

# Recommended Emergency Home Fuel Storage Limits and Guidelines

## American Fork Fire Department 801-763-3045

The information in this brochure is only intended to provide typical homeowners with general guidelines concerning emergency fuel storage at residential locations. Please consult the Fire Marshal for definitive answers to any questions you might have, after reviewing the following recommendations.

The following guidelines are based on National Fire Protection Association (NFPA) sections 30 & 58 and the 2012 edition of the International Fire Code.

#### **Fuel Storage Concerns**

Over the past 10 years, the United States Environmental Protection Agency (EPA) State Environmental Agencies, and local fire departments have required motor fuel dispensers (gas stations, Etc.) throughout the country to spend millions of dollars to control leakage of motor fuels into the environment from their underground and above ground fuel storage tanks. Naturally, we are now concerned about having hundreds of homeowners throughout the country with relatively uncontrolled fuel storage capacities on their personal property.

Therefore, we strongly recommend that you reduce your home fuel storage capacities to no more than 5 gallons of flammable liquids (gasoline or Coleman white gas), 25 gallons of flammable gas (propane) in portable DOT cylinders. Heating fuels do not have an indefinite shelf life; and in fact, many heating/cooking appliance manufactures recommend that you consume all said fuels within 6 months of purchase.

Your voluntary cooperation in complying with these important Life Safety guidelines is greatly appreciated by the Public Safety community (Health, Fire, and Police). These guidelines are truly intended to save your life and preserve your property. Please contact the Fire Chief or Fire Marshal for further clarification on these or any other issues.

#### **Home Storage of Flammable LP-Gases**

(Propane & Butane)

- Residential Propane storage issues are more complex than those for flammable & combustible liquids. If you want a permanent LP-gas system & tank installed, city ordinance allows you up to 2,000 gallons water capacity in heavily populated areas, provided you obtain a permit, comply with relevant installation codes, & hire a state licensed contractor to perform the work and supply the equipment and product. However, some cities have passed local ordinances that restrict total LP-gas capacity to 500 gallons or less, where natural gas services are readily available. Please contact any state licensed Propane supplier for more information regarding permanent Propane gas installations.)
- For portable DOT tank storage, you are allowed up to **25 gallons** total capacity. You could have up to **five** 5-gallon (20lb) portable appliance cylinders (the size usually found on BBQ grills-DOT 4BA240); or **one** 23 gallon (100 lb) cylinder (DOT 4BW240), in storage at your home, in an unattached garage or shed. If you want to store propane and flammable/combustible liquids together, they should be separated by at least 10 feet.)
- You are only allowed to store up to two (2) of the small portable 1-pound disposable propane cylinders inside your home or attached garage. All other propane cylinder storage must be outside your home in an unattached garage or shed.
- Propane cylinders attached to heating and/or cooking appliances, as well as those mounted on trailers, motor homes, and campers, do not count towards your total storage capacity. However, unattached or empty cylinders count as being full for purposes of calculating total storage capacity.

### **Home Storage of Combustible Liquids**

(Diesel, Kerosene & Lamp Oil)

- Maximum residential storage of combustible liquids (Diesel, Kerosene & Lamp Oil) shall be limited to 60 gallons: total, no more than 10 gallons can be stored in an attached garage; and absolutely no combustible liquid storage is allowed in basements.
- Combustible liquid storage containers shall be over an approved type. Most of these containers are labeled as approved for flammable liquid use, and indicate the standards they are designed to meet (DOT, ASTM, NFPA, Etc.). Always use approved or original containers. (No used milk jugs!)
- If you decide to store more than 25 gallons of combustible liquids at your home, you need at least one (1) 2A10BC rated fire extinguisher, located no closer than 10 feet, and no further than away than 50 feet.
- Control of sources of ignition is mandatory! All transfer and dispensing of flammable liquids requires careful attention be paid to eliminating static spark discharge, and ignition of flammable vapors. Open flames and high temperature devices must be controlled and approved for use with combustible liquids. Also, smoking is prohibited in the storage area.
- Portable kerosene heating appliances shall be (UL) listed and shall be limited to a fuel tank capacity of 2 gallons. However, International Fuel Gas Code specifically prohibits the use of these unvented heating appliances in occupied living spaces. If you decide to use these devices, closely follow the manufacture for use, always maintain adequate separation from combustible surfaces, maintain good ventilation in order to prevent carbon monoxide poisoning, and use a battery powered carbon monoxide detector.

#### **Home Storage of Flammable Liquids**

(Gasoline & Coleman White Gas)

- Maximum residential storage of flammable liquids (gasoline & white gas) shall be limited to 25 gallons; preferably stored in an unattached garage or shed. Of this 25 gallons, no more than 10 can be stored in an attached garage; and absolutely; no flammable liquid storage is allowed in basements.
- Empty containers shall be counted as full when calculating total storage capacity.
- Flammable liquid storage containers shall be over an approved type. Most of these containers are labeled as approved for flammable liquid use, and indicate the standards they are designed to meet (DOT, ASTM, NFPA, Etc.). Always use approved or original containers. (No used milk jugs!)
- If you decide to store more than 5 gallons of flammable liquids at your home, you need al least one (1) 2A10BC rated fire extinguisher, located no closer than 10 feet, and no further than away than 50 feet.
- Control of sources of ignition is mandatory! All transfer and dispensing of flammable liquids requires careful attention be paid to eliminating static spark discharge, and ignition of flammable vapors. Open flames and high temperature devices must be controlled and approved for use with flammable liquids. Also, smoking is prohibited in the storage area.
- Flammable liquids in the fuel tanks of vehicles do not count towards total home storage quantities.

#### **Common Questions & Answers**

- **Q:** Can I store emergency fuel containers inside my home, basement, and/or attached garage?
- A: No! Generally speaking, we ask that you only store emergency fuel containers in a detached garage or shed to minimize fire hazard. 2 or 3 1-gallon DOT rated containers for gasoline and 2-cycle fuel for general lawn maintenance in allowed in your attached garage.
- **Q:** Can I store as many containers as I want in my garden shed or unattached garage?
- A: No. Depending on the type of fuel (gasoline, kerosene, diesel, propane), you are allowed to store limited quantities of each type of fuel, in certain kinds and sizes of containers. See the following guidelines for each type of fuel.
- **Q:** What authority does the fire department have to tell me what I can & cannot do in my home?
- A: The legal authority comes from fire prevention related portions of the United States Code and local city and county ordinances. This really is a life safety issue. Also, your homeowner's insurance provider would like to keep the amount of flammable liquids stored at your residence to a minimum.