

Combustible Dust



Too Much Dust?

- ◆ NFPA 654 warns that a dust layer $>1/32$ of an inch accumulated on surface areas of at least 5 percent of a room's floor area presents a significant explosion hazard.
- ◆ CSB found that West Pharmaceutical explosion was caused by dust accumulations primarily under $1/4$ inch.

OSHA Compliance Activity

- ◆ “Because it is virtually impossible to eliminate all ignition sources from an industrial setting, preventing the accumulation of fuel provides the best protection against fires and explosions.”

Common Trends Identified

- ◆ Hazard not recognized
- ◆ Ineffective housekeeping
- ◆ Inadequate engineering controls
- ◆ Ineffective process controls
- ◆ Unapproved electrical

Welding Activities

- ◆ Of the 20 accidents reviewed, 35% involved welding activities.
- ◆ Inadequate hot work programs & procedures
- ◆ Inadequate communication
- ◆ Inadequate cleaning

Summary

- ◆ Combustible dust continues to be a very real problem in NC manufacturing facilities.
- ◆ Preventing the accumulation of dust provides the best protection against fires and explosions.
- ◆

This information was edited from the PowerPoint, "Combustible Dust" by



(Industrial Extension Service – www.ies.ncsu.edu).

Resources

NCDOL Industry Alert: http://www.nclabor.com/osha/etta/hazard_alerts/CombDust.pdf

USDOL Safety & Health Topics: <http://www.osha.gov/dsg/combustibledust/index.html>

If you have questions, please contact ASU Occupational Safety & Health at 828-262-4008.

(Revised 2/19/2011-rer)