This information will help employers (including the self-employed and franchisees) comply with the Control of Substances Hazardous to Health Regulations 2002 (COSHH), as amended, to control exposure and protect workers’ health.

It is also useful for trade union safety representatives.

This sheet describes good practice using dust extraction for fixed abrasive wheels.

It covers the points you need to follow to reduce exposure to an adequate level.

It is important to follow all the points, or use equally effective measures.

The trade press and industry associations are good sources of information.

Abrasive wheels are used for grinding, fettling, dressing and cutting.

Main points

- Dust created by abrasive wheels may cause lung diseases as well as irritation.
- Check that all the controls are being used properly.

**Access and premises**

- Restrict access to those people who need to be there.
- Provide access to good washing facilities.

**Equipment**

- Keep the workplace well ventilated; at least 10 air changes per hour with a through draught.
- You need an extraction rate up to 8 metres per second around the inlets to the wheel for equipment in frequent use.
- Make sure a manometer or pressure gauge is fitted near the extraction point, to show that it is working properly.
- Discharge extracted air to a safe place, away from doors, windows and air inlets. Have a supply of clean air coming into the workroom to replace extracted air.

Caution: Some metal dusts and oily cloth fibres can self-ignite.

**Personal protective equipment (PPE)**

- You may need respiratory protective equipment (RPE) for maintenance, cleaning and emptying the vacuum cleaner. Seek advice from your RPE supplier.
- Provide eye protection when using an abrasive wheel.
- Provide close-fitting overalls to avoid clothing being caught up in the wheel.
- Skin creams are important for skin protection and help in washing contamination from the skin. These are not ‘barrier creams’. After-work creams help to replace skin oils.

Caution: Never allow compressed air use to remove dust from clothing.

**Procedures**

- Confirm that the extraction is turned on and working at the start of work. Check the gauge.
Special Care
✓ Dust from cutting or polishing stone can cause serious lung diseases.
   Leather dust can cause cancer.

Maintenance, examination and testing
✓ Follow instructions in maintenance manuals - keep equipment in
effective and efficient working order.
✓ If the extraction is faulty, stop work until it is repaired.
✓ At least once a week, look for signs of damage.
✓ You need to know the extraction design performance to know if it is
working properly. The equipment supplier’s manual should give this
information.
✓ Get a competent ventilation engineer to examine the system thoroughly
and test its performance at least once every 14 months. See the HSE
publication HSG54 - see ‘Further information’.
✓ Keep records of all examinations and tests for at least five years.
✓ Abrasive wheels have special safety provisions - seek specialist advice.

Health monitoring
✓ Ask your workers to check their skin for dryness or soreness every six
months. If these effects appear, check the proper use of skin creams
and PPE.
✓ Consult an occupational health professional if workers report frequent
lung infections. See sheet G401.

Cleaning and housekeeping
✓ Keep the work area clean - use a vacuum cleaner.
   Caution: Never use compressed air to clear dust.

Training and supervision
✓ Working in the right way and using the controls correctly is important
for exposure control. Train and supervise workers. See sheet SR0.
Further information

- Maintenance, examination and testing of local exhaust ventilation
- Preventing dermatitis at work: Advice for employers and employees
  Leaflet INDG233 HSE Books 1996 (single copy free or priced packs
  of 15 ISBN 0 7176 1246 5)
- Safety in the use of abrasive wheels HSG17 (Third edition)
  HSE Books 2000 ISBN 0 7176 1739 4

Useful links

- HSE priced and free publications are available from HSE Books
  Tel: 01787 881165 Website: www.hsebooks.co.uk.
- For information about health and safety ring HSE’s Infoline Tel: 0845
  345 0055 Textphone: 0845 408 9577 e-mail: hse.infoline@natbrit.com.
- Contact the British Occupational Hygiene Society (BOHS) on 01332
  298101 or at www.bohs.org for lists of qualified hygienists who can
  help you.
- Look in the Yellow Pages under ‘Health and safety consultants’ and
  ‘Health authorities and services’ for ‘occupational health’.
- Also see www.nhsplus.nhs.uk.

Employee checklist

☐ Is the extraction switched on and working properly?
☐ Check the gauge.
☐ Look for signs of leaks, wear and damage.
☐ If you find any problems, tell your supervisor. Don’t just carry on working.
☐ Wash your hands after use, and before and after eating, drinking, smoking and
  using the lavatory.
☐ Never clean your hands with concentrated cleaning products or solvents.
☐ Check your skin regularly for dryness or soreness - tell your supervisor if these
  symptoms appear.
☐ Use skin creams provided as instructed.

This guidance is issued by the Health and Safety Executive. Following the
guidance is not compulsory and you are free to take other action. But if
you do follow the 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.