SAFETY SOLUTIONS

CURRENT STRATEGIES AND ACTIONS



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CRI Committee 120, Environmental Health and Safety, has been quite busy compiling, creating, and developing safety information that is directly related to the concrete and masonry repair industry.

The committee was formed in 2006, arising out of the Vision 2020 initiative, with a mandate to focus on delivering to the industry concise, user-friendly

guidelines, presentations, and papers that meet the Vision 2020 goal, which was defined as:

Develop environmentally and worker friendly repair methods, equipment, and materials that will greatly reduce the adverse effects on workers, the public, and the earth's ecosystem.

The specific strategies to achieve these goals and the actions completed to date are as follows:

Strategy #1: Create a guideline of existing standards and recommended procedures for abrasive blasting, concrete demolition, and disposal that minimizes hazardous airborne particulates to the workers, the public, and the environment.

To this end, the committee published an article in the September/October 2009 issue of the *Concrete Repair Bulletin*, "Silica in the Repair Environment: What You Need to Know about the Issues and Solutions." This paper describes the hazards associated with dust, particularly silica dust; mitigation strategies and controls; training programs; and employee monitoring programs that offer the current best practice in the industry. As controlling and managing employee exposure to crystalline silica is an OSHA National Emphasis Program, it is an important tool for contractors, owners, and manufacturers to understand and share to protect employees and the public.

Strategy #2: Promote development of demolition equipment that is quiet and dust free, with low impact on the body.

To this end, ICRI has sponsored sessions with many of the world leaders in demolition tool technologies to lay out the objectives of this strategy to the manufacturers. Our challenge to them was to improve existing tools and develop new tools, to think "outside the box," and to meet our strategy objectives of being quiet and dust free, with low impact on the body.

The committee also participated in an ergonomic workshop facilitated by a consultant firm that included job-site visits and a user's forum. The users were field technicians experienced in the use of concrete demolition tools. The following topics were discussed at the workshop:

- A. Observation of job sites
- B. Exploration of specific task performance
 - 1. Tool support
 - 2. Safety gear
 - 3. Equipment innovation
 - 4. Procedure review

The results of the workshop included identifying tools and safety gear to be used by field technicians to evaluate the effect

of the solutions on lessening the wear and tear on their bodies. There are many vibration-reducing tools that are now available in the market that address this important issue. While we have seen improvement in tool technology and the impact on users, we still are looking for continued technology breakthroughs that will more closely meet the objectives of this strategy.

Strategy #3: Develop a series of industry safety guides.

The committee recently completed ICRI Technical Guideline120.1-2009, "Guidelines and Recommendations for Safety in the Concrete Repair Industry," which is now available for purchase (see ad on page 5). The objectives of this guideline are to provide industry-specific safety information that is easy to use and understand. The regulations and requirements that govern safety in construction are numerous and the pages voluminous, which can be quite overwhelming. OSHA and other regulatory agencies expect and require compliance—failure to do can result in fines; restrictions on the pursuit of new work; and, in the extreme, criminal liability. The objective of safety regulations is to ensure a safe environment for workers, inspectors, and the public. Education is key to gaining an understanding of what are acceptable actions and behaviors that lead to safer job sites. Guideline 120.1 was developed to fill an important aspect of this educational need. The guideline reflects safety procedures for the most common tasks encountered in the repair industry. Each page is a graphical representation of the task and the associated safety requirements. The committee would like to see the guideline put into the hands of every operational leader that is engaged in the performance of the work, from the executive leader to the project manager, especially the field manager who directly controls the work. The guideline can be used for training sessions, job hazard analysis, task planning, toolbox talks, and any other manner of knowledge transfer.

The topics in the guideline and the associated safety recommendations are based on real occurrences and represent real solutions. Rest assured that each page in the manual represents a reaction to something that happened on a repair or restoration project. Please take advantage of these sometimes hard lesson and use the guideline to proactively inform the workforce of the proper and safe way to perform the work. By providing this information to the workforce in an interactive process, we can look forward to safer work environments for all.

ICRI Committee 120 will also be developing a PowerPoint presentation that can be used by the ICRI chapters to promote the use of the guideline.

Finally, the next publication of the committee will focus on hearing conservation, another important safety topic that needs greater attention in our industry.

Your feedback and active participation in Committee 120, Environmental Health and Safety, is encouraged.