PITFALLS TO STORING GASOLINE

Submitted by Susie Rosoff.....From the Internet For December 2011 Spanner Newsletter

If you plan to refuel your cars from storage gas cans, you had better read this article first. If, on a long stretch of highway between your home and your destination, the unthinkable happens (like it did to me at the 2009 St. Patty's Day Rally!), and you run out of gas, you should heed the following recommendations on how to store your gasoline and diesel fuel properly.

No matter which season it is or what the current price of fuel is, it's important to have a supply on hand. You'll want fuel to run your car and/or generator. You'll also need propane, white gas, or kerosene to power your camp stove, gas grill, and maybe an indoor heater. You **will** need it and having it at home could protect you from having to get in a long line at a gas station and will possibly help you avoid a really bad situation.

All of that being said, improperly stored fuel can become a safety hazard. Many types of fuel, including gas, lose stability over time making them difficult to ignite. That means even if you store your fuel safely, if you don't take proper steps to ensure its long-term stability, you could just be storing canisters of useless liquid - liquid that will let you down when you need it most.

Okay friends of mine, here's the skinny:

- #1. <u>Do not store any inflammable liquids in your home or attached garage</u>. The reasons for this should be obvious. It needs to be in a well-ventilated shed or other outbuilding. Putting it into a shed helps protect it from direct sun exposure and from moisture due to weather conditions. By preventing solar heating, you slow the evaporation process. And, of course, you never want water or moisture in your gasoline.
- #2. Always keep a fire extinguisher near your fuel tanks. If the wiring in your outbuilding is not in a sealed conduit, you risk fuel vapors coming in contact with an electric spark. The reason for having the proper fire extinguisher is obvious as is the reason to use sealed conduit on your wiring.
- #3. <u>Make sure you always store fuel in a container designed for it</u>. Gasoline, for example, is corrosive to many plastics. Storing gasoline in a plastic drum that hasn't been rated for fuel storage will destroy the drum and render the gas useless.
- #4. <u>Make sure you mark your fuel containers with the name of the product inside</u>. The reasons for this is also obvious. You don't want to accidentally use gasoline in a diesel engine or put it into a propane or kerosene stove.
- #5. <u>Make sure your fuel is stored in watertight, airtight containers</u>. Excess moisture can ruin the performance of most fuels as well as gum up the engine. Although airtight, your container should have a vent valve to prevent a buildup of vapors. Most fuels evaporate quickly even at low temperatures and in Vegas, you could possibly lose your fuels over one of our long, hot summers.
- #6. Additives that will preserve your fuel longer. Did you know that gasoline will expire in a mere few weeks without added stabilizers? Propane on the other hand will last indefinitely. Check on the long-term storability of the fuels you plan to store and add stabilizers as needed. There are many options. A couple of the most common are Sta-bil and Pri-G (for gasoline) or Pri-D (for diesel). Diesel fuels also need to be treated with a biocide to keep anaerobic bacteria from ruining the fuel. Diesel is an organic fuel and provides an ideal environment for microscopic fungi, yeast and bacteria to feed & grow (without oxygen).
- #7. <u>Set up a rotation schedule</u>. The reasons for doing this are also obvious. If you start using your stored fuels regularly, you'll always have a fresh batch that will start your equipment just when you need it most. Of course, always refill the containers as soon as you empty them. I also suggest you mark a date on each canister when it was last filled and then change that date as you refill it.

There are many other ideas to consider when storing fuel. You can install a fuel storage system behind your pickup cab for extra gas and it's good to have it in place in case you must leave home in a hurry! Gas (and paint) should both be stored in their respective metal cabinets with doors. You should also shop around and store gasoline that doesn't contain ethanol. The ethanol gas is more prone to retain moisture as it sits and that will certainly gum up your engine later. Remember not to stock up on fuel and then ignore it. Safe fuel storage is like having a smoke alarm......you should test it once a month to make sure it's working; so, check your canisters frequently and make sure nothing is leaking. Only if you take care of your stored fuel will you be able to make sure it's there and will work when you need it. Be smart about it.

Also check on the legal issues of storing fuel at your home. The law will vary from state to state, county to county, city to city, regarding how much you can store and where you can put it. Contact the appropriate authority and ask for a list of regulations. Have a friend do this for you if you don't want to tip off authorities to your plans.

Susie......(From the Internet.)