

COMBUSTIBLE DUST

HOUSEKEEPING CHECKLIST

Stop the secondary explosion before it starts — based on OSHA 29 CFR 1910.272

THE 1/8-INCH ACTION LEVEL

OSHA requires action once dust reaches 1/8 inch in priority areas — roughly the thickness of a few sheets of paper. If accumulation hides the color of the floor, there is already enough dust on hand to fuel a fire or explosion.

■ PRIORITY HOUSEKEEPING AREAS (CHECK THAT EACH IS COVERED BY YOUR PLAN)

- Floor areas within 35 ft of inside bucket elevators
- Floors of enclosed areas containing grinding equipment
- Floors of enclosed areas containing grain dryers located inside the facility

■ ROUTINE CHECKS

- Written housekeeping program is current, posted, and followed
- Dust accumulation is below 1/8 inch in all priority areas
- Hidden surfaces checked: beams, ledges, rafters, and tops of equipment
- Leg boots, transfer points, and conveyors cleaned out
- Dust collection systems inspected and functioning
- No visible dust clouds during normal grain movement

■ SAFE CLEANING PRACTICES

- Vacuum or soft-bristle brooms used first, to avoid re-suspending dust
- Compressed-air blowdowns only after ignition sources are shut down and controlled
- Each cleaning logged with date, area, and method

- WHY IT MATTERS:** A primary blast is ~2 psi. The secondary explosion it triggers can exceed 100 psi — several times the ~25 psi rupture strength of concrete. Settled dust is the fuel. Remove it.

Educational aid only — not a substitute for the full OSHA standard (29 CFR 1910.272) or your site-specific safety program.