MONSON'S 2009 WATER QUALITY REPORT

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We are dedicated to providing a safe, dependable and affordable supply of drinking water to our customers.

The Massachusetts Department of Environmental Protection (MassDEP) and Environmental Protection Agency (EPA) prescribe regulations that limit the amount of certain contaminants in water which we monitor and test accordingly, ensuring that you receive the safest and highest quality drinking water possible. This report includes 2009 water quality testing results, information on improvements we have made to our water system, and tips on how you can help to protect our wells and use water wisely.

During calendar year 2009, the rehabilitation of the Ely Road Water Tank #1 was completed. The project included the cleaning and repainting of the tank, installation of a Tideflex internal mixing system to maintain water freshness, an additional 30" man-way, a re-fabricated overflow hatch, a new roof vent and various safety and security improvements. We were able to incorporate this project into our existing Drinking Water State Revolving Fund (DWSRF) 2% loan and the original 1.8 million dollar loan amount, saving thousands of dollars in interest and restored our old tank to like new condition. This project also qualified for $63,317 in American Recovery and Reinvestment Act (ARRA) funds which results in a significant discount on the project cost. For more information about your water system, please visit Our Page on the Town's Web-Site at www.monson-ma.gov.

We are pleased to announce that our drinking water was judged best tasting in Massachusetts for the second year in a row at the Massachusetts Rural Water Association (MWRA) Fourth Annual Water Taste Test Competition held on September 9, 2009. The water from Monson defeated some thirty other water systems throughout the state to be crowned "Mass Rural Water Taste Test Champion 2009".

The Board meets on alternate Wednesdays at 6:30 p.m. at the Monson Water Dept.; meetings are posted at the town offices and on our web page. The public is always invited to attend or contact us with any concerns you may have with your water quality. Your support is appreciated as the Commission and staff strive to improve and upgrade the water system while keeping rates at or below the state average and ensuring you receive the highest quality drinking water and best service possible 24 hours a day, 365 days per year.

Sources of Drinking 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, and 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 stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining and farming; **Pesticides and herbicides**, may come from a variety of sources such as agriculture, urban storm water runoff and residential uses; **Organic chemical contaminants**, include synthetic and volatile organic chemicals which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems; **Radioactive contaminants** which can be naturally-occurring or be a result of oil and gas production, and mining activities.

Monson's Water Sources	DEP Source ID #	Source Type	Location
Bethany Rd Well	1191000-03G	Groundwater	East side of Chicopee Brook off of Bethany Rd
Palmer Rd Well	1191000-04G	Groundwater	West side of Chicopee Brook off of Rt. 32
Bunyan Rd Replacement Wells	1191000-06G & 07G	Groundwater	West side of Chicopee Brook off of Bunyan Rd

Total Pumping for 2009 = 155,526,000 gal. Average of 426,099 gal/day. Our peak day was 1,330,000 gal. on 09/20/2009

Monson Source Protection ~ MassDEP completed a Source Water Assessment and Protection (SWAP) Report in 2002 which assesses the susceptibility of the water sources supplying Monson. The SWAP report is available at our office or online at www.state.ma.us/dep/brp/dws/. Based on the information collected during the assessment our system received a susceptibility ranking of high. One of the major recommendations of the report was the completion and adoption of a Source Water Protection Plan (SWPP) which was done in 2004 and available at our office or online on our web page. This plan will assist us in minimizing risks to our water sources and provide guidelines for future growth and development. Remember to protect your drinking water through proper auto care and waste disposal and remember to dispose of hazardous household chemicals at hazardous materials collection days. If you choose to fertilize think about using organic types. Please follow the directions on the package and use only what is necessary more is not always better.

How Is Monson's Water Treated? ~ Many drinking water sources in New England are naturally corrosive (i.e. they have a pH of less than 7.0). So, the water they supply has a tendency to corrode and dissolve the metal piping it flows through. This not only damages pipes but can also add harmful metals, such as lead and copper, to the water. For this reason it is beneficial to add chemicals that make the water neutral or slightly alkaline. The Monson Water Department adds Sodium Carbonate (Soda Ash) to adjust the water to a non-corrosive pH. Testing throughout the water system has shown that this treatment has been effective at reducing lead and copper concentrations.

Cross Connection Program ~ 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. You hook up your hose to the sprayer that contains the fertilizer. If the water pressure drops (say because of fire hydrant use in the town) when the hose is connected to the fertilizer, the fertilizer may be sucked back into the drinking water pipes through the hose. Using an attachment on your hose called a backflow-prevention device can prevent this problem. The Monson Water Department recommends the installation of backflow prevention devices, such as a low cost hose bib vacuum breaker, for all inside and outside hose connections. You can purchase this device at a hardware store or plumbing supply store. This is a great way for you to help protect the water in your home as well as the drinking water system in your town! For additional information on cross connections and on the status of your water system's cross connection program, please contact us.

Water Main Flushing ~ To ensure our water quality is at its best our flushing program will continue during 2010. Prior to flushing, notices will be published in the Hometown Section of the Springfield Republican paper and broadcast on MPACT. Updates will appear on our web page providing the expected daily flushing area. We apologize for any inconvenience that this may cause. The discolored water may not be aesthetically pleasing, but it will be temporary and it is not harmful, however we do advise you to take precautions regarding your laundry routine.

MONSON (PWS ID# 1191000) 2009
Water Quality Testing Results

The MassDEP has reduced the monitoring requirements for the following contaminant groups because that particular source has been determined not to be at risk of contamination. The date the last sample was collected for the specific group is listed in the table below and was found to meet all applicable EPA and MassDEP standards.

2009 Water Quality Monitoring Waiver Status										
Source	VOC	Sampled	SOC	Sampled	IOC	Sampled	Arsenic	Sampled	Perchlorate	Sampled
Bethany Rd Well	No	5/4/2009	Yes	2/24/2003	Yes	7/27/2009	Yes	7/27/2009	Yes	7/27/2009
Palmer Rd Well	No	5/4/2009	Yes	2/24/2003	Yes	7/27/2009	Yes	7/27/2009	Yes	8/14/2008
Bunyan Rd Wells #1& #2	Yes	11/7/2008	Yes	11/6/2006	No	7/27/2009	No	7/27/2009	Yes	8/14/2008

VOC = volatile organic contaminants; **SOC** = synthetic organic contaminants; **IOC** = Inorganic contaminants.

The water quality test results presented in the table below are from the most recent round of testing done in accordance with the regulations. All data shown was collected during the last calendar year unless otherwise noted in the table. **Coliforms** are bacteria that are naturally present in the environment and are not harmful themselves; however, their presence can be an indicator that other potentially harmful bacteria may be present. Coliforms were found in more samples than allowed and this was a warning of potential problems. Immediate follow-up tests were performed to see if other bacteria of greater concern, such as fecal coliform or E. coli, were present. We did not find any of these bacteria in our subsequent testing, and further testing shows that this problem has been resolved. The public was notified via mailing, posting and website publication in accordance to federal regulations. We are committed to providing you with the best water quality available. We are proud to report that last year your drinking water met all applicable health standards regulated by the state and federal government. Visit our web page for additional testing information. Please note a list of terms, abbreviations and definitions-used has been included below the table.

Contaminant	Level Detected	HDL	MCL	MCLG	Date	Violation	Possible Sources
Nitrate	0.717 - 1.57 ppm	1.57 ppm	10 ppm	10 ppm	7/27/2009	No	Runoff from fertilizer use, leaching from septic tanks, erosion of natural deposits
Antimony	ND – 1.2 ppb	1.2 ppb	6 ppb	6 ppb	7/27/2009	No	Discharge from fire retardents; ceramics; electronics; solder
Barium	0.032-0.066 ppm	0.066 ppm	2 ppm	2 ppm	7/27/2009	No	Discharge from drilling wastes & metal refineries, erosion of natural deposits
Sodium	8.16 – 49.0 ppm	49.0 ppm	none	none	7/27/2009	No	Erosion of natural deposits
Gross Alpha Activity	0.14 - 0.40 pCi/L	0.40 pCi/L	15 pCi/L	0 pCi/L	5/2/2006	No	Erosion of natural deposits
Radium 228	0.34 - 0.82 pCi/L	0.82 pCi/L	5 pCi/L	0 pCi/L	5/2/2006	No	Erosion of natural deposits

Contaminant	# Positive Samples	# Samples	MCL	MCLG	Date	Violation	Possible Sources
Total Coliform	13	33	1	0	9/14-9/30/2009	Yes	Naturally present in environment
Fecal Coliform or E.Coli	0	13	*	0	9/14-9/30/2009	No	Human and animal fecal waste

Contaminant	Level Detected	Action Level	90th Percentile	Sites Sampled	Sites Above Action Level	Violation	Sample Date	Possible Sources
Copper	0.016–0.101 ppm	1.3 ppm	0.082 ppm	20	0	No	9/5/2008	Household plumbing
Lead	ND – 10.8 ppb	15 ppb	2.2 ppb	20	0	No	9/5/2008	Household plumbing

* Compliance with fecal coliform/E.coli MCL is determined upon additional repeat testing

Action Level (AL) = The concentration of contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow; **HDL** = Highest detected level; **Maximum Contaminant Level Goal (MCLG) =** The level of 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 contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology; **n/a** = not applicable; **nd** = not detectable at testing limit; **ppb** = parts per billion (1 drop in 10,000 gallons); **ppm** = parts per million (1 drop in 10 gallons); **pCi/L** = picocuries per liter; **mg/L** = milligrams per liter; **90th percentile** = Nine out of every ten homes sampled were at or below this level.

Health Information ~ In order to insure that tap water is safe to drink, The MassDEP and EPA prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. The Food and Drug Administration (FDA) and the Mass Department of Public Health (DPH) regulations establish limits for contaminants in bottled water that must provide the same protection for public health. 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. 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 from their health care providers. Contact EPA's **Safe Drinking Water Hotline at 800-426-4791** for more information about contaminants, potential health effects and EPA/CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants. 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 Monson 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.

Fluoride is not added to the town's drinking water. Please discuss your children's fluoride needs with their pediatrician or dentist.

Water Saving Tips ~ Only use as much as needed. **Change your habits;** turn water off while brushing teeth. Only do full loads when washing dishes and when doing laundry use the proper setting size for the load you are washing. **Repair leaky** faucets, pipes, showerheads, plumbing fixtures and **especially toilets** to avoid high water bills and wasted water. **Install water-saving devices,** such as low-flow sink faucets and shower heads, update your toilet to a modern unit which uses 1/3 the water an older toilet uses. **Outdoor tips,** only water when needed (grass does not move back when stepped on) and do so only during the cooler parts of the day, watering in the early morning or evening hours minimizes evaporation. Use mulch to retain water, use drought tolerant plants and add shade trees and shrubs to protect your lawn from the scorching sun. Visit our Frequently Asked Questions page on the Town's Web-Site at www.monson-ma.gov for more conservation tips.

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