Insulation - removal

Control approach R
Respiratory protective equipment

What this sheet covers
This sheet describes good practice for removing insulating materials. It covers the key points you need to follow to help reduce exposure to an acceptable level, as part of your COSHH assessment.

This sheet does not cover work with refractory ceramic fibres (RCF) – seek specialist advice for work with RCF.

The sheet also does not cover work with asbestos materials. See useful links for specialist advice.

Hazards
✓ Machine-made mineral fibre (MMMF) can irritate the eyes, skin and respiratory system.
✓ Check the asbestos register to ensure that asbestos is not present
✓ The workplace exposure limits (WELs), for MMMF are 5 mg/m³ and 1 fibre/ml (8-hour time-weighted average (TWA)).

Access
✓ Where possible, erect an enclosure or habitat.
✓ Erect barriers and notices.
✓ Restrict access to authorised personnel.

Equipment and procedures

Planning
✓ Ensure that material for removal is free of asbestos.
✓ Reduce fibre releases from old insulation, eg “wet removal” methods.

Control equipment
✓ Provide a Class H vacuum cleaner (HEPA filter) to remove dust.
✓ Respiratory protective equipment is normally required.
✓ Provide eyewash equipment close to the work site.
Personal protective equipment (PPE) – see OCM3
✓ Ensure that all items of PPE are compatible.

Respiratory protective equipment (RPE) – see OCM4
✓ Provide CE-marked RPE with an assigned protection factor of at least 20 for particles.

Other protective equipment
✓ Provide a disposable coverall (type 5), gloves and eye protection.
✓ Dispose of used coveralls before every break.

Maintenance, examination and testing

Examination and testing
✓ Class H vacuum cleaners, used to clean up should have a technical examination to check for damage to filters, air tightness and to check the 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.

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

Exposure monitoring
✓ Monitoring is not normally necessary.

Cleaning and housekeeping
✓ Vacuum dry residues, or use wet cleaning methods.

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

Waste
✓ Bag and label MMMF waste.

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.
✓ Explain the early signs of dermatitis.
✓ Training includes toolbox talks on:
  ■ safe handling procedures;
  ■ how to use RPE and check that it is working;
  ■ how to decontaminate effectively; 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)
OCM7 Health surveillance

Employee checklist

☐ 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.
☐ Discard single-use gloves every time you take them off. Discard other gloves at the end of the shift.
☐ Wash hands before eating, drinking or using the lavatory.

Other hazards

☐ Thermal – risk of overheating
☐ Musculoskeletal disorders – manual handling awkward? heavy items in restricted places

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

BS EN 60335-2-69:2009:
Household and similar electrical appliances. Safety. Particular requirements for wet and dry vacuum cleaners, including power brush, for commercial use

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.