GUIDANCE FOR EMPLOYERS ON CONTROLLING EXPOSURE TO RCS IN THE WORKPLACE

GOOD PRACTICES FOR GENERAL INDOOR STORAGE

This activity covers design of general indoor storage in plants where crystalline silica containing products are present.

ACCESS

Restrict access to the work area to authorised personnel only.

DESIGN AND EQUIPMENT

General design aspects:

- Define a specific area for storage, which is clearly identified using appropriate signs.
- The area should be spacious, organised, well lit and well ventilated but without excessive velocity that would cause settled dust to be made airborne again.
- Demarcate storage areas by painting lines on the floor and/or using appropriate signs.
- The installation of partitions in buildings will help to reduce the spread of dust.
- Where possible, provide separate routes for pedestrians and vehicles.
- Ensure floors are impervious and easy to clean.
- Inflammable materials, such as empty packaging, must be kept in a separate store room.
- Design the layout of storage facilities to minimise risks from collisions between vehicles and stored materials.
- Limit the height to which pallets of stored materials are stacked so as to minimise the risk of them falling.
- Develop procedures for dealing with spillages and provide the necessary cleaning equipment (e.g. vacuum cleaner).
- Where reasonably practicable, cover stockpiles that are not in use with tarpaulins/plastic covers or, where appropriate, use spray membrane systems.

Silos:

- Provide dust filtration for air displaced from silos during filling.
- Put barriers around silos to prevent damage, e.g. by forklift trucks.
- Individually label feed lines.

MAINTENANCE

- Ensure equipment used in the task is maintained as advised by the supplier/installer in efficient working order and in good repair.
- Adopt a "Permit to Work" system for maintenance work on storage tanks and silos.
- Follow any special procedures that are needed before opening or entering storage tanks and silos, e.g. purging and washing.

EXAMINATION AND TESTING

- Visually check silos at least annually for signs of damage. Periodic specialist examination and testing should also be arranged in order to check the condition of silos.
- 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

- Maintain good housekeeping standards in storage areas and deal with spills immediately. Keep floors clean to prevent dust being stirred up by moving vehicles etc. Dispose of empty containers safely.
- Repackage any damaged or leaking packages, or dispose of them safely.
- **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

- ☐ Make sure the room is well ventilated and any dust extraction system is switched on and is working.
- ☐ 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 handling aids to move sacks and drums.
- ☐ Keep traffic and pedestrian routes clear and only store materials in demarcated areas.
- ☐ Clean up using vacuum or wet cleaning methods.
- ☐ Clear up spills straight away and dispose of spills safely.
- ☐ Use, maintain and store any respiratory protective equipment provided in accordance with instructions.
- ☐ 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.

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 when storing small, medium and large quantities of crystalline silica containing products.

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.