

BOK CENTER SUITE RENOVATION



SITE SPECIFIC PROJECT SAFETY PLAN

PROJECT SAFETY PROGRAM

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1. **Project Safety Plan**

A. Purpose

1. Prevention of accidental injury, occupational illness and property damage and to establish methods whereby all Project employees will be actively involved in the safe construction of the Project.
2. Outline the safety duties and responsibilities of all parties on this Project.
3. Establish and implement a plan for safety education, training and monitoring to promote identification and elimination of hazards and unsafe acts.

B. Basic Principles of the Project Safety Plan

1. All Subcontractors shall ensure that their employees, subcontractors and suppliers, regardless of tier, understand and agree to comply with their Company Safety Program, the Project Safety Plan, the Project Documents, OSHA Standards and all other federal, state and local codes and regulations.
2. Prior to beginning work, each Subcontractor shall prepare a Hazard Analysis that defines the activity to be performed and identify the sequence of work, the specific hazards, and methods to be used to eliminate or minimize each hazard. The Hazard Analysis shall be reviewed, during the Pre-Activity meeting, by the Quality Control Manager and the Project Superintendent or their designated representatives. See attached Job Hazard Analysis.
3. All major subcontractors, such as Structural Steel, Mechanical, Electrical, Elevator, Plasterer/Drywall, Painting, Glazing, Roofing and Fire Protection must provide a Site Specific Safety Program to the Quality Control Manager prior to the start of their work.
4. All Subcontractors shall provide their employees with the necessary safety and personal protective equipment and weather protective gear required for the performance of their work and enforce the use of same as a condition of employment. Hard hats are required to be worn at all times where construction activities are taking place. The wearing of eye protection with side-shields is required at all times.
5. Each Subcontractor shall have at least one employee qualified in First Aid/CPR treatment whenever the Subcontractor has employees working on this project.
6. For emergency purposes, each Subcontractor shall submit a list to the Project Manager of key personnel with home addresses and telephone numbers.
7. Tulsa Vision Builders is a drug and alcohol free workplace. All employees and subcontractors are required to comply with Tulsa Vision Builders' Drug-Free Workplace Program.

C. Responsibility

1. Project Manager shall:
 - a. Be responsible for the administration of the Project Safety Program.

- b. Assist the Project Superintendent and the Project Site safety coordinator with all matters pertaining to safety when deemed necessary and as required.

2. Project Superintendent shall:

- a. Enforce compliance with the Project Safety and HAZCOM Programs, the Project Documents, OSHA Standards and all other federal, state and local safety codes and regulations.
- b. Distribute a Medical Emergency Procedure and a fire Emergency Procedure for this Project to all Subcontractor Safety Representatives and post copies in all trailers and offices. These Procedures shall be discussed at the Project Safety Meetings and shall be a required subject for a Toolbox Talk for all Project employees.
- c. Identify facilities for immediate first aid and/or medical/hospital treatment for all work related injuries and illnesses of employees.
- d. Regularly inspect the Project for safety compliance.
- e. Schedule weekly Project Safety Meetings.
- f. Receive all safety related correspondence and accident reports.

3. Project Site Safety Coordinator shall:

- a. Make daily safety inspections, ensuring coverage of the entire project each week, with a weekly written report.
- b. Notify responsible persons regarding noncompliance with the Project Safety and HAZCOM Programs, the Project Documents, OSHA Standards and all other federal, state and local safety codes and regulations.
- c. Implement and enforce the Safety Enforcement Policy.
- d. Check with Sub Safety Rep. on disposition of safety related matters.
- e. Render assistance at TVB and Subcontractor Toolbox Talks.
- f. Investigate all accidents as directed by the Project Superintendent.
- g. Issue weekly Safety Bulletins regarding pertinent safety issues.
- h. Maintain records of all TVB and Sub Safety and Toolbox Meetings.
- i. Assist the Project Superintendent with all safety related matters.
- j. Shall keep a Log of First Aid Treatment.

4. Subcontractor Safety Representative(s) shall:

- a. Ensure that their employees are trained to perform their work in a safe manner and have the ability to recognize and correct potential and actual hazards.
- b. Be responsible for the Sub Accident Reporting Requirements.

- c. Attend each weekly Project Safety Meeting.
- d. Chair their weekly Company Toolbox Talks. Arrange for written minutes to be taken and copy these minutes to the Project Site safety coordinator.
- e. Work with the Tulsa Vision Builders Project Superintendent to participate in safety audits as required.
- f. Report all safety related matters to the Project Site Safety Coordinator or Superintendent.

5. All Project Employees shall:

- a. Perform their work in a safe manner for prevention of accidents to themselves, fellow workers, the general public and property of all concerned.
- b. Attend their weekly Company Toolbox Talks.
- c. Alert their Foremen of hazards, unsafe acts and near misses.
- d. Notify their Foremen immediately of any accident.
- e. Comply with their Company Safety and HAZCOM Programs, the Project Documents, OSHA Standards and all other federal, state and local codes and regulations, as well as the site specific Infectious Disease Control Plan. See attached Infectious Disease Control Plan.
- f. All Project Employees shall be subject to fair, consistent and constructive disciplinary action for safety noncompliance. The severity of a violation shall determine the level of disciplinary action administered. See the Guide to Disciplinary Action on the next page.

The typical disciplinary action pattern is as follows:

- (1) Verbal Reprimand: The employee shall be informed verbally of the safety violation committed which, if repeated, could result in further disciplinary action.
- (2) Written Reprimand: The employee shall be notified by formal written notice of the safety violation committed and informed that future violations may result in suspension or discharge from work.
- (3) Suspension: The employee shall be suspended from working on the site for a specified period of time for the safety violation committed and informed that future violations may result in permanent removal from the project.
- (4) Termination: The employee shall be barred from the project as a result of a major safety violation or a pattern of safety violations.

GUIDE TO DISCIPLINARY ACTION				
	MINOR	SIGNIFICANT	SERIOUS	FLAGRANT
SEVERITY OF INFRACTION EXAMPLES	<ul style="list-style-type: none"> - Not wearing safety glasses - Not wearing hard hat - Not wearing hearing protection 	<ul style="list-style-type: none"> - Horseplay - Crossing a red barricade 	<ul style="list-style-type: none"> - Not tying off - Using incomplete scaffold - Endangering another employee 	<ul style="list-style-type: none"> - Knowingly endangering another employee - Fighting
SEVERITY OF INFRACTION DEFINITIONS	A safety violation that does not immediately expose an employee to serious injury or death.	A safety violation in which the employee exposed self or others in a significant risk of injury.	A safety violation in which an employee exposed self or others to risk serious injury or death.	A safety violation in which an employee has committed an inexcusable unsafe act.
FIRST OFFENSE	VERBAL REPRIMAND	WRITTEN REPRIMAND	SUSPENSION	TERMINATION
SECOND OFFENSE	WRITTEN REPRIMAND	SUSPENSION	TERMINATION	
THIRD OFFENSE	SUSPENSION	TERMINATION		
FOURTH OFFENSE	TERMINATION			

D. Safety Meetings

1. Weekly Project Safety Meeting

- The Project Superintendent shall schedule a weekly Safety Meeting to review accidents, injuries, and near misses, review safety related problems and plan for upcoming work activities.
- The Project Safety Meeting should be attended by supervisory personnel.

2. Weekly Toolbox Talks

- Supervisors shall hold weekly Toolbox Talks. The topics of these talks shall be relevant to the work being performed by the supervisor's crew.
- Documentation of the weekly Toolbox Talk shall be submitted to the Project Superintendent before 3:00 P.M. each Friday.
- The weekly Toolbox Talk Minutes shall contain the following:
 - (1) Name of Employer and date.
 - (2) Name of the TVB Foreman or Subcontractor Safety Rep.
 - (3) Name of all employees in attendance.
 - (4) Subjects discussed.
 - (5) Safety comments and suggestions from employees.

d. The weekly Toolbox Talk Agenda shall include, as a minimum, the following:

- (1) Instruction in the safe planning and performance of their work.
- (2) Review of Project accidents, near misses, hazards and unsafe acts.
- (3) Employee suggestions and comments relating to safety.

E. Accident Reporting Requirements

1. Project Employee Injury:

a. All on-site accidents, regardless of how incidental, including those sustained by Subcontractors, shall be verbally reported to the Superintendent ASAP, Coordinate any emergency response through the MCC staff at site. Detailed investigation and report can follow.

b. Non-incidental injuries and near misses shall be reported in writing as an accident/incident report that contains the following:

- Names and addresses of victims and witnesses.
- Description of events leading up to the accident/incident.
- Factors that may have contributed to the accident/incident.
- Action taken to prevent this accident/ incident in the future.

c. The Site Safety Coordinator or Project Superintendent shall notify the Owner's Designated Rep. of all recordable injuries to any person. The notification shall describe the circumstances of the accident and any corrective action taken. The written notification shall be within 24 hours of any injury.

d. Subcontractors shall be responsible for notifying OSHA within eight (8) hours in the event of any hospitalization, amputation or fatality.

F. Subcontractor Safety Compliance Program

1. All Subcontractors shall, prior to their start of work, submit the names of their authorized and qualified Project Safety Representatives to the TVB Project Superintendent. All Project Safety Representatives shall be held accountable by their Companies for the immediate correction of hazards and unsafe acts and compliance with their Company Safety and HAZCOM Programs, the Project Documents, OSHA Regulations and all other federal, state and local codes and regulations by their employees and their subcontractors and suppliers, regardless of tier.

2. Consistent with the Employee Compliance program, written warnings for subcontractor employee safety violations will be documented using the safety warning form, referenced at the back of this document.

3. To address recurring subcontractor safety violations, corrective action may include but is not limited to any of the following:

a. A stop work order for the specific operation or area of construction until the hazard or unsafe act is corrected.

b. Correction made by TVB or others and backcharged to the Subcontractor.

c. Written notice to the Subcontractor's Project Manager and Company President.

d. Replacement of the Subcontractor's Project Safety Representative, Foremen and/or crew.

G. Visitors

1. Persons not directly involved with the on-site construction of this Project shall not enter the site unless they obtain permission from the Project Superintendent or the Project Superintendent's designated representative, sign a Visitor's Release Form and obtain and wear a hard hat and any other personal protective equipment required.

H. Conclusion

1. All employers are responsible for instructing their employees in the recognition and elimination of hazards and unsafe acts and the regulations applicable to their work.
2. Safety training, good safety practices and appropriate immediate corrective action are the keys to the prevention of accidents, loss of life and property damage. No matter how many rules and regulations are set forth, a good Safety Program depends mainly on a positive and intelligent attitude by the Management and Labor involved in the construction of this Project.

II **Accident Prevention Plan**

The elements of this Accident Prevention Plan address some of the potential hazards associated with the scope of work and provide guidelines to eliminate or minimize those hazards.

A. Applicable Safety Standards

1. All work shall be performed in accordance with the safety and health requirements set forth in the Code of Federal Regulations (CFR) Title 29, Part 1926, "Safety and Health Standards for the Construction Industry", and Title 29, Part 1910, "General Industry Safety and Health Standards", as well as the applicable state and local regulations.
2. Copies of the applicable OSHA standards will be made available at the site.

B. Scope of Coverage

1. This Accident Prevention Plan shall apply to all contractors, subcontractors, suppliers, and lower tier subcontractors and their employees while performing work activities on this project.

C. Employee Orientation

1. Each employer is responsible for providing an orientation for their employees as follows:
 - Orientations shall be given to each employee on the project prior to that employee performing work.
 - Orientations shall be documented and copies shall be submitted to Tulsa Vision Builders Construction Company following their completion.
 - Orientations must address specific jobsite conditions and cover all applicable Tulsa Vision Builders Construction Company safety policies, local, state and federal regulations.
2. Each employee shall be provided an initial orientation that will address training and other information that will allow them to perform their work in a safe manner. The orientation shall be based on elements of this Accident Prevention Plan.

3. Below is a list of the minimum topics of training. This list is not all-inclusive and shall not be considered to identify all hazards associated with construction.

- a. Employees responsibility to work safely.
- b. Elements of the Accident Prevention Plan that apply to their work.
- c. Tulsa Vision Builders Construction Company's Disciplinary Action Policy
- d. Mandatory personal protective equipment (hard hats, safety glasses, safety harnesses, etc.)
- e. Procedure for reporting accidents/injuries.
- f. Hazard Communication Program.
- g. Rules and regulations for operating motor vehicles.
- h. Mandatory attendance at Safety Meetings.
- i. How and when to use Fire Protection Equipment (fire extinguishers).

D. Hazard Communications Programs

1. Tulsa Vision Builders Construction Company (TVB)

- a. By reference of the TVB Hazard Communication Program, it is hereby incorporated in its entirety in the Accident Prevention Plan.
- b. A copy of the OSHA Hazard Communication Standard 1926.59, the Hazard Communication Program, Hazardous Chemical Inventory List and all Material Safety Data Sheets (MSDS) shall be located in the Project Field Office.

2. Subcontractors

- a. Each Subcontractor/Purchase Contractor and lower tier subcontractors must submit to Tulsa Vision Builders Construction Company a written Hazard Communication Program as outlined in the Occupational Safety And Health (OSHA) Code of Federal Regulations 1926.59. All Hazard Communication Programs submitted to TVB must have the following elements and be divided accordingly:

- (1) A written HazCom program.
- (2) Provisions for employee training. Employers need to be able to certify that their employees have been trained in all aspects of HazCom.
- (3) An alphabetical listing of the hazardous materials that the Subcontractor will be bringing onto this Project.
- (4) Copies of Material Safety Data Sheets for the hazardous materials that the Subcontractor will be bringing onto this Project.

Whenever new products are brought on site by the Subcontractor, the Subcontractor's HazCom Coordinator will be responsible for bringing the Subcontractor's program up to date.

The information requested above must be submitted in book format with the company name, the name of a contact person (HazCom Coordinator) familiar with the HazCom program, and applicable telephone numbers, listed on the front cover.

E. Working in Confined Spaces

1. When it becomes necessary to enter and conduct work activities in a confined space, a Confined Space Entry Program shall be enforced.
2. See attached OSHA's New Standards for Confined Spaces in Construction.

F. Temporary Electric Power

1. Temporary power shall be in compliance with the NEC and CFR 29, 1926, Subpart K.
2. All branch circuits supplying 120 volts single phase to 15 and 20 amp receptacles shall be protected with GFC Interrupters.
3. Employees shall inspect the cords to electric power tools and extension cords prior to each use and shall remove from service any cords found to be defective.

G. Fall Protection

1. Employees shall be protected from the hazards of falling in accordance with OSHA regulations and Tulsa Vision Builders Construction Company Safety requirements. Standard guardrails, lifelines, floor covers and personal protective equipment shall be used to meet this requirement.
2. Personal fall protective equipment such as safety belts, safety harnesses, lanyards, and life lines shall be inspected by the wearer before each use.
3. To further fall protection measures, Tulsa Vision Builders has implemented the following requirements to be applied to all project employees:
 - All employees, subcontractors, vendors, suppliers, and owners on a working/walking surface 6-feet or more above a lower level shall be protected by the 100% fall protection policy.
 - This 100% fall protection policy extends beyond OSHA regulations to include structural steel ironworkers and scaffold builders.
 - Acceptable fall-protection methods include personal fall-arrest systems (2 lanyards required), properly- built scaffolds, guardrail systems, safety nets, warning line systems, controlled access zones, and safety monitor systems. The Project Superintendent shall review Subcontractor fall protection plans in the context of job hazard analysis discussions.
 - All overhead work shall be confined to an area clearly marked by red barricade tape at the closest working surface below the overhead work activity.

I. Fire Protection

1. Tulsa Vision Builders Construction Company will maintain temporary portable fire extinguishing equipment for building protection. Fire extinguishers of the ABC type will be provided in the quantity and size required by CFR 29 1926.150. Subcontractors shall be responsible for providing fire protection for specific tasks as necessary including but not limited to cutting, welding, soldering, and roofing operations as well as flammable/combustible material storage areas.
2. All employees shall be instructed by their employer in the proper use of fire protection equipment. Documentation of such training shall be maintained by each employer.

J. Flammable and Combustible Liquids

1. All flammable/combustible liquids shall be stored and handled in accordance with CFR 29, 1926.152.
2. Gasoline shall be stored in approved metal safety cans that are equipped with a flash arresting screen and spring-closing lid.
3. Fire Extinguishing equipment shall be available where flammable/combustible liquids are stored.

K. First Aid

1. Each employer shall have at least one (1) Certified First Aid/CPR trained employee on site when working on this project. Each employer shall maintain a suitable first aid kit for use by its employees.
2. Tulsa Vision Builders Construction Company will maintain at least one (1) First Aid cabinet in the Project Field Office.

L. Medical Emergency

1. Employees suffering non life-threatening injuries shall be transported to medical facilities by their employer.
2. For all life-threatening injuries or illnesses, the employer shall immediately call for medical assistance by dialing 911.
3. Other emergency telephone numbers shall be posted at each telephone.

M. Hand and Power Tools

1. Each employer is responsible for the condition of the tools their employees use. Employees must be instructed in the hazards and limitations associated with the tools they use. Hand and power tools must be inspected prior to each use and removed from service when found to be defective.
2. Hand and Power tools shall be used, inspected, and maintained in accordance with the manufacturer's instructions and shall be used only for the purpose for which they were designed.
3. Power tools designed to accommodate guards shall be equipped with the guards when in use.

N. Scaffolds

1. Scaffolds shall be erected, modified, and dismantled ONLY under the direction of a Competent Person and shall follow the OSHA regulations outlined in CFR 29 1926.451.
2. Employees erecting, dismantling, or working from scaffolding must maintain Tulsa Vision Builders Construction Company's 100% fall protection policy.
3. Upon completion, scaffolds shall have and maintain a green tag scaffold permit attached to the scaffold in full visibility of all employees at the access to the scaffold.

4. Green scaffold tags shall be turned into the Superintendent once the scaffold has been dismantled.
5. Scaffolds that are incomplete, being modified, dismantled or that are damaged shall be barricaded off with red barricade tape and red tagged incomplete.
6. Scaffolds without tags shall be considered red tagged and not for use.
7. Standard guardrail systems including top rail, mid-rail, and toe-board shall be installed on all scaffolds in accordance with OSHA regulations. Scaffold platforms that employees are working from shall be completely decked over for the entire width of the scaffold.
8. In the event that scaffold configurations or physical obstructions make it impossible to install standard guardrail system, employers shall supply a personal fall arrest system or other means of fall protection.
9. Employees shall not be allowed to pass beneath scaffolds where work is being performed overhead unless appropriate measures have been taken to protect employees from falling material.
10. All overhead work shall be confined to an area clearly marked by red barricade tape at the closest working surface below the overhead work activity.
11. Manually propelled mobile scaffolds shall only be used on a hard, level surface that is free from debris and other obstructions that could pose a hazard. Employees shall not be allowed to ride on mobile scaffolds that are being moved.

O. Ladders

1. Ladders shall be used in accordance with the requirements of CFR 29, Part 1926.1053.
2. Employees required to use ladders shall be trained in accordance with CFR 29, Part 1926.1060.
3. Ladders used to access elevated work areas shall extend at least 36" above the landing and shall be secured to prevent displacement.
4. Employees using ladders for access to elevated work areas shall not carry tools/materials when climbing up or down a ladder.
5. Employees shall be instructed not to stand above the top two rungs of stepladders.
6. Employees shall be tied-off 100% of the time when working closer than one and one-half (1-1/2) times the ladder height to an opening or the edge of the building. (e.g. an employee using a ten (10) foot stepladder must tie-off when fifteen (15) or less from the edge of a opening or the building).
7. Employees shall be tied off 100% of the time when **working** on straight ladders.

P. Lockout/Tagout

1. No employee shall work on any electrical, hydraulic, steam, or other pressurized system/equipment until the system/equipment is secured from operating and all stored energy has been released.
2. Electrical equipment or circuits that are de-energized shall be rendered inoperative and shall have tags attached at all points where such equipment or circuits can be energized. Tags shall be placed to identify the equipment or circuits being worked on.

Q. Accident Reporting Requirements

1. Project Employee Injury:
 - a. All on-site accidents, regardless of how incidental, including those sustained by Subcontractors, shall be reported to the Project Superintendent or his designated representative.
 - b. Subcontractors shall be individually responsible for notifying OSHA within eight (8) hours in the event of any hospitalization, amputation, or fatality.

R. Respirator Program

1. Employers who allow or require their employees to wear respirators shall have a written respirator program in accordance with CFR Title 29, Part 1910.134.
2. Employees allowed or required to use respirators shall be trained in the proper selection, maintenance, and limitations of respirators. Each employee shall be fit tested before using a negative pressure respirator.

S. Sanitation

1. Potable Water
 - a. Employees shall be provided with an adequate supply of potable water. Where single use cups are provided, a trash container for used cups shall also be provided.
 - b. Containers for potable water shall be conspicuously marked as containing potable water.
2. Toilet Facilities
 - a. Toilet facilities shall be provided and maintained in accordance with OSHA regulations.

T. Floor and Wall Openings

1. All floor and wall openings, 2 inches or greater in size, shall be guarded or covered. Guardrails shall be of standard construction as outlined in CFR Title 29, Part 1926.502.
2. When floor covers are used they shall be capable of withstanding the maximum intended load. Covers will be secured against displacement and marked to indicate "HOLE" or "COVER", or they shall be color coded.

3. Hole covers shall be constructed so that normal construction activities will not displace the cover from its location (wired, shot, nailed or bolted down).

U. Masonry Walls

1. Subcontractors erecting masonry walls shall do so in accordance with CFR Title 29, Part 1926.706.
2. Prior to erecting any masonry wall, a Limited Access Zone shall be established and maintained throughout construction of the wall.
3. All overhead work shall be confined to an area clearly marked by red barricade tape at the closest working surface below the overhead work activity.

V. Housekeeping

1. Job-site cleanliness is an item of major significance on this project and will be closely monitored.
2. Housekeeping shall be performed on a continuous basis. Waste materials such as wood, concrete, rebar, cardboard, plastic wrap, and other types of trash must not be allowed to accumulate and become a hazard.

VI. Silica

1. Site Specific Silica Exposure Control Plan must be written by a Competent Person and at a minimum must include:
 - Your Company name and business contact information
 - The name of the site the plan is written for (address and location)
 - A listing and description of all tasks that many involve exposure to Silica
 - The types of Silica-containing materials handled in each task (ie: Concrete, Tile, Mortar, Grout, etc.)

OSHA's New Standards for Confined Spaces in Construction

Construction Newsletter

12.10.15

Jason P. Rogers

The Occupational Safety and Health Administration (OSHA) recently published new standards governing Confined Spaces in Construction ("New Standards"), to provide added protections to employees performing work in confined spaces (e.g., sewers, manholes, HVAC ducts, boilers, crawl spaces, tanks, and pits). The New Standards went into effect on August 3, 2015, and OSHA began enforcing compliance on October 2.

The New Standards mainly target three particular parties:

- The "host employer," such as the owner or property manager of the site
- The "controlling contractor," the party having primary control over the project
- The "entry employer," whose employees will at some point occupy the confined space.

These parties are subject to a comprehensive set of requirements designed to protect employees from exposure to hazards associated with work in confined spaces. The requirements imposed by the New Standards fall into the following categories:

- Work site evaluation by a competent person to identify confined spaces
 - Continuous monitoring of confined space atmospheres by employers, including by employing lookouts or equipment to monitor, for example, engulfment hazards like flash flooding in storm sewers
 - Training workers on the location and hazards of permit-required confined spaces
 - Maintaining a written confined space program if workers will enter permit-required confined spaces
 - Ensuring that unauthorized workers do not enter permit-required confined spaces
- If there are multiple trades working in the same confined spaces, coordination of activities between employers to avoid introducing hazards into confined spaces from outside work areas

Much of the onsite administrative burden falls on the controlling contractor, who must act as the primary point of contact for information about the permitted confined spaces at the worksite and ensure that all such information is communicated to the entry employer. The controlling contractor also is charged with implementing the above requirement (vi), i.e., taking steps to prevent the introduction of "outside" hazards to confined spaces. For example, if the host employer's employees will be running a generator near the entrance of a confined space, the controlling contractor must inform the entry employer if the generator exhaust could result in increased levels of carbon monoxide.

The requirements imposed by the New Standards are comprehensive and detailed, and this article is intended to provide a general summary only. Contractors and subcontractors should take appropriate steps to familiarize themselves with the New Standards and should consult legal counsel if necessary to ensure compliance.

OSHA's Crystalline Silica Rule: Construction

OSHA is issuing two standards to protect workers from exposure to respirable crystalline silica—one for construction, and the other for general industry and maritime—in order to allow employers to tailor solutions to the specific conditions in their workplaces.

Who is affected by the construction standard?

About two million construction workers are exposed to respirable crystalline silica in over 600,000 workplaces. OSHA estimates that more than 840,000 of these workers are exposed to silica levels that exceed the new permissible exposure limit (PEL).

Exposure to respirable crystalline silica can cause silicosis, lung cancer, other respiratory diseases, and kidney disease. Exposure can occur during common construction tasks such as using masonry saws, grinders, drills, jackhammers and handheld powered chipping tools; operating vehicle-mounted drilling rigs; milling; operating crushing machines; and using heavy equipment for demolition or certain other tasks.



Photo: NIOSH

Without dust controls, using a handheld power saw to cut concrete can expose workers to high levels of respirable crystalline silica.

The construction standard does not apply where exposures will remain low under any foreseeable conditions; for example, when only performing tasks such as mixing mortar; pouring concrete footers, slab foundation and foundation walls; and removing concrete formwork.

What does the standard require?

The standard requires employers to limit worker exposures to respirable crystalline silica and to take other steps to protect workers.

The standard provides flexible alternatives, especially useful for small employers. Employers can either use a control method laid out in **Table 1*** of the construction standard, or they can measure workers' exposure to silica and independently decide which dust controls work best to limit exposures to the PEL in their workplaces.

Regardless of which exposure control method is used, all construction employers covered by the standard are required to:

- Establish and implement a **written exposure control plan** that identifies tasks that involve exposure and methods used to protect workers, including procedures to restrict access to work areas where high exposures may occur.
- Designate a **competent** person to implement the written exposure control plan.
- Restrict **housekeeping** practices that expose workers to silica where feasible alternatives are available.
- Offer **medical exams**—including chest X-rays and lung function tests—every three years for workers who are required by the standard to wear a respirator for 30 or more days per year.

- **Train workers** on work operations that result in silica exposure and ways to limit exposure.
- **Keep records** of workers' silica exposure and medical exams.

What is Table 1?

Table 1 matches common construction tasks with dust control methods, so employers know exactly what they need to do to limit worker exposures to silica. The dust control measures listed in the table include methods known to be effective, like using water to keep dust from getting into the air or using ventilation to capture dust. In some operations, respirators may also be needed.

Employers who follow Table 1 correctly are not required to measure workers' exposure to silica and are not subject to the PEL.

Table 1 Example: Handheld Power Saws

If workers are sawing silica-containing materials, they can use a saw with a built-in system that applies water to the saw blade. The water limits the amount of respirable crystalline silica that gets into the air.

Table 1: Specified Exposure Control Methods When Working with Materials Containing Crystalline Silica			
Equipment/ Task	Engineering and Work Practice Control Methods	Required Respiratory Protection and Minimum Assigned Protection Factor (APF)	
		≤ 4 hrs/ shift	> 4 hrs/ shift
(ii) Handheld power saws (any blade diameter)	<p>Use saw equipped with integrated water delivery system that continuously feeds water to the blade.</p> <p>Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions.</p> <ul style="list-style-type: none"> • When used outdoors. • When used indoors or in an enclosed area. 	<p>None</p> <p>APF 10</p>	<p>APF 10</p> <p>APF 10</p>

Excerpt from Table 1.

*See regulatory text for construction standard, with complete Table 1 at www.osha.gov/silica/SilicaConstructionRegText.pdf.

In this example, if a worker uses the saw outdoors for four hours or less per day, no respirator would be needed. If a worker uses the saw for more than four hours per day or any time indoors, he or she would need to use a respirator with an assigned protection factor (APF) of at least 10. In this case, a NIOSH-certified filtering facepiece respirator that covers the nose and mouth (sometimes referred to as a dust mask) could be used. If a worker needs to use a respirator on 30 or more days a year, he or she would need to be offered a medical exam.

Alternative exposure control methods

Employers who do not use control methods in Table 1 must:

- Measure the amount of silica that workers are exposed to if it may be at or above an **action level of 25 µg/m³** (micrograms of silica per cubic meter of air), averaged over an eight-hour day.
- Protect workers from respirable crystalline silica exposures above the **permissible exposure limit of 50 µg/m³**, averaged over an eight-hour day.
- Use **dust controls** to protect workers from silica exposures above the PEL.
- Provide **respirators** to workers when dust controls cannot limit exposures to the PEL.

When are employers required to comply with the standard?

Construction employers must comply with all requirements of the standard by June 23, 2017, except requirements for laboratory evaluation of exposure samples, which begin on June 23, 2018.

Additional information

Additional information on OSHA's silica rule can be found at www.osha.gov/silica.

OSHA can provide extensive help through a variety of programs, including technical assistance about effective safety and health programs, workplace consultations, and training and education.

OSHA's On-site Consultation Program offers free and confidential occupational safety and health services to small and medium-sized businesses in all states and several territories across the country, with priority given to high-hazard worksites. On-site consultation services are separate from enforcement and do not result in penalties or citations. Consultants from state agencies or universities work with employers to identify

workplace hazards, provide advice on compliance with OSHA standards, and assist in establishing and improving safety and health management systems. To locate the OSHA On-site Consultation Program nearest you, call 1-800-321-OSHA (6742) or visit www.osha.gov/dcsp/smallbusiness.

For more information on this and other health-related issues impacting workers, to report an emergency, fatality, inpatient hospitalization, or to file a confidential complaint, contact your nearest OSHA office, visit www.osha.gov, or call OSHA at 1-800-321-OSHA (6742), TTY 1-877-889-5627.

This is one in a series of informational fact sheets highlighting OSHA programs, policies or standards. It does not impose any new compliance requirements. For a comprehensive list of compliance requirements of OSHA standards or regulations, refer to Title 29 of the Code of Federal Regulations. This information will be made available to sensory-impaired individuals upon request. The voice phone is (202) 693-1999; teletypewriter (TTY) number: (877) 889-5627.

For assistance, contact us. We can help. It's confidential.



www.osha.gov (800) 321-OSHA (6742)

DSG FS-3681 03/2016



U.S. Department of Labor

Job Hazard Analysis

Company Name:

Activity/Work Task:		Overall Risk Assessment Code (RAC) (Use highest code)				L	
Project Location:		Risk Assessment Code (RAC) Matrix					
Contract Number		Severity		Probability			
Date Prepared:				Frequent	Likely	Occasional	Seldom
Prepared by (Name/Title):		Catastrophic	E	E	H	H	M
Reviewed by (Name/Title):		Critical	E	H	H	M	L
		Marginal	H	M	M	L	L
		Negligible	M	L	L	L	L
Notes: (Field Notes, Review Comments, etc.) Use of the following PPE is required during operations: <ul style="list-style-type: none">Hard hatSafety glassesANSI Class II vest (daytime)/ANSI Class III vest (nighttime)Safety toe work bootsGloves (if necessary)		Step 1: Review each “ Hazard ” with identified safety “ Controls ” and determine RAC (See above)					
		“ Probability ” is the likelihood to cause an incident, near miss, or accident and identified as: Frequent, Likely, Occasional, Seldom or Unlikely.				RAC Chart	
		“ Severity ” is the outcome/degree if an incident, near miss, or accident did occur and identified as: Catastrophic, Critical, Marginal, or Negligible				E = Extremely High Risk	
		Step 2: Identify the RAC (Probability/Severity) as E, H, M, or L for each “Hazard” on AHA. Annotate the overall highest RAC at the top of AHA.				H = High Risk	
						M = Moderate Risk	
Job Steps		Hazards		Controls			RAC
•	•	•					
Equipment to be Used		Training Requirements/Competent or Qualified Personnel name(s)		Inspection Requirements			
•		•		•			

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PURPOSE	<ul style="list-style-type: none"> This document establishes the requirements for asbestos exposure protection and informing all employees about possible hazards in their work areas. It applies to all personnel including PMT, EPC Contractors, Subcontractors, and visitors involved in this field operation.
SCOPE	<ul style="list-style-type: none"> This procedure applies to all Manhattan jobsites.
RESPONSIBILITY	<ul style="list-style-type: none"> The Superintendent is responsible for implementing and enforcing this procedure. The Superintendent should work with a Safety Engineer to develop a site-specific plan to address these requirements, if applicable.
REFERENCES	29 CFR 1926 and 1910 (OSHA Standards) 29 CFR 1926.1101: (OSHA Asbestos) 29 CFR 1910.1001: (OSHA Asbestos) 33 CFR (Coast Guard Oil Spill Prevention) 40 CFR (Environmental Protection Agency) 49 CFR (Department Of Transportation)

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GENERAL	<ul style="list-style-type: none"> • All Employees engaged in operations or activities where asbestos-containing materials may be encountered shall receive the proper procedures, training, and equipment necessary to protect themselves from harmful exposure to these materials. • This document has been established to ensure the health and safety of Employees who may encounter asbestos containing materials in their work environment and who may be required to work with or around these materials. • This document shall apply to all Company projects where the presence of asbestos containing materials is known or suspected and where Employees may encounter these substances as part of their work activities. • The appropriate federal and state agencies must be notified for any asbestos abatement activities. Be sure to consult specific state environmental regulations prior to conducting any asbestos work for specific requirements.
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ASBESTOS EXPOSURE PROTECTION	<p>With the abundance of asbestos containing materials (ACM) in our society and its workplaces, Company Employees are potentially exposed to asbestos from time to time.</p> <p>In structures built prior to 1980:</p> <ul style="list-style-type: none"> • All roofing, resilient flooring, insulation, sound proofing, and surfacing materials should be assumed to contain asbestos (PACM) until positively proven through analysis (bulk sampling) otherwise. • Any intrusive activity; repair and maintenance, alteration, removal and demolition may be considered asbestos activity. • During building custodial activities; clean up of damage deteriorated buildings and materials listed above may be considered asbestos activity. • Common asbestos activities in industrial maintenance and construction activities include: <ul style="list-style-type: none"> ❑ Removing/replacing asbestos gaskets and leak sealant materials. ❑ Removing/installing or otherwise disturbing asbestos roofing and siding. This includes repair/alteration of transite wall or roof panels.
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	<ul style="list-style-type: none"> ❑ Cutting new asbestos to make gaskets, out of stock materials. ❑ Cutting or otherwise disturbing insulating, fireproofing or soundproofing materials that might contain asbestos to gain access to equipment to be worked on. ❑ Mixing asbestos cement or fire proofing materials. ❑ Opening boxes containing asbestos materials (gaskets, insulation, brake and clutch pads, etc.). ❑ Spraying asbestos containing insulation or fireproofing. ❑ Using asbestos fire blankets or hot gloves. ❑ Cad welding. ❑ Automotive brake repair. • Any time our Employees perform asbestos work, or are potentially exposed to ACM from work inside/adjacent to asbestos regulated areas; Project Management shall contact the Division Senior Safety Engineer, and jointly assign a Competent Person to develop a site specific asbestos safety/compliance plan for that activity.
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TRAINING

- Training is required prior to initial assignment and annually thereafter for Employees engaged in asbestos work activity, or who may encounter asbestos containing materials as part of their routine work activities.
- Initial training for asbestos workers will consist of an EPA accredited course appropriate for the class of work being performed; or conform with the policy set below for Class IV, and special cases of Class II work activities.
- Class I and Class II* workers: 32 hours training
 - ❑ Class II: Training may only be 8 hours, or equivalent in length with part of that being hands-on training if the employee will remove only one type of Class II material.
 - ❑ Class III: 16 hours training
 - ❑ Class IV: Training must be 2 hours in length.
 - ❑ Class IV: Job/site specific procedures and protective measures are added to the training and covered as part of the instruction.
- For Class II work which involves the removal or disturbance of only one of the Class II materials, and 8-hour (equivalent) course is acceptable. This course must cover the following at a minimum:***
 - ❑ Methods of recognizing asbestos.
 - ❑ The health effects of exposure to asbestos.
 - ❑ The relationship between smoking and asbestos in producing lung cancer.
 - ❑ The names, and how to contact organizations, which have information/programs on quitting smoking (Smoking cessation programs).
 - ❑ The nature of work activity that could result in exposure to asbestos.
 - ❑ The purpose, proper use, fitting instructions and limitations of respirators (if applicable).
 - ❑ The appropriate work practices, procedures, and protective measures for performing the asbestos job.

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TRAINING (CONTINUED)	<ul style="list-style-type: none"> ❑ The medical surveillance program required for asbestos workers. ❑ The content of the OSHA asbestos standard: 29 CFR 1926.1101. • Competent Persons at a minimum must take the 40-hour EPA accredited course for asbestos supervisors, and can only be designated as such with approval by Project Management, Division Operations Manager and the Division Senior Safety Engineer • Competent Persons supervising <u>only</u> Class III and IV jobs can take the 16-hour EPA accredited course for operations and maintenance activities (O&M) if deemed appropriate by Project Management, the Division Operations Manager and Senior Safety Engineer. • Awareness level training must be completed by all Employees who may encounter asbestos containing materials as part of their work activities. • Records of all training and copies of medical examination results must be maintained as part of the Employee's file.
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MULTI-EMPLOYER WORKSITES	<ul style="list-style-type: none"> • Anytime the Company performs an asbestos job requiring the designation of a Regulated Area, Project Management is responsible for informing the client, and all other site employers of: <ul style="list-style-type: none"> ❑ The location and nature of the asbestos work planned. ❑ The existence of and the requirements pertaining to the regulated area(s). ❑ Measures planned to protect persons outside that area. • In the event Company Employees perform an asbestos job, Project Management must ensure all asbestos hazards are contained within the Regulated Area(s). • In the event Company Employees are not involved in the asbestos activity but are working adjacent to a Regulated Area; Project Management still has a duty to ensure there is no exposure to Company Employees, or make appropriate protective provisions. This would normally be coordinated with the employer performing the asbestos job. • If there is reason to believe Employees have been exposed to asbestos materials, Project Management must contact the Division Senior Safety Engineer immediately to determine the proper follow-up actions, which may include; communications, medical monitoring, etc. • In the event the Company is the General Contractor; Project Management is responsible to ensure any sub-contractors performing asbestos work are in compliance with applicable OSHA regulations.
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REGULATED AREAS	<ul style="list-style-type: none"> • All Class I, Class II, Class III, and any work which exceeds the Permissible Exposure Limit (PEL) shall be conducted within Regulated Areas. • Barricades and warning signs (posted in all approach directions) will be erected at a sufficient distance to permit a person to read them and take appropriate precautions well in advance of any potential exposure. • Signs must read: <div data-bbox="716 793 1218 993" data-label="Text"> <p style="text-align: center;"> Danger Asbestos Cancer and Lung Disease Hazard Authorized Personnel Only Respirators and Protective Clothing Are Required in this Area </p> </div> • For jobs which a Negative Exposure Assessment has been completed, (no respirators or other PPE required) Signs must read: <div data-bbox="735 1129 1198 1260" data-label="Text"> <p style="text-align: center;"> Danger Asbestos Cancer and Lung Disease Hazard Authorized Personnel Only </p> </div> • Access to Regulated Areas is limited to persons trained and qualified in all phases of this procedure. All entrants must don and wear the prescribed PPE in the Regulated Area. • No person will be allowed to eat, drink, smoke, chew tobacco or gum, apply cosmetics or bring related materials in the Regulated Area. • Persons should be logged in and out and when unattended, the Regulated Area must be made secure from unauthorized entry.
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BULK SAMPLING	<ul style="list-style-type: none"> • The only way to positively identify the existence of asbestos in any material is by Bulk Sampling, followed by laboratory analysis. • All Bulk Sampling of PACM or ACM shall be performed by a designated Competent Person using established EPA sampling protocol and documentation thereof. • Bulk sample results must be reviewed during the planning stages for any removal operation. • The laboratory performing the analysis must participate in the EPA bulk asbestos identification quality assurance program as a minimum requirement. • Any percentages of the asbestos called Amosite will require special encapsulating removal agents in lieu of normal wetting agents (amended water). • A visual inspection of the ACM should also be performed prior to removal to determine friability (hardness) and accessibility. Both of which will determine work practices and along with bulk sampling results can help anticipate fiber count prior to the initial personal monitoring results.
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**EXPOSURE
ASSESSMENTS
AND
PERMISSIBLE
EXPOSURE
LIMITS**

- Each workplace or job task with asbestos work must perform exposure assessments (air monitoring) to accurately determine airborne concentrations of asbestos to which Employees are exposed.
- A designated Competent Person will perform the initial and subsequent daily monitoring as required by OSHA 29 CFR 1926.11011, and Appendix A.
- Representative exposure assessments of each Employee shall be made.
- The results of exposure assessments shall be made on the basis of representative 8 hour time weighted averaging (TWA).
- The results of exposure assessments shall be maintained with the Employees medical records for retention purposes, by the Corporate Human Resources Department.
- All Employees who participated in personal exposure assessment monitoring will be notified of the results upon receipt, regardless of the fiber count.
- OSHA 29 CFR 1926.1101 establishes two exposure limits for employees whose work involves asbestos containing materials:
 - ❑ Permissible Exposure Limit (PEL): 0.1 Fibers per cubic centimeter (0.1 f/cc) averaged over and eight (8) hour day. This is the maximum concentration of airborne asbestos an employee may be exposed to during and 8-hour work shift without the use of protective measures such as respirators or protective clothing.
 - ❑ Excursion limit: 1.0 f/cc averaged over a 30-minute period. This is the maximum concentration of airborne asbestos an employee may be exposed to during any 30-minute period during a work shift without the use of protective measures such as respirators or protective clothing.
- A documented assessment of the expected level of asbestos exposure must be conducted by a Competent Person for each asbestos job to be undertaken. This would include even short duration jobs such as the removal of an intact asbestos gasket.

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EXPOSURE ASSESSMENTS AND PERMISSIBLE EXPOSURE LIMITS (CONTINUED)	<ul style="list-style-type: none"> • By exposure assessment data collected in the last 12 months of similar jobs under similar conditions with similar materials, which indicates that Employee exposures will not exceed the PEL or Excursion Limit. • By initially monitoring the job being undertaken and determining that the level of asbestos exposure is below the PEL and Excursion Limit • Until a Negative Exposure Assessment has been completed, all asbestos related work activities and tasks must be conducted under the assumption that airborne asbestos levels might exceed the PEL and adequate protective measures to protect Employees from possible harmful exposures must be provided, i.e. respirators and protective clothing. • Upon establishment of a Negative Exposure Assessment, the use of these protective measures (respirators and protective clothing) may not be required as determined by the Competent Person.
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NEGATIVE EXPOSURE ASSESSMENT	<ul style="list-style-type: none"> • A Negative Exposure Assessment means that for any one asbestos job, under the worst conditions, the levels of airborne asbestos fibers will not exceed the PEL or excursion limit. The Competent Person must use one of the following methods to establish a Negative Exposure Assessment: • Basing the exposure determination on data collected from prior jobs conducted under similar conditions and with similar materials, which demonstrates that these job activities cannot release asbestos fibers in concentrations exceeding the PEL or Excursion Limit. • By exposure assessment data collected in the last 12 months of similar jobs under similar conditions with similar materials, which indicates that Employee exposures will not exceed the PEL or Excursion Limit. • By initially monitoring the job being undertaken and determining that the level of asbestos exposure is below the PEL and Excursion Limit. • Until a Negative Exposure Assessment has been completed, all asbestos related work activities and tasks must be conducted under the assumption that airborne asbestos levels might exceed the PEL and adequate protective measures to protect Employees from possible harmful exposures must be provided, i.e. respirators and protective clothing. • Upon establishment of a Negative Exposure Assessment, the use of these protective measures (respirators and protective clothing) may not be required as determined by the Competent Person.
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DEFINITIONS

- *Project* is used in its broadest sense and includes all land, property, building, structures, installations, employee lockers, cars, trucks and all other equipment being utilized for Project business.
- *PMT* signifies the Project Management Team located at the Home office and / or Project site.
- *EPC Contractor* is used to identify any of the Engineering, Procurement, and Construction Contractors working on the Project.
- *Amended Water (Wetting Agent)* Water to which a surfactant has been added to increase the ability of the liquid to coat, penetrate and stick to ACM.
- *Asbestos* Includes chrysotile, amosite, crocidolite, tremolite asbestos, anthophyllite asbestos, actinolite asbestos and any of these minerals that has been chemically treated and/or altered. For purposes of this policy, "asbestos" includes PACM listed below.
- *Asbestos Containing Material (ACM)* any material containing more than 1% asbestos.
- *Asbestos Work* Any work with ACM as defined/covered by Asbestos Work Classes I through IV below.
- *Asbestos Work Classes* OSHA divides ACM work into four classes as follows:
 - ❑ Class I - Activities involving the removal of thermal system insulation (TSI) and surfacing asbestos containing materials or presumed asbestos-containing materials (PACM).
 - ❑ Class II - Activities involving removal of asbestos-containing material, which is not thermal system insulation or surfacing material. This includes, but is not limited to, the removal of asbestos containing wall board, floor tile, and sheeting, roofing and siding shingles, construction mastics, gaskets and leak sealant materials.
 - ❑ Class III - Repair and maintenance operations where ACM including thermal system insulation and surfacing material is likely to be disturbed.
 - ❑ Class IV - Maintenance and custodial activities during which employees contact ACM and PACM and activities to clean-up waste and debris.
- *Bulk Sample* A process of collecting samples of materials to be sent to a laboratory for analysis to determine whether or not the material contains asbestos, and if so, what types and percentages.



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**DEFINITIONS
(CONTINUED)**

- *Competent Person* One who is capable of identifying existing asbestos hazards in the workplace and selecting the appropriate control strategy for asbestos exposure, and who has the authority to take prompt corrective measures
- *Excursion Limit* 1.0 fibers per cubic centimeter (1.0 f/cc) averaged over a 30-minute period. This is the maximum concentration of airborne asbestos an employee may be exposed to during any 30-minute period during a work shift without the use of protective measures such as respirators or protective clothing
- *Exposure Assessment* Air monitoring done to determine employee exposure to airborne asbestos, which is compared to the PEL and Excursion Limit
- *High Efficiency Particulate Air (HEPA) Filter* A filter capable of trapping and retaining at least 99.97 of all single dispensed particles of 0.3 micrometers in diameter
- *Negative Exposure Assessment* A demonstration by the employer that employee exposure during an activity is expected to be consistently below the PEL
- *Permissible Exposure Limit (PEL)* - 0.1 fibers per cubic centimeter (0.1 f/cc) Time weighted average (TWA) for an eight-hour period. The maximum concentration of airborne asbestos an employee may be exposed to during an 8-hour work shift without the use of protective measures such as respirators or protective clothing.
- *Presumed Asbestos Containing Material (PACM)* Materials suspected of containing asbestos that has not been positively identified as not containing asbestos. These are normally sprayed or troweled on materials in buildings and facilities constructed prior to 1980. These materials must be treated as asbestos containing material until they are determined to not contain asbestos.
- *Regulated Area* an area established to demarcate areas where Class I, II, and III asbestos work is conducted, and any adjoining area where debris and waste from such asbestos work accumulates; and any work area which exceeds, or where there is a reasonable possibility to exceed the Permissible Exposure Limit.
- *Surfacing Materials* asbestos containing material sprayed or troweled on surfaces (walls, ceilings, structural members) for acoustical, decorative or fireproofing purposes.
- *Thermal System Insulation (TSI)* Insulation used to inhibit heat transfer or prevent condensation on pipes, boilers, tanks, ducts, and various other components of hot. This includes pipe lagging, pipe wrap, block, batt and blanket insulation, cements and "mud's" and a variety of other products.
- *Wetting Agent* See "Amended Water" in this Section

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Site-Specific Silica Exposure Control Plan

Location: _____ **Date:** _____

Work description:

Primary silica control options (check those options used and explain use if needed)

◆ Substitution controls (using procedures or products that do not create silica; must review SDS's)

- ☐ Other means of demo: _____
- ☐ Different products: _____
- ☐ Other substitutions: _____

◆ Engineering controls (when using ventilation, draw air out and don't expose others to exhaust dusts)

- ☐ Vacuuming: _____
- ☐ Wetting: _____
- ☐ Ventilation: _____
- ☐ Isolation: _____
- ☐ Other means: _____

◆ Administration controls (reducing exposure by work schedules, timing, or planning options)

Control points: _____

Work schedule: _____

Other means: _____

Secondary silica control options (check those options used and explain use if needed)

◆ Personal protective equipment

Half-mask

respirators: _____ Cartridge type: _____ Fit tests confirmed: _____

Full-face respirators: _____ Cartridge type: _____ Fit tests confirmed: _____

Supplied air units: _____

Coveralls required: _____

◆ Hygiene and decontamination options (reducing exposures after work has stopped or during breaks)

Water or washing facilities on site: _____

Vacuuming clothing/self: _____

Safe work procedures and other details: _____



Ventilation plan (sketch)



Show direction of airflow including makeup air locations and discharge air outlets

Area or location in building of ventilation plan (e.g., floor #, wing)

Date plan was reviewed by workers and posted for workers to see

Types of neg. air fans & no.'s *

* Indicate on plan by number the location of the negative air fans

Ventilation safety checklist

- | | |
|--|--|
| <input type="checkbox"/> Makeup air free of possible contaminants | <input type="checkbox"/> Workers not placed between contaminants created and exhaust inlet ports |
| <input type="checkbox"/> Exhaust fan operation has failure warning | <input type="checkbox"/> Discharge air not affecting others |
| <input type="checkbox"/> Dilution fans not stirring up dust | <input type="checkbox"/> All workers equipped with approved respirators |
| <input type="checkbox"/> Wetting of materials used to keep dust down | |

Note: Attach additional sheets if needed or other documents if required due to hazards or work conditions.

Print supervisor's name

Supervisor's signature