

Important NFPA Standards for Combustible Dust



General Industries

NFPA 660

Standard for Combustible Dusts and Particulate Solids

NFPA 660 consolidates NFPA Standards 61, NFPA 484, NFPA 652, NFPA 654, NFPA 655, and NFPA 664. NFPA 660 covers all facilities and processes that manage combustible dust. NFPA 660 requires facilities to conduct a Dust Hazard Analysis for all new and existing processes and facility components handling combustible dusts. Revalidation is also required every 5 years. NFPA 660 also includes requirements for employee training, management systems and emergency preparedness.

NFPA 68 & 69

Standards on Explosion Prevention Systems

Provides the criteria for design, installation, maintenance of explosion prevention systems, such as explosion suppression, isolation, control of combustible concentrations, and spark detect and extinguishing systems, and deflagration panels.

NFPA 499

Standard that provides recommended area classifications for electrical equipment in areas where combustible dusts are produced or handled

Recommended Practice for the Classification of Combustible Dusts and of Hazardous (Classified) Locations for Electrical Installations in Chemical Process Areas.

Individual Industries

As included in new NFPA 660

NFPA 61

Standard for the Prevention of Fires and Dust Explosions in Agricultural and Food Processing Facilities

For facilities engaged in dry agricultural bulk materials including grains, oilseeds, agricultural seeds, legumes, sugar, flour, spices, feeds, dry dairy/food powders, starches, and other related materials.

NFPA 664

Standard for the Prevention of Fires and Explosions in Wood Processing and Woodworking Facilities

Covers all facilities that process wood or manufacture wood products using wood or other cellulosic fiber that produce wood chips, particles, or dust.

NFPA 484

Standard for Combustible Metals.

Covers all facilities engaged in the production, processing, or handling of all metals and alloy dusts or with operations that produce combustible metal powder or dust such as machining, sawing, grinding, buffing, and polishing.

Trinity's Combustible Dust Services



Trinity's experts provide the background and knowledge necessary to provide thorough guidance including an understanding of dust ignition sources, the likelihood of a combustible atmosphere to occur in/around certain equipment, and the most appropriate risk mitigation techniques.

- ▶ Dust Hazard Analysis facilitation
- ▶ NFPA regulatory compliance assistance
- ▶ Combustible dust testing analysis and interpretation
- ▶ Prevention and mitigation method recommendations (e.g. provide explosion venting or suppression) with vendor selection support
- ▶ Standard interpretation and applicability assistance

Experts



Stephen Kang

EIT, Senior Consultant

Mr. Kang has varied experience conducting Combustible Dust Hazard Analyses. He has led DHA's for a variety of industries and clients both domestically and internationally. These included food and agriculture, plastics, wood products, pharmaceutical, and metal equipment manufacturers. Mr. Kang has also assisted facilities with complying with a variety of other National Fire Protection Association (NFPA) standards.

Mr. Kang can be contacted at 404.751.0248 or skang@trinityconsultants.com.



Colt Sommers

Managing Consultant

Mr. Sommers has varied EHS experience that spans environmental compliance and process safety. Mr. Sommers became involved with combustible dusts while conducting Process Hazard Analyses for the chemical manufacturing industry, and his combustible dust experience has since expanded into many industries such as agriculture, chemical manufacturing, food processing and recycling.

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Curtis Petrosky

PE, CSP, Managing Consultant

Mr. Petrosky gained his combustible dust experience while working in the chemical industry at sites where solids and powders were processed and packaged. Here he led Process Hazard Analysis (PHA) Studies and performed Dust Hazard Analyses (DHA) on various processes and equipment with combustible dust. He has worked with organic and inorganic materials and has identified methods of dust explosion prevention and mitigation for equipment retrofit and replacement.

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