

Helping You with NFPA 652/654

The initial issue of NFPA 652, Standard on the Fundamentals of Combustible Dust, was issued in September 2015. Are you on track with the compliance deadline of September 2018?

The standard provides the basic principles of and requirements for identifying and managing the fire and explosion hazards of combustible dusts and particulate solids. Of notable interest is Chapter 7 which introduces the Dust Hazard Analysis (DHA). The DHA is different from other forms of risk assessments such as a Process Hazard Analysis (PHA) and must be completed by September 2018. Also, the new standard does not allow the absence of previous incidents as a basis for deeming a particulate to not be combustible or explosible.

PROCESS can provide clients with a review of their existing combustible dust handling systems to develop a plan for bringing them into compliance with the NFPA 652/654 standards. Such services often involve the following tasks:

- **Site Visit** to each facility to review the existing unit operations, gather technical data, meet with Operations personnel, and review system operating procedures and Process Hazards Analyses (PHA).
- **Evaluation Basis Preparation**
 - Detail the basis of design/evaluation for the equipment/system handling the combustible dusts
 - Determine if there is sufficient information to confirm that the material being handled is a combustible dust and the degree of hazard associated with the material. In addition, define additional material testing requirements to complete this effort (e.g. flammability, flow, constituent concentrations, etc.).
- **Dust Hazards Analysis**
 - Work with the client to rank the degree of hazards for each area so that a strategic plan can be developed for more detailed qualitative evaluations
 - For selected areas, perform a detailed DHA to qualitatively and quantitatively define the degree of hazard and the necessary steps and/or modifications required to comply with the NFPA requirements.
- **Identification of Technical Alternatives for Equipment Upgrades** with a list of design, physical installation, and operational modifications that could be implemented to meet the new/updated standards.
- **Capital Cost Estimate** for proposed modifications for planning purposes.