California OSHA Enforcement of Construction Silica Standard Begins on September 23rd

On April 19, 2017, the Department of Industrial Relations for the State of California issued an important update to Cal/OSHA’s new Respirable Crystalline Silica Standard for Construction. The standard is substantially similar to Federal OSHA’s new rules for silica. The new standard is found under Title 8 section 1532.3 of the California Code of Regulations and like the federal rule was set to go into effect on June 23, 2017.

However, Federal OSHA decided to delay enforcement of the silica rule so that it had more time to provide guidance to employers due to the unique nature of the requirements. Cal/OSHA decided to follow Federal OSHA and will enforce the new requirements beginning September 23, 2017.

Employers in California must keep in mind that they will be subject to Cal/OSHA’s new permissible exposure limit for respirable crystalline silica of 0.05 milligrams per cubic meter (0.05 mg/M3), found in Title 8 section 5155, Table AC-1. In addition, employers must continue to comply with the requirements set forth under Title 8 section 1530.1 to control employee exposures to dust created by operations conducted on concrete or masonry materials.

What is Crystalline Silica?

The type of sand used in making concrete and used for sandblasting have jagged rough-hewn surfaces for bonding and joining and for solidification and strength. The crystalline form of silica is known as silicon dioxide (SiO₂) and comes in a number of forms, the most common of which is quartz. Quartz can be found in virtually all soil in nearly every part of the country. So when you think of crystalline silica, think of very jagged micro sized crystalline glass-type of shards.

Silica is a known carcinogen, however, the most common disease is silicosis which scars the tissue of the lung making breathing difficult because the lung’s ability to extract oxygen from the air is impeded. There is no cure for silicosis. It is the microscopic lacerations of the alveoli in the lung that causes the formation of scar tissue and the creation of fibroids. Once the lungs are damaged, they do not heal, which is unlike what happens when people quit smoking. You cannot heal silica damaged lungs.

Although visible dust from concrete sawing, drilling, jackhammering, sweeping, etc. contains particles that are easy to see, it is the tiny respirable-sized particles (those that can get deep in the lung) that pose the greatest danger.

“Electron microscope image of Crystalline Silica.”

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Here is what the new construction regulation for respirable crystalline silica says:

- Reduces the allowable limit for airborne crystalline silica to 50 micrograms per cubic meter of air, averaged over an 8-hour shift.
- Requires employers to use engineering controls and/or provide respirators when levels exceed the limit, and limit worker exposure to areas with high levels of silica.
- Requires employers to develop a written exposure control plan, provide periodic medical check-ups to certain workers, and train all workers on the risks of airborne silica and how to avoid exposure.
- Provide regular medical monitoring to workers exposed to high levels of silica, and give these workers information on their lung health.
- Provides flexibility so that small companies can comply with the requirements without incurring large expenses.

Dust Control Requirements

In the majority of cases, at least in the construction industry, adherence to the silica regulation will come in the form of dust control measures, such as using water to wet the dust or a vacuum to suck it up, to limit the exposure to silica dust. Tools that offer these kinds of integral control measures are available now, and will be in higher demand in the near future.

Certain activities that create a higher level of silica dust will require workers to wear respiration equipment in addition to the recommended dust control method. Workers that spend a lot of time in an environment where respirators are necessary will be required to have regular medical exams and have their lung function evaluated.

The regulation contains a table (Table 1) with some common construction activities, the recommended engineering or dust control method, and whether and what type of respiration protection is required based on the number of hours the worker will be exposed to the hazard.

Excerpt from Table 1:

Equipment/Task – Handheld power saws (any blade diameter)

Engineering and Work Practice Control Methods – Use saw equipped with integral water delivery system that continuously feeds water to the blade. Operate and maintain tool in accordance with manufacturer’s instructions to minimize dust emissions.

Required Respiratory Protection and Minimum Assigned Protection Factor (APF):

- Less than 4 hours per shift - when used outdoors - None
- Less than 4 hours per shift – when used indoors or in an enclosed area – APF 10*
- More than 4 hours per shift – when used outdoors – APF 10*
- More than 4 hours per shift – when used indoors or in an enclosed area – APF 10*

*APF 10 protection is equivalent to a dusk mask.

Contractors will find that in most cases, silica exposure can be brought to a safe level using effective dust control, such as water or vacuum suction. When dust control cannot be performed, worker exposure must be controlled through engineering controls, limiting the time of exposure, and the use of respirators.

If an employer chooses not to employ the dust control measures given in Table 1 of the regulation, then the company must test the amount of silica in the air, and if it is above 25 micrograms per cubic meter of air, averaged over an 8-hour period, it must employ dust control measures to ensure that the level does not go above the 50 microgram limit, or provide respirators when those measures aren’t possible. The 25 microgram level is called the “action level” by the regulation.
**Other Requirements**

The silica regulation requires employers to set up a written exposure control plan, which details the activities most commonly undertaken, the method of dust or exposure control, and includes procedures for restricting access to areas where high exposure will occur. In addition, a "competent person" must be designated for implementing the exposure control plan and assessing areas of exposure.

Employers will need to assess their current housekeeping methods and insure that alternatives that lower the risk of airborne silica exposure are employed. Training workers to identify silica exposure opportunities and how to reduce their risks is also required.

Workers who are required to wear a respirator for more than 30 days in a calendar year will need to have regular employer-provided medical exams. These exams include a baseline exam to assess lung function before exposure and a chest X-ray, and regular check-ups every 3 years to compare lung function over time. Workers must be allowed to receive reports of these exams. Employers must keep records of these exams and the workers’ exposure level over time.

According to OSHA’s FAQ (frequently asked questions) sheet on the new rule, “The rule is expected to result in annual costs of about $1,524 for the average workplace covered by the rule. The annual cost to a firm with fewer than twenty employees will be less, averaging about $560.”

Finally, we include several other references for you and/or the individual in your firm with primary safety responsibility.

◊ When Federal OSHA first released the new standard in April of 2016, the National Office of NECA was part of a coalition of construction industry trade groups that produced a roughly one-hour webinar on the new rule. To access the webinar, titled “OSHA’s New Final Rule on Crystalline Silica: What You Need to Know,” click on the link [http://vimeo.com/168242085](http://vimeo.com/168242085) and use password: CSC4.

◊ In 2009, way before this new Standard was developed, Federal OSHA developed a publication “Controlling Silica Exposures in Construction,” which is also useful. Keep in mind it is not up-to-date with new standard.

◊ Since you need a written exposure control plan by September 23rd -- we have included a representative sample Respirable Crystalline Silica Program. You might also want to check with the loss control consultant for your workers compensation insurance carrier for additional help. Know that Cal OSHA is going to want to see a systematic, centralized, updated index of steps and practices to minimize or eliminate exposure to respirable (breathable) crystalline silica.

◊ Several of the tool manufactures now address dust control for concrete sawing and drilling. Click here to go to the Dewalt Site, [here](http://example.com/dewalt) for Milwaukee, and [here](http://example.com/milwaukee) for Hilti Site.

◊ All of us probably need to make better use of the common dust masks (N95) -- and avoid scheduling work in areas with ongoing concrete demolition. This is especially important if the demo is indoors or in enclosed areas.
The Annual Meeting of the Contra Costa County Electrical Industry Trust will be held at Ruth’s Chris Steak House, in Walnut Creek, Thursday, September 21, 2017 @ 6:00 p.m. Our September NECA Chapter Membership Meeting will be held in conjunction with the Annual Meeting, and is open to all signatory contractors.

Each year the Board of Trustees report on the progress of the Electrical Industry Trust and the other Trust funds that are included in the hourly contribution rate, which include the Joint Apprenticeship and Training Committee, our local LMCC, and our Statewide LMCC.

The Electrical Industry Trust will also be holding an election during this meeting to fill two Trustee positions. Candidates must be a representative of a Contra Costa-based firm that makes contributions on a regular basis to the various Trust funds under the Inside Wireman's Agreement. If interested, please contact the NECA office to get the proper nomination form and procedures.

Please make an effort to attend the meeting so you can catch up on anything you may have missed over the summer.

Click Here to RSVP.
NorCal Sound and Communication JATC recently posted a newly designed web site (www.norcal-jatc.com) that is fully mobile-ready and offers a much faster user experience. The increased speed allows visitors to browse the site faster and access important information quicker.

The website’s facelift includes a more polished visual look, a new home page, and three distinct sections for applicants, apprentices and installer/technicians. Each of these sections offer Frequently Asked Questions for each group. (Previously one FAQ section addressed all three groups).

The new home page features a number of recruiting tools, including a four-minute video about the Technology Training center, produced by the IBEW Hour Power (www.ibewhourpower.com), and a digital version of the recruitment brochure. It also offers an overview of the program and its benefits and outlines the classes offered in each year of study. An extensive directory can also be accessed through the Contact Us section of the homepage.

There are new tools for applicants including a new application flow chart and a map showing local union coverage areas.

In the Installer/Tech section, viewing and signing up for upgrade classes has been made easier and techs can sign up for an exam prep course in order to take practice tests. There is also updated information about your medical benefits, including a link to the plan administrator’s website (www.soundcommbenefits.com).

The website offers its own search engine, allowing you to quickly find the online information you are looking for. The site has also been optimized for search engines, making it easier to find on Google, Yahoo and Bing. The photo gallery has been updated with photos from the new Training Center and each of the new labs.
AB 626 Follow-up – Claim Notice

Last year, NECA successfully co-sponsored industry legislation (AB 626), regarding change order and extra work claims, to ensure a process that was fair and allowed contractors a path to initiate payment for that work.

Now that the law is in place, we have received requests to develop and provide a notice that our contractors may use when making a claim under the new statute. That notice and a copy can be viewed and downloaded from links below:

Public Contract Code Notice

Public Contract Code Section 9204
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