(continued from the front page)

This process includes:

Pre-treatment: This includes the pre-oxidation with the application of ozone , rapid mix, coagulation and dissolved air flotation (DAF). These processes and a coagulant chemical called 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 it 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. At the end of this process all remaing ozone is converted back to oxygen.
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 us in our State certified laboratory and the DEP to determine the effectiveness of existing water treatment and to determine if any additional treatment is required.

Opportunities for Public Participation and Further Information

•The Cambridge Water Board meets monthly, usually on the first 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.

•Visit our Web Site at **www.cambridgema.gov/cwd/** and email us at **cwd@cambridgema.gov**.

Cambridge Water Department
250 Fresh Pond Parkway
Cambridge, MA 02138

Cambridge, MA

Este relatório contem informação muito importante sobre seu que bebendo água. Por favor traduza-o, ou fala com alguém quem entende-o.

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

Questa relazione contiene delle informazioni molto importanti del suo che la bendo acqua. Per favore tradurrlo, o parlare con qualcuno che capisce esso.

Ce rapport contient des informations importantes à propos de votre eau potable. Demander à quelqu'un de traduire ces informations pour vous ou discuter avec une personne qui comprend ces informations.

Este informe contiene información importante acerca de su agua potable. Haga que alguien lo traduzca para usted, o hable con alguien que lo entienda.

이 보고서에는 귀하의 식수에 대한 중요한 내용이 실려있습니다. 그러므로 이 보고서를 이해할 수 있는 사람한테 번역해 달라고 부탁하시기 바랍니다.

此报告包含有关您的饮用水的重要信息。请人帮您翻译出来，或请看懂此报告的人将内容说给您听。

City of Cambridge Water Department
2003 Annual Drinking Water Quality Report

250 Fresh Pond Parkway
Cambridge, MA 02138

DEP PWS ID#3049000

June 2004

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

"This report is a snapshot of drinking water quality that we provided in 2003. As your drinking water came only from our own sources during this period, it is the first report that you have received directly from the Cambridge Water Department. 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 about your water system." Sam Corda, Managing Director, Cambridge Water Department (CWD)

Water System Improvements and Monitoring

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 the 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 the City, www.cambridgema.gov, and Department www.cambridgema.gov/cwd/ Web sites.

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 these 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.

Watershed Protection

As part of our ongoing commitment to protect the source 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.

This 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.

Although 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 implementation of best management practices (BMP) throughout the Cambridge watershed 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 Resevation changes the incoming source water 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.

(continued on the back page)

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 of 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)

Cambridge Water Quality Testing Results

The water quality information presented in the tables below are from the most recent rounds of testingperformed in accordance with all regulations. The data shown was collected during the last calendar year (2003) unless otherwise noted. We are required to monitor for a variety of regulated and un-regulated chemicals. Only chemicals found in our drinking water are reported here. We are pleased to report that last year, 2003, your drinking water met all the applicable heath lstandards regulated by the state and federal government.

Bacteria

	Highest % Positive in a month	Total # Positive	MCL	MCLG	Violation (Y/N)	Possible Source of Contamination
Total Coliform	3.5% (August)	4	>5%	0	No	Naturally present in the environment

Lead and Copper

	Date(s) Collected	90TH percentile	Action Level	MCLG	# of sites sampled	# of sites above Action Level	Possible Source of Contamination
Lead (ppb)	2002	9.0	15	0	60	3	Corrosion of household plumbing systems; Erosion of natural deposits
Copper (ppm)	2002	0.06	1.3	1.3	60	0	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives

Tubidity

Turbidity	TT	Lowest Monthly % of Samples	Highest Detected Daily Value	Violation (Y/N)	Possible Sources of Contamination
Daily Compliance (NTU)	1.0	___	0.12	No	Soil Runoff
Monthly Compliance*	At Least 95%	100	___	No	Soil Runoff

Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of water quality.
*Monthly turbidity compliance is related to a specific TT. Our system filters the water so at least 95% of our samples each month must be below the turbidity limits specified in the regulations.

Unregulated Contaminant	Date(s) Collected	Result or Range Detected	Average Detected	Possible Source
Inorganic Contaminants				
Sodium (ppm)	2003	65-85		Natural sources; runoff from use as salt on roadways; by-product of treatment process
Sulfate (ppm)	2003	23-31		Natural sources
Organic Contaminants				
Bromodichloromethane (ppb)	2003	1.10-4.40	2.62	By-product of drinking water chlorination
Bromoform (ppb)	2003	0.00-2.00	1.13	By-product of drinking water chlorination
Chloroform (ppb)	2003	0.00-3.70	1.20	By-product of drinking water chlorination
Dibromodichloromethane (ppb)	2003	2.00-5.30	3.45	By-product of drinking water chlorination

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Regulated Contaminants	Dates Collected	Highest Detect	Range Detected	Highest Average	MCL or MRDL	MCLG or MRDLG	Violation (Y/N)	Possible Source(s)
Inorganic Contaminants								
Barium (ppm)	2003	0.04	0.03-0.04		2	2	N	Erosion of natural deposits
Fluoride (ppm)	2003	1.3	0.99-1.2		4	4	N	Water additive which promotes strong teeth
Nitrate (ppm)	2003	0.83	0.35-0.83		10	10	N	Runoff from fertilizer use, leaching from septic tanks
Nitrite (ppm)	2003	0.24	0-0.24		1	1	N	Runoff from fertilizer use, leaching from septic tanks
Volitale Organic Contaminants								
Chloramines (ppm)	2003	2.2	1.5-2.2		4	4	N	Water additive used to control microbes
Haloacetic Acids (HAA5)(ppb)	2003	13.7	7.5-13.7	9.5	60	---	N	Byproduct of drinking water disinfection
Total Trihalomethanes (TTHMs)(ppb)	2003	13.9	4.0-13.9	9.2	80	---	N	Byproduct of drinking water disinfection
Radioactive Contaminants								
GrossBata/photon emmiters (pCi/L) **	2002	13			50	0	N	Decay of natural and man-made deposites