Dear Ms. Sweatt:

The American Industrial Hygiene Association® (AIHA) greatly appreciates the opportunity to comment upon this request for information (RFI), which is part of OSHA’s efforts to update Table 1 (29 CFR 1926.1153(c)) of its final rule on occupational exposure to respirable crystalline silica (81 FR 16286). Below is AIHA’s feedback on this RFI:

We support the expansion of Table 1. The use of Table 1 has greatly facilitated compliance both for small contractors and for companies that do not routinely perform construction work but have maintenance personnel who routinely conduct construction-like tasks. Table 1 has provided them with effective ways to comply, in situations where monitoring each task every time is impractical.

We realize, though, that additions to Table 1 need to be based on objective data. Although we are proposing additions, we are not providing any of those data in this response. While AIHA members may have exposure data, there are limitations in their ability to share those data. We would be happy to provide additional information about what data from AIHA members may be available for OSHA’s use.

- Within Table 1, when referencing efficiency, a MERV rating or particle size range for which efficiency is achieved is not referenced clearly (e.g., “99% or greater efficiency”). AIHA recommends that Table 1 clearly specify what the efficiency applies to.

- We recommend that OSHA specifically contact equipment manufacturers and trade associations to request data from them on exposure levels and controls. Most of the power tool manufacturers have invested significant resources in developing dust capture systems for their equipment.

- Expand the use of exhaust ventilation/dust capture systems as an option for control. Wet methods work well, but become difficult to use in cold weather, when air temperatures drop.
well below freezing. Architects have prohibited the use of water on some construction materials.

- Compliance with the regulatory requirements of tile/masonry workers who are cutting tiles on roofs is impractical. Cutting tiles at the ground-level is imprecise and involves the danger of hoisting the tiles up to the roof. AIHA recommends that Table 1 be updated to address this type of work.

- Cleanup tasks are not addressed in Table 1. AIHA recommends that Table 1 be updated to address this type of work, when data are available to show what cleanup methods are effective in different situations. The type of cleanup activity would, of course, need to be specified. It may also be necessary to break cleanup tasks into specific categories based on the activity that created the dust. If, for instance, the use of sweeping compounds has been shown to work well when cleaning up dust from grinding but not from fireproofing, that use could be added to Table 1 (note: we do not have exposure data for this specific example). The use of sweepers such as street sweepers or ride-on sweepers (such as Tennant ride-on or walk-behind sweepers) would also be a good addition to this category.

- Add concrete mixing (including mortar, grout, and other cement/silica products), but make that specific for the type and size of the mixer. Exposure to silica from a bag of premixed concrete poured into a five-gallon bucket and mixed with a drill attachment will be very different from the exposure of someone pouring dry material into a large mixer.

- Add interior demolition work, such as drywall demolition necessitated by asbestos or mold remediation.

- Add grinding off paint, when the paint contains silica, if data are available.

- Add hauling and dumping sand and gravel. That typically won't have high exposures and the exposures can be controlled by wetting the material and/or by using enclosed cabs, but it is a common construction task.

- According to Table 1, it is acceptable to utilize a water delivery system that supplies water at the point of impact as a control when using a jackhammer. However, the there is no mention of using water as a control when using a rotary hammer drill. AIHA believes that the use of water as a control method when using a rotary hammer drill should be added to Table 1.

- Abrasive blasting should also be added to Table 1, with the caution that the type of blasting and the abrasive used would need to be specified. Even though it is well known that abrasive blasting with silica sand creates extremely high exposure levels, employers are required to monitor. Listing abrasive blasting (along with specific control measures such as wet blasting or the use of alternative abrasives) would allow employers to focus on controls.

- List tasks for which OSHA has identified that exposure is typically below the Action Limit. The OSHA document, Frequently Asked Questions (“FAQs”) for the Construction Industry, mentions some tasks, but that is not a resource that contractors are likely to find. Including the tasks that are not likely to create concerns in Table 1 will provide contractors with one central resource for determining how to control exposures.
• Table 1 breaks tasks down into less than four hours or more than four hours. AIHA would like to see one more breakdown, for very short duration tasks. The Frequently Asked Questions mentions that there are many tasks, such as drilling a few holes in concrete, for which overexposure is not likely because of the short duration. We would like to see this included as part of Table 1.

• Public works, facilities maintenance, and grounds maintenance tasks should be explicitly included in the construction standard. The tasks for which those employees have exposure to silica are usually of short duration and occur irregularly. Ensuring that they can use Table 1 will give them a needed tool to comply.

Conclusion and Next Steps
AIHA thanks you for the opportunity to comment upon this request for information on occupational exposure to respirable crystalline silica. We look forward to working with you to help achieve our common goals of protecting worker health and safety. For additional information, please feel free to contact Mark Ames at mames@aiha.org or (703) 846-0730.

Respectfully,

Kathleen S. Murphy, CIH
President
AIHA