## Adequate Water Storage in Emergencies

By Joseph Parish

Lately my wife and I have been giving serious thought to our emergency water supply. Like most people our preparations in that area are far from adequate and would not last us for any sort of extended emergency period. We currently have several bottles of water in both gallon and individual size but that is totally unacceptable as far as I am concerned. Our immediate goals are to establish no less than 110-gallon storage capacity. Perhaps at some later date that also will be expanded.

Since for us space is at a premium it becomes extremely important to be able to plan accordingly and make due with what we have. Every inch of our home must serve as storage when planning our future emergency preparations. Our weak point at this time is the water storage as we are well along with our food preparations and supplies.

I have come to realize that I cannot store any vast quantity of water for any long period of time using the usual plastic gallon water containers as purchased in the grocery store. These containers eventually begin to break down and leak as the plastic leaches into the drinking water as well. Naturally the life span of the plastic container depends upon how thick the plastic is as well. The thicker ones will last much longer than the usual thin milk carton plastic ones.

With this weakness of containers in mind I have approached this issue from several different viewpoints and believe the following will assist us to become better water prepared. First, I plan to recycle rain water by the use of a 50-gallon water reservoir. This is merely being mentioned as a dire backup measure. I have found several fancy rain water containers which will be both practical and pleasing to the eye. Our goal contains plans to install gutters on our shed to allow the downspouts to fill these rain barrels.

We currently have a 10 by 12 storage shed which holds miscellaneous items that need to be sorted and properly disposed of. Alternately, Rubbermaid makes a Roughneck securable shed which could serve as a water storage building. This unit could be placed on our patio and none would be the wiser as to what is in it. Either way my goals are to turn either the shed or the Rubbermaid unit into a water storage location. The storage shed is anchored down so I feel safe that it will survive some strong hurricane winds if necessary. If I choose to use the Rubbermaid I will have to deal with the tie down issue at another time. My main objective is to survive any sort of emergency for at least a 30day period of time. I realize that the recommended amount of water is around two gallons per person per day but this would be a sufficient start. This water supply would not be utilized for anything but drinking and cooking.

We will be purchasing several five-gallon buckets in which to transport the water from the storage shed location to our kitchen. We would employ a rack system to hold the two 55-gallon barrels one above the other. This way we could fill the bottom barrel first stacking an empty on top and then fill that top one. We might need to purchase a hand
operated siphon pump to fill the units but the cost there would be a mere five to ten dollars. When it comes time to obtain water from the barrels, we would siphon what we need from the upper barrel first and then move to the lower one.

Keep in mind that we will also have water purification materials stored as well just in case they are necessary, this way we could use water which is ready available and purify it. We have not forsaken our plans to purchase the Cadillac of water filters known as a Burkey along with extra filters but I like to keep all options open. One thing that many people fil to realize is that water filters do not always guarantee the safety of the water being filtered.

Walmart markets a small kit which includes iodine and purification tablets to purify water. You merely have to add the chemicals and let it sit a while prior to drinking it. Be advised that lodine purified water often tastes horrible but when one is faced with the possibility of dehydration or drinking nasty tasting iodine water, I believe most would vote for the nasty water.

Although water does not spoil it does become flat after sitting still for a long period of time. This is not a major issue as you merely need to aerate it slightly by placing some in a container and pouring it back and forth between containers. This adds air to the water and eliminates the flat taste. If you are like me you will store powdered fruit drinks, instant tea or Kool-Aid to aid in making the water more palatable.

When storing water, you must first sterilizing the containers. Wash the containers well with soapy water and rinse them thoroughly. Let dry and fill them half full of water. Add 1 cup of chlorine bleach for every gallon of water. Finish up by filling the container to the top with additional water. Place the cap on the container and lay it on its side for 3 minutes. This is a process to sterilize the containers only and is not intended for drinking. After processing the containers pour the liquid down the drain.

To prepare your drinking water follow the rules below when adding bleach:
Amount of water Bleach to add (clear water) Bleach to add (cloudy/dirty water)

| 1 gallon | 8 drops | 16 drops |
| :--- | :--- | :--- |
| 5 gallons | $1 / 2$ teaspoon | 1 teaspoon |

After the bleach has been added the water will need to be mixed by either stirring it or shaking the container after which you should let the water stand for a 30 -minute period prior to using it. You will notice a slight chlorine odor if not you should consider adding another dose of bleach and letting the water sit for another 15 minutes. It is recommended that you only treat enough water to meet your immediate needs (48 hours).

Stored water should always be covered. Green mold will form inside buckets of water that has been sitting in the bright sunlight for too long of a time. This will happen to stored water as well if it is not kept from direct sunlight. Empty and re-sanitize your water holding containers once per year and then refill them with fresh water.

Previously we had employed just about anything you could imagine to store up on water for a projected emergency such as soda pop bottles of all shapes and sizes, juice bottles. We have found in the past that water stored in any type of plastic containers such as the soda bottles provides a fairly useful life span. Avoid the plastic milk containers however.

