A toxic product dumped on the ground or down a storm drain can contaminate your drinking water and other surface waters and is strictly prohibited by law.

The City of Kalamazoo welcomes and encourages public input for improving water quality. What is a “backflow”? Backflow is water flowing in the opposite direction of its normal flow. This can occur if a water main breaks, fire department usage, or during times of hydrant flushing. If any of these conditions occur in your area, you should flush your lines before using the water to minimize iron particles and other undesirable contaminants that may be present. Flush your taps by starting in your restroom facility or utility sink, and work toward your food service area.

The following suggestions will help all customers prevent cross-connections:

- Do not submerge hoses in buckets, pools, tubs, sinks or process tanks.
- Do not use spray attachments without a backflow prevention device. The chemicals used on your lawn are toxic and can be carried through cross-connections.
- Do buy and install inexpensive backflow prevention devices (hose bib vacuum breakers) for all threaded faucets around your home or business. They are available at hardware stores and supermarkets.
- If you have unusual activity or persons around city water facilities, wells, tanks, and fire hydrants, contact the Public Services Department Environmental Services Supervisor at 337-8365.

The City of Kalamazoo Wellhead Protection website www.protectyourwater.net has specific information about the WHPP, including sources to contamination. The susceptibility rating is on a six-tiered scale from “very low” to “high” based primarily on geologic sensitivity, water supply, distance to the surface water and ability to be contaminant. There are fifteen active wellfields with 17 sources ranging in capacity from 300 to 1,500 gallons per minute. For more information regarding these ratings or the WHPP, please contact the Environmental Services Program Manager at 337-8737 or visit www.protectyourwater.net.

The Kalamazoo County Household Hazardous Waste Center at 1301 Lamont Avenue, located off Lake Street near the Kalamazoo County Fairgrounds. Contact the center at 269-373-5211 or view their website at www.kalamazoo.org/hhw. Unwanted prescription drug disposal locations and hours are listed at www.kalamazoo.org/hhw-med-disposal.htm. A toxic product dumped on the ground or down a storm drain can contaminate your drinking water and other surface waters and is strictly prohibited by law.

Keep your drinking water (groundwater) safe! Help prevent groundwater contamination byproperly storing hazardous household chemicals including mercury-containing products to the Kalamazoo County Household Hazardous Waste Center at 1301 Lamont Avenue, located off Lake Street near the Kalamazoo County Fairgrounds. Contact the center at 269-373-5211 or view their website at www.kalamazoo.org/hhw. Unwanted prescription drug disposal locations and hours are listed at www.kalamazoo.org/hhw-med-disposal.htm.
STORMWATER/WATERSHED MANAGEMENT

Stormwater is generally considered as the runoff from streets and parking lots that is collected by open grated catch basins and inlets. The City of Kalamazoo has separate sewer systems for sanitary and stormwater. A portion of stormwater runoff is routed directly to the Kalamazoo River, creeks, lakes or ponds. Consequently, it is important to keep oil, grease, fuels, chemicals, lawn fertilizer, grass clippings, trash and other debris from getting on our streets.

Since groundwater and surface water are generally interconnected, your efforts to protect one may positively impact the other. Stormwater is generally rainwater or snowmelt from streets and parking lots that is collected by open grated catch basins and inlets.

### What can you do?

If you observe:
- A strong chemical odor near a storm water drain or outlet
- Discharges-someone dumping suspicious substances into drains or into a water body
    - Sewage on the ground

Call the Illisitic Discharge Elimination Program 24-hour hotline 269-381-3171, because clean drinking water is everyone's business!

ADDITIONAL HEALTH INFORMATION

Sources of drinking water for both tap water and bottled water can 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 and other materials, and can pick-up substances resulting from the presence of animals or from human activity.

Contaminates that may be present in source water include:
- Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- Inorganic contaminants, such as salts, and metals, which can be naturally-occurring or result from urban stormwater 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 stormwater runoff and residential uses.
- Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can come from gas stations, urban stormwater runoff, and septic systems.
- Radiocative 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 contaminates in water provided by public water systems. The Food and Drug Administration regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

All drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminates does not necessarily indicate that water poses health risks. More information about contaminants and potential health effects can be obtained by calling the EPA’s Safe Drinking Water Hotline at 1-800-426-4791.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons, persons with cancer undergoing chemotherapy, persons with HIV/AIDS and 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 care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection are available from the Safe Drinking Water Hotline at 1-800-426-4791.

DEFINITIONS

**Water Quality Data Table Abbreviations and Terms**

According to federal and state laws the City of Kalamazoo monitors for contaminants in our drinking water. The table in this report is based on over 5,000 analyses conducted in 2014 and those tests conducted are listed below in order for each year. The Water Quality Data Table lists only the contaminants that were detected. If the test was not performed in 2014, then the most recent analysis is listed.

The City of Kalamazoo’s state certified laboratory analyzes for the absence of microorganisms and, in all cases, for the presence of limited treatment chemicals (Hexamethylenephosphamide, Fluoride, and Radioactive Chromium) in the City’s water supply. The Microbial Analysis is conducted weekly. All limited treatment chemicals are on automated feed control systems that are monitored 24/7 by City of Kalamazoo staff.

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

**MCL (Maximum Contaminant Level)** – The level of a contaminant in water which, if exceeded, triggers treatment or other requirements that a water system must follow.

**MCLG (Maximum Contaminant Level Goal)** – The level of a contaminant in water which health experts believe is acceptable for people to consume throughout their lives without an expected risk to health.

**MRDLG (Maximum Residual Disinfectant Level Goal)** – The level of a contaminant in water which, if exceeded, is likely to result in a disinfection by products (DBP) that may cause cancer in humans at high concentrations and is linked to other problems.

**MRDL (Maximum Residual Disinfectant Level)** – The highest level of a contaminant that is allowed in drinking water. There is no known or expected risk to health if a water system does not achieve the MRDL.

**Unregulated Contaminant** – A contaminant that is not currently regulated by EPA because it has not been conclusively determined to be a public health concern.

**Unit of Measure** – A measure of radioactivity.

**Violation Data**

What water quality data table abbreviations and terms are those for EPA that have not established drinking water standards. Monitoring helps EPA to determine where certain contaminants occur and whether it needs to regulate those contaminants.

The City did not complete cyanide sampling for one of our wastewater sampling locations for the 2014 monitoring period. We collected the necessary missed sample on October 2, 2014 and the results of the sample was non-detect. The results for all sampling locations were non-detect for cyanide.

### What Water Quality Data Table Abbreviations and Terms

**Units** – The concentration of a contaminant, which, if exceeded, is likely to result in a disinfection by products (DBP) that may cause cancer in humans at high concentrations and is linked to other problems.

**ADDITIONAL HEALTH INFORMATION**

Typical Source of Contaminant

**ADDITIONAL HEALTH INFORMATION**

**Public Services Department Environmental Services Division**

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**ADDITIONAL HEALTH INFORMATION**

**Public Services Department Environmental Services Division**
KEEP OUR DRINKING WATER (GROUNDWATER) SAFE

CROSS-CONNECTION PROGRAM

As a City of Kalamazoo drinking water supply customer, you can help ensure that the water you are drinking within your home and business remains safe. Prevent cross-connections with the City of Kalamazoo’s water supply by ensuring that all backflow prevention devices are installed, inspected and properly maintained by licensed and certified plumbers as required by state and local plumbing codes.

What is a “cross-connection”? Cross-connections are arrangements of piping or appurtenances through which a backflow of undesirable material could enter the potable (drinking) water system. What is a “backflow”? Backflow is water flowing in the opposite direction of its normal flow. Backflow can allow contaminants to enter the drinking water system through cross-connections.

The undesirable material may come from sources connected to your own home or facility’s internal or external plumbing. A backflow in the water system can create many situations that experience a sudden loss of pressure. Pressure changes can occur as a result of water main breaks, fire department usage, or during times of hydrant flushing. If any of these conditions occur in your area, you should flush your taps by starting in your restroom facility or utility sink, and working out towards your food service area.

The following suggestions will help all customers prevent cross-connections within their homes and businesses:

- Do not remove safety attachments without a backflow prevention device. The chemicals used on your lawn are toxic and can be harmful.
- Do not install or arrange backflow prevention devices (hose bib vacuum breakers) for all threaded faucets around your home;
- Never install sprinkler systems, fire suppression systems, or boilers with chemical additives without proper backflow prevention devices.
- Ensure that your softener drain line has an air gap between the drain line and the receiving drain.
- Residential and commercial establishments connected to the municipal water system must properly abandon all water wells onsite and provide abandonment information to the City of Kalamazoo and the Kalamazoo Environmental Community Health Department.

CUSTOMER SERVICE WELCOME

PROTECTING OUR GROUNDWATER

Groundwater is the source of drinking water for everyone in Kalamazoo County. Groundwater is located beneath the ground surface in the spaces between sand and gravel particles. Groundwater is preferred over surface water in this area since it is relatively abundant, easy to extract, and generally lacks harmful bacteria. However, groundwater can also be vulnerable to contamination if any spills, leaks, or dumping of harmful substances occur at or beneath the ground surface.

WELLHEAD PROTECTION PROGRAM

The City of Kalamazoo is pleased to provide its customers with information about the quality of our drinking water. This is done in compliance with the Safe Drinking Water Act and as a service to our customers.

The water quality data in this report shows that the water we provide to our customers meets the standards established by federal and state regulations. The report summarizes our efforts and commitment to provide safe and affordable drinking water. Our facilities operate 24 hours a day, 7 days a week and are monitored continuously both on and off site by qualified, trained and licensed personnel.

KALAMAZOO PUBLIC WATER SUPPLY SYSTEM

The City of Kalamazoo Public Water Supply System is the second largest groundwater-based drinking water system in Michigan and is ranked one of the lowest for water rates out of the twelve largest systems within the state.

30 million gallons maximum daily production
10 service contracts with local governments
813 approximate miles of water main
5,757 hydrants
8 independent service pressure districts, with several booster and bleeder stations

2014 Kalamazoo Water Facts

SOURCES
17 active wellfields
16 water pumping stations
98 wells ranging from 300 to 1,500 gallons per minute
17 million gallons produced on average per day

PROTECTING OUR GROUNDWATER

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WELLHEAD PROTECTION PROGRAM

The City has a Michigan Department of Environmental Quality (MDEQ) approved Wellhead Protection Program (WHPP). The American Water Works Association (AWWA) awarded Kalamazoo’s water system the 2014 Exemplary Source Water Protection Award for large groundwater systems in North America. The City has also been designated a Groundwater Guardian Community by the Groundwater Foundation, a national groundwater protection organization, every year since 1998. The City of Kalamazoo Wellhead Protection website wellprotectyourwater.net has specific information about the City of Kalamazoo Water System, related ordinances, great links to other websites, and information about stormwater and other surface water issues.

The Michigan Department of Environmental Quality performed Source Water Assessments to assess the susceptibility of all public water supply sources to contamination. The susceptibility rating is on a six-tiered scale from “very low” to “high” based primarily on geologic sensitivity, water chemistry, well construction and contaminant sources. The susceptibility rating of the city’s (then) 19 wellfields was: Moderate (2 wellfields), Moderate High (12 wellfields) and High (5 wellfields). For more information regarding these ratings or the WHPP, please contact the Environmental Services Program Manager at 337-8737 or visit wellprotectyourwater.net.