# 2020

# Kirkwood Water Annual Water Quality Report

MO6010430

#### Source Of Your Drinking Water

Drinking water in Kirkwood comes from and is treated by the Missouri American Water Company, purchased by the City and redistributed to Kirkwood customers through City mains. This water that is purchased from Missouri American originates from the Missouri River.

#### **Source Water Assessment**

The Department of Natural Resources conducted a source water assessment to determine the susceptibility of our water source to potential contaminants. This process involved the establishment of source water area delineations for each well or surface water intake, and then a contaminant inventory was performed within those delineated areas to assess potential threats to each source. Assessment maps and summary information sheets are available on the Internet at http://

#### Kirkwood's Water Quality Report

As part of our ongoing quality assurance program, the Kirkwood Water has published this "report card" for our customers to use in evaluating the quality of their drinking water. This "Consumer Confidence Report" lists any detected substances found in the water as a result of testing, the concentration detected, and the maximum contaminate level (MCL) allowed for that substance, as established by the Environmental Protection Agency (EPA) in compliance with the Safe Drinking Water Act and regulated by the Missouri Department of Natural Resources.

maproom.missouri.edu/swipmaps/pwssid.htm. To access the maps for your water system, you will need the State-assigned identification code for the Missouri American Water Company, which is MO6010716. The Source Water Inventory Project maps and information sheets provide a foundation upon which a more comprehensive source water protection plan can be developed.

#### Why Are There Contaminants In The Water & Where Do They Come From?

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and groundwater 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 naturallyoccurring 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 residential uses.

- 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 result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, the Department of Natural Resources prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. Department of Health regulations establish limits for contaminants in bottled water that must provide the same protection for public health.

### **Special Health Information**

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 (1-800-426-4791).

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromized 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 from their health care providers about drinking water. 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)**.

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. Kirkwood Water 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 (800-426-4791) or at <a href="http://water.epa.gov/drink/info/lead/index.cfm">http://water.epa.gov/drink/info/lead/index.cfm</a>.



*Kirkwood Water, City of Kirkwood* 212 S. Taylor Avenue, Kirkwood, MO 63122

(314) 984-5936 Ph (314) 984-5920 Fx

## **Kirkwood Water Quality Report 2020**



#### **Public Participation Opportunities**

Kirkwood City Council meetings are typically held at 7:00 p.m. on the first and third Thursday of each month, in the Council Chambers, located on the top floor of Kirkwood City Hall, 139 South Kirkwood Road. These meetings provide opportunity for public participation in decisions that affect drinking water quality.

Disinfection Byproducts Moni		ng Period	RAA	Range		Unit	MCL	MCLG		Typical Source			
* CHROMIUM	* CHROMIUM 2020		_	_		ppb	opb 100		00	Discharge from steel and pulp mills			
(HAA5)	(HAA5) 2020		33	19.2—	-57.5	ppb	60	(	0		Byproduct of drinking water di	sinfection	
TTHM	2	2020		6.93—	-54.1	ppb	ppb 80		0 Byproduct of drinking water disinfection			sinfection	
Lead and Copper	Date	90th Perc	entile	Range			Unit	AL	AL Sites Over AL		Typical Source		
Copper	2017—2019	017—2019 0.0234		0.00338—0.0648			ppm	1.3	0	)	Corrosion of household plumbing systems		
Microbiological		Result		MCL		MCLG			Typical Source				
	* Regulated	Contaminants	- NO DET	ECTED R	RESULTS	S FOR (	CHROMI	JM WE	RE FOU	IND IN T	HE CALENDAR YEAR OF 2020		
Unregulated Contaminant Monitoring Rule (UCMR)			Col	Collection Date of HV			Highest Value (HV)			')	Range	Unit	
HAA5				06/10/19			40.8				17.51—40.8	ppb	
HAA6Br				03/18/19			4.09				1.2-4.09	ppb	
HAA9				06/10/19			43.87				19.58—43.87	ppb	
Manganese				06/10/19			1				0.46—1	ppb	
	Viola	tions and Heal	th Effects	Informat	ion - NO	VIOLA	TIONS C	CCURI	RED IN	THE CAL	LENDAR YEAR OF 2020		
RESELLER CONTAMIN	ANTS												
Regulated Contami- nants	Collection Date	Highest Value	Ra	ange	Unit	MCL	MCLG				Typical Source		
2, 4-D	4/7/2020	0.1	0-	—0.1	ppb	70	70		Runoff from herbicide used on row crops				
2-METHOXYETHANOL	9/12/2019	5.7	0-	—5.7	UG/L								
ARSENIC	4/7/2020	2	0	)—2	ppb	10	0		Erosion of natural deposits				
ATRAZINE	4/72020	0.3	0-	—0.3	ppb	3	3		Runoff from herbicide used on row crops				
FLUORIDE	4/7/2020	0.66	0.56	6—0.66	ppm	4	4		Natural deposits; Water additive which promotes strong teeth				
NITRATE-NITRITE	4/7/2020	1.89	0.2-	—1.89	ppm	10	10	R	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits				
SELENIUM	4/7/2020	2	0	)—2	ppb	50	50		Erosion of natural deposits				
SIMAZINE	1/7/2020	0.1	0-	-0.1	ppb	4	4		Herbicide runoff				

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. KIRKWOOD 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 (800-426-4791) or at <a href="http://water.epa.gov/drink/info/lead/index.cfm">http://water.epa.gov/drink/info/lead/index.cfm</a>.

Reseller Contaminants - NO VIOLATIONS OCCURRED IN THE CALENDAR YEAR OF 2020									
Disinfection Byproducts	Monitoring Period	Highest RAA Range		Unit	MCL	MCLG	Typical Source		
(HAA5)	2020	27	8.7—40.8	ppb	60	0	Byproduct of drinking water disinfection		
TTHM	2020	54	2.9—78.2	ppb	80	0	Byproduct of drinking water disinfection		

The state has reduced monitoring requirements for certain contaminants to less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Records with a sample year more than one year old are still considered representative.

#### **Definitions Of Terms Used In This Report**

 MCLG: Maximum Contaminant Level Goal, or the level of a contaminant in drinking water where there is no known or expected risk to health. MCLGs allow for a margin of safety.

0

- MCL: Maximum Contaminant Level, or 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.
- AL: Action Level, or the concentration of a contaminant which, when exceeded, triggers treatment or other requirements, which a water system must follow.
- **90th percentile:** For lead and copper testing, 10% of test results are above this level and 90% are below this level.
- Range: Shows the lowest and highest levels found during a testing period; if only one sample was taken, then this number equals the Level Found.
- RAA: Running Annual Average, or the average of sample analytical results for samples taken during the previous four calendar quarters.

#### Abbreviations Used In This Report

- TTHM: Total Trihalomethanes (Chloroform, bromodichloromethane, dibromochloromethane, and bromoform) as a group.
- HAA5: Haloacetic Acids (mono-, di- ad tri-chloracetic acid, and mono- and dibormaocetic acid) as a group.
- ppb: parts per billion or micrograms per liter.
  - ppm: parts per million or milligrams per liter.