

Troubled Water *Solutions*



**Safeway
Water®**

CHANGING LIVES BY... **CHANGING WATER**

Well Water

has its own unique challenges and water treatment needs.



Bacteria



SOURCE

Water supply is contaminated

HEALTH CONCERN

Non Pathogenic: **Minimum**
Pathogenic: **High Risk**

PROPERTY DAMAGE

Minor, often first sign is "slime" in the back of a toilet

Most bacteria are of no health concern because they do not cause disease in humans. These are called non pathogenic bacteria. Pathogenic, or disease causing bacteria, are responsible for such diseases as cholera, typhoid fever, infectious hepatitis, dysentery, and gastroenteritis.

Iron



SOURCE

Naturally occurring from mineral deposits

HEALTH CONCERN

High concentrations and long term exposure have been associated with damage to the liver, heart, and pancreas.

PROPERTY DAMAGE

Staining, odor, mineral build up, clogging

Iron, in its various forms, is one of the most persistent and troublesome challenges in water treatment. Iron occurs naturally in three essential forms with some variations : Ferrous Iron, also called clear water iron; Ferric Iron or red water iron is visible in water and gives it a rust color; Heme Iron, or organic iron is organically bound iron combined with tannins.

Manganese



SOURCE

Naturally occurring from mineral deposits, mostly found with Iron

HEALTH CONCERN

High concentrations and long term exposure have been associated with nervous system diseases with symptoms like parkinson's disease.

PROPERTY DAMAGE

Staining, odor, mineral build up, clogging

Manganese is an essential mineral to both plant and animal life that is found in many soils, rocks, and sediment.

Manganese can be found in deep water wells with concentrations as high as 2 to 3 parts per million. The complexity of mineral in certain states because of oxidation, pH, and the presence of other minerals makes this a challenging water quality problem to correct.

Sediment



SOURCE

New well, damaged well screen

HEALTH CONCERN

Varies depending on sediment

PROPERTY DAMAGE

Clogged plumbing/appliances

Suspended solids, sand, silt and other sediment found in your water that can damage appliances and plumbing fixtures, as well as impact your water's clarity, taste and odor.

Smells



SOURCE

Naturally occurring gas; Bacteria

HEALTH CONCERN

Higher concentrations can be poisonous and corrosive

PROPERTY DAMAGE

Staining, strong odor, flammable gas

Hydrogen Sulfide, H₂S, is a colorless gas which is best known for giving water a "rotten egg" odor. The objectionable odor makes water unfit for drinking, household use, and for industrial processes.

AIR INDUCTION SYSTEM



ADVANCED OZONE OXIDIZER



PEROXIDE INJECTION SYSTEM



CHLORINE INJECTION SYSTEM

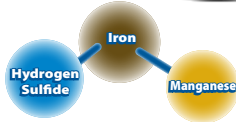


PROBLEMS

Rust staining, metallic smells and tastes, damage to clothes and appliances, mild rotten egg smell.

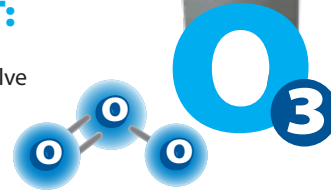


#1
SELLING IRON
SYSTEM



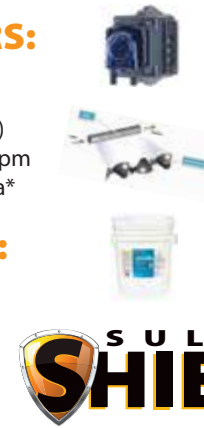
PROBLEMS

Rust staining, metallic smells and tastes, damage to clothes and appliances, mild to intermittent rotten egg smell.



PROBLEMS

Strong rotten egg smell.



PROBLEMS

Rust staining, metallic smells and tastes, damage to clothes and appliances, rotten egg smell, sediment, bacteria related health.



PARAMETERS:

1. Light Iron (<4ppm)
2. Mild Sulfur (<1.5ppm)
3. Manganese (<2ppm)
4. Proper Back Wash gpm
5. No Bacteria

EQUIPMENT:

Iron Zapper
Air Draw Premium Valve
Air Check Valve
(Optional UV)

PARAMETERS:

1. Moderate Iron (>5ppm)
2. Sulfur (>4ppm)
3. Manganese (>2ppm)
4. Proper Back Wash gpm
5. Iron / Sulfur Bacteria*

EQUIPMENT:

Iron Zapper
Air Draw Premium Valve
EOG – Ozone System
(Optional UV)

PARAMETERS:

1. Light Iron (<1ppm)
2. Sulfur (<5ppm)
3. Manganese <1ppm)
4. Proper Back Wash gpm
5. Iron / Sulfur Bacteria*

EQUIPMENT:

Sulfur Shield
Static Mixer
Econ Pump
Peroxide
(Optional UV)

PARAMETERS:

1. Heavy Iron (>5ppm)
2. Mild Sulfur (>2ppm)
3. Manganese (>2ppm)
4. Proper Back Wash gpm
5. Bacteria

EQUIPMENT:

SafetySorb
Contact Tank
Solution Tank
Pump
(Optional UV)

**System is designed to reduce the effects of Iron and sulfur bacteria on the unit and not for the elimination of bacteria, additional treatments like UV are highly recommended.*



CHANGING LIVES BY... **CHANGING WATER**





YOUR WATER TEST RESULTS:

Water Source:

☐ City ☐ Well ☐ Other

Current System(s):

☐ Yes ☐ No

Hardness:

☐ 0-2 ☐ 3-5 ☐ 6-8 ☐ 9-11 ☐ 12+

Chlorine:

☐ 0 ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 +

pH:

Acidic
0

Neutral
7

Alkaline
14

Iron:

Good

Staining

Very Bad Staining

0

0.5

1

1.5

2

2.5

TDS:

0

250

500+

Odor:

☐ Rotten Egg ☐ Metallic ☐ Musty/Moldy

Color:

☐ Clear ☐ Cloudy ☐ Yellow ☐ Rusty Brown

Water Closet:

☐ Clear ☐ Sediment ☐ Rust Stained ☐ Slime

Notes:
