

Thank you for allowing me the opportunity to testify. My name is Rashod Johnson. I am a licensed professional engineer who owns a construction materials testing laboratory and civil engineering design firm, located in Chicago, IL. Previously, I served as the Director of Engineering for the Mason Contractors Association of America (MCAA) where I was an integral part in occupational health and safety of MCAA members throughout the US. It was here, 13 years ago, that I began my research in Silica. Since then, I was the Subcommittee Chairman of ASTM E34.30 on Construction. This is the Subcommittee that oversaw the development of the first ever *Standard Practice for Controlling Occupational Exposure to Respirable Crystalline Silica for Construction and Demolition Activities* in 2006. I remain an active member of this committee and many others as a consultant on behalf of the MCAA.

I would like to give you a brief background on the association I am representing here today. The Mason Contractors Association of America (MCAA) is the national trade association representing all mason contractors both union and open shop. MCAA was incorporated in 1950. Its purpose is to help educate, train, and represent the mason contractor through its various programs aiding members to maintain their excellence in craftsmanship and safety.

### **ASTM E2625-09**

After OSHA's 2003 Proposed Silica Rule stalled, the masonry industry, in particular, the Mason Contractors Association of America (MCAA) realized that we missed the boat as it pertained to protecting our workforce from exposure to respirable crystalline silica. As such, the MCAA encouraged our regional chapters to begin using OSHA's consultative services in multiple areas across the US in order to better ascertain our workforce's silica exposure. This information gathering occurred for the better part of four (4) years. In this same four (4) years (from 2003-2007), the US saw its greatest economic upswing in the construction industry since after WWII. This allowed us to gather a good amount of information and data concerning construction exposure to respirable crystalline silica.

Seeing that OSHA's rulemaking process had somewhat stalled, the MCAA and other construction associations decided to use this data and other published data about silica exposure in order to develop a national consensus standard to control silica, particularly in construction. After years of due diligence, research, data mining and balloting, ASTM International (ASTM – formerly the American Society for Testing and Materials) published ASTM E 2625, *Standard Practice for Controlling Occupational Exposure to Respirable Crystalline Silica for Construction and Demolition Activities* in 2006 (later improved in 2009, which is the current version of the Standard Practice).

The MCAA felt as though ASTM was the best place for such a document because ASTM allows for the Standard Practice to become a “living document” that can adapt and change as technologies and industries evolve. In addition, the ASTM Standard is a nationally recognized consensus standard, unlike any other silica documents that may have been developed for a particular segment of the industry. This distinction allows for the ASTM Standard to be specified by architects and engineers as a part of the official construction documents of any

construction project. This makes it part of the construction contract. Secondly, ASTM Standards can be referenced by national and local building codes (such as the International Building Code (IBC) and the International Residential Code (IRC)), hence making it law by Code adoption.

OSHA was not only aware of the Standard Practice, but also attended and participated in some of ASTM's committee meetings during its development. The current Proposed Rule, references ASTM Silica Standards over 25 times. Often times, however, it's cited out of context without taking into account the entire Standard Practice as a whole. If given the opportunity, the MCAA feels as though ASTM E2625 can more than adequately protect the construction industry against overexposure to respirable crystalline silica. All we need is the opportunity to prove its effectiveness.

### **Technical Feasibility**

OSHA defines Engineering controls as “the first and best strategy to control the hazard at its source. Engineering controls do this, unlike other controls that generally focus on the employee exposed to the hazard. The basic concept behind engineering controls is that, to the extent feasible, the work environment and the job itself should be designed to eliminate hazards or reduce exposure to hazards.” The key words in the entire definition are “to the extent feasible”.

What is “feasible” in construction? This is the key question. Construction, masonry construction in particular, is an extremely mobile industry whose average projects may last for 2-3 weeks maximum. Often times, masonry contractors employ multiple small crews simultaneously to increase efficiency.

Is “wet-cutting” feasible? Maybe. Maybe not. Often times, wet cutting masonry causes additional hazards that are rarely mentioned. For example, the vast majority of masonry saws provide water on the blade itself. This is solely for the purpose of keeping the blade cool during cutting. A side effect, just happens to be dust suppression. Now, manufacturers of these saws are starting to explicitly state that the water used is for cooling the blade only and should not be used to suppress dust. Another example is in California. The California Environmental Protection Agency (CEPA), has deemed that the silica slurry produced from wet cutting should be classified as a hazardous material. This means that contractors in California, now have to follow HAZMAT procedures for a product that hasn't been proven harmful. Lastly, there are many situations where wet cutting just isn't an option (i.e. structural units, on scaffold, during cold weather construction). Therefore, to mandate wet cutting would be short sighted.

The technology that is necessary to comply with the Proposed Ruling has multiple problems. From a purely technological perspective, most of the technology is cutting edge and new. By default, cutting edge and new technology is largely unproven, cost prohibitive (especially to small firms) and not widely available. The MCAA realized this when we published the ASTM Standard, whose PEL was 4 times higher than the proposed PEL.

According the Center for Disease Control (CDC) there are currently about 300 “B” readers in the entire US. IF they are spread evenly across the US (and we know they are not), this means there

are six (6) in every US State. Yet, the Proposed Rule would require millions of construction workers to have this test performed. In our consultations with OSHA, we found that sometimes the “B” reader results took as long as four (4) months to get results because there are so few i.e. there are 4 in ALL of Texas, the largest state in the continental US. This poses a massive supply and demand issue. Unfortunately, the victim will be the contractor.

Simply put, the engineering controls and medical surveillance portion of the construction industry is largely unready. This fact will set up THOUSANDS of contractors across the country to fail miserably, get cited, pay fines and close their businesses due to no fault of their own. Regardless of the intent of the Proposed Rule, this will be the effect.

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