"Toilets can Run but they can't hide!"

Let the Automated Meter Reading (AMR) "High Read" Notification

Program help you find leaks and $ave money.

The Cambridge Water Department's "High Read" notification program, allows the Water Department to contact property owners soon after an incident of high usage is detected. Speedy notification will allow property owners to repair any leaks that may cause the high read, thus minimizing the impact on the Water and Sewer Bill.

The program needs customers to update contact information so the Water Department is able to contact property owners as soon as a "High Read" is detected. Please call Brian McCoy at 617-349-4771 or email him at HighReads@cambridgema.gov with your account number, phone number, mailing address and email address.

24 Hour Emergency/Customer Service
Phone Number 1-(617) 349-4770

Visit Our Web Site at
www.cambridgema.gov/cwd/

Email us at cwd@cambridgema.gov

Cambridge Water Department
250 Fresh Pond Parkway
Cambridge, MA 02138

PRESORTED
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US POSTAGE
PAID
Boston, MA
Permit No. 97

ECRWSS

Postal Customer
Cambridge, MA

This report contains very important information about your drinking water. Please translate it, or speak with someone who understands it.

Si usted desea obtener una copia de este reporte en español, llamenos al telefono 617-242-5323.

Im Bericht steht wichtige Infor-mation über die Qualität des Wassers Ihrer Gemeinschaft. Der Bericht soll übersetzt werden, oder sprechen Sie mit einem Freund, der ihn gut versteht.

这份报告中有些重要的信息，讲到关于您所在社区的水的品质。请您找人翻译一下，或者请能看得懂这份报告的朋友给您解释一下。

La relazione contiene impor-tanti informazioni sulla qualità dell'acqua della Comunità. Tra-durlo o parlarne con un amico che lo comprenda.

この資料には、あなたの飲料水についての大切な情報が書かれています。内容をよく理解するために、日本語に翻訳して読むか説明を受けてください。

O relatório contém infor-mações importantes sobre a qualidade da água da comunidade. Tra-duza-o ou peça a alguém que o ajude a entendê-lo melhor.

इस रिपोर्ट में "पीने के पानी" के विषय पर बहुत जरूरी जानकारी दी गई है। कृपया इसका अनुवाद कीजिये, या किसी जानकार से इस बारे में पूछिये।

Sprawozdanie zawiera ważne informacje na temat jakości wody w Twojej miejscowści. Poproś kogoś o przetłumaczenie go lub porozmawiaj z osobą która je dobrze rozumie.

يحتوي هذا التقرير على معلومات هامة عن نوعية ماء الشرب في منطقتك. يرجى ترجمته أو ابحث التقرير مع صديق لك يفهم هذه المعلومات جيداً.

Η κατοιδέν ανάφορα παρουσιαζή σπουδδαες πλήροφορειες για το ποσιμο νερο σσς. Πρεκαλόιο να το μεταφράσετε ή να το αξολέιασετε με κατσιον που το κατελόβδανη ασιολήτας.

Báo cáo có ghi những chi tiết quan trọng về phẩm chất nước trong cộng đồng quý vị. Hãy nhờ người thông dịch, hoặc hỏi một người bạn biết rõ về vấn đề này.

Отчет содержит важную инфор-мацию окачестве воды в Вашем районе. Переведите его или попросите другаб, хорошо понимающего текст, обьяснить. Вам его содержание.

Le rapport contient des infor-mations concernant la qualité de l'eau de votre communauté. Faites-le traduire, ou parlez-en à un ami qui le comprend bien.

City of Cambridge Water Department
2007 Annual Drinking Water Quality Report

250 Fresh Pond Parkway
Cambridge, MA 02138

DEP PWS ID#3049000

June 2008

24 Hour Emergency/Customer Service
Phone Number 1-(617) 349-4770

"This report is a summary of drinking water quality that was provided by the CWD in 2007. Included are details about where your water comes from, what it contains, and how it compares to state and federal drinking water standards. We are pleased to be providing this report and encourage you to use the contact information if you have questions or need further information about your water system." Sam Corda, Managing Director, Cambridge Water Department (CWD)

This Year's Annual Drinking Water Quality Report Includes:

- **2008 Fresh Pond Reservation and Treatment Facility Tours**
- **Our Contact Information**
- **Opportunities for Public Involvement**
- **An Introduction to Cross-Connections**
- **Cambridge Water System Description**
- **2007 Water Quality Data**
- **DEP and US EPA Water Quality Information**
- **Water Conservation: the Cost of Leaks**

Summer 2008 Activities at the Cambridge Water Department

Fresh Pond Reservation Volunteer Program

The Cambridge Water Department is introducing the Fresh Pond Reservation Volunteer Maintenance and Monitoring Program this summer! Volunteers will have a chance to learn about invasive species, plant identification and meet other Reservation users. We will be holding plant identification training starting in May along with weekly weeding sessions throughout the summer. Come join the fun! If you would like to recieve information about these events, email fpr@cambridgema.gov .

Northeast Sector Tours

Monday Evenings: June 23, July 28, August 25 and September 22 at 6 pm begining at the Walter J. Sullivan Water Treatment Facility, 250 Fresh Pond Parkway, Cambridge

Chip Norton, Watershed Manager for the Cambridge Water Department, will explain the landscape restoration process, including planning, soil revitalization, and invasive plant species removal. Attendees will learn about creating a healthy native plant ecosystem at Fresh Pond Reservation. Participants will have the chance to ask questions about every step of the restoration process, and understand how restoration at Fresh Pond Reservation fits into the water quality protection plan of the Cambridge Water Department.

Tours of the Water Purification Facility

Monday evenings:June 16, July 21, August 18, September 15, October 20 and November 17 at 6 pm at the Walter J. Sullivan Water Treatment Facility, 250 Fresh Pond Parkway, Cambridge

Timothy MacDonald, Manager of Water Operations, will lead monthly tours of the City's beautiful treatment facility. Participants will learn about the range of Water Department activities that are required to manage, treat and deliver water to our customers. Learn how water that falls as rain in the suburbs 10 miles west of Cambridge is tranported to Fresh Pond and transformed into drinking water for our city.

24 HOUR EMERGENCY/CUSTOMER SERVICE
PHONE NUMBER 1-(617)-349-4770

VISIT OUR WEB SITE AT
www.cambridgema.gov/cwd/

EMAIL US AT cwd@cambridgema.gov

Opportunities for Public Participation and Further Information

•The Cambridge Water Board meets monthly, usually on the second Monday of the month, from 5:00 pm to 6:30 at Walter J. Sullivan Water Purification Facility at 250 Fresh Pond Parkway, Cambridge, MA 02138.
•For more information about the dates of upcoming meetings and to review minutes from previous meetings, refer to the Cambridge Water Department Website (www.cambridgema.gov/cwd/).
•If you have additional questions about your water supply, please contact Timothy W.D. MacDonald, Manager of Water Operations, at 617-349-4773.

Contamination from Cross-Connections

A cross-connection is formed at any point where a drinking water line connects to equipment (boilers), systems containing chemicals (air conditioning systems, fire sprinkler systems, irrigation systems) or water sources of questionable quality. Cross-connections that could contaminate drinking water distribution lines are a major concern. Cross-connection contamination can occur when the pressure in the equipment or system is greater than the pressure inside the drinking water line (backpressure). Contamination can also occur when the pressure in the drinking water line drops due to fairly routine occurrences (main breaks, heavy water demand) causing contaminants to be siphoned out from the equipment and into the drinking water line (backsiphonage).

Outside water taps and garden hoses tend to be the most common sources of cross-connection contamination at home. The garden hose creates a hazard when submerged in a swimming pool or when attached to a chemical sprayer for weed killing. Garden hoses that are left lying on the ground may be contaminated by fertilizers or garden chemicals. Protection can be provided through the installation of an inexpensive device called a hose connection vacuum breaker. Also at home, improperly installed valves in your toilet can also be a source of cross-connection contamination.

Community water supplies are continuously jeopardized by cross-connections unless appropriate valves, known as backflow prevention devices, are installed and maintained. The Cambridge Water Department surveys industrial, commercial, and institutional facilities in the City to make sure that potential cross-connections are identified and eliminated or protected by a backflow preventer. We also inspect and test each backflow preventer to make sure that it is providing maximum protection.

For more information, call us at 617-349-4770 or visit the CWD web site www.cambridgema.gov/cwd

Facts About the Cambridge Water System and Water Qauality Data from 2007

The Cambridge Water Supply: The Cambridge water supply comes from three surface water reservoirs located in Cambridge, Lexington, Waltham, Lincoln and Weston. The Hobbs Brook (3049000-01S-4S) and Stony Brook (3049000-03S) reservoirs are the primary sources of water for our system. The total capacity of the two up-country reservoirs is 3095 million gallons. The water is transferred to the terminal reservoir, Fresh Pond (3049000-02S), via the Stony Brook Conduit. The Fresh Pond Reservoir has an additional 1308 million gallons of water storage. Our supply is also backed up by interconnections to the Massachusetts Water Resources Authority (MWRA) water system.

Our water system is routinely inspected by the Department of Environmental Protection (DEP) for its technical, financial and managerial capacity to provide safe drinking water to you. To ensure that we provide the highest quality water, our system is operated by Massachusetts certified treatment and distribution operators. Descriptions and details of ongoing improvements in watershed, distribution, and treatment systems and our customer service efforts in engineering, billing and metering are available on Department Web site www.cambridgema.gov/cwd/

Watershed Protection: As part of the CWD's ongoing commitment to protecting the resource water, we participated with the DEP in the preparation of a Source Water Assessment Program (SWAP) Report for the Cambridge water supply system during 2003. The SWAP Report assesses the susceptibility of our public water supply and notes the key land use and protection issues, which includes: Zone A Land Uses, Residential Land Uses, Transportation Corridors, Hazardous Material Storage and Use, and Presence of Oil or Hazardous Materials Contamination Sites.

The report commends the Cambridge Water Department for taking an active role in promoting source protection measures and recommends that we continue these efforts to further protect the supply. These practices include:
•Working cooperatively with watershed towns on emergency response and storm water management.
•Placing spill kits at strategic points within the watershed.
•Actively monitoring source water quality throughout the watersheds and using the data to target source protection.
•Working cooperatively with businesses in the watersheds to encourage source protection.
•Adopting the Fresh Pond Master Plan, which includes long-term source protection measures for the Fresh Pond Reservation.
•Dedicating staff resources to inspections, public education, and coordinating of source protection efforts.

While a susceptibility ranking of "High" was assigned to the Cambridge water supply system using the land use and potential sources of contamination information collected during the assessment by DEP, the actual risks may be lower based on the implementation of best management practices (BMP's) throughout the Cambridge watershed and by the ongoing watershed protection programs.

For a copy of the SWAP Report and details of CWD's plans and schedules for implementing recommendations, please visit our web site at www.cambridgema.gov/cwd/

How We Treat Your Water: The Walter J. Sullivan Water Purification Facility at Fresh Pond Reservation changes the incoming source waters of the Cambridge reservoir system into the drinking water that is delivered to your home or business. The raw water is treated to exceed State and Federal drinking water standards. The process includes:

Pretreatment: This includes the pre-oxidation with the application of ozone , rapid mix, coagulation and dissolved air flotation (DAF). These processes and a coagulant chemical, alum, remove: manganese, natural color, particles, algae, protozoa, viruses and bacteria from the water.
Primary Ozone Disinfection: Fine bubbles of ozone are dissolved into the water and disinfect the water by killing bacteria, viruses, and protozoa. The ozone is generated in the plant and introduced into the water in a series of chambers that allow contact and mixing of the ozone with the water.
Filtration using Granular Activated Carbon (GAC) Media: This step follows the ozone application to help remove any organic compounds by biological action in the filters and further polish the water by removing additional particles, color and protozoa from the water.
Chlorination/Chloramination: Kills bacteria that may develop during the normal operation of the filters. This second disinfection step provides a level of redundancy in the overall process and provides a constant disinfection level in the distribution system.
Post Treatment Chemical Addition: This includes the adjustment of pH for corrosion control and the addition of fluoride for dental health.

The water quality of our system is constantly monitored by CWD's State certified laboratory and by the DEP to determine the effectiveness of existing water treatment and to determine if any additional treatment is required.

Cambridge Water Department - Consumer Confidence Report 2007 Data

Lead and Copper	Units	90% Value	Range	Action Level(AL) (90%)	MCLG	Violation	Sites exceeding the AL	
Copper (2005)	ppm	0.035	0.001-1.09	1.3	0	NO	0 of 60	Corrosion of household plumbing.
Lead (2005)	ppb	7	0 - 157	15	0	NO	2 of 60	Corrosion of household plumbing.
Regulated- Inorganic Contaminants		**Highest**	**Range**	**MCL**	**MCLG**	**Violation**		
Barium	ppm	0.039	0.03-0.039	2	2	NO		Erosion of natural deposits.
Cyanide	ppm	0.019	0-0.019	0.2	0.2			False Positive –see below**
** The current EPA sampling method for cyanide is causing false positives by converting organics in the water to cyanide. In the actual water these organics are converted to non-toxic cyanates.								
Fluoride	ppm	1.20	0.98-1.2	4	4	NO		Water additive to promote strong teeth.
Nitrate as Nitrogen	ppm	0.71	0.255 - 0.71	10	10	NO		Runoff from fertilizer use.
Nitrite as Nitrogen	ppm	0.062	<0.003 - 0.062	1	1	NO		Runoff from fertilizer use.
Unregulated - Inorganic Contaminants		**Average**	**Range**					
Sulfate	ppm	29	24-29	n/a	n/a	NO		Erosion of natural deposits.
Sodium	ppm	79	53-79	n/a	n/a	NO		road salt.
Unregulated - Organic Contaminants		**Average**	**Range**					
Bromodichloromethane	ppb	2.8	1.44-4.6					By-product of drinking water chlorination.
Bromoform	ppb	1.1	0.7-1.75					By-product of drinking water chlorination.
Chloroform	ppb	1.8	0.81-3.54					By-product of drinking water chlorination.
Dibromodichloromethane	ppb	3.1	2.06-4.05					By-product of drinking water chlorination.
Regulated -Volitale Organic Contaminants		**Highest Ave**	**Range**	**MCL**	**MCLG**	**Violation**		
Total Trihalomethanes(THMs)	ppb	12.8	4.3-12.8	80	0	NO		By-product of drinking water chlorination.
Haloacetic Acids(HAA5)	ppb	9.1	4.9-9.1	60	0	NO		By-product of drinking water chlorination.
		Highest Ave	**Range**	**MRDL**	**MRDLG**	**Violation**		
Chlorine as Chloramine	ppm	3.0	0.27-3.0	4	4	NO		Water additive used to control microbes.
Regulated - Radioactive Contaminants						**Violation**		
Gross Beta Activity(2002)	pCi/L	13		50	0	NO		Decay of naturally occurring deposits.
Turbidity	**TT**	**Lowest Monthly %**		**Highest Daily Value**		**Violation**		
Daily Compliance(NTU)	1			0.08		NO		Suspended matter from soil runoff.
Monthly Compliance	At least 95% (<0.3)	100				NO		Suspended matter from soil runoff.
Bacteria	**Highest % Positive in a Month**			**Total # positive**	**MCL**	**Violation**	**MCLG**	
Total Coliform	1.0% (Aug&Dec)			1,1	>5%	NO	0	Naturally occurring in the environment.
Fecal Coliform	1.0% Dec	Violation based on repeat	occurrence	1	0	NO	0	Human and animal fecal waste

What the EPA and DEP say about Drinking Water - 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, 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 -which may come from a variety of sources such as agriculture, urban stormwater 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 stormwater 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 Massachusetts Department of Environmental Protection (DEP) and U.S. Environmental Protection Agency (EPA) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. The Food and Drug Administration (FDA) and Massachusetts Department of Public Health (DPH) 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 (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 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 (800-426-4791).

IMPORTANT DEFINITIONS
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.
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 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.
Maximum Residual Disinfectant Level Goal (MRDLG) — The level of a drinking water disinfectant (chlorine, chloramines, chlorine dioxide) below which there is no known expected risk to health. MRDLG's do not reflect the benefits of the use of disinfectants to control microbial contaminants.
Treatment Technique (TT) – A required process intended to reduce the level of a contaminant in drinking water.
Action Level (AL) – The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.
90th Percentile – Out of every 10 homes sampled, 9 were at or below this level.
Variances and Exemptions – State or EPA permission not to meet an MCL or a treatment technique under certain conditions.
ppm= parts per million, or milligrams per liter (mg/l)
ppb= parts per billion, or micrograms per liter (ug/l)
ppt= parts per trillion, or nanograms per liter
pCi/l = picocuries per liter (a measure of radioactivity)
NTU= Nephelometric Turbidity Units
N/A= Not Applicable
ND= Not Detected
mrem/year = millimrems per year (a measure of radiation absorbed by the body)