

OSHA & NFPA Compliant Keeping Your Plant Safe

Combustible Dust National Emphasis Program (NEP) Takes Effect

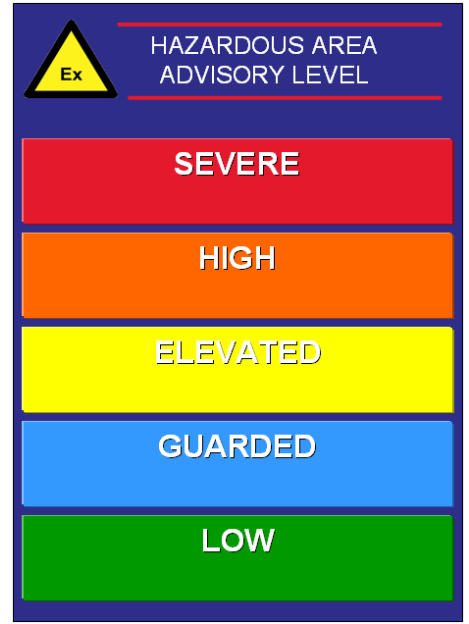
Over the last few decades, industries in the US have been plagued by fires and explosions caused by the ignition of gases, vapors, mists or combustible dust.

In 2008, the Assistant Secretary of Labor for the Occupational Safety and Health Administration (OSHA) declared in a testimony in front of Congress that OSHA intends to step up its enforcement and regulatory activities, and issue citations and stiff fines to companies that fail to comply with standards 29 CFR 1910.22\1910.176 and 29 CFR 1910.307.

In March of that same year, OSHA reissued its Combustible Dust National Emphasis Program (NEP) notifying approximately 30,000 companies nationwide that they will be targeted for inspections over the next few years. The following is a listing of just some of the citations a company could receive under the OSHA Combustible Dust NEP.

29CFR 1910.22 General Housekeeping Citations

The general housekeeping standard requires that "all places of employment, passageways, storerooms, and service areas shall be kept clean and orderly and in a sanitary condition." OSHA has stated that they will issue citations for the presence of combustible dust under this standard if dust accumulations exceed 1/32-inch deep, cover at least 5% of a room's total area, and are combustible. Dust accumulations on overhead beams, joists, on top and under equipment are included in the determination of the total dust coverage area.



METTLER TOLEDO

29CFR 1910.307 Electrical Safety Citations

The electrical safety standard requires that all electrical equipment, wiring methods, and installations of equipment in hazardous locations shall be intrinsically safe and or approved for use in the classified location. Class II hazardous locations are locations that are hazardous because of the presence of combustible dust. There are two divisions of Class II hazardous locations. Division 1 locations are areas where the combustible dust is suspended in air under normal operating conditions, or where mechanical failure or abnormal operation of machinery might cause ignition, or where combustible dusts are electrically conductive. Division 2 locations are areas where combustible dust is not suspended in air under normal operating conditions, but may be suspended as a result of malfunctioning handling or processing equipment. OSHA will issue a citation if electrical equipment in the area is not intrinsically safe or approved for Class II locations.

Is Your Plant Safe?

Would your plant pass an Occupational Safety and Health Administrative (OSHA) review?

Between March 11 2008, and June 17 2009, 3,662 violations were identified during 813 OSHA inspections in a wide variety of workplaces throughout the nation. The majority of the facilities subjected to the nationwide OSHA inspections were chosen at random. OSHA's reason for the inspections was to look for plants with a high risk for combustible dust hazards. Among the violations most frequently cited include housekeeping, hazard communication, personal protective equipment, and electrical and general duty clauses. In July, a ready-to-assemble furniture manufacturer in Ohio was fined \$108,700 and cited for repeat violations and serious violations stemming from an earlier inspection. Many of the alleged violations involved potential dust hazards.

In another recent case, OSHA levied more than \$255,000 in fines for safety and health hazards against a manufacturer of firearms based in Newport, New Hampshire. Violations noted included the lack of spark detectors or suppression systems to minimize fire, and explosion hazards in ventilation systems that collect combustible wood and metal dust, allowing combustible dust to accumulate.

OSHA has stepped up its enforcement and regulatory activities, including announcing plans to initiate comprehensive inspections of facilities at risk over the next few years. Now is the time to make sure your facility is prepared. Can you answer the next four questions correctly?

Is Your Facility Prepared?

1. Does your company have a Hazardous Area Safety Program?

If an occupation safety and health administration representative came to your facility, one of the first items they would ask to see would be your written safety program. This is a document that addresses the means a company will use to eliminate or control the potential for injuries and illnesses at the work site. The primary goal of each written safety plan is the elimination of job hazards in order to provide a safe and healthful work environment. The secondary goal is the "control" of job hazards through administrative, engineering or personal protective equipment controls.

2. What standard(s) do you use to classify or zone your Hazardous Area to?

Globally, in area classification, there are two major standards. One is the IEC (International Electrotechnical Commission) system, which is mainly followed in Europe, Asia, Australia and many other regions. The second system is the NEC (National Electrical Code) which is popular in North America and parts of the Middle East. The IEC system has three zones (Zones 0, 1 and 2) based on decreasing probability of explosive vapor or gas mixtures being present, and the NEC system has two (Division 1 and Division 2), again based on decreasing probability of hazardous mixtures of gas or vapor being present.

3. How is electrical equipment specified for use in a hazardous area by your company?

It is the manufacturer's responsibility to ensure that all electrical equipment meet the appropriate Health and Safety standards and consider the related costs of the product throughout its entire lifecycle, including the cost of installation, maintenance, service and repair.

4. Does your company have a Hazardous Area Maintenance Program?

If a company employs well-scheduled maintenance and inspections with trained manpower, many problems can be detected which can avoid catastrophic incidents or eliminate unplanned work stoppage. These inspections may detect things like bolts missing on explosion-proof boxes or improper grounding of barriers. Or it may be that an instrument which is certified for use only in a Class 1 Div 2/Zone 2 was installed in Class 1 Div 1/Zone 1 (because the technician who replaced it could not understand what those funny symbols and labels mean!).

Take Proactive Measures

METTLER TOLEDO has been providing intrinsically safe weighing equipment for over 20 years. Their best in class product portfolio combined with their knowledge and experience enables companies uncompromised weighing in all Hazardous Areas. To ensure customer's preserve the value of their investment, they have developed a professional and highly trained service organization that offers calibration and maintenance plans that include confirmation of weighing accuracy in the work setting using calibration procedures and certificates that satisfy quality and regulatory scrutiny.



But that is not all, METTLER TOLEDO recognizes that many manufacturers are not up-to-date on the latest hazardous area compliance regulations or may not know that their industry is subject to those regulations. In an effort to improve safety in the workplace and further educate industry, METTLER TOLEDO has put together free educational webinars on hazardous area manufacturing and the associated compliance regulations. These webinars are available at no charge simply by registering through their website at www.mt.com.

Don't wait until your facility receives a surprise visit from OSHA or worse yet, for a catastrophic incident to occur. Take the proactive approach to addressing the "hazardous area advisory level" in your facility. Call METTLER TOLEDO today and reduce your plant to the level "green"

Reference: Combustible Dust in Industry US Department of Labor

Reference: Combustible Dust National Emphasis Program Status Report OSHA