Other Common Water Quality Complaints/Questions

Possible reasons/solutions when the water company has no knowledge of system activities that would adversely affect customers' water – such as a line break or line/hydrant flushing. When a customer encounters a smell from tap water, often it is assumed the water is contaminated, but here are many reasons why water has developed an off odor or appearance. The change could because of chemical characteristics, increased minerals, and/or organic material. Much of the biological activity that cause taste and odor problems is indirect- as result of the processes/interactions with certain types of pipes, such as iron, copper and lead. *Most taste and odor complaints originate within the customers' premises. Common causes are stagnant plumbing, backflow events, hot water heater odors and corrosion of pluming materials. New plastic pipe can leach odors for a period of time.*

Here is some of the most prevalent water quality problems, what causes them, and possible solutions for some.

Cloudy/ Milky Water

You may not realize it but often- particularly in the late fall and winter months the water that enters your homes can be quite cold. When this cold water enters your home plumbing, it is exposed to significantly warmer temperatures. This causes dissolved oxygen that can reach significantly higher levels in colder water than in warmer water, to escape in the form of "micro-bubbles" that can give water a cloudy appearance. If a glass of this water is allowed to sit for a short period of time the cloudy effect will dissipate.

White Particles in the Water

It has been determined that a number of hot water heaters manufactured between 1993 and 1997 may have defective cold water supply dip-tubes. The tubes are designed to direct the cold water entering the heaters to the bottom, thereby forcing the previously heated water to the hot water outlet near the top of the tank. The effective dip tubes have been found to separate from the cold water inlet and, over time, disintegrate into very small pieces that resemble crumbled eggshells. This material can easily clog sink aerators and showerheads, but it is supposed to be nontoxic. In addition, traditional hot water tanks (and in general other household appliances) just do not last as long as they used to (10 years is roughly the lifetime of hot water tanks). Some websites state that regular maintenance that includes draining and flushing will prolong the lives of hot water tanks. This will also reduce the chances of the white particle accumulation.

Rusty Water

The water heater should be drained and flushed on a regular basis, according to manufacturers' recommendations, to keep it working effectively and efficiently.

Brown, Red, Orange or Yellow Water

Usually caused by iron rust. Galvanized iron, steel, or cast iron pipes in a home or business, or the water main can cause rusty water. While unpleasant and potentially damaging to clothes and fixtures, iron in drinking water is not typically a human health concern.

Erratic Pressure

If you have a pressure regulator that is in or outside your home on your private service line- they do wear out and need replaced. Sometimes cleaning them may do the trick. Follow manufacture's suggestions or contact a plumber.

Pressure Loss at Particular Faucet

Remove and clean the screen. In winter, check for frozen plumbing.

Green or Blue Water

Usually caused by corrosion of copper plumbing. If corrosion is occurring, dripping water will leave a bluish-green stain on porcelain fixtures. Certain metals that can get into drinking water from corrosion, such as copper or lead, may pose a health concern.

Black or Dark Brown Water

Often caused by manganese in the water or pipe sediment. Manganese does not pose a threat to human health. If it doesn't clear after a few minutes of flushing all your cold water faucets and toilets, wait about an hour and try again

Taste and Smells:

If a taste or odor occurs at every water faucet on the property, the cause is could be the main water supply. If it occurs only in certain faucets, the problem is the fixtures or pipes supplying those specific faucets. If the problem goes away after running the water for a few minutes, the problem is somewhere in your household plumbing system. The best way to reduce taste and odor caused by your plumbing is to run the faucet for several minutes, put some water in a container, and then store it in the refrigerator. You may also consider installing a certified water filter.

Off-Taste

Sometimes these issues are resolved when customers have been advised to disconnect out-door garden hoses. Often these hoses, with nozzles attached, can be found in a collapsed condition. It appears that in these cases, the rubber-like or plastic-tasting water that had been in the hose could, under the right conditions, be suctioned (back-flow) into the homes by partial vacuum pressure.

Metallic Taste

Minerals, such as iron or copper, may leach into the water from the pipes.

Sulfur or Rotten Egg Odor

Bacteria growing in your sink/shower drain or hot water heater may cause odor. To evaluate the cause, put a small amount of water in a narrow glass, step away from the sink, swirl the water around inside the glass, and smell it. If the water has no odor, the likely problem is bacteria in the sink drain. If the water does have an odor, it could be from your hot water heater. If the smell is only noticed when running hot water, it could be a chemical reaction taking place inside the water heater. There is an element in your hot water heater designed to protect it from corrosion. Sometimes the element causes sulfide smell as it deteriorates over time. A licensed plumber may be able to evaluate this problem.

Moldy, Must, Earthy, Grassy, or Fishy Odor

Bacteria growing in a sink drain or from organic matter such as plants, animals, or bacteria that are naturally present in lakes and reservoirs during certain times of the year may cause odor. You can evaluate the source of this problem by putting a small amount of water in a narrow glass, stepping away from the sink, swirling the water around inside the glass and smelling it. If the water has no odor, the likely source is in the sink drain. If it does have an odor, the source could be organic matter in your drinking water. Although harmless, this material can affect the taste and smell of your drinking water even at very low concentrations. The water heather is typically the idea growing habitat for iron bacteria because of the high temperature. Customers may even find slime in the toilet tank or other plumbing in addition to the foul smell and taste. When iron and oxygen mix, iron bacteria develop. The bacteria feed on the iron and generate slime. When the bacteria die, they give off an earthy smell. Most iron bacteria are found in water wells with high iron levels. CBPSD water supply is from surface water- not wells. Fishy smell usually indicates a high concentration of chloramines, barium or cadmium. Chloramines are chlorine-ammonia compounds used to disinfect public water. It is vital to eliminate the contaminants, it may leave the treated water with a bad odor. Barium and cadmium are naturally occurring metals that might enter water by fertilizer contamination or corroding metal service lines and /or old iron plumbing lines. It seldom indicates the presence of hazardous bacteria or pollutants; the smell is not great.

Chlorine, Chemical, or Medicinal Taste or Odors

Bleach smell indicates elevated or low amounts of chlorine in the water, similar to the smell in swimming pools. The levels are likely to be higher in homes closer to water plants or chlorine booster stations (CBPSD booster is located in Core area) or from customers who are located at end of water lines or those that have an extra long private service line. Chlorine is essential for water treatment. Allowed chlorine residual levels in public water supplies are from .20 to 4.0 mg/l. In other words, chlorine levels up to 4 milligrams per liter (mg/l or 4 parts per million (ppm) are considered safe in drinking water.

Adding chlorine to the water or the interaction of chlorine with a build-up of organic matter in your plumbing system may cause the taste or odor to be strong. This is not usually an immediate health threat but can result in dry skin, smell and taste. Report any unusually high chlorine smells to the water company.

D:\My Documents\My Documents\Customer Service Information\Other Common Water Quality Complaints.doc