



North Raynham Water District

Raynham, MA

PWSID # 4245002

2007 Annual Water-Quality Report

VISIT US @
WWW.NRWD.ORG

North Raynham Water District
P.O. Box 1
Raynham, MA 02767

BULK RATE
CARRIET SORT
U.S. POSTAGE
PAID
RAYNHAM, MA 02767
PERMIT NO. 43

Water Quality Table

Inorganic Contaminants	Date Tested	Units	MCL	MCLG	Detected Level	Range	Major Sources
Fluoride	6/5/06	ppm	4	4	<0.10	<0.10	Erosion of natural deposits; Discharge from fertilizer and aluminum factories
Nitrate	6/6/07	ppm	10	10	2.47	0.41 - 2.47	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Nitrite	5/11/05	ppm	1	1	<0.05	<0.05	Erosion of natural deposits
Sodium	6/5/06	ppm	na	na	79.3	21.6-79.3	Erosion of natural deposits
Sulfate	6/4/07	ppm	na	na	16.4	12.2 - 16.4	Erosion of natural deposits
Inorganic Contaminants	Date Tested	Units	AL	MCLG	90th Percentile	# of sites found above the AL	Major Sources
Copper	6/12/05	ppm	1.3	1.3	0.15	0	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
Lead	6/12/05	ppb	15	0	.001	0	Corrosion of household plumbing systems; Erosion of natural deposits
Inorganic Contaminants	Date Tested	Units	MCL	MCLG	Detected Level	Range	Major Sources
Perchlorate	8/14/07	ppb	2.0	na	.14	.09 - .14	Blasting, fireworks, military munitions, disinction by-product
Radioactive Contaminants	Date Tested	Units	MCL	MCLG	Detected Level	Range	Major Sources
Alpha emitters	9/22/03	pCi/L	15	0	0	—	Erosion of natural deposits
Regulated							
Volatile Organic Contaminants	Date Tested	Units	MCL	MCLG	Detected Level	Range	Major Sources
Total Trihalomethane	8/14/07	ppb	80.0	na	26.4	3.5 - 26.4	By-product of drinking water chlorination
Total Haloacetic Acid	8/14/07	ppb	60	na	1.0	nd - 1.0	Drinking water chlorination
Unregulated							
Volatile Organic Contaminants	Date Tested	Units	MCL	MCLG	Detected Level	Range	Major Sources
Methyl-tertiary-butyl ether ¹	2007	ppb	na	na	nd	nd	Gasoline additive
Bromodichloromethane ^e	2007	ppb	na	na	2.4	1.6 - 2.4	By-product of drinking water chlorination
Bromoforn ¹	2007	ppb	na	na	2.1	1.1 - 2.1	By-product of drinking water chlorination
Chloroform	2007	ppb	na	na	0.9	0.6 - 0.9	By-product of drinking water chlorination
Chlorodibromomethane	2007	ppb	na	na	3.9	2.8 - 3.9	

Water Quality Table Footnotes

¹These are unregulated contaminants. Unregulated contaminants are those for which EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist EPA in determining their occurrence in drinking water and whether future regulation is warranted.

Key to Table

AL = Action Level
MCL = Maximum Contaminant Level
MCLG = Maximum Contaminant Level Goal
pCi/L = picocuries per liter (a measure of radioactivity)
ppm = part per million, or milligrams per liter (mg/L)
ppb = parts per billion, or micrograms per liter (ug/L)
na = not applicable
nd = none detected

This brochure explains how drinking water provided by North Raynham Water District is of the highest quality. Included is a listing of results from water quality tests as well as an explanation of where our water comes from and tips on how to interpret the data. We're proud to share our results with you. Please read them carefully.

We are proud to report that the water provided by NORTH RAYNHAM WATER DISTRICT meets or exceeds established water-quality standards.

In 2003 the Department of Environmental Protection completed the Source Water Assessment and Protection (SWAP) Program Report for The North Raynham Water District.

What is SWAP?

The Source Water Assessment and Protection (SWAP) Program, established under the Federal Safe Drinking Water Act, requires every state to:

- inventory land uses within the recharge areas of all public water supply sources;
- to assess the susceptibility of public water supplies to potential contamination from these land uses by microbiological pathogens and chemicals; and
- publicize the results to provide support for improved protection.

What is system ranking?

A susceptibility ranking of **high** was assigned to this system using the information collected during the assessment by the DEP.

Where Can I See The SWAP Report?

The complete SWAP report is available at the North Raynham Water District Office located at 80 Baker Road, The Town of Raynham Board of Health and the Board of Selectmen's offices located at 53 Orchard Street, Raynham, Massachusetts. For more information, call Arthur S. Bendinelli with the North Raynham Water District at (508) 824-0520.

Project Update

The District will begin construction of your new filtration plant during the spring of 2008. It is anticipated to be on-line during the summer of 2009. When completed, the plant will be capable of producing 1.3 million gallons of water per day. The

New Bedrock Well that was approved in 2007, the existing First Street Well and King Philip Wells 3A and 3B will be combined together to give a more uniform blend of water. The First Street Well has high levels of manganese and little iron, so the blend will provide a balancing out of the high iron content in the remaining sources. The new plant, designed to remove iron and manganese, the two major sources of customer complaints, will be a welcomed improvement for the ratepayers of the District. We look forward to the completion of this project and being able to provide a quality product.

How to Read This Table

This report is based upon tests conducted in the years 2003-2007 for North Raynham Water District. Terms used in the Water Quality Table and other parts of this report are defined here.

Maximum Contaminant Level or MCL

The highest level of a contaminant that is allowed in drinking water. MCL's 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.

Detected Level

The highest level detected of a contaminant for comparison against the acceptance levels for each parameter. These levels could be the highest single measurement, or an average of values depending on the contaminant.

Action Level (AL)

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

Range

The range of all values for samples tested for each contaminant.

The data presented in this report is from the most recent testing done in accordance with regulations.

For more information, call Arthur S. Bendinelli with North Raynham Water District at (508) 824-0520.

Additional Health Information

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 Environmental Protection Agency's Safe Drinking Water Hotline (800-426-4791).

The sources of drinking water (both tap water and bottled water) include rivers, 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, in some cases 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:

- (A) Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- (B) Inorganic contaminants, such as salts and metals, which can be naturally-occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- (C) Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.
- (D) Organic chemical contaminants, including synthetic and volatile organics, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff and septic systems.
- (E) Radioactive contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, EPA prescribes regulations to establish limits for contaminants in bottled water which must provide the same protection for public health. Food and Drug

Administration (FDA) regulations establish limits for contaminants in bottled water that must provide the same protection for public health.

There are also sources of contamination that exist from physical piping connections in the water supply system between potable and non-potable sources. The District is required by the State to maintain a program to eliminate all physical piping cross-connections in municipal, industrial and commercial establishments by the use and proper maintenance of backflow prevention devices. However, the law does not address residential cross-connections of which there are many. Residents should be aware of the hazards of any cross-connections between potable and non-potable sources that provide for the non-potable source to be siphoned back into the District's water system (potable source). This occurs when the water pressure in the water supply suddenly drops due to a fire or water main break and permits a contaminated source to flow back into the water piping. Common sources of residential cross-connections are filling of swimming pools and car wash buckets filled with soap that both have the hose submerged in the water. The best protection against any cross-connections is to provide an air gap between the source and the receptor.

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 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* and other microbial contaminants are available from the Safe Drinking Water Hotline (800) 426-4791).



The Board of Water Commissioners meets on a monthly basis. Please call the District office at (508) 824-0520 to find out the time for the next scheduled meeting. The meeting times are also posted at the water office located at 80 Baker Road and the Raynham Town Hall located at 53 Orchard Street, Raynham.