Consumer Confidence Report for Year: 2005

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PRESORT
BULK RATE
U.S. POSTAGE
PAID
Tewksbury, MA
PERMIT No. 33

Resident
Postal Patron
Rural Route Patron

Town of Tewksbury Water Department **PWSID# 3295000**

Water Billing: (978) 640-4350 Water Plant: (978) 858-0345
Water / Sewer Division: (978) 640-4440 ext. 5
For Questions and Inquiries Contact:
Lewis Zediana, Chief Operating Engineer: (978) 858-0345

Water Source: Merrimack River Alternative Sources: Lowell Water, Andover Water and Billerica Water.
Water Treatment Technique: Full conventional with dual media filters using Activated Carbon and Sand.
Treatment Capacity: 7 million gallons per day. System Storage Capacity: 2.0 million gallons.

Useful Websites:
www.epa.gov and www.state.ma.us/dep and www.tewksbury.info

Tours and participation in the water system process may be arranged at the above numbers.

As always we ask all residents to conserve water as best as possible.

Backflow preventor issues or questions call 978-858-0345

Please find below our water quality analysis report. We are required to report any regulated detectable compounds present in the water.

Many other tests are performed which were found to be non-detectable and therefore are not tabulated.

The source water assessment report is available for viewing or downloading at:
http://www.mass.gov/dep/water/drinking/neroreps.htm

This report and much of its format is mandated by the EPA.

Analysis Table:

Contaminant	Highest detect value	Range detected	Average detect	MCL/ MRDL	MCLG/ MRDLG	Violation (Y/N)	Possible source of contamination
Perchlorate (PPB)	0.3	ND-0.3	0.1	1	0	N	Oxygen additive for solid fuel propellant for rockets fuels and missiles.
Fluoride (PPM)	0.87	NA	0.87	4	4	N	Erosion of natural deposits; water additive which promotes strong teeth; Discharge from fertilizer and aluminum factory
Sodium (PPM)	38	38-38	38	N/A	N/A	N	Natural sources; runoff from use as salt on roadways; by-product of treatment process
Nitrate (PPM)	0.33	0.33-0.33	0.33	10	10	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of nature deposits
Turbidity (NTU)	0.06 NTU	0.03-0.06	0.04	0.30	<5% over 0.3 NTU	N	Soil runoff
Sulfates (PPM)	22.0	NA	22.0	N/A	N/A	N	Soil runoff and household detergents
TTHM's (PPB)	103	38-103	70 average	80 average	N/A	N	By-product of drinking water chlorination
HAA's (PPB)	28	8.6-28	17	60	N/A	N	By-product of drinking water chlorination
VOC's	None Detected	None Detected	None Detected	varies	0	N	Discharge from industrial chemical factories
Chlorite (PPM)	0.16	0.04-0.16	0.07	1.0	N/A	N	Disinfection by-product.
Total Coliform	0	0	0	< 5%	0	N	Naturally Present in the Environment
Contaminant	**90TH percentile**	**# of sites exceeded**	**# of sites sampled**	**Action level**	**MCLG**	*****	**Possible source of contamination**
Copper (PPM)	0.066	0	31	1.3	1.3	N	Corrosion of household plumbing systems; erosion of natural deposits; Leaching from wood preservatives
Lead (PPM)	0.004	0	31	0.015	0	N	Corrosion of household plumbing systems; erosion of natural deposits

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Important definitions

1. **Maximum Contaminant Level (MCL)** – the highest level of a contaminant that is allowed in drinking water.
2. **Maximum Contaminant Level Goal (MCLG)** – the level of a contaminant in drinking water below which there is no known or expected risk to health.
3. **Maximum Residual Disinfectant Level (MRDL) --** The highest level of a disinfectant (chlorine, chloramines, chlorine dioxide) allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.
4. **Maximum Residual Disinfectant Level Goal (MRDLG)** -- The level of a drinking water disinfectant (chlorine, chloramines, chlorine dioxide) below which there is no known of expected risk to health. MRDLG's do not reflect the benefits of the use of disinfectants to control microbial contaminants.
5. **Treatment Technique (TT)** – A required process intended to reduce the level of a contaminant in drinking water.
6. **Action Level (AL)** – The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.
7. **PPB –** Parts per billion or micrograms per liter (µg/L).
8. **PPM –** Parts per million or milligrams per liter (mg/L).

Substances found in tap water

Sources of drinking water (both tap water and bottled water) 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 in some cases, radioactive material. It can pick up substances resulting from the presence of animals or from human activity. Contaminants that may be present in source water include:

Microbial contaminants -such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
Inorganic contaminants -such as salts and metals, which can be naturally-occurring or result from urban storm-water 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 agricultural, urban storm-water runoff, and residential uses.
Organic chemical contaminants -including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm-water runoff, and septic systems.
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, the U.S. Environmental Protection Agency (EPA) prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. The Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water that must provide the same protection for public health. 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. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline at 800.426.4791.

Important Information

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 some infants can be particularly at risk from infections. These people should seek advice about drinking water 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 at 800.426.4791.

Lead*:* 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 and flush your tap for 30 seconds to 2 minutes before using tap water. Additional information is available from the Safe Drinking Water Hotline at 800.426.4791.

THM: Some people who drink water containing trihalomethanes in excess of the MCL over many years experience problems with their liver, kidneys, or central nervous systems, and may have increased risk of getting cancer.

Turbidity: Turbidity has no health effects. However, turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease causing organisms. These organisms include bacteria, viruses and parasites that can cause symptoms such as nausea, cramps, diarrhea and associated headaches.

Q&A:

My water is cloudy?

During seasonable changes harmless gasses dissolved into the water escape once the water is poured into a glass. Typically the water will clear from the bottom up as the tiny bubbles float to the top. If you lose water pressure and/or flow and you have cloudy water this may indicate a broken service lie.

My water is brown?

There are several reasons for brown water. Brown water is caused by tiny particles of minerals that form during the trip to your house through many miles of pipeline. Brown water is typically caused by agitation of the pipes by construction, fire department use, sudden increases in water demand, pipe breaks. These particulate minerals are typically always in the water and are harmless. Brown water is aesthetically unappealing and should not cause harm if accidentally used. Brown water can typically be cleared up by running the cold water only.