

# 2018 Drinking Water Quality Report

Summarizing 2017 Water Quality Test Results



# 2017 WATER QUALITY REPORT

## Rockford Water Division

### Annual Drinking Water Quality Report Rockford IL 2010300

### Annual Water Quality Report for the period of January 1 to December 31, 2017

This report is intended to provide you with important information about your drinking water and the efforts made by the water system to provide safe drinking water.

The source of drinking water used by ROCKFORD is Ground Water

For more information regarding this report contact:

Kyle Saunders, Water Superintendent  
Phone: 779-348-7371

Este informe contiene información muy importante sobre el agua que usted bebe. Tradúzcalo ó hable con alguien que lo entienda bien.

### Source of 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:

- **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 storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.

### Information About Inorganic Contaminants

**Iron:** This contaminant is not currently regulated by USEPA. However, the state has set an MCL for this contaminant for supplies serving a population of 1000 or more.

**Manganese:** This contaminant is not currently regulated by USEPA. However, the state has set an MCL for this contaminant for supplies serving a population of 1000 or more.

**Sodium:** There is not a state or federal MCL for sodium. Monitoring is required to provide information to consumers and health officials that are concerned about sodium intake due to dietary precautions. If you are on a sodium-restricted diet, you should consult your physician about this level of sodium in the water.

**Arsenic:** While your drinking water meets EPA standards for arsenic, it does contain low levels of arsenic. EPA's standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. EPA continues to research the health effects of low levels of arsenic, which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.

- **Pesticides and herbicides**, which may come from a variety of sources such as agriculture, urban storm water 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 also come from gas stations, urban storm water runoff, and septic systems.
- **Radioactive contaminants**, which can be naturally-occurring or be the result of oil and gas production and mining activities.

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 EPA's Safe Drinking Water Hotline at (800) 426-4791.

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.

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 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 by Cryptosporidium and other microbial contaminants are 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. We 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>.

### Need help?

- Water Quality** .....779-348-7151
- After Hours Emergencies** .....779-348-7300
- Billing Problems** .....779-348-7300

## Source Water Assessment

We want our valued customers to be informed about their water quality. If you would like to learn more, please feel welcome to attend any of our regularly scheduled meetings. The source water assessment for our supply has been completed by the Illinois EPA. If you would like a copy of this information, call Water Quality at 779-348-7151. To view a summary version of the completed Source Water Assessments, including: Importance of Source Water; Susceptibility to Contamination Determination; and documentation / recommendation of Source Water Protection Efforts, you may access the Illinois EPA website at <http://www.epa.state.il.us/cgi-bin/wp/swap-fact-sheets.pl>.

To determine Rockford's susceptibility to groundwater contamination, the Well Site Survey and IRWA's recharge area survey were reviewed. During the surveys of Rockford's source water protection areas, the Rockford Water Department Production Division recorded potential sources, routes, or possible problem sites within the 200 or 400 foot minimum setback zones, 1,000 foot maximum setback zones, and IRWA recorded the sites in the regulated recharge areas. Following are the results of the surveys conducted. Only the wells that have associated sites are listed. The well name is followed by the number of sites within the minimum zone, the maximum zone, and the recharge area, respectively. Group well #1 has 11 sources within 400 feet and 10 within 1,000 feet. Five additional sources are located outside the 1,000 foot zone. Group well #2 has 9 sources within 400 feet and 15 within 1,000 feet. Five additional sources are located outside the 1,000 foot zone. Unit wells #5 and #5A have 2 sources located within 1,000 feet. Unit well #9A has 8 sources within

the recharge area. Six additional sources are located outside the 1,000 foot zone and recharge area. Unit well #10 has 3 sources located within 200 feet and 8 within 1,000 feet. One additional source is located outside the 1,000 foot zone and recharge area. Unit well #13 has 1 source within 200 feet and 1 within 1,000 feet. Unit well #18 has 2 sources within 200 feet and 1 within 1,000 feet. Unit well #21 has 12 sources within 1,000 feet. Unit well #22 has 8 sources within 1,000 feet. Unit well #23 has 1 source within 1,000 feet and 15 within the recharge area. Six additional sources are located outside the 1,000 foot zone and recharge area. Unit well #24 has 2 sources within 1,000 feet and 3 within the recharge area. Seven additional sources are located outside the 1,000 foot zone and recharge area. Unit well #26 has 9 sources within 1,000 feet. Unit well #30 has 1 source within 200 feet. Unit well #31 has 2 sources located outside the 1,000 foot zone and recharge area. Unit well #35 has 4 sources within 400 feet and 9 within 1,000 feet. One additional source is located outside the 1,000 foot zone and recharge area. Unit well #36 has 3 sources located within 1,000 feet. Unit well #40 has 1 source located outside the 1,000 foot zone and recharge area. The Illinois EPA considers the source water of this facility to be susceptible to contamination. This determination is based on a number of criteria including: monitoring conducted at the wells, monitoring conducted at the entry point to the distribution system, the available hydrogeologic data on the wells, and the land-use activities in the recharge area of the wells. A source water assessment is available upon request.

## Lead and Copper

### Definitions:

**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.

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

Lead And Copper	Collection Date	MCLG	Action Level (AL)	90th Percentile	Number of Sites Over AL	Units	Violation	Likely Source of Contamination
Copper	07/25/2016	1.3 ppm	1.3 ppm	1	2	ppm	No	Erosion of natural deposits; Leaching from wood preservatives Corrosion of household plumbing systems.
Lead	07/25/2016	0 ppb	15 ppb	4	1	ppb	No	Corrosion of household plumbing systems; Erosion of natural deposits.

### Notes For Charts:

Highest Level Detected indicates the annual running average of the analyte listed.  
NOTE: The state requires monitoring of certain contaminants less than once per year because the concentrations of these contaminants do not change frequently. Therefore, some of this data may be more than one year old.

### The Rockford Water Division is pleased to provide you this Water Quality Report.

If, upon its review, you should have questions or concerns, please contact Kyle Saunders, Water Superintendent (1-779-348-7371).

For other information and updates to activities at the Water Division, please visit our web site at [www.rockfordil.gov](http://www.rockfordil.gov).



**Definitions:** The following tables contain scientific terms and measures, some of which may require explanation.

**Avg:** Regulatory compliance with some MCLs are based on running annual average of monthly samples.

**Level 1 Assessment:** A Level 1 assessment is a study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system.

**Level 2 Assessment:** A Level 2 assessment is a very detailed study of the water system to identify potential problems and determine (if possible) why an E. coli MCL violation has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions.

**Maximum Contaminant Level or 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.

**Maximum Contaminant Level Goal or 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 residual disinfectant level or 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 disinfectant level goal or MRDLG:** The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

**na:** not applicable.

**mrem:** millirems per year (a measure of radiation absorbed by the body)

**ppb:** micrograms per liter or parts per billion - or one ounce in 7,350,000 gallons of water.

**ppm:** milligrams per liter or parts per million - or one ounce in 7,350 gallons of water.

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

## Regulated Contaminants

Disinfectants and Disinfection By-Products	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Chlorine	12/31/2017	0.5	0 - 1	MRDLG=4	MRDL=4	ppm	No	Water additive used to control microbes
Haloacetic Acids (HAA5)	2017	36	0 - 90.2	No goal for the total	60	ppb	No	By-product of drinking water disinfection
Total Trihalomethanes (TTHM)	2017	12	4.63 - 14.85	No goal for the total	80	ppb	No	By-product of drinking water disinfection
Inorganic Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Arsenic	2017	3	0 - 3	0	10	ppb	No	Erosion of natural deposits; Runoff from orchards Runoff from glass and electronics production wastes.
Barium	2017	0.73	0.048 - 0.73	2	2	ppm	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Chromium	2017	5.9	0 - 5.9	100	100	ppb	No	Discharge from steel and pulp mills; Erosion of natural deposits
Fluoride	2017	0.6	0.576 - 0.829	4	4.0	ppm	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Nitrate (Measured as Nitrogen)	2017	4	0 - 4.1	10	10	ppm	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Selenium	2017	1	0 - 2.8	50	50	ppb	No	Discharge from petroleum and metal refineries; Erosion of natural deposits; discharge from mines.
Sodium	2017	33	2.3 - 33			ppm	No	Erosion from naturally occurring deposits: Used in water softener regeneration.
Radioactive Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Combined Radium 226/228	2017	5	0 - 4.9	0	5	pCi/L	No	Erosion of natural deposits
Gross Alpha Excluding	2017	4	0 - 5.2	0	15	pCi/L	No	Erosion of natural deposits
Volatile Organic Contaminates	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
1, 1, 1-Trichloroethane	2017	2.3	0 - 2.3	200	200	ppb	No	Discharge from metal degreasing sites and other factories
Tetrachloroethylene	2017	2	0 - 2	0	5	ppb	No	Discharge from factories and dry cleaners
Trichloroethylene	2017	1	0 - 1.5	0	5	ppb	No	Discharge from metal degreasing sites and other factories
cis-1,2-Dichloroethylene	2017	9	0 - 10	70	70	ppb	No	Discharge from industrial chemical factories
trans-1,2-Dichloroethylene	2017	0.85	0 - 0.85	100	100	ppb	No	Discharge from industrial chemical factories
State Regulated Contaminants	Date	Detected	Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Iron	2017	0.7	0 - 0.77		1.0	ppm	No	This contaminant is not currently regulated by the USEPA. However, the state regulates. Erosion of natural deposits.
Manganese	2017	416	0 - 460	150	150	ppb	No	This contaminant is not currently regulated by the USEPA. However, the state regulates. Erosion of natural deposits.
Zinc	2017	0.008	0 - 0.02	5	5	ppm	No	This contaminant is not currently regulated by the USEPA. However, the state regulates. Naturally occurring; discharge from metal.



# Lead Awareness At The City Of Rockford

## Lead In Drinking Water

Drinking water that the City of Rockford Water Division delivers to each of the service connections in the community contains no detectable levels of lead. Drinking water is essentially lead free when leaving the water treatment plant, but lead can be released when the water comes in contact with pipes and plumbing fixtures that may contain lead. Lead sources and lead levels will vary from home to home, so it is important to identify and remove any lead sources in each household. Lead in drinking water is primarily attributed to the corrosion of lead-based materials associated with service lines and household plumbing. The water service line, which is owned by the property owner, connects the water main in the street via a cut-off box located at your property line. The City owns the small portion of piping that runs from the cut off box to the water main completing the connection. The City of Rockford Water Division is responsible for providing high quality drinking water but cannot control the variety of materials used in household plumbing components.

If present, elevated levels of lead can cause serious health problems especially for pregnant women and children. When your water has been sitting in household plumbing unused for several hours, you can minimize the potential for lead exposure by flushing your cold water tap for at least two

minutes before using the water for drinking or cooking. If you are concerned about lead in your drinking water, you should determine if you have lead plumbing or other sources of lead on your property. You may refer to the interactive Water Service Line map on the City website that shows the service line material, if available for each home. You may also consider having your water tested for lead. To request a free lead test kit from the Rockford Water Division, please contact our Water Quality Group at 779-348-7151 to make arrangements to have your kit delivered.

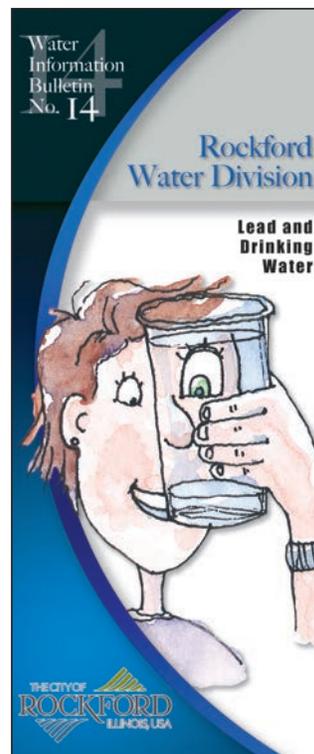
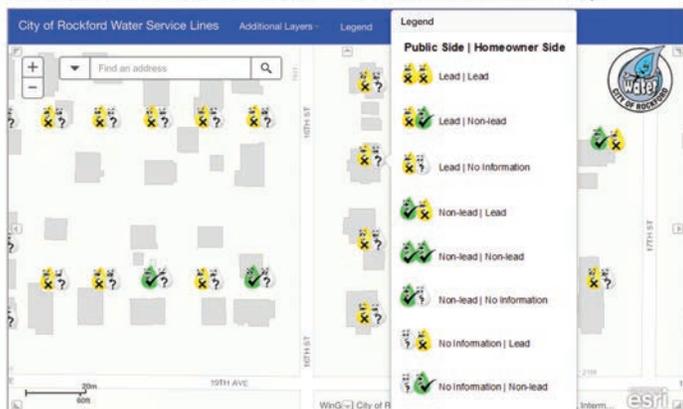
Until all household sources of lead in drinking water have been removed, pregnant or nursing women and children under the age of six may want to use filtered tap water for drinking and cooking. This includes water used for making infant formula, beverages and ice. Filters should be certified to meet NSF Standard 53 for lead removal. Information on lead in drinking water, testing methods and steps you can take to minimize exposure is available from the EPA's Safe Drinking Water Hotline (800-426-4791); <https://www.epa.gov/ground-water-and-drinking-water/basic-information-about-lead-drinking-water> or <https://rockfordil.gov/city-departments/public-works/water-division/lead-and-drinking-water/>.

## Service Line Map

### Use our map to check for lead service lines on your property

Lead service lines were predominantly installed prior to 1960 in the City of Rockford. You can use our service line map to see the information the Water Division has about your service line. <http://rockfordil.gov/rockford-maps/interactive-lead-service-identification-map/>

Interactive Lead Service Line Identification Map



## Download Our Brochure Lead And Drinking Water

Visit [rockfordil.gov](http://rockfordil.gov) or contact us at [lead@rockfordil.gov](mailto:lead@rockfordil.gov)

Reminder: Remove and clean faucet aerators every 3 months.

# Pipe Identification Procedures

## How To Identify A Lead Water Service Pipe

### Tools Needed:

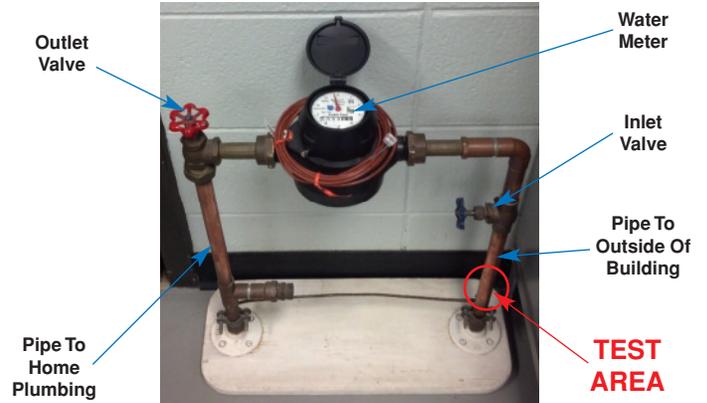
Flathead Screwdriver, Refrigerator Magnet & A Penny (or other coin)

### Step 1:

#### Locate the water service line coming into the building.

This is typically found in the basement. An “inlet valve” and the water meter are installed on the pipe after the point of entry.

Identify a test area on the pipe between the point where it comes into the building and the inlet valve. If the pipe is covered or wrapped, expose a small area of metal.



### Step 2:

#### Scratch the surface of the pipe.

Use the flat edge of a screwdriver or other tool to scratch through any corrosion that may have built up on the outside of the pipe.

### Step 3:

#### Compare your pipe to the chart below.

Each type of pipe will produce a different type of scratch, react to the magnet differently and produce a unique sound when tapped with a metal coin.



### Lead Pipes

#### The Scratch Test

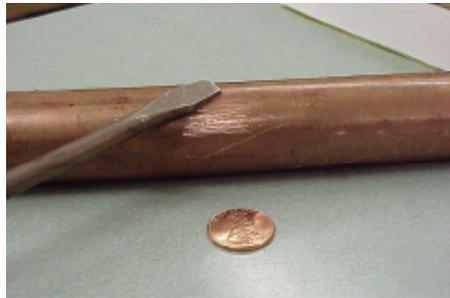
If the scraped area is shiny and silver, your service line is lead.

#### The Magnet Test

A magnet will not stick to a lead pipe.

#### The Tapping Test

Tapping a lead pipe with a coin will produce a dull noise.



### Copper Pipes

#### The Scratch Test

If the scraped area is copper in color, like a penny, your service line is copper.

#### The Magnet Test

A magnet will not stick to a copper pipe.

#### The Tapping Test

Tapping a copper pipe with a coin will produce a metallic ringing noise.



### Galvanized Pipes

#### The Scratch Test

If the scraped area remains a dull gray, your service line is galvanized steel.

#### The Magnet Test

A magnet sticks to a galvanized pipe.

#### The Tapping Test

Tapping a galvanized pipe with a coin will produce a metallic ringing noise.

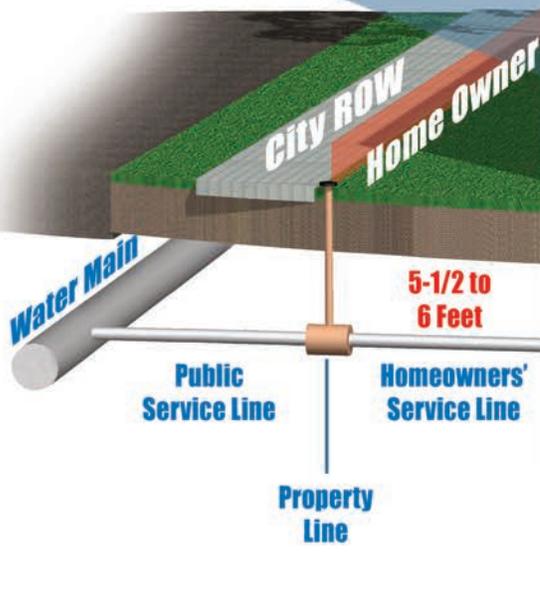
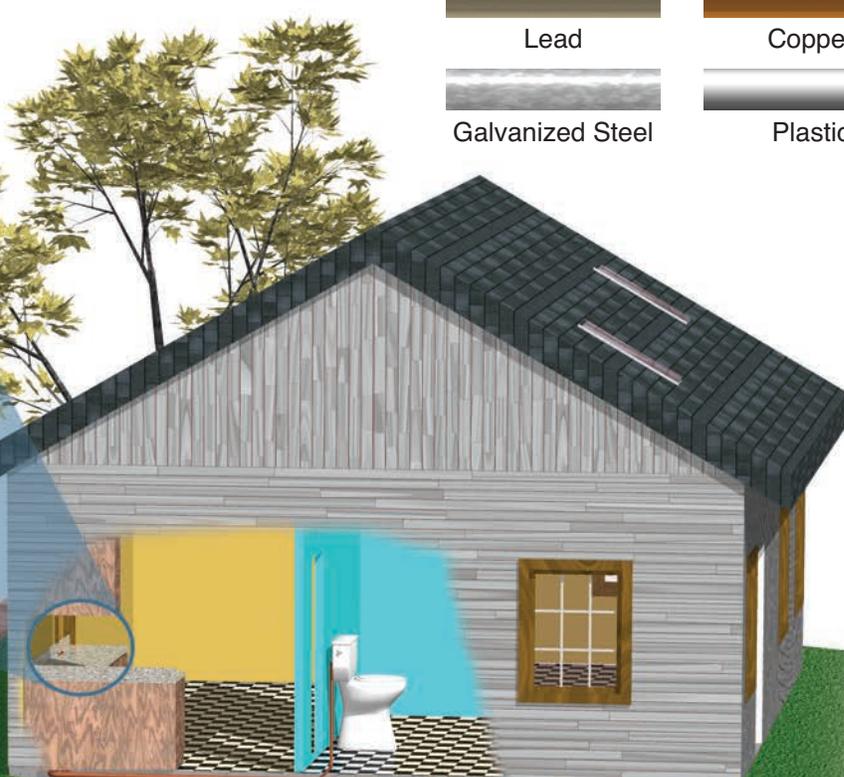
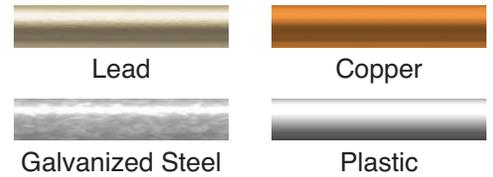


# Where Can Lead Be Found In Home Plumbing?

The City's water main system is lead free. However, some homes may have a water service line, (running from the water main to homes) that is made of lead.

Lead can also be found in older brass fixtures and valves and in old solder, where pipes are joined.

## Possible Pipe Materials



**Water Service Line:** Homeowners' pipes may be made of lead, copper, galvanized steel or plastic.

