

GENERAL PRINCIPLES**SCOPE**

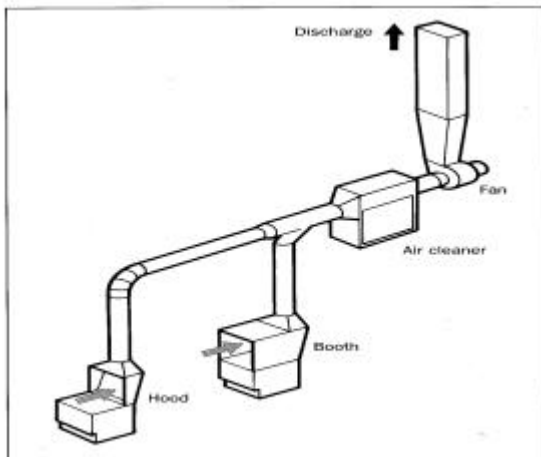
This control sheet is part of the ILO Chemical Control Toolkit and should be used when the toolkit identifies that a control approach 2 is needed. The sheet gives good practice advice on the application of local exhaust ventilation, which is the commonest form of engineering control. Local exhaust ventilation can be applied to a range of small, medium and large-scale tasks involving solids and liquids. This sheet identifies the minimum standards you need to apply to protect your health. It should not be used to justify a lower standard of control than that which may be required for process control or control of other risks. Air cleaning equipment may be necessary before discharging exhaust air to the atmosphere. Some chemicals are flammable or corrosive and your controls must be suitable for those hazards too. Look at the safety data sheet for more information.

ACCESS

- Keep unnecessary people away from the work area. Ensure that no one is working close by downwind.

DESIGN AND EQUIPMENT

- Apply local exhaust ventilation (LEV) at the source of the exposure. There



should be sufficient airflow to capture the dust or vapour before it disperses into the workplace. For dusts, airflows above 1m/sec will generally be needed, for vapours airflows above 0.5 m/sec will generally be needed. The airflow should be measured at the origin of the dust or vapour.

- Enclose the source of dust or vapour as much as possible to help stop it spreading.

- Don't allow the worker to get

between the source of exposure and the LEV, or they will be in the path of the contaminated air.

- Where possible, locate the work away from doors and windows to stop draughts interfering with the LEV and spreading the dusts or vapours.
- Keep extraction ducts short and simple and avoid long sections of flexible duct.
- Provide an easy way of checking the LEV is working such as a ribbon strip attached to the intake side.

- Discharge extracted air to a safe place away from doors, windows and air inlets. Be careful that extracted air does not affect neighbours.

EXAMINATION, TESTING AND MAINTENANCE

- Check that the extraction system is working every day when it is switched on.
- Visually check the ducting once a week for signs of damage and repair when necessary.
- Have the system thoroughly examined and tested at least once a year.
- Maintain the equipment as advised by the supplier/installer, in effective and efficient working order.
- Do not use the equipment if you have any suspicion that it is not working properly.

CLEANING AND HOUSEKEEPING

- Only keep the amount of material in the workplace that will be used that day.
- Clean the work equipment and work area daily.
- Spills are the major cause of dust or vapour in the workplace. Clean up all spills immediately.
- Don't clean up dusts with a brush or compressed air. Use a damp cloth or vacuum.
- Put lids on containers immediately after use.
- Store containers in a safe place where they won't get damaged.
- Store volatile liquids out of direct sunlight.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

- Chemicals in hazards group S can damage the skin or eyes, or enter the body through the skin and harm you. Sheets Sk100 and Sk101 give good advice on how to keep the materials off your skin.
- Check the material safety data sheet or ask your supplier to find out what personal protective equipment is needed.
- Look after your protective equipment. When not in use, keep it clean and store it in a clean, safe place.
- Change your protective equipment at recommended intervals or when it is damaged.

TRAINING AND SUPERVISION

- Tell your workers about the harmful nature of the substances they are working with and why they must use the controls and PPE provided.
- Teach them to handle chemicals safely. Check controls are working and what to do if something goes wrong.
- Have a system to check that the precautions you have put in place are being followed.