

DRAFT

§0000.0. Control of employee exposures from dust-generating operations conducted on concrete or masonry materials.

- (a) Scope and Application. This section applies to the use of powered tools or equipment to cut, grind, core, or otherwise mechanically disrupt concrete or masonry materials.

Issue: Specifically name and exclude some operations because of impracticality or lack of serious hazard, e.g., drilling, chipping, scaling, jackhammering?

Exception: This section shall not apply to soft cutting of concrete.

Issue: How long can concrete set before it is not “soft”?

Issue: How define concrete and masonry? Should any other silica-containing construction materials besides concrete block and brick, clay brick, natural and manufactured stone, and terra cotta generally be included?

Issue: Other materials under consideration specifically for exclusion: roofing tile and roofing pavers, drywall, greenboard, stucco, wall cladding, tile backer boards, tile and stone less than 7/8 inches thick, plastering material. Any others?

- (b) Definitions.

As needed depending on discussion.

- (c) Where powered tools are used to cut, grind, core, drill, or otherwise mechanically disrupt concrete or masonry materials, water shall be applied to the extent feasible to continuously and effectively reduce the generation and presence of airborne dust.

Issue: Supplemental respiratory protection needed for some or all such operations?

Exception: Methods specified in subsection (d) may be used instead of water to control airborne dust where any of the following conditions apply:

1. Water cannot be used without causing permanent damage to the appearance or integrity of a construction product.

Issue: Are further criteria needed to define or determine the degree of “permanent damage to the appearance or integrity” that will trigger the exception?

2. The operation must be performed on scaffolds, other elevated work platforms, or in other situations where wet processes cannot be used without creating a more serious slipping, electrical, or other hazard due to the presence of water. In determining whether this exception applies, measures typically used to protect employees from hazards related to rain and other sources of water in construction shall be taken into consideration.

3. The use of water is prohibited by law or regulation.

4. The operation does not result in exposure exceeding the Permissible Exposure Limits for crystalline silica listed in section 5155, as demonstrated reliably by air sampling data applicable to the type of operation being performed.

Issue: Should any presumptively de minimus operation be included within this exception, e.g, detail work of short duration?

(d) Alternatives to the use of water.

(1) Where water is not used to control airborne dust, the employer shall implement and maintain effective engineering controls in the form of dust-collection systems or engineering solutions designed to control airborne dust.

Issue: Testing to determine effectiveness of equipment? Include a requirement to follow manufacturer's instruction for use, maintenance and servicing? No standards currently exist for design, testing, maintenance or output of equipment.

Issue: Is there a role for process isolation?

Issue: How specify the use of respiratory protection?

(e) Training.

(1) Employee training. Training in the following topics shall be provided to all supervisory and non-supervisory employees prior to their assignment to jobs or work areas where they be exposed to airborne dust from dry or wet processes conducted on concrete or masonry materials:

- A) The potential hazards of exposure to airborne dust generated from concrete and masonry materials, including silicosis and lung cancer.
- B) Methods used by the employer to control employee exposures to airborne dust from concrete and masonry materials, including wet processes, local exhaust ventilation systems, and process isolation, as applicable, and the rationales behind the employer's choice of methods.
- C) The employer's hazard communication program.
- D) The levels of exposure to total dust and to total and respirable crystalline silica measured by the employer, or by other reliable sources, that are associated with the types of tasks conducted by the employer's employees
- E) The current values of the PELs for total dust and for total and respirable quartz and cristobalite found in section 5155.
- F) The importance of good personal hygiene and housekeeping practices when working in proximity to dust from concrete and masonry materials including:
 - 1. Not smoking tobacco products; appropriate methods of cleaning up before eating, and appropriate methods of cleaning clothes.
 - 2. Avoiding, to the extent practical, activities that would contribute significantly to an employee's exposure to airborne dusts.

(2) Supervisor training. Prior to assignment to supervision of employees working where dust-generating operations on concrete or masonry materials are possible, training on the following topics shall be provided:

- A) The information required to be provided by section (e)(1) above.
- B) Identification of tasks the employees will perform, which may result in employee exposure to concrete or masonry dust.

Procedures for implementation of the measures used by the employer to reduce the exposure to concrete or masonry dust.