

OCM⁴

Offshore COSHH essentials



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 may need help from a RPE supplier or manufacturer, or from an occupational hygienist.

Respiratory protective equipment (RPE)

Control approach 4 Special advice

What this sheet covers

This sheet describes good practice for selecting respiratory protective equipment (RPE).

When to use RPE

- ✓ RPE is not a substitute for engineering controls. It is uncomfortable to use, expensive in the longer run, and always fails to danger. However, some processes need RPE, eg:
 - installing engineering control;
 - clearing up a spillage;
 - maintenance;
 - emergencies;
 - cleaning, eg pressure washing;
 - a short-term one-off procedure; and
 - whenever required for safe working.

Managing RPE

- ✓ Ask the RPE supplier or occupational hygiene consultant for help.
- ✓ Get safety data sheets for all chemical products.
- ✓ Put in place a management system for the correct selection, use and maintenance of PPE.
- ✓ Make sure all PPE you require can be worn and used together.
- ✓ Control the provision and timely replacement of PPE.

Caution: RPE can reduce visibility, limit communication and increase heat stress.

- ✓ Where personal alarms are provided, these must be fully charged and working properly.
- ✓ Personal alarms should be mounted in the worker's breathing zone.
- ✓ You need to know the potential challenge to select the type of RPE with the right level of protection (UK assigned protection factor = 4, 10, 20, 40 or 2000).
- ✓ Plan and carry out face-fit testing (see 'Further information') for all mask wearers.
- ✓ RPE must be CE marked. The basic types are:
 - filtering respirators relying only on lung power;
 - fan-assisted filtering respirators;
 - constant flow or demand breathing apparatus (BA).
- ✓ Fill in the RPE selection table below. Show it to your RPE supplier.
- ✓ Powered or air-fed RPE is more comfortable to wear.

- ✓ Any air supplied to breathing apparatus must be fit to breathe, free of oil, water and other contaminants, and checked regularly.

Using RPE

- ✓ Wearers must be medically fit to wear RPE.
- ✓ RPE users need:
 - initial and repeat fit testing for RPE masks;
 - the right type and size of RPE for them personally;
 - training to check the fit every time, to wear RPE correctly and to recognise defects;
 - any necessary instruction in cleaning and maintenance;
 - to guard against tangling or mis-connection of BA air lines.
- ✓ RPE must be worn the whole time while in the contaminated area, until the wearer is in clean air.
- ✓ If RPE depends on a face seal, the worker must be clean shaven.
- ✓ Keep RPE clean and store it in a clean place.
- ✓ Change respirator filters and valves as recommended by the manufacturer.
- ✓ Depending on the hazards present, respirators may need a combination filter to cope with both dust and vapour.

Caution: For filtering RPE, make sure the correct filter is fitted. Vapour filters will not give adequate protection against dust, and vice-versa

Procedures

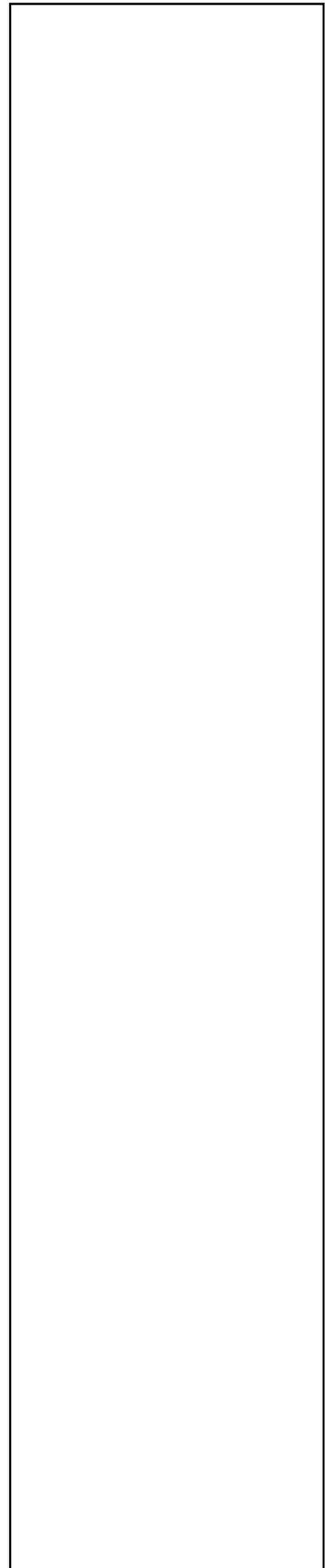
- ✓ RPE mask wearers must be fit-tested and trained how to look after it. RPE that depends on face-fit is suitable for clean-shaven workers only.
- ✓ Ensure RPE fits properly. Tell workers to check it is working properly before every use.
- ✓ Change the filters on respirators regularly – your supplier should be able to advise you.
- ✓ Tell workers to discard disposable RPE at the end of the shift, or sooner if heavily soiled.
- ✓ Keep RPE clean and store it in a clean place.

Maintenance, examination and testing

- ✓ Examine and test RPE thoroughly at least monthly and infrequently used RPE at least three monthly. Replace worn parts.
- ✓ Replace time-expired, worn or damaged parts including valves and face seals.
- ✓ Keep a stock of replaceable parts.
- ✓ Check the expiry dates on RPE and filters.
- ✓ Check the air quality to BA at least once every three months. Make sure that compressors take in only clean air.
- ✓ Keep records of all maintenance checks undertaken.

Training

- ✓ Training covers:
 - wearing RPE effectively;
 - the limitations of RPE;
 - storing RPE correctly;



- how to check and maintain RPE;
 - replace disposable RPE after one use; and
 - to stop work and leave the area immediately if they think their RPE is not working.
- ✓ Keep training records.

Respirator selection: Information to help your PPE supplier

Job or activity	
Chemicals in the substance (see safety data sheet)	
Physical form	gas/fume/vapour/dust/other
If solid, dustiness	high/medium/low
If liquid, boiling point	°C
If liquid, water-based	yes/no
Is the humidity high	yes/no
Task duration	hours/minutes
Confined space	yes/possibly/no
Explosive/flammable in air	yes/possibly/no
Work rate	heavy/medium/light
Space to do task	restricted/unrestricted
Amount of moving around	one place/many places
Vision requirement	all round/not relevant
Spoken communication	necessary/unnecessary
Wearer's physical fitness	OK/unsure
Wearer's aspect	face hair/spectacles/turban/etc
What other PPE worn	hard hat/earmuffs/visor/goggles

Useful links

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

Further information

*Respiratory protective
equipment at work: A practical
guide* HSG53 (Third edition)
HSE Books 2005
ISBN 978 0 7176 2904 6
www.hse.gov.uk/pubns/books/hsg53.htm

RPE guidance by assigned
protection factor
www.hse.gov.uk/pubns/guidance/rseries.htm

*Fit testing of respiratory
protective equipment
facepieces* HSE OC 282/28

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.