Dover Water Company (PWSID#: NJ1409001)

100 Princeton Avenue, Dover, NJ 07801

Year 2017 Annual Water Quality Report

What's The Quality of Your Water?

Dover Water Company is proud to supply you with this year's Water Quality Report required by the State of New Jersey Department of Environmental Protection (NJDEP) and the U.S. Environmental Protection Agency (EPA). The tables in this report show the results of our water quality analysis in the year 2016. Every regulated contaminant detected in the water, even in the minutest traces, is listed. The table contains the name of each highest level allowed by regulation (MCL), the ideal goals for public health (MCLG), usual sources of such contamination, definitions that explain what was tested, and a key to the units of measurement. *The data tables in this report show only the substances **detected** in your water; other substances may have been tested and not detected.*

The EPA requires monitoring for over 80 drinking water contaminants. The contaminants listed in the table on the next page reflect only the contaminants detected in your water for the monitoring period January 1 to December 31, 2016. We routinely monitor for contaminants in your drinking water according to federal and state laws. The state allows us to monitor for some contaminants less than once per year because the concentrations of those contaminants do not change frequently. Some of our data, though representative, may be more than one year old.

Sources of Supply

Dover Water Company takes its water from 3 groundwater wells located at 100 Princeton Avenue. These wells are treated for organics removal via 2 air stripping facilities. The water is then chlorinated and sent to 2 clear wells and from these to municipal water service connections. Water is also supplied to Victory Gardens, portions of Wharton, Randolph, Rockaway Township, and Mine Hill.

GENERAL DRINKING WATER INFORMATION:

Water Sources

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. Contaminants that may be present in source water include:

- *Biological* - may come from human, agricultural, or wildlife sources.
- *Inorganic* - can be natural, from storm run-off, or from industrial or domestic wastewater discharges.
- *Pesticides and herbicides* - may come from agricultural, storm run-off or residential use.
- *Organic chemicals* - may come from industrial or domestic processes, storm run-off, and septic systems.
- *Radioactive materials* - can be naturally occurring or the result of mining or other human activities.

Presence of 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 EPA's Safe Drinking Water Hotline (1-800-426-4791). In order to ensure that tap water is safe to drink, the EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems.

Immuno-Compromised Persons

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/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 (1-800-426-4791).

DOVER WATER COMPANY WATER QUALITY TABLE

Contaminant	MCL Violation Y/N	Level Detected	Unit of Measurement	MCL (Highest Level Allowed)	MCLG (Goal)	Potential Source
Inorganic Contaminants:						
Lead Test Results Year: 2015 Result at 90th Percentile	N	ND No samples exceeded the action level	ppb	0	AL=15	Corrosion of household plumbing systems, erosion of natural deposits
Copper Test Results Year: 2015 Result at 90th Percentile	N	0.1 No samples exceeded the action level	ppm	1.3 (Action Limit)	1.3	Corrosion of household plumbing
Nitrate Test Results Year: 2016	N	Range = 0.7 – 1.2 Highest Detect = 0.9	ppm	10	10	Runoff from fertilizer use; leaching from septic tanks; erosion of natural deposits
Chromium Test Results Year: 2014	N	Range = 2.4 – 2.5 Highest Detect = 2.5	ppb	100	100	Discharge from steel and pulp mills; erosion of natural deposits
Selenium Test Results Year: 2014	N	Range = ND - 10 Highest Detect = 10	ppb	50	50	Discharge from petroleum and metal refineries; erosion
Thallium Test Results Year: 2014	N	Range = ND – 0.6 Highest Detect = 0.6	ppb	2	0.5	Leaching from ore-processing sites; discharge from electronics, glass, and drug factories
Radioactive Contaminants:						
Gross Alpha Test Results Year: 2014	N	Range = ND – 3.4 Highest Detect = 3.4	pCi/L	15	0	Radiological: Erosion of natural deposits
Combined Radium Test Results Year: 2014	N	Range = ND – 2.7 Highest detect = 2.7	pCi/L	5	0	Radiological: Erosion of natural deposits
Disinfection Byproducts:						
TTHMs Total Trihalomethanes Test Results Year: 2016	N	Highest LRAA = 9 Range: 9 - 10	ppb	80	N/A	Disinfectant Byproducts
HAA5s Haloacetic Acids Test Results Year: 2016	N	Highest LRAA = 3 Range: 3 – 3	ppb	60	N/A	Disinfectant Byproducts
Chlorine Residual Test Results Year: 2016	N	Average: 0.3 Range: ND-0.79	ppm	MRDL 4	MRDLG 4	Water additive used to control microbes

Secondary Contaminants

Contaminant	Average Level Detected	Range of Detections	Unit of Measurement	RUL	Potential Source
Sodium Test results Year: 2016	**71**	61 - 80	ppm	50	Naturally Occurring

Sodium

We exceeded the secondary Recommended Upper Limit for Sodium. For healthy individuals the sodium intake from water is not important, because a much greater intake of sodium takes place from salt in the diet. However, sodium levels above the Recommended Upper Limit (RUL) may be of concern to individuals on a sodium restricted diet.

UCMR – Unregulated Contaminants for which EPA Requires Monitoring (Completed in 2015)

Unregulated contaminants are those for which the EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist the EPA in determining both the occurrence of the specific unregulated contaminants and levels of said contaminants. Ultimately the data will be used to determine if future regulation is warranted. Dover Water was required to analyze for a total of 21 contaminants for this round of UCMR. The table below lists only the contaminants that were detected.

Contaminant	Range of Detections (ug/L)
Total Chromium	0.50 – 0.80 ppb
Hexavalent Chromium	0.37 – 0.49 ppb
Strontium	150 – 190 ppb
Vanadium	0.27 – 0.29 ppb
Chlorate	ND – 30 ppb

How to read this report:

Word, Acronym, Symbol or Note	Definition
Y/N	Yes/No
AL	Action Level. The concentration of a contaminant, which, if exceeded, triggers a treatment or other requirements, which a water system must follow.
CDC	Centers for Disease Control
EPA	United States Environmental Protection Agency.
LRAA	Locational Running Annual Average
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.
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.
MRDL	Maximum Residual Disinfectant Level – The highest level of a disinfectant allowed in drinking water.
MRDLG	Maximum Residual Disinfectant Level Goal – The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.
N/A	Not applicable
NJDEP	New Jersey Department of Environmental Protection
ND	Not detected
ppb	Parts per billion. Means 1 part per 1,000,000,000 (same as micrograms per liter) and correspond to 1 penny in $10 million.
ppm	Parts per million. Means 1 part per 1,000,000 parts (same as milligrams per liter) and corresponds to 1 penny in $10,000.
RAA	Running Annual Average
RUL	Recommended Upper Limit

Violations

Our water system received a violation in 2016 for failure to report on time Cyanide and Mercury levels for the monitoring period January 1, 2014 to December 31, 2016. We will make every effort going forward for more timely submissions in the future.

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 Water 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 second to 2 minutes before using water for drinking and 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.

Source Water Assessment

The New Jersey Department of Environmental Protection (NJDEP) has completed and issued the Source Water Protection Report and Summary for this public water system, which is available at www.nj.gov/dep/watersupply/swap/creport.htm or by contacting the NJDEP, Bureau of Safe Drinking Water at 609-292-5550.

The table below illustrates the susceptibility rating for each individual source for each of the contaminant categories at this water system. For susceptibility ratings of purchased water, refer to the specific water system's source water assessment report. NJDEP considered all surface water highly susceptible to pathogens. For the purpose of the Source Water Assessment Program, radionuclides are more of a concern for ground water than surface water. If the system is rated highly susceptible for a contaminant category, it does not mean that a customer is or will be consuming contaminated drinking water. The rating reflects the potential for contamination of source water, not the existence of contamination. Public water systems are required to monitor for regulated contaminants and to install treatment if any contaminants are detected at frequencies and concentrations above allowable levels. As a result of the assessments, NJDEP may customize (change existing) monitoring schedules based on the susceptibility ratings. If you have questions regarding the source water assessment report or summary, please contact the Bureau of Safe Drinking Water at 609-252-5550.

Source ID/Name	Pathogens	Nutrients	Pesticides	VOCs	Inorganics	Radionuclides	Radon	DBPs
	Rating	*Rating*	*Rating*	*Rating*	*Rating*	*Rating*	*Rating*	*Rating*
003 / Well 1	M	H	L	H	M	M	H	H
005 / Well 3	M	H	L	H	M	M	H	H
008 / Well 5	M	H	L	H	M	M	H	H

Susceptibility ratings for a public water system are based on the potential for a contaminant to be:

- At or above 50% of the Drinking Water Standard (MCL) = **(H) High**
- Between 10 and 50% of the Drinking Water Standard (MCL) = **(M) Medium**
- Less than 10% of the Drinking Water Standard (MCL) = **(L) Low**

Definitions:

Pathogens: Disease-causing organisms such as bacteria and viruses. Common sources are animal and human fecal wastes.

Nutrients: Compounds, minerals and elements that aid growth, and are both naturally occurring and man-made. Examples include nitrogen and phosphorus.

Volatile Organic Compounds (VOCs): Man-made chemicals used as solvents, degreasers, and gasoline components. Examples include benzene, methyl tertiary butyl ether (MTBE), and vinyl chloride.

Pesticides: Man-made chemicals used to control pests, weeds and fungus. Common sources include land application and manufacturing centers of pesticides. Examples include herbicides such as atrazine, and insecticides such as chlordane.

Inorganics: Mineral-based compounds that are both naturally occurring and man-made. Examples include arsenic, asbestos, copper, lead, and nitrate.

Radionuclides: Radioactive substances that are both naturally occurring and man-made. Examples include radium and uranium.

Radon: Colorless, odorless, cancer-causing gas that occurs naturally in the environment. For more information go to http://www.nj.gov/dep/rpp/radon/index.htm or call 800-648-0394.

(DBPs) Disinfectant Byproduct Precursors: A common source is naturally occurring organic matter in surface water. Disinfection byproducts are formed when other disinfectants (usually chlorine) used to kill pathogens react with dissolved organic material (for example leaves) present in surface water.

This Water Quality Report was prepared for Dover Water Company by:

Agra
Environmental & Laboratory Services
90 1/2 West Blackwell Street
Dover, NJ 07801
P: (973) 989-0010
F: (973) 989-0156