2017 Water Quality Report

City of Amesbury, MA | DPW–Water Department | PWSID# 3007000

Amesbury's public water system operates under strict state and federal regulations. To help meet the stringent standards, quality control and quality assurance procedures are employed at every level of water system operations. A multi-barrier approach to drinking water protection is in place to eliminate contamination from the supply water all the way to the tap. The management and employee teams charged with the responsibility for providing safe drinking water to you are skilled and well-trained. With this combination of measures, we are able to provide a safe and reliable product that is essential to this community.

Each year at this time our customers are mailed a Consumer Confidence Report (CCR) summarizing information about your drinking water, which includes information on source water, the treatment plant process, distribution system, drinking water contaminants, and our compliance with drinking water regulations. These components all play a critical role in protecting public health.

This is the Twentieth annual CCR that is part of the regulatory process of informing you, and it discusses the results of water quality testing during 2017. It reflects the water department's ability to achieve and maintain compliance with the federal Safe Drinking Water Act. It describes how we operate and manage our water resources to meet your needs.

Kenneth Gray
Mayor

Robert L. Desmarais, P.E.
DPW Director

For more information about the treatment process, or to schedule a tour of the facility, contact Tom Rogers at 978-388-0853.

Visit our website at:
www.amesburyma.gov

Our goal is to provide in the best interests of the public's health and welfare. If you have any questions or comments about this report, please feel free to contact me at 978-388-0853 or email masonj@amesburyma.gov.

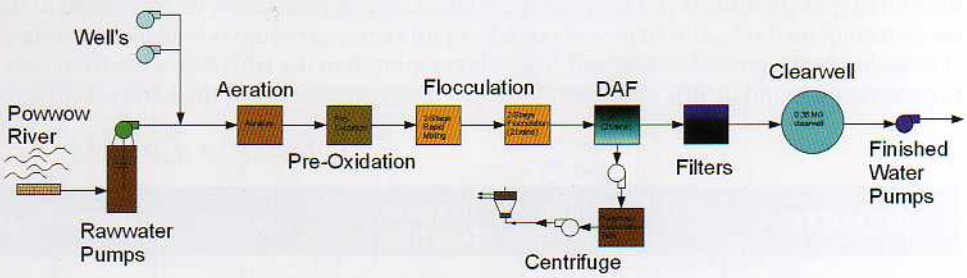
Sincerely,

Jeff Mason
Water System Manager

Facts:

- Total Finished Water Pumped to city (2017) = 464,989,131 gallons
- Average gallons per person per day in Amesbury (2017) = 48 gallons
- Leaky faucet at 1 drip per second = 3000 gal per year (EPA data)
- Amesbury Water rate (as of Jan 2016) = $8.75 per 100 cubic feet (748 gal) = 1.2 cents per gallon

Where Your Drinking Water Comes From



Amesbury receives its drinking water from the Powow River which is supplemented by Tuxbury Pond, Lake Attitash and Meadowbrook. Two groundwater wells are also available for use during peak season. Each day millions of gallons of Powow River water is drawn directly into the water treatment plant for purification. The treatment process utilizes a series of physical and chemical steps designed to produce a safe and consistent quality product. The current treatment process is illustrated in the schematic below.

This consumer confidence report is the 20th publication to be issued under the Environmental Protection Agency (EPA) regulations requiring annual notification to all consumers about local drinking water sources and water quality information. It is being delivered to all consumers, the Amesbury Board of Health, the Massachusetts Department of Public Health (DPH), and the Massachusetts Department of Environmental Protection (DEP). Additional copies are available at the library, town hall, and water treatment plant. It summarizes Amesbury's drinking water sources, treatment facility, monitoring information, water quality parameters, and health-related water issues.

How to Read the Following Tables

The following tables present the results of most recent water quality testing during the 2017 calendar year, unless otherwise noted. All of the regulated drinking water contaminants that were detected in the water are listed in the tables that follow. The presence of contaminants in the water does not indicate that the water poses a health risk. Any potential health risk associated with a contaminant is clearly explained. All testing was done in accordance with EPA and MA DEP drinking water regulations. The following definitions have been provided to help you better understand Amesbury's water quality information.

Maximum Contaminant Level or 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 or 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.

Meter reading crew

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 (ex. chlorine, chloramines, chlorine dioxide).

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.

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

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

Parts Per Million (ppm), Parts Per Billion (ppb): These units are used to describe the levels of detected contaminants. One ppm is comparable to 1 cent in $10,000 dollars; one ppb is comparable to 1 cent in $10,000,000 dollars.

EPA = U.S. Environmental Protection Agency
DEP = Massachusetts Department of Environmental Protection (MA DEP)
CDC = U.S. Center for Disease Control and Prevention

TON (Threshold Odor Number): A measure of odor in water.

SMCL (Secondary Maximum Contaminant Level): SMCLs are established to regulate the aesthetics of drinking water like taste and odor.

Office of Research and Standards Guideline (ORSG): This is the concentration of a chemical in drinking water at or below which adverse health effects are unlikely to occur after chronic (lifetime) exposure, with a margin of safety. If exceeded, it serves as an indicator of the potential need for further action.

Test Results

Thousands of water samples were analyzed for the presence of biological, inorganic, and organic contaminants throughout the year. The following tables show only those contaminants that were detected in Amesbury's water at some level. Although all of the results listed here are under the Maximum Contaminant Levels (MCL), we feel it is important that you know exactly what was detected in the drinking water and how much of the substance was present. Massachusetts Department of Environmental Protection (DEP) allows us to monitor for certain substances less than once per year because the concentration of these substances do not change frequently. In these cases, the most recent test results are included along with the year in which the sample was collected. All units of measure for test results are reported in parts per million (ppm) unless noted otherwise.

Information About 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 Amesbury 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 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 (1-800-426-4791) or at http://www.epa.gov/safewater/lead. The values reported in the table below are from tests conducted in 2017. Results represent the highest concentration found in 90% of the homes sampled and are well below the EPA's action levels requiring additional corrective measure.

Range Levels

PARAMETER	90th Percentile Value	Range of Detection	MCL	MCLG	# of Sites Above AL	SOURCE OF CONTAMINANT
Lead (ppb) 2017	ND	ND - 7.0	15 (action level)	Zero	Zero	Corrosion of household plumbing
Copper (ppm) 2017	0.25	0.04 - 0.31	1.3 (action level)	1.3	Zero	Corrosion of household plumbing

	HIGHEST RESULT	AVERAGE DETECTED	VIOLATION (Y/N)	POSSIBLE SOURCE OF CONTAMINATION
Turbidity (NTU)	0.60	0.04 – 0.60	N	Soil runoff
Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of water quality.				