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Spring cleaning must include flushing the hot water tank

When was the last time you flushed your hot water heater or checked the anode rod to see if it needed to be replaced? Come to think of it, do you even know what the anode rod is or where it is located?

Hot water is an integral part of our lives. We love to take nice hot showers on cold crispy mornings, and nothing soothes like a nice hot bath.

Despite its importance, most of us forget our hot water tank the day after it is installed.

Then, when problems start, we gripe that the darned thing only lasted 7-10 years. Spring cleaning time would be a good time to give your hot water heater tank a little of the TLC it deserves so it can give you the hot water you need to get your cleaning jobs done.

The most basic maintenance you can do for your hot water heater is to flush it. Most people have never flushed their hot water heater, even though it is supposed to be done on a regular basis.

This is not a hard job. The most difficult part will probably be finding the garden hose and dragging it over to the hot water heater. Hook the hose up to the bottom drain valve and run it to the floor drain if in a basement, or to the sink if the tank is on the main floor.

Open the drain valve and run the water out of the hose until the water turns clear. Wear gloves, it's hot. Turn off the drain valve and carefully disconnect the hose so you don't spill any water. You're done.

If your hot water has started to smell like rotten eggs or you hear a popping sound, you have a bigger cleaning problem, but now is the time to fix it.

According to the people at A.O. Smith, (800) 433-2545, www.hotwater.com, one of the largest manufacturers of water heaters, the most common cause of smelly water is nontoxic sulfate-reducing bacteria. The rotten egg smell is a byproduct of the bacteria that convert sulfate in the water to hydrogen sulfide as part of the bacteria's life process. The bacteria get into the water through construction, a break in ground piping, or a well system.

Factors that increase the likelihood of having the bacteria in your water supply include having a well, using a water softener or not using the water system for a prolonged period of time.

Most anode rods are made of aluminum. They also are made of magnesium and a combination of magnesium and zinc. If your hot water is giving off a rotten egg smell, the easiest solution is to replace the aluminum anode rod with a non-aluminum anode rod. You can get replacement aluminum and magnesium anode rods at a plumbing supply house.

The anode rod is a tube that extends from the top 39 to 54 inches down into the tank. The rod keeps metal parts and connections in the tank from corroding through a chemical process called cathodic protection. The anode rod creates an electrical charge that prevents metallic ions from going into the solution and corroding. The rod is self-sacrificial and wears away over time. When new, anode rods are three-quarters of an inch in diameter.

When replaced, they are often down to one-eighth of an inch. If the rod is not replaced in time, metal parts and connections start to corrode, causing premature replacement of the water heater.

If changing the anode rod does not correct the odor problem, the water tank and hot water lines may need a chlorine bleach bath. This procedure kills the bacteria with 1 gallon of household bleach for every 25 gallons of tank capacity. Afterward, the bath, the tank and lines have to be continuously flushed.

The entire 13-step procedure is described in A.O. Smith's Technical Bulletin No. 23. A plumbing professional should do a procedure this involved.

Water tanks can also start making rumbling, crackling or popping sounds associated with mineral buildup in the water tank. The popping sound is caused by water trapped under lime deposits escaping or being boiled away when trapped above the heating element.

A product called Mag-Erad by Tri Brothers Chemical Corporation dissolves the mineral buildup so that it can be flushed from the tank. The project takes about two hours, according to the water-heating specialists at Hartford and Ratliff, (800) 466-3110.

The company sells a one-pound container of Mag-Erad for \$21.35. Two containers are needed for a 30- or 40-gallon water heater and three containers for a 50- or 60-gallon water heater. If you have an older water heater, you may need more Mag-Erad to do the job.

If you clean your hot water heater, it will save you money, help you clean, then, give you a relaxing hot bath when the jobs are done. You can't beat that for service.