EPA Standards Reference Sheet

Contaminant / Parameter	EPA Primary Standard - Maximum Level	Source	Health Effects
Lead	0.015 mg/L	Corrosion of plumbing; natural deposits	Deficit in learning ability for children; kidney problems & high blood pressure for adults
Copper	1.3 mg/L	Corrosion of plumbing; natural deposits	Liver & kidney damage
Mercury	0.002 mg/L	Natural deposits; refineries & factories	Kidney damage
Fluoride	4 mg/L	Water additive; fertilizer & aluminum factories	Bone disease; mottled teeth
Total Chlorine	4 mg/L	Water disinfectant	Skin irritation; stomach discomfort
Nitrite	1 mg/L	Runoff from fertilizer and animal waste	Blue baby syndrome (infants under 6 months old); shortness of breath; nausea; dizziness
Nitrate	10 mg/L	Runoff from fertilizer and animal waste	Blue baby syndrome (infants under 6 months old); shortness of breath; nausea; dizziness
Coliform Bacteria	Negative result	Bacterial contamination	Potential for diarrhea/bloody diarrhea; vomiting and stomach pains (E. coli)
	EPA Secondary Standard - Recommended Limit		
Iron	0.3 mg/L	Natural deposits; corrosion; refineries & factories	Rusty color & staining; metallic taste
Manganese	0.05 mg/L	Natural deposits; refineries & factories	Black/brown color; bitter metallic taste
Zinc	5 mg/L	Natural deposits; fertilizer	Metallic taste
Sulfate	250 mg/L	Natural deposits; fertilizer; sewage treatment plants	Salty taste
Hydrogen Sulfide	0 mg/L	Sulfur gas forming in water supply	Rotten egg odor and foul taste
pH	6.5 - 8.5	Alkalinity; minerals; water treatment chemicals	Low pH: bitter metallic taste; corrosion High pH: slippery feel; deposits
Total Alkalinity	75 - 150 mg/L	Minerals	Low alkalinity is associated with acidic pH and corrosion
Total Hardness	10 - 100 mg/L	Minerals	Mineral scale buildup; dry skin and hair; damage to appliances
Sodium Chloride	250 mg/L	Water softeners, natural deposits, sewage & fertilizers	Bloating - swollen hands & feet

KNOW YOUR PARAMETERS

- **LEAD:**
  Lead can enter drinking water when your plumbing that contains lead corrodes. Corrosion of pipes can be caused by acidic water (low pH). Side effects include damage to the nervous system, infertility, and decreased kidney function.

- **IRON:**
  Iron is a naturally occurring mineral that can enter your well water through surrounding soil. It does not pose a threat to your health, but can cause various complications with your appliances.

- **SODIUM CHLORIDE:**
  Sodium Chloride increases the electrical conductivity of water and thus increases its corrosively. In metal pipes, chloride reacts with metal ions to form soluble salts, thus increasing levels of metals in drinking-water.

- **NITRITE:**
  Nitrites come from fertilizers through the runoff of water and sewage deposits. They can stimulate the growth of harmful bacterias.

- **PH:**
  Water with a pH lower than 7 is considered acidic, and water with a pH above 8.5 is considered basic. A pH of 7 is considered pure, and a range of 6.5 to 8.5 is recommended.

- **HARDNESS:**
  Hardness is the amount of dissolved calcium and magnesium. Soft water can cause corrosion of your plumbing and appliances. Hard water can cause residue buildup and difficulties using soap.

- **ZINC:**
  Zinc is an essential nutrient for our bodies, usually introduced into water by products such as steel production. However, exposure to high levels can lead to stomach cramps, nausea, and vomiting.

- **MERCURY:**
  Mercury is a naturally occurring element that occurs from the degassing of the earth's crust. High levels can cause kidney damage.

- **HYDROGEN SULFIDE:**
  Hydrogen Sulfide gas occurs naturally in some groundwater through decomposing organic matter such as plant decay. Drinking water with high levels of hydrogen sulfide produces a pungent rotten egg smell. This can lead to nausea and stomach pain.

- **FLUORIDE:**
  Fluoride is a natural compound found in many rocks and is added to public water sources to prevent cavities. Groundwater can contain high levels of fluoride, which can cause dental fluorosis and thyroid problems.

- **COPPER:**
  Copper can enter your drinking water through corrosion of pipes or direct contamination. High levels can cause nausea, vomiting, and diarrhea.

- **TOTAL CHLORINE:**
  Chlorine is added to drinking water to kill disease causing pathogens. Total chlorine is the amount of Free Chlorine + Used chlorine (Chloramines) in your water. Nausea, diarrhea, and vomiting are common side effects of ingesting too much chlorine.

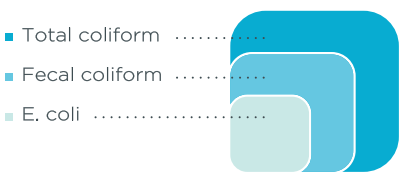
- **NITRATE:**
  Nitrate is one of the most common groundwater contaminants in drinking water. It most commonly comes from fertilizer runoff. Excess amounts can cause blue baby disease - a lack of oxygen to the brain.

- **ALKALINITY:**
  Alkalinity is the level of dissolved minerals in your water that help neutralize acidity. Water with low levels of alkalinity are more likely to be corrosive, and high levels can cause scaling.

- **SULFATE:**
  Sulfate is naturally occuring in the earth's sediment and can cause a laxative effect, as well as clogged plumbing.

- **MANGANESE:**
  Manganese occurs naturally in surface water, although human activities are also responsible for manganese in drinking water. Possible side effects are stained clothes/appliances and nerve damage.

- **TOTAL COLIFORM / E. COLI BACTERIA:**
  Common sources of bacteria in drinking water include sewers, septic systems, and animal waste. Fecal coliform bacteria can lead to stomach ache, nausea, and various severe illnesses.



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