

*2017 Annual Water Quality Report
Consumer Confidence Report for the Period of
January 1, to December 31, 2016*

**CAMDEN-WYOMING SEWER AND
WATER AUTHORITY**

PWSID # DE0000563

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June 9, 2016

YOUR ANNUAL WATER QUALITY REPORT

Dear Valued Customer:

The Camden-Wyoming Sewer and Water Authority (CWS&WA) is pleased to present you with the 2017 Annual Drinking Water Quality/Consumer Confidence Report for the period of January 1, 2016 to December 31, 2016. This report is intended to provide important information about your drinking water and the efforts that are made toward the delivery of safe drinking water to you and your family. As you know, the Authority's goal is to provide its customers with a safe and dependable supply of drinking water. Each year, continuous and systematic efforts are made toward the improvement of your water quality as well as the quality of our services, the protection of our water resources, and the enhancement/maintenance of our water storage and distribution systems.

The source of drinking water used by CWS&WA is ground water. Our wells draw from the Piney Point and the Cheswold aquifers. Located in the Piney Point Formation, the Piney Point aquifer comprises fine to medium grained sand and glauconitic. The Cheswold aquifer is the lower aquifer of the Chesapeake Group. The Chesapeake Group comprises blue to gray silts, shells, and fine to medium sand.

**2017 Consumer Confidence/Annual Water Quality Report
for the Period of January 1, to December 31, 2016**

Camden-Wyoming Sewer and Water Authority

June 9, 2016

The Camden-Wyoming Sewer and Water Authority is once again pleased to report that your drinking water meets Federal and State standards under the Safe Drinking Water Act (SDWA).

Your drinking water is routinely monitored for contaminants in accordance with Federal and State laws. The water quality table below compares the quality of your drinking water to the standards established by the Environmental Protection Agency (EPA) and the Delaware Department of Health and Social Services (DHSS), Division of Public Health, Office of Drinking Water (ODW), as outlined in the SDWA.

TEST RESULTS

(The reported water quality laboratory test results reflect the most current data available. The State allows monitoring for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of the data, though representative, are more than one year old as noted)

Contaminant	Violation Y/N	Max. Level Detected / Range	Unit of Measurement	MCLG	MCL	Likely Source of Contamination
<u>Regulated Inorganic Contaminants (2014 & 2016 Test Results [as noted])</u>						
Fluoride (F) [2016]	N	0 - 0.86	ppm	2.0	2.0	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Barium [2016]	N	0.0005	ppm	2	2	Discharge of drilling wastes; Discharge from refineries; Erosion of natural deposits
Nitrite [2016]	N	0 - 0.1	ppm	1	1	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Nitrate [2016]	N	0 - 0.9	ppm	10	10	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
<u>Lead and Copper (2014 Test Results)</u>						
Lead (Pb) † [2014]	N	3.4	ppb	0	AL = 15	Corrosion of household plumbing systems; Erosion of natural deposits
Copper (Cu) † [2014]	N	0.08	ppm	1.3	AL = 1.3	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
<i>(† No. of Sites that exceeded AL = 0)</i>						
<u>Regulated Volatile Organic Contaminants (2016 Test Results)</u>						
Total Trihalomethanes (TTHMs)	N	19.0 - 21	ppb	N/A	80	Byproduct of drinking water Disinfection
Total Haloacetic Acids (HAA5s)	N	5.6	ppb	N/A	60	Byproduct of drinking water disinfection
<u>Radioactive Contaminants (2016 Test Results)</u>						
Combined Radium 226 / 228	N	0 - 0.937	pCi/L	0	5	Erosion of Natural deposits

Unregulated Inorganic Contaminants (2011 & 2016 Test Results [as noted])

		Range	Average			
Sodium (Na) [2016]	N/A	12 - 131.2	71.6	ppm	N/A	N/A
Alkalinity (Alk) [2016]	N/A	120 - 283	201.5	ppm	N/A	N/A
PH [2016]	N/A	5.2	N/A	N/A	N/A	6.5 - 8.5
Chloride (Cl) [2016]	N/A	4.4 - 8	5.76	ppm	N/A	250
Hardness [2011]	N/A	38.3	N/A	ppm	N/A	250

Suggested Limits

Unregulated / Secondary Standards (2016 Test Results)

		Range	Average			
Manganese (Mn)	N/A	0.014 - 0.092	0.053	ppm	N/A	50
Nickel (Ni)	N/A	0.0011	N/A	ppm	N/A	100
Sulfate (SO2-4)	N/A	2.5 - 3.6	3.03	ppm	N/A	250

Suggested Limits

In the water quality table you may find terms and abbreviations with which you may not be familiar. The following definitions have been provided to help you better understand these terms:

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

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.

Picocuries per liter (pCi/l) - A unit of measurement of the rate of radioactive decay in water equivalent to one second in 32 million years.

Maximum Contaminant Level (MCL) - 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 (MCLG) - 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 contaminants.

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

The Delaware Division of Public Health, Office of Drinking Water, in conjunction with the Department of Natural Resources and Environmental Control, Division of Water Resources has conducted a Source Water Assessment for CWS&WA as required under the 1996 amendments to the Safe Drinking Water Act (SDWA). Copies of the Assessment are available at the CWS&WA Office, telephone number (302) 697-6372, as well as on the Delaware Source Water Protection website at <http://www.wr.udel.edu/swaphome/index.html>

The following is a summary of the Report, prepared by the Department of Natural Resources and Environmental Control, Division of Water Resources:

The Department of Natural Resources and Environmental Control (DNREC) Division of Water Resources has completed a Source Water Assessment for the public water supply of CWS&WA as required under the 1996 amendments to the Safe Drinking Water Act. This assessment has been performed using the methods specified in the State of Delaware Source Water Assessment Plan (DNREC, 1999).

CWS&WA uses two wells for drinking water supply. Because the wells are in confined aquifers, these wells have a low vulnerability.

There is one discrete potential source of contamination (underground storage tank) located within the wellhead protection area. The dominant land use for the wellhead protection area is residential.

Data from the Department of Health and Social Services' Division of Public Health's Office of Drinking Water's (DPH-ODW) analytical database was reviewed for raw/untreated water quality data for the past five years. If any naturally occurring compound was detected above 50% of the drinking water standard or any synthetic compound was detected, then all data for that compound was recorded. However, it should be noted that CWS&WA water supply system utilizes certain treatment methods that remove contaminants or impurities from the drinking water before it is delivered to the public.

A system-wide susceptibility is based on the most conservative rating from the wells that summarizes the most susceptible portion of this system. Overall, CWS&WA's drinking water supply system exceeds standards to metals, has a very high susceptibility to pesticides, has a low susceptibility to petroleum hydrocarbons, PCBs, other organics and other inorganics, and a very low susceptibility to nutrients and pathogens.

This is a conservative assessment of the system based on a roll-up of the individual wells. The system-wide susceptibility does not stand alone in describing a system's water quality. The system-wide susceptibility is a tool to help understand what possible impacts to drinking water quality occur within the source water area.

We are proud to report that your drinking water currently meets all Federal and State standards. Our drinking water monitoring and testing have revealed that some contaminants have been detected, however, the EPA has determined that your drinking water is safe at these levels.

MCL's are set at very stringent levels. To understand the possible health effects described for many regulated constituents, a person would have to drink 2 liters of water every day at the MCL level for a lifetime to have a one-in-a-million chance of having the described health effect.

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 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.

All sources of drinking water are subject to potential contamination by substances that are naturally occurring or man made. 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 production, 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; and *Radioactive contaminants*, which can be naturally-occurring or be the result of oil and gas production and mining activities.

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 (800) 426-4791. 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 (FDA) regulations established limits for contaminants in bottled water which must provide the same protection for public health.

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 for 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 (800) 426-4791.

Contaminants may be found in drinking water that may cause taste, color, or odor problems. These types of problems are not necessarily causes for health concerns. For more information on taste, odor, or color of drinking water, please contact the system's business office.

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. We 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 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>.

In our continuing efforts to provide you and your family with clean, quality water, it may be necessary to make improvements in your water system. The costs of these improvements may be reflected in future rate structures because rate adjustments may be necessary in order to address these improvements. We appreciate your understanding in this regard.

We want our valued customers to be informed about their water utility. If you want to learn more, please attend any of our regularly scheduled public meetings. Regular public meetings are normally held on the second Tuesday of each month and public workshop sessions, when needed, are normally held on the fourth Tuesday of each month, both at 7:00 p.m. in the Camden-Wyoming Sewer and Water Authority conference room at 16 South West Street in Camden, Delaware. If you have any questions about this report or concerning your water utility, please contact the Camden-Wyoming Sewer and Water Authority Superintendent, Harold Scott, Sr. at (302) 697-6372 or visit us on the web at www.cwsa.com

We at Camden-Wyoming Sewer and Water Authority make every effort to provide top quality water to every tap. We ask that all our customers help us protect our water sources, which are the heart of our community, our way of life and our children's future.