

*Annual Water Quality Report
Consumer Confidence Report for the Period of
January 1, to December 31, 2022*

**CAMDEN-WYOMING SEWER AND
WATER AUTHORITY**
PWSID # DE0000563

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June 30, 2023

YOUR ANNUAL WATER QUALITY REPORT

Dear Valued Customer:

The Camden-Wyoming Sewer and Water Authority (CWS&WA) is pleased to present its Annual Drinking Water Quality/Consumer Confidence Report for the period of January 1, 2022 to December 31, 2022. 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 and 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.

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Camden-Wyoming Sewer and Water Authority
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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 (DPH), 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	Highest Level Detected / Range	Unit of Measurement	MCLG	MCL	Likely Source of Contamination
<u>Regulated Inorganic Contaminants (2022 Test Results)</u>						
Arsenic	N	1 / 1 - 1	ppb	0	10	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes
Fluoride	N	0.9 / 0.1 - 0.9	ppm	2.0	2.0	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories

<u>Lead and Copper (2020 Test Results)</u>						
		<u>90th Percentile</u>				
Lead (Pb) †	N	3	ppb	0	AL = 15	Corrosion of household plumbing systems; Erosion of natural deposits
Copper (Cu) †	N	0.1	ppm	1.3	AL = 1.3	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems

(† No. of Sites that exceeded AL = 0)

<u>Regulated Contaminants (2022 Test Results) Disinfectant and Disinfection By-Products</u>						
Free Residual Chlorine	N	1 / 0 - 1	ppm	MRDLG = 4	MRDL = 4	Water additive used to control microbes
Haloacetic Acids (HAA5)	N	13 / 13 - 13	ppb	N/A	60	By-product of drinking water Disinfection
Total Trihalomethanes (TTHMs)	N	34 / 34 - 34	ppb	N/A	80	By-product of drinking water Disinfection

<u>Regulated Radioactive Contaminants (2022 Test Results)</u>						
Combined Radium 226/228	N	1 / 0 - 1	pCi/L	MCLG = 0	MCL = 5	Erosion of natural deposits

<u>Regulated Volatile Organic Contaminants (2022 Test Results)</u>						
Ethylbenzene	N	75 / 0 - 75	ppb	MCLG = 700	MCL = 700	Discharge from petroleum refineries
Styrene	N	6 / 0 - 6	ppb	MCLG = 100	MCL = 100	Discharge from rubber and plastic factories; Leaching from landfills
Toluene	N	0.002 / 0 - 0.002	ppm	MCLG = 1	MCL = 1	Discharge from petroleum factories
Xylenes	N	1 / 0 - 1	ppm	MCLG = 10	MCL = 10	Discharge from petroleum factories; Discharge from chemical factories

<u>Unregulated Inorganic Contaminants (2022 Test Results)</u>						
		Range	Average	Unit of Measurement	MCLG	MCL
Sodium (Na)	N/A	10 - 119	48	ppm	N/A	N/A
Alkalinity (Alk)	N/A	119 - 288	178	ppm	N/A	N/A
Chloride (Cl)	N/A	2.9 - 6.5	5.3	ppm	N/A	250
Sulfate (SO ₄ -4)	N/A	1.8 - 3.5	3.0	ppm	N/A	250
Manganese (Mn)	N/A	26 - 26	26	ppb	N/A	50

} 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: <https://delawaresourcewater.org/>, under Source Water Assessments.

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

The Delaware Department of Natural Resources and Environmental Control's (DNREC) Division of Water has completed the Source Water Assessment for the public water supply wells for Camden Wyoming Sewer and Water Authority. This Assessment is required under the 1996 amendments to the Safe Drinking Water Act. The compiling of this assessment followed the methods specified in the State of Delaware Source Water Assessment Plan (DNREC, 1999).

Camden Wyoming Sewer and Water Authority uses three wells to provide drinking water to the system. These wells withdraw water from the confined Piney Point and Cheswold aquifers. These wells are classified as having a low vulnerability because significant clay layers exist between the ground surface and the well screen.

This public drinking water system provides water to an average daily population of 3,500 consumers from January 1 to December 31 through 1302 residential service connection.

There are two discrete sources of potential contamination in the wellhead protection areas for Camden Wyoming Sewer and Water Authority public water system. The contaminant potential from all discrete sources is low for nutrients and petroleum hydrocarbons and negligible for pathogens, pesticides, PCBs, other organic, metals and other inorganic.

Based on the 2007 Land Use and Land Cover, 55 percent of the total wellhead protection area for the system contains residential land use. There is approximately 41 percent commercial land use, 2.5 percent cropland, one percent combined urban and less than one percent wetlands.

The DPH ODW analytical database was queried for raw/untreated water quality data for the past six years. The data for well 10078 showed concentrations of sodium exceeded the Health Advisory Level and the concentration of total dissolved solids (TDS) was greater than one half the Secondary National Drinking Water Standard.

The data for well 227937 showed concentrations of sodium were greater than one half the Health Advisory Level. The data for well 249930 showed concentrations of total dissolved solids (TDS) were equal to one half the Secondary National Drinking Water Standard.

Camden Wyoming Sewer and Water Authority is exceedingly susceptible to metals and has a very high susceptibility for other inorganic compounds based on the analytical data. It has a medium susceptibility rating for nutrients and a low susceptibility for pathogens, petroleum hydrocarbons, pesticides, PCBs and other organic compounds.

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 and public workshop sessions, when needed, are normally held at 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 Engineer, Soheil Gharebaghi, P.E. 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 high 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.