POLICY FOR THE CONTROL OF SUBSTANCES HAZARDOUS TO HEALTH (COSHH)

INTRODUCTION & LEGISLATION

Using chemicals or other hazardous substances at work can put people’s health at risk. The law requires employers to control exposure to hazardous substances to prevent ill health.

Employers have to protect both employees and others who may be exposed by complying with the Control of Substances Hazardous to Health Regulations 2002 (COSHH) (as amended).

RESPONSIBILITIES

Lews Castle College will implement such general precautions that will ensure, so far as is reasonably practicable, the safety of its employees, students, contractors and visitors to its premises.

All Lews Castle College employees have a legal responsibility under Section 7 of the Health and Safety at Work Act (1974) to take reasonable care of themselves and all others who may be affected by their acts and/or omissions and to co-operate with the employer with regard to health and safety.

ASSESSMENT

Where employees are liable to be exposed to hazardous substances during the course of their work, the employer must undertake a suitable and sufficient assessment of the risks associated with these exposures.

Such assessments must be reviewed regularly or immediately if there are any changes that render the original assessment invalid or where a monitoring programme indicates it may be necessary.

The significant findings of the assessment must be recorded as soon as possible after the assessment, along with any control measures implemented to prevent or control exposure to hazardous substances.

The findings of the risk assessment must be communicated to all those who may be affected by it. The COSHH assessment should specifically consider:

- The hazardous properties of the substance;
- Relevant information from the substance supplier of any effects on health eg. information contained in material safety data sheets (MSDS’s);
- The degree, nature and duration of exposure;
- Specific work circumstances eg. the quantity of substance involved;
- Any activities where there is a high risk of exposure eg. maintenance work;
- Relevant workplace exposure limits (WEL’s);
• The effectiveness of existing and new control measures;
• The results of any monitoring and health surveillance programmes;
• The effects of simultaneous exposure to more than one hazardous substance;
• Approved classification of any biological agents;
• Any other relevant information.

HAZARDOUS SUBSTANCES

Hazardous substances include:

• Substances used directly in work activities (eg. adhesives, paints, cleaning agents);
• Substances generated during work activities (eg. fumes from soldering and welding, dust from wood processing);
• Naturally occurring substances (eg grain dust);
• Biological agents such as bacteria and other micro organisms.

Hazardous substances can be found in nearly all work environments, for example:

• Kitchens and food preparation areas;
• Workshops;
• External Storage Areas;
• Cleaners cupboards;
• Estates and Maintenance stores;
• Laboratories;
• Offices;
• It is also important to consider the location of hazardous substances generated during work activities.

Effects of Hazardous Substances

Examples of the effects of hazardous substances include:

• Skin irritation or dermatitis as a result of skin contact;
• Asthma as a result of developing allergy to substances used at work;
• Losing consciousness as a result of being overcome by toxic fumes;
• Cancer, which may appear long after the exposure to the chemical that caused it;
• Infection from bacteria and other micro organisms (biological agents).
Substances Hazardous to Health not Included in COSHH

COSHH applies to virtually all substances hazardous to health except:

- Asbestos and lead, which have their own regulations;
- Substances which are hazardous only because they are:
  - Radioactive;
  - At high pressure;
  - At extreme temperatures; or;
  - Have explosive or flammable properties (other regulations apply to these risks);
- Biological agents that are outwith an employers control.

Hazardous Substances Inventory

Each Department and Centre will maintain a hazardous substances inventory. The Lews Castle Form “Hazardous Substances Inventory” should be used for this purpose.

The Hazardous Substances Inventory will enable Lews Castle College to maintain a register of hazardous substances and will assist the Heads of Department/Line Managers and competent persons to decide if a COSHH assessment requires to be carried out for substances in their respective areas of responsibility.
PROCEDURE FOR CONDUCTING A COSHH RISK ASSESSMENT AT LEWS CASTLE COLLEGE

In order to comply with the requirements of the Control of Substances Hazardous to Health Regulations 2002 (as amended) the following procedure will be followed to ensure that all employees, students and visitors to Lews Castle College are not exposed to hazardous substances during the course of their employment, visit or studies.

Heads of Department and Line Managers assisted by members of staff are required to identify all activities, processes and substances within their area of responsibility and establish if it is necessary to conduct a specific COSHH risk assessment.

A list of activities, processes and substances should then be compiled and recorded using the Lews Castle College Form: “Register of COSHH Risk Assessments”.

Each risk assessment will then be allocated a unique RA number.

Thereafter, the COSHH risk assessment will be conducted using the Lews Castle College Form: “COSHH Risk Assessment”.

When the risk assessment has been completed, its findings must be communicated to all those who may be affected by it. It should be regarded as a live working document and must be available for reference at all times.

The format of the assessment will be as follows:

STEP 1

ASSESS THE RISK

Identify the Substance

1. The Heads of Department and Line Manager assisted by competent persons will be required to identify all hazardous substances found in their area of responsibility. This could be:

(a) A chemical, a substance or mixture of substances classified as dangerous to health under the Chemicals (Hazard Information and Packaging to Supply) Regulations 2009 (CHIP 4).

(b) A substance with workplace exposure limits listed in the HSE publication EH40/2005 Workplace Exposure Limits.

(c) Biological agents (bacteria and other micro-organisms), if they are directly connected to the work, such as farming, sewage treatment, or healthcare, or if the exposure is incidental to the work (eg exposure to bacteria from an air conditioning system that is not properly maintained).

(d) Any kind of dust if its average concentration in the air exceeds the levels specified in COSHH.
(e) Any other substance which creates a risk to health, but which for technical reasons may not be specifically covered by the Chemicals (Hazard Information and Packaging for Supply) Regulation (CHIP 4). Including: asphyxiants (i.e. gases such as argon and helium, which while not dangerous in themselves, can endanger life by reducing the amount of oxygen available to breath), pesticides, medicines, cosmetics, or substances produced in chemical processes.

NOTE: A copy of the HSE book EH40/2005 Workplace Exposure Links is available for reference at Lews Castle College Library and is also available on the HSE website.
1. **Identify the Area/Process where the Hazardous Substance is Used**

   It is important that all areas and processes where hazardous substances are used are identified and made known to all those who may be affected.

   As well as listing these areas on the **COSHH Risk Assessment** Form, suitable and appropriate signage must be made available to warn personnel that a hazardous substance may be present.

2. **Identify How the Substances are Hazardous**

   Decide whether each substance is in a form in which it could be:

   (a) Inhaled;

   (b) Swallowed (either directly or from settling on food etc or from eating food with contaminated fingers);

   (c) Absorbed or introduced through the skin or via the eyes (either directly or from contact with contaminated surfaces or clothing);

   (d) Injected into the body by high pressure equipment or contaminated sharp objects.

   Ensure that all forms in which a substance is available are considered as some substances can be normally harmless in some forms, while very hazardous in others.

   **NOTE:** Packaging labels and Material Safety Data Sheets must be referred to in order to identify the main hazards.

3. **Decide What Effects the Hazardous Substances Could Have**

   For each route of entry or contact identified, it is necessary to establish the sort of harm that could result.

   (a) Could serious effects or death, either immediate or delayed, occur from a single exposure to the substance?

   (b) Could adverse effects or death result from repeated, even low level exposures over a period of time?

   (c) Could there be both long term and short term effects? Some substances may have only acute effects and some chronic but, as the previous two examples show, others may have both.

   (d) Could cancers occur?

   (e) Could the substance cause sensitisation or allergic reactions?

   (f) Could the substance be harmful to the human reproductive process?
(g) In the case of micro-organisms, could they cause infection or could an infected individual infect others?

(h) Check all sources of information for indications of any enhanced harmful effects from exposures to mixtures of substances. These can occur if people come into contact with two or more substances, either at the same time or successively. It may be necessary to ask a competent toxicology or health adviser for further details.
STEP 2

DECIDE WHAT PRECAUTIONS ARE NEEDED

If significant risks are identified by the risk assessment process, it will be necessary to decide on the action required to remove or reduce them to an acceptable level.

To help decide whether risks are significant, it is suggested that a comparison is made between controls already in use with:

- Good practice advice from the Health and Safety Executive, including information contained in “COSHH Essentials Easy Steps to Control Chemicals”.
- The results of monitoring employees’ and students’ exposure with workplace exposure limits (WEL’s) published in EH40/2005, Workplace Exposure Limits.
- Good working practices and standards used by or recommended by Further and Higher Education Sector advisory bodies, Health and Safety Commission.

Chemical suppliers and manufacturers will also provide advice on storage, use and disposal.

It is important to:

- Check that control systems work and are effective.
- Consider whether the substance could be absorbed through the skin. Where this could occur a biological monitoring programme may help to assess the risks.

NOTE: The HSE Publication “Biological Monitoring in the Workplace” sets out when biological monitoring is useful and the procedures for setting up an effective programme.

FURTHER ACTION TO BE TAKEN

If the COSHH Assessment identifies that there are risks to health, action must be taken to protect the health of staff and students and others that may be affected.
RECORDING & REVIEWING THE ASSESSMENT

The findings of the COSHH risk assessment must be recorded.

The Lews Castle College Form **COSHH Risk Assessment** Form should be used for this purpose.

The record should be made as soon as practicable after the assessment and contain enough information to explain the decisions that have been taken and whether the risks are significant, as well as the need for control measures.

The actions required to ensure that hazardous substances are adequately controlled must also be recorded.

If the risk assessment indicates that there is no risk to health or the risk is trivial, the identity of the substance, the control measures taken, and the fact that the substance poses little or no risk should be recorded.

The assessment should be a "living" document, which should be revisited if circumstances change.

The assessment must definitely be reviewed when:

- There is reason to suspect the assessment is no longer valid;
- There has been significant change in the work;
- The results of monitoring staff and students’ exposure shows it is necessary;

The assessment should state when the next review is planned.
STEP 3

PREVENT OR ADEQUATELY CONTROL EXPOSURE

Prevent Exposure

The COSHH Regulations require exposure to substances hazardous to health to be prevented if it is reasonably practicable to do so.

This may be achieved by:

- Changing the process or activity so that the hazardous substance is not needed or generated;
- Replace it with a safer alternative;
- Use it in a safe form.

Adequately Control Exposure

If prevention is not reasonably practicable, exposure must be adequately controlled.

Consideration must be given to put in place measures appropriate to the activity and consistent with the risk assessment including in order of priority, one or more of the following:

- Use appropriate work processes, systems and engineering controls, and provide suitable work equipment and materials eg. use processes which minimise the amount of material used or produced or equipment which totally encloses the process;
- Control exposure at source (eg. local exhaust ventilation), and reduce the number of employees exposed to a minimum, the level and duration of their exposure, and the quantity of hazardous substances used or produced in the workplace;
- Provide personal protective equipment (eg face masks, respirators, protective clothing), but only as a last resort and never as a replacement for other control measures which are required.

Meaning of “Adequate Control”

Under COSHH, adequate control of exposure to a substance hazardous to health means:

- Applying the eight principles of good practice set out in Schedule 2A to COSHH;
- Not exceeding the workplace exposure limits (WEL) for the substance (if there is one);
- If the substance causes cancer, heritable genetic damage or asthma, reducing exposure to as low as is reasonably practicable.
Adequate Control of Carcinogens, Mutagens and Asthamagens

COSHH acknowledged the particular hazards of substances which cause cancer, heritable genetic damage or asthma by requiring that exposure to these is reduced to as low as is reasonably practicable.

For carcinogens (substances which cause cancer) or mutagens (substances which may cause heritable genetic damage) special requirements apply. These are contained in regulation 7(5) of COSHH and explained in APPENDIX 1 of COSHH Approved Code of Practice (ACOP).

SKIN ABSORPTION

Some substances can damage skin itself while others can readily penetrate it, become absorbed into the body and cause harm. It is therefore essential to consider the need to protect skin when deciding on control measures.
STEP 4

ENSURE THAT CONTROL MEASURES ARE USED AND MAINTAINED

Using the Controls

COSHH requires employees to make proper use of control measures and to report defects. It is the employer’s responsibility to take all reasonable steps to ensure that they do so. This is the reason that it is essential that employees are given suitable training, information and appropriate supervision.

Maintain Controls

COSHH places specific duties on the employer to ensure that exposure control are maintained. The objective being to ensure that every element of the control measure continues to perform as originally intended.

This applies to items of equipment such as local exhaust ventilation equipment and to systems of work, which will have to be regularly checked to make sure that they are still effective.

Respiratory protective equipment should also be examined and, where appropriate, tested at suitable intervals.

COSHH sets specific intervals between examinations for local exhaust ventilation equipment and records of examinations and tests carried out must be retained for at least 5 years.
STEP 5

MONITOR EXPOSURE

Under COSHH, it is necessary to measure the concentration of hazardous substances in the air breathed in by workers where the assessment concludes that:

- There could be serious risks to health if control measures failed or deteriorated;
- Exposure limits might be exceeded; or;
- Control measures might not be working properly.

Air monitoring must be carried out when employees are exposed to certain substances, and processes specified in Schedule 5 to the COSHH Regulations.

Where it is appropriate to carry out personal air monitoring, the air to be sampled is the space around the worker’s face from where the breath is taken.

Records of any exposure monitoring carried out must be kept for at least 5 years.

Where an employee has a health record (required where they are under health surveillance) any monitoring results relevant to them as an individual must be kept with their health record. They should be allowed access to their personal monitoring record.
STEP 6

CARRY OUT APPROPRIATE HEALTH SURVEILLANCE

COSHH requires employers to carry out health surveillance in the following circumstances:

- Where an employee is exposed to one of the substances listed in Schedule 6 to COSHH and is working in one of the related processes, eg. manufacture of certain compounds of benzene, and there is a reasonable likelihood that an identifiable disease or adverse health effect will result from that exposure.

- Where employees are exposed to a substance linked to a particular disease or adverse health effect and there is a reasonable likelihood, under the conditions of the work, of that disease or effect occurring and it is possible to detect the disease or health effect.

Health surveillance might involve examination by a doctor or trained nurse. In some cases trained supervisors could for example, check employees’ skin for dermatitis or ask questions about breathing difficulties where work involves substances known to cause asthma.

A health record of any health surveillance carried out must be retained.

COSHH requires by law that health records are kept for at least 40 years.
STEP 7

PREPARE PLANS AND PROCEDURES TO DEAL WITH ACCIDENTS, INCIDENTS AND EMERGENCIES

This will apply where work activity gives rise to a risk of an accident, incident or emergency involving exposure to a hazardous substance, which goes well beyond the risks associated with during normal day to day work.

In such circumstances, the employer must plan a response to an emergency involving hazardous substances before it happens.

This will involve preparing procedures and setting up warning and communication systems to enable an appropriate response immediately any incident occurs, and ensuring that information on emergency arrangements is available to those who need to see it, including the emergency services. It also requires these “safety drills" to be practised at regular intervals.

If any accident, incident or emergency occurs, it is Lews Castle College’s responsibility to ensure that immediate steps are taken to minimise the harmful effects, restore the situation to normal and inform staff and students who may be affected. Only those staff necessary to deal with the incident may remain in the area and they must be provided with appropriate safety equipment.

Emergency procedures need not be introduced if:

- The quantities of substances hazardous to health present in the workplace are such that they present only a slight risk to staff and students health;

- The measures that have been put in place under STEP 3 are sufficient to control that risk.
STEP 8

ENSURE THAT EMPLOYEES ARE PROPERLY INFORMED, TRAINED AND SUPERVISED

COSHH requires that employers provide staff and students with suitable and sufficient information, instruction and training which should include:

- The names of the substances they work with or could be exposed to and the risks created by such exposure, and access to any safety data sheets that apply to those substances;
- The main findings of all risk assessments;
- The precautions they should take to protect themselves and other employees;
- How to use personal protective equipment and clothing provided;
- Results of any exposure monitoring and health surveillance (without providing employees’ names);
- The emergency procedures which need to be followed.

It is essential to update and adapt the information, instruction and training to take account of significant changes in the type of work carried out or work methods used.

Information must be provided that is appropriate to the level of risk identified by the assessment and in a manner and form in which it will be understood by staff and students.

These requirements are vital. Lews Castle College must ensure that staff and students understand the risks from hazardous substances they could be exposed to. Control measures will not be fully effective if staff and students do not know their purposes, how to use them properly or the importance of reporting faults.
LOCAL EXHAUST VENTILATION

Under the COSHH Regulations, employers are required to perform the following tasks.

- Ensure that control measures, such as LEV, are maintained in efficient working order by undergoing regular examination and testing. Unless specifically stated in the COSHH Regulations, this examination and testing should occur at least every 14 months. However, more frequent testing may be required eg where the consequences of a system failure are serious. With systems used to control asbestos – containing dust, these tests should be carried out more frequently (ie. at least once every 6 months). COSHH requires more frequent testing for some specific processes.

- Consider testing requirements of LEV systems during the assessment of risks, and specify an appropriate testing interval.

- Keep examination and test records, including details of any repairs carried out to an LEV as a result of this work, for at least 5 years.

**NOTE:** Test records and work details will be held by the Health and Safety Adviser.

The Management of Health and Safety at Work Regulations 1999 require employers to make appropriate arrangements for the effective planning, organisation, control, monitoring and review of preventative and protective measures. These requirements are applicable to LEV systems.