By the Numbers – Combustible Dust



DID YOU KNOW?

Combustible dust explosions can cause employee injuries, deaths and destruction of entire buildings. Combustible dust is one of the biggest hazards confronting a wide variety of industries. Because it is mostly unseen or otherwise sensed, it is easily unrecognized for the damage and injury it can cause.

- From the 2018 CDID incident reporting, wood processing, food processing and agricultural activities account for almost 60% of the dust-related fire and explosion incidents. Automotive manufacturing, metal working, power generation and mining contributed an additional 17%. The remaining 24% of incidents occurred in other industries, including pulp and paper, education, coatings, oil and gas, textiles and recycling.
- Very frequently, materials involved in wood-product incidents were specified as sawdust or wood dust, and materials involved in food processing or agriculture were specified as grain dust. In cases were specific materials were named, pine chips, cellulose, corn, pecan, cocoa, flour, cereal, barley and spices were implicated in dust incidents. Although not broken out in the data, coal dust accounted for almost 7% of the total incidents. In cases involving metal dusts, aluminum, titanium, magnesium and iron were cited most often.
- This suggests that explosions tend to be more severe in terms of injuries and lives lost than facility fires. However, the trend for facility damages shows the reverse. Out of the eleven incidents with reported losses of $1 million and above, eight were from fires and three were from explosions. This highlights the importance of both fire and…