

## **OSHA's Respirable Crystalline Silica Standard for Construction** **Frequently Asked Questions**

### **Scope**

The standard applies to all occupational exposures to respirable crystalline silica in construction work, except where employee exposures will remain below an Action Level (“AL”) of 25 µg/m<sup>3</sup>, calculated as an 8-hour time weighted average (“TWA”), under any foreseeable conditions. The exception is intended to ensure that the standard does *not* apply to employees whose work results in only minimal silica exposures.

The FAQs clarify that many common construction tasks are likely to be *outside* the scope of the standard because they typically generate exposures below the AL. This includes mixing small amounts of mortar; mixing small amounts of concrete; mixing bagged, silica-free drywall compound; mixing bagged exterior insulation finishing system base and finish coat; and removing concrete formwork. In addition, tasks where employees are working with silica-containing products that are, and are intended to be, handled while wet, are likely to generate exposures below the AL (examples include finishing and hand wiping block walls to remove excess wet mortar, pouring concrete, and grouting floor and wall tiles). The FAQs also state that many silica-generating tasks performed for only 15 minutes or less a day will fall outside the scope of the standard.

### **Definitions**

The standard defines certain key terms used in the rule. The standard defines such terms as “action level” (a concentration of airborne respirable crystalline silica of 25 µg/m<sup>3</sup>, calculated as an 8-hour TWA), “employee exposure” (exposure to airborne respirable crystalline silica that would occur if the employee were not using a respirator), and “competent person” (an individual who is capable of identifying existing and foreseeable respirable crystalline silica hazards in the workplace, and has authorization to take prompt corrective measures to eliminate or minimize them and the knowledge and ability necessary to fulfill the responsibilities set forth in paragraph (g) of the standard). 29 C.F.R. § 1926.1153(b).

The FAQs clarify that the standard defines a competent person in terms of capability, i.e., having the knowledge and ability to perform the duties outlined in the standard. A person with these capabilities (whether acquired through training, education, work experience, or otherwise), who is authorized by the employer to perform the duties of a competent person, qualifies as a competent person under the standard. In addition, the FAQs clarify that, where the standard refers to high-efficiency particulate air (HEPA) filters, employers can rely on a manufacturer’s representation that a filter is at least 99.97 percent efficient in removing mono-dispersed particles of 0.3 micrometers in diameter or that it is compliant with the OSHA definition of a “HEPA filter.” The standard does not require employers to independently test the effectiveness of a filter to determine if it meets the definition in paragraph (b).

### **Exposure Control Methods**

The standard permits employers to select from two methods of compliance to control exposures to respirable crystalline silica: “specified exposure control methods” commonly referred to as Table 1 or

“alternative exposure control methods.” Employers that follow Table 1 do not have to assess employee exposures or separately ensure compliance with the permissible exposure limit. Table 1 includes common construction tasks.

### *Specified Exposure Control Methods - Table 1*

The FAQs clarify that the Table 1 requirement that employers “[o]perate and maintain” tools “in accordance with manufacturer’s instructions to minimize dust emissions,” applies only to manufacturer instructions that are *related to dust control*. Other information in these instructions, including recommended respiratory protection, do not have to be followed for purposes of the standard.

For a few tasks on Table 1, respirator requirements vary based on task duration, *i.e.*, whether the task is performed for “less than or equal to four hours/shift” or “greater than four hours/shift.” The FAQs make clear that an employer does not have to track the exact amount of time that employees are performing a job throughout a shift to be in compliance with Table 1. Rather, before a task is performed, an employer must make a good-faith judgment about whether the task will take more than four hours. If the employer anticipates that an employee will be engaged in a task for more than four hours, the employer must provide the employee, at the beginning of the shift, the respiratory protection required in the “greater than four hours/shift” column on Table 1. If, in contrast, the employer anticipates that an employee will be engaged in a task for four hours or less, the employer needs to provide respiratory protection in accordance with the “less than or equal to four hours/shift” column. Finally, the FAQs clarify that handheld powered demolition hammers with bushing tools and tile saws are covered by Table 1.

### *Alternative Exposure Control Methods*

The FAQs make some important clarifications regarding alternative exposure control methods. The FAQs clarify that an exposure assessment is not required if the employer has made a reasonable determination that exposures will remain below the AL due to the use of engineering or work practice controls. This determination must be based on applicable experience or evidence. In addition, under the scheduled monitoring option, employers are not required to monitor exposures every time a new job is started, provided that the task and the workplace conditions in the new work area are substantially similar, in that they are not reasonably expected to result in exposures above those detected during the most recent monitoring. Also, the employer has the option of switching from the scheduled monitoring option to the performance option and can use air monitoring data generated during scheduled monitoring to fulfill assessment requirements under the performance option.

### **Housekeeping**

The standard includes requirements related to housekeeping on construction worksites. In particular, employers must 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.” In addition, employers must 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: (1) the compressed air is used in conjunction with a ventilation system that effectively captures the dust cloud created by the compressed air, or (2) no alternative method is feasible.

The FAQs clarify that if employee exposure will remain below the AL under any foreseeable conditions, the prohibition on dry sweeping, dry brushing, and the use of compressed air for cleaning clothing and surfaces does not apply. They also clarify that the prohibition on these activities only apply to housekeeping activities, not to the use of these practices to perform a work task.

### **Written Exposure Control Plan**

The standard requires employers to establish and implement a written exposure control plan that contains at least the following elements: (1) a description of the tasks in the workplace that involve exposure to silica; (2) a description of the engineering controls, work practices, and respiratory protection used to limit employee exposure to silica for each task; (3) a description of the housekeeping measures used to limit employee exposure to silica; and (4) a description of the procedures used to restrict access to work areas, when necessary, to minimize the number of employees exposed to silica and their level of exposure, including exposures generated by other employers or sole proprietors.

The FAQs clarify that the standard does not require employers to develop a *new* written plan for each job or worksite. It requires only that employers have a written exposure control plan applicable to each worksite. Employers may develop a single comprehensive written exposure control plan that covers all required aspects of the plan for all work activities at all worksites. The FAQs also clarify that when silica generating tasks are being performed, the standard is not intended to prohibit *all* employees from entering entire areas of a construction site simply because employees in those areas are performing some work involving the generation of silica. The rule calls only for *minimizing* the number of employees in the relevant work areas. The standard does not preclude employees from entering work areas where silica-generating tasks are occurring when it is necessary for them to do so.

### **Medical Surveillance**

The standard requires construction employers to make medical surveillance available at no cost, and at a reasonable time and place, to any employee who is required by the silica standard to use a respirator for 30 or more days a year. An initial examination must be offered within 30 days of initial assignment, unless the employee has received a medical examination that meets the requirements of the standard within the last three years.

The employee will receive a written medical report within 30 days of each exam that includes: (1) a statement indicating the results of the medical examination; (2) any recommended limitations on the employee's use of respirators; (3) any recommended limitations on the employee's exposure to silica; and (4) a statement, if applicable, that the employee should be examined by a specialist. The employer must also obtain a written medical opinion within 30 days of each exam, which contains more limited information than the report to the employee. The opinion to the employer contains the date of the examination, a statement that the examination has met the requirements of the standard, and any recommended limitations on the employee's use of respirators.

The FAQs make some important clarifications regarding medical surveillance. The silica standard does not preclude in-house health care providers from performing the required medical surveillance examinations. In addition, the standard does not preclude employers from receiving the same information

that employees receive from the surveillance examination, if it is received for other purposes and through other means, such as through workers compensation records and proceedings. The FAQs also make clear that the standard requires employers to make medical surveillance *available* to qualifying employees, but does not require that employees participate in the surveillance.

### **Employee Information and Training**

The standard requires employers to ensure that each employee can demonstrate knowledge and understanding of the health hazards associated with exposure to silica, specific tasks in the workplace that could result in exposure to silica, specific measures the employer has implemented to protect employees from exposure to silica, the contents of the standard, the identity of the competent person designated by the employer, and the purpose and a description of the medical surveillance program. 29 C.F.R. § 1926.1153(i)(2)(i).

The FAQs clarify that employers are in the best position to determine which method of training would be most effective for their employees. Acceptable forms of training may include hands-on training, videos, slide presentations, classroom instruction, informal discussions during safety meetings, written materials, or any combination of these methods. Regardless of the method, employees must be provided the opportunity to ask questions and receive answers. Similarly, there is no set method employers must use to ensure employees demonstrate knowledge and understanding of the required subjects. Acceptable forms of assessment may include discussion of the required training subjects, written tests, or oral quizzes. Finally, while the standard does not explicitly address re-training or on-going training, the FAQs also clarify that periodic training, additional or repeated training may be necessary under certain circumstances. For example, if an employer observes an employee engaging in activities that contradict knowledge gained through training, it is a sign to the employer that the employee may require a reminder or periodic retraining on work practices.

### **Recordkeeping**

The standard requires that employers make and maintain records of certain information, including air monitoring data, objective data, and medical surveillance data. Required records must be maintained and made available in accordance with 29 C.F.R. § 1910.1020, which generally requires employers to ensure that these types of records are maintained for at least 30 years. 29 C.F.R. § 1926.1153(j).

The FAQs clarify that employers are responsible for ensuring the retention of records in the possession of the PLHCP. Employers can fulfill this obligation by including the retention requirement in the agreement between the employer and the PLHCP or by specifically communicating to the PLHCP the substance of OSHA's record-retention requirements.