

2.1.1

This guidance sheet is aimed at employers to help them comply with the requirements of workplace health and safety legislation, by controlling exposure to respirable crystalline silica.

Specifically, this sheet provides advice on dust control during cleaning operations in the workplace. Following the key points of this task sheet will help reduce exposure. Depending on the specific circumstances of each case, it may not be necessary to apply all of the control measures identified in this sheet in order to minimize exposure to respirable crystalline silica. i.e. to apply appropriate protection and prevention measures.

This document should also be made available to persons who may be exposed to respirable crystalline silica in the workplace, in order that they may make the best use of the control measures which are implemented.

This sheet forms part of the Good Practices Guide on silica dust prevention, which is aimed specifically at the control of personal exposure to respirable crystalline silica dust in the workplace.



Cleaning

This activity relates to cleaning of surfaces in the workplace of substances, which may contain a proportion of crystalline silica dust. Cleaning should be carried out in a routine basis, but may also be required in response to a spillage of a substance containing crystalline silica.

Access

- ✓ Restrict access to the work area to authorised personnel only.

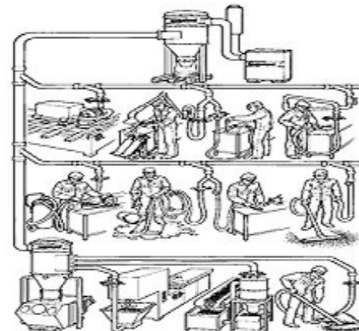
Design and equipment

Wet cleaning:

- ✓ Dust control can be achieved using wet cleaning methods, which prevent fine dust from becoming airborne by trapping it in water.
- ✓ Wet cleaning methods may involve mopping, wet brushing or the use of water sprays or hoses.
- ✓ Where water sprays are used, ensure that water supplies are adequate and that they are maintained. Take extra precautions during cold weather to protect against freezing.
- ✓ When wetting bulk spillages of fine, dry dusty material it is best to use a fine mist. The use of a jet of water will cause dust to become airborne.
- ✓ Where wet cleaning methods are used, electrical installations must be designed with protection against water ingress.
- ✓ The provision of appropriate drainage systems is essential when using water sprays and hoses.

Dry cleaning:

- ✓ Dust control can be achieved using dry cleaning methods, which involve vacuuming of the dry dust.
- ✓ Industrial vacuum cleaners may be portable units, equipped with high efficiency particulate filters (HEPA filter) or equivalent technique. Alternatively a building may be equipped with an integrated vacuum cleaning system, with strategically located connections leading to a central dust collector.
- ✓ Vacuum systems may need to be of an approved type.
- ✓ If vacuum cleaning systems will need to deal with large or bulk spillages of powdered material, they should be especially designed to avoid overloading or blocking.
- ✓ When wet cleaning or vacuum cleaning is not possible and only dry cleaning with brushes can be done, ensure that the workers wear appropriate personal protective equipment and ensure that measures are taken to prevent crystalline silica dust from spreading outside the working area.
- ✗ Vacuum cleaning systems are not generally suitable for cleaning up spillages of damp materials.



Maintenance

- ✓ Ensure equipment used in the task is maintained as advised by the supplier/installer in efficient working order and in good repair.
- ✓ Replace consumables (filters etc) in accordance with the manufacturer's recommendations.

Examination and testing

- ✓ Visually check the cleaning equipment for signs of damage at least once per week or, if it is in constant use, check it more frequently. If used infrequently, then check it before each use.
- ✓ Have cleaning equipment tested against its performance standard at least once each year.
- ✓ Keep records of inspections for a suitable period of time which complies with national laws (minimum five years).

Cleaning and housekeeping

- ✓ In order to prevent dust accumulating, clean your workplace on a regular basis.
- ✓ Deal with spills immediately. When dealing with bulk spillages of fine, dry, dusty materials, ensure that cleaning work is undertaken following a written safe working procedure and using the information in this task sheet.
- ✗ **Do not clean up with a dry brush or using compressed air.**
- ✓ Use vacuum or wet cleaning methods.

Personal Protective Equipment

- ✓ Refer to task sheet 2.1.15 dedicated to Personal Protective Equipment.
- ✓ -Risk assessment must be carried out to determine whether existing controls are adequate. If necessary, respiratory protective equipment (with the appropriate protection factor) should be provided and worn.
- ✓ Provide storage facilities to keep personal protective equipment clean when not in use.
- ✓ Replace respiratory protective equipment at intervals recommended by its suppliers.
- ✓ When cleaning dry dust, the employer must provide appropriate clothing which avoids dust being absorbed. Your workwear supplier will be able to advise you of appropriate clothing.

Training

- ✓ Give your employees information on the health effects associated with respirable crystalline silica dust
- ✓ Provide employees with training on: dust exposure prevention; checking controls are working and using them; when and how to use any respiratory protective equipment provided and what to do if something goes wrong. Refer to task sheet 2.1.19 and part 1 of the Good Practice Guide.

Supervision

- ✓ Have a system to check that control measures are in place and that they are being followed. Refer to task sheet 2.1.17.
- ✓ Employers should make sure that employees have all the means to perform the checklist given opposite

Employee checklist for making the best use of the controls

- ☐ **For wet cleaning methods, make sure the water supply is working properly before starting the cleaning work.**
- ☐ **For dry cleaning methods, make sure the vacuum cleaning system is working efficiently.**
- ☐ **Check the condition of the filters used in vacuum cleaners weekly. Replace them if necessary.**
- ☐ **Follow appropriate procedures when emptying vacuum cleaners of dust.**
- ☐ **When cleaning up bulk spillages of fine, dry dusty materials, ensure that you work in accordance with your Company's written safe working procedure.**
- ☐ **Look for signs of damage, wear or poor operation of any equipment used. If you find any problems, tell your supervisor. If you think there is a problem with your dust control equipment, ensure additional control measures are taken to reduce exposure to respirable crystalline silica dust while the problem persists..**
- ☐ **Use, maintain and store any personal protective equipment provided in accordance with instructions.**