



January – March 2012

## EMERGENCY HEATING

**Coal** stores well if kept in a dark place and away from moving air. Air speeds deterioration and breakdown, causing it to burn more rapidly. Coal may be stored in a plastic-lined pit or in sheds, bags, boxes, or barrels and should be kept away from circulating air, light, and moisture. Cover it to lend protection from weather and sun.

**Wood.** Hardwoods such as apple, cherry, and other fruit woods are slow burning and sustain coals. Hardwoods are more difficult to burn than softer woods, thus requiring a supply of kindling. Soft woods such as pine and cedar are light in weight and burn very rapidly, leaving ash and few coals for cooking. If you have a fireplace or a wood/coal burning stove, you will want to store several cords of firewood.

Firewood is usually sold by the cord which is a neat pile that totals 128 cubic feet. This pile is four feet wide, four feet high, and eight feet long. Some dealers sell wood by the ton. As a general rule of thumb, a standard cord of air dried dense hardwood weighs about two tons and provides as much heat as one ton of coal. Be suspicious of any alleged cord delivered in a 1/2 or 3/4 ton pickup truck.

For best results, wood should be seasoned (dried) properly, usually at least a year. A plastic tarp, wood planks, or other plastic or metal sheeting over the woodpile is useful in keeping the wood dry. Other types of fuels are more practical to store and use than wood or coal.

**Newspaper logs** make a good and inexpensive source of fuel. You may prepare the logs in the

following manner:

- Use about eight pages of newspaper and open flat.
- Spread the stack, alternating the cut sides and folded sides.
- Place a 1" wood dowel or metal rod across one end and roll the paper around the rod very tightly. Roll it until there are 6-8 inches left to roll, then slip another 8 pages underneath the roll. Continue this procedure until you have a roll 4-6 inches in diameter.
- With a fine wire, tie the roll on both ends. Withdraw the rod. Your newspaper log is ready to use. Four of these logs will burn about 1 hour.

**Propane** is another excellent fuel for indoor use. Like kerosene, it produces carbon dioxide as it burns and is therefore not poisonous. It does consume oxygen so be sure to crack a window when burning propane.

Propane stores indefinitely, having no known shelf life. Propane stoves and small portable heaters are very economical, simple to use, and come the closest to approximating the type of convenience most of us are accustomed to using on a daily basis.

The storage of propane is governed by strict local laws. In this area you may store up to 1 gallon inside a building and up to 60 gallons stored outside. If you store more than these amounts, you will need a special permit from the fire marshal.

The primary hazard in using propane is that it is heavier than air and if a leak occurs it may "pool" which can create an explosive atmosphere. Furthermore, basement natural gas heating units CANNOT be legally converted for propane use. Again, the vapors are heavier than air and form "pockets." Ignition sources such as water heaters and electrical sources can cause an explosion.

**White gas** (Coleman fuel). Many families have camp stoves which burn Coleman Fuel or white gasoline. These stoves are fairly easy to use and produce a great amount of heat. However, they, like charcoal, produce vast amounts of carbon monoxide. **NEVER** use a Coleman Fuel stove indoors. It could be a fatal mistake to your entire family.

Never store fuels in the house or near a heater. Use a metal store cabinet which is vented on top and bottom and can be locked.

**Kerosene** (also known as Range Oil No. 1) is the cheapest of all the storage fuels and is also very forgiving if you make a mistake. Kerosene is not as explosive as gasoline and Coleman fuel. Kerosene stores well for long periods of time and by introducing some fuel additives it can be made to store even longer. However, do not store it in metal containers for extended time periods unless they are porcelain lined because the moisture in the kerosene will rust through the container causing the kerosene to leak out.

Most hardware stores and home improvement centers sell kerosene in five gallon plastic containers which store for many years. A 55 gallon drum stores in the back yard, or ten 5 gallon plastic containers will provide fuel enough to last an entire winter if used sparingly.

**Caution:** To burn kerosene you will need a kerosene heater. There are many models and sizes to choose from but remember that you are not trying to heat your entire home. The larger the heater the more fuel you will have to store.

Most families should be able to get by on a heater that produces about 9,600 BTUs of heat, though kerosene heaters are made that will produce up to 25,000 to 30,000 BTUs. If you have the storage space to store the fuel required by these larger heaters they are excellent investments, but for most families the smaller heaters are more than adequate. When selecting a kerosene heater be sure to get one that can double as a cooking surface and source of light. Then when you are forced to use it be sure to plan your meals so that they can be cooked when you are using the heater for heat rather than wasting fuel used for cooking only.

When kerosene burns it requires very little oxygen, compared to charcoal. You must crack a window about 1/4 inch to allow enough oxygen to enter the room to prevent asphyxiation.

During combustion, kerosene is not poisonous and is safe to use indoors. To prevent possible fires you should always fill it outside. The momentary incomplete combustion during lighting and extinguishing of kerosene heaters can cause some unpleasant odors. To prevent these odors from lingering in your home always light and extinguish the heater out of doors. During normal operation a kerosene heater is practically odorless.

**Charcoal.** **Never** use a charcoal burning device indoors. When charcoal burns it is a voracious consumer of oxygen and will quickly deplete the oxygen supply in your little "home within a home." Furthermore, as it burns it produces vast amounts of carbon monoxide which is a deadly poison. If you make the mistake of trying to heat your home by burning charcoal it could prove fatal to your entire family. Never burn charcoal indoors.

### Upcoming CERT Training:

January 14<sup>th</sup> 8:00 am to 5:00 pm  
and January 21<sup>st</sup> 9:00 am to 1:00 pm  
Taylorsville LDS chapel at 955 W 4800 S  
Register online at:

<http://www.unifiedfire.org/divisions/community/cert.aspx>

The class requires an online course to be completed before January 14<sup>th</sup>.

### CPR training:

Register online  
at: [http://www.unifiedfire.org/divisions/ops/cpr\\_schedule.aspx](http://www.unifiedfire.org/divisions/ops/cpr_schedule.aspx)

This class is offered at the Salt Lake County Emergency Operations Center located at 3380 S. 900 W. Salt Lake City, UT 84119 (directly west of the Salt Lake County Jail)