

# Potential Water Contaminants

## Alkalinity

**Source:** Alkalinity is caused by the presence of bicarbonates, carbonates, and hydroxides in the water.

**Additional Information:** Alkalinity moderates or buffers pH change. Excessive alkalinity produces a "soda" taste and it has a drying effect on the skin. No U.S Federal limit:

Low Alkalinity < 30 mg/l

High Alkalinity > 300 mg/l

### Treatment Systems

#### **Whole House Systems:**

[pH/Alkalinity Reducer](#)

[ROMaster™ 2200 \(2,200 gpd Whole House RO w/ Adjustable Recovery\)](#)

## Arsenic

**Source:** Discharge from semiconductor manufacturing; smelters; glass; petroleum refining; wood preservatives; animal feed additives; herbicides; erosion of natural deposits.

#### **Recommended Test Kits**

[PurTest Arsenic Water Test Kit](#)

[Arsenic Speciation Test Kit - As\(III\) and As\(V\)](#)

**Additional Information;** Arsenic sometimes occurs naturally in water and can be found in public and private water supplies. Arsenic is a semi-metal element in the periodic table that is odorless and tasteless. It enters drinking water supplies from natural deposits in the earth or from agricultural and industrial practices. It is a poison that can pose a health risk for people and animals. Arsenic contamination of water can result from mining operations, semiconductor manufacturing, use of wood preservers, and pesticide application.

Arsenic is often found in ground water or mineral water at levels over 100 times the safe drinking water limits as established by the US Environmental Protection Agency (EPA). Arsenic has been linked to lung and skin cancer, and in some cases, to death. Non-cancer effects can include thickening and discoloration of the skin, stomach pain, nausea, vomiting; diarrhea; numbness in hands and feet; partial paralysis; and blindness. Arsenic has been linked to cancer of the bladder, lungs, skin, kidney, nasal passages, liver, and prostate. Consequently, anyone who has a private well should test their water for arsenic at least annually. The World Health Organization safe standard for arsenic is 10 parts per billion (ppb). The EPA has set the arsenic standard for drinking water at .010 parts per million (10 parts per billion) to protect consumers.

Possible health effects include skin damage, circulatory system problems, and increased risk of cancer.

Maximum Contamination Level (MCL) = 0.01 mg/L or ppm.

### Treatment Systems

#### **Whole House Systems:**

[Arsenic Treatment System](#)

[Arsenic-V Master™ Whole House Water Filtration System](#)

## Barium

**Source:** Pigments; epoxy sealants; spent coal; erosion of natural deposits.

**Additional Information:** Possible health effects include increase in blood pressure.

Maximum Contamination Level (MCL) = 2 mg/L or ppm

### Treatment Systems

**Whole House Systems:** [Arsenic Treatment System](#)

## Cadmium

**Source:** Corrosion of galvanized pipes; erosion of natural deposits; discharge from metal refineries; runoff from waste batteries and paints.

**Additional Information:** Possible health effects include kidney damage.

Maximum Contamination Level (MCL) = .005 mg/L or ppm

### Treatment Systems

#### **Whole House Systems:**

Arsenic Treatment System

## Chloramines

**Source:** Added disinfectants

**Additional Information:** Chemical complexes formed from the reaction between ammonia and chlorine used to disinfect many municipal water supplies. Unlike chlorine, chloramines do not combine with organics in the water to form potentially dangerous trihalomethanes (THMs).

Water containing chloramines may not be used for fish or for kidney dialysis applications. Possible health effects can be an allergic reaction causing rashes to form on the body and respiratory problems if breathed in as a water vapor (in a shower).

Maximum Contamination Level (MCL) = 4 mg/L or ppm

### Treatment Systems

#### **Whole House Systems:**

PureMaster™ V-300™ Whole House Water Filtration System

PureMaster™ V-500™ Whole House Water Filtration System

PureMaster™ V-700™ Whole House Water Filtration System

## Chlorine (Cl<sub>2</sub>)

**Source:** Added disinfectant

**Additional Information:** A gas widely used in the disinfection of water and an oxidizing agent for organic matter. Chlorine is known to react with organic matter in the water to form trihalomethanes (THMs), a suspected carcinogen.

Maximum Contamination Level (MCL) = 4 mg/L or ppm

### Treatment Systems

#### **Whole House Systems:**

PureMaster™ V-300™ Whole House Water Filtration System

PureMaster™ V-500™ Whole House Water Filtration System

PureMaster™ V-700™ Whole House Water Filtration System

#### **Point of Use Systems:**

V-5 Countertop Water Filtration System

V-5 Undercounter Water Filtration System

EQ-25 Undercounter Water Filtration System

V-20 Shower Water Filtration System

## Chromium (III)

**Source:** Discharge from steel and pulp mills, mining, electroplating, pigments, erosion of natural deposits.

**Additional Information:** Possible health effects include allergic dermatitis.

Maximum Contamination Level (MCL) = 0.1 mg/L or ppm

### Treatment Systems

#### **Whole House Systems:**

Arsenic Treatment System

## Coliform Bacteria

**Source:** Fecal waste

**Additional Information:** A particular group of bacteria primarily found in human and animal intestines and wastes. These bacteria are widely used as indicator organisms to show the presence of such wastes in water and the possible presence of pathogenic (disease producing) bacteria. Escherichia coli (E. coli) is one of the fecal coliform bacteria widely used for this purpose.

Maximum Contaminant Level (MCL) = 0 mg/L or ppm

### Treatment Systems

#### **Whole House Systems:**

Turbidity or sediment reduction to one NTU, then disinfection:

Inline Chlorinator™ Chlorine Feeder System

Inline UV™ 3/4" S8QPA

Inline UV™ Monitored SSM-37 3/4"

Inline UV™ 1" S12QPA

Inline UV™ Monitored SSM-39 1"

Inline UV™ 1" S12QPA w/ .35-micron Absolute Post Filter

## Color

**Source:** Natural deposits, tannins, iron, copper, and manganese

**Additional Information:** Visible tint in your drinking water.

Recommended color level < 15 color units.

### Treatment Systems;

#### **Whole House Systems:**

PureMaster™ V-300™ Whole House Water Filtration System

PureMaster™ V-500™ Whole House Water Filtration System

PureMaster™ V-700™ Whole House Water Filtration System

PureMaster™ V-750™ Whole House Water Filtration System

MetalMaster™ 6gpm Whole House Water Filtration System

MetalMaster™ 8gpm Whole House Water Filtration System

MetalMaster™ 10gpm Whole House Water Filtration System

TanninMaster™ Whole House Water Filtration System

## Copper

**Source:** Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives

**Additional Information:** Visible tint in your drinking water.

Recommended color level < 15 color units.

### Treatment Systems:

#### **Whole House Systems:**

pH Neutralizer™ Water System with backwash, for pH > 6.0

pH Neutralizer™ Water System with backwash, for pH < 6.0

MetalMaster™ 6gpm Whole House Water Filtration System

MetalMaster™ 8gpm Whole House Water Filtration System

MetalMaster™ 10gpm Whole House Water Filtration System

## Fluoride

**Source:** Natural deposits; fertilizer; aluminum industries; drinking water additive

**Additional Information:** A naturally occurring constituent of some water supplies, an excess of which (over 2.0 ppm) can cause discolored teeth (mottling). Skeletal fluorosis, a serious crippling bone disorder resembling osteoporosis, can develop from many years of exposure to drinking water with more than 4.0 ppm of fluoride.

#### **Effects:**

Tooth discoloration (over 2.0 ppm)

Bone disease (pain and tenderness of the bones)

Children may get mottled teeth (4.0 ppm).

Maximum Contamination Level (MCL) = 4 mg/L or ppm

### Treatment Systems

#### **Whole House Systems:**

FluorideMaster™ Whole House Fluoride Water Filtration System

FluorideMaster™ Replacement System w/ Media Inside

## Giardia Lamblia and Cyptosporidium Cysts

**Source:** Human and animal fecal waste

**Additional Information:** A type of cyst found in the intestines of mammals and in water contaminated by mammal droppings. The giardia lamblia cyst, common and frequently carried by water, is capable of causing a contagious waterborne disease characterized by acute diarrhea. This disease is referred to as beaver fever because beaver droppings can contain giardia lamblia.

Maximum Contaminant Level (MCL) = 0 mg/L or ppm

### Treatment Systems:

#### **Whole House Systems:**

0.35 Micron Filter (pre / post filter)

## **Haloacetic Acids (HAA5)**

**Source:** Drinking water chlorination by-products

**Additional Information:** Possible health effects include cancer and other effects.

Maximum Contamination Level (MCL) = 0.06 mg/L or ppm

### **Treatment Systems:**

#### **Whole House Systems:**

PureMaster™ V-300™ Whole House Water Filtration System

PureMaster™ V-500™ Whole House Water Filtration System

PureMaster™ V-700™ Whole House Water Filtration System

## **Hard Water**

**Source:** Natural deposits causing calcium (limestone) and magnesium salts in raw water

**Additional Information:** Water containing total hardness in the amount of one grain per U.S. gallon (or more) measured as calcium carbonate equivalent. Whitish scale deposits in pipes, water heater, and tea kettle. No limits. Problems can occur with the water pressure after excessive build up.

Iron (red, brown, yellow, and orange staining) is NOT hardness.

### **Treatment Systems**

#### **Whole House Systems:**

HardnessMaster™ Electronic Water Conditioner

## **Iron Bacteria**

**Source:** Microorganisms that utilize oxidation of ferrous iron or ferric iron in metabolic processes

**Additional Information:** Bacteria which thrives on iron and are able to actually use ferrous iron (as found in water or steel pipes), in their metabolic processes, to incorporate ferric iron in their cell structure, and to deposit gelatinous ferric hydroxide iron compounds in their life processes. Iron bacteria can cause staining, plugging, and taste and odor problems in a water system.

### **Treatment Systems**

#### **Whole House Systems:**

Inline Chlorinator™ Chlorine Feeder System

When the Inline Chlorinator is used, always use a carbon filter to remove the chlorine.

## Iron, Ferrous Iron, Ferric Iron

**Source:** Natural deposits in ground water

**Additional Information;** A very common element often present in groundwater in amounts ranging from 0.01 to 10.0 ppm (mg/L). Iron can be found in three forms:

Soluble form as in ferrous bicarbonate

Bound with a soluble organic compound

As suspended ferric iron particles

The effects can be: rusty color sediment, metallic taste, reddish or orange staining.

Maximum Contaminant Level (MCL) = 0.3 mg/L or ppm

### Treatment Systems

#### **Whole House Systems:**

MetalMaster™ 6gpm Whole House Water Filtration System

MetalMaster™ 8gpm Whole House Water Filtration System

MetalMaster™ 10gpm Whole House Water Filtration System

SedimentMaster™ Backwash Sediment System

Well Water System Package #2

Well Water System Package #3 w/MetalMaster™ 6 gpm

Well Water System Package #3 w/MetalMaster™ 8 gpm

Well Water System Package #3 w/MetalMaster™ 10 gpm

Well Water System Package #4 w/MetalMaster™ 6 gpm

Well Water System Package #4 w/MetalMaster™ 8 gpm

Well Water System Package #4 w/MetalMaster™ 10 gpm

Ferrous iron (clear water iron) is readily converted to ferric iron (red water iron) in the presence of any air or oxidizing material. Ferrous iron would be treated with the MetalMaster™ / Arsenic Treatment System. If iron bacteria is present, the Inline Chlorinator™ is necessary to break down iron bacteria and allow the MetalMaster / Arsenic Treatment System to work properly.

When the Inline Chlorinator is used, always use a carbon filter to remove the chlorine.

## Lead

**Source;** Corrosion of household plumbing systems; erosion of natural deposits; plumbing solder; brass alloy fixtures.

**Additional Information;** A heavy metal that is hazardous to health if breathed or swallowed. Its use in gasoline, paints, and plumbing compounds has been sharply restricted or eliminated by federal laws and regulations.

Possible Health Effects:

- Infants and children: Delays in physical or mental development
- Adults: Kidney problems; high blood pressure

Maximum Contamination Level (MCL) = 0.015 mg/L or ppm

### Treatment Systems

#### **Whole House Systems:**

PureMaster™ V-300™ Whole House Water Filtration System

PureMaster™ V-500™ Whole House Water Filtration System

PureMaster™ V-700™ Whole House Water Filtration System

Arsenic Treatment System

MetalMaster™ 6gpm Whole House Water Filtration System

MetalMaster™ 8gpm Whole House Water Filtration System

MetalMaster™ 10gpm Whole House Water Filtration System

## Legionella

**Source;** Found naturally in water; multiplies in heating and cooling systems.

**Additional Information;** Over 26 species of bacteria, such as Legionella pneumonia, which can cause the pneumonia-like illness called "Legionnaires' Disease" (after the American Legion convention at which the disease first drew attention). These bacteria are known to thrive at about 100 degrees F and are believed to live in infected humidifiers, cooling tower water, and shower rooms. Infection is by inhalation.

Maximum Contamination Level (MCL) = 0 mg/L or ppm

### Treatment Systems

#### **Whole House Systems:**

- Inline UV™ 3/4" S8QPA
- Inline UV™ Monitored SSM-37 3/4"
- Inline UV™ 1" S12QPA
- Inline UV™ Monitored SSM-39 1"
- Inline UV™ 1" S12QPA w/ .35-micron Absolute Post Filter

## Manganese

**Source;** Natural deposits

**Additional Information;** An element sometimes found dissolved in groundwater usually in combination with - but in lower concentrations than iron. Manganese is noticeable because in concentrations above 0.05mg/L it causes black staining of laundry and plumbing fixtures.

Maximum Contamination Level (MCL) = 0.05 mg/L or ppm

### Treatment Systems

#### **Whole House Systems:**

- MetalMaster™ 6gpm Whole House Water Filtration System
- MetalMaster™ 8gpm Whole House Water Filtration System
- MetalMaster™ 10gpm Whole House Water Filtration System

## Mercury

**Source;** Erosion of natural deposits; discharge from refineries and factories; runoff from landfills and cropland; batteries; electrical switches

**Additional Information;** Possible health effects include kidney damage.

Maximum Contamination Level (MCL) = 0.002 mg/L or ppm

### Treatment Systems

#### **Whole House Systems:**

- PureMaster™ V-300™ Whole House Water Filtration System
- PureMaster™ V-500™ Whole House Water Filtration System
- PureMaster™ V-700™ Whole House Water Filtration System
- Arsenic Treatment System
- ROMaster™ 2200 (2,200 gpd Whole House RO w/ Adjustable Recovery)

*Note: If you are not sure about or would like to discuss your water condition, we're here to answer your questions and concerns. Call us at +968 71554240 for a FREE Phone Consultation or contact us via email [info@gst.om](mailto:info@gst.om) and communicate your specific water condition. We can give you straightforward answers and/or high-quality, affordable options to fully and properly address your specific water conditions.*

## MTBE

**Source;** Additive to gasoline

### **Additional Information**

Since MTBE was incorporated in the mid-1980s into gasoline mixtures as an antiknock replacement for aromatics and as an "oxygenator" to reduce carbon monoxide emissions, it has increasingly appeared in groundwater due to spills of reformulated gasoline and leaking underground storage tanks at gasoline stations. It is highly water soluble and its appearance typically marks the leading front of a contamination plume. The molecular weight of MTBE (C<sub>5</sub>H<sub>12</sub>O) is 88.15.

In terms of non-carcinogenic effects, it has low oral toxicity, but at the gasoline pump and in the automobile, symptoms such as airway and eye irritation have been reported. In water, MTBE has a noticeable odor at 20 to 40 ug/L (U.S. Environmental Protection Agency, 1997). Though MTBE is not mutagenic/genotoxic, exposure to high levels by inhalation (8000 ppm) or by ingestion (1000 mg/kg) was associated with the development of lymphoma and leukemia, as well as liver, renal, and testicular cancers in rodents (Burleigh-Flayer et al., 1992; Belpoggi et al., 1995).

The relevance of these cancers to human health is not clear, but "weight of evidence suggests that MTBE is an animal carcinogen. Concentrations in the range of 20 to 40 ug/L are about 20,000 to 100,000 (or more) times lower than the range of exposure levels in which cancer or non-cancer effects were observed in rodent tests." (U.S. Environmental Protection Agency, 1997). Thus, the USEPA says "protection of the water source from unpleasant taste and odor will also protect consumers from potential (MTBE) health effects."

MTBE is adsorbed onto activated carbon similar to chloroform, but with a use rate of 2-3 times that of chloroform, i.e., the life of the activated carbon may be only 1/2 to 1/3 of that for chloroform when MTBE will begin to break through. For concentrations of MTBE greater than 100 ug/L or parts per billion, pretreatment with an atmospheric air stripping system with pressurization is recommended prior to activated carbon adsorption.

### **Treatment Systems**

#### **Whole House Systems:**

PureMaster™ V-300™ Whole House Water Filtration System  
PureMaster™ V-500™ Whole House Water Filtration System  
PureMaster™ V-700™ Whole House Water Filtration System

#### **Point of Use Systems:**

V-5 Countertop Water Filtration System  
V-5 Undercounter Water Filtration System  
EQ-25 Undercounter Water Filtration System  
V-20 Shower Water Filtration System

## Nitrate

**Source;** Runoff from fertilizer use; leaching from septic tanks; sewage; erosion of natural deposits

**Additional Information;** A natural nitrogen compound sometimes found in well or surface waters. In high concentrations, nitrates can be harmful to young infants.

Maximum Contaminant Level (MCL) = 1 mg/L or ppm

### **Treatment Systems**

#### **Whole House Systems:**

Nitrates and Sulfates System

#### **Point of Use Systems:**

Nitrate Pre-Filter Cartridge



## Odor

**Source;** Hydrogen sulfide septic pollution; iron or sulfate bacteria; methane gas in water causes a garlic like taste and odor; synthetic organic chemicals

**Additional Information;** Musty, garlic, or chemical smell; distinctive rotten egg odor caused by hydrogen sulfide (N<sub>2</sub>S) as low as 0.5 mg/l

### Treatment Systems

#### **Whole House Systems:**

- MetalMaster™ 6gpm Whole House Water Filtration System
- MetalMaster™ 8gpm Whole House Water Filtration System
- MetalMaster™ 10gpm Whole House Water Filtration System
- Well Water System Package #2
- Well Water System Package #3 w/MetalMaster™ 6 gpm
- Well Water System Package #3 w/MetalMaster™ 8 gpm
- Well Water System Package #3 w/MetalMaster™ 10 gpm
- Well Water System Package #4 w/MetalMaster™ 6 gpm
- Well Water System Package #4 w/MetalMaster™ 8 gpm
- Well Water System Package #4 w/MetalMaster™ 10 gpm

## Pesticides, Insecticides, Herbicides

**Source;** Farm and garden runoff

**Additional Information;** Can be very hazardous to your health in large doses.

Maximum Contamination Level (MCL) = 0 mg/L or ppm

### Treatment Systems

#### **Whole House Systems:**

- PureMaster™ V-300™ Whole House Water Filtration System
- PureMaster™ V-500™ Whole House Water Filtration System
- PureMaster™ V-700™ Whole House Water Filtration System

#### **Point of Use Systems:**

- V-5 Countertop Water Filtration System
- V-5 Undercounter Water Filtration System
- EQ-25 Undercounter Water Filtration System
- V-20 Shower Water Filtration System

## pH (potential of hydrogen)

**Source;** Balance of acids

**Additional Information;** A measure of the degree of the acidity or the alkalinity of a solution as measured on a scale ("pH scale") of 0 to 14. The midpoint of 7.0 on pH scale represents neutrality, that is, a neutral solution is neither acid nor alkaline. Numbers below 7.0 indicate acidity; numbers above 7.0 indicate alkalinity. It is important to understand that pH is a measure of intensity, not capacity. That is, pH indicates the intensity of alkalinity in the same way temperature tells how hot something is but not how much heat the substance carries

### Treatment Systems

#### **Whole House Systems:**

- pH Neutralizer™ Water System with backwash, for pH > 6.0
- pH Neutralizer™ Water System with backwash, for pH < 6.0
- pH/Alkalinity Reducer

## Radium 226 and Radium 228

**Source;** Erosion of natural deposits

**Additional Information;** Naturally-occurring radioactive elements (radium 226 and radium 228) created in the decay of the uranium and thorium series. Radium can be removed from water by cation exchange softening. Possible health effects include an increased risk of cancer.

Maximum Contamination Level (MCL) = 5 pCi/L

### Treatment Systems

#### Whole House Systems:

- Water Softener 32,000 Grain Capacity
- Water Softener 40,000 Grain Capacity
- Water Softener 48,000 Grain Capacity
- Water Softener 64,000 Grain Capacity
- ROMaster™ 2200 (2,200 gpd Whole House RO w/ Adjustable Recovery)

## Radon

**Source;** Natural deposits

**Additional Information;** A colorless, odorless, short lived radioactive gas which is produced by decay of the uranium/radium series and is soluble in water. Radon is considered carcinogenic when inhaled by humans. Radon can be removed from water by aeration or activated carbon.

Maximum Contamination Level (MCL) = 0 mg/L or ppm

### Treatment

#### Whole House Systems:

- PureMaster™ V-300™ Whole House Water Filtration System
- PureMaster™ V-500™ Whole House Water Filtration System
- PureMaster™ V-700™ Whole House Water Filtration System
- Aerator

## Sulfate

**Source;** Natural deposits

**Additional Information;** Medicinal taste laxative effect on those not accustomed to high sulfates above 500 mg/l.

Maximum Contamination Level (MCL) = 250 mg/L or ppm

### Treatment Systems

#### Whole House Systems:

- Nitrates and Sulfates System
- ROMaster™ 2200 (2,200 gpd Whole House RO w/ Adjustable Recovery)

## Tannins

**Source;** Natural deposits; heavy wooded areas; streams; rivers, lakes

**Additional Information;** Any of a group of water soluble, natural organic phenolic compounds that are produced by metabolism in trees and plants, and are part of the degradation-resistant fulvic acid materials formed during the decomposition of vegetation. Tannins occur in water in almost any location where large quantities of vegetation have decayed. Tannins can impart a faintly yellowish to brown color to water which can stain clothes, sinks, toilets, showers, and so on.

### Treatment

#### Whole House Systems:

- TanninMaster™ Whole House Water Filtration System
- Well Water System Package #2

## Tannins

**Source;** Natural deposits; heavy wooded areas; streams; rivers, lakes

**Additional Information;** Any of a group of water soluble, natural organic phenolic compounds that are produced by metabolism in trees and plants, and are part of the degradation-resistant fulvic acid materials formed during the decomposition of vegetation. Tannins occur in water in almost any location where large quantities of vegetation have decayed. Tannins can impart a faintly yellowish to brown color to water which can stain clothes, sinks, toilets, showers, and so on.

### Treatment Systems

#### **Whole House Systems:**

[TanninMaster™ Whole House Water Filtration System](#)  
[Well Water System Package #2](#)

## Total Dissolved Solids (TDS)

**Source;** Natural deposits brackish water intrusion or salt water intrusion

**Additional Information;** With too many organic or non-organic solids dissolved in the water it can cause issues with hardness; deposits; spots on glasses, dishes, fixtures, etc.; colored water; staining; salty taste.

Maximum Contaminant Level (MCL) = 500 mg/L or ppm

### Treatment Systems

#### **Whole House Systems:**

[ROMaster™ 2200 \(2,200 gpd Whole House RO w/ Adjustable Recovery\)](#)

## Total Trihalomethanes (TTHMs)

**Source;** Byproduct of drinking water chlorination

**Additional Information;** A group of organic chemicals, suspected of being carcinogenic, which are formed in water when chlorine being used as a disinfectant reacts with natural organic matter such as humic acids from decayed vegetation.

Maximum Contamination Level (MCL) = 0.08 mg/L or ppm

### Treatment Systems

#### **Whole House Systems:**

[PureMaster™ V-300™ Whole House Water Filtration System](#)  
[PureMaster™ V-500™ Whole House Water Filtration System](#)  
[PureMaster™ V-700™ Whole House Water Filtration System](#)

## Turbidity

**Source;** Soil Runoff

**Additional Information;** Turbidity has no health effects, but can interfere with disinfection and provides medium for microbial growth.

MCL Requirements for safe water = 0.5 to 1 NTU.

### Treatment Systems

#### **Whole House Systems:**

[SedimentMaster™ Backwash Sediment System](#)  
[MetalMaster™ 6gpm Whole House Water Filtration System](#)  
[MetalMaster™ 8gpm Whole House Water Filtration System](#)  
[MetalMaster™ 10gpm Whole House Water Filtration System](#)

## Uranium

**Source;** Natural deposits

**Additional Information;** A radioactive metallic element found naturally only in combination with other substances. Uranium 238 (U-238) is the most common form, but about 0.7 percent of natural uranium is present as U-235, which is the important fissionable component in work with atomic energy. Uranium in natural water exists as anionic complexes  $UO_2(CO_3)_2^{2-}$  and  $UO_2(CO_3)_3^{4-}$ . Possible health effects include an increased risk of cancer.

Maximum Contamination Level (MCL) = 0.03 mg/L or ppm

### Treatment Systems

#### **Whole House Systems:**

Arsenic Treatment System

## Viruses

**Source;** Human and animal fecal waste

**Additional Information;** A parasitic infectious microbe composed almost entirely of protein and nucleic acids, which can cause disease(s) in humans. Viruses can reproduce only within living cells. They are 0.004 to 0.1 micron in size, about 100 times smaller than bacteria.

Maximum Contamination Level (MCL) = 0 mg/L or ppm

### **Treatment**

#### **Whole House Systems:**

(turbidity or sediment reduction to one NTU, then disinfection)

Inline Chlorinator™ Chlorine Feeder System

Inline UV™ 3/4" S8QPA

Inline UV™ Monitored SSM-37 3/4"

Inline UV™ 1" S12QPA

Inline UV™ Monitored SSM-39 1"

Inline UV™ 1" S12QPA w/ 0.35-micron Absolute Post Filter

## Volatile Organic Chemicals (VOCs)

**Source;** Ground water, city water, well water, rain water

### **Additional Information**

Organic chemicals that turn into vapor at relatively low temperatures.

### Treatment Systems

#### **Whole House Systems:**

PureMaster™ V-300™ Whole House Water Filtration System

PureMaster™ V-500™ Whole House Water Filtration System

PureMaster™ V-700™ Whole House Water Filtration System

#### **Point of Use Systems:**

V-5 Countertop Water Filtration System

V-5 Undercounter Water Filtration System

EQ-25 Undercounter Water Filtration System

V-20 Shower Water Filtration System

*Note: If you are not sure about or would like to discuss your water condition, we're here to answer your questions and concerns. Call us at +968 71554240 for a FREE Phone Consultation or contact us via email [info@gst.om](mailto:info@gst.om) and communicate your specific water condition. We can give you straightforward answers and/or high-quality, affordable options to fully and properly address your specific water conditions.*