

WHY DOES MY WATER SMELL LIKE ROTTEN EGGS?

A sewer, or "rotten egg" odor, from your tap water could be the result of several problems in your own home, and may not be directly related to the water supply. If you detect the odor in your kitchen faucet, it could be the result of a partially clogged drain or a dirty garbage disposal. The easiest way to verify this is to check another faucet in the house. If the water from the other faucet smells fine, then, more than likely, the bad odor is a result of a dirty garbage disposal or remains in your sink's trap.

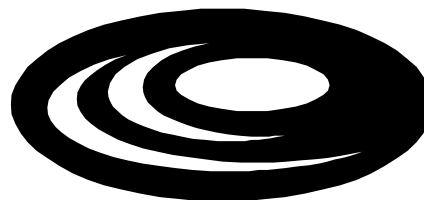
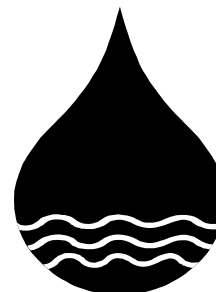
Another common cause for a "rotten egg" odor from house tap water can be associated with your hot water heater.

A hot water heater can produce a rotten egg odor when it is turned on. To determine if the odor is from the hot water heater, go to a sink closest to the water heater and fill a glass with water from the hot water faucet and a second glass from the cold water faucet and smell them. If the offending odor is detected only from the glass of water taken from the hot water faucet, the problem is most likely originating from the water heater. Newer water heaters are a real problem (see below). This also works to increase the smells. Flushing the water heater yourself, or contacting a plumber to perform the flushing, and then resetting the water heater to the correct temperature will, in most cases, solve the problem.

What Do Iron Particles in the Water or the Hardness of Water Have to Do with the Sulfur/Rotten Egg Smell?

The sulfur smell comes from the breakdown of iron particles that is commonly found in water that comes from wells. Iron in water is often the cause for "hard" water. The more iron particles in your water the harder your water. Municipal water systems add phosphate to coat the iron particles and reduce the "hardness" of their water supply. Homeowners often install a water softener system to do the same thing. However, the amount of phosphate the municipality can add is regulated by the State because of the health concerns over high levels of phosphate in the human body. Thus, the municipal water system can only add what has been determined to be a safe amount of phosphate. That amount may not be enough to coat all of the iron particles found in the municipal water.

Why is this important? Because, as the tiny iron particles break down it produces sulfate – the sulfur, rotten egg smell. Sulfate-reducing bacteria help break down the particles.



How Does My Water Heater Cause Smells?



It is relatively common to have this rotten egg odor in hot water only. That is because the water heater's "sacrificial" anode rod is to blame. This rod, made of magnesium, helps protect the tank lining from corrosion; instead, the rod itself corrodes. Unfortunately, as it does, the magnesium gives off electrons that nourish sulfate reducing bacteria – the bacteria that eats up the iron particles and in the process releases the sulfur smell. Removing this rod may eliminate the problem. Some have found aluminum rods can be installed with success.

Temperature is Important

Once you get the sulfate-reducing bacteria in your water heater you will want to get them out. Even if you drain your water heater, change the anode you'll still have the bacteria. But, there is an easy way to kill them off. To eliminate sulfate-reducing bacteria from the water heater, you need to raise the water temperature above 140 degrees for 8 hours. Bacteria die out at temperatures above 140 degrees. To safely follow this procedure, first make sure your water heater has a functioning temperature and pressure relief valve. Also, to prevent accidental scalding, warn users that water will come out of faucets extremely hot and should not be used at the increased temperature.

Drain Your Water Heater

In water systems with "hard" water, it is best to drain your water heater twice a year. This drains out the tiny iron particles that settle to the bottom of your water heater. Draining them out of your water heater does two good things. First, it removes the tiny particles of iron that have settled to the bottom that may discolor your water and that provide sulfate-reducing bacteria their food supply. Secondly, you are heating water more efficiently as you are no longer first heating the sludge that settled to the bottom of the water heater before you heat the water.

Still Having Problems

If you believe your water is still 'bad', please contact Village Director of Public Service, John Small so that he may explore the problem further. Mr. Small may be reached at 657-3148.

Information from the Village of Paw Paw

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