WORK SAFE BC

**Toolbox Meeting Guide** 

# Combustible wood dust: awareness and controls

Be aware of the potential for a combustible wood dust fire or explosion in your workplace.

If combustible wood dust collects in a building or structure or on machinery or equipment, it must be safely removed before built-up dust could cause a fire or explosion.



If a high concentration of wood dust becomes airborne and contacts an ignition source in a contained area, an explosion will likely occur.



WorkSafeBC Prevention Information Line: 604.276.3100 or toll-free 1.888.621.SAFE (7233)

Your employer should provide you with education on the following:

- Details of the company's combustible wood dust control program
- Processes in your workplace that use or produce combustible wood dust
- Areas in your workplace where combustible wood dust can build up
- Hidden areas where wood dust may build up (e.g., on rafters, in enclosed areas, underneath structures, in cable trays, and behind equipment)
- How combustible wood dust is dispersed in the air
- Potential fuel sources other than combustible wood dust (e.g., grease and hydraulic fluid used to power lift cylinders)
- Potential ignition sources, such as the following:
  - Production and maintenance equipment and machinery
  - Hot work (e.g., welding, grinding)
  - Hot surfaces (e.g., steam pipes)
  - Friction (e.g., seized/overheated bearing[s], hot motors, sparks)
  - Heating equipment
  - Electricity
  - Smoking
  - Static electricity (e.g., ducting not grounded and bonded)

#### How to spot an explosion in the making

If you spot a scene like this, report it immediately...



A handful of fine wood dust can be enough to fuel an explosion. All it takes is about 3 mm (1/8 in.) of built-up dust, covering as little as five percent of the surface in a contained area.

Or, if you see something like this...



If wood dust contacts a heat source in a contained area, there is a high risk of explosion. Report this hazard to your supervisor immediately.

### Controlling the hazards of combustible wood dust

You must be trained in applicable safe work procedures that relate to safely managing combustible wood dust. These procedures may include the following:

- Cleaning and maintenance of machinery and equipment. These items could be ignition sources or fuel sources or both.
- Safe cleaning methods that do not send clouds of wood dust into the air. Examples include the following:
  - Appropriate vacuum systems for dust collection
  - Washing with water or wet rags
  - Using soft bristle brooms on telescopic poles to clean high areas
- Hot work procedures.
- Other applicable safe work procedures such as the de-energization of equipment, fall protection, and use of proper PPE.
- Compressed air should only be used as a last resort. It should only be used in localized or isolated areas. To avoid sending clouds of combustible wood dust into the air, do not use compressed air to combine dust piles or clean open areas.

Remove built-up wood dust from accessible surfaces after every shift or as directed by your supervisor.

If you see a buildup of wood dust in your workplace, report it to your supervisor or employer immediately. A handful of fine wood dust can be enough to fuel an explosion. All it takes is about 3 mm (1/8 in.) of built-up dust, covering as little as five percent of the surface in a contained or enclosed area.

For more information on how to work safely around combustible wood dust, ask your supervisor or employer.



Work areas must be kept clear of wood dust buildups.

Project					
Address		City		Province	Postal code
Employer		Supervisor			
Date (yyyy-mm-dd)	Time		Shift		
Number in crew		Number attending			

## Other safety issues or suggestions made by crew members

#### Record of those attending

Name (please print)	Signature	Company
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		
11.		
12.		
13.		
14.		
15.		

Manager's remarks	
Manager's signature	Supervisor's signature