



# U. S. Chemical Safety and Hazard Investigation Board

## RECOMMENDATION STATUS CHANGE

### SUMMARY

<b>Report:</b>	Didion Milling Company Explosion and Fire
<b>Recommendation Number:</b>	2017-07-I-WI-R13
<b>Date Issued:</b>	December 6, 2023
<b>Recipient:</b>	National Fire Protection Association (NFPA)
<b>New Status:</b>	Open – Acceptable Response or Alternate Response
<b>Date of Status Change:</b>	November 18, 2024

#### Recommendation Text:

*Update NFPA 61, Standard for the Prevention of Fires and Dust Explosions in Agricultural and Food Processing Facilities, or a successor standard, to incorporate, at a minimum, the following elements:*

1. *Unify the requirements for performing dust hazard analyses to remove equipment exemptions and require the assessment of all processes, such as cyclones, as required in:*
  - a. *The 2019 edition of NFPA 652, Standard on the Fundamentals of Combustible Dust*
  - b. *Chapters 3, 5, and 6 of the CCPS's Guidelines for Combustible Dust Hazard Analysis.*
2. *Incorporate the additional guidance for Management of Change to include but not limited to:*
  - a. *Harmonize the 2019 edition of NFPA 652, Standard on the Fundamentals of Combustible Dust, requirements for section 8.12.2.4, modifications to operating and maintenance procedures, and section 8.12.2.4, employee training requirements.*
  - b. *Chapter 3 and Appendix B of the CCPS's Guidelines for the Management of Change for Process Safety, such as addressing temporary changes, operating and maintenance procedures, employee training, and dust testing results, to standardize MOC requirements across all industries that handle combustible dust.*
3. *Update the requirements for incident investigation management systems, to include but not limited to:*
  - a. *Incorporate the optional guidance of the 2019 edition of NFPA 652, Standard on the Fundamentals of Combustible Dust, as a mandatory requirement.*
  - b. *Chapters 4 and 10 of CCPS's Guidelines for Investigating Process Safety Incidents (3rd Edition).*

#### Board Status Change Decision:

##### A. Rationale for Recommendation

On May 31, 2017, an explosion and fire occurred at the Didion Milling, Inc. (Didion) facility in Cambria, Wisconsin. The fire spread throughout the facility resulting in multiple combustible dust explosions both within and external to the production equipment.

Five employees of Didion were fatally injured as the result of the incident. An additional 14 employees were injured. Several of the fatalities and injuries were caused by exposure to the flames generated by the combustible dust explosions and flash fires, while others can be attributed to the collapse of the buildings. The incident resulted in an estimated \$15.37 million in property damage.

The U.S. Chemical Safety and Hazard Investigation Board (CSB) investigated the incident and found several safety issues including ineffective combustible dust safety management, ineffective process safety leadership, and a lack of regulatory coverage for combustible dusts. As a result of these findings, the CSB issued one recommendation to the National Fire Protection Association (NFPA). This status change summary addresses CSB Recommendation No. 2017-07-I-WI-R13.

#### Response to the Recommendation

NFPA has notified the CSB that language intended to meet the recommendation has been approved for the 1<sup>st</sup> Edition of NFPA 660, Standard for Combustible Dusts (NFPA 660). NFPA 660 is expected to be published during 2025. Once the standard is published the CSB can evaluate this recommendation for closure.

#### B. Board Analysis and Decision

Based upon the information above, the Board voted to change the status of CSB Recommendation No. 2017- 07-I-WI-R13 to: “Open – Acceptable Response or Alternate Response.”