|  |  |
| --- | --- |
|  | User’s guide to filling in the CoSHH/Risk Assessment form |
|  |  |
|  | Wolfson School Safety Team  [Date] |

**Filling out the Risk Assessment form - *user’s guide* for Wolfson School**

Regulations (see appendix 4), underpin the Health and Safety at Work Act 1974.

Preparing and recording risk assessments and CoSHH assessments is a legal requirement (*Management of Health and Safety at Work Regs 1999, Reg 3 (1) (2)*).

The Risk Assessment should be suitable and sufficient and meet ‘foreseeable’ concerns.

Thinking about what you are going to do during your project/experiment/research/daily work, and how you are going to carry it out safely, will reduce the likelihood of accidents or ill health arising from any mechanical/electrical or chemical/bio process in your work, or a combination of all.

Conducting the safety documentation process electronically creates an efficient method for locating and sharing past assessments. The approved Risk Assessments are given a unique number and added to the Wolfson Health & Safety Register. Similarly, the CoSHH form is given a unique number and added to the CoSHH register.

A work **method statement** is a document that details the way a work task or process is to be completed. The **method statement** should outline the hazards involved and include a procedural guide on how to do the job safely.

**COSHH - Control of Substances Hazardous to Health -** an extension of the risk assessment – also a legal requirement

• prevents or limits harm to people caused by chemicals.

• COSHH - covers substances that are hazardous to health and or the environment. Substances can take many forms and include:

•**chemicals**

•**products containing chemicals**

•**fumes**

•**dusts**

•**vapours**

•**mists**

•**nanotechnology**

•**gases** and **asphyxiating gases**

•**biological agents .**

If the packaging has any hazard pictograms, then it is classed as a hazardous substance. A Manufacturer’s Safety Data Sheet should be readily available for the material(s) if requested at a lab audit or safety inspection.

**NO ACTIVITY SHALL TAKE PLACE UNTIL THE RISK ASSESSMENT HAS BEEN APPROVED BY A DESIGNATED/AUTHORISED SSO/DSO OR COMPETENT OTHER**

**The Documentation Header**

A screenshot of a computer screen

Description automatically generated

Select risk assessment ‘header’ form from the drop-down box (see appendix 1 and 2.

Current version

Buttons add **(+)** or delete **(-)** rows from a list.

Supervisor name primarily for Student use – (the person who would normally review the risk assessment) or academic research lead. Staff may self-authorise and leave this blank.

Describe what activity the risk assessment covers. Should be concise and easy to understand.

Select School or Professional Service from drop down box.

Enter name and e-mail address – must be lower case.

Where the activity being assessed takes place

**Safety Method Statement -** This is the body of the assessment. Every stepof the process**, from start to finish** of the activity.

A screenshot of a document

Description automatically generated

Step by step narrative of what operation is occurring from start to finish and the precautionary or individual control measures put in place at each juncture. For example,

**Process step.**

Prepare test piece by ultrasonically cleaning and rinsing with distilled water.

**Precautionary measures and comments**

Equipment to be within current PAT date.

Wear PPE

Reference user manual, other risk assessment, training course attended – detail pertinent to activities.

Emergency protocols – evacuation procedure – how will equipment be left when the above actions are required? Explain here!

Must have knowledge of where spill kits are available – how to clear away specific agents, oil, water, chemical. If there is an accident, who do you contact? What is the procedure? Info required here.

List all chemicals used in the process. These chemicals should also be included in the CoSHH section of the assessment.

Specific training requirements should be recorded. Also, competency to do the activity.

Details pre-filled from first page entry. But Ref number can only be inputted by DSO/SSO on approval.

Every piece of equipment posing a risk must be listed.

**Process Risk Assessment**

Associated hazards and risks to the method statement.

You have told us step by step what you are doing.

If lasers are being used then the information about class, power, use etc. and mitigating methods can be placed both here and in the Method Statement

Now you tell us how you are making the process practicably safe.

A screenshot of a computer

Description automatically generated

Input people/groups at risk using drop down.

Associated risks and control measures to be input.

Use the impact and probability drop downs to give a residual risk rating.

Low – good

Medium – look at controls.

High – unacceptable review risk, hazards, and methods – substitute or eliminate source of hazard or input extra controls.

See appendix 3 Hierarchy of control of controls control.

Enter the hazards associated with the process.’ Click on the space - a drop-down list provides a selection of prompts. If these are not suitable for the process, then there is an ‘Other’ option which you can type over.

Activating these buttons changes the format of the *Category 1*: table – see appendix for other examples for *1 General use 2 Event.*

Lone working must be discussed and agreed with your supervisor or line manager. It must be part of the Risk Assessment.

Those working with high voltage (above 45 Volt) cannot lone work. There must always be two persons/colleagues present.

Table recording persons present or taking part in the activity that may be at risk in the area whilst the activity takes place.

A table of activity with numbers and symbols

Description automatically generated with medium confidence

Table provides information on the numbers and category of person(s) present who may be directly affected in the event of an incident. The table should be used as a measure of potential impact in an event, but also the safety management requirements as a group – includes different risk levels but also potential level of involvement. You may wish to exclude some from the areas because of the assessment that has been produced and level of risk.

Grand total should never be less than the number of people present at time of activity.

The table should automatically total

**The CoSHH Form** – information can be input from the relevant MSDS.

Amount used is adjusted from your experiment.

The overall risk of using this chemical is automatically assessed from the data you input.

A close-up of a computer screen

Description automatically generated

Pictogram for hazard statement appears here.

Physical state of the chemical being used. Can be used as part of the calculation of the exposure potential. Options are available for solids, liquids, and gases.

Displays the routes of exposure based upon the hazard codes entered.

Enter chemical name *Sulfuric Acid* or brand (e.g. *Loctite SI 5980*).

Enough space for two lines of text

Where is the chemical used ?

Open, which means there is no barrier between the user and the chemical.

Semi Closed, which means there is a shield/air barrier between the user and the chemical (e.g. fume hood.)

Closed, which means the user and the chemical are completely isolated from each other.

Chemical abstract service- internationally recognised code to identify this chemical that may be known by a different name in some areas of the world.

Enter the WEL (workplace Exposure Limit) value here. There may be Long Term and / or Short-Term Exposure Limits (LTEL/STEL) and will be found in the literature (e.g. Safety Data Sheet (SDS))

Examples - **COSHH Workplace Exposure Limits (WELs)**:

* These limits apply to hazardous substances under the Control of Substances Hazardous to Health (COSHH) regulations.
* To calculate the 8-hour time-weighted average (TWA) WEL, follow these steps:
  + Suppose someone is exposed to 0.25 mg/m³ for 3 hours and 0 mg/m³ for the remaining 5 hours.
  + Calculate the average exposure:

8(0.25×3)+(0×5)​=0.135mg/m³

**Short-Term Exposure Limit (STEL)**:

* The STEL sets a maximum concentration for a shorter period (e.g., 15 minutes).
* It aims to prevent acute effects due to brief high exposures.
* Employers must monitor and limit exposure during these short periods.

**The CoSHH Form** cont.

The H and P statements can be chosen from the drop down.

This information is available at section 2 of the Manufacturer’s Safety Data Sheet (MSDS or SDS)

The rest of the information for this table can also be found in the MSDS.

The disposal method offers a drop-down list – there is an ‘Other’ choice to write over if required.

‘Spillages’ is also a drop-down list also offering an ‘Other’ choice.

A screenshot of a computer

Description automatically generated

Is there another process RA associated with this one. Or is this an additional CoSHH form for an existing RA?

If additional PPE is required to what has already been noted, please add here.

Click the Add another chemical button if more required.

Add sources of data – e.g. chemical provider and SDS

Add a ‘Statement to work’ e.g. word doc., chemical reaction mechanism diagram, or schematic) by using Show Image button.

**Form Approval**

A form with a box and a box with text

Description automatically generated with medium confidence

The document should be signed by the Academic Supervisor for students to establish that due diligence has been paid. Once the assessment is signed the Supervisor is responsible for ensuring that the Student will work to the Risk Assessment instructions. The Supervisor has a resposibility to ensure that this is followed closely

The form is then sent to the SSO or DSO for approval. They may reject the application if they feel that it is unsuitable or requires additional information adding.

Once the SSO/DSO has signed and dated a unique number will be added to the RA and Method Statement and a different number to the CoSHH form. These numbers are exclusive to the form and are stored on relevant safety registers. A review date will be added. Once signed by the SSO/DSO the form is locked to prevent any additional, so unapproved editing.

If for any reason chemicals or different machining processes are required then the form is sent back to the SSO/DSO for them to erase their signature. The student or academic then makes the appropriate adjustments and returns the form to the SSO/DSO. The alterations will be reviewed and returned to the student *et al*, bearing an up to date signature and ‘new review’ date

**NO ACTIVITY CAN TAKE PLACE UNTIL THE RISK ASSESSMENT HAS BEEN APPROVED**

**Appendix 1**

Risk Assessment – General Use

A screenshot of a computer

Description automatically generated

Note the absence of work equipment hazards compared to the Laboratory/Workshop RA header.

This configuration should be used for on campus activities, but not for workshop or lab use.

This does not mean that the work equipment risks don’t exist. It is important this is still addressed in the Method Statement and the known risks - testing on a Campus Sports Field utilising measurment equipment (camers, lighting rigs etc.) outdoors, or in the Tennis Center; you may be transporting goods on a trailer from one building to another, drone flying, will be included in the *risk/hazard* association further down the Risk Assessment page.

**Appendix 2**

Risk Assessment – Event

A screen shot of a computer

Description automatically generated

Similar to that found in Appendix 1 but is purposely set out for event risk assessing.

If you are organising events such as a School barbecue, or a mini-conference, then this is the configuration to use

Remember that for ‘events’ other agencies across Campus should be approached – FM, Estates, Insurance.

External agencies may also be approached e.g for drone flying (CAA)

**Appendix 3**

**Elimination** – When a potential hazard is identified in a facility, the first thing that should be done is to try to eliminate it - remove the hazard altogether

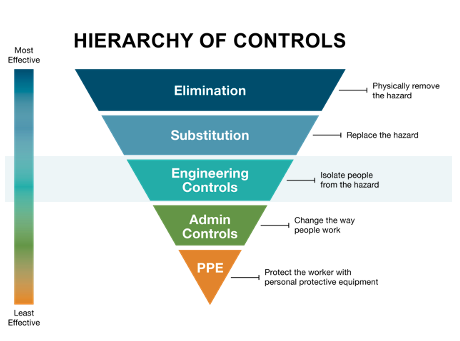
**Substitution** – If it cannot be eliminated, is there a chemical that can have the same effect but is less hazardous? Is there another way of processing with a lower risk? If so change

**Engineering controls** – Isolate the hazard from the user - guarding, light gates, E-stops etc. What makes the work safer?

**Administrative controls** – control the risk - how do you work, what protocols are in place? Risk Assessments, Safe Operating Procedures, Safe Systems of Work

**PPE** – Although PPE is considered the last line of defence, it is still extremely important for workplaces to have it readily available. PPE is provided by the employer who shall ensure that workers have sufficient information, instruction, and training on PPE use. Once provided with PPE, it must be worn. Some risk may remain after engineering controls and safe systems of work have been applied. PPE may then be needed to reduce the risk of injury from:

* breathing in dust, nano particles, mist, gas, or fume
* falling materials hitting people
* flying particles or splashes of corrosive liquids getting into people’s eyes
* skin contact, with corrosive materials
* excessive noise
* extremes of heat or cold



**Appendix 4**

The following regulations apply across the full range of workplaces and underpin the Health and Safety at Work Act 1974:

1. Management of Health and Safety at Work Regulations 1999: require employers to conduct risk assessments; plan to implement necessary measures, appoint competent people and arrange for appropriate information and training to be in place.
2. Workplace (Health, Safety and Welfare) Regulations 1992: cover a wide range of basic health, safety, and welfare issues such as ventilation, heating, lighting, workstations, seating, and welfare facilities.
3. Health and Safety (Display Screen Equipment) Regulations 1992: set out requirements for work with Visual Display Units (VDUs).
4. Personal Protective Equipment at Work Regulations 1992: require employers to provide appropriate protective clothing and equipment for their employees.
5. Provision and Use of Work Equipment Regulations 1998: require that equipment provided for use at work, including machinery, is safe.
6. Manual Handling Operations Regulations 1992: cover the moving of objects by hand or bodily force.
7. Health and Safety (First Aid) Regulations 1981: cover requirements for  first aid.
8. The Health and Safety Information for Employees Regulations 1989: require employers to display a poster telling employees what they need to know about health and safety.
9. Employers’ Liability  (Compulsory Insurance)  Act 1969: require employers  to take out  insurance against accidents and ill health to their employees.
10. Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 1995 (RIDDOR): require employers to notify certain occupational injuries, diseases, and dangerous events.
11. Noise at Work Regulations 1989: require employers to take action to protect employees from hearing damage.
12. Electricity at Work Regulations 1989: require people in control of electrical systems to ensure they are safe to use and maintained in a safe condition.
13. Control of Substances Hazardous to Health Regulations 2002 (COSHH): require employers to assess the risks from hazardous substances and take appropriate precautions.
14. Chemicals (Hazard Information and Packaging for Supply) Regulations 2002: require suppliers to classify, label and package dangerous chemicals and provide safety data sheets for them.
15. Construction (Design and Management) Regulations 1994: cover safe systems of work on construction sites.
16. Gas Safety (Installation and Use) Regulations 1994: cover safe installation, maintenance and use of gas systems and appliances in domestic and commercial premises.
17. Control of Major Accident Hazards Regulations 1999: require those who manufacture, store or transport dangerous chemicals or explosives in certain quantities to notify the relevant authority.
18. Dangerous Substances and Explosive Atmospheres Regulations 2002: require employers and the self-employed to conduct a risk assessment of work activities involving dangerous substances.

*(HSC 13 Health and Safety regulation a short guide- HSE*)

Additionally, certain regulations focus on more explicitly specific hazards such as asbestos and lead.

For more information on LU H&S Policies, please go to Professional Services – Health and Safety Service at the address below.

[Health and Safety Service | Loughborough University (lboro.ac.uk)](https://www.lboro.ac.uk/services/health-safety)