OSHA laying the hammer down on (selected) stone fabricators
by Michael Reis, Editor

As an industry trade magazine, I believe that one of the most important things we can do to benefit the trade is to promote workplace safety. This is why we cover it throughout the year and in every single edition of this E-Newsletter. But after thoroughly examining OSHA's proposal for a new silica standard -- and discussing it with some leading fabricators -- it is clear that the organization needs to rethink its entire game plan.

In researching the proposed standard, I looked through OSHA's official "Notice of Proposed Rulemaking," a 757-page document. (If you have a few days to spare, check it out yourself at https://www.osha.gov/silica/nprm.pdf.) Basically, OSHA's proposal is to cut the exposure limit formula in half, to 50 micrograms of respirable crystalline silica per cubic meter of air (over an eight-hour day). In particular, the granite/stone industry is among those being targeted by OSHA, according to the document.

As supporting evidence for its proposal, OSHA cites a number of studies, including ones conducted on granite industry workers in the U.S., Canada and Europe. The most recent of these studies was conducted in 2007, while others date as far back as 1983.

The report also has a number of facts and figures on the stone fabrication industry, including the number of shops and assumed profit levels as well as the estimated compliance costs that will result from the new compliance standard. I sat for hours analyzing these figures, and I came up with one conclusion:

**OSHA HAS NO IDEA WHAT OUR INDUSTRY IS ALL ABOUT**

Where do I begin? Well, for one, OSHA states that the U.S. has exactly 1,943 stone processors. This number is based on the U.S. Census Bureau designation of firms classified as "Cut Stone and Stone Product Manufacturing." There are no other business designations in the entire 757-page report that would include stone fabricators.
It is extremely difficult to estimate how many stone fabricators there are in the U.S., but I can tell you that Stone World has more than 8,300 of them on its subscriber list. So with this in mind, I have a hard time digesting some of the figures that OSHA released as estimates for compliance -- numbers such as profits, profits per entity, and compliance cost as a percentage of profits.

**What will this cost? (OSHA doesn't know)**

With that in mind, let's go ahead and dismiss OSHA's estimate that the U.S. stone-processing industry faces an annual cost of just over $8.6 million to be in compliance with the new regulations. I've seen that figure published in headlines, and it is absolutely meaningless. Instead, let's look at OSHA's convoluted figures on a per-operation basis. According to OSHA's figures, the average annual costs for a company classified as "Cut stone and stone product manufacturing" would be $4,426, but this data is based on an overall industry-wide average and is not based on company size. OSHA estimates that individual companies in this category have an average revenue total of $1.9 million, with a profit rate of 5.49%. Thus, compliance would cost 0.23% of revenue and 4.2% of profit.

As for the size of individual operations, the U.S. Census Bureau classifies companies in the stone-related category with less than 500 employees as "small entities." Given the typical makeup of a stoneworking firm, the vast majority of companies fall into this category, with 1,874 of the 1,943 companies (96.45%) having less than 500 employees. Overall, "small entities" are reported to have an average revenue total of $1.73 million and the same profit rate of 5.49%, and they would see slightly lower annual compliance costs of $4,284 -- 0.25% of revenue and 4.51% of profit.

However, while 1,874 stoneworking companies have been classified as "small entities," the OSHA report further classifies any businesses with less than 20 employees as "very small entities" -- adding more complication to the overall compliance-cost data that has been released. A total of 1,471 companies (75.7%) fall into the "very small" category. These stoneworking operations show annual revenue of $946,566, according to OSHA, and run at the same overall profit level of 5.49%. For these companies, OSHA estimates annual compliance costs to be $1,872 per year, representing 0.20% of revenue and 3.6% of profit.

Looking at what OSHA thinks the industry will be spending for compliance, they feel that 68.49% of the additional costs will be for "engineering controls" within an operation, with another 21.28% going towards exposure assessment and the remainder going towards respirators, medical surveillance, establishing regulated areas and training.
Is working wet enough? (OSHA doesn't know)
If you compare the latest OSHA report against previous reports, they're not consistent on that point either. The latest report includes the following statement on granite processing: "OSHA believes that wet methods alone will provide sufficient protection for shifts lasting four hours or less and is proposing to require the use of half-mask respirators with an APF of 10 for shifts lasting more than four hours."
However, in 2009, an OSHA report entitled "Controlling Silica Exposures in Construction" did not recommend respirators for shifts lasting more than four hours: "Wet grinding is highly effective in reducing silica exposures. Handheld water-fed grinding equipment is commercially available for concrete applications, granite grinding, and polishing operations. Conventional grinding equipment can be retrofitted to add a water-feed capability."
So what prompted this change in thinking? I couldn't find the answer on any of the 757 pages of the report. And the scientific studies cited in the latest report were completed before the 2009 report came out, so it is unclear.
I'm not even saying that the increased requirement of a respirator is wrong; I just want to know where it came from.

A (very) uneven playing field for fabricators
In speaking with fabricators since OSHA's proposal, the consensus seems to be that OSHA enforcement (of any kind) is lacking for shops that fly under the radar. The ones with no licensing, insurance, etc. Meanwhile, the conscientious shops are the ones that get inspected and will have to adhere to whatever raised standards are put in place. Their feeling is that OSHA's funding and efforts should focus more on enforcement of existing standards on an industry-wide basis. One fabricator said that their OSHA inspector seemed to be extremely inexperienced and only focused on "basics" like electrical cords and such. He summed up by saying: "There most certainly needs to be more enforcement on existing laws before more are passed."
As I said it is difficult to precisely quantify the number of fabricators in the U.S. -- or even define "fabricator" -- because of the potential low start-up costs; you can get away with purchasing a second-hand saw and portable edge router for a few thousand dollars. This, coupled with the fact that some slab distributors have been so beaten down by the economy that they are willing to sell on consignment, makes it really easy for these fly-by-nights to exist. These are typically the guys taping the "Granite for $19/foot" signs to utility poles, and they are far and away the greatest challenge to that sector of the industry. From a safety standpoint, they are often cutting and grinding stone in a small rented space that is not equipped for wet cutting (or even outdoors), and they have no stake in the industry on any sort of long-term basis.
It seems to me that, thus far, these "hack shops" are not anywhere on OSHA’s radar, and that addressing this fact should be OSHA’s number one priority right now. Fabricators are finding themselves frustrated in that they are not playing on a level playing field with shops like these -- including when it comes to OSHA. The feeling is that whatever increased OSHA regulations are in place won’t affect these underground shops anyhow; they will only affect the above-board fabricators doing things right. This is where I see the most resistance to a buy-in by fabricators, as they feel that OSHA should be allocating more resources to regulating the underground shops than to increasing regulations on legitimate ones.

We know that silica is dangerous, but the current standard does not need to be changed

Let me clarify one point here: I know that silica is dangerous, and I know that shops need to have measures in place to control it. I think that the legitimate stone fabricators out there know this as well. I’ve visited hundreds of fabrication shops across the country, and the vast majority of them have very clear systems and protocols in place to protect their employees from silicosis. It’s not just a matter of safety; it makes good business sense, as no one wants to lose their company over a silicosis lawsuit. Again, I think it is part of my magazine's job to promote workplace safety, so let me reiterate that the Marble Institute of America (MIA) has produced a number of training guides about silica, which have been reposted onto one page for easy viewing on its website -- www.marble-institute.com/silica. They invite all stone groups to utilize the following as education and awareness resources:

- Silicosis: Incurable but Preventable (video available in English, Spanish and French)
- Silicosis: An Industry Guide to Awareness and Prevention (hardcopy technical module available in English and Spanish)
- Several toolbox talk training outlines on the topic of silica

In my opinion, the MIA has been extremely diligent in maintaining a partnership with OSHA, while also looking out for the best interests of the industry as a whole, and they are also opposed to changing the standard. "The MIA is urging the OSHA to maintain current levels as they are appropriate if adhered to," reads a statement released by the MIA. "Data from the U.S. Centers for Disease Control (CDC) show a greater
than 90% reduction in the silicosis mortality rate from 1968 to 2010. It is doubtful that a further reduction of the allowable exposure limits will impact those numbers.

"Advances in wet cutting and stone industry education have positively aided OSHA in the effort to curb silica exposure during the past few years," the statement continues. "The MIA believes that OSHA will continue to have a positive impact if attention is focused on compliance at the current exposure levels."

"We consider ourselves partners with OSHA in this effort, and believe strongly that safety is paramount," said James Hieb, MIA Executive Vice President, who pointed out that independent studies have estimated costs for construction industry compliance will exceed $1 billion per year. "Don't hamper economic growth for companies who are in compliance at the current levels."

**Communication with OSHA?**

OSHA has established a 90-day comment period on the proposed silica standard, and the industry has until November 21 to participate. We encourage members of the natural stone industry -- particularly those who quarry or process stone -- to review this rule. To read about the rule, visit [https://www.osha.gov/silica/](https://www.osha.gov/silica/). The "Public Participation" tab allows for commentary on the proposed rule.

Over the past few weeks, I have been hearing resistance by fabricators when it comes to reaching out to OSHA. At first, I didn't really get it, but I do see how they feel that the same shops get inspected over and over, while others get a free pass. That's what prompted me to write this article. But I can also say this: OSHA (or at least some representatives of OSHA) wants feedback from the stone industry. I certainly plan to offer some, and I hope our trade associations -- the MIA, Building Stone Institute and Stone Fabricators Alliance -- do the same. It would be nice for the Natural Stone Council to craft a statement as well.

All of these statements can have an impact, but here's the thing: I've never cut a piece of stone in my life. I think the most informed opinions can come from the people in the shops, running businesses the right way. I know that there are some stone fabricators out there that have been given "Star" recognition as part of OSHA's Voluntary Protection Program (VPP). These fabricators need to say something. You have OSHA's ear -- tell them that rather than addressing standards that don't need addressing, they need to start going after some of these hack shops. Maybe they'll listen.