

Water Efficient

## Point-of-Use Reverse Osmosis Systems

Throughout the United States, millions of households have installed point-of-use reverse osmosis (RO) systems, which are water treatment systems connected to a single fixture (e.g., at the kitchen sink) that remove contaminants from water. While RO systems work to rid household water of possible contaminants, they can waste a great deal of water in the treatment process. To help reduce water waste, the U.S. Environmental Protection Agency's (EPA's) WaterSense® program has developed a draft specification to label water-efficient and high-performing RO systems.

## **RO SYSTEM EFFICIENCY**

Reverse osmosis is the process by which pressure forces water through a semi-permeable membrane, creating a stream of treated water, called "permeate," and a stream of reject water called "concentrate" or "brine." These systems can potentially remove water contaminants, including lead, volatile organic compounds (VOCs), per- and polyfluoroalkyl substances (PFAS), arsenic, bacteria, and viruses. While RO systems can improve water quality, these systems can also generate a significant amount of water waste in the process of removing contaminants. In fact, a typical RO system sends five gallons of water or more down the drain for every one gallon of treated water it produces!

Once the WaterSense specification is finalized, consumers will be able to look for and install WaterSense labeled RO systems that are significantly more water-efficient than typical RO systems, sending just 2.3 gallons of water or less down the drain for every gallon of treated water it produces. The WaterSense specification will also ensure that labeled RO systems are just as effective at providing the high-quality drinking water that consumers expect from these products.

## **FUTURE SAVINGS**

For consumers who are planning to replace their RO system at the point of water use in the future, selecting a WaterSense labeled model will reduce water use on average by nearly 3,200 gallons of water per year—or 48,000 gallons of water over the system's lifetime—compared to the water use of a typical point-of-use RO system. In fact, if all point-of-use RO systems sold in the United States were WaterSense labeled, we could save nearly 3.2 billion gallons of water across the country annually, which is equivalent to the annual household water needs of more than 40,000 American homes.

As with all WaterSense labeled products, once the specification is final, all WaterSense labeled RO systems must be tested and independently certified to ensure that they meet the EPA criteria for efficiency and performance.

## LOOK FOR THE WATERSENSE LABEL IN THE FUTURE!

Once EPA finalizes its specification, consumers can look for WaterSense labeled RO systems to provide a more water-efficient option for treating water. For more information, visit www.epa.gov/watersense.



look for