

## TREATMENT TECHNIQUES IN USE

TABLE II (CONTINUED)

Secondary Contaminants are non-mandatory water quality standards. The EPA does not enforce “secondary maximum contamination levels” or SMCL. They are established only as guidelines to assist public water systems in managing their drinking water for aesthetic considerations such as taste, color and odor. These contaminants are not considered to present a risk to human health at the SMCL.						
Secondary Contaminant	Dare(s) Collected	Highest Detect	Range Detected	Average Detected	SMCL	Noticeable Effects Above the Secondary MCL
Alkalinity (ppm)	07/10/07	112.0	24.5-112.0	63.5	N/A	Not applicable (no SMCL)
Aluminum (ppm)	07/31/07	0.01	N/D-0.01	0	0.05-0.2	Colored or tinted water
Calcium (ppm)	07/11/07	41.9	15.1-41.9	25.9	N/A	Not applicable (no SMCL)
Chloride (ppm)	07/10/07	75.0	24.0-75.0	52.5	250	Salty taste
Color (Color Units)	07/10/07	30	0-30	4.0	15	Visible tint
Copper (ppm)	07/11/07	0.1	N/D-0.1	0.03	1.0	Metallic taste; blue-green staining
Hardness (ppm)	07/11/07	140	49-140	86.4	N/A	Not applicable (no SMCL)
Iron (ppm)	07/11/07	1.8	N/D-1.8	0.28	0.3	Rusty color; sediment; metallic taste; reddish or orange staining
Magnesium (ppm)	07/11/07	8.7	2.8-8.7	5.3	N/A	Not applicable (no SMCL)
Manganese (ppm)	07/11/07	1.5	N/D-1.5	0.30	0.05	Black to brown color; black staining; bitter metallic taste
Odor (Threshold Odor #/TON)	07/10/07	1	0-1	.50	3	“Rotten egg,” musty or chemical smell
pH	07/10/07	7.4	5.7-7.4	6.5	6.5-8.5	Low pH: bitter metallic taste; corrosion. High pH: slippery feel; soda taste; deposits
Potassium (ppm)	07/11/07	43.4	1.8-43.4	11.4	N/A	Not applicable (no SMCL)
Silver (ppm)	07/16/07	N/D	N/D	N/D	.10	Skin discoloration; graying of the white part of the eye
Sulfate (ppm)	07/10/07	37	11.9-37	24.13	250	Salty taste
Total Dissolved Solids (ppm)	07/11/07	323	150-323	227.5	500	Hardness; deposits; colored water; staining; salty taste
Turbidity (NTU)	07/10/07	6.1	0.15-6.1	.99	N/A	Not applicable (no SMCL)
Zinc (ppm)	07/11/07	0.02	N/D-0.02	0.006	5	Metallic taste

<b>Maximum Contamination Level or (MCL):</b> 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. <b>Maximum Contamination Level Goal or (MCLG):</b> The level of a contamination in drinking water below, which there is no known or expected risk to health MCLGs allow for a margin of safety. <b>Maximum Residual Disinfectant (MRDL):</b> 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 (ex. chlorine, chloramines, chlorine dioxide).	<b>Maximum Residual Disinfectant Level Goal (MRDLG):</b> The level of a drinking water disinfectant below which there is no known of expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants. <b>Action Level:</b> The concentration of a contaminant, which if exceeded, triggers treatment or other requirements that a water system must follow. <b>N/A:</b> Not Applicable <b>N/D:</b> None Detected	<b>Lead and Copper 90th Percentile:</b> Nine out of every 10 homes sampled were at or below this level. <b>Part Per Million (ppm) Part Per Billion (ppb):</b> These units are used to describe the levels of a detected contaminant. (One part per million is the equivalent of 1 cent in \$10,000 / one part per billion is the equivalent of 1 cent per \$10,000,000.) <b>pCi/L:</b> Picocuries per liter (a measure of radiation). <b>SMCL:</b> These standards are developed to protect the aesthetic qualities of drinking water and are not health based.
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Our water system violated drinking water standards over the past year. Even though these were not emergencies, as our customers, you have a right to know what happened and what we did to correct these situations. Monitoring requirements not met for the Sudbury Water District: The Sudbury Water District is required to collect 20 samples per month and test them for coliform bacteria. In September of 2008, the samples were collected, however, the laboratory that we formerly used to analyze the samples failed to report the results to the DEP. We have since changed to a new laboratory, and we are in compliance with DEP regulations. 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. The Sudbury Water District is required to collect 20 samples per month and test them for coliform bacteria.

In March of 2009, we only collected 19. One of our sites was having work performed and the water was turned off. We have since collected the correct number of samples and no problems were detected. 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.

# 2008

SUDBURY WATER DISTRICT

11th Annual Water Quality Report

PWS ID NO 3288000

SUDBURY WATER DISTRICT

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MANDATORY WATER RESTRICTIONS

LEVEL 1

Outdoor watering following an odd/even schedule for a maximum period of three hours.

LEVEL 2

Outdoor watering by use of a hand-held device only, such as a hose with a spray nozzle attached (lawn irrigation and sprinklers of any form are prohibited at this level) following an odd/even schedule for a maximum period of one hour.

LEVEL 3

Outdoor watering prohibited except by the use of a watering can.

So as to eliminate confusion during mandatory watering restriction periods, the District provides official “private well” signs to homeowners using a well for irrigation. If you have a private well and are interested in obtaining a sign for your home, contact the District office at 978-443-6602.



LAWN IRRIGATION BY-LAW

In-ground irrigation systems serving residential users installed after July 1, 2001 are required to comply with the following: Installation of new in-ground irrigation systems and expansion of existing systems will be permitted only when the source of water supply is a private well owned & under control of the property owner or legally created organization of the owners of property using the well. All wells installed for the purpose of this bylaw shall be subject to the regulations of the Sudbury Board of Health. All wells shall be tested for Coliform bacteria and shall require treatment if such test indicates the presence of Coliform. Private wells for irrigation purposes shall not be located within 100' of a sewage disposal system, within 100' of an existing potable water supply well and within 100' of wetland or vernal pool. Lesser setbacks to sewage disposal systems may be approved by the Board of Health. Wells shall be dug/drilled to a minimum depth of 100', unless it is demonstrated through hydrogeological analysis that the cone of influence of the well at its maximum pumping capacity does not intercept any surface water resource. There will be NO connection between private water supply and municipal water service. Separation using valves or removable sections of pipe is prohibited. Discharge of water from the private water supply will be through subsurface sprinkler heads, which rise when activated by water pressure. Water from this source will NOT be available through sill cocks, garden hoses or any other points. The purpose of the private water supply is limited to irrigation of lawn and plants, and is not to be used for washing automobiles, filling swimming pools or as a potable water supply. Irrigation systems sourced by private water supplies and operated as described herein shall not be limited to specific hours of operation nor odd/even days of use if the Town declares a water emergency. All irrigation systems shall utilize moisture sensors. An Integrated Pest Management Plan shall be compiled and submitted with an application to install an in-ground irrigation system. The plan shall encourage minimal use of fertilizers and pesticides by use of non-chemical methods to control pests, such as by the use of indigenous species of plants. Sellers of property covered by these regulations are responsible for informing the purchaser of these requirements in any purchase and sales agreement. A permit to install a new in-ground irrigation system shall be required from the Board of Health (978-443-2209 ext. 1379) and fees for review and inspection shall be established. All other state, federal or local approvals shall be required where necessary. Exceptions: In-ground irrigation systems installed on land used primarily and directly for the raising of fruits, vegetables, berries, nuts and other foods for human consumption, feed for animals, flowers, trees, nursery or greenhouse products, and ornamental plants and shrubs; or on land to be used in a related manner which is incidental thereto and represents a customary and necessary use in raising such products.

WATER RATES	
For the purpose of calculating water bills, there is a base charge of \$5.00 per quarter. Above this base charge, the water rate for each incremental amount is:	
\$4.00/1,000 Gallons:	For the volume of water consumed up to 20,000 Gallons
\$6.00/1,000 Gallons:	For the volume of water consumed between 20,000 Gallons and 30,000 Gallons
\$7.00/1,000 Gallons:	For the volume of water consumed between 30,000 Gallons and 40,000 Gallons
\$9.00/1,000 Gallons:	For the volume of water consumed between 40,000 Gallons and 50,000 Gallons
\$11.00/1,000 Gallons:	For the volume of water consumed between 50,000 Gallons and 60,000 Gallons
\$13.00/1,000 Gallons:	For the volume of water consumed above 60,000 Gallons

## 2008 WATER QUALITY REPORT

A LETTER FROM YOUR BOARD OF WATER COMMISSIONERS

We are pleased to present the eleventh annual “Water Quality Report,” covering operations of the Sudbury Water District for the 2008 calendar year.

The quality of the water being delivered to your home is excellent, and the following report and accompanying table(s) demonstrate this point. The primary objective of the District is to continue to improve upon our ability to deliver an adequate supply of high quality water to all our consumers.

From the quality standpoint, we continue to monitor our water at a level substantially beyond the requirements of the EPA or the DEP. Our treatment is extensive and consists of neutralization for pH correction, chlorination for sanitization, fluoridation and removal of iron, manganese and volatile organics. Your water is tested regularly for bacteria, lead/copper, fluoride, nitrate, nitrite, synthetic organic compounds, trihalomethanes, secondary contaminants, volatile organic compounds, inorganics, PCBs, herbicides, pesticides, total suspended solids, radionuclide, MTBE, perchlorates and haloacetic acids. All this testing is done in accordance with a schedule promulgated by the DEP and at a cost to us of over \$50,000.00 per year.

Financially, we are pleased to report that our position is good. Although our operating costs continue to increase, we have been able to meet all our financial obligations and continue to operate with no long-term debt. We have developed a long-range capital plan wherein we have identified 10 million dollars worth of projects important to the maintenance and further development of our supply and distribution system. We believe that the fiscal controls we have in place will allow us to complete these projects with operating revenues and limited short-term borrowing.

Your water commissioners invite your comments and questions regarding the District and this annual water quality report.

The Board of Water Commissioners of the Sudbury Water District,  
Lee H. Goodstone, Chairman  
Robert H. Sheldon  
William J. Cossart

CONTACTING THE DISTRICT

Sudbury Water District is staffed by five field personnel and three office staff, all of whom are dedicated to bringing into your home the highest quality of drinking water. Office and field personnel are on hand at the District office (199 Raymond Road) weekdays between 9 a.m. and 4 p.m. to meet and address your water needs. Superintendent Al Renzi is also available during regular business hours. Arrangements to discuss matters in person with the Superintendent can be made by contacting the District office by phone (978-443-6602) or emailing Al directly at [arenzi@sudburywater.com](mailto:arenzi@sudburywater.com). Although office hours are limited, the District always has an experienced field technician on-call, 365 days per year, for emergency and after-hour matters. Should you experience or observe a water emergency after business hours, simply contact the Sudbury Police or Fire Department. Either will page and dispatch our on call technician to address the matter.

EMAIL COMMUNICATION

Modern technology has made possible a means of communicating with the District directly by way of email. We have found this to be a great service to our customers. In the event of an emergency or as important information develops, we are able to transmit a mail message immediately to those consumers. Customers can also access our website, [sudburywater.com](http://sudburywater.com), which is used as a means of supplying important information easily and rapidly—including our latest water quality tests, frequently asked questions and explanations of the rules and regulations of the District. To register as an email subscriber, simply submit your request to [customerservice@sudburywater.com](mailto:customerservice@sudburywater.com). Include your name, street address and email address. Because our mail messages are forwarded in bulk, it is essential that [customerservice@sudburywater.com](mailto:customerservice@sudburywater.com) be added to your list of acceptable mail; otherwise your SPAM blocker will prevent delivery of our message.

BI-WEEKLY COMMISSIONERS' MEETINGS

The Board of Water Commissioners meets every other week at 5 p.m. at the District office (199 Raymond Road) to discuss and vote on District issues. Superintendent Renzi keeps the Commissioners up-to-date on current projects and developing situations. You are invited to participate in this public forum and become more knowledgeable about your drinking water, as well as bring your concerns to the attention of the Commissioners and the Superintendent. Contact the office of the Water District (978-443-6602) to obtain the scheduled meeting dates.

ANNUAL MEETING

Every third Tuesday in May, at 7 o'clock in the evening, the District holds its Annual District Meeting and Special District Meeting at the Sudbury Senior Center, 40 Fairbank Road. The primary functions of these meetings are to elect District officials and to vote on and discuss articles that are essential to the daily operation of the District. Every member of the District is strongly encouraged to attend these most important meetings.

The voting polls open promptly at 7 o'clock in the morning and close at 7 o'clock in the evening. Commissioners are elected to staggered three-year terms and the positions of District Treasurer, District Clerk and Moderator are up for election annually. Approximately two months prior to the election, nomination papers are available for these positions. A candidate interested in running for District office must be a qualified Sudbury voter and member of the District. Each candidate may pick up an informational packet at the District office. These packets contain information concerning election regulations and deadlines.



## 2008 WATER QUALITY REPORT

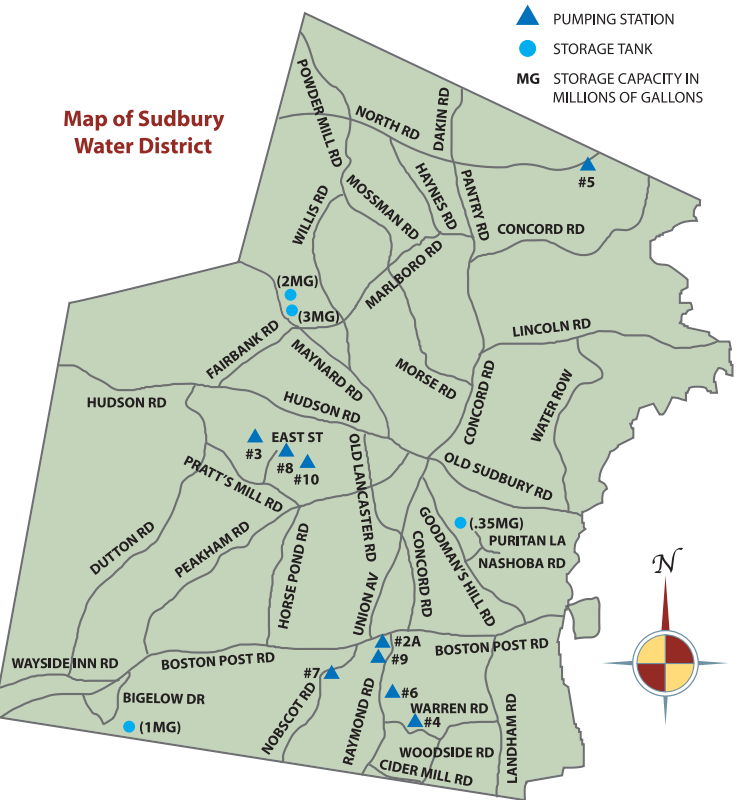
Requirements for voting and participating at the District's Annual and Special meetings are (i) to be a registered voter within the Town of Sudbury (ii) whose principal place of residence is within the geographical confines of the Sudbury Water District (iii) with said property being serviced by the District. For purposes of determining whether said property is being serviced by the District, said property must be connected to the District and must be in use by virtue of the existence of an active account for service and with service actually being provided by the District. Any non-District member wishing to attend and address these meetings must be represented by a qualified voter within the District who is present at these meetings.

The official District Warrants are distributed throughout Sudbury at the end of April. Notices of the Meetings are posted in at least three public places within the District as well as on our website and advertised in the *Town Crier* and *MetroWest Daily* newspapers. Our email subscribers are also electronically mailed a notice of the Annual District Meeting.

Qualified members of the District unable to attend the Annual or Special District election for reasons of illness or scheduling conflicts can obtain an application for absentee ballots at the District office. Contact the District during normal hours of operation for further instructions concerning absentee ballots.

### THE SYSTEM

The District currently services 5,862 homes and businesses, 927 hydrants and 740,814 feet of water main, all of which increase every year. Our water is obtained from nine gravel-packed ground wells located in three separate aquifers; these aquifers are known as Raymond Road, Hop Brook and Great Meadow. We also have four storage tanks located throughout the Town, with a storage capacity ranging from 0.35 to 3.0 million gallons, and totaling 6.35 million gallons.



### WATER QUALITY TESTING PROGRAM

The Sudbury Water District maintains an extensive water quality assurance program. Both treated and untreated water samples are collected at various points throughout the system according to a schedule promulgated by the Massachusetts Department of Environmental Protection. The samples are analyzed at a Massachusetts certified laboratory for both regulated and unregulated contaminants as required by the Federal Safe Drinking Water Act. The frequency at which any specific contaminant is measured varies depending upon contaminant seriousness, likelihood of occurrence and historical record of presence in our water.

### CONTAMINANTS THAT MAY BE PRESENT IN YOUR 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 and treatment plants, septic systems, agricultural livestock operations and wildlife. Inorganic contaminants, such as salts and metals, can be naturally occurring or resulting from urban storm-water runoff, industrial or domestic wastewater discharges, mining, farming, and oil and gas production. Organic chemical contaminants, including synthetic and volatile organic chemicals, which are byproducts of industrial process and petroleum production, and may 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.

## 2008 WATER QUALITY REPORT

### 2008 TESTING SCHEDULE

Contaminant	Number of Samples	
Bacteria	310	
Nitrate	2	
Trihalomethanes	15	
Synthetic Organic Compounds	0	
Volatile Organic Compounds	16	
Fluoride	10	
Lead & Copper	34	
Haloacetic Acids	15	
Total Suspended Solids	75	
Total	477	

### TREATMENT

Because there are variations in the water quality among our nine sources, treatment systems are designed to specifically address the type and amount of contaminants present at each site. Following treatment, water is pumped to elevated storage tanks for distribution to your home.

When tanks are full, the pumps at the wells shut off and water is fed to customers from the tanks. As soon as demand brings tank levels to the "start" level, the pumps restart and the cycle begins again.

In order to perform scheduled and emergency maintenance operations, the specific wells selected to be in service at any time will vary. Therefore, the water delivered to your home does not necessarily originate at a single point, but rather is a blend of a number of our wells. See Table I on the following page for treatment techniques used in your drinking water.

### AUTOMATED METER READING PROGRAM

2008 brings us close to completion of our Automated Meter Reading (AMR) Program. As you may recall, a field technician paid a visit to your home to install an AMR device (one-way communication transceiver). This component transmits water usage data via spread spectrum frequency to a mobile data collector. AMR allows our entire customer base to be read in a matter of hours, therefore eliminating segregated billing cycles resulting in an equitable billing period among all users.

**WATER RATE STRUCTURE**

As our new AMR system allows for unified billing, traditional semi-annual invoicing comprised of four residential cycles has been eliminated. The preferred method of quarterly billing incorporating one residential cycle has replaced conventional meter reading and billing. June 1st will launch our newly adopted policy; subsequent quarterly invoices will follow every October 1st, January 1st, April 1st and July 1st. Terms and conditions remain the same, however, water rates have been restructured to reflect shorter periods. The new rates have been announced via direct mail, electronic mail (to subscribers) and posted online. For questions and concerns regarding our new rate structure, call 978-443-6602.

### FURTHER EDUCATIONAL INFORMATION CONCERNING CONTAMINANTS

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.

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 systems disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice from their health care providers about drinking water. Disease Control and Prevention (CDC) guidelines on lowering risk of infection from Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline at 800-426-4791.

### SOURCE WATER ASSESSMENT PROGRAM

In 2002, the DEP prepared a Source Water Assessment Program (SWAP) Report for our water supply source(s). This report assessed the susceptibility of public water supplies: The Zone I for our wells is a 400-foot radius around the wellhead. Massachusetts Drinking Water Regulations (310 CMR 22.00 Drinking Water) require public water suppliers to own or control the Zone I through a conservation restriction. Only water supply activities are allowed in the Zone I. However, many public water supplies were developed prior to the DEP's regulations and contain non-water supply activities such as homes, recreation fields and public roads. The DEP's findings are based on Well No. 5, where there appears to be agriculture in the extreme western portion of Zone I. Also, North Road (Rte. 117) cuts through the northern section of the Zone. Additional findings in the SWAP are: all of our wells are located in aquifers with a high vulnerability to contamination due to the absence of hydrogeologic barriers (clay) that can prevent contamination migration.

The Zone IIs for Sudbury are a mixture primarily of residential, forest and wetlands land uses with a small portion consisting of other uses such as recreation, agriculture, commercial, light industry and mining. The District plans on corrective actions by continuing to work with local and state offices for the promotion of good practices on land contained within our Zone I and Zone II areas. The DEP has commended the District for taking an active role in promoting source protection measures in the water supply protection areas through adopting land use controls that meet the DEP's Drinking Water Regulations and partnering with the Town of Sudbury to study the feasibility of sewerage the commercial section of Route 20. A complete SWAP Report is available at the District office at 199 Raymond Road (978-443-6602) or can be viewed on-line at [www.mass.gov/dep/water/drinking/swapreps.htm](http://www.mass.gov/dep/water/drinking/swapreps.htm).

### MINIMIZING LEAD EXPOSURE

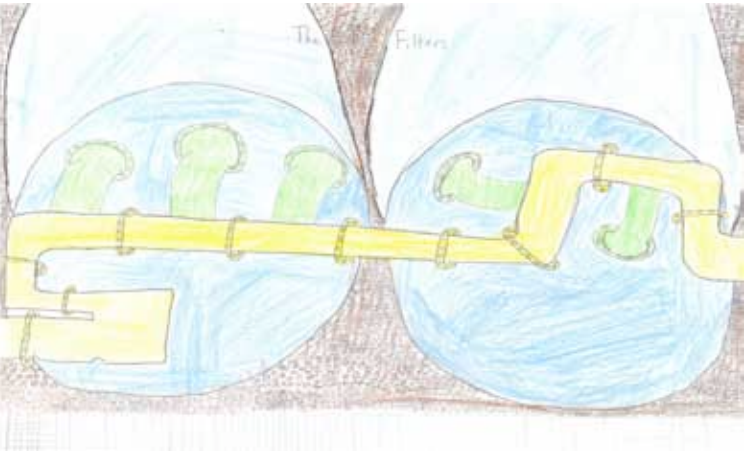
If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water comes primarily from materials and components associated with service lines and home plumbing. Sudbury Water District is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components within your home. 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>.

### HYDRANT MAINTENANCE

The District owns, operates and maintains 927 hydrants throughout Sudbury. Though every hydrant is marked by a reflective flag, harsh New England winters bring unavoidable snowfall, and accumulation during winter storms combined with road clearing efforts is likely to camouflage their location. Proactive snow removal by home and business owners alike is strongly encouraged. In the event of a fire emergency, immediate access to a readily available supply of water could minimize damages and help save lives. Familiarize yourself with the hydrant located closest to your home or business and collaborate with friends and neighbors to keep it exposed during our most challenging season.

### COMMUNITY EDUCATION

For the past four years, the District has eagerly hosted a field trip to the Raymond Road Treatment Plant for the 5th grade students of the Peter Noyes Elementary School. Every effort is extended to assure an enjoyable and educational visit. Following the tour, the students are asked to submit a drawing representing their observations, and a winner is selected to receive an Ice Cream Sundae Party for his or her class and awarded 1st Place where his or her artwork is included in this report! This year we are pleased to announce our 2008 winning artist:



### JOSEPH CALTABIANO

Who offers these Words of Wisdom: "Take shorter showers and turn off the faucet when you're brushing your teeth."

### HELP PREVENT BACKFLOW CONTAMINATION

A cross connection is a connection between a drinking water pipe and a non-approved source. Did you know that contamination can come from your own home? For instance, you're going to spray fertilizer on your lawn and you attach your hose to the sprayer that contains the fertilizer. If the water pressure drops when the hose is connected to the fertilizer, the fertilizer could 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. We recommend the installation of backflow prevention devices, such as a low cost hose bib vacuum breaker, for all inside and outside hose connections. The attachment can be purchased at any hardware or plumbing supply store and at the Sudbury Water District office.

### FINAL WORD

In closing, it is our hope you have found this latest report and accompanying table(s) informative, allowing you the opportunity to become familiar with your public water supply. Your Commissioners and District employees strive to achieve the highest quality drinking water together with excellence in customer service. Questions, concerns or comments with regard to this report can be addressed by calling 978-443-6602.

## TREATMENT TECHNIQUES IN USE

TABLE I (GRAVEL PACKED WELLS)

Type of Treatment	G.P. Well 2A	G.P. Well 3A	G.P. Well 4	G.P. Well 5	G.P. Well 6	G.P. Well 7	G.P. Well 8	G.P. Well 9	G.P. Well 10
Chlorination	*✓	*✓	*✓	*✓	*✓	*✓	*✓	*✓	*✓
Neutralization	✓	✓	✓	✓	✓	✓	✓	✓	✓
Air Stripping	✓			✓					
Greensand Filtration	✓				P	✓	✓	✓	
Fluoridation	✓	✓	✓	✓	✓	✓	✓	✓	✓

\*: Required By DEP    ✓: Installed    P: Planned

**Chlorination** is used to disinfect and prevent waterborne disease. **Neutralization** is used to increase pH and reduce acidity through the addition of potassium hydroxide. **Air Stripping** is used primarily to remove volatile organic compounds, but will also reduce acidity and remove radon. **Greensand Filtration** is a treatment process to remove manganese and iron. **Fluoridation** is generally acknowledged to prevent tooth decay.

### TABLE II

The following table lists all drinking water contaminants that were detected in your treated water during the 2008 calendar year or during the most recent sampling period within the past five years. These were the only contaminants detected in all the DEP-required monitoring. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. The state requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year.

**Regulated Contaminants** are those for which the EPA has set legal limits on the levels allowed in drinking water. The limits reflect both the level that protects human health and the level that water systems can achieve using the best available technology.

Regulated Contaminant	Date(s) Collected	Highest Detect	Range Detected	MCL or MRDL	MCLG or MRDLG	Violation (Yes/No)	Possible Source(s) of Contamination
Fluoride (ppm)	11/04/08	1.2	0.70-1.2	4	4	No	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories
Nitrate (ppm)	05/10/08	3.82	0.49-3.82	10	10	No	Runoff from fertilizer use; leaching from septic tanks; sewage; erosion of natural deposits
Arsenic (ppb)	05/23/06	4	N/D-4	10	N/A	No	Discharge from fire retardants; ceramics; electronics; solder
Barium (ppm)	05/23/06	0.066	0.007-0.066	2	2	No	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Gross Alpha (pCi/L)	07/23/03	2.5	0.2-25	15	0	No	Erosion of natural deposits of certain minerals that are radioactive and may emit a form of radiation known as Alpha Radiation
Gross Beta (pCi/L)	07/23/03	43	1.0-43	50	0	No	Decay of natural and man-made deposits
Radium 226 & 228 (pCi/L)	08/06/03	0.2	N/D-0.2	5	0	No	Erosion of natural deposits
Chlorine (ppm)	01/08/08	0.94	.01-.94	4	4	No	Water additive used to control microbes
Haloacetic Acids (HAA5) (ppb)	11/04/08	16.1	N/D-16.1	60	N/A	No	Disinfection by-product
Total Trihalomethanes	11/04/08	38.2	1.4-38.2	80	N/A	No	By-product of drinking water chlorination

Lead & Copper Monitoring	Date(s) Collected	90th Percentile	Action Level	MCLG	No. of Sites Sampled	No. of Sites Above Action Level	Possible Source(s) of Contamination
Lead (ppb)	09/10/08	0.007	15	0	30	2	Corrosion of household plumbing systems; erosion of natural deposits
Copper (ppm)	09/10/08	0.22	1.3	1.3	30	0	Corrosion of household plumbing; erosion of natural deposits; leaching from wood preservatives

**Unregulated Contaminants** are those for which the EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist EPA in determining their occurrence in drinking water and whether future regulation is warranted.

Unregulated Contaminant	Date(s) Collected	Highest Detect	Range Detected	Average Detected	MCL or MRDL	MCLG or MRDLG	Violation Yes/No	Possible Source(s) of Contamination
Sodium (ppm)	05/23/06	35.2	13.2-35.2	25.67	250	N/A	No	Naturally occurring; runoff from use of salt on roadways; by-product of treatment process
Nickel (ppm)	05/23/06	0.003	0-0.003	0	N/A	N/A	No	Discharge from industrial processes
Sulfate (ppm)	05/23/06	38.1	12-38.1	24.99	N/A	N/A	No	Natural sources
MTBE (ppb)	08/12/06	0.7	0-0.7	.13	N/A	N/A	No	A fuel additive; leaks and spills from gasoline storage tanks