COMBUSTIBLE DUST

Innovations Manufacturing, Inc. (the Company)

Purpose

The purpose of this plan is to provide guidance and requirements necessary for efficient, effective, and compliant combustible dust safety.

Scope

This procedure applies to all Company employees. When work is performed on a non-owned or operated site, the operator's program shall take precedence, however, this document covers Company employees and contractors and shall be used on all Company owned and/or operated sites.

Responsibilities

- The Safety Director shall administer the Combustible Dust Plan.
- Supervisors and Managers shall ensure the requirements of this plan are followed and implemented.
- Employees shall understand this plan, follow its guidelines, and report any unsafe work conditions.

General Information

What is a Combustible Dust

There are several definitions, but all agree that it is a very small particulate that when dispersed in air can explode under certain conditions. The NFPA 654 (2006) defines it as a combustible dust particulate solid that presents a risk of fire or explosion, regardless of size or shape, when suspended in air (or other oxidant) at various concentrations. This was the definition adopted by OSHA for its National Emphasis Program, launched in 2008. The following will be considered as solid particulate matter.

- dust
- fibers
- fragments
- flakes
- chips, or
- mixtures of any of the above mentioned.

What Elements Should be Considered to Prevent an Explosion

Two of the most contributing factors to a combustible dust explosion are the accumulation of dust in the work areas and surfaces and the presence of ignition sources.

General Requirements

Ignition Sources

Proper equipment and processes shall be installed to adequately control ignition sources in areas where combustible dust may be present. This may include, but is not limited to, not performing hot work in areas where combustible dust may be present or smoking only in designated smoking areas as outlined by Company policy.

Equipment Used

Electrical cleaning devices used in dusty areas should be approved for the hazard classification. Equipment shall be approved not only for the class of location, but also for the ignitable or combustible properties of the specific gas, vapor, dust, or fiber that will be present.

Compressed Air
Compressed air shall not be used, and vigorous sweeping shall not be performed, in any area where combustible dust may be present in order to prevent dust clouds from forming. Only vacuums or wet sweeping methods shall be used.

Housekeeping
Proper housekeeping and cleaning measures are in place to minimize dust accumulations. Cleaning and wetting frequencies should be established for floors and horizontal surfaces, such as ducts, pipes, hoods, ledges, and beams, to minimize dust accumulations in operating areas of the facility.

Hazardous Areas
The following areas are where combustible dust is gathered via dust collection systems:

- Shipping- wood dust
- Windows- vinyl dust
- Windows- Styrofoam dust

The assured grounding systems of the vacuum collection systems are designed to prevent a static ignition source in said equipment.

Training

Employees who are involved with operating, maintaining, and supervising facilities that handle combustible dust shall be trained in the hazards relating to combustible dust. Training shall be completed on an annual basis.