Consumer Confidence Report for Year: 2007

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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: 7.0 million gallons.

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

Please visit these sites: www.merrimack.org, www.cleanriverproject@comcast.com and www.shawsheen.org these non-profit organizations have contributed greatly to help monitor and clean-up sections of the Merrimack and the Shawsheen River. Please take time to visit their web-sites. They are always looking for volunteers and assistance in the form of contributions.

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. Water usage: 1049 million gallons or 52 gallons/ person /day

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: **www.mass.gov/dep/water/drinking/neroreps.htm**

Town Re-metering Program

In July of 2008 the Town of Tewksbury will start a re-metering program to replace all of the water meters in the town. Over 9,000 residential water meters and over 500 industrial meters will be replaced over a 3 year period. The water meters are being supplied by the Badger Meter Company, Milwaukee, Wisconsin and the actual installation shall be performed by the Easton WinWater Works Company, Brockton, MA.

The re-metering process shall consist of the installer contacting residents to arrange a suitable time to remove the old meter and install the new meter. In addition, new technology call Automatic Meter Reading (AMR) will be installed along with the new meter. The AMR unit consists of a small transmitter contained in sealed box that operates on its own internal battery power. This unit (Called an MTU) will be installed typically in the ceiling joists or in any other suitable location. This device will monitor the water meter and report back daily meter readings through a radio collection network already up and running in the town. This technology will allow for up to date meter readings, eliminate most the labor involved in reading meters manually, allow for detection of 'stuck' meters and will also offer leak detection. There will be no cost involved for replacement of residential meters. However residents with non-standard plumbing or damaged valves may require the services of a plumber before the installation can be performed. To avoid conflicts of interest the installing company may not perform plumbing services as part of this program. They are however capable of repairing any accidental damage that may occur during the swap out. This program shall be performed in cooperation with the water department and we ask for everyone's patience and cooperation while the process takes place. Information and questions can be directed to anyone of the numbers listed within this brochure.

Yearly Reportable Analysis Table

Contaminant	Highest detect value	Range detected	Average detect	MCL/ MRDL	MCLG/ MRDLG	Violation (Y/N)	Possible source of contamination
Perchlorate (PPB)	None Detected	None Detected	None Detected	2	0	N	Oxygen additive for solid fuel propellant for rockets fuels and missiles.
Fluoride (PPM)	1.10	0.90-1.10	1.10	4	4	N	Erosion of natural deposits; water additive which promotes strong teeth; Discharge from fertilizer and aluminum factory
Sodium (PPM)	23	23	23	N/A	N/A	N	Natural sources; runoff from use as salt on roadways; by-product of treatment process
Nitrate (PPM)	0.43	0.22-0.43	0.33	10	10	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of nature deposits
Turbidity (NTU)	0.08 NTU	0.02-0.08	0.04	0.30	<5% over 0.3 NTU	N	Soil runoff
Sulfates (PPM)	21.0	21.0-21.0	21.0	N/A	N/A	N	Soil runoff and household detergents
TTHM's (PPB)	80	37-80	55.31 average	80 average	N/A	N	By-product of drinking water chlorination
HAA's (PPB)	33.6	4.0-33.6	18.50	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)	0.12	0.01-0.12	0.063	1.0	N/A	N	Disinfection by-product.
Total Coliform	0	0	0	< 5%	0	N	Naturally Present in the Environment
Sampled 8/05	**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

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).

What is the Town Stormwater Management Plan? Please see: www.tewksbury.info/dcd/engineering/Stormwater/indexSW.html

Storm water is water that passes over impervious surfaces such as parking lots, driveways, buildings etc., but does not have a chance to be absorbed into the ground. Rather it simply drains into a collection system and runs directly into the nearest river, pond or lake. Unfortunately this drainage also drags with it various contaminants such as grit, oil and gas, bacteria and other unwanted substances. This type of pollution is known as non-point pollution since it cannot be traced to one "offender". Through the Clean Water Act, all municipalities with populations over 10,000 people must create a Stormwater Management Plan. This document has been created with the input and cooperation of the Town Manager, DPW, Board of Health, Town Engineer and Conservation Commission. The Plan plots the actions to be taken over a 5 year period to educate the community about the importance of keeping our stormwater outfalls clean. There are also many action items town departments must implement to keep Tewksbury in compliance with EPA regulations. For more information, please contact Michele Stein, Town Engineer at 978-640-4370, ext 239 or E-mail mstein@town.tewksbury.ma.us

Substances Found in Source 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.

What is New?

The new Colonial Drive storage tank was officially put on-line back in January. This new water tank has increased our storage to about 7 million gallons of water. Typically anywhere from 4-7 million gallons may be held in storage using all three water tanks. This will supply the town with a 24-48 hour back-up supply in case of an emergency. For many years the town operated on as little as 3-4 hours of back-up water. There were many times that the back-up supply dwindled to even less. This valuable infrastructure investment will aid Tewksbury in supplying water to the entire town for many years to come. A picture of the new Colonial Drive water tank has also been featured in the AWWA Journal, a national trade magazine.

Do you speak SCADA?

SCADA or Supervisor Command and Data Acquisition is a digital communication system based on very small VHF radio-modems. We now transmit through the air all of our commands and data between the various stations. This system is based on state of the art electronics and offers an easily expandable system to accommodate any new stations that might be needed in the future. Much of the system was paid for through an energy grant obtained from National Grid.

Security Up-grade:

We now have CCTV cameras patrolling areas of the water system. It is a Federal offense (US Code Title 42, section 300i-1) to trespass or damage any part of a public water supply system. We can see our sites night and day adding additional security.

IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER
Monitoring Requirements Not Met for Tewksbury Water Division

Our water system violated a drinking water standard over the past year. Even though this was not an emergency, as our customers, you have a right to know what happened and what we did to correct these situations.

We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not our drinking water meets health standards. During February 2008 we did not monitor or test for the disinfectant by-product known as Chlorite in the water distribution system at three distinct locations and therefore cannot be sure of the quality of our drinking water during that time. However, we are also required to monitor the Chlorite concentration as your drinking leaves the water treatment plant and during the month of February 2007 the Chlorite concentrations ranged for a low of 0.00 ppm or mg/l to a high of 0.21 ppm or mg/l.

What should I do? There is nothing you need to do at this time.

The table below lists the contaminant we did not properly test for during the last year, how often we are supposed to sample for this contaminant and how many samples we are supposed to take, how many samples we took, when samples should have been taken, and the date on which follow-up samples were taken.

Contaminant	Required sampling frequency	Number of samples taken	When all samples should have been taken	When samples were or will be taken
Chlorite	3 samples every month	0	February 2008	March 2008-Six samples were taken

What happened? What is being done?

The laboratory that performs the monthly Chlorite analysis discontinued shipments of sample bottles. When we discovered the oversight the samples ended up being collected six (6) days late. We have now instituted a UPS tracking system to eliminate this from happening. For more information, please contact Lewis Zediana at 978-858-0345 or E-mail Lzediana@town.tewksbury.ma.us

Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.

This notice is being sent to you by: The Tewksbury Water Department: PWS ID#3295000 Distributed on or before June 30th, 2008.

Please note that the above language is mandatory as dictated by the EPA. The Tewksbury Water Department has a near perfect track record in regards to performing testing and monitoring, this is our first monitoring violation since the plant opened in 1988. While we do take all of the water regulations and rules very seriously, we do however take exception to the phrasing above "*and therefore cannot be sure of the quality of our drinking water during that time."* This facility also performs our own daily testing for Chlorite as it leaves the plant and was found to be between the levels reported in the second paragraph above. Since we do respect the rules and regulations of the safe water drinking act this informational brochure is presented in the form as required by the regulatory agencies that oversee our facility. (LZ/ML)

Future Plans:

We are finishing up several on going projects which include a new Powered Activated Carbon system. Powered Carbon is used in this process to help "sweeten" the water taste. In addition, powered activated carbon absorbs disinfection by-products and other organic substances naturally found in the water. Work is beginning on an automatic valve to help balance the flow of water throughout the town more evenly. In addition, refurbishment of two emergency inter-connections between the Town of Tewksbury, the City of Lowell and the Town of Andover are being worked on. The continued sewer work will place a challenge for the outside water crews as they assist in mark-outs for construction of sewer mains and perform repairs for pipe breaks that are all too common to the sewer contracts.