

MHEC
(MIDWESTERN HIGHER EDUCATION COMPACT)
OSHA'S NEW FINAL RULE ON CRYSTALLINE
SILICA: WHAT YOU NEED TO KNOW

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Tod Hollis, Vice President Dallas, TX

Geffrey Price Senior Vice President – Chicago, IL

Overview

- History of the Silica Standard
- Procedural Background
- Publication of Final Rule
- Legal Challenges to the Final Rule
- Obligations under the Standard

When Must I Comply?

- (k) **Dates.** (1) This section shall become effective June 23, 2016.
- (2) All obligations of this section, except requirements for methods of sample analysis in paragraph (d)(2)(v), shall commence June 23, 2017.
- (3) Requirements for methods of sample analysis in paragraph (d)(2)(v) of this section commence June 23, 2018.

One year compliance date!

Am I Covered by the New Rule?

Scope and Application.

This section applies to all occupational exposures to respirable crystalline silica in construction work, except where employee exposure will remain below 25 micrograms per cubic meter of air (25 $\mu\text{g}/\text{m}^3$) as an 8-hour time-weighted average (TWA) under any foreseeable conditions.

What Do I Do to Comply?

Specified exposure control methods.

For each employee engaged in a task identified on Table 1, the employer shall fully and properly implement the engineering controls, work practices, and respiratory protection specified for the task on Table 1, unless the employer assesses and limits the exposure of the employee to respirable crystalline silica in accordance with paragraph (d) of this section.

If you comply with Table 1, you do not need to monitor for silica or comply with the PEL.

Specified Exposure Control Methods When Working with Materials Containing Crystalline Silica

Equipment Task	Engineering and Workpractice Control Methods	Required Respiratory Protection and Minimum Assigned Protection Factor (APF)	
		≤ 4 hours/shift	> 4 hours/shift
(i) Stationary masonry saws	Use saw equipped with integrated water delivery system that continuously feeds water to the blade.	None	None
	Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions.		
(ii) Heldhand power saws (any blade diameter)	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.		
	When used outdoors.	None	APF 10
	When use indoors or in an enclosed area.	APF 10	APF 10
(iii) Handheld power saws for cutting fiber-cement board (with blade diameter of 8 inches or less)	For tasks performed outdoors only:		
	Use saw equipped with commercially available dust collectipon system.	None	None
	Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emmissions.		
	Dust collector must provide the air flow recommended by the local tool manufacturer, or greater, and have filter with 99% or greater efficiency.		

Notes to Table 1 ...

When implementing the control measures specified in Table 1, each employer shall:

- i. For tasks performed indoors or in enclosed areas, provide a means of exhaust as needed to minimize the accumulation of visible airborne dust;
- ii. For tasks performed using wet methods, apply water at flow rates sufficient to minimize release of visible dust;
- iii. For measures implemented that include an enclosed cab or booth, ensure that the enclosed cab or booth:
 - A. Is maintained as free as practicable from settled dust;
 - B. Has door seals and closing mechanisms that work properly;
 - C. Gaskets and seals that are in good condition and working properly;
 - D. Is under positive pressure maintained through continuous delivery of fresh air;
 - E. Has intake air that is filtered through a filter that is 95% efficient in the 0.3-10.0 μm range (e.g., MERV-16 or better); and
 - F. Has heating and cooling capabilities.

Operation of Table 1 ...

Where an employee performs more than one task on Table 1 during the course of a shift, and the total duration of all tasks combined is more than four hours, the required respiratory protection for each task is the respiratory protection specified for more than four hours per shift. If the total duration of all tasks on Table 1 combined is less than four hours, the required respiratory protection for each task is the respiratory protection specified for less than four hours per shift.

What If I Don't Use Table 1?

Alternative exposure control methods. For tasks not listed in Table 1, or where the employer does not fully and properly implement the engineering controls, work practices, and respiratory protection described in Table 1:

- 1) Permissible exposure limit (PEL).** The employer shall ensure that no employee is exposed to an airborne concentration of respirable crystalline silica in excess of 50 $\mu\text{g}/\text{m}^3$, calculated as an 8-hour TWA.
- 2) Exposure assessment** —The employer shall assess the exposure of each employee who is or may reasonably be expected to be exposed to respirable crystalline silica at or above the action level in accordance with either the performance option or the scheduled monitoring option.

What if I Don't Use Table 1 (continued)?

Performance option. The employer shall assess the 8-hour TWA exposure for each employee on the basis of any combination of air monitoring data or objective data sufficient to accurately characterize employee exposures to respirable crystalline silica.

Scheduled monitoring option. The employer shall perform initial monitoring to assess the 8-hour TWA exposure for each employee on the basis of one or more personal breathing zone air samples that reflect the exposures of employees on each shift, for each job classification, in each work area. Where several employees perform the same tasks on the same shift and in the same work area, the employer may sample a representative fraction of these employees in order to meet this requirement. In representative sampling, the employer shall sample the employee(s) who are expected to have the highest exposure to respirable crystalline silica.

What if I Don't Use Table 1 (continued)?

Employee notification of assessment results.

- A. Within five working days after completing an exposure assessment, the employer shall individually notify each affected employee in writing of the results of that assessment or post the results in an appropriate location accessible to all affected employees
- B. Whenever an exposure assessment indicates that employee exposure is above the PEL, the employer shall describe in the written notification the corrective action being taken to reduce employee exposure to or below the PEL.

What if I Don't Use Table 1 (continued)?

Observation of monitoring.

- A. Where air monitoring is performed to comply with the requirements of this section, the employer shall provide affected employees or their designated representatives an opportunity to observe any monitoring of employee exposure to respirable crystalline silica.
- B. When observation of monitoring requires entry into an area where the use of protective clothing or equipment is required for any workplace hazard, the employer shall provide the observer with protective clothing and equipment at no cost and shall ensure that the observer uses such clothing and equipment.

What if I Don't Use Table 1 (continued)?

Methods of compliance.

The employer shall use engineering and work practice controls to reduce and maintain employee exposure to respirable crystalline silica to or below the PEL, unless the employer can demonstrate that such controls are not feasible. Wherever such feasible engineering and work practice controls are not sufficient to reduce employee exposure to or below the PEL, the employer shall nonetheless use them to reduce employee exposure to the lowest feasible level and shall supplement them with the use of respiratory protection.

Housekeeping Requirements

Housekeeping.

- A. The employer shall not allow dry sweeping or dry brushing where such activity could contribute to employee exposure to respirable crystalline silica unless wet sweeping, HEPA-filtered vacuuming or other methods that minimize the likelihood of exposure are not feasible.
- B. The employer shall not allow compressed air to be used to clean clothing or surfaces where such activity could contribute to employee exposure to respirable crystalline silica unless:
 - i. The compressed air is used in conjunction with a ventilation system that effectively captures the dust cloud created by the compressed air;
or
 - ii. No alternative method is feasible.

Written Exposure Control Plan

Written exposure control plan.

- The employer shall establish and implement a written exposure control plan that contains at least the following elements:
 - i. A description of the tasks in the workplace that involve exposure to respirable crystalline silica;
 - ii. A description of the engineering controls, work practices, and respiratory protection used to limit employee exposure to respirable crystalline silica for each task;
 - iii. A description of the housekeeping measures used to limit employee exposure to respirable crystalline silica; and
 - iv. A description of the procedures used to restrict access to work areas, when necessary, to minimize the number of employees exposed to respirable crystalline silica and their level of exposure, including exposures generated by other employers or sole proprietors.

The employer shall designate a competent person to make frequent and regular inspections of job sites, materials, and equipment to implement the written exposure control plan.

Medical Surveillance

Medical surveillance.

General.

- i. The employer shall make medical surveillance available at no cost to the employee, and at a reasonable time and place, for each employee who will be required under this section to use a respirator for 30 or more days per year.
- ii. The employer shall ensure that all medical examinations and procedures required by this section are performed by a PLHCP.

Medical Report for the Employee

The employer shall ensure that the PLHCP explains to the employee the results of the medical examination and provides each employee with a written medical report within 30 days of each medical examination performed. The written report shall contain:

- i. A statement indicating the results of the medical examination, including any medical condition(s) that would place the employee at increased risk of material impairment to health from exposure to respirable crystalline silica and any medical conditions that require further evaluation or treatment;
- ii. Any recommended limitations on the employee's use of respirators;
- iii. Any recommended limitations on the employee's exposure to respirable crystalline silica; and

A statement that the employee should be examined by a specialist if the chest X-ray provided in accordance with this section is classified as 1/0 or higher by the B Reader, or if referral to a specialist is otherwise deemed appropriate by the PLHCP.

Medical Report for the Employer

The employer shall obtain a written medical opinion from the PLHCP within 30 days of the medical examination. The written opinion shall contain only the following:

- A. The date of the examination;
- B. A statement that the examination has met the requirements of this section; and
- C. Any recommended limitations on the employee's use of respirators.

Hazard Communication

The employer shall include respirable crystalline silica in the program established to comply with the hazard communication standard (HCS) (29 CFR 1910.1200). The employer shall ensure that each employee has access to labels on containers of crystalline silica and safety data sheets, and is trained in accordance with the provisions of HCS and paragraph (i)(2) of this section. The employer shall ensure that at least the following hazards are addressed: cancer, lung effects, immune system effects, and kidney effects.

Information and Training

The employer shall ensure that each employee covered by this section can demonstrate knowledge and understanding of at least the following:

- A. The health hazards associated with exposure to respirable crystalline silica;
- B. Specific tasks in the workplace that could result in exposure to respirable crystalline silica;
- C. Specific measures the employer has implemented to protect employees from exposure to respirable crystalline silica, including engineering controls, work practices, and respirators to be used;
- D. The contents of this section;
- E. The identity of the competent person designated by the employer; and
- F. The purpose and a description of the medical surveillance program.

Recordkeeping

Air monitoring data. The employer shall make and maintain an accurate record of all exposure measurements taken to assess employee exposure to respirable crystalline silica.

Objective data. The employer shall make and maintain an accurate record of all objective data relied upon to comply with the requirements of this section.

Medical surveillance. The employer shall make and maintain an accurate record for each employee covered by medical surveillance.

Questions



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