Dear Customers,

The District of Columbia Water and Sewer Authority (WASA) is happy to provide you with its year 2002 water quality report.

We are once again proud to report that Washington, DC's drinking water met or surpassed all requirements of the federal Safe Drinking Water Act (SDWA) every single day in 2002. This Water Quality Report is the fifth in the series of reports. It provides information on DC's drinking water quality - the source of water, how it is treated and tested, and what it contains. Although some EPA mandated information is repeated each year, the report provides continuing updates on some of the programs and technologies that we use to deliver safe drinking water to your tap. We appreciate your input and comments on our 2001 report and look forward to your continued support of WASA's commitment to supplying you with safe and affordable drinking water.

As the nation continues to deal with increased levels of preparedness and response, WASA has elevated its level of security to reduce system vulnerability. We continue to be thankful for the help and support from concerned citizens in reporting suspicious activities and look forward to your continued support.

I trust that you will find our 2002 water quality report informative and useful.

Jerry N. Johnson, General Manager
District of Columbia Water and Sewer Authority

Water Treatment and Distribution System

The DC Water and Sewer Authority (WASA) distributes water to residences and businesses throughout D.C. for drinking, fire fighting and other uses. WASA purchases the drinking water from the US Army Corps of Engineers, Washington Aqueduct. The Washington Aqueduct (WA) withdraws approximately 180 million gallons of water each day from the Potomac River at the Great Falls and the Little Falls intakes, and then treats the water at the two water treatment plants, Dalecarlia and McMillan (see the water treatment scheme). Important treatment processes at WA's Dalecarlia and McMillan facilities include sedimentation, filtration, fluoridation, pH adjustment, primary disinfection using free chlorine and finally, conversion of the free chlorine to chloramines through addition of ammonia. The chloramine residual provides secondary disinfection as the water travels through WASA's network of 1,300 miles of distribution system water pipes.

Reminder! Chloramine is now the Secondary Disinfectant

As of November 1, 2000, chloramine is used as a secondary disinfectant to maintain protection against microbial contamination in the water distribution system. This is in addition to the use of free chlorine as the primary disinfectant in DC's drinking water. The change in disinfectant is an effort to reduce the concentrations of disinfectant byproducts called trihalomethanes (THM's), in compliance with more stringent national standards established by EPA. Chronic exposure to high concentrations of trihalomethanes is considered to be potentially carcinogenic. Since the treatment change to chloramines, we have obtained an average reduction of trihalomethanes in the drinking water of approximately 40%.We once again want to remind facilities providing kidney dialysis treatment, individuals and businesses maintaining fish tanks, and laboratories and businesses affected by chloraminated water that their pretreatment steps must remove chloramines. WASA will provide fact sheets on chloramines upon request.

Note: It is the general practice among utilities using chloramines to convert from chloramines back to free chlorine during the spring flushing program. This periodic conversion back to free chlorine in combination with the flushing program helps to maintain water quality control in the distribution system. During 2002 the switch to free chlorine was effective from March 13th until May 13th, after this period chloramine will continue to be used as a secondary disinfectant.

Water Quality Enhancement Programs

WASA has embarked on many projects in the distribution system to improve water quality and provide you with safe drinking water. The cross-conection control program, which protects the drinking water from potential contaminants, is now established in D.C. In addition to compliance monitoring, WASA has implemented supplementary monitoring programs to ensure water quality. Supplying water also means making sure water delivery pipes, pumps and tanks are in place and working, even in emergencies. WASA has developed a $1.6 billion capital improvement plan to repair and upgrade the utility's overall infrastructure during the next ten-year period.

The quality of drinking water is affected as it flows through the distribution system. WASA has undertaken a number of programs to protect, maintain and enhance water quality in the distribution system. Examples include such proactive maintenance activities as comprehensive system flushing, water main rehabilitation, construction, and cross-connection control management.

Water Main Flushing - Annually each spring through fall, WASA conducts an aggressive flushing program to systematically "flush" water mains in the distribution system. The water is released by sequentially opening the District's 8,700 fire hydrants and flushing water in a unidirectional manner. As some of the water being flushed may end up in streams and rivers, we are dechloraminating the water being flushed to protect aquatic life. Flushing water through the pipes at high velocities removes potential buildup in pipes that may cause discolored water. Look for the flushing schedule on our website, www.dcwasa.com.

How To Flush Your Household Pipes - Organic matter in your household pipes which may cause taste and odor problems can be eliminated by flushing *your* water pipes. The procedure is outlined in the following steps.

Remove the screens (called aerators) from the ends of the indoor faucets and run all of the faucets wide open and simultaneously for 3 to 5 minutes.

Flush the toilets two or three times each while the faucets are running. This generates a large flow of water through the pipes and will hopefully dislodge any build-up of organic material that causes taste and odor problems. Removing the aerators before flushing the plumbing will prevent anything dislodged from accumulating on the screens.

After 3 to 5 minutes of flushing, turn off the water faucets, clean the aerators, and reinstall the aerators on the ends of the faucets. Replace worn-out aerators with new ones.

Cross Connection Control Regulation Program - The purpose of WASA's cross connection control program is to eliminate potential "cross connections" – physical links that could allow contaminants to flow into the District's water supply from customers' facilities. WASA's cross connection control regulations are published in chapter 54 Title 21 DCMR under the heading "Cross Connections." Under these regulations to protect public health, WASA is requiring local businesses to install backflow prevention devices at the water service connection, which will prevent contaminants from entering the drinking water supply. Backflow of contaminating materials may cause serious illness. WASA is leading this cooperative effort that includes the D.C. Department of Health, the D.C. Department of Consumer and Regulatory Affairs, the EPA and consumers.

Drinking Water Quality is Important for Everyone

Important Health Information

Cryptosporidium, a microorganism that lives in the gut of animal hosts, is found in surface water throughout the U.S. People can be exposed to *Cryptosporidium* through ingestion of contaminated food, recreational water, or drinking water containing *Cryptosporidium* cysts.

Exposure to *Cryptosporidium* may cause diarrhea, fever, and gastrointestinal illness. The illness is generally easily handled by healthy individuals. However, 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 about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline at 1-800-426-4791.

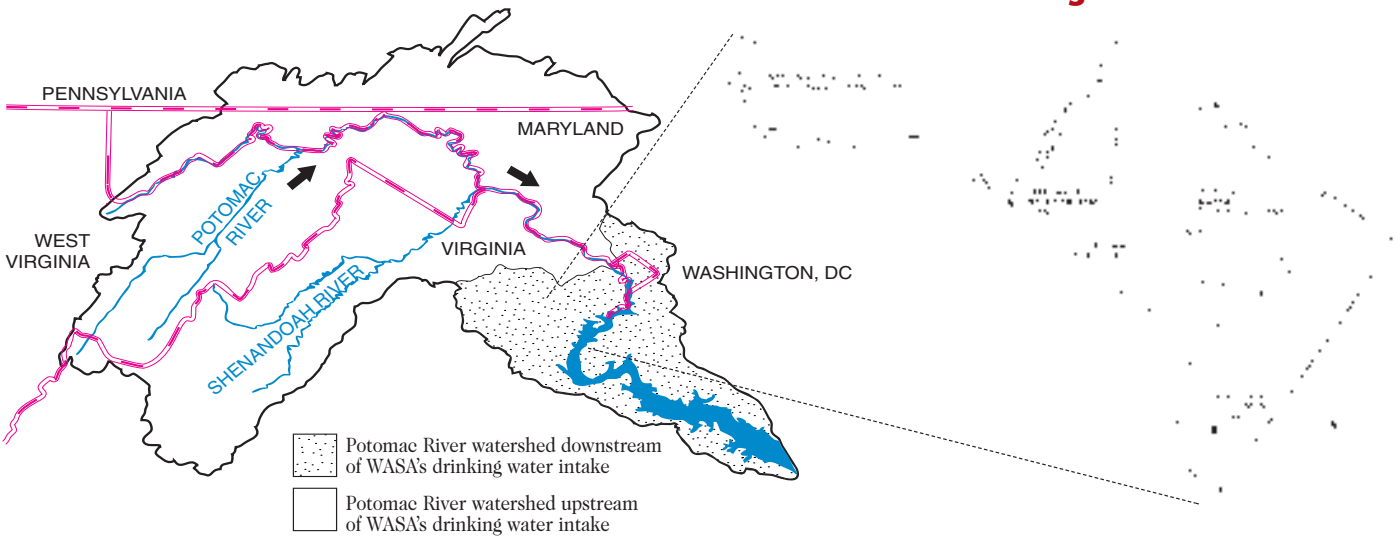
The Washington Aqueduct (WA) tests the untreated source water for *Cryptosporidium*. Tests of the source water (prior to treatment) have not detected *Cryptosporidium*. Because current test methods for *Cryptosporidium* cannot conclusively assure that the organism will never be present in our source water, WASA and WA continue to provide a multiple-barrier approach – chemical treatment, highly efficient filtration technology and disinfection – designed to remove *Cryptosporidium*, if present, at our water treatment plants and minimize the risk to public health.

Basic Facts on DC Water Chemistry

Many of our customers have asked about the pH, alkalinity and hardness of our water. These characteristics, while important indicators of buffering capacity and mineral content, are not regulated by EPA. There is also considerable variation in mineral content throughout the year associated with varying amounts of Potomac River Flow. Representative figures are shown below:

	Average	Range
pH(units)	8.0	7.7-8.5
Alkalinity(mg/l $CaCO_3$)	74	43-115
Total Hardness(mg/l $CaCO_3$)	146	116-191

Activities in the Potomac Watershed Affect Your Drinking Water!



Water Quality Monitoring Programs

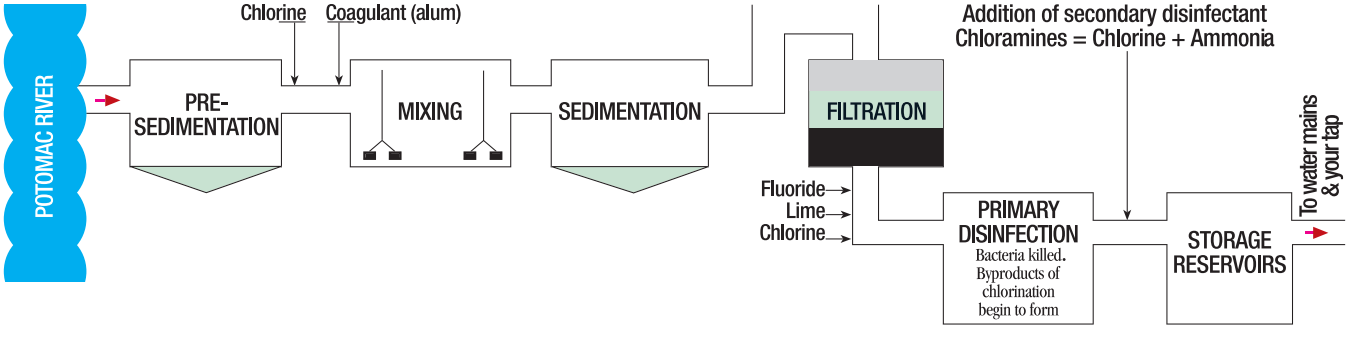
Coliform Bacteria Monitoring - A primary method of testing the safety of drinking water is frequent laboratory analysis for coliform bacteria. Most coliform species are harmless; however, they have been found to be a useful measure of the effectiveness of the treatment process in the removal of harmful microorganisms, and of efforts to prevent their infiltration into the drinking water storage and distribution system. Thus, coliform bacteria monitoring throughout the District is used as an "early warning system" for potential contamination. If coliform bacteria are found in the water, more samples are immediately taken, and the situation is investigated to assure that the water is safe to drink.

Lead and Copper Monitoring Program - The most common cause of lead in drinking water is corrosion, a reaction between the water and lead pipes, fixtures containing lead (such as some brass fixtures) or lead-based solder to connect copper pipes installed in interior household plumbing prior to 1987. One of the treatment objectives for DC's system is to control the corrosivity of water to minimize leaching of lead or copper from customer plumbing into the water. WASA regularly monitors for elevated lead and copper concentrations by collecting water samples at consumer taps. During 2002, concentrations found in these sampling programs exceeded EPA's action level based on analysis of 53 samples collected with the assistance of customers. WASA has embarked on remedial programs to meet EPA's requirements. Infants, young children, and pregnant women tend to be more vulnerable to lead than the general public.

The following are some tips to help you further minimize lead in drinking water:

Drink water or prepare beverages, especially infant formula, from the cold water tap. Hot water dissolves lead more quickly than cold water.

If water has been standing in the pipes without use for a few hours, run the cold water tap for a few minutes before drinking it. This will get rid of stagnant water that may contain dissolved lead from household plumbing.



Main Treatment Processes at Dalecarlia and McMillan Water Treatment Plants

Pre-Sedimentation – Allows large particles in untreated water to settle out naturally.

Mixing – "Coagulants" are added to the water to cause small particles to stick together when the water is mixed, making larger, heavier particles.

Sedimentation – Allows the newly formed larger particles to settle out naturally.

Filtration – Removes smaller particles by trapping them in sand filters.

Primary Disinfection – with Chlorine/Chloramines (after 11-1-2000). Other chemicals added include:
Lime to adjust the pH (the water's acidity) to prevent corrosion.
Fluoride at low levels to protect teeth (as recommended by the American Dental Association).

How You Can Help To Protect Washington, DC's Drinking Water Supply

Watershed Protection - A watershed is an area of land surrounding a river from which water eventually drains into the river. Everyone can help protect the Potomac River from contamination by protecting the watershed. Dispose of household wastes and motor oil in a proper manner. Never dump anything down a storm drain. To participate in watershed protection activities, contact the Interstate Commission on the Potomac River Basin at 301-984-1908.

Report Fire Hydrant Vandalism - Fire hydrants are used primarily to supply water for fire protection. WASA also issues permits for other specific hydrant uses, with prescribed requirements for the use of a special backflow prevention device when drawing water from a hydrant. Unauthorized opening of fire hydrants, or causing damage to fire hydrants are serious criminal offenses. Vandals opening fire hydrants drain thousands of gallons of fresh drinking water into streets. The torrent of water can damage roads and be a safety hazard to traffic and pedestrians. In addition, by improper use of fire hydrants, the increased water velocity causes mineral sediment in the lines to come loose, resulting in discoloration and potential water quality problems in the area. Most importantly, unauthorized hydrant use without a backflow preventor can result in the introduction of contaminants into the system. Anyone seeing someone opening a fire hydrant without apparent authorization should call 202-612-3400 immediately.

Volunteer Program - WASA has a number of drinking water quality monitoring programs offered during specific periods in which you can participate. By participating in these programs you will not only be serving the community but will also be able to receive detailed information about the water quality at your tap. We have recently mailed out the analysis data to all participants in our supplementary monitoring program. We also have received numerous calls from volunteers for the Lead and Copper Program. We are maintaining a listing of volunteers for future contact. We are planning to increase our monitoring programs to accommodate the maximum number of participants. For more information call the WASA Water Quality Division at 202-612-3440.

Be a Partner in Our Cross-Connection Control Program - Our cross connection surveyors will be conducting inspections of the drinking water supply in commercial, industrial and apartment buildings on a schedule prioritized by hazard potential. We would appreciate your cooperation in assisting our surveyors. Depending on the survey findings, WASA will inform you of the type of back flow preventor which may be needed.

Community Meetings - WASA periodically conducts community meetings with Advisory Neighborhood Commissions, civic associations, schools, libraries, and other groups. If you would like a speaker from WASA to make a presentation to your community group, contact the WASA Public Affairs Office at 202-787-2200, or email us at info@dcwasa.com.

Board of Directors Meetings - The WASA Board of Directors conducts regular business meetings, open to the public, generally on the first Thursday of each month. If you'd like to attend, please call the Office of the Board Secretary at 202-787-2330 to confirm the specific meeting time and location.

The Potomac River – Our Water Supply Source

Drinking water for all of Washington, DC comes from the Potomac River, a "surface water" supply. As water travels over land and rocks, through creeks, and into the Potomac River, it dissolves naturally occurring minerals, leaves and vegetation, and sometimes even radioactive materials. It may also dissolve animal waste, pesticides, and other debris from human activity. Rain or other precipitation may also pick up contaminants as it falls through the atmosphere and into the river.

Contaminants that may be present in source water (before treatment) include:

Microbial contaminants, such as viruses and bacteria tha come from agricultural livestock, septic systems and wildlife;

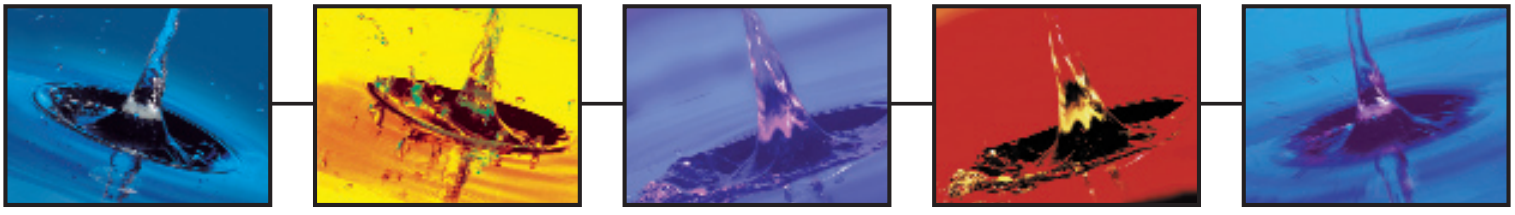
Inorganic contaminants, such as salts and metals that can be naturally occurring or result from urban storm water runoff, industrial or domestic wastewater discharges;

Pesticides and herbicides that may come from agriculture, 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 products; and

Radioactive contaminants, which can be naturally occurring or due to mining activities.

The DC Department of Health is conducting a Source Water Assessment of the Potomac River watershed, upstream of the water supply intakes for the District. The assessment includes the delineation of the District of Columbia source water area, the identification of potential contamination sources, a susceptibility analysis for the intakes, and modeling of contaminant transport within the river system. The study has been coordinated with various state and local government agencies and interest groups, and there will be opportunity for public participation at important stages of the project. For more information on this project, contact the DC Department of Health at 202-535-2190 or visit the web site http://www.dchealth.com/eha/wqd/services.htm.



What's In My Drinking Water?

EPA establishes standards for drinking water to make sure that it's safe for you to drink. The table summarizes DC's drinking water test results during the year 2002. The water is tested for the presence of 127 prescribed contaminants; however for clarity only those detected are listed in the table. The table compares the level of each detected contaminant to an allowable upper limit (maximum contaminant level, or MCL) and the ideal goal (maximum contaminant level goal, or MCLG) set by EPA. Note that the concentrations of all detected contaminants in DC's drinking water were considerably below EPA-established maximum limits. If you want a complete list of contaminants tested for and results call 202- 612-3440.

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 expected health risks can be obtained by calling the Environmental Protection Agency Safe Drinking Water Hotline at 1-800-426-4791.

Washington, DC Drinking Water Analysis Data for 2002

Regulated Contaminants

Category of Contaminants	Units	EPA Limits		DC Drinking Water		Typical Sources of Contaminants
		MCLG	MCL or TT	Highest	Range	
Water Treatment Plant Performance						
Turbidity	NTU	NA (TT)	5 (maximum)	0.28	NA	Soil runoff.
	% of turbidity readings ≤ 0.5 NTU	NA (TT)	95% (minimum)	100%		
Microbiological Indicators						
Total Coliform Bacteria	% of total-coliform-positive samples	0	5% (maximum)	2.5%	0 to 2.5%	Naturally present in the environment.
Disinfectants and Disinfection Byproducts						
Chlorine	ppm	4 (MRDLG)	4.0 (MRDL)	3.7	3.4 to 3.7	Water additive that protects against microbiological contamination. Chlorine is combined with ammonia to form Chloramine
Total Trihalomethanes[3]	ppb (4-quarter running average)	0	80	53 (highest 4-quarter average)	17 to 94 (individual samples)	Trihalomethanes are a byproduct of drinking water chlorination. Comment: Changeover to chloramines has reduced trihalomethanes formation.
Inorganic Metals						
Selenium	ppb	50	50	2.0	ND to 2.0	Discharge from petroleum and metal refineries; erosion of natural deposits.
Barium	ppm	2	2	0.05	0.03 to 0.05	Discharge of drilling waste and metal refineries; erosion of natural deposits.
Arsenic	ppb	50	50	0.6	ND to 0.6	Erosion of natural deposits.
Chromium	ppb	100	100	3.0	ND to 3.0	Discharge from steel and pulp mills; erosion of natural deposits.
Copper (at the customer's tap)	ppm	1.3	1.3 (AL)	0 samples[1] out of 53 above AL	90% of samples ≤ 0.1	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives.
Lead (at the customer's tap)	ppb	0	15 (AL)	26 samples[1] out of 53 above AL	90% of samples ≤ 49	Corrosion of household plumbing systems; erosion of natural deposits.
Inorganic Ions						
Fluoride	ppm	4	4	1.0	0.6 to 1.0	Water additive that promotes strong teeth.
Nitrate (as N)	ppm	10	10	2.7	0.2 to 2.7	Runoff from fertilizer use; leaching from septic tanks; erosion of natural deposits.
Herbicides						
Dalapon	ppb	200	200	4.4	ND to 4.4	Runoff from herbicide used on rights-of-way.
2-4, D	ppb	70	70	0.1	ND to 0.1	Runoff from herbicide used on rights-of-way.
Radionuclides						
Alpha Emitters	pCi/L	0	15	2.1	ND to 2.1	Erosion of natural deposits.
Beta Emitters	pCi/L	0	50	3.0	1.2 to 3.0	Decay of natural and man-made deposits.

Unregulated Contaminants

Category of Contaminants	Units	Status	Highest	Range	Typical Sources of Contaminants
Inorganic					
Sulfate	ppm	NR	84	42 to 84	Naturally present in the environment and in mine drainage wastes.
Nickel	ppb	NR[2]	2.0	0.9 to 2.0	Used in manufacturing alloys, corrosion resistant batteries, and electroplating.
2,4 & 2,6 di-nitrotoluene, Acetochlor, DCPA mono & di-acid degradate, 4,4-DDE, EPTC, Molinate, MTBE, Nitrobenzene, Perchlorate and Terbacil			The contaminants shown in the adjacent column are required to be monitored under the "unregulated contaminant monitoring rule" (UCMR) by large water providers on a quarterly basis for one year. EPA requires that large water systems monitor for these compounds to help determine the need for future regulations. The monitoring for the UCMR began January 2002. None of the contaminants listed is detected. Results are available on request.		
Disinfection Byproducts					
Chloral Hydrate	ppb	NR	13.0	1.6 to 13.0	The non-regulated (NR) contaminants shown here are byproducts of drinking water chlorination. EPA required that large water providers monitor for these compounds to help determine the need for future regulations.
Chloropicrin	ppb	NR	0.9	< 0.5 to 0.9	
Haloacetic Acids(6)	ppb	NR	53	15 to 53	
Haloacetonitriles	ppb	NR	12.3	2.3 to 12.3	
Haloketones	ppb	NR	4.9	1.1 to 4.9	
Total Organic Halides	ppb	NR	330	160 to 330	

[1] EPA regulations require that corrective action be taken if greater than 5 of 50 samples exceed the action level.
[2] Nickel is required to be monitored while EPA reconsiders its MCL.

Abbreviations and Definitions

Action Level (AL) = The concentration of a contaminant which, if exceeded, triggers a treatment or other requirement that a water system must follow.

CDC = Centers for Disease Control and Prevention, located in Atlanta, Georgia, whose mission is to promote health and quality of life by preventing and controlling disease, injury, and disability. CDC is an agency of the U.S. Department of Health and Human Services.

Haloacetic Acid (6) (HAA6) = The six haloacetic acid species required to be monitored by EPA.

MRDL = Maximum Residual Disinfectant Level. The highest level of a disinfectant that is allowed in drinking water.

MRDLG = Maximum Residual Disinfectant Level Goal. The level of drinking water disinfectant in water below which there is no known or expected risk to health. MDRLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

MCLG = Maximum Contaminant Level Goal. The level of a contaminant in water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

MCL = Maximum Contaminant Level. 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 technologies.

NA = Not Applicable.

ND = Non-Detectable.

NR = Not regulated by EPA at this time.

NTU = Turbidity is measured with an instrument called a nephelometer, which measures the intensity of light scattered by suspended matter in the water. Measurements are given in nephelometric turbidity units (NTUs).

pCi/L = Picocuries per liter (a measure of radioactivity).

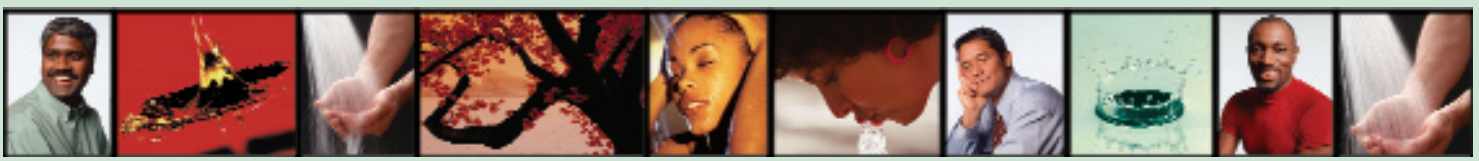
ppm = Parts per million.

ppb = Parts per billion.

TT = Treatment Technique. A required process intended to reduce the level of a contaminant in drinking water.

Turbidity = A measure of the cloudiness of water. We measure turbidity because it is a good indicator of the effectiveness of the water treatment system. Turbidity in excess of 5 NTU is just noticeable to the average person.

"<" = less than. In some cases, the laboratory's analytical method was not capable of measuring at or below EPA's minimum detection level. In these cases, if the contaminant was not detected, a "less than" result is reported under the "Highest" detected level in DC's drinking water.



For More Information or Questions - concerning this report call our Water Quality Division, at 202-612-3440. For any other aspect please call one of the numbers listed below:

Drinking Water Quality	WASA Water Quality	202-612-3440
Other General Information	WASA Switchboard	202-787-2000
Water Bills	WASA Water Bill Action Line	202-354-3600
To Report Pipe Breaks, Leaks, or Open Hydrants (24 Hours per Day)	WASA Water Operations Emergency	202-612-3400
Information About WASA and WASA's Programs	WASA Public Affairs Office	202-787-2200
Storm Drain Complaints or	WASA Department of	202-264-3820
	Sewer Services	202-612-3400
Source Water Protection	DC Department of Health	202-535-2190
Source Water Protection	Interstate Commission on the Potomac River Basin	301-984-1908
Drinking Water Treatment	Washington Aqueduct Division, USACE	202-764-2753
Safe Drinking Water Hotline	EPA	800-426-4791

Visit Our Website - WASA's annual Water Quality Report and other information about WASA are available on the Internet at:

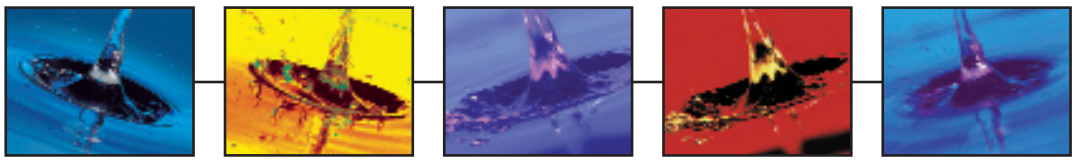
http://www.dcwasa.com

Other web sites with information about drinking water are listed below:

EPA's Surf Your Watershed	http://www.epa.gov/surf
American Water Works Association	http://www.awwa.org

Glenn S. Gerstell – ***Chairman of the Board*** Jerry N. Johnson – ***General Manager***

Comments can also be e-mailed to info@dcwasa.com or faxed to 202-787-2210



Serving the Public • Protecting the Environment

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Cassette recordings of this brochure can be obtained by calling the WASA Public Affairs Office at 202-787-2200.

June 2003