

Dear Harwich Water Customer:

1. The quality of drinking water is a subject that is frequently discussed but more often misunderstood. Just a few years ago we seldom questioned the water that came from our faucets. In the past few years technology has given us the ability to measure the level of contaminants in the smallest amounts. Along with this technology comes public knowledge and more Federal and State regulations.
2. Some people still question the safety of the water and blindly turn to alternative sources for drinking water without realizing that those other sources are not as closely regulated as public water suppliers.
3. This report will show you that we meet all the stringent standards that are imposed upon us by regulatory agencies. It will show you that all water including bottled water is expected to contain small amounts of some contamination.
4. This Consumer Confidence Report is one way of making the public aware of the the excellent quality of Harwich's drinking water. In this report you will find the results of the water quality tests that have been taken in the past year. What is in your water and how it is treated. You will also learn a little about the people who help supply you the water.
5. It is with great pleasure that I submit my first annual CCR to the water users of Harwich.

Sincerely,
Deborah A. Fuller
Acting Superintendent

Understanding this report:

This water quality report is intended to provide the reader with all the available information on the quality of the Harwich drinking water. The first section of the report provides general information on the Harwich water system, the second part contains the results of water tests conducted during the year. The test results are divided according to the contaminant categories being tested. For each detected contaminant the highest level found is tested along with the maximum level allowed by law.

Glossary of Terms:

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

Distribution System-The network of pipes and valves which carry water from the treatment plant to the homes and businesses where water is used.

Massachusetts Department of Environmental Protection (DEP)- The state agency responsible for setting and enforcing drinking water regulations in Massachusetts

Maximum Contaminant Level (MCL)- The highest level of a contaminant in drinking water. MCL's are set as close to the MCLG's (see below) 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. MCLG's allow for a margin of safety.

90th percentile-A statistical measure used in the Lead and Copper Rule. A test result at the 90th percentile level means that 90 percent of all the test results fall below that level.

ND- Not detected; contaminants that are in concentrations too small to be detected by analytical instruments.

Ppm-parts per million

Ppb- parts per billion

Ppt- parts per trillion

Listed below are the employees who help provide the services to maintain your Water Department:

Deborah Fuller

Acting-Superintendent/Administrative Assistant 18 years experience License-Grade 2 Distributions, Grade 1 Treatment

Bruce Cahoon

Assistant Superintendent 46 years experience License-Grade 3C(combination)

Dan Hanley

Primary Foreman/Secondary Operator 46 years experience License-Grade 3C(Combination), Grade 2T and 3T(Treatment), 4D (Distribution), 4M-OT(Wastewater), Cross Connection Testor and Surveyor, Hoisting License and CDL(Tanker)

Peter Scichilone

Primary Operator 20 years experience License-Grade 4D(Distribution), 1T(Treatment), Cross Connection and Surveyor, Hoisting License and CDL(Air Brakes)

Richard Bassett

Foreman 35 years experience License-Grade 3C(Combination)

William Peninger

Backflow Inspector 20 years experience License-Grade 2D(Distribution)

William Eldredge

Safety Officer 16 years experience License- Grade 1D(Distribution)

Phil Sparrow

Equipment Technician 17 years experience License-Grade 1D(Distribution)

Neil Salzillo

Alternate Operator 3 years experience License-1T(Treatment), Grade 2D(Distribution)

John McCarthy

Maintenance Man/Meter Reader 3 years experience No license available at time of printing

Barbara Sayers

Head Clerk 8 years experience

Carol Connor

Principal Clerk 5 years experience

General Information:

The Town of Harwich has eleven (11) gravel packed wells which draw water from the Monomoy Lens Aquifer and three (3) treatment facilities that use potassium hydroxide to adjust the Ph of the water. The wells, their locations and pumping capacities are listed below:

STATION	GALLONS AVAILABLE	LOCATION	GALLONS PUMPED
Main Station	650 gpm	Chatham Rd	76,192,500
Well #1	530 gpm	Chatham Rd	67,039,300
Well #2	300 gpm	Chatham Rd	26,200,200
Well #3	500 gpm	Chatham Rd	60,762,600
Well #4	400 gpm	Chatham Rd	130,500
Well #5	460 gpm	Depot Rd.,SH	60,213,000
Well #6	530 gpm	Depot Rd.,SH	65,628,900
Well #7	600 gpm	Depot Rd.,SH	71,370,700
Well #8	380 gpm	Bay Rd	45,812,500
Well #9	490 gpm	Bay Rd	62,368,100
Well #10	580 gpm	North Westgate Rd	68,067,400
Well #11	580 gpm	Pleasant Bay Rd	40,850,700
TOTAL	6,000 gpm		644,636,400

Station 4 is rarely use as it has a high iron and manganese level which causes staining problems in laundry and fixtures.

MICROBIOLOGICAL CONTAMINANTS

Contaminant	Highest # positive in a month	Highest # positive in a month	MCL	MCLG	Violation (Y/N)	Possible Source of contamination
Microbial	(PWS collects <40 samples per month)	(PWS collects >40 samples per month)				
TOTAL COLIFORM		6 16% positive		5%	0 Y	naturally present in the environment
FECAL COLIFORM		0	0		0 n	

Bacteria in the Total Coliform group are naturally present in soil, surface water and vegetation. Total Coliform Bacteria are not necessarily harmful, but serve as indicators of possible disease causing bacteria.

Whenever Total Coliform is detected in a water sample, that sample is also tested for Fecal Coliform. The presence of Fecal Coliform is cause for concern since these organisms are usually, but not always, associated with sewage or human/animal waste.

The Harwich Water Department monitors for Total Coliform bacteria by collecting a minimum of 37 samples each month during the winter (September - May) and 74 samples each month during the summer (May – September).

On November 8, 2000, the Harwich Water Department received a notice of Non-Compliance for a MCL Violation of Total Coliform Bacteria.

The description of the Non-Compliance was as follows:

1. On September 13, 2000 Harwich Water Department was informed that two routine distribution samples collected on September 12, 2000, were positive for total coliform bacteria. Repeat samples, which were collected on September 14, 2000 indicated four (4) sampling location were positive for total coliform bacteria. The above constitutes an exceedance of the maximum contaminant level (MCL) for total coliform bacteria.
2. The Department of Environmental Protection was not notified of this exceedance until September 19, 2000.

The EPA requires certain language when notifying our customers of any violation. On September 22, 2000, we published the following in the daily Cape Cod Times newspaper.

PUBLIC SERVICE ANNOUNCEMENT
TOWN OF HARWICH

The Town of Harwich Water Department during routine water sampling in the month of September 2000 had received positive results for total coliform bacteria.

The Harwich Water Department in accordance with Environmental Protection Agency, and the Massachusetts Department of Environmental Protection Agency (DEP) regulations is to notify the public of presence of bacteria in the public water system. Coliform was confirmed in the system during routine bacteriological sampling. The United States Environmental Protection Agency (EPA) sets drinking water standards and has determined that the presence of total coliform is a possible health concern. Total coliforms are common in the environment and are generally not harmful themselves. The presence of the bacteria in drinking water, however, generally is a result of a problem with the water treatment or the pipes which distribute the water, and indicates that the water may be contaminated with organisms that can cause disease. Disease symptoms may include diarrhea, cramps, nausea, and possible jaundice, and any associated headaches and fatigue. These symptoms, however, are not just associated with disease-causing organisms in the drinking water, but also may be caused by a number of factors other than your drinking water. EPA has set an enforceable drinking water standard for total coliforms to reduce the risk of these adverse health effects. Under this standard, no more than 5.0 percent of the samples collected during a month can contain these bacteria, except that systems collecting fewer than 40 samples per month that have one total coliform-positive sample per month are not violating the standard. Drinking water, which meets this standard, is usually not associated with a health risk from disease-causing bacteria and should be considered safe.

The Harwich Water Department has re-sampled continuously to monitor the situation. Additional samples were taken, the distribution system is being flushed and the problem was traced to only two storage tanks (Brooks Park and Route 39).

For more information, contact Kenneth Bulley, Superintendent Harwich Water Department, 196 Chatham Road, Harwich, MA 02645.

Telephone: (508)432-0304.

LEAD AND COPPER

Contaminant	90th percentile	# of sites exceeded	# of sites sampled	Action level	MCLG	Violation (Y/N)	Possible source of contamination
Lead	0.002	0	30	15(.015)	0	No	corrosion of household plumbing system: Erosion of natural deposit
Copper	0.85	0	30	1.3	1.3	No	Corrosion of household plumbing system: Erosion of natural deposit: Leaching from wood preservatives

Lead and copper are inorganic contaminants that have a very specific and unique set of rules for sampling and testing. Unlike other contaminants, which tend to contaminate the water supply at the well, lead and copper typically come from the plumbing within your home. Lead comes from the solder used to connect the copper pipes. The copper comes from the pipe itself.

The most common cause is corrosion, a reaction between the water and the pipe and pipe solder. Water that has a low pH or soft water (which lathers soap easily) is a common cause of corrosion.

The practice of grounding electrical equipment to water pipes is not only dangerous to the safety of Water Department employees, but, increases the rate of corrosion. Any electrical current traveling through the ground wire will accelerate the corrosion of lead in the pipes.

Infants and young children are typically more vulnerable to lead in drinking water than the general population. It is possible that lead levels at your home may be higher than at other homes in the community as a result of materials used in your home's plumbing. If you are concerned about elevated lead levels in your home's water, you may wish to have your water tested. The longer water resides in your home's plumbing the higher the lead level may be. Flushing your tap for 30 seconds to 2 minutes before using tap water also helps in reducing levels. Additional info is available from the Safe Drinking Water Hotline (800-426-4791).