

MAFES Dawg Tracks



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Burning Problem: Combine & Tractor Fires



Fires in any situation are horrible experiences. Somehow in our culture or thinking, we often times take for granted that fires happen at other places and to other people, but not in our environment or situation. This is pure false security, and if you have ever had the experience of going through a fire, you won't forget it. You will forever be conscious of that possibility. Hopefully, we won't have to experience fire losses in our personal lives.

We try to impress on all areas that we should never get complacent with fire protection, but we should always remain cognizant that these catastrophes can happen and keep all parties alert to all means of protection to avoid a fire incident.

Combine and tractor fires in the USA annually cost over \$20 million in pure equipment losses and millions more in lost time and crop losses. Fires not only cause huge losses in equipment, time lost and crop losses, but also in personnel injuries. Each year there are 40 to 50 serious injuries and occasionally we hear of a fatality as the result of an equipment fire.

There are two keys to preventing disasters related to combating equipment fires:

- **PREVENTION**
- **PREPARATION IN CASE A FIRE DOES BREAK OUT**

MACHINERY FIRE PREVENTION -

Three things must happen for a fire to occur. Fires must have air, material to burn and a source of heat. It is impossible to eliminate air from around equipment or buildings for that matter. So, it becomes critical that in our prevention procedures or practices that we should endeavor to keep all the equipment as clean as possible and free of debris that might fuel a fire. Also, we must work to eliminate all the possible heat sources that could fuel a fire.

CLEANLINESS AND MAINTENANCE -

Statistics show that approximately 75% of all equipment fires start in the engine and engine compartment areas. A good maintenance program for equipment hygiene should include:

A daily time allowance for cleaning the equipment after each day's harvest, bush hog jobs, hay cutting, etc. should be installed, if a program isn't already in effect. Dry debris from the above jobs makes a potential fire hazard if it is allowed to remain on the equipment. This will enable the equipment to run cooler, smoother and also increase the life of the machine, in addition to reducing the chance for a fire hazard.

- A part of a good hygiene program should include checking belts, guards and shields to remove the residues as well.
- The daily maintenance should also include checking fuel and oil lines for leaks or breaks.

ELIMINATION OF HEAT SOURCES -

- The exhaust system is the most common source of heat in combines and tractors. Be sure to make frequent checks on the muffler, manifold and turbocharger for leaks, and that they are in good repair.
- When you are performing the first echelon maintenance each morning, look around for faulty wiring, abrasions on wiring or signs of deterioration
- Check the belts, bearings and chains for extreme wear. Ball bearings can become extremely hot from friction and wear, as do belts, and both can cause an ignition and start a flame.

BEING PREPARED -

Despite good preventive programs and our best intentions, an equipment fire can and just might occur. The best protection is to have the machines equipped with (2) 10 lb., Type ABC fire extinguishers, one with cab access, one for ground access; and for tractors equip them with (1) 5 lb., Type ABC extinguisher. The extinguishers should be UL approved and should be inspected annually to guarantee that they are performance ready.

If there is a fire, shut down the engine, grab the extinguisher and call for help.

**PREPARE & PREVENT
INSTEAD OF
REPAIR & REPENT!!**

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Excerpts: www.cdc/nasd/umes

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