

Chemical Safety Policy
Queen Mary University of London
Health and Safety Policy

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1.0 Executive Summary

- 1.1 This Health and Safety Policy establishes the framework for the effective risk assessment, health & safety risk controls and measures to be adopted and implemented for work with hazardous chemicals by Queen Mary staff, students; and others or the environment who/which may be affected by Queen Mary activities. The objective of the Policy is to control and reduce and where significant, eliminate the risks and to ensure compliance with the legislation governing work with hazardous chemicals.
- 1.2 The Policy defines the management of hazardous chemicals and safe working arrangements in the context of Queen Mary's activities. It identifies the roles and responsibilities for Heads / Managers / Supervisors of Schools / Institutes / Directorates conducting the work and for Queen Mary staff, students and others or the environment who/which may be affected by the work and notes the key legal and compliance requirements specified in the relevant health and safety legislation and supporting guidance. Specific notification requirements to the regulators are identified along with enabling Queen Mary procedures.
- 1.3 This version of the Policy has been issued following a structured gap analysis. A schedule of amendments made in this version is provided in Appendix 10.5.

2.0 Introduction

- 2.1 Queen Mary University of London (Queen Mary) has a longstanding history of teaching and research requiring the use hazardous chemicals. E.g. laboratory chemicals.

In addition, the development and maintenance of the University campus require the use of substances that also have the potential to cause harm, though their potential to do so may be less immediately obvious, e.g. cleaning products.
- 2.2 Such activities have an inherent risk of accidents where harm may occur through several routes.
 - Acute health effects e.g. corrosives and toxic materials.
 - Chronic health effects which can take years to develop. This contains obvious materials like carcinogens, and sensitisers. But in addition, some common materials can cause issues e.g. skin reactions to products like flour over a long period.
 - Through supporting or promoting fire. Includes oxidising agents like oxygen as well as flammable liquids which can cause rapid fire to spread.
 - Asphyxiants. Materials like liquid nitrogen can replace atmospheric oxygen in poorly ventilated spaces and lead to death.
 - Physical damage. This would include corrosives which can damage equipment and items such as drainpipes.
 - Explosions. Includes explosive gases if they leak into a poorly ventilated space.
 - Damage to the environment. Poor waste disposal: loss of containment e.g. leaks of diesel into drains; inappropriate use of insecticides and similar in managing our grounds.
- 2.3 The benefits of the educational and research activities to the University and wider society must be weighed against the risks. As a responsible institution, we seek to

understand the nature of the risk, its magnitude and take necessary steps to control it to a tolerable level.

2.4 This policy informs the structures and processes that the University uses to

- identify and characterise risk.
- minimise risk to tolerable levels.
- take remedial action when required.
- educate and inform staff, students, and others regarding their responsibilities.
- interact with regulators.
- align with the University Sustainability policy e.g. waste disposal processes.

3.0 Purpose

3.1 To reduce, as far as reasonably practicable, the likelihood of damage to persons, property or the environment through activities involving the use of hazardous chemicals.

3.2 To promote best practice and a sound understanding of applicable legislation and derived guidance relating to the use of hazardous chemicals.

3.3 To ensure full statutory compliance with applicable legislation.

4.0 Scope

4.1 This Policy applies to all Queen Mary staff, postgraduate and undergraduate students, and others (e.g. academic or teaching visitors and contractors) who are to conduct activities at Queen Mary with hazardous chemicals, and to all others who may be affected by Queen Mary activities involving such substances.

4.2 The Policy applies to all activities which involve the use of all hazardous chemicals.

4.3 This Policy is applicable to all Queen Mary campuses and premises within the UK and EU. Outside of these regions local rules differ significantly and should be followed, although the overall aim and intention of the policy must still apply.

4.4 This Policy document does not deal with the following materials or substances, which are addressed in separate Queen Mary Health & Safety Policy or Guidance documents:

- Biological material, pathogens or agents which may constitute a hazard to health.
- Radioactive materials
- Asbestos
- Compressed gas hazard caused by physical harm, e.g. high pressure, mechanical injury. (although it does consider its ability to cause harm through exposure, asphyxiation, fire or explosion)
- Note there are also overlapping Queen Mary H&S policies where safe use of substances and detailed processes for health & safety are also specified: Personal Protective Equipment, Local Exhaust Ventilation (LEV), Health Surveillance and Monitoring, Cryogenic Liquids and Solids and procedures for transporting of dangerous goods.

- 4.5 Whilst the Policy does identify the need to minimise our negative impact on the wider environment this concept is covered in much more detail in our Sustainability Policy. The focus of this policy on the environment is prevention of harm through the uncontrolled release of hazardous chemicals.
- 4.6 The policy is intended to identify and delineate areas of responsibility rather than provide a guide to best practice in the use of chemicals. Various training courses and guidance documents are provided elsewhere, including the Queen Mary guidance on the [safe storage of chemicals](#).

5.0 Legislation

- 5.1 Enacted under the Health and Safety at Work etc. Act 1974, the Control of Substances Hazardous to Health (COSHH) Regulations 2002 (as amended) require the use of substances which may cause harm to health in the workplace to be controlled. This is the principal regulation which governs the use of chemicals within the workplace, supported by the L5 Approved Code of Practice.
- 5.2 Additional legislation which place constraints on the use of certain chemicals include-
- GB CLP – the retained Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures, as amended (including by the Classification, Labelling and Packaging of Substances and Mixtures (Amendment and Consequential Provision) Regulations 2023), under which the GB mandatory classification list (GB MCL) applies in place of EU Annex VI.
 - Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations 2009.
 - Dangerous Substances and Explosive Atmospheres Regulations 2002 (DSEAR).
 - The Regulatory Reform (Fire Safety) Order 2005.
 - Environmental Damage (Prevention and Remediation) (England) Regulations 2015.
 - The Hazardous Waste (England and Wales) Regulations 2005.
 - Environmental Protection Act 1990; Environmental Permitting (England and Wales) Regulations 2016; Water Industry Act 1991 (trade effluent consent for any discharge to sewer).
 - UK REACH (the REACH etc. (Amendment etc.) (EU Exit) Regulations 2019 and retained REACH).
 - Control of Lead at Work Regulations 2002.
 - Management of Health and Safety at Work Regulations 1999 (including regulations 16–18 on new and expectant mothers, and provisions on young persons).
 - Personal Protective Equipment at Work Regulations 1992, as amended by the Personal Protective Equipment at Work (Amendment) Regulations 2022.
 - Misuse of Drugs Act 1971 (controlled drugs listed in Schedule 2 to the Act) and the Misuse of Drugs Regulations 2001 (Schedules 1–5).
 - Assimilated Regulation (EC) No 273/2004 governing procurement and supply of drug precursors.

- Explosives Regulations 2014.
- Anti-terrorism, Crime and Security Act 2001 (Schedule 5).
- The Control of Explosives Precursors and Poisons Regulations 2023, made under the Poisons Act 1972 (as amended).
- Chemical Weapons Act 1996, implementing the Chemical Weapons Convention 1997.
- The Fluorinated Greenhouse Gases Regulations 2015.
- The Ozone-Depleting Substances Regulations 2015.
- EU Directives 2004/37/EC (carcinogens, mutagens and reprotoxic substances at work) and 92/85/EEC (pregnant workers) are retained in this document as informative references only. Following EU exit they are not directly binding in Great Britain; the operative duties are those in COSHH (including Schedule 1 and regulation 7) and the Management of Health and Safety at Work Regulations 1999.

6.0 Terms and Definitions

6.1 Hazardous chemical refers to.

- All chemical substances classified as hazardous under GB CLP Regulation.
- Any substance or mixtures of which have the potential to cause harm to health if they are ingested, inhaled, or are absorbed by, or come into contact with the body.
- 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.
- Any material which if discharged in an uncontrolled manner may cause harm to the environment.

It must be noted that in some cases the chemical hazard is not obvious and arises from a change of form to the substance due to a process or repeat exposure.

For example-

- Grinding of stone to generate respirable silica dust which may cause lung disease.
- Repeated dermal exposure to cleaning products leading to dermatitis and sensitisation.
- Laser cutting of steel generating nickel and chrome vapour, presenting serious long term health effects.

6.2 Regulated substances refer to substances whose manufacture, possession and use are governed by additional specific legislative controls e.g. controlled drugs

6.3 Hazardous waste: substances no longer required that are categorised as hazardous by the Waste Catalogue and require disposal by a specialist contractor.

6.4 Local Exhaust Ventilation (LEV): a range of engineering controls that reduce exposure from harmful chemicals they are working with, typically using fans and ducting to create a pressure differential which removes dust, fume or vapour away to a safe location. The most common example are fume cabinets.

6.5 Laboratories can refer to:

6.5.1 Wet labs

Laboratory space designed to support routine work with hazardous chemicals. Whilst the exact specifications will vary according to need there are minimum standards which must be met before the space can be considered a wet lab. Work surfaces and floors will be suitably chemical resistant, sealed to prevent spillages escaping. There will be suitable provision of chemical / equipment storage, LEV, services. There is a requirement for hand wash sinks. Ventilation should be between 6-11 air changes per hour.

There is a crossover between the concept of Wet Lab and Containment Lab, a more detailed specification for laboratories working with biological material, see the [Biological Safety Webpage](#). Containment Laboratories are typically suitable for some work with Hazardous Chemicals subject to risk assessment.

The expectation is that most research and teaching activities covered by this policy will take place ONLY in designated laboratories.

6.5.2 Dry labs

A laboratory space primarily used for analytical equipment or work with electrical equipment e.g. Scanning Electron Microscopy or X-ray Diffraction:

Limited, small scale chemical use is suitable in this space. Typically, prepared samples are bought here from Wet Lab spaces. Use of solvents will be minimal. LEV may not be required, depending on usage. The space may require use of compressed or cryogenic gases.

6.5.3 Workshop

A space primarily used for use of mechanical tools e.g. saw, drills, lathes. Hazardous chemical use in this space will be limited to proprietary mixtures intended for lubrication, cleaning, or manufacture. The use of tools may generate fine dusts or powders of hard wood, silica etc which are hazardous. Workshop spaces typically require LEV to deal with dust, fume, and vapours. Consideration must be given to storage of products which may be flammable or product toxic vapours.

6.6 Chemical handling equipment

Any equipment used for the processing, storage, separation, reaction, distribution of hazardous chemicals. This covers a wide range of equipment such as glove boxes, rotary evaporators, pumps, reactors, spray guns. All equipment must be certified as safe to use for the intended purpose by the risk assessor and must be maintained appropriately and inspected before use. Only to be used by suitably trained persons. Other regulatory requirements may need to be considered, including but not limited to Provision and Use of Workplace Equipment Regulations 1998 (PUWER), Control of Noise at Work 2005 regulations, and the Pressure Systems Safety Regulations 2000 (PSSR)

6.7 Use

In this instance refers to all activities that occur whilst the hazardous chemical is on the property of Queen Mary, e.g. from when it is delivered onto campus to the point it is disposed of.

6.8 HSE

Health and Safety Executive - the enforcing body for compliance with the Health and Safety at Work Act etc 1974.

7.0 Roles and Responsibilities

7.1 Queen Mary Head of School or Directorate / Director of Institute

It is the responsibility* of the Head of School / Directorate or Director of Institute to ensure that where staff or students use hazardous chemicals:

**Responsibilities can be delegated to a competent person, typically to a Principal Investigator or Laboratory Manager etc, however ultimate accountability remains with the responsible person.*

- Staff with supervisory health & safety responsibilities are appointed, trained and are competent for the work involving hazardous chemicals (e.g. responsible academic or teaching staff member, lab manager).
- Staff with allocated health and safety responsibility will verify that contractors they authorise to undertake work which utilises hazardous chemicals are sufficiently competent to undertake such tasks and review their risk assessments prior to work starting.
- A framework for the School / Directorate / Institute is in place for the drafting, dissemination, implementation and review of risk assessment/s and local procedures ('safe systems of work') for working with hazardous chemicals and for the facilities / infrastructure, in line with Queen Mary policy, arrangements and guidance.
- A system is in place for the collection of hazardous chemicals, their safe storage and timely disposal by an authorised contractor via the Health & Safety Directorate (HSD) Chemical Waste Lead.
- Appropriate resources (including budgetary allocations) are provided for laboratories; related infrastructure, equipment and consumables for the work in order to minimise risks to staff, students and others / environment to a tolerable level.
- A framework for the training of all users of hazardous chemicals is in place and that training is recorded (including training needs assessment, initial and refresher training- refer to the [H&S Training & Competency policy](#))
- All accidents and incidents involving hazardous chemicals are reported as per the [Queen Mary Accident & Incident Policy](#),
- Sufficient resources are given to developing and practicing local emergency response.
- Collaboration takes place with Estates & Facilities (EAF) Fire Safety Operations Manager and the relevant HSD Safety Manager to keep an up -to- date list of hazardous chemical information within the Premises Information Box (PIB) for buildings which they are responsible for.
- Cooperation is established with Queen Mary Estates & Facilities to conduct necessary planned preventative maintenance schemes for Wet Laboratories and equipment.

- Where a Queen Mary School / Institute occupies 'embedded space' within another organisation's premises, to ensure that risks arising from hazardous chemical use and storage are communicated to partner organisations in a suitable format, and actions are completed to minimise the identified risks.

7.2 Queen Mary Estates & Facilities – Capital Projects and Infrastructure Maintenance

It is the responsibility* of the Director of Estates & Facilities to ensure that they

** Responsibilities can be delegated to a competent person, typically to a project or campus maintenance manager etc, however ultimate accountability remains with the responsible person.*

- Select and employ competent contractors in line with applicable Queen Mary H&S policies for contractors.
- Ensure that a Laboratory or Facility built or re-fitted as part of a Capital Project is installed in accordance with relevant health and safety regulations and appropriate industry/sector standards.
- Ensure that suitable commissioning of the Laboratory is carried out and that the relevant handover documentation is provided to the facility manager or responsible person.
- Ensure that the handover documentation is forwarded to Estates Infrastructure Maintenance, and that details of any newly installed LEV are entered on the Queen Mary asset register.
- Ensure that the parts or equipment corresponding to Laboratory / workshop under their remit is maintained in accordance with all relevant health and safety regulations and appropriate industry / sector standards.
- Have planned preventative management plans in place for parts of equipment in the Laboratories or workshops within their remit for local inspections and checks, statutory testing and where required, servicing and repairs. That they are conducted within specified timescales, and records are available for Queen Mary and Regulatory Authority audits and inspections.
- Have a Permit to Work system in place to ensure service engineer / examiner safety during testing / servicing and to ensure return of the system in a safe condition.
- Verify the competency of contractors who maintain LEV and compressed gas distribution systems.
- Maintain operating instructions and other documentation relating to Laboratory/ workshop facilities within their remit where it can be readily accessed (electronically or hardcopy).
- Ensure all staff whose work means they may foreseeably be exposed to hazardous chemicals (e.g. working within a laboratory) receive the appropriate level of training such that they understand the risk and how to control it.
- Ensure all EAF staff or appointed contractors who use hazardous chemicals are part of their role are competent to do so.

- Where a significant risk relating to hazardous chemicals has been identified as part of a work plan, a COSHH assessment is in place prior to the start of work.
- Refer staff to occupation health where this need is identified by the COSHH assessment and by legislation / Queen Mary Health Surveillance policy.
- Ensure all statutory records pertaining to their work are kept and communicated to the regulator in good time.
- Designate adequate space and resources for the safe storage of hazardous chemicals within their remit.

7.3 Queen Mary Managers / Supervisors/ Principal Investigators

It is the responsibility of a Manager / Supervisor. Principal Investigators to ensure that:

- Appropriate risk assessments for work with hazardous chemicals are made, recorded and kept up to date by periodic review. Where revisions are made, all persons who may be directly affected are informed (i.e. those working with that procedure, or in the case of high residual risk those working in proximity).
- The hazardous substance risk assessment template provided by HSD is used in conjunction with other specialist risk assessments as necessary. The assessment must be uploaded to the University safety management software system MySafety to ensure ease of distribution and evidence of affected persons being adequately informed of changes.
- The risk assessment is periodically reviewed and updated as necessary over the active life of the work as per Queen Mary Policy. The frequency of review will scale with residual risk. The expectation is that an incident will automatically trigger a review of all relevant risk assessments.
- Intention to start new work that involves (a) high residual risk, (b) regulated chemicals, or (c) hazardous work with carcinogens, mutagens, reprotoxic substances (CMRs) or sensitising agents is first discussed with the University Chemical Safety Adviser.
- They notify their HSD Safety Manager and the Fire Safety Team of the intention to make use of any compressed gas cylinder containing highly flammable or oxidising gases prior to purchase.
- Storage of hazardous chemicals is carried out with reference to applicable legislation and guidance, including the University [QMHS D HS GDN069 Chemical Storage Guidance](#). The quantity, type, location etc. is accurately recorded using an inventory management system. Safety Data Sheets are retained. Stocks are managed to minimise the quantity held with reference to historic patterns of usage. Access to stocks of hazardous chemicals is limited in accordance with their likelihood of causing harm or being a target of theft.
- Restrictions are placed on the purchase of hazardous chemicals to limit their use to authorised persons and limit the quantity held on site to what is necessary, considering the risk of storing them and the cost of disposing of them.
- Staff are trained and competent in the Queen Mary hazardous waste disposal procedures and strictly observe the requirement to label all substances adequately.

- Staff and students are aware of the requirements of the Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations 2009 that apply to their activities.
- Following training needs assessment, all users of hazardous chemicals receive appropriate training (initial and refresher). Users must be competent to carry out the intended work. Where independent work with hazardous chemicals takes place, the staff member or postgraduate researcher must pass the HSD course HS005 'Hazardous substances risk assessment' before being given unrestricted access to the laboratory.
- All accidents and incidents involving hazardous chemicals are reported as per the [Queen Mary Accident & Incident Policy](#).
- Formal induction procedures are in place for each laboratory space, tailored to staff, students, contractors / engineers, and visitors. Records are kept.
- Local emergency and assistance procedures (e.g. appropriate first aid personnel and procedures, spill procedures, rescue procedures) are in place and are tested by a simulated exercise periodically for effectiveness.
- All users are fully aware of applicable hazard warning systems (e.g. low oxygen alarm) and know how to respond safely in an emergency.
- Working practices are periodically monitored for compliance with applicable health & safety legislation requirements and Queen Mary / local written laboratory / facility rules, and where applicable, manufacturer's operating instructions.
- Reasonable steps are taken to prevent access to laboratory spaces or chemical storage areas by persons who are not suitably inducted or trained, especially where supporting visitors from other Schools or institutions.
- Health monitoring and surveillance measures are implemented where a need is identified via the job hazard form and/or the hazardous substance / task risk assessment and/or per legislation or HSE / healthcare professional guidance, with the assistance of the Queen Mary Occupational Health Service as per the process on the [health surveillance and monitoring](#) webpage. Requests for surveillance are made to Occupational Health, which makes and maintains the statutory health record for each individual (see 8.8); the individual is provided with a copy of their own record.
- Unattended, overnight and out-of-hours work, and any lone working with hazardous chemicals, is authorised and controlled in accordance with section 8.21.
- Appropriate local rules and standard operating procedures are written, reviewed and provided to lab users.
- All engineering controls, chemical handling equipment and PPE identified in the risk assessments and protocols are correctly set up, maintained and tested (where stipulated, via planned preventative maintenance) and these control measures are locally checked and inspected periodically for effectiveness. These include equipment such as fume cupboards, reactors and respirators.
- Full compliance with the Queen Mary Local Exhaust Ventilation guidance is ensured, including routine user checks of fume cupboards (see 8.2).

- Operating instructions and other documentation relating to LEV, chemical handling equipment and warning systems are maintained where they can be readily accessed (electronically or hardcopy).
- Where a defect / failure is identified with LEV, chemical handling equipment or warning systems, remedial or corrective actions are identified and implemented without delay. Where remedial action for a safety measure is not in their control, defects / failures are reported to the appropriate Queen Mary department or, in the case of embedded space, to the host organisation responsible person as soon as possible for action.
- Condemned or failed LEV or chemical handling equipment is taken out of use until full repair and safety checks have been satisfactorily made, and no unsolicited modifications are carried out to containment equipment or systems that are likely to render them unsafe.
- Liaison with EAF Campus Maintenance managers takes place to communicate the need for statutory or reactive maintenance (for EAF-managed equipment) in good time to facilitate effective organisation.

A Permit to Work system is in place to ensure service engineer / maintenance operative safety during testing / servicing of applicable LEV or equipment used with hazardous chemicals and to ensure return of the system to a safe condition

7.4 Users of hazardous chemicals at Queen Mary

It is the responsibility of users of hazardous chemicals to ensure that they

- Take reasonable care of their own health and safety, and that of others who may be affected by their work. This is achieved by following the local safety rules & instructions, understanding the risk assessment findings, attending mandatory and other appropriate training for the work, in line with Queen Mary Policy and arrangements.
- To use all safety and protective equipment (equipment and/or personal protective) appropriately in line with manufacturer's information and local risk assessment / instructions.
- Know and understand the limitations for health and safety when working with hazardous chemicals, and know and understand safety critical features of equipment, personal protection and hazard warning alarms and emergency procedures.
- Ensure they undertake training identified as necessary and periodic refreshers as required. The HSD Hazardous substances risk assessment course is mandatory for all working independently with hazardous chemicals.
- Report all accidents and incidents involving hazardous chemicals as per the [Queen Mary Accident & Incident Policy](#).
- Report any defects with equipment or deficiencies in work practices to their Manager / Supervisor as soon as possible for remedial action.
- Do not use failed or condemned equipment until they are repaired and fully fit for use.
- Do not ignore or misuse anything provided for user health and safety during the work (e.g. not to mute hazard warning alarms of a fume cabinet and then continue to handle hazardous chemicals within it).

7.5 Queen Mary Chemical Safety Adviser

It is the responsibility of the Chemical Safety Adviser to

- Provide Queen Mary with Policy and Guidance, tools and templates for the risk assessment, safe handling, use, safe disposal and transport of hazardous chemicals.
- Provide competent chemical safety advice to Heads of Schools or Directorates / Director of Institutes and their nominated duty holders, on legislative requirements and best practice.
- Establish and co-ordinate registration procedures such that use of regulated substances are notified to the overseeing body at defined points and declarations made as required. e.g., purchase of an Ozone Depleting Substance (ODS) chemical.
- Be the point of contact for the national regulators for all chemical safety matters, and report findings as required by legislation, codes of practice or policy, to the enforcing authorities (in particular, the Health and Safety Executive).
- Inspect and monitor Queen Mary systems and procedures for use of hazardous chemicals in line with the topic and H&S Audit and Inspection Policy and provide recommendations to improve chemical safety.
- Facilitate and/or provide training for the safe use of hazardous chemicals by Queen Mary staff and students.
- Liaise with the Queen Mary Estates & Facilities, and other duty holders with regard to provide competent advice on health and safety legislation and standards for Laboratories, advise on the suitability of proposed facilities for intended use of hazardous chemicals and related design, installation, commissioning, maintenance and decommissioning.
- Liaise with the Queen Mary Occupational Health Service with regards to occupational health surveillance and monitoring for hazardous chemicals where necessary.
- Keep their own competency, training, knowledge and experience up to date.

7.6 Queen Mary Safety Coordinators

It is the responsibility of Safety Coordinators to:

- Proactively monitor compliance with Queen Mary policy and guidelines within users of hazardous chemicals, in particular compliance with local rules.
- Act as a point of first contact within their department for concerns relating to the safe use of hazardous substances.
- Investigate reported incidents relating to the use of hazardous substances in conjunction with HSD.

7.7 Queen Mary Occupational Health Service

It is the responsibility of the Occupational Health Service to:

- Establish and maintain systematic [health surveillance and monitoring](#) activities which involve obtaining information about staff and students' health and which help protect them at an early stage from the use of hazardous chemicals during work or study.

- Make and maintain the statutory health record for every member of staff under health surveillance, retaining it for 40 years from the date of the last entry in accordance with COSHH regulation 11(3), and provide the individual with a copy of their own record.
- Keep appropriate records of Queen Mary staff who have been working with hazardous substances with the potential for long-term health effects which may not immediately manifest.
- Collect data for detecting or evaluating health hazards involving work with hazardous chemicals.
- In conjunction with the Chemical Safety Adviser, evaluate control measures against chemical exposure, and highlight defective or insufficient measures for remedial action.

8.0 Policy / Operational Arrangements

8.1 Risk assessment

By law, a suitable and sufficient risk assessment must take place before work liable to expose persons to hazardous chemicals begins. The depth and formality of the assessment should be proportionate to the risk; simple, low-hazard activities require only a simple, proportionate assessment, but no activity within scope is exempt from assessment. Assessments must consider primarily the requirements set out in the relevant sections of the COSHH, DSEAR and EPA regulations with an aim to-

- Adequately control exposure to materials that cause ill health.
- Control harm resulting from fire or explosion.
- Prevent or minimise pollution of the environment due to the release of chemicals.

The Queen Mary Hazardous Substances based risk assessment template should be utilised to ensure assessment details are not missed. Additional specialist risk assessments should be employed where required e.g., use of radioactive materials, GMOs

Regulation 7(1) of the Control of Substances Hazardous to Health Regulations 2002 (as amended) requires employers to ensure that employees' exposure to substances hazardous to health is prevented or, where prevention is not reasonably practicable, substitution takes preference. Where the work cannot proceed without a particular chemical, the assessment must record why, and the substance must be used in the least hazardous form and smallest quantity the work allows, with exposure adequately controlled

If reasonably foreseeable risk of negative health affects remain after controls are in place, health surveillance or monitoring may be required. Such higher risk experiments will have to be justified and should be authorised by the Head of School/Directorate.

The risk assessment should be periodically reviewed (formally at least once every 3 years if residual risk is low, and annually if residual risk is higher) and updated as necessary over the active life of the project as per Queen Mary Policy.

Risk assessments must be stored electronically (in the MySafety system) where they may be viewed by staff with responsibility for safety in that area.

What COSHH regulation 6 requires of the assessment

The assessment must be “suitable and sufficient” (COSHH regulation 6; and, for the general risk, regulation 3 of the Management of Health and Safety at Work Regulations 1999). A safety data sheet is information, not an assessment: it must be interpreted for the specific substances, quantities, people and premises involved. A suitable and sufficient assessment must:

- identify the hazardous substances present and their hazard classification, and consider the ways in which they could cause harm (the hazardous properties);
- assess the nature, degree and duration of exposure, taking account of the physical form, volatility and quantity of each substance and the frequency and duration of the work;
- take account of all relevant routes of exposure – inhalation, skin and eye contact, ingestion and injection;
- consider the work activity and foreseeable human factors (how the task is designed, the individual doing it, and the organisational context), following the HSE Job / Individual / Organisation framework (HSG48), since human error is a foreseeable cause of exposure;
- consider the whole life cycle of each substance – storage, use and waste;
- evaluate the risk from any accident, incident or emergency arising from the work;
- decide what control measures are needed, applying the hierarchy of control and the Schedule 2A principles of good practice (see 8.2);
- identify whether exposure monitoring (regulation 10) or health surveillance (regulation 11) is required, and any statutory flags for carcinogens, mutagens, reprotoxic substances (H340/H350/H350i) and respiratory sensitisers (H334), for which exposure must be reduced as low as reasonably practicable;
- identify the information, instruction, training and supervision required (regulation 12); and
- record the significant findings and the steps taken.

The assessment must be carried out by a competent person and, in accordance with Queen Mary arrangements, reviewed and approved by a competent person before high-residual-risk work begins. The level of detail is proportionate to the risk: simple, low-hazard work produces a short assessment, while greater rigour is required where health effects are serious or irreversible.

8.2 Control Measures

Control measures must be selected in accordance with the hierarchy of control and the principles of good practice in Schedule 2A of COSHH, compliance with which defines adequate control under regulation 7(7). In order of preference:

- Elimination – change the process or activity so the hazardous substance is not required or generated.
- Substitution – replace the substance with a safer alternative or use it in a safer form (e.g. pellets instead of powder, dilute instead of concentrated).
- Engineering controls – totally or partially enclose the process, and/or use local exhaust ventilation, in proportion to the health risk.

- Administrative controls – safe systems of work, restricted access, reduced exposure time and numbers exposed, supervision, hygiene measures.
- Personal protective equipment – as a last line of defence, in combination with other measures where adequate control cannot otherwise be achieved.

The Schedule 2A principles of good practice must be applied in every assessment: design and operate processes to minimise emission, release and spread; take account of all relevant routes of exposure; control exposure proportionate to the health risk; choose the most effective and reliable control options; where adequate control cannot otherwise be achieved, provide suitable PPE in combination with other measures; check and regularly review control measures; inform and train all employees on hazards, risks and controls; and ensure controls do not increase the overall risk to health and safety.

All control measures must be periodically verified by a responsible, competent person. The frequency is dependent on the potential harm should they fail, and the likelihood of failure. This should be specified within the risk assessment.

LEV must undergo Thorough Examination and Test (TEt) at least once every 14 months; this must be carried out by a competent contractor and records kept. In addition, users must carry out and document routine checks between statutory examinations in line with the Queen Mary LEV guidance: before each use, confirm the fume cupboard airflow indicator shows adequate flow (or check face velocity where an indicator is not fitted), maintain sash discipline (work with the sash at or below the marked working height, closed when unattended), and do not use the cupboard as a storage location.

Gas detection systems (e.g. oxygen depletion monitors) must be maintained according to the manufacturer's instructions, and a service agreement must be in place. Where a gas detection system has failed, the lab space must not be used until remedial work is completed. Gas systems supplying the lab should be closed at source.

Where pressure relief valves (PRVs) are used to vent gas in the event of a pressure system failure, the gas must be routed to a safe place which cannot have any dangerous interactions with the surrounding area.

The risk to persons entering the space and the action they should take in an emergency should be communicated to all affected persons via (a) induction and training, (b) risk assessments, (c) local rules, and (d) signage.

8.3 Dangerous Substances and Explosive Atmospheres Regulation (DSEAR)

Where the chances of a fire starting or an explosive atmosphere forming are foreseeable and the consequences non-trivial, the hazardous substances risk assessment must fully evaluate the risk. The general hierarchy of control and Schedule 2A principles in section 8.2 apply; this section addresses the additional fire and explosion controls required by DSEAR.

The assessment will consider the quantity of material, its flammability (flash point, lower explosive limit) the potential range of conditions (temperature, humidity), the environment (volume of area, ventilation rate) and potential modes of failure.

If necessary, the assessment will assign a DSEAR zone according to the likelihood of the explosive atmosphere occurring and its expected frequency.

Where a zone has been assigned and its likely extent delineated, controls must address prevention of the formation of an explosive atmosphere.

Preventing sources of ignition is a key control. This can be achieved through managing the process and its surroundings or potentially using ATEX/UKEx rated equipment, e.g. spark free fans and lights.

It is anticipated that in the university environment zoning will not normally proceed beyond zone 2, and this is likely to be relevant to bulk chemical storage areas (where a mixture of air and flammable substances in the form of gas, vapour or mist is not likely to occur in normal operation, but if it does occur, will persist for a short period only).

Where a significant risk of fire or explosion is identified there must be a consultation with the Chemical Safety Adviser and Fire Safety team prior to commencement of related work to ensure facilities and management arrangements are suitable.

8.4 Chemical handling equipment

All such equipment must be verified as suitable for the intended purpose before purchase and at the point of use. Compliance with relevant legal standards should be verified- this is of particular importance when obtaining equipment from outside the UK or EU. (Note - UK Competent Authority (UKCA) marking now applies in full to many products, with continuing recognition of EU standards until notified on GOV.UK).

The generic use of the equipment should be risk assessed (considering non-chemical hazards and their potential interaction with hazardous chemicals) and standard operating procedure written after commissioning. This information must be reviewed periodically and made available to all operators or affected person upon request.

Must be maintained according to manufacturer's instructions. Where the maintenance of safety critical features is required, formal records must be made of this.

Maintenance should be carried out by a competent person and records kept. Where local staff lack this competence, maintenance shall be carried out by a third party whose competence has been assessed as suitable.

8.5 Personal Protective Equipment

Must conform to relevant British Standards (may be noted as BS EN / ISO standards) and UKCA marking (or applicable continued EU standard CE marking until notified on GOV.UK). [Using personal protective equipment \(PPE\) to control risks at work: Product safety and supply - HSE](#)

Must be provided free of charge by the School, Institute/Directorate.

Must be identified as suitable for the intended task through the risk assessment process.

Consider the individual needs of the user.

Be maintained by the user or responsible person such that their protection is maintained.

Eye protection and labcoat must be always worn in all Queen Mary Laboratory spaces unless a risk assessment makes an exception for that **entire** lab space.

Where a need for respiratory protective equipment has been identified in the risk assessment, its use must be preceded by training and face-fit testing (for tight fitting respiratory equipment) organised through the Queen Mary Occupational Health service.

Minimum PPE standard for wet laboratories

In any Queen Mary wet laboratory, the default minimum control for the risk of chemical or biological splashes and spills is a laboratory coat and eye protection, worn by all staff, students and visitors beyond the entrance to the space. A risk assessment may raise this standard for a specific activity but must not lower it; the standard may only be modified where a specific written risk assessment demonstrates that the substance splash/spill risk is not present, or that the PPE would provide no additional control (for example, a microscope-only area within a wet lab).

Laboratory coats.

- A suitable laboratory coat must be worn, fully fastened, whenever a person is beyond the entrance to a wet lab. Jewellery, scarves, ties and loose accessories that could become contaminated or entangled should be contained within the coat.
- Coats must be made from fabric suitable for the hazards of the space. Where fire or naked flames are a significant hazard, readily flammable synthetic or high-polyester coats must not be used; a flame-retardant or predominantly cotton coat is required, set on a lab-wide basis. • Each worker should be issued with at least one coat; clean coats in a range of sizes must be available for visitors. Coats must be kept in good condition, laundered at routine intervals and as soon as possible after any spill or splash, and must not be worn outside the wet lab where they could contaminate corridors or shared areas.

Eye protection.

- Eye protection to at least BS EN 166 (class 1, F strength, 3 chemical-risk marking) must be worn beyond the entrance to a wet lab or put on immediately on entry and always before work starts.
- Users must visually check eye protection before each use and remove from service anything damaged, contaminated or that has taken an impact. Arrangements must accommodate prescription-glasses wearers with compliant over-glasses or prescription safety glasses; standard prescription spectacles are not eye protection.

Suitable clothing and footwear.

- Although not PPE, clothing and footwear must provide baseline skin protection. Footwear must be fully enclosed and cover the foot; cotton or canvas shoes are not suitable as chemicals soak through quickly. Clothing must cover the legs and resist splashes and spills. Refer to the [QMHSD HS GDN084-Wet-laboratories-everyday-clothing-and-footwear.pdf](#) for more information.

Gloves and movement between laboratories.

- Gloves must be selected for the substances handled and stored away from contamination and (for nitrile) direct sunlight. Where gloves used to protect against sensitisation are themselves a hazard for a given activity, the risk assessment must state the alternative controls, which may include low-level health surveillance for occupational dermatitis.
- Gloves must not be worn outside the wet lab. When transferring samples between labs, package them so PPE is not required; where this is not possible, a written risk assessment and agreed local rules must control the transfer. Within a linked suite (e.g. a CL3 suite) coat, eye protection and gloves may be worn around the suite but must be removed on leaving it.

Departments must ensure each wet lab has a risk assessment stating how this standard is met (or justifying any area-specific variation), that PPE is provided in a range of sizes, and that storage for coats and eye protection is available close to the lab. Failure to wear the required PPE, or to wear it correctly, may result in the individual being asked to leave the wet lab and, if repeated, in further action.

For more information, please refer to the following:

- [QMUL Personal Protective Equipment \(PPE\)](#)
- [PPE User Guidance – Gloves](#)

8.6 Emergency procedures

Where the risk profile of an area indicates that the standard Queen Mary fire evacuation and first aid procedures are not sufficient, a bespoke emergency procedure will be written for that area.

The complexity and level of detail of these procedures will scale with the residual hazard identified in the risk assessment process.

Emergency procedures must be circulated to all potentially affected parties as necessary, and when any changes are made this must be circulated and receipt recorded.

The risk profile of a space will determine the type of specialised emergency equipment that is required and its location. This includes, but is not limited to,

- Specialist first aid e.g. antidotes, medical oxygen. Where hydrofluoric acid (HF) is used or stored, calcium gluconate gel must be provided at the point of use, kept in date, and users trained in its application.
- Drench showers (where there is significant use of corrosives for example)
- Eye wash stations
- Chemical neutralisation solutions for the person e.g. Diphoterine
- Fire suppression systems
- Spill kits

Information on the correct use of such systems must be provided to all affected person, training records retained, and periodic refresher training organised.

All safety critical equipment must be regularly inspected and maintained.

Relevant hazard information must be made available to responding parties in the event of an emergency- e.g. Safety Data Sheets, inventory.

Lab managers shall collaborate with HSD and EAF to ensure that emergency information and maps detailing the nature of chemical hazards must be kept up to date such that it may be accessed at any time during an emergency (held within the Premises Information Box)

Where there is a risk of a hazardous chemical spill that cannot be safely dealt with by lab users that spill procedure must be regularly reviewed and its efficacy tested by lab managers, safety coordinators and HSD.

Periodic reminders and/or drills should take place to ensure all users of a space understand how to protect themselves and others.

Any use of emergency systems must be reported via the University incident reporting system.

8.7 Information, training, and supervision

All persons entering a space with significant use of hazardous chemicals should first receive an induction from a responsible person. Records of the induction should be kept.

Local rules must be in place for each space with routine use of hazardous chemicals based on the risk profile and typical activities that take place. The rules must be displayed prominently, circulated to affected parties.

Repeated failure to comply with the local rules must result in a formal sanction. Lab rules must be enforced by responsible persons, e.g. PIs, lab managers, safety coordinators and Head of Schools.

Each space where there is routine use of hazardous chemicals should clearly indicate this with signs on every external door. The sign must describe the nature of the hazard within using warning signs complying to [HSE Guidance document L64 "Safety signs and signals"](#).

It must also have current contact details for the responsible persons. The [Queen Mary template](#) provided should be utilised.

Training needs of staff and students should be identified on their joining the university and commencing work/or study and reviewed as necessary.

Training records must be kept for all activities such that it can be shown the person has received formal, written instruction of how to safely perform that activity. The expectation is that standard operating procedures are written and reviewed to assist with this process.

The appropriate level of supervision must be always maintained with reference to the persons level of experience and training. It is the responsibility of the line manager or PI to ensure this supervision takes place and review its suitability, although it may be delegated.

Staff providing instruction and training should be sufficiently skilled and competent to do so. The 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. The level of skill and competence required to instruct others must be proportionate to the risk of the activity.

8.8 Health surveillance

Health surveillance is required where the activities involve chemicals/substances where risk assessment determines the following:

- (i)an identifiable disease or adverse health effect may be related to the exposure,
- (ii)there is a reasonable likelihood that the disease or effect may occur under the conditions of his work, and
- (iii)there are valid techniques for detecting indications of the disease or effect, and the technique of investigation is of low risk to the employee.

It is expected that control measures used are sufficient to reliably prevent exposure, and health surveillance should not be relied upon in place of control.

Completion of the job hazard form is required for all staff and PGR recruitment, and requests for health assessment and surveillance must be sent to the [Queen Mary Occupational Health Service](#), as per the process on the [health surveillance and monitoring](#) webpage.

Where health surveillance is identified for an individual, the statutory health record is made and maintained by the Occupational Health Service on behalf of the University and retained for 40 years from the date of the last entry, in accordance with COSHH regulation 11(3). The individual is provided with a copy of their own record and may request access at any time. More detail on specific chemical hazard health surveillance and monitoring can be found within the Occupational Health policy.

8.9 Carcinogens, Mutagens Teratogens, and substances toxic to reproduction

Any substance to which the following apply-

- Category 1A, 1B carcinogen under GB CLP Regulation
- Listed in Schedule 1 COSHH regulations 2002
- Category 1A, 1B or 2 Mutagen (as classified under GB CLP Regulation)
- Category 1A or 1B reprotoxic substance (as classified under GB CLP Regulation). (EU Directive 2004/37/EC Schedule III may be consulted as an informative reference only.)

Use of such chemicals must only follow robust justification. Where safer alternatives are available, they must be used. Exposure must be prevented or, where prevention is not reasonably practicable, controlled to as low a level as is reasonably practicable and as far below the workplace exposure limit as possible, applying the specific measures in COSHH regulation 7(5).

A record must be kept for 40 years of the following in each case (the institutional record is held via Occupational Health; see the [Health Surveillance and Monitoring](#) webpage):

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

Where there is reason to believe that uncontrolled exposure has occurred (as a result of an accident, monitoring of control measures or health surveillance), the risk assessment and method must be kept along with this information.

Quantities purchased and used must be as low as possible. Arrangements for use, storage, and transport must be designed to limit the chances of exposure to other persons as far as possible, e.g. dedicated workspaces.

Control measure testing (e.g. LEV) frequency should be increased and records kept. Any failure of control measures must be reported on the University reporting system. Workplace monitoring must be considered (see 8.8).

All affected persons must fully understand the risks to their health.

Health assessment and surveillance and/or monitoring must be put in place where control measures are not sufficiently reliable.

Young persons and new and expectant mothers must not work with CMRs or anywhere where potential exposure may take place.

Persons who become pregnant whilst potentially exposed to CMRs must notify their line manager or PI as soon as possible; the pregnancy risk assessment should be completed and, where the procedure identifies that a higher hazard level to the pregnant worker and/or unborn or newborn child may exist, it is notified to the [Queen Mary Occupational Health Service](#).

8.10 Young Persons

There are specific provisions in the Management of Health and Safety at Work Regulations 1999 to prevent the harmful exposure of persons under the age of 18 to any hazardous chemical which is toxic or carcinogenic, cause heritable genetic damage or harm to the unborn child or which in any other way chronically affect human health.

In reflection of this, any work that Young Persons carry out on Queen Mary premises using hazardous chemicals must be restricted to exclude any chemicals classified as above.

8.11 New and expectant mothers

The Management of Health and Safety at Work Regulations 1999 (regulations 16–18) stipulate that risk assessment must specifically consider the enhanced potential for harm that certain types of activities have on the health of an unborn or nursing child. Work with substances of the kinds identified in those regulations (informatively listed in Annexes I and II of Council Directive 92/85/EEC) requires the risk assessment to consider the potential for new and expectant mothers to be exposed.

When a person becomes aware that they are pregnant and is working with hazardous substances, they should inform their line manager or PI to (a) fully assess the risk to themselves and their child following the process and using the [New-Expectant Mothers risk assessment form](#) and (b) make alternative arrangements for the necessary duration if necessary.

Equivalent protection applies to pregnant and breastfeeding students. A student who becomes aware that they are pregnant and whose study involves hazardous chemicals should inform their supervisor or module lead, who must arrange a specific risk assessment using the student-facing process and put alternative arrangements in place where a risk of exposure to substances of concern is identified.

Where the ongoing potential for exposure to hazardous chemicals of specific concern has been identified, the expectation is that such work will cease for the worker or student in question and alternative arrangements will be made that do not negatively affect their career and/or study for as long as necessary.

8.12 Sensitising agents

Sensitisers are substances that may cause an allergic response in the respiratory system (respiratory sensitisers) and/or the skin (skin sensitisers) following workplace exposure. Once sensitisation has developed, subsequent exposure—even to very small amounts—may trigger a severe reaction. Respiratory sensitisers may cause occupational asthma, while skin sensitisers may cause allergic contact dermatitis.

For the purposes of this policy, sensitising agents include any substance classified under the GB CLP Regulation with either of the following hazard statements:

- **H334:** May cause allergy or asthma symptoms or breathing difficulties if inhaled.
- **H317:** May cause an allergic skin reaction.

This also includes substances identified in relevant HSE guidance as skin sensitisers or respiratory sensitisers, including those listed in [Substances that can cause occupational asthma](#).

Health surveillance is required where the risk assessment identifies that exposure remains reasonably foreseeable despite the control measures in place, or where respiratory protective equipment is used as a control measure.

For laboratory animal work, use the specific risk assessment form and follow the process set out in the [Sensitisers – Laboratory animals -HSD webpage](#)

8.13 Purchase of hazardous chemicals

All hazardous chemicals will be procured via **University approved suppliers only**. Each School/Directorate shall have a procedure to manage the authorisation, purchase, and receipt alongside associated record keeping.

Purchase of regulated chemicals must be with prior agreement of the person responsible for statutory declarations- typically the Chemical Safety Adviser.

Consideration of the necessary storage arrangements must take place before ordering.

Purchase must take place only after checking that this hazardous chemical is not already held and available for use within the School or Directorate.

Minimal quantities required must be ordered unless suitable storage arrangements are in place which minimise the associated risk e.g. secure external storage.

Delivery must be to a location with facilities and staffing suitable for the acceptance and storage of the hazardous chemical.

It is the responsibility of the person ordering the chemical to ensure that any relevant notifications are made and that the chemical inventory is updated.

Transfer of hazardous chemicals from another institution should be with written permission of the Head of School and carried out by a competent, licenced contractor. The QMUL policy [Compliance \(as consignors\), with the carriage of dangerous goods on the road](#) must be followed.

8.14 Labelling

Chemical labelling must conform to GB CLP Regulation. Labels must be clearly legible and replaced should any deterioration occur.

Containers should be marked with the date of receipt and the group who purchased them. Where applicable, the date of opening the container must be annotated – this is mandatory for time-sensitive chemicals such as peroxide formers (see 8.16).

Where a chemical of any type (e.g. samples, whether hazardous or not) is decanted into a new container (e.g. a vial), it must be stored in such a way that the exact nature of the sample is clear, along with its owner and date. Code or shorthand is not acceptable. Use of secondary containers may be permitted to facilitate this.

8.15 Security

Access to areas where hazardous chemicals are used (including storage) must be limited strictly to authorised users. Authorisation is granted based on (a) a current, legitimate need for access and (b) sufficient training and competence to safely work in the space. Periodic

review of user access should take place to ensure only the minimum number of people required may enter these spaces.

Physical and personnel security arrangements for higher-hazard and regulated chemicals should follow NaCTSO [Secure hazardous materials to help prevent terrorism | ProtectUK](#)

Regulated substances must be kept in a designated, locked cabinet of suitable construction. Access must be limited to the minimum number of responsible persons. Physical logs of access and usage must be maintained.

When not in use, higher-hazard chemicals (e.g. corrosive liquids, acute toxins, pyrophorics) should be kept in a secure location within the laboratory space and never on the open bench.

Any loss or theft of chemicals must be reported immediately as an incident. In addition, any theft, loss or suspicious disappearance of a regulated or reportable explosives precursor or poison must be reported to the Home Office on 0800 789 321 within 24 hours of discovery, in accordance with the Control of Explosives Precursors and Poisons Regulations 2023; the Chemical Safety Adviser is the responsible reporter and must be notified without delay. Suspicious enquiries or attempted acquisitions of such substances must be reported by the same route.

8.16 Storage

Storage facilities must be assessed as suitable and safe for the intended use, e.g. providing suitable segregation of incompatible chemicals, adequate ventilation, adequate bunding, suitable proximity to fire detection systems and fire-fighting equipment, and appropriate access restriction. Detailed requirements are set out in the [Queen Mary guidance on the safe storage of chemicals](#) which must be applied.

Segregation of incompatible chemicals

Chemicals must be stored by primary hazard class in accordance with the compatibility matrix and hazard-priority ladder in the storage guidance, applying the defined levels of physical control: separation (separate shelf or different secondary containment boxes on the same shelf), segregation (different cabinet, or at least 3 metres from incompatible material), and isolation (different room, or different cabinet and at least 3 metres from incompatible material). Oxidisers must always be segregated from flammables and other fuels. Chemicals should be held in chemically resistant secondary containment to protect against spillages.

Flammable liquids

Hazardous chemicals must not be stored in corridors or within 3 metres of fire exits. Quantities of flammables and oxidising agents must be kept to the minimum operational requirement due to the fire risk. No more than 50 litres of highly flammable liquid may be held within a laboratory space outside fire-rated cabinets. Where 90-minute fire-rated cabinets conforming to BS EN 14470-1 are provided, the total held may be increased up to 200 litres per laboratory – (figure to be confirmed by Pushminder0, subject to risk assessment. Any volume over 5 litres must be stored in a fire-rated cabinet, and this requirement will be verified during inspections.

Any central chemical storage facility (i.e. serving multiple laboratory spaces) will be managed by specific named persons who are competent to manage the risk profile of that facility. The construction and operation of bulk flammable chemical stores will comply with the requirements set out in HSE guidance document HSG51 'Storage of flammable liquids in containers. Storage facilities will display appropriate warning signage to indicate the nature of the hazardous chemicals within.

Time-sensitive and reactive chemicals

Arrangements must be in place to manage the risk from hazardous chemicals which deteriorate in storage such that their hazard classification changes and their risk profile increases beyond an acceptable level, e.g. formation of touch- or friction-sensitive explosive degradation products. The detailed regime is set out in the [Queen Mary guidance on the safe storage of chemicals](#),:

Other storage controls

- Fume cupboards must not be used as chemical storage locations.
- Flammable materials requiring cold storage must be kept only in spark-free (laboratory-safe) refrigerators or freezers, labelled as such; domestic refrigerators must not be used.
- Gas cylinders must be kept to the minimum number at the point of use, restrained against toppling, and stored preferably in external or purpose-built stores.

8.17 Record keeping

All Schools or Directorates who use hazardous chemicals must keep an up-to-date inventory. The inventory must indicate the chemical name, CAS number, date of purchase, quantity, location, hazard classification, responsible person, and any other relevant information such as shelf life or incompatibilities. Responsibility for maintaining the inventory must be assigned to and understood by relevant parties. Stock checks should take place periodically.

Two complementary stock-life mechanisms apply. First, default storage lives apply from the date of receipt: 5 years for hazardous chemicals and 10 years for non-hazardous chemicals, unless a shorter manufacturer expiry or the time-sensitive chemicals regime (8.16) applies; retention beyond the default life requires documented justification and container integrity checks. Second, where records indicate chemicals have not been used for a period of three years or more, disposal should be considered regardless of age.

Where unexplained losses of hazardous chemicals are discovered, this must be urgently reported as an incident (and see 8.15 for the 24-hour Home Office reporting duty for explosives precursors and poisons).

When an academic or researcher leaves Queen Mary, transfer of chemicals will require permission from the Head of School and be carried out by a licensed and competent contractor. Consignment and packaging of the chemicals must be done by a competent person trained in the packaging, documentation, security and consignment duties for dangerous goods.

Any material no longer required should be disposed of by the School, following the [laboratory clearance process](#).

8.18 Transport

Transport within the demise of Queen Mary (i.e. between buildings on one campus) can take place subject to risk assessment and use of suitable equipment.

Transport of hazardous chemicals between Queen Mary campuses or to other institutions requires prior consideration of the Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations 2009; this should be carried out in conjunction with HSD unless a previous method has been established and validated.

Where the need to cross a public road (e.g. Bancroft Road) occurs, CDG regulations DO apply unless exempted.

The transfer of novel substances (e.g. currently unclassified under GB CLP Regulation) will place further obligations on the user, including :

- compilation of relevant hazard information;
- evaluation of hazard information relating to the substance;
- review of information against GB CLP chemical hazard criteria;
- self-classification of any chemical hazards

Given the complexity of the regulations this will require consultation with the University Dangerous Goods Adviser, via the Chemical Safety Adviser/HSD. Transfer of novel research chemicals to other organisations will likely require a Material Transfer Agreement to cover issues around liability and intellectual property. This can be organised via the Joint Research Management Office.

Export must follow the Queen Mary Export Controls and Sanctions Policy and the applicable local regulations on chemical safety.

Please refer to [Transport of Dangerous Goods - Health and Safety Directorate](#) webpage for more information.

8.19 Disposal

Each School / Directorate must have a written local procedure for the disposal of hazardous chemical waste that aligns to the [HSD procedure](#).

The School procedure will name designated person(s) who are responsible for (a) ensuring information submitted is correct, (b) keeping the waste storage facilities in good order, (c) ensuring waste disposal occurs in a timely fashion to prevent accumulation of waste in working areas, and (d) passing information to the Chemical Waste Lead.

Hazardous chemicals must not be disposed of to drain. Any proposed discharge of trade effluent to sewer requires a trade effluent consent from the sewerage undertaker under section 118 of the Water Industry Act 1991 and must be agreed in advance with HSD and Estates & Facilities; uncontrolled discharge may also constitute an offence under environmental permitting legislation.

No hazardous chemical designated as waste will be kept on Queen Mary premises for more than one year. All removal of hazardous chemical waste from Faculties will be overseen by the HSD Chemical Waste Lead. EAF and their subcontractors have a parallel process to deal with products used by maintenance and projects.

All relevant records will be maintained in an accessible format and retained for a period of at least 3 years. Derived statistics will be submitted to HESA, the Sustainability team and other interested parties as required.

Prior to selection of a hazardous chemical waste disposal contractor, due diligence will be carried out to ensure that Queen Mary meets its statutory obligations.

Equipment disposal will be organised via Estates & Facilities; where relevant a decontamination certificate will need to be completed by the user.

8.20 Regulated substances.

8.20.1 There are specific legal obligations on certain substances.

Persons intending to use these substances must, prior to purchase, ensure they are familiar with the relevant legislation and guidance and are able to implement the operational requirements they stipulate.

There may be a requirement for a licence and auditing by the enforcing body.

For purchase or possession of Category 1 precursors, the department or research group will require a license issued by the Home Office. Further information and an application form may be found at the relevant [Home Office link](#).

In all cases there is a need for the substances to be stored securely- within a dedicated locked cabinet and keys available only from nominated responsible persons.

Records of use must be kept demonstrating compliance, assist with auditing and annual declarations should these be required.

Annual declarations or changes in use must be made to the relevant body, by the school, institute or group holding the license or in some cases by the university Chemical Safety Advisor.

Once the substance is no longer required it should be disposed of. This may require notification to the regulating body, a specialist contractor, or an independent witness to the disposal process.

Local processes must be written to meet the requirements of the use of these substances and ensure that management arrangements are understood by all affected persons.

8.20.2 Controlled drugs

The Misuse of Drugs Act 1971 is the main piece of legislation covering drugs and their categorisation.

Companies and individuals in England, Wales or Scotland need to apply for Home Office licences if they wish to produce, supply, possess, import or export controlled drugs

University research departments do not usually need a licence to possess and supply controlled drugs in schedules 2 to 5 of the Misuse of Drugs Regulations 2001. However, you will need a licence to produce any of those drugs and to also produce, possess or supply controlled drugs listed in schedule 1.

[Controlled drugs: domestic licences - GOV.UK](#)

8.20.3 Controlled drug precursors

Controlled drug precursors are chemicals with legitimate uses that may also be used to the illicit manufacture of controlled drugs. In Great Britain, the control regime is principally established by Regulation (EC) No 273/2004.

Drug precursor chemicals are divided into four categories, which determine the applicable controls. An overview of the drugs in each category and the requirements is available [HERE](#)

- **Category 1** Each operator and premises must hold the appropriate Home Office domestic licence before acquiring, possessing, using or supplying these substances. A responsible person must be appointed by each department/research group to

control the use of these chemicals. They must take reasonable measures to ensure that the chemicals are being used for the intended legitimate purposes. The chemicals must be securely stored, access must be restricted to authorised persons, and any theft, loss or suspicious disappearance must be reported immediately in accordance with section 8.15.

Further information and an application form can be found at [Precursor chemical licensing - GOV.UK](#)

Drug precursor category 1 has been expanded from 29 June 2026 more information at [Circular 003/2026: drug precursor chemicals - GOV.UK](#)

- **Category 2** Covers less sensitive substances and some pre-precursors. A license is not generally required for Category 2 precursors. Domestic registration is not required providing end users do not subsequently provide the substances to other entities. The only exceptions are acetic anhydride, where registration is required if more than 100 litres per calendar year is acquired; and red phosphorous, where registration is required if more than 200 g per year is acquired
- **Category 3** covers bulk chemicals. A domestic licence or registration is not normally required for use within the University, but import, export controls may apply.
- **Category 4** covers medicinal products containing certain Category 1 substances and is principally subject to import and export controls.

8.20.4 Chemical Weapons Convention Scheduled Chemicals

The Organisation for the Prohibition of Chemical Weapons (OPCW) administers the Chemical Weapons Convention (CWC). The CWC prohibits the development, production, stockpiling and use of chemical weapons and controls specified toxic chemicals and their precursors. In the UK, the CWC is implemented by the UK National Authority, which submits required information to the OPCW.

Before collaborating with researchers or partner organisations based overseas, the responsible person must consider whether additional international security, export-control or research-security requirements apply and obtain appropriate advice where necessary.

Chemicals controlled under the CWC are assigned to Schedules 1, 2 or 3 according to their risk and legitimate uses. Queen Mary may acquire scheduled chemicals from commercial suppliers only for legitimate research, teaching or other authorised purposes. The University must submit annual declarations to the UK National Authority for applicable Schedule 2 chemicals that are consumed and Schedule 3 chemicals that are produced, imported or exported, subject to the relevant thresholds.

The Chemical Weapons Act 1996 implements the Chemical Weapons Convention in the UK.

- **Schedule 1 chemicals:** These chemicals must not be produced, acquired, possessed or used unless the activity is authorised by a licence issued by the Secretary of State and all licence conditions are met.
- **Schedule 2 and Schedule 3 chemicals:** These chemicals are subject to specified declaration thresholds. Required annual declarations must be coordinated through the Chemical Safety Adviser and submitted to the UK National Authority within the Department for Energy Security and Net Zero.

- **Schedule 3 chemicals:** These are the scheduled chemicals most likely to be encountered in the University because they have legitimate uses. However, they may be highly toxic or may serve as essential precursors to more strictly controlled substances; their purchase, use, storage and transfer must therefore be appropriately controlled and recorded.

8.20.5 Explosives

Under the Explosives Regulations 2014, “explosive” means:

(a) any explosive article or explosive substance which would –

- if packaged for transport, be classified in accordance with the United Nations Recommendations as falling within Class 1; or
- be classified in accordance with the United Nations Recommendations as being unduly sensitive or so reactive as to be subject to spontaneous reaction and accordingly too dangerous to transport, and falling within Class 1; or

(b) a desensitised explosive (a solid or liquid explosive that is wetted or dissolved to suppress its explosive properties, and which would be a Class 1 substance without that treatment).

The acquisition, keeping and use of explosives are subject to licensing (by the police for acquire/keep, and by the Health and Safety Executive for manufacture and higher-hazard storage) and to the security provisions of the Explosives Regulations 2014. Given the significant hazards, no work involving the manufacture, synthesis or intentional handling of explosives may take place without prior written approval from the Chemical Safety Adviser and a specific risk assessment.

Substances that can form explosive degradation products in storage – for example peroxide-forming solvents, and desensitised explosives such as picric acid that are allowed to dry out – are managed under the storage provisions (see 8.16) and must not be allowed to reach a dangerous condition.

8.20.6 Explosive precursors

Explosives precursors are chemicals listed under the Poisons Act 1972 (as amended) and controlled by the Control of Explosives Precursors and Poisons Regulations 2023, administered by the Home Office. They comprise regulated substances (which members of the public may acquire, import, possess or use only under an explosives precursors and poisons (EPP) licence) and reportable substances.

The University acquires and uses these substances in its professional capacity and is not required to hold an EPP licence, but must apply the security, record-keeping and reporting duties in 8.15 and 8.20.1. Any suspicious transaction or enquiry, and any theft, loss or suspicious disappearance, must be reported to the Home Office on 0800 789 321 within 24 hours of discovery (see 8.15).

8.20.7 Poisons

Substances listed as regulated or reportable poisons under the Poisons Act 1972 (as amended) and the Control of Explosives Precursors and Poisons Regulations 2023. While members of the public require an explosives precursors and poisons (EPP) licence to acquire regulated substances; acquisition and use in the University's professional capacity does not require a licence but must follow the security, record-keeping and reporting requirements in 8.15 and 8.20.1.

8.20.8 Anti-terrorism, Crime and Security Act 2001 (ATCSA)

The Anti-terrorism, Crime and Security Act 2001 restricts the use and storage of chemicals that can be used as weapons of mass destruction. [Schedule 5 of ATCSA](#) lists highly dangerous pathogens and toxins. Their purchase and use have stringent regulatory requirements and will require prior approval from the Home Office and specific security infrastructure and procedures would apply.

8.20.9 Ozone Depleting Substances

Halogenated hydrocarbons which when released into the environment can cause depletion of the ozone layer. Usage is heavily regulated although there are exemptions for research a declaration of use must still be made annually.

8.21 Unattended experiments, out-of-hours and lone working

Experiments involving hazardous chemicals that are to run unattended (including overnight) must be specifically authorised in the risk assessment. The assessment must demonstrate fail-safe design: consideration of loss of services (water, power, extraction), over-temperature and over-pressure scenarios, containment of any release, and automatic shutdown where reasonably practicable. Unattended experiments must display signage stating the nature of the experiment, the hazards, emergency shut-down instructions, and current emergency contact details for the responsible person.

Out-of-hours work with hazardous chemicals requires the prior authorisation of the PI / line manager and must be proportionate to the risk: higher-hazard activities (e.g. work with pyrophorics, large-scale reactions, distillation of peroxide-forming solvents) must not be carried out outside normal working hours or when working alone. Lone working with hazardous chemicals is permitted only where the risk assessment explicitly justifies it, and never for activities where a foreseeable incident could incapacitate the worker; [the Queen Mary lone working arrangements](#) apply in addition to this policy.

8.22 Teaching laboratories

Undergraduate and taught-postgraduate practical classes must be covered by pre-approved teaching risk assessments, reviewed before each delivery cycle.

Supervision levels must be set in the risk assessment with reference to the hazard of the activities and the experience of the students and maintained throughout the class.

Demonstrators and teaching assistants must be trained and assessed as competent for the specific practical before supervising students and must understand the emergency arrangements for the space.

Chemicals selected for teaching must be the least hazardous that the educational objective permits, in quantities scaled to the class.

8.23 Nanomaterials

Work with engineered nanomaterials must be risk assessed with specific regard to their particle-scale properties, which are not fully captured by GB CLP classification of the parent substance.

A precautionary approach must be applied following the UK NanoSafety Group guidance, [UKNSG 2025 - Working Safely with Nanomaterials 3rd Edition](#) and [HSE Using nanomaterials](#)

[at work Using nanomaterials at work guidance](#), consult the Chemical Safety Adviser before commencing new work with nanomaterials.

9.0 Further Information

9.1 QMUL Guidance documents-

There is useful guidance available on all of these topics available on the [HSD Connected](#) site. This will include, where relevant, policies, forms, and guidance documents.

9.2 Chemical safety

[Working with substances hazardous to health](#): A brief guide to COSHH

9.3 LEV

[Clearing the air](#)- A simple guide to buying and using local exhaust ventilation (LEV)

[Controlling airborne contaminants at work: A guide to local exhaust ventilation \(LEV\)](#)- a detailed guide explaining the concepts behind LEV and the duties placed on users, owners, and maintenance engineers.

9.4 Flammable chemical storage and management

[Chemical warehousing: The storage of packaged dangerous substances](#)- HSE guidance document. Whilst aimed at industrial sites has useful guidance on the design of flammable liquid and gas stores and controls to prevent and mitigate against fire and explosion.

[Storage of flammable liquids in containers](#)- HSE guidance document. Helpful practical guidance on external flammable storage of liquids.

9.5 Fire and explosion ATEX

[ATEX and explosive atmospheres](#)- HSE guidance on managing the risks from explosive atmospheres. ATEX is a European Council directive relating to minimum requirements for managing and the applicable standards for equipment used in Explosive Atmospheres

9.6 Flammable cabinet standard

[British standard for flammable cabinets for liquids](#)

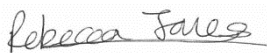
Note - Many standards may be accessed at the [Queen Mary Library BSOL portal](#) by staff and students.

9.7 Health surveillance

[Biological monitoring in the workplace](#)- A guide to its practical application to chemical exposure- current HSE guidance giving practical advice on monitoring programmes.

[EH40/2005 Workplace exposure limits](#)- Workplace exposure limits (4th edition, 2020): the list of workplace exposure limits approved by HSE; the limits in Table 1 are legally binding under COSHH regulation 7, and the remainder of the document is guidance. [Higher Education Occupational Practitioners](#) - website containing guidance on occupational hazards in research.

Document Control

Author: Charles Coster Date: 22/03/24 Signature: 	Position: Health and Safety Manager Faculty of Science and Engineering, University Chemical Safety Adviser
Approved by: Rebecca Jones Date: 27 th March 2024 Signature: 	Position: Director of Health & Safety
Date of issue: March 2024	Date of next scheduled review: March 2028

Date of alteration and re-issue	Details of changes	Changes made by (Name and position)	Approved by (Name and position)
18 September 2026	Section 4.6 – Reference added to the Queen Mary guidance on the safe storage of chemicals.	Isabelle Sangregorio H&S Manager (Science and Engineering) and University Chemical Safety Adviser	Rebecca Jones Director of Health & Safety
18 September 2026	Section 5.1 – COSHH statement corrected, and the L5 Approved Code of Practice identified as supporting the Regulations.	Isabelle Sangregorio H&S Manager (Science and Engineering) and University Chemical Safety Adviser	Rebecca Jones Director of Health & Safety
18 September 2026	Section 5.2 – Legislation list revised for the post EU exit position. CLP entry recast as GB CLP (retained Regulation (EC) No 1272/2008 as amended), under which the GB	Isabelle Sangregorio H&S Manager (Science and Engineering) and University	Rebecca Jones Director of Health & Safety

	mandatory classification list applies in place of EU Annex VI. REACH entry recast as UK REACH. Regulation (EC) No 273/2004 identified as assimilated legislation. – Merged Control of Explosives Precursors and Poisons Regulations 2023 / Chemical Weapons Convention entry separated, and the Chemical Weapons Act 1996 named as the UK implementing legislation. Misuse of Drugs Act 1971 and Misuse of Drugs Regulations 2001 separated. Schedule 5 identified for the Anti-terrorism, Crime and Security Act 2001. – Legislation added: Environmental Permitting (England and Wales) Regulations 2016; Water Industry Act 1991 (trade effluent consent for discharge to sewer); Management of Health and Safety at Work Regulations 1999, including regulations 16–18 and the young persons provisions; Personal Protective Equipment at Work Regulations 1992 as amended by the Personal Protective Equipment at Work (Amendment) Regulations 2022. – Council Directives 2004/37/EC and 92/85/EEC retained as informative references only, with an express statement that they are not directly binding in Great Britain following EU exit and that the operative duties are those in COSHH (including Schedule 1 and regulation 7) and the Management of Health and Safety at Work Regulations 1999.	Chemical Safety Adviser	
18 September 2026	Section 7.3 – Risk assessment duty completed; the requirement	Isabelle Sangregorio	Rebecca Jones Director of Health & Safety

	that persons directly affected are informed of revisions was previously left unstated. – Reference added to University guidance QMHSD_HS_GDN069 Chemical Storage Guidance . Waste disposal duty raised from staff being “trained sufficiently” to staff being trained and competent. – Health surveillance duty amended. The individual is no longer required to keep their own health exposure record. Requests are made to Occupational Health, which makes and maintains the statutory health record, and the individual is provided with a copy. – New duty added covering unattended, overnight and out of hours work and lone working with hazardous chemicals, controlled in accordance with section 8.21. – Local exhaust ventilation duty extended to include routine user checks of fume cupboards.	H&S Manager (Science and Engineering) and University Chemical Safety Adviser	
18 September 2026	Section 7.7 – New duty added requiring the Occupational Health Service to make and maintain the statutory health record for every member of staff under health surveillance, retain it for 40 years from the date of the last entry in accordance with COSHH regulation 11(3), and provide the individual with a copy.	Isabelle Sangregorio H&S Manager (Science and Engineering) and University Chemical Safety Adviser	Rebecca Jones Director of Health & Safety
18 September 2026	Section 8.1 – Assessment trigger amended. The exemption for work where “the risk is trivial” removed, proportionality of the assessment stated, and an express statement added that no activity within scope is exempt from assessment. – Prevention and substitution recast against COSHH regulation 7(1).	Isabelle Sangregorio H&S Manager (Science and Engineering) and University Chemical Safety Adviser	Rebecca Jones Director of Health & Safety

	Where work cannot proceed without a particular chemical the assessment must record why, and the substance must be used in the least hazardous form and smallest quantity the work allows with exposure adequately controlled. – Genetically modified organisms added to the examples of parallel specialist risk assessment regimes. – New sub-section added setting out what COSHH regulation 6 requires of a suitable and sufficient assessment: hazardous properties; nature, degree and duration of exposure; all routes of exposure; work activity and human factors following HSG48; whole life cycle; accident, incident and emergency; control measures applying the hierarchy of control and the Schedule 2A principles; exposure monitoring under regulation 10 and health surveillance under regulation 11; statutory flags for carcinogens, mutagens and reprotoxic substances (H340, H350, H350i) and respiratory sensitisers (H334); information, instruction, training and supervision under regulation 12; and the record of significant findings. Assessment by a competent person, and approval before high residual risk work begins, also stated.		
18 September 2026	Section 8.2 and 8.3 – Sections reordered. Control Measures is now 8.2 and Dangerous Substances and Explosive Atmospheres Regulations is now 8.3, so that the general controls precede the fire and explosion specific arrangements. Internal cross-references updated.	Isabelle Sangregorio H&S Manager (Science and Engineering) and University Chemical Safety Adviser	Rebecca Jones Director of Health & Safety

	– New provision added at 8.2 requiring control measures to be selected in accordance with the hierarchy of control and the principles of good practice in Schedule 2A of COSHH, compliance with which defines adequate control under regulation 7(7). The five step hierarchy and the eight Schedule 2A principles are set out. – Requirement added for documented routine user checks of local exhaust ventilation between statutory examinations: confirmation of airflow before each use, sash discipline, and a prohibition on using fume cupboards for storage. – Cross-reference added at 8.3 confirming that the general hierarchy of control and the Schedule 2A principles at 8.2 apply in addition to the DSEAR specific controls. – Reference to ATEX rated equipment extended to ATEX/UKEx rated equipment to reflect the Great Britain conformity route.		
18 September 2026	Section 8.5 – Minimum standard amended to require a laboratory coat in addition to eye protection in all Queen Mary laboratory spaces. – New sub-section added setting a minimum personal protective equipment standard for wet laboratories: laboratory coat and eye protection as the default beyond the entrance, which a risk assessment may raise but not lower; laboratory coat requirements covering fastening, fabric suitability where naked flames are a significant hazard, issue, laundering, and a prohibition on wear outside the laboratory; eye protection to BS EN 166 class 1, F	Isabelle Sangregorio H&S Manager (Science and Engineering) and University Chemical Safety Adviser	Rebecca Jones Director of Health & Safety

	strength, 3 chemical risk marking, with pre-use inspection and provision for prescription spectacle wearers; suitable clothing and enclosed footwear; glove selection, storage, transfer between laboratories and the position in linked suites; departmental duties on risk assessment, sizing and storage; and the consequences of non-compliance. Links added to the Queen Mary personal protective equipment and glove guidance and to QMHSD_HS_GDN084.		
18 September 2026	Section 8.6 – Requirement added that where hydrofluoric acid is used or stored, calcium gluconate gel is provided at the point of use, kept in date, and users are trained in its application.	Isabelle Sangregorio H&S Manager (Science and Engineering) and University Chemical Safety Adviser	Rebecca Jones Director of Health & Safety
18 September 2026	Section 8.8 – Health surveillance trigger recast as the three limb statutory test in COSHH regulation 11(2): an identifiable disease or adverse health effect that may be related to the exposure; a reasonable likelihood that it may occur under the conditions of the work; and valid techniques of low risk to the employee for detecting it. Commentary on preferred sampling media removed. – Health record provision amended. The statutory health record is made and maintained by the Occupational Health Service on behalf of the University and retained for 40 years from the date of the last entry in accordance with COSHH regulation 11(3); the individual is provided with a copy and may request access at any time.	Isabelle Sangregorio H&S Manager (Science and Engineering) and University Chemical Safety Adviser	Rebecca Jones Director of Health & Safety

18 September 2026	Section 8.9 – Classification triggers recast by reference to GB CLP Regulation. Category 1A and 1B reprotoxic substances added as a trigger in their own right. Schedule III of Directive 2004/37/EC retained as an informative reference only. – Control standard tied to COSHH regulation 7(5): exposure prevented or, where prevention is not reasonably practicable, controlled to as low a level as is reasonably practicable and as far below the workplace exposure limit as possible.	Isabelle Sangregorio H&S Manager (Science and Engineering) and University Chemical Safety Adviser	Rebecca Jones Director of Health & Safety
18 September 2026	Section 8.11 – Duty placed on the Management of Health and Safety at Work Regulations 1999, regulations 16 to 18. Annexes I and II of Council Directive 92/85/EEC retained as an informative list only. The assessment form named. – New provision added giving equivalent protection to pregnant and breastfeeding students, with a specific risk assessment arranged by the supervisor or module lead.	Isabelle Sangregorio H&S Manager (Science and Engineering) and University Chemical Safety Adviser	Rebecca Jones Director of Health & Safety
18 September 2026	Section 8.12 – Explanatory text added on sensitisation, covering respiratory and skin sensitisers, the effect of subsequent exposure once sensitisation has developed, occupational asthma and allergic contact dermatitis. Classification recast by reference to GB CLP Regulation, the HSE list replaced with a reference to Substances that can cause occupational asthma, and laboratory animal work directed to the Health & Safety Directorate process.	Isabelle Sangregorio H&S Manager (Science and Engineering) and University Chemical Safety Adviser	Rebecca Jones Director of Health & Safety

18 September 2026	Section 8.13, 8.14 – Requirement added that transfers of hazardous chemicals from another institution follow the Queen Mary policy on compliance as consignor for the carriage of dangerous goods by road. – Labelling recast by reference to GB CLP Regulation. Annotation of the date of opening changed from advisory to mandatory, and made a requirement for time sensitive chemicals such as peroxide formers.	Isabelle Sangregorio H&S Manager (Science and Engineering) and University Chemical Safety Adviser	Rebecca Jones Director of Health & Safety
18 September 2026	Section 8.15 – Reference added to NaCTSO and ProtectUK guidance on securing hazardous materials, applicable to higher hazard and regulated chemicals. – Statutory reporting duty added. Any theft, loss or suspicious disappearance of a regulated or reportable explosives precursor or poison must be reported to the Home Office on 0800 789 321 within 24 hours of discovery in accordance with the Control of Explosives Precursors and Poisons Regulations 2023, with the Chemical Safety Adviser as responsible reporter. Suspicious enquiries and attempted acquisitions are reportable by the same route.	Isabelle Sangregorio H&S Manager (Science and Engineering) and University Chemical Safety Adviser	Rebecca Jones Director of Health & Safety
18 September 2026	Section 8.16 – Storage section restructured under four headings – segregation of incompatible chemicals, flammable liquids, time sensitive and reactive chemicals, and other storage controls – and tied to the Queen Mary guidance on the safe storage of chemicals. – Segregation provision added requiring storage by primary hazard class against the compatibility matrix and	Isabelle Sangregorio H&S Manager (Science and Engineering) and University Chemical Safety Adviser	Rebecca Jones Director of Health & Safety

	hazard priority ladder in the storage guidance, applying the defined levels of separation, segregation and isolation, with oxidisers always segregated from flammables and other fuels, and chemically resistant secondary containment provided. – Flammable liquid limits amended. The 50 litre limit now applies to highly flammable liquid held outside fire rated cabinets, with an increased total permitted where 90 minute fire rated cabinets conforming to BS EN 14470-1 are provided. The requirement for volumes over 5 litres to be held in a fire rated cabinet is retained and stated as verifiable at inspection. – Time sensitive chemicals provision amended to refer to touch or friction sensitive explosive degradation products, with the detailed regime placed in the chemical storage guidance. – Controls added prohibiting the use of fume cupboards as storage locations, restricting cold storage of flammable materials to spark free laboratory refrigerators and freezers and prohibiting domestic units, and requiring gas cylinders to be minimised at the point of use, restrained, and stored preferably externally.		
18 September 2026	Section 8.17 – Stock life provision added. Default storage lives apply from the date of receipt, being 5 years for hazardous chemicals and 10 years for non-hazardous chemicals, unless a shorter manufacturer expiry or the time sensitive chemicals regime applies, with documented justification and	Isabelle Sangregorio H&S Manager (Science and Engineering) and University Chemical Safety Adviser	Rebecca Jones Director of Health & Safety

	container integrity checks required for retention beyond. – Requirement added that consignment and packaging on transfer is carried out by a competent person trained in the packaging, documentation, security and consignment duties for dangerous goods.		
18 September 2026	Section 8.18. – Consultation route amended to the University Dangerous Goods Adviser via the Chemical Safety Adviser and the Health & Safety Directorate. Link added to the Health & Safety Directorate transport of dangerous goods webpage	Isabelle Sangregorio H&S Manager (Science and Engineering) and University Chemical Safety Adviser	Rebecca Jones Director of Health & Safety
18 September 2026	Section 8.19 – New provision added prohibiting disposal of hazardous chemicals to drain. Trade effluent consent from the sewerage undertaker under section 118 of the Water Industry Act 1991 is required for any proposed discharge to sewer and must be agreed in advance with the Health & Safety Directorate and Estates & Facilities. Uncontrolled discharge identified as a potential offence under environmental permitting legislation	Isabelle Sangregorio H&S Manager (Science and Engineering) and University Chemical Safety Adviser	Rebecca Jones Director of Health & Safety
18 September 2026	Section 8.20.1 to 8.20.3 – Requirement that licence applications are verified by the Health & Safety Directorate removed. Category 1 precursor licensing requirement and a link to the Home Office application added. Annual declarations reassigned to the School, Institute or group holding the licence, or in some cases the University Chemical Safety Adviser. – Controlled drugs expanded from a definition to the operating position: the Misuse	Isabelle Sangregorio H&S Manager (Science and Engineering) and University Chemical Safety Adviser	Rebecca Jones Director of Health & Safety

	of Drugs Act 1971 as the principal legislation; Home Office licensing for production, supply, possession, import and export; the position of university research departments for Schedules 2 to 5; and the licence requirement for production and for Schedule 1 substances. – Controlled drug precursors expanded to the four category regime with the controls applicable to each. Category 1 requires a Home Office domestic licence per operator and premises, an appointed responsible person, secure storage, restricted access and immediate reporting under 8.15. Category 2 registration thresholds stated for acetic anhydride above 100 litres per calendar year and red phosphorus above 200 grams per year. Categories 3 and 4 described. The expansion of Category 1 from 29 June 2026 noted by reference to Home Office Circular 003/2026.		
18 September 2026	Section 8.20.4 to 8.20.8 – Section 8.20.4 retitled Chemical Weapons Convention Scheduled Chemicals. The Organisation for the Prohibition of Chemical Weapons and UK National Authority framework added, with the Chemical Weapons Act 1996 named as the implementing legislation. Schedule 1 chemicals prohibited unless licensed by the Secretary of State. Schedule 2 and 3 annual declarations to be coordinated through the Chemical Safety Adviser and submitted to the UK National Authority within the Department for Energy Security and Net Zero. Consideration of international security, export control and research security	Isabelle Sangregorio H&S Manager (Science and Engineering) and University Chemical Safety Adviser	Rebecca Jones Director of Health & Safety

	requirements added for overseas collaboration. – Explosives expanded from a definition to a control. Licensing identified, being the police for acquisition and keeping and the Health and Safety Executive for manufacture and higher hazard storage, together with the security provisions of the Explosives Regulations 2014. No work involving manufacture, synthesis or intentional handling may take place without prior written approval from the Chemical Safety Adviser and a specific risk assessment. Cross-reference added to peroxide forming solvents and desensitised explosives such as picric acid at 8.16. – Explosives precursors: instrument title corrected to the Control of Explosives Precursors and Poisons Regulations 2023, made under the Poisons Act 1972 as amended. Regulated and reportable substances distinguished, the University professional capacity position stated, and the 24 hour Home Office reporting duty cross-referenced to 8.15. – Poisons recast against the Poisons Act 1972 as amended and the Control of Explosives Precursors and Poisons Regulations 2023, distinguishing regulated and reportable poisons. The previous reference to Schedule 1 of the 1972 Act removed. – Purpose of the Anti-terrorism, Crime and Security Act 2001 added, and Schedule 5 described as listing highly dangerous pathogens and toxins.		
18 September 2026	Section 8.21 – New section added covering unattended	Isabelle Sangregorio	Rebecca Jones Director of Health & Safety

	experiments, out of hours and lone working. Unattended and overnight runs must be specifically authorised in the risk assessment, which must demonstrate fail safe design against loss of services, over temperature and over pressure, containment of release and automatic shutdown where reasonably practicable, with signage giving the hazards, shut down instructions and emergency contacts. Out of hours work requires prior authorisation and excludes higher hazard activities. Lone working is permitted only where explicitly justified, and never where a foreseeable incident could incapacitate the worker	H&S Manager (Science and Engineering) and University Chemical Safety Adviser	
18 September 2026	Section 8.22 – New section added covering teaching laboratories: pre-approved teaching risk assessments reviewed before each delivery cycle; supervision levels set in the assessment; demonstrators and teaching assistants trained and assessed as competent for the specific practical; and chemicals selected as the least hazardous the educational objective permits, in quantities scaled to the class.	Isabelle Sangregorio H&S Manager (Science and Engineering) and University Chemical Safety Adviser	
18 September 2026	Section 8.23 – New section added covering nanomaterials. Engineered nanomaterials must be risk assessed with regard to particle scale properties not captured by GB CLP classification of the parent substance, applying a precautionary approach following UK NanoSafety Group guidance (3rd edition, 2025) and HSE guidance on using nanomaterials at work, with the Chemical Safety	Isabelle Sangregorio H&S Manager (Science and Engineering) and University Chemical Safety Adviser	Rebecca Jones Director of Health & Safety

	Adviser consulted before new work begins.		