FOX MARBLE™
STONE · TILE · RESTORATION

10/28/26

Division of Occupational Safety and Health
Research and Standards Branch
RS@dir.ca.gov

**Re: Discussion Draft of October 22, 2026, proposed section 5204.1 and amendments to sections 5204 and 1532.3**

Thank you for the work Cal/OSHA has put into this draft, and for the chance to comment. As a countertop fabricator, Fox Marble shares the goal of ending silicosis among stone workers. We support the prohibition on dry cutting and the effort to remove the most dangerous material from California shops. Our suggestions are meant to make the rule clear and workable for the employers who must follow it. We have three.

## 1. Clarify the limit, and use one number for the same work.

The draft sets a 10 µg/m³ "artificial stone action level" and says wet methods must keep exposure below it "at any time" (5204(b)(17), (f)(2)(A)). A level employers must never exceed works as a limit. It would help to say whether 10 µg/m³ is a PEL, a monitoring trigger, or both.

Section 1532.3(a)(1) sets the construction scope at 25 µg/m³, and the draft does not say whether the 10 µg/m³ level reaches construction work. Coring, drilling and sink cutouts count as fabrication wherever they happen.

We would appreciate help understanding how the 10 µg/m³ level fits both shop and field work. A worker who cuts stone in a shop and one who cuts it in the field breathe the same dust, yet the draft sets different expectations for each. One number might make the rule easier to follow and to enforce. If brief tasks are the reason for a lower number, a short-term limit may be one way to address them. We are not aware of one for silica from OSHA or ACGIH, and we would be glad to help think it through. [8]

We would also welcome the exposure basis for 10 µg/m³. At the standard OSHA ID-142 sample volume, 10 µg/m³ is 8.16 µg per sample. That is above the method's 2.84 µg detection limit and below its 9.76 µg reliable quantitation limit. [7]

## 2. Keep respirator selection tied to exposure, as section 5144 already does.

Section 5144 already tells employers how to choose a respirator. They must identify and evaluate the hazard and estimate exposure (d)(1)(C), select a respirator suited to that hazard (d)(1)(A), use the assigned protection factors in Table 1 (d)(3)(A)1, and keep exposure at or below the respirator's maximum use concentration (d)(3)(A)2. [2] Table 1's half-mask value rests on OSHA's 2006 review of workplace and simulated workplace studies. [1] We are not aware of new evidence that the value fails for silica when the wearer is fit tested under a compliant program.

A default of APF 1000 would replace that exposure-based method with one choice for every task. Protection should rise with exposure. A respirator that exceeds what a task needs adds weight and expense without adding protection.

The cadmium rule requires a respirator program under section 5144 and selection under 5144(d)(3)(A)1 (5207(g)(2)(A), (g)(3)(A)). [3] If staff believe a class of respirator is inadequate for silica, we suggest addressing it in section 5144, where it would apply to every substance.

Engineered stone work can release other airborne hazards. A 2023 study of dry cutting found styrene, benzene, ethylbenzene, toluene and phthalic anhydride, a respiratory sensitizer. [4] Particulate filters do not capture vapors, and (d)(3)(C) sets separate rules for them. [2] Hazards differ by product, tool and

shop. So we suggest the rule stay general and require the employer to complete a hazard assessment and decide what protection employees will receive. Section 5144(d)(1)(A) and (C) already work this way. The rule could also confirm that the higher filter class in the draft is needed for each task, since (d)(3)(D) accepts any NIOSH-certified particulate filter. [2]

We also ask Cal/OSHA to weigh cost and supply, as Labor Code 144.6 and Government Code 11346.3(a) direct. [5] A powered respirator system costs about $1,850 or more per worker before upkeep, and few models accept vapor cartridges. [6]

**Suggested change:** Let Table 1 and the maximum use concentration rule in section 5144 decide the respirator for the measured exposure, and rely on the employer's hazard assessment for other hazards, including VOCs.

## 3. Make wet methods work in practice.

Wet methods are the right first control, and we support them. How much they help depends on the task and the setup. In one NIOSH test, sheet-flow wetting cut exposure by about half during edge grinding and blade cutting. Adding local exhaust raised the cut to about 72 percent for cutting and 95 percent for grinding. [9] NIOSH also found that wet grinding and polishing of engineered quartz may still lead to overexposure. [10] So holding every exposure below 10 µg/m³ with wet methods alone may be hard.

The draft already says water must cover the surface where the tool touches the work (5204(b)(17)). Tool size can help meet that. NIOSH notes that a strong spray hitting a fast-spinning wheel may throw silica mist toward the worker. [11] We did not find research on polishing wheel size in wet stone work, and we wonder if Cal/OSHA has looked at it. In our shop, we replaced 4-inch polishing wheels with 2-inch wheels. Since then, our industrial hygiene sampling has shown exposures down to the 10 µg/m³ level the draft proposes, and the water now keeps pace with the dust. We have data that support this, though a more in-depth study would be worthwhile, and we would be glad to share what we have. It may be worth checking whether wheel size belongs in the wet-method rules.

Thank you for considering these suggestions. We would be glad to talk with staff about any of them.

Respectfully,

David Galaviz, EHS Director
Fox Marble

## Sources


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2. California Code of Regulations, Title 8, section 5144 (Respiratory Protection), DIR text, last amended 2012: https://www.dir.ca.gov/title8/5144.html

3. California Code of Regulations, Title 8, section 5207 (Cadmium): https://dir.ca.gov/title8/5207.html

4. Ramkissoon C, et al. Engineered stone fabrication work releases volatile organic compounds classified as lung irritants. Ann Work Expo Health 2023: https://academic.oup.com/annweh/article/67/2/288/6760968

5. California Labor Code section 144.6: https://california.public.law/codes/labor_code_section_144.6. California Government Code section 11346.3: https://california.public.law/codes/ca_gov't_code_section_11346.3

6. Retail listing accessed October 27, 2026 (not a quote): Sundström SR 500 PAPR kit, $1,866.99, https://www.zoro.com/sundstrom-safety-papr-kit-sr-500-ml-h06-0621/i/G4541896. Vapor cartridge availability varies by model; see manufacturer listings.

7. OSHA Method ID-142 (crystalline silica by XRD): https://www.osha.gov/sites/default/files/methods/osha-id142.pdf

8. OSHA, Crystalline Silica, General Industry (8-hour PEL and action level; no short-term limit listed): https://osha.prod.pace.dol.gov/silica-crystalline/general-industry-info. ACGIH value for respirable crystalline silica (8-hour TWA, no STEL listed), as tabulated by WorkSafeBC: https://elimit.online.worksafebc.com/substance/silica-crystalline-alpha-quartz-and-cristobalite-respirable/

9. NIOSH. Experimental Evaluation of Respirable Dust and Crystalline Silica Controls During Simulated Performance of Stone Countertop Fabrication Tasks With Powered Hand Tools. Ann Work Expo Health 2017;61(6):711: https://academic.oup.com/annweh/article/61/6/711/3930904

10. NIOSH. In-Depth Survey Report: Engineering Control of Silica Dust from Stone (2015 survey): https://stacks.cdc.gov/view/cdc/175032/cdc_175032_DS1.pdf

11. NIOSH. Comprehensive Report: Engineering Control of Silica Dust from Stone (EPHB 2021-DFSE-710): https://www.cdc.gov/niosh/publications/surveyreports/pdfs/2021-DFSE-710.pdf