## CRIDERSVILLE MUNICIPAL WATER SYSTEM 110 W. MAIN CRIDERSVILLE, OHIO 419-645-5001 KING WATER CONSUMER CONFIDENCE REPORT

## DRINKING WATER CONSUMER CONFIDENCE REPORT FOR 2018

The Cridersville Municipal Water System 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.

### What if I have questions about my water?

The Village Council meets the second Monday of every month at 7:30 PM in the Village Hall at 110 West Main Street. The public is encouraged to attend. You may also call Jarid Kohlrieser, Village Administrator at 419-645-5001.

### Where does my water come from?

Cridersville "raw" water is drawn from four (4) wells located in Tower Park at the south end of Water Street. This water is considered groundwater. Wells #1 and #2 are located inside the Water Treatment building. Well #3 is located about 50 feet East and well #4 is located about 125 feet Southwest of the Water Treatment building.

Cridersville owns the land around the wells and restricts activities around the well field, to prevent contamination of the wells. Ohio EPA recently completed a study of the village's source of drinking water, to identify potential contaminant sources and provide guidance on protecting the drinking water source. According to this study, the aquifer (water-rich zone) that supplies water to the village has a low susceptibility to contamination. This determination is based on the following:

- Presence of a thick protective layer of clay overlying the aquifer,
- Significant depth (over 50 feet below ground surface) of the aquifer,
- · No evidence to suggest that ground water has been impacted by any significant levels of chemical contaminants from human activities, and
- No apparent significant potential contaminant sources in the protection area.

This susceptibility means that under currently existing conditions, the likelihood of the aquifer becoming contaminated is relatively low. This likelihood can be minimized by implementing appropriate protective measures. More information about the source water assessment or what consumers can do to help protect the aquifer is available by calling 419-645-5001.

The "raw" water from the wells is pumped into the water treatment plant where we use multiple treatment process, including aeration, chlorination, and pressurized multimedia iron filters before the water enters the distribution system and your tap. We have a current, unconditioned license to operate our water system.

### Why must you treat my water?

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 at 1-800-426-4791.

### What contaminants might be in water?

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, agriculture livestock operations and wildlife.
- Inorganic contaminates, 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 septic systems;
- Organic Chemical contaminants including synthetic and volatile organic chemicals, which are byproducts 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 results of oil and gas production and mining activities.
- 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. Cridersville water system is responsible for providing high quality drinking, 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 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 at 1-800-426-4791.

### About your drinking water

The source 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 can pick up substances resulting from the presence of animal or human activity.

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.

The EPA requires regular sampling to ensure drinking water safety. The Cridersville Municipal Water System conducted samples for contaminants including bacteria, inorganic and organic contaminants during 2014. 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.

isted below is information on contaminants that were detected in the Cridersville Municipal Water System's drinking water.

isted below is informa	ition on contam	inants that we	re detected in	the Cridersville	Municipa Municipa	i Water Sy	stem's drinki	ng water.
Disinfectants and Disinfection By- Products	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG *	- MCL	Units	Violation	Likely Source of Contamination
Haloacetic Acids (HAA5)*	2018	12.0	6.0-12.0	No goal for the total	60	ppb	N	By-product of drinking water chlorination.
Total Trihalomethanes (TThm)*	2018	45.1	25.1-45.1	No goal for the total	80	ppb	N	By-product of drinking water chlorination.
Total Chlorine	2018	2.2	0.5-2.2	MRDLG=4 MRDL=4	MCL=	ppm	N	Water additive used to control microbes
		=						
Inorganic Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Barium	2017	0.031	0.031- 0.031	2	2	ppm	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Fluoride	2017	1.47	1.47 - 1.47	4	4.0	ppm	N	Erosion of natural deposits; Water additive which promotes strong teeth. Discharge from fertilizer & aluminum factories.
		1						
Lead and Copper	Collection Date	90th Percentile	# of Samples Over AL	MCLG	Action Level (AL)	Units	Violation	Likely Source of Contamination
Copper	2018	0.14	0	1.3	1.3	ppm	N	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems
Lead	2018	5.0	0	0	15	ppb	N	Corrosion of household plumbing systems; Erosion of natural deposits.



Backflow
Prevention and
Cross-Connection
Control

Protecting our Public Water System

August 2015



Division of Drinking and Ground Waters P.O. Box 1049
Columbus, Ohio 43216-1049
(614) 644-2752

www.epa.ohio.gov

# What is a cross-connection?

Any physical connection created between a possible source of contamination and any drinking water system piping.

## What is backflow?

It is the flow through a cross-connection from a possible source of contamination back into the drinking water system. It occurs when a cross-connection is created and a pressure reversal, either as backsiphonage or backpressure, occurs in the water supply piping.

## Why be concerned?

- ALL cross-connections pose a potential health risk.
- 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. Chemical burns, fires, explosions, poisonings, illness and death have all been caused by backflow through crossconnections.
- Backflow occurs more often than you think
- You are legally responsible for protecting your water supply plumbing from backflow that may contaminate drinking water, either your own or someone else's. This includes complying with the plumbing code and not creating cross-connections.

# 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 a level lower than the source of contamination. This condition, which is similar to drinking from a glass with a straw, allows liquids to be siphoned back into the distribution system.

# What causes backpressure?

Backpressure occurs when a higher opposing pressure is applied against the public water system's pressure. This condition allows undesirable gases or liquids from another system to enter the drinking water supply. Any pumping system (such as a well pump) or pressurized system (such as a team or hot water boilers) can exert backpressure when cross-connected with the public water system.

## What can I do?

 Maintain air gaps. Do not submerge hoses of place them where they could become

Be aware of and eliminate cross-connections.

- Use hose bib vacuum breakers on fixtures (hose connections in the basement, laundry room and outside).
- Install approved, testable backflow preventers on lawn irrigation systems.
- Do not create a connection between an auxiliary water system (well, cistern, body of water) and the water supply plumbing.

# 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 backsiphon into the water supply plumbing through a faucet or hose submerged in a bucket or laundry basin.
- Pool water backsiphons into the water supply plumbing through a hose submerged in a swimming pool.
- Fertilizers/pesticides backsiphon into the water supply plumbing through a garden hose attached to a fertilizer/pesticide sprayer.
- Chemicals/pesticides and animal feces drawn into the water supply plumbing from a lawn irrigation system with submerged nozzles.
- Bacteria/chemicals/additives in a boiler system backsiphon into the water supply plumbing.
- Unsafe water pumped from a private well applies backpressure and contaminates the public water supply through a connection between the private well discharge and the potable water supply plumbing.

# What must be done to protect the public water system?

The public water supplier must determine potential and actual hazards. If a hazard exists at a customer's public water supply service connection, the customer will be required to install and maintain an appropriate backflow preventer\* at the meter and/or at the source of the hazard.

\*Check with your water supplier to verify which backflow preventer is required before purchase or installation.

# Who is responsible?

In Ohlo, 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 preventers 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 hazards. Local ordinances or water department regulations may also exist and must be followed in addition to state regulations.

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

# Special Conditions

# Auxiliary Water Systems

# What is an auxiliary water system?

It is 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 preventer must be installed at the service connection (where the public water system connects to the customer's plumbing system).

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 The auxiliary water system must be eliminated.

# Are there exceptions?

At their discretion, the water supplier may waive the requirement for a backflow preventer at the service connection if all the following conditions are met:

 All components of the auxiliary water system, including pumps, pressure tanks and piping, are removed from the premises, which are defined as all buildings, dwellings, structures or areas with water supply plumbing connected to the public water system.

- The possibility of connecting the auxiliary water system to the water supply plumbing is determined by the water supplier to be extremely low.
- No other hazards exist.
- The customer enters into a contract with the water supplier, as described below.

The contract will require the customer:

- To understand the potential hazard of a crossconnection.
- To never create a cross-connection between the auxiliary water system and the public water system.
- To allow an inspector to survey their property for hazards as long as the contract is in effect.
- 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 to verify the conditions have not changed, which would warrant installation of a backflow preventer. The water supplier must, by law, do everything reasonably possible to protect the water system from contamination.

## Booster Pumps

# What is the concern?

Booster pumps connected to plumbing systems or water mains can cause backsiphonage by reducing the water mains. The following requirements are in place to help prevent backsiphonage:

- Booster pumps, not used for fire suppression must be equipped with a low suction cut-off switch that is tested and certified every year;
- Alternately, when a booster pump is necessary for one-, two- and three-family dwellings, it is preferred that the booster pump draw from a surge tank filled through an air gap; and

system, must be equipped with either a low system, must be equipped with either a low suction throttling valve on the discharge side or be equipped with a variable speed suction limiting control system. Low-pressure cut-off devices will suffice for fire pumps installed prior to August 8, 2008, until a significant modification is warranted, at which point the minimum pressure sustaining method must be updated. Each of these methods must be tested and certified each year.

## Contacts

# Need more information?

Questions concerning backflow prevention and cross-connection control may be directed to your local water department or to your local Ohio EPA District Office at the following numbers:

Central District	Southeast District	Southwest District	Northeast District	<b>Northwest District</b>
(614) 728-3778	(740) 385-8501	(937) 285-6357	(330) 963-1200	(419) 352-8461

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.

John Kasich, Governor Craig W. Butler, Director

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### 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 a 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 which, if exceeded, triggers treatment or other requirements which a water system must follow.

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 more that 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 1 second in 31.7 vrs

Maximum Residual Disinfectant Level Goal (MRDLG): 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 Disinfectant Level: The highest level of a disinfectant allowed in drinking water.

*EP001*: The first point water from the treatment plant enters the distribution system.

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.

### Water Conservation and Pollution Prevention tips

Water conservation measures not only save the supply of our water source, but can also cut the cost of water treatment. They can cut the energy costs at the treatment facility associated with pumping, and also chemical costs for processing of the water. There are a number of measures you as the water consumer can do to conserve on water usage.

### Conservation measures you can use inside you home include:

- 1. Fixing leaking faucets, pipes, toilets, ect.
- 2. Installation of water-saving devices in faucets, toilets and appliances. Low flow fixtures are now the only kind produced since 1994. Simply replacing old fixtures with new will reduce water consumption by nearly one-half.
- 3. Wash only full loads of laundry
- 4. Don't use the toilet for trash or garbage disposal.
- 5. Take shorter showers. Do not let the water run while shaving, washing, brushing, teeth, or cleaning fruits and vegetables.
- 6. Soak dishes before washing. Run the dishwasher only when full.

### You can conserve outdoors as well:

- 1. Water the lawn and garden as little as possible. If you must water, do so in the early morning or evening.
- 2. Use mulch around plants and shrubs or choose plants that don't need much water.
- 3. Repair leaks in faucets and hoses. Use water-saving nozzles.
- 4. Use water from a bucket to wash your car and save the hose for rinsing.
- 5. Sweep clipping and leaves from walks and driveways rather than using the hose.

## Remember to dispose of hazardous waste properly

All of the storm water catch basins and drains in the village eventually flow to a stream or pond. No storm drains flow to a treatment plant to be processed. Hazardous household wastes such as cleaners, paints, and solvents should never be disposed of by dumping on the ground or down the drain. They should be stored in a safe place until they can be taken to a hazardous waste collection site.

Never pour used motor oil, antifreeze, or fuel of any kind into a storm drain. It is both illegal and hazardous to public safety. These items can be disposed of at the local recycle site.

### Please recycle

Do your part to conserve natural resources by recycling anything that can be recycled after use such as plastic milk jugs, newspapers, magazines, and glass bottles and jars just to name a few.

There are blue dumpster containers to place your recyclables into located on the West side of the former recycling building.

Village of Cridersville 110 W. Main St. Cridersville, Ohio 45806

RETURN SERVICE REQUESTED

Prsrt. Std. U.S. Postage PAID Lima, Ohio Permit No. 117