

SPONTANEOUS COMBUSTION ON THE JOBSITE

What is spontaneous combustion?

Spontaneous combustion occurs when materials self-ignite due to chemical reactions or heat buildup. Fires can spread rapidly on construction sites, potentially destroying all materials and property. It is important to be aware of susceptible materials and other common causes, and what can be done to help prevent these unexpected fires.



Common Causes

- **Oily rags** – Oils can oxidize in cloth, generating enough heat to ignite. Both wet and dry fabrics are at risk and become increasingly at risk while drying.
- **Chemical reactions** – Incompatible chemicals and materials can set fire when in contact.
- **Heat from equipment** – Overheated equipment can set fire to nearby flammable items.
- **Electrical work and temporary wiring** – Improper or overloaded wiring can cause fire.
- **Hot work** – Hot work areas and materials can ignite surrounding combustible debris.
- **Wood chips, bark mulch, and sawdust** – Inadequate ventilation in storage areas can lead to heat buildup in wood byproducts and can result in a fire.

Loss Prevention Tips

- Store flammable materials such as wood chip and sawdust in small well-ventilated, areas. Try to avoid storing materials in or around buildings or equipment.
- Spread out oily rags away from combustible materials when drying, or store oily rags in FM compliant metal containers with lids.
- Have a professional hazardous waste removal service handle disposal of oily rags and utilize a professional laundering service for reusable rags.
- Keep work areas clean and free of debris.
- Shut down and unplug equipment when finished using and allow time for equipment to cool before leaving the jobsite.

Conclusion

- Train all workers proper material storage and housekeeping practices, how to spot and report fire hazards, and emergency procedures to follow in the event of a fire.
- Walk through the jobsite to look for and address any potential hazards before closing for the day.
- Hire professionals to help dispose of flammable hazardous materials.
- Always be prepared for an emergency and have fire extinguishers readily available.

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Training Sign-In Sheet

Organization: _____ Date: _____

Trainer: _____ Trainer's Signature: _____

Class Participants:

Name: _____ Signature: _____

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