

Home Water Purification

Lots of options, how to choose...

Pure water is something that we all take for granted until there is a water main break or our water supplier discovers a contaminant in our water supply. Some people have asked, "How do I choose a home water purification system from the myriad of choices?" How indeed...I decided this would be something worth a bit of research. Here is what I've discovered.

NSF, an independent not for profit organization, lists five main technologies used for water purification. These are listed in Table 1 below.

In this Issue:

Water Purification - p.1-3 Fireplace Inspection - p. 4 Parking Enforcement - p. 4 PRVA Yard Sale - p. 5 Free Trash Day - p. 5 Recipe - p. 6 Monthly Minute - p. 6

Technology + (NSF/ANSI Standard)	Description of Technology
Filtration (NSF/ANSI 42 & 53)	Filtration is the use of a physical medium to remove contaminates by trapping them either on the surface or in the pores of the medium. i.e. Use of a coffee filter to keep the coffee grounds out of your brewed coffee.
Softeners (NSF/ANSI 44)	Softeners use ion exchange chemicals to 'soften' your water by removing unwanted 'hard ' calcium or magnesium from your water. Shampoo and dish detergent work better in 'soft' water.
Ultraviolet Treatment (NSF/ANSI 55)	Ultraviolet or UV treatment uses light in the short ultraviolet wavelength region to kill bacteria in your water.
Reverse Osmosis (NSF/ANSI 58)	Reverse Osmosis or RO uses high pressure to force water through a semi-permeable membrane leaving behind contaminates which are too large to fit through the microscopic holes in the membrane.
Distillers (NSF/ANSI 62)	Distillers purify water by heating it to boiling and collecting the water vapor steam leaving most contaminates behind.

Water purification - continued on page 2

Dates of Note:

Mother's Day - May 10 Armed Forces Day - May 16 Memorial Day - May 25

Recycling for May: Paper - May 13, 27 Recyclables - May 6, 20



Table 1: Water Purification Technologies

WATER PURIFICATION (FROM PAGE I)

OK, so there are five basic methods of water purification. Along with this there are two basic categories of home water purification: Point of Entry (POE) and Point of Use (POU).

A Point of Entry (POE) system is one which is installed where the water supply enters the home and it treats all the water to be used in the home. Most water softener systems are POE systems as they soften all the water coming into the home. POE systems are able to treat high volumes of water.

A Point of Use (POU) system in one which only treats the water where it is being used. An example of a POU system would be a filter attached to your water faucet. POU systems can be much less expensive than similar POE systems as they treat a much smaller volume of water.

Usually when looking to select a water purification system the best approach is to go for the most bang for your buck. An examination of the water quality report from your water supplier helps here.

From the data provided in the published 2007 Water Quality Report from Aquarion our water quality scores fairly well. Nothing in the 2007 report exceeds the Maximum Contaminate Level (MCL), though we can't forget the incident last year where initial testing revealed high perchlorate levels in one of the supply wells used for our water system. Subsequent testing found no perchlorate contamination, but the incident did raise people's awareness of aspects of our water supply.

Given that we do have rather high quality water we can focus on nuisance contaminates that effect the taste and odor of our water. Generally this means chlorine which is used to disinfect our water supply. Most people can detect the odor of even trace amounts of chlorine in their water.

The most cost effective method for treating chlorine in your water is through the use of Point of Use (POU) systems. A Point of Entry (POE) system that treats all water entering a home can be an expensive method of dealing with nuisance contaminants.

Typical POU systems can range from simple things like water filtration pitchers to an undersink installed Reverse Osmosis (RO) system. Personally, I'm in favor of using the simple water filtration pitcher to remove the chlorine odor from my drinking water because it lets me have nice cold water from the pitcher stored in the refrigerator. I could use a tap mounted water filtration system, but that would only encourage the use of more water as I'd likely have to run the tap in order to have cold water. The downside of the water filtration pitcher is the need to continually fill it after use.

A refrigerator with a built in water dispenser likely has a filter element to provide a good supply of filtered and chilled water. I found it was very easy to tap into the cold water supply line for the first floor bathroom sink by drilling a small hole in the wall between the kitchen and the bathroom. It just has to be large enough to run the water line from the refrigerator to the area under the sink. A simple 'saddle' valve can be used to tap into the cold water supply line, but a better solution is to use a T-connector with a shutoff so that you can turn off the water supply to the refrigerator.

I mentioned an under-sink installed RO system. While that would work on nuisance contaminates it is an expensive solution to the problem. Most under-sink RO units are also only going to be able to provide something like 10-50 gallons of purified water each day. Forcing water through the small holes of an RO membrane takes time.

You may also want to eliminate chlorine odors from the water in your shower. For this there are shower head units with replaceable filter elements. Generally, these filter elements use a combination of KDF and activated carbon. KDF is a special media made from copper and zinc alloys that helps the activated carbon last longer.

As with any replaceable filter you will need to change the filter periodically. Consult the instructions provided by the manufacturer of your water purification system for details on how often you will need to change the filter.

As I can't go into detail about every water purification system on the market I'm providing some links to some internet sites that may prove useful in your quest for clean, odor free water.

WATER PURIFICATION - USEFUL LINKS

NSF - Water Treatment Information:

http://www.nsf.com/consumer/drinking_water/index.asp

Aquarion - Water Quality

http://www.aquarionwater.com/ma.cfm/section/Quality http://www.millbury-ma.org/Public_Documents/MillburyMA_BBoard/ (look for the Aquarion Notices)

Water Purification Articles

http://www.consumerwaterpurificationsystems.com/allsiteinfo.htm

Home Water Purification Systems

http://www.allwaterpurification.com/home-water-filter.html

Water Filter Comparisions

http://www.waterfiltercomparisons.com/water_filter_comparison.php?d=gp

KDF - Fluid Treatment

http://www.kdfft.com/index.htm

Quality Water Filters http://www.quality-water-filters.com/

Pure Water For Less http://www.purewaterforless.com/

Advanced Water Filters http://www.advancedwaterfilters.com



2009 is Fireplace Inspection Year!

ALL fireplaces must be inspected and cleaned (if necessary) between April 1 and October 1

A certificate of inspection from a licensed chimney sweep must be submitted to the Board no later than October 1, 2009. Most of our unit owners use Top Hat in Grafton. For details on a discount Top Hat is offering PRVA, call (508) 839-9997. Fireplace cleaning and inspection is a safety issue that concerns ALL of us at PRVA.

Homeowners and tenants are reminded that our fireplaces are NOT made to withstand continual, hot, wood fires and are **NOT** to be used as a primary source of heat for your unit.

PRVA Parking Regulations to be ENFORCED

The board has elected to start fining residents of PRVA who violate the association's parking policies.

1. Commercial vehicles are not allowed at any time unless it is a vendor doing work. If you have a work vehicle do not even bring it home for lunch.

2. No parking on any sidewalks or on any streets (except along Bunker Hill Road). Alert your guests!

Violation will result in a daily fine of \$25



Spring PRVA Yard Sale Saturday June 6

(Rain date Sunday June 7th) Set up 7am-9am at the front entrance Yard Sale 9am-noon

If you are interested in setting up a table, please email Board@PaulRevereVillage.com



We will have a **FREE** Trash Pickup Day Monday June 8 following the Yard Sale-ANY items (furniture, paint, computers, tvs) can be disposed of at NO additional cost to you! There will be a small dumpster at the water shed for metal items and a larger dumpster for general items.

EASY SUMMERTIME PIE

I love making this pie. It is so easy to make and at the same time cold and refreshing for those warm Summer days.

Mix together in a large bowl:

2 cups sour cream 1 can crushed pineapple (drained) 1 1/2 packages instant vanilla pudding

Pour into a graham cracker crust, cover and chill to set.

This can also be lightened up by using sugar free pudding mix and light cool whip and sour cream. I wouldn't use any of the fat free products.

MONTHLY MINUTE WITH MAUREEN

I am reminded today, May 1 st, of my Mother. She died on May 1 st, 2001. It has already been 8 years. Not a day goes by that I don't think of her. There have been so many moments in the past years that I have wished that she could have been present. The day I married Jeff, I was wishing that she could have been there to see how happy I was. She would have just loved being there when I picked out my wedding dress, the cake and the flowers. She would have loved having Jeff as a son-inlaw. Everyone that knew my Mother from Milford Hospital, where she worked for many years, knew her to be a kind lady who was always smiling. She was such a good mother who always put her kid's well being in front of her own. My brother and I stood beside her in her last days and we made the hardest

decision that we ever had to make. We chose to give her peace. She will always be in my heart and | thank her for setting such a fine example.

~ Maureen



Spring at Southwick's Zoo...

