

<b>Hazardous Substances (COSHH) Procedure</b>	
<b>Enabling Policy Statement; Executive Owner; Approval Route:</b>	Our Safety - Chief Operating Officer - Compliance Committee
<b>Is the Procedure for internal use only (Non-disclosable)?</b>	Disclosable
<b>Associated Policy Statements:</b>	N/A
<b>Authorised Owner:</b>	Director of Health and Safety
<b>Authorised Co-ordinator:</b>	Health and Safety Officer (Hazardous Materials)
<b>Effective date:</b>	27 November 2023
<b>Due date for full review:</b>	26 November 2026
<b>Sub documentation:</b>	<ul style="list-style-type: none"> <li>- <a href="#">Use of Hazardous Substances Guidance</a></li> <li>- Hazardous Substances Risk Assessment Template (COSHH)</li> <li>- <a href="#">Guidance on the process of health surveillance</a></li> </ul>

### Approval History

<b>Version</b>	<b>Reason for review</b>	<b>Approval Route</b>	<b>Date</b>
1.0	Reviewed and updated (including in accordance with new Policy Framework 2022). Replaces Control of Hazardous Substances Policy (Version 2.1, dated November 2022).	Compliance (Health, Safety and Wellbeing) Committee	22 November 2023

## 1. Purpose

This Procedure defines the University's arrangements for the management of hazardous substances. The arrangements are based on the requirements of the Control of Substances Hazardous to Health (COSHH) Regulations 2002 (as amended) and accompanying Approved Code of Practice and guidance (L5), together with other legislative standards. It identifies how the University will identify and manage the risks arising from hazardous substances used in or created by workplace activities.

In recognition of these legal obligations and the potential adverse health effects to staff and others from exposure, the University will implement appropriate arrangements to ensure that no work activities are carried out without first considering the risks and necessary precautions, and any other action necessary to comply with the Regulations. This will be achieved by carrying out an assessment of the risks to health and implementing appropriate control measures to either prevent exposure, or where this is not reasonably practicable, adequately control.

## 2. Scope and Exceptions to the Procedure

This Procedure applies to all University of Surrey staff (including visiting academics), students, as well as contractors employed by the University who use or may be exposed to hazardous substances.

This Procedure applies to the use of hazardous substances on all University of Surrey sites as well as any University related off-site activities involving hazardous substances.

The COSHH Regulations only apply to substances which are hazardous to health. There may, therefore, be other hazards associated with properties of the substance (e.g., explosive, flammable, oxidising), which will also need to be considered and measures taken to control any risks, as required by the Dangerous Substances and Explosive Atmospheres Regulations (DSEAR) 2002.

This Procedure does not apply to lead and its compounds, for which there are specific requirements under the Control of Lead at Work Regulations 2002.

Furthermore, this Procedure does not apply to the management of asbestos, legionella or ionising radiation, for which there are distinct University Procedures.

## 3. Definitions and Terminology

**Hazardous substance** – the COSHH Regulations define the following as hazardous substances:

- (a) Chemicals or mixtures of chemicals listed in the Classification, Labelling and Packaging of Substances Regulations (the CLP Regulation), and for which an indication of danger is specified as serious long term health hazard, acute toxicity, harmful, corrosive, or irritant.
- (b) Substances that have been assigned a Workplace Exposure Limit (WEL). These are listed in the Health and Safety Executive (HSE) publication EH40.
- (c) A dust of any kind, if its average concentration in air exceeds the levels specified in the COSHH Regulations (i.e., >10mg/m<sup>3</sup> of inhalable dust, or 4mg/m<sup>3</sup> of respirable dust, time-weighted average exposures over an 8-hour period).
- (d) Biological agents which are directly connected with work (e.g., used in laboratories) or a work activity or process (e.g., Legionella bacteria from water aerosols). COSHH applies to incidental exposure as well as deliberate work with biological agents.
- (e) Any other substance hazardous to health, but which does not fall into the above categories.

This category includes:

- carcinogens and mutagens
- substances that cause occupational asthma

- asphyxiant gases and vapours
- pesticides
- products or by-products of chemical reactions.

**Workplace Exposure Limit (WELs)** – occupational exposure limits approved by the HSE. They are set to help protect workers' health. WELs are concentrations of hazardous substances in the air, averaged over a set period of time.

**Competent person** – an individual who has the skills, knowledge, attitude, training and experience to undertake the role effectively.

**Training and briefing** – Training is equipping staff, students (and others where the University has a duty of care) with relevant skills to deal appropriately with a given health and safety situation.

**Briefing** is informing such persons of relevant knowledge in relation to health and safety.

**Training and briefing** will be made available in a range of formats according to the needs of the trainee and different groups of staff, students and others.

## 4. Procedural Principles

### 4.1. Commitment

Compliance with the requirements of this Procedure will ensure:

- The University meets its obligations in respect of legislation.
- The safe management of hazardous substances.
- That exposure to hazardous substances is prevented, or, where this is not reasonably practicable, adequately controlled.
- Everyone is aware of their roles and responsibilities.
- The safety and health of staff and students whilst working with hazardous substances.
- The safety and health of others (including contractors, visitors, members of the public) is not compromised by those persons working with hazardous substances.
- That staff, students and others who work with hazardous substances are appropriately informed, instructed, and where necessary trained and supervised.

### 4.2. Arrangements

In order to meet the above objectives, the University will:

- Clearly define the organisational arrangements for achieving compliance (*see roles and responsibilities section of this Procedure*).
- Ensure resources are made available to achieve compliance.
- Ensure the availability of competent persons to provide necessary advice and assistance.
- Assess the risks to employees (and others likely to be affected by the work) from hazardous substances present or generated in the workplace (*see Risk assessment section of this Procedure*).
- Prevent, or adequately control, the exposure to hazardous substances of employees and others likely to be affected by the work (*see Control of exposure and control measures section of this Procedure*).
- Ensure that any control measures identified, including engineering controls and personal protective equipment (PPE) are properly used and maintained (*see Use and maintenance of control measures*).
- Ensure that procedures, where identified as a control measure, are appropriate and are being followed (*see Use and maintenance of control measures*).
- Ensure that appropriate records relating to the procurement, use and disposal of hazardous substances are retained, and adequately maintained.
- Ensure that hazardous substances are packaged, labelled, stored and transported

appropriately, in accordance with relevant Regulations.

- Ensure that there are appropriate emergency plans, equipment, personnel and procedures in place to deal effectively with foreseeable adverse incidents.
- Where required, monitor the exposure of employees to hazardous substances (*see Monitoring of exposure*).
- Where necessary, arrange for occupational health surveillance for employees (*see Health surveillance*).
- Ensure that employees are provided with information, instruction and training, so that they understand the potential effects of exposure to hazardous substances, and how to use the control measures provided (*see Information, instruction and training*).

#### 4.3. Risk Assessment

The purpose of the risk (COSHH) assessment is to identify how to prevent, or adequately control, employees' exposure to hazardous substances. The University's COSHH assessment form is designed to help with this assessment process.

It is preferable to adopt an activity-based approach to COSHH assessments, for all the substances to which employees (and others) may be exposed. The assessment should be completed by a competent person (i.e., someone familiar with the activity and who has completed the required COSHH Assessment training).

A COSHH assessment must be carried out before work involving the use of hazardous substances. Further guidance on points to consider as part of the assessment are included in the University's [Use of Hazardous Substances Guidance](#).

Note: While risk assessments for biological agents follow the same principles of COSHH, the assessment process uses a different template, the COBRA (Combined Biological Risk Assessment) form.

#### 4.4. Control of exposure and control measures

The Regulations set a hierarchy of control, which must be adhered to as follows:

- (a) Prevent exposure to hazardous substances where reasonably practicable, e.g.,
  - (i) Change the procedure so that hazardous substances are not required/not produced (e.g., use colophony-free solder to avoid the production of colophony fumes, which may cause asthma, from resin-cored solder);
  - (ii) Use a safer alternative substance (e.g., use Decon instead of chromic acid for cleaning glassware, where possible);
  - (iii) Use a safer form of the substance (e.g., use premixed acrylamide solutions instead of acrylamide powders, to avoid exposure to acrylamide dust).
- (b) If exposure cannot be prevented, it must be adequately controlled.
  - (i) The eight [principles of good practice](#) must be applied.
  - (ii) If there is a WEL for the substance used, then it must not be exceeded.
  - (iii) If the substance causes cancer, heritable genetic damage or asthma, then the exposure must be reduced to as low as reasonably practicable.
- (c) The [principles of good practice](#) define an order of priority for the choice of control measures where exposure cannot be prevented by the methods described in (a) above.
  - (i) Totally enclose the process (e.g., by using a glove box or Class 3 microbiological safety

- cabinet).
- (ii) Change the system of working, so as to minimise the number of people exposed, to limit their exposure time (e.g., by controlling access to areas of particular hazard), and to minimise the amount of hazardous substance used or produced.
  - (iii) Use partial enclosure with Local Exhaust Ventilation (LEV) (e.g., a fume cupboard or Class 1 or 2 microbiological safety cabinet); use LEV (e.g., dust extraction equipment on woodworking machinery, or tip extraction on soldering irons); ensure there is good general ventilation.
  - (iv) Provide safe handling, storage, transport and disposal of hazardous substances (e.g., use only the minimum quantity and use containment measures (e.g., double containers) where danger would arise from spillage in storage or transport.
  - (v) Provide adequate hygiene measures (e.g., provide facilities for laundering lab coats and other protective clothing; enforce the prohibition on eating or drinking in laboratories).
  - (vi) Use PPE only where adequate control cannot be achieved by other measures, and then use it only in addition to those measures (e.g., you must not provide dust respirators as an alternative to providing LEV).
  - (vii) Where respiratory protective equipment (RPE) is provided as a control measure, then face fit testing will be required.

#### 4.5. Use and maintenance of control measures

Control measures must be properly used to be effective. Schools/Departments/Directorates must have adequate supervision arrangements in place to ensure compliance. Employees also have a duty to use control measures properly and to report any defects (i.e., in equipment, PPE or working practices) to their supervisor/line manager. Control measures also need to be maintained to ensure they remain effective.

For example:

- (a) Users should check before use that there is an inward airflow to their LEV ensuring that any displays or indicators provided on the equipment are confirming proper operation. Where monitoring equipment (e.g., vane anemometer) is used to measure airflow, this must be maintained/calibrated in accordance with the manufacturer's instructions. Responsibility for ensuring this rests with the person who has day-to-day responsibility for the area/laboratory.
- (b) LEV must be maintained in accordance with the manufacturer's instructions.
- (c) LEV must be thoroughly examined and tested at least every 14 months<sup>1</sup> by a competent person. The examination and test should ensure that the equipment can meet its intended operating performance for controlling hazardous substances. Further guidance on the maintenance, examination and testing of LEV can be found here: [LEV Guidance \(HSE\)](#)
- (d) Where RPE (other than disposable RPE) is provided, then this must also be maintained, examined, and tested according to the manufacturer's recommendations.

#### 4.6. Monitoring of exposure

Where suitable techniques exist, monitoring of airborne containments may be required, for example:

- (a) where failure or deterioration of control measures may result in a serious health effect, either because of the toxicity of the substance or because of the extent of the potential exposure, or both;
- (b) where it is necessary to check that a WEL has not been exceeded;
- (c) as an additional check on the effectiveness of any control measure;
- (d) when any change occurs in the conditions affecting employees' exposure which could mean that adequate control of exposure is no longer being maintained, e.g., an increase in the

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<sup>1</sup> The University of Surrey currently examines and tests LEV every 12 months.

- quantity of a substance used or changing systems of work or introducing new equipment/plant;
- (e) where it is necessary to check the effectiveness of control measures (e.g., where a case of work-related disease has been diagnosed).

Where a Department/School/Directorate either establishes or considers there to be a potential need for monitoring, contact should be made with their Health and Safety Manager.

#### **4.7. Health surveillance**

Health surveillance is intended to protect individual employees by the early detection of work-related adverse health changes; to help evaluate the efficiency of control measures; and to evaluate hazards to health by collecting and analysing data.

Health surveillance will be required in the following circumstances:

- (i) where employees are exposed to a hazardous substance that is linked to an identifiable disease or adverse health effect; and
- (ii) where there is a reasonable likelihood that the disease or health effect may occur under the particular conditions of their work; and
- (iii) where there are valid techniques for detecting the disease or health effect.

#### **4.8. Information, instruction and training**

Managers must ensure that their staff (and others within their area of responsibility) working with hazardous substances are provided with the information contained in the COSHH assessments relating to their work. Where applicable, they must also be provided with information about the health surveillance process (purpose of health surveillance, their duty to attend, and arrangements for being informed of the results, and access to their health surveillance records).

Departments/Schools/Directorates must also provide information and training so that employees know:

- (a) when and how to use the control measures provided;
- (b) how to use PPE, and especially RPE, correctly (e.g., how to fit and remove gloves, and how long to use disposable gloves and masks, before they must be replaced);
- (c) how to clean and the storage arrangements for reusable PPE, including RPE;
- (d) how to act in an emergency involving hazardous substances (e.g., how to deal with spillages, or any first aid arrangements to be taken if there is personal exposure).

#### **4.9. Roles and responsibilities**

4.9.1. Heads of School/Department/Directorate (or other Senior Managers as administratively appropriate) have overall responsibility for:

- Ensuring that risks associated with hazardous substances are assessed and managed, within their area of responsibility.
- The provision of resources to enable compliance with this Procedure.
- The requirement for, and retention of, any licence/authorisation pertaining to the use and storage of 'controlled' or 'regulated' substances.
- The provision of appropriate information, instruction, and where necessary training and supervision to users of hazardous substances.
- Ensuring effective control measures are in place to prevent or adequately control exposure, including the implementation of appropriate safe systems of work.
- The provision of plans and processes to deal with accidents, incidents and emergencies.
- Ensuring security arrangements are in place to control unauthorised access to regulated substances/chemicals.
- Implementing effective arrangements where facilities are shared or where staff and students are working on premises managed by other employers.

Note: Where it may lie outside the level of responsibility to take appropriate action (which includes funding), the matter must be referred to the next level of management.

4.9.2. Managers/Supervisors/Laboratory Managers (within their area of responsibility) have a duty of care placed upon them to actively monitor the implementation of this Procedure. As persons directing the work, they have an essential role in ensuring that any work with hazardous substances is carried out safely and in accordance with all relevant legislation.

As such they are responsible for:

- Ensuring the risks presented by the use and handling of hazardous substances are assessed before starting work and that action is taken to either prevent exposure, or where this is not reasonably practicable, adequately control.
- Ensuring those they manage/supervise are competent to work with hazardous substances and have been provided with information instruction and, where necessary, training on the risks presented by their use and the use of the control measures.
- Ensuring the requirements of this Procedure and other local procedures are communicated to staff and others who may be directly or incidentally exposed.
- Implementing measures to ensure that Workplace Exposure Limits (where applicable) are not exceeded.
- Ensuring any control measure to protect health is used correctly and maintained in an efficient state and good working order, and when there is a failure or deterioration in that control measure that could result in a health effect, the work/activity is either stopped, or a suitable alternative protection measure implemented.
- Providing suitable PPE where appropriate, including implementing effective arrangements to ensure it is maintained (including replaced or cleaned as appropriate) in an efficient state, in efficient working order and in good repair.
- Initiating the provision of health surveillance, where the COSHH assessment identifies this to be necessary, and ensuring their staff (and others they are responsible for) attend any required appointments associated with health surveillance.
- Initiating the provision of workplace monitoring, where the COSHH assessment identifies this to be necessary.
- Informing their Health and Safety Manager where the risk (COSHH) assessment has indicated that there is a 'high' residual risk.
- Ensuring that a copy of the risk (COSHH) assessment is available to anyone who needs to refer to it.
- Ensuring that risk (COSHH) assessments are reviewed and updated at least every 3 years or sooner where there is:
  - a significant change, or
  - reason to suspect it is no longer valid, or
  - following any incident.
- Ensuring that equipment and work areas are maintained in a clean state and free from any contamination and, where necessary, effective procedures are implemented for decontamination.
- Ensuring that established waste procedures are followed.
- Ensuring that on completion of a project or when employees leave the Department/School/Directorate, all hazardous substances they are responsible for are either disposed of appropriately, or ownership is transferred to another responsible person.

4.9.3. Members of staff and students (including postgraduates and undergraduates) have a responsibility to:

- Undertake a suitable and sufficient risk (COSHH) assessment before working with hazardous substances, which must be approved by an appropriate Supervisor/Manager.

*Note: A risk (COSHH) assessment will be required following the introduction of new substances, a new process, or, for example changing the use or increasing the quantity of substances beyond that already assessed.*

- Work in accordance with control measures outlined in a risk (COSHH) assessment and other safe working practices for handling and use.
- Undertake any training deemed necessary by the University.
- Use and maintain work equipment in accordance with any information, instruction or training.
- Store, label, transport and use hazardous substances safely, and use them only for Department/School/Directorate approved activities.
- Leave work areas in a clean and uncontaminated state, decontaminating equipment and such areas to the required standard.
- Follow the required waste procedures for disposal.
- Use and maintain PPE in accordance with any information, instruction or training.
- Immediately report any accidents, near misses or health concerns that occur to their Supervisor/Manager and via the University incident reporting system.
- Report defects in equipment used (including PPE).
- Where requested, attend appointments associated with Health surveillance programmes.

Note: There are regulations to deal with the carriage (transport) of dangerous goods, the purpose of which is to protect everyone either directly involved (such as consignors or carriers), or who might become involved (such as members of the emergency services and public). Regulations place duties upon everyone involved in the carriage of dangerous goods, to ensure that they know what they must do to minimise the risk of incidents and guarantee an effective response. For further advice on transport, please contact your Faculty Health and Safety Manager or the University's Dangerous Goods Safety Adviser (DGSA).

4.9.4. Managers and supervisors of contractors are responsible for:

- Making contractors aware of this Procedure and any other factors that may affect the contractors' risk (COSHH) assessment.
- Ensuring that a risk (COSHH) assessment is completed by the contractor for works involving hazardous substances.
- Monitoring that any control measures identified in the risk (COSHH) assessment are being implemented.
- Advising contractors of any risks and risk controls necessary from any University activities occurring in the areas they are working.
- Ensuring that any required Permits to Work and/or Authorisation to Access are implemented and complied with.

4.9.5. Contractors will:

- Prior to work commencing, undertake a risk (COSHH) assessment for any use of hazardous substances.
- Implement any control measures, including emergency procedures established from the risk (COSHH) assessment.
- Ensure their staff are competent to work with hazardous substances by providing information, instruction, training and supervision.
- Provide any PPE identified to be necessary from the risk (COSHH) assessment.
- Arrange suitable monitoring and/or health surveillance, where the risk (COSHH) assessment establishes this to be necessary.

Note: Where contractors are not working with hazardous substances directly but are carrying out work in an area such substances are present (e.g. a laboratory), they must follow the instructions of any 'Permit to Work' or 'Authorisation to Access'.

4.9.6. The University Occupational Health Provider is responsible for:

- Organising and carrying out appropriate health surveillance programmes and providing associated information, as required.
- Ensuring that health surveillance records are confidentially maintained.

Note: Individuals who have developed health conditions will be referred to Occupational Health, assessed, and the University advised on the risks from further exposure.

4.9.7. Health and Safety Managers/Advisors are responsible for:

- Providing advice and assistance on the risk (COSHH) assessment process and the safe use of hazardous substances.
- The provision of training in relation to COSHH, including the ongoing monitoring of training uptake, and its effectiveness.
- Investigating any adverse incidents in relation to hazardous substances.
- Monitoring their Faculties/Directorates adherence to the requirements of this Procedure and local safe working practices.
- Remaining informed on updates in legislation and current best practice.

4.9.8. Director of Health and Safety is responsible for:

- The provision of advice and guidance on the application of the requirements of legislation and this Procedure.
- Monitoring compliance with the requirements of this Procedure through the health and safety audit programme.
- Investigating and reporting incidents under RIDDOR.

## 5. Governance Requirements

### 5.1. Implementation: Communication Plan

This Procedure will be available on the University procedures webpages.

Relevant Health & Safety Committees and EF/CS Committees will be notified, and information disseminated through the line management. Faculty Health and Safety Committees will also be informed, as required.

The Procedure and relevant supporting documentation is also published on the University Health and Safety Intranet site.

### 5.2. Implementation: Training Plan

Communicated through specific, relevant training – including inductions, training for those required to undertake COSHH assessments, and contractors 'Green Book' training.

### 5.3. Review

The Director of Health and Safety will monitor for required changes and updates. Minor changes will be reviewed by the Hazardous Substances Working Group and approved by Compliance (Health, Safety and Wellbeing) Committee. Major changes will also be reviewed by the Hazardous Substances Working Group, prior to submission to the Compliance (Health, Safety and Wellbeing) Committee for approval, and if required, noted at Executive Board.

This Procedure will be reviewed every three years or in line with relevant changes in legislation, if

sooner. The Health and Safety Consultative Committee will be consulted during the review process, as required.

#### 5.4. Legislative Context and Higher Education Sector Guidance or Requirements

##### 5.4.1. Applicable Legislation

This Procedure complies with the requirements of the Health and Safety at Work Act 1974, and the Control of Substances Hazardous to Health Regulations 2002 (as amended), including the accompanying Approved Code of Practice and Guidance (L5).

##### 5.4.2. Legislative context

This procedure sets out to comply with the required ‘duty of care’ placed upon the University. Under Health and Safety Law a ‘duty of care’ is generated between organisations and individuals when carrying out activities that could foreseeably cause harm.

The primary duty of care is owed through the employer-employee relationship in which the employer owes a duty of care to ensure that work activities that could result in harm to the employee are assessed and controlled. That duty of care is put into practice by the line management responsibilities as set out in the hierarchy of the organisation.

This duty of care cannot be delegated away; instead, the act of delegation must be accompanied by a realistic and workable system of monitoring or supervision to ensure that the delegated task has been adequately implemented (i.e., the responsibility is not met by giving directions; it is met when those directions have been confirmed as carried out). The result is a cascade of delegated accountability that runs through the organisation via the line management network, accompanied by a system of monitoring, supervision, and feedback.

The duty of care extends to assurance that services provided by others (be they another department of the University or contractors) are undertaken safely. The level of assurance required should be commensurate with the risk of the activity. In addition, anyone carrying out an activity owes a duty of care to anyone who may be put at risk by the activity, such as students, staff, and visitors.

#### 5.5. Sustainability

This Procedure and its associated processes will not significantly increase the use of energy and the emission of carbon. Similarly, waste management output is not expected to increase beyond the previous policy. Furthermore, it is not anticipated that this Procedure will increase consumable use significantly above that of the previous policy. Where possible, health and safety and Departments will work with sustainability to find sustainable solutions to existing energy and materials intense activities.

#### 6. Stakeholder Engagement and Equality Impact Assessment

- 6.1. An Equality Impact Assessment was completed on **07/11/2023** and is held by the Authorised Co-ordinator.
- 6.2. Stakeholder Consultation was completed, as follows:

Stakeholder	Nature of Engagement	Request EB Approval (Y/N)	Date	Name of Contact
Governance	Development and creation of this Procedure	N	03 July 2023	Andrea Langley, Regulatory Compliance

	v1.0.			Manager (OIA).
Members of the Compliance Management Group	Development and creation of this Procedure v1.0.	N	03 July 2023	Members of this Group.
Health and Safety Consultative Committee	Development and creation of this Procedure v1.0.	N	03 July 2023	Members of this Committee.
EF/CS Health and Safety Management Group	Development and creation of this Procedure v1.0.	N	03 July 2023	Members of this Management Group.
Hazardous Substances Working Group	Development and creation of this Procedure v1.0.	N	03 July 2023	Members of this Working Group.
Equality, Diversity and Inclusion	Development and creation of this Procedure v1.0.	N	03 July 2023	Jo McCarthy-Holland, Equality and Diversity Manager.
Sustainability	Development and creation of this Procedure v1.0.	N	03 July 2023	Members of the University Sustainability Team.
Heads of School/Department	Development and creation of this Procedure v1.0.	N	04 October 2023	Relevant Heads of School/Department.