

## RISK ALERT: US CHEMICAL SAFETY BOARD PRODS OSHA TO ACT ON HAZARDS

On July 25, 2013, members of the US Chemical Safety Board (CSB) declared the response by the Occupational Safety and Health Administration (OSHA) to seven long-standing recommendations on combustible dust, fuel gas, and the Process Safety Management standard to be “unacceptable.” The CSB also voted to make the adoption of a combustible dust standard for general industry to be the first priority of its recently established “Most Wanted Safety Improvements” program, which will result in stepped-up advocacy for the measure.

### DUST REGULATIONS

The CSB has recommended that a new general industry combustible dust standard be based on existing National Fire Protection Association (NFPA) dust explosion standards. Under its “Most Wanted Safety Improvement” program launched last year, the CSB will advocate “vigorously” with OSHA for such a standard and on other program recommendations.

Based on recent comments, OSHA’s next rulemaking step is to complete the review process as required under the Small Business Regulatory Enforcement Fairness Act (SBREFA). Due to the need to develop additional regulatory alternatives and associated economic analyses, this is scheduled to begin in October of 2013. OSHA plans to publish a proposed rule following the SBREFA review. OSHA originally anticipated issuing regulations in 2014 following completion of its National Emphasis Program related to dusts. Now it will rely on the outcomes of the SBREFA review to support or extend that date.

### IMPACT ON YOUR OPERATIONS

#### PREVENTION OF FIRES AND EXPLOSIONS

The first step that your organization should take to determine the risk, impact, and mitigation needs arising from what may be a significant change in the regulatory environment is to validate that the dust in and around your operations has the specific chemical composition of a combustible dust. A systematic approach to assessing the hazard will help you select the most cost-effective mitigation methods. The dust’s ability to produce a deflagration depends on many variables, including:

- Size of particles.
- Shape of particles.
- Characteristics of the ignition source (including magnitude and level of energy needed to ignite the dust).

Once that is understood, you should evaluate your programs that monitor conditions and audit internal and external partners as well as housekeeping methods and frequencies. Knowing the



hazard and the programs that control it are also essential pieces of the hazard communication program for workers.

#### ENGINEERING CONTROLS

Your company’s standard operating procedures, equipment set-up, and quality control programs likely already have primary and secondary engineering controls to mitigate combustible dust hazards. Most firms today plan and build out production areas that feature physical interlocks, shut-offs, and overflow systems to prevent the escape of dust into unwanted areas. Those controls can effectively eliminate the accumulation of dust on surfaces — in effect “engineering out” the hazard. That, in concert with proper electrical equipment (leading ignition source), can make compliance regimes related to potential new regulations much easier to implement.

Primary controls are supported by secondary controls such as dust collection, proper construction, fire suppression, and alarm systems. Acting

together, these systems will help limit property damage, injuries, or production interruptions after a fire or explosion.

## WHAT YOU CAN DO TODAY

In Marsh Risk Consulting's (MRC) broad experience with catastrophic risk issues, we have seen how best practices and real-life risk mitigation strategies can come together quickly when supported by a focused organizational effort with the following considerations.

- **Align your organization behind one plan:** Compliance, safety, property conservation, and insurance functions all touch these high impact issues. Cross-functional cooperation helps focus on a clear strategy to minimize exposures.
- **Act on what matters:** Validate your hazards so you can have confidence in your organization's mitigation capabilities and focus on solutions that support staff and operational reliability.
- **Be consistent:** Use a set of tools that can provide consistent results from the evaluation of exposures across your enterprise. They should allow you and your firm to choose the level of analysis and depth of study required for your specific risks and for your specific budget.
- **Expand your vision:** Increase your understanding of the impact of the risks associated with equipment

and processes and how those risks expose your operation upstream and downstream of the area of concern.

## HOW MRC CAN HELP

MRC's property risk consultants are engaged with NFPA committees and in OSHA activity to provide you with the most up-to-date information on impending rules and rule changes. This is especially valuable to those in industries such as agriculture, food manufacturing, wood products, and chemicals that may soon be faced with both regulatory and underwriter-driven compliance requirements. Our technical specialists can quickly bring real world solutions and business cases for mitigation improvements. With our close alignment with Marsh's placement specialists, we can help you obtain maximum benefit from your risk management dollar.

Our experience has shown that risk managers and business leaders need to understand the operational impact from catastrophic dust and other events, the workforce consequences, and their ultimate effect on P&Ls, response plans, and recovery plans. Our solutions for mitigating these risks are typically a blend of fixed protection systems, program enhancements through training, and business process improvements such as supply chain management, enabling you to meet or exceed regulatory and insurer requirements in a cost-effective manner.

To learn more about our dust exposure studies and customized risk management solutions, please contact your local Marsh representative or MRC professional. You can also reach our experts directly as follows:

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Further insight and related solutions can be found on: [www.marsh.com](http://www.marsh.com) or [www.marshriskconsulting.com](http://www.marshriskconsulting.com).

### KEY LINKS

#### **US Chemical Safety Board (CSB)**

[Combustible Dust: An Insidious Hazard \(including video\)](#)

#### **Occupational Safety and Health Administration (OSHA)**

[Safety and Health Topic: Combustible Dust – An Explosion Hazard](#)

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