Silica Task Specific Written Exposure Control Plan

0206500_CP_11_25_en_A3

CENTENNIAL
Part of the Bilfinger Group

SECTION I – Job Description

Date:	Company Name:
Work Area:	Operator Name:
Description of Work:	

SECTION II – Tool Selection

- ☐ Stationary Mason Saw(s)
- ☐ Handheld Power Saw(s)
- ☐ Walk behind Saw(s)
- ☐ Drivable Saw(s)
- ☐ Rig-mounted Core Saw(s) or Drill(s)
- ☐ Handheld and Stand Mounted Drill(s) (includes impact and rotary hammer drills)
- ☐ Crushing Machine(s)
- ☐ Sandblasting (with media containing silica, and/or surfaces containing silica)
- ☐ Dowel Drilling Rig(s)
- ☐ Vehicle-Mounted Drilling Rig(s)
- ☐ Jackhammer(s) and Handheld Powered Chipping Tool(s)
- ☐ Handheld Grinder(s)
- ☐ Walk-behind Milling Machine(s) and Floor Grinder(s)
- ☐ Drivable Milling Machine(s)
- ☐ Heavy Equipment and Utility Vehicle(s) (w/ attachments for demo, grading, excavating)

SECTION III – Control Method

Complete either Option 1 or Option 2 for the control method implemented.

OPTION 1 (Reference OSHA Table 1 on Back Page)

Check all that apply:

- ☐ OSHA Control Method Fully Implemented
- ☐ <4 Hours Exposure ☐ >4 Hours Exposure

Respiratory Protection Required **Yes** or **No**

Required Exposure Reduction Steps:

- ☐ Housekeeping Practices (Exposure Reduction)
- ☐ Written Exposure Plan Available
- ☐ Employee Medical Surveillance (Required for employees who must wear a respirator under the silica standard for 30 or more days a year.)
- ☐ Crystalline Silica hazards communicated to affected employees.

Note: For task involving tools that create crystalline silica exposure that are not lised in OSHA table 1, ie. mortar mixing, must comply with Option 2.

Option 2 (Alternative Controls)

☐ The crystalline silica exposure level has been assessed through industrial hygiene testing, well documented procedures for measuring and controlling dust and/or historical air monitoring conducted by the employer for the work being performed is below the OSHA PEL of 50 µg/m^3.

☐ Written Exposure Plan Available

Alternative Methods Compliance

Check all that Apply:

Engineering Controls

- ☐ Wet Methods to control dust
- ☐ Local Exhaust to capture dust
- ☐ Isolation from dust exposure

Recommended Work Practices

- ☐ Inspection/Maintenance of Controls
- ☐ Proper water nozzle for wet methods
- ☐ Hoses for water or dust collection have proper flow of air or water.
- ☐ Wetting down silica before sweeping
- ☐ Modify work schedule to reduce number of employees exposed to silica.
- ☐ Respiratory Protection Required
- ☐ Houskeeping Practices

SECTION IV – Permit Review / Approval

Completed prior to the start of work.

Supervisor Approval: (Pre-Start Approval) Printed Name/Date:

Competant Person Review: Printed Name/Date:

TABLE 1: SPECIFIED EXPOSURE CONTROL METHODS WHEN WORKING WITH MATERIALS CONTAINING CRYSTALLINE SILICA

Equipment or Task	Engineering and Work Practice Control Methods	Respiratory Protection	
		≤ 4 hour shift	> 4 hour shift
(i) Stationary masonry saws	• Use saw equipped with integrated water delivery system that continuously feeds water to the blade. • Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions.	None	None
(ii) Handheld power saws (any blade diameter)	• Use saw equipped with integrated water delivery system that continuously feeds water to the blade. • Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions. – When used outdoors. – When used indoors or in an enclosed area.	None APF 10	APF 10 APF 10
(iii) Handheld power saws for cutting fiber-cement board (with blade diameter of 8 inches or less)	For tasks performed outdoors only: • Use saw equipped with commercially available dust collection system. • Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions. • Dust collector must provide the air flow recommended by the tool manufacturer, or greater, and have a filter with 99% or greater efficiency.	None	None
(iv) Walk Behind Saws	• Use saw equipped with integrated water delivery system that continuously feeds water to the blade. • Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions. – When used outdoors. – When used indoors or in an enclosed area.	None APF 10	None APF 10
(v) Drivable saws	For tasks performed outdoors only: • Use saw equipped with integrated water delivery system that continuously feeds water to the blade. • Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions.	None	None
(vi) Rig-mounted core saws or drills	• Use tool equipped with integrated water delivery system that supplies water to cutting surface. • Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions.	None	None
(vii) Handheld and stand-mounted drills (including impact and rotary hammer drills)	• Use drill equipped with commercially available shroud or cowling with dust collection system. • Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions. • Dust collector must provide the air flow recommended by the tool manufacturer, or greater, and have a filter with 99% or greater efficiency and a filter-cleaning mechanism. • Use a HEPA-filtered vacuum when cleaning holes.	None	None
(viii) Dowel drilling rigs for concrete	For tasks performed outdoors only: • Use shroud around drill bit with a dust collection system. Dust collector must have a filter with 99% or greater efficiency and a filter-cleaning mechanism. • Use a HEPA-filtered vacuum when cleaning holes.	APF 10	APF 10
(ix) Vehicle-mounted drilling rigs for rock and concrete	• Use dust collection system with close capture hood or shroud around drill bit with a low-flow water spray to wet the dust at the discharge point from the dust collector. OR • Operate from within an enclosed cab and use water for dust suppression on drill bit.	None None	None None
(x) Jackhammers and handheld powered chipping tools	• Use tool with water delivery system that supplies a continuous stream or spray of water at the point of impact. – When used outdoors. – When used indoors or in an enclosed area. OR • Use tool equipped with commercially available shroud and dust collection system. • Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions. • Dust collector must provide the air flow recommended by the tool manufacturer, or greater, and have a filter with 99% or greater efficiency and a filter-cleaning mechanism. – When used outdoors. – When used indoors or in an enclosed area.	None APF 10 None APF 10	APF 10 APF 10 APR 10 APF 10
(xi) Handheld grinders for mortar removal (i.e., tuckpointing)	• Use grinder equipped with commercially available shroud and dust collection system. • Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions. • Dust collector must provide 25 cubic feet per minute (cfm) or greater of airflow per inch of wheel diameter and have a filter with 99% or greater efficiency and a cyclonic pre-separator or filter-cleaning mechanism.	APF 10	APF 25

Equipment or Task	Engineering and Work Practice Control Methods	Respiratory Protection	
		≤ 4 hour shift	> 4 hour shift
(xii) Handheld grinders for uses other than mortar removal	For tasks performed outdoors only: • Use grinder equipped with integrated water delivery system that continuously feeds water to the grinding surface. • Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions. OR • Use grinder equipped with commercially available shroud and dust collection system. • Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions. • Dust collector must provide 25 cubic feet per minute (cfm) or greater of airflow per inch of wheel diameter and have a filter with 99% or greater efficiency and a cyclonic pre-separator or filter-cleaning mechanism. – When used outdoors. – When used indoors or in an enclosed area.	None None None	None None APF 10
(xiii) Walk-behind milling machines and floor grinders	• Use machine equipped with integrated water delivery system that continuously feeds water to the cutting surface. • Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions. OR • Use machine equipped with dust collection system recommended by the manufacturer. • Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions. • Dust collector must provide the air flow recommended by the manufacturer, or greater, and have a filter with 99% or greater efficiency and a filter-cleaning mechanism. • When used indoors or in an enclosed area, use a HEPA-filtered vacuum to remove loose dust in between passes.	None None	None None
(xiv) Small drivable milling machines (less than half lane)	• Use a machine equipped with supplemental water sprays designed to suppress dust. Water must be combined with a surfactant. • Operate and maintain machine to minimize dust emissions.	None	None
(xv) Large drivable milling machines (half lane or larger)	For cuts of any depth on asphalt only: • Use machine equipped with exhaust ventilation on drum enclosure and supplemental water sprays designed to suppress dust. • Operate and maintain machine to minimize dust emissions. For cuts of four inches in depth or less on any substrate: • Use machine equipped with exhaust ventilation on drum enclosure and supplemental water sprays designed to suppress dust. • Operate and maintain machine to minimize dust emissions. OR • Use a machine equipped with supplemental water spray designed to suppress dust. Water must be combined with a surfactant. • Operate and maintain machine to minimize dust emissions	None None None	None None None
(xvi) Crushing machines	• Use equipment designed to deliver water spray or mist for dust suppression at crusher and other points where dust is generated (e.g., hoppers, conveyers, sieves/sizing or vibrating components, and discharge points). • Operate and maintain machine in accordance with manufacturer's instructions to minimize dust emissions. • Use a ventilated booth that provides fresh, climate-controlled air to the operator, or a remote control station.	None	None
(xvii) Heavy equipment and utility vehicles used to abrade or fracture silica-containing materials (e.g., hoe ramming, rock ripping) or used during demolition activities involving silica-containing materials	• Operate equipment from within an enclosed cab. • When employees outside of the cab are engaged in the task, apply water and/or dust suppressants as necessary to minimize dust emissions.	None None	None None
(xviii) Heavy equipment and utility vehicles for tasks such as grading and excavating but not including demolishing, abrading, or fracturing silica-containing materials.	• Apply water and/or dust suppressants as necessary to minimize dust emissions. OR • When the equipment operator is the only employee engaged in the task, operate equipment from within an enclosed cab.	None None	None None