

Oral Statement of Úna Connolly  
Before the Occupational Safety and Health Administration  
Public Hearing  
Proposed Rule on Occupational Exposure to Respirable Crystalline Silica  
March 27, 2014

Good Morning, I am Úna Connolly, vice president of safety and environmental compliance for the American Road and Transportation Builders Association (ARTBA).

ARTBA represents more than 6,000 members nationwide, involved in all sectors of the U.S. transportation design and construction industry. Our membership includes private and public sector members that are involved in the planning, designing, construction and maintenance of the nation's roadways, bridges, ports, airports and transit systems. The industry we represent generates more than \$380 billion annually and sustains more than 3.3 million American jobs.

I would like to begin by thanking OSHA for the opportunity to speak at today's public hearing. We appreciate OSHA's efforts to protect the health and welfare of our members and all construction workers.

Let me say at the onset that we are not here to say OSHA should not update its silica standard. Rather, our comments are geared toward making a standard that is workable in our industry.

It is important to note that the transportation construction industry is highly transient with projects changing on a daily or weekly basis in an array of different environmental conditions. You will most likely see construction workers as you drive on the highways and streets, working to build or maintain our nation's roads and bridges. It is work that begins in one location on any given day and may be found miles away from the initial site the following day. Likewise, the materials our industry is moving, cutting, breaking, constructing, etc. can also change daily – even hourly – as our members transport and deposit tons of earth, asphalt, concrete and rock. Sometimes these materials contain crystalline silica, sometimes they don't.

As has been noted several times during these hearings, silica is ubiquitous and can be found in nearly all construction materials and products. Moreover, respirable crystalline silica can be in the ambient air naturally and thus, even when workers are not cutting, drilling, sawing etc. the material, they may be potentially exposed above the Action Level (AL) of  $25 \mu\text{g}/\text{m}^3$ , and potentially, even the proposed permissible exposure lever (PEL) of  $50 \mu\text{g}/\text{m}^3$  when they are working on a construction worksite.

What is significant is that crystalline silica can be found in the natural environment and workplace. Thus, the exposure level of employees on each shift, for each job classification, in each work area could vary immensely on a given day, location, or project. By the nature of the transportation construction industry's work, visible dust will be nearly impossible to eradicate.

Some of the challenges we face in complying with the proposed PEL and action level result from the nature of our business. Our members can sample the air and products they are using one day and learn silica is not present, but the next day they may find themselves in another location, using different materials where it is present. Yet, they will never know what their exposures on a given site will be until weeks after the sample is taken due to the time lag between sending samples to the lab and getting the results. By the time companies in this transient industry provide air samples to the lab for analysis and receive the results, workers have moved on to other projects or tasks and are no longer in the environment where testing occurred.

Futhermore, under the auspices of the proposed rule, OSHA has stated that laboratories have two years from the time the rule is finalized to come into compliance and allow testing procedures to catch up to the new standard, while employer obligations will begin at 180 days after publication.

ARTBA is also concerned that current analytical methods - and the capabilities of the labs to complete an analysis that are reproducible and consistent - are not good enough to measure 50 or 25  $\mu\text{g}/\text{m}^3$  as required by the proposed rule. OSHA has stated that it believes the "good labs can do it," which may be comforting reassurance, but we do not know how our members will be able to determine the competency of a lab, who is good and who is not. We urge OSHA to carefully address the issues of reliability of exposure measurements for silica and laboratory requirements, especially at these low levels. Specifically, OSHA should provide a list of which labs are qualified to perform this analysis to remove any potential ambiguity.

In reviewing OSHA's data contained in the NPRM, along with data compiled from other sources, we are also somewhat perplexed about the timing for this rulemaking effort. OSHA's issuance of a proposed rule on crystalline silica comes at a time where silicosis mortality has significantly declined. According to the Centers for Disease Control ("CDC"), the silicosis mortality rate in the U.S. significantly declined - by 93 percent from 1968-2007. The CDC data indicates that silica mortality is steadily declining under the current PEL of 250  $\mu\text{g}/\text{m}^3$ . NIOSH similarly reported that there has been a steep decline in silica mortality rates, noting that one of the main factors for such a decline is that many deaths in the early part of its study period occurred among persons whose main exposure to crystalline silica dust probably occurred before the introduction of national standards for silica dust exposure were established by OSHA and the Mine Safety and Health Administration (MSHA). This steep decline in deaths indicates that workers are being protected from exposure to silica and exposures are likely to continue to decrease over the years.

Moreover, many of the studies OSHA uses for the proposed rule are based on exposures from the 1930s through 1960s - before the current PEL was implemented and arguably when exposure levels were much greater than those found today. For example, the British Coal Miner study, as

referenced in the NPRM, concerned exposures between 1954 through 1978, when exposures would have been higher and when much of the exposures would have taken place before standards were put in place. Similarly, the Hessel and Hughes studies reflected exposures of workers to generally higher average concentrations of respirable quartz than are permitted by OSHA's current exposure limits. In fact, the two studies that OSHA primarily relies upon – Miller and Ng – had average exposure ranges as high as  $480 \mu\text{g}/\text{m}^3$ , which is significantly more than the current OSHA PEL for construction.

OSHA is also considering promulgating requirements to those employers that initiate an initial medical examination due to potential silica exposure. One of these requirements is the use of a NIOSH-certified "B" reader – a physician that is certified by NIOSH as demonstrating a proficiency in classifying radiographs for the presence of pneumoconiosis (an occupational lung disease). ARTBA is concerned that should employers determine that medical surveillance is necessary; the dearth of NIOSH-certified "B" readers in the U.S. will potentially cause a gross misinterpretation and misclassification of x-ray results. As OSHA recognizes, there are only 242 certified "B" readers in the United States as of February 2013. NIOSH has noted that if there is excessive interpretations between different readers, reader variability can reduce the quality and utility of the data. Bias may also occur when a reader has information concerning the radiograph being classified (including information regarding the worker, such as the type of exposure or job type), by consciously or unconsciously influencing their classification. OSHA should consider how new and existing "B" readers are monitored to minimize bias or misinterpretation of the data.

On a note regarding job function, OSHA has not raised the specter of a greater hazard in regards to respirator use. ARTBA agrees with OSHA that all possible engineering controls be used and respirator use should be a last resort method of protection. However, workers in the transportation construction arena work outdoors during some of the hottest months of the year. When coupling the necessity of strenuous work in high heat, amongst heat generating materials like hot mix asphalt and the potential necessity of wearing a respirator – there is a real danger to human health by heat exposure and heat stroke that will likely exceed the danger caused by possible silica exposure.

In terms of the economic analysis presented in OSHA's proposed rule, ARTBA has several concerns. The economic analysis refers to a number of source materials and data. With the 90 days comment period allowed by OSHA it was extremely difficult to find some of the original information to validate the very specific economic data used by OSHA in its analysis.

For example, as noted on page 56361 of the Federal Register, OSHA is unable to match up cost data and compliance information at the firm or facility level. As a result, the true per company cost of meeting the proposed standards is unknown. In averaging the cost of compliance across all workers, this could potentially understate the costs of compliance for businesses that could not meet the new standard.

ARTBA also asks OSHA to revise its analysis to include the most recent data available to provide a more accurate economic impact assessment. For example, OSHA refers to the 2006

U.S. Census Bureau Statistics of U.S. Businesses for characteristics of the industries affected by the proposed standard in Table VIII-3. Average profit rates for Tables VIII-14 and VIII-15 are based on the Internal Revenue Source's Corporation Source Book for 2000 through 2006. These are two examples where more current data is available. There have been significant changes in the construction industry, including the number of businesses and value of construction work, since the economic downturn in 2008. Factoring in some of these economic realities would provide a more accurate analysis of the per industry cost of OSHA's proposed silica rules.

We look forward to working with OSHA towards achieving a healthier workforce through regulatory efforts which harmonize occupational health and safety and our nation's infrastructure needs.

Thank you for your time and I would be happy to answer any questions the panel may have.