



What is Reverse Osmosis and How can it benefit you?

Reverse osmosis is typically used for wastewater treatment, purification of contaminated water and can even produce energy. Reverse osmosis is one of the main processes that makes removing salt from seawater possible and we call this process Desalination.

Water issues such as contaminated water has become a major national and global problem in recent years. With threats such as climate change, over population and environmental issues, water becomes one of the foremost environmental areas to keep a close eye on for our next generation.

Water purification systems are now using reverse osmosis to address most of the issues arising to contaminated water.

Reverse osmosis takes place when specific pressure is applied to a highly concentrated solute solution causing the solvent to pass through a membrane to the lower concentrated solution, leaving a higher concentrate of solute on one side, and only solvent on the other side. Reverse Osmosis is known as the most effective way to purify water globally with nano-filtration and ultra filtration coming in a close second and third respectively.

A good Reverse osmosis system can remove contaminants such as arsenic, nitrates, sodium, copper, lead, organic chemicals, and the municipal additive of fluoride.

Some Advantages of using Reverse Osmosis:

- Friendly to the environment
- Minimal amount of power is required
- Can be used for domestic and industrial applications
- Removes dissolved minerals and other contaminants that cause water to smell unpleasant, taste poor and take on unusual colors.
- Great purified water taste
- Removal of dissolved minerals, metals and other particles benefits plumbing systems (There is nothing in the water to corrode pipes or collect as sediment.)
- Helps remove harmful bacteria and viruses in your municipal and borehole water systems.

Interesting Facts about Reverse Osmosis:

- If the water quality problem in your home has inorganic contaminants, then reverse osmosis is an excellent treatment method. Many RO units can remove 90% or more of certain inorganic chemicals.
- "High purity" home drinking water can only be produced by one of two types of systems: Steam Distillation or Reverse Osmosis.
- Reverse osmosis, when combined with a simple carbon filter WILL provide drinking water which is 98-99% free of organic chemicals such as chlorine, free ammonia, fluoride, arsenic, magnesium to name a few.
- Books such as "Home Enlightenment" by Annie B. Bond and "Better basics for the home" have been written promoting the process of reverse osmosis and what Health benefits it has for you and your family.