

REDUCING THE RISK OF FIRE AND EXPLOSION

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How To Reduce Your Risk of Fire and Explosion

- **Reduce/Eliminate Dust Generation**
- **Limit/Restrict Dust Migration**
- **Remove/Clean Dust Accumulation**

Reduce/Eliminate Dust Generation

- Install Local Dust Collection or Water Sprays at Belt Transfer Points
 - Very important if Belt is Covered
- Maintain These Systems
- Find the Source of Release and Fix it!

Limit Restrict Dust Migration

- Keep Inspection Doors Closed/Equipment Tight.
- Keep Doors closed
- Seal Up Openings in Walls, Partitions

Remove Accumulations By

- First Shoveling
- Then Sweeping
- Then Vacuuming
 - Use only Industrial Types or Listed if Used in an Electrically Classified Area (Group F)
- Water Wash, if Feasible

Housekeeping Do's and Don'ts Coal Dust and Rubble

- Do
 - Perform regular cleaning on walls, floor and horizontal surfaces such as equipment, ducts, pipes, hoods, ledges, beams stair rails and above suspended ceilings and other concealed surfaces.
 - Use a vacuum cleaner that is listed for use in Class II hazardous locations or a fixed-pipe system with a remotely located exhauster and dust collector

Housekeeping Do's and Don'ts Coal Dust and Rubble

- Do:
 - Not allow dust layers to accumulate more than 1/32”
 - Coal dust layers 1/32” can be sufficient to warrant immediate clean-up.
 - A dust layer is capable of creating a hazardous condition if it exceeds 5% of the building's floor area.
 - Dust accumulations on ledges, overhead beams and joists contributes significantly to the secondary dust cloud and is approx. equivalent to 5% of the floor area.

Housekeeping Do's and Don'ts Coal Dust

- Don't
 - Use compressed air or steam to blow down surfaces unless:
 - The area and equipment has been vacuumed prior to blowdown.
 - Electrical equipment not suitable for Class II locations and other sources of ignition (hot surfaces or flames capable of igniting a dust cloud) are removed from the area.
 - Low-pressure steam or compressed air, not exceeding a gauge pressure of 15 psig is used