1.0 Policy

Sunbelt Controls does not anticipate performing work involving silica or in work areas where silica levels exceed the OSHA (State and Federal) Permissible Exposure Limit. However employees, who may work in areas which could contain silica due to other contractor activities, shall be trained on the hazards and precautions to be taken to avoid silica dust inhalation.

2.0 Purpose

To provide a safe and healthy workplace for our employees and ensure our employees, customers, subcontractors and others do not come into contact with silica in excess of the Permissible Exposure Limits (PEL).

3.0 Scope

This applies to all employees and sub-contractors work activities within Sunbelt Controls including but not limited to the service department, pipe fitting, plumbing, sheet metal, sales and office.

4.0 Definitions

Silica – Exposure to **respirable crystalline silica dust** during construction activities can cause serious respiratory disease. **Silica** is a natural mineral that comes in several forms, some more hazardous than others. Typically it's the crystalline forms that are of greatest concern. Silica can be present in large quantities in certain types of rocks and sand. Construction materials made from these natural ingredients then become the source of exposure associated with several of the construction trades.

Employee Exposure – The exposure to respirable crystalline silica that would occur if the employee were not using respiratory protective equipment

Permissible Exposure Limit (PEL) – The maximum permitted 8-hour time-weighted average concentration of an airborne contaminant. The PEL of silica is 0.1 mg/m3.

Dust Containment Device -- A device attached to a power tool such as a pouch, bag, plastic container, or similar attachment which is intended to capture dust generated by the power tool. This device is not intended to be a dust reduction system as defined under this section.

Dust Reduction System -- Technology that utilizes the application of water or local exhaust ventilation to reduce airborne dust generated by the use of powered tools or equipment. Local exhaust ventilation may include vacuum systems, dust collection systems, and dust exhaust systems.

5.0 Requirements

5.1 Training

In the event a Sunbelt Controls employee could come into contact with silica; they shall receive silica awareness training. If respirators or other personal protective equipment are required, the employees shall receive the appropriate respirator training in accordance of the company policies. Equipment and training will be provided at no cost to employees.

When operations include using powered tools or equipment to cut, grind, core, or drill concrete or masonry materials, Sunbelt Controls shall provide training on the following topics to all employees prior to their assignment to jobs or work areas where Sunbelt Controls will be conducting these operations:

- The potential health hazards of overexposure to airborne dust generated from concrete and masonry materials, including silicosis, lung cancer, chronic obstructive lung disease (COPD) and decreased lung function.
- Methods used to control employee exposures to airborne dust from concrete and masonry materials, including wet cutting, local exhaust ventilation systems, and isolation of the process from the operator or other employees by means of distance, enclosure, or other method, as applicable.
- Proper use and maintenance of dust reduction systems, including the safe handling and disposal of waste materials collected in connection with their use.
- The importance of good personal hygiene and housekeeping practices when working in proximity to dust from concrete and masonry materials including:
    - Not smoking tobacco products; appropriate methods of cleaning up before eating, and appropriate methods of cleaning clothes.
    - Avoiding, to the extent practical, activities that would contribute significantly to an employee's exposure to airborne dusts.
- When training is needed contact the safety department directly.
- Training shall be conducted by a safety representative, project management, or their designee.
- Once training is completed originals are to remain in the job site safety training files until job completion and an electronic/ scanned copy shall be sent to the Sunbelt Controls Safety Dept. Administrator to be kept on file within one week.

5.2 Working in Areas With Silica

- Procedures shall be implemented to ensure that dust reduction systems maintain their effectiveness for dust reduction throughout the work shift.
- Dust reduction systems shall be installed, operated, and maintained in accordance with manufacturer recommendations to the extent they exist.
- Silica dust exposure hazards my still exist when reduction systems are not effective. In this case, employees must wear respiratory protection to prevent inhalation.

- Reduction controls are rarely effective when mixing concrete material. Therefore any time Sunbelt Controls employees or its subcontractors are performing this activity, respiratory protection is required.
- Contact the Safety Department in advance of working in an area with potential silica exposure to arrange air monitoring to ensure the silica exposure is below Cal-OSHA's Permissible Exposure Limit (PEL) $0.1 mg/m^3$.
- The minimum PPE requirement for silica dust is a ½ face respirator with a HEPA P100 Cartridge or as determined by an industrial hygienist.

5.3 Clean Up

- Minimize dust generation when working with or around silica-containing materials.
- Never use compressed air to clean off equipment, surfaces or your clothes. Where feasible use water or a HEPA vacuum. Consider using disposable (such as Tyvek coveralls) or reusable clothing that stays at the work site.
- Handle and dispose of waste materials without generating airborne dust
  - Use a HEPA vacuum, squeegee instead of broom, or sweeping compound, in that order

6.0 Frequently Asked Questions (FAQ)

6.1 What operations typically produce silica?

- Granular Surface Preparation activities *(i.e. grading and rolling)*,
- Surface grinding concrete
- Rock drill
- Broom or shovel
- Jackhammer
- Hand held masonry saw
- Walk-behind concrete saw
- Mixing concrete, grout, etc.
- Bobcat
- Road mill
- Backhoe, excavator, bulldozer
- Chipping gun

6.2 What are some of the health effects of Silica?

Breathing too much dust containing the crystalline forms of the silica particles small enough to enter the deep parts of the lung can cause "silicosis." Silicosis is scaring of the lung tissues, cancer and other forms of lung disease, including an increased risk of getting tuberculosis. It usually takes several years before you know you have a problem. Higher exposures can produce health problems much sooner. At first there can be no symptoms of disease, and then shortness of breath, fatigue, sever cough and chest pain can develop later on.

6.3 What if we are not sure whether there is Silica or not?

We can either presume it is silica containing material or send it a sample of it to a certified lab to determine whether it is silica containing material.