



Control approach 2

Removing waste from a dust extraction unit

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Engineering control



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), or control approach 3 (containment) (for medium-scale uses only), as the suitable approach for your chemical(s) and task(s).

This sheet provides advice on removing waste from a dust extraction or air cleaning unit. 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 are also flammable or corrosive. Where they are, your controls must be suitable for those hazards too. Look at the safety data sheet for more information.

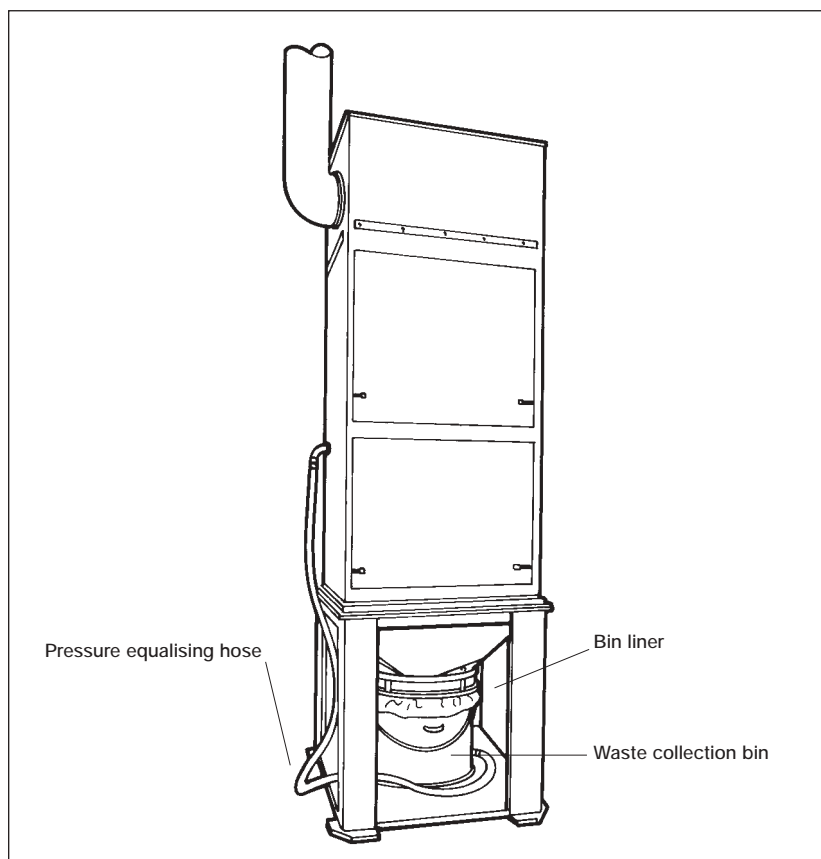
Depending on the scale of work, releases into the atmosphere may be regulated within the pollution prevention and control (PPC) framework. You should consult your local authority or the Environment Agency. In Scotland, consult the Scottish Environment Protection Agency (SEPA). They will advise you if 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

- ✓ Where possible, locate the extraction unit outside of the main work area, but away from draughts and the prevailing wind.
- ✓ Consider the need for explosion relief for combustible solids, and ensure that equipment is appropriately earthed.
- ✓ Have a pressure equalising mechanism at the base of the waste bin to prevent the bag being sucked out.
- ✓ Determine how often the waste bin will require emptying.
- ✓ Consider providing a shut-off valve to isolate the bin for removal.
- ✓ Consider how the bin will be lifted for emptying, and provide mechanical help if necessary.
- ✓ Dispose of waste in accordance with environmental legislation.
- ✓ Provide an easy way of checking the control is working, eg a manometer, pressure gauge or tell-tale.
- ✓ You can re-circulate clean, filtered air into the workroom.



Maintenance

- ✓ Ensure the extraction unit is maintained as advised by the supplier/installer. It should be in efficient and effective working order.

Examination and testing

- ✓ Get information on the design performance of the extraction unit from the supplier. Keep this information to compare with future test results.
- ✓ Visually check the ventilation equipment at least once a week for signs of damage.
- ✓ Get the ventilation equipment 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

- ✓ Ensure the bin is emptied on a regular basis.
- ✓ Tie the dust bag top before removal from the bin.
- ✗ Do not allow the waste bin to overflow.
- ✓ Clean work equipment and the work area daily. Clean other equipment regularly - once a week is recommended.
- ✓ Deal with spills immediately.
- ✗ 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 may be necessary for emptying the waste bin.
- ✓ 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**
- *Safe handling of combustible dusts: Precautions against explosions* HSG103 HSE Books 1994 **ISBN 0 7176 0725 9**
- Control guidance sheets 101, 302, S100 and S101

Employee checklist for making the best use of the controls

- Empty the bin on a regular basis - as per instructions and before it overfills.
- Stand upwind when removing the waste bin from the extraction unit.
- Look for signs of damage, wear or poor operation of the extraction unit. If you find any problems, tell your supervisor. Do not carry on working if you think there is a problem.
- Make sure that the bag or other waste is not drawn into the filter unit.
- Wash your hands before and after eating, drinking or using the lavatory.
- 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.



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