

## The Village of Mount Gilead

72 West High Street  
Mount Gilead, Ohio 43338

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# The Village of Mt. Gilead

Drinking Water Consumer Confidence Report

For 2009

***The Village of Mt. Gilead has prepared the following report to provide information to you, the consumer, on the quality of our drinking water.***

The aquifer that supplies drinking water to the Village of Mt. Gilead has a moderate susceptibility to contamination, due to the moderate sensitivity of the aquifer in which the drinking water well is located and the existence of potential contaminant sources within the protection zone. This does not mean that this wellfield will become contaminated; only that conditions are such that groundwater could be impacted by potential contaminate sources. Future contamination may be avoided by implementing protective measures. More information is available by calling the Village of Mt. Gilead Water Department.

The Village of Mt. Gilead receives its drinking water from five wells located in the north central portion of town, on village property just east of State Route 61, with a drive at 352 E. Union Street (U.S. 42). All of the wells are considered ground water sources with required treatment prior to being used for drinking. The water treatment plant is designed as an iron removal and ion exchange plant, and has the capacity to treat 1,000,000 gallons per day.

### What are the sources of contamination to drinking water?

The sources of drinking water (both tap 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 pick up substances resulting from the presence of animals or from human activity.

Contaminant that may be present in source water include: (A) Microbial contaminants, such as viruses and bacteria, (B) Inorganic contaminants, such as salts and metals, (C) Pesticides and herbicides, (D) Organic chemical contaminants, including synthetic and volatile organic chemicals, (E) Radioactive contaminants.

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)**.

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 Mount Gilead 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 800-426-4791 or at <http://www.epa.gov/safewater/lead>.

### 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)**. "Some people who drink water containing arsenic in excess of the MCL over many years could experience skin damage or problems with their circulatory system, and may have an increased risk of getting cancer."

### About your drinking water.

The EPA requires regular sampling to ensure drinking water safety. The Village of Mt. Gilead conducted sampling for contaminant sampling during 2009. Samples were collected for several different contaminants most of which were not detected in the Village of Mt. Gilead 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, are more than one year old. We have a current, unconditioned license to operate our water system.

- Chemicals/pesticides and animal feces drawn into your water supply plumbing from a lawn irrigation system with submerged nozzles.
- Bacteria/chemicals/additives present in a boiler system backsiphon into the water supply plumbing.
- A connection made between a private well supply and the water being supplied by a public water system through the water supply plumbing.

#### What can you do to prevent backflow situations in your home or business?

- Be aware of and eliminate cross-connections.
- Maintain air gaps. Do not submerge hoses or place them where they could become submerged.
- Use hose bib vacuum breakers on fixtures (hose connections in the basement, laundry room and outside).
- Install approved, testable backflow prevention devices on lawn irrigation systems.
- Do not create a connection between an auxiliary water system (well, cister, body of water) and the water supply plumbing.

**What must be done to protect the public water system?** The water supplier is required to determine potential and actual hazards. If a hazard exists at a customer's service connection to the public water system, the customer will be required to install and maintain an appropriate backflow prevention device\* at the meter and/or at the source of the hazard.

\* Check with your water supplier on the appropriate backflow prevention device required before purchase or installation of the device.

**Who is responsible?** In Ohio, the responsibility for preventing backflow is divided. In general, state and local plumbing inspectors have authority over plumbing systems within buildings while Ohio EPA and water suppliers regulate protection of the distribution system at each service connection.

Water customers have the ultimate responsibility for properly maintaining their plumbing systems. It is the homeowner's or other customer's responsibility to ensure that cross-connections are not created and that any required backflow prevention devices are tested yearly and are in operable condition.

**What is the law?** Ohio Administrative Code Chapter 3745-95 requires the public water supplier to protect the public water system from cross-connections and prevent backflow situations. The public water supplier must conduct cross-connection control inspections of their water customers' property to evaluate cross-connection hazards. Local ordinances or water department regulations may also exist and must be followed in addition to state regulations.

If a customer is found to have a potential or actual cross-contamination hazard, the customer will be required to eliminate the hazard and/or install an appropriate backflow prevention device at the service connection and/or at the hazard.

#### Special Conditions

##### Auxiliary Water Systems

**What is an auxiliary water system?** Any water system on or available to your property other than the public water system. Used water or water from wells, cisterns or open reservoirs that are equipped with pumps or other sources of pressure, including gravity, are examples.

##### What protection is required?

- The auxiliary water system must be completely separated from water supply plumbing served by a public water system; and
- an approved backflow prevention device must be installed at the service connection (where the public water system connects to the customer's plumbing system).

#### or

- The auxiliary water system must be eliminated.

**Are there exceptions?** The water supplier may waive the requirement for a backflow prevention device at the service connection, at the discretion of the water supplier, if:

- all components of the auxiliary water system, including pumps, pressure tanks and piping, are removed from the premises, which is defined as all buildings, dwellings, structures or areas with water supply plumbing connected to the public water system; and
- the possibility of connecting the auxiliary water system to the water supply plumbing is determined by the water supplier to be extremely low; and
- no other hazards exist; and
- the customer enters into a contract with the water supplier.

The contract will require the customer:

- to understand the potential hazard of a cross-connection;
- to never create a cross-connection between the auxiliary water system and the public water system;
- to allow an inspector to survey his/her property for hazards as long as the contract is in effect; and
- to face loss of service and other penalties if the contract is violated.

The water supplier must perform an annual inspection of the customer's contract-regulated property. It is at the water supplier's discretion to waive a backflow prevention device since the water supplier must, by law, do everything reasonably possible to protect the public water system from contamination.

#### Booster Pumps

**What is the concern?** Booster pumps connected to plumbing systems or water mains can reduce the pressure in water mains causing backsiphonage conditions.

- Booster pumps are prohibited in one, two and three family dwellings unless they draw from a surge tank filled through an air gap.
- All other booster pumps must be equipped with a low suction cut-off switch that is tested and certified every year.

#### Contacts

**Need more information?** Questions concerning backflow prevention and cross-connection control may be directed to your local water department at the number shown on the front of this brochure, to Ohio EPA's Division of Drinking and Ground Waters central office at (614) 644-2752, or to your local Ohio EPA district office at the following numbers:

Northwest District (419) 373-3048

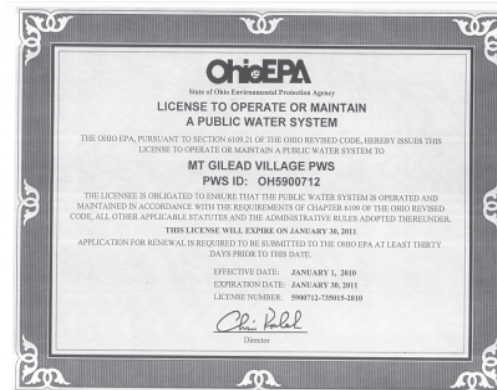
Northeast District (330) 963-1200

Southwest District (937) 285-6357

Southeast District (740) 385-8501

Central District (614) 728-3778

Questions regarding internal plumbing in the home may be directed to your local plumbing authority or to the Ohio Department of Commerce, Plumbing Administrator at (614) 644-3153.



**Listed below is information on those unregulated and detected contaminants that were found in the Village of Mt. Gilead drinking water.**

CONTAMINANTS (UNITS)	MCLG	MCL	LEVEL FOUND	RANGE OF DETECTION	VIOLATIONS	SAMPLE YEAR	TYPICAL SOURCE OF CONTAMINANTS
<b>INORGANIC CONTAMINANTS</b>							
NITRATE (mg/l)	10	10	0.55	N/A	NO	2009	RUNOFF FROM FERTILIZER USE; LEACHING FROM SEPTIC TANKS, SEWAGE
FLOURIDE (mg/l)	4	4	0.86	N/A	NO	2009	WATER ADDITIVE WHICH PROMOTES STRONG TEETH; EROSION OF NATURAL DEPOSITS; DISCHARGE FROM FERTILIZER & ALUMINUM FACTORIES
ARSENIC (ppb)	0	10	4.77	N/A	NO	2009	EROSION OF NATURAL DEPOSITS; RUNOFF FROM ORCHARDS, GLASS & ELECTRONIC PRODUCTION WASTE.
COPPER (ppm) 90th%	0	AL=15	1.01	N/A	NO	2007	CORROSION OF HOUSEHOLD PLUMBING SYSTEMS; EROSION OF NATURAL DEPOSITS.
BARIUM (ppm)	2	2	0.0281	N/A	NO	2006	DISCHARGE OF DRILLING WASTE; DISCHARGE FROM METAL REFINERIES; EROSION OF NATURAL DEPOSITS.
TOTAL CHLORINE (ppm)	MRDL G=4	MRDL=4	0.99	N/A	NO	2009	WATER ADDITIVE USED TO CONTROL MICROBES.
<b>ORGANIC DISINFECTION BY-PRODUCTS</b>							
HALOACETIC ACID (HAA5) (ppb)	0	60	7.7	N/A	NO	2009	BY-PRODUCT OF DRINKING WATER CHLORINATION.
TOTAL TRIHALOMETHANES (TTHMs) (ppb)	0	80	44.43	N/A	NO	2009	BY-PRODUCT OF DRINKING WATER CHLORINATION.
<p>“Under the State 2 Disinfectants/Disinfection Byproducts Rule (D/DBPR), our 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 Acids (HAA5). USEPA sets standards for controlling the levels of disinfectants and disinfectant byproducts in drinking water, including both TTHMs and HAA5s.”</p>							
<b>IDSE TTHM Low District</b>	N/A	N/A	N/A	19.2-32.2	NO	2009	By-products of drinking water disinfection
<b>IDSE HAA5 Low District</b>	N/A	N/A	N/A	4.9-6.1	NO	2009	By-products of drinking water chlorination
<b>IDSE TTHM High District</b>	N/A	N/A	N/A	22.9-38.4	NO	2009	By-products of drinking water disinfection
<b>IDSE HAA5 High District</b>	N/A	N/A	N/A	5.1-7.2	NO	2009	By-products of drinking water chlorination

**Of the twenty sites tested none exceeded the lead or copper action levels.**

**Definitions of some terms contained in this report**

- MCLG:** Maximum contaminant level goal. The level of a contaminant in drinking water below which there is no known or expected Risk to health. MCLG's allow for a margin of safety.
- MCL:** The highest level of contaminant that is allowed in drinking water. MCL's are set as close to MCLG's as feasible using the best available treatment technology.
- ppm:** Parts per million or milligrams per liter (mg/l). A part per million corresponds to one second in a little over 11.5 days.
- ppb:** Parts per billion, or micrograms per liter (ug/l). A part per billion corresponds to one second in 31.7 years.
- AL:** Action level. The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
- SMCL:** Secondary Maximum Contaminant Level. These are not a health hazard, but deal with the appearance of the water.
- 90th%:** To determine the 90th% you list the entire sample results from the last round of sampling, in order from lowest to highest. If you had ten samples, the ninth highest sample would be the 90th%.
- pCi/l:** Picocuries per liter (a measure of radioactivity).
- N/A:** Not applicable.

**How do I participate in decisions concerning my drinking water?**

Public participation and comment are encouraged at regular meetings of council, which meets the first and third Mondays each month at **7:30 P.M. at City Hall, 72 West High Street, Mt. Gilead.**

For more information on drinking water, contact **Kit St. Clair (419) 569-2537** between 7:00 and 3:30 p.m., Monday through Friday.

**Tests run at Mt. Gilead WTP**

TEST (UNIT)	MCLG	SMCL	HIGHEST LEVEL FOUND	AVG	RANGE	YEAR
IRON (mg/l)	N/A	0.3	0.39	0.1	0.08-0.39	2009
MANGANESE (mg/l)	N/A	0.05	0.1	0.04	0.03-0.10	2009
HARDNESS (mg/l)	N/A	N/A	274	118	88-274	2009
pH (units)	N/A	7.00 - 10.5	8.20	7.71	7.4-8.2	2009
SODIUM (mg/l)	N/A	N/A	204	173	120-204	2009
CHLORINE, free (mg/l)	N/A	N/A	1.9	1.27	0.50-1.9	2009
ALKALINITY, total (mg/l)	N/A	N/A	328	319	310-328	2009
ALKALINITY, stability (mg/l)	N/A	N/A	328	319	314-328	2009
PHOSPHATE as TOTAL P (mg/l)	N/A	N/A	0.79	0.04	0.05-0.79	2009

**OhioEPA**  
**Backflow Prevention and Cross-Connection Control - Protecting our Public Water System - June 2004**  
 Division of Drinking & Ground Waters, 50 W. Town St., P.O. Box 1049, Columbus, Ohio 43215-1049  
[www.epa.state.oh.us](http://www.epa.state.oh.us)

- What is cross connection?** Any physical connection between a possible source of contamination and any drinking water system piping.
- What is backflow?** The flow through a cross-connection from a possible source of contamination back into the drinking water system.
- Why should you be concerned?**
  - ALL cross-connections pose a potential health risk. **Chemical burns, fires, explosions, poisonings, illness and death have all been caused by backflow through cross-connections.**
  - Backflow can be a health hazard for your family or other consumers if contaminated water enters your water supply plumbing system and is used for drinking, cooking or bathing.
  - Backflow occurs more often than you think.
  - Cross-connections with water supply plumbing or public drinking water piping systems are prohibited by law.
  - Protecting the public water system from backflow contamination is the law.
  - You are responsible for protecting your water supply plumbing from backflow that may contaminate your drinking water and the drinking water of others. This includes complying with the plumbing code and not creating cross-connections.
- Why does backflow occur?** Backflow occurs when a cross-connection is created and a pressure reversal, either as backsiphonage or backpressure, occurs in the water supply piping.
- What causes backsiphonage?** Backsiphonage occurs when there is a loss of pressure in a piping system. This can occur if the water supply pressure is lost or falls to below the source of contamination. This condition allows liquids to be siphoned back into the distribution system, just like drinking from a glass with a drinking straw.
- What causes backpressure?** Backpressure occurs when an opposing pressure is applied against the public water system's supply pressure and the higher pressure overcomes the public water system's pressure. This condition allows undesirable gases or liquids from another system to enter into the drinking water supply. Any pumping system (such as a well pump) or pressurized system (such as steam or hot water boilers) can exert backpressure when cross-connected with the public water system.
- What are some common backflow hazards that threaten the homeowner and other consumers?**
  - Hose connections to chemical solution aspirators to feed lawn and shrub herbicides, pesticides or fertilizers.
  - Lawn irrigation systems.
  - Chemically treated heating systems.
  - Hose connections to a water outlet or laundry tub.
  - Swimming pools, hot tubs, spas.
  - Private and/or non-potable water supplies located on the property.
  - Water-operated sump drain devices.
  - Feed lots/livestock holding areas or barnyards fed through pipes or hoses from your water supply plumbing.
- What are examples of cross-connection and backflow scenarios?**
  - Soapy water or other cleaning compounds backsiphoned into your water supply plumbing through a faucet or hose submerged in a bucket or laundry basin.
  - A hose submerged in a bucket or laundry basin.
  - Fertilizers/pesticides backsiphoned into your water supply plumbing through a garden hose attached to a fertilizer/pesticide sprayer.

*continued*