

Construction Industry Safety Coalition
Testimony of Patrick O'Brien
Concrete Sawing & Drilling Association Executive Director
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Thank you for allowing me the opportunity to testify. My name is Patrick O'Brien. I serve as the Executive Director of the Concrete Sawing & Drilling Association (CSDA). I am here to testify on OSHA's Notice of Proposed Rulemaking on Occupational Exposure to Crystalline Silica.

My tenure as CSDA Executive Director began in 1991. Prior to that I worked for a decade with GE Superabrasives which manufactured the synthetic diamond that is used in the saw blades, core bits, diamond wire and polishing heads. My career before GE was in the aviation industry, conducting flight test of jet aircraft on and off aircraft carriers for the Department of Defense/Naval Air Systems Command. I hold a BS in Aeronautical and Astronautical Engineering and an MS in Management.

CSDA is a nonprofit trade association of contractors, manufacturers and affiliated members from the construction and renovation industry. The mission is to promote the use of professional cutting, polishing, imaging, and selective demolition contractors and their methods. In support of this

goal, the CSDA Code of Ethics demands that members pursue the highest standards of safety, quality and integrity. A second objective is to provide a forum in which members can share their ideas, needs and concerns in a constructive framework to further enhance technologies, education and training.

-Sawing and drilling with diamond tools offers the construction industry many benefits including lower total project costs, precision cutting, maintenance of structural integrity, reduced downtime, reduced noise, dust and debris, limited access cutting and the ability to cut heavily-reinforced concrete. Founded in 1972, CSDA has 500 international member companies. CSDA is one of the 25 associations making up the Construction Industry Safety Coalition (CISC).

Based on my 30+ years of experience in the construction industry, I am aware of the issues concerning occupational exposure to respirable crystalline silica. I fear that what OSHA has proposed here is simply unworkable for the construction industry, and in particular for the sawing and drilling segment of the industry.

During my brief testimony I would like to focus on three key points that are both general to the construction industry and specific to CSDA type sawing and drilling contractors. These are areas that I believe have not been addressed in prior testimony.

First, I ask how OSHA can state that lowering the PEL from 100 $\mu\text{g}/\text{m}^3$ to 50, or even 25 will “save nearly 700 lives.” The Centers for Disease Control and Prevention (CDC) analysis of data from National Institute for Occupational Safety and Health (NIOSH) and National Occupational Respiratory Mortality System (NORMS) from 1968 to 2002 that I have researched indicate that deaths attributed to silicosis in construction have decreased from 1,157 in 1968 to 148 in 2002. In addition, data from the US Bureau of Labor statistics indicate that this figure has been further reduced to 102 by 2012.

It would appear that the PEL established by OSHA over 40 years ago is working. The focus should not be on introducing a vastly more complicated rule, but to figure a way to increase compliance with the current rule.

CSDA has taken a compliance approach with the current rule that is simple but effective. Simple works in the construction industry. I would rather have a simple system that may not 100% perfect than a technically complicated system that will not be used, indeed cannot be used for sawing and drilling contractors.

CSDA has worked with NIOSH and contractors to collect data on all of the sawing and drilling operations over the past decade to produce a Best Practice document CSDA-BP-016. This Best Practice is simple but effective. An operator on the job can look at the chart and easily determine if respiratory protection is required and what type of protection is needed. No cumbersome sampling is needed and could not even be done as I will explain in a minute.

I believe that this approach is simple and would be utilized by contractors to a much higher degree and thus protect workers from any possible exposure to airborne silica.

Second, the proposed silica rule would be laborious and costly in addition to being overly-complicated. The majority of CSDA type sawing and drilling

contractors perform work on multiple locations and jobsites each day. This is the main business of these contractors and an average operator will be on 4-5 job sites in a single day. Many contractors have had operators on 7-8 job sites in a single day.

To have someone monitor an operator on each of these jobs and take air samples is just not economically feasible or practical. In addition, taking an air sample reading would provide meaningless data five days from then as the operator would never be on that job site again.

In addition to the impracticability to the logistics, there is the cost. There are over 2,000 sawing and drilling companies in the US with an average revenue of less than \$2 million. That translates into 8-10 operators working on 4-5 job sites per day, or up to 100,000 job sites per day. OSHA has estimated that the cost to implement this proposed rule would be \$637 million. One of our contractors on the Small Business Regulatory Enforcement Fairness Act (SBREFA) panel in 2003 estimated that the cost for a sawing and drilling company would be \$3 million. This contractor was larger than the average. But if we assume that if the cost of only a quarter of the 2,000 sawing and drilling contractors was \$3 million to implement this

proposed rule, then the total cost would be over a \$1 billion. This far exceeds the OSHA estimate of \$637 million for the construction industry. And sawing and drilling contractors represent less than 0.5% of the construction activity.

Finally, I would like to point out the differences between professional sawing and drilling contractors and the rest of the construction industry who utilize diamond tools. When I see any discussion about silica there inevitably is a photo of a saw generating a large plume of dust. I believe that the general consensus is that sawing with these tools can only be done with the resulting dust. Nothing could be further from the truth for professional CSDA sawing and drilling contractors. Nearly 100% of CSDA contractors use water on each and every job and this has to do with extending the life of the expensive diamond tools. The reason for this is that diamond will begin to back convert to carbon at temperatures above 800 degrees C. Water is used to keep the diamond tools cool so that the diamond will not back convert and the life will be maximized.

The use of water has an additional benefit of containing silica particles that could become airborne. CSDA invited NIOSH visit our national training

center at St Petersburg College in Clearwater, FL to observe our operations. The NIOSH representatives have indicated that there is very little chance for airborne particles using such water systems. The only time there is any possibility of exceeding the current PEL level would be indoors and the CSDA Best Practice addresses those instances.

I appreciate the opportunity to appear here today and I know that OSHA is serious about hearing from stakeholders. I hope that OSHA carefully considers these comments on behalf of CSDA in determining how to best protect construction workers. I hope that you will agree that the best way to protect workers health in the construction industry is with simple, rather than complicated, methods.

Thank you for your consideration of this testimony.