

Annual Drinking Water Quality Report
Borough of West Cape May Water Department
 Report for the Year 2017, Results from the Year 2016

Following is this year's Annual Drinking Water Quality Report. This report is designed to inform you about the quality water and services we deliver to you every day.

Our water source: We purchase water from the City of Cape May Water Department. Their water comes from the Cohansay Aquifer and the Atlantic City 800 Foot Sands. The New Jersey Department of Environmental Protection (NJDEP) has completed and issued the Source Water Assessment Report and Summary for the City of Cape May's public water system, which is available at WWW.state.nj.us/dep/swaq or by contacting NJDEP's Bureau of Safe Drinking Water at (609) 292-5550. Cape May City's water system's source water susceptibility ratings and a list of potential contaminant sources is included.

Our drinking water is routinely monitored for contaminants according to Federal and State laws. The tables show the results of monitoring for the period of January 1st to December 31st, 2016. The state allows us and the City of Cape May to monitor for some contaminants less than once per year because the concentrations of these contaminants, does not change frequently. Some of the data, though representative, are more than one year old.

Vulnerable populations: 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 microbiological contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

City of Cape May Water Department Test Results PWS ID # NJ0502001						
Contaminant	Violation Y/N	Level Detected	Units of Measurement	MC LG	MCL	Likely Source of Contamination
Radioactive Contaminants:						
Combined Radium 228 & 226 Test results Yr. 2012	N	1.5	pCi/l	0	5	Erosion of natural deposits
Inorganic Contaminants:						
Arsenic Test results Yr. 2015	N	0.2	ppb	N/A	5	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes
Barium Test results Yr. 2015	N	0.001	ppm	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Chromium Test results Yr. 2015	N	0.4	ppb	100	100	Discharge from steel and pulp mills; erosion of natural deposits
Copper Test results Yr. 2014 Result at 90 th Percentile	N	0.16 No samples exceeded the action level.	ppm	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits
Lead Test results Yr. 2014 Result at 90 th Percentile	N	10 No samples exceeded the action level.	ppb	0	AL=15	Corrosion of household plumbing systems, erosion of natural deposits
Mercury (inorganic) Test results Yr. 2015	N	0.03	ppb	2	2	Erosion of natural deposits; discharge from refineries and factories; runoff from landfills; runoff from cropland
Nickel Test results Yr. 2015	N	0.3	ppb	N/A	N/A	Erosion of natural deposits
Selenium Test results Yr. 2015	N	0.4	ppb	50	50	Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines
Disinfection By-Products:						
TTHM Total Trihalomethanes Test results Yr. 2016	N	Range = 8 Highest detect = 8	ppb	N/A	80	By-product of drinking water disinfection
HAA5 Total Haloacetic Acids Test results Yr. 2016	N	Range = 1 - 2 Highest detect = 2	ppb	N/A	60	By-product of drinking water disinfection
Regulated Disinfectants		Level Detected		MRDL		MRDLG
Chlorine Test results Yr. 2016		Average = 0.5 ppm		4.0 ppm		4.0 ppm

Borough of West Cape May Water Department Test Results						
Contaminant	Violation Y/N	Level Detected	Units of Measurement	MC LG	MCL	Likely Source of Contamination
Inorganic Contaminants:						
Copper Tested Yr. 2014 Result at 90 th Percentile	N	0.118 No samples exceeded the action level.	ppm	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead Tested Yr. 2014 Result at 90 th Percentile	N	10.2 1 sample out of 10 exceeded the action level.	ppb	0	AL=15	Corrosion of household plumbing systems, erosion of natural deposits
Disinfection By-Products:						
TTHM Total Trihalomethanes Test results Yr. 2016	N	Range = 4 - 32 Highest detect = 32	ppb	N/A	80	By-product of drinking water disinfection
HAA5 Total Haloacetic Acids Test results Yr. 2016	N	Range = 2 - 5 Highest detect = 5	ppb	N/A	60	By-product of drinking water disinfection
Regulated Disinfectants		Level Detected		MRDL		MRDLG
Chlorine Test results Yr. 2016		Average = 0.2 ppm		4.0 ppm		4.0 ppm

Waivers: The Safe Drinking Water Act regulations allow waivers to reduce or eliminate the monitoring requirements for asbestos, volatile organic chemicals and synthetic organic chemicals. Our supplier received monitoring waivers for all of these contaminants.

Water Quality: To ensure the continued quality of our water, the Cape May City Water Department uses a reverse osmosis process to protect against potentially harmful contaminants, lime for Ph adjustment and sodium hypo-chlorite for disinfection.

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. The City of Cape May Water Department and the West Cape May Water Department 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>.

Potential sources of contamination: 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:

- Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- Inorganic contaminants, such as salts and metals, which can be naturally-occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas projection, mining, or farming.
- Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses.
- 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 storm water runoff, and septic systems.
- 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.

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 the water poses a health risk. 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.

Definitions:

In the tables, you will find many terms and abbreviations you might not be familiar with. To help you better understand these terms we've provided the following definitions:

Non-Detects (ND) - laboratory analysis indicates that the constituent is not present.

Parts per million (ppm)- one part per million corresponds to one minute in two years or a single penny in \$10,000.

Parts per billion (ppb) - one part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.

Picocuries per liter (pCi/L) - picocuries per liter is a measure of the radioactivity in water.

Action Level - the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

Maximum Contaminant Level - The "Maximum Allowed" (MCL) is 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.

Maximum Contaminant Level Goal -The "Goal"(MCLG) is 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.

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 benefits of the use of disinfectants to control microbial contamination.

Unregulated Contaminant Monitoring Rule (UCMR)

The City of Cape May Water Department participated in the UCMR. 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 the occurrence of unregulated contaminants in drinking water and whether regulation is warranted. Our results are available upon request. We found the substances listed below.

Contaminant	Level Detected	Units of Measurement	Likely source
Chlorate	Range = 30 - 95	ppb	Agricultural defoliant or desiccant; disinfection byproduct; used in the production of chlorine dioxide
Chromium (VI) Hexavalent	Range = 0.03 -- 0.08	ppb	Naturally-occurring element; used in the making of steel and other alloys; chromium -3 or -6 are used for chrome plating, dyes and pigments, leather tanning, and other wood preservation
Strontium	Range = 19 - 150	ppb	Naturally-occurring element; historically commercial use of strontium has been in the faceplate glass of cathode-ray tube televisions to block x-ray emissions

Cape May Water and Sewage Utility- PWSID # NJ0502001

Cape May Water and Sewage Utility is a public community water system consisting of 5 wells.

This system's source water comes from the following aquifer: Kirkwood-Cohansey Watertable Aquifer System

This system can purchase water from the following water system: Lower Township MUA

Susceptibility Ratings for Cape May Water and Sewage Utility Sources

The table below illustrates the susceptibility ratings for the seven contaminant categories (and radon) for each source in the system. The table provides the number of wells and intakes that rated high (H), medium (M), or low (L) for each contaminant category. For susceptibility ratings of purchased water, refer to the specific water system's source water assessment report.

The seven contaminant categories are defined at the bottom of this page. DEP considered all surface water highly susceptible to pathogens, therefore all intakes received a high rating for the pathogen category. For the purpose of Source Water Assessment Program, radionuclides are more of a concern for ground water than surface water. As a result, surface water intakes' susceptibility to radionuclides was not determined and they all received a low rating.

If a system is rated highly susceptible for a contaminant category, it does not mean 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, DEP may customize (change existing) monitoring schedules based on the susceptibility ratings.

Sources	Pathogens			Nutrients			Pesticides			Volatile Organic Compounds			Inorganics			Radionuclides			Radon			Disinfection Byproduct Precursors		
	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L
Wells - 5			5			5			5			5			5			5			5			5

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, that are both naturally occurring and man-made. Examples include nitrogen and phosphorus.

Volatile Organic Compounds: 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.

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

For additional information: If you have any questions about this report or concerning your water utility, please contact David S. Carrick at 609-884-2726. If you want to learn more, please attend any of our regularly scheduled Borough Council open public meetings. Meetings are held on the first Tuesday of each month at 7:00 p.m. at Borough Hall, 732 North Broadway. Thank you.

IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER

The Borough of West Cape May Water Department Monitored Late for Total Trihalomethanes at One Monitoring Location

Our water system recently violated a drinking water standard. Although this is not an emergency, as our customers, you have a right to know what happened and what we did to correct this situation.

We routinely monitor for the presence of drinking water contaminants. We received notice that we inadvertently monitored late for Total Trihalomethanes (which are disinfection byproducts) during 2016 at one of our monitoring locations. We have two monitoring locations. We were required to monitor in April, which we did at the one monitoring location, but at the other location we monitored in September. The test results for both monitoring locations are reflected in "Test Results" table, and are in compliance. The MCL for Total Trihalomethanes (TTHMs) is 80 ppb.

Parts per billion (ppb) or Micrograms per liter - one part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.

Maximum Contaminant Level - The "Maximum Allowed" (MCL) is 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.

Total Trihalomethanes (TTHMs) are byproducts of drinking water disinfection / chlorination. Some people who drink water containing TTHMs in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer.