

Clean-up of hazardous combustible dust

Wood dust is a combustible dust. If the dust is disturbed and a sufficient amount becomes air-borne and a source of ignition is present, then the dust may explode. Uncontrolled cleaning activities may generate a dust cloud that could explode.

In order to clean safely, use cleaning methods that do not generate dust clouds, especially in confined areas where ignition sources (flames, sparks, and static electricity) are present. These cleaning methods would include:

- Vacuuming, using a vacuum approved for dust collection
- Water wash or wet rags (do not use water near live electrical equipment). First apply a water mist and then increase the flow to a high velocity water stream. Be cautious not to plug the drain piping.
- Soft bristle brooms on telescopic poles (to clean high areas)
- Compressed air should only be used as a last resort and then, only in localized or isolated areas. Compressed air must not be used to consolidate dust piles or clean open areas. Cleaning must occur in a way that minimizes the amount of dust that is dispersed into the air and the nature of the dust and its combustibility needs to be considered prior to cleaning with compressed air. Sweep and vacuum all accessible dust first and where practicable, wash the area with water or apply water mist. Compressed air pressure should not exceed 15 psi and it should be kept as low as practicable. Ensure that any electrical equipment

in the area is locked out and de-energized, any hot equipment or other surfaces are cooled down, and sources of open flame, sparks, or static discharge are identified and eliminated.

Likely areas of dust accumulations may include:

- Structural members
- Conduit and pipe racks
- Cable trays
- Floors
- Above the ceiling (if a suspended ceiling is present)
- On and around dust collection equipment
- The interior of a dust collector and ductwork

Horizontal and vertical surfaces should be cleaned (where dust could settle). Dust and wood waste must be cleaned up at regular intervals:

- At least once per shift, or
- Sooner, if dust and wood waste accumulates quickly, or
- Immediately, if dust spills from a machine or device (this information should be reported to a supervisor or manager)

Disposal of waste must be conducted properly and safely.

The cleaned area should be inspected to ensure the cleaning is complete and any deficiencies addressed. Tools and equipment for clean-up should be kept in a designated area.

Workers cleaning up hazardous dust should wear personal protective equipment that includes eye goggles and a respirator (elastomeric half-face respirator with P100 cartridges, as a minimum).

Please refer to Guideline G4.42(1) Cleaning with compressed air — Hazards of combustible dusts for additional information:

http://www2.worksafebc.com/publications/OHSRegulation/GuidelinePart4.asp#SectionNumber:G4.42_1