Treating Water in an Emergency Situation

During an emergency, such as a major earthquake, the City of Lake Oswego may issue a "boil water notice" until it can verify that the water is not contaminated and is safe to drink. During a "boil water notice" period, any water used for drinking or food preparation should be boiled at a full rolling boil for at least one full minute. A full rolling boil is a vigorous boil that cannot be stopped by stirring the water. If the water is very dirty looking and/or has particulate matter in it, filter the water through a coffee filter, paper towels, or clean cloth before boiling.

If the emergency has left you with no way to boil the water or if you have limited fuel and do not want to use it for boiling water, you may treat the water with liquid chlorine laundry bleach. NOTE: do not use scented laundry bleach, powdered bleach, or swimming pool chlorine; these contain additional chemicals that are poisonous. Below is a chart that indicates how much liquid bleach to add to the water.

Amount of Water	Amount of bleach to add to clear water	Amount of bleach to add to cloudy/dirty water
1 gallon	8 drops	16 drops
5 gallons	1/2 teaspoon	1 teaspoon

After you add the bleach, thoroughly mix by stirring or shaking the container. Let the water stand for 30 minutes before using. A slight chlorine odor should be noticeable in the water; if not, add another dosage of bleach and allow the water to stand another 15 minutes before using. The water can also be treated with the use of water purification tablets that can be purchased at most outdoors or sporting goods stores. Follow the directions for use on the package you purchase. Treat only enough water to meet your needs for 48 hours at a time. There is an increased chance of recontamination if the treated water sits for more than 48 hours. Refrigeration will also help prevent recontamination.

Note: Most home water filters are meant for water that is already microbiologically safe. Using these filters during a "boil water notice" will not guarantee the safety of the water. Replace any filter cartridges after the boil water notice has been lifted to ensure your filter is not contaminated.

How to store an emergency water supply

Bottled water purchased at grocery stores can be stored for several years. The bottles should be stored in a cool dark place and should not be exposed to sunlight, fumes of petroleum products, and pesticides/herbicides. They should be checked periodically to ensure that the plastic has not cracked or developed leaks. If the containers have cracked or leak, replace them.

Storing tap water for emergency use is more complicated. The storage containers must be disinfected and the water treated before it is stored. Also the water should be changed every six months.

Disinfecting the containers

Containers made of heavy opaque plastic with screw-on caps are the best to use. Plastic milk and orange juice containers are very thin and tend to crack and leak as they get old. Also these containers often have snap-on lids that do not seal as well as screw-on caps.

- Wash the containers with soapy water. Rinse thoroughly. Fill the container half full with water and add 1 cup of chlorine bleach for each gallon the container holds. NOTE: do not use scented laundry bleach, powdered bleach, or swimming pool chlorine; these contain additional chemicals that are poisonous. Finish filling the container with water (all the way to the top). Put the cap on and lay the bottle on its side for about 3 minutes. This allows you to check if the container leaks while the bleach-water disinfects the cap. If the container leaks, do not use it.
- Pour the bleach-water into the next container to be disinfected. The same disinfecting bleach-water can be

used for several containers, simply "top off" the new container with water as needed.
*** REMEMBER! This is not drinking water - pour down drain when finished ***

Treating the water to be stored

- Fill the disinfected bottle half full with tap water. Add 8 drops of chlorine bleach for each gallon the container holds. NOTE: do not use scented laundry bleach, powdered bleach, or swimming pool chlorine; these contain additional chemicals that are poisonous. Finish filling the bottle with tap water. Leave a small air space at the top of the container to allow for expansion if the water heats up slightly where you store it.
- Put the cap on tightly.

Storing the water

The water containers should be stored in a cool dark place and should not be exposed to sunlight, fumes of petroleum products, and pesticides/herbicides. They should be checked periodically to ensure the plastic has not cracked or developed leaks. If the containers have cracked or leak, replace them.

Change the water in the containers every six months.

Source URL (retrieved on *12/22/2014 - 1:24pm*):
http://www.ci.oswego.or.us/publicworks/treating-water-emergency-situation