Chapter 56: Respirable Crystalline Silica

Handheld and Stand-mounted Drill Work Plan

1 Purpose

The purpose of these requirements is to ensure that worker exposure to respirable crystalline silica remains below the permissible exposure limit (PEL) and that material containing silica is properly handled and disposed of. They cover work with handheld and stand-mounted drills (including impact, rotary hammer, and other drill types) that could cause the release of silica. They apply to workers and supervisors.

2 Requirements

1. Use drill equipped with commercially available shroud or cowling with dust collection system
2. Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions
3. Dust collector must provide the air flow recommended by the tool manufacturer, or greater, and have a filter with 99 percent or greater efficiency and a filter-cleaning mechanism
4. Use a high-efficiency particulate air (HEPA)-filtered vacuum when cleaning holes
5. Immediately follow drilling with HEPA vacuuming of area
6. Use standard construction site personal protective equipment (PPE): safety glasses, hearing protection, and dust mask
7. If there is no integrated dust collection as described above, then a half-face respirator with HEPA cartridges is required until air sampling has been performed to characterize silica exposure with the tools and controls utilized.
8. Respiratory protection must be worn when emptying contents of silica vacuum cleaners. Vacuum contents must be disposed of in bags that can effectively hold dust without breaking.
9. Contact Waste Management for waste characterization before disposal