Appomattox River Water Authority



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## 2011 Consumer Confidence Report

Virginia PWSID No. 4041035

Microbiological Contaminant	Units	MCLG	MCL	Highest	Average	Comment
Fotal Coliform Bacteria	onito	0	present in <= 5%	riigilest	Arciuge	Localities must report their own results!
Bacteria		Ŭ	monthly samples	4.76%	0.41%	240 of 241 samples were negative
Fecal Coliform & <i>E. coli</i>		0	routine sample &	4.7078	0.4178	Localities must report their own results!
		Ŭ	repeat sample if positive	None Positive	None Positive	241 of 241 samples were negative
			or 1 is also fecal coliform or	None i ositive	None i ositive	241 of 241 samples were negative
			E. coli positive			
TOC (total organic carbon)	n/a	n/a	TT = running annual	1.25	1.29	Daily calculations of TOC removal percentages
	n/a	n/a	average removal ratio	(min)	1.20	Minimum allowable RAA ratio = $1.0$
			minimum	1.36		
				(max)		
urbidity - combined filtered water	NTU	0	TT=1 NTU max	0.142	0.056	No Violations (**)
	NTU	0	TT=<0.3 NTU 95% of time	100.0%	100.00%	36448 of 36448 readings were <0.3 NTU
Cryptosporidium	oocyst/L	<0.075		0.1	0.012	Samples were collected twice a month from October 2006 - September 2008.
Radiological	Units	MCLG	MCL	Highest	Average	Comment
Beta/photon emitters	pCi/l	0	50(*)	4	N/A	October 22, 2008 test - next test is 2012
Alpha emitters	pCi/l	0	15	0.1	N/A	October 22, 2008 test - next test is 2012
Radium	pCi/l	0	5	0.9	N/A	October 22, 2008 test - next test is 2012
norganics	Units	MCLG	MCL	Min/Max	Average	Comment
Fluoride	ppm	4	4	1.40 (max)	0.44	Four Daily analyses at plant
				0.00 (min)		
Nitrate + Nitrite	ppm	10	10	0.18	N/A	October 27, 2011 test
Barium	ppm	2	2	0.025	N/A	October 27, 2011 test
Disinfectants	Units	MRDL	MRDLG	Min/Max	Average	Comment
Chlorine Dioxide	ppm	0.8	0.8	0.19 (max)	0.01	Daily at plant
				-0.14 (min)		
Chlorine	ppm	4	4	3.80 (max)	3.08	Weekly analysis of water in the transmission system
				1.10 (min)		
Disinfection By-products	Units	MCLG	MCL	Min/Max	Average	Comment
Chlorite	ppm	0.8	1.0	0.88 (max)	0.28	Daily at plant
				0.05 (min)		
TTHMs @ plant	ppb	0	80	NA	N/A	ARWA done weekly. Localities report their results
IAAs @ plant	ppb	0	60	NA	N/A	ARWA done weekly. Localities report their results
Inregulated Contaminants	Units	MCLG	MCL	Highest	Average	Comment
Sulfate	ppm	none	none	32.1	N/A	October 27, 2011 test
Chloroform	ppb	none	none	23	N/A	October 27, 2011 test
Bromodichloromethane	ppb	none	none	3.1	N/A	October 27, 2011 test
MTBE - finished water	ppb	none	none	<5.0	N/A	October 27, 2011 test
Dibromochloromethane	dqq	none	none	<0.50	N/A	October 27, 2011 test

(\*) The MCL for beta particles is 4 millirem/year. EPA considers 50 pCi/l to be the level of concern.

## Definitio

<b>Definitions</b>	
MCL -	Maximum Contaminant Level - The highest level of a contaminant that is allowed in drinking water. The MCLs are set as close to the MCLG 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.
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 contaminants.
RAA -	Running Annual average - removal ratio and the range of the removal for the individual months
NTU -	Nephelometric Turbidity Units - The measure of turbidity in the water.
AL -	Action Level - The concentration of a contaminant which, if exceeded, triggers a treatment or other requirement which a water system must follow.
тт -	Treatment Technique - A required process intended to reduce the level of a contaminant in drinking water.
ppm -	parts per million - (1/1,000,000) or milligrams per Liter (mg/l)
ppb -	parts per billion - (1/1,000,000,000)
pCi/L -	picocuries per Liter (a measure of radioactivity)