



Weekly Safety Meeting

The 3 “C”s of Combustible Dust

Combustible dust is finely separated or divided dust that poses a fire or explosion hazard when suspended in air in the right concentrations. Even some materials that would not normally burn can burn in dust form. The particles must be small enough to float in the air, and the material must be able to burn and create heat to be defined as combustible dust. The particles can be set off by an oxidizing medium, or the presence of oxygen.

Combustible dust hazards can be found in a variety of industries and processes from agriculture to manufacturing. Many kinds of materials can be explosible in dust form, including food products such as candy, sugar, spice, starch, and flour; animal grain and feed; tobacco; wood, paper and pulp; plastics; metals such as aluminum, chromium, iron, magnesium, and zinc; rubber; dyes; coal; and pharmaceuticals.

The 3 “C”s of Combustible Dust

To avoid incidents, the dust must be controlled through three steps: Capture, Contain, and Clean.

Capture

First, the work facility should have adequate dust collection systems to keep the dust from entering into work areas. These systems must be properly designed, approved, and maintained.

Contain

Second, equipment should be in operation that contains the dust within safe confines, whether that be a room or bag. However, whatever containment unit is used must be safe to hold and store combustible dust.

Clean

Work areas, overhead surfaces, and concealed spaces should be cleaned frequently. This is considered regular housekeeping to keep the dust to a minimum. If there is a lot of dust to be cleaned daily, steps should be taken to improve the capture and containment systems.

Workplace Precautions

Employers should be aware of the presence of combustible dust in the workplace and determine if it is explosible. If so, they should have an incident action plan and provide safety training to employees to be prepared for an emergency incident.

Employers should take precautions to protect workers from flash fires and explosions. And, in case an incident occurs, the proper class of fire extinguisher and extinguishing agent (dependent on the explosible material) should be readily available. Powered equipment and tools should not introduce sources of ignition (heat or flame) around the dust. Power should be able to be turned off locally or at the breaker in case of an emergency.

Workers must be protected not only from combustible dust flash fire and explosion hazards, but also from breathing particulate matter. For workers' health and safety, they should also wear masks, depending on the hazard.

CAPTURE, CONTAIN, AND CLEAN...TO PREVENT COMBUSTIBLE DUST!

Safety Meeting Sign-In Sheet

Supervisor:	Subject:
Location:	Date:
Conducted By:	Trainer Signature:

Name (print clearly)	Signature	Comments / Safety Concerns / Training Requests