

Health and Safety Department

# Chemical Safety Policy

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## 1. Overview

### 1.1 Purpose

Effective chemical management requires consideration of the safe, responsible, sustainable and economical use of substances throughout the chemical lifecycle – from procurement, storage, use, transport and through to disposal. All aspects of hazardous chemical use are governed by a comprehensive set of legislation to ensure the risks posed by substances which may be harmful to health or to the environment are suitably controlled.

### 1.2 Scope

This policy provides a framework for Schools and Services to develop and implement their own chemical management programs to fulfil their statutory duties and ensure the health and safety of staff and students using hazardous chemicals.

The policy applies to:

- All staff, students (both postgraduate and undergraduate) and personnel (e.g. contractors and visitors) at workplaces under the control of Loughborough University.
- All chemical substances classified as hazardous under the EC regulation 1272/2008 Classification, labelling and packaging of substances and mixtures.
- Substances classified as hazardous under the Dangerous Goods List outlined in Annexe A, Part 3 of the European Agreement concerning International Carriage of Dangerous Goods by Road (ADR).
- Hazardous substances as outlined in the Control of Substances Hazardous to Health Regulations (COSHH) 2002 and the Dangerous Substances and Explosives Atmospheres Regulations (DSEAR) 2002.
- Substances used in or generated as a result of work activities that are hazardous to health.
- Substances that due to their chemical properties or the way in which they are used or present in the workplace pose a risk of injury, fire or explosion.
- Regulated substances – substances whose manufacture, possession and use of governed by additional specific legislative controls.

Separate policies for Asbestos, Radiation and Biological safety are available from the UH&HS website.

## 2. Key Legislative Requirements

### 2.1 Control of Substances Hazardous to Health Regulations (COSHH) 2002

### 2.2 Other Key Legislation

- Dangerous Substances and Explosive Atmospheres Regulations (DSEAR) 2002
- Classification Labelling and Packaging (CLP) regulation (EC No 1272/2008)
- Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations 2009
- Chemical Weapons Convention (CWC) 1997
- Precursor of Chemical Licensing (EC Regulation No 273/2004)
- Misuse of Drugs Act 1971
- Explosive Regulations 2014
- Use of Controlled Substances (Ozone Depleting) (EC Regulation 1005/2009)
- Environmental Damage (Prevention and Remediation)(England) Regs 2015
- Environmental Protection Act 1990

## 3. Duty Holders

### 3.1 Deans of Schools/Heads of Professional Services

Deans of Schools/Heads of Professional Services shall:

- Ensure that systems are in place to control the purchasing or acquisition of substances hazardous to health. An inventory of Hazardous chemicals should be kept within the School/Service for this purpose.
- Ensure that systems are in place to comply with this policy.
- Ensure that adequate resources are made available to implement this policy. In particular:
  - o Allocate sufficient resources to install and maintain effective control measures in accordance with statutory requirements
  - o Provide training for staff to comply with this policy
- Seek confirmation from School/Service staff that arrangements are still effective
- Appoint responsible person to manage any dedicated central chemical stores (if applicable)
- Ensure training and competencies for all relevant staff and student
- Ensure safe disposal of all hazardous chemicals and material

### 3.2 School/Department Safety Officers

SSO's/DSO's shall monitor the effectiveness of any control measures and make recommendations to the Dean of School/Head of Service as necessary. In particular:

- Monitor that all hazardous chemicals are introduced into the School/Service in accordance with local procedures and that an inventory of hazardous chemicals is maintained
- Assist in training of all staff, students and assessors.
- Audit risk/COSHH assessment documentation to verify that suitable and sufficient assessment are in place and up to date.
- Suitable personal protective equipment (PPE) is provided where appropriate and is maintained to a good order. Reusable items are regularly examined for faults, damage, wear and tear.
- Ensure that LEV equipment is used appropriately, that members of staff are trained in their safe use and that problems with LEV performance are promptly reported to the Facility Management Department. LEV found to be operating below the standard appropriate for the type of use it is being put to, are to be taken out of use pending repair.
- Verify that plant, equipment and engineering controls are maintained in accordance with the agreed schedule
- Liaise with COSHH assessors to verify that suitable working practices have been adopted.
- Ensure equipment, work areas are decontaminated and appropriate clearance permits are completed prior to decommissioning and transferring to alternative locations (see University Chemical Safety Officer for advice)
- Liaise with occupational health service to arrange health surveillance as required.
- Report accidents or near misses involving exposure to substances hazardous to health to the UH&SS and the University Chemical Safety Officer

### 3.3 Line Managers/Academic Supervisors

Staff who are responsible for managing the activities carried out by students, staff or volunteers are considered as laboratory or academic supervisors. As such they have a duty to ensure the health and safety of the students/staff they supervise and have particular responsibilities where their students/staff handle Hazardous chemicals.

Line managers are responsible for the health and safety of the staff/students they manage and others who may be affected by their work.

Line Managers/Academic Supervisors will ensure:

- The risks posed by the use and handling of hazardous chemicals are assessed before starting to work with these substances and that action is taken to prevent or control exposure so far as reasonably practicable
- Personnel they manage/supervise are competent to work with Hazardous chemicals and have been provided with sufficient information and training on the risk posed by the substances they use and the control measures in place
- Measures are employed to ensure that Workplace Exposure Limits (where applicable) are not exceeded – Seek advice from DSO/SSO
- Equipment is used correctly and maintained in an efficient state and good working order.
- Risk assessments are reviewed and updated regularly, when significant changes occur or following an incident.
- Ensure using the hierarchy of control to facilitate the risk assessment process.
- Ensure equipment and work areas they are responsible for are decontaminated

- Ensure that on completion of a project or when staff/students they manage leave the School/Service all Hazardous chemicals they are responsible for are either disposed of appropriately using University Hazardous Waste procedures or responsibility is transferred to another responsible person. Transfer must be documented and items identified to prevent 'abandoned, unknown' chemicals.

Information must be given to DSO/SSO

### 3.4 COSHH assessors

COSHH assessors shall

- Carry out suitable and sufficient COSHH/risk assessments prior to using Hazardous chemicals.
  - Follow the local procurement/acquisition procedure within their School/Service
  - Identify suitable control measures and monitor ongoing compliance with the control measures
  - Liaise with their DSO/SSO to ascertain whether workplace monitoring is necessary and if so, carried out accordingly.
  - Report deficiencies or problems with PPE and LEV to DSO/SSO as necessary.
- COSHH assessor must have adequate and appropriate training to ensure they can appropriately risk assess prior to working with hazardous substances.

### 3.5 University Health & Safety Service

The University Health and Safety Service (UH&SS) shall:

- Produce, and as often as necessary, review the Chemical Safety Policy and associated guidance documents
- Monitor compliance with this policy
- On request provide information and guidance to staff/students on workplace exposure to Hazardous chemicals
- Support Deans/Heads of Professional Services in their duty to provide sufficient training to comply with this policy.
- Arrange monitoring for Hazardous chemicals where appropriate
- Attend University Chemical Safety Committee and escalated reports to the University Health, Safety and Environment Committee as necessary

### 3.6 Environmental Manager

Arrange for disposal of Hazardous chemicals/chemicals through a central facility. For further information see the Management of Chemicals guidance document and the Hazardous Waste Disposal Procedure or call the University Environmental Manager on 228083.

### 3.7 Occupational Health Service

The Occupational Health Service shall carry out health surveillance where this is required by risk assessment, or in accordance with schedule 6 of COSHH.

Occupational Health will give advice on health surveillance requirements.

### 3.8 Facilities Services

Facilities Services shall:

- Identify and compile a register of items of plant, equipment and engineering control that have been installed following a COSHH risk assessment whenever this apparatus forms part of the University estate.
- Ensure that items on the register are thoroughly inspected and tested at a frequency not less than stipulated in the relevant legislation (14 months unless stated otherwise).
- Report the results of the inspection/testing to DSO/SSO and instigate remedial action where necessary.
- Support Schools/Services by providing technical advice on plant, equipment or engineering controls that is/shall be provided following a COSHH risk assessment.
- Keep records of inspection/testing for at least 5 years.

### 3.9 Employees and students

Employees and students shall:

- Attend training as requested by the SSO/DSO
- Ask for approval if Hazardous chemicals are to be brought into the School/Service other than by the School/Service own procurement procedures.
- Co-operate with the University to implement any control measures identified in the COSHH risk assessments
- Report any defects or deficiencies in these measures (e.g. problems with PPE, or concerns regarding the effectiveness of LEV's)
- Dispose of unwanted Hazardous chemicals in accordance with departmental arrangements

## 4. General Requirements and Guidance

### 4.1 Purchase and acquisition

The following requirements relate to both the purchase of chemical substances hazardous to health and situations where chemicals are brought into the University from other organisations.

Hazardous chemicals may only be procured and delivered through the University system by current members of staff and post graduate research students for use in legitimate university activities. Each School/Service must have a procedure in place to manage the authorisation, purchase, acquisition, recording and receipt of Hazardous chemicals in line with the relevant legislation.

Regulated substances may only be purchased by an authorised member of university staff, who must notify the SSO/DSO of their intention to acquire these substances and provide details of the substance and quantities required.

Staff purchasing regulated substances that require licences or registration must liaise with their SSO/DSO and the University Chemical Safety Officer to ensure the university has the correct licence and the appropriate authorities are notified.

The University Chemical Safety Officer must be notified of the acquisition of all precursor chemicals, controlled drugs, chemicals outlined under the Chemical Weapons Convention and Class 1 explosive or Class 4 desensitised explosive substances for approval prior to use. If ordering on Agresso use code P\_LYJ.



When ordering nanomaterial on agrid, the code P\_LYI must be used.

Prior to acquiring new substances, line managers/academic supervisors must ensure that a suitable risk/COSHH assessment is completed according to the requirements outlined under the COSHH and DSEAR regulations.

When acquiring previously held substances, line manager/academic supervisors must ensure an up to date risk/COSHH assessment exists to cover the task for which the chemical is to be used for. Risk/COSHH assessments should be reviewed regularly and following any significant change.

Staff/student acquiring Hazardous chemicals should ensure the current Safety Data Sheet (SDS) is obtained from the supplier/manufacturer.

Staff should purchase the minimum quantities required for their work to avoid storing excess unused chemicals.

## 4.2 Purchase and acquisition

A chemical inventory should identify the nature, quantity and location of hazardous chemical holdings within the work place. This provides the baseline knowledge for identifying and understanding what risks are posed by the range of chemicals used.

The following information should be included in the inventory:

- Substance name
- CAS (Chemical Abstract System) number
- Supplier
- Date of acquisition
- Quantity held
- Location
- Person responsible
- Hazard classification
- Any special storage/disposal requirements e.g. shelf life, storage temperature and chemical incompatibility.

Inventories of regulated substances must be formally audited by the School/Service at least annually to ensure they reflect current chemical stocks. Audits must be documented and the results kept for 3 years.

## 4.3 Labelling

Chemicals purchased from 1st June 2015 must conform to the Classification Labelling and Packaging (CLP) regulation (EC) No 1272/2008. Chemicals obtained prior to this may conform to both CLP regulations and the Chemicals (Hazard Information Packaging for Supply) Regulations 2009.

Staff and students must ensure all labels are intact and can be read clearly. Labels should provide information about the contents – chemical name, supplier, hazards and precautions for safe use.

On receipt, containers must be labelled either with the date acquired, the name of the purchaser and any expiry date (where this is applicable) or in a manner that enables the container to be traceable through a local chemical inventory. Once the chemical/substance has been opened, it should have an open date on as well.

Containers into which a chemical has been decanted must be clearly labelled with the contents, date, user name and an appropriate hazard warning. Labels must be durable.

#### 4.4 Storage

Deans/Heads of Professional Services must appoint a responsible person to manage any dedicated central chemical stores; the individual must have an understanding of the hazards present and be provided with adequate information, training and instruction to competently manage the facility.

This responsible person:

- Ensure that all hazardous chemical storage for which they are responsible, is assessed with regards the risks posed by the hazards presents, the physical and chemical properties and the quantities of the substances stored. The assessment should consider the type of storage that is required, the impact should a fire occur and whether the location presents any increased risk to the health and safety of persons working within or near to the facility.
- The risk/COSHH assessment informs the development of a risk control strategy to ensure the store area is fit for purpose, provides suitable segregation of incompatible chemicals, is adequately ventilated, and has suitable proximity to fire detection systems and fire-fighting equipment and that appropriate access restrictions are in place.

Specific storage arrangements for substances which are potentially unstable or may degrade during prolonged storage are identified and put in place. This must include establishing designated shelf lives for these substances, ensuring a robust system for stock control and a suitable, documented inspection regime is in place.

It is recommended that the maximum quantities that may be stored in such cabinets and bins are no more than 50 litres for extremely, highly flammable and those flammable liquids with a flashpoint below the maximum ambient temperature of the workroom/working area; and no more than 250 litres for other flammable liquids with a higher flashpoint of up to 55°C. – With any greater quantities requiring a specific risk assessment and would need approving via the UH&SS.

See Chemical Storage Guidance on the UH&SS website for more information.

#### 4.5 Transport and transfer of Hazardous chemicals to other organisations

Any transfer of hazardous chemicals to another organisation must be recorded and the local chemical inventory updated accordingly. Chemicals must be classified, labelled and packaged according to the Classification, Labelling and Packaging (CLP) regulations and a safety data sheet.

Staff and students need to be aware of the requirements of Carriage of Dangerous Goods and use of Transportable Pressure Equipment Regulations 2009 and how that applies to their activities. Speak to the UH&SS for more information.

The transfer of novel research chemicals and mixtures to another research organisation may be subject to additional requirements under CLP. These include:

- Compilation of relevant hazard information
- Evaluation of hazard information relating to the substance
- Review of information against CLP chemical hazard criteria
- Self-classification of any chemical hazards
- Notification to European Chemical Agency Classifications and Labelling Inventory.

Staff or students wishing to transfer novel research chemicals to another organisation must arrange a formal Materials Transfer Agreement (contact Research Office for further details).

#### 4.6 Disposal and Decontamination

It is important for Schools/Services to consider the waste disposal route before purchasing or using chemicals for the first time. A suitable waste disposal route must be identified. Please refer to the Hazardous Waste Disposal Procedure and guidance on the LU Sustainability website or speak to the Environment Manager for further advice.

COSHH risk assessments must provide information relating to appropriate decontamination procedures.

All equipment which has been used in conjunction with hazardous chemicals must be decontaminated and assessed for any residual risk posed by the chemical hazards before it is released for maintenance, repair or disposal. Please speak to the University Chemical Safety Officer for clearance certificates.

Extraction clearance certificates must be approved and issued by UH&SS.

#### 4.7 Emergency Arrangements

In the event of a serious incident, arrangements must be in place to make hazard information readily available to individuals (including security and external emergency services) attending the incident to enable the appropriate action to be taken.

The fire information packs within the red boxes near entrances must be reviewed regularly and changes escalated to the Fire Safety Officer.

Where there is serious risk to health, immediate steps should be taken to mitigate the effects, provide information to those who may be affected and restore the situation to normal.

Emergency procedures and arrangements should have been identified by the risk assessments; this should consider what to do in the event of fire, first aid and spills/unintended release of a hazardous substance.

Appropriate spill kits must be made available in areas where hazardous substances/chemicals are used and ensure staff are instructed on their correct use and are aware of local arrangements for responding to spills. Please refer to the Spill Response Procedures available from the LU Sustainability website.

#### 4.8 Training, instruction and supervision

All staff and students must have suitable instruction and training to enable them to work with Hazardous chemicals safety. Instruction should include:

- Information on the substances used
- Risk to health presented by the use of those substances
- Relevant workplace exposure limits
- Relevant safety data information
- COSHH/Risk assessment training
- DSEAR training (if applicable)
- Precautions to take to prevent or reduce exposure
- Correction operation and use of equipment and control measures
- Correct disposal route
- Emergency procedures and spill response

An appropriate level of supervision should be determined by risk assessment. Everyone working with chemicals/hazardous substances should be able to demonstrate they are competent to use them safely.

Training needs must be reviewed on a regular basis or when there are significant changes to work involving hazardous chemicals.

Staff providing instruction and training should be sufficiently skilled and competent to do so to a standard necessary to ensure Health and Safety of the individuals they are instructing. HSE defines competence as a suitable combination of training, skills, sector experience and knowledge of the working environment, the techniques, equipment and substances used and the hazards they pose.

## 5. Specific Requirements

### 5.1 Disposal and Decontamination

Schools/Services must ensure arrangements are in place to comply with COSHH 2002. The risks to health of staff and students from activities involving Hazardous chemicals must be assessed. The COSHH/risk assessment should reflect:

- The hazard classification of the substance
- Information on health effects provided by the supplier, including information contained in any relevant safety data sheet
- Whether the substance poses a risk to health of new or expectant mothers.
- The type and duration of exposure
- The activity to be carried out, including the amounts to be used and individuals at risk of exposure.
- Additional activities, such as preventative maintenance, where there is the potential for a high level of exposure.
- Any relevant occupational exposure standard, workplace exposure limit or similar occupational exposure limit.
- Whether the substance can be eliminated or be substituted with less hazardous alternative or form
- Details of the control measures necessary to prevent or adequately control exposure.
- Identify suitable arrangements for storage and disposal and any related precautions that should be followed to ensure safe management of the substances.
- Identify whether there is a need to carry out workplace monitoring, this may be to demonstrate compliance with Workplace Exposure Limits or where the effectiveness of control measures is uncertain.
- Identify whether there is a residual risk to health once all other control measures have been implemented that may require staff to undergo health surveillance. This would normally be required where there exposure to particular substances is known to cause an identifiable adverse health effect.

COSHH assessments must be reviewed regularly, following any significant change, incident or where the results of any relevant exposure monitoring indicate that existing control measures are not effective.

Suitable measures must be implemented to prevent exposure to substances hazardous to health or where this is not reasonably practicable, ensure exposure is adequately controlled.

Schools/Services must ensure any engineered control measures (e.g. LEV) are in efficient state, good repair and are within any applicable examination and testing period before use. PPE issued to staff/students must be suitable for the purpose intended, fits correctly, is stored properly and is regularly checked.

Please see COSHH guidance document on UH&SS website for further information.

## 5.2 Carcinogen, Mutagens, Teratogens and substances toxic to reproduction

Schools/services must ensure arrangements are in place to maintain an inventory of all category 1 carcinogens and mutagens held. Records for those individuals working with category 1 carcinogens and mutagens must be taken and kept for 40 years. These records should include:

- The name of the carcinogen/mutagen used.
- Title of the procedure project.
- Name of the PI/authorised users.
- Dates that users started and finished work with the substance.

Schools/service must identify activities which involve the use of any substance identified as:

- Category 1A, 1B or 2 carcinogen under Classification, Labelling and Packaging of Substances and Mixtures (EC) No 1 2722008 (CLP/GHS)
- Listed in schedule 1 COSHH regulations 2002
- Category 1A, 1B or 2 mutagen (as classified under CLP/GHS)

**New and expectant mothers** may be particularly vulnerable to the effects of carcinogens and advised to inform their line manager/supervisor of the pregnancy as soon as is possible. It is the responsibility of line managers/supervisors to review work activities with the individual, to ensure further risk assessments are carried out, and any additional control measures are identified and implemented.

**Young Persons (under 18 years) must not** handle known carcinogens, mutagens or substances toxic to reproduction.

The following substances are prohibited under the COSHH regulations: import, manufacture and use of 2-naphthylamine, benzidine, 4-aminodiphenyl and their salts and any substance containing any of these compounds in a total concentration equal to or greater than 0.1% by mass.

Please see Carcinogen/Mutagen guidance document on UH&SS for further information.

## 5.3 Dangerous Substances and Explosive Atmospheres Regulations 2002 (DSEAR)

School/Service managed facilities (e.g. school chemical stores, laboratories, waste areas of workshops) must comply with the Dangerous Substance and Explosive Atmosphere Regulations (2002) (See policy on UH&S website). Additional guidance on how to store chemicals can be found in the Chemical Storage guidance document on the UH&S website.

## 6. Regulated Substances

Please see Regulated Substances Guidance from UH&SS website for further information.

### 6.1 Chemical Weapons Convention (CWC) 1997

Chemicals listed in schedules 1 to 3 of the Chemical Weapons Convention are subject to verification by the CWC UK National Authority. Anyone who either produces, uses, processes, imports or exports substances listed within the schedules is subject to certain legal requirements.

Schools/Services must ensure procedures are in place to identify activities that involve the use of scheduled substances. Where substances listed within Schedule 1, CWC are identified, the appropriate licence for use must be held and a copy of the license is forwarded to the University Chemical Safety Officer.

When ordering these chemicals the agresso code P\_LYJ must be used. This will ensure that the Chemical Safety Officer can approve the order prior to purchase.

Schools/services must record their annual use of schedule 1, 2 and 3 substances as required by the CWC. The Chemical Safety Officer will collate and report annual declaration on behalf of Loughborough University to the CWC UK National Authority.

### 6.2 Precursor Chemical Licensing

Procedures must be in place to identify activities which involve the use of category 1 or 2 precursor chemicals as outlined in EC regulation number 273/2004 and obtain a relevant licence for category 1 precursors, application to the Home Office prior to work with those substances commencing. Therefore before work can begin with these chemicals the chemical safety officer must be authorised to ensure the University has the correct licence.

Schools/Services must ensure procedures are in place to collate and submit an annual return of all category 1 and 2 precursor chemicals used to the chemical safety officer. Staff/School Safety Officers purchasing category 1 and 2 precursors must complete a 'Declaration of Specific uses form' prior to purchase; these forms should be available from the relevant supplier.

When ordering these chemicals the Agresso code P\_LYJ must be used.

Records must be maintained for all category 1 and 2 precursor chemicals they hold, records should include:

- Supplier
- Date of purchase
- Person responsible
- Amount
- Date of disposal
- Amounts disposed

Losses or theft of category 1 and 2 chemicals must be reported to the Dean of School/Head of Professional Service, University Security Services and University Chemical Safety Officer immediately.

University Chemical Safety Officer will compile annual return of category 1 and 2 precursor chemical use on behalf at Loughborough University to the Home Office.

### 6.3 Use of controlled drugs for research and activities

Schools/service must ensure measures are in place to identify activities which require the use of controlled drugs as detailed in Schedule 2 of the Misuse of Drugs Act 1971 and in Schedules 1 to 5 of the Misuse of Drugs Regulations 2001. Use of controlled drugs must be authorised by the University Chemical Safety Officer to ensure the appropriate licence is obtained for this work.

### 6.4 Explosive Substances

The use or storage of UN class I explosives (UN numbers 0001 to UN0600) or any desensitised explosive (subject to exemptions outlined in Schedule 2 of the Explosives Regulations 2014) must be authorised by the Chemical Safety Officer/Fire Safety Officer. Explosives certificates and storage licences would be required.

### 6.5 Laboratory use of Ozone Depleting Substances

The use of controlled substances under regulation (EC) 1005/2009 Substances that deplete the ozone layer is subject to restrictions and registration with the European Commission's Ozone Depleting Substances (ODS) database. Substances outlined in the Annexe 1 of the regulation may be used for essential laboratory or analytical purposes when no alternative is available.

Staff wishing to use an ODS substance must ensure the proposed use is permitted under the regulation and arrange registration with the ODS database through the University Chemical Safety Officer prior to purchase.

### 6.6 Mercury

Mercury vapour, and most compounds of mercury, are toxic to the human nervous system and act as cumulative poisons. Exposure to mercury vapours can occur when mercury containing products (such as thermometers, sphygmomanometers and fluorescent lamps) are broken. Whilst spills such as that from a broken thermometer do not pose a high risk, the area of the spill should be cordoned off and the spill cleaned up immediately to prevent spread and secondary exposures. Mercury vapours are heavier than air and may linger in higher concentrations at the site of the spill.

**Mercury should only be used if a suitable alternative is not available. Please speak to UH&SS for further advice. Alcohol thermometers must be used in preference to mercury thermometers.**



If mercury must be used, the following precautions should be observed:

- Keep mercury surfaces covered to prevent evaporation.
- Ensure good ventilation of the working area.
- Carry out manipulations of mercury over a tray which will contain spills. The surface of the tray should be smooth and impervious.
- Clean up spilled mercury, at once.
- If a mercury hazard is suspected, arrange with the School Safety Officer for airborne concentrations of mercury vapour to be measured.

## 7. Technical References And Further Reading

### **UH&SS guidance documents**

<http://www.lboro.ac.uk/services/health-safety/policies/guidance/>

Chemical Storage  
COSHH guidance  
Procurement of Hazardous Material  
Cryogenic gas guidance  
Nano material guidance  
Carcinogens, Mutagens and Teratogens Guidance  
Chemical weapons/Drug precursor guidance  
Non laboratory user guide to Chemicals  
COSHH/Risk assessment short user guide

### **Sustainability – Waste (Resource) Management**

<http://www.lboro.ac.uk/services/sustainability/policy/waste/>

Management of Chemicals, Reagents and Solvents  
Hazardous waste disposal procedures  
Emergency spill response

### **Legislation**

Control of Substances Hazardous to Health 2002  
Dangerous Substances and Explosive Atmospheres Regulations (DSEAR) 2002  
Classification Labelling and Packaging (CLP) regulation (EC No 1272/2008)  
Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations 2009  
Chemical Weapons Convention (CWC) 1997  
Precursor of Chemical Licensing (EC Regulation No 273/2004)  
Misuse of Drugs Act 1971  
Explosive Regulations 2014  
Use of Controlled Substances (Ozone Depleting) (EC Regulation 1005/2009)  
Environmental Damage (Prevention and Remediation)(England) Regs 2015  
Environmental Protection Act 1990

## Appendix 1 – Key areas covered in COSHH

The regulations (SI 2002/2677) are cited as the Control of Substances Hazardous to Health Regulations 2002 and came into force on 21 November 2002.

The key areas covered in COSHH are listed in the table below.

<b>Regulation</b>	<b>Duty</b>	<b>Comment</b>
6	Duty to <b>assess the risk</b> to health arising from work involving substances hazardous to health	This is the fundamental requirement of COSHH. The assessment must be carried out <b>prior</b> to work commencing
7	Prevention or control of exposure	An assessment should always aim in the first instance to eliminate exposure to hazardous substances but if this is not possible the assessment should address the precautions necessary to prevent harm.
8	Use of control measures	Once control measures have been identified the employer has to ensure that the control measures are used and maintained properly and that safety procedures are followed.
9	Maintenance, examination and testing of control measures	See above
10	Monitoring exposure at the workplace	It is necessary to monitor exposure if the assessment indicates: <ul style="list-style-type: none"> <li>• There could be serious risk to health if a control measure fails</li> <li>• An exposure limit could be exceeded</li> <li>• Control measures may not be working properly</li> </ul>
11	Health surveillance	It is necessary to carry out health surveillance where the assessment shows it is necessary or where COSHH sets specific requirements
12	Information, instruction and training for person who may be exposed to substances hazardous to health	Information must be provided which explains the findings of the risk assessment and informs employees of the precautions that they must take to prevent harm to themselves or others. Information must be up to date and delivered in a manner that is understandable to the target audience
13	Arrangements to deal with accidents, incidents and emergencies	If an accident or incident involving a hazardous substance carries a risk of exposing anyone to harm that exceeds that associated with normal day to day work then the employer has a duty to make arrangements to restore the situation to normal. An example could be failure of a LEV that would necessitate the emergency evacuation and ventilation of a laboratory.