Annual Drinking Water Quality Report

ANTIOCH

IL0970050

Annual Water Quality Report for the period of January 1 to December 31, 2009

This report is intended to provide you with important information about your drinking water and the efforts made by the water system to provide safe drinking water.

The source of drinking water used by ANTIOCH is Ground Water

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Este informe contiene información muy importante sobre el agua que usted bebe. Tradúzcalo ó hable con alguien que lo entienda bien.

Source of Drinking Water

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 pickup 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 storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.

- Pesticides and herbicides, which may come from a variety of sources such as 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 production, and can also come from gas stations, urban storm water runoff, and septic systems.
- Radioactive contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities.

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 EPAs Safe Drinking Water Hotline at (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.
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).

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. We 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 http://www.epa.gov/safewater/lead.

Source Water Information

Source Water Name		Type of Water	Report Status	Location
WELL 1 (20309)		GW	_____	SOUTHWEST CORNER OF ORCHARD ST AND TOPT AVE.
WELL 10 (01650)		GW	_____	300 FT WEST OF WELL 9
WELL 2 (20310)		GW	_____	27 FT SOUTH OF WELL #1
WELL 3 (20311)		GW	_____	NORTHEAST CORNER OF MCMILLIAN RD AND GAIL ST
WELL 5 (20313)	S OF RT 173 E OF RR 3 OF	GW	_____	SOUTH OF RT 173, EAST OF RAILROAD
WELL 6 (00633)	SW COR OF ORCHARD & TOFT	GW	_____	SOUTHWEST CORNER OF ORCHARD AND TOFT
WELL 7 (01053)		GW	_____	NEXT TO 250000 GALLON ELEVATED TANK
WELL 8 (01648)		GW	_____	WNW OF SAVAGE AND WHITE ROADS
WELL 9 (01649)		GW	_____	200 FT NW OF WELL 8

Source Water Assessment

We want our valued customers to be informed about their water quality. If you would like to learn more, please feel welcome to attend any of our regularly scheduled meetings. Village Board meetings are held at 7:30 p.m. on the first and third Monday of every month in the Municipal Building Board Room: 874 Main Street, Antioch, IL. For more information, visit the Village of Antioch's website at www.antioch.il.gov.
The source water assessment for our supply has been completed by the Illinois EPA. If you would like a copy of this information, please stop by City Hall or call Dave Hanson, water operator at 847-395-1881. To view a summary version of the completed Source Water Assessments, including: Importance of Source Water; Susceptibility to Contamination Determination; and documentation/recommendation of Source Water Protection Efforts, you may access the Illinois EPA website at http://www.epa.state.il.us/cgi-bin/wp/swap-fact-sheets.pl.

Based on information obtained in a Well Site Survey published in 1990 by the Illinois EPA, sixty-two potential sources or possible problem sites were identified within the survey area of Antioch's wells. Furthermore, information provided by the Leaking Underground Storage Tank and Remedial Project Management Sections of the Illinois EPA indicated several additional sites with ongoing remediation's which may be of concern. The Illinois EPA has determined that the Antioch's wells #1, #2, #3, #5 and #6 source water is not susceptible to contamination. However, the source water obtained from Well #7 is susceptible to contamination. This determination is based on a number of criteria including; monitoring conducted at the wells; monitoring conducted at the entry point to the distribution system; and the available hydro geologic data on the wells.

2009 Regulated Contaminants Detected

Lead and Copper

Definitions:
Action Level Goal (ALG): The level of a contaminant in drinking water below which there is no known or expected risk to health. ALGs allow for a margin of safety.
Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

Lead and Copper	Date Sampled	MCLG	Action Level (AL)	90th Percentile	# Sites Over AL	Units	Violation	Likely Source of Contamination
Copper	09/06/2007	1.3	1.3	0.469	0	ppm	N	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.
Lead	09/06/2007	0	15	12	1	ppb	N	Corrosion of household plumbing systems; Erosion of natural deposits.

Water Quality Test Results

Maximum Contaminant Level Goal or 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 Contaminant Level or 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 residual disinfectant level goal or MRDLG:	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.
Maximum residual disinfectant level or MRDL:	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.
Definitions:	The following tables contain scientific terms and measures, some of which may require explanation.
ppb:	micrograms per liter or parts per billion - or one ounce in 7,350,000 gallons of water.
na:	not applicable.
Avg:	Regulatory compliance with some MCLs are based on running annual average of monthly samples.
ppm:	milligrams per liter or parts per million - or one ounce in 7,350 gallons of water.

Regulated Contaminants

Disinfectants and Disinfection By-Products	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Chlorine		1.8	0.2 - 1.8	MRDLG = 4	MRDL = 4	ppm	N	Water additive used to control microbes.
Total Trihalomethanes (TThm)*	06/11/2008	2.8	2.8 - 2.8	No goal for the total	80	ppb	N	By-product of drinking water chlorination.

Not all sample results may have been used for calculating the Highest Level Detected because some results may be part of an evaluation to determine where compliance sampling should occur in the future

Inorganic Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Arsenic - While your drinking water meets EPA standards for arsenic, it does contain low levels of arsenic. EPAs standard balances the current understanding of arsenics possible health effects against the costs of removing arsenic from drinking water. EPA continues to research the health effects of low levels of arsenic, which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.		5.4	0 - 5.4	0	10	ppb	N	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes.
Barium		0.1	0.05 - 0.1	2	2	ppm	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.

Fluoride		0.81	0.68 - 0.81	4	4.0	ppm	N	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Iron		1.1	0.16 - 1.52		1.0	ppm	N	Erosion of natural deposits.
Manganese		13	2.4 - 13	150	150	ppb	N	Erosion of natural deposits.
Selenium		1.9	0 - 1.9	50	50	ppb	N	Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines.
Sodium		42	32 - 42			ppm	N	Erosion from naturally occurring deposits: Used in water softener regeneration.
Zinc		0.0075	0 - 0.0075	5	5	ppm	N	Naturally occurring; discharge from metal factories. from metal factories
Radioactive Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Combined Radium 226/228		1	1.21 - 1.21	0	5	pCi/L	N	Erosion of natural deposits.
Gross alpha excluding radon and uranium		1	2 - 2	0	15	pCi/L	N	Erosion of natural deposits.