THE BOURNE WATER DISTRICT'S WATER QUALITY REPORT FOR 2013

(PWS ID # 4036000)

Dear Customer,

We are pleased to present a summary of the quality of the drinking water provided to you during 2013. We conducted over 447 tests for more than 84 contaminants. This report is a snapshot of last yearôs water quality. The Bourne Water District is committed to providing you with a reliable water supply. **We believe informed customers are our best allies**. You are welcome to attend the Board of Water Commissioners meetings held at the Bourne Water Districtôs office, at 211 Barlowôs Landing Road in Pocasset. The boardôs meetings are scheduled for the second Tuesday of the month at 8:30 AM, and the Annual District meeting is scheduled on the fourth Monday in April.

.

WATER SOURCES AND TREATMENT

The Bourne Water District is supplied by 7 different sources, six of our own gravel packed well sites and three gravel packed well sites from the Upper Cape Regional Water Supply Cooperative. Four of our well sites are in the Monument Beach area of the Town Forest. The other two wells are in the Cataumet area of the Town of Bourne. A new well, on Joint Base Cape Cod, will be on line in spring of 2014. The Bourne Water District treats all supplies with lime slurry for corrosion control. The lime slurry is used to raise the pH of the water. This makes the water less aggressive to the copper pipe and lead joints in your homes to prevent exposure to lead and copper.

WHAT DOES THE FOLLOWING TABLE MEAN?

Action Level (AL) The concentration of a contaminant which if exceeded triggers treatment or other requirements.

Maximum Contaminant Level (MCL) The highest level of a contaminant that is allowed in the drinking water. The MCL is set as close to the MCLG as feasible using the best available treatment technology.

Maximum Contaminant Level Goal (MCLG) The level of a contaminant in the drinking water below which there is no known or expected risk to health. The MCLG allow for a margin of safety.

KEY TO TABLE

AL = Action Level
MCL = Maximum Contaminant Level
MCLG = Maximum Contaminant Level Goal
MFL = million fibers per liter
Mrem/year = millirems per year (a measure of radiation absorbed by the body)
NTU = Nephelometric Turbidity Units
pci/l = picocuries per liter (a measurement of radioactivity)
ppm = parts per million, or milligrams per liter (mg/l)
ppb = parts per billion, or micrograms per liter (ug/l)
ppt = parts per trillion, or nanograms per liter
ppq = parts per quadrillion, or picograms per liter
TT = Treatment Technique

Contaminant	Year	Unit	MCL	MCLG	Highest Detect	Range	Major Sources
INORGANIC CONTAMINANTS							
Lead	2012	ppb	AL = 0.015	0	0.0042	0 - 0.0042	Corrosion of home plumbing system (The 90% value was 0.0023, no sites exceeded the action level) (The next scheduled lead sampling in 2015)
Copper	2012	ppm	AL = 1.3	0	0.96	0.16-0.96	Corrosion of home plumbing system (The 90% value was 0.327, no sites exceeded the action level) (The next scheduled copper sampling in 2015)
MICROBIOLOGICAL CONTAMINANTS							
Total Coliform	2013		0	0	0		Naturally present
VOLATILE ORGANIC CONTAMINANTS							
Tetrachloroethylene (PCE)	2013	ppb	5.0	0	1.73	0 ï 1.73	Leaching from vinyl lined pipes/factories/ dry cleaners
UNREGULATED CONTAMINANTS (No MCL)							
Manganese	2013	ppb	none		<0.008		Natural Erosion
Chloroform	2013	ppb	none	70	2.55	1.24 ï 2.55	Naturally occurring
Nickel	2009	ppm	n/a	0.1	0.065	<.005- 0.065	Naturally Erosion
Sodium	2012	ppm	OSRG = 20	n/a	21.6	4.0 ï 21.6	Road salt runoff
Sulfate	2009	ppm	750	n/a	8.1	6.3 ï 8.1	Natural sources
REGULATED CONTAMINANTS							
Asbestos	2013	ppm	7	5	0	0	Natural Erosion/ Leaching from pipe
Nitrate	2013	ppm	10	10	0.51	0.17 ï 0.51	Natural Erosion / Septic/Fertilizers
Nitrite	2011	ppm	1	0.004	0	0 - 0.004	Natural Erosion
Perchlorate	2013	ppb	2	0	0	0	An oxidizer in explosives
Radium 226	2012	pCi/L4	5	0	0.05	0.13	Natural Erosion
Radium 228	2012	pCi/L4	5	0	-0.62	1.45	Natural Erosion
Gross Alpha Particle Activity	2012	pCi/L	none	n/a	0.72	0.05 - 0.72	Natural Erosion

The table above includes water quality results from both the Bourne Water District and the Upper Cape Regional Water Cooperative.

NATIONAL PRIMARY DRINKING WATER REGULATION COMPLIANCE

The Total Coliform rule requires water systems to meet a stricter limit for Coliform bacteria. Coliform bacteria are harmless, but the presence in water can be an indication of disease-causing bacteria. When Coliform bacteria is found, special follow up tests are done to determine if harmful bacteria are present in the water supply. Over 431 Coliform samples were taken throughout the Bourne Water District in the year 2013.

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 Bourne Water District 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.

Sodium; ORSG = 20 Sodium sensitive individuals, such as those experiencing hypertension, kidney failure or congestive heart failure, should be aware of the levels of sodium in their drinking water where exposures are carefully being controlled. Massachusetts Office of Research and Standard Guidelines (ORSG): This is the concentration of a chemical in drinking water, at or below which, adverse health effects are likely 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.

The Bourne Water District sampled for Synthetic Organic Compounds (SOC) in 2012. All tested SOC Regulated Contaminants had returns of no detect (no contaminants present).

In addition to the contaminants we test for, we are mandated to test for hundreds of additional substances and microscopic organisms to make certain our water is safe and of high quality. If you are interested in a more detailed report, contact Andrew G. Campbell at 508-563-2294.

REQUIRED ADDITIONAL HEALTH INFORMATION:

To insure that tap water is safe to drink, Department of Environmental Protection (DEP) and Environmental Protection Agency (EPA) prescribes limits on the amounts of certain contaminants in water provided by public water systems. Food and Drug Administration (FDA) and the Massachusetts Department of Public Health regulations establish limits for contaminants in bottled water. 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

Safe Drinking Water Hotline (1-800-426-4791).
The sources of drinking water (both tap and 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 the sources 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 storm 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, storm water 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 storm water runoff and septic systems.

(E) Radioactive contaminants, which can be naturally occurring or be the results of oil and gas production and mining activities. 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. FDA regulations establish 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 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 infections by Cryptosporidium are available from the Safe Drinking Water Hotline (1-800-426-4791).

SOURCE WATER ASSESSMENT
The Bourne Water District had a source water assessment performed by the MA. Department of Environmental Protection in 2002. 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.

- Assess the susceptibility of drinking water sources to contamination from these land uses.

- Publicize the results to provide support for improved protection.

A susceptibility ranking of high was assigned to the Bourne Water District using the information collected during the assessment by the DEP. The high ranking was due to the potential contamination from land uses such as auto repair shops, truck terminal, furniture refinishing, auto salvage operation, an industrial park and activities in the recharge area (Zone IIôs)of some of the wells.
The complete SWAP report is available at the Bourne Water Districtôs office. For more information contact Andrew G. Campbell at 508-563-2294.

CROSS CONNECTION
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, and you hook up your hose to the sprayer that contains the fertilizer. If the water pressure drops (say because of a fire hydrant being used or water main break) when the hose is connected to the fertilizer sprayer, the fertilizer may be sucked back into the drinking water pipes through your hose. Using an anti-siphon backflow-prevention device on your sprayer or hose bib can prevent this problem.
The Bourne Water District recommends using devices with an anti-siphon feature or equipping hose bibs with hose bib vacuum breakers to prevent against back flow. For additional information on cross connections and on the status of your water system's cross connection program, please contact Andrew G. Campbell at 508-563-2294

UPPER CAPE REGIONAL WATER SUPPLY COOPERATIVE (PWS #4261024)

The Upper Cape Regional Water Supply consists of three groundwater supply wells located on the Massachusetts Military Reservation. A Board of Managers representing the four member public water supply systems manages the Cooperative. The member public water supply systems include Bourne Water District, Sandwich Water District, Mashpee Water District and the Town of Falmouth. The Cooperative also has capacity to supply water to the Otis Air National Guard public water system, and the Barnstable County Jail.

Wells #1, #2, #3 are located in a forested area of the northeastern portion of the Massachusetts Military Reservation (MMR). The MMR has adopted a Groundwater Protection Plan to prohibit inappropriate activities in the Zone II areas of community public water supply wells. In addition, the creation of the Environmental Management Commission provides oversight over activities on the northern portion of the MMR. For information regarding the Groundwater Protection Plan call Robert Cannon at 508-968-6487. For information regarding the Environmental Management Commission call Mark Begley at 508-968-5127.