

Where does my drinking water come from?

The University of Kentucky purchases its drinking water from Kentucky American Water. Kentucky American provides this water by drawing raw water from the Kentucky River, Jacobson Reservoir, or Lake Ellerslie and processing it at one of its treatment facilities. Approximately 42 million gallons per day are supplied to its customers on a daily basis. The University is responsible for the consumption of approximately 1.5 million gallons of that water.

How is my water treated?

All water supplied to the University is thoroughly treated and disinfected by Kentucky American Water. As water travels to reach the river or reservoirs, it picks up contaminants. When water is drawn from these sources, the contaminants must be removed at a treatment facility before the water is safe for use. The treatment facility removes the dirt and other particles in the water, filters it, and then disinfects it to kill any bacteria or microorganisms that may be present. Once the process is completed, the water flows through pipes to the University.

To ensure that proper treatment is being provided, Kentucky American must remove contaminants to EPA specified levels at the treatment facility. In order to make sure the water is clean, Kentucky American is required to routinely sample for things like fertilizers, sediment, metals, disinfection by-products, and bacteria. A complete report of the water quality can be found on the American Water website: (<http://www.amwater.com/ccr/lexington.pdf>)

What issues could I have with my drinking water?

While drinking water is deemed safe as it travels to campus, there are several issues that you may experience from time to time. These issues may be caused by old lines, construction, general maintenance, or weather. These issues may include:

Cloudy or Milky Water

Cloudy or Milky looking water is usually the result of tiny air bubbles suspended in the water. These bubbles are so small that they are almost invisible. This gives the water a very white, cloudy appearance. If you pour a glass of water and allow it to stand for a few minutes, the air bubbles will rise to the surface. This quality of the water is not affected nor is the water harmful to consume. If the water does not clear from the bottom up, Environmental Management should be called.

Brown or Yellow Water

If the water remains discolored only for a minute or two after the tap is turned on, the buildings internal plumbing may be the culprit. This is usually a sign of iron or rust in the pipes. If it's only in the hot water supply, there may be an issue with the water heater. Although the presence of iron is not a health hazard (since iron is an essential nutrient), it can be a nuisance. If you find the discoloration unsuitable, simply flush the tap until the water runs clear.

Water may also become discolored due to sediments getting stirred up when fire hydrants are used, construction is taking place on the lines, or if there is a line break. If the water doesn't clear up after a few minutes, Environmental Management should be notified.

Taste and Odors

The most common reason water may have a strange taste/odor is the chlorine added at the treatment facility to kill bacteria and other organisms that can impact human health. The addition of disinfectant is required by the Kentucky Department of Environmental Protection and the U.S. EPA. A certain level must be maintained in the distribution system to protect consumers from disease causing organisms as the water travels from the treatment plant to your building.

This taste/odor may increase certain times during the year as Kentucky American Water cleans their distribution system and switched disinfectants. This increase is normal and is not harmful.

Other possible taste and odor issues include:

Earthy or musty tastes and odors – These are associated with changing weather conditions and algae outbreaks. They typically occur seasonally in the spring or fall. When this happens, the treatment facility adjusts their process and monitors the issue.

Rotten Egg Odor – If not maintained properly, hot water heaters may produce this type of odor. If you experience this odor in the hot water only, your building operator should be notified.

During the summer when the campus population is severely reduced, taste and odor issues may develop in certain buildings due to lack of use. The rotten egg or sulfur odor develops as the water stagnates in the lines. If this odor is in the cold water only, the building may need to be flushed. Environmental Management should be notified.

Metallic Taste – A metallic taste can be caused by actual metals in the water supply. Older supply pipes, particularly those made of iron can be the source of these metal contaminants. Often times, these metals only cause taste/odor issues and are not harmful to human health. However, if this is experienced, Environmental Management should be notified so that the water can be tested to ensure that contaminant levels are within acceptable ranges.

Lead - It should be noted that you cannot see, taste, or smell lead in drinking water. Lead enters drinking water when service pipes that contain lead corrode. Buildings constructed prior to 1986 are more likely to have lead pipes, fixtures, solder, or fittings. If you have concerns about lead levels in your building, Environmental Management should be contacted.

Often times drain odors can be perceived as the odor being present in the water. To verify if the water contains the odor, a clean glass (plastic not recommended) should be filled with water from the suspected tap and taken away from the sink area, preferably in a different room away from the odor. If the odor is still present in the water, Environmental Management should be contacted.

White Stains

White stains on the faucet aerator, around the sink area, or in the area where water is typically used may be the result of hard water. Hardness is the measure of the concentration of calcium and magnesium in water. These two minerals are naturally present in water and pose no health risk. Excessive hardness can cause mineral deposits to remain on surfaces after water evaporates. Hardness levels leaving the Kentucky American Water Treatment Plant that supplies water to the University average 181 ppm, indicating hard water. Hard water stains can be removed with a mixture of vinegar and water.