Fire Prevention

While fire prevention is a very broad subject, listed below are only some general precautions and areas to be aware of that are commonly encounter at MSU. Mississippi State University is subject to the International Fire Code as adopted by the Mississippi Department of Insurance State Fire Marshal's Office.

Extension Cords

- Extension cords are not to be substituted for permanent wiring.
- Use appropriately sized extension cords.
- Extension cords should never be run through walls, above ceiling tiles, or under carpet/rugs.
- Extension cords must be plugged directly into an approved receptacle, not a power strip.

Multi-plug Adapters

- Cube adapters, unfused power strips, or any other device not approved must not be used.
- Power strips that are UL listed (marking on the power strip) can be used. Power strips must be plugged directly into a receptacle – NOT another power strip or an extension cord.

Storage

- Storage of materials must be orderly and in stable stacks.
- Do not allow combustible waste materials to accumulate in buildings, structures or on the premises.
- Combustibles should not be stored under/in stairways, in mechanical/electrical rooms, egress pathways, or exits.
- Storage must be maintained 2 feet below the ceiling in nonsprinklered areas, or minimum of 18 inches below sprinkler head deflectors in sprinklered areas.
- Chemical and flammable liquid storage requirements are to be based on quantity by fire zone, segregated by type, and other items as noted in its safety data sheets. Storage may include special containers or storage cabinets.

Portable, Electric Space Heaters –

See MSU policy 95.502 https://www.policies.msstate.edu/policy/95502

- All portable, electric space heaters utilized must be Underwriter's Laboratory (UL) labeled.
- Never operate a heater you suspect is damaged.
- Position a minimum of 3 feet from any combustible material. Keep combustible material such as beds, sofas, curtains, papers, and clothes at least 3 feet from the front, sides, and rear of the heater.
- The heater must never be left unattended. It must be unplugged, not just turned off, anytime you leave your work area.

Keep Equipment Clean

- Harvesters, cutters, mowers, conveyors and other such equipment should be cleaned off daily to prevent accumulation of a fuel source should a fire start from component failure or other incidents. The same is true for tractors, vehicles, UTVs, ATVs, and other rolling stock that may accumulate debris in skid-plates, undercarriage, or around exhaust and other heat producing areas.

Spontaneous Combustion

- Oily Rags: Carbon-based animal or vegetable oils, such as linseed oil, cooking oil, cottonseed oil, corn oil, soybean oil, lard and margarine, can undergo spontaneous combustion when in contact with rags, cardboard, paper or other combustibles. A common example is with linseed oil used to finish wood, including some exterior deck sealers and wood stains. . Heat is generated during the drying process and therefor a pile of oil-soaked rags act as an insulator, allowing the oxidizing oil to become hot enough to cause the cloth to smoke and eventually ignite. The bigger the pile, the greater the possible heat and the greater the risk. Petroleum based oils like motor oil, grease, diesel & gasoline on rags are not a concerns for spontaneous combustion (although don't forget to keep them away from sparks).
    - ✓ Large quantities of oily rags should be dispose in an approved enclosed, metal container to await pickup by an industrial cleaning company.
    - ✓ When you have a single or small amount of oily rags, allow the rags to dry before disposal. Spread the soiled rags in a single layer outdoors on concrete or a metal rack to prevent the buildup of heat and allow the rags to become hard and brittle. Place the rags out of direct sunlight and secure the corners to prevent movement by wind. Once dry they are safe for disposal.
- Hay: The principal way to avoid fire is to bale hay at proper moisture levels. Hay in round bales should contain no more than 18% moisture when placed inside a barn, while hay in small rectangular bales should contain no more than 20% moisture.
    - ✓ Whether stacked in the field or placed in a barn, new hay should be checked frequently for possible heating. At first, check in the morning and afternoon. If no signs of abnormal heating are found, the intervals may be lengthened. If the temperature reaches 130°F, move the hay to allow increased air circulation and cooling.
    - ✓ Protect the bales from ground moisture and runoff by placing them on a bed of gravel, old tires, poles or pallets. If storing hay inside, be sure the barn roof and any plumbing do not leak. Likewise, provide adequate drainage so water will not enter the barn during storms. Hay may be at the proper moisture content when baled and stored, but wetting from a leak can allow bacterial activity to increase and result in a fire.

Hot Work

Hot work is any operation that involves open flames or sparks or produces sufficient heat to ignite flammable or combustible materials. Examples of hot work includes, but is not limited to: cutting, welding, soldering, brazing, grinding, thawing pipe, and torch applied roofing.

A fire watch shall be provided during the hot work activities and shall continue for not less than 30 minutes after the conclusion of the work. The fire watch shall include the entire hot work area. Individuals designated to fire watch duty shall have fire-extinguishing equipment readily available and shall be trained in the use of the equipment. Individuals assigned to fire watch duty shall be responsible for extinguishing spot fires and communicating an alarm. The individuals responsible for performing the hot work and individuals responsible for providing the fire watch shall be trained in the use of portable fire extinguishers.

A pre-hot-work check shall be conducted prior to work to ensure that all equipment is safe and hazards are recognized and protected. A report of the check shall be kept at the work site during the work and available upon request. The pre-hot-work check shall determine all of the following:

1. Hot work equipment to be used shall be in satisfactory operating condition and in good repair.
2. Hot work site is clear of combustibles or combustibles are protected.
3. Exposed construction is of noncombustible materials or, if combustible, then protected.
4. Openings are protected.
5. Floors are kept cleaned.
6. No exposed combustibles are located on the opposite side of partitions, walls, ceilings, or floors.
7. Fire watches are assigned.
8. Fire extinguishers are operable and available.

If hot work is to be conducted inside a building on the main campus, contact the EH&S department for a hot work permit.
https://www.ehs.msstate.edu/forms/hot-work-permit-request-form

Open Burning

Always notify the proper authorities – Calling the fire department, city hall (for guidance when inside city limits), campus/local law enforcement officials, and/or forestry office non-emergency phone at these offices will help you contact the correct person. A burn permit may be necessary in some circumstances. Notifying your close neighbors is also a good practice.

Burning Permits are required for any fire set for a recognized agricultural and/or forestry purpose, these are issued by The Mississippi Forestry Commission based on the daily fire weather forecast. Contact the appropriate MFC district office to obtain a permit. https://www.mfc.ms.gov/burning-permits

Important Steps to Prevent Wildfires from Open Burning:

- ✓ Check the conditions. Don't burn when windy or vegetation is dry.
- ✓ Check local regulations.
- ✓ Burn this, not that … Most places allow burning of dry, natural vegetation grown on the property. Household trash, plastics, or tires are not good to burn and even illegal to burn in some areas.
- ✓ Look up … Choose a safe burning spot away from power lines, overhanging limbs and buildings. You'll need at least 3xs the height of the pile of vertical clearance.
- ✓ Look around … Burn site should be surrounded by gravel or dirt of at least 10 ft. in all directions. Keep the surrounding watered down and have a shovel close by.
- ✓ Prepare your pile … Keep it small and manageable. Add additional debris as the fire burns down.
- ✓ Have a cell phone within reach to request help quickly in case of an emergency.
- ✓ Have a contingency plan in case the wind shifts, the fire gets out of control, someone gets injured, equipment breaks down, or smoke creates severe visibility problems.
- ✓ Stay with the fire until it is completely out … Drown the fire with water, turn over the ashes with shovel, and repeat to ensure it's put out completely.

Should there be a fire …

1. **ACTIVATE** the building alarm system or notify the fire department by calling 911.
   Or, have someone else do this for you.

2. **ASSIST** any person in immediate danger, or those incapable on their own, to exit the building, without risk to yourself.

3. (Only after these two are completed should you) **ATTEMPT** to extinguish the fire.

Only fight a fire if:

- ✓ The fire is small and contained.
- ✓ You are safe from toxic smoke.
- ✓ You have a means of escape.
- ✓ Your instincts tell you it's OK.

When it is time to use the extinguisher on a fire, just remember **PASS!**

1. **Pull** the pin.
2. **Aim** the nozzle or hose at the base of the fire from the recommended safe distance (about 10 feet).
3. **Squeeze** the operating lever to discharge the fire extinguishing agent.
4. **Sweep** the nozzle or hose from side to side until the fire is out. Move forward or around the fire area as the fire diminishes. Watch the area in case of re-ignition.