

# Preventing On-the-Farm Flammable Liquid and Gasoline Fires

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Gasoline, diesel fuel, propane gas, and degreasing and paint solvents are among the flammable materials found on most farms. Some household products also require care in use and storage. Basic safety precautions should be followed to avoid fires.

## Storing Fuels and Flammable Liquids

- Protect your fuel facilities so children cannot draw out any fuel. The facility should be off limits. Warn children sternly about playing with matches/lighters in all areas. Keep fuel cans out of reach, and never store fuel in food or drink containers.
- Locate above ground fuel storage tanks at least 50 feet from buildings and 100 feet from any public use borderline. If a tank is near a burning structure, it could explode and spread the fire. There is no specific separation distance requirement for underground tanks except that they are outside buildings.
- Fuel tanks and pumps should be located where passing farmyard traffic and wide equipment will not bump them.
- Gasoline storage tanks should be vented to minimize vapor loss and discharge vapors away from any source of ignition. The venting system should meet the NFPA 54, National Fuel Gas Code recommendations by the National Fire Protection Association.
- Store small quantities of gasoline and other flammable fuel in labeled safety containers. Do not risk confusing diesel fuel and gasoline. Paint gasoline cans red and diesel cans green. Store cans in a cool, well-ventilated place, away from living quarters and ignition sources.
- Do not use gasoline, benzene, naphtha and similar products for cleaning or degreasing agents. You can buy much safer products formulated for these types of jobs, such as vegetable oil and synthetic based solutions.
- When refueling, turn off the engine and extinguish smoking materials (NO SMOKING). Allow the engine to cool down. This is especially important if the fuel tank is mounted near the engine and a fuel spill could come in contact with the engine. Remove the tank filler cap slowly and allow the pressure to dissipate. This is a particularly important step if you are using Gasoline and the tractor's tank is located above or just behind the engine. Due to engine heat or a hot day vapor pressure could build up in the tank. If the cap vent is clogged or bent closed, fuel can erupt from the tank when the cap is removed. Never use a non-standard cap and keep the vent clean and open.

- Large propane storage tanks should be at least 50 feet from the nearest building and 20 or more feet from other aboveground fuel tanks. Household 'bottled gas' tanks should be at least 3 feet from a window or door and at least 6 feet from a lighting rod. Do not allow children to climb on or play around propane tanks.
- Provide and maintain a solid foundation to support propane gas tanks so they will not settle, tip, break or damage connections. Also anchor tanks securely to the supporting base if flooding of the area is prevalent.
- Be alert for leaks in the propane gas system. Protect gauges and regulators from weather and dirt. If you smell gas, turn off the valve(s). Open windows and doors to ventilate the building. Do not switch on any electrical equipment. Get everyone out. Immediately call a repairman to find and fix the trouble.
- Read container directions on all products. Note warnings concerning flammability and safety precautions.
- Store flammable products in their original containers, in a cool place, and out of the sun. Keep the caps on tightly. Dispose of or store used cleaning rags in a closed metal container.
- Control static electricity and sparks. Ground electrical equipment and keep switches, motors and connections in good condition to reduce sparking and arcing. Do not use grinders, welders or other spark-producing tools near flammable materials or where vapors are present.

For household hazardous waste information please contact the Outreach and Extension Household Hazardous Waste Project (417) 889-5000.

For additional information, contact your local Outreach and Extension Center or the MU Extension Rural Safety and Health Program at 1.800.995.8503.

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