

Chemical Safety Legislation

There is a vast and ever increasing quantity of chemical safety legislation. The most recent is the Registration Evaluation and Authorisation of Chemicals Regulations (REACH). These regulations do not replace COSHH or other legislation on chemical safety.

All this legislation offers a measure of protection to workers and the public; safety representatives need to be informed about its scope. Reps also need to understand the limits of the law and realise it does not provide enough protection on its own, not least because it is poorly enforced.

COSHH

The COSHH Regulations came fully into force in 1990 and have been amended a number of times since then, though without changing the basic characteristics. They apply to all workplaces and all chemicals except those with specific regulations of their own (see later). They do not cover compounds which are dangerous only because they have radioactive or asphyxiant properties, are at high temperature or extreme pressure, or have explosive or flammable properties. The Regulations come with an Approved Code of Practice (ACoP). COSHH Guidance on a number of specific industries has been published. Employers must carry out an assessment of the risks of chemicals to the health of their employees. COSHH makes it illegal for an employer to expose an employee to any chemical without first carrying out a suitable and sufficient risk assessment. The assessment must be reviewed if there is reason to believe it is no longer valid or if there is a significant change in the work to which it relates. Whoever does the assessment must be competent to do so. Safety reps are entitled to be consulted about

assessments and to receive all the information on which they are based. Employers must introduce appropriate measures to safeguard the health of exposed workers. There are a number of principles that all employers must use to eliminate or reduce exposure. If eliminating the use of the chemical is not reasonably practicable, employers should introduce suitable control measures, namely:

- ▲ Design and operate processes and activities to minimise emission, release and spread of substances hazardous to health.
- ▲ Take into account all relevant routes of exposure – inhalation, injection, skin absorption and ingestion – when developing control measures.
- ▲ Choose the most effective and reliable control options which minimise the escape and spread of substances hazardous to health.
- ▲ Check and review regularly all elements of control measures for their continuing effectiveness.
- ▲ Inform and train all employees on the hazards and risks from the substances with which they work and the use of control measures developed to minimise the risks.
- ▲ Ensure that the introduction of control measures does not increase the overall risk to health and safety.
- ▲ Finally and as a last resort, where adequate control of exposure cannot be achieved by other means, provide, in combination with other control measures, suitable personal protective equipment. (PPE)

Control measures should be fully and properly used. Equipment used for controlling emissions should be maintained, examined and tested to ensure they are in working order. PPE must be kept clean. Records of test and inspections must be kept for five years.

Monitoring of exposure must be performed when required to protect health and records must be kept for 40 years for identifiable employees. Health

surveillance of employees should be carried out in certain circumstances.

Employees and those carrying out risk assessments must be given information, instruction and training to enable them to carry out their duties safely.

Compliance with the COSHH Regulations has always been poor. Enforcement is weak and surveys have shown that many managers are unaware of their duties. The situation is particularly unsatisfactory among small and medium enterprises.

A single type of workplace exposure limit (WEL) has been introduced, with Workplace Exposure Limits (WELs) replacing Maximum Exposure Limits (MELs) and Occupational Exposure Standards (OESs). Some substances previously having OESs are now banned. Lists of WELs are published annually and are periodically reviewed. The WEL of a substance hazardous to health must not be exceeded.

Carcinogens and biological agents

Specific ACOPs have been published on carcinogens and on biological agents. The Carcinogens ACOP defines higher standards of risk assessment, exposure or control, monitoring, health surveillance, and the provision of information, etc. than for general chemicals. It also prohibits the use of certain substances without an Exemption Certificate.

Biological agents are classified into one of four groups according to the risk of infection. Detailed containment requirements are specified for each group. Detailed guidance is given on the factors to be taken into account in a risk assessment and on the control measures which should be applied as a result of this assessment. Requirements for the maintenance, examination and testing of PPE and for the information to be provided to employees are higher than for general chemicals. Employers must keep

lists of employees exposed to the more dangerous agents. Employers must notify the Health and Safety Executive (HSE) of the use and transport of biological agents.

CHIP

The CHIP Regulations first came into force in 1994; subsequent amendments were published up until 2002 when new regulations came into force (CHIP3). They require suppliers and manufacturers of chemicals to identify the hazards of the chemicals they give, provide information about the hazards of chemicals via labels and safety data sheets, and package chemicals safely. Requirements for the transport of chemicals are covered by the Carriage of Dangerous Goods by Road and Rail (Classification, Packaging and Labelling) Regulations which were once part of CHIP.

The Approved Supply List, that is part of CHIP 3, classifies more than 2500 substances according to their health and safety effects; they appear on labels as pictograms, risk phrases (R phrases) and safety phrases (S phrases). Suppliers must classify chemicals not on the list; guidance on this is given in the Approved Classification and Labelling Guide.

Safety data sheets must be provided with all dangerous chemicals and must contain information under the following headings:

- identification of the substance/preparation and company
- composition/information on ingredients
- hazards identification
- first aid measures
- fire fighting measures
- accidental release measures
- handling and storage
- exposure controls/personal protection
- physical and chemical properties
- stability and reactivity
- toxicological data
- ecological data
- disposal
- transport information
- regulatory information
- other information

Safety data sheets vary widely in

quality and should never be treated as an authoritative source of information. Their compilation by the end users of chemicals does not in itself constitute a COSHH assessment.

Lead, asbestos and pesticides

Those chemicals which were separately regulated before COSHH came in continue to have their own legislation. A total ban on asbestos has been in force since 1999. The latest version of the Control of Asbestos at Work Regulations came into force in 2006.

The 2006 regulations stop employers from using their own employees to do work with asbestos which would otherwise need a licence. The regulations reduce the WEL to 0.1 fibres per millilitre measured over 4 hours and they improve the requirements for training but they remove the requirement for licences for work on textured coatings such as artex. This reduced requirement will cause thousands of workers to be exposed to asbestos contamination.

They remove the 2002 requirement for work on textured coatings, containing asbestos, to only be carried out under the terms of licensed removal. So while the 2006 Regulations strengthen the 2002 Control of Asbestos at Work Regulations the HSE shamelessly removed the requirement for a licence to work on textured coatings such as artex.

The regulation of work with lead has a long history and the latest legislation came into force in 2002.

In addition to duties under COSHH, the use of pesticides is also covered by the Food and Environmental Protection Act, the Control of Pesticides Regulations and the Plant Protection Products Regulations. Each year the HSE, in conjunction with the Ministry of Agriculture, publishes a list of pesticides approved for use.

Major accidents

Planning for emergencies and major accidents involving dangerous chemicals is covered by Control of Major Accident Hazards Regulations.

Further information

▲ *Chemical Hazards Handbook: A workers' guide to chemical hazards and how to avoid them*, London Hazards Centre, 1999, can be accessed and downloaded from: <http://www.lhc.org.uk/members/pubs/books/chem/chAAAAAA.htm>

HSE publications on legislation

▲ *List of workplace exposure limits* can be accessed and downloaded from: <http://www.hse.gov.uk/coshh/table1.pdf>

▲ *Control of Substances Hazardous to Health Regulations 2002*, comprising the General COSHH ACOP, the Carcinogens ACOP and the Biological Agents ACOP, 1999, ISBN 0 7176 1670 3

Brief guide to regulations can be found at:

<http://www.hse.gov.uk/pubns/indg136.pdf>

▲ *Chemicals (Hazard Information and Packaging for Supply) Regulations 2002*

Enforcement circular can be found at:

<http://www.hse.gov.uk/lau/lacs/37-11.htm>

▲ <http://www.hse.gov.uk/a-z/index.htm>

Factsheets online www.lhc.org.uk London advice 020 7794 5999

