

# OCE26

## 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.

# Drilling waste treatment

## Control approach 3

### Containment

#### What this sheet covers

This sheet describes good practice for control of exposure to drill cuttings and associated waste handling and treatment systems. It covers the key points you need to follow to help reduce exposure to an acceptable level, as part of your COSHH assessment.

#### Hazards

- ✓ Individual substances should meet workplace exposure limits (WELs).
- ✓ Skin exposure arises from handling of drilling fluids and drill cuttings, which may lead to skin irritation and dermatitis.
- ✓ Drilling fluids and non-aqueous base fluids at high temperature produce mists and vapour that may cause respiratory and skin irritation.

#### Access

- ✓ Restrict access to authorised personnel.
- ✓ Impose 'confined space entry procedures' for entry to enclosed cuttings treatment equipment.
- ✓ Keep access doors closed.

#### Equipment and procedures

##### Substitution

- ✓ Use low toxicity base fluids with high flash point and low vapour pressure.

##### Control equipment

- ✓ Where practical, enclose transport and storage equipment.
- ✓ Provide enough fresh air to dilute and remove air contaminants to a safe area.
- ✓ Provide fixed alarms for flammable and hazardous gases.

##### Cuttings transfer from solids control equipment

- ✓ Enclose the transport equipment, eg closed augers or pneumatic conveying systems.
- ✓ Regulate flow to reduce potential for system overload and spillage.

##### Cuttings storage

- ✓ Use enclosed skips and keep hatches closed.
- ✓ Use skip-filling equipment which does not require manual levelling of skip contents.

- ✓ Ensure equipment vents on pneumatic storage systems are vented to a safe area.
- ✓ Keep tank hatches and sampling points closed when not in use.

#### *Skip and ship*

- ✓ Ensure hatches are closed and sealed before lifting onto vessel.
- ✓ Visually inspect skip integrity prior to lifting.

#### *Waste injection*

- ✓ See OCE9 *Use of drilling muds (shale shaker and mud pit areas)* for guidance on the addition of solids and liquid chemicals to the waste injection slurry mix system.
- ✓ Check integrity of injection system and flow line, including a successful pressure test, before starting pumping.

#### **Cleaning and housekeeping**

- ✓ Clean the work area regularly and clean spilled materials immediately.
- ✓ Label bags of oil-contaminated clothing to warn the laundry about the hazard.

#### *Waste*

- ✓ Store and dispose of waste safely, clearly label waste containers.

#### *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.
- ✓ Instruct workers in how to clean their skin effectively.
- ✓ 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.
- ✓ Educate personnel in the hazards associated with their work.
- ✓ Explain the early symptoms of health hazards associated with chemical exposure.
- ✓ Training should include:
  - how to properly use equipment;
  - how to check that extraction is working properly;
  - how to use respiratory protective equipment (RPE) and check that it is working;
  - how to clean up spills correctly; and
  - what to do if something goes wrong.

### **Employee checklist**

- Is the equipment in good condition and working properly?
- Is the extraction working?
- Is your respirator working properly? Check it every time.
- Look for signs of leaks, wear and damage before every job.
- Look for signs of wear and damage to equipment.
- If you find any problem, get it fixed. Don't just carry on working.
- Co-operate with health surveillance.
- Use, look after and store your PPE in accordance with instructions.
- Wash hands before eating, drinking or using the lavatory.

## Essential information

OCE0 *Advice for managers*

OCM1 *Confined spaces*

OCM2 *Local exhaust ventilation (LEV)*

OCM3 *Personal protective equipment (PPE)*

OCM4 *Respiratory protective equipment (RPE)*

OCM7 *Health surveillance*

## Other hazards

- Noise
- Musculoskeletal disorders – manual handling awkward heavy items in restricted places.
- Hydrogen sulphide (H<sub>2</sub>S)
- Substances harmful to the marine environment

## Further information

*Petroleum Industry Training Service Non Water-based Drilling and Completion Fluids Industry Recommended Practice IRP Vol.14 2002*

*Drilling fluids and health risk management: a guide for drilling personnel, managers and health professionals on the oil and gas industry OGP/IPIECA 2009*

*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](http://www.hse.gov.uk/pubns/books/hsg53.htm)*

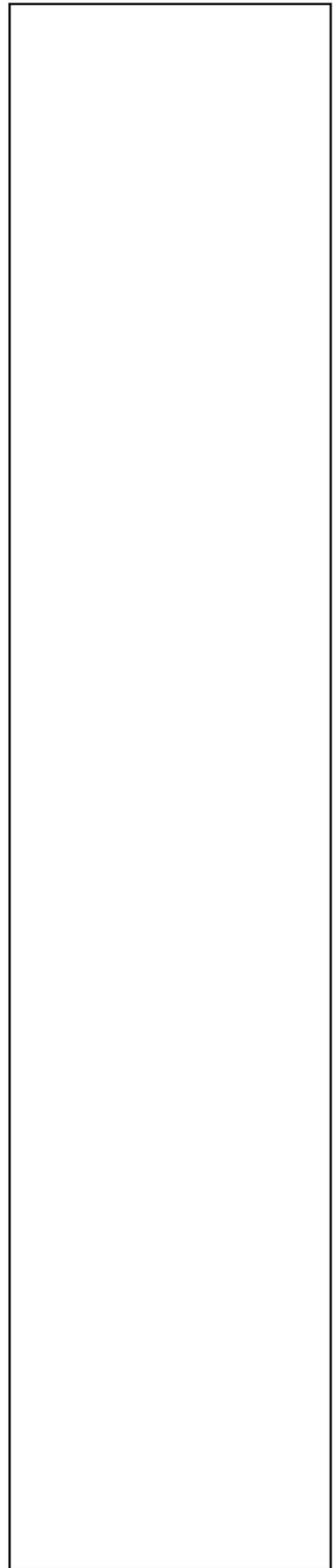
*Controlling airborne contaminants at work: A guide to local exhaust ventilation (LEV) HSG258 HSE Books 2008 ISBN 978 0 7176 6298 2 [www.hse.gov.uk/pubns/books/hsg258.htm](http://www.hse.gov.uk/pubns/books/hsg258.htm)*

Other countries' exposure limits  
GESTIS  
[www.dguv.de/bgia/en/gestis/limit\\_values/index.jsp](http://www.dguv.de/bgia/en/gestis/limit_values/index.jsp)

*Workplace exposure limits EH40*  
[www.hse.gov.uk/coshh/table1.pdf](http://www.hse.gov.uk/coshh/table1.pdf)

You can find the full Offshore COSHH essentials series at  
[www.hse.gov.uk/coshh/index.htm](http://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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