HSE
Health and Safety Executive

OCM2

Offshore COSHH essentials

Local exhaust ventilation (LEV)

Control approach 4

Special advice

This information will help offshore dutyholders (owners, operators and contractors) to comply with the Control of Substances Hazardous to Health Regulations 2002 (COSHH), as amended, to protect workers' health. This guidance consolidates good control practice and reinforces existing knowledge with additional information. It will help you carry out COSHH assessments, review existing assessments, deliver training and in supervising activities involving substances hazardous to health.

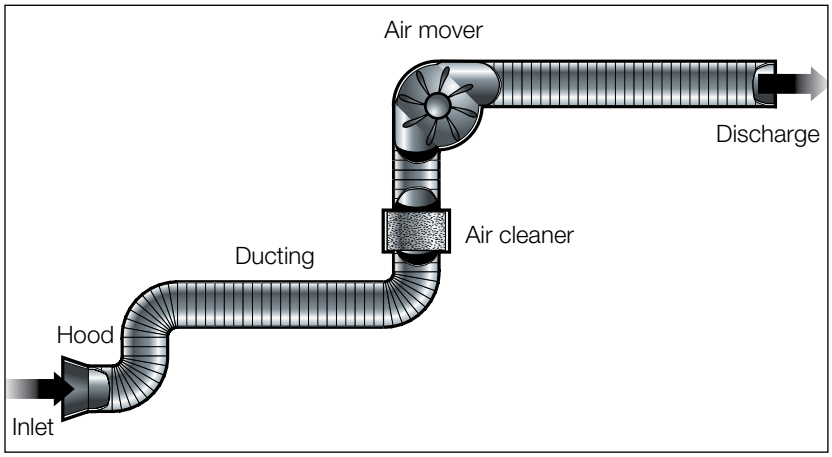
It is aimed at staff whose responsibilities include the management of substances hazardous to health on offshore installations (eg occupational health specialists, COSHH assessors, supervisors etc). It is also useful for trade union and employee safety representatives. Following the guidance is not compulsory and you are free to take other action. But if you do follow this guidance you will normally be doing enough to comply with the law. Health and safety inspectors seek to secure compliance with the law and may refer to this guidance as illustrating good practice.

If you need a service provider (eg consultant), OCM sheets describe what they should deliver. You should plan LEV checking and maintenance.

Operators and supervisors need training to use LEV systems. You may need help from a ventilation engineer or occupational hygienist for commissioning and statutory testing of LEV. The report should cover the points in this sheet.

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.

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