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Inventory of Work Activities			
Reference Number: (please refer to PRS RA Repository for next running number)		**Division**	Food, Chemical and Biotechnology
Title	gg		

Ref	Location	Process	Work Activity	Remarks
1		hiking	Planning hiking routes and difficulty levels	
2		waste disposal	Disposal of glass capillaries tubes	
			Disposal of chemical solid waste	
			Disposal of chemical liquid waste	

Note:
1. This form is to be completed before filling in the Risk Assessment Form.
2. The contents of the Process (column) and Work Activity (column) in the Inventory of Work Activities Form are to be copied over to the Process (row) and Work Activity (column), respectively, in the Risk Assessment Form.

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RISK ASSESSMENT						
Reference Number				RA Leader:		Approved by:	
Title:	gg			RA Team:		Signature:	
						Designation:	
Division:	Food, Chemical and Biotechnology	Location:					
Last Review Date:	17 Jul 2025	Next Review Date:	17 Jul 2028			Date	

	Hazard Identification			Risk Evaluation				Risk Control							
Ref	Activity	Hazard	Possible injury / ill-health	Existing risk controls	S	L	RPN	Additional controls	S	L	RPN	Implementation Person	Due date	Remarks
waste disposal															
1.1	Disposal of glass capillaries tubes	Broken or breaking of glass tubes	a) Cuts to personnel	a) b) Perform operation under close guidance and supervision c) Ensure users wear PPE such as goggles, lab coat and nitrile gloves as	2	2	4	a)						

Likelihood / Severity	Rare (1)	Remote (2)	Occasional (3)	Frequent (4)	Almost Certain (5)
Catastrophic (5)	5 (M)	10 (M)	15 (H)	20 (H)	25 (H)
Major (4)	4 (M)	8 (M)	12 (M)	16 (H)	20 (H)
Moderate (3)	3 (L)	6 (M)	9 (M)	12 (M)	15 (H)
Minor (2)	2 (L)	4 (M)	6 (M)	8 (M)	10 (M)
Negligible (1)	1 (L)	2 (L)	3 (L)	4 (M)	(M)

	Hazard Identification			Risk Evaluation				Risk Control						
Ref	Activity	Hazard	Possible injury / ill-health	Existing risk controls	S	L	RPN	Additional controls	S	L	RPN	Implementation Person	Due date	Remarks
				mandatory PPE always d) Dispose into punctureresistant sharp disposal bin										
1.2	Disposal of chemical solid waste	Exposure to chemical waste	Skin and/or eye irritation from chemical	a) b) Ensure users wear PPE such as goggles, lab coat and nitrile gloves as mandatory PPE always. c) Ensure, Solid wastes dispose into a zip lock bag and seal it. Dispose the whole zip lock bag into the hazardous waste bag d) Check the hazardous bin is not overfilled and the bin lid is always closed e) Seal hazardous waste	2	2	4	a)						

Likelihood / Severity	Rare (1)	Remote (2)	Occasional (3)	Frequent (4)	Almost Certain (5)
Catastrophic (5)	5 (M)	10 (M)	15 (H)	20 (H)	25 (H)
Major (4)	4 (M)	8 (M)	12 (M)	16 (H)	20 (H)
Moderate (3)	3 (L)	6 (M)	9 (M)	12 (M)	15 (H)
Minor (2)	2 (L)	4 (M)	6 (M)	8 (M)	10 (M)
Negligible (1)	1 (L)	2 (L)	3 (L)	4 (M)	(M)

	Hazard Identification			Risk Evaluation				Risk Control						
Ref	Activity	Hazard	Possible injury / ill-health	Existing risk controls	S	L	RPN	Additional controls	S	L	RPN	Implementation Person	Due date	Remarks
				bags before transporting them to waste room										
1.3	Disposal of chemical liquid waste	Exposure to chemical waste	Skin and/or eye irritation from chemical	a) b) Ensure users wear PPE such as goggles, lab coat and nitrile gloves as mandatory PPE always. c) Ensure waste container is properly labelled with product identifier and associated GHS pictograms before usage. d) Ensure the waste bottle used is compatible with the organics e) ventilated area inside the fume hood. f) Extremely flammable liquid and vapour: Flash	2	2	4	a)						

Likelihood / Severity	Rare (1)	Remote (2)	Occasional (3)	Frequent (4)	Almost Certain (5)
Catastrophic (5)	5 (M)	10 (M)	15 (H)	20 (H)	25 (H)
Major (4)	4 (M)	8 (M)	12 (M)	16 (H)	20 (H)
Moderate (3)	3 (L)	6 (M)	9 (M)	12 (M)	15 (H)
Minor (2)	2 (L)	4 (M)	6 (M)	8 (M)	10 (M)
Negligible (1)	1 (L)	2 (L)	3 (L)	4 (M)	(M)

	Hazard Identification			Risk Evaluation				Risk Control						
Ref	Activity	Hazard	Possible injury / ill-health	Existing risk controls	S	L	RPN	Additional controls	S	L	RPN	Implementation Person	Due date	Remarks
				point < 23°C and initial boiling point ? 35°C g) Highly flammable liquid and vapour: Flash point < 23°C and initial boiling point > 35°C h) Keep the liquid waste away from heat, direct sunlight, hot surfaces, sparks, smoke, open flames and other ignition sources and incompatible materials (e.g. oxidize i) . j) Ensure the fire extinguisher is available for use inside lab and waste room with location identified. k) Apply colour code for											

Likelihood / Severity	Rare (1)	Remote (2)	Occasional (3)	Frequent (4)	Almost Certain (5)
Catastrophic (5)	5 (M)	10 (M)	15 (H)	20 (H)	25 (H)
Major (4)	4 (M)	8 (M)	12 (M)	16 (H)	20 (H)
Moderate (3)	3 (L)	6 (M)	9 (M)	12 (M)	15 (H)
Minor (2)	2 (L)	4 (M)	6 (M)	8 (M)	10 (M)
Negligible (1)	1 (L)	2 (L)	3 (L)	4 (M)	(M)

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	Hazard Identification			Risk Evaluation				Risk Control						
Ref	Activity	Hazard	Possible injury / ill-health	Existing risk controls	S	L	RPN	Additional controls	S	L	RPN	Implementation Person	Due date	Remarks
				different types of waste (refer to poster in lab and waste roo l) . m) Waste container should only be filled up to 75% mark, and 75% mark on the waste carboy should be labelled clearly. n) Ensure chemical wastes stored are compatible with one another. Refer to safety data sheet for more information.										
hiking														
2.1	Planning hiking routes and difficulty levels	Uneven or rugged terrains during hiking	a) Slips b) trips c) and falls that could lead to	a) Implement a buddy system, provide training on how to negotiate difficult terrains, advise to wear	4	3	12	a)						

Likelihood / Severity	Rare (1)	Remote (2)	Occasional (3)	Frequent (4)	Almost Certain (5)
Catastrophic (5)	5 (M)	10 (M)	15 (H)	20 (H)	25 (H)
Major (4)	4 (M)	8 (M)	12 (M)	16 (H)	20 (H)
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Minor (2)	2 (L)	4 (M)	6 (M)	8 (M)	10 (M)
Negligible (1)	1 (L)	2 (L)	3 (L)	4 (M)	(M)

	Hazard Identification			Risk Evaluation				Risk Control						
Ref	Activity	Hazard	Possible injury / ill-health	Existing risk controls	S	L	RPN	Additional controls	S	L	RPN	Implementation Person	Due date	Remarks
		route planning.	sprains d) fractures or head injuries.	suitable footwear and use necessary equipment.										
2.2	Planning hiking routes and difficulty levels	Exposure to adverse weather conditions such as heat, cold, or rain.	a) Hypothermia b) heat stroke c) dehydration d) skin burns from sun exposure.	a) Use of appropriate clothing, hats, sunscreen for protection against sun, provision of water for hydration, weather updates check.	3	3	9	a)						
2.3	Planning hiking routes and difficulty levels	Exposure to harmful plants, insects or wildlife during hiking.	a) Allergic reactions b) bites c) stings d) scratches.	a) Knowledge and awareness of local fauna and flora, avoid areas known for harmful wildlife, wearing appropriate attire.	3	3	9	a)						
2.4	Planning hiking routes and difficulty levels	Overexertion from planning	a) Muscular strain b) joint injuries	a) Regular breaks during planning, implementing a proper training regimen,	3	2	6	a)						

Likelihood / Severity	Rare (1)	Remote (2)	Occasional (3)	Frequent (4)	Almost Certain (5)
Catastrophic (5)	5 (M)	10 (M)	15 (H)	20 (H)	25 (H)
Major (4)	4 (M)	8 (M)	12 (M)	16 (H)	20 (H)
Moderate (3)	3 (L)	6 (M)	9 (M)	12 (M)	15 (H)
Minor (2)	2 (L)	4 (M)	6 (M)	8 (M)	10 (M)
Negligible (1)	1 (L)	2 (L)	3 (L)	4 (M)	(M)

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	Hazard Identification			Risk Evaluation				Risk Control						
Ref	Activity	Hazard	Possible injury / ill-health	Existing risk controls	S	L	RPN	Additional controls	S	L	RPN	Implementation Person	Due date	Remarks
		difficult hiking routes.	c) cardiovascular stress.	ensuring good physical health before planning difficult routes.										

Likelihood / Severity	Rare (1)	Remote (2)	Occasional (3)	Frequent (4)	Almost Certain (5)
Catastrophic (5)	5 (M)	10 (M)	15 (H)	20 (H)	25 (H)
Major (4)	4 (M)	8 (M)	12 (M)	16 (H)	20 (H)
Moderate (3)	3 (L)	6 (M)	9 (M)	12 (M)	15 (H)
Minor (2)	2 (L)	4 (M)	6 (M)	8 (M)	10 (M)
Negligible (1)	1 (L)	2 (L)	3 (L)	4 (M)	(M)

Level	Severity	Description
1	Negligible	Negligible injury.
2	Minor	Injury or ill-health requiring first-aid only (includes minor cuts and bruises, irritation, ill-health with temporary discomfort, fatigue, mental well-being).
3	Moderate	Injury or ill-health (including mental well-being) requiring medical treatment (includes lacerations, burns, sprains, minor fractures, psychosocial stress, dermatitis and work-related upper limb disorders).
4	Major	Serious injuries or life-threatening occupational diseases (includes amputations, major fractures, multiple injuries, occupational cancers, acute poisoning, diagnosed mental illnesses, disabilities and deafness).
5	Catastrophic	Fatality, fatal diseases or multiple major injuries.

Level	Likelihood	Description
1	Rare	Not expected to occur but still possible.
2	Remote	Not likely to occur under normal circumstances.
3	Occasional	Possible or known to occur.
4	Frequent	Common occurrence.
5	Almost certain	Continual or repeating experience.

Risk score	Acceptability of risk	Recommended actions
Low 1-3	Acceptable	No additional risk control measures may be needed. Frequent review and monitoring of hazards are required to ensure that the risk level assigned is accurate and does not increase over time.
Medium 4-12	Tolerable	A careful evaluation of the hazards should be carried out to ensure that the risk level is reduced to as low as reasonably practicable (ALARP) within a defined time period. Interim risk control measures, such as administrative controls, may be implemented while long term measures are being established. Management attention is required.
High 15-25	Not acceptable	High Risk level must be reduced to at least Medium Risk before work commences. There should not be any interim risk control measures and risk control measures should not be overly dependent on personal protective equipment. If practicable, the hazard should be eliminated before work commences. Management review is required before work commences.

Note:

1. For the Role and Responsibilities of the Approver and RA Leader please refer to sections 4.3 and 4.4 of the Risk Management Programme respectively.