EBC New Hampshire Program: New OSHA Silica Standards – Understanding the Regulations & Liabilities
Welcome

Robert Varney

Chair, EBC New Hampshire Chapter
President, Normandeau Associates, Inc.
Introduction and Overview

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GZA GeoEnvironmental, Inc.

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EnviroVantage
Health and Safety Issues

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Vice President / Principal / Corporate EHS Director
GZA GeoEnvironmental, Inc.
OSHA SILICA STANDARD

HEALTH AND SAFETY ISSUES
Silicosis History
FRANCES PERKINS
FIRST FEMALE CABINET MEMBER
CAME UP WITH
SOCIAL SECURITY,
THE 40-HOUR WORK
WEEK, AND OVERTIME
PAY
YOU’RE WELCOME, AMERICA
Silica is Everywhere

Crystalline silica is one of the most abundant minerals on the planet. It is estimated that silica makes up 59 percent of the earth’s crust and is found in nearly all known rocks. It is therefore not surprising that silica dust turns up in a wide range of industrial processes and applications.
Is Sand Dangerous?
Large upper lobe masses

“Egg-shell” calcification

Scarring on lower lobes

Health Effects
## Summary of Changes

<table>
<thead>
<tr>
<th>Item</th>
<th>Old</th>
<th>New</th>
</tr>
</thead>
<tbody>
<tr>
<td>OSHA PEL</td>
<td>100 ug/M3</td>
<td>50 ug/M3</td>
</tr>
<tr>
<td>OSHA Action Level</td>
<td>No</td>
<td>25 ug/M3</td>
</tr>
<tr>
<td>Engineering Controls</td>
<td>No</td>
<td>Required</td>
</tr>
<tr>
<td>Exposure Control Plan</td>
<td>No</td>
<td>Required</td>
</tr>
<tr>
<td>Competent Person</td>
<td>No</td>
<td>Required</td>
</tr>
<tr>
<td>Medical Exams</td>
<td>No</td>
<td>Required</td>
</tr>
<tr>
<td>Exposure Records</td>
<td>General Guidance</td>
<td>Required</td>
</tr>
<tr>
<td>Respirator Use</td>
<td>General Guidance</td>
<td>See Table 1</td>
</tr>
</tbody>
</table>
### Table 1

**SAMPLE OF TABLE 1:**
*Specified Exposure Control Methods When Working with Materials Containing Crystalline Silica*

<table>
<thead>
<tr>
<th>Equipment / Task</th>
<th>Engineering and work practice methods</th>
<th>Required respiratory protection and Minimum assigned protection factor (APF)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(i) Stationary masonry saws</td>
<td>Use saw equipped with integrated water delivery system that continuously feeds water to the blade. Operate and maintain tool in accordance with manufacturer’s instructions to minimize dust emissions.</td>
<td>≤ 4 hours/shift: None</td>
</tr>
<tr>
<td>(ii) Handheld power saws (any blade diameter)</td>
<td>Use saw equipped with integrated water delivery system that continuously feeds water to the blade. Operate and maintain tool in accordance with manufacturer’s instructions to minimize dust emissions.</td>
<td>When used outdoors: None</td>
</tr>
<tr>
<td></td>
<td></td>
<td>When used indoors or in an enclosed area: APF 10</td>
</tr>
<tr>
<td>(iii) Handheld power saws for cutting fiber-cement board (with blade diameter of 8 inches or less)</td>
<td>For tasks performed outdoors only: Use saw equipped with commercially available dust collection system. Operate and maintain tool in accordance with manufacturer’s instructions to minimize dust emissions. Dust collector must provide the air flow recommended by the tool manufacturer, or greater, and have a filter with 99% or greater efficiency.</td>
<td>None</td>
</tr>
</tbody>
</table>

Three of 18 specified control methods from Table 1. Source: OSHA 29 CFR Parts 1910, 1915, and 1926.
Compliance Dates

9/23/2017

6/23/2018

6/23/2021
Silica Exposure Control Plan

EBC Seminar

Date: 10/24/2017

Speaker: David L berard PE
29CFR 1926.1153(g)(1) Written exposure control plan

- Required when workers are exposed to respirable silica in the work area.
- Implemented by a competent person designated by the employer.
- Evaluated at least annually for compliance with the OSHA regulations.
Required elements of an exposure control plan

- Description of all tasks involving respiratory silica.
- Description on engineering controls, work practices, and respiratory protection used to limit worker’s exposure to each task.
- Description of house keeping measures.
- Description of how to restrict access to the area.
Regulated Community

Curt Knightly

Vice President

EnviroVantage
Managing Project Liability & Risk: 
The Silica Standard

Presented by:
Curt Knightly, Corporate Compliance Officer
Project Goals

- Implementation of the Silica Standard in ALL bid docs
- Zero injuries or recordable incidents
- Zero Silica OSHA violations
  - Written exposure control plan
  - Negative exposure assessment (NEA)
  - Documented training
  - Documented medical surveillance
- Zero change orders due to a vague scope of work
Silica Compliance & the Scope of Work

- Does the Owner and Construction Manager understand the Silica rule as it applies to sub-contractors?
- Does the project specification contain a section on Silica? Does it contain:
  - Required Work Practices?
  - Engineering Controls?
  - Recommended Administrative Controls?
  - PPE Requirements?
- Does the schedule reflect the impact of Silica compliance?
- Are the Silica impacting hazard areas identified?
- Are prohibited activities listed?
Working with Other Trades

• Are all trades Silica Compliant?
  • Do they have a Respiratory Protection Program?
• Regulated areas defined and demarcated
• Does the schedule reflect the possible exclusion of a trade from a work area?
  • HVAC, electricians, etc.

(If not a Table 1 process, monitoring may be needed to determine the exposure level in the work space.)
Processes

Table 1 Compliant in Enclosed Areas

- Water intrusion issues
- Noise issues
- Air filtration – exhausting to the exterior 1926.1153 (c)(2)(i)
- Work Practices
- Engineering Controls
- Administrative Controls
- PPE Required Activities

Non-Table 1

- Air monitoring, respiratory protection needed
Worker Protection

- Work Practices – Power tools with integrated water delivery or integrated dust shrouds
- Engineering controls
  - Regulated areas
  - Wet Methods
  - Air Filtration
- Administrative Controls – job rotation – not to another Silica task
- PPE Required Activities – correct level of protection
- Air monitoring for non-Table 1 tasks
- Ensure other trades are compliant
Legal Issues

Gregory H. Smith, Esq.

Chairman, Environmental and Regulatory Practice Group
McLane Middleton

Environmental Business Council of New England
Energy Environment Economy
Your potential legal liability for exposure to crystalline silica

Gregory H. Smith, Esq.
McLane Middleton, Professional Association
Director & Chair, Administrative Law Department and Environmental Practice Group
1. Statutory Law (State and Federal)
2. Regulations
3. Common Law (Judge-Made)
BASIS FOR LEGAL CLAIMS: STATUTES AND REGULATIONS

1. Government Enforcement

2. Private Causes of Action
   a) Express
   b) Implied
“any person may commence a civil action on his own behalf ... against any person ... who is alleged to have violated ... or to be in violation of ....”

Clean Air Act, Section 304
BASIS FOR LEGAL CLAIMS: COMMON LAW

1. Tort (Negligence)
2. Breach of Contract
ELEMENTS OF NEGLIGENCE

• Duty of Care
  • Does the law impose a legal obligation on the defendant toward the plaintiff?

• Standard of Care
  • What would a reasonably prudent person do in similar circumstances?

• Breach of Care
  • Did you act as a reasonably prudent person would?

• Causation

• Damages
NEGLIGENCE PER SE

Duty of Care
Standard of Care
OSHA Regulations
Breach of Care
Causation
Damages
EVIDENCE OF NEGLIGENCE

Duty of Care

Standard of Care:

**OSHA Regulations PLUS**

Breach of Care

Causation

Damages

OSHA violation

PLUS other evidence about the employer’s conduct or the workplace environment (unsafe conditions, etc.)
## WHY DOES IT MATTER?

**Negligence Per Se**

The employer’s violation of a regulation *in and of itself* is sufficient legal proof that the employer was negligent.

An unexcused violation will result in **liability** for the employee’s injury.

**Evidence of Negligence**

A regulatory violation is **NOT** dispositive.

Jurors are free to draw their own conclusions and place their own weight on the impact that the violation played in causing the alleged injury.
Conclusions

- You cannot safely ignore these regulations
  - Compliance is not an impenetrable shield

- New Regulations
  - Private parties will likely resort to litigation where the government’s enforcement is lax or none exists

- Novel regulatory situation with consultants
  - The law allows private parties to impose liability which would have the effect of “enforcing” the regulatory standards against you as a consultant or your individual, commercial or industrial clients where government enforcement is lax
Moderated Discussion

Moderator:
• Muriel Robinette, GZA GeoEnvironmental

Keynote Speaker:
• Rick Ecord, GZA GeoEnvironmental
• Curt Knightly, EnviroVantage
• Dave Berard, DLB Safety Services LLC
• Greg Smith, Esq., McLane Middleton