

FREQUENTLY ASKED QUESTIONS RELATING TO NEW SILICA STANDARDS ENFORCEMENT

The new exposure limit within the OSHA/CALOSHA Standard for respirable crystalline silica, began on September 23, 2017. This standard was first enacted in 1972 and stated that the **Permissible Exposure Limit (PEL)** to respirable crystalline silica was 250 micrograms per cubic meter (ug/cm^3) in a time-weighted 8-hour period. The new standard has changed the PEL to $50 \text{ ug}/\text{cm}^3$ in a time-weighted 8-hour period. Further, if the project is proven to have respirable silica exposure of $25 \text{ ug}/\text{cm}^3$, known as the **Action Level**, or less in a time-weighted 8-hour period, then no further action is required.

1. Why are the Silica Standards changing?

Only inhaling air with minimal amount of silica micrograms can cause silicosis but, eliminating respirable silica exposure are not realistic. The 50 micrograms per cubic liter rule was determined to be feasible.

2. Can you explain the terms Action Level and Permissible Exposure Limit (PEL)?

When monitoring work areas for respirable crystalline silica exposure show levels to be less than 25 micrograms per cubic meter (ug/cm^3), no further action is necessary. When monitoring indicates levels between $25 \text{ ug}/\text{cm}^3$ but less than $50 \text{ ug}/\text{cm}^3$ additional monitoring will be required. This range is known as the **Action Level**. When levels reach $50 \text{ ug}/\text{cm}^3$, the **PEL** or the maximum employee exposure occurs. Employee Exposure is defined by OSHA as "exposure to respirable crystalline silica that would occur if the employee were not using a respirator".

3. What are Record Keeping requirements?

All **Employers** must implement a **Written Exposure Control Program** that details procedures to limit **Employee** exposure to respirable crystalline silica dust. Program should be responsibility of the Competent Person.

4. What is the purpose of a Written Exposure Control Program and when must it be provided?

The **Written Exposure Control Program** includes the following: Implemented by Competent Person

- A. Description of workplace tasks involving silica dust exposure
- B. Description of engineering controls, work practices and respiratory protection used to limit **Employee** exposure
- C. List of Housekeeping measures including no "dry-sweeping" and not using compressed air to clean clothing or surfaces unless a proper ventilation system is used.
- D. Description of procedures to restrict work access when necessary to reduce respirable crystalline silica exposure including exposure generated by other employers or sole proprietors.
- E. **Employers** should have this plan in affect by September 23, 2017.

5. **Who is the “Competent Person” and their responsibilities.**
 - A. Employed by **Employer**, a person (e.g. existing safety manager or QA/QC person) capable of Identifying existing and foreseeable respirable crystalline silica hazards in the workplace.
 - B. Has authorization to take prompt corrective measures to eliminate or minimize them.
 - C. Responsible for maintaining Written Exposure Control Plan.
 - D. Every **Employee** should be notified of the “Competent Person”.
 - E. **Employer** should appoint “Competent Person” by September 23, 2017

6. **What is OSHA Table 1: Specified Exposure Control Methods?**

One of three methods **Employers** can use to limit **Employee** exposure. **Employer** may also measure **Employee** exposure but if Table 1 is followed, **Employee** measurement is not required.

7. **Is there a method the Employer can take if activities are not included in Table 1?**

When **Employee** task is not in Table 1 or if **Employer** cannot fully implement Table 1, The **Employer** shall ensure that no **Employee** is exposed to airborne concentration of respirable crystalline silica one of two ways:

 - A. Performance Option
Any Combination of air monitoring data & Objective Data
 - B. Scheduled Monitoring Option
Time-weighted 8-hour monitoring of a percentage of employees who are performing similar tasks in potentially silica-exposure areas.

8. **What are the OSHA requirements for “Objective Data”?**
 - A. Monitoring data from industry wide surveys or calculations.
 - B. Demonstrates a relative exposure to a product or material or related to a specific task, process or activity.
 - C. Workplace conditions or exposure potentials cannot be higher than Objective Data conditions.
 - D. If Objective Data evidence indicates respirable silica levels are below established levels, no additional Air Monitoring is required.

9. **How is air monitoring sampling for silica conducted and who implements sampling?**
 - A. An Industrial Hygienist or The Competent Person (must be properly trained to perform monitoring) will use a combination device called a cyclone assembly and a sampling pump to trap tiny respirable silica particles from the air in the work environment.
 - B. The cyclone assembly and sampling pump will be placed on the **Employee**, who will wear the device throughout the work shift for up to 8 hours or over a time-weighted average (TWA)
 - C. **Employees** may be fitted with the sampling device or just a fraction of workers doing similar work and who are closest to the silica source may be fitted.
 - D. The Industrial Hygienist or Competent Person will return at the end of the sampling period to de-activate the sampling pump and remove the filters to be sent to accredited lab for analysis.

10. What happens when air monitoring indicates respirable silica levels are below established levels set by OSHA

If initial test indicates silica levels are below 25 ug/cm³, no further testing is required. If test indicates silica levels above 25 micrograms, known as the **Action Level**, but does not exceed the **PEL** of 50 micrograms per cubic meter, then an additional test should be performed within six months after the most recent test. If crystalline silica levels are above 50 micrograms then refer to the written exposure control plan.

11. What is the purpose of the Respirator Program and what are Employer requirements?

To ensure the **Employee** is not exposed (breathes in) an airborne concentration of respirable crystalline silica more than 50 micrograms and known as The Permissible Exposure Limit (PEL). The PEL is calculated and averaged out for a time-weighted 8-hour period known as the Time-Weighted Assessment (TWA). **Employer** must supply appropriate respiratory devices (dusk masks) to all **Employees** exposed to silica dust unless exempted by Table 1, Appendix A of employer's silica written control plan or from onsite monitoring that shows acceptable crystalline limits.

12. Does the presence of Silica in a product or SDS then require air monitoring to confirm actual respirable silica levels?

No unless airborne particles are created.

13. What is Medical Surveillance?

Employer must make Medical Surveillance available free of charge for each **Employee** that uses a respirator for 30 days or more per year for exclusive protection from crystalline silica. Initial exam within 30 days of initial assignment.

14. What type of facility is qualified to perform Medical Surveillance

A physician or other Licensed Health Care Professional (PLHCP) legally permitted to independently provide or be delegated the responsibility to provide some or health care services when monitoring an **Employee**. Testing is performed by a licensed laboratory that analyzes air samples for respirable crystalline silica.

15. What are the Employer's requirements for silica education of employees?

Employers must comply with the Hazard Communication Standard (29 CFR 1910.1200), including training workers on the silica hazard, the health effects of exposure, protective measures (controls used to reduce exposures), the identity of the Competent Person, and the Medical Surveillance program.

16. When and how often must an Employee undergo a medical exam?

Every three years or sooner if PLHCP deems it necessary.