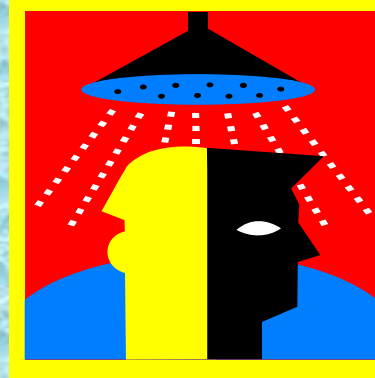


**INDIAN RIVER COUNTY  
DEPARTMENT OF UTILITY  
SERVICES  
PRESENTS**



**WATER PRODUCTION  
&  
REVERSE OSMOSIS**

# **REVERSE OSMOSIS – THE BEST IN WATER TREATMENT!**

**Reverse Osmosis is one of the most advanced water treatment methods available. It is also the most costly to build because of the materials used to produce water. To explain how the water plants work, we must know what osmosis is.**



# WHAT IS OSMOSIS?

**Osmosis is the transportation of a fluid, (in this case water), through a semipermeable membrane. The membrane restrains particles smaller than bacteria, viruses, and salt molecules from passing through the membrane. The membrane can be thought of as a “molecular” filter.**



## **REVERSE OSMOSIS, (cont'd)**

**Raw water comes from the wells to the water plant via a pipeline made of High Density Polyethylene. (HDPE). This pipe is corrosion resistant. It does not rot, rust, or corrode. The pipe is leak-tight by heat-fused joints. The fusion joints are as strong as the pipe.**



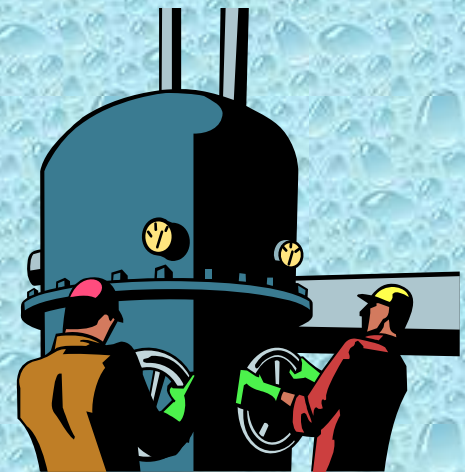
## **REVERSE OSMOSIS, (cont'd)**

**Reverse Osmosis was developed by the U.S. Government to desalinate sea water. Today, it earns its name as the most convenient and thorough method to filter water. It is used in water bottling plants, and by many industries that require ultra-refined water in manufacturing processes.**



## **REVERSE OSMOSIS, CONT'D.**

**Pressure forces the raw water through the membrane, separating the water from unwanted substances. The most amazing aspect of RO is that the substances are automatically diverted to a waste drain so they don't build up in the system as with conventional treatment devices.**



## **REVERSE OSMOSIS, CONT'D**

**This is accomplished by using a part of the unprocessed water, (feed water), to carry away substances to the drain, thus keeping the membrane clean. This is the reason why RO membranes last so long and perform like new with minimum maintenance even after years of operation.**



## **REVERSE OSMOSIS, CONT'D.**

**We in the Utility are proud to be able to offer our water customers the best drinking water available. We feel that we have achieved that goal by using Reverse Osmosis at our water production plants. Yearly Consumer Confidence Reports consistently show that Indian River County has the purest drinking water available. Call the South County RO plant at 978-1830 and schedule a tour at one of our water plants. You'll be glad you did!**

