

# **The Family's Guide on Planning for Fuel Shortages**

*Provided by the Lincoln County Emergency Management Agency*

## **Introduction**

We can't always know when a fuel shortage will affect us; but we can prepare. This guide is meant to help you plan for multiple fuel related issues.

## **Disruption to Fuel Supplies**

All organizations and households rely to some extent on fuel; be it getting to work, distributing product or providing services. The availability of fuel within the US is generally very good; however there have been examples within recent years of disruptions to supply, on a regional, national and international basis.

A disruption could be caused by a number of factors, including scarcity of supply, a technical problem with part of the fuel supply infrastructure, industrial action or public protest. In the event of such a disruption to supply, it is also possible that stocks could be further depleted through increased consumer demand or panic buying in the event of a disaster or crisis. Currently, due to ongoing economic factors, many are trying to pre-purchase fuel & heating oil for the coming winter months; which is contributing to further strain of the fuel supply system. In the most extreme of circumstances gas stations and commercial supplies could be exhausted within 48 hours of a large scale incident and it could take up to 10 days before stock levels are fully restored.

## **Responsibility**

While both governmental and private entities work to make sure the fuel supply remains constant, issues can arise. And though, in the event of a disaster or shortage, these entities will try to either maintain or re-establish the fuel supply line, they cannot control everything. As such, it is incumbent on each family to prepare for a fuel shortage to the best of their ability.

## **Ripple Effect:**

A fuel shortage will affect more than just one area. Lack of diesel or gasoline can hinder delivery of goods to stores and markets. A long-term power outage can cause a rush on gasoline as people try to fuel their generators. If one source of fuel or energy is compromised, expect all other sources to be affected as well.

## **Planning for a Fuel Disruption**

The most effective way to prepare for a fuel supply disruption is to develop a family plan detailing types of fuel used, how much you use and ways to store spare fuel. Start by taking a good look at the following criteria to evaluate.

- 1) Reducing the dependency of your household on fuel;
- 2) Reducing fuel usage during a fuel supply disruption;
- 3) Reallocating resources use fuel only where necessary;
- 4) Store spare fuel safely;
- 5) Effective communication with employers, schools, family members on what your needs are and whether you may need assistance.

## **Storage of Fuel**

Fuel must be stored in the proper containers. Certain fuels also have a 'shelf life' so to speak. Stored fuels must be rotated and used, otherwise the fuel may separate into its blended components. The longer fuel is stored there is also an increased risk of being contaminated with water.

Gasoline:

Store in small containers (5 gallons) in gasoline approved fuel cans. Gas cans should be red in color. Keep in a cool, dark, ventilated area such as a garage. Do not store inside or near a heating source. If storing longer than 3 months consider using non-ethanol gasoline and also adding in a fuel stabilizer. After 12 months gasoline should be either used or disposed of.

Diesel Fuel:

Store in small containers (5 gallons) in diesel approved fuel cans. Diesel cans should be yellow in color in distinguish them from gasoline cans. Keep in a cool, dark, ventilated area such as a garage. Do not store inside or near a heating source. Diesel fuel will store longer than gasoline but ideally should be rotated at least every 6 months.

#### Propane:

If you use propane for heating or cooking your household will need a larger tank. Try to keep your tank as full as you can especially during the winter months. Smaller tanks such as 1 lb canisters or 20 lb tanks commonly used for barbecues can be stored for long periods of time without problem. Avoid storing tanks where there are extreme temperatures (heat or cold).

#### Firewood:

Even if you do not burn wood for heat it is not a bad idea to keep some firewood handy. Wood can be stored outside exposed to the elements but you should at least consider covering with a tarp to stop snow and ice buildup in the winter. Wood can be stored easily for years. Avoid burning wood that is rotten or has large amount of fungus on it. Do not burn wood that has been pressure treated or stained/painted.

#### Coal/Charcoal:

While there are few coal furnaces in modern homes, charcoal is used quite often, mainly for barbecues. Charcoal can provide a fuel alternative for cooking and outdoor fires allowing regular firewood to be used for heating purposes. Coal/Charcoal should be kept in the original paper bag or a burlap sack. It should be stored in a dry place.

#### Mixing Oil:

Mixing oil is used for many small engines, such as chainsaws. Mixing oil will stay shelf stable for long periods of time and should be kept in the original bottles. Avoid temperature extremes.

#### Kerosene/Lamp Oil/Paraffin

Kerosene can be used as a heat source or for lanterns. Store in 5 gallon containers. Containers should be blue in color. Do not store in the house. Kerosene should be used within 6 months. Lamp oil or paraffin should be stored in the original container in a temperature stable area. Paraffin can be safely stored for long periods of time but it is best to rotate every 12 months.

## **Planning for a Fuel Supply Disruption – A Checklist**

To assist you in the development and review of plans the following checklist has been developed specifically in relation to fuel shortages. The following lists identify important and specific activities that homeowners can do to prepare for a fuel shortage. This list is not exhaustive and not all measures listed here are suitable for all homes. Depending on your house, its location, its size & age as well as the number of people living in the house, a shortage of fuel will affect your home differently.

<b>1. Assessing the impacts of a fuel shortage on your household.</b>			
Planning is essential for any household during a fuel shortage. The list below gives some guidance to basic steps that could make your home more resilient.			
Complete	In Progress	Not applicable	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Identify your home's primary source of heat.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Does your home have a backup heating source that uses a different type of fuel?
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Do you use propane or natural gas for your stove, water heater or other appliances?
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Will you need to have a generator to run major appliances or your home heating unit?
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Do you have a generator?
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	What type of fuel will you need for a generator? How much will you need?
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Do you have an alternate method to cook other than the kitchen stove?
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	What type of fuel will you need? Propane? Charcoal? Wood?
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Assess the feasibility of increasing flexible working for staff (e.g. working from home).
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Can you increase heating efficiency through better insulation or an updated heating system?
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Can you close off area of your house to reduce energy loss?

## 2. Travelling to and from the place of work

Getting to and from your place of work can be difficult during a fuel supply disruption, but there are various options to consider in order to overcome this obstacle.

Complete	In progress	Not applicable	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Document how you usually travel to work and whether and what alternative forms of transport would be available if required.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Will your work/job allow you to work from home?
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Do you have a designated office space in your home?
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Is there anyone you can carpool with?
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Can you help organize an office carpool?
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	If your work is far away are you able to stay at a motel/hotel to reduce amounts of travel? Will your workplace help with this?

## 3. Communication

It is crucial to be able to communicate with your work, school and other community members in the event of a fuel shortage.

Complete	In progress	Not applicable	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Does your work have a plan for how your job may change in the event of a fuel shortage? How will they let you know?
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Does your child's/children's school have a plan for a fuel shortage? How will they tell you if something changes?
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Do you know who to call in the event you are not notified?
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	How will you let you work or school know that your family is experiencing hardship due to a fuel shortage?
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Do you know any community organizations that can help during a fuel shortage? Do you know how to contact them?

**4. Other considerations**

There are other considerations you may wish to take into account

Complete	In progress	Not applicable	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	In the event of long-term power loss and/or fuel shortage will you have to relocate?
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	If you do have to relocate, how far away is the location? Do you have enough spare fuel to get you there?
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Will weather or season dictate which actions you take?
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	If you are able to relocate, will the alternate living arrangement allow you to work from home?
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Can your new living arrangement accommodate the number of additional people living together with a limited/or no increase in fuel consumption?