MAFES Dawg Tracks

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Gasoline: Always a Risk

Some things, or situations, have been used so much that they become rote. We take so much of our work for granted because so much of it is repetitive, either weekly or by seasons. Herein lies the potential problem. We do some of these things so much that it's almost like a part of our lives. Gasoline use is one of these items.

Gasoline is a common commodity in our personal and business lives. We know how dangerous it can be, and for the most part, we remain cognizant of these dangers. Sometimes carelessness comes into play and therein lies the problem.

Would you store 20 sticks of dynamite in your basement or in a spare room or garage? I don't think so! But if you are storing gasoline in your home, you have that same potential as the dynamite. A gallon of gasoline (four liters) has the same explosive power as the dynamite. For a gasoline explosion, it takes only a small friction spark from a light switch, the flame of a pilot light, or static from socks coming out of a clothes dryer.

The danger in gasoline results from the vapors that can catch fire and explode. The vapors can travel a long way from the source; the fire will quickly burn back to the original source and BAM! – Results – the explosion.

Why is Gasoline flammable?

- It has a low flashpoint – it will burn at -45 degrees F. (-43 Celsius).
- It has a high vapor density (meaning that it is heavier than air) and will travel great distances along the ground, pooling in low and enclosed spaces.
- It is a mixture of hydrocarbons – a petroleum distillate fraction containing mostly saturated hydrocarbons, as well as other components, such as benzene, toluene and xylene. When it completely burns, the only byproducts are carbon dioxide and water. An incomplete burn yields hydrocarbons and additives, such as carbon monoxide and formaldehyde.

Guidelines for Safer Use and Storage of Gasoline:

- Gasoline should be only used for its designed purpose, a fuel. We should never use it as a solvent or a cleaning fluid.
- Gasoline should never be stored or used indoors or close to heat or a flame. It should also never be used or stored where the vapors can seep into basements or under buildings.
- Never use gasoline around a source of ignition, such as matches, lighters, cigarettes and many other sources.
- Never use gasoline to start or accelerate a fire.
- Fill equipment tanks prior to their use. Refuel engines only after the engine has been turned off and cooled down.
- If you have to transport gasoline in a vehicle, keep the container in the trunk and keep the trunk lid cracked for ventilation.
- If the fire does start while handling the gasoline, do not attempt to extinguish the fire or stop it from spreading. Leave the area immediately and call for help.
- Use caution when fueling automobiles. Do not get in or out while fueling. These incidents are rare, but an electrical charge on your body could spark a fire, especially during the dry winter months.
- Fill portable gasoline containers outdoors only. Place the container flat on the ground and never fuel it up in the trunk or in the back of a SUV or station wagon.
- Follow all manufacturer instructions when using a cell phone or other electronic devices (those with batteries or connected to an electrical outlet) near the gasoline.

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