

If you have discolored water



There can be many reasons, but discolored water usually originates in the water distribution system or private plumbing systems. Corrosion or rusting of the interior surfaces of metal pipes is a primary source of discoloration and particles that can appear in your water. Several possible situations can cause this material to be dislodged. The most probable of these causes are listed below along with the steps you can take to deal with a temporary problem.

Distribution System Causes

Main Breaks: water is delivered to your home or business through a network of underground pipes referred to as the distribution system. The principal pipe or conduit is called a main. Water mains in

this distribution system can fail due to age, corrosion, earth quakes/trimmers, temperature changes, defective materials, or damage by construction work. Fire hydrants can also be broken off by vehicles. When a main breaks, the increased velocity of the water can pick up dirt and other materials that normally settle to the bottom of the pipes.

Dead Ends: every distribution system has mains that must be ended due to physical obstructions. This results in a "dead end" that does not connect back with another main. Low usage in these areas results in sediment accumulation. Over time, the lack of circulation can result in the appearance of discolored, foul tasting stale water.

Fires and Fire Hydrants: the high velocity of water used to fight fires and to test fire hydrants can pick up sediment as described under Main Breaks.

Construction Activities: sometimes mains must be replaced or cleaned. In addition, new buildings require connection to the existing water main. These and other similar activities may disturb the accumulated sediment and result in temporarily dirty water.

Private Plumbing System Causes

Hot-Water Systems: dirty water often originates in the hot-water tank. Hot water tanks can accumulate sediment and therefore need to be flushed.

House Piping: defective plumbing can lead to many dirty water conditions. Pieces of rubber or plastic washers that age and crumble can result in particles in the water. Improperly joined dissimilar materials (such as iron and galvanized, or copper and iron) can accelerate corrosion and turn water red or green. Rapid shut-off of faucets or automatic valves in washing machines can cause tremendous pressure surges that dislodge material from pipe walls.

Cross Connections: improper attachments for insecticide sprayers, irrigation systems or hoses attached to faucets can lead to back-siphoning and introduce unwanted materials into the house plumbing system.

What should you do if you have dirty water?

Step One: Determine the source of the dirty water- is it the hot or the cold water?

- First try flushing the toilet, and look into the bowl. Since the toilet uses only COLD water, if the bowl is clear, then the problem is with the hot water. If the bowl water is dirty, then the cold water is affected, and activities outside your home should be considered as the cause. Check your household filter to see if it needs replaced or cleaned.
- If the hot water is the source, the hot water tank must be flushed clean, according to the manufacturer's recommendations. If the cold water is the source, the cold water needs to be flushed. Do not continue to flush the toilet after the initial test. Do not use the hot water. Prevent further accumulations of sediment in the hot water tank by not using the hot water. If the dishwasher or clothes washer is running, stop it mid cycle until the water is cleared up.

Step Two: Look outside.

- If distribution system repair or maintenance is under way, this may be the cause. Also, look for signs of a fire hydrant being opened.

Step Three: Flush your plumbing.

- Open the cold-water faucet in the bathtub all the way open, full force, with the drain open, for about 3 to 5 minutes. Most dirty water situations will clear up in this time. If not, turn the water off, wait 10-15 minutes, and repeat the flushing again. If the second attempt does not clear up, call SIWD (Sullivans Island Water Department) 883-3947. We will check the water at your meter to determine if the water main needs flushing. If you have clothes that have been affected by discolored water, Do Not Dry Them. You may pick up a bottle of Red-B-Gone at Town Hall 1610 Middle St. Follow the instructions on the bottle to remove the discoloration from the clothes.