

# MAFES Dawg Tracks



October 29, 2007

Fire Safety in  
Agriculture



We all know that farm fires cost lives and many dollars each year. The leading cause of farm fires is from welding and equipment, static electricity, sparks, friction, bonfires, and candles. Other natural causes of farm fires fall in two categories...spontaneous combustion and lightning.

## HOW FIRES BURN -

Fires need three things to burn:

- Fuel –Something to burn
- Air – Oxygen
- Heat – Something to set it off

If we prevent one of these from entering the picture, then we can reduce the potential for fire.

## KNOW YOUR FIRE EXTINGUISHERS -

Fire extinguishing equipment can be classified as portable or fixed. Portable extinguishers are more practical for farm use. Type ABC extinguishers are recommended for agriculture use, as they are intended for use in A, B, and C types of fires.

## FOUR BASIC FIRE CLASSES -

- **Class A** - Includes combustibles such as wood, fabric, or paper textiles, where a quenching, cooling effect is required.
- **Class B** – Includes flammable liquids, gasoline, oils, and fats; paints where oxygen exclusion or flame interruption is appropriate.
- **Class C** – Includes live, electrical wiring, motors, and appliances, where non-conductivity of the extinguishing agent is crucial.
- **Class D** - Includes combustible materials, such as magnesium, sodium, and potassium.

## CONTROLLING FIRE HAZARDS -

- Cut down the weeds and brush around buildings.
- Make periodic checks for dust, lint, feathers, or other potential combustibles on the inside of the buildings.
- Store surplus or unneeded items that will burn away from heat.
- Arrange shops and barns so that the flammables are away from ignition sources.
- Make sure that fuse boxes or circuit breakers, outlets, enclosed motors, and other similar equipment are kept clean and maintained.
- Periodic checks for wiring, exposed wiring on electric motors and appliances, incorrect installations, or broken insulation.

## MINIMIZE SITE HAZARDS -

- Clean up oil/fuel spills immediately.
- Keep flammable liquids in approved and clearly marked containers in well-ventilated areas away from heat and ignition sources.
- Above ground fuel tanks should be at least 40 feet away from buildings.
- Store compressed gases in upright cylinders and secure to a wall or buggy to prevent them from tipping over and also away from heat sources.
- Keep the different types of gases separated and also separate full and empty containers. Empty containers should be secured as well. All compressed gas cylinders should be labeled as to their contents.
- Check for leaks in fuel lines, carburetors, pumps, and filters.
- Be extremely careful when refueling equipment; both large implements and small appliances as well. Fuel spills around hot engines present a high-risk fire hazard.
- Check that exhaust systems on large implements and small appliances are in good repair. Many fires are started through faulty exhaust systems.

## HOT WORK -

- Anytime welding or working with cutting torches is being done, a fire extinguisher should be in the close proximity of the equipment for quick access.
- Be careful to keep flammable materials away from the cutting and welding areas. Hot metal from sparks or drops can cause a fire quickly. Flammables should be at least 35 feet away from the “hot” areas.

## SPONTANEOUS COMBUSTIBLES -

- Be careful with oil soaked rags; keep them in a well-ventilated area and separated as much as possible. Some materials under various heated conditions will ignite.
- Avoid storing wet hay and check for warm spots on stored hay. If hay reaches 175 degrees, it should be moved and separated into smaller stacks, as it has the potential to ignite.

**WORK SAFE TODAY –  
~LET HEAVEN WAIT~**

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Excerpts: [www.cdc.gov/nasd](http://www.cdc.gov/nasd)

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### DO:

- ~Avoid clutter of flammable materials
- ~ Install smoke detectors in buildings
- ~Check for leaks or deterioration in fuel storage tanks
- ~Keep areas around buildings free of brush and debris
- ~Maintain a hygiene program for the inside of all buildings

### DON'T:

- ~ Store fuel in food or drink containers
- ~Refuel engines while they are hot or running and inside of buildings
- ~Store compressed gas cylinders close to heat or ignition sources.
- ~Store wet hay
- ~Allow straw and other debris to collect around manifold systems.