Respirable Crystalline Silica
On June 23, 2018, the new respirable crystalline silica rule promulgated by the Occupational Safety and Health Administration (OSHA), became effective. The rule, which covers ready mixed concrete plants, is intended to eliminate exposure to workers of respirable crystalline silica. According to OSHA, exposure to silica over a certain threshold and prolonged exposure can lead to respiratory health problems, including silicosis. The new standard requires employers to prevent worker exposure to silica.

Preventing Silica Exposure
In order to determine how to prevent and/or limit worker silica exposure, a concrete plant first needs to know what, if any, the exposure level might be. Determining an exposure level through an exposure assessment, can be completed by an industrial-hygienist, third-party testing group, mail-order testing kit, or a producer’s insurance provider. Once an assessment has been performed, only then will a producer know what the exposure may be. If the exposure level is below a certain threshold, a producer may have little or no action to take. Exposures recorded over a certain threshold may require specific actions that could include regular testing and monitoring, creating a written exposure control plan, extra housekeeping, recordkeeping, signage, training, employee notification, new controls, a respiratory protection program and even medical surveillance.

Actions
Conditions that can prevent silica exposure and help maintain compliance with the new rule:
- Think first
- Proper ventilation
- Wet methods for grinding, chipping, cutting, sweeping
- Isolation of dust creating activities
- Worker rotation
- Use of water trucks and/or sprinklers in plant yard
- Regular, proper housekeeping
- Minimize drum chipping
- PPE where appropriate (OSHA views PPE as the last line of defense)

Resources
For more information on silica exposure compliance please follow the links below:
- NRMCA Silica Guide
- Respiratory Protection Program
- OSHASilicaStandard
- OSHA National Emphasis Program: Silica
- NRMCA: Safety Series

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