

General Risk Assessment

Management Unit:	Engineering	Location: (Site/ Building/ Room)	Level 5 Environmental lab
Assessment Date:	05/12/2013	Review Date:	05/12/14
Assessors Name:	Julie Russell	Job Title:	Technician
Task / Activity:			

What are the hazards? (See list of sample hazards)	What are the risks?	Who might be harmed? (eg Staff, students, visitors)	What control measures are required to eliminate or reduce the risks?	Risk Evaluation			Risk Rating
				Consequence (1 – 3)	Likelihood (1 – 3)	Overall risk (C x L)	Low, Medium or High
Inexperienced and untrained personnel	Carrying out tasks without care due to insufficient knowledge or training	Staff and students	Read and sign code of practice for this lab. Train staff and students in safe use of equipment and methods.	2	2	2	Medium
Chemicals	Chemicals may be harmful, carcinogenic, corrosive, flammable, irritant	Staff and students	Carry out COSHH risk assessment, train all personnel in safe handling and use. Use PPE where necessary	3	2	6	High
Biological substances	Biological agents may be harmful to human health by ingestion, inhalation or skin contact	Staff and students	Carry out Biological risk assessment for each biological agent. Only trained staff to have access to biological agents Use PPE where necessary.	2	2	4	Medium
Gas cylinders	Dropping cylinder when transporting, release of contents or pressure	Staff and students	Train personnel in their safe use. Use appropriate safety restraints and trolleys. Return empty cylinders to BOC	3	1	3	Low
Electrical equipment	Electric shock or burns	Staff and students	PAT testing, only qualified electricians allowed to carry out repairs	3	1	3	Medium
Tripping	Injury from falling, slipping or tripping	Staff and students	Good housekeeping, do not leave anything lying around. Clean up spills immediately. Use wet floor signs if necessary. Only use specialised equipment for reaching heights eg ladders	2	2	4	Medium
UV radiation	Damage to skin and eyes from improper use of gel imaging equipment	Staff and students	Use gloves, cover all exposed skin and work behind safety shield. Only trained personnel allowed to use this equipment.	3	2	6	high

Solvents	Harmful to human health by inhalation and skin contact. Risk of fire/explosion	Staff and students	Minimise quantities stored in the lab and store in flammable cabinet. Always wear gloves and lab coat.	2	2	4	Medium
Bunsen burners	Risk of fire spreading to clothes and nearby areas	Staff and students	Do not work alone. Long hair must be tied back. Work away from flammable substances.	2	2	4	Medium
Scalpels needles other sharps	Injury to skin, transfer of micro organisms	Staff and students	Use appropriate safety devices, keep needles sheathed when not in use. Use sharp bins for disposal.	2	2	4	Medium
Hot blocks	Burns	Staff and students	Make other staff aware when hot blocks are in use, place a warning sign in front of equipment	1	1	1	low
Freezers dry ice	Freezer burns, damage to skin	Staff and students	-80 freezer is extremely cold, always wear thermal gloves, never put bare hands into the freezer. Wear gloves when handling dry ice	1	1	1	low

GUIDANCE ON COMPLETION OF RISK ASSESSMENT

1. EXAMPLE HAZARDS THAT MAY BE APPLICABLE TO THE JOB or WORK ACTIVITY			
Working at Height	Noise	Hand tools	Vibration
Falling objects	Extreme Heat / cold	Confined spaces	Repetitive hand/ arm movement
Slippery/ uneven/ worn floors	Radiation	Poor housekeeping / cleaning	Machine operation
Obstructions/ projections	Lighting	Vehicle movement	Electro Magnet
Manual handling	Compressed air	Fire / explosion	Pressurised systems
Mechanical Lifting	Substances / materials	Electricity	Other (specify on assessment)

2. RISK MATRIX		Potential consequence of harm		
		1 – Minor Injury (e.g. hazard can cause illness, injury or equipment damage but the results would not be expected to be serious)	2 – Significant Injury (e.g. hazard can result in serious injury and/or illness, over 3 day absence)	3 – Major Injury (e.g. hazard capable of causing death or serious and life threatening injuries)
Likelihood of harm	1 – Unlikely (injury rare, though possible)	1 – Low	2 – Low	3 – Medium
	2 – Possible (injury could occur occasionally)	2 – Low	4 – Medium	6 – High
	3 – Probable (injury likely to occur, can be expected)	3 – Medium	6 – High	9 – Extreme

3. RISK EVALUATION

This is calculated by multiplying the likelihood against the consequence e.g. taking a likelihood of 1, which is classified as Unlikely and multiplying this against a Potential Consequence of 2, which is classified as Significant Injury, would give you an overall Risk Rating of 2, which would result in an overall evaluation as a low risk.

1 to 2 = Low risk

Low risks are largely acceptable, monitor periodically to determine situation changes which may affect the risk, or after significant changes

3 to 4 = Medium risk

Medium risks should only be tolerated for the short-term and then only whilst further control measures to mitigate the risk are being planned and introduced, within a defined time period.

6 = High risk

High risks activities should cease immediately until further control measures to mitigate the risk are introduced. The continued effectiveness of control measures must be monitored periodically.

9 = Extreme Risk

Work should not be started or continued until the risk has been mitigated. Immediate action is required to reduce exposure. A detailed mitigation plan must be developed, implemented and monitored by senior management to reduce the risk before work is allowed to commence