Glendale Water Reports 2008 Annual Quality Report

We are pleased to provide you the **2008 Annual Water Quality Report.** This report is designed to inform you about the quality and services we deliver to your home or business each day, every day.

We work hard to protect our water resources and to continually improve the water treatment process. Our goal is to provide you with a safe and dependable water supply, by protecting and improving water quality.

Our water source is known as the Little Miami Aquifer. Water is supplied from two (2) wells, located in the **Glendale Water** well field at 2779 East Sharon Road. The well field has a high susceptibility rating based on a study by the Ohio EPA. This is based on the thin discontinuous layer of low permeability material overlaying the aquifer and the potential contaminant sources around the well field. The likelihood of any contamination is minimized, by using appropriate measures.

We want our valued customers to be informed about their water utility. If you have any questions about this report or concerning your water utility, please contact Mike Heuer at (513)771-6860. If you want to learn more, please attend any of our regularly scheduled meetings. Our City Council meets the first Monday of each month at the Town Hall located at 80 East Sharon Road, Glendale, Ohio at 7:00pm.

At **Glendale Water** we work around the clock to provide top quality water to every tap. We ask that our customers help us protect our water sources, which are the heart of our community, our way of life and our children's future.

The sources of drinking water, both tap water and bottled water, includes 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 materials, 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 results from urban storm water 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 storm water runoff, and residential uses;
- (**D**) **Organic chemical contaminants,** including synthetic and volatile organic chemicals, which are by-products of industrial processes and protroleum production, and can also come from gas stations, urban storm water runoff, and septic systems;
- (E) Radioactive contaminants, which can come be naturally occurring or be the result of oil and gas production and mining activities.

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. Immune-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, persons 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 providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbiological contaminants are available from the Safe Drinking Water Hotline 1-800-426-4791.

Glendale Water routinely monitors for contaminants in your drinking water according to Federal and State laws. This table shows the results of our monitors for contaminants in your drinking water for the period of Jan. 1st to December 31st, 2008.

				Tes	t Results		
Contaminant	Violation	Level	MCL	MCGL	Range of	Date	Likely Source of Contamination
		Detected			Detection		

			Regula	ted Inor	gabnic Cont	aminates	
Fluoride	None	1.02 ppm	4	4	.28 ppm - 1.28 ppm	1/16/08	Erosion of natural deposits: water additive which promotes strong teeth; discharge from furtilizer and aluminum plant
Nitrogen, Nitrate + Nitrate	None	0.417 ppm	10	10	0.417 ppm	1/16/08	Runoff from furtilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Arsenic	None	3.38 ppb	10	10	3.38 ppb - AA ppb	4/25/08	Erosion of natural deposits

				(Copper		
Copper	None	.280 ppb	1.300	1.300	.280 ppb -	9/4/08	Corrosion of household plumbing
			ppb	ppb	AA ppb		systems; Erosion of natural deposits,
							Leaching from wood preservatives

			Regu	lated V	olatile Comp	ounds	
TTHM	None	AA ppb	80 ppb	0	80 ppb	8/22/06	Disinfectant byproducts
-							

					Lead		
Lead	None	AA ppb	A1 = 15	0	AA ppb	9/4/08	Corrosion of household plumbing systems; Erosion of natural deposits

Definitions for table:			
MCL = Maximum Conta	minant Level -	The highest level of a contaminant	t that is allowed in drinking water.
MCLG = Maximum Con	taminant Level Goal -	The level of contaminant in drinkin known or expected risk to health.	ng water below which there is no
AL = Action Level -	The concentration a water system mu		eatment or other requirements which
ppm = parts per	million AA	= below detectable levels ppb = parts per billion	ug/l = micrograms per liter

MCL's are set to the very stringent levels. To understand the possible health effects described for many regulated contaminants, a person would have to drink 2 liters of water every day at the MCL level for a lifetime to have a one-in-a-million chance of having the described health effect.

All 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 the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Drinking Water Hotline at 1-800-426-4791.

In our continuing efforts to maintain a safe and dependable water supply it may be necessary to make improvements in <u>your</u> water system. The cost of these improvements may be reflected in the rate structure. Rate adjustments may be necessary in order to address these improvements.

Tier 3: Monitoring Violation Notice

DRINKING WATER NOTICE - Monitoring requirements were not met for Glendale Village Public Water System during February, 2009. We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not your drinking water meets health standards. During February 2009, we "did not complete all monitoring or testing" for total coli form bacteria and therefore cannot be sure of the quality of your drinking water during that time (an employee missed the end of the month bacterial testing by one working day).

What Should I Do?

- There is nothing you need to do at this time. You do not need to boil your water or take other corrective action.
- This notice is to inform you that the Glendale Village PWS did not monitor and report results for the presence of total coli form bacteria in the public drinking system during the February 2009 time period, as required by the Ohio Environmental Protection Agency.

What Is Being Done?

Upon being notified of this violation, the water supply was required to have the drinking water analyzed for the above mentioned parameters. The water supplier will take steps to ensure that adequate monitoring will be performed in the future. For more information, please contact Mike Heuer, Chief Utility Operator at (513)771-7200 or Village of Glendale, 30 Village Square, Glendale OH 45246. (<u>MHeuer@glendaleohio.org</u>). Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.

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						Miller Water				Bottom Water			Typical Source of Contaminant
Substance	Unit	Unit Maximun Allowed (MCL, AL, TT)* MCGL*	:Г' ЧГ' <u>Т</u> Т)*	MCGL*	Highest Compliance Range of Level Detected Detections	of ns	Violation	Year Sampled	Year Highest Compliance Range of ampled Level Detected Detections		Violation	Year Sampled	
Fluoride	mdd	4		4	0.97	0.79 - 1.03	No	2008	0.98	0.83 - 1.09 No	-	2008	2008 Additive which promotes strong teeth. May come from erosion of natural deposits.
Nitrate	mdd	01		10	1.10	048 - 1.10	٥N	2008	3.33	2.05 - 3.33 No	No	2008	Runoff from fertilizer use, leaching from septic tanks,sewage, erosion of natural deposits.
Gross Beta	pCi/L	20		0	24	nd - 24	No	2008	9	9 - pu	No	2008	Decay of natural and man-made deposits. (Epaconsiders 50 pC//L to be the level of concern).
Turbidity	NTU	TT1<1NTU Max <i>and</i> TT2<0.3NTU 95% of the time	<i>nd</i> he time	na	0.11 100%<0.3NTU	0.05 - 0.11	No	2008	JU	nr	na	na	na Soil runoff.

osion of natural deposits; Discharge of drilling wastes; Discharge from metal

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Total Organic Carbon

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osion of natural deposits; Discharge from steel and pub mills. osion of natural deposits; Discharge from petrolium and metal refineries

Regulated Contaminants: Contaminants subject to a Maximum Contaminant Level (MCL), Action Level (AL) or Treatment Technique (TT)*

Unregulated Contaminants for which EPA requires monitoring

				Mille	Miller Water				Bottom Water	ŗ	
Substance	Unit	WCLG*	Avers De	Average Level Detected	Range of Detections	Violation	Year Sampled	Average Level Detected	Range of Detections	Violation	Year Sampled
Chloroform	qdd	na		2.03	0.83 - 3.17	na	2008	2.03	1.76 - 2.31	na	2008
Bromodichloromethane	qdd	0		3.98	2.77 - 7.36	na	2008	3.91	3.23 - 4.43	na	2008
Dibromochloromethane	qdd	60	,	6.78	2.60 - 17.2	na	2008	6.33	5.44 - 8.4	na	2008
bBromoform	qdd	0		3.84	0.45 - 13.7	na	2008	4.04	3.05 - 6.05	na	2008
Sulfa	mdd	na		79	57 - 119	na	2008	50	48 - 52	na	2004

The value reported under "Highest Compliance Level Detected" for Total Organic Carbon (TOC) is the lowest ratio between percentage of TOC actually removed to the percentage of TOC required to be removed. A value of greater than one (1) indicates that the water systen is in compliance with TOC removal requirements. A value of Less than one (1) indicates a violation of the TOC removal requirements.

ppb: parts per billion

Results of GCWW Voluntary Monitoring For Cryptosporidium

GCWW has tested for Cryptosporidium (Crypto) in treated water and has never detected it. Crypto is a microorganism that, when ingested, can result in diarrhea, fever and other gastrointestinal symptoms. GCWW also tested for Crypto in the Ohio River surface water and it was not found during 2008. The organism is found in the surface waters and comes from animal and human wastes which enter the watershed. Crypto is eliminated by an effective combination including sedimentation, and disinfect ion.

Sodium: GCWW has tested for sodium in treated water as it leaves the treatment plants and has found 32 mg (milligrams) per liter in the Miller water and 28 mg per liter in the Bottom water. There are approximately 4 cups in a liter.

Turbidity: We are required to report on the turbidity as an indication of the effectiveness fof our filtration system. Turbidity is a measure of the cloudiness of water. The turbidity limit set by the EPA is 0.3 NUT in 95% of the daily samples and shall not exceed 1 NTU at any time. As reported in the table above, GCWW's highest recorded turbidity result for 2008 was 0.11 NTU (Miller Water) and the lowest monthly percentage of samples meeting the turbidity limits was 100%.

Abbreviations

ppm: parts per million na: not applicable NTU: Nephelometric Turbidity Unit, used to measure clarity in drinking water nd: not detectable at testing limits pCi/L: picoCuries per liter, a measure of radioactivity in water.

2008 CCR Data for GCWW Wholesale Customers (Continued)

Definitions

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

Maximum Contaminant Level or MCL: The Highest level of a contaminant allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

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

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

The < Symbol: A symbol which means less than. A result of <5 means that the lowest level that could be detected was 5 and the contaminant in that sample was not detected