

Village of Green Springs
Board of Public Affairs
P. O. Box 362
Green Springs, Oh. 44836

VILLAGE OF GREEN SPRINGS
DRINKING WATER CONSUMER CONFIDENCE REPORT

2009

Village of Green Spring PWS ID# 7400512

Drinking Water Consumer Confidence Report

For 2009

The Village of Green Spring has prepared the following report to provide information to you, the consumer, on the quality of our drinking water. Included within this report is general health information, water quality test results, how to participate in decisions concerning your drinking water and water system contacts. The Village of Green Spring is constantly striving to maintain and improve its water treatment and water distribution systems in order to provide you, the consumer, with the best possible water. We have a current, unconditioned license to operate our water system.

Source Water Information

During 2009, the Village of Green Springs purchased its water from the City of Clyde. The Clyde Water Plant receives surface water from the Beaver Creek watershed. This watershed covers an area of approximately 56 square miles and the water received needs extensive treatment before being delivered to your homes. On average, Clyde pumps 250-500 million gallons of water a year from the runoff of this area and produces 350-500 million gallons of treated water per year.

The City of Clyde's public water system uses surface water drawn from an intake on Beaver Creek. 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 City of Clyde's drinking water source protection area contains potential contaminant sources such as agriculture, home construction, oil and gas production activities, junk yards and landfills, above ground storage tanks, airports, other commercial sources, and roadways.

The City of Clyde's 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 Beaver Creek. More detailed information is provided in the City of Clyde's Drinking Water Source Assessment Report, which can be obtained by calling the Clyde WTP Superintendent at (419) 547-9805.

What are sources of contamination to 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 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 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.

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 (1-800-426-4791).

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 (1-800-426-4791).

Lead Education

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 Green Springs is responsible for providing high quality drinking water, but cannot control the variety of materials using 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 you 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>.

About your drinking water

The EPA requires regular sampling to ensure drinking water safety. Samples were collected for several different contaminants during 2009, most of which were not detected in the Village of Green Spring's 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.

The Clyde Water Plant conducted sampling for various contaminants during 2009. Information on those contaminants may be found in the City of Clyde Water Treatment Plant 2009 Consumer Confidence Report for Drinking Water included with this report.

Listed below is information on those contaminants that were found in the Village of Green Spring's drinking water.

Contaminants (units)	MCLG	MCL	Level Found	Range of Detections	Violation	Sample Year	Typical Source of Contaminants
Volatile Organic Contaminants							
Haloacetic Acids (HAA5) (ppb)	0	60	28.25	21 - 31.3	NO	2009	By-product of drinking water chlorination.
Total Trihalomethanes (TTHM) (ppb)	0	80	78.72	44.3 - 145.4	NO	2009	By-product of drinking water chlorination.
IDSE TTHMs (ppb)*	NA	NA	NA	46.6 - 84.5	NO	2009	By-product of drinking water chlorination.
IDSE HAA5 (ppb)*	NA	NA	NA	25.2 - 41.2	NO	2009	By-product of drinking water chlorination.
Residual Disinfectants							
Total Chlorine (ppm)	MRDL= 4	MRDLG= 4	0.4 - 1.4	0.8	NO	2009	Water additive used to control microbes

How do I participate in decisions concerning my drinking water? By attending the monthly BPA meetings. They are held on the 1st and 3rd Mondays of every month at 5:30 p.m. in the municipal building.

For more information on your drinking water contact Lonnie or Holly McGhee of McGhee's Technical Water Services, Inc. at (419) 886-4716.

*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 byproducts are grouped into two categories, Total Trihalomethanes (TTHM) and Haloacetic Acid (HAA5). USEPA sets standards for controlling the levels of disinfectants and disinfectant byproducts in drinking water, including both THMs and HAAs.

Definitions of some terms contained within 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.

Parts per Million (ppm) or Milligrams per Liter (mg/L) are units of measure for concentration of a contaminant. A part per million corresponds to one second in a little over 11.5 days.

Parts per Billion (ppb) or Micrograms per Liter (ug/L) are units of measure for concentration of a contaminant. A part per billion corresponds to one second in 31.7 years.

Maximum Residual Disinfection Level (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.

Maximum Residual Disinfection Level Goal (MRDLG): the level of residual disinfectant below which there is no known or expected risk to health.

Not applicable: (NA)

A final word: We strive to provide you with the water you need, where and when you need it. Our water quality meets or exceeds all government standards. Careful monitoring takes place daily to keep it that way. We work hard to earn your trust.

System Contacts:

Ted Rutherford, Mayor (419) 639-2123

James Smith, BPA (419) 639-2123

Curt Inks, Water/Wastewater Superintendent (419) 639-2123

IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER
Monitoring and Reporting Requirement Not Met for
VILLAGE OF GREEN SPRINGS

Our water system is required to conduct a system evaluation to characterize disinfection byproducts (DBPs) in our distribution system and identify the best places to monitor. We recently failed to collect the correct number of drinking water samples required for the evaluation. Although this incident was not an emergency, as our customers, you have a right to know what happened and what we did to correct this situation.

We routinely monitor for the presence of drinking water contaminants. During August 2009 and November 2009, our water system failed to collect the required number of DBP samples for total trihalomethanes (TTHM) and haloacetic acids (HAA5) in our drinking water distribution system at one sample location.

What should I do?

There is nothing you need to do. The missed samples were for the purpose of a system evaluation and are not compliance samples. You do not need to boil your water or take other corrective actions. You may continue to drink the water. If a situation arises where the water is no longer safe to drink, you will be notified within 24 hours.

What was done?

TTHM and HAA5s are groups of chemicals that are formed when chlorine or other disinfectants used to control microbial contaminants in drinking water react with naturally occurring organic and inorganic matter in water. We are working to minimize the formation of TTHA and HAA5 while ensuring an adequate level of disinfection to protect customers from exposure to bacteria.

We will be taking samples to complete the evaluation during the following time periods: August 2010 and November 2010. For more information, please contact:

PWS Contact Name: Curt Inks

Phone Number: (419) 639-2355

Mailing Address: P.O. Box 362, Green Springs, OH 44836

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.

PWS ID: OH7400512

Date Distributed: _____

Clyde Water Treatment Plant

2009 Consumer Confidence Report for Drinking Water

The City of Clyde Water Treatment Plant has prepared the following report to provide information to you the consumer, on the quality of our drinking water. Included within this report is, general health information, water quality test results, and how to participate in decisions concerning your drinking water, and water system contacts.

Source Water Information:

The Clyde Water Plant receives surface water from the Beaver Creek watershed. This watershed covers an area of approximately 56 Square miles and the water received needs extensive treatment before being delivered to your homes. On average, we pump 250-500 Million gallons of water a year from the runoff of this area and produce 350-500 Million gallons of treated water a year.

The City of Clyde public water system uses surface water drawn from an intake on Beaver Creek. 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 City of Clyde's drinking water source protection area contains potential contaminant sources such as agriculture, home construction, oil and gas production activities, junkyards and landfills, above ground storage tanks, airports, other commercial sources, and roadways.

The City of Clyde's 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 Beaver Creek. More detailed information is provided in the City of Clyde's Drinking Water Source Assessment report, which can be obtained by calling The Clyde WTP Superintendent at 419-547-9805

What are sources of contamination to 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 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, 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.

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* (1-800-426-4791).

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 (1-800-426-4791).

"Infants and young children are typically more vulnerable to lead in drinking water than the general population. It is possible that lead levels at your home may be higher than at other homes in the community as a result of materials used in your home's plumbing. If you are concerned about elevated lead levels in your home's water, you may wish to have your water tested and flush your tap for thirty seconds to two minutes before using tap water. Additional information is 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. The City of Clyde Water Treatment Plant 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 <http://www.epa.gov/safewater/lead>".

About your Drinking Water.

The EPA requires regular sampling to ensure drinking water safety. The Clyde Water Plant conducted sampling for bacteria, inorganic, synthetic organic, and volatile organic contaminants (VOC) sampling during 2009. Samples were collected for approx. 51 different contaminants, most of which were not detected in the Clyde 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, may be more than one year old.

Monitoring and Reporting Violations: There were no monitoring or reporting violations in 2009.

Definitions of some terms contained within 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.

Parts per Million (ppm) are units of measure for concentration of a contaminant. A part per million corresponds to one second in a little over 11.5 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.

Picocuries per liter (pCi/l): Picocuries per liter are the measurement of radioactivity in water.

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

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.

Nephelometric Turbidity Units (NTU): Nephelometric turbidity units are a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

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

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

Not Applicable: NA

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

Maximum Residual Disinfectant Level (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.

IDSE: Initial Distribution System Evaluation

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

Listed below is information on those contaminants that were found in the City of Clyde drinking water.

Contaminants (Units)	MCLG	MCL	Level Found	Range of Detections	Violation	Sample Year	Typical Source of Contaminants
Turbidity (NTU)	NA	TT	0.176	.035-0.176	NO	2009	Soil Runoff
Turbidity (% of samples meeting standards)	NA	TT	100%	100%	NO	2009	Soil Runoff
Total Organic Carbon (TOC) ***	NA	TT	2.058	1.800-2.600	NO	2009	Naturally present in the environment
Radioactive Contaminants	MCLG	MCL	Level Found	Range of Detections	Violation	Sample Year	Typical Source of Contaminants
Beta/Photon Emitters (pCi/L) *	0	AL=50	5.6	NA	NO	2003	Decay of natural and man-made products
Inorganic Contaminants	MCLG	MCL	Level Found	Range of Detections	Violation	Sample Year	Typical Source of Contaminants
Copper (ppm) **	1.3	AL=1.3	0.064	NA	NO	2008	Corrosion of household plumbing systems, erosion of natural products
Zero samples out of twenty was found to have copper levels in excess of Action Level of 1.3ppm.							
Fluoride (ppm)	1.3	4.0	1.08	0.80-1.22	No	2009	Erosion of natural deposits, Water additive to promote strong teeth.
Lead (ppb) **	0	AL=15	<4	NA	No	2008	Corrosion of household plumbing systems
One sample out of twenty was found to have lead levels in excess of Action Level of 15 ppb.							
Nitrate (ppm)	10	10	0.83	<0.10-0.83	No	2009	Runoff from fertilizer use; Erosion of natural deposits
Synthetic Organic Contaminants	MCLG	MCL	Level Found	Range of Detections	Violation	Sample Year	Typical Source of Contaminants
Atrazine (ppb)	3	3	0.627	0.530-0.790	No	2009	Runoff from herbicide used on row crops
Volatile Organic Contaminants	MCLG	MCL	Level Found	Range of Detections	Violation	Sample Year	Typical Source of Contaminants
TTHM- Total Trihalomethane (ppb)	NA	80	44.58	25.80-72.80	No	2009	By-product of drinking water chlorination
HAA (ppb) Haloacetic Acids	NA	60	23.90	16.10-34.40	No	2009	By-product of drinking water chlorination
IDSE TTHMs (ppb)	NA	NA	NA	32.3-72.6	No	2009	By-product of drinking water chlorination
IDSE HAA5 (ppb)	NA	NA	NA	18.3-39.3	No	2009	By-product of drinking water chlorination
Residual Disinfectants	MRDLG	MRDL	Level Found	Range of Detections	Violation	Sample Year	Typical Source of Contaminants
Total Chlorine	4	4	1.69	0.70-2.30	No	2009	Water additive used to control microbes

* EPA considers 50 pCi/l to be the level of concern for beta particles.

** Lead and Copper tests were done in 2008. The next set will be done in 2011.

*** The value reported under "Level Found" 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 indicates that the water system is in compliance with TOC removal requirements. A value of less than one indicates a violation of the TOC removal requirements. The value reported under the "Range" for TOC is the lowest monthly ratio to the highest monthly ratio.

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 NTU* in 95% of the daily samples and shall not exceed 1 NTU at any time. As reported on page #2, the Clyde Water Plant highest recorded turbidity result for 2009 was 0.176 NTU and lowest monthly percentage of samples meeting the turbidity limits was 100%.

Total organic carbon (TOC) has no health effects. However, total organic carbon provides a medium for the formation of disinfection by-products. These by-products include trihalomethanes (THM's) and haloacetic acids (HAA5's). Drinking water containing these by-products in excess of the MCL may lead to adverse health effects, liver or kidney problems, or nervous system effects, and may lead to an increase risk of getting cancer.

"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 byproducts concentrations. The locations selected for the IDSR may be used for compliance monitoring under the 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 byproducts are grouped into two categories, Total Trihalomethanes (TTHM) and Haloacetic Acids (HAA5). USEPA sets standards for controlling the levels of disinfectants and disinfectant byproducts in drinking water, including both TTHMs and HAA5s."

For more information on your drinking water:

Contact Phil Farrar, Water Plant Superintendent, at (419) 547-9805. Public participation and comments are encouraged at regular meetings of Clyde City Council, which meets on the 1st and 3rd Tuesday of each month at 7:00PM, at the Clyde City Hall Council Room.