

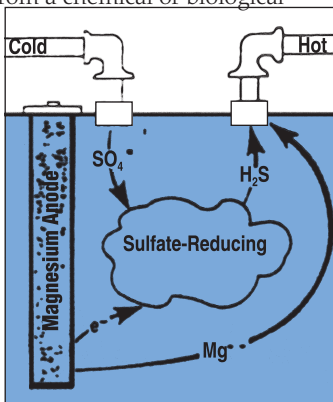
# Does Your Water Smell Like Rotten Eggs

Marina Coast Water District customers may be experiencing a rotten egg odor coming mainly from the hot water.

## What is the smell?

The rotten egg odor is caused by hydrogen sulfide ( $H_2S$ ) gas. Although the smell is offensive, the gas is not harmful at the concentrations found in your water.

Hydrogen sulfide results from a chemical or biological reaction between sulfur, bacteria and electrons. Sulfates and a nonharmful bacteria are naturally found in water supplies. Bacteria together with energy from electrons turn sulfate into  $H_2S$ . Electrons are usually produced by corrosion of the "sacrificial" anode in your water heater. (Sacrificial because its purpose is to corrode so that the inside of your water heater won't.)



## What is the solution?

By substantially reducing the sulfur, bacteria or electrons in your hot water heater, you can control the odor problem.

### RECOMMENDED STEPS FOR ELIMINATING ODOR:

- ✓ Flush out the sediment (a breeding ground for bacteria) in your tank. Flushing is not a simple matter of opening the drain valve. Specialized tools are usually required. Contact a reputable water heater repair service that specializes in eliminating odor.
- ✓ Replace the anode in your tank with a zinc bearing anode or a power rod that will provide protection from corrosion without supporting the sulfate-reduction reaction that causes  $H_2S$  gas. Many types of anodes are available, but use one recommended by a qualified plumber. (The anode must be the zinc type.)
- ✓ Add one to two pints of hydrogen peroxide (non-toxic) in your tank for one hour to kill the bacteria. (Recolonization will most likely occur, which is why hydrogen peroxide should be done with the other steps.)

**Note:** Each step must be completed in order to effectively eliminate the odor.

## What we're doing

We're adjusting our treatment system to control  $H_2S$  formation. If you continue to have the smelly water problem, please contact us.



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