

## TOWN OF ACUSHNET 2010 WATER QUALITY REPORT PSWID #4003000

### Introduction

The Acushnet Water Department is committed to providing you with the safest and most reliable water supply. We are pleased to present a summary of the quality of the water provided to you during the past year.

Regular monitoring and testing ensures that the 2010 test results indicate the water supplied by the Acushnet Water Department met or exceeded all state and federal requirements. Under the United States Environmental Protection Agency's (USEPA) Information Collection Rule (ICR), the water department collected additional samples for microbiological contamination and disinfection by-products. This report summarizes the laboratory results for substances detected in your water. Although Acushnet receives all of its water from the City of New Bedford, each year Acushnet conducts approximately 150 of its own water quality tests for approximately 5 contaminants. These tests confirm whether or not your tap water meets all state and federal drinking water quality standards. We will be providing you with a report each year with information about the quality of your drinking water. Along with water quality test results, this report will also provide you with such information as:

### The Source of Your Water

The water treated at the Quittacas Water Treatment Plant for the City of New Bedford comes from a surface supply comprised of five ponds. The principal storage area is Little Quittacas Pond, located in the Town of Rochester. The other ponds are Great Quittacas, Pocksha, Assawompsett, and Long Pond situated in the towns of Freetown, Lakeville, and Middleboro. Treatment consists of conventional filtration, disinfection, corrosion control, and fluoridation (as of January 2007). The City of New Bedford also supplies water to parts of Freetown and Acushnet along with Dartmouth on a seasonal basis and Fairhaven on an emergency basis.

The Source Water Assessment and Protection (SWAP) program assesses the susceptibility of public water supplies to potential contamination by microbiological pathogens and chemicals. A susceptibility ranking of "high" was assigned to the New Bedford Water Division using the information collected during the assessment by the Massachusetts Department of Environmental Protection. The complete SWAP report is available at the Water Division Office 1105 Shawmut Avenue, For more information call Charles Kennedy at (508) 763-2231.

### Discussion of Detected Impurities

"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 material and components associated with service lines and home plumbing. Acushnet 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 or at: <http://www.epa.gov/safewater/lead>.

### Addition of Fluoride

As directed by the New Bedford Health Department, fluoride is now being added to the Drinking Water. Treatment started January 8, 2007. The optimum dosage is 1.0 parts per million (ppm) with an operational range of 0.8 - 1.2 ppm. Thousands of research studies and 60 years of experience have shown that water fluoridation is safe, effective and the best method of improving oral health in a community.

### Questions or Comments

Do you have questions about information in this report? If you do, please call Paul Sylvia, Superintendent, at (508) 998-0230. We encourage public interest and participation in our community's decisions affecting drinking water.

### Additional Health Information

To insure that tap water is safe to drink, EPA prescribes limits on the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water that 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 water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA's **Safe Drinking Water Hotline (800-426-4791)**.

The sources of drinking water (both tap & bottled) 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 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, such as viruses & bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife.
- Inorganic, such as salts & metals, which can be naturally occurring or result from urban storm 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, storm water runoff and residential uses.
- Organic chemicals, which include synthetic and volatile organics, that are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff and septic systems.
- Radioactivity, which can be naturally occurring or be the result of oil and gas production and mining activities.

Some people may be more vulnerable to contaminants in drinking water than is 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* are available from the **Safe Drinking Water Hotline (800-426-4791)**.

*Portuguese – A informação neste documento é extremamente importante. Para uma tradução completamente em português, faça favor de telefonar (508) 991-6151 e uma cópia, em português, será mandada pelo correlo à sua casa. Obrigado.*

## New Bedford Department of Public Infrastructure - Water Division - CONSUMER CONFIDENCE REPORT DATA - 2010

### How to read the following tables

The table shows the results of our water quality analysis. Every regulated contaminant that we detected in the water, even in the most insignificant traces are listed here. The table contains the name of each substance, the highest level allowed by regulation (MCL), the ideal goals for public health (MCLG), the amount detected, the usual sources of such contaminant, footnotes explaining our findings, and a key to units of measurement. Definitions of MCL and MCLG are important. The data present in this report is from testing performed in 2010 or otherwise indicated. All testing was done in accordance with drinking water regulations. In 1998, the New Bedford Water Department performed monthly testing for Cryptosporidium which were not detected. Optional testing for Radon was not performed, as it has not been a concern in surface water supplies. Other radionuclides were tested for and were not detected.

CONTAMINANT	HIGHEST LEVEL ALLOWED (MCL)	LEVEL GOAL (MGGL)	HIGHEST LEVEL DETECTED	RANGE OF LEVELS DETECTED	SAMPLE DATE	SOURCE OF SUBSTANCE
Total Trihalomethanes <sup>1</sup> (ppb)	80 (Running Annual Average) <sup>5</sup>	N/A	43 Running Annual Average (samples from distribution system)	32-50 Individual samples	2010	By-Product of Drinking Water Chlorination
Haloacetic Acids (ppb)	60 (Running Annual Average)	N/A	42 Running Annual Average (samples from distribution system)	25-59 Individual samples	2010	By-Product of Drinking Water Chlorination
Turbidity <sup>2</sup> (NTU's)	0.3 NTU in 95% of samples collected. No samples to exceed 1.0 NTU <sup>TT2</sup>	N/A	0.20 (100% of samples less than 0.3 NTU)	0.05-0.20	2010	Soil Runoff
Total Chlorine <sup>6</sup> Residual (ppm)	MRDL <sup>7</sup> 4 Running Annual Average	MRDLG <sup>8</sup> 4	1.76 Running Annual Average	1.29-2.56 Individual samples	2010	Product of Water Disinfection
Sodium (ppm)	N/A <sup>3</sup>	N/A	30	-	2/23/10	Naturally occurring By-Product of Corrosion Control
Nitrates (ppm)	10	10	.08	-	2/24/10	Run-off from fertilizer use. Leaching from septic tanks, sewage. Erosion of natural deposits.
N-Nitrosodimethylamine (NDMA) (ppt) <sup>10</sup>	Unregulated <sup>4</sup>	N/A	2 (Average=0.67)	0-2.0	9/16/09	Discharge from industrial use; as a byproduct of drinking water treatment; produced from naturally occurring precursor chemicals.
Fluoride (ppm) <sup>9</sup>	4	4	1.3	0.7-1.3 (Avg.=0.9) <sup>9</sup>	2010	Water additive which promotes strong teeth

**Abbreviations:** MCL- Maximum Contaminant Level; MCLG - Maximum Contaminant Level Goal; ppb - parts of contaminant per billion parts of water; ppm - parts of contaminant per million parts of water; NTU - Nephelometric Turbidity Units; MRDL - Maximum Residual Disinfection Level; MRDLG- Maximum Residual Disinfection Level Goal; TT - Treatment Technique; N.D. - Not Detected; ppt - parts of contaminant per trillion parts of water; N/A - Not Applicable; n/a - not available.

**Footnotes:** (1) Some people who drink water containing Trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous system and may have an increased risk of getting cancer; (2) Turbidity is a measure of the cloudiness of water. We monitor it because it is a good indicator of the effectiveness of our filtration system. The effectiveness of turbidity removal is determined by a Treatment Technique standard. This is a required process intended to reduce the level of contaminant in drinking water; (3) The Massachusetts Department of Environmental Protection maintains a guideline level of 20 parts per million (ppm) for sodium; (4) 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 their occurrence in drinking water and whether future regulation is warranted; (5) Running annual average is computed from the LAST four quarters of data. The last average is computed at the end of each quarter; (6) The New Bedford DPI-Water Division commenced treatment of its filtered water with combined chlorine as of November 4, 2002. This is a combination of chlorine and ammonia. It is measured in terms of total chlorine; (7) The Maximum Residual Disinfection Level is the highest level of disinfection allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for the control of microbial contaminants; (8) Maximum Residual Disinfection Level Goal is the level of a drinking water disinfectant below which there is no known expected risk to health. MRDLG's do not reflect the benefits of the use of disinfectants to control microbial contaminants; (9) The New Bedford DPI-Water Division started treating the drinking water with fluoride as of January 8, 2007, as directed by the New Bedford Health Department. The optimum dosage is 1.0 ppm with an operational range of 0.8 to 1.2 ppm; (10) There is currently no maximum contaminant level for NDMA, although a notification level of 10 ppt was set by the California Department of Health Services.

## TEST RESULTS FOR THE TOWN OF ACUSHNET - 2010

**COPPER:** Copper is an essential nutrient, but some people who drink water containing copper in excess of the action level over a relatively short amount of time could experience gastrointestinal distress. Some people who drink water containing copper in excess of the action level over many years could suffer liver or kidney damage. People with Wilson's Disease should consult their personal doctor.

**LEAD:** Infants and children who drink water containing lead in excess of the action level could experience delays in their physical or mental development. Children could show slight deficits in attention span and learning abilities. Adults who drink this water over many years could develop kidney problems or high blood pressure.

CONTAMINANT	MEETS STANDARD	TEST DATE	ACTION	*Non-Detection	
				RESULTS	TYPICAL SOURCES
Lead	EPA 200.8	8/19,20/2008	0.015 mg/L	ND* -0.02	Corrosion of household plumbing systems; erosion of natural deposits
Copper	EPA 200.8	8/19,20/2008	1.3 mg.L	ND* - 0.05	Corrosion of household plumbing; leaching; erosion of natural deposits

**MICROBIOLOGICAL CONTAMINANTS:** Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful bacteria may be present.

### Microbial

CONTAMINANT MICROBIAL	HIGHEST # POSITIVE IN A MONTH (PCS COLLECTS >40 SAMPLES PER MONTH)	HIGHEST # POSITIVE IN A-MONTH (PCS COLLECTS <40 SAMPLES PER MONTH)	# OF SITES SAMPLED	MCL	MCLG	VIOLATION (Y/N)	POSSIBLE SOURCE OF CONTAMINATION
Total Coliform	N/A	0	10	N/A	0	N	Naturally present in environment

**ORGANIC CHEMICAL:** Some people who drink water containing PCE in excess of the MCL over many years may experience problems with Liver, Kidneys, Nervous System, and may have increased risk of Cancer.

### Tetrachloroethylene (PCE)

CONTAMINANT	MEETS STANDARD	TEST DATE	DETECTION LIMIT	ACTION LEVEL	* Non-Detection	
					RESULTS	TYPICAL SOURCES
PCE	Std. Meth. 524.2	2/13/2008	0.5	5.0	ND*	Vinyl lined asbestos cement pipe

### Drinking Water Disinfection By-Products

CONTAMINANT	MEETS STANDARD	TEST DATE	DETECTION LIMIT	MCL	RESULTS	RANGE OF LEVELS DETECTED	TYPICAL SOURCES
Trihalomethane	EPA 524.2	Quarterly Testing	0.5	80 Total	36.5 avg.	31.3 - 47.1	BY-Products of Chlorination
Haloacetic Acids	EPA 552.2	Quarterly Testing	1-3	60 Total	26.75 avg.	16.3 - 46.1	BY-Products of Chlorination

*If you have any questions about your water, please call one of the numbers listed below:*

**Acushnet Water Department .....508-998-0230**  
**New Bedford Water Department.....508-979-1557**  
**Massachusetts (DEP Info Line) .....1-800-462-0444**

The Town of Acushnet Water Department is in the process of converting our touch read water meter system to a radio read system. This new system will provide instant meter reads of all our water users on a predetermined schedule.

New radio meter transmission units (MTU's) will be installed at all meter locations.

Residents can schedule an appointment to have a MTU installed at their home by calling the Acushnet Water Department at (508) 998-0230. Installation requires access to the water meter and is completed in approximately 20 minutes. The Acushnet Water Department thanks you in advance for your cooperation.





## WATER CONSERVATION TIPS

### **Water costs money... don't waste it!**

A dripping faucet or fixture can waste 3 gallons a day... a total of 1095 gallons a year.

	U.S Equivalent	Metric Equivalent
Fluid oz.	8 fl. drams (1.804 cu. inches)	29.573 milliliters
Pint	16 fl. oz. (28.875 cu. inches)	0.473 liter
Quart	2 pints (57.75 cu. inches)	0.946 liter
Gallon	4 quarts (231 cu. inches)	3.785 liters

#### Waste per quarter at 60 psi water pressure

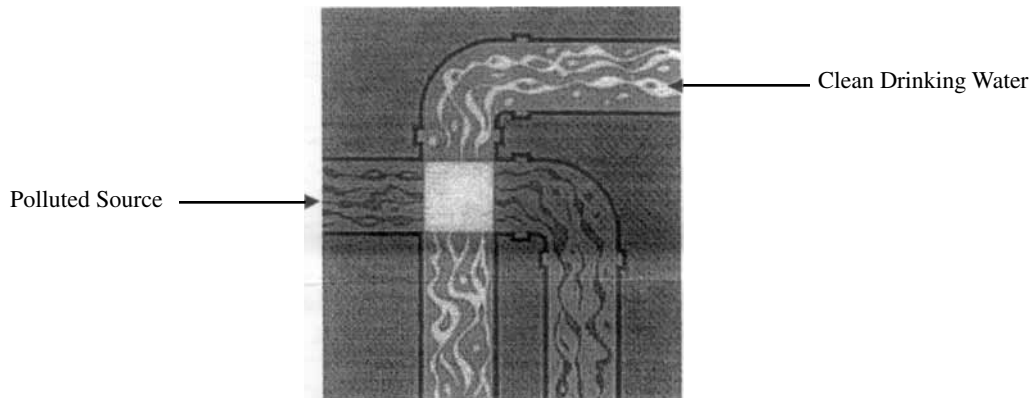
Diameter of stream	Gallons	Cubic Feet	Cubic Meters
 1/4"	1,181,500	158,000	4,475
 3/16"	666,000	89,000	2,521
 1/8"	296,000	39,400	1,115
 1/16"	74,000	9,850	280

↑ A continuous leak from a hole this size would, over a three month period, waste water in the amounts shown above.

### WATER CONSERVATION IN YOUR HOME

### WATER CONSERVATION OUTSIDE

Fixing leaking faucets, pipes, toilets, etc. See chart above.	Minimize the size of your lawn watering, this may consume more than 30% of summer residential water use.
Install water-saving devices in faucets, toilets and appliances.	Use mulch around plants and shrubs and choose plants that don't need much water.
Wash only full loads of laundry.	Use water from a bucket to wash your car, and save the hose for rinsing. A running hose uses 3 - 5 gal/min.
Don't use the toilet for trash disposal.	Sweep clippings and leaves from walls and driveways rather than using the hose.
Take shorter showers. An average shower uses 20 - 30 gallons.	Obey any and all water bans and regulations.
When washing hands, brushing teeth or shaving, use only as much water as you need, and avoid letting the faucet run.	Lawn watering can use 7 to 43 gallons per 100 ft



#### What is a Cross Connection and what can I do about it?

A cross connection is a connection between a drinking water pipe and a polluted source. The pollution can come from your own home. For instance, you're going to spray fertilizer on your lawn. You hook up your hose to the sprayer that contains the fertilizer. If the water pressure drops (say because of fire hydrant use in the town) when the hose is connected to the fertilizer, the fertilizer may be sucked back into the drinking water pipes through the hose. Using an attachment on your hose called a backflow-prevention device can prevent this problem.

The Acushnet Water Department recommends the installation of backflow prevention devices, such as a low cost hose bib vacuum breaker, for all inside and outside hose connections. You can purchase this at a hardware store or plumbing supply store. This is a great way for you to help protect the water in your home as well as the drinking water system in your town. For additional information on cross connections and on the status of your water system's cross connection program, please call 508-998-0230.