

Respirable Silica Standard

Compliance Summary

In June 2016, OSHA issued its' Final Rule for crystalline silica, addressing both general industry and maritime as well as the construction sector. While the bulk of the standard goes into effect in June 2017, certain compliance elements including the new OSHA Action Level (AL) and the Permissible Exposure Limit PEL) are in effect from June 2016.

Previously, OSHA regulated respirable silica under 29 CFR 1926 Subpart Z. There was no actual silica standard, and a PEL was calculated for each sample collected based on the percentage of silica in that sample. The old construction standard also used arcane units (i.e. millions of particles per cubic foot or mppcf) which have long ago fallen from favor.

The new silica requirements include a comprehensive standard, similar in many ways to the lead in construction standard (1926.62).

The newly issued standard requires employers to do the following:

Implement a Written Program

Each company needs to develop a comprehensive written program that:

- Identifies each of the company's activities that involve silica exposure
- Provide a description of the engineering controls, work practices and respiratory protection to be used
- Describes the housekeeping measures to be employed and the means by which work area access will be restricted

The program need to be reviewed annually at a minimum and updated as needed. It shall be available to all employees or their representative for reviewing and copying. The company also needs to designate a Competent Person to inspect the job site, materials and equipment required to implement the plan. Lastly, the plan needs to be integrated into the Company's Hazard Communication Program.

Implement Exposure Control Methods

Employers need to assess worker exposures or implement the OSHA recommended task procedures.

The standard provides a table which describes about 18 common silica related tasks. Companies can implement the OSHA recommended controls and PPE completely and fully and bypass exposure sampling (although a limited number of samples is recommended to support the effective implementation).

Alternatively, companies can conduct traditional task specific sampling and develop their exposure assessment strategies from there. Results above the AL or PEL establish the schedule for future sampling.

Implement a Respiratory Protection Program

Assuming that Respirator usage is part of the company's approach, the company will require a written respiratory protection program, medical clearance to wear respirators, fit testing and respirator training. This is required by OSHA for all respirators (i.e. all devices with an N95 or higher rating). If the company already actively uses respirators and already has these elements in place, that will typically suffice. Keep in mind that having a respiratory protection program is required by numerous OSHA requirements so this program will see use beyond silica.

Implement a Medical Surveillance

Employers need to make medical surveillance available to each employee who is required to wear a respirator for 30 or more days per year. The requirement to wear respirators is based on the task identified in Table 1 or based on personal monitoring. The standard describes the required medical surveillance elements. Exams are to be made available at least once every three years.

Conduct Training

Each employee needs to be trained in the standard's contents, the health hazards of silica, the tasks that could result in exposure, the controls the employer is implementing, the medical surveillance program, etc.

Maintain Record Keeping

Record regarding air monitoring, objective data, and medical surveillance need to be maintained according to 29 CFR 1910.1020.

Please note that this is only a summary of the standard and not all details have been discussed.