

OCE1

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 this 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.

Also see essential information on the back of the sheet.

Preparing surfaces for painting

Control approach R

Respiratory protective equipment

What this sheet covers

This sheet describes good practice for surface preparation by wet and dry blasting and the use of power tools such as needle guns, wire brushes etc. It covers the key points you need to control exposure to an acceptable level as part of your COSHH assessment.



It is important to note that generated dusts may also contain specific airborne contaminants from the existing paint (eg lead, chromium etc) and exposure should be controlled within the exposure limit for each contaminant. Specialist advice should be sought for these situations.

This sheet does not cover ultra high-pressure jetting.

Hazards

- ✓ Exposure to high concentrations of airborne dust can lead to loss of lung function. Dusts not classified elsewhere as hazardous to health or assigned a workplace exposure limit (WEL) are subject to COSHH at levels above 10 mg/m³, and respirable dust at 4 mg/m³, both as 8-hour time-weighted averages (TWAs).

Access

- ✓ Make a specific assessment where rope work or over-side work is required.
- ✓ Where possible, erect an enclosure or habitat.
- ✓ Erect barriers and notices.
- ✓ Restrict access to authorised personnel.
- ✓ Where necessary post a stand-by or sentry to raise the alarm in an emergency.
- ✓ Before blasting starts, warn workers nearby.

Equipment and procedures

Planning

- ✓ Check whether the coating to be removed contains any hazardous components, like lead.

Control equipment

- ✓ Provide forced ventilation where there is no through draught.
- ✓ Provide a Class H vacuum cleaner (HEPA filter) to clean up dusts.
- ✓ Respiratory protective equipment is normally required.

Personal protective equipment (PPE) – see sheet OCM3

- ✓ Ensure that all items of PPE are compatible.

Respiratory protective equipment (RPE) – see sheet OCM4

- ✓ For wet and dry blasting, provide a CE-marked compressed airline blasting helmet with an assigned protection factor of at least 40. Provide dedicated connectors to prevent accidental connection to non-breathing lines, eg nitrogen.
- ✓ For power tool or wire brushwork, provide CE-marked RPE with an assigned protection factor of at least 20.

Other protective equipment

- ✓ For wet and dry blasting, provide gauntlets, safety boots and a 'slicker suit'.
- ✓ For power tool or wire brushwork, provide a visor or goggles in addition to standard site PPE.

Maintenance, examination and testing

Checking and maintenance

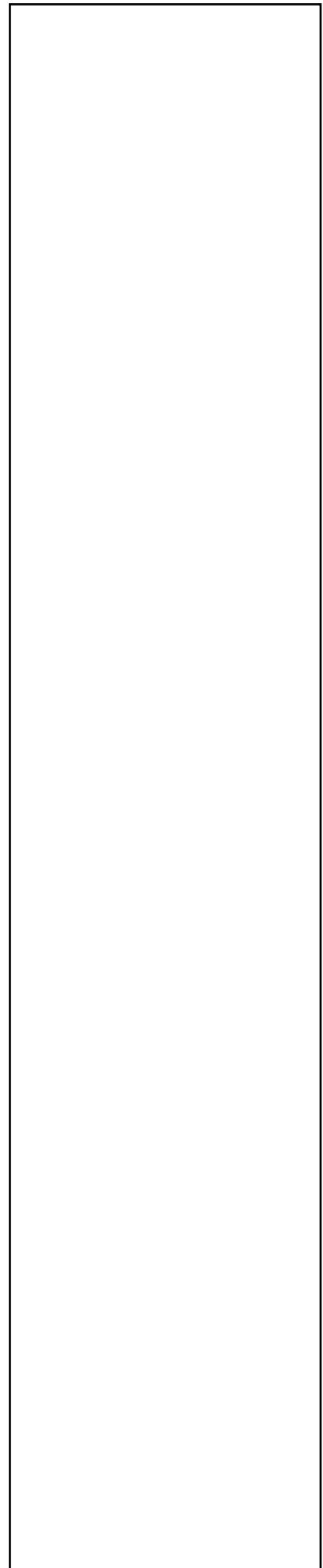
- ✓ Before every use, look for signs of damage to blasting equipment and power tools.
- ✓ Before use, check compressed air lines; check that any compressed air cutout works properly.
- ✓ At least once a week, check the condition and operation of blasting equipment.
- ✓ At least once a quarter, maintain the equipment according to the manufacturer's instructions.
- ✓ Keep this information in your testing logbook.

Examination and testing

- ✓ Class H vacuum cleaners, used to clean up, should have a technical examination to check for air tightness, damage to filters, and filtration efficiency.
- ✓ Get a competent person to carry out the examination.
- ✓ Make sure any repairs and actions identified in the annual examination are carried out.

RPE

- ✓ Examine and test RPE thoroughly at least monthly and infrequently used RPE at least three monthly. Replace worn parts.



-
- ✓ Check the airflow and air quality to air-fed RPE at least once every three months, or before use. Check in-line filters.
 - ✓ Ensure that breathable air compressors take in clean air.

Records

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

Exposure monitoring

- ✓ Prove that you are using the right level and type of RPE – use monitoring records or carry out personal air monitoring.

Cleaning and housekeeping

- ✓ Vacuum residues from dry blasting.
- ✓ Wash down residues from wet blasting.
- ✓ Label bags of dirty clothing to warn the laundry about the hazard.

Caution: Do not use a brush or compressed air for cleaning. Never use compressed air to remove dust from clothing.

Waste

- ✓ Residues are 'hazardous waste'. Label containers clearly – include a UN number where appropriate. Store and dispose of waste safely.

Personal decontamination and skin care

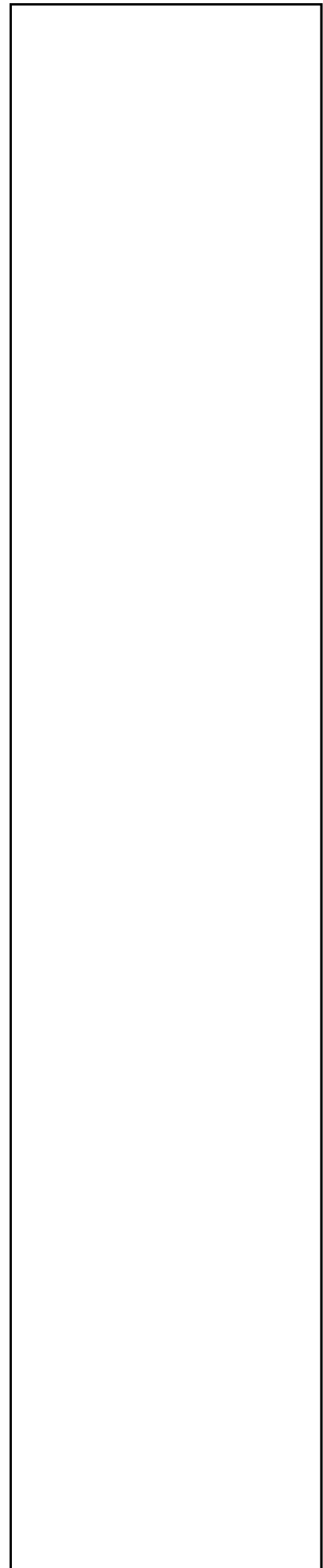
- ✓ Provide warm water, mild skin cleansers, nailbrushes, and soft paper, fabric towels or hot air for drying. Avoid abrasive cleansers.
- ✓ Tell workers to wash hands before every break.
- ✓ Provide pre-work skin creams, which will make it easier to wash dirt from the skin, and after-work creams to replace skin oils.

Health surveillance

- ✓ Conduct low-level health surveillance for dermatitis involving skin checks by suitably trained responsible person.

Training and supervision

- ✓ Provide supervision – ensure that safe work procedures are followed.
- ✓ Tell workers, including maintenance workers, what the hazards and risks are.
- ✓ Training includes toolbox talks on:
 - following safe working procedures;
 - how to use equipment properly;
 - how to use RPE and check that it is working; and
 - what to do if something goes wrong.
- ✓ Involve managers and supervisors in health and safety training.



Essential information

OCE0 *Advice for managers*

OCM1 *Confined spaces*

OCM3 *Personal protective equipment (PPE)*

OCM4 *Respiratory protective equipment (RPE)*

OCM5 *Emergency planning*

OCM6 *Exposure monitoring*

OCM7 *Health surveillance*

Employee checklist

- Are you sure about safe work procedures?
- Is the stand-by person in place?
- Is the equipment in good condition and working properly?
- Is your respirator working properly? Check it every time.
- Look for signs of leaks, wear and damage before every job.
- If you find any problem, get it fixed. Don't just carry on working.
- Co-operate with health surveillance.
- Wash hands before eating, drinking or using the lavatory.

Other hazards

- Noise
- Vibration
- Substances harmful to the marine environment

Further information

Workplace exposure limits EH40

www.hse.gov.uk/coshh/table1.pdf

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.