

JOINT BASE ANDREWS WATER SYSTEM



2013 WATER QUALITY REPORT



Terrapin
Utility Services, Inc.

A Subsidiary of American States Utility Services, Inc.

Delivering Excellence, One Drop at a Time

Protecting and Preserving Your Drinking Water

We are pleased to present the following Joint Base Andrews 2013 Water Quality Report, which contains information about testing completed in your water system through December 2013.

Terrapin State Utility Services, Inc. (TUS) takes seriously its job as the guardian of drinking water quality for its customers. TUS is regulated by the state and federal government, and we are proud to say the quality of your water continually meets all drinking water quality standards.

TUS work with the Washington Suburban Sanitary Commission (WSSC) and members of the 779th Aerospace Squadron to ensure you receive water that meets regulatory requirements. Each week, industry professionals take water samples to monitor quality at approved sites throughout the distribution system. If there is an exceedance of a drinking water standard, we are required to notify you quickly and take action to restore normal service.

We pride ourselves on our strong customer service culture that comes from industry knowledge and relationships built in the water industry. Our representatives are available around the clock to answer questions and address any water concerns day or night.

On behalf of all of us at Terrapin Utility Services, Inc., thank you for providing us the opportunity to serve you. If you have any questions about this report, please call the TUS office at (301) 735-4101.

Sincerely,

Robert Spowls
President and Chief Executive Officer
American States Water Company

Greg Booker
Utility Manager
Terrapin State Utility Services

About the Company

American States Water Company is an investor-owned utility publicly traded on the New York Stock Exchange under the trading symbol AWR and is the parent company of American States Utility Services (ASUS). ASUS is one of the leaders in privatization of utilities on military installations across the nation. Through its subsidiary, Terrapin State Utility Services, Inc. (TUS), the important responsibility of managing the water systems at Joint Base Andrews is accomplished.

AWR and its family of companies provide water to communities throughout the United States. For more than 80 years, we've been installing and maintaining complex structures consisting of thousands of miles of pipelines, wells, pumping stations and reservoirs. With AWR companies, you can count on reliable water services, quality drinking water, and unsurpassed response to your questions.

You can find our companies in California, Maryland, New Mexico, North Carolina, South Carolina, Texas and Virginia. Our trained personnel have thousands of years of combined experience and are certified to work the various aspects of water systems. Our water testing procedures allow us to meet or exceed the water quality regulations set in place by the US Environmental Protection Agency (USEPA) and the Maryland Department of Health and Environmental Control (DHEC) to deliver quality, wholesome water to you – our customers.

Managing the daily operations for TUS is Greg Booker, Utility Manager. Greg is a seasoned professional in the water industry. He has worked in all phases of water distribution.

All the men and women at TUS are committed to meeting the needs of Joint Base Andrews. The water system at Joint Base Andrews undergoes comprehensive infrastructure analysis to determine what areas need repair, replacement or new facilities.

We're here to give you peace of mind – water when you need it and unsurpassed service. For questions on your water service, please contact Greg Booker at (301) 735-4101.

Safekeeping of Water Supplies and Facilities

To reduce the risk of terrorism affecting local water supplies and distribution systems, Terrapin State Utility Services, Inc. is following recommendations from the Federal Bureau of Investigation, the United States Environmental Protection Agency and the American Water Works Association. While water systems have a low relative likelihood of experiencing terrorist acts, these agencies advise that water systems should guard against unplanned physical intrusion, review emergency response plans, and increase vigilance. Terrapin State Utility Services, Inc. has taken all these steps and is continuing to look for additional safety improvements.

If You Have Questions – Contact Us

For information about your water quality or to find out about upcoming opportunities to participate in public meetings, please contact Greg Booker, Utility Manager, at (301) 735-4101.

Information Statement from EPA on Lead

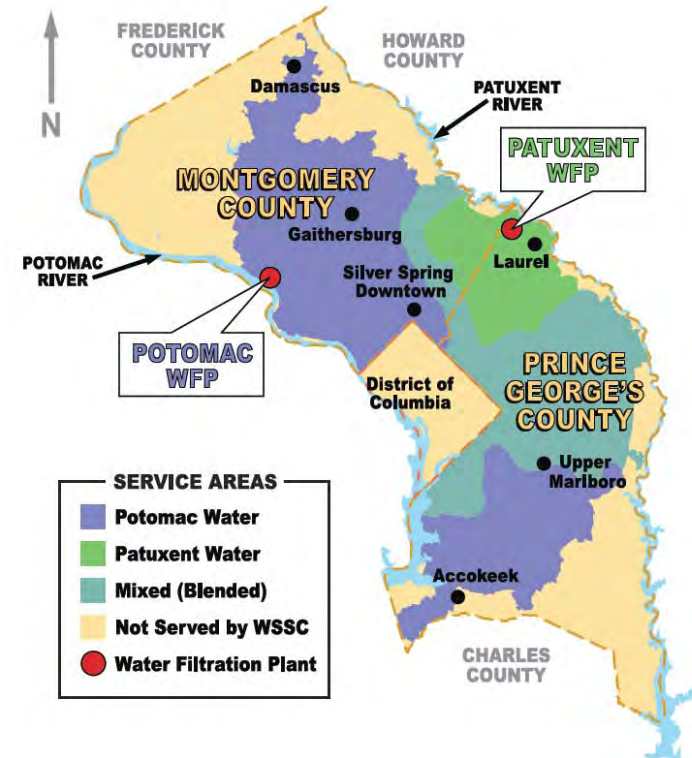
If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. WSSC is responsible for providing high quality drinking water, but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

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 epa.gov/safewater/lead.

For more information about health effects of the listed constituents in the enclosed tables, call the EPA hotline at 1-800-426-4791.

Where Does Our Water Come From?

Joint Base Andrews purchases its drinking water from the Washington Suburban Sanitary Commission (WSSC). WSSC filters and processes water from the Patuxent and Potomac Rivers and provides this water to Joint Base Andrews through their distribution system.



The source water treated at the Patuxent Water Filtration Plant (WFP) is held in two reservoirs - Triadelphia and T. Howard Duckett (also known as Rocky Gorge) - and is pumped to the plant. The Potomac WFP draws water directly from the Potomac River. The map shows the approximate service areas for both the Patuxent and Potomac WFPs.

Why Is My Water So Hard?

Hard water contains more dissolved calcium and magnesium. Potomac water tends to be hard (typically averaging about 120-130 milligrams per liter). Patuxent water is soft (typically averaging about 60-65 milligrams per liter).

Risk to Tap and Bottled Water

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 mean water may be a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline (1-800-426-4791).

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.

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 animal or human activity.

For People with Sensitive Immune Systems

Some people may be more vulnerable to constituents in the water than the general population. Immuno-compromised people, such as those with cancer undergoing chemotherapy, persons who have had organ transplants, people with HIV/AIDS or other immune system disorders, some elderly persons and infants can be particularly at risk of infections. These people should seek advice about drinking water from their healthcare providers.

The EPA and the Centers for Disease Control guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the PA's safe drinking water hotline at 1-800-426-4791.

Water Quality Data									
DETECTED REGULATED CONTAMINANTS									
SUBSTANCE	UNITS	PATUXENT TAP		POTOMAC TAP		MCL (or TT)	MCLG	VIOLATION?	MAJOR SOURCE IN DRINKING WATER
		LEVEL FOUND	RANGE	LEVEL FOUND	RANGE				
PHYSICAL									
Turbidity	NTU	0.03	0.02-0.09	0.02	0.05-0.2	TT=1 NTU	n/a	NO	Soil runoff
	% <0.3 NTU	100%	n/a	100%	n/a	TT=95% min	n/a	NO	
METALS									
Arsenic	µg/L	n/d	n/d	n/d	n/d - <2	10	0	NO	Erosion of natural deposits; runoff from orchards
Barium	mg/L	0.024	0.018-0.032	0.033	0.024-0.042	2	2	NO	Discharge of drilling wastes & metal refineries; erosion of natural deposits
Total Chromium	µg/L	<2	n/d - 2	<2	n/d - 2	100	100	NO	Discharge from steel & pulp mills; erosion of natural deposits
Copper	mg/L	0.016	0.009-0.028	<0.002	n/d - 0.002	n/a	n/a	NO	Erosion of natural deposits; algae control treatment chemicals
Selenium	µg/L	n/d	n/d - <2	<2	n/d - <2	50	50	NO	Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines
INORGANICS									
Residual Chlorine	mg/L	1.4	0.9-1.7	1.8	1.0-2.8	TT=0.2	n/a	NO	Water additive used to control microbes
Fluoride	mg/L	0.68	0.42-0.95	0.68	<0.2-0.82	4	4	NO	Water additive which promotes strong teeth; erosion of natural deposits
Nitrate	mg/L	1.1	0.5-1.6	1.6	0.5-2.8	10	10	NO	Runoff from fertilizer use; leaching from septic tanks; sewage; erosion of natural deposits
Nitrite	mg/L	n/d	n/d - <0.05	n/d	n/d - <0.05	1	1	NO	Runoff from fertilizer use; leaching from septic tanks; sewage; erosion of natural deposits
DISINFECTION BYPRODUCT (DBP) PRECURSOR									
Total Organic Carbon	n/a		met TT requirements		met TT requirements	TT	n/a	NO	Naturally present in the environment
PESTICIDES & SYNTHETIC ORGANIC CHEMICALS									
Atrazine	µg/L	n/d	n/d - <1	n/d	n/d - <1	3	3	NO	Runoff from herbicide used on row crops
Dialon	µg/L	n/d	n/d - <1	n/d	n/d	200	200	NO	Runoff from herbicide used on rights of way
Di[2-ethylhexyl] phthalate	µg/L	n/d	n/d - <2	n/d	n/d - <2	8	0	NO	Discharge from rubber & chemical factories
Pentachlorophenol (PCP)	µg/L	0.2	n/d - <0.8	n/d	n/d	1	0	NO	Discharge from wood preserving factories
RADIONUCLIDES									
Gross Alpha	pCi/L	<2	<2 - <2	<2	<2 - <2	15	0	NO	Erosion of natural deposits
Gross Beta	pCi/L	4.1	<4-4.4	<4	<2-4.1	50	0	NO	Decay of natural and man-made deposits
Radium 226	pCi/L	<1	<0.8 - <1	<1	<0.8 - <1	5	0	NO	Erosion of natural deposits
DISTRIBUTION SYSTEM									
SUBSTANCE	UNITS	CUSTOMER TAP ¹		AL	MCLG	VIOLATION?	MAJOR SOURCE IN DRINKING WATER		
		90th PERCENTILE ¹	# of SITES ABOVE AL						
METALS									
Copper	mg/L	0.133	0 sample	1.3	1.3	NO	Corrosion of household plumbing systems		
Lead	µg/L	<2	1 sample	15	0	NO	Corrosion of household plumbing systems		
BACTERIOLOGICAL									
Total Coliform	% Positive per month	0.61	0-1.31	5	0	NO	Naturally present in the environment		
No. of E. coli Positive Routine Samples	Count	0	0-0	n/a	n/a	n/a	Human and animal fecal waste		
No. of E. coli Positive Repeat Samples	Count	0	0-0	0	0	NO			
DISINFECTANT & DBPs									
Residual Chlorine	mg/L	1.23 ¹	n/d ¹ - 2.8	4 ¹	4 ¹	NO	Water additive used to control microbes		
Halooxetic Acids (HAA5)	µg/L	37.3 ¹	7.4 - 70.6	80 ¹	n/a	NO	By-product of drinking water chlorination		
Total Trihalomethanes (TTHMs)	µg/L	61.3 ¹	11.7 - 102	80 ¹	n/a	NO	By-product of drinking water chlorination		

DETECTED UNREGULATED CONTAMINANTS									
SUBSTANCE	UNITS	PATUXENT TAP		POTOMAC TAP		MCL	MCLG	VIOLATION?	MAJOR SOURCE IN DRINKING WATER
		LEVEL FOUND	RANGE	LEVEL FOUND	RANGE				
METALS									
Hexavalent Chromium ¹¹	µg/L	0.034	0.024-0.046	0.110	0.048-0.160	n/a	n/a	n/a	
Strontium ¹¹	µg/L	111	62-180	82	62-82	n/a	n/a	n/a	
Vanadium ¹¹	µg/L	n/d	n/d	0.51	0.38-0.64	n/a	n/a	n/a	
INORGANICS									
Chlorate ¹¹	µg/L	n/d	n/d	23	n/d-46	n/a	n/a	n/a	
PESTICIDES & SYNTHETIC ORGANIC CHEMICALS									
Dicamba	µg/L	1	n/d - <4	n/d	n/d	n/a	n/a	n/a	
VOLATILE ORGANIC CHEMICALS									
p-isopropyltoluene	µg/L	n/d	n/d - <0.5	n/d	n/d	n/a	n/a	n/a	
RADIONUCLIDES									
Tritium	pCi/L	<100	<100 - <100	<100	<100 - <100	n/a	n/a	n/a	
DISTRIBUTION SYSTEM									
SUBSTANCE	UNITS	DISTRIBUTION SYSTEM		MCL	MCLG	VIOLATION?	MAJOR SOURCE IN DRINKING WATER		
		LEVEL FOUND ¹	RANGE						
METALS									
Total Chromium ¹¹	µg/L	<0.2	n/d - 0.34	n/a	n/a	n/a			
Hexavalent Chromium ¹¹	µg/L	0.113	0.051-0.210	n/a	n/a	n/a			
Strontium ¹¹	µg/L	117	75-170	n/a	n/a	n/a			
Vanadium ¹¹	µg/L	0.41	0.20-0.74	n/a	n/a	n/a			
INORGANICS									
Chlorate ¹¹	µg/L	<20	n/d - 40	n/a	n/a	n/a			

Sampling Results

Our drinking water meets or exceeds all Federal (EPA) drinking water requirements. This report is a summary of the quality of the water we provide our customers. The analysis was made using data from the most recent U.S. Environmental Protection Agency (EPA) required tests and is presented in the included pages. We hope this information helps you become more knowledgeable about what's in your drinking water.

Although all the substances listed here are under the Maximum Contaminant Level (MCL), we feel it is important that you know exactly what was detected and how much of the substance is present in the water. Compliance (unless otherwise noted) is based on the average level of concentration being below the MCL. The State allows us to monitor for some contaminants less than once per year because the concentrations do not change frequently. Some of our data, though representative, are more than a year old.

Lead and Copper

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service line and home plumbing. The Washington Suburban Sanitary Commission is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. 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 the 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 at 1-800-426-4791 or at <http://www.epa.gov/safewater/lead>.

Measurements

Water is sampled and tested throughout the year.

Contaminants are measured in:

- Parts per million (ppm) or milligrams per liter (mg/L),
- Parts per billion (ppb) or micrograms per liter ($\mu\text{g/L}$),
- Parts per trillion (ppt) or nanograms per liter (ng/L).
- Grains per gallon (grains/gal) – A measurement of water hardness often used for sizing household water softeners. One grain per gallon is equal to 17.1 mg/L of hardness.
- Nephelometric Turbidity Units (NTU) – A measurement of the clarity of water. Turbidity in excess of 5 NTU is noticeable to the average person.
- Picocuries per liter (pCi/L) – A measurement of radioactivity in water.

If this is difficult to imagine, think about these comparisons:

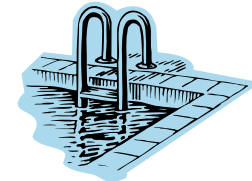
Parts per million:

3 drops in 42 gallons
1 second in 12 days
1 inch in 16 miles



Parts per billion:

1 drop in 14,000 gallons
1 second in 32 years
1 inch in 16,000 miles



Parts per trillion:

10 drops in enough water to fill the Rose Bowl
1 second in 32,000 years
1 inch in 16 million miles



Definitions

Maximum Contaminant Level (MCL)

The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the maximum contaminant level goals as is economically and technologically feasible. Secondary MCLs are set to protect the odor, taste and appearance of drinking water.

Maximum Contaminant Level Goal (MCLG)

The level of contaminant in drinking water below which there is no known or expected risk to health. Maximum contaminant level goals are set by EPA. MCLGs allow for a margin of safety.

Maximum Residual Disinfectant Level (MRDL)

The level of a disinfectant added for water treatment that may not be exceeded at the consumer's tap. 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 disinfectant added for water treatment below which there is no known or expected health risk. MRDLGs are set by EPA. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contamination.

Primary Drinking Water Standard (PDWS)

MCLs for contaminants that affect health, along with their monitoring and reporting requirements, and water treatment requirements.

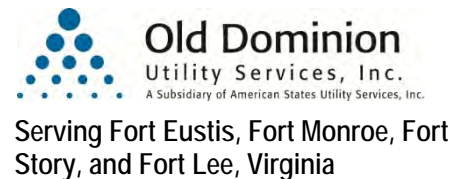
Action Level (AL)

The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

Treatment Technique (TT)

A required process intended to reduce the level of a contaminant in drinking water.

Our Subsidiaries

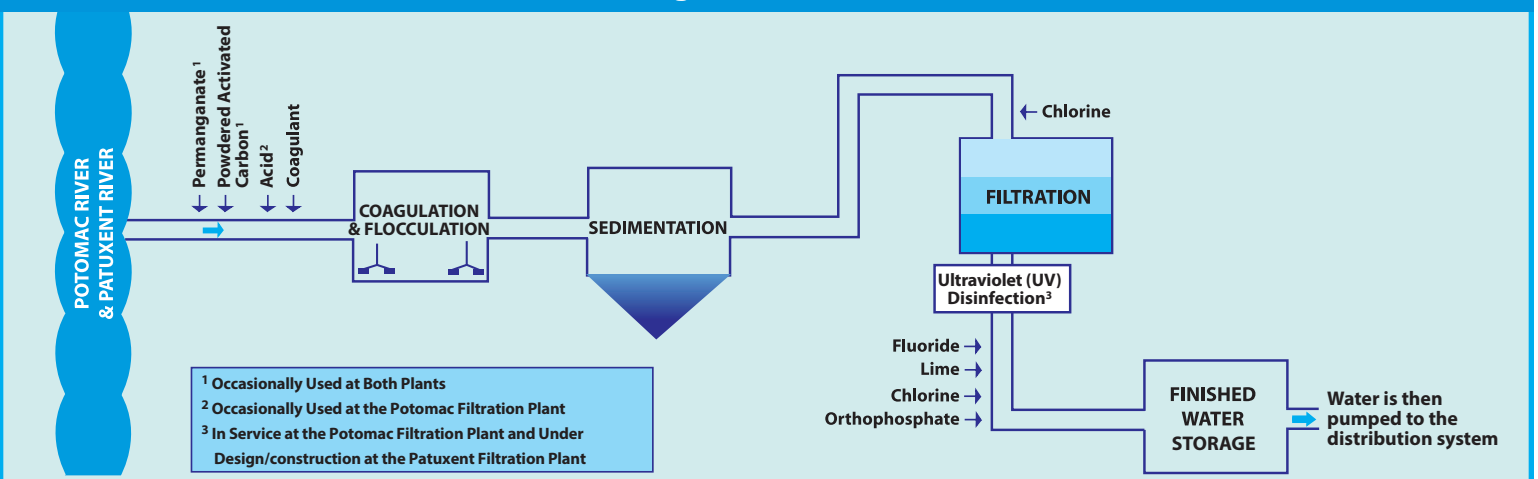


Water Quality Data

DETECTED REGULATED CONTAMINANTS

SUBSTANCE	UNITS	PATUXENT TAP		POTOMAC TAP		MCL (or TT)	MCLG	VIOLA-TION?	MAJOR SOURCE IN DRINKING WATER
		LEVEL FOUND*	RANGE	LEVEL FOUND*	RANGE				
PHYSICAL									
Turbidity	NTU	0.03	0.02-0.09 ¹	0.02	0.05 - 0.2 ¹	TT=1 NTU	n/a	NO	Soil runoff
	% <0.3 NTU	100%	n/a	100%	n/a	TT=95% min	n/a	NO	
METALS									
Arsenic	µg/L	n/d	n/d	n/d	n/d - <2	10	0	NO	Erosion of natural deposits; runoff from orchards
Barium	mg/L	0.024	0.018 - 0.032	0.033	0.024 - 0.042	2	2	NO	Discharge of drilling wastes & metal refineries; erosion of natural deposits
Total Chromium	µg/L	<2	n/d - 2	<2	n/d - 2	100	100	NO	Discharge from steel & pulp mills; erosion of natural deposits
Copper	mg/L	0.016	0.009 - 0.026	<0.002	n/d - 0.002	n/a	n/a	n/a	Erosion of natural deposits; algae control treatment chemicals
Selenium	µg/L	n/d	n/d - <2	<2	n/d - <2	50	50	NO	Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines
INORGANICS									
Residual Chlorine	mg/L	1.4	0.9 - 1.7	1.8	1.0 - 2.6	TT=>0.2	n/a	NO	Water additive used to control microbes
Fluoride	mg/L	0.68	0.42 - 0.95	0.68	<0.2 - 0.82	4	4	NO	Water additive which promotes strong teeth; erosion of natural deposits
Nitrate	mg/L	1.1	0.5 - 1.6	1.6	0.5 - 2.8	10	10	NO	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Nitrite	mg/L	n/d	n/d - <0.05	n/d	n/d - <0.05	1	1	NO	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
DISINFECTION BYPRODUCT (DBP) PRECURSOR									
Total Organic Carbon	n/a	met TT requirements		met TT requirements		TT	n/a	NO	Naturally present in the environment
PESTICIDES & SYNTHETIC ORGANIC CHEMICALS									
Atrazine	µg/L	n/d	n/d - <1	n/d	n/d - <1	3	3	NO	Runoff from herbicide used on row crops
Dalapon	µg/L	n/d	n/d - <1	n/d	n/d	200	200	NO	Runoff from herbicide used on rights of way
Di(2-ethylhexyl) phthalate	µg/L	n/d	n/d - <2	n/d	n/d - <2	6	0	NO	Discharge from rubber & chemical factories
Pentachlorophenol (PCP)	µg/L	0.2	n/d - <0.8	n/d	n/d	1	0	NO	Discharge from wood preserving factories
RADIONUCLIDES									
Gross Alpha	pCi/L	<2	<2 - <2	<2	<2 - <2	15	0	NO	Erosion of natural deposits
Gross Beta	pCi/L	4.1	<4 - 4.4	<4	<2 - 4.1	50 ²	0	NO	Decay of natural and man-made deposits
Radium 228	pCi/L	<1	<0.8 - <1	<1	<0.8 - <1	5 ³	0 ³	NO	Erosion of natural deposits
SUBSTANCE	UNITS	CUSTOMER TAP ⁴				AL	MCLG	VIOLA-TION?	MAJOR SOURCE IN DRINKING WATER
		90th PERCENTILE ⁵		# of SITES ABOVE AL					
METALS									
Copper	mg/L	0.133		0 sample		1.3	1.3	NO	Corrosion of household plumbing systems
Lead	µg/L	<2		1 sample		15	0	NO	Corrosion of household plumbing systems
SUBSTANCE	UNITS	DISTRIBUTION SYSTEM				MCL (or MRDL)	MCLG (or MRDLG)	VIOLA-TION?	MAJOR SOURCE IN DRINKING WATER
		LEVEL FOUND [*]		RANGE					
BACTERIOLOGICAL									
Total Coliform	% Positive per month	0.61		0 - 1.31		5	0	NO	Naturally present in the environment
No. of <i>E. coli</i> Positive Routine Samples	Count	0		0 - 0		n/a	n/a	n/a	Human and animal fecal waste
No. of <i>E. coli</i> Positive Repeat Samples	Count	0		0 - 0		0	0	NO	
DISINFECTANT & DBPs									
Residual Chlorine	mg/L	1.23 ⁶		n/d ⁷ - 2.8		4 ⁸	4 ⁸	NO	Water additive used to control microbes
Haloacetic Acids (HAA5)	µg/L	37.3 ⁹		7.4 - 70.6		60 ¹⁰	n/a	NO	By-product of drinking water chlorination
Total Trihalomethanes (TTHMs)	µg/L	61.3 ⁹		11.7 - 102		80 ¹⁰	n/a	NO	By-product of drinking water chlorination

WSSC Drinking Water Treatment Process



Water Quality Data (cont'd)

DETECTED UNREGULATED CONTAMINANTS

SUBSTANCE	UNITS	PATUXENT TAP		POTOMAC TAP		MCL	MCLG	VIOLA-TION?	MAJOR SOURCE IN DRINKING WATER
		LEVEL FOUND*	RANGE	LEVEL FOUND*	RANGE				
METALS									
Hexavalent Chromium ¹¹	µg/L	0.034	0.024 - 0.046	0.110	0.048 - 0.160	n/a	n/a	n/a	
Strontium ¹¹	µg/L	111	62 - 160	62	62 - 62	n/a	n/a	n/a	
Vanadium ¹¹	µg/L	n/d	n/d	0.51	0.38 - 0.64	n/a	n/a	n/a	
INORGANICS									
Chlorate ¹¹	µg/L	n/d	n/d	23	n/d - 46	n/a	n/a	n/a	
PESTICIDES & SYNTHETIC ORGANIC CHEMICALS									
Dicamba	µg/L	1	n/d - <4	n/d	n/d	n/a	n/a	n/a	
VOLATILE ORGANIC CHEMICALS									
p-Isopropyltoluene	µg/L	n/d	n/d - <0.5	n/d	n/d	n/a	n/a	n/a	
RADIONUCLIDES									
Tritium	pCi/L	<100	<100 - <100	<100	<100 - <100	n/a	n/a	n/a	
SUBSTANCE	UNITS	DISTRIBUTION SYSTEM				MCL	MCLG	VIOLA-TION?	MAJOR SOURCE IN DRINKING WATER
		LEVEL FOUND *		RANGE					
METALS									
Total Chromium ¹¹	µg/L	<0.2		n/d - 0.34		n/a	n/a	n/a	
Hexavalent Chromium ¹¹	µg/L	0.113		0.051 - 0.210		n/a	n/a	n/a	
Strontium ¹¹	µg/L	117		75 - 170		n/a	n/a	n/a	
Vanadium ¹¹	µg/L	0.41		0.20 - 0.74		n/a	n/a	n/a	
INORGANICS									
Chlorate ¹¹	µg/L	<20		n/d - 40		n/a	n/a	n/a	

Terms Defined

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 technology.

MCLG - Maximum Contaminant Level Goal. 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.

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

AL - Action Level. The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

MRDL - Maximum Residual Disinfectant Level. 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.

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

Turbidity - A measure of the cloudiness of the water. We monitor it because it is a good indicator of the effectiveness of our treatment process.

NTU - Nephelometric Turbidity Unit

mg/L - Milligrams per liter, equal to parts per million (ppm). The equivalent of one minute in 2 years or one penny in \$10,000.

µg/L - Micrograms per liter, equal to parts per billion (ppb). The equivalent of one minute in 2,000 years or one penny in \$10 million.

ng/L - Nanograms per liter, equal to parts per trillion (ppt). The equivalent of one minute in 2,000,000 years or one penny in \$10 billion.

pCi/L - Picocuries per liter (a measure of radiation)

n/d - Not detected

n/a - Not applicable

= Equals

< Less than

* Based on yearly average except as noted.

1. Filtered water, maximum of measurements taken every 15 minutes.
2. EPA considers 50 pCi/L to be the level of concern for beta particles.
3. The MCL and MCLG apply to combined Radium 226 and 228.
4. Most recent sampling, between June and September 2011.
5. If more than 10% of sites exceed the action level, system is required to take additional steps to control corrosiveness of their water.
6. Highest running annual average (RAA)
7. All samples deemed to have detectable disinfectant residual.
8. Maximum residual disinfectant level (MRDL), the highest level of a disinfectant allowed in drinking water; based on RAA.
9. Highest locational running annual average (LRAA)
10. Maximum contaminant level based on LRAA
11. Unregulated contaminants were monitored in accordance with third cycle of EPA's Unregulated Contaminant Monitoring Rule (UCMR3). For full results and explanations, go to wsscwater.com/ucmr3

Water is treated to EPA standards

As stewards entrusted to provide safe drinking water to our customers, WSSC treats our water to meet or exceed U.S. EPA standards.

WSSC drinking water undergoes extensive purification and treatment after it arrives at the plant and before it is sent to the distribution system for delivery to half a million homes and businesses. Our water treatment process includes: coagulation and flocculation (to make small particles and microorganisms in the raw source water adhere to each other); sedimentation (to remove most of those particles and microorganisms); filtration (to remove nearly all the remaining particles and microorganisms); chlorination (for disinfection); lime addition (to minimize the potential for dissolving lead solder used in older homes); and fluoridation (to prevent tooth decay). Orthophosphate is also added to help minimize copper pipe pinhole leaks in home plumbing.

Our Potomac Plant also includes UV disinfection to provide an extra barrier of protection against microbial pathogens such as *Cryptosporidium*. Plans for the UV disinfection upgrade at our Patuxent Plant are underway.

Information on *Cryptosporidium* Health Effects and WSSC Treatment

Cryptosporidium is a microbial pathogen found in surface water throughout the U.S.

Cryptosporidium must be ingested to cause disease, and it may be spread through means other than drinking water. Ingestion of *Cryptosporidium* may cause cryptosporidiosis, an abdominal infection. Symptoms of infection include nausea, diarrhea, and abdominal cramps. Most healthy individuals can overcome the disease within a few weeks. However, immuno-compromised adults, infants and small children, and the elderly are at greater risk of developing life-threatening illness. We encourage immuno-compromised individuals to consult their doctor regarding appropriate precautions to take to avoid infection.

Although filtration removes *Cryptosporidium*, the most commonly used filtration methods cannot guarantee 100 percent removal. While our existing treatment processes meet new EPA requirements for addressing concerns about *Cryptosporidium*, as an extra precaution, we have installed UV disinfection to provide an extra barrier of protection against *Cryptosporidium*.