A New Era of Construction Literacy

While reading the ACI’s Concrete SmartBrief, I came across this statement by Alvin Toffler, renowned futurist and author of Future Shock, The Third Wave, Revolutionary Wealth and numerous other excellent works: “The illiterate of the 21st century will not be those who cannot read and write, but those who cannot learn, unlearn and relearn.”

I think the statement is a wake-up call for our industry, and “illiterate” is a good term to characterize those who are unable or unwilling to adapt to the tremendous paradigm shift taking place in construction today. As we move forward in the 21st century, there is no doubt in my mind that those in our industry who cling to outmoded methods, materials, tools and technologies will be left behind.

Perhaps the most critical aspect of the shift we are experiencing involves the role that we as contractors play in relation to others in the overall project development process.

The old way of doing things was to bid on plans and specs created upstream by designers, architects and planners. We were essentially order takers, waiting for others to design the project and then hand it off. The new paradigm calls for us to be full partners throughout the entire process, having a seat at the table with the architects, designers, planners and clients, adding value and perspective by offering ideas, making suggestions, developing relationships, and, above all, helping to shape the project vision that we then, must execute.

In this new era of construction literacy we will bring our experience and knowhow to the process from the get-go, advising our upstream partners on what is doable and buildable, using our expertise and field experience to ensure that every step takes advantage of the best materials, methods and practices. Our involvement will save time and money for owners. It will save frustration and avoid costly mistakes for designers and architects. A key benefit for our industry will be the respect and recognition we will gain as integral members of the team.

For many of us who have been construction professionals for decades, the prospect of “learn[ing], unlearn[ing] and relealearn[ing] is somewhat intimidating. It took a great deal of hard work and effort to get to where we are today in our careers. But the sands are shifting and we cannot afford to stand still.

What new methods, tools, technologies and other changes are most affecting the way you do business? These questions are continuously being addressed by staff and members of ASCC. I am so grateful to be a part of an organization that is always educating themselves and others regarding innovations and change in our industry. The knowledge and passion that our group exhibits is always invigorating and inspirational.
**Challenges to overcome In the Polishing Industry**

Safety, Be Aware

It’s an everyday challenge to keep everyone working safe.

Safety glasses, safety vest, hard hat and boots is where we start.

But that’s just the tip of the iceberg.

Getting everyone on board to look past the obvious is the challenge. How are we going to lift? Are we using our legs? Are our extension cords in good condition? Is the ground in place?

For my company, Surfacing Solutions Inc., (SSI), “Safety Stops Injuries” is part of our culture.

When we hire a new team member, we go through the typical onboarding safety video to review all the OSHA hot buttons like heat stress and silica training.

We also take the time to discuss how truly dangerous a job site is. Everyone on a modern-day job is under stress. Stress to get the job done on their own schedule, as well as the general contractor’s fast tracked schedule.

This added stress is where the breakdown starts. Everyone is moving too fast and loses track of their surroundings.

We tell our crews to look up and pay attention to what’s going on around them. Make eye contact with the lift driver, look up and around when you step outside of the building to make sure something isn’t going to drop off the scaffolding. Be situationally aware to help ensure you go home every night to your family.
Respirators are a form of Personal Protective Equipment (PPE) used to protect employees when a respiratory hazard cannot be eliminated by other means such as engineering, tooling or administrative practices.

If a respiratory hazard exists or is suspected, the employer needs to develop a written respiratory program that identifies potential airborne hazards. Once hazards are identified, the employer must determine their methodology for protecting their workers from those hazards. Many companies choose to include respirators as part of the control measures to protect their employees. The written plan should include:

- Types of respiratory or airborne hazards workers may encounter
- Control measures to keep workers safe
- How those control measures will be implemented
- A designate program administrator qualified to oversee the program
To be OSHA compliant, prior to issuing a worker a respirator an employer must do the following:

- Train the worker to understand how to properly use and maintain the respirator. Workers should know when they can and cannot use company issued respirators to protect themselves. For example, a worker should know that a 1/2 face respirator and P100 cartridge used to protect against silica dust cannot be used for Immediately Dangerous to Life and Health (IDLH) environments such as low oxygen.
- Medically evaluate the employee to assure they can safely use the issued respirator. An individual may have a health condition that could prevent them from using a respirator.
- Fit test the employee to make sure the issued respirator can safely protect them. Each individual is different and an employer must ensure that the PPE issued can protect a given employee from anticipated hazards. For tight fitting, air purifying respirators, a fit test must be performed to confirm the seal between the worker’s face and the respirator will guard against the hazard.

OSHA can cite an employer for failure to comply with the respiratory protection standard found; Standard number 1926.103 (Construction) and 1910.134 (Industry). However, by developing a good written program and following the guidelines above an employer can protect their workers and avoid costly citations.

The Construction Silica Standard One Year Later; Use the Enforcement Statistics to Your Benefit

Joe Whiteman, Director of Safety Services

Now that we’ve had time to de-compress from the first year complying with the new construction silica standard, we can utilize the enforcement data to identify trends to help us better prepare as we continue forward. I recently submitted a Freedom of Information Act (FOIA) request for specific data related to the enforcement of 1926.1153 Respirable Crystalline Silica standard for the construction industry, September 23, 2017 to September 23, 2018. Though I was provided a Violation Detail Data Report for states, the percentages of where the citations were focused mirrored that of the Federal OSHA’s Frequently Most Cited document that surfaced a few months ago.

Within the FOIA document, there were a total of 192 citations issued to 85 companies. The immediate takeaway is that companies are receiving multiple citations per inspection; in this case at least two per contractor. Of the companies included in this request, several received over five. The severity of the citations was evenly split between Other Than Serious and Serious. I surmise more originally carried the Serious connotation, but through negotiation have landed where they are now. There were four obvious leaders that received the bulk of the citations. First was 1926.1153 (d)(2) employer Exposure Assessment requirements. Second was 1926.1153 (g)(1) Exposure Control Plan requirements. Third was 1926.1153 (c)(1), the Table 1 requirements, and lastly, 1926.1153 (j)(1) complying with the Hazard Communication Standard, including access to labels and containers, Safety Data Sheets, and ensuring the negative health effects related to this standard are communicated. The remaining citations were sprinkled across Medical Surveillance, Housekeeping, Training and Respiratory provisions. To reiterate, they were nearly the same proportions of those on the Federal OSHA’s Frequently Most Cited document.

What was really telling about the FOIA document was where companies have been cited for one requirement of the standard, there will be a second and even a third citation for other portions that are contingent upon another. It should be no surprise that if OSHA cites a company for not complying with Table 1, almost all were also cited for not having performed the required exposure assessment. The company assumed they didn’t need to do this because they were “complying” with Table 1. That is the main reason for those two provisions being at the top of the most frequently cited list. The same goes for other provisions. Many companies were cited for things like the Written Exposure Control Plan, accompanied by a citation for not complying with the Hazard Communication portion. Same goes for companies that were cited for not providing adequate respiratory protection, who also received one for training or lack thereof.

As the statistics show, if you are found out of compliance with one portion of this rule, it’s a safe bet you will be cited for another provision as well. Now that we know the trends and statistics, ask yourselves these questions. Is compliance with Table 1 the correct approach? Have we performed the required exposure assessments? Have we incorporated and referenced the Hazard Communication and Respiratory Protection requirements fully and properly? Does our Exposure Control Plan cover all dust generating activities and the required information? Are our folks properly trained? If OSHA were to question them about their activities and the safety requirements of this standard, would they answer correctly? We are well beyond a year into this new ruling. Now is a great time to reevaluate your programs and ensure you are properly and fully complying with this standard.