

# NE <sup>14</sup>Si LEX

Silica Dust Suppressant

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**How to meet the new  
OSHA Silica Rule in the  
Construction Industry**



Why Do We Need A  
Solution for Silica  
Dust Control?

# OSHA's Silica Rule (29 CFR 1926.1153) and its Impact on the Asphalt Pavement Road Construction Industry

\* Taken from National Asphalt Pavement Association's "Interim Guidance"

## What is the Silica Rule?

- PEL to 50 mg/m<sup>3</sup>
- Control Technologies Provide Relief
- Rule Affects All Industries



# What is Silica and why do we need to control it?

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## What is Crystalline Silica?

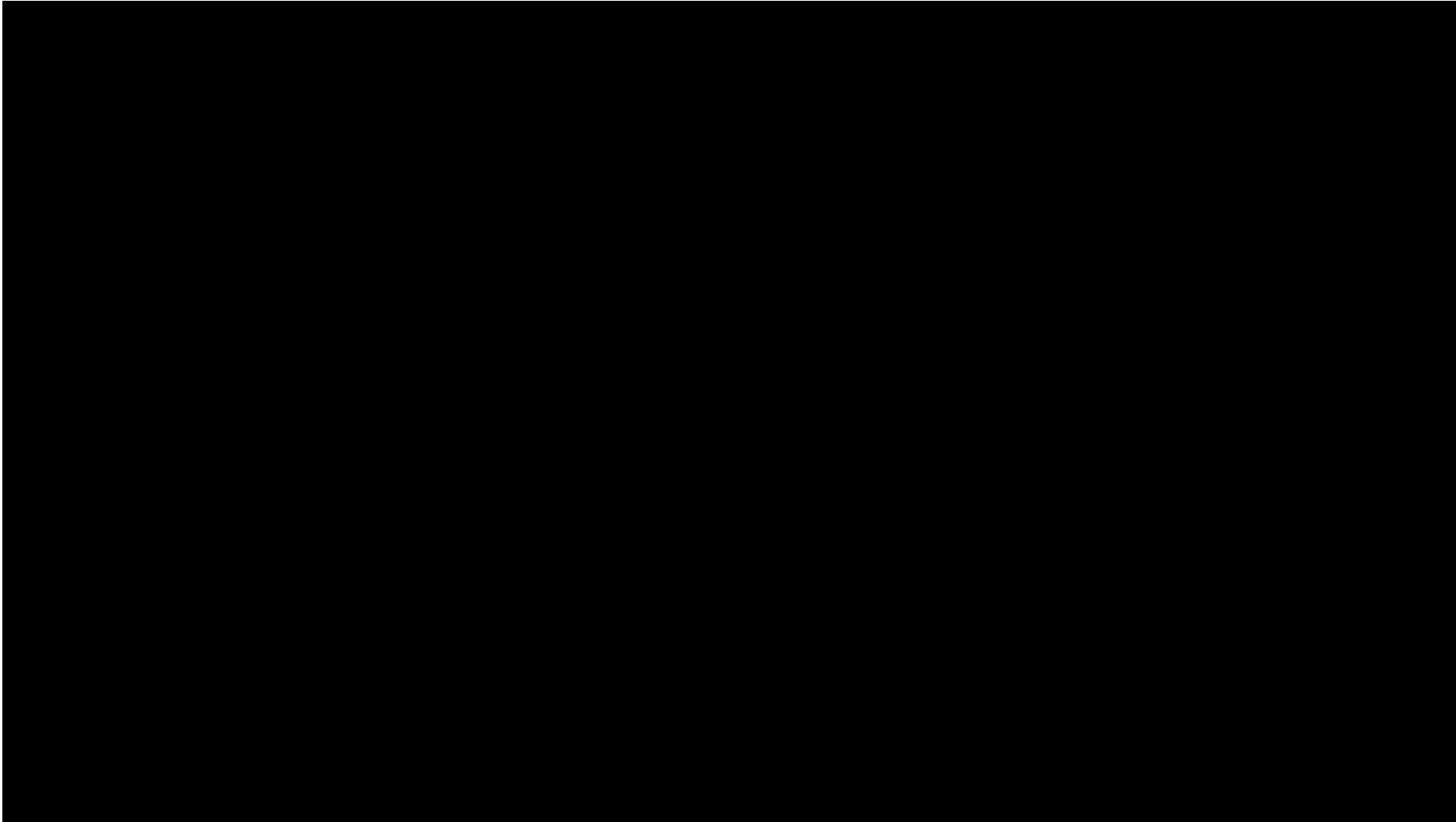
- Crystalline silica ( $\text{SiO}_2$ ) is found in asphalt, concrete, and rocks.
- Breathing dust containing Crystalline Silica Causes:
  - Breathing Difficulty
  - COPD
  - Silicosis

## Lung with Silicosis vs. Health Lung

Source: <https://iqpowertools.com/know-your-exposure/>



# How Silica Dust Enters the Lungs



# Hawk's Nest Tunnel Disaster

Three mile long diversion tunnel through Gauley Mountain for the New River — one mile through solid rock!



# How Does OSHA's Silica Rule Affect the Construction Industry?

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Rule Directly Affects Several Construction Job Tasks

The silica standard was scheduled to become effective on June 23, 2017, but was pushed back to September 23, 2017. OSHA is giving the industry 30 days from that date to institute full compliance with the standard.

## Job tasks with potential for silica dust exposure:

- Monitoring Aggregate crushing operations
- Operating Machinery to Transport Aggregate over gravel roads
- Baghouse and Drum Maintenance
- Roadway Milling Operations
- Roadway Sweeping
- Roadway Saw-Cutting Activities



# How Do Contractors Comply with the Regulations?

## Table 1 Specifies Controls

**Employers are Responsible for Compliance!**

**Two Options for Employers to Become OSHA Compliant:**

Exposure Assessment

Use OSHA-Specified Controls



What are the  
OSHA Specified  
Controls in Table  
1?

## For Milling Operations:

- Half-lane and larger milling machines - BOTH ventilation control exhaust AND supplemental water
- Half-lane and larger milling without ventilation control 4 inch cuts – Water with Dust Control Product
- Small (drivable and less than half-lane) milling machines - Water with Dust Control Product





What are the  
OSHA Specified  
Controls in Table  
1?

## For Other Milling, Sawing, and Jackhammering Activities

- For walk-behind milling machines and other sawing, cutting, and various types of pavement impact machinery, such as jackhammers – Water, Dust Control would help.
- The use of a rotating mill attached to the front of an open-cab skid – No Controls Listed – Water plus Dust Control is safe practice



## For Earth-Moving and Grading Activities

What are the OSHA Specified Controls in Table 1?

- For earth-moving or grading/excavation equipment that does not fracture or abrade materials – Water plus Dust Control Product
- For heavy equipment, like hoe-ramming and rock ripping – Enclosed Cab – Water plus Dust Control for workers outside



## Compliance & Safety

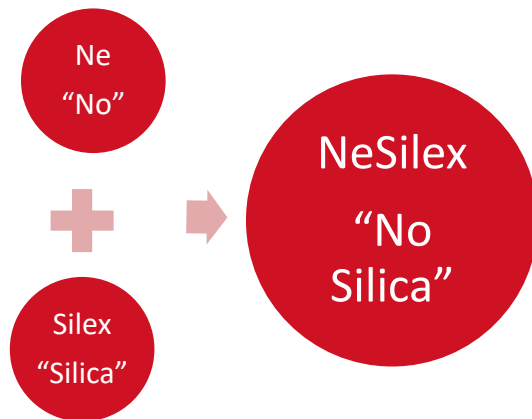
OSHA Compliance  
is Secondary to  
the Health and  
Safety of Workers

- OSHA's compliance is important but ***worker health and safety*** is the primary benefit of NeSilex.
- A company's ***workers*** are the strength of the company and must be ***protected***
- ***Lawsuits*** certainly are also a concern



# This is Where NeSilex is Needed

## Latin Translation



Meets OSHA Standard 29 CFR  
1926.1153 Table 1 Guidelines for  
Exemption of Employee Exposure  
Assessment for Certain Milling  
Operations – Half lane machines milling  
up to 4 inches with water spray down  
system





# NeSilex Simulation Demonstration Vs Dawn

**NE<sup>14</sup>SiLEX<sup>®</sup>**  
Silica Dust Suppressant



## Benefits of NeSilex

Improves Worker Safety

Targeted Formula for Dust Control

Meets OSHA Standards

Effective at High Dilution Rate

Saves Time & Water

Preserves Milling Bits



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# QUESTIONS?

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