

What is Manganese and is it harmful?

Manganese is a naturally occurring element found in rock formations, soil, air, and water. The primary source of manganese for most people is the food they eat. Nuts, grains, fruits, legumes, tea, leafy vegetables, infant formula, and some meats and fish contain substantial amounts of manganese.

Manganese has no taste or odor. Manganese cannot be seen when dissolved in the water but when it comes out of solution (precipitates out) and separates from the water, it can cause a gray or black deposit that you might see in your toilet tank and may appear as dark color in the water.

Manganese has no bad health effects except in much higher concentrations than is found in the O'Connor Water wells. The State Water Board Control Board Division of Drinking Water would require additional notification for potential health concerns (neurological effects) if the manganese level were 500 parts per billion or higher. O'Connor Water well water has never come close to that level.

Manganese content of common foods in a human diet (Linus Pauling Institute).

FOOD SERVING SIZE	-	MANGANESE (mg)
Pineapple, raw 1/2 cup, diced		1.28
Pineapple juice 1/2 cup (4 ounces)		1.24
Pecans 1 ounce		1.12
Almonds 1 ounce		0.74
Peanuts 1 ounce		0.59
Instant oatmeal (prepared with water) 1 packet		1.20
Raisin bran cereal 1 cup		1.88
Brown rice, cooked 1/2 cup		0.88
Whole wheat bread 1 slice		0.65
Pinto beans, cooked 1/2 cup		0.48
Lima beans, cooked 1/2 cup		0.48
Navy beans, cooked 1/2 cup		0.51
Spinach, cooked 1/2 cup		0.84
Sweet potato, cooked 1/2 cup, mashed		0.55
Tea (green) 1 cup (8 ounces)		0.41-1.58
Tea (black) 1 cup (8 ounces)		0.18-0.77

What should I do if I have black water after the mains are flushed or the water was turned off for repairs?

For a few minutes following flushing, some sediments might get into your home's plumbing. If this happens, please be patient and allow your **cold** water to run for a few minutes at full velocity. During this time, you should **avoid using hot water to prevent sediment accumulation in your hot water tank**. Remember that flushing is aimed at maintaining *long-term* water quality, but it could result in some *short-term* effects (in case all of the sediment is not removed). Signs are posted advising when flushing operations are on your street, **if possible, try not to use water during the flushing period**.

What are the white deposits on shower doors and plumbing fixtures?

The white deposits are caused by calcium. Water with calcium in it is referred to as "hard water." This hardness does not have any bad health effects. Calcium is an important element in the diet. It is impractical to remove calcium from the source water from the wells, although some owners have installed water softeners.

Why is the water sometimes white?

We use a hydropneumatic tank that contains pressurized air and water, which causes air to mix with the water. When you pour water from the tap, the air emerges as small bubbles, causing a white appearance. If you let the water sit for a minute the bubbles will dissipate and the water will clear. The compressed air acts as a cushion exerting or absorbing pressure. This type of tank serves three main functions:

1. Delivers water within a selected pressure range so the well pump is not continuously running.
2. Prevents a pump from starting up every time there is a minor call for water from the distribution system.
3. Minimizes pressure surges.