

Silica: Verify Dust Controls Before Cutting

Todd Jerome Jenkins | v1.0 | Reviewed October 6, 2026 | Discussion + field checks

Why this matters

A water hose beside a saw or a vacuum plugged into an outlet does not prove that dust is controlled. The complete setup must suit the material, tool and task. Changes in location or task duration can change the required protection.

Objective: Identify the approved silica-control method and verify its key functions before dust-producing work.

Key hazards or failure points

Unknown material; wrong control setup; interrupted water or capture; changed indoor conditions; exposure of nearby crews; dust raised during cleanup.

Practical controls

- Confirm the material and task with the supervisor and silica competent person. Use the employer's written exposure-control plan. For covered construction work, confirm the applicable Table 1 method or assessed alternative.
- Use the specified tool, water delivery or dust collection, work practices and required respiratory protection together. A respirator does not excuse a failed required engineering control.
- Control access and coordinate adjacent work. Include filter changes, waste handling and cleanup in the plan; use the approved method that limits dust.

Verify It in the Field

Before starting, the competent person and operator compare the actual setup with the applicable task row or assessment and equipment instructions. Check material, tool, indoors/outdoors and expected duration.

Using the prescribed safe checks, verify water reaches the required point, or the specified shroud, hose, collector and filters are connected and functioning. Use the actual airflow, water-delivery and maintenance criteria; do not invent a universal setting or rely on a HEPA label alone.

Confirm required respiratory protection arrangements before exposure. Record the control, source/criterion, actual check result, checker and time. Observe performance during work from a protected position; absence of visible dust does not prove exposure is acceptable.

Stop and reassess

Stop dust-producing work for failed water or extraction, a changed task or material, uncontrolled dust, or missing required protection. Notify the competent person. Correct, recheck and rebrief before restarting. Do not improvise dry sweeping or compressed-air cleanup; the plan must meet applicable housekeeping restrictions.

Ask the crew

1. What part of today's task must match the control plan?
2. Show how we will check that water delivery or dust capture works.
3. What failure or change means we stop, and who clears the restart?

Before exposure: verify the whole method, then monitor it as work changes.

Sources: OSHA 1926.1153, Table 1 and paragraphs (d)–(g); task-specific instructions.

Free next step: [JHA/JSA planning & field-verification worksheet](#)

Expanded guidance, references, supervisor check and attendance record accompany this talk.