Key Provisions

- Reduces the permissible exposure limit (PEL) for respirable crystalline silica to 50 micrograms per cubic meter of air (50 µg/m³), averaged over an 8-hour shift.
- Implements an Action Level of airborne respirable crystalline silica of 25 micrograms per cubic meter of air (25 µg/m³), averaged over an 8-hour shift.
- Requires employers to institute engineering controls where feasible, such as exhaust ventilation or wet cutting.
- Requires employers to provide respiratory protection until engineering controls are instituted, or not feasible, and to control access to areas where exposures might exceed the PEL.
- Requires employers to provide medical exams to monitor highly exposed workers and gives them information about their lung health.

Industries and Operations in Which Exposure to Crystalline Silica Can Occur

- Construction
- Demolition
- Glass products
- Pottery products
- Structural clay product
- Concrete products

Industries Affected

Construction, Hydraulic Fracturing, Maritime, and General Industry

**EMSL Analytical, Inc. is accredited to ANSI/ISO/IEC Standard 17025:2005 with respect to Crystalline Silica through the American Industrial Hygiene Association (AIHA)**

- Rigorous Quality Control (QC) program to provide accurate and defensible data
- Respirable Dust/Silica Sampling Kits available at no additional charge
- Multiple accredited EMSL Analytical, Inc. laboratories and XRD instruments for unmatched silica capacity and geographic coverage
- Two CIH’s on staff to assist with silica sampling, analytical results interpretation and OSHA compliance questions
EMSL Analytical, Inc. provides independent crystalline silica analysis by NIOSH 7500 and OSHA ID-142 using X-Ray Diffraction (XRD). Our three AIHA-LAP, LLC accredited laboratories located in Cinnaminson, NJ, Indianapolis, IN, and Huntington Beach, CA meet the current OSHA Appendix A of 29 CFR 1910.1053 (General Industry and Marine) and 29 CFR 1926.1153 (Construction) guidelines for silica analysis.

EMSL Silica Testing Lab Locations

EMSL - East Coast  
200 Route 130 North  
Cinnaminson, NJ 08077  
AIHA-LAP, LLC  
Industrial Hygiene (IHLAP)  
Laboratory ID: 100194  
XRD: NIOSH 7500M and OSHA ID-142M  
Gravimetric: NIOSH 0500 and NIOSH 0600

EMSL - Midwest  
6340 CastlePlace Drive  
Indianapolis, IN 46250  
AIHA-LAP, LLC  
Industrial Hygiene (IHLAP)  
Laboratory ID: 157245  
XRD: NIOSH 7500M and OSHA ID-142  
Gravimetric: NIOSH 0500 and NIOSH 0600

EMSL/LA Testing - West Coast  
5431 Industrial Drive  
Huntington Beach, CA 92649  
AIHA-LAP, LLC  
Industrial Hygiene (IHLAP)  
Laboratory ID: 101650  
XRD: NIOSH 7500 and OSHA ID-142  
Gravimetric: NIOSH 0500 and NIOSH 0600

Sampling Recommendations

<table>
<thead>
<tr>
<th>Samples</th>
<th>RL (ug)</th>
<th>Action Level (ug/m³)</th>
<th>OSHA PEL (ug/m³)</th>
<th>Recommended Volumes To Achieve PEL</th>
<th>Recommended Volumes To Achieve Action Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alpha Quartz</td>
<td>5</td>
<td>25</td>
<td>50</td>
<td>300L</td>
<td>600L</td>
</tr>
<tr>
<td>Cristobalite</td>
<td>10</td>
<td>25</td>
<td>50</td>
<td>300L</td>
<td>600L</td>
</tr>
<tr>
<td>Tridymite</td>
<td>10</td>
<td>25</td>
<td>50</td>
<td>300L</td>
<td>600L</td>
</tr>
<tr>
<td>All 3 Species</td>
<td>10</td>
<td>25</td>
<td>50</td>
<td>300L</td>
<td>600L</td>
</tr>
</tbody>
</table>

EMSL Sampling Kits

- EMSL Parallel-Particle Impactor (PPI) Kit  
- Available Flow Rates: 2LPM, 4LPM, 8LPM  
- Pump/Charger, Tubing and Clip, Rotameter, PPI  
  *Impactor purchased separately*

- EMSL Cyclone Sampling Kit  
- Available Flow Rate: 2.5LPM  
- Pump/Charger, Tubing and Clip, Rotameter, Aluminum Cyclone  
  *Nylon Cyclones Also Available*

EMSL Impactors and Media

- Disposable PPI Impactor (2, 4, 8 LPM) with Pre-Weighted Filter  
- Disposable PPI Impactor (2, 4, 8 LPM) with Non Pre-Weighted Filter  
- Also Available: Reusable PPI Impactors

- Gravimetric Pre-Weighed PVC Cassette  
- Non Pre-Weighed PVC Cassette

1Non Pre-Weighed filters prohibit reporting of Respirable Dust. If respirable dust is required, a Pre-Weighed Filter MUST be used.

RL = Reporting Limit  
PEL = Permissible Exposure Limit

EMSL’s Services are subject to Terms and Conditions noted in EMSL’s T&C section located in the Lab Services Guide.

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