General Ventilation General Principles

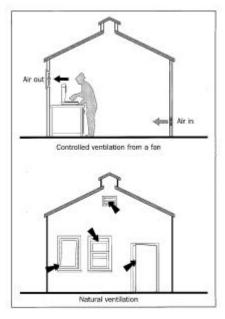
Scope

This control sheet is part of the ILO Chemical Control Toolkit and should be used when the toolkit identifies that a control approach 1 solution is appropriate. The sheet gives good practice advice on the application of general ventilation to the workplace and includes working in the open outside of a building. General ventilation is suitable for a range of small, medium and large scale tasks involving solids and liquids. It is important all the points are followed. 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. 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.

Access

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

Design and Equipment



- Ensure that there is unrestricted access to fresh air. This can be done by working outdoors. It may need doors and windows open, or it may need air to be supplied or removed by a powered fan.
- If you work in a factory building, you will normally require a wall mounted fan to remove the dirty air and airbricks or louvers or ceiling vents to allow fresh, clean air in to the workroom to replace it. It may sometimes be more effective for the fan to blow clean air towards the worker rather than suck dirty air from the room.
- Do not release dirty air near to the clean air intake.
- Ensure, where possible that clean air flows past the worker then past the work area. In the open, use the wind to take dirty air away from you.
- For factories, ensure that the size or number of fans is sufficient to remove the dirty air from the workplace (more than one fan may be needed). A minimum of 5 air changes an hour is recommended.

Examination, Testing and Maintenance

- Keep any fans or extractors in good working order.
- Every day, check that the fans are working when they are switched on. A ribbon strip attached to the exhaust side of the fan cage can be used as an indicator that the fan is working.

Cleaning and Housekeeping

- 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 hazard 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.
- Keep your protective equipment clean and change it at recommended intervals or when it is damaged.

Training and Supervision

- Tell your workers about any harmful properties 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 ensure that they know what to do if something goes wrong.
- Have a system to check that the precautions you have put in place are being followed.