

We are



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Process Safety Dispatch

In this Issue

- Safety Feature: Safe Use of Flexible Intermediate Bulk Containers (FIBCs) – Requirements of NFPA 652
 - Cases in the News: Sawdust Plant Explosion
 - Free On Demand Webinars
 - Spring 2019 Full-Day Training Courses
-

Safety Feature: Safe Use of Flexible Intermediate Bulk Containers (FIBCs) – Requirements of NFPA 652

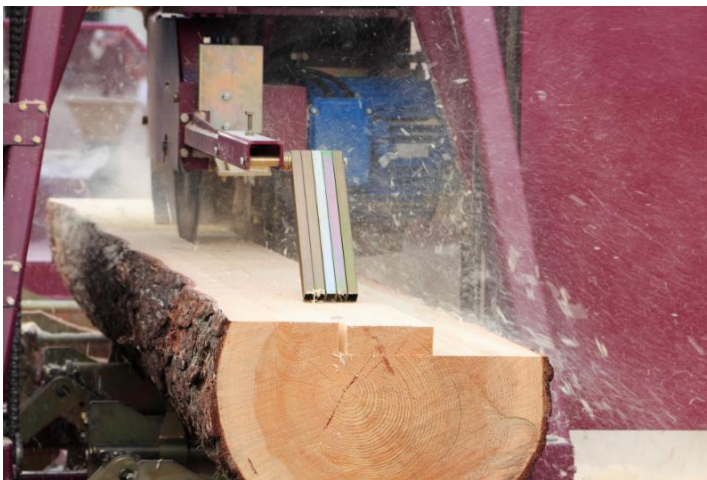
Both users and manufacturers of FIBCs need to take action to prevent dust explosions caused by static electricity

A dust cloud of fine explosible particles in air with a concentration that is above its minimum explosible concentration (MEC) can be expected at some point when FIBCs are filled or emptied. The dust cloud could occur inside the bag – or even external to the bag in some cases.... [Continue reading](#)



Vahid Ebadat, CEO, Stonehouse Process Safety, discusses NFPA 652 at an AIHA Professional Development event December 5, 2018 in South Plainfield, NJ.

Cases in the News: Sawdust Mill Explosion



On November 8, 2018, fire crews from four local fire departments were called to a reported dust explosion and fire at a woodworking facility in the Midwest. When the crew arrived, they successfully tackled a fire raging in a dust collector and trailer used to collect sawdust from the facility.

It was reported that a saw had shut down, sending a spark into the dust handling system, which is presumed to have been the

ignition source. The event required the closure of a highway during morning hours while the fire crews were on the scene. Fortunately, no one was reported as hurt.

Source: The Crescent-News

Stonehouse Process Safety commentary

Most of us have tried to start a camp fire – and usually struggled. We know if we first prepare kindling, we might light that first and hope that the logs will eventually flame. What we may not realize is that if we take sawdust from that same wood and disperse it in the air, we could have a flashfire or dust explosion on our hands. Wood needs a lot of surface area to combust, and the more you have, the faster will be the combustion.

Sawmills and wood workshops throughout the country create wood dust in their operations, and special precautions are required to prevent that dust from inadvertently catching fire or even creating an explosion. Electrically operated saws can overheat and cause dust to smolder, and they can also create sparks, especially if they encounter a hard object such as a piece of metal or stone - and they can sometimes generate burning or smoldering dust that gets transferred along dust extraction systems. When this burning or smoldering dust reaches a dust collector or collection bin it can cause fire or, if the dust concentrations are sufficient, an explosion.

The risk of injuries to employees or others from events like the one described here is real. However, dust explosions and fires like these are preventable. There are systematic techniques available to conduct Dust Hazard Analysis in accordance with NFPA 652 that can significantly reduce both the likelihood of events like this happening, as well as ensure that if a problem does arise, that the consequences are minimized and controlled.

Free On Demand Webinars

Combustible Dust Hazards: Assessment, Prevention and Protection Including the Requirements of NFPA 652 [\[watch\]](#)

Electrostatic Hazards in Processing Industry: The Nature of the Problem and Practical Measures for its Control [\[watch\]](#)

Fire and Explosion Hazards: How to Identify and Control Them in Your Process [\[watch\]](#)

---- Mark your Calendar ----

2019 Full Day Training Courses

Combustible Dust Hazards: Assessment, Prevention and Protection Including the Requirements of NFPA 652 [Learn more](#)

Wednesday, March 13, 2019
Location: New Brunswick, NJ

Electrostatic Hazards in Processing Industry: The Nature of the Problem and Practical Measures for its Control [Learn more](#)

Thursday, March 14, 2019
Location: New Brunswick, NJ

Fire and Explosion Hazards: How to Identify and Control Them in Your Process [Learn more](#)

Friday, March 15, 2019
Location: New Brunswick, NJ

Stonehouse Process Safety provides expert process safety consulting, testing, training, and litigation support services in the specialist areas of dust flash fires & explosions, gas & vapor flammability, electrostatic hazards, and thermal decomposition. Headquartered in Princeton, NJ, Stonehouse serves clients in the pharmaceutical, chemical, food, legal/insurance, metals, plastics, rubber and other process manufacturing industries.

www.stonehousesafety.com

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