



Hazardous Working Policy

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Version History

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1	Clive Parkinson		June 2010
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3	Clive Parkinson / Danny Bosdet	New Format with revisions	August 2015

Approval History

Equality Analysis

Version	Reviewed by	Comments	Date
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Committee Sign Off

Version	Committee Name	Date of Sign Off
3	Health and Safety Committee (review)	22 October 2015
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1	Introduction
1.1	Purpose
1.1.1	The University of Surrey acknowledges that there may be an increased risk to the health and safety of its employees or students when undertaking hazardous activities or working in hazardous environments. This Policy forms part of the University's commitment to managing these risks in order to provide a safe place in which to work and study. This policy details the arrangements and responsibilities that are in place to effectively manage these risks.
1.2	Scope
1.2.1	<p>The health and safety of staff, students and visitors is of paramount importance to the University. Our Health and Safety Policies enable the University to operate effectively and allow its staff, students and visitors to undertake their activities without detriment to their health, safety and wellbeing. To achieve this, the University will assess and control the risks for all personnel who are deemed to be carrying out hazardous activities or to be working in hazardous areas.</p> <p>This policy applies to all University personnel who are working on or off University of Surrey premises. The policy emphasises the responsibilities and expectations placed upon managers and supervisors of University personnel as well as on those who actively control contractors engaged on University business.</p> <p>Particular emphasis is placed on those personnel whose exposure to risk is increased by a requirement to work alone or outside of usual university hours.¹ This policy also applies to students undertaking practical / experimental projects without direct supervision or to those students who may be carrying out fieldwork outside of the campus and who may be exposed to a significant risk arising from their work activities or work environment.</p>
1.3	Equality Analysis
1.3.1	<p>Consideration is given to the protected characteristics of all people groups identified in the Equality Act 2010. The protected characteristics are gender, age, race, disability, sexual orientation, religion/belief, pregnancy and maternity, and marriage/civil partnership.</p> <p>The University recognises the need for specific measures to ensure the health and safety of each of these groups. This policy and all other associated Health and Safety related policies take this into account.</p>
1.4	Definitions
1.4.1	University Personnel: all staff, visiting academics or students who are engaged in University work; or contractors employed by the University.

¹ Usual University opening hours are defined as between 08:00-18:00 on weekdays

1.4.2	<p>Hazardous Areas: areas where a University worker may be exposed to risks that are considered greater than those normally encountered within low risk working environments such as offices or teaching rooms. These areas may include laboratories, workshops or any area where special control measures are necessary to minimise risk.</p> <p>Hazardous areas may be classified as low, medium or high and may subsequently have restricted access. These areas will have signage on the outside of the door indicating any access restrictions.</p>
1.4.3	<p>Hazardous Task: a task where the hazards are considered to be greater than those that would be encountered in normal circumstances. A good example might be a worker using hazardous chemicals or substances or the operation of a hazardous item of work equipment.</p>
1.4.4	<p>Significant Hazard: a hazard, associated with an occupational activity, which has the potential to cause harm. A significant hazard is more easily foreseeable than a natural hazard which may be associated with normal activities.</p>
1.4.5	<p>Competence, Training and Briefing</p> <p>Competence is based upon training and is equipping all staff, students (and others where the University has a duty-of-care) with relevant skills and knowledge to deal appropriately with a given health and safety situation.</p> <p>Briefing is informing such persons of relevant knowledge in relation to health and safety.</p> <p>Training and briefing will be made available in a range of formats according to the needs of the trainee and different groups of personnel.</p> <p>University and departmental training matrices are used to assign the levels of training required for any individual. These matrices should be used to set the competency of a particular individual as relates to a particular task.</p>
1.4.6	<p>Competent person</p> <p>A competent person has the knowledge, training and experience to understand the activity being carried out. They are familiar with all the equipment/substances being used as well as with the layout of the building and all applicable emergency procedures. They will be able to make safe any equipment and summons an emergency response if required.</p> <p>In order to judge competency a person must themselves be competent. Competency should be judged by a person who has the following qualities:</p> <ul style="list-style-type: none"> • They know the person they are assessing • They are experienced with the type of work they are assessing • Their knowledge in the area is current • They are familiar with all procedures and emergency arrangements • They have undergone all training that is deemed necessary to work in that area
1.4.7	<p>Accessibility</p> <p>The duty to make reasonable adjustments, as far as possible, to ensure that all staff and students (and others where the University has a duty-of-care) with a disability have equal access to everything they need to do a job or studies as those persons without a disability.</p>

1.4.8	<p>Safe System of Work</p> <p>A formal procedure which results from the systematic examination of a task in order to identify all the hazards. It defines methods to ensure that hazards are eliminated or risks minimised.</p>
1.5	Legislative context
1.5.1	<p>There are general duties under the Health and Safety at Work Act 1974 and specific duties within the Management of Health Safety at Work Regulations 1999 that require the University to provide a safe environment and safe systems of work for its employees and those working on its premises. The University has a duty to undertake risk assessments to identify significant risks and to implement suitable control measures to minimise the risks wherever practicable. These requirements are equally applicable to work situations and activities where staff and students are working alone or outside normal working hours in hazardous environments.</p>
1.6	Health & Safety Implications
1.6.1	<p>This Policy forms part of the University Health and Safety Policy.</p>
2	Policy
2.1	Principles
2.1.1	<p>This policy aims to ensure that all hazardous activities are subject to proper and thorough risk assessment before commencing.</p>
2.1.2	<p>This policy aims to ensure that all control measures that are identified in the risk assessment are fully and correctly implemented so as to reduce any risk to a level which is as low as is reasonably practicable.</p>
2.2	Procedures
2.2.1	<p>Risk Assessment of Hazardous Work</p> <p>Any work activity that has a significant hazard associated with it must be subject to risk assessment. This risk assessment should be conducted by a competent person, ideally the person carrying out the work. The risk assessment should be passed to a supervisor/manager for approval. Risk assessments may only be carried out or approved by a competent person (meaning they have been trained in risk assessment procedures).</p> <p>Any measures that are identified in the action plan must be implemented by the due date and the risk assessment must be subject to review. The risk assessment should also identify any necessary control measures required regarding lone working arrangements.</p>
2.2.2	<p>Lone Working Arrangements and Controls</p> <p>The risk profile of any activity can be different if the activity is to be carried out in an area where others are not present. For this reason arrangements are in place to aid personnel in determining if working alone is suitable. All personnel should consider lone working as a possible factor associated with any activity and should be aware that lone working scenarios may develop at any time of the day.</p>

	<p>From the risk assessment any activity should be broadly placed in to one of the following hazard categories.</p> <ul style="list-style-type: none"> • Low Hazard Activity • Medium Hazard Activity • High Hazard Activity <p>Examples of the types of activities that may fall in to each hazard class are shown in Appendix 1. Some areas or departments may assign hazard groups to particular activities. These assignments are then used to determine the lone working controls that are required. An example of this is shown in Appendix 2 (Chemistry lone working guidelines). Such grids are very useful and effective ways of describing what type of work is permitted.</p> <p>The following risk control measures should be applied for each hazard category along with any other additional measures identified by the risk assessment. The overriding principle of control is to reduce the risk to the lowest level practicable.</p> <p>Low Hazard Activities</p> <ul style="list-style-type: none"> • Can only be undertaken by workers who are familiar with the premises and are aware of the emergency procedures. • Work is undertaken in accordance with established safe working procedures. <p>Medium Hazard Activities</p> <ul style="list-style-type: none"> • Can only be undertaken by competent persons if there is at least one other person in the vicinity (either in the same area or close by) who is competent to make safe any work being undertaken and is also familiar with any emergency procedures for the area. • Must be authorised (using risk assessment form) by the line manager/supervisor (or equivalent e.g. Principal Investigator). • Activity is undertaken in accordance with safe working procedures. <p>High Hazard Activities</p> <ul style="list-style-type: none"> • Can only be undertaken by competent persons if there is at least one other person in the same location who is competent to make safe any work being undertaken and who is also familiar with any emergency procedures. • Suitable emergency arrangements, such as the provision of adequate first aid or fire safety measures must be in place. Additional measures may be required depending on the time of day when the work is being undertaken. • Must be authorised (using risk assessment form) by the Head of Department (or equivalent e.g. Director). • Activity is governed by a safe system of work.
2.2.3	<p>Access Arrangements for Hazardous Areas</p> <p>Only competent persons may enter hazardous areas. Competent persons may include members of Faculty, Research Postgraduates, technicians, visiting research workers or persons of equivalent status.</p> <p>All other persons entering hazardous areas must be accompanied by a competent person.</p>

	<p>Hazardous areas may have access restricted in any of the following ways.</p> <ul style="list-style-type: none"> • Swipe access: contact Faculty gatekeeper for staff card activation. • Key code access: contact Lab Manager for code. • Key access: contact Faculty Facilities Manager/Lab Manager for key. <p>In all cases it is the responsibility of the person granting/approving access to ensure that the requesting individual possesses the requisite competency</p>
2.2.4	<p>Taught Undergraduate Students</p> <p>Undergraduates are required to be adequately supervised by a competent person whilst undertaking classes in a hazardous area.</p>
2.2.5	<p>Undergraduate Project Students</p> <p>Undergraduate project students are allowed access to hazardous areas provided that they:</p> <ul style="list-style-type: none"> • Have demonstrated a suitable level of maturity and competence. • Have received any training prescribed for their particular activity. • Have obtained authorisation from their Faculty supervisor. • Are familiar with the local safety regulations and emergency procedures.
2.2.6	<p>Postgraduate Students</p> <p>Postgraduate students fall in to two categories:</p> <ul style="list-style-type: none"> • Taught - PG/T • Research - PG/R <p>PG Students may be required to work in a hazardous area and are allowed access provided that they are judged to be competent by their Supervisor or another suitable authority.</p> <p>The Supervisor must ensure that a suitable level of supervision/oversight is provided until they are confident that the PG Students are competent.</p>
2.2.7	<p>Maintenance and Emergency Works</p> <p>All work must be subjected to a risk assessment and, where appropriate, a written safe system of work provided, e.g. "Permit to Work".</p> <p>The safe system of work must include an emergency action assessment and all work must be carried out against pre-planned schedules.</p> <p>In all cases where remedial work is to be carried out a suitable authority must approve the work and ensure the work is carried out in a safe manner and that all necessary precautions have been taken to protect any person carrying out the work and other affected parties.</p>
2.2.8	<p>Special Procedures</p> <p>Some highly controlled areas will be subject to Special Procedures, such as when workers wish to work in radiation controlled areas. When such measures exist all users must be accredited and have received suitable training and authorisation from the nominated person.</p>

3	Governance Requirements
3.1	Responsibility
3.1.1	<p>The Director of Health & Safety is responsible for the following:</p> <ul style="list-style-type: none"> (a) Auditing compliance with this policy. (b) The provision of advice, training and guidance to all persons within the University, Faculties and Directorates regarding compliance with this policy. This advice may be given directly or through the appointment of competent persons. (c) Ensuring that this policy and any accompanying guidance is current and correct. (d) Liaising with any relevant Regulatory authorities.
3.1.2	<p>Deans and Directors ² are accountable for the provision of measures to ensure the following.</p> <ul style="list-style-type: none"> (a) That all control measures which are deemed necessary are maintained and effective. (b) That staff and students have sufficient instruction and information and are adequately trained and supervised. (c) That any staff or students who meet the criteria for health surveillance attend for this surveillance and that appropriate records are kept. (d) That any recommendations made by the University Occupational Health Service are actioned and that records are kept. (e) That adequate arrangements are in place where facilities are shared or where staff and students are working on premises managed by other employers. (f) That adequate emergency plans and procedures are in place to deal with foreseeable adverse events. (g) That sufficient resources are made available to enable compliance with this policy. (h) To ensure that any required licences are up to date, that suitable arrangements are in place for storage, and that complete records are maintained pertaining to the use and storage of controlled or dangerous agents.
3.1.3	<p>Managers and Supervisors (including academic) of staff and students are responsible for ensuring the following.</p> <ul style="list-style-type: none"> (a) Prior to carrying out any hazardous activities a suitable and sufficient risk assessment has been written, approved and documented. (b) Any control measures identified by the risk assessment, including those advised by Occupational Health, have been fully implemented.

² A Director is defined for the purposes of this policy as those who have control over either hazardous areas or personnel who carry out hazardous activities.

	<p>(c) Work is only begun when a risk assessment has been undertaken. The Supervisor must ensure their reportee has either carried out their own risk assessment or has read and fully understood any risk assessment that has been written for the particular activity.</p> <p>(d) That adequate information, instruction, training and supervision is provided.</p> <p>(e) That suitable arrangements have been made in the event of lone working and that the risk assessment has identified suitable controls to manage this scenario.</p> <p>(f) That the Dean/Director and Faculty/Unit Health & Safety Advisor has been informed of any activity where the risk assessment has indicated that there is a high residual risk associated with a particular activity.</p> <p>(g) A copy of any risk assessments must be available and provided if requested.</p>
<p>3.1.4</p>	<p>Staff and Students who carry out hazardous activities must comply with the following requirements.</p> <p>(a) A suitable and sufficient risk assessment must be carried out. This risk assessment must be approved by an appropriate Supervisor/Manager.</p> <p>(b) Staff/Students must read and fully understand any risk assessment that has been completed by somebody else in relation to their hazardous activities.</p> <p>(c) All students/staff must follow all Local/University rules and procedures when carrying out hazardous activities or working in hazardous areas.</p> <p>(d) Any measures identified by the risk assessment must be fully implemented and assessed prior to work beginning.</p> <p>(e) To use and maintain any Personal Protective Equipment (PPE) provided in an appropriate manner. If a risk assessment identifies PPE as a control measure then staff/students must use it.</p> <p>(f) To report any defects, errors or omissions in the procedure, PPE or equipment.</p> <p>(g) To report any accidents or near misses that occur whilst carrying out hazardous activities to their Supervisor/Manager and <i>via</i> the University reporting procedure.</p> <p>(h) To undertake any training deemed necessary by the University.</p> <p>(i) To attend any Occupational Health appointments required for health surveillance and to cooperate with this process.</p> <p>(j) To report any health concerns they may have regarding their involvement in hazardous activities to their Supervisor/Manager.</p>
<p>3.1.5</p>	<p>Managers and Supervisors of contractors have the following responsibilities.</p> <p>(a) To make contractors aware of this policy and any other factors that may affect the contractors' risk assessment.</p> <p>(b) To ensure that a written risk assessment has been undertaken where required.</p>

	<p>(c) To monitor and ensure that any control measures identified by the risk assessment have been implemented.</p> <p>(d) To advise contractors of any risks to them deriving from any University activities occurring in the areas they are working.</p> <p>(e) To ensure that any required Permit to Work is in place and is approved.</p>
3.1.6	<p>Contractors must comply with the requirements of this policy in the following ways.</p> <p>(a) By carrying out a risk assessment for any hazardous work before that work commences.</p> <p>(b) By implementing any control measures, including emergency procedures, identified by the risk assessment.</p> <p>(c) By providing adequate information, instruction, training and supervision to their staff and ensuring that they are competent.</p> <p>(d) By providing any PPE that is required to work safely in the particular area.</p> <p>(e) Arrange suitable health surveillance should it be deemed necessary.</p>
3.1.7	<p>Health and Safety Advisers have the following responsibilities</p> <p>(a) To give competent and informed advice to all users required to carry out hazardous activities or to work in hazardous areas.</p> <p>(b) To provide training as required and in a format that is appropriate; to monitor the uptake and effectiveness of this training.</p> <p>(c) To provide information on ... Health and Safety Performance..</p> <p>(d) To investigate any adverse incidents arising during hazardous activities in order to identify the root cause.</p> <p>(e) To remain up to date and informed regarding current best practice and legislation.</p>
3.2	Implementation / Communication Plan
3.2.1	<p>Leaders alert to managers.</p> <p>Policy will be placed on University Policy Website and also be available on Health and Safety pages.</p> <p>A copy of the Policy will be placed in lab safety folders (where appropriate).</p> <p>The Policy will be explained during local training which is provided to all staff and students.</p> <p>The policy will be introduced during Induction Training.</p>

	<p>Risk assessment training will reference this Policy.</p> <p>The Staff Handbook given to all staff will reference this Policy.</p>
3.3	Exceptions to this Policy
3.3.1	None
3.4	Supporting documentation
3.4.1	<p>Health and Safety Policy; Piped Compressed Gas Systems and Standalone Gas Cylinder Policy; Asbestos Policy; Biosafety and Biosecurity Policy; Hazardous Substances Policy; Dangerous Substances and Explosive Atmospheres Guidance; Radiation (Ionising) Safety Policy</p>

Appendix 1: Examples of activities and associated risk category for lone working risk assessment along with controls.

Hazard Category	Activity	Hazard	Control Measure
Low	Office-based lone working	Illness	If known illness then consideration should be given to restricting working alone to periods of less than one hour. Consider regular checking in with Security
		Fire	Evacuate to assembly point and report to Incident Controller.
		Intruder in building	Secure building and contact Security on emergency number if you see or hear anything suspicious.
		Unplanned event	Personnel must be familiar with emergency procedures.
Low	Collecting routine data. Carrying out routine procedures in laboratory.	Laboratory environment.	Use only specified equipment. Avoid use of hazardous materials (e.g. sharps, chemicals)
		Unplanned event	Personnel must be familiar with emergency procedures.
Medium	Working with workshop/laboratory	Injury	Work must not be undertaken alone but with a competent colleague in the vicinity.
		Unplanned event	Personnel must be familiar with emergency procedures.
High	Work within a specialised unit e.g. CL3, High Voltage access, highly toxic chemicals, pyrophoric chemicals.	Injury	Work must not be undertaken alone but with a competent colleague in the same location.
		Unplanned event	Personnel must be familiar with emergency procedures.
		Emergency plan	Local incident plan required.

Appendix 2: Example departmental specific lone working matrix guide

General Laboratory Activity Scenarios (note: these are only indications of typical activities):

Example Activities:

- A. Handling of high hazard materials (BuLi, metal hydrides, halogens, explosives, strong corrosives), high pressure equipment, or reactions on larger scales (> 500 mL) and at temperatures above 250 °C
- B. Standard reaction procedure (< 500 mL): setup, handling of standard reagents, extractive workup (e.g. separation funnel), use of liquid nitrogen
- C. Other workup, including drying, filtration, rotavap, recrystallization, column chromatography
- D. Analysis, including TLC, prep for or running of spectra, use of spectrometers
- E. Housekeeping, including tidying, sorting, washing glassware
- F. Brief monitoring or inspection, including e.g. visual check on reaction

Activity periods:

1. Normal working hours: direct supervision (direct visual contact)
2. Normal working hours: others working in lab (within earshot)
3. Normal working hours: temporarily alone (no one else in lab for a few minutes)
4. Out of hours (lone working or not): 5:30 pm – 9:00 am weekdays or at any time during the weekends
5. University closure (no lone working permitted)

	Generally allowed after risk assessment			May be allowed (seek advice)		Generally Prohibited	
	1	2	3	4	5		
A	Green	Yellow	Red	Red	Red		
B	Green	Green	Yellow	Red	Red		
C	Green	Green	Green	Yellow	Red		
D	Green	Green	Green	Yellow	Red		
E	Green	Green	Green	Yellow	Red		
F	Green	Green	Green	Green	Yellow		