



PUBLIC WORKS DEPARTMENT
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What is the white stuff floating in my water?
You may have a defective hot water tank "Dip Tube"

What is a hot water tank dip tube?

The dip tube is a plastic tube that carries cold water from the cold water inlet at the top your hot water tank to the bottom area of the tank where the heating elements and controls are located. Each time you draw hot water from your tap, hot water flows out of the top of your hot water tank and cold water flows via the dip tube into the bottom.

What's wrong with my hot water tank dip tube?

Between late 1992 and spring 1996, the plastics manufacturer that supplied 90% of the dip tubes used by most of the major hot water tank manufacturers in the United States used defective plastic to make the tubes. It is estimated nearly 21 million hot water tanks made in this time period may have been built with these defective dip tubes. After a period of use, the defective tube breaks down inside the tank and disintegrates into thousands of tiny grains or flakes of white or bluish-white plastic. These tiny chips of plastic float. When hot water is drawn from the tank, they flow with the water into the plumbing, where they often clog up the fixtures and appliances attached to the system.

The signs and symptoms that this has occurred in your hot water tank are:

- White or bluish-white flakes floating in your bathtub when you fill it with bath water.
- Suddenly reduced or low flow at your kitchen and bathroom taps.
- Reduced warm or hot water flow at your washing machine.
- Reduced hot water capacity or hot water run time. (When the tube disintegrates cold water flows into the top to the tank as you draw out the hot water. The cold water "short circuits" to the outlet piping and the hot water appears to turn cold quickly)
- Faucet screens or appliance inlet screens are plugged with white or bluish-white material.

If you are not sure if you have this problem, you can call your local utility and ask them to look at the particles and help identify them.

How do I correct this problem?

If you have confirmed you have a failed dip tube, your dip tube or possibly your hot water tank will have to be replaced. If you know how, you can do this work yourself, or if not, you may want to hire a plumber to do it for you. Regardless of whether just the dip tube or the entire tank is replaced, your plumbing will have to be flushed to remove the plastic particles caught in it. All of the screens, strainers, aerators, showerheads and appliances connected to your hot water plumbing should be disconnected and cleaned. At the same time all of the hot water lines should be flushed. If you only replace the dip tube, the hot water tank will also have to be drained and thoroughly flushed prior to cleaning the piping and appliance fixture screens.

Can I expect any help from the hot water tank manufacturer?

No. The homeowner must cover the cost or repair and replacement. Because many of the dip tubes failed in the first two or three years of use, settlement of a nationwide class action lawsuit only required the manufacturers to pay for repair or replacement of dip tubes that failed prior to December 31st, 2000. Tanks that fail now are typically 5-8 years old and are outside normal warranties for defects in workmanship and materials. Since most hot water tanks only last 8-10 years, you may want to consider replacing yours if the dip tube fails and your tank is already 7 or 8 years old.