

WATER QUALITY REPORT FOR 2008

The Plainville Water Department (PWD); Massachusetts PWS ID # 4238000, is pleased to present our 2008 Water Quality Report. We are committed to supplying our customers with drinking water that meets or exceeds both Federal and State Standards for quality and safety. This report; required to be published annually before July 1st of each year, is being made available thru this newspaper and is also available upon request to our office.

PWD Water System

Our system is comprised of 3 main wells with 2 satellite wells near Turnpike Lake; 1 well off West Bacon Street and 3 wells at Lake Mirimichi. Water from the wells at Turnpike Lake has been classified as Groundwater Under The Direct Influence of Surface Water, requiring us to provide additional treatment and monitoring procedures. Treatment consists of disinfection using liquid chlorine with extended contact time within a one half million gallon storage tank and ultraviolet light technology; pH adjustment using sodium hydroxide, iron and manganese removal using greensand pressure filtering with potassium permanganate addition for aeration and aluminum sulfate for

coagulation and turbidity control for filtered solids. Water from the well off West Bacon Street is pumped to a filtration plant in North Attleboro (N.A.) where it receives similar treatment as the wells at Turnpike Lake with an additional process, the addition of sodium fluoride and the exception of the ultraviolet light disinfection process, as that is not necessary. This water is then pumped into the N.A. water distribution system and a booster pumping facility is utilized to return water from N.A. back to Plainville. Water from the wells at Lake Mirimichi is treated with an aeration process, disinfected with liquid chlorine, pH adjusted with sodium hydroxide.

Cross Connection Component

A cross connection is defined as “any connection between a drinking water pipe used for potable or “safe to consume” water, provided by the PWD and an unapproved water source or any possible source of pollution, such as a private well, irrigation system or other processes within a commercial, industrial or residential facility that; in the possible instance of back-siphonage, may contaminate or make the water provided by the PWD unfit for human consumption”. The PWD

operates a cross connection control program aimed at the prevention of any such instances. Please contact the PWD for more information regarding our program.

Definitions

The following is a summary of the terms used in the next section of this report that deals with the list of contaminants detected in the water supplied by PWD during 2008 or within the last five years as required. Not listed are or may be numerous other contaminants for which we tested but were not detected.

Maximum Contaminant

Level Goal: (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.

Maximum Contaminant

Level: (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.

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

Treatment Technique: (TT) a required process

intended to reduce the level of a contaminant in drinking water.

90th Percentile: out of every ten homes, 9 were at or below this level.

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.

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.

Ppm: parts per million; one part per million is equivalent to 1 dollar in 1 million dollars

Ppb: parts per billion; one part per billion is equivalent to 1 dollar in 1 billion dollars

ND: not detected

pCi/L: picocuries per litre is a measure of the radioactivity in water

UR: unregulated

SWAP: Source Water Assessment and Protection; what is a SWAP? The SWAP program assesses the susceptibility of public water supplies to potential contamination by microbiological pathogens and chemicals. A susceptibility ranking for every system is assigned

using the information collected by DEP during the assessment. The SWAP Report for Plainville is available at our office and on line at <http://www.mass.gov/dep/water/drinking/swapreps.htm>.

Is Our Water Safe?

Some people may be more vulnerable to contaminants in drinking water than the general population. People with immuno-compromised human systems such as persons with cancer and undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly and some infants can be particularly at risk from infections. These people should seek advice from their health care providers.

EPA/Centers for Disease Control and Prevention (CDC) guidelines on lowering the risk of infection by cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline 800-426-4791.

Substances Found In Your Tap Water

Sources of drinking water (tap and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs and wells. As water passes through the ground or over the surface of the land, it dissolves naturally occurring

minerals and sometimes radioactive materials, materials from animals and human activity. These substances can sometimes end up in the drinking water, some of which are listed here: Microbial contaminants, Inorganic contaminants, pesticides and herbicides, other organic contaminants, radioactive contaminants and personal care and pharmaceutical products. In order to assure that **TAP WATER** is safe to drink, the Massachusetts and the United States EPA prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. All 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. *"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. Plainville 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>."
More information about contamination and potential health affects can be obtained by calling the EPA's **Safe Drinking**

Water Hotline 800-426-4791. Or if you want to know more about the Plainville Water Supply or System or this report, please contact James Marshall, Superintendent at 508-695-6871 or by email at supt@plvws.org.

Inorganic Contaminants	MCL	MCLG	Plainville Water	Range of Detection	Sample Date	Violation	Typical Source of Contaminant
Fluoride	2	4	1.5	0.0 - 1.5	varies	No	water additive for promotion of strong teeth; erosion of natural deposits; discharge from fertilizer and aluminum factories
Nitrate as nitrogen (ppm)	10	10	0.65		5/23/2008	No	runoff from fertilizer
Unregulated contaminants	MCL	MCLG	Plainville Water	Range of Detection	Sample Date	Violation	Typical Source of Contaminant
Chloroform	n/a	n/a	18.1	n/a	varies	No	a by-product of drinking water chlorination (regulated collectively with total trihalomethanes (TTHMs); in non-chlorinated sources, chloroform may be naturally occurring.
Bromodichloromethane	n/a	n/a	11.3	n/a	varies	No	Trihalomethane; by-product of drinking water chlorination
Chlorodibromomethane	n/a	n/a	5.6	n/a	varies	No	Trihalomethane; by-product of drinking water chlorination
Bromoform	0.8	n/a	0.8	n/a	varies	No	Trihalomethane; by-product of drinking water chlorination
Contaminant	MCL	MCLG	Plainville Water	Range of Detection	Sample Date	Violation	Typical Source of Contaminant
Perchlorate	2	0	0	0.07 - 0.15	5/1/2008	No	rocket propellants, fireworks, munitions, flares, blasting agents.
Contaminant	Action Level (AL) mg/l	90%th mg/l					
Lead	0.015	0.005	0	.001 - .006	9/17-19/2008	no	corrosion of household plumbing systems; erosion of natural deposits
Copper	1.3	0.3	0	0.11 - 0.34	9/17-19/2008	no	corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Contaminant	MCL	MCLG	Range of Detects	Average Detected Levels		Violation	Possible Source
Total Haolacetic Acids (HAA5) (ppb)	60	n/a	2.0 - 27.8	11.45	varies	No	By product of water disinfection
Total Trihalomethane (TTHM) (ppb)	80	n/a	5.9 - 108.0	38.23	varies	No	By product of water disinfection