How to meet the new OSHA Silica Rule in the Construction Industry
OSHA’s Silica Rule (29 CFR 1926.1153) and its Impact on the Asphalt Pavement Road Construction Industry

- PEL to 50 mg/m3
- Control Technologies Provide Relief
- Rule Affects All Industries

What is the Silica Rule?

Why Do We Need A Solution for Silica Dust Control?

* Taken from National Asphalt Pavement Association’s “Interim Guidance”
What is Silica and why do we need to control it?

What is Crystalline Silica?

- Crystalline silica (SiO2) 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?

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.
What are the OSHA Specified Controls in Table 1?

For Earth-Moving and Grading Activities

- 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
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

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
QUESTIONS?

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