Treatment Systems for Private Water Supplies

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Water treatment methods have evolved quickly in recent years and advances in treatment technology and available products occur regularly. For this reason, it is a good idea to consult with a professional that has the most up to date and complete information about available technology. NSF International is a not-for-profit group which tests treatment technologies and provides information to the public about available technologies and their effectiveness. Following are some terms, questions and notes to consider before contacting a professional.

Useful Terms:

Point of Use (POU) treatment devices are installed on one faucet to treat a sufficient volume of water for drinking and cooking.
Point of Entry (POE) treatment devices are installed on the supply line and treat all water supplied to the house. These systems treat more water than POU systems and generally cost more.

Choosing a Treatment System Requires Consideration of:

- Available budget for treating water

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About Us

- Which contaminants you want to remove
- Amount of contaminants present
- Total Dissolved Solids and amount of constituents which may clog treatment systems
- Temperature of water
- Quantity of water to be treated
- For Reverse Osmosis systems, the amount of waste water that is acceptable
  (new technology is up to 100% efficient)
- Knowledge of system maintenance requirements. All treatment systems require some maintenance
  on some type of schedule. Certain devices are easily maintained by homeowners
  and others require maintenance by professionals.

**Note: Treatment devices which are installed but not maintained according to their specifications will not treat the water as intended. Furthermore, poorly maintained treatment systems can harbor bacteria and actually add contamination to the water.

Finding a Water Treatment Professional:

If you have access to the internet, the Water Quality Association (WQA) website has a list of companies who are members of the association and have agreed to abide by a set code of ethics. For each company there is also a highlighted list of professionals who have completed additional training and taken certification exams related to water treatment skills. Another resource on the WQA website is a product certification page that lists treatment products which have been tested for ability to remove contaminants. NSF International offers a similar but more comprehensive service on their website listed below. If you can not access the internet or no one on the list is in your area, you can check your local yellow pages for a list of water treatment professionals. It is important that the professional has experience with local water quality issues and appropriate training related to testing water, installing, and maintaining treatment systems. Inquiring with friends and neighbors about the professional's history and comparing information from different professionals is also an option.

Contacting a Professional:

A professional should make arrangements to come to your home and test your water quality, ask you about what you want to accomplish with treatment, and ask about your budget and other specific needs. Some companies may do part or all of the assessment for free. Professionally installed systems start around $500 for a simple POU reverse osmosis system and range up to $6,000 for

POE turbidity systems with a whole range of possibilities in between. If considering a discount treatment system to install yourself, make sure you understand efficiency (water wasted), initial cost, maintenance requirements and costs (life of filters etc.), and whether the system is compatible with your specific needs. Finally, if you have not done so, a water test completed by a certified water quality lab is a good idea to confirm the need for treatment. A list of certified labs in Montana is available at the MSU Extension Water Quality Website.

Bottled Water:

Given the expense, installation, and maintenance requirements for the above treatment options,
bottled water may be a consideration. Water bottled in the state of Montana is regulated by
Montana Drinking Water Quality Standards, and all bottled water is regulated by the US Food
and Drug Administration as a food product. An estimated average cost for bottled water delivery
for a family of four is $25-35 a month plus the cost of the dispenser @ $80-200.