What this sheet covers
This sheet describes good practice for checking, maintaining and testing local exhaust ventilation (LEV) equipment to control gas, vapour, fume or dust.

Local exhaust ventilation should:
- collect or contain the airborne contaminant;
- carry it away from workers for treatment and/or discharge to a safe place; and
- ensure adequate control of exposure and, where applicable, below relevant workplace exposure limit (WEL).

Loss of LEV control can lead to ill health.

Checking and maintaining existing LEV
- You need to know that the system is performing to its design specification.
- The LEV user manual and logbook should set out the frequency of checking, maintenance and parts replacement.
- If the LEV has no user manual or performance data, hire a competent ventilation engineer and occupational hygienist to determine the performance needed for adequate control.
- Checks and maintenance cover four types of parts:
  - moving parts that wear, eg fan bearings, filter shakers;
  - hoods, ductwork and seals that can get damaged;
  - parts that deteriorate with use, eg filters, flexible ducting; and
  - items needing regular attention, eg filter bins, sludge collectors.
- Make sure relevant COSHH assessment for cleaning and maintenance is carried out.
✓ Make sure everyone knows who is responsible for what checks, and for completing the records.

Caution: You may need to use permit-to-work procedures.

**Thorough examination and test**

✓ Most LEV needs a statutory test at least once every 14 months to make sure it works well. Exceptions to this are given in Schedule 4 of the COSHH Regulations.

✓ The test must be done by a competent person, testing against standards in the LEV commissioning report.

**Action**

✓ Implement the report recommendations.

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

Caution: The thorough examination and test can be used by an employer as an audit of the past year’s LEV system management. A long list of actions arising from this test shows that your checking and maintenance are not thorough enough.

**Training**

✓ Training covers:
  - How the LEV system works.
  - How to use the LEV to get the best out of it.
  - How to check that the LEV is working.
  - What to do if something goes wrong.

✓ Keep training records.

✓ Changes to the work process and LEV means that staff may need retraining.

**New LEV**

✓ Use a reputable LEV supplier, with experience of the type of control that you need.

✓ Ask LEV suppliers how they will prove that their system will control exposure adequately.

✓ LEV is rarely straightforward and mistakes are costly.

**Installation and commissioning**

The LEV supplier should give you three documents:

✓ A user manual describing what the LEV is designed to control, and how it achieves control. It should also contain the following:
  - the LEV description, with diagrams;
  - the LEV performance from commissioning;
  - checks, maintenance and parts replacement schedules;
  - description of the statutory ‘thorough examination and test’ and exposure targets;
  - signs of wear and control failure to look out for;
  - description of how operators should use the LEV so it works effectively; and
  - list of replaceable parts.
A logbook that includes:
- schedules for regular checks and maintenance;
- records of checks, maintenance, replacements and repairs;
- checks that the LEV is being used in the right way; and
- the name of the person making the checks.

A commissioning report that includes:
- diagrams and a description of the LEV, including test points;
- details of the LEV performance specification;
- results, such as pressures and air velocities at stated test points;
- calculations made;
- written descriptions of commissioning, the tests made, and the outcome along with any air sampling results; and
- a description of how operators should use the LEV so that it works effectively.

If any of these is missing, your LEV needs recommissioning to produce a user manual, a logbook and a commissioning report.

The LEV also needs recommissioning if it is changed in any way.

Further information
Clearing the air: A simple guide to buying and using local exhaust ventilation (LEV)
INDG408 Leaflet HSE Books 2008 (priced packs of 25
ISBN 978 0 7176 6300 2)
www.hse.gov.uk/pubns/indg408.pdf

Controlling airborne contaminants at work: A guide to local exhaust ventilation (LEV)
HSG258 HSE Books 2008
ISBN 978 0 7176 6298 2
www.hse.gov.uk/pubns/books/hsg258.htm

Useful links
Occupational Safety and Health Consultants Register
www.oshcr.org/

Independent National Inspection and Testing Association
www.inita.org.uk/

Further information
www.hse.gov.uk/lev/

You can find the full Offshore COSHH essentials series at
www.hse.gov.uk/coshh/index.htm

This guidance was developed by representatives from the UK offshore oil and gas industry and trade unions, with HSE.