Sack filling

2 Control approach 2

Engineering control 206

This guidance sheet is aimed at employers **to help them comply with the requirements of the Control of Substances Hazardous to Health Regulations 2002 (COSHH) by controlling exposure to chemicals and protecting workers' health.**

The sheet is part of the HSE guidance pack *COSHH essentials: easy steps to control chemicals*. It can be used where the guide recommends control approach 2 (engineering control) as the suitable approach for your chemical(s) and task(s).

This sheet provides good practice advice on sack and bag filling, and can be applied to tasks involving medium quantities of solids. It describes the key points you need to follow to help reduce exposure to an adequate level.

It is important that all **the points are followed.**

Some chemicals can also be flammable or corrosive. Where they are, your controls must be suitable for those hazards too. Look at the safety data sheet for more information.

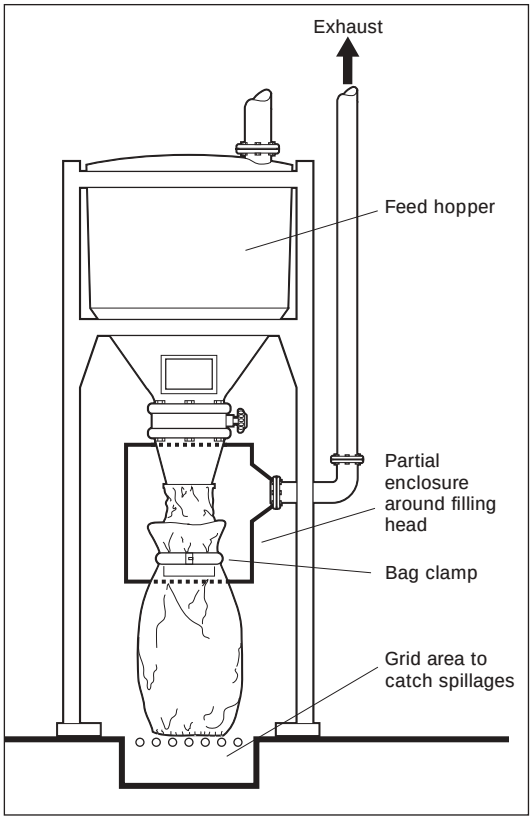
Depending on the scale of work, releases into the atmosphere may be regulated within the pollution prevention and control (PPC) framework. You should consult your local authority or the Environment Agency. In Scotland, consult the Scottish Environment Protection Agency (SEPA). They will advise you if PPC legislation applies to your company, and about air cleaning and discharging emissions into the air. Otherwise, minimise emissions into the air.

Access

- ✓ Restrict access to the work area to authorised staff.

Design and equipment

- ✓ Ensure bags/sacks and filling equipment are compatible and well maintained.
- ✓ Enclose the filling head as much as possible (see illustration).
- ✓ Provide a ventilated enclosure around the filling point with an inward airflow of at least 1 metre per second.
- ✓ Make sure the enclosure is large enough to allow the bag/sack to be closed before it leaves the enclosure.
- ✓ Check for dust emission during filling. Provide clamps and seals, and make arrangements to discharge air displaced during filling.
- ✓ Provide a hopper at floor level to capture spills.
- ✓ Ensure the filling head doesn't discharge dust when the bag/sack is removed.
- ✓ Provide good lighting. It should be suitable for the chemical(s) and task(s), eg dust tight or flameproof.
- ✓ Avoid manual handling.
- ✓ Where possible, site the work area away from doors, windows and walkways, to stop draughts interfering with the ventilation and spreading dust.
- ✓ Provide an air supply to the workroom to replace extracted air.
- ✓ Provide an easy way of checking the control is working, eg a manometer, pressure gauge or tell-tale.
- ✓ Discharge extracted air to a safe place away from doors, windows and air inlets.
- ✓ You can re-circulate clean, filtered air into the workroom.



Maintenance

✓ Maintain the equipment as advised by the supplier/installer, in effective and efficient working order.

Examination and testing

✓ Get information on the design performance of the ventilation equipment from the supplier to compare with future test results.

✓ Visually check the equipment at least once a week for signs of damage.

✓ Ensure the ventilation equipment is examined and tested against its performance standard - generally at least every 14 months (see HSE publication HSG54).

✓ Keep records of all examinations and tests for at least five years.

Cleaning and housekeeping

✓ Clean work equipment and the work area daily. Clean other equipment and the workroom regularly - once a week is recommended.

✓ Deal with spills immediately.

✓ Store sacks/bags in a safe place and dispose of empty sacks/bags safely (see CGS 101).

✘ Don't clean up with a dry brush or compressed air. Vacuum or wet clean.

Personal protective equipment (PPE)

✓ Chemicals in hazard group S can damage the skin and eyes, or enter the body through the skin and cause harm. See CGS S100 and S101 for more specific advice. Check the safety data sheets to see what personal protective equipment is necessary.

✓ Ask your safety clothing supplier to help you select suitable protective equipment.

✓ Respiratory protective equipment should not be necessary for routine operations. It may be necessary for some cleaning and maintenance activities, eg cleaning up spills.

✓ Keep PPE clean and replace it at recommended intervals.

Training

✓ Give your workers information on the harmful nature of the substance.

✓ Provide them with training on: handling chemicals safely; checking controls are working and using them; when and how to use any PPE you provide; and what to do if something goes wrong.

Supervision

✓ Have a system to check that control measures are in place and being followed.

Further information

- Safety data sheets
- *Maintenance, examination and testing of local exhaust ventilation* HSG54 (second edition) HSE Books 1998 ISBN 0 7176 1485 9
- *An introduction to local exhaust ventilation* HSG37 (second edition) HSE Books 1993 ISBN 0 7176 1001 2
- Control guidance sheets 101, 204, S100 and S101

Employee checklist for making the best use of the controls

☐ **Make sure the ventilation system is switched on and is working.**

☐ **Make sure it is running properly; check the manometer, pressure gauge or tell-tale.**

☐ **Look for signs of damage, wear or poor operation of any equipment used. If you find any problems, tell your supervisor. Do not carry on working if you think there is a problem.**

☐ **Make sure that bags and other waste aren't drawn into the ventilation duct.**

☐ **Use handling aids when provided.**

☐ **Wash your hands before and after eating, drinking or using the lavatory.**

☐ **Do not use solvents to clean your skin.**

☐ **Clear up spills immediately. Use vacuum cleaning or wet mopping. Dispose of spills safely.**

☐ **Use, maintain and store any PPE provided in accordance with instructions.**

HSE

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