



Small Engine Refueling Safety & Flammable Vapor Awareness

Refueling is a common activity and even though is a dangerous task people do become complacent when they are using gasoline. Every year the Excelsior Fire District responds to garage, shed, lawn mower, and other fires caused by vapors being ignited. Know how to be safe and protect your family and property.

Improper gasoline or diesel refueling of a riding lawn mower, push mower, weed trimmer, chain saw or small engine equipment can cause burns, fires, or explosions.

Diesel fuel does have a higher ignition temperature than gasoline; however the same safety tips do apply.

REFUELING SAFETY

- Follow the manufactures instructions.
- Follow the maintenance guidelines in the manufactures instructions.
- Check gas lines, hoses, and vales for leaks.
- Have an ABC 4.5 pound or larger fire extinguisher in an accessible location.
- Use an approved potable gasoline can or container for the fuel. Make sure it is clearly marked "GAS".
- When you are refueling keep a safety zone around you and the equipment. Tell kids and train pets to keep their distance when you are refueling.
- Keep your safety in mind when you are refueling equipment.
- Always concentrate on the task at hand. Do not try to complete other tasks while refueling, like using your cell phone.
- Never smoke, vaporizers, or use electronic cigarettes when refueling.
- Make sure there are no open flames or ignition sources in the area where you are refueling, tiki torches, barbeque grills, turkey fryers, candles, people welding or smoking.
- Follow manufactures instructions for refueling.
- Do not refuel in a building, garage, or shed.
- If possible refuel in an open area, away from buildings, decks, and combustibles.
- Refuel in an area with good air circulation.
- Turn off the engine and allow it to cool down.
- Chock the wheels if there is a possibility the equipment could roll.

- Use a plastic funnel.
- On hot days, allow room in the tank for the fuel to expand.
- Do not overfill the fuel tank.
- Do not top off the tank.
- Wipe up spills.
- Rags, towels, clothing, or any items that has been used to wipe up spills, absorb, or has been splash with gasoline should be laid out in an open space outdoors. Allow enough time for the vapor to evaporate before washing or discarding.
- Wash your hands and any area of your body that came in contact with the gasoline immediately after refueling. The benzene in gas can be absorbed through the skin.

WINTERIZING • REMOVING OLD GAS • EMPTYING THE FUEL TANK

- Follow the same safety tips for refueling.
- Place the can or container on level ground.
- Safely siphon out the fuel.
- Siphon into approved potable gasoline can or container.
- Never siphon into a potable gasoline can or container that is in the bed of truck or inside a vehicle.
- After siphoning, wipe off the container and ensure the cap is secure and the air vent is tight.
- If there are only small amounts of fuel left in the tank and you are going to let the equipment run out of gas, follow the same safety tips for as refueling.
- Never place equipment you are going to wait to run out of gas in a building, garage, or shed.
- Never leave the equipment you are waiting for to run out of gas unattended.

ADDITIONAL SAFETY TIPS

- Never use gasoline for anything other than its intended purpose, as a fuel.
- Never use it as a cleaning solvent or in the washing machine!
- When your children start using the lawn mower, weed trimmer or driving a vehicle, show them how to use gasoline properly, how to refuel safely, and make sure they understand vapors.
- Avoid prolonged inhalation of vapors as gasoline contains benzene, a known carcinogen.

VAPOR AWARENESS

- Liquid gasoline doesn't burn, it is the vapors it produces that can ignite into flames when they come in contact with open flames, sparks, or hot items like lawn mower mufflers.
- Gasoline is very volatile when changing from a liquid to a vapor and can ignite into flames in temperature as low as 45 degrees Fahrenheit.
- Gasoline vapors are denser than air, meaning these vapors will sink and collect in low spots in your yard, basements, drains, or the sewers system.

- Gasoline must be mixed with air before it can burn. Gasoline mixed with just a small amount of air can be ignited by a hot surface, a smoldering object, an open flame, or even a static spark.
- Gasoline that contains water still produces vapors.

Created: June 21, 2018