

FARM FIRE SAFETY SHEET



FIRE SAFETY REMINDERS

FLAMMABLE LIQUIDS AND GASES

Gasoline, diesel fuel, LP gas, degreasing solvents, paint solvents, and certain paints are among flammable materials found on most farms.

Keep these flammable materials away from open flames and motors that spark.

Clean up spills right away and put oily rags in a tightly covered metal container.

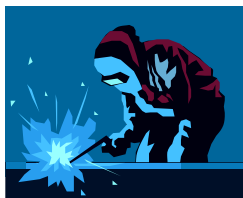
Store flammable liquids in approved containers, in well-ventilated areas away from heat and sparks.

Be sure all containers for flammable liquids are clearly and correctly marked.

Do not keep gasoline inside the home or transport it in the trunks of automobiles or recreation vehicles. If gasoline must be transported, carry only a small amount in a labeled safety can on the floor of the back seat. Roll down the windows so moving air can sweep away vapors.

HOT WORK

Never do cutting or welding work alone. Always have someone on hand to put out a fire before it can get out of hand.



Watch for molten metal. It can ignite flammables or fall into cracks and start a fire that might not erupt until hours after the work is completed.

Use portable cutting and welding equipment in clean areas. Keep flammables at least 35 feet from hot work area.

Be sure tanks and other containers that have held flammable liquids are completely neutralized and purged before you do any work on them.

REFUELING

When refueling, turn off engine and extinguish smoking materials.

Remove fuel cap slowly and allow pressure to dissipate.



If engine is hot, allow it to cool for a few minutes.

Avoid over filling. Allow any spilled fuel to evaporate before starting the engine.

Refuel small equipment outside -- never in an enclosed area. A funnel will make the job easier when using a safety can.

Only fill portable gasoline containers outdoors. Place the container on the ground before filling and never fill containers inside a vehicle or in the bed of a pick-up truck.

FLAMMABLE OR COMBUSTABLE MATERIALS

If at all possible, hay, straw and other types of bedding should not be stored in the same building in which livestock is housed. Care should be taken that these materials are not stored with machinery or near any type of electrical or heat source.

LIGHTNING PROTECTION

Buildings should be equipped with professionally installed lightning rods of copper or aluminum.

The system should be properly grounded.

All pipes, water systems, electrical systems and telephone lines should also be grounded.

Contact a professional company for proper maintenance and installation.

FIRE EXTINGUISHERS

ABC (all class) dry-chemical fire extinguisher should be in all livestock buildings, workshops, garages, or wherever welding is done.

Extinguishers on the farm should be 10 lb in size.

Even if a unit is partially discharged, the extinguisher must be replaced or recharged.



A fire extinguisher should be hanging at all exterior doorways, in the middle of long aisles, and in the milk house.

Signs denoting placement of fire extinguisher should be highly visible.

SMOKE ALARMS

In the event of a fire, a smoke alarm can save your life and those of your loved ones. They are the single most important means of preventing fire fatalities by providing an early warning signal -- so you and your family can escape.

Smoke alarms need to be properly installed, maintained and replaced when needed to be effective. Install smoke alarms on every level of your home, including in side the bedrooms and the basement.

Smoke alarms don't last forever. Smoke alarms need to be Replaced every 10 years.

Many hardware, home supply or general merchandise stores carry smoke alarms. Make sure the alarm you buy is a photoelectric style that is AC powered with a battery back up and is UL-listed. If you need additional assistance call your local fire department (on a non-emergency telephone number) and they will provide you with some suggestions.

A variety of fire detection and warning systems are also available for barns.

ELECTRICAL SYSTEMS AND DEVICES

Electrical systems in barns, especially in older structures, are often the cause of a barn fire. The following safety precautions should be taken when installing a new system or repair of an older electrical system.

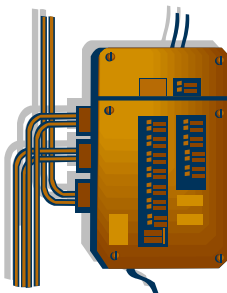
Avoid areas of excessive moisture for the location of the main electrical panel box.

Place panel box in the driest, most dust free area as possible. (Stall areas are not recommended). Panel box should be corrosive resistant and weather-proofed even if installed inside a building.

Outlets and switch boxes should be made of metal and have a dust and water tight spring-loaded covers that close when released.

Wires should be encased in metal conduit pipe. Even temporary wires should be run through conduit pipe to keep the wires safe from breakage and away from the teeth of horses, livestock, rodents and metal shoes of horses.

Light fixtures for fluorescent lights should have dust and moisture resistant covers. Incandescent bulbs should have globe with seals that are dust and moisture proof, and surrounded by a cage to prevent accidental breakage.



Motors - such as the type used for circulation fans, water pumps or hay elevators should be designed for agricultural use and be moisture/dust proof. Motors should not be within 18 inches of any combustible material (hay, bedding).

Any appliances or electric fence units used in the barn should be UL approved and grounded. An appliance with broken, frayed cords or bent plugs should not be used until properly repaired.

All appliances should be disconnected when not in use.

Older portable heaters should not be used in the barn area. Many of these heaters do not contain safety devices which prevent overheating.

Do not place portable heaters near livestock where they may be knocked over. Make sure heaters have a shut-off device that activates if the unit is knocked over.

Improperly utilized heat lamps are a major source of barn fires. They are often placed too close to hay and bedding which may ignite quite easily from the heat.

Never use extension cords with heat lamps.

Heat tapes and water tank heaters must have a thermostat and be UL listed. Tapes and tank heaters should be installed and used following manufacturer's instructions.

Heat tapes and tank heater cords should be adequately protected so that animals (horses, livestock, cats, dogs, rodents) cannot easily chew through them causing electrocution, electrical shocks or a barn fire.

BARN CONSTRUCTION OR RENOVATION

When constructing or renovating an agricultural building precautions should be taken to reduce the chance of barn fires.

Many insurance companies will lower premiums if extra safety precautions are taken during the construction of a new building, some of which may be above and beyond the standards required by local codes.

Check with your insurance company regarding which features will possibly lower your insurance premiums. Extra measures may include:

- Approved fire doors.
- A fire wall between hay/bedding storage and the actual stabling area.
- Use of materials that are flame retardant or fire resistive.
- Use of fire retardant latex paint - preferably two coats.
- Installation of smoke detectors, fire alarm and sprinkler systems.
- Trickle-charged battery powered emergency lighting to permit evacuation of people and animals in case of power failure.
- A water source on the premises, especially a pond will help the fire department to save buildings. Remember to have the water source properly fenced to keep unwanted visitors out.



HOUSEKEEPING

Shops, garages, machine sheds and barns often are cluttered with unnecessary accumulations of items that can add fuel to a fire.

Often, these items are located near sources of ignition. Large amounts of unneeded items that will burn, such as papers, clothing and straw, should be kept away from heat.

Arrange shops and barns so that flammables are safely away from ignition sources. A little rearranging could reduce fire risk considerably.

SMOKING

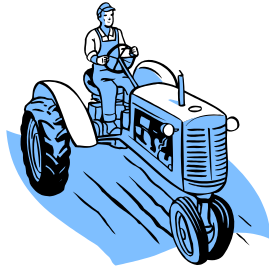
Cigarette or cigar smoking causes many fires in the United States each year.

Post and Obey "No Smoking" signs in the barn.

Keep matches, lighters and lighter fluids away from small children.

FARM MACHINERY

Common causes of tractor and machinery fires include defects in the fuel or ignition systems, improper method of refueling, smoking and matches, over-heated engines, sparks from exhaust and friction.



Refuel with care. Watch for and repair leaks in fuel lines, carburetors, pumps and filters.

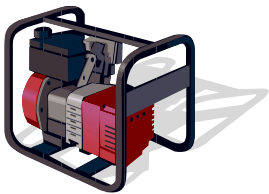
Keep exhaust systems in good condition to avoid sparks.

Keep engines properly tuned and timed to avoid backfiring.

Keep machinery properly lubricated to minimize friction.

EMERGENCY GENERATORS

Always consult and follow your operator's manual. All generators operate differently and have safety and maintenance requirements.



Use only in areas that are well ventilated, away from children and pets, and away from air intakes to the home. Always keep your generator clean and free from dirt and dust.

Do not install a generator to the main power supply unless you have a special disconnect switch. This switch must be installed by a qualified and licensed electrician.

Carbon monoxide (CO) alarms should be installed in areas where people sleep.

FIRE EMERGENCY PROCEDURES

Design a fire safety plan. Review the plan with all family members and employees and update your plan regularly to accommodate changes to the buildings, livestock or employees.

When a fire breaks out in a house or a farm building, human safety must be your first priority.

If you decide to evacuate animals, don't become trapped. Always have a good escape route and keep in mind that if there is significant fire or smoke within the building, the danger is generally too great to risk your own life.

Normal exits may be blocked; therefore, it is essential that emergency exits exist. Doors and windows should be closed when escaping a fire, failure to do so may cause air drafts which can fan the fire.

Call the fire department immediately. Give your name, address, and the exact building or location of the fire.

Make sure everyone follows the rules: Ensure anyone visiting or working on the property learns and obeys the fire safety rules.



MORE SAFETY REMINDERS

Keep all equipment used for petroleum storage and handling in good condition. Watch for leaks, deterioration or damage. Make needed repairs or replace faulty components immediately. Keep cap vents clean and free, and tank and safety can pressure-relief valves functional.

When servicing machinery, check the fuel system for leaks. Double check connections to be sure they are secure and leak-free after changing fuel filters or performing other work requiring disconnecting or removing a fuel line or fuel system component.

Turn off portable heaters before refueling. Make sure the filler cap is replaced and tightened. Set portable heaters away from combustibles where they cannot be tipped over.

Motor oil and grease are considerably less flammable than engine fuels, but they will burn. Keep them away from ignition sources.

Do not store vehicles and machinery in the barn. Aisles should be raked or swept clean of hay and bedding. Vacuum up cobwebs and dust regularly. Wipe dust/dirt off light fixtures, outlet covers, switches and panel boxes.

Hay/bedding storage should not be near lights, fans, electrical boxes, heaters or outlets.

Weeds, twigs, and other trash should be kept mowed or picked up from around the outside of the barn.

Aboveground LP storage tanks having the capacity of 2,001-30,000 gallons should be at least 50 feet from the nearest building and 20 or more feet from other aboveground fuel tanks. Provide and maintain solid foundations to support LP-gas tanks so they won't settle or tip and break or damage connections.

Be alert for leaks in the LP-gas system. Protect gauges and regulators from weather and dirt. If you smell gas, turn off valve(s) at the tank(s). Open windows and doors to ventilate the building, and don't switch on/off anything electrical. Get everyone out and call the fire department.



The USDA is an equal opportunity employer.

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WARNING

**Before you use a fan,
portable heater or heat lamp
in your barn,
be absolutely certain
it is designed for
Agricultural or Industrial use.**

**The fire risk is extremely high
when residential products
are used in barns**



Produced by

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