



VIA ELECTRONIC SUBMISSION

February 11, 2014

The Honorable David Michaels, Ph.D., MPH
Assistant Secretary
Occupational Safety and Health Administration
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, D.C. 20210

Re: Docket ID OSHA-2010-0034, Comments on OSHA's Proposed Rulemaking on Occupational Exposure to Respirable Crystalline Silica

Dear Assistant Secretary Michaels:

Associated Builders and Contractors, Inc. (ABC) submits the following comments to the U.S. Department of Labor's (DOL) Occupational Safety and Health Administration (OSHA) in response to the above-referenced notice of proposed rulemaking published in the *Federal Register* on September 12, 2013, at 78 Fed. Reg. 56274.¹

About Associated Builders and Contractors, Inc.

ABC is a national construction industry trade association with 22,000 chapter members. ABC and its 70 chapters help members develop people, win work and deliver that work safely, ethically and profitably for the betterment of the communities in which they work. ABC member contractors employ workers, whose training and experience span all of the 20-plus skilled trades that comprise the construction industry. Moreover, the vast majority of our contractor members are classified as small businesses. Our diverse membership is bound by a shared commitment to the merit shop philosophy in the construction industry. The philosophy is based on the principles of nondiscrimination due to labor affiliation and the awarding of construction contracts through open, competitive bidding based on safety, quality and value. This process assures that taxpayers and consumers will receive the most for their construction dollar.

ABC members know exceptional jobsite safety and health practices are inherently good for business. ABC understands the importance of common-sense regulations based on sound evidence and scientific analysis with appropriate consideration paid to implementation costs and input from employers. Many ABC companies have implemented safety programs that are among the best programs in the industry, often far exceeding OSHA requirements.

¹ ABC shares the concerns and recommendations provided in comments filed to this docket by the Construction Industry Safety Coalition (CISC) and incorporates them into this letter by reference.

Background

Crystalline silica is one of the most abundant substances on earth and is ubiquitous in rocks, sand and soils. The current respirable crystalline silica standard was adopted in 1971. Following a National Institute for Occupational Safety and Health (NIOSH) recommendation that the construction industry better control crystalline silica exposure levels, OSHA issued an Advanced Notice of Proposed Rulemaking on crystalline silica in 1974. OSHA ultimately chose not to pursue a final rule on crystalline silica at that time.²

To receive input from small businesses on the proposed rule, OSHA initiated Small Business Regulatory Enforcement Fairness Act (SBREFA) proceedings in 2003. The SBREFA panel, which was convened with representatives from general industry, maritime and construction, submitted recommendations to OSHA's Assistant Secretary in December 2003. In 2009, OSHA met with representatives from the Advisory Committee on Construction Safety and Health (ACCSH) to discuss the rulemaking and receive their comments and recommendations.

In 2010, OSHA completed a peer review of the draft Health Effects analysis and Preliminary Quantitative Risk Assessment following procedures set forth by the Office of Management and Budget.³ In Feb. 2011, the proposed rule was submitted to the Office of Management and Budget for review. The notice of proposed rulemaking was published in the *Federal Register* on September 12, 2013 and the initial 90-day comment period was extended an additional 47 days by OSHA. On Jan. 24, OSHA announced a 15-day extension due to an error on OSHA's public comment submission page.⁴

ABC's Comments in Response to OSHA's Proposed Rule

The proposed rule is potentially the most far-reaching regulatory initiative proposed by OSHA for the construction industry. Crystalline silica is ubiquitous in construction worksites—silica can be found in numerous building materials and can be disturbed by a number of routine jobsite tasks. For construction, most silica-related tasks cannot be separated from daily activities or avoided on a worksite; instead, it is something construction employers, with input from employees, successfully minimize exposure to each day through existing abatement procedures.

ABC has a number of specific concerns with OSHA's Sept. 12 NPRM, each of which are addressed below.

I. Proposed Permissible Exposure Limit (PEL)

One of the main provisions in OSHA's proposed rule is lowering the "Permissible Exposure Limit" (PEL) of crystalline silica. For construction and general industry, the proposed rule lowers the PEL to 50 $\mu\text{g}/\text{m}^3$, with an action level of 25 $\mu\text{g}/\text{m}^3$. Previously, the construction industry had a PEL of 250

² 78 Fed. Reg., at 56292.

³ 78 Fed. Reg., at 56295.

⁴ ABC requested a 90 day extension for submitting written comments on September 27, 2013. OSHA in turn granted a 47 day extension for submitting written comments. ABC submitted a second extension request on December 5, 2013, asking the agency to grant the full 90 days originally requested. OSHA denied ABC's request to grant the full 90 days. Due to the denial of ABC's extension request, ABC's comments include the best available information at this time.

$\mu\text{g}/\text{m}^3$ versus the general industry PEL of $100 \mu\text{g}/\text{m}^3$. Therefore, while this would be a 50 percent reduction in PEL for general industry, it would be a 80 percent reduction in PEL for the construction industry.

OSHA's stated reasoning for lowering the PEL is that "the current PEL results in a significant risk of material health impairment among exposed workers, and that compliance with the proposed standard will substantially reduce that risk."⁵ Data and statistics, however, show there has been a significant decline in silicosis cases in recent years under the current PELs. According to the Centers for Disease Control and Prevention (CDC), there has been a significant downward trend in the silicosis mortality rate. CDC's data shows that, between 1968 and 2007, the silicosis mortality rate declined by 93 percent (1,157 cases in 1968 to 123 cases in 2007).⁶ NIOSH also has reported a steep decline in silica mortality rates; their study indicated the main reason is because many of the deaths occurred prior to OSHA and Mine Safety and Health Administration crystalline silica standards being introduced.⁷ The decline in deaths indicates workers are being protected under the current PELs from exposure to silica and exposures will continue to decrease over the years. Based on the NIOSH study's data, lowering the proposed PEL to $50 \mu\text{g}/\text{m}^3$ is unnecessary. Furthermore, it is simply not technologically or economically feasible.

II. Technological Feasibility

OSHA has not shown that the proposed rule is technologically feasible for the construction industry. To do so, the agency would need to show reaching a PEL of $50 \mu\text{g}/\text{m}^3$ is attainable in most operations most of the time. In its failed attempt to meet this burden, OSHA divided the construction industry into 12 activities that it believes could result in exposure to silica. For 10 of the 12 activities⁸, OSHA concluded employers are capable of meeting the proposed PEL of $50 \mu\text{g}/\text{m}^3$ most of the time (except abrasive blasters and tuckpointers/grinders). OSHA's analysis is flawed and incomplete and, thus, fails to meet the legal standard for proving the rule is technological feasibility.

OSHA's analysis omits a number of job categories that would be affected by the proposed rule. The list OSHA has published is limited; for example it excludes activities such as cement mixing, overhead drilling, handling of paving stones and compaction of interlocking pavers. Furthermore, OSHA neglected to analyze and identify the effects of the proposed rule on trades not considered "silica-related." OSHA has not met its burden of proving technological feasibility, as it has failed to identify and analyze all construction activities that could result in some sort of exposure to silica.

Along with failing to identify all of the affected construction activities, OSHA has not considered the scope of tasks and environments that will be affected by the proposed rule. Silica is unlike any other health hazard OSHA has previously regulated in that it is everywhere and can be found in virtually everything. Determining if a specific control measure can feasibly be implemented with similar effectiveness in every work environment is virtually impossible. When a worker is on a jobsite, the percentage of silica in soil/rock or building material can differ significantly. For example, the level of silica exposure could depend on where the worker cuts the rock/soil. If OSHA's analysis looks at the

⁵ 78 Fed. Reg., at 56446.

⁶ Centers for Diseases Control and Prevention, *Silicosis: Mortality* (March 2012), at <http://www2a.cdc.gov/drds/worldreportdata/FigureTableDetails.asp?FigureTableID=2595&GroupRefNumber=F03-01>.

⁷ 78 Fed. Reg., at 56298.

⁸ Refer to CISC's discussion on OSHA's analysis of the individual construction activities (Section V, G).

low end of the silica content in a building material, it therefore would not be able to speak to whether the same material on the high end of silica content has the ability to meet the PEL. OSHA's analysis does not in many cases include the bulk silica content in the material being disturbed.

Additionally, weather and climate can have a significant impact on silica exposure. For example, performing the same job activity in one end of the country versus the other can have a significant impact on the silica exposure because of differences in climate. In fact, OSHA's contractor Eastern Research Group (ERG) demonstrated the impact weather can have on silica exposure during a site visit at a temporary concrete recycling facility that utilized multiple water sprays and a control booth to reduce exposures to silica. OSHA found that even with controls, a full-shift exposure to silica was slightly above the proposed PEL ($54 \mu\text{g}/\text{m}^3$). OSHA stated that the sampling took place during a day with "wet ground conditions" caused by a patch of wet weather. In OSHA's view this "might have helped minimize airborne dust" as the "concrete being crushed was wetter than usual."⁹ Therefore, in dry conditions, the exposure would likely be significantly higher than $54 \mu\text{g}/\text{m}^3$, which is already above the proposed PEL. However, even after acknowledging this fact, OSHA fails to account for climate and weather in its analysis. In order to demonstrate feasibility, OSHA should broaden its data collection to determine if climate and weather conditions will alter its conclusion with respect to the frequency with which employers are capable of meeting the proposed PEL and action level.

The construction industry is unique in that multi-employer worksites are the norm and, thus, secondary exposure is unavoidable. Yet, in its analysis, OSHA makes the flawed assumption that there would be no secondary exposure from adjacent activities, claiming that all silica exposure on the worksite will be effectively controlled. This assumption is unrealistic, as secondary and tertiary silica-generating tasks will likely still contribute to silica exposures. Even by employing engineering controls, employers will not be able to eliminate secondary exposure. The only way for employers to eliminate all exposure would be to shut down secondary activities, which is simply infeasible for the construction industry.

OSHA provided the construction industry with Table 1 as a means of compliance. Table 1 identifies 13 operations, with engineering and work practice control methods and required respirators for employers to follow in order to be in partial compliance with the rule. OSHA states the PEL can be reached with engineering and work practices in most construction operations most of the time. Table 1, however, contradicts this, as eight of the operations use some sort of respiratory protection under certain conditions. This does not seem to meet OSHA's conclusion that through engineering and work practice controls, the proposed PEL can be met most of the time.

In the proposed rule, OSHA also added an action level of $25 \mu\text{g}/\text{m}^3$, which is half of the proposed PEL. Employers are not required to reach levels of exposure below the action level, but if they do not reach below $25 \mu\text{g}/\text{m}^3$ they trigger certain exposure monitoring requirements. Therefore, if the employer is at a PEL of $27 \mu\text{g}/\text{m}^3$ they would trigger exposure monitoring requirements. OSHA, in the proposed rule, never specifically cites that any construction activity, with the exception of drywall finishing using silica free joint compound, can most of the time meet the action level of $25 \mu\text{g}/\text{m}^3$. For the construction industry, it simply is not feasible most of the time to get below the action level of $25 \mu\text{g}/\text{m}^3$. OSHA's own feasibility analysis shows that it is not attainable for the construction industry to reach the action level most of the time.

⁹ PEA Chapter IV, p. IV-488.

OSHA simply has not met its burden of showing the proposed rule is technologically feasible. OSHA's analysis does not support that reaching a PEL of 50 µg/m³ is attainable in most operations most of the time.

III. Economic Feasibility

OSHA's analysis significantly underestimated the true costs and impacts the proposed rule would have on the construction industry. One of the main problems with OSHA's economic analysis is it omitted 1.5 million workers who perform tasks that could expose them to respirable crystalline silica. For example, OSHA has omitted plumbers, roofers and electricians—all of whom perform tasks similar to those of carpenters and plasters who were included in the cost estimate. OSHA's analysis left out a significant portion of the workforce, by adding in these occupations it increases OSHA's estimate of the affected construction workforce by about 50 percent.

OSHA's analysis also made an unrealistic assumption about control equipment deployment. OSHA believes the equipment will be deployed in limited fashion only when the employee is engaging in a silica exposing task rather than being available all the time. Under OSHA's assumption, the control equipment is only being actively engaged less than 20 percent of the time workers are spending on the job. OSHA is incorrect because it is more likely the employer would have the equipment available at all times, in case there is the possibility that a silica exposing task would need to be completed.

In its analysis, OSHA also looks at the percentage losses in time (productivity penalties), which takes into account the time involved in conducting a task with controls, versus conducting the task without controls. OSHA only looked at the productivity losses with labor and not with the equipment. OSHA should look at the equipment as well as labor since they work hand-in-hand.¹⁰

ABC looked specifically at OSHA's cost estimate for nonresidential building construction, which includes both controls and program requirements costs. OSHA stated the cost for nonresidential building would be \$39,664,914.00. Based on the discussion above, OSHA has significantly underestimated the cost to comply with the proposed rule, as it will cost the nonresidential building construction sector nearly four times that amount (\$196,185,123.00).¹¹ Both cost estimates still do not account for all the costs the commercial construction companies will endure. OSHA's estimate solely looks at the costs of that industry/sector's employees. Commercial construction companies not only employ their own employees, they also subcontract out some of their work. The compliance cost borne by the subcontractor will be felt by the commercial construction company as well, since the subcontractor will pass some share of this cost down. Additionally, ABC's contractors are likely to be hit by some of the general industry's portion of the compliance costs. As contractors will be buying building materials—such as brick, block and stucco—directly from companies who will also have to comply with the rule. OSHA's estimate does not include the full cost the construction industry would endure. Thus, OSHA significantly underestimated the cost by at least a factor of four. This is further reason why OSHA should reconvene a new SBREFA panel and perform a new economic analysis, which should be opened up to the public for notice and comment.

¹⁰ Refer to CISC's comments on economic feasibility (Section VI and Exhibit C).

¹¹ Refer to CISC's comments for the full breakdown of cost estimates (Exhibit C). These cost estimates are preliminary and are subject to change pending the March public hearing.

IV. Proposed Ancillary Provisions

OSHA lists a number of ancillary provisions in the proposed rule it believes will help reduce risk when it is reasonably necessary and appropriate to achieve the standard's goal. Many of the ancillary provisions included in the proposed rule seem to be similar to previous health standards issued by the agency, however, as previously noted, silica is radically different from other standards. Many of the provisions are simply not viable for the construction industry.

A. Exposure Monitoring

One of the main ancillary provisions is the requirement for employers to assess the exposure of employees who are or may reasonably be expected to be exposed to crystalline silica at or above the action level. The employer is required to determine the eight-hour time weighted average exposures of employees for each shift, for each job classification, in each work area. This is simply not feasible for the construction industry. Unlike manufacturing, mining or warehousing, workers in the construction industry are constantly moving between worksites, sometimes multiple times in one day.

As mentioned before, silica is found everywhere on the worksite, and in many instances cannot be substituted or engineered out of building materials. Respirable crystalline silica can be found in the ambient air even when workers are not performing construction activities, which would mean employers would have to monitor nearly every worker that is on the worksite. Requiring employers to conduct exposure monitoring whenever exposure levels could potentially be above the action level is not reasonable. Furthermore, a construction jobsite is dynamic in that it is ever-changing; structures are not enclosed until late in the construction process, meaning exposure conditions can change constantly via wind patterns. Monitoring exposure levels in these conditions can result in wide-ranging and inaccurate readings and, therefore, is infeasible.

B. Regulated Areas

OSHA requires the use of regulated areas or a written access control plan whenever an employee's exposure to respirable crystalline silica is, or can reasonably be expected to be, above the PEL. One of the main problems with this provision is OSHA has not explained what "reasonably expected" means;¹² this term is very vague and subjective. The language that OSHA is using will create numerous compliance and enforcement issues.

Instead of having a designated area, an employer is allowed to have a written access control plan. However, spaces on construction jobsites are not conducive to written access plans. Unlike a confined space, which is fairly static in its' structure and where a written access control plan is effective, most construction jobsites are constantly changing on a daily, sometimes hourly, basis with numerous ongoing activities. Therefore, a written access control plan is infeasible. A new plan would have to be created for every jobsite every day—possibly multiple times a day—because a "one-size-fits all" approach is not feasible for construction. ABC cannot support the use of regulated areas or written access control plans to help regulate

¹² 78 Fed. Reg., at 56443.

crystalline silica due to the numerous problems it creates. Instead, ABC believes training can be equally as effective in making employees aware of the presence of respirable crystalline silica.

C. Methods of Compliance

OSHA requires that employers first implement engineering and work practices to reduce employee exposure; if these do not sufficiently reduce exposure levels to, at or below the PEL, then the employer must supplement with the use of respirators. OSHA's hierarchical approach and implementation of engineering controls significantly raises the cost of the entire rule. The approach advocated by OSHA will make it very difficult for small businesses to comply because of the added cost burdens. OSHA should reevaluate this hierarchical approach.

D. Table 1

One of the ancillary provisions OSHA includes is the addition of Table 1 for the construction industry. Table 1 identifies 13 operations, with engineering and work practice control methods and required respirators for employers to follow. While ABC appreciates that OSHA attempted to recognize the unique characteristics of the construction industry, it ultimately falls short.

One of the main reasons Table 1 is ineffective can be found in the notes included in the "Engineering and work practice control methods" section of the table, which states that there be "no visible dust" emitted from a process after the introduction of the engineering control methods.¹³ Even through the use of wet methods or engineering controls, rarely, if ever, will there be no visible dust emitted from silica generated activities. Therefore, Table 1 as written would not be a viable path for reaching compliance.

In addition, OSHA uses many vague and subjective terms in the table. Using ambiguous terms makes it difficult for an employer to know if they are complying with the standard. For example, one of the specification cites "ensure saw blade is not excessively worn".¹⁴ There is no guidance included on what excessively worn means, therefore it is left open for interpretation. During a worksite inspection, the Compliance Safety and Health Officer may judge that the blade is excessively worn when the employer disagrees. Without specific guidance, there is no recourse for the employer to successfully appeal what is, in essence, a judgment call.

Another concern with Table 1 is that OSHA has failed to make it a true safe harbor for employers. Employers can choose to use Table 1, which means they no longer have to utilize exposure monitoring requirements; however, they still have to ensure that all the exposures are at or below the proposed PEL. OSHA may have had good intentions in the creation of Table 1, however, as written, the table is a compliance option that no employer would opt to use.

E. Respiratory Protection

OSHA relies heavily in the proposed rule on the use of respirators, which is demonstrated through Table 1. The majority of the construction activities in Table 1 require some sort of

¹³ 78 Fed. Reg., at 56496.

¹⁴ 78 Fed. Reg., at 56496.

respiratory protection. This approach by OSHA demonstrates ABC's view that reaching a PEL of 50 µg/m³ is not technologically feasible in most operations most of the time. The heavy use of respirators is the wrong approach for OSHA to take.

F. Medical Surveillance

OSHA's proposed rule states that employers must provide medical surveillance at no cost to the employee, at a reasonable time and place, for each employee who will be occupationally exposed to respirable crystalline silica above the PEL for 30 or more days per year. With this provision, OSHA ignores the transient nature of the construction industry. The turnover rate in the construction industry is very high; OSHA even cites the turnover rate being at 64 percent.¹⁵

Putting all the above aside, how is an employer supposed to determine whether an employee will be exposed above the PEL for 30 days unless they are using Table 1, which we already described above was not a compliance option an employer would choose as the Table is written.

G. Hazard Communication/Training

OSHA states that employers must include respirable crystalline silica as part of the requirements under the Hazard Communication Standard. Under this standard, employers must provide access to labels, safety data sheets, employee information and training, as well as discuss the following hazards with employees: cancer, lung effects, immune system effects, and kidney effects. ABC supports employees being trained on the hazards and having the information available. However, OSHA has not met its burden of showing that the hazards listed above are linked to the exposure of respirable crystalline silica.

H. Recordkeeping

The proposed rule contains a provision that requires employers to maintain exposure monitoring results and objective data used or relied on to characterize employee exposure to respirable crystalline silica. OSHA requires that employers maintain these records for 30 years. OSHA is failing to understand the transient nature of the construction industry, which would result in large and burdensome amounts of records that an employer would need to store and maintain. OSHA also fails to clarify why the employer is required to maintain the records for 30 years. Further, it is also unclear how OSHA would enforce this provision; for example, what if records are lost or destroyed after, 20 years?

V. Conclusion

ABC understands OSHA has spent considerable time and effort on this rulemaking; however the agency has failed to meet its burden of showing that the proposal is technologically and economically feasible for the construction industry. Many of the provisions and requirements will simply not work in the "real world" of construction.

¹⁵ 78 Fed. Reg., at 56286.

Silica is unlike any other health standard the agency has regulated in the construction industry, as it is ubiquitous in construction worksites. The approach OSHA has taken on this rulemaking simply does not reflect this sentiment.

For the reasons outlined above and in the Construction Industry Safety Coalition's comments, ABC urges OSHA to withdraw the burdensome proposal until it can demonstrate a rulemaking of this kind is necessary and workable. At the very least the agency must reconvene a SBREFA panel and perform a new economic analysis. ABC would welcome the opportunity to engage in a working dialogue with OSHA on what type of standard would work in the construction industry. ABC also encourages OSHA to work with the industry to ensure that this positive trend in the reduction of silicosis-related disease continues.

Thank you for the opportunity to submit comments on this matter.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Geoffrey Burr", with a long horizontal flourish extending to the right.

Geoffrey Burr
Vice President, Government Affairs