



## Control approach 1



This guidance sheet is for employers **including** the self-employed and franchisees 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 HSE guidance *COSHH essentials: easy steps to control chemicals*. It describes the key points you need to follow to help reduce exposure to an adequate level. It is important to follow all the points, or use equally effective measures.

The trade press and industry associations are good sources of information. Emissions such as vehicle exhaust fumes do not have 'safety data sheets'.

Vehicle exhaust fumes irritate the eyes and respiratory tract, and are a risk to health by breathing in. Petrol or gas (LPG) fuelled engine fumes contain up to 10% of carbon monoxide, a poisonous gas.

General ventilation with a detector-alarm is the recommended approach. This advice is given mainly to protect your workers, but it will also help to protect customers.

# Exhaust fumes from moving vehicles

## General ventilation

SR15

### Workplace and access

- Motor vehicle exhaust can reach high levels in confined and congested places.
- Typical places include indoor go-kart tracks, underground car parks, ro-ro ferries etc.
- ✓ You need alarms fitted.
- ✓ Mark out safe pedestrian routes.

### Design and equipment

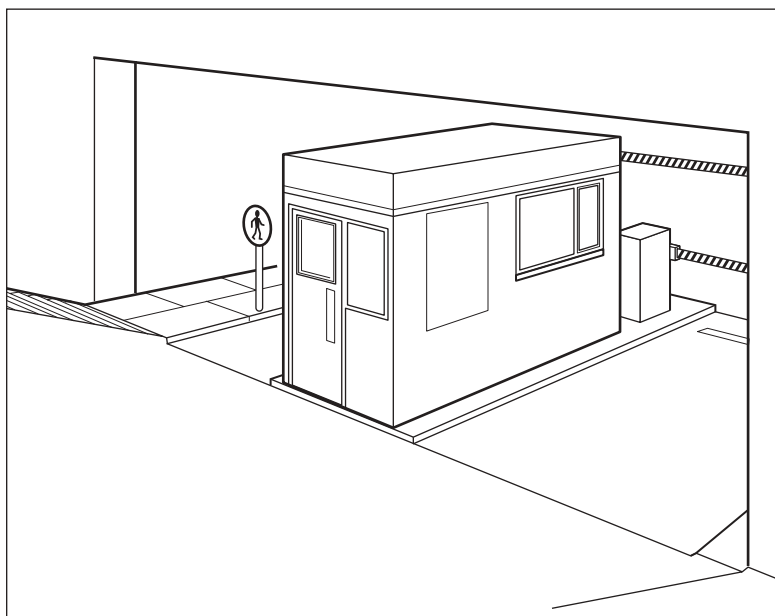
- ✓ You need an air supply that is designed to keep carbon-monoxide concentrations below 200 ppm at the busiest times.
- ✓ Install carbon-monoxide monitors linked to a visual and audible alarm, to trigger at 200 ppm. Make sure this cannot be mistaken for a fire alarm.
- ✓ Warn drivers to turn off their engines immediately if the carbon-monoxide alarm sounds.
- ✓ Provide a supply of fresh air to staff (eg tollbooth operators, supervisors etc) - 5 to 10 air changes per hour.

### Procedures

- ✓ Test alarms regularly - at least once a week.
- ✓ Advise people to turn off their engine if the queue out of the car park stops moving. Consider printing this message on tickets.

### Maintenance

- ✓ Keep equipment in effective and efficient working order.
- ✓ If you think the ventilation or alarm is faulty, get it repaired immediately.



## Examination and testing

- ✓ At least once a week, check visually that the ventilation is clearing the fumes properly.
- ✓ Get a competent ventilation engineer to examine the system thoroughly and test its performance regularly.
- ✓ Arrange for an expert to check the alarm calibration at least once every six months.
- ✓ Call in the system engineer if you suspect the calibration is faulty.
- ✓ Keep records of all examinations and tests for at least five years.

## Personal protective equipment (PPE)

- ✓ Respiratory protective equipment (RPE) should not be needed if the extraction and ventilation are working properly.

## Training

- ✓ Show your staff this sheet and check that they understand it.
- ✓ Train staff on how to tell clients about the risks.

## Further information

- Health and safety consultants: the BOHS Faculty of Occupational Hygiene keeps lists of qualified hygienists who can help you. Contact BOHS on 0133 229 8087 or at [www.bohs.org/](http://www.bohs.org/)

## Employee checklist

- Check visually that exhaust fumes are clearing properly and that the alarm sounds when you expect it to.
- If you find any problems, tell your supervisor. Don't just carry on working.
- Never clean your hands with concentrated cleaning products, solvents or fuel.



*COSHH essentials:  
easy steps to control chemicals*  
October 2003

Printed and published by  
the Health and Safety Executive