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**Water Heater Problem May Decrease Efficiency  
But Poses No Threat to Water Safety, AWWA Says**

***Defective Water Heater Dip Tubes Could Affect 21 Million Consumers***

(Denver, Colorado) The American Water Works Association (AWWA) today said that water containing tiny plastic chips from defective household water heaters is safe.

"These plastic chips are a nuisance, and they may decrease the performance of your appliances, but they are non-toxic and do not pose a health threat," said Clare Haas, AWWA Water Quality Engineer. "Affected consumers should call their water heater manufacturer immediately to get the problem remedied."

According to plumbing industry sources, up to 90 percent of residential water heaters built between 1993 and 1996 an estimated 21 million units may rely on defective polypropylene "dip tubes," which break down inside the water heater and cause plastic chips to flow to water faucets. The chips do not pose a health risk, but they can decrease water flow from household faucets and appliances and diminish water heater efficiency and effectiveness. Many water heater manufacturers are now replacing the defective water heaters or dip tubes at no cost to the consumer.

Virtually all water heaters rely on some type of dip tube, a pipe that delivers cold water to the bottom of a water heater, where the burner is located. Manufacturers altered their process between 1993 and 1996, using materials that can break down and dissolve in as little as two to three years.

During the past several years, consumers have reported the telltale white or gray deposits that clog bathroom, kitchen and other water fixtures. The subject was first addressed on AWWA's web site, where drinking water experts shared information and identified the problem in a "technical forum."

In order to educate consumers on the potential problems and help them avoid unnecessary costs, AWWA offers consumers the following advice:

**How to tell if you're affected** - If you notice a decrease in the amount of hot water, the efficiency of your water heater, or have particles blocking your faucets, your water heater's dip tube may have disintegrated. To perform a quick test, disconnect water lines on your washing machine and look for any white or gray particles in them. If you find particles in the cold water line, they are probably not from your hot water heater. If you find particles in the hot water line or in the screen on your faucet, put them in standing water to see if they float. Particles that float are from the dip tube. Another test is to apply heat to the particles. If the chips are from the dip tube, they will melt and the smoke will smell like plastic.

**How to fix the problem** To fix the problem, the dip tube has to be replaced. Although the dip tube is relatively inexpensive, it can be very difficult to a homeowner to replace because the water heater will also need to be flushed to remove any lingering plastic chips. Another option is to completely replace the water heater, which is usually more expensive than replacing the dip tube and flushing the water heater. In either case the fixtures, strainers, and aerators will have to be cleaned several times until all the dip tube chips are flushed from the piping. Although many consumers have replaced water faucets in an attempt to fix the problem, replacement is not necessary if the fixtures are adequately cleaned.

**Where to call** - If you experience problems with a dip tube, contact your water heater

manufacturer. Dip tubes manufactured by Perfection Corporation have a five-year warranty and many water heater manufacturers will pay to replace either the dip tube or the entire water heater, including installation costs.

The American Water Works Association and its 55,000 members work to assure a safe, sufficient supply of drinking water for the people of U.S., Canada, and Mexico. The group leads efforts to advance the science, technology, consumer awareness, management, conservation, and government policies related to drinking water.