OSHA publishes final rule on silica

Agency updates standard for first time since 1971

Sarah Trotto
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Secretary of Labor Thomas Perez was apologetic as he announced that OSHA had released its long-awaited final rule on protecting workers from exposure to respirable crystalline silica.

“I’m sorry it took this long,” Perez said during a March 24 stakeholder event in Bowie, MD. The Department of Labor shared a video depicting the story of Tom Ward, a masonry trainer whose father died of silicosis. Ward’s father was a sandblaster who became short of breath, suffered collapsed lungs and died five years after his diagnosis.

The rule marks the agency’s first updated regulation for silica since 1971. After facing regulatory delays, pushback from industry groups, and collection of feedback and testimony, OSHA estimates that the new rule will save more than 600 lives and prevent more than 900 cases of silicosis – an incurable lung disease – each year. The rule also is intended to help protect against lung cancer, chronic obstructive pulmonary disease and kidney disease.

A known human carcinogen, crystalline silica exists in sand, stone, soil, concrete and other materials. Exposure can occur during tasks such as cutting, sawing and crushing of concrete, brick or rock, when workers inhale particles that can result in lung diseases such as silicosis and lung cancer. When suffering from silicosis, the lungs become scarred, affecting breathing.

A NIOSH study in 2015 stated that silicosis deaths have decreased in the last decade, but the condition continues to kill about 100 people per year.

Approximately 2.3 million workers are potentially exposed to respirable crystalline silica, including 2 million construction workers and 300,000 workers in foundries and brick manufacturing facilities and at hydraulic fracturing sites, OSHA states.

The new permissible exposure limit for respirable crystalline silica – 50 micrograms per cubic meter of air averaged during an 8-hour shift – equals what NIOSH recommended in 1974. OSHA’s new PEL is half the previous limit for general industry.
and 5 times lower than the previous limit for construction.

“Unfortunately, it has taken over 40 years for the politics to catch up with the science,” Perez said at a press conference following the announcement. “In the meantime, the industry has changed, technology has progressed, businesses have innovated. A good government also adapts, even if it’s long overdue.”

The details

The new rule covers engineering controls, protective clothing, medical surveillance and other issues. OSHA presents the rule as two standards – one for general industry and maritime and the other for construction. Highlights include:

- Mandating that employers use engineering controls and work practices to restrict worker exposure, bar access to high-exposure sites, supply respiratory protection when controls cannot curb exposures to the PEL, train employees, and offer medical exams to highly exposed workers
- Offering a table of specified controls that construction employers can follow for “greater certainty and ease of compliance” without monitoring exposure
- Allowing employers to have enough time to satisfy requirements by spacing out compliance dates

OSHA created the table in response to small construction employers’ claims that measurement is expensive and difficult, agency administrator David Michaels said during the press conference, adding that construction employers can avoid measuring by following the table’s principles.

“This new, lower limit can be achieved using common sense, practical controls – wetting it down, turn the water on, turn the vac on,” Perez said. “This isn’t rocket science, and it isn’t cost-prohibitive. I want to emphasize that the rule provides remarkable flexibility to employers, small businesses and large businesses alike, as they implement this standard.”

Both standards are scheduled to go into effect on June 23. Industries will then have one to five years to meet most requirements. The construction industry must comply by June 23, 2017; general industry, maritime and hydraulic fracturing must adhere to requirements by June 23, 2018; and hydraulic fracturing will have until June 23, 2021, to comply with engineering controls. The extended time allows employers to provide medical exams to some workers, and gives hydraulic fracturing employers the opportunity to implement dust controls for the new PEL, OSHA states.
THOMAS PEREZ
SECRETARY OF LABOR

Answering critics

OSHA has been working on the silica rulemaking since at least 2003. The agency sent a draft of its final rule to the White House Office of Management and Budget in December.

Despite the delays in rulemaking, Perez pointed out that some critics will say OSHA moved too quickly.

“I guarantee that if and when someone files a lawsuit – and I’m confident that if that happens we will prevail – one of the arguments they’re going to make is we went too fast,” Perez said. “And the record will show we were very deliberate and considered every comment, left no stone unturned and came down with a result that respects the science, mirrors the science, and is the product of a very inclusive process.”

In September 2013, the agency published a proposed rule on silica that included changing the PEL. OSHA received more than 1,700 comments from the public, and more than 200 stakeholders gave testimony during hearings. Many industry stakeholders opposed the proposed reduced PEL.

Stakeholders also have alleged that the change will cost more and will be difficult to measure. Michaels claims the annual compliance cost will be about $1,500 for the average employer and less than $600 for employers with fewer than 20 workers. He added that the cost for industry will be more than $1 billion annually but will reap benefits of about $7 billion.

“The [cost] is high because this will affect a lot of employers across the country, but it’s going to save a lot of lives,” he said.

Reaction

Worker safety advocates and labor groups praised the rule. North America’s Building Trades Unions said it and its affiliates have been asking for a new rule for 20 years. The AFL-CIO issued a press release in which federation President Richard Trumka called the standards “the most significant OSHA standards issued in decades.” And in a statement, Jessica Martinez, acting executive director of the National Council for Occupational Safety and Health, said “workers across America can breathe easier today.”

Nevertheless, industry critics remain vocal. The Washington-based National Industrial Sand Association said it agrees with the rule “in principle,” but argues that a lower PEL is unnecessary.

“The major reason silicosis is still a threat to worker health is not because the
mandated exposure limit is too high, it is because of the level of compliance among industry is too low,” association President Mark Ellis said in a press release. “The major impact of OSHA’s new rule is not the change in the permissible exposure limit. It is that it will for the first time require employers to regularly monitor the level of silica exposure in their workplaces and the health of their employees to insure companies are doing what is necessary to protect workers. That is long overdue.”

The National Association of Manufacturers was more harsh. “Not only does this rule rely on appallingly out-of-date economic data, it also drastically underestimates the exorbitant costs that will be inflicted on manufacturers and the entire economy and requires mandates that simply are not feasible to achieve,” Chicago-based NAM President and CEO Jay Timmons said. “As a result, small and medium-sized manufacturers could be forced to close their doors while others will be saddled with crushing regulations.”

NAM and the American Foundry Society have petitioned the U.S. Court of Appeals for the 5th Circuit Court to renew the rule.

The Arlington, VA-based Associated General Contractors of America labeled the rule “a missed opportunity.” According to the association’s statement, “Instead of crafting new and innovative ways to get more firms to comply with the current silica standard, which we know would save even more workers each year, administration officials appear to have instead opted to set a new standard that is well beyond the capabilities of current air filtration and dust removal technologies.”

News of the rule quickly reached Congress. House Education and the Workforce Committee Chairman John Kline (R-MN) and Workforce Protections Subcommittee Chairman Tim Walberg (R-MI) said in a joint statement that the committee will review its concerns about the rule’s feasibility, cost and deadline for compliance, adding that DOL should have focused on enforcing current standards. “Even the department admits an alarming number of jobsites have not complied with existing requirements, yet the agency has failed to hold them accountable. There is no reason to believe this new approach will be any different,” Kline and Walberg said.

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