Annual Drinking Water Quality Report for Year 2009
Village of Crooksville

12th Annual Consumer Confidence Report May 2010

We're pleased to present this year's Annual Quality Water Report. This report is designed to inform you about the quality water and services we deliver to you everyday. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to ensuring the quality of your water. Our water source is treated surface water from the following reservoirs.

1.) Crooksville #l and #2 reservoirs in Morgan County.
2.) Crooksville #3 reservoir in Perry County.
3.) Crooksville #4 reservoir in Perry County..

This report shows our water quality and what it means.

What are sources of contamination to drinking water?

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 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 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 petroleum production, and can also come from gas stations, urban storm water runoff, and septic systems; **(E)** radioactive contaminants, which can 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 that limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water that 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 (l-800-426-479l).

Who needs to take special precautions?

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 infection. 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 (l-800-426-479l).

About your drinking water

The EPA requires regular sampling to ensure drinking water safety. The Village of Crooksville conducted sampling for **(bacteria; inorganic; radiological; synthetic organic; volatile organic)** contaminant during 2009. Samples were collected for different contaminants most of which were not detected in the Village of Crooksville water supply.

The Ohio EPA requires us to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data, though accurate, is more than one year old.

TABLE OF DETECTED CONTAMINANTS

FOR: VILLAGE OF CROOKSVILLE

	MCLG	MCL	Level Found	Range of Detections	Violation	Year Sampled	Typical Source of Contamination
Microbiological Contaminants							
Total Coliform Bacteria	0	>1	2	0-2	Yes	2009	Naturally present in the environment
Residual Disinfectants							
Chlorine (ppm)	MRDLG = 4	MRDL = 4	1.51	1.18-1.82	No	2009	Water additive used to control microbes.
Inorganic Contaminants							
Lead (ppb)	0	Action Limit = 15	<5.0	NA	No	2009	Corrosion of household plumbing systems; erosion of natural deposits
	Zero out of ten samples were found to have lead levels in excess of the Action Level of 15 ppb						
Copper (ppb)	1,300	Action Limit = 1,300	<40	NA	No	2009	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
	Zero out of ten samples were found to have copper levels in excess of the Action Level of 1,300 ppb						
Nitrate (ppm)	10	10	0.49	ND-0.49	No	2009	Runoff from fertilizer use; erosion of natural deposits
Fluoride (ppm)	4	4	1.3	0.8-1.3	No	2009	Water additive which promotes strong teeth; erosion of natural deposits
Barium (ppb)	2,000	2,000	17.6	NA	No	2009	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits.
Volatile Organic Contaminants							
Total Trihalomethanes (ppb)	NA	80	93.63	42.8 – 133.2	YES	2009	By-product of drinking waster chlorination
Five Haloacetic Acids (ppb)	NA	60	32.46	16.5 – 34.6	No	2009	
IDSE TTHM (ppb)	NA	NA	NA	37.6 – 116.7	NA	2009	
IDSE HAA5 (ppb)	NA	NA	NA	20.63 – 50.1	NA	2009	
Treatment Technique							
Turbidity (NTU)	NA	TT	0.73	0.04-0.73	No	2009	Soil Runoff
Turbidity (% samples meeting standard)	NA	TT	98.89%	98.89-100%	No	2009	
Total Organic Carbon	NA	TT	1.513	1.08-1.96	No	2009	Naturally present in the environment

TOC Language

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

Turbidity Language

"Turbidity is a measure of the cloudiness of water and is an indication of the effectiveness of our filtration system. The turbidity limit set by the EPA is 0.3 in 95% of the daily samples and shall not exceed l NTU at any time. As reported above, the Village of Crooksville's highest recorded turbidity result for 2009 was .73 NTU and lowest monthly percentage of samples meeting the turbidity was 98.89%

TTHM Health Information

"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 may have an increased risk of getting cancer.

Enforcement Action

Crooksville Village Officials met with the Ohio Environmental Protection Agency in April of 2008 to discuss past violations Crooksville Water System has encountered. The major violation and the reason Crooksville has decided to purchase 'finished' water in the future from the Burr Oak Regional Water District is for exceeding the maximum contaminant level (MCL) for thrihalomethanes (TTHM). In short, TTHM is a byproduct formed from using chlorine in our water as a disinfectant. Crooksville has agreed to comply with a Bilaterial Compliance Agreement (enforcement action) from OEPA to come into compliance with the Safe Drinking Water Act. Crooksville Village Officials and the BORWD Board executed the Crooksville/Burr Oak Interconnect Agreement for Crooksville to purchase all their 'finished' water from the BORWD System. Project completion is expected to be in April 2011. Crooksville/Burr Oak Interconnect Project was possible through funding from the Ohio Public Works Commission, Ohio Water Department Authority and OEPA's Water Supply Revolving Loan Account.

The Clover Hill, Saltillo and Redfield residents need to know that Crooksville is currently in violation for exceeding disinfection byproduct (DBP's) levels. DBP's are formed when disinfectants used in water plants react with natural organic matter (i.e. decaying vegetation) present in the source water. Disinfection Byproducts for which regulations have been established have been identified in drinking water, including trihalomethanes, haloacetic acids, bromated and chlorite. When installing water main extensions, such as the Clover Hill extension Crooksville recently installed, the potential impact on water quality is the primary issue. The Ohio Environmental Protection Agency (OPEA) approved this extension only because Crooksville is taking the necessary steps to eliminate the disinfection byproducts from their source water. In 2007, Crooksville entered into an agreement with the Burr Oak Regional Water District to purchase all their potable water from the BORWD for its current and future customers. The BORWD is currently in the construction phase of building a new 'ground' water plant with an expected completion date of April 2011. Once the new plant is operational, Crooksville will abandon its treatment plant and 'raw' water source and connect to the new Burr Oak Regional system. For additional information on disinfection byproducts or the Burr Oak-Crooksville interconnection, you may contact Tom Collins, Village Administrator, at 740-982-2712

IDSE Monitoring

"Under the Stage 2 Disinfectants/Disinfection Byproducts Rule (D/DBPR), our public water system was required by USEPA to conduct an evaluation of our distribution system. This is known as an Initial Distribution System Evaluation (IDSE), and is intended to identify locations in our distribution system with elevated disinfection byproduct concentrations. The locations selected for the IDSE may be used for compliance monitoring under Stage 2 DBPR, beginning in 2012. Disinfection byproducts are the result of providing continuous disinfection of your drinking water and form when disinfectants combine with organic matter naturally occurring in the source water. Disinfection by products are grouped into two categories, Total Trihalomethanes (TTHM) and Haloaetic Acids (HAA5). USEPA sets standards for controlling the levels of disinfectants and disinfectant byproducts in drinking water, including both TTHMs and HAA5s."

Lead Educationsal Information

"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. The Village of Crooksville 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 at http://www.epa.gov/safewater/lead."

LTO Language

"We have a current, unconditioned license to operate our water system."

Source Water Information

"The Village of Crooksville water system uses surface water drawn from Crooksville's four reservoirs. For the purposes of source water assessments, in Ohio, all surface waters are considered to be susceptible to contamination. By their nature, surface waters are readily accessible and can be contaminated by chemicals and pathogens which may rapidly arrive at the public drinking water intake with little warning or time to prepare.

The Village of Crooksville's drinking water source protection area contains a minimal number of potential contaminant sources which include agricultural run-off, oil and gas wells, and road crossings.

The Village of Crooksville public water system treats the water to meet drinking water quality standards, but no single treatment technique can address all potential contaminants. The potential for water quality impacts can be further decreased by implementing measures to protect the reservoirs. More detailed information is provided in the Village of Crooksville's Drinking Water Source Assessment report, which can be obtained by calling Thomas W. Collins at 740-982-2712 Ext 1101.

How do I participate in decisions concerning my drinking water?

How do I participate in decisions concerning my drinking waster? Protecting our drinking waster source from contamination is the responsibility of all area residents. Please dispose of hazardous chemicals in the proper manner and report polluters to the appropriate authorities. Only by working together can we insure an adequate safe supply of water for future generations.

The Village of Crooksville is concerned about our citizen's health and well being. Water is one of the most important necessities for sustaining life and health. We strive to provide the highest quality of water possible for our residents. The Crooksville Water Plant treats and purifies an average of about .4 million gallons per day.

This high standard of treating surface water is costly for the Village. Sometimes we have to slightly adjust our consumer rates to help offset the cost of analysis, treatment supplies and overhead. Our commitment to our consumers is to provide a dependable source of fresh pure water at the fairest rate possible

If you have any questions about this report or concerning your water utility, please contact Thomas W. Collins at 982-2712 ext. 1101or contact the billing office at 982-2712 for direction. We want our valued customers to be informed about their water utility. If you want to learn more, please attend any of our regularly scheduled meetings. The Village Council meets on the 1st and 3rd Mondays monthly at 7:00 p.m. at the Administration Building located at 98 South Buckeye Street

Definitions of Terms Contained in This Report

Maximum Contaminant Level Goal **(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 **(MCL):** The highest level of contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

Action Level **(AL): The** concentration of a contaminant that, if exceeded, triggers treatment or other requirements that a water system must follow.

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

Parts per Million **(ppm) are** units of measure for concentration of a contaminant. A part per million corresponds to one second in approximately ll.5 days.

Parts per billion **(ppb)** are units of measure for concentration of a contaminant. A part per billion corresponds to one second in 31.7 years.

The **"<"** symbol: A symbol that 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.

Picocuries per liter **(pCi/l):** picocuries per liter is a measure of the radioactivity in water.

Nephelometric Turbidity Unit **(NTU):** Nephelometric turbidity unit is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.