

September 30, 2026

The California Occupational Safety and Health Standards Board
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RE: Comments on the September 16, 2026 discussion draft for proposed new section §5204.1 “Crystalline Silica Activities Strictly Prohibited,” and proposed changes to §5204 “Occupational Exposures to Respirable Crystalline Silica”, and §1532.3. “Occupational Exposures to Respirable Crystalline Silica.”

To the Board Members:

We are writing to comment on the discussion draft of §5204.1 and related changes, issued by the Standards Board on September 16, 2026. As scientists with deep experience and expertise in exposure science, toxicology, and epidemiology and knowledge of crystalline silica exposure in the countertop fabrication industry, we discuss here several ways in which the proposed silica prohibition and related changes can better align with the scientific evidence and take advantage of relevant research.

INCLUDE SCIENTIFIC INPUT WHEN DEVELOPING CHANGES TO THE SILICA STANDARD

1. The Standards Board has indicated it will convene a Silica Science subcommittee to render a scientific opinion on whether artificial and natural stone with high crystalline content can be fabricated safely, and if so, what minimum measures would ensure worker safety. Meanwhile, the Board issued a discussion draft that includes a prohibition on fabricating silica-bearing artificial stone. We urge the Board to convene the scientific subcommittee soon, to ensure that the options for safe fabrication are fully considered and that emergency silica rulemaking is based on the best available science to effectively protect California employees.

ENFORCING SOUND EXPOSURE CONTROL PRACTICES IS A MORE PROMISING APPROACH TO ADEQUATELY PROTECT WORKERS

2. Surveys and case studies, including my own research, indicate that artificial stone with >1% silica content can be fabricated at commercial scale while maintaining respirable crystalline silica concentrations below the OSHA Permissible Exposure Level or Action Level. This level of protection is achieved through ordinary means, including shop layout and workflow, automated wet milling, ventilation, housekeeping and maintenance, along with regular exposure monitoring and active

management. As stone countertop fabrication is hazardous¹ regardless of silica content, the Board should evaluate whether identifying actionable, scalable, adaptable exposure control solutions and replicating these across the industry would protect workers more effectively than the proposed >1% silica prohibition.

3. While Cal OSHA has set relatively strict requirements in the 2016, 2023 and 2025 Silica Standard, Cal OSHA inspections, NIOSH, and academic studies have shown that a majority of fabricators currently do not comply and prohibited practices such as dry cutting are still common. The current enforcement protocol relies on labor-intensive agency inspections and air monitoring, and under the Silica Emphasis program inspectors have monitored less than 15% of the 1341 California fabrication shops identified by CDPH.² To close this gap, fabricator licensing with a required auditing and reporting component would enable monitoring and enforcement of acceptable practices at good-faith operators and shut down unsafe shops. Importantly, the information gained from these activities would support ongoing program evaluation and continuous improvement.
4. Emergent silicosis cases are concentrated among small business fabricators, where exposure controls and hazard communications are frequently nonexistent. These operations often feature extremely dusty workplaces with dry milling and zero mechanical ventilation, dangerous conditions that are easily identifiable by visual inspection alone. Rapidly locating and intervening at these specific jobsites is a highly effective way to eliminate what is otherwise avoidable non-compliant exposure. Therefore, we encourage the Board to allocate stone fabrication industry-specific resources to Cal OSHA's two proactive enforcement programs, the High-Hazard Industry list and Local Emphasis Programs, with the express purpose of eliminating severe exposure risks as soon as possible.
5. Emergency regulations, whether they take the form of a material ban or more robust exposure controls enforcement, will require new administrative and regulatory frameworks that will require effort to put in place and must be designed to function well over time. We ask the Board to outline a realistic implementation plan and timeline for the proposed ban versus enforcement and enhancement of regulations already in place, taking into account the considerations discussed here and the available and emerging science. We believe a program of enhanced monitoring and enforcement, supplemented by rapid intervention, will provide the most effective, timely, and sustainable protection for stone fabrication and installation workers.

THE PROPOSED BAN WOULD NECESSITATE ADDITIONAL PRODUCT VERIFICATION AND DOES NOT ADDRESS SOME IMPORTANT HAZARDS

6. A ban on fabricating artificial stone that contains >1% crystalline silica must include a practical method for shop owners and Cal OSHA to verify, before purchase, whether the material type is artificial stone

¹ Known hazards include crushing while handling slabs, forklift accidents, noise, and fumes from volatile organic compounds, adhesives and solvents.

² CDPH estimates that California has 1,342 countertop fabrication shops (CDPH dashboard, September 25, 2026). Under the Silica Special Emphasis program, Cal OSHA in 2024 did 85 inspections related to silica exposure in 2024. 26% had serious violations and were issued Orders Prohibiting Use; approx 95% of closed inspections were issued citations. At the Standards Board June 18 2026 meeting, Cal/OSHA reported continued inspection activity targeting countertop fabrication shops (the Special Emphasis Program) and reported that, as of June 15, Cal/OSHA had opened 192 inspections at countertop fabricators.

and, if so, that the crystalline silica content is 1% or less. This evaluation requires two different laboratory tests and destruction of the material during sampling. As discussed at the July 31, 2026 advisory meeting, the ban would require a new framework for material testing and verification: either the manufacturer's Safety Data Sheets must confirm the product's silica content at 1% or greater precision, and/or a third-party certification attesting that the product can be fabricated legally in California. Scientific and technical issues must be addressed so that certification is standardized, verifiable, and accurate.

7. The discussion draft allows in situ installation, maintenance and repair of artificial stone containing >1% silica, while the same material would be banned in fabrication shops. This could lead to an increase in onsite fabrication that exposes workers to high silica concentrations, as high-silica prefabricated components could legally be brought in, cut to fit onsite dimensions, and installed. Installers are exposed to uncontrolled dust in unventilated settings, and their disease rates match or exceed rates for fabrication workers in a shop setting.^{3,4} Installation workers should be provided the same protections, e.g., dust control, as shop workers, as part of Title 1 regulation.
8. The proposed Action Level of 3.0 µg/m³ for airborne respirable crystalline silica when fabricating artificial stone >1% silica will not protect workers from other hazards in artificial stone dust, and may not be a workable or feasible standard, as it is close to the laboratory minimum reporting level, which may indeed be its basis. A rationale for the proposed Action Level is generally missing from the draft.
9. The proposed prohibition on fabricating artificial stone with >1% crystalline silica does not protect workers from potential hazards when fabricating substitute materials. The toxicological mechanisms linking artificial stone fabrication to adverse health outcomes are not well understood, but a considerable body of literature suggests that exposure to organic resins, metals, minerals, pigments, and vitreous silica in artificial stone dust have adverse effects, and physical characteristics such as crystal fracturing and particle size, as well as pharmacodynamics, affect its potency. Thus, a prohibition on crystalline silica may invite regrettable substitutions that enter the market before their hazards are understood.



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³ Requena-Mullor, Mar, Raquel Alarcón-Rodríguez, Tesifón Parrón-Carreño, Jose Joaquín Martínez-López, David Lozano-Paniagua, and Antonio F. Hernández. "Association between Crystalline Silica Dust Exposure and Silicosis Development in Artificial Stone Workers." *International Journal of Environmental Research and Public Health* 18, no. 11 (2021): 5625. <https://doi.org/10.3390/ijerph18115625>.

⁴ Aránzazu Pérez-Alonso et al., "Outbreak of Silicosis in Spanish Quartz Conglomerate Workers," *International Journal of Occupational and Environmental Health* 20, no. 1 (2014): 26–32, <https://doi.org/10.1179/2049396713Y.0000000049>.