GOOD PRACTICES FOR BAG EMPTYING – SMALL BAGS

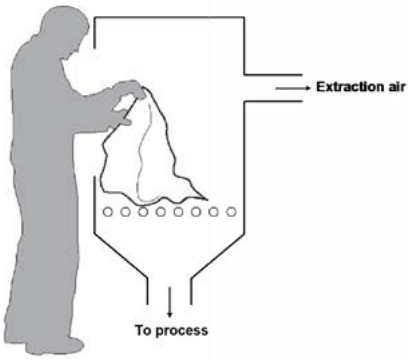
This sheet provides advice on emptying of small bags of products containing crystalline silica in a production unit, particularly those containing dry materials.

ACCESS

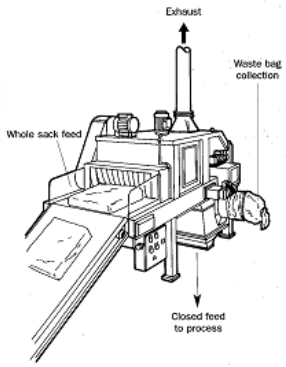
Restrict access to the work area to authorised personnel only.

DESIGN AND EQUIPMENT

- Ensure bag emptying equipment is fit for purpose.
- Enclose the bag emptying equipment as much as possible and keep it under negative pressure by using a local exhaust ventilation system – refer to task guidance sheet **2.1.13**.
- For small bags, the use of automatic or semi-automatic bag dumping stations is recommended for emptying the bags.
- Ensure workers tip the bag contents gently – never dump them. Bags should be emptied with the open end facing away.
- Bag crushing creates a lot of dust. Workers should roll up empty bags within the extraction zone.
- In order to dispose of empty bags without creating dust, drop them into a large plastic sack supported and held open by a metal frame. When it is full, seal the sack and dispose of it in a suitable waste skip. **DO NOT let the waste sack overflow.** Alternatively, use a compactor equipped with a dust extraction system or which is fully enclosed.
- Bag emptying equipment should be connected to a suitable dust arrestment system (e.g. bag filter/cyclone). A permanent dust extraction system is preferred, though a stand-alone mobile unit is acceptable.
- Bag emptying equipment should be designed for easy access to all parts for maintenance, unblocking and cleaning. Access panels should be interlocked or have trip devices where necessary to prevent persons accessing dangerous parts of machinery.
- Consider providing mechanical/pneumatic assistance with bag handling.
- Where possible keep bag emptying equipment away from doors, windows and walkways to prevent draughts affecting the performance of dust extraction systems.
- Provide a clean air supply to the workroom to replace extracted air.



Manual Bag Emptying



Automated Bag Emptying

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.
- Obtain information on the design performance of dust suppression and/or extraction equipment from the supplier. Keep this information to compare with future test results.
- 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

- Clean your workplace on a regular basis.
- 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

- ☐ Make sure the ventilation system is working properly. Make sure the dust extraction system is switched on and is working correctly before starting work.
- ☐ 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 when available.
- ☐ Clear up spills straight away. Use vacuum or wet cleaning methods.
- ☐ Clean up work rooms using vacuum or wet cleaning techniques.
- ☐ Use, maintain and store any respiratory protective equipment provided in accordance with instructions.
- ☐ Check and implement the measures of controlling 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 good practice advice on dust control during small bag emptying operations.

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.