	90 <sup>th</sup> Percentile Value	Units	# of Sites Above AL of Total Sites	Violation Y/N	Sources of Contamination
Lead-2016	15	0	5	ppb	0	N	Corrosion of household plumbing.
Copper-2016	1.3	1.3	.78	ppm	0	N	Corrosion of household plumbing.

***Violations: No Violations to report!***