

Call Perry Sasser at 703-228-6578 for information about the next opportunity for public participation in decisions about your drinking water. You may also consult the County's Website at www.arlingtonva.us/dpw/index.htm and, for more information, see U.S. Environmental Protection Agency (EPA) water information at www.epa.gov/safewater/

WSS is a member of:
American Water Works Association
AWWA Research Foundation
Partnership for Safe Drinking Water
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Arlington County Department of Environmental Services
Water, Sewer and Streets Bureau
4200 South 28th Street
Arlington, VA 22206

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Important Water Quality Information Enclosed



Department of Environmental Services

Utilities and Environmental Policy Division
Water, Sewer and Streets Bureau

ARLINGTON REPORT



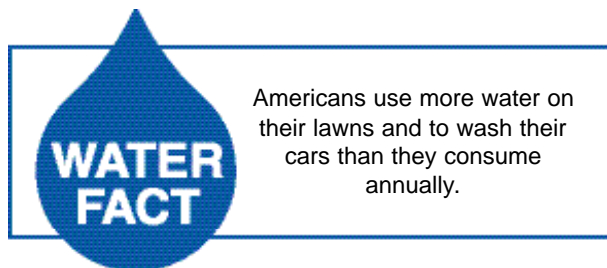
2004
Annual
Water
Quality
Report

HOW GOOD IS ARLINGTON COUNTY WATER?

The Arlington County Water, Sewer and Streets Bureau is committed to providing residents with a safe and reliable supply of high quality drinking water. We test County water using sophisticated equipment and advanced procedures and our water meets all state and federal standards for water quality. This annual "Consumer Confidence Report," required by the Safe Drinking Water Act (SDWA), tells you where your water comes from, what our tests show about it, and other things you should know about drinking water.

Property Managers of Multiple Unit Dwellings: Please post this report in a public area of the building managed in Arlington County. If additional copies are needed, please notify Perry Sasser at 703-228-6578.

El informe contiene información importante sobre la calidad del agua en su comunidad. Tradúzcalo ó hable con alguien que lo entienda bien.



WHAT ARE WE DOING TO MAKE THINGS BETTER?

In August of 2004, the Washington Aqueduct Division, in accordance with guidance provided by the EPA, began introducing orthophosphate to the finished water supply. Orthophosphate is a colorless, odorless, tasteless food-grade additive used by utilities nationwide to control corrosion in metal pipes. Locally, the public water systems serving Fairfax County, Alexandria, Prince William County, Loudoun County, Montgomery County, and Prince Georges County all use some form of phosphate in their water treatment processes. The addition of orthophosphate into the finished water supply controls corrosion by creating a thin insoluble mineral scale which lines the inside of the public water mains and private plumbing pipes and fixtures. This coating provides a barrier between the water and the pipe material which minimizes the potential for any leaching of material from the pipe and protects the pipe from the corrosive action of water. Orthophosphate should not affect the taste or smell of the water, and is safe for humans, pets and aquariums.

Annual Water Main Flushing

Arlington County conducts its water main flushing program during the months of March and April of each year. This program allows for cleaning of the water mains, inspection of fire hydrants and operation of the many water valves located throughout the county.

County citizens may experience low water pressure, discolored water, or high chlorine smell during the flushing program. Low pressure and discolored water conditions should be short in duration, and in most cases will clear within a few minutes of running the water in your home or business. Higher chlorine smells may be present throughout the flushing program.

Aquarium and fish pond owners in past years were advised that a conversion from Chloramines to Free Chlorine would accompany the water main flushing program. The conversion did not occur in 2004, and at this time a decision to continue this practice has not been made. Aquarium and fish pond owners should treat their water for the presence of Chloramines and not Free chlorine until further notice.

If you have any questions or concerns, please contact Perry Sasser at 703-228-6578. To report low pressure or discolored water, contact the Water Control Center at 703-228-6555.

WHERE DOES OUR WATER COME FROM?

Arlington County purchases its water from the Washington Aqueduct Division of the Army Corps of Engineers. The Washington Aqueduct Division operates two water treatment plants in the District of Columbia that treat water from a surface water source, the Potomac River. Arlington receives its water from the Dalecarlia Treatment Plant located on MacArthur Boulevard in Northwest Washington. Our water source from the Potomac River is monitored for vulnerability and influence through a source water assessment program which includes routine observation of land use activities. The Arlington Waterworks maintains water quality assurance through our continuous distribution/storage evaluations and routine water sampling analysis.

WHAT ELSE SHOULD I KNOW?

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline (800-426-4791).

WHERE DOES WATER COME FROM?

The 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:

- A. Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- B. 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, or farming.
- C. Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.
- D. 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.
- E. Radioactive contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities.

IMPORTANT HEALTH INFORMATION

The Washington Aqueduct participates in a major drinking water quality testing program called the Information Collection Rule (ICR). One of the contaminants that the County tests for is the parasite, *Cryptosporidium*, which has caused outbreaks of intestinal disease in the U.S. and overseas. It is common in surface water, difficult to kill, and even the best water system will contain some live parasites. The U.S. Environmental Protection Agency (EPA) is working to resolve several scientific issues that will allow it to set *Cryptosporidium* safety standards. Testing by the Washington Aqueduct was conducted from January through December 2004. There was no presence of *Cryptosporidium* detected in the treated finished water supply. No precaution about County drinking water is currently necessary for the general public. See advice about special populations, and a source for more information below.

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 (800-426-4791).

HOW TO READ THIS TABLE

It's easy! Our water is tested to assure that it is safe and healthy. The results of tests performed in 2001 or the most recent testing available are presented in the table. Footnotes below the chart are provided to explain important details.

The column marked **GOAL** shows the Maximum Contaminant Level Goal or **MCLG**. This is 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.

The column marked **MAXIMUM ALLOWED** is the Maximum Contaminant Level or **MCL**. This is 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.

The column marked **DETECTED LEVEL** shows the results observed in our water during the most recent round of testing.

SOURCE OF CONTAMINANTS provides an explanation of the typical natural or man-made origins of the contaminant.

ACTION LEVEL is the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

TREATMENT TECHNIQUE is a required process intended to reduce the level of a contaminant in drinking water.

KEY TO TABLE

AL = Action Level
MCL = Maximum Contaminant Level
MCLG = Maximum Contaminant Level Goal
n/a = not applicable
nd = none detected
NTU = Nephelometric Turbidity Units
pCi/L = picocuries per liter (a measure of radioactivity)
ppm = parts per million, or milligrams per liter (mg/L)
ppb = parts per billion, or micrograms per liter (ug/L)
TT = Treatment Technique

SUMMARY OF WATER QUALITY DATA

NONORGANIC CONTAMINANTS	DATE TESTED	UNIT	GOAL (MCLG)	MAXIMUM ALLOWED (MCL)	DETECTED LEVEL	RANGE OF LEVELS TESTED	SOURCE OF CONTAMINANTS
Arsenic	2004	ppb	n/a	50	0.5	0–0.5	Erosion of natural deposits; run off from orchards; run off from glass and electronic production waste.
Barium	2004	ppm	2	2	.045	.03–.045	Discharge of drilling waste; discharge from metal refineries; erosion of natural deposits.
Chromium	2004	ppb	100	100	1.3	0–1.3	Discharge from steel and pulp mills; erosion of natural deposits.
Copper ¹	2004	ppm	1.3	AL=1.3	.085	0	Corrosion of household plumbing; erosion of natural deposits; leaching from wood preservatives.
Flouride	2004	ppm	4	4	0.99	0.71–0.99	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories.
Lead ²	2004	ppb	0	AL=15	4	0	Corrosion of household plumbing; erosion of natural deposits.
Nitrate (as Nitrogen)	2004	ppm	10	10	2.87	1.31–2.87	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural products.
Selenium	2004	ppb	50	50	0.7	0–0.7	Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines.
SYNTHETIC ORGANIC CONTAMINANTS (Sampled at the treatment plant)	DATE TESTED	UNIT	GOAL (MCLG)	MAXIMUM ALLOWED (MCL)	DETECTED LEVEL	RANGE OF LEVELS TESTED	SOURCE OF CONTAMINANTS
Atrazine	2004	ppb	3	3	0.18	0–0.18	Runoff from herbicide used on row crops.
Simazine	2004	ppb	15	15	2.1	0–2.1	Herbicide runoff.
VOLATILE ORGANIC CONTAMINANTS	DATE TESTED	UNIT	GOAL (MCLG)	MAXIMUM ALLOWED (MCL)	DETECTED LEVEL	RANGE OF LEVELS TESTED	SOURCE OF CONTAMINANTS
Chloramines	2004	ppm	4	4	3.7	3.3–3.7	Water additive used to control microbes.
TTHM	2004	ppb	n/a	80	43	17–43	By-product of drinking water chlorination.
HAA5	2004	ppb	n/a	60	33	15–33	By-product of drinking water chlorination.
MICROBIOLOGICAL CONTAMINANTS (Sampled at the treatment plant)	DATE TESTED	UNIT	GOAL (MCLG)	MAXIMUM ALLOWED (MCL)	DETECTED LEVEL	RANGE OF LEVELS TESTED	SOURCE OF CONTAMINANTS
Turbidity ³	2004	NT	n/a	0.5	0.06	0.04–0.06	Soil runoff.
MICROBIOLOGICAL CONTAMINANTS (Sampled in the distribution system)	DATE TESTED	UNIT	GOAL (MCLG)	MAXIMUM ALLOWED (MCL)	DETECTED LEVEL	RANGE OF LEVELS TESTED	SOURCE OF CONTAMINANTS
Total Organic Carbon (TOC)	2004	ppm	n/a	TT	2.05	0.97–2.05	Naturally present in the environment.
Total Coliform	2004	n/a	n/a	†	.22%	6 of 1373	Naturally present in the environment.
RADIOACTIVE CONTAMINANTS (Sampled at the treatment plant)	DATE TESTED	UNIT	GOAL (MCLG)	MAXIMUM ALLOWED (MCL)	DETECTED LEVEL	RANGE OF LEVELS TESTED	SOURCE OF CONTAMINANTS
Alpha emitters	2002	pCi/L	0	15	2.1	0–2.1	Erosion of natural deposits.
Beta emitters	2002	pCi/L	0	50	3.0	1.2–3.0	Decay of natural and man-made deposits.

WATER QUALITY TABLE FOOTNOTES

¹None of the samples tested for copper exceeded the current Action Level of 1.3 ppm.

²None of the 150 samples tested for lead exceeded the current Action Level of 15 ppb.

³100% of the samples tested were below the Treatment Technique Level of 0.5 NTU. Turbidity is the measure of cloudiness of the water. We monitor it because it is a good indicator of the effectiveness of the filtration process.

†Presence of coliform bacteria in >5% of monthly samples.

Lead and Copper Results – Because of the County's Ultimate Reduced Monitoring status, lead and copper samples will next be collected in 2004.

IMPORTANT HEALTH INFORMATION ON TOTAL TRIHALOMETHANES (TTHMs):

The TTHM result of 43 ppb were the highest quarterly average concentration for 2004. The 12-month running average result was 30 ppb. Both results meet and exceed the MCL of 80 ppb set for 2004. Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and have an increased risk of getting cancer.

FREQUENTLY REQUESTED LEVELS OF COMPOUNDS IN ARLINGTON COUNTY DRINKING WATER:

Average Hardness 7.6 Grains per Gallon
 Average pH 7.9 pH Units
 Average Chloramine
 Residual 2.9 ppm
 Average Fluoride84 ppm

NOTE: Arlington County DPW recorded six positive samples for total coliform in calendar year 2004. The positive samples were 6 out of 1373 taken for the year 2004. Subsequent re-sampling at the location was negative for coliform bacteria.

HALOACETIC ACIDS (HAAs) ANALYSIS:

HAAs are compounds that are created from organic compounds that exist in source water blended with disinfectants like chlorine, that are used to eliminate potential microbial pathogens, such as bacteria and viruses. The US EPA has not determined the long-term health effects of HAAs ingestion. Arlington County monitored HAA's in all four quarters of 2004. The maximum detected level of 33 ppb meets and exceeds the level of 60 ppb set by the EPA.