

CONTROL OF SUBSTANCES HAZARDOUS TO HEALTH REGULATIONS 2002

A SUBSTANCE HAZARDOUS TO HEALTH is defined as a substance that is-

- listed with the Chemicals (Hazard Information and Packaging for Supply) Regulations 2002 (CHIP3/CHIP 2002) as very toxic, toxic, harmful, corrosive or irritant
- subject to an Health and Safety Commission Approved workplace exposure limit (see below)
- a harmful organism, a substantial concentration of any dust, or any substance which because of its chemical or toxicological properties and the way it is used or is present creates a risk to health

Whilst the COSHH Regulations are concerned with all health risks, a major concern is with inhalation of gases, vapours, fumes and dust of substances hazardous to health, and workplace exposure limits (WELs) have been imposed on the use of some substances

- workplace exposure limit (WEL) for a SHH means the exposure limit approved by the Health and Safety Commission for that substance.

The WELs relate to specified reference periods when calculated by a method approved by the Health and Safety Commission. The methods and the limits are contained in the HSE publication EH40 Workplace Exposure Limits, which is updated from time to time.

The duties of employers under these regulations (except for the requirements to provide monitoring, health surveillance, information and training and dealing with accidents etc (Regulation 10-13)) extend to persons who are not employees but who are on the premises, i.e. contractors (Regulation 3).

ASSESSMENT (Regulation 6): Where employees may be exposed to a SHH, employers shall -

- make a suitable and sufficient assessment of health risks and the necessary precautions
- review the assessment regularly and immediately following work changes, and if suspected of being no longer valid or the results of monitoring (Regulation 10) show it to be necessary. The assessment should be revised accordingly.

The risk assessment shall consider:

- the hazardous properties of the substance
- information on the health effects provided by the supplier (e.g. data sheet)
- level, type and duration of exposure
- the circumstances of the work, including the amount of substance involved
- activities such as maintenance (where there is the potential for a high level of exposure)
- any relevant workplace exposure limit
- the effect of control measures (Regulation 7)
- the results of health surveillance
- the results of monitoring (Regulation 10)
- the risk presented by combinations with other substances present
- the classification of any biological agent and any other additional information.

Employers (with more than 5 employees) shall record the significant findings of the risk assessment and the steps taken to control exposure (Regulation 7).

CONTROL OF SUBSTANCES HAZARDOUS TO HEALTH REGULATIONS 2002

PREVENTION OR CONTROL OF EXPOSURE (Regulation 7): Where work involves exposure to a substance hazardous to health, employers shall -

- control exposure if prevention is not reasonably practicable, and should substitute a hazardous substance by a substance or process which either eliminates or reduces the risk to health
- where it is not reasonably practicable to prevent exposure to a substance hazardous to health apply appropriate control measures consistent with the risk assessment, in the following order of priority:
 - the design and use of appropriate work processes, systems and engineering controls and the provision and use of suitable work equipment and materials
 - the control of exposure at source, including adequate ventilation systems and appropriate organisational measures (such as arrangements for safe handling, storage and transport, maintenance procedures, reducing numbers of people exposed, level and duration of exposure, appropriate general ventilation and hygiene measures etc); and
 - where adequate control cannot be achieved by other means, provide personal protective equipment (PPE) as necessary (i.e. control of exposure should be secured by measures other than PPE)

The employer shall, where it is not reasonably practicable to prevent exposure to a carcinogen, apply the following additional measures:

- totally enclose the process and handling systems, unless this is not reasonably practicable
- prohibit eating, drinking and smoking in areas that may be contaminated by carcinogens
- clean floors, walls and other surfaces at regular intervals and whenever necessary
- designate those areas which may be contaminated and use suitable and sufficient warning signs, and
- store, handle and dispose of carcinogens safely, for instance using closed and clearly labelled containers

Similar measures apply to the control of exposure to biological agents. Control of exposure to substance hazardous to health is only considered adequate if

- the principles of good practice are applied (Schedule 2A)
- any WEL is not exceeded; and
- for a substance which carried the risk phrase R45, R46 or R49, or is listed in Schedule 1, or R42, or R42/43 or listed in section C of HSE's 'Asthmagen? Critical assessments of the evidence for agent implicated in occupational asthma' as updated from time to time, or any other substance which the risk assessment has shown to be a potential cause of occupational asthma, exposure is reduced to as low as reasonable practical.

Principles of Good Practice (Schedule 2A): the principles of good practice for the control of exposure to substance hazardous health are:

- design and operate processes and activities to minimize emission, release and spread of substances hazardous to health

CONTROL OF SUBSTANCES HAZARDOUS TO HEALTH REGULATIONS 2002

- take into account all relevant routes of exposure – inhalation, skin absorption and ingestion – when developing control measures
- control exposure by means that are proportionate to the health risk
- choose the most effective and reliable control options which minimize the escape and spread of substances hazardous to health
- where adequate control of exposure cannot be achieved by other means, provide, in combination with other control measures, suitable PPE
- 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 minimize risks
- ensure that the introduction of control measures does not increase the overall risk to H&S

Ensure that any respiratory protective equipment (RPE) provided is suitable and either bears a 'CE' mark or, where this is not applicable, is of a type or standard approved by HSE

PPE shall be suitable for the purpose and comply with the Personal Protective Equipment Regulations 2002 where they apply, or be of a type (or conform to a standard) approved by HSE.

CONTROL MEASURES (Regulation 8,9): Where work involves exposure to a substance hazardous to health, employers shall take all reasonable steps to ensure control measures and PPE are properly used.

Employees shall use control measures and PPE provided, report any defect and return any PPE to the accommodation provided after use (Regulation 8).

Employers shall also –

- ensure control measures are maintained in an efficient state, efficient working order, in good repair and clean
- for systems of work, supervision and any other measure, review at suitable intervals and revise as necessary
- ensure local exhaust ventilation plant (LEV) is examined and tested at the following frequency –
 - blasting of metal castings - *every month*
 - dry grinding, polishing or abrading of metal for more than 12 hours per week - *every six months*
 - dust or fume from non-ferrous castings - *every six months*
 - other applications of LEV - *every 14 months*
- ensure that any other controls (i.e. PPE and RPE other than disposable RPE) are periodically examined, properly stored, checked and where defective, repaired, or replaced before use
- keep a record of examinations etc for five years (Regulation 9)

If contaminated, PPE shall be kept apart from uncontaminated clothing and equipment & decontaminated, cleaned, or if necessary, destroyed.

MONITORING (Regulation 10): Employers shall (at regular intervals and when any change occurs which may affect exposure) -

CONTROL OF SUBSTANCES HAZARDOUS TO HEALTH REGULATIONS 2002

- monitor exposure to substances hazardous to health where this is necessary to ensure control or health protection (Regulation 10)
- specifically monitor any exposure to vinyl chloride monomer (VCM) or chromium plating (Schedule 5)
- keep a record of monitoring for 40 years where it relates to an employee, otherwise for five years

Where an employee is required by (Regulation 11) to be under health surveillance, an individual record of any monitoring carried out shall be made, maintained and kept for that employee.

The employer shall -

- with reasonable notice, allow an employee access to his personal monitoring records
- provide the HSE with copies of monitoring records as required
- if he ceases to trade, notify HSE in writing and make all monitoring records available

HEALTH SURVEILLANCE (Regulation 11): Employers shall -

- provide health surveillance for employees exposed to substances hazardous to health listed in Schedule 6 (if significant) or where:
 - an identifiable disease or ill-effect may result from exposure; and
 - it is likely with the kind of work; and
 - the disease or ill-effect can be detected
- provide for continued health surveillance of employees after exposure ceases, if required
- allow employment medical advisers or appointed doctors to inspect the workplace and health records
- keep health records for 40 years, offering them to HSE if they cease trading
- afford employees access to their health records upon reasonable notice
- remove employees from work involving substances hazardous to health if they are certified unfit for it

Employees shall co-operate with any health surveillance procedure and can appeal to HSE against a suspension on medical grounds.

INFORMATION, INSTRUCTION, TRAINING (Regulation 12): Where work exposes employees to substances hazardous to health, employers shall provide suitable and sufficient information, instruction and training including -

- the names of the substances hazardous to health and the risks they present
- details of any relevant workplace exposure limit
- access to any relevant safety data sheet
- the significant findings of the risk assessment
- the appropriate precautions and actions to be taken
- the results of any monitoring, immediately if a WEL is exceeded

CONTROL OF SUBSTANCES HAZARDOUS TO HEALTH REGULATIONS 2002

- the collective results of any health surveillance (Regulation 11)

and this shall take account of significant changes in the type or method of work and be appropriate to the level, type and duration of exposure identified by the risk assessment.

The employer shall also extend information, instruction and training to those who discharge the employer's duties regarding COSHH, whether or not they are his employees (e.g. contractors).

ACCIDENTS, INCIDENTS & EMERGENCIES (Regulation 13): In order to protect employees' health from an accident, incident or emergency related to substances hazardous to health the employer shall ensure that:

- procedures, including appropriate first aid facilities and safety drills (to be tested at regular intervals), have been prepared which can be put into effect when such an event occurs
- information on emergency arrangements is available, including:
 - details of relevant work hazards and hazard identification
 - arrangements, and
 - specific hazards likely to arise at the time of an accident,
 - incident or emergency; and
- suitable warning and other communication systems are established to enable an appropriate response, including remedial actions and rescue operations, to be made immediately

The information on the procedures and systems shall be made available to relevant accident and emergency services to enable them to prepare their own response, and also if appropriate, be displayed at the workplace. The first part of this regulation does not apply (unless the SHH is a carcinogen or biological agent) where the risk assessment shows that because of the quantity there is only a slight risk and that the control measures are sufficient. In the event of an accident, incident or emergency related to the presence of SHH at the workplace the employer shall ensure that:

- immediate steps are taken to:
 - mitigate the effects of the event
 - restore the situation to normal, and
 - inform those employees who may be affected; and
- only those persons who are responsible for carrying out repairs and other necessary work are permitted in the affected area and they are provided with:
 - appropriate PPE, and
 - any necessary specialised safety equipment and plant
- which shall be used until the situation is restored to normal.

DEFENCES (Regulation 21): It shall be a defence to prove that all reasonable precautions were taken and all due diligence was exercised to avoid committing an offence.

CONTROL OF SUBSTANCES HAZARDOUS TO HEALTH REGULATIONS 2002

SPECIAL PROVISIONS (Regulation 5): COSHH does not apply to -

- lead or asbestos (see relevant regulations)
- radioactive, explosive or flammable properties of a substance
- temperature or pressure of a substance
- anything used in medical treatment (Regulation 5)

Fumigation is subject to strict controls including prior notification (Regulation 14).

PROHIBITIONS (Regulation 4, Schedule 2): The use of substances hazardous to health for some processes is prohibited. This includes prohibiting the supply for use in 'diffusive applications' (such as surface cleaning) of eight chlorinated solvents (except for the purposes of research and development, or for analysis) (Schedule 2).