

#### GUIDANCE FOR EMPLOYERS ON CONTROLLING **EXPOSURE TO RCS IN THE WORKPLACE**

### **GOOD PRACTICES FOR PERSONAL** PROTECTIVE EQUIPMENT (PPE)

This activity covers the use and maintenance of PPE for workers exposed to respirable crystalline silica dust.

The use of PPE should be seen as a last resort, to be used only when all reasonable engineering and organisational control measures have been implemented and have failed to provide adequate control of exposure.



### **ACCESS**

Restrict access to the work area to authorised personnel only. Work areas where the use of personal protective equipment is mandatory should be clearly demarcated through the provision of appropriate signage.



### DESIGN AND EQUIPMENT

- Personal protective equipment must comply with the relevant Community provisions on design and manufacture with respect to safety and health. All personal protective equipment must be provided by the company and it must carry a CE mark.
- Employer must specify what equipment is needed for the task.
- Where PPE is used, a programme should be established covering all aspects of the selection, use and maintenance of the equipment.
- PPE should be selected on the basis of performance (e.g. protection factor), comfort and durability.
- Where it is necessary to wear more than one item of PPE, ensure that those items are compatible with each other.
- Protective clothes (overalls) must be used during all dusty tasks. Dark colours may be used to help indicate dust contamination. Your workwear supplier will be able to advise you of appropriate clothing.
- Use the pictograms in the workplace to explain where the use of PPE is required.





### < MAINTENANCE

- Ensure equipment used in the task is maintained as advised by the supplier in efficient working order and in good repair.
- Protective clothes (overalls) should NOT be taken home. They should be cleaned by the employer.

### $\mathcal P$ EXAMINATION AND TESTING

- Visually check PPE daily for signs of damage. If used infrequently, then check it before each use.
- Check effectiveness of respiratory protective equipment before use. Seek advice from the supplier on appropriate fit testing methods.
- Keep records of inspections for a suitable period of time which complies with national laws (minimum five years).
- Put in place measures to control the risk of bacterial growth within water sources used across site, focusing most on systems where water droplets will be generated.



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# CLEANING AND HOUSEKEEPING

- Keep non-disposable items of PPE clean.
- Employers must provide clean storage facilities for PPE.
- · DO NOT clean clothing using compressed air.
- Use vacuum or wet cleaning methods.

### **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 guidance sheet
   2.3.4 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 guidance sheet 2.3.3.
- Employers should be in line with Directive 89/391/EEC (Framework Directive) and make sure that employees have all the means to perform the checklist given below.

## 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. Equipment should be selected
  that is compatible with other items of personal protective
  equipment e.g. ear defenders, goggles, welding visors.
- Involve the employees in the selection of the masks.
- Ensure that the operator achieves the essential face seal
  with the selected mask. This can be checked using simple
  testing methods e.g. a mist of sugar solution can be dispersed
  in the air to check if the operator tastes it. If so there is
  evidence of leakage.
- Note that facial hair will reduce the effectiveness of a dust mask. Operators with facial hair should be provided with air fed respirators or other suitable alternative.
- Tight fitting respirators should not be used for more than one hour at a time (to avoid discomfort and reduce the risk that workers may remove their mask). Use powered respirators for longer periods.
- Provide storage facilities to keep personal protective equipment clean when not in use.
- For each work activity, make an assessment to determine how frequently respiratory protective equipment should be replaced in order to guarantee its effectiveness. Replace respiratory protective equipment at intervals recommended by its suppliers.

#### EMPLOYEE CHECKLIST

	Look for signs of damage, wear or poor operation of any equipment used. If you find any problems, tell your supervisor.  Even if you do not normally wear respiratory protective equipment, it may be necessary for you to wear it temporarily in the event other control measures fail.		Use, maintain and store any personal protective equipment provided in accordance with instructions.  Adjust your PPE so that it fits you correctly.		If you have facial hair, this could reduce the effectiveness of a dust mask. Select an appropriate air fed respirator or suitable alternative.  When it is necessary for you to wear more than one item of PPE, ensure that all items are compatible with each other.		Check and implement measures to control the risk of bacterial growth within water sources used across site, focusing most on systems where water droplets will be generated.
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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 the use and maintenance of personal protective equipment (PPE).

Following the key points of this task guidance 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 minimise 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.