

# GOOD PRACTICES FOR SYSTEMS OF PACKAGING

This activity relates to the selection of the different packaging systems for silica products.

## ACCESS

Restrict access to the work area to authorised personnel only.

## DESIGN AND EQUIPMENT

- Select only equipment that carries the CE mark.
- The choice of packaging will often be based on customer/user preference. Factors that will need to be considered when choosing supply options include:
  - Type of material (small particle size gives more potential for airborne dust generation);
  - Tonnages of material used;
    - Economics (payback from investment in bulk handling equipment compared to the premium that is charged for bags);
    - Degree of automation of the producer's and the end user's processes;
    - Permanence of supply (e.g. small bags may be more appropriate for trial products);
    - Health and safety requirements relating to ergonomics, manual handling, noise etc.
- The use of small bags gives the greatest potential for exposure to respirable crystalline silica during both bag filling and emptying.
- The use of bulk (big) bags may help to reduce exposure for the producer. However, this can lead to increased problems at the customer premises due to difficulty in emptying the bags.
- Where possible, preference should be given to the use of enclosed bulk transport systems rather than using bags.



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

### MAINTENANCE

- Select machinery that has easy access for maintenance.
- Ensure equipment is maintained as advised by the supplier/installer in efficient working order and in good repair.

### EXAMINATION AND TESTING

- Visually check the storage area at least once per week for signs of damage or, if it is in constant use, check it more frequently. If used infrequently, then check it before each use.
- 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.

### CLEANING AND HOUSEKEEPING

- Select machinery that has easy access for cleaning.
- Clean work area daily.
- Deal with spills immediately.
- **DO NOT clean up with a dry brush or 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 make sure that employees have all the means to perform the checklist given below.

### PERSONAL PROTECTIVE EQUIPMENT

- Refer to task guidance 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.

## EMPLOYEE CHECKLIST

- |  |  |  |   |
|--|--|--|---|
| <input type="checkbox"/> Use your work equipment in accordance with your employer's safe working procedures.                                     | <input type="checkbox"/> 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. | <input type="checkbox"/> When packages are damaged, take appropriate measures to protect yourself (personal protective equipment). | <input type="checkbox"/> equipment provided in accordance with instructions.  |
| <input type="checkbox"/> Look for signs of damage, wear or poor operation of any equipment used. If you find any problems, tell your supervisor. |  | <input type="checkbox"/> Clear up spills straight away.  | <input type="checkbox"/> 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. |
|  |  | <input type="checkbox"/> Clean up using vacuum or wet cleaning methods.  |   |
|  |  | <input type="checkbox"/> Use, maintain and store any respiratory protective  |   |

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 selection of the most appropriate delivery form for silica products.

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.